

**United States Department of the Interior
National Park Service****National Register of Historic Places Registration Form**

This form is for use in nominating or requesting determinations for individual properties and districts. See instructions in National Register Bulletin, *How to Complete the National Register of Historic Places Registration Form*. If any item does not apply to the property being documented, enter "N/A" for "not applicable." For functions, architectural classification, materials, and areas of significance, enter only categories and subcategories from the instructions.

1. Name of PropertyHistoric name: Ryan Historic DistrictOther names/site number: Ryan

Name of related multiple property listing:

N/A

(Enter "N/A" if property is not part of a multiple property listing)

2. LocationStreet & number: 100 Ryan RoadCity or town: Death Valley State: CA County: InyoNot For Publication: ☒Vicinity: ☐

3. State/Federal Agency Certification

As the designated authority under the National Historic Preservation Act, as amended,

I hereby certify that this ___ nomination ___ request for determination of eligibility meets the documentation standards for registering properties in the National Register of Historic Places and meets the procedural and professional requirements set forth in 36 CFR Part 60.

In my opinion, the property ___ meets ___ does not meet the National Register Criteria. I recommend that this property be considered significant at the following level(s) of significance:

___ national ___ statewide ___ local

Applicable National Register Criteria:

___ A ___ B ___ C ___ D

Signature of certifying official/Title:**Date**

State or Federal agency/bureau or Tribal Government

Ryan Historic District
Name of Property

Inyo, CA
County and State

In my opinion, the property ___ meets ___ does not meet the National Register criteria.

Signature of commenting official:

Date

Title :

State or Federal agency/bureau
or Tribal Government

4. National Park Service Certification

I hereby certify that this property is:

- ___ entered in the National Register
___ determined eligible for the National Register
___ determined not eligible for the National Register
___ removed from the National Register
___ other (explain:) _____

Signature of the Keeper

Date of Action

5. Classification

Ownership of Property

(Check as many boxes as apply.)

Private:

☒

Public – Local

☐

Public – State

☐

Public – Federal

☐

Category of Property

(Check only **one** box.)

Building(s)

☐

District

☒

Ryan Historic District
Name of Property

Inyo, CA
County and State

Site ☐

Structure ☐

Object ☐

Number of Resources within Property

(Do not include previously listed resources in the count)

Contributing	Noncontributing	
<u>22</u>	<u>1</u>	buildings
<u>16</u>	<u>0</u>	sites
<u>22</u>	<u>1</u>	structures
<u>1</u>	<u>0</u>	objects
<u>61</u>	<u>2</u>	Total

Number of contributing resources previously listed in the National Register 0

6. Function or Use

Historic Functions

(Enter categories from instructions.)

DOMESTIC/single dwelling

DOMESTIC/secondary structure

DOMESTIC/hotel

DOMESTIC/institutional housing

COMMERCE/department store

COMMERCE/restaurant

GOVERNMENT/post office

EDUCATION/school

RECREATION AND CULTURE/auditorium

RECREATION AND CULTURE/sports facility

RECREATION AND CULTURE/work of art

INDUSTRY/PROCESSING/EXTRACTION/extractive facility

INDUSTRY/PROCESSING/EXTRACTION/waterworks

INDUSTRY/PROCESSING/EXTRACTION/energy facility

INDUSTRY/PROCESSING/EXTRACTION/communications facility

INDUSTRY/PROCESSING/EXTRACTION/industrial storage

HEALTH CARE/hospital

DEFENSE/fortification

Ryan Historic District

Name of Property

Inyo, CA

County and State

LANDSCAPE/parking lot

LANDSCAPE/street furniture

LANDSCAPE/natural feature

TRANSPORTATION/rail-related

TRANSPORTATION/road-related

TRANSPORTATION/pedestrian-related

OTHER/filming location

Current Functions

(Enter categories from instructions.)

DOMESTIC/single dwelling

DOMESTIC/secondary structure

DOMESTIC/institutional housing

RECREATION AND CULTURE/auditorium

RECREATION AND CULTURE/museum

RECREATION AND CULTURE/work of art

INDUSTRY/PROCESSING/EXTRACTION/waterworks

LANDSCAPE/parking lot

LANDSCAPE/park

LANDSCAPE/unoccupied land

LANDSCAPE/natural feature

LANDSCAPE/conservation area

TRANSPORTATION/road-related

TRANSPORTATION/pedestrian-related

OTHER/workshop

Ryan Historic District
Name of Property

Inyo, CA
County and State

7. Description

Architectural Classification

(Enter categories from instructions.)

Other: Early 20th Century

Other: CORPORATE VERNACULAR

Materials: (enter categories from instructions.)

Principal exterior materials of the property:

FOUNDATION: Wood, Concrete, Stone, Other: Bedrock

WALLS: Earth, Wood, Stone, Metal, Stucco, Concrete, Other: Bedrock

ROOF: Earth, Metal, Other: Bedrock

OTHER: Earth, Wood, Brick, Stone, Metal, Terra Cotta, Asphalt, Concrete, Other: Bedrock

Narrative Description

(Describe the historic and current physical appearance and condition of the property. Describe contributing and noncontributing resources if applicable. Begin with a **summary paragraph** that briefly describes the general characteristics of the property, such as its location, type, style, method of construction, setting, size, and significant features. Indicate whether the property has historic integrity.)

Summary Paragraph

Located in eastern Death Valley, Inyo County, California, the Ryan Historic District is composed of a central core with extant buildings, two mine complexes, the remains of the Death Valley Railroad, the remains of the Baby Gauge Railroad, a network of trails and roads, and archaeological deposits associated with borax mining (1914-1927), Death Valley tourism (1928-1956), film and television production (1952-1959), and the Civil Defense movement (1962-1971). It sits at 3,000 feet in elevation on the western slopes of the Greenwater Range, and its nearest neighbor is the tourist center of Furnace Creek, California, approximately 15 miles distant. The district encompasses 107 acres and contains 22 contributing (1 non-contributing) buildings, 16 contributing sites, 22 contributing (1 non-contributing) structures, and 1 contributing object. It is perhaps best known for its remarkable preservation; the integrity and condition of the buildings, archaeological sites, structures, and objects is unlike that seen at other historic districts in California. The camp was constructed and operated by one company, Pacific Coast Borax. Most of the buildings are wood-framed construction in a green and white paint scheme with metal siding and roofs and intact finishes in a distinctive corporate vernacular style. Extensive dry-laid native stone walls terrace the hillside, railroad grades and trackways striate the slopes, and the remnants of mining and industrial infrastructure abound. The district is owned and managed by the 501(c)(3) nonprofit the Death Valley Conservancy and is inhabited year-round by Death Valley Conservancy employees, who maintain and mindfully preserve its resources.

Ryan Historic District
Name of Property

Inyo, CA
County and State

Narrative Description

The Ryan Historic District represents one of the most significant and enduring historic borax mining operations in Death Valley, the state of California, and perhaps North America. Founded by the Pacific Coast Borax Company (PCB) in 1914 as a base of operations for mining borax along the western slopes of the Greenwater Range in eastern Death Valley, the camp of Ryan evolved into an autonomous company town supporting mining activity in the area's six underground mines—the Played Out, Upper and Lower Biddy McCarthys, the Grandview, the Lizzie V. Oakley, and the Widow (collectively known as the Hillside Group). The mines delivered borate ore to Ryan via a series of tramways and a narrow 24-inch-gauge railroad, called the Baby Gauge. Once at Ryan, the ore was transferred into rail cars and shipped to the processing center at Death Valley Junction by a 20-mile long, 36-inch-gauge railroad, the Death Valley Railroad, specifically designed and constructed for this purpose.

The layout of Ryan during its early period (1914-1919) was haphazard but dictated by the Death Valley Railroad (DVRR) right-of-way and its physical setting. Early buildings were placed in a north-south orientation along the contour of the railroad, with the largest structures located at the wye terminus of the rail line. As the camp grew, construction occurred on the steep, rocky slopes, with builders forced to reconcile uneven terrain with retaining walls, platforms, and post-and-pier foundations. While many of these buildings were constructed on site with materials delivered by the DVRR, several were moved from defunct PCB properties (such as the Lila C mine and “old” Ryan, 20 miles distant), and busted mining camps, such as Goldfield, Nevada. In fact, one of the most iconic Ryan buildings, the Rec Hall, was transported via rail in 1919 from the abandoned gold mining town of Rhyolite, Nevada.

The 1920s were a period of much growth and activity at Ryan and its vicinity as PCB embarked on a push toward modernization of the Ryan facilities. Much of the camp underwent restructuring with the remodeling of extant buildings (such as the Hospital, Powerhouse, Store, and original Boarding House) and the addition of new buildings (such as two large miners' bunkhouses, Schoolhouse, Warehouse, and state-of-the-art management houses). Camp infrastructure also improved at this time with the construction of massive dry-laid rock terraces, better defined road networks, and improved water and sewer systems including indoor plumbing, steam heat, and an ice plant.

In 1927, PCB shifted its focus from Ryan and the Hillside Group to the Kramer deposit at Boron, CA. By then, PCB had extracted over \$30 million worth of borates from its mines at old and new Ryan, making it by far the biggest and most profitable mining venture in the Death Valley and the Amargosa country.¹ Seeing the rise in Death Valley tourism, PCB and its tourist branch, the Death Valley Hotel Company, seized the opportunity to use Ryan for tourist accommodations and remodeled the camp into the Death Valley View Hotel. It converted the two large bunkhouses into hotel rooms by adding bathrooms and lobby areas, changed the original boarding house/dining area into a hotel lobby/dining room, and configured management housing

¹ Lingenfelter, Richard, *Death Valley and the Amargosa: A Land of Illusion*, Berkeley, University of California Press, 1986, 396.

Ryan Historic District

Name of Property

Inyo, CA

County and State

into guest cottages. A tennis court was also added. Industrial structures such as a set of giant timber ore bins in the center of the camp were removed and the Baby Gauge rail line was outfitted as a tourist train. A partnership with Union Pacific Railroad guaranteed visitors to the camp on their journey to Death Valley; tourists would arrive by rail on the DVRR, stay at the Death Valley View Hotel, and then tour Death Valley by motor coaches driven by Union Pacific employees.

In 1930, the DVRR was decommissioned and its track and rolling stock moved to a different company property. Since Ryan depended on the railroad for water shipments from Death Valley Junction, the camp became reliant on water trucked to the site from the local Navel Spring for fire protection and domestic purposes. This difficulty in obtaining water, along with the removal of Ryan as a “first stop” for tourists coming to Death Valley, negatively affected the Death Valley View Hotel’s business. Hotel records indicate that the Death Valley View Hotel operated on a limited basis until the 1950s, often acting as overflow for other area hotels when tourist traffic peaked.

PCB (now U.S. Borax) eventually placed Ryan on “care and maintenance” status and employed several individuals as caretakers of the Ryan property over the years. Caretakers’ duties ranged from camp maintenance, security, hosting school groups, mining at local mines, and mining claim assessment work, to hauling water and maintaining the Navel Spring water works.

Despite its “mothball” status, activity at Ryan continued into the 1960s. During the 1950s, Ryan provided the location for several filming events. Seven episodes of the PCB-produced series *Death Valley Days* and one episode of the television series *The Twilight Zone* were filmed at Ryan. In addition, the opening scenes of the Universal film *Spartacus* (1960) starring Kirk Douglas and Peter Ustinov and directed by Stanley Kubrick were filmed at Ryan, with the camp’s rocky hills as stand-ins for the mines of Libya.

In a further illustration of its versatility, Ryan was chosen in 1962 by California’s Civil Defense Commission to house a Civil Defense fallout shelter due to its remote location and extensive underground workings. In late 1962, the Ryan Haulage Tunnel was identified as a fallout shelter and an adjacent space excavated to store supplies. The shelter was officially decommissioned in the 1970s.

In 2009, Ryan became a Rio Tinto (now the parent company of U.S. Borax) legacy property and in 2013, Rio Tinto donated Ryan and roughly 300 encompassing acres constituting the Ryan Historic District to the nonprofit group the Death Valley Conservancy (DVC). The DVC is committed to the long-term preservation, restoration, and protection of Ryan. The ultimate goal for the district is for it to function as a living laboratory, supporting scientific research and education in historic preservation, archaeology, history, and the biological and physical sciences. All stabilization, restoration, and other construction activities occur under the auspices of the Secretary of the Interior’s *Standards for the Treatment of Historic Properties*, *Standards and Guidelines for Archaeology and Historic Preservation*, and *Guidelines for the Treatment of Cultural Landscapes*; each preservation, restoration, and construction project occurs with the utmost care and consideration for the integrity of historic buildings, structures, and features.

Ryan Historic District

Name of Property

Inyo, CA

County and State

General public access and education is supported via special events, periodic guided tours, publications, and interpretive displays.

Today the Ryan Historic District contains 22 buildings, 1 non-contributing building, 16 contributing archaeological sites, 22 contributing structures, 1 non-contributing structure, and 1 contributing object representing the breadth of its history. Its oldest building predates the site at 1906, and its most recent building dates to 1924. Ongoing monitoring, maintenance, and repair combined with few alterations and limited visitation over the years, has resulted in a district-wide remarkable state of preservation, including the retention of exterior finishes and fixtures and interior furnishings, fixtures, and finishes. The present character of the district comports to the "Fulltime Hotel Era" (1928-1930); the DVC has identified this time period as the target for sensitively managed restoration activities and preservation planning. The Ryan Historic District resources with their corresponding resource numbers are listed below.

1. Hotel Complex – Contributing Building
2. Warehouse – Contributing Building
3. Powerhouse – Contributing Building
4. Storage Adit 1 – Contributing Building
5. Storage Adit 2 – Contributing Building
6. Storage Adit 3 – Contributing Building
7. Powder Magazine – Contributing Building
8. Schoolhouse and Schoolyard – Contributing Building
9. Boiler House – Contributing Building
10. Bunkhouse 1 – Contributing Building
11. Bunkhouse 2 – Contributing Building
12. Hospital – Contributing Building
13. Rec Hall – Contributing Building
14. House 1 – Contributing Building
15. House 2 and Shed – Contributing Building
16. House 3 and Shed – Contributing Building
17. House 4 and Shed – Contributing Building
18. Railroad-Grade-Level Shed – Contributing Building
19. Gerstley Shed – Non-contributing Building
20. Copenhagen Row – Contributing Site
21. Early Ryan – Contributing Site
22. Little Mesa – Contributing Site
23. Poison Rock – Contributing Site
24. Shower House Building Pad – Contributing Site
25. House 5 Building Pad – Contributing Site
26. Tennis Court – Contributing Site
27. Building Foundations Site – Contributing Site
28. Oil House – Contributing Site
29. Garage – Contributing Site
30. Cooling Tower Foundation/Basin – Contributing Site
31. Ryan Waterworks – Contributing Structure

Ryan Historic District

Name of Property

Inyo, CA

County and State

32. Incinerators and Trackway – Contributing Structure
33. Rock-retained Terraces and Railings – Contributing Structure
34. Sewer Line and Cesspit – Contributing Structure
35. Fuel Pump Platforms – Contributing Structure
36. Former Power Line – Contributing Structure
37. Cadillac Chassis – Contributing Structure
38. Modern Power Line and Maintenance Road – Non-contributing Structure
39. Weathervane – Contributing Object
40. Death Valley Railroad (DVRR) Remains – Contributing Site
41. Oil Transfer Structure – Contributing Structure
42. Locomotive Storage Adit – Contributing Building
43. Baby Gauge Railroad (BGRR) Remains – Contributing Site
44. Haulage Tunnel and Civil Defense Supplies Room – Contributing Structure
45. Locomotive and Car – Contributing Structure
46. Wooden Dugout – Contributing Building
47. Privy – Contributing Building
48. Upper Biddy McCarthy Mine Site – Contributing Site
49. Skip Track and Loading Areas – Contributing Structure
50. Ore and Waste Trackway and Trestle, Ore Chute, and Waste Rock Dump – Contributing Structure
51. Utility Poles Network – Contributing Structure
52. Hoist and Original Skip Track Remains – Contributing Structure
53. Historic Road and Wooden Platform – Contributing Structure
54. Privy – Contributing Building
55. Lower Biddy McCarthy Mine Site – Contributing Site
56. Temporary Explosive Storage Structure – Contributing Structure
57. Lower Biddy Skip Track – Contributing Structure
58. Ore Car Track and Trestle – Contributing Structure
59. *Spartacus* Set Remains – Contributing Site
60. Ryan Road – Contributing Structure
61. Old Ryan Road – Contributing Structure
62. The Northern Road – Contributing Structure
63. Upper Reservoir Road – Contributing Structure

PHYSICAL SETTING

The Ryan Historic District sits at a 3,000 ft elevation along a western slope of the Greenwater Range, just outside the eastern boundary of Death Valley National Park, in Inyo County, California. The Greenwater Range is considered a subrange of the Funeral Mountains, which form the eastern wall of Death Valley and from Ryan much of the northern portion of the valley is visible. Geologically, the district is characterized by colorful sedimentary deposits capped by basalt flows. The terrain is rugged with pronounced topographic relief; the weathering and erosion of the basalt cap above Ryan, the Black Mesa, has created an abundance of multiple-sized basalt boulders littering the hillside. The landscape is subject to periodic flash flooding and

Ryan Historic District

Name of Property

Inyo, CA

County and State

contains associated erosional features such as gullies and washes; however, the slope has remained relatively stable over Ryan's existence.

Death Valley is the hottest place in the world and the hottest, driest, and lowest place in North America. Climatic data from Furnace Creek, 190 ft below sea level, indicates that an average daily temperature for January, the coldest month ranges from 37°F-65°F, and for July, the hottest month, temperatures range between 87°F-116°F. However, these are mere averages and summer temperatures can easily top 120°F. At a higher elevation, the Ryan Historic District temperatures are slightly (about 10°F-15°F) cooler. Rainfall totals average 2.4 inches per year with most of the precipitation occurring in the winter and summer months. There is no incipient water source in district.

The vegetation in the Ryan Historic District is comprised of the *Larrea tridentata* (creosote) shrubland alliance with *L. tridentata* as the predominant plant. Predominant flora in this alliance are *Atriplex hymenelytra* (desert holly), *Tidestromia oblongifolia* (honeysweet), *Bebbia juncea* var. *aspera* (sweetbush), *Eriogonum hoffmannii* ssp. *hoffmannii* (Hoffman's buckwheat), *Hymenoclea salsola* (cheesebush), and *Ambrosia dumosa* (burrobush). Other plants observed include *Opuntia basilaris* (beavertail cactus), *Echinocactus polycephalus* (cotton-top barrel cactus), *Psoralea argemone* sp. (indigo bush), *Eunide urens* (rock nettle), *Peucephyllum schottii* (pygmy cedar), and *Psathyrotes ramosissima* (turtleback).

Over the years, Ryan residents planted shade trees and shrubs around the property; several desert-loving non-native *Tamarix ramosissima* (tamarisk, salt cedar) were planted in the 1950s and two of these remain in the residential area. One *Tamarix* was replaced in 2013 with the native *Prosopis glandulosa* (honey mesquite).

Several species of wildlife frequent the Ryan Historic District. Endemic animals include reptiles such as the stocky *Sauromalus ater*, (chuckwalla), *Uta stansburiana* (side-blotch lizard), *Cnemidophorus tigris tigris* (Great Basin whiptail), *Dipsosaurus dorsalis* (desert iguana), *Phrynosoma platyrhinos* (desert horned lizard), *Callisaurus draconoides* (zebra-tailed lizard), *Crotaphytus bicantores* (Great Basin collared lizard), *Crotalus stephensi* (Panamint rattlesnake), *Crotalus c. cerastes* (Mojave sidewinder), *Coluber constrictor* (red racer), *Pituophis catenifer* (gopher snake), and *Coleonyx variegatus* (western banded gecko).

Year-round birds include *Carpodacus mexicanus* (house finch), *Catherpes mexicanus* (canyon wren), *Sayornis saya* (Say's phoebe), *Buteo jamaicensis* (red-tailed hawk), *Corvus corax* (common raven), and *Streptopelia decaocto* (Eurasian collared dove), an exotic species. Migratory birds observed at Ryan include *Pheucticus chrysopheplus* (Yellow grosbeak), *Piranga ludoviciana* (Western tanager), *Icterus bullockii* (Bullock's oriole), *Cathartes aura*, (turkey vulture), *Falco sparverius* (American kestrel), *Dendroica petechia* (yellow warbler), *Carduelis psaltria* (lesser goldfinch) and *Calypte* sp. (hummingbird).

Mammals include the small species of *Dipodomys* (kangaroo rats), *Neotoma* (wood rats), *Peromyscus* (mice), *Ammospermophilus leucurus* (squirrels) and *Lepus californicus* (black-tailed jackrabbit). Larger mammals include *Spilogale gracilis* (western spotted skunk), *Bassariscus*

Ryan Historic District

Inyo, CA

Name of Property

County and State

astutus (ring-tail cat), *Urocyon cinereoargenteus* (grey fox), and possibly *Felis concolor* (mountain lion). *Taxidea taxus* (badger) and *Ovis canadensis nelsoni* (desert bighorn sheep) are infrequently observed.

HISTORIC PROPERTIES

For clarity and organizational purposes, historic properties discussed in this nomination are grouped based on geographical location and historical function: Ryan Camp, the Death Valley Railroad, the Baby Gauge Railroad, the Upper Biddy McCarthy Mine, the Lower Biddy McCarthy Mine, the *Spartacus* filming area, and roads and trails.

RYAN CAMP

Ryan Camp forms the central core of the Ryan Historic District with 18 contributing buildings, 11 contributing sites, 7 contributing structures, and 1 contributing object. It also has 1 non-contributing building and 1 non-contributing structure. See the table below for a list of resources.

Resource Number	Type	Name	Built or Move Date; Alterations	Photograph/s
1a	Contributing Building	Hotel Complex: Store/Post Office	Moved 1914; lowered, reoriented, addition on north 1921	6-8
1b		Hotel Complex: Lobby/Dining Room (Boarding House)	Built or moved 1914-1915; large western addition and smaller northern addition 1921; northern addition removed by 1928	5-7, 9-11
1c		Hotel Complex: Kitchen	Built 1921	5-7, 12-15
2	Contributing Building	Warehouse	Built 1924	16-17
3	Contributing Building	Powerhouse	Built 1924	18-19
4	Contributing Building	Storage Adit 1	1920-1921	16, 20
5	Contributing Building	Storage Adit 2	1919	21
6	Contributing Building	Storage Adit 3	1919	21

Ryan Historic District

Inyo, CA

Name of Property

County and State

7	Contributing Building	Powder Magazine	1919	2, bottom right
8	Contributing Building	Schoolhouse and schoolyard	Built or moved 1920-1921	22-23, 40
9	Contributing Building	Boiler House	Built 1920	24
10	Contributing Building	Bunkhouse 1	Built 1919; modified for DVVH guest housing 1927	25-27
11	Contributing Building	Bunkhouse 2	Built 1919; modified for DVVH guest housing 1927	28-30
12	Contributing Building	Hospital	Built 1914-1915; renovated into hospital 1919-1921; major renovation to the modern configuration in 1924; modified for DVVH guest housing 1927	31-32
13	Contributing Building	Rec Hall	Built off site 1906; moved 1919; stage addition, 1919; bathroom addition 1921; restoration 2019-present	33-34
14	Contributing Building	House 1	Built 1924	35
15a-b	Contributing Building	House 2 and Shed	Built 1924	35
16a-b	Contributing Building	House 3 and Shed	Built 1924	36
17a-b	Contributing Building	House 4 and Shed	Built 1924	37
18	Contributing Building	Railroad grade level shed	Built 1921	31
19	Non-Contributing Building	Gerstley Shed	Moved 2012	6

Ryan Historic District

Inyo, CA

Name of Property

County and State

20a-g	Contributing Site	Copenhagen Row	1921	38
21a-r	Contributing Site	Early Ryan	1914-1920	39
22	Contributing Site	Little Mesa	1921	40
23	Contributing Site	Poison Rock	N/A	21
24	Contributing Site	Building Pad (Shower House)	1920	4
25	Contributing Site	Building Pad (House 5)	1924	37
26	Contributing Site	Tennis Court	1927	26
27a-f	Contributing Site	Building Foundations	1916; also includes <i>The Twilight Zone</i> set, ca. 1959	41-42
28	Contributing Site	Oil House	1919	17
29	Contributing Site	Garage	1919, 1935	40
30	Contributing Site	Cooling Tower Foundation/Basin	1925	19
31a-e	Contributing Structure	Ryan Waterworks	1914	2, 4
32	Contributing Structure	Incinerators and Trackway	Late 1910s	16, 43
33	Contributing Structure	Rock-retained terraces and railings	1919-1925	44
34	Contributing Structure	Sewer line and cesspit	Late 1910s	58
35	Contributing Structure	Fuel Pump Platforms	1925, 1928	8
36	Contributing Structure	Former Power Line	1914	
37	Contributing Structure	Cadillac Chassis	1912, modified pre-1919	45
38	Non-Contributing Structure	Modern Powerline and maintenance road	1963	26
39	Contributing Object	Weathervane	1930s; photographed by Ansel Adams 1952	16, 46

Ryan Historic District

Name of Property

Inyo, CA

County and State

Contributing Buildings

1. Hotel Complex

Dates: 1914, 1921, 1927

**Property Types: 4 Commercial and Community, 6 Tourism, 7 Architecture,
8 Location-Filming**

Photos: 5-15

The one-story building known as the Hotel Complex actually contains three major buildings attached to one another and so are treated collectively: the Store (eastmost), the Lobby and Dining Room (center), and the Kitchen (westmost). Several smaller secondary additions are present, with shed and side-gabled roofs. The complex as a whole has an irregular footprint; the Store and Lobby/Dining Room buildings have roughly rectangular footprints (20 ft by 68 ft and 36 ft by 62 ft, respectively), while the Kitchen building has an irregular footprint due to smaller additions (roughly 20 ft by 59 ft, with a 7 ft by 14 ft northwestern projection). An enclosed breezeway near the building's north end attaches the Store and Lobby/Dining Room. The Lobby/Dining Room and Kitchen are directly attached to each other (the Kitchen is technically an addition to the Lobby/Dining Room) but are treated here as separate volumes as recognizable from the exterior, where each has its own gabled roof. The volumes are all wood-framed, with front-gabled roofs and corrugated metal siding and roofing; most of the roofs have open eaves with plain bargeboards and exposed rafter tails. Due to the presence of projecting wraparound porches, the rooflines have the general appearance of Dutch gables (more so on the Store and Lobby/Dining Room buildings than the Kitchen building). Most of the windows in the complex are double-hung sashes with multiple lights, while doors are typically paneled wood. Both exterior and interior doors and windows have simple wood surrounds, and windows have sills. All door and window hardware appears to be original, or in some cases, period-appropriate.

1a. Hotel Complex: The Store (Post Office)

The most easternmost volume functioned as Ryan's store and post office beginning in 1914. It is fronted by a projecting porch that wraps around from the north (primary) façade to the east and south façades. The porch's corrugated metal-clad pent roof extends beyond the building's roofline and is supported by plain wood post supports painted green. The building's north (primary) façade is symmetrical, with a large single wood door that is fully glazed, with ten lights. It is flanked by two double-hung wood windows (six-over-six light) with simple wood surrounds and sills. A wood vent with horizontal slats sits in the roof gable.

The east façade contains three doors and seven windows and two of the doors have mail slots in them. The façade's southmost door led to the women's bathroom during the Hotel Era (1928-1956). All of the façade's windows are double-hung, multi-light wood sashes in identical openings, all with simple wood surrounds and sills. The eastern part of the roof contains two stovepipes near the gable peak, anchored by guy wires. A flagpole is affixed to a porch post on this side.

The south façade contains one single-paneled wood door at its western portion, which led to the men's bathroom during the Hotel Era. It also contains two inward-opening hopper wood

Ryan Historic District

Inyo, CA

Name of Property

County and State

windows with obscure glass and simple surrounds/sills. The roof gable contains a wood vent with horizontal slats.

The west façade contains a wood five-paneled door elevated above grade and five windows of various types. From north to south, they include one double-hung, single-light sash with horns; two horizontal wood hoppers, internally opening with wood screens attached at top; and two wood six-over-six windows (one was painted or reconstructed 2005-2011). All of the windows have simple wood surrounds and sills. The building's roofline at this façade has only a shallow overhang, with exposed rafter tails.

Chronology

Much is known about the origin and history of the Store building. In 1914, a building used as a store at the Lila C mining camp (the original "Ryan") was moved to Ryan to serve as a store and post office (Figure 1); it was reoriented at its new location so the previous front became the rear (Figure 2). The building was set above the ground on relatively tall wooden piers and had an open, roofed wraparound porch.² By 1922, the building was slightly reoriented, lowered, and an addition was placed on the building's south end. Windows and door openings were changed on east façade and the southernmost porch area partially enclosed. In addition, the interior wood shelving and built-ins were added in the Store area.

During the late 1920s when Ryan was adapted for use as a hotel and tourist facility, a breezeway was added between this building and the Lobby/Dining Room and the southernmost part of building was converted into bathrooms.³ The building also began additional use as an office.⁴ Based on postal records, the post office remained functioning until 1930⁵; after which the post office pass-through was closed off.

The east, south, and north façades of the Store figured prominently in several episodes of *Death Valley Days*, filmed on location in the early 1950s. "Claim Jumpin' Jennie" (S1E14, Airdate: 31 Mar 1953), "Yaller" (S2E10, Airdate: 30 Jan 1954), "Twelve Pound Nugget" (S2E11, Airdate 30 Jan 1954), "Million Dollar Wedding" (S3E12, Airdate: 1 Mar 1955), and "Mr. Bigfoot" (S4E14, Airdate: 12 Mar 1956) were filmed on the porch of the Store. While the production design crew set-dressed the porch with props like barrels, buckets, benches, and signs (e.g. "US POST OFFICE"), the porch appears on screen much as it does today.

Since 1974, the building has functioned as a workshop and is colloquially known as "The Shop." Store shelving and post office cubbies remain.

² Ringhoff, Mary, *Life and Work in the Ryan District, Death Valley, California, 1914-1930: A Historic Context for a Borax Mining Community*, University of Southern California, Master's Thesis, 2012, 103; Pacific Coast Borax Company, "Buildings at Ryan, Calif.," July 1915 (site plan) with hand corrected insurance values October 1915, copy on file Death Valley Conservancy Archives; Boyer, Albert, "Store before they removed the stilts," ca. 1920, Boyer Collection, copy on file Death Valley Conservancy Archives.

³ Ringhoff, 146.

⁴ Motor coach passengers at Ryan, 1929, DV-RYA 44E, Death Valley National Park Archives.

⁵ Palazzo, Robert P., *Post Offices and Postmasters of Inyo County, California, 1866-1966*, Fernley, CA, Douglas McDonald, 2005, 37.

Ryan Historic District

Name of Property

Inyo, CA

County and State

1b. Hotel Complex: Lobby and Dining Room

The Lobby and Dining Room (originally the “Boarding House”) building is fronted by a projecting porch that runs discontinuously around from the north (primary) façade to the east and south façades; it is interrupted by the breezeway connecting the building to the Store. The porch has plain wood post and board supports and a tongue and groove wood floor atop boards and timbers of varying sizes. At its north end, the porch is enclosed with a low wood-framed wall and screens and three wood paneled screen doors with period-appropriate hardware are present. The main entry door has a small slot cut in it and the outline of a former catch box on its interior face, indicating use as a key drop. A wood vent with horizontal slats sits in the roof gable and a large reproduction sign reading “PACIFIC COAST BORAX COMPANY/20 MULE TEAM BORAX PRODUCTS” is affixed between the vent and the top of the porch roof. Remnants of knob and tube wiring are visible at the wall-roof interface, running into external conduit.

The east façade has no openings north of the breezeway; however, south of the breezeway, it has one five-panel wood door and six double-hung, multi-light wood windows with simple wood surrounds and sills. The east façade also contains a large chimney of mortared stone that extends up the wall and through the porch roof. The porch on this side is open, with tongue and groove floors over flush-laid boards, and simple wood posts supporting the roof (with open eaves and exposed rafters).

The south façade has a set of double wood doors, fully glazed with ten lights each, and another fully-glazed single wood door with ten lights. It also contains four double-hung windows. At the south façade, the porch is a floor of flush-laid boards only, with no roof or supports. This floor sits atop an open subterranean area showing the building’s post and pier foundation.

The building’s west façade directly connects to the kitchen building, so only the portion above that volume is visible. The roofline here has open eaves and exposed rafter tails, and two pop-up monitors/skylights with vents are visible in the west part of the roof.

The Lobby and Dining Room building’s interior is divided into two large, open rooms separated by a wall with a set of double wood doors. The east room (Lobby) served as a lobby and public gathering area during the camp’s Hotel Era (1928-1956), while the west room (Dining Room) served as a dining area during that time. The Lobby appears as it did during the Hotel Era, including tongue and groove floors, original light fixtures, a fireplace of mortared natural cobbles and brick, and a built-in wood counter and a hotel key cabinet, as well as a telephone on the north wall. The Dining Room retains its tongue and groove floors, stained wainscoting, original light fixtures, and two large wood skylights with obscure glass.

Chronology

According to period site plans and photographs, the Lobby/Dining Room was moved to Ryan from the Lila C in 1914-1915 and repurposed/renovated for use as a boarding house (dining space for workers and staff). The interior likely always had two open rooms, one for staff/management and one for workers. The locations of the original kitchen (and bathrooms/privies, if any) are unknown, however around 1921, a large kitchen addition was placed on west side (see following Kitchen description) and a smaller gabled concrete addition

Ryan Historic District

Inyo, CA

Name of Property

County and State

containing a reservoir/cooling plant placed on north façade.⁶ This concrete addition was later removed in 1927-1928; however, its foundation was unearthed during a waterline replacement project in 2016.

Also during the 1920s, a screened porch was added to the primary (north) façade, the open porch at south façade was screened, and the eastern portion of the porch was enclosed (Figure 3).⁷ During the hotel conversion, signage was amended on the primary façade, the eastern room was converted to a hotel lobby/communal space, an enclosed breezeway was added between this room and the Store/Post Office, the Dining Room was remodeled, and a fireplace and chimney were added to the Lobby (Figure 4).⁸ The skylights were added to the ceiling/roof in 1937.⁹

Like the Store, the north and south façades of the Lobby/Dining Room figured prominently in several *Death Valley Days* episodes. In addition to being seen in those episodes mentioned above, “The Bandits of Panamint” (S1E15, Airdate 7 Apr 1953) featured the southern façade of the building outfitted with the sign “OFFICE,” a prop still on the property today.

1c. Hotel Complex: Kitchen

The Kitchen is attached to the west wall of the Lobby/Dining Room building, and it includes three smaller sections: a main kitchen room accessible by a door from the Lobby/Dining Room, a projecting volume on the north (primary) façade containing a refrigeration/ice plant, and a shed-roofed volume off the west façade’s screened porch containing food storage areas.

The Kitchen building’s north (primary) façade is dominated by a projecting addition creating a shaded open area. The eastern portion of the Kitchen’s north façade is fronted by a recessed screened porch. A screened and partially enclosed porch also runs from the northmost projecting addition (the refrigeration/ice plant) to the rear of the building. The porch sits on a concrete slab over wood framing, a portion of which projects beyond the porch walls to support a small volume containing food storage rooms. The porch has built-in wood counters and work surfaces, and iron drains in the concrete floor. Visible wiring, some knob and tube run along the ceiling.

The south façade projects beyond the roof gable, with open eaves and exposed rafters. It has only one opening, a sliding wood multi-light window (six-next-to-six lights) with a simple wood surround and sill. The eastern portion of the façade has a smaller, more projecting volume sitting

⁶ “The Pacific Coast Borax Mine in Death Valley,” ca. 1925, Frank A. Schilling Collection LS_4391, James R. Parks Library and Archives; “Borax Mines at Ryan, California, ca. 1925,” Herbert Summer Collection P.42086, James R. Parks Library and Archives.

⁷ Motor coach passengers at Ryan, 1929, DV-RYA 44E, Death Valley National Park Archives; Willard, Stephen H., Overview of Ryan, 1928, DV-RYA 59, Death Valley National Park Archives.

⁸ Frasher, Burton, “Guesthouses, Death Valley View Hotel, Ryan Death Valley, Calif.” ca. 1930, Frashers Fotos, copy on file Death Valley Conservancy Archives; Gower, Harry P., “Correspondence with F.M. Jenifer re: update on ongoing construction at the Furnace Creek Inn, and notes on conversion of Ryan into the Death Valley View Hotel,” 6 October 1928, U.S. Borax Collection, Death Valley National Park Archives, 2558/01-1295; Motor coach passengers at Ryan, 1929, DV-RYA 44E, Death Valley National Park Archives.

⁹ Gower, Harry P., “Correspondence with F.M. Jenifer re: number of guests at all properties in March 1937, and request for repairs (including some at Ryan),” 30 March 1937, U.S. Borax Collection, Death Valley National Park Archives, 2558/01-1298; Gower, Harry P., “Correspondence with F.M. Jenifer re: repeated request for repairs,” 15 September 1937, U.S. Borax Collection, Death Valley National Park Archives, 2558/01-1298.

Ryan Historic District

Name of Property

Inyo, CA

County and State

on exposed posts above grade; the foundation of the rest of the façade is clad with vertical fascia boards. The roof gable is completely enclosed, with metal bent over junctions instead of exposed rafters and purlins as seen elsewhere.

The west façade is dominated by a screened and partially enclosed porch running from the northmost projecting addition (the refrigeration/ice plant) to the rear roof with open eaves and exposed rafters, supported by boards atop lower walls of board and batten. Screen is missing from portions of the porch, and a paneled wood screen door is present. The southmost part of the porch is enclosed with corrugated metal and has a double-hung, multi-light wood window with a simple wood surround and sill.

Inside, the main kitchen room appears as it did during the Hotel Era (1928-1956) and includes concrete floors, two large wood skylights, swinging doors to the Dining Room and the lunch counter (the northern addition), built-in shelves, cabinets, counters, two large galvanized metal sinks, a stove area with a metal hood, a large icebox manufactured by the Ft. Smith Refrigerator Works, and an improvised wood pot rack hangs from the ceiling near the stove.

Exiting the main kitchen room to the west and across the enclosed porch breezeway is two adjoined food storage rooms, a pantry and a “California cooler” cold food storage box both with insulated wood doors with heavy hardware. The refrigeration/ice plant addition at the north end of the building contains ice making machinery on lumber bases, electrical equipment, and ice forms used for creating ice blocks. To the south and sharing a wall with the ice plant is the refrigerated food storage room. It has a finished interior of stained horizontal wood boards over thick insulated walls. The room has built-in wood shelving and some metal rods, from which a meat hook hangs. Refrigeration piping and a condensate pan/drain are at the ceiling.

Chronology

Based on historical documents, around 1921, the Kitchen was added to west side of the Hotel Lobby/Dining Room when it was a boarding house. It may have been moved rather than built new here. When the refrigeration/ice plant was added, it had a smaller wood cooling tower projecting from its north façade. The rest of the Kitchen building’s north façade had a recessed screened porch as seen today. The screened porch and food storage rooms appear to have been original to the Kitchen building.¹⁰

The Kitchen, refrigeration/ice plant, and food storage rooms were fully operational during Ryan’s mining and hotel eras. During the mining era, the Kitchen insured that the “board” in the room and board portion of the miners’ salary was provided. During the Hotel Era, the Kitchen provided sustenance to hotel guests, who were faced with few dining options in the remote area. The Dining Room and Kitchen continued to operate after the Hotel ceased full-time operations and was active into the 1950s.

¹⁰ Ringhoff, 167; “The Pacific Coast Borax Mine in Death Valley,” ca. 1925, Frank A. Schilling Collection LS_4391, James R. Parks Library and Archives; Motor coach passengers at Ryan, 1929, DV-RYA 44E, Death Valley National Park Archives; Overview of Ryan, southwest view, ca. 1921, TICOR/Pierce Collection, CHS-14222, USC Digital Archive 2004, California Historical Society.

Ryan Historic District

Name of Property

Inyo, CA

County and State

Condition

The Hotel Complex is structurally sound and retains most of its historic materials. Its post and pier foundation requires some stabilization, especially along the southern portion of the volume. In 1995, an elastomeric coating was added to the corrugated metal roof; while not historically accurate (the roof was unpainted), the coating has prevented potential water damage.

2. Warehouse

Date: 1924

**Property Types: 3 Residential, 4 Commercial and Community, 6 Tourism,
7 Architecture**

Photos: 16-17

The Warehouse is a two-story building with a rectangular footprint (28 ft by 37 ft), sitting at the excavated foot of an south-facing slope and is directly north of the Hotel Complex. It has a raised foundation of concrete poured in place, and wood-framed construction with the building's exterior walls and roof clad with corrugated metal. Its doors and windows have exterior and interior simple wood surrounds, and the windows have sills. All door and window hardware appears to be original, or in some cases, period-appropriate. A portion of the 18-inch gauge track (ties and one rail) leading to the camp's incinerator (Resource 32) is visible immediately to the south of the Warehouse building.

The building's east façade has a set of wood stairs with open risers, wood plank treads, and two wood plank landings, one at each story; the stairs terminate at the open second-story balcony on the north façade. Below the first landing is a set of concrete steps leading down into a well with a single wood basement access door in the concrete basement wall. The basement has concrete floors, board-formed concrete walls, and a ceiling of exposed wood beams below panels of cement plaster over Hy-Rib steel lath. At the first landing are three five-panel wood doors and one double-hung, single-light wood window. The doors access three rooms: one office, one bedroom, and a bathroom. The façade's second story contains a single-panel wood door that is no longer accessible as the flooring from the stair landing is missing (only the framing is present, and the flooring is now stored in the basement). The door accessed seven rooms arrayed around a central corridor. Six bedrooms line the corridor (three on each side), and a bathroom is at the west end. Each room has a built-in wood cabinet/wardrobe, some in better condition than others, and a row of coat hooks. Bureaus, chairs, and in some cases, beds are present.

The south façade has a concrete ramp that runs up to the west from grade, ending in a concrete landing at the first story. The raised concrete ramp/foundation has two rectangular openings with wood framing and a partial lining of galvanized metal. The building's first story contains a set of double doors (modern replacements), each with five panels; the opening has a wide wood surround which has been recently repainted. The doors lead to a large open storage room at the west end of the building. The story also contains a single double hung, single-light wood window with horns. The second story contains three identical windows of the same type.

The west façade exhibits a gap in the concrete foundation that has been filled with dry-laid natural rocks in no discernable configuration. The first story contains two horizontal wood

Ryan Historic District

Name of Property

Inyo, CA

County and State

hopper windows. The second story contains an identical window. A wood vent with horizontal slats is present in the gable end, and one vertical metal pipe runs up from the foundation and pierces the roof.

The north façade's first story directly abuts the hillside and is not easily visible from the exterior; from the interior, two windows can be seen. The western portion of the façade contains a single wood, multilight window (visible from the storage room). The eastern portion contains a single double-hung, single light wood window with horns (visible from the first-floor bedroom at the building's northeast corner). The second story contains a wood-framed balcony extending from the building to the hillside, sheltered by an extension of the building's gabled roof, which has open eaves and exposed rafters. The balcony has tongue and groove floors and simple wood post and board supports. The façade at the second story contains three windows identical to those on the other façades.

Chronology:

According to historical documentation and an inscription reading "MAR 22/A.D./1924" found in the basement, the building was constructed in 1924 as a kitchen staff quarters and supply house. The balcony on the west façade was screened. During the Hotel Era, the Warehouse was used by the Death Valley View Hotel as storage, office space, and employee housing (seven double rooms and showers).¹¹

Condition

The Warehouse is structurally sound and retains most of its historic materials. In 1995, an elastomeric coating was added to the sheet metal roof; while not historically accurate (the roof was unpainted), the coating has prevented potential water damage. The Warehouse has been recently brought online with electrical power, water service, and sewer.

3. Powerhouse

Date: 1924, 1928-1935, pre-1942

Property Type: 5 Infrastructure, 7 Architecture, 8 Location Filming

Photos: 18-19

The Powerhouse is a one-story building with an irregular footprint (roughly 17 ft by 46 ft); it consists of a primary large volume with a cross-gabled roof and a smaller volume at the west end with an open gable roof. The entire building is wood-framed, with corrugated metal siding and roofing, and it sits on a concrete pad foundation. The roofs of both volumes have slight overhangs with open eaves and exposed wood rafters. A large opening has been cut out of the gable peak of the main volume, and a tall smoke stack pierces the eastern side of the roof, anchored by guy wires. North of the building are several concrete pads and machinery mounts, and a square depression with a wood collar is present to the south.

¹¹Gower, Harry P., "Death Valley View Hotel, Ryan, Calif.," 20 March 1946, U.S. Borax Collection, Death Valley National Park Archives, 2558/01-1098; Warehouse, ca. 1925, Schilling Collection, Eastern California Museum.

Ryan Historic District

Inyo, CA

Name of Property

County and State

The building's north (primary) façade has a small shed-roofed projection with a horizontal window opening in the eastern portion; the window opening has no sash but retains a wood surround and sill. A single industrial light sconce sits above the window opening. To the east of the projection is a window opening with wood surround and sill but no sash; to the west of the projection is a large opening with a segmental arch and no doors, leaving the interior open. To the west of the opening is the north façade of a small addition volume; it contains double wood doors with strap hinges, a single knob, and a wood surround. To the west of the doors is a single hung multi-light wood window (six-over-six) with wood surround and sill.

The building's east façade contains a small gable with a wood vent and the end of an exposed I-beam; the ends of two wood beams project from the façade below the vent. A section of gutter runs across this façade. The façade also contains two windows; the south window opening contains only an upper sash (six light) with no glazing, and it is not operable. The north opening has no sash. Both openings retain remnant wood surrounds and sills.

The south façade contains two window openings, both with no sashes and with remnant wood surrounds and sills, and a single wood, five-panel door with wood surround. A wood beam with remnants of electrical wiring projects from the gable, and a metal pipe with elbow projects just above and east of the door. This façade exhibits an area of corrugated metal patching which suggests an opening enclosure, but there is no sign of this on the building's interior.

The west façade contains a single window opening in the small addition volume, with remnant wood surround and sill but no sash. A round hole sits above the window opening. The west façade of the building's larger volume contains a wood vent in the gable, with an exposed I-beam above the gable and two projecting wood beam ends below it.

The building's interior has an exposed concrete pad floor with open channels that expose the dirt floor below. The walls are exposed wood framing supporting the corrugated metal exterior, and the roof system is exposed wood trusses. The doors have simple wood surrounds (except for the large arched opening), and the windows have simple wood surrounds without sills. The south wall contains a tall wood ladder and wood cabinetry. Extant machinery (engine and flywheel) and concrete mounts are present, with a large metal pipe extending through the roof. The interior side of the south façade's door has "60" stenciled on it, and the interior side of one of the north façade's doors has a metal "2" nailed to it; one or both of these may indicate re-use of doors from another building in camp.

Chronology

The Powerhouse was constructed in 1924 and replaced a 1918 powerplant at the same location. The building held three generators driven by Fairbanks Morse diesel engines, which were used as the primary power source at Ryan. Since Ryan and the nearby Upper Biddy McCarthy Mine (Resources 46-53) relied on electric power during their operations, the Powerhouse was an integral feature of the historic district. In 1928-1935, the building was significantly truncated (northern part removed) and the smaller gabled volume may have been moved from the north façade to the west façade at this time, and rotated 90 degrees to attach to the larger volume at its

Ryan Historic District

Inyo, CA

Name of Property

County and State

gable end.¹² After 1935 but before 1942, a shed-roofed addition was placed on the north façade.¹³

The Powerhouse appeared in the *Death Valley Days* episode “The Bandits of Panamint” (S1E15, Airdate 7 Apr 1953), where it was shown operating with smoke billowing from the smokestack. It continued to provide electricity to the Ryan Historic District until the 1960s when line power was installed to Ryan (Figure 5).

Condition

The Powerhouse is structurally sound and retains most of its historic materials. Several windows are missing their sashes and lights; however, the sashes have been retained and are awaiting repair. Most of the original generating equipment is missing with the exception of one of the Fairbanks Morse engines. In 1995, an elastomeric coating was added to the corrugated metal roof; while not historically accurate (the roof was unpainted), the coating has prevented potential water damage. The ventilation cupola was removed in the 2000s due to its poor condition and is stored in the building.

4. Storage Adit 1

Date: 1920-1921

Property Type: 4 Commercial and Community

Photo: 16, 20

Storage Adit 1 is the largest of the storage adits and is excavated into a western hill bordering the camp. It is oriented east-west with an eastern facing opening and is centrally located across from the Hotel Complex. Storage Adit 1 is fronted by a single corrugated metal and wood door measuring 5 ft 3 in wide by 9 ft high. A wooden floor present in the first compartment of the adit extends beyond the door and out into the excavated threshold of the adit where it meets the incinerator trackway (Resource 32).

The adit is comprised of three timber-lined rectangular shaped compartments. The first compartment nearest the opening measures 6 ft 8 in across by 17 ft deep by 8 ft 4 in high and is entirely timber-lined with square-set style bracing and 2x12 lagging. This section has a wooden floor and shelves along each side. The second or main chamber of the adit is separated by a steel double door and measures 13 ft 4 in wide by 46 ft 4 in deep. The ceiling height is 8 ft 9 in. Three 2 ft 7 in shelves are set along the northern side of the main chamber. Similarly configured shelving is also found on the southwestern side of the chamber. The main chamber is timber-lined with a rough wooden floor. The third compartment is the smallest at 5 ft 9 in wide by 4 ft deep and is an off shoot of the main chamber but separated by a decorative wooden door. It is unique in that it is lined by corrugated metal on two sides, and it contains shallow shelving.

¹² Willard, Stephen H., Overview of Ryan, 1928, DV-RYA 59, Death Valley National Park Archives; Ryan Overview, ca. 1965, DV-RYA 45A, Death Valley National Park Archives; Pacific Coast Borax Company, “Buildings at Ryan, Calif.,” February 1935 (site plan) with hand-corrected insurance values December 1941, copy on file Death Valley Conservancy Archives.

¹³ Pacific Coast Borax Company, “Buildings at Ryan, Calif.,” revised to February 1942 (site plan and building list), copy on file Death Valley Conservancy Archives.

Ryan Historic District

Name of Property

Inyo, CA

County and State

The storage adit is ventilated via a 3 ft square ventilation shaft, which extends from the main chamber up to the surface (at a height of 30 ft). The air vent is capped on the surface with a 5 ft by 5 ft by 6 ft tall cupola, with louvered wood on all four sides. A pyramidal shaped corrugated metal roof is attached to the top of the structure. This cupola is visible in early photos of Ryan and is one of the prominent features of the Ryan Historic District landscape.

Chronology

Photos help date the storage adit to approximately 1920-1921.¹⁴

Condition

Functioning knob and tube wiring provides lighting in Storage Adit 1 and the adit continues to be used for storing lumber and construction materials.

5. Storage Adit 2

Date: 1919

Property Type: 1 Transportation, 4 Commercial and Community

Photo: 21

Storage Adit 2 is an excavated rectangular room located in the north-facing cliff underneath Poison Rock. The adit is enclosed by double swinging corrugated metal and wood doors each measuring 4 ft 6 in by 8 ft. At 12 ft wide and 17 ft deep, the adit is timber-lined with some bedrock visible on the ribs (sides) and face (back). Wooden shelving flanks both sides and a modern wooden part sorter bin is located at the back. Corrugated steel retains loose rock at the back and sides and the adit continues above the back part of the sorter bin by at least 7 ft.

Chronology

The 1912 Cadillac touring car with flanged wheels (Resource 37) was housed in this adit and on a 1919 insurance map the adit is demarked as a “garage.”¹⁵ It has had multiple uses over the years and is labeled as a “Paint Shop” on a 1942 map, “Motor House No. 9” on a map from 1947, and an “Engine House” on a 1952 map.¹⁶

Condition

The adit continues to be used for storing pipe, tools, and hardware. It has changed little through the years (Figure 14).

6. Storage Adit 3

Date: ca. 1919

¹⁴ Overview of Ryan, southwest view, ca. 1921, TICOR/Pierce Collection, CHS-14222, USC Digital Archive 2004, California Historical Society.

¹⁵ Pacific Coast Borax Company, “Buildings at Ryan, Calif.,” June 1919 (site plan) with hand-corrected insurance values March 1920, copy on file Death Valley Conservancy Archives.

¹⁶ Pacific Coast Borax Company, “Buildings at Ryan, Calif.,” February 1935 (site plan); Pacific Coast Borax Company, “Buildings at Ryan, Calif.,” revised to February 1942 (site plan and building list); Pacific Coast Borax Company, “Buildings at Ryan, Calif.,” March 1947 (site plan), March & McLennan Engineering Dept., Los Angeles, copy on file Death Valley Conservancy Archives; Pacific Coast Borax Company, “Buildings at Ryan, Calif.,” January 1952 (site plan), Behrendt-Levy Insurance Agency Engineering Dept., Los Angeles, copy on file Death Valley Conservancy Archives.

Ryan Historic District

Name of Property

Inyo, CA

County and State

Property Type: 4 Commercial and Community

Photo: 21

This storage adit is located adjacent to Storage Adit 2 in an eastern rock face. It is smaller than Storage Adit 2, measuring 5 ft 5 in wide by 6 ft high by 6 ft deep. One hinged wooden door partially covers the 3 ft 6 in by 5 ft 5 in timber collared opening (which originally had two doors). The adit is partially timber-lined with wooden shelves on both sides.

Chronology

Unlike Storage Adit 1 and 2, the adit does not appear on any insurance maps but appears to be contemporaneous with Storage Adit 2, ca. 1919.

Condition

The adit door is missing however, the adit is structurally sound. It continues to be used for small storage.

7. Powder Magazine

Date: 1919

Property Type: 2 Mineral Extraction

Photo: 2, bottom right

The Powder Magazine is a north-south trending adit with western and eastern branches excavated into the same hill as Storage Adit 1 that forms the western boundary of the camp with a north-facing opening. The adit measures 4 ft wide by 6 ft high and extends 33 ft where it splits into two branches. The western branch measures 7 ft wide by 7 ft high and runs for 21 ft. The eastern branch is 6 ft wide by 6 ft high and extends an additional 20 ft into the hill. The main adit has an arched back (or top) and is enclosed by a corrugated metal and wood door. Iron rail curves into the adit from the incinerator trackway but disappears about 10 ft from the magazine opening. Wooden rails are found in place inside of the adit extending to the wye, or branching. The adit is wired for lighting.

Chronology

The Powder Magazine is labeled as such on a 1919 site plan and follows the typical design for the separation of blasting caps and explosives.¹⁷

Condition

The Powder Magazine is structurally sound and is largely unchanged from historic times.

8a-b. Schoolhouse and Yard

Date: 1920-1921

Property Type: 4 Commercial and Community, 7 Architecture

Photos: 22-23, 40

¹⁷ Pacific Coast Borax Company, "Buildings at Ryan, Calif.," June 1919 (site plan).

Ryan Historic District

Name of Property

Inyo, CA

County and State

8a. Schoolhouse

The Schoolhouse is a small one-story building (18 ft by 22 ft) with a generally rectangular footprint and form. It has a wood frame with no foundation, and corrugated metal siding and roofing. The corrugated roof is front-gabled, with closed overhanging eaves and a small pyramidal hipped-roof cupola (with operable bell) at the south end of the gable peak. The cupola containing a functional bell has corrugated metal roofing, an open wood balustrade, and a flagpole affixed to the roof peak. A wood vent with horizontal slats sits under the gable peak at either end of the building, with a wood surround and sill. The building has a wood baseboard at grade affixed to the metal siding. All of the trim is painted green and white; the corrugated siding has a light wash of white paint.

The building's south (primary) façade is symmetrical, featuring a central entrance with a projecting porch. A wood vent sits at the top of the façade, in the gable end. The porch has a front-gabled roof, wood post supports, and a wood handrail. Its landing is wood tongue and groove and a gooseneck light fixture is affixed to its gable. Below the porch is a single, four-panel wood door with historic hardware and a wood surround. It is flanked by two single-hung, multi-light wood windows (six-over-six) with wood surrounds and sills.

The west façade contains four windows of the same type as the south façade.

The north façade has no openings aside from the same wood vent as seen on the south façade; it appears that two window openings have been covered with corrugated metal siding. The east façade has no openings.

The building's interior is a single room with a wood tongue and groove floor and walls and ceiling of wallboard. The walls are covered with wallpaper depicting children at play. The north wall contains built-in wood casework flanking and framing a chalkboard. It is faced by several rows of desks. A second chalkboard is on the east wall, and it appears that one next to it has been removed. A vent hole for a stove (removed) sits in the ceiling's southwest corner, and a hatch for attic access is in the ceiling above the primary entry.

8b. The Schoolyard

The schoolyard is a roughly oblong site with the dimensions of 84 ft north/south by 80 ft east/west. It is enclosed by the natural upslope to the east, rock retaining wall to the south, a three-rail wooden fence to the west with a gate opening, narrows to the north following the natural topography, and is partially bounded by another rock retaining wall. The Schoolhouse sits in the eastern portion of the yard. The yard contains three play apparatus: a carousel, teeter-totter, and swing. The carousel is constructed of steel (painted green) and white boards on which to sit. It is a hexagon shape and measures almost 9 ft across. The carousel sits on a dry-laid rock-retained platform about 12-16 in above the rest of the yard. It still rotates. A teeter-totter, constructed of steel and wood, sits in the middle of the yard adjacent to the Schoolhouse door. It is painted green and its board a 1x12 18 ft in length is a modern replacement. It is 3 ft high at its fulcrum. The swing is constructed of wooden posts set perpendicular into the ground 6 ft apart and is connected at the top by a post with two braces on either side. The tall posts are supported by wooden braces (two on each side) at 45-degree angles. Two cables are suspended from the

Ryan Historic District

Name of Property

Inyo, CA

County and State

upper cross post by eye bolts for the “chain” of the swing and a 2 ft by 8 in wooden board, painted green, forms the seat. The playground equipment is original to the schoolyard and dated photos suggest it was in use by the early 1920s.¹⁸ A flagpole, located adjacent to the carousel on the same level, is also original.

A footpath connects the Schoolhouse to the remains of 6 ft by 6 ft privy in the north section of the schoolyard. The privy has evidence of plumbing and likely held a toilet. The privy has a rock-retained ramp up to it and part of it is capped with concrete. The schoolyard also had a water faucet, as there is evidence of a drinking spout at the outside southwest corner of the Schoolhouse. The privy area contains sparse artifacts with some glass, concrete, ceramic sewer pipe, wire, and intact plumbing.

There are a few artifacts present on the surface of the schoolyard including sparse brown bottle glass, bone, nails, lumber, metal, ceramics, electrical fixture and lighting parts, patent medicine bottle fragments, pipe, and pipe fittings. There are possibly subsurface artifacts present as well.

Chronology

In 1920-1922, the Schoolhouse was moved to or constructed on its current site at Ryan (Figure 6). Assistant Superintendent Harry Gower stated the school was a remodeled barn but he did not specify where it came from.¹⁹ It was in use until the late 1920s; in fact the latest dated photograph of a school group in the schoolyard is 1927.²⁰ It was not in use during the Hotel Era.

Condition

The Schoolhouse is structurally sound and contains its historic materials. It has been preserved since the 1920s and is in good condition. While the plumbed privy is missing its walls, its foundation is undisturbed. The playground equipment is in working order. In 1995, an elastomeric coating was added to the Schoolhouse’s corrugated metal roof; while not historically accurate (the roof was unpainted), the coating has prevented potential water damage. It was recently brought online with power.

9. Boiler House

Date: 1920

Property Type: 5 Infrastructure, 7 Architecture

Photo: 24

The Boiler House is a small one-story rectangular building (12 ft by 15 ft) located downslope to the west of the two bunkhouse buildings. It has a wood frame with a concrete slab on-grade foundation, an open gabled roof, and corrugated metal roofing and siding. A tall metal smoke stack emerges from the west end of the gable peak and is anchored with guy wires to the hillside.

The building’s south façade contains a single corrugated metal and wood door with no surround. The north façade contains a single horizontal window with a fixed six-light sash and a wood

¹⁸ Boyer, Albert, “School Play Yard,” ca. 1921, Boyer Collection, copy on file Death Valley Conservancy Archives.

¹⁹ Gower, Harry P., “I Remember Ryan,” *U.S. Borax Pioneer* Vol. 6 No. 12, December 1965.

²⁰ “1927 Ryan Elementary School,” copy on file Death Valley Conservancy Archives.

Ryan Historic District

Name of Property

Inyo, CA

County and State

surround with sill. There is an opening at grade, and a large metal tank sitting on a wood structure adjacent to it.

The east façade contains a single horizontal window with a fixed six-light sash and a wood surround with sill. This façade has several pipe penetrations and the remnants of connections to power lines. The building's west façade has no openings.

The building's interior is a single room with a concrete slab floor, unfinished walls of exposed wood framing supporting the corrugated metal exterior, and exposed wood roof beams. The windows have simple wood surrounds with sills, while the door has no surround. A boiler sits on a metal mount in the interior, with roof penetration for the large smoke stack, and a smaller tank is adjacent to the west wall. Electrical panels and switches are present on the walls, and pipes connect the various pieces of boiler equipment.

Chronology

In 1920, the Boiler House was constructed, along with the two bunkhouses and a shower house (Figure 6). The building held an oil-fired boiler that generated steam heat for the bunkhouses, Shower House, Hospital, and Houses 2 and 3. A solar powered water heater was added in between the Boiler House and Shower House at the same time and may have been connected to either building. The Boiler House was still in use by the Death Valley View Hotel to heat the bunkhouses and Hospital as late as 1946.²¹ However, after 1946 use ceased and the radiators were removed (boiler and piping remain in place).

Condition

The Boiler House is structurally sound and retains most of its historic materials. In 1995, an elastomeric coating was added to the corrugated metal roof; while not historically accurate (the roof was unpainted), the coating has prevented potential water damage.

10. Bunkhouse 1

Date: 1919, 1927

Property Type: 3 Residential, 6 Tourism, 7 Architecture

Photos: 25-27

Bunkhouse 1 is a two-story wood-framed building with a long rectangular footprint, (30 ft by 114 ft), a concrete foundation, and painted stucco walls (applied over Hy-Rib steel lath). Its doors and windows have exterior and interior wood surrounds, with wood thresholds and windowsills. The corrugated metal roof is side-gabled, with overhanging open eaves and exposed rafters. It extends over a wraparound wood balcony and full-length concrete slab porches on the east and west façades. The porches and balcony have simple wood post supports and wood handrails; some of the balcony supports are in a "Y" form with angled board supports nailed to the vertical posts. The balcony has a tongue and groove floor, with an underlying wood plank and beam structure visible from the porch below. The porches and balcony were originally screened.

²¹ Gower, "Death Valley View Hotel, Ryan, Calif.," 20 Mar 1946.

Ryan Historic District

Name of Property

Inyo, CA

County and State

Bunkhouse 1 Exterior

The building's south façade has a set of exterior wood stairs with open risers, wood plank treads, and simple wood post supports; it leads to an extension of the wood balcony across the entire façade and continues east past the building to the next terrace up slope (the DVRR grade level). The balcony has wood handrails but no roof at this façade. The first and second stories each contain a centered single-panel wood door. A modern industrial gooseneck light fixture sits above the second story door. The gabled roof does not overhang this façade but is basically flush with simple bargeboards.

The north façade has a set of exterior wood stairs with open risers, wood plank treads, and simple wood post supports, running up to a door at the second story. The first story contains a single, partially glazed, three-panel wood door. The gabled roof has a slight overhang at this façade, with exposed board purlins. A vertical plumbing vent pipe extends the full height of this façade and penetrates the roof.

The east and west façades have identical door and window patterns on the first and second stories; the doors open onto the porches and balcony. Each story contains 11 five-panel wood doors and 11 double-hung, multi-light (two-over-two) wood windows, representing one window and one door for each of the interior rooms. The only difference between the doors is the metal number affixed to each one; the east façade's numbers are odd, while the west façade's numbers are even. The east façade's first story contains rooms 201-221 and the second story contains 101-121; west façade's first story contains rooms 202-222 and the second story contains 102-122. The second story of both façades is open in the frieze area between the top plate of the walls and the bottom of the roof assembly, exposing vertical wood roof members.

Bunkhouse 1 Interior

Bunkhouse 1 contains forty-two rooms and two central corridors (one on each floor). Each central corridor is lined with bedrooms on either side, with bathrooms at the ends, and one open communal room on each floor. The second floor also contains a linen room. The corridors have wallboard ceilings and concrete floors; the floor has remnant linoleum rugs adhered to the concrete. Their walls are troweled/brushed, painted plaster. Four period-appropriate ceiling light fixtures are present in each corridor and an electrical panel sits in each east wall. The bedrooms, bathrooms, and linen room are accessed via five-panel wood doors off the corridor; all interior doors have simple wood surrounds and metal numbers.

The bedrooms and open rooms (referred to as mini-lobbies) also have doors to the exterior porches and balconies. All windows have simple wood surrounds and sills. The first floor contains eighteen bedrooms, two bathrooms, and one mini-lobby accessed from its corridor; the corridor has only remnants of its linoleum runner and modern illuminated exit signs have been affixed above the doors at the corridor ends. All of the first-floor bedrooms have concrete floors, wallboard ceilings, plaster walls, and hanging ceiling light fixtures. Each room also has a wall-mounted sink and towel bar, and a built-in wood cabinet/wardrobe. The mini-lobby has the same finishes as the other rooms, with a single ceiling light fixture but no sink or cabinet.

Ryan Historic District

Inyo, CA

Name of Property

County and State

The second floor contains seventeen bedrooms, two bathrooms, one mini-lobby, and one linen room accessed from its corridor. The rooms have the same basic layout, finishes, and fixtures as on the first floor: wallboard ceilings, plaster walls, concrete floors, ceiling light fixtures, and bedroom sinks and cabinets. This floor's open room has a linoleum rug. The bathrooms are the same as on the first floor, with the men's room at the building's northwest corner and the women's at the southeast. The linen room is at the northeast end of the corridor; it has built-in wood cabinets and shelving.

Chronology

In 1919, Bunkhouse 1 was constructed containing forty-four double rooms to hold two miners to each room (Figure 6). Other buildings constructed at this time or shortly after included Bunkhouse 2, the Boiler House, and the Shower House.²² These new miners' living quarters replaced previous iterations of company dormitories, although very little is known about those buildings. It was likely ready for occupancy, including a steam heating system, in January 1920.

During the conversion of the camp to the Death Valley View Hotel in 1927, the interior of Bunkhouse 1 was drastically remodeled to house thirty-five guest rooms.²³ Harry Gower describes "Guest House No. 1" as a "two story stucco building 44 x 110 feet including 36 double rooms opening into interior hallway leading to bath and wash rooms at each end of the building also opening onto 4 long screened porches running the length of the building...Each room has hot and cold running water and steam heat."²⁴

As Gower reported, four end rooms were converted to bathrooms and sinks and towel bars were installed in the guest rooms. The original layout did not have indoor plumbing as the Shower House provided for all restroom needs. In addition, two mini-lobbies were added by removing/moving walls and enlarging the opening from the corridor. One room was converted to linen closet and interior walls were covered with textured plaster. Built-in wardrobes may have also been added during this time.

Exteriorly, the stairs were reconfigured and landings were added. In addition, exterior paint, a light ochre color (still existing in several areas), was added to the body of the building while the trim remained its characteristic green hue.

Condition

Bunkhouse 1 is structurally sound and retains many of its historic materials. In 1995, an elastomeric coating was added to the corrugated metal roof; while not historically accurate (the roof was unpainted), the coating has prevented potential water damage. The stairs, landing, balcony, and railings on the southern façade were reconstructed in 2017 with design and

²² Ringhoff, 128-129; A.B. Todd, Construction Engineer, "Pacific Coast Borax, Lodging Houses for 176 Men, Ryan, Calif.," 15 December 1918, No. 403 Building Plan, copy on file Death Valley Conservancy Archives; Pacific Coast Borax Company, "Buildings at Ryan, Calif.," June 1919 (site plan); "Many Miners Go to Death Valley," *Reno Evening Gazette*, 12 November 1920.

²³ Ringhoff, 146; Boyd, Julian, "Annual Report for Ryan, 1926-27," 19 Oct 1927, U.S. Borax Collection, Death Valley National Park Archives, 2558/01-1737.

²⁴ Gower, "Death Valley View Hotel, Ryan, Calif.," 20 Mar 1946. Gower's reporting of thirty-six rooms instead of thirty-five is likely a mistake as he may have been considering the linen closet to be a guest room.

Ryan Historic District

Name of Property

Inyo, CA

County and State

materials to match original components. The building is connected to power.

11. Bunkhouse 2

Date: 1919, 1927

Property Type: 3 Residential, 6 Tourism, 7 Architecture

Photos: 28-30

Bunkhouse 2 is a two-story wood-framed building constructed at the same time as Bunkhouse 1, with a similar exterior. It has a long rectangular footprint (30 ft by 114 ft), a concrete foundation, and painted stucco walls (applied over Hy-Rib steel lath). Its doors and windows have exterior and interior wood surrounds, with concrete thresholds and wood windowsills. The corrugated metal roof is side-gabled, with overhanging open eaves and exposed rafters. It extends over wood balconies and full-length concrete slab porches on the east and west façades. The balconies on this building do not wrap around to meet on the south façade as they do on Bunkhouse 1. The porches and balconies are of equal depth on the east and west façades, and each one contains two period-appropriate ceiling light fixtures. The porches and balconies have simple wood post supports and wood handrails; some of the balcony supports are in a “Y” form with angled board supports nailed to the vertical posts. The balconies have tongue and groove floors, with underlying wood plank and beam structures visible from the porches below. The porches and balconies were originally screened.

Bunkhouse 2 Exterior

The building's south façade has a set of exterior wood stairs with open risers, wood plank treads, and simple wood post supports; the stairs lead to a partial-width balcony providing access to a door at the second story and connecting to the balcony on the east side of the building. The stairs continue east past the building to the next terrace up slope (the DVRR grade level). The balcony at this façade has wood handrails but no roof. The first and second stories each contain a partially glazed three-panel wood door in the center of the façade. A modern industrial gooseneck light fixture sits above the second story door. The gabled roof does not overhang this façade, but is basically flush with simple bargeboards.

The north façade has a set of exterior wood stairs with open risers, wood plank treads, and simple wood post supports, running up to a partially glazed, three-panel wood door at the second story. The first story contains a five-panel wood door. The gabled roof has a slight overhang at this façade, with exposed board purlins.

The east and west façades have identical doors and windows opening onto the porches and balconies, but the patterns are slightly different at each façade. The doors have numbers on metal tags affixed to each one; the east façade's numbers are odd, while the west façade's numbers are even. The east façade's first story contains rooms 401-411 and the second story contains 301-311; the west façade's first story contains rooms 402-412 and the second story contains 302-312. The second story of both façades is open in the frieze area between the top plate of the walls and the bottom of the roof assembly, exposing vertical wood roof members.

The east façade's first and second stories have identical door and window patterns. Each story

Ryan Historic District

Name of Property

Inyo, CA

County and State

has six five-panel wood doors and twelve double-hung windows of two types: six are taller sashes (two-over-two lights), and six are smaller sashes (two-over-two lights) with horns. The west façade's first and second stories have identical door and window patterns. Each story has six five-panel wood doors and thirteen double-hung windows of two types: seven are taller sashes (two-over-two lights), and six are smaller sashes (two-over-two lights) with horns.

Bunkhouse 2 Interior

Bunkhouse 2 contains twenty-four guest rooms with en-suite bathrooms and two closets accessed via two central corridors (one on each floor). Each central corridor is lined with guest rooms on either side, with one linen closet on the east side. The corridors have concrete floors and wallboard ceilings. Their walls are troweled/brushed, painted plaster. The guest rooms and closets are accessed via five-panel wood doors off the corridor; all interior doors have simple wood surrounds and metal tags with room numbers. The rooms also have doors accessing the exterior porches and balconies. All windows have simple wood surrounds and sills.

The first floor contains twelve guest rooms with bathrooms, and one closet with built-in cabinetry that includes a sink. The guest rooms are nearly identical, except for two pairs of rooms at the south end which are connected to each other via adjoining interior five-panel wood doors. All of the first-floor bedrooms have concrete floors, plaster walls, and wallboard ceilings, and hanging ceiling light fixtures. Each room has an unpainted area in the center of its painted concrete floor where a linoleum or textile area rug would have been. Each room has a built-in wood cabinet/wardrobe, some of which have handles over original Eagle locks. All of the first floor en-suite bathrooms are accessed via five-panel wood doors and have concrete floors, plaster walls, and wallboard ceilings with ceiling-mounted light fixtures; each contains a toilet, wall-mounted sink, two towel bars, a metal toilet paper holder, and a glass shelf with metal brackets; a few also have metal soap and cup holders. Each bathroom also has a shower in a solid cementitious plaster-finished enclosure that does not extend all the way to the ceiling.

The second floor also contains twelve guest rooms with bathrooms, and one linen closet with built-in cabinetry and a sink on the east side of the corridor (between rooms 303 and 305). Its room configurations and finishes are identical to those on the first floor. The two pairs of rooms with connecting doors are rooms 302 and 304 on the west side, and 301 and 303 on the east side.

Chronology

Bunkhouse 2 was constructed in 1919 along with Bunkhouse 1 and contained forty-four double rooms (Figure 6).²⁵ As with Bunkhouse 1, it replaced previous worker housing and was constructed to accommodate as many as eighty-eight single miners. As the building did not have interior plumbing, the Shower House located between the Bunkhouse 1 and 2 provided washroom facilities.

In 1927, Bunkhouse 2 was converted to the Death Valley View Hotel's Guest House 2 with

²⁵ Ringhoff, 128-129; A.B. Todd, Construction Engineer, "Pacific Coast Borax, Lodging Houses for 176 Men, Ryan, Calif.," 15 December 1918, No. 403 Building Plan, copy on file Death Valley Conservancy Archives; Pacific Coast Borax Company, "Buildings at Ryan, Calif.," June 1919 (site plan); "Many Miners Go to Death Valley," *Reno Evening Gazette* 11 Nov 1920.

Ryan Historic District

Inyo, CA

Name of Property

County and State

twenty-four guest rooms.²⁶ In 1946, Harry Gower described "Guest House No. 2" as a "two story stucco building 44 x 110 feet including 24 double and triple rooms, each with private bath. These rooms open onto screened porches and also into the interior hallway running the length of the building...Steam heat and hot water delivered to every room from nearby heating plant."²⁷

In contrast to Bunkhouse 1, the guest rooms were combined and reconfigured to include attached bathrooms with showers: walls were removed and door and window patterns changed (smaller windows for the bathrooms). Two of the rooms were converted to linen closets, interior walls were covered with textured plaster, and built-in wardrobes may have been added at this time. As with Bunkhouse 1, exterior stairs were reconfigured and landings were added. Also, the body was painted a light ochre while the trim remained green.

Condition

Bunkhouse 2 is structurally sound and retains most of its historic materials. Sometime after 1980, the landing/balcony on south façade was partially dismantled.²⁸ In addition, in 1995 an elastomeric coating was added to the corrugated metal roof; while not historically accurate (the roof was unpainted), the coating has prevented potential water damage.

12. Hospital

Date: 1914, 1919, 1924, 1927

Property Type: 3 Residential, 4 Commercial and Community, 6 Tourism, 7 Architecture

Photos: 31-32

The Hospital is a two-story, wood-framed building with a rectangular footprint (31 ft by 52 ft) and a gabled roof; both the roof and the walls are clad with corrugated metal. Its doors and windows have exterior and interior wood surrounds, with wood thresholds and windowsills. A mix of exterior and interior door types and hardware indicate likely reuse from the building's older iteration, and/or incorporation of elements from other buildings. The window openings are larger at the first story than the second. The building has a wood baseboard affixed to the metal siding. Its roof extends over a wraparound porch running across all four sides of the building at the first story, and a wraparound balcony doing the same at the second story. It has closed eaves covered with plywood.

The porch's floor is concrete slab with expansion joints and on the eastern side, a metal drain and several holes are vestiges of the laundry area that was once there. The porch's supports are simple wood posts of varying sizes. They stand atop a low wood-framed wall with corrugated metal on the exterior and plywood (originally wallboard) on the interior. The porch roof (bottom of the balcony floor) is covered with wallboard. The balcony has a low wood-framed wall with corrugated metal exterior and plywood interior, along with simple wood supports as at the porch. The balcony floor is wood tongue and groove with diagonal jointing at the corners. Both the porch and balcony were originally screened.

²⁶Ringhoff, 146; Pacific Coast Borax Company, "Guest House No. 3 [sic], Ryan, Calif. 1st and 2nd Floors Identical, ca. 1928," copy on file Death Valley Conservancy Archives.

²⁷ Gower, "Death Valley View Hotel, Ryan, Calif.," 20 Mar 1946.

²⁸ View of Bunkhouse 2, ca. 1990, Moore Collection, copy on file Death Valley Conservancy Archives.

Ryan Historic District

Name of Property

Inyo, CA

County and State

The building has wood staircases in the north and south porches/balconies, both with closed risers, wood balustrades, and wood storage cabinets tucked underneath them. Its balcony also has access from the terrace to the east via two wood gangplanks with wood handrails (leading to the residential level). The remnants of a clothesline sit at an open terrace to the north of the building; they include a vertical wood post set in concrete, with a cross-member, and two parallel concrete walkways that connect in the middle, making an "H" pattern.

Hospital Exterior

The building's west façade has different window patterns on the first and second stories. The first story contains two five-panel wood doors (one of which has a doorbell button next to it) and nine identical windows (double-hung wood sashes with single lights and horns). The second story contains two five-panel wood doors and five identical windows (double-hung wood sashes with two-over-two lights). A variety of door hardware styles are present, some of which (Eastlake style) are likely to have been repurposed from the earlier superintendent's house incarnation.

The south façade's first story contains one partially glazed three-panel wood door and five windows. All of the windows are double-hung sashes with single lights and horns; the two eastmost windows have smaller openings. The second story contains two five-panel wood doors and three double-hung wood windows. The westmost window has two-over-two light sashes with no horns, and the two eastern windows have one-over-one light sashes with horns; the central window is smaller than the others.

The east façade's first story contains three doors and six windows. The northmost and center doors are partially glazed two-panel wood doors, while the southmost door is a single-panel wood door. The windows are all double-hung with single lights and horns; three are larger and three are smaller. The second story contains two five-panel wood doors and seven double-hung wood windows. The two southmost windows are larger size and have four-over-four lights. The next two windows to the north have single lights and horns and are smaller. The next two to the north are the larger size with four-over-four lights, and the last (northmost) is larger size with single lights. An exterior metal pipe runs vertically up the entire façade and extends through the roof, which has multiple small pipe vents in its east side.

The north façade's first story contains four double-hung, single-light wood windows with horns; the two at the west are larger size and the two at the east are smaller, and the eastmost window, at the former kitchen, is more horizontally oriented than others in the building. The second story contains five double-hung wood windows; the three eastmost have single lights and horns and one is small. The two westmost have two-over-two lights, one sash with horns and one without. Some sashes retain vintage weatherstripping.

Hospital Interior

The building's first story contains nine rooms (seven numbered bedrooms and two bathrooms) arrayed around a central corridor, which opens to the exterior at its south end. The corridor has wallboard walls and ceilings, linoleum floors over concrete, and painted baseboards. The ceiling is covered with wallpaper and has four lights, with one fixture missing. A built-in wood

Ryan Historic District

Inyo, CA

Name of Property

County and State

cabinet/closet is present at the north end of the corridor and a fuse box is affixed to the west wall. All of the rooms' doors and windows have painted wood surrounds; the windows have sills and the doors have lintels. All door and window hardware appears original or period-appropriate, with a mix of Eastlake and Japanned copper as well as plain ferrous metal (possibly steel); the older Eastlake escutcheons probably came from the previous superintendent's house, while the Japanned copper may date to the hotel conversion. All light switches in the building are of the push-button type, some one-button, some two. The rooms all have linoleum floors over concrete, wallboard walls and ceilings, and painted baseboards, but are differently sized and have some door, finish, and fixture differences. All of the bedrooms except for Room 14 are wallpapered, typically with a floral pattern on the walls and one of several lighter silvery (mica) reflective abstract patterns on the ceilings. Plumbing fixtures are a mix of original and Hotel Era types, as are their surrounds. Some rooms have curtains, which may date to the Hotel Era or earlier.

The building's second story contains nine rooms (six numbered bedrooms, two bathrooms, and a shower room). The rooms are arrayed around a central corridor which has no openings to the exterior. The corridor has wallboard walls and ceiling, a tongue and groove floor. The north end of the corridor contains a built-in wood cabinet/closet, and the south end contains a closet-size bathroom. All of the bedrooms have doors to the exterior balcony and all of the bedrooms have tongue and groove floors (most with linoleum rugs), while the bathrooms have linoleum floors. All of the rooms' doors and windows have wood surrounds; the windows have sills and the doors have lintels. All door and window hardware appears original or period-appropriate. All light switches in the building are of the push-button type. The bedrooms have simple crown molding, baseboards, and wallboard walls and ceilings (most of which are wallpapered, with a muted floral pattern with border on the walls and reflective pattern on the ceilings). Some rooms have curtains, which may date to the Hotel Era or earlier.

Chronology

The Hospital, like the Hotel Complex, is unique in that it dates to Ryan's original settlement period. It was moved to or constructed at Ryan in 1914 or 1915 as a residence for the camp's superintendent, Bill Smitheram (Figure 7). According to early plans, the building measured 22 ft by 52 ft with a gabled overhanging roof, wraparound porch, and a projecting sleeping porch volume. It was similar in appearance to the Store and Lobby/Dining Room ("Boarding House") buildings, with a Dutch gable-esque roof.²⁹ In 1917, additions were placed, though their specifics are unknown, and in 1919 the building was labeled on a site map as "Hospital" (Figure 8).³⁰ In 1921, the Hospital was "wrecked" in a windstorm but was repaired.³¹

In 1924, the building was substantially added to and altered into a two-story building containing staff and guest rooms plus hospital facilities (Figure 9).³² Based on existing floor plans, this

²⁹ Ringhoff, 101-102; Pacific Coast Borax Company, "Buildings at Ryan, Calif." July 1915 (site plan); "View of Ryan looking north, 1915," DV-RYA 01A, Death Valley National Park Archives.

³⁰ Faulkner, H.W., "Annual Report for Ryan 1916-1917," 28 November 1917, U.S. Borax Collection, Death Valley National Park Archives, 2558/01-1073; Pacific Coast Borax Company, "Buildings at Ryan, Calif.," June 1919 (site plan).

³¹ Boyer, Albert, "Hospital Ryan, 1922," Boyer Collection, copy on file Death Valley Conservancy Archives.

³² Woodman, Ruth, "Notes on Julian Boyd Interview," 19 March 1947, U.S. Borax Collection, Death Valley National Park Archives; Pacific Coast Borax Company, "Floor Plan of Hospital to be Erected at Ryan, Calif.," ca. 1920, copy on file Death Valley Conservancy Archives; Pacific Coast Borax Company, "Second Floor Plan of Proposed Hospital and Staff House, Ryan,

Ryan Historic District

Inyo, CA

Name of Property

County and State

modification may have been a near-total rebuild. The floor plans note the new hospital would be the exact same length as the old building (52 ft), while its width would be 9 ft greater (31 instead of 22); these dimensions hint at additions (and total interior reconfiguration) as opposed to total demolition and new construction. What appears to have happened is that the original roof and sleeping porch were removed and replaced with a full second story; a two-story addition expanded the building's width by 9 ft; a new wraparound porch was constructed; and fenestration and door openings were changed. The mix of doors, windows, and hardware suggests some were reused from the older building.

During the hotel conversion period in 1927, the Hospital was converted to guest housing.³³ Gower reports that "Guest House No. 3," formerly the hospital and staff quarters, contains "12 large double bed rooms and ample detached bathing facilities. As in Guest House No. 1 and No. 2 this two story building is completely furnished and with hot and cold water and steam heat in every room. Screened porches circle the whole building on both floors."³⁴ According to a comparison of building plans, the medicine closet and linen cabinet at the south end of the building were removed, the corridor was extended into this area, an exterior door was added at south façade, and the linen cabinet was added to north end of corridor. One room's closet and corridor-accessed water closet to the north was converted into a bathroom with anteroom. In all the rooms, wallpaper was added to walls, sinks and towel bars were installed in some guest rooms (some sinks appear to have been original to building), and light fixtures were replaced and added.

Since the late 1920s, the Hospital has undergone very little change. All exterior and interior finishes, furniture, fixtures, roller shades, and window treatments appear to date to the hotel conversion.

Condition

The Hospital is structurally sound and retains most of its historic materials. According to Ryan caretaker records dating from the 1950s, balusters were removed from exterior staircase railings, screens were removed from the porches and balcony, the railings were rebuilt at tops of staircases, and the balcony (second story) ceilings and lower wall wallboard were replaced with plywood and batten (with the same replacement at the first-story porch walls but porch ceiling has its original wallboard). The porch's concrete slab floor has substantial cracking but appears stable. In addition, in 1995 an elastomeric coating was added to the corrugated metal roof; while not historically accurate (the roof was unpainted), the coating has prevented potential water damage.

13. Recreation Hall (Rec Hall)

Date: 1906, 1919, 2019

Property Type: 4 Commercial and Community, 7 Architecture, 8 Location Filming

Calif.," ca. 1920, copy on file Death Valley Conservancy Archives; Boyer, Albert, Photograph of the Hospital Under Construction, ca. 1924, Boyer Collection, copy on file Death Valley Conservancy Archives.

³³Ringhoff, 146; Gower, Harry P., *50 Years in Death Valley: Memoirs of a Borax Man*, San Bernardino, California, Death Valley 49ers, 1969, 113-114.

³⁴ Gower, "Death Valley View Hotel, Ryan, Calif.," 20 Mar 1946.

Ryan Historic District

Name of Property

Photos: 33-34

Inyo, CA

County and State

The Rec Hall is a one-story wood-framed building with a generally rectangular footprint (roughly 28 ft by 62 ft); originally St. Mary's Catholic Church in Rhyolite, NV, it was moved to this location in 1919 and two additions were constructed. One is a stage addition at the north end, giving the building a very slight L-shape, and the other is a small bathroom addition to the projecting gabled entry at the south end. The building has a front-gabled roof clad with corrugated metal with closed overhanging eaves. The building's walls have wood clapboard siding on the main volume, corrugated metal siding on the north addition, and vertical board siding on the south addition. The building's base on the east side is set into a cut in a west-trending slope, and the rest of the building except for the perimeter (see below) sits on an open wood post and pier foundation system. Dry-laid rock retaining walls are present on the west and north sides, and the foundation is partially enclosed on the south elevation with vertical fascia boards.

Rec Hall Exterior

The Rec Hall's south (primary) façade is somewhat symmetrical, with a central projecting porch/vestibule with a front-gabled roof. The porch is elevated from grade and accessed via wood steps with closed risers, wood plank treads, and a simple wood handrail. It has tongue and groove flooring and is partially enclosed with wood clapboard; the wide door opening remains open (only hinges are present to indicate the onetime presence of double doors) and is flanked by two double-hung, single-light wood windows. The interior of the porch and the building's south façade within the porch is clad in horizontal V-groove siding above wainscoting of vertical beadboard. A gooseneck light fixture sits above the entrance.

A small shed-roofed addition is attached to the east wall of the porch. It has vertical wood plank siding and a corrugated metal roof, and its south façade contains a fixed six-light wood window. The addition sits partially in a slope cut to the east. Above the entry porch, a small fixed four-light wood window sits below the gable end. Inside the porch, the building's south façade contains a central set of double wood doors; each door has five panels and they sit in a simple shared wood surround. The bathroom addition to the porch is accessed via a four-panel wood door and contains a wood-tank toilet on a board floor; its walls are tongue and groove, except for the north wall, which is the exterior clapboard wall of the main building.

The west façade is elevated above grade, fronted by a roofed porch that extends the length of the original church building and terminates at the addition to the north. The porch is accessed at the south end via wood steps with closed risers, wood plank treads, and a wood balustrade. The porch is anchored to the main volume to the east on a ledgerboard and to the west it sits on a concrete foundation (see below). A dry-stacked stone retaining wall sits in front of the concrete foundation and covers it. Subsurface testing in 2016 found that part or all of the building's original rock wall terrace has been buried intact at the west side.

The south portion of the west façade (the original church building) contains a single-panel wood door with historic hardware and a wood surround. Four wood windows are present; all are double-hung multi-light sashes (two-over-two) with three-light pointed-arch hopper transoms; all

Ryan Historic District

Inyo, CA

Name of Property

County and State

have simple wood surrounds with sills. The north portion of the west façade is the stage addition, which projects west from the rest of the building with an extension of the main gabled roof. It is clad in corrugated metal and has a five-panel wood door with a wood surround in its south façade. The west façade of the addition contains three rectangular, horizontal single-light hopper windows with wood surrounds and sills.

The north façade is entirely that of the addition, with corrugated metal siding and a gabled roof with a wood vent in the gable end. The façade contains two identical pairs of windows, with each pair set in a shared wood surround with the sill. Each window is a double-hung, multi-light (six-over-six) sash with a single-light transom.

The building's east façade contains three windows of the same type on the west façade, with pointed arch transoms, as well as a four-panel wood door with an identical transom. North of these bays are a four-panel wood door with wood surround and a double-hung, single-light wood sash with wood surround and sill, both located in the corrugated metal-clad north addition. A terra cotta flue pipe extends up the building's façade just north of the southern door, piercing the roof overhang.

Rec Hall Interior

The Rec Hall's interior is an open room with a stage volume added to the north end and an interior balcony or choir loft located at the south end. The main room has tongue and groove floors (painted gray) and walls of horizontal V-groove boards (painted white) with vertical beadboard wainscoting (painted green). The vaulted ceiling is also V-groove boards painted white. Several large metal ties and anchors span the room at the tops of the walls and in the ceiling; these extend to the exterior. Three period-appropriate light fixtures hang from the ceiling. All of the doors and windows have simple wood surrounds and the windows have sills. The room has several small built-in wood shelves on the east, west, and north walls, a wood cabinet on the east wall, and larger shelving and racks at the south wall/southwest corner of the room. The east wall also contains a rectangular metal sheet with a small concrete slab beneath it and the remnant of a stovepipe above it, indicating the former location of a stove. The building's north wall contains a large rectangular opening to the stage addition, with a proscenium accessed via wood steps on its east and west sides.

The balcony at the south end of the room is supported by two floor-to-ceiling wood posts, and has a tongue and groove floor. Like the main room, its walls are horizontal V-groove and it shares the same ceiling; a small attic access door is located here. The balcony's north side is a low wall (solid railing) of vertical V-groove boards. The floor appears to have some indications of film projector location/alignment. The balcony is accessed via a steep interior staircase in the southeast corner of the main room; it is wood-framed with vertical V-groove walls and wainscoting, with closed risers. A low swinging wood gate controls access to the stairs, and a full-size door made of vertical V-groove boards accesses a closet under them.

The stage addition at the north end of the building has a tongue and groove floor, with baseboard and an inset trough for footlights at its south edge. Its walls and ceilings are wallboard; the north and south walls have segments of wood picture rail. The stage's south wall has a large, riveted

Ryan Historic District

Inyo, CA

Name of Property

County and State

iron pipe mounted above the proscenium opening, with attached rope pulleys which could be used to raise and lower a curtain. Push-button light switches sit next to the opening. West of the stage are three dressing rooms with wallboard walls and ceilings and no doors in their openings. The southmost room is the largest and contains a built-in wood cabinet, counter with sink, and a ceiling light fixture. The center room has a built-in counter and a bare bulb ceiling light fixture. The northmost room has no casework or fixtures. The area under the stage itself serves as storage.

Chronology

In 1906, the building was constructed as the St. Mary's Catholic Church in Rhyolite, NV.³⁵ Between February 1918 and April 1919, the church was moved to Ryan via DVRR flat cars and it is shown as the "Club House" in April 1919 handwritten corrections to the February 1918 Ryan site plan (Figure 10).³⁶ From 1919-1921, the building underwent several changes. A porch was constructed on the western façade under a roof overhang with wood post supports and railings; a small gabled projecting volume was placed at the north façade; a small north volume was replaced with a larger stage addition, elongating the building footprint; and a bathroom addition was placed on south façade.³⁷ In 1937-1939, the roof overhang over the west porch was removed.³⁸

Condition

From 1960 to 2018, several small-scale projects focused on the stabilization and repair of specific areas in the Rec Hall. Cable supports were added and tied into the exterior slope. Porches, railings, and stairs were rebuilt and the vestibule doors at the south façade were removed. The building was rewired for electricity, props in storage under the stage were removed, and the building was painted. Elastomeric roof coating was added, the roof was cabled down on the west side when wind was lifting it and cross-tension cables were placed in the attic to secure the vestibule on the south façade to the building.

In 2019, a major Rec Hall renovation began to address the building's structural issues. The project entailed constructing a hidden concrete perimeter foundation under the building. This foundation was anchored into the fill using grouted hollow rock bolts, allowing for minimal disturbance of the site. Original siding was removed in specific locations to allow for the construction of seismic shear panels; the siding was replaced using historic and historically-accurate reproduction materials. The existing scissor trusses were strengthened. The historic porch roof, removed in the late 1930s, was reconstructed using historically-accurate materials. The elastomeric-coated roof panels, which were in poor condition, were replaced with new historically accurate corrugated panels with a galvanized (original) finish. Restoration work is ongoing with a projected finish date of mid-2025.

³⁵ *Rhyolite Herald*, "Rhyolite Churches," Pictorial Edition, March 1909, reprinted in Betsy Ritter, *Life in the Ghost City of Rhyolite, Nevada*, pp. 15-16, 1939, reprint Morongo Valley, California, Sagebrush Press, 1982.

³⁶ Pacific Coast Borax Company, "Buildings at Ryan California," February 1918 (handwritten corrections April 1919), copy on file Death Valley Conservancy Archives.

³⁷ Ryan, northeastern view, ca. 1920-1921, RAM 2117, Eastern California Museum; Ringhoff, 160; Frasher, Burton, "Guesthouses, Death Valley View Hotel, Ryan Death Valley, Calif.," ca. 1930, Frashers Fotos, copy on file Death Valley Conservancy Archives.

³⁸ Willard, Stephen H., Photograph of Ryan, ca. 1928, McCu 99, Eastern California Museum.

Ryan Historic District
Name of Property

Inyo, CA
County and State

14. House 1

Date: 1924

Property Type: 3 Residential, 6 Tourism, 7 Architecture

Photo: 35

House 1 is a one-story, wood-framed building with a rectangular footprint (32 ft by 44 ft), a post and pier foundation, and a side-gabled roof. Both the roof and the walls are clad with corrugated metal. Its doors and windows have exterior and interior wood surrounds, with wood window sills. The overhanging roof extends over a wraparound porch spanning the west (primary), north, and south façades. The roof has closed eaves with wood soffits and simple bargeboards; a brick chimney and several stovepipes project from the roof near the gable peak. The undersides of the roof at the porches are enclosed with wallboard, to which are affixed globe light fixtures. The porches' floors are concrete slabs, and their aprons partially extend under the house. The porches have low wood walls with corrugated metal on the exterior and wallboard on the interior, and their supports are simple wood posts and boards. They are screened, though screen is missing from some areas. The wraparound porch has two door openings in its west side (no screen doors), and a modern metal screen door in its south side. Visible at portions of the roofline of the porch interior are small metal pulleys once used with cords to raise and lower roll-up fabric shades; the north side of the porch interior retains a portion of the rolled-up green and white canvas shades, wrapped on a wooden pole core. Tie-downs at sills are also present. The roll-up shades were originally present around the entire porch. The north side's porch has more decorative ceiling light fixtures and the building's north façade has exterior light switches and outlets, all indicating the former presence of a sleeping porch area.

House 1 Exterior

The building's west (primary) façade has a fully-glazed wood door with historic hardware and a doorbell, likely dating to 1974-2005, next to it. Weatherstripping is present at its left side. The façade also contains six double-hung wood windows, all single light with horns, arranged in three pairs with shared openings. A small wood door at the base of the façade is a firewood pass-through to the interior.

The north façade contains two sets of fully-glazed wood French doors, each set with a wood hopper transom. The doors flank one small double-hung wood window, with single lights and horns. A vent with vertical wood slats sits in the gable end. As noted above, light switches, outlets, and porch ceiling fixtures indicate this area served as a sleeping porch.

The east façade contains seven double-hung wood windows with single lights and horns; three are larger, three are smaller, and one is horizontally oriented. Two of the larger windows are paired with a shared opening, while the rest are single. Six of the windows have newer metal screens that attach at the bottom.

The south façade contains a single-panel wood door and three double-hung, single-light wood

Ryan Historic District

Name of Property

Inyo, CA

County and State

windows with horns. The east end of the façade contains a small projecting utility closet (originally a toilet/water closet, now containing a modern water heater) of V-groove boards, and the portion of the façade from there west to the door is wood V-groove boards rather than corrugated metal like the rest of the house. An unpainted portion just east of the door, where a short plywood-clad wall projects, is where the original “flash” water heater and cabinet were removed. The window in this wood-clad portion of the façade is horizontally oriented.

House 1 Interior

House 1’s interior contains six rooms: a living room, a kitchen, three bedrooms, and a bathroom. The rooms are arranged around a central corridor. Interior walls and ceilings are typically painted wallboard (or painted wallpaper over wallboard) with wood baseboards; the house’s doors and windows have wood surrounds and the windows have sills. All door and window hardware appears original or period-appropriate. Most light switches in the building are of the push-button type. Closets have wallpaper and automatic, door-activated light switches original to the building.

The corridor has an unpainted tongue and groove wood floor, plaster walls and ceiling, wood baseboards, and crown molding. All of the rooms off the corridor are accessed with single-panel wood doors, including a wallpapered hall closet off the east wall with built-in shelving and a ceiling vent.

House 1 retains most of its original built-in cabinetry in the living room, bathroom, and bedroom closets. In addition, original or period-appropriate wall sconces are present as well as many fixtures and finishes.

Chronology

House 1 was constructed at its current site to serve as the assistant superintendent’s residence in 1924 (Figure 11). It replaced a previous residence, which was lost to a fire. According to the original floor plans, the service porch at the south façade originally had a toilet/water closet (now housing a water heater) and a laundry area with a boiler.³⁹

Very few structural changes have been made to House 1 since its construction. Some notable superficial changes include the original cementitious shower was refinished with tile and board, the lower built-ins on the south side of the kitchen were replaced with a newly constructed base cabinet, countertop, backsplash, and sink, and a metal fireplace insert was fabricated and installed in the living room. Also in the kitchen, a built-in ironing board cabinet was converted to a spice cabinet and on the back porch, the “flash” electric water heater was removed leaving a hole in the kitchen’s west wall where the controls for the water heater used to be. The original picture molding and several original wall sconces were removed from the living room and bedrooms, and the original wallboard was replaced in the living room.

Condition

³⁹ Pacific Coast Borax Company, “Floor Plans for Superintendent’s Residence No. 50 and Ass’t Superintendent’s Residence No. 1, Ryan, Calif.,” copy on file Death Valley Conservancy Archives.

Ryan Historic District

Name of Property

Inyo, CA

County and State

House 1 is structurally sound and retains most of its historic materials. In 1995, an elastomeric coating was added to the corrugated metal roof; while not historically accurate (the roof was unpainted), the coating has prevented potential water damage.

15a-b. House 2 and Shed

Date: 1924

Property Type: 3 Residential, 7 Architecture

Photo: 35

15a. House 2

House 2 is a one-story, wood-framed building with a rectangular footprint (34 ft by 48 ft), a post and pier foundation, and a side-gabled roof. Both the roof and the walls are clad with corrugated metal. Its doors and windows have exterior and interior wood surrounds, with wood window sills. The building has a wood baseboard affixed to the metal siding. The overhanging roof extends over a wraparound porch spanning the west (primary) and north façades, and over a smaller service porch at the building's southeast corner. The roof has closed eaves with wood soffits and simple bargeboards; the undersides of the roof at the porches are enclosed with wallboard, to which are affixed globe light fixtures. The porches' floors are concrete slabs, and their aprons partially extend under the house. The porches are enclosed with low wood walls with corrugated metal on the exterior and wallboard on the interior, and their supports are simple wood posts and boards. They are fully screened (a recent repair/rehabilitation). The north interior wall of the porch has metal pulleys at the roofline, indicating the former location of fabric roll-up shades in what used to be the sleeping porch area (shades were originally present around the entire porch). The sleeping porch area also has more decorative ceiling light fixtures than elsewhere on the porch. The wraparound porch has two wood screen doors on its west side, and the service porch has one of the same type (all recent reconstructions with period-appropriate hardware).

House 2 Exterior

The building's west (primary) façade has a fully-glazed wood door with historic hardware and vintage weatherstripping. Five double-hung wood windows, all single light with horns, are present. A mortared stone chimney runs up the façade and extends through the roof, and two built-in wood storage benches are present; the southern bench has a pass-through into the house interior for firewood.

The north façade contains two sets of fully-glazed wood French doors, each set with a wood hopper transom. The doors flank two small double-hung wood windows, single light with horns. A vent with vertical wood slats sits in the gable end.

The southmost portion of the east façade, behind the service porch, contains a single-panel wood door to a storage room; north of that are a pair of double-hung wood windows with single lights and horns, and a single, larger window of the same type. A pedestal utility sink is affixed to the façade in this area and a washer and dryer sit next to it. The next bay to the north contains a windowless area (a plywood-enclosed portion of what used to be a longer north portion of the porch); north of that are two small double-hung windows with single lights, horns, and wood

Ryan Historic District

Name of Property

Inyo, CA

County and State

screens attached at the top, and one larger window of the same type.

The south façade contains a single-panel wood door to the kitchen in the screened service porch area; west of that are three double-hung, single-light wood windows. The two westmost are larger, with horns, and the eastmost is smaller, with no horns. One window of each type has a wood screen attached at the top. A vent with vertical wood slats sits in the gable end and an electrical box with conduits is mounted on the façade.

House 2 Interior

House 2's interior contains nine rooms: a living room, a kitchen, three bedrooms, two bathrooms, an interior storage room, and a storage room accessed from the exterior. The rooms connect directly to each other, with no corridors. Interior walls and ceilings are typically painted (over wallpaper) wallboard with wood baseboards and picture rail; the house's doors and windows have wood surrounds and the windows have sills. All door and window hardware appears original or period-appropriate. All light switches in the building are of the push-button type, and closets have automatic, door-activated light switches original to the building. The rooms are all of different sizes and have some finish and fixture differences, but most fixtures and finishes are original, or period-appropriate. In addition, original built-ins remain throughout the house.

15b. House 2 Shed

In 2011, a small, freestanding storage shed was constructed off the southeast corner of House 2 to hold a water treatment system. It measures approximately 3 ft 2 in east/west by 4 ft 2 in north/south by 7 ft 4 in at its tallest point. Its exterior construction is green-painted board and batten walls and it has a corrugated metal shed roof, while its interior is finished with OSB on top of a concrete slab foundation. It comports to existing Ryan architecture, however it is considered a non-contributing element of the House 2 building.

Chronology

In 1924, House 2 was constructed at its current site to serve as the superintendent's residence (Figure 11). It replaced a previous superintendent's residence that had succumbed to fire. The house was designed to house the camp superintendent, Julian Boyd, and occasionally his family when they visited from their permanent home in Hollywood, CA. The back room and en-suite bath, not originally connected to the main living quarters via an interior door, provided teacher housing.⁴⁰ The teacher likely shared use of the kitchen or frequented the camp's dining room for meals.

A comparison of historic photographs shows that sometime after House 2's construction, its chimney was enlarged and extended.⁴¹ This is likely a result of a malfunction in the drafting of the chimney; currently the fireplace is not used for this reason. The house was likely heated with an oil heater that sat in the dining area of the living room. According to hole patterns in the

⁴⁰ Pacific Coast Borax Company, "Floor Plans for Superintendent's Residence No. 50 and Ass't Superintendent's Residence No. 1, Ryan, Calif."

⁴¹ Boyer, Albert, View of House 2 from DVRR level, ca. 1925, Boyer Collection, copy on file Death Valley Conservancy; Frasher, Burton, "Guesthouses, Death Valley View Hotel, Ryan Death Valley, Calif.," ca. 1930, Frashers Fotos, copy on file Death Valley Conservancy Archives.

Ryan Historic District

Name of Property

Inyo, CA

County and State

original wood floors, the bedrooms were likely heated with steam radiators.

From the Hotel Era to the present, House 2 has seen continuous use by camp superintendents and caretakers. In 1970, the main living quarters and back “teacher’s room” were joined by enclosing a portion of the screened-in back porch. In the 1980s, the non-master bathroom was reconfigured to have a tub/shower combination with the original shower stall becoming a closet. Around the same time, the kitchen counters and sink were modernized with formica and stainless steel. The original kitchen cabinets and hardware (minus the main swinging kitchen entry door and a set of swinging louvered doors under the sink) remain largely unchanged.

Condition

House 2 is structurally sound and retains most of its historic materials. In 1995, an elastomeric coating was added to the corrugated metal roof; while not historically accurate (the roof was unpainted), the coating has prevented potential water damage. Between the years 2011 to 2016, House 2’s porch screens and molding were reconstructed, painted, and installed and the porch ceiling wallboard was patched. The three screen doors were reproduced and installed, each containing period-appropriate hardware. Wallboard in the south and west porch walls and missing slats in the north gable vent were replaced. Most of the building exterior was painted its historically accurate colors, green and ivory.

16a-b. House 3 and Shed

Date: 1924

Property Type: 3 Residential, 7 Architecture

Photo: 36

16a. House 3

House 3 is a one-story, wood-framed building with a rectangular footprint (24 ft by 42 ft), a post and pier foundation, and a side-gabled roof. Its roof and walls are clad with corrugated metal. Its doors and windows have exterior and interior wood surrounds, with wood windowsills; these surrounds are different from those seen on the other houses. The overhanging roof extends over a wraparound porch spanning the west (primary) and north façades. The roof has closed eaves with wood soffits and simple bargeboards; the undersides of the roof at the porches are enclosed with battened wallboard. The porch floor is painted wood tongue and groove, and the porch walls are low wood with corrugated metal on the exterior and plywood on the interior. The porch supports on the west side are wood turned posts, unlike the simple post and board supports seen on the north and south sides, and on the other houses’ porches. They may have been installed upside down, and demonstrate splicing to increase their span. The porch was once screened, though the screens are now missing, and it has door openings with no doors on the north and south sides. The southeast corner of the house contains a partially enclosed service porch with a concrete slab floor containing a drain; this porch’s south side is corrugated metal with a reconstructed wood screen door, and its east side is wood-framed and screened. The service porch has a painted wallboard interior, baseboards, and a wood built-in cabinet.

House 3 Exterior

The building’s west (primary) façade has a five-panel wood door and four double-hung wood

Ryan Historic District

Name of Property

Inyo, CA

County and State

windows with single lights and horns. The north façade contains two wood doors, one five-panel and one single-panel. It also contains one double-hung wood window with single lights, and horns. The east portion of the north façade has evidence of former walls that partially enclosed a sleeping porch. A vent with horizontal wood slats and a simple surround sits in the gable end.

The east façade is very close to a cut in the rocky slope behind the house. Its south end is the screened service porch and its north end is the wraparound porch. The façade contains six double-hung wood windows with single lights and horns. The two southmost windows are paired, with a shared opening and an attached operable metal bar that likely once held an awning; small metal pulleys and a metal cord winder/holder are mounted on the frame. One metal and PVC pipe runs vertically up the east façade and pierces the roof, and several other pipes run into the façade itself. A crawlspace access panel is present at this location.

The south façade's east end contains the service porch, enclosed at this façade with corrugated metal and a reconstructed screen door. Within this porch, the south façade contains a five-panel wood door to the kitchen. West of the porch, the façade contains three double-hung wood windows with single lights and horns. A vent with horizontal wood slats and a simple surround sits in the gable end, an industrial light fixture is affixed to the gable end, and an electrical box with conduits is mounted on the façade.

House 3 Interior

House 3's interior contains five rooms: a living room, a kitchen with dining nook, two bedrooms, and one bathroom. The rooms connect directly to each other, with no corridors, much like House 2. Interior walls and ceilings are typically painted wallboard with battens and wood baseboards; seams beneath the paint suggest that many areas actually have painted-over wallpaper. The doors and windows have simple wood surrounds and the windows have sills. All door and window hardware appears original or period-appropriate.

Each room, exclusive of the kitchen and bath, has either painted tongue and groove flooring or linoleum flooring and wallboard walls and ceilings, some with picture rail. The living room, accessed directly from the west entry door has a header supported by simple, shallow wood pilasters that runs east-west across the ceiling, just north of the door to the kitchen, and visually separates the room into two distinct spaces. The house's north end contains two adjoining bedrooms of roughly equal size, accessing each other via a five-panel wood door. Both bedrooms have walk-in closets; the eastern bedroom also has a door to access the outside porch to the north. The kitchen retains built-in wood cabinets, cupboards, and drawers, mostly built of V-groove boards, with metal drawer pulls and latches; the lower cupboards include two corner bins for vegetables or flour. The south end of the kitchen contains a dining nook with an arched entry, built-in wood storage benches, and a table. The bathroom retains a built-in wood medicine cabinet, a corner wall-mounted sink, and a built-in wood cabinet and storage bench, both of V-groove boards.

16b. House 3 Shed

A small, freestanding storage shed sits off the southeast corner of House 3. It has board and batten walls, a shed roof of corrugated metal over boards, and a floor of flush-laid boards. The

Ryan Historic District

Name of Property

Inyo, CA

County and State

roof and part of the south façade extend to meet a cut in the rocky slope to the east, creating shaded open storage. The shed's north façade has a board and batten door, and the south façade has a screened window opening (boarded up with plywood from the interior). This opening sits three feet above the ground level and resembles openings found in chicken coops. The shed contains built-in wood shelving.

Chronology

House 3 and its associated shed were constructed on its current site at Ryan in 1924 (Figure 11).⁴² It contains many characteristics that deviate from House 1, 2, and 4, such as the turned porch posts and raised wooden porch, as well as other interior architectural details and finishes, suggesting that it may incorporate elements salvaged from other buildings. Similar characteristics shared by House 3 and the other houses seem to have been added shortly after construction. The breakfast nook, the enclosed screened-in front, sleeping, and back porches, and the steam-heat appear to be add-ons.

Historical records are not clear on who inhabited House 3 after its construction; since it is located among the management housing, it was likely PCB employees in management or staff positions.

After the 1930s, House 3 underwent periodic small-scale renovations. The south side of the service porch was enclosed with corrugated sheet metal (which remains in place), a clawfoot tub was removed from the bathroom, and a shower stall was added (the tub is stored in the Warehouse); the sleeping porch partitions and a wardrobe unit were removed from the east portion of north façade; and the kitchen countertops and backsplash were replaced with new tile and plywood, and new vinyl was added to the kitchen and bathroom floors.

In addition, sometime after 1930, a small shed roof was added between the service porch and the storage shed.⁴³ By 1965, this roof was removed.⁴⁴

Condition

House 3 and its associated shed are structurally sound and retain most of their historic materials. In 1995, an elastomeric coating was added to House 3's corrugated metal roof; while not historically accurate (the roof was unpainted), the coating has prevented potential water damage.

17a-b. House 4 and Shed

Date: 1924

Property Type: 3 Residential, 6 Tourism, 7 Architecture

Photo: 37

17a. House 4

⁴² Photograph depicting House 3 under construction, view west, 1924, Rosenloecher Collection, copy on file Death Valley Conservancy Archives.

⁴³ Not present in Frasher, Burton, "Guesthouses, Death Valley View Hotel, Ryan Death Valley, Calif.," ca. 1930, Frashers Fotos, copy on file Death Valley Conservancy Archives, but present in Ryan Overview, ca. 1965, DV-RYA 45A, Death Valley National Park Archives.

⁴⁴ Photograph of House 3, northeast view, ca. 1971, Kern Collection, DV-RYA 65, Death Valley National Park Archives.

Ryan Historic District

Name of Property

Inyo, CA

County and State

House 4 is a one-story, wood-framed building with a rectangular footprint (22 ft by 39 ft), a post and pier foundation, and a side-gabled roof. Built around the same time as Houses 1, 2, and 3, House 4 differs in that it has been unoccupied for some time and has undergone very few alterations. Both the roof and the walls are clad with corrugated metal. Its doors and windows have exterior and interior wood surrounds, with wood windowsills. The building has a wood baseboard affixed to the metal siding. The overhanging roof extends over a wraparound porch spanning the west (primary) and north façades, and over a smaller service porch at the building's southeast corner. The roof has closed eaves with wood soffits and simple bargeboards; the undersides of the roof at the porches are enclosed with wallboard. The floor of the larger wraparound porch is unpainted wood tongue and groove with diagonal jointing, while the service porch has a concrete slab floor. The porches have low wood walls with corrugated metal on the exterior and wallboard on the interior, and their supports are simple wood posts and boards. They were once screened, though the screens are now missing. The wraparound porch has door openings in its north and south sides, and the service porch has a door opening in its south side; none contain screen doors. Visible at portions of the roofline of the porch interior are small metal pulleys once used with cords to raise and lower roll-up fabric shades; a remnant of the fabric is tacked to part of the west porch wall.

House 4 Exterior

The building's west (primary) façade has a five-panel wood door flanked by double-hung wood windows with single lights and horns. Two more pairs of the same window type in shared openings are present on either side, for a total of six. The north façade contains a single-panel wood door and no fenestration. A vent with vertical wood slats sits in the gable end. The east façade contains six double-hung wood windows with single lights and horns. The two largest windows are paired with a shared opening, while the rest are smaller and single. Two of this façade's windows have wood-framed screens attached at the top. The south façade has no fenestration. Its east end contains the service porch, which has a built-in storage cabinet of V-groove boards. A single-panel wood door leads from the service porch into the kitchen. A vent with vertical wood slats sits in the gable end.

House 4 Interior

House 4's interior contains four rooms: a living room, an eat-in kitchen, one bedroom, and one bathroom. A small corridor sits at the center of the building. Interior walls and ceilings are typically wallboard finished with original wallpaper and wood baseboards. Doors and windows have wood surrounds and the windows have sills. Where present, all door and window hardware appears original or period-appropriate. Most light fixtures and switches have been removed.

All rooms have tongue and groove flooring; in the corridor, kitchen, and bath it is overlaid with linoleum. The living room has a picture rail and a built-in wood and glass cabinet with a glass knob. The kitchen retains built-in wood cabinets, cupboards, and drawers with metal pulls and latches. An enameled metal sink sits in an original countertop of cementitious plaster; the backsplash is the same material, while another portion of the countertop is wood. There is also a built-in hood over a former stove location and a dining nook (as seen in Houses 1 and 3). This nook has built-in wood storage benches and a table like the others in the camp. The bedroom contains a large walk-in closet, with coat hooks and built-in drawers. The bathroom is unchanged

Ryan Historic District

Inyo, CA

Name of Property

County and State

since being constructed with a built-in wood medicine cabinet, a wall-mounted sink, a toilet, and two original wall sconces, an enameled bathtub with cementitious plaster and a shower with intact shower controls.

17b. House 4 Shed

A small, freestanding storage shed sits off the southeast corner of House 4. It has board and batten walls, a corrugated metal shed roof, and a floor of flush-laid boards. The storage shed directly abuts rocky slopes to the east and south. Nearby stand the remnants of a clothesline (vertical wood posts set in concrete), accessed by a wood plank walkway. It is contemporaneous with the house.

Chronology

House 4 was built at the same time as Houses 1, 2, and 5 in 1924. It was originally constructed at its current site to serve as the storekeeper's residence.⁴⁵ As previously mentioned, the house was not regularly occupied after 1930 and so it retains many of its original architectural elements and finishes.

Condition

House 4 and its associated shed are structurally sound and retain most of their historic materials; however, some wallboard paneling is missing in the porch interior and ceiling. In 1995, an elastomeric coating was added to House 4's corrugated metal roof; while not historically accurate (the roof was unpainted), the coating has prevented potential water damage.

18. Railroad-grade level shed

Date: 1924

Property Type: 4 Commercial and Community

Photo: 31

A small, storage shed is located on the railroad grade level of Ryan Camp directly below and to the west of the Hospital. It is wood framed with two corrugated metal walls and a corrugated metal shed roof. Its back has no framing as it abuts the dry-laid rock wall. It has a dirt floor and no evidence that a door has ever been present (although there is a wooden threshold). A fire hose cart is located inside of the shed and a hydrant is located approximately one foot north of the shed. This suggests that the shed was likely used for fire suppression/equipment storage. Its dimensions measure 4 ft 9 in square by 7 ft 2 in at its highest roof point (at the back).

Chronology

⁴⁵ Pacific Coast Borax Company, "Store Keeper's Residence, Ryan, Calif.," May 1925 (building plan), Death Valley Conservancy Archives.

Ryan Historic District

Name of Property

Inyo, CA

County and State

The shed appears to be contemporaneous with the Hospital renovation project in 1924 (Figure 9). It is present in a photograph of the Hospital under construction during this time but is absent in a photograph of the same view taken in 1922, before the Hospital renovation began.⁴⁶

Condition

The railroad-grade level shed retains its framing, siding, and roof. It is in good condition.

Non-Contributing Buildings

19. Gerstley Shed

Photo: 6

The Gerstley Shed is a small one-story square building (12 ft 3 in square) located south of the Hotel Complex. It has a wood frame with no foundation, a gabled roof, and corrugated metal roofing and siding. It has plywood covered window openings on its northwest, southwest, and southeast walls and a wooden door in its northeast wall. The northeast and southwest walls contain a wooden louvered vent in the gables. The interior of the shed is finished with plywood walls and ceiling, and a floor of flush-laid boards. This building functioned as a small office and storage room at the Gerstley Mine, a PCB property near Shoshone, CA. This building was moved to Ryan in one piece in August 2012 and is used for storage at the site.⁴⁷

Contributing Sites

20a-g. Copenhagen Row

Date: 1919-1921

Property Type: 3 Residential, 6 Tourism

Photo: 38

Copenhagen Row is a group of five consecutive house pads, dugouts, footpaths, and privy remains located in an east-west orientation along a slope on the northern edge of Ryan Camp. The grouping lies below the DVRR grade and above the level of Ryan Road.

[REDACTED]

Chronology

The houses were constructed between 1919 and 1921; two of them first appeared on a 1919 map (House Pad 2 and 3), and all five appear in a camp overview photograph, dated 1922 (Figure 12).⁴⁸ The houses were colloquially called “Copenhagen Row” either because they held Danish immigrants, they were associated with the tobacco of the same name, or for an unknown

⁴⁶ Boyer, Albert, Photograph of the Hospital Under Construction, ca. 1924, Boyer Collection, copy on file Death Valley Conservancy Archives; Boyer, Albert, “Hospital Ryan, 1922,” Boyer Collection, copy on file Death Valley Conservancy Archives.

⁴⁷ Since several buildings were relocated from Ryan to the Gerstley Mine in the 1940s-1950s, it is possible that this building originated within the district.

⁴⁸ Boyer, Albert, “1922, Town was taken from top of Funeral Range 1,” Boyer Collection, copy on file Death Valley Conservancy Archives; Pacific Coast Borax Company, “Buildings at Ryan, Calif.,” June 1919.

Ryan Historic District

Inyo, CA

Name of Property

County and State

reason.⁴⁹ The dwellings were equipped with power and shortly after construction, they were connected to the camp's water and sewer systems. The houses were likely occupied by management and company support staff and were rented out as cottages during the Hotel Era; they were razed or possibly relocated around 1952.⁵⁰

[REDACTED]

21a-r. Early Ryan Residential Area

Date: 1914-1920

Property Type: 3 Residential

Photo: 39

The Early Ryan Residential Area is an archaeological site composed of building remains, tent platforms and pads, artifact scatters, privy pits, and footpaths measuring 500 ft N/S by 250 ft W/E, representing the original residential area of Ryan Camp. The site is located directly upslope and to the east of the extant residential area, but below the Upper Reservoir.

[REDACTED]

Chronology

The site of Early Ryan represents the first established residential area in the Ryan Historic District and may date to as early as 1914. The earliest map of the camp, from 1915, shows fifteen cabins arranged in rows up the slope from the DVRR grade.⁵¹ Early photographs depict the cabins as modest wood-framed, rectangular buildings, some with porch projections (Figure 13).⁵² By June 1919 the quantity of cabins grew to eighteen; however, the 1919 site plan only identifies insured buildings, but other less substantial structures, such as tents (as evidenced by photographs and archaeological remains), were also present. By 1922, the buildings were either intentionally razed or demolished by Upper Bidy McCarthy mining activity.⁵³ They were no longer needed as the building of the bunkhouses in 1919 allowed workers to be housed in a more centralized location. The lack of extant historic resources dating to the earliest period of Ryan renders this site especially significant in its potential to reveal information about the early residents of Ryan and the evolution of the camp.

[REDACTED]

⁴⁹Pacific Coast Borax Company, "Buildings at Ryan, Calif.," March 1947 (site plan), identifies the houses as "Copenhagen Row."

⁵⁰ The houses are absent on Pacific Coast Borax Company, "Buildings at Ryan, Calif.," January 1952 (site plan).

⁵¹ Pacific Coast Borax Company, "Buildings at Ryan, Calif.," July 1915 (site plan).

⁵² Boyer, Albert, A photograph depicting the earliest cabins at Ryan, view east, ca. 1919, Boyer Collection, copy on file Death Valley Conservancy Archives.

⁵³ Boyer, Albert, "Ryan from mountain, our house," ca. 1922, Boyer Collection, copy on file Death Valley Conservancy Archives.

Ryan Historic District

Name of Property

Inyo, CA

County and State

22. Little Mesa

Date: 1921

Property Type: 3 Residential, 6 Tourism, 8 Location Filming

Photo: 40

The “Little Mesa” is a prominent bluff topped by a 36 ft by 142 ft flat area on the westernmost part of Ryan Camp. It lies directly across Ryan Road from the Schoolhouse to the west and is north of and below the incinerator and trackways (Resource 32). It is not a natural landform, but was constructed out of fill created when other parts of the camp were leveled in 1919-1920. The flat mesa is flanked on the eastern side by a retaining wall (dry-laid, 2-3 courses high). It is largely devoid of building remains except for wire nails and other fasteners; [REDACTED] Two historic Fresno Scrapers, used for land leveling, ditch digging, and road and railroad construction, now sit on the mesa, but were likely moved there in more modern times. A partial barbed wire fence, added for security in the 1970s, is found on the western edge of the mesa.

Chronology

Three management houses were constructed on the Little Mesa in 1921 (Figure 12).⁵⁴ During the Hotel Era (1928-1956), the houses functioned as rental cottages. The houses, especially the most southern one, were prominently featured in several *Death Valley Days* episodes filmed in the 1950s. The dwellings were razed around 1965.

Condition

While the site does not retain much evidence of the houses that once stood there, it is one of the first landmarks encountered by guests to the Ryan Historic District and remains a prominent feature on the landscape.

23. Poison Rock

Date: Not applicable

Property Type: 4 Commercial and Community, 6 Tourism

Photo: 21

Poison Rock is a prominent, natural rock landform located on the southern end of Ryan Camp and is visible from several vantage points around Ryan. It is composed of silicious sediment that has been rounded by wind weathering and contains several cracks, which contributes to the appearance that it is precariously leaning and may fall. In fact, according to local legend, the name Poison Rock was so given because “one drop will kill you.”⁵⁵

Chronology

Due to its prominence on the Ryan landscape, Poison Rock appears in many historic photographs of the camp. The first use of the name Poison Rock appears in a Frasher’s image from 1930, where the image is labeled “Poison Rock, Death Valley View Hotel” (Figure 14).⁵⁶ A

⁵⁴ Boyer, Lillian, “Notes on Life at Ryan, 1919-1924,” Boyer Collection, copy on file Death Valley Conservancy Archives.

⁵⁵ This saying is often attributed to Harry Gower, who worked for PCB beginning in the mid-1910s.

⁵⁶ Frasher, Burton, “‘Poison Rock,’ Death Valley View Hotel, Ryan, Death Valley, Calif.,” ca. 1930, Frashers Fotos, copy on file Death Valley Conservancy Archives.

Ryan Historic District

Name of Property

Inyo, CA

County and State

contemporaneous photograph/postcard by Stephen Willard is labeled “137 - Balanced Rock, Ryan, Cal.”⁵⁷ The postcard has a postmark of 2 May 1929 and interestingly the writer notes the landform and pens “This is Poison Point. One drop is death.” She apparently had heard the origin story of the name of the landform but misnames it “Poison Point” instead of “Poison Rock.” This is not surprising, though, because she remarks, “You would like Ryan Inn, it is located on a volcanic mt – but it is hot!” mistaking the Death Valley View Hotel for the non-existent Ryan Inn. It could be that Willard labeled the landform “Balanced Rock” because he had not heard the local name upon visiting Ryan. Previous to the Hotel Era, it is not known how the landform was referred. The grandson of the first superintendent of Ryan, William Smitheram, kept a scrapbook in which he labeled a ca. 1916 photograph of the landform “Leaning Rock.”⁵⁸ It is not clear whether he used this label as a name of the rock because he had heard this name from his grandfather, or whether he was simply being descriptive.

Condition

Poison Rock shows no sign of geologic failure and appears the same as it did when first photographed in 1910s.

24. Building Pad (formally the Shower House)

Date: 1920

Property Type: 3 Residential

Photo: 4

The Shower House building pad consists of a dirt and concrete footprint in a T-shape located in between Bunkhouses 1 and 2. The western concrete portion measures 23.5 ft wide by 9 ft 3 in deep and has the plumbing remains of nine toilets. There are ten rectangular concrete cutouts 3.5 in square that likely held posts for bathroom stalls. The toilet holes are 5 in in diameter. There is a drain 9 in square in a piece of adjoining concrete. A segment of exposed pipe is northwest of the drain. A threshold in the southern concrete section marks the location of a door. The dirt section of the pad is 10 ft to 12 ft wide by 29 ft 8 in long and has several cut-out sections but no obvious plumbing. There is a 7 in border around the concrete pad containing the toilets, which likely is the foundation of a wall. There are also three posts along the pad’s western edge, which may have held a railing after the building was razed in 1927. [REDACTED]

Chronology

The Shower House building provided indoor toilets and showers for miners residing in the company bunkhouses beginning in 1920. While a few photographs depict the Shower House, little is known about its exact construction and layout (Figure 6). It is known that along with the bunkhouses, Hospital, and management houses, the Shower House was heated by the Boiler House. When the bunkhouses were outfitted with indoor plumbing during the hotel conversion in 1927, the Shower House was razed. [REDACTED]

⁵⁷ Willard, Stephen H., “137-Balanced Rock, Ryan, Cal.,” ca. 1928, [the rear of the postcard is addressed to John P. Dobbins, postmarked “Death Valley, 2 May 1929”], copy on file Death Valley Conservancy Archives.

⁵⁸ Smitheram, William, “Leaning Rock – Ryan,” ca. 1916, Smitheram Family Photo Album, copy on file with Death Valley Conservancy Archives.

Ryan Historic District

Name of Property

Inyo, CA

County and State

Condition

The building pad shows little evidence of disturbance and can potentially yield information about one of the essential worker-associated buildings during the mining era.

25. Building Foundation (formally House 5)

Date: 1924

Property Type: 3 Residential, 6 Tourism

Photo: 37

The foundation that held House 5 is a rock-retained platform located uphill and west of the Hospital, uphill and north of House 3, and downhill and west of House 4. Extant remains are a T-shaped concrete walkway, approximately 2 ft wide and an elevated concrete pad, measuring 5 ft 1 in by 9 ft 8 in, which served as a back porch. Other remains include plumbing (water and sewer lines), two small cylindrical water tanks, sparse lumber and electrical parts and wire, nails, pipe, and two posts (one in the southeast corner and one in the northwest corner of the platform). A footpath connects House 3, 4, 5, and the Rec Hall.

Chronology

House 5 was contemporaneous with Houses 1, 2, and 4, which dates it to 1924. According to building plans, the house measured 27 ft by 39 ft and contained one bedroom, bath, living room, dining room, and kitchen with dining nook.⁵⁹ It had a screened porch, like other district properties. The building plans call it the "Surveyor's Residence," thus revealing its intended inhabitant. The house was sold, disassembled, and moved to a property in Amargosa Valley, NV in 1980 (current location and condition unknown).

Condition

The House 5 building foundation is in good condition.

26. Tennis Court

Date: 1927

Property Type: 6 Tourism

Photo: 26

The former tennis court is located directly south of Bunkhouse 1 in a large open area approximately 44 ft by 112 ft. It was historically abutted on its northern edge by one side of an embedded drainage channel composed of two sets of 1x12s placed on end and 10 in apart. Posts (4x4s) are located every eight feet along the board; now they are flush (18 in high) with the board but originally supported court fencing, extending above the Bunkhouse's upper level at a height of 12 to 13 ft. Fencing also ran along the court's western side; the posts, approximately 8 ft apart (and now 3.5 ft tall) were embedded in the top of the rock terrace wall on this level; they are extant but are now incorporated into a split rail fence, which extends down the length of the terrace. The tennis court extended all the way to the concrete Lower Reservoir on its southern

⁵⁹ Pacific Coast Borax Company, "Surveyor's Residence, Ryan, Calif.," November 1924, copy on file Death Valley Conservancy Archives.

Ryan Historic District

Name of Property

Inyo, CA

County and State

end, and had fencing along this side, however, no remains of the fencing is observed. The dry-laid rock retaining wall and a shorter wooden retaining wall topped with additional fencing and no posts formed the eastern side. Both the rock and wooden retaining walls are extant.

Chronology:

The tennis court was constructed as a part of the conversion of Ryan to the Death Valley View Hotel in 1927 (Figure 15). A brochure from that year boasts that one of the feature amenities of the property is that “an excellent tennis court is at the disposal of the guests.”⁶⁰ The tennis court included a clay surface, painted lines, netting, and a 12-13 ft tall fence on the north, west, and southern sides, while the eastern side was bounded by the rock wall terrace and additional fencing where the wall ended. Dimensions determined from a photograph indicate the court was standard sized.⁶¹ It is not clear when the tennis court was dismantled. A 1939 photo indicates that the court, including the net posts, was removed by that time but the tall fencing posts remained.⁶² By 1958, the tall fencing posts along the northern edge of the court (next to the bunkhouse) had been removed and fencing posts along the western edge of the court had been shortened and incorporated into the extant railing.⁶³

Condition:

Excavation for a utility line in 2023 uncovered the possible extant surface of the tennis court buried approximately 6 in below the modern ground surface. Its net and fence post bases may also be buried. [REDACTED]

27a-f. Building Foundations and *Twilight Zone* Set

Date: 1916, 1959

Property Type: 3 Residential, 8 Location Filming

Photo: 41-42

Two substantial building foundations, a tent foundation, the possible remains of a privy, and an associated foot path are located [REDACTED]. The episode of the CBS-series *The Twilight Zone*, “I Shot An Arrow Into the Air,” (Season 1, Episode 15) was filmed in this area.

[REDACTED]

Chronology

The building foundations are the only remains of two of Ryan’s earliest dwellings. The Ryan site map dating from 1916 depicts the buildings as 170 ft west of the superintendent’s house (later the Hospital).⁶⁴ The more southern one is T-shaped and roughly 22 ft by 22 ft in size, while the

⁶⁰ Death Valley Hotel Company, “Ryan, California,” ca. 1927, copy on file Death Valley Conservancy Archives.

⁶¹ Frasher, Burton, “Guesthouses, Death Valley View Hotel, Ryan Death Valley, Calif.,” ca. 1930, Frashers Fotos, copy on file Death Valley Conservancy Archives.

⁶² Hagemeyer, Johan, “Death Valley – Ryan. Jane [Bouse] in Despair about Car – Trouble,” 1939, negative, Hagemeyer Photograph Collection, The Bancroft Library, University of California, Berkeley, <https://calisphere.org/item/ark:/13030/ft229004jb>. Accessed 16 Nov 2023.

⁶³ Color transparency depicting the Ryan guesthouses during a class field trip, view north, April 1958, Ryan_Apr_1958-00002, copy on file Death Valley Conservancy Archives.

⁶⁴ Pacific Coast Borax Company, “Buildings at Ryan, Calif.,” August 1916, copy on file Death Valley Conservancy Archives.

Ryan Historic District

Inyo, CA

Name of Property

County and State

northern building is about 21 ft by 12 ft with a 5 ft porch projecting from its southern end. Both buildings are observed as being wood-framed with gabled roofs in an early photograph; the privy is also pictured.⁶⁵ The 1918 site plan labels both buildings as cabins and shows the addition of a porch on the eastern end of both dwellings.⁶⁶ Two more buildings appear in the 1919 site plan in between the cabins and the newly-built bunkhouses, roughly 18 ft by 10 ft (for the most western one) and 12 ft by 30 ft (for the most eastern) in size and photographic evidence suggests that these were tent structures (Figure 10).⁶⁷ Based on size, the tent foundation described above is likely the larger tent, however since no other tent foundation was observed the most eastern structure might have been completely destroyed by the building of Bunkhouse 2. The two substantial wood-framed buildings appear in various photographs from 1918 to 1927 (Figure 12), while the tent structures are not present in photographs after Bunkhouse construction in 1919.⁶⁸ The buildings were probably razed (and possibly purposely burned down) during the hotel conversion in 1927 as they are absent from a 1930 photograph of the Death Valley View Hotel.⁶⁹

Condition

The building foundations and associated features (privy and footpath) are in good condition. There is very little evidence of disturbance occurring after the buildings were razed in 1927; however some foundation rocks may have been displaced with the installation of the sewer line that serve the bunkhouses. [REDACTED]

27f. The Twilight Zone Set

The ending scene of the episode "I Shot an Arrow Into the Air" was filmed at a location that has been identified as encompassing a 40-ft diameter sloped area approximately 75 ft northwest and below the tent foundation at the edge of the bluff above Ryan Road. In the scene, the main character, Corey (played by Dewey Martin), crests a rock hill and then spies a line of telephone poles, a highway with a bus and semi-tractor trailer, and three painted rectangular signs (Figure 16). One sign advertises "Nelson's Motel/Just Up Ahead/Eats/Gas&Oil," another says "Reno/97 Miles," and the third, "Nevada/385." Several elements from the scene remain. On the bluff, the eastern edge of the feature is demarked by a 10 ft long row of stacked rocks along the footpath (Resource 27e). At this location, the production crew made use of several basalt boulders to emulate a rocky outcrop that the character crests, and most remain in the same location. At the western edge of the feature, two distinct basalt boulders are located about 10 ft east of the edge of the bluff. The boulders are present in the scene where Corey spies the signs and remain in their exact location. In addition, although it was repaved in 2015, Ryan Road (the highway) appears very similar to as it did in the scene likely because it was newly paved in the 1950s. While some poles are missing, the historic powerline (Resource 36) is present. Finally, the rocks used to hold up the signs in the cleared area across Ryan Road remain.

⁶⁵ View of Ryan from the Upper Biddy, ca. 1919, DV-RYA-09, Death Valley National Park Archives.

⁶⁶ Pacific Coast Borax Company, "Buildings at Ryan Calif.," February 1918.

⁶⁷ Pacific Coast Borax Company, "Buildings at Ryan, Calif.," June 1919 (site plan); View of Ryan from the Upper Biddy, ca. 1919, DV-RYA-09, Death Valley National Park Archives.

⁶⁸ For example, Boyer, Albert, "Ryan from top of Funeral Range," 1922, Boyer Collection, copy on file Death Valley Conservancy Archives.

⁶⁹ Frasher, Burton, "Guesthouses, Death Valley View Hotel, Ryan Death Valley, Calif.," ca. 1930, Frashers Foto, copy on file Death Valley Conservancy Archives; they are also missing from Pacific Coast Borax Company, "Buildings at Ryan, Calif.," February 1935 (site plan).

Ryan Historic District
Name of Property

Inyo, CA
County and State

Chronology

Filming took place in October 1959, and the episode aired 15 January 1960.

Condition

The stacked rocks appearing in the episode remain intact. In the area where the signs were placed across Ryan Road, no posts remain however the stacked rocks around their bases and fragments of wooden boards, which may have been the signs, are located nearby. Even though it is not fully intact, *The Twilight Zone* set is in fair condition.

28. Oil House

Date: 1919

Property Type: 1 Transportation, 2 Mineral Extraction, 5 Infrastructure

Photo: 17

Located 20 ft west of the Warehouse, the Oil House consists of a rectangular raised lumber platform, a wooden deck, and associated artifacts. The platform is approximately 22 ft on a north-south orientation by 24 ft on an east west orientation and 3.5 ft tall. The edges are skirted with corrugated metal and the platform is built into the grade of an south-facing slope. The platform is post-and-pier with roughly-hewn 1x12s laid lengthwise east-west for the deck. The deck has square cutouts in its southwest corner. Three rectangular metal tanks are under the platform and line up with these square cut outs in the deck. [REDACTED]

The Oil House was likely associated with the fueling of DVRR locomotives and other mechanical equipment at Ryan. It is located along the rail line at the junction of the wye just west of the Warehouse's platform and according to the early plans, a coal shed (non-extant) was situated directly east. The Oil House may also have held other bulk lubricants as well as equipment and hardware associated with train and equipment maintenance.

Chronology

The Oil House platform is the remnants of a corrugated metal building and associated equipment depicted in historic photographs dating to as early as 1922.⁷⁰ The Ryan site plan dated June 1919, shows a building labeled the "Oil House" in the location of the extant Oil House platform, however its dimensions at 10 ft by 14 ft are smaller than those of the building's current iteration.⁷¹ The earliest site plan showing the "Oil House" in the correct location with matching dimensions is 1935, but it was likely there much earlier.⁷² This plan also depicts a 700 gallon steel oil tank sitting directly west of the building. This fuel tank may be associated with the grade-level deck southwest of the platform mentioned above.

⁷⁰ Boyer, Albert, "Ryan from top of Funeral Range," 1922, Boyer Collection, copy on file Death Valley Conservancy Archives; Photograph depicting House 3 under construction, view west, 1924, Rosenloecher Collection, copy on file Death Valley Conservancy Archives; "The Pacific Coast Borax Mine in Death Valley," ca. 1925, Frank A. Schilling Collection LS_4391, James R. Parks Library and Archives.

⁷¹ Pacific Coast Borax Company, "Buildings at Ryan, Calif.," June 1919 (site plan).

⁷² Pacific Coast Borax Company, "Buildings at Ryan, Calif.," February 1935 (site plan).

Ryan Historic District

Name of Property

Inyo, CA

County and State

Condition

Although it is missing its walls and roof structure, the platform, wooden decking, and associated equipment are in good condition and have the potential to provide information on the care and maintenance of the DVRR locomotives and other industrial equipment at Ryan.

29. Garage

Date: 1919

Property Type: 1 Transportation

Photo: 40

The Garage is represented by a triangular rock-retained foundation that once held a 4-car garage. It is located in a depression at the base and east of the Little Mesa and is bordered by Ryan Road on its eastern side. It is approximately 100 ft west of the Schoolhouse. The dry-laid rock retaining wall is 80 ft in length and 3 ft high and runs east to west. The apex of the triangular platform is 40 ft. The wall contains a square post about 63 ft west of the eastern edge of the platform and a 2 1/2-inch galvanized pipe juts out of the middle of the retaining wall at a distance of 39 ft west of the eastern edge. The retaining wall is in-filled with native material to create a level surface. Sparse artifacts include a sanitary can, wood fragments, window glass, copper tubing, bottle glass (colorless and amethyst), an amber applied bottle glass finish, two green machine-made bottle glass finishes, and wrapped wire.

Chronology

The 4-car garage measured 15 ft by 40 ft, according to the 1935 Ryan site plan.⁷³ The 40 ft length matches to the 40 ft apex of the triangular platform, orienting the long end of the garage north to south. While a garage building does appear on the 1919 plan in a similar location, its dimensions were smaller at 18 ft by 22 ft.⁷⁴ The garage appears on subsequent Ryan site plans dated to 1942, 1947, and 1952, and in the last plan the garage is labeled as "PVT. AUTO STORAGE."⁷⁵ Since the garage was tucked in between the Little Mesa and Ryan Road it is not readily visible in many historic photos however it can be surmised that the garage platform probably held different garage buildings since its construction. The location is an ideal site to park and store a vehicle before heading up the steep incline into Ryan Camp.

Condition

The garage platform shows very little evidence of disturbance and is in good structural condition.

30. Cooling Tower Foundation/Basin

Date: 1925

Property Type: 5 Infrastructure

Photo: 19

⁷³ Pacific Coast Borax Company, "Buildings at Ryan, Calif.," February 1935 (site plan).

⁷⁴ Pacific Coast Borax Company, "Buildings at Ryan, Calif.," June 1919 (site plan).

⁷⁵ Pacific Coast Borax Company, "Buildings at Ryan, Calif.," January 1952 (site plan).

Ryan Historic District

Name of Property

Inyo, CA

County and State

The cooling tower foundation/basin is located approximately 50 ft west and downslope of the Hotel Complex and 70 ft to the east and upslope of the Powerhouse. It is composed of a square concrete and dirt foundation approximately 13 ft by 13 ft in size. Concrete, 7-in-wide, forms the edges of the structure; the concrete seems to have quite some depth as 31 in is exposed on the western corner and 8 in is exposed on the southeastern side; however the rest of the foundation is buried. The concrete is capped by timber, notched in the corners to fit together, and attached to the concrete by bolts. The dirt inside of the concrete is a reddish silt; there are also nails, bolts, wood, and a few glass fragments and one pipe fragment. A dry-laid rock wall runs parallel to the entire length of the southwestern edge approximately 1 ft distant. It is 2 ft high.

Chronology

The function of this feature is largely unknown; however, this structure is labeled as a "Water Cooler" on a Ryan insurance maps from 1935 and 1942 and a "Cooling Tower and Basin" on a map from 1952.⁷⁶ It was probably used to provide cooling water to the equipment inside of the Powerhouse, 70 ft to the south. It is seen in photos taken between 1925-1928 and consisted of several stacked pipes enmeshed in concrete.⁷⁷ It was covered by a gabled roof but was partially enclosed with louvered walls.

Condition

Although the stacked pipes and concrete framework is missing, the cooling tower foundation/basin is intact and in fair condition. It provides an excellent example of a technological adaptation to the extreme desert climate.

Contributing Structures

31a-e. Ryan Waterworks

Date: 1914, 1922, 1930

Property Type: 5 Infrastructure, 7 Architecture

Photo: 2, 4

The Ryan waterworks is a system of structures including two reservoirs, a pumphouse, and a network of piping, associated with the storage and distribution of water throughout Ryan Camp. From its inception in 1914, Ryan has had no incipient source of water; therefore, water was transported to the site via DVRR tanker cars from 1914 to 1930, and then hauled to the site from Navel Spring four miles distant via truck from 1930 onward. Extant structures associated with the evolution of water transport, storage, and distribution, include the Pump House, Upper and Lower Reservoirs, and a network of pipes throughout the camp (Figure 15 shows the reservoirs and pipelines).

31a. Pump House

The Pump House is a wood-framed building with galvanized steel siding and a shed-type roof. It measures 13 ft by 6.5 ft by 8.5 ft high and contains several large horizontal timbers that served as

⁷⁶ Pacific Coast Borax Company, "Buildings at Ryan, Calif.," February 1935 (site plan); Pacific Coast Borax Company, "Buildings at Ryan, Calif.," January 1952 (site plan).

⁷⁷ "Ryan Postcard," ca. 1925, Page 2 ECM2000.4.2, Pape Collection, Eastern California Museum; "The Pacific Coast Borax Mine in Death Valley," ca. 1925, Frank A. Schilling Collection LS_4391, James R. Parks Library and Archives.

Ryan Historic District

Name of Property

Inyo, CA

County and State

equipment bases. It was built into the side of the hill below the railroad grade and abutting Ryan Road to the south. The Pump House held pump equipment for transporting water delivered by the Death Valley Railroad water car into the Lower Reservoir up to the Upper Reservoir structure for camp use.

Chronology

It is unclear when the Pump House was originally used. The earliest site plans place a 12 ft by 24 ft pumphouse and two cylindrical iron tanks on the same level but in a different location than the extant building.⁷⁸ In the location that the extant pump house is now was a building labeled the “Carp[enter’s] Shop.”⁷⁹ The building was likely repurposed into the Pump House with construction of the adjacent Lower Reservoir around 1922.⁸⁰ It continued to be used in tandem with the Lower Reservoir for several years. Starting in the mid-1960s, water was trucked all the way to the Upper Reservoir and the Pump House and Lower Reservoir were no longer used.

31b. Lower Reservoir

The Lower Reservoir is a concrete rectangular structure used historically to hold water from Death Valley Junction as delivered by the DVRR before it was pumped to the Upper Reservoir and distributed throughout the camp. Its approximate dimensions are 15 ft 3 in (east-west) by 28 ft 9 in (north-south) and 5 ft 9 in high. The walls are tapered so that the dimensions of the top are slightly narrower than the ground dimensions. Its walls are 7 in thick and reinforced with 3/4 in wire rope. The floor is 6 in thick. The reservoir is compartmentalized into two sections separated by a 7 in thick partition that is partially demolished. The smaller compartment measures 8 ft by 14 ft.

The reservoir is lined with asphalt. Remnants of it remain on the floor and up the sides. There are two rough cut openings—one in the western wall and one in the partition wall. The outside of the reservoir was painted green at one time and some paint remains. It also contains a painted warning “Restricted Area...Keep Out.”

Chronology

The Lower Reservoir was in use by 1922.⁸¹ It took the place of several smaller cylindrical tanks on the same level; all of the water reservoirs were filled by the DVRR water car from the railroad-grade level above. Water was pumped from the Lower Reservoir to the Upper Reservoir to be gravity fed throughout the camp. Harry Gower explained the hole in the concrete compartment partition as a means to placate Ryan residents who were particular to the origin of their drinking water.⁸² Supposedly they wanted water from Shoshone and so camp management partitioned the Lower Reservoir into drinking water (from Shoshone) and all other water (from

⁷⁸ Pacific Coast Borax Company, “Buildings at Ryan, Calif.,” July 1915 (site plan).

⁷⁹ Pacific Coast Borax Company, “Buildings at Ryan, Calif.,” June 1919 (site plan).

⁸⁰ Boyer, Albert, South-facing view of the Lower Reservoir, Ryan Road, and Trackway, ca. 1922, Boyer Collection, copy on file Death Valley Conservancy Archives.

⁸¹ Boyer, Albert, South-facing view of the Lower Reservoir, Ryan Road, and Trackway, ca. 1922, Boyer Collection, copy on file Death Valley Conservancy Archives.

⁸² Woodman, Ruth, “Notes on Julian Boyd Interview,” 19 March 1947.

Ryan Historic District

Name of Property

Inyo, CA

County and State

Death Valley Junction). To trick residents, management blew a hole in the partition undetectable from the exterior, so residents would think their water originated from Shoshone when it all actually came from the source in Death Valley Junction. The validity of this story cannot be verified.

The Lower Reservoir continued to be used after 1930 (when the DVRR was dismantled, and water was trucked to the site from Navel Spring). Use ended in the 1960s.

31c. Upper Reservoir

The Upper Reservoir is a rectangular concrete and metal structure used for water storage and distribution with a low-profile gabled roof partially built into a western facing slope. It is the highest elevation structure at Ryan to allow for gravity feed to the camp. The Upper Reservoir sits on a semi-rock-retained pad and measures approximately 33 ft long (north-south) by 23 ft wide (east-west). It is 8 ft tall along its western edge, and as it is built into the slope, it is about 3.5 ft above ground on its eastern edge. Its water storage capacity is 29,000 gallons. The concrete sides are reinforced with metal and contain buttressing along their edges. The western edge has three buttresses (approximately 2 ft wide by 10 in deep; except for the middle one that is 6 in wider), while the other three sides each have 2 (at 2 ft wide by 10 in deep). The concrete is thicker along the base to support the weight of the water. The reservoir's roof is wood framed with tarpaper and galvanized corrugated sheeting. Screen at the eaves allows for ventilation, while protecting the water from contamination. There is a metal hatch in the eave for access as well as a 2 ft by 2 ft hatch on the northwest corner roof. A rectangular plywood and metal box extends from the middle of the western wall that holds valves and a 4-in riveted pipe projects 15 ft out of the base to serve as a drain.

Chronology

The Upper Reservoir took the place of a set of original cylindrical galvanized steel tanks sometime after 1920 and was in place by 1922.⁸³ It has changed little from its construction. The plywood and metal valve box and liner was added in the 1980s. It is still used as a reservoir for the district's water supply.

31d. Pipelines

There are several segments of historic water pipeline extant within Ryan Camp. Some of these are buried, and their integrity cannot be ascertained; however, some pipe segments rest on the surface. One surface pipeline runs from the Upper Reservoir to the Haulage Tunnel (Resource 44). It is 1-in steel 21-foot segments with steel couplings. Another 2-in pipeline runs from the Upper Reservoir to the residential level. Neither pipeline is in use at present.

Chronology

A 2-in pressure line is shown on the 1915 site plan originating from the two original cylindrical tanks above Ryan Camp and following the route of the extant pipeline to the residential level. An entire pipeline network, including the pipeline running to the Haulage Tunnel area is depicted on the 1935 site plan. No historic pipelines are still in service.

⁸³ Boyer, Albert, "Ryan from top of Funeral Range," 1922, Boyer Collection, copy on file Death Valley Conservancy Archives.

Ryan Historic District

Name of Property

Inyo, CA

County and State

31e. Modern Cylindrical Steel Tank

A modern cylindrical corrugated steel tank was added to the Ryan Waterworks in 2019 for fire suppression and emergency backup use. It is located approximately 20 ft southwest of the Upper Reservoir and measures 12 ft in diameter by 18.5 ft tall. It comports to the aesthetics of an original Ryan water tank that sat below the Upper Reservoir, however it is considered a non-contributing element of the Ryan Waterworks structure.

Condition

As a whole, components of the Ryan Waterworks are in good condition. The Pump House no longer holds pump equipment however the building is structurally sound and intact. The Lower and Upper Reservoirs are in the process of being rehabilitated. New free standing steel tanks have been constructed in both of the structures. Where the concrete needs repair, it will be mended with concrete of a similar composition and appearance. The roofs will be reinstalled using as much as the historic material as possible. New material, when required, will match the historic fabric. The resulting tanks will appear similar to the originals and will have the same character defining features. The historic pipelines have been left in place undisturbed.

32. Incinerators and Trackway

Date: Late 1910s

Property Type: 5 Infrastructure

Photos: 16, 43

[REDACTED]

The larger and most distant incinerator is constructed of mortared brick, lumber, cast iron piping, and concrete. It consists of three levels. The first and most southern is 6 ft 5 in long by 5 ft wide and is 6 ft 4 in tall. It is brick with a concrete top. On its south facing side it contains an iron door and two rail braces on either side. The door measures 17 in by 17 in and has a latch. The second section of the incinerator is level with the trackway and is constructed of brick and concrete. It measures 5 ft 5 in by 3 ft 9 in by 6 in high and is connected to the first level on its southern side. It contains an iron door on its top measuring approximately 2 ft by 2 ft. The door lifts up to reveal a sloped chute continuing into the first level. The third and upper level is a chimneystack constructed of brick with a concrete top measuring 2 ft 1 in long by 3 ft 3 in wide and 4 ft 2 in high. It recesses in at roughly 1 ft from its base and sits atop the first level. This incinerator was used for burning kitchen refuse; [REDACTED]

Approximately 150 ft east of the larger incinerator is the remnants of a second incinerator. It measures 5 ft 2 in wide by 5 ft 4 in long, but may extend further back into the hillside. It has a concrete foundation with iron grating set at one-inch intervals. It is surrounded by a debris field both upslope and downslope where it continues into a gully. [REDACTED]

Both incinerators are connected to the camp by a stand of ore car track, which extends 830 ft from the west side of the Hotel Complex Kitchen area. The track is 18-in in width and from the incinerators follows a contour, runs along the base of a hill past Storage Adit 1, and terminates in

Ryan Historic District

Name of Property

Inyo, CA

County and State

between the Kitchen and Warehouse. As it follows the contour of the hill, it is supported by timber and retaining walls in some areas. The incinerator trackway is one of the first industrial appearing landmarks encountered upon arrival to Ryan Camp.

Chronology

Based on diagnostic artifacts and historic photographs, the incinerator was likely constructed in the late 1910s to burn refuse. The earliest photograph depicting the trackway as it appears today dates to 1922, however earlier photographs indicate that the incinerator may have been constructed before the trackway was installed.⁸⁴ The incinerators were likely used during the Hotel Era with the operation of the Dining Room until 1956.

Condition

The incinerators, trackway, and associated artifacts are in good condition.

33. Rock-retained terraces, railings, sidewalks, and staircases

Date: 1919-1925

Property Type: 5 Infrastructure, 7 Architecture

Photo: 44

Ryan's steep topography is mediated by several large, stepped terraces built into the hillside (Figure 15). Features on the terraces are reinforced by masonry walls of faced, native cobbles built by at least three local stone masons starting the early 1920s: Dobie Gunnarson, Jourgensen (first name unknown whose tool box remains at Ryan), and Serafin Esteves, a Ryan miner of Basque descent who later did rockwork at other Death Valley landmarks, namely the Furnace Creek Inn and Zabriskie Point.⁸⁵

The lowest terrace contains Bunkhouse 1 and 2, the remains of the Shower House, the Lower Reservoir, the Pump House, and former Tennis Court. The terrace is only intermittently retained. On its northwestern edge in front of Bunkhouse 2 there is a 50 ft long dry-laid rock wall as tall as 15 ft (or 20 rock courses) in some parts. There is also evidence of a buried retaining wall along the edge of the former tennis court. The remainder of the terrace is edged by a natural, but steep, slope. A three-rail railing starts at the edge of Bunkhouse 1 and continues along the terrace edge, along the edge of Ryan Rd and terminates west of the schoolyard. Several posts from the extant railing are shortened former tennis court fencing posts.

The DVRR-level terrace is retained by a 12-ft-tall dry-laid retaining wall starting from about 60 ft north of where the terrace meets Ryan Rd and continuing intermittently behind the bunkhouses. The wall does not continue all the way up to the DVRR-level; it ends about 10 ft below the DVRR-grade level. A partially concrete-mortared rock wall runs the whole length of the terrace's western edge and supports a three-rail wooden railing. The portion of the rock-retained cut south of Bunkhouse 1 juts out from the railroad grade's edge by about 12 ft and

⁸⁴ Boyer, Albert, South-facing view of the Lower Reservoir, Ryan Road, and Trackway, ca. 1922, Boyer Collection, copy on file Death Valley Conservancy Archives; Southwest view of Ryan from Hospital with snow, ca. 1918, DV-RYA-27, Death Valley National Park Archives.

⁸⁵ Ringhoff, 134-135.

Ryan Historic District

Inyo, CA

Name of Property

County and State

contains indents for railroad trestles. These formerly present wooden trestles supported a length of track that would allow water tanker train cars to dump their loads into the Lower Reservoir. The three-rail wooden railing was originally in a X-pattern with a top rail, but was reconfigured in the 1990s. A concrete sidewalk (3-ft-wide) starts at where the train tracks once traversed the terrace and leads to the base of two staircases: one leads to the residential level and the other leads to the rock-retained platform and the Hospital.

The next level terrace contains the Hospital, adjacent open space north of the Hospital, and a rock-retained platform. The northern portion of this terrace is retained by one of the most substantial masonry walls present at Ryan. This wall affronting and supporting the Hospital rises 10 ft above the grade and consists of approximately 17 courses of dry-laid, faced native cobbles. It is cut by two staircases leading to the Hospital, a wooden span north of the building and a concrete span south of the building. From the southern staircase, the wall gradually shortens to 4.5 ft, or 6 courses, at its terminus the corner of a platform with sidewalk. The rock-retaining wall edging the platform measures 140 ft long by 20 ft wide and the platform is bisected by a concrete sidewalk accessed by a concrete staircase on its southern edge.

The fourth terrace holds the residential level and is on the same contour as the Rec Hall. The southern portion of the residential terrace is flanked by a retaining wall composed of both set concrete and dry-laid faced stone. The concrete base is 5 ft 4 in tall and supports a dry-laid faced stone wall 6 ft in height. Atop the rock portion, in front of Houses 1 and 2 is a concrete cap with wooden railing. To the north of House 2, the wall extends and provides slope support for the area behind the aforementioned platform and the Hospital building, where it reaches its maximum height of about 11 ft, or 20 courses of dry-laid faced stone. At the Rec Hall, as there is evidence of a similar buried wall to the west and south sides of that building.

A concrete and rock staircase, approximately 8 ft wide and 8 ft tall with 18 steps (1 ft treads with 6 in risers) provides access from the DVRR-level terrace to the residential level. The staircase has a landing that forms the base to two staircases, 56 in wide by 4 ft tall each with 8 steps (1 ft treads with 6 in risers) leading either north to House 2 and buildings beyond, or south to House 1. Concrete sidewalks, 3 ft wide continue from the staircase in both directions, with the southern looping around House 1 (the sidewalk is 2 ft wide behind the house) and the northern leading all the way to the Rec Hall (the sidewalk becomes 2 ft wide in between Houses 2 and 3). This level is flanked by an intermittent dry-laid rock retainer beginning at the southeastern corner of House 1 and continuing to the southern edge of House 3. A section of wall behind (east) House 1 and between House 1 and 2 was mortared in the 1980s for stability. The length in between House 2 and 3 is not mortared and stands at an approximate height of 4 ft with 11 courses of smaller dry-laid cobbles.

Chronology

The terraces and railings were constructed over a period of five years, matching camp development. The earliest terraces at the Bunkhouse and DVRR-levels likely date to 1919 when those buildings were constructed. The significant renovation of the Hospital in 1924, occurred

Ryan Historic District

Name of Property

Inyo, CA

County and State

atop the hospital-level terrace, indicating that it was likely constructed by that time.⁸⁶ The wall supporting House 3 as well as the one reinforcing the Rec Hall may also been constructed at this time. By 1925, with the addition of the new staff houses (House 1 and 2), the concrete and stone wall and staircase were in place.⁸⁷ The railings and staircases are contemporaneous with their related rock walls.

Condition

Most of the rock-retained terraces are in good condition with a couple of exceptions. The rock wall flanking Bunkhouse 2 on the lowest terrace exhibits some erosion with a 15 ft wide portion of its span completely missing. The dry-laid rock wall flanking (to the west) the Hospital terrace has a crack parting some of the rocks, caused by a tree root. The root also cracked the concrete at the base of the stairs and some of the adjoining concrete stairs. Due to this damage, the tree was removed in 2011.

Most of the railings were replaced in the 1990s, however the original posts were left intact. The replacement railings retain the character-defining features of the original railings. The railing along the residential-level terrace is in the process of being restored to its original configuration, reusing the original posts when possible.

34. Sewer line and cesspit

Date: Late 1910s

Property Type: 5 Infrastructure

Photo: 58

The sewer line and cesspit serviced the southern portion of Ryan Camp including the Warehouse and Hotel Complex.⁸⁸ A ceramic sewer line, composed of 2-ft sections of 6-in brown-glazed earthenware ceramic, originates at a junction just west of those buildings, travels 900 ft downslope, and terminates at a cesspit. The sewer line is mostly above ground and is located in a slightly excavated channel reinforced in some locations by stacked rocks. The line follows the contours of the slope, curving when necessary.

The sewer line terminates at an excavated cesspit, measuring approximately 11 ft by 13 ft. A buried wooden structure is only minimally exposed on the eastern edge of the excavated area and is composed of the ends of three 1x12s and one 1x8 cross brace. The sewer line ceramic pipe goes directly under the exposed lumber at its east end. A 6-in iron pipe, perhaps functioning as overflow, emerges from the western part of the pit and terminates in an adjacent wash. There are very few artifacts aside from iron fragments.

Chronology

The sewer line and cesspit are likely date to the late 1910s. They are no longer used.

⁸⁶ Boyer, Albert, "New hospital under construction," ca. 1924, Boyer Collection, copy on file Death Valley Conservancy Archives.

⁸⁷ Boyer, Albert, "New staff houses from below," ca. 1924, Boyer Collection, copy on file Death Valley Conservancy Archives.

⁸⁸ The northern buildings were served by a different sewer line that has been modernized to empty into a modern septic tank. Thus, this feature has not been included in this nomination.

Ryan Historic District

Name of Property

Inyo, CA

County and State

Condition

The sewer line is mostly intact and visible on the surface as it follows its path to the cesspit. It is a remarkable example of PCB's approach to waste management and its engineering. It is difficult to assess the condition of the cesspit structure because it is buried, but it is likely also intact.

35. Fuel Pump Platforms

Date: ca. 1925, 1928

Property Type: 1 Transportation, 6 Tourism

Photo: 8

Two concrete platforms which once held fuel pumps are located adjacent to the Hotel Complex. Fuel Pump Platform 1, a 4 ft 5 in square concrete structure, is located at the base of the eastern unretained slope face on the railroad grade level approximately 25 ft directly east of the Store's porch. The platform is 6-in-thick with inlaid iron braces. A 1-in iron pipe is embedded in the platform and a 1 ft by 3 ft portion of the southern edge of the platform is built up to 10 in thick. The platform is a similar construction to the other fuel pump platform described below, however the concrete type differs with finer aggregates.

Fuel Pump Platform 2 is an oval-shaped concrete structure located approximately 5 ft east of the Store's porch, adjacent to the building's opening that once held the post office. The platform measures 4 ft 9 in wide by 9 ft long and is 1 ft high. It is made of buff-colored concrete containing locally sourced aggregates and contains a 6-in opening approximately 3 ft 9 in from the southern edge lined with a terracotta pipe. A wooden plug has been placed in the opening (likely for safety reasons). Six small iron circles are embedded in the concrete around the opening and likely anchored the fuel pump. The opening is not centered in the pattern of circles, but is offset to the south. Four L-shaped iron brackets are embedded in the concrete on the outside of the pattern of circles to form a 30-in square shape. Finally, two 2-in iron brackets are embedded in the platform 1 ft in from each long edge and 6 in west of the eastern edge of the platform.

Chronology

Based on historic photographs, Fuel Pump Platform 1 held a complete gas pump by 1925, although an earlier photo shows a pump base with no tank.⁸⁹ The pump resembled a visible handcrank gas pump with a glass cylinder and spherical globe top (Figure 3). The pump was removed by 1929.⁹⁰ Fuel Pump Platform 2 is not present in a 1925 image of the camp, however it is present in a photo dating from 1930 (Figure 46).⁹¹ At that time, it resembled a visible

⁸⁹ Frasher, Burton, "Post Office, Store, and Dining Room, Ryan, Calif.," ca. 1925, DV-RYA-08, Death Valley National Park Archives; View of Store and Ore Bins, ca. 1924, Rosenloecher Collection, copy on file Death Valley Conservancy Archives.

⁹⁰ Motorcoach Passengers, ca. 1929, DV-RYA-44E, Death Valley National Park Archives.

⁹¹ "The Pacific Coast Borax Mine in Death Valley," ca. 1925, Frank A. Schilling Collection LS_4391, James R. Parks Library and Archives; Frasher, Burton, "Guesthouses, Death Valley View Hotel, Ryan Death Valley, Calif.," ca. 1930, Frashers Fotos, copy on file Death Valley Conservancy Archives.

Ryan Historic District

Inyo, CA

Name of Property

County and State

handcrank gas pump with a glass cylinder but no top globe. The manufacture of the gas pump cannot be definitively determined, however based on the fastener pattern in embedded in the concrete, it may have been a Wayne 515 or 615.

The fuel pumps were likely not used in tandem, but consecutively. Early on, the fuel pumps were essential in the fueling of many of the passenger and work vehicles present in the district. In addition, Fuel Pump Platform 1 is located directly east of the DVRR track approximately 500 ft from the modified Cadillac's garage (Storage Adit 2) indicating it could have been used to fuel that vehicle as it traveled to and from Death Valley Junction. Later, the proximity of the pumps to the post office suggests that they may have been aimed towards tourist use as tourists began to visit Ryan even before the hotel conversion in 1927. Before a gas station was installed in Furnace Creek in the late 1920s, the Ryan fuel pumps would have been a necessary stop to travelers visiting sights south of Ryan, such as Dante's View or Greenwater Valley, or those coming to and leaving Death Valley.

While the pump located on Fuel Pump Platform 2 was likely removed by the 1950s, an exact date is unknown. It is not present in a *Death Valley Days* production still from 1956; in fact, the photograph shows the cast and crew using the platform as a resting spot.⁹²

Condition

While the pumps are missing, the fuel pump platforms are in good condition.

36. Former Power Line

Date: 1914

Property Type: 5 Infrastructure

A network of poles and lines transmitted electricity within Ryan Camp and was routed between Ryan and some of its satellite communities and mines. One set of poles is found among the Copenhagen Row site connecting this area to the main power grid. The poles are square posts and some have native basalt boulders around their bases for support. They are generally constructed with one cross piece fastened by two metal strips in a V-pattern. There is one wooden peg on each end of the crosspiece.

In 1963-1964, Bell Telephone installed and buried telephone cable from the Furnace Creek Wash to Ryan in an extant road paralleling this set of power poles. The buried line follows the trajectory of the above ground powerline, but deviates to the south as it approaches Ryan. While most of the line is outside of the district boundaries, it terminates at the north end of Bunkhouse 2 at an extant cut powerpole (but is connected to the houses via cable buried in the mid-1980s). Although a part of the overall infrastructure of the site, the buried telephone line is not contributing resource.

A set of remnant and extant poles is found within Ryan Camp among the buildings and extends up to the Upper Biddy McCarthy Mine. Extant poles can be found near the Lower Reservoir, at

⁹² Production Still, "Million Dollar Wedding," *Death Valley Days*, 1954, copy on file Death Valley Conservancy Archives.

Ryan Historic District

Inyo, CA

Name of Property

County and State

the Baby Gauge Level of the camp approximately 225 ft west of the Haulage Tunnel, and in a line spanning approximately 700 ft to the Upper Biddy McCarthy Mine. These poles conveyed electricity and possibly telephone.

A final system of powerline connects the Powerhouse to a wooden transformer rack. The transformer rack is located approximately 40 ft west of the Hotel Complex building and 280 ft southeast of the Powerhouse. It is constructed in an H pattern with two upright poles 12 ft apart connected by several horizontal crosspieces. The crosspieces have wooden pegs for insulators. From this structure, power was distributed to the other poles at the site.

Chronology

Some of the extant power poles, especially those within Ryan Camp and extending up to the Upper Biddy McCarthy Mine, may be associated with the earliest "Electric Light Plant," (no longer extant), in place by 1915.⁹³ The poleline extending through to the lower area of Ryan Camp likely supplied the lower residences (represented by Resource 27) with electricity and likely date to 1916. That same series of poles appears in the 1960 episode of *The Twilight Zone*, entitled "I Shot an Arrow Into the Air," in which the main character refers to them as "telephone poles."⁹⁴ The transformer rack brought power from the Powerhouse (located downslope) to the main level of Ryan Camp and is contemporaneous with the original power plant (ca. 1918 and replaced by the Powerhouse in 1924). Poles and lines were decommissioned over the years as power was removed from unused buildings and extant utilities were moved underground. The entire system was sequentially phased out beginning when line power was brought to Ryan in 1963.

Condition

These surviving remnants of Ryan's telecommunication and power networks are only a fraction of the quantity of poles and lines existing historically at Ryan. Even early photographs depict many more poles and overhead wires connecting almost all the buildings at Ryan. The remaining structures are in good condition.

37. Cadillac chassis

Date: 1912, pre-1919

Property Type: 1 Transportation

Photo: 45

The remains of a 1912 Cadillac Touring car, outfitted with flanged wheels for use on the DVRR, is located approximately 50 ft to the west and behind the Hotel Complex Kitchen sitting on remnant DVRR track. Remains include the chassis, engine block (an inline 4-cylinder with overhead valves), partial body including two sides with doors, flywheel, steering gear, partial wooden running boards with associated brackets, a partial cowl, rear engine mounts, a right-hand steering column, transmission lever, and two wood-spoked flanged wheels (29-inch diameter).

⁹³ Pacific Coast Borax Company, "Buildings at Ryan, Calif.," July 1915 (site plan).

⁹⁴ "I Shot an Arrow Into the Air," *The Twilight Zone*, Season 1, Episode 15, CBS, Airdate 15 January 1960.

Ryan Historic District

Name of Property

Inyo, CA

County and State

Chronology

The 1912 Cadillac Touring car was originally used for transportation in Death Valley between Ryan and Greenland Ranch (Furnace Creek) and between PCB's Death Valley properties, including Ryan, the Lila C, and Death Valley Junction. Sometime between 1914 and 1919 the car was outfitted with iron flanged wheels 36-inches apart, so that it could operate on the DVRR rails (Figure 17). It was housed in Storage Adit 2, which was identified as a "Garage" on the 1919 Ryan site plan and was used to transport individuals to and from Death Valley Junction. The car appears in several photographs from the 1920s and was of crucial importance to Ryan employees, such as management and medical staff⁹⁵; in fact, at one point carrying a young child to get her broken arm set after a tumble down the Little Mesa.⁹⁶

Condition

The modified 1912 Cadillac has been a victim to the elements and vandals throughout the years and is in poor condition; however, it retains enough original parts for indubitable identification.

Non-Contributing Structures

38. Modern Powerline and Maintenance Road

Photo: 26

A powerline with several poles (one present within the district boundaries) brings power into Ryan from the west through the lower slopes of Ryan and terminates at the southwest corner of Bunkhouse 1. The poles are approximately 400 ft apart and numbered according to their locations. They are serviced by a 12-foot-wide maintenance road. According to date nails on the poles, the powerline was constructed in 1963 as Ryan transitioned from reliance on the Powerhouse to line power from beyond Death Valley. Despite being older than 50 years, the powerline and maintenance road are non-contributing structures to the significance of the Ryan Historic District.

Contributing Objects

39. Weathervane

Date: 1930s, 1952

Property Type: 4 Commercial and Community, 7 Architecture

Photos: 16, 46

The Ryan Weathervane is located on top of the small peak along the western edge of Ryan Camp (above Storage Adit 1). From the DVRR-level, it is accessed via a 20-ft long metal staircase and a 180-ft long footpath. It stands 8 ft 8 in tall and is composed of a former steel flagpole embedded in a rock and concrete base with a diameter of 36 in. The Weathervane's cardinal directions are formed from bent rods and pipefittings comprise the pivot assembly. The 42-inch-long pointer is made from a steel rod and heavy gauge sheet metal composes the head and tail fin.

⁹⁵ Boyer, Albert, "Cadillac with flange wheels to drive on R.R. tracks, Jos & Thelma," ca. 1921, Boyer Collection, copy on file Death Valley Conservancy Archives.

⁹⁶ Boyer, Lillian, "Notes on Life at Ryan, 1919-1924."

Ryan Historic District

Inyo, CA

Name of Property

County and State

Chronology

The exact date of the Weathervane is unknown, mostly due to the fact that it cannot be seen very well in historic photographs. Two photographs of Ryan around 1930 show a tall flagpole in the location of the Weathervane; at some point after 1930 and before 1941 (when the Weathervane first appears), the flagpole was shortened and the Weathervane attached.⁹⁷ The Weathervane reached a new level of iconography in 1952 when photographer Ansel Adams on a tour of Death Valley photographed it entitling the work "Weather Vane, Ryan." He included the photograph in his 1954 published manuscript *Death Valley* (Figure 18).⁹⁸

Condition

The Ryan Weathervane is in good condition. It was removed in the mid 2000s, but reinstalled in 2012. It has mostly original parts, with the exception of the pivot assembly and bushing.

DEATH VALLEY RAILROAD

The Death Valley Railroad (DVRR) grade is a 20.2-mile stretch of narrow 36-inch railroad with numerous rock-retained sections, culverts, rock cuts, rock filled trestles, and the remains of wooden trestles constructed in 1914 to connect the camp of Ryan and its associated borax mines to the borax processing center of Death Valley Junction, California. The historic railway varies in its degree of preservation and its landownership, with portions lying within Bureau of Land Management boundaries, as well as multiple privately-held properties. Due to its length and complexity, only the portions of the railway directly passing through and within the boundaries of the Ryan Historic District are considered a contributing resource.

Within the boundaries of the Ryan Historic District, the DVRR railroad grade can be sectioned into three stretches but only count as 1 contributing site and an additional 1 contributing structure. Resource 40a-e is the section of grade north of the camp beginning at the district boundary and continuing to the northern edge of the camp. Resource 40f-l is the section of grade traversing through the camp, including the wye section behind the Hotel Complex and a leg leading to the Storage Adit 2, culminating west of the Warehouse and Oil House. Resource 40m-r includes the section of grade from the western edge of the camp to the Lower Biddy McCarthy Mine, where it historically terminated.

Resource Number	Type	Name	Construction Date	Photograph/s
40a-e	Contributing Site	Railroad grade, rock cuts, culverts, and retaining walls	1914	38

⁹⁷ For example, Frasher, Burton, A View of the Death Valley View Hotel from the Upper Biddy Mine, Looking North, 1930, A-1124-1930, Frashers Fotos, copy on file Death Valley Conservancy Archives; Frasher, Burton, A photograph showing Ryan from downslope, view southeast, 1941, F-2763-1941, Frashers Fotos, copy on file Death Valley Conservancy Archives.

⁹⁸ Adams, Ansel, and Nancy Newhall, *Death Valley*, Redwood City, California, 5 Associates Publishing, 1954, Photograph 19.

Ryan Historic District

Inyo, CA

Name of Property

County and State

40f-l		Railroad grade and wye, track, buried ties, standing rail and switches	1914-1915	31
40m-r		Railroad grade, trackways, pipelines, and retaining walls	1915	19, 64
41	Contributing Structure	Oil Transfer Structure	1918	19

Contributing Site

40a-e. Railroad grade, rock cuts, culverts, and retaining walls

Date: 1914

Property Type: 1 Transportation, 6 Tourism

Photo: 38

Resource 40a-e encompasses approximately 0.14 miles of DVRR railroad grade from the Ryan Historic District's northern boundary (as demarcated by a natural gully) to the northern edge of Ryan Camp (a water hydrant along the east side of the grade marks the arbitrary boundary). Within this section there are two culverts, two rock retaining walls, and a wooden post. Other railroad related artifacts such as bolts and spikes were observed but not included in the resource list. Please refer to the table below for individual descriptions and the attached district map for location information.

Resource Number	Resource Type	Description	Condition
40a	Retaining wall	Elaborate dry-laid rock retaining wall measuring 220 ft long on the western edge of the grade. Located 20 ft north of Ryan Camp boundary. Likely associated with slope retention and fill. Ranges from 4 to 20 courses of rocks.	Mostly intact, however contains a 10 ft long eroded area
40b	Culvert	24-inch diameter corrugated steel culvert buried under the grade. Located 40 ft south of northern edge of retaining wall (40a). Both intake and output are apparent.	Intact, some damage to intake

Ryan Historic District

Inyo, CA

Name of Property

County and State

40c	Wooden post	Square 10x10 in wooden post 8 ft in height. Located 15 ft west of the western edge of the railroad grade.	Good condition
40d	Retaining wall	Elaborate dry-laid rock retaining wall, V-shaped, and measuring 155 ft long on the western edge of the grade. Likely associated with slope retention and fill. Ranges from 20 courses at the midpoint of the V to 2-3 courses at the ends.	Intact
40e	Culvert	24-inch diameter corrugated steel culvert approximately 16 ft in length. Six feet of the culvert juts out of embankment below the grade to the west; the intake is not apparent.	Intact

40f-l. Railroad grade and wye, track, buried ties, standing rail and switches

Date: 1914-1915

Property Type: 1 Transportation, 6 Tourism

Photo: 31

Section 40f-l encompasses approximately 0.3 miles of DVRR railroad grade from the northern edge of Ryan Camp (a water hydrant along the east side of the grade marks the arbitrary boundary) to the western edge of the Oil House. It also includes the wye of standing ties, tracks, and switches behind the Hotel Complex (measuring 302 ft) as well as a section of track from the break of the wye (at Ryan Rd junction) to Storage Adit 2 that once held the rail-equipped Cadillac (measuring 477 ft) (Figure 19). Within this section there are two stretches of exposed track, buried track, a sidewalk for railcar egress, footing for an ore bin, a retaining wall, and a buried coal deposit likely associated with the DVRR locomotives. These resources are detailed in the table below.

Resource Number	Resource Type	Description	Condition
40f	Track	100-ft-long section of exposed intact track composed of approximately 57 railroad ties on the grade between the Hospital and Bunkhouse 1 and 2. Some ties are completely exposed,	Intact except for some splintering

Ryan Historic District

Inyo, CA

Name of Property

County and State

		and others only partially exposed; this section shows a switch, where a tail of the track veers westward to allow dumping of water into the Lower Reservoir. No rail or hardware present.	
40g	Sidewalk	A 125-ft-long by 3-ft-wide section of concrete sidewalk also mentioned in Resource 33, which extends from the base of the stairs below the terraced platform, leading to the residential level, and then on to the location of the pre-existing track. A section of smaller gauge track (likely for small flat cars and connecting to the Baby Gauge track) crossed the sidewalk at its midpoint. The sidewalk allowed passengers to exit/enter the rail cars without walking on gravel/dirt. Likely dates to the 1920s.	About 70% intact
40h	Buried track	Two sections of intact track (ties and ballast) have been uncovered during modern construction projects – one at the railroad grade junction with Ryan Rd and the other directly north of the Warehouse building. It is likely that several others exist in this stretch of the DVRR. The sections were composed of 6-foot-long ties spaced 2 ft apart with some intact hardware and likely date to the original construction of the DVRR.	Intact, but buried and not visible on surface
40i	Ore bin footings	At least two dry-laid rock walls, which acted as the footings for enormous	Intact with minimal erosion

Ryan Historic District

Inyo, CA

Name of Property

County and State

		wooden ore bins, exist along the eastern rock face of the railroad grade level adjacent to the Hotel Complex buildings. The most northern one is 3 ft tall and 6 ft 8 in long and composed of large boulders (some possibly dressed) in four courses. The second, located 30 ft south, is 8 ft tall by 7 ft long and composed of several courses of dressed flat rocks in three distinct steppes. These footings are the only remains of the wooden ore bins used to load borax ore on to the DVRR from the Baby Gauge rail/mine cars and were removed in 1927.	
40j	Track (wye)	The DVRR wye is approximately a 260 ft length of track located behind (to the west of) the Hotel Complex which allowed locomotives and railcars to turn around.	Fair
40k	Retaining wall	Dry-laid retaining wall measuring 70 ft long on the western edge of the wye behind (southwest of) the Hotel Complex. 30 courses of medium-sized rock.	Intact
40l	Buried coal	Buried coal deposit 10 in under the surface located 15 ft east of the Warehouse and associated with buried track at that location. Its full extent was not evaluated but it ranged from 1-4 in thick and was the thickest 10 ft due north of the Kitchen's porch. Its proximity to the track suggests that the coal is associated with the operation	Intact, but completely buried

Ryan Historic District

Inyo, CA

Name of Property

County and State

		of the steam locomotive that was used early in the DVRR's construction and operation.	
--	--	---	--

40m-r. Railroad grade, trackways, pipelines, and retaining walls

Date: 1915

Property Type: 1 Transportation, 6 Tourism

Photo: 19, 64

Section 40m-r encompasses approximately 0.3 miles of DVRR railroad grade from the western edge of the Oil House to the Lower Biddy McCarthy Mine where it historically terminated. Within this section there are two stretches of partially exposed track, eight retaining walls, two buried pipelines, and a dirt ramp with utilities. These resources are detailed in the table below.

Resource Number	Resource Type	Description	Condition
40m	Retaining walls	Approximately 25% of the grade is supported by at least eight sections of an intermittent dry-laid retaining wall along its western edge. The wall varies from 6 to 20 courses of medium sized native rock. Most of the wall is intact; some erosion is present.	Intact
40n	Buried pipe	Curved 1-inch diameter pipe with both ends buried. Approximately 3.5 ft long.	Fair
40o	Dirt ramp	A 10-ft-wide dirt ramp leading 60 ft down from the DVRR grade to a utility area containing the remains of a pipe and tank with fittings (e.g. a spigot).	Good
40p	Track	15-ft-long section of exposed intact track composed of approximately 9 partially buried railroad ties spaced 12 in apart. No rail or hardware is present.	Exposed parts of ties are splintered but largely intact. The parts that are buried are likely intact.

Ryan Historic District

Inyo, CA

Name of Property

County and State

40q	Track	6-ft-long section of exposed intact track composed of approximately 4 partial railroad ties spaced 18 in apart. No rail or hardware present.	Exposed parts of ties are splintered but largely intact. The parts that are buried are likely intact.
40r	Pipeline	20-ft-long partially buried 1-inch pipe along the grade. May be related to the Lower Biddy McCarthy Mine.	Good

Contributing Structures

42. Oil Transfer Structure

Date: 1918

Property Type: 1 Transportation, 5 Infrastructure

Photo: 19

The Oil Transfer Structure is a timber structure located along the southern edge of the DVRR grade (section included in Resource 40m-r) as it extends from Ryan Camp southwesterly towards the Lower Biddy McCarthy Mine. Composed of several pieces of timber, nails, a galvanized barrel, and pipe, it measures 8 ft (E/W) by 6 ft (N/S) with a 3 ft by 5 ft wood deck flush with the railroad grade. The deck is sitting over a 22 in diameter by 32 in high barrel with screening and a 2-inch pipe attached on its bottom. The Oil Transfer Structure is fastened to the exposed track in this location by two timber pieces 6.5 ft apart acting as ties. It was used to transfer fuel oil from rail cars into a holding tank (located at the end of the dirt ramp), from where it could be drawn off from a pipe and spigot. A pipeline possibly connected the tank to the Powerhouse because fuel oil was used to operate the Powerhouse. An adjacent rock retaining wall (Resource 40m), pipe (Resource 40n), and dirt ramp (Resource 40o) are likely related to its functioning.

Chronology

The Oil Transfer Structure is contemporaneous with the extant Powerhouse (which replaced the earlier power plant, built in 1918) and was likely constructed after 1918.⁹⁹ It was likely not used after the railroad was decommissioned in 1930.

Condition

The timber composing the structure is dry and splintered in some areas; the structure is in fair condition.

BABY GAUGE RAILROAD

The Baby Gauge (or Baby Gage) Railroad (BGRR) is a narrow 24-inch rail line connecting the three borate mines, the Grandview, Lizzie V. Oakley, and Widow located south of Ryan, to the

⁹⁹ Present in Boyer, Albert, "1922, Town was taken from top of Funeral Range 1.," Boyer Collection, copy on file Death Valley Conservancy Archives.

Ryan Historic District

Inyo, CA

Name of Property

County and State

camp and loading area for the DVRR. The railroad is composed of over 3.75 miles of track, switches, and small sidings, four tunnels, several trestles, two rock sheds, and an extant locomotive and rolling stock. The railroad was constructed over a period of several years beginning in late 1914; and changes in mine focus and topographical challenges forced its constant maintenance and slight reorientation of some areas. When mining operations ceased in 1927, the BGRR was outfitted for use as a tourist train. At least four flatcars were adapted to hold seating for passengers, and the locomotive transported tourists along the railway and through the mines. The railroad tours continued until 1950. The locomotive continued to be operated on the railway for mine assessment work until the 1960s and was featured in several episodes of the *Death Valley Days* television series.

The Baby Gauge includes over 3.75 miles of total trackway and several resources located on land owned by the Death Valley Conservancy, Rio Tinto Minerals, and the Bureau of Land Management. This nomination includes only the portion existing within the district boundaries, including 1 contributing building, 1 contributing site, and 2 contributing structures.

Resource Number	Type	Name	Construction or Move Date	Photograph/s
42	Contributing Building	Locomotive Storage Adit	1916	47-48
43a-e	Contributing Site	Baby Gauge Railroad	1914	49, 52
44a-b	Contributing Structure	Haulage Tunnel	1914, 1920, 1962	50-51
45	Contributing Structure	Locomotive and Car	1919, 1923	47

Contributing Building

42. Locomotive Storage Adit

Date: 1916

Property Type: 1 Transportation, 6 Tourism

Photos: 47-48

The Locomotive Storage Adit is a timbered room built into the side of a north facing slope located approximately 250 ft west and above the Hotel Complex (pictured in Figure 55, right). The adit measures 8 ft 3 in wide and 34.5 ft deep with a height of 7 ft. The room widens at the back for a total width of 12 ft 4 in and is flared in both directions. The adit is lined by 10x10 square-set timbers set 5 ft 4 in apart. The openings between square sets are lagged (lined) by 5-6 stacked 2x12s. The floor is dirt with two sections of 24-inch track with a switch just inside the opening. The opening, or portal, is 6.5 ft tall by 6 ft 9 in wide and is enclosed by wood and corrugated steel double doors. One of the steel sheets has "Pacific Coast Borax Co." painted on its back. The adit contains knob and tube wiring along its right side and three bare bulb lights.

Ryan Historic District

Name of Property

Inyo, CA

County and State

The Locomotive Storage Adit contains several tools (historic and modern) hanging on each wall, along with two large pieces of equipment, a modified flat car (see Resource 45), a large wooden crate (containing replica bench seats for the restored modified flat car), various hardware including fuel containers, a handmade bucket, mining equipment (columns for a bar and column drill), machinery parts, and letter stencils, to name a few. One of the large pieces of equipment is the Plymouth BL locomotive with attached flat car (discussed in more detail under Resource 45) and the other, a Mancha electric mule 1.5-ton Little Trammer battery locomotive painted with "United States Borax Company." It likely dates from the 1940s-1950s, contains a wooden seat, and may have originated from a local area mine (not Ryan). A 6 ft 8 in by 3 ft utility flat car, manufactured by Hendy, with a wooden deck flanked by metal brackets for stake sides is also present in the adit. It contains spare parts and iron mine car wheels on its deck.

Chronology

The Locomotive Storage Adit appears first on Ryan site plans in 1916 and is labeled a "Car House" on the 1918 plan.¹⁰⁰ At that time it measured 12 ft by 18 ft, and so at some point it was enlarged. No dimensions are recorded on later site plans, but the 1935 and 1947 maps call it the "Motor House," and the "Engine House," respectively.¹⁰¹

Condition

The Locomotive Storage Adit is structurally sound and in good condition.

Contributing Sites

43a-e. Baby Gauge Railroad

Date: 1914

Property Type: 1 Transportation, 6 Tourism

Photos: 49, 52

The BGRR is composed of five major components: the Baby Gauge Level, a set of Baby Gauge mine cars, the Baby Gauge rail line extending to the Widow Mine over 3 miles distant, a wooden trestle, and rock sheds. While they are associated with the BGRR, the Haulage Tunnel and Locomotive are treated as separate structures.

43a. Baby Gauge Level

The Baby Gauge Level represents a 17,635 sq ft area that was the terminus and turnaround for the BGRR to dump ore into massive wood bins so it could be transferred to the DVRR and transported to Death Valley Junction for processing. The site is roughly oval and flanked on two sides by steep slopes containing the Locomotive Storage Adit to the south and the Haulage Tunnel to the east. It shows evidence of several track ways, several historic mine cars, and the remains of the wooden ore bins (the footings of which are described in Resource 40i).

¹⁰⁰Pacific Coast Borax Company, "Buildings at Ryan, Calif.," August 1916; Pacific Coast Borax Company, "Buildings at Ryan California," February 1918.

¹⁰¹ Pacific Coast Borax Company, "Buildings at Ryan, Calif.," February 1935; Pacific Coast Borax Company, "Buildings at Ryan, Calif.," March 1947 (site plan).

Ryan Historic District

Name of Property

Inyo, CA

County and State

The Baby Gauge Level contains three main trackways composed of 24-inch gauge light rail with ties measuring 5 in by 3.5 in by 3.5 ft long, spaced 12 in apart, including spikes and associated hardware, like switches. There are two main trackways: one is curved and allowed the train to enter the Haulage Tunnel, and another is straight veering westward onto a wood-framed trestle that once extended over the now removed wooden ore bins. From the Locomotive Storage Adit the curved track measures approximately 660 ft. The straight track measures 385 ft and is supported on its western part by a partially buried wooden trestle. According to historic photos, this trestle carried the Baby Gauge ore cars to the tops of wooden ore bins where they could dump their loads. A third trackway was laid exclusively for the tourist train and connects the Locomotive Storage Adit and Haulage Tunnel to a passenger loading area on the southeast corner of the Hotel Complex. Beginning at the Haulage Tunnel, this trackway follows the contour of the slope and runs along a road, which leads from the level of the Hotel Complex to the Baby Gauge Level. The distance from the portal to the loading area is approximately 1000 ft.

Chronology

The Baby Gauge Level was used from 1914, and the curved track was employed for the life of the BGRR up until it ceased operation in the 1960s. The straight trackway leading onto the trestle and over the removed ore bins was discontinued in 1927 and partially demolished in the construction of the third trackway, which allowed the Baby Gauge to descend to the level of the passenger loading area near the Hotel Complex.

Condition

The Baby Gauge Level varies in its condition. The curved track is in mostly good condition with ties, rail, and track hardware either present or presumably buried. The eastern portion of the straight track (which led to the ore bins) on solid ground is in fair condition, the western portion and remnants of the wooden trestle is largely deteriorated. The third trackway leading down the slope and in the middle of the road is about thirty percent extant.

43b. Mine Cars

Several (12) historic mine cars are located on the straight trackway—five of these cars contribute to the significance of the Baby Gauge Level site as they were historically employed at Ryan. A flat car measuring 4 ft by 11 ft is present on the trackway and represents one of the cars modified for use on the when the Baby Gauge was a tourist train. It has a wooden deck with hole patterns indicative of holding four rows of passenger seat frames. It also contains the remains of two ratcheting wheel-type brake assemblies on its deck. There is another unmodified flat car measuring 3 ft by 7 ft 7 in that is iron-framed with iron holders for stakes. It is a utility car and currently holds Baby Gauge rail ties. One additional car is a rectangular design side-emptying 3.5 ft by 8 ft by 2 ft deep, embossed with “MATTESON CAR Pat. July 23 1907 size no 1125 1919”. It was manufactured by Joshua Hendy Ironworks in San Francisco and likely dates to 1919. A chassis identical to the one holding the Matteson car but with no deck or body is also present on the trackway. One additional modified flat car is located on the trackway leading down to the Hotel Complex about halfway down the slope. It measures 4 ft by 9 ft and has a wooden deck with hole patterns similar to the modified car discussed above. Since it is shorter, it only held three rows of seats. It has parts of an iron ratcheting wheel-type brake actuation shaft protruding approximately 24 in from the deck. The remaining cars are considered non-

Ryan Historic District

Name of Property

Inyo, CA

County and State

contributing resources based on their recent arrival to the Ryan Historic District. These cars (seven of the total) are side-dumping, likely date from the 1950s and were moved to Ryan in the early 2000s from a local mine.

Chronology

The Baby Gauge cars are contemporaneous with the original operation of the BGRR as an ore transporting railway and the use of the rail line for tourist purposes.

Condition

The cars are in good condition.

43c. Baby Gauge Rail Line

The Baby Gauge Rail Line site is represented by approximately 3.75 miles of historic rail line beginning at the Baby Gauge Level and culminating at the most distant mine of the Hillside Complex – the Widow. The rail line varies in condition and land ownership; thus, for the purposes of feasibility, only the portion of the line located within district boundaries is described here.

From the Baby Gauge Level, two main rail line routes are observed. The older route continued southwest from the Locomotive Storage Adit via a switch next the portal over a wooden trestle structure (which is no longer present), along a rock-retained bed approximately 10 ft wide, skirted the contour of the mountain slope along Poison Rock, passed over a wooden trestle (Resource 43d) and under a rock shed (Resource 43e) before it exited the Ryan locality. The second route leaves the Baby Gauge Level through a 1500-foot-long “haulage” tunnel driven under the Upper Biddy McCarthy Mine and exits the mountain at a point 515 ft south of the rock shed. Both lines coalesce at a point 1450 ft southeast of the Hotel Complex (as the crow flies) and continue to the boundary line 250 ft farther.

Chronology

The older of the two Baby Gauge rail lines was originally constructed in 1914, and abandoned when track maintenance and upkeep became laborious, and an alternate underground route was implemented (Figure 20). The Haulage Tunnel (see below) was constructed sometime between 1919 and 1921 allowing the BGRR to circumvent the rock fall hazards associated with slope erosion, sharp curves, and older alignments. The rail line route through the Haulage Tunnel was used into the 1960s.

Condition

The older of the rail lines around Poison Rock has no track and erosion has negatively impacted the rail bed; however its original route remains discernable. The rail line route through the Haulage Tunnel is 95% intact with rail, ties, and associated hardware present.

43d. Trestle

[REDACTED]

Chronology

Ryan Historic District

Name of Property

Inyo, CA

County and State

The trestle's exact date of construction is unknown however it is contemporaneous with the original route of the Baby Gauge, and likely dates to 1914. It appears in early photographs of the Baby Gauge line and is the only section of original trestle network remaining within district boundaries.¹⁰²

Condition

While the majority of the trestle is intact, it is likely not structurally sound. Some underneath lagging, hand railing, ties, and rail are missing, while some of the extant timbers are deteriorating. The structure is in fair condition.

43e. Rock Shed

[REDACTED]

Chronology

The Rock Shed was built in 1917 when the Upper Biddy McCarthy was heavily mined to a point that its southern rock dump negatively impacted the rail line (Figure 21). The failure of the shed to adequately protect the railway and train may have influenced the construction of the Haulage Tunnel around 1920.

Condition

The Rock Shed has been significantly damaged from rock fall throughout the years. Two exposed sections at the western (47 ft long) and eastern (25 ft long) ends are heavily damaged; however, the most western section of rock shed approximately 5.5 ft long is relatively intact and adequately conveys its initial design. The other sections of the shed are completely buried (and assumed intact) or destroyed.

Contributing Structures

44a-b. Haulage Tunnel

Date: 1914, 1920, 1962

Property Type: 1 Transportation, 2 Mineral Extraction, 6 Tourism, 9 Civil Defense

Photos: 50-51

The Haulage Tunnel is a 1,590 ft underground tunnel driven into an eastern slope, which allowed the BGRR to bypass unstable ground and sharp curves as it traveled to mines located south of Ryan. It represents an extension of a tunnel originally constructed to allow the transfer of borax ore from the Upper Biddy McCarthy Mine (upslope from the camp) to the level at which it could be more easily loaded onto BGRR and then DVRR train cars. In addition, the Haulage Tunnel was identified as a fallout shelter space in the 1960s, and a room was excavated at that time to allow for the storage of supplies.

¹⁰² A public relations photograph of the Baby Gauge Railroad, view north, ca. 1916, DV-RYA-44, Death Valley National Park Archives.

Ryan Historic District
Name of Property

Inyo, CA
County and State

[REDACTED]

Chronology

The Haulage Tunnel appears on the earliest of Ryan site plans and is contemporaneous with mining the Upper Biddy McCarthy beginning in 1914. By 1920, the tunnel was extended to include a complete underground thoroughfare for the BGRR.

According to records, in late 1962, the Ryan Haulage Tunnel was designated as a fallout shelter and the Civil Defense Storage Room was excavated to store survival supplies.¹⁰³ The room also originally contained narcotics, but authorities from the Civil Defense Program removed these drugs when the shelter was decommissioned in 1971. The caretaker at the time noted that he was taking an official into the Ryan tunnel “to remove drugs from medical kits”; however, the antibiotics, analgesics, first aid supplies, water barrels and food were left behind.¹⁰⁴

[REDACTED]

45. Locomotive and Car

Date: 1919, 1923, 1927

Property Type: 1 Transportation, 6 Tourism, 8 Location Filming

Photo: 47

A 1919 Plymouth BL 6-ton gas powered locomotive is located in the Locomotive Storage Adit. The locomotive was manufactured by Plymouth Locomotive Works of Plymouth, Ohio and furnished with a 50 HP BUDA BTU four-cylinder Pittsburgh Model gasoline engine. It measures 13 ft long by 4 ft 1 in wide by 5 ft 10 in at its tallest point and sits upon 4-flanged iron wheels spaced 24 inches apart. The Plymouth is unique in that it has a friction-drive transmission composed of two parts: a metal flywheel and a fiber-rimmed driven wheel, which took the place of a clutch and transmission. As the wheel spun, a lever brought the flywheel in contact with the driven wheel, transferring power via a chain to the axles. This allowed the locomotive to start under a heavy load without a sudden jerk and speed could be monitored without “changing gears.” While the Plymouth was marketed as a 6-ton locomotive it was likely a 7-ton.

One modified flat car is attached to the Plymouth BL locomotive. It measures 11 ft 2 in long by 4 ft wide by almost 2 ft high. It contains four rows of iron benches atop a refinished wooden deck. Each bench is 3 ft 10 in long by 1 ft 8 in wide and 2 ft 2 in at its tallest point. They are missing their cushions (which are stored in a wooden crate in the Locomotive Storage Adit).

The combined length of the Plymouth BL locomotive and connected flat car is 25 ft 8 in.

Chronology

¹⁰³ Gill, James, “Friday, November 2, 1962,” Ryan Caretaker Log 1962, copy on file Death Valley Conservancy Archives.

¹⁰⁴ Moore, Lyn, “Friday, October 15, 1971,” Ryan Caretaker Log 1971, copy on file Death Valley Conservancy Archives.

Ryan Historic District

Name of Property

Inyo, CA

County and State

According to correspondence dated 11 September 1923, in which a list of recommended purchases includes “one 6 ton Plymouth gasoline loco. Price 1919 \$3,200,” this machine was likely acquired by PCB for use at Ryan in 1923-1924 and became the primary mover of the Baby Gauge Railroad.¹⁰⁵ The locomotive replaced battery locomotives as they struggled to keep up with mining production; in 1923 the output of Ryan mines reached a massive 9,000 tons per month, predicating the need for a more powerful engine and historic photos depict the Plymouth pulling long lines of filled ore cars (Figure 20).¹⁰⁶

As Ryan transitioned from mining to tourism, the Plymouth was employed to haul ore and passenger cars for a period, and then entirely passenger cars. Four flat cars originally designed to haul lumber were fashioned with cushioned benches. Each car had four rows of benches allowing approximately 8 passengers to ride, for a total of 32 passengers. The Baby Gauge tourist train ride was purported to take visitors “through the workings of the Borax Mines” providing “a unique, thrilling and instructive tour of 7 miles.”¹⁰⁷ Tours were given by Bob Gardiner, an Irish employee of PCB (see Figure 21). Gardiner drove the Plymouth and operated the train until 1945, when he departed Ryan. Al Padgett assumed the role of camp caretaker and Baby Gauge operator until 1950, when the railroad was no longer used for tourism purposes.

In the 1950s, the Plymouth BL locomotive was featured prominently in two episodes of *Death Valley Days*, filmed on location in district. “Yaller,” (S2E10, Airdate 30 Jan 1954) depicts the Plymouth BL locomotive with a line of flat cars operating on the Baby Gauge Level and entering the Haulage Tunnel. In addition, the Plymouth and cars are prominently featured in the episode, “Million Dollar Wedding” (S3E12, Airdate 1 Mar 1955) as the means by which the main characters, a wedded couple, are sent off on their honeymoon.

U.S. Borax explored re-commissioning the BGRR for tourist purposes in the early 1960s, but they had no plans to employ the Plymouth BL locomotive due to revised safety regulations regarding gasoline powered equipment used underground.¹⁰⁸

Condition

The Plymouth was partially restored on site in the early 1990s. It was brought to working order and repainted. At present, the locomotive is in excellent condition. It runs and is housed in its Storage Adit, protecting it from the elements. The attached flat car was also restored in the 1990s—its deck was refinished, iron bench holders repainted and arm rests replaced. The bench seats were recovered with historically accurate material and are also stored in the Locomotive Storage Adit.

UPPER BIDDY MCCARTHY MINE (UPPER BIDDY)

¹⁰⁵Pacific Coast Borax Company, “Expenses for Ryan and Death Valley Boarding Housing 1923-1925,” U.S. Borax Collection, Death Valley National Park Archives.

¹⁰⁶ A public relations photograph of the Baby Gauge Railroad, view north, ca. 1916, DV-RYA-44, Death Valley National Park Archives.

¹⁰⁷ Death Valley Hotel Company Brochures, 1935-1942, copies on file Death Valley Conservancy Archives.

¹⁰⁸ Scholl, C.A., Correspondence to W.M. Childs dated August 11, 1960 regarding the Ryan Baby Gauge, U.S. Borax Collection, Box 37 File 75.09, Death Valley National Park Archives.

Ryan Historic District

Name of Property

Inyo, CA

County and State

The Upper Biddy McCarthy mine (sometimes called the Upper Biddy McCarty, Upper Biddy, or Big Biddy) is one of six borate mines in the Hillside Group of claims associated with the Ryan Historic District. It is located up the steep slope east of Ryan Camp, and while the mine workings are not visible from the camp, the remnants of the mine's associated structures including the skip track, hoist, and wooden trestle are some of the most visible components representing the historic mining landscape in the district. The area encompasses approximately 12 acres. Along with the Played Out and Lower Biddy McCarthy, the Upper Biddy was one of the first mines to begin producing ore in 1914. It held its place as the central mine in the Ryan district, remaining a steady producer until late 1927, when PCB shifted its operations away from Ryan.

Remaining resources associated with the Upper Biddy include 2 contributing buildings, 1 contributing site (the Upper Biddy Mine workings and associated features), and 5 contributing structures, including the remains of two skip tracks.

Resource Number	Type	Name	Construction Date	Photograph/s
46	Contributing Building	Wooden Dugout	1914	53
47	Contributing Building	Privy	1916	
48a-g	Contributing Site	Upper Biddy McCarthy Mine Site	1914	54, 57
49a-d	Contributing Structure	Skip track and Loading Areas	1916	52, 55-56
50	Contributing Structure	Ore and waste trackway and trestle, ore chute, waste rock dump	1916	52, 55, 57
51	Contributing Structure	Utility Poles Network	1918	52, 54
52	Contributing Structure	Hoist and Original Skip Track Remains	1916	56
53	Contributing Structure	Historic Road and Wooden Platform	Pre-1919	50

Contributing Buildings

46. Wooden Dugout

Date: 1914

Property Type: 2 Mineral Extraction

Photo: 53

A wooden dugout [REDACTED] is composed of a framework of 4x4 posts and measures 11.5 ft by 6 ft 5 in wide and oriented north/south. It is dug into the hill and is 5.5 ft tall. Its walls and roof are composed of 2x12 planks and the roof is at a slanted angle. Benches made of 2x12s are

Ryan Historic District

Name of Property

Inyo, CA

County and State

found inside along the western and southern sides about 18 in above the ground. The southern side has an additional bench about 18 in above the lower bench. There is also a small bench directly adjacent to the door in the northern wall. The door measures 4 ft 8 in tall by about 2 ft wide. [REDACTED]

Chronology

The wooden dugout was likely utilized as a break room during mining activity, beginning in 1914 and ending in 1927. Since it is located in between the skip track and the mine workings, it likely served both of these workstations.

Condition

The wooden dugout is intact and in good condition.

47. Privy

Date: 1916

Property Type: 2 Mineral Extraction

The remains of a privy are located approximately 50 ft south of the skip track (Resource 49) along a rock-retained contour above the one containing the wooden dugout described above. The privy likely sat along a rock-retained pathway progressing to the south but it has been eroded away. The privy is collapsed but its components (except for the roof that was likely corrugated steel) are largely intact allowing its dimensions to be determined at 5 ft 4 in (N/S) by 8 ft (E/W) by 6 ft tall. The privy is composed of a 2x4 wooden frame sided by 1x12s with battens at the joints. The seat area along the south part of the privy extends 1 ft 7 in above the floor and is made of 2x4s with 1x12 siding. The seat bench measures 2 ft 3 in deep by 7 ft 3 in long and has three tear-shaped holes (with the rounded part towards the back wall). They are spaced 2 ft apart from center to center. Each hole contains a wooden cover. Screen fragments suggest that the privy was ventilated and it appears that the door of the building faced north. A broom was observed in one of the holes.

Chronology

The privy is likely contemporaneous with the skip track and dates from the late 1910s. It was likely in usage after the skip track was abandoned as the Upper Biddy McCarthy retained a workforce during that period.

Condition

Despite its collapse, sections of the building are intact and it is in fair condition.

Contributing Sites

48a-g. Upper Biddy McCarthy Mine Site

Date: 1914

Property Type: 2 Mineral Extraction

Photos: 54, 57

Ryan Historic District

Name of Property

Inyo, CA

County and State

The Upper Biddy McCarthy Mine site is a roughly 6-acre area which sits just below the ridgeline known as the Black Mesa, bordering the Ryan Historic District to the east. A large central flat area measures roughly 220 ft N/S by 600 ft W/E and is demarked with extensive diggings and contains several mine openings and areas of surface workings. There are also affiliated features such as waste rock dumps, trackways, artifacts, and a footpath present. Each feature type, including its chronology and condition (if applicable), is discussed below.

[REDACTED]

Contributing Structures

49a-d. Skip Track and Loading Areas

Date: 1916, 1920

Property Type: 1 Transportation, 2 Mineral Extraction

Photos: 52, 55-56

The Upper Biddy Skip Track is a roughly 520 ft structure used to transport ore, materials, and possibly workers up and down the steep slope from the Upper Biddy Mine to the level at which ore was deposited into the ore bins and then loaded onto the DVRR cars (at the Baby Gauge Level) (Figure 22). Two iterations of the skip track have been identified. The oldest version likely dates to 1916 and began at the base of a hoist house at the top of the slope and continued vertically down the slope, ending at the Baby Gauge Level. The second iteration, a “gravity tram,” dates to 1920 and began slightly south of the hoist house and followed a separate path down the slope before ending at a point slightly north of the ending point of the earlier version but on the same level. The original skip track was likely disassembled so that its lumber and hardware could be repurposed into the newer (extant) version—thus, components of the extant skip track (or gravity tram) probably originate from the original skip track. The original trackway (except for a section to be discussed below) is not observed; however, the extant skip track as a whole is in fair condition.

As mentioned, the skip track system had several components vertically aligned down a steep, west-facing slope. Extant features from the lowest to highest elevation include the lower terminus directly above the Haulage Tunnel, a section of surface track, a section of elevated track, and the upper terminus at the level of the Upper Biddy mine workings. There are also several associated features such as a wooden dugout (Resource 46), a privy (Resource 47), an ore chute system (Resource 50) and most predominately the Upper Biddy Mine (Resource 48).

[REDACTED]

50. Ore and Waste Trackway and Trestle, Ore Chute, Waste Rock Dump

Date: 1914

Property Type: 2 Mineral Extraction

Photo: 52, 55, 57

An ore and waste trackway and trestle, ore chute, and waste rock dump are located north of the skip track and intersect it [REDACTED] up from the lower skip track terminus (Resource 49a).

Ryan Historic District

Name of Property

Inyo, CA

County and State

These features were likely employed in tandem to transport ore and waste rock from mine workings either to the skip track, to a surface ore chute which deposited ore into the Haulage Tunnel, or in the case of waste rock to a waste rock dump at the end of a wooden trestle to the north. This set of features is located at the level of the lowest opening for the Upper Biddy mine, suggesting that it was employed to transport ore and waste from this mine level.

A horizontally-trending graded trackway which likely held mine car track intersects the skip track [REDACTED] above the skip track's lower terminus. The trackway, which resembles a rock-retained road (approximately 8-10 ft wide), eventually leads past the dugout (Resource 46) and collapsed adit (Resource 48b) and eventually to the wooden mining trestle framework to be detailed below. The road is flanked by a retaining wall on its eastern edge, which acts to hold back rock fall. (It is unclear whether the retaining wall provided an additional roadbed or trackway above this thoroughfare.) Along the roadbed there is evidence of ties with spikes and some 2x12 boards running parallel to the contour suggesting that a track once ran along the contour. A wooden platform which was likely a loading dock is about 50 ft north of the skip track along the same road on its eastern flank. It is 7 ft 3 in by 5 ft 7 in and almost 3 ft high.

A crevice in the rock on the slope of the hill serving as a natural ore chute whereby mined material could be moved quickly down the slope by gravity is located approximately 30 ft north of the platform. Midway down (50 ft below) this natural ore chute a steel plate was hung by a wire rope to serve as a means of funneling rock material as well as slowing its flow as it moved down the slope. After moving down the natural chute, material was deposited into a shaft connected to the Haulage Tunnel. To contain the material and deflect aberrant rocks, a fence was placed in a semi-circular orientation around the perimeter of the opening. The fence was composed of 8x8 vertical posts 6 ft high, at 8 ft intervals, and connected by three pieces of 2x12 lagging. Vertical posts and three sections of the fence are still present.

Once the material entered the mine opening, it was collected in a timber chute inside of the Haulage Tunnel (described under Resource 44a above). From there, ore could be dumped into mine cars and transferred to the large ore bins for loading onto the DVRR rail cars.

Right above the natural chute at the level of the trackway, mine cars were dumped via a wooden platform composed of 8x8s and 2x12s, on a framework of upright 6x6s. Atop the 6x6s is an 8x8 notched square-set timber cap, 6 ft in length and wrapped with steel (to abate wear) on the part facing the eastern slope.

Mined material deemed waste rock was transported from the mine workings on a system of track in a northerly direction along the same contour as the trackway discussed above and dumped off of a wooden trestle. [REDACTED] The wooden dump trestle is supported by several structures varying in both construction, height, and spacing depending on their location, but all following a similar design. Generally, they are composed of two parallel, vertical 8x8s with a 2x8 supporting crosspiece and capped by another 8x8 (or other pieces of lumber adding to those dimensions), which was 5-6 ft long. Two 8x8 beams roughly 16 ft long are laid 3 ft apart on top of the structures. Ties composed of 2x12s approximately 6 ft long and spaced 30 in apart are fastened to the parallel beams and then three 2x12 "walk boards" lie parallel to the trestle and

Ryan Historic District

Inyo, CA

Name of Property

County and State

perpendicular to the ties. These boards would allow for someone to walk across the trestle while tramming ore but were spaced in such a way to allow rail to be attached to the ties. The trestle supported 18-inch gauge track, typical mine car dimensions in this district. One section of trackway has steel sheeting laid over the wooden horizontal beams to abate wear, and the trestle had a handrail composed of 4x4 vertical posts capped by a 2x6 standing roughly 3 ft tall. The trestle displays evidence of several track extensions as it likely grew in length as more material was mined, transported, and dumped off of the waste rock pile. As it is today, it runs approximately 191 ft in length and curves to hug the natural shape of the slope. Along with the extant skip track, the trestle is one of the most visible mine-related features in the Ryan Historic District.

In this same area, a second dumping station and waste rock trestle is located slightly to the north and one level (40 ft) above the main trackway contour. This is the terminus for a system of track that comes in from a set of mine workings to the east. As it approaches the precipice from the east, the trackway splits. One branch goes directly west and then curves to the north for 70 ft to an ore dumping station via a wood chute buttressed on both sides by vertical posts with three 2x12s serving as lagging. The chute is roughly 10-15 ft wide and while the chute boards are intact on the eastern side, only one board remains on the west. The track leading to the dump station crossed a ravine and was supported by a now collapsed trestle structure. This "upper" chute funneled ore from this level of the mine into the aforementioned natural ore chute. The other branch of track goes to the north through a cut and onto a wooden trestle. The trestle allowed waste material to be dumped down the slope onto a massive waste rock pile.

Chronology

This system of ore and waste dumping was likely employed throughout the life of the Upper Biddy mine, beginning as early as 1914 and continuing until 1927; however, individual elements were likely constructed and changed as mine development progressed. Few photographs of the Upper Biddy mine have been located, but the wooden trestle structure appears in the earliest ones, dating it to at least 1916.¹⁰⁹

As for the natural chute, its use appears contemporaneous with the second iteration of the skip track (ca. 1920) and may have been the primary means at that time by which ore was transported from the Upper Biddy workings down to the Baby Gauge Level via the Haulage Tunnel and then on to the level of the DVRR.¹¹⁰

Condition

The remnants of the ore and waste rock dumping trackways and trestles, platforms and dumping station, natural ore chute with steel apron, rock-control fencing, vertical shaft (raise from the Haulage Tunnel), and ore chute inside of the Haulage Tunnel are in good condition and provide an excellent example of local mine transportation systems. This structure conveys how district mining engineers and miners used the natural topography to transport ore for shipment in distinctive innovative ways.

¹⁰⁹ Photograph of Ryan Camp from the Lower Biddy, looking northeast, ca. 1916, Ryan-USB-1924-1, copy on file Death Valley Conservancy Archives.

¹¹⁰ Upper Biddy skip track and east part of Ryan from trestle, ca. 1919, DV-RYA-06, Death Valley National Park Archives.

Ryan Historic District
Name of Property

Inyo, CA
County and State

51. Utility Poles Network

Date: 1917

Property Type: 2 Mineral Extraction

Photos: 52, 54

A utility pole network connected the Upper Biddy to the Ryan power grid and is represented by a series of six extant power poles starting above the Baby Gauge Level and continuing along the ridge south of the skip track, terminating adjacent to the Upper Biddy mine workings. Judging from their construction, each pole was independently fabricated depending on its location and available materials, but generally conformed to a similar size and composition. Poles were generally 13-18 ft tall and made from a 6x6 post (or in one case three 2x6s fastened together), with a 4x4 cross arm. The cross arm was 3-5 ft at its widest point and fastened into place with steel bracing. [REDACTED] Sections of wire are observed on the ground near the pole line.

Chronology

By late 1917, the Upper Biddy was noted as having a power line to connect it to the newly constructed powerhouse (the original powerhouse before it was reconfigured into the extant Powerhouse); while this is the first known reference to electrical power at the Upper Biddy, it was likely connected to power from the original light plant.¹¹¹ In 1924, the Upper Biddy reportedly received a new power line, but whether the original system was replaced or only the wires and hardware is unknown.¹¹²

Condition

The utility poles are in good condition.

52. Hoist and Original Skip Track Remains

Date: 1916

Property Type: 1 Transportation, 2 Mineral Extraction

Photo: 56

A gas-engine hoist, staircase, platform, and remnants of ties represent the 1916 original skip track (Figure 23, also see Figure 13 for a top-down view). The gas-engine hoist sits approximately 35 ft north of the upper terminus of the 1920 skip track on a concrete pad with angled sides; the top dimensions measure 6 ft 8 in by 5 ft 1 in with a height of 2 ft and is made of concrete with local aggregate. The hoist is a Union Gas Engine Company gas engine hoist with only the winch remaining. The drum is 36 in in diameter and the width of the drum is 34 in. A divider was fabricated at 16 in to make it a double drum hoist. The southern section of the drum still contains wire rope. The base of the hoist is 6 ft wide (oriented NE/SW) by 4 ft 4 in long. The brake and clutch mechanisms are found scattered about. The hoist sits on a flat platform which is

¹¹¹Faulkner, Herbert, "Annual Report for Ryan 1916-1917," 28 Nov 1917, U.S. Borax Collection, Death Valley National Park Archives.

¹¹²Hart Bros., Ellis & Co., "Additions and Betterments for the year ending 30th September 1924," U.S. Borax Collection, Death Valley National Park Archives.

Ryan Historic District

Inyo, CA

Name of Property

County and State

partially rock-retained on the western side. Charred lumber and nails (as well as a historic photo) suggest that the hoist was once inside a building that has since burned.¹¹³

Approximately 18 ft lower than the hoist is a 23 ft long by 3 ft wide wooden staircase. The treads are 1 ft deep and are constructed from 2x12s. The staircase stringers are 2x12s with 21 steps remaining. The staircase connects the hoist platform area to a loading dock composed of three 2x12s, 8-ft-long supported by a 4x4 frame. There is also evidence of 8x8 timbers on the surface that may have been associated with the 1916 skip track.

Chronology

As previously surmised, the hoist, stairway, loading dock, and ties are the remains of the original skip track dating to 1916 that descended the slope at a slightly different trajectory (starting about 15 ft north) than the extant skip track. It is unknown why this skip track was abandoned; however, most of its hardware and lumber were likely repurposed for use in the reconstructed skip track. Since the hoist building appears relatively intact in a historic photo alongside the newer skip track, fire is likely not the cause of its cease of use.¹¹⁴

Condition

The hoist and original skip track are in fair condition.

53. Historic Road and Wooden Platform

Date: Pre-1919

Property Type: 1 Transportation, 2 Mineral Extraction

Photo: 50

A historic road and wooden platform intersect the lower surface level section of the skip track at approximately 70 ft higher than the skip track's lower terminus. The road is 10 ft wide and runs for 108 ft beginning north of the skip track and continuing across the track to a wooden platform. It is rock-retained in sections. The wooden platform sits directly north and alongside the original skip track route and may have been associated with it. It measures 6 ft square and is composed of (6) 2x12 decking over a framework of (2) 2 ft 5 in long 4x4s. Two 6-ft-long horizontal joists are on either side and diagonally braced by 4 ft long horizontal 4x4s. The platform is rock-retained and juts out from the slope about 30 ft south of the 1920 skip track on the same contour as the historic road. The road likely provided construction access to the skip track and the platform, which may have held a small tank at one time. [REDACTED]

Chronology

Historic photographs indicate that the road and platform are contemporaneous with the original skip track and date to before 1919.¹¹⁵

Condition

¹¹³ Upper Biddy skip track and east part of Ryan from trestle, ca. 1919, DV-RYA-06, Death Valley National Park Archives; Upper Biddy hoist, n.d. (ca. 1924), BOM 6, Death Valley National Park Archives.

¹¹⁴ Upper Biddy hoist, n.d. (ca. 1924), BOM 6, Death Valley National Park Archives.

¹¹⁵ View of Ryan from the Upper Biddy, ca. 1919, DV-RYA-07, Death Valley National Park Archives.

Ryan Historic District

Name of Property

Inyo, CA

County and State

Both resources have little disturbance and are in good condition.

LOWER BIDDY MCCARTHY MINE (LOWER BIDDY)

The Lower Biddy McCarthy Mine (sometimes called the Lower Biddy McCarty, Lower Biddy, or Little Biddy) is one of six borate mines in the Hillside Group of claims associated with the Ryan Historic District. Along with the Played Out and Upper Biddy McCarthy, it was one of the first mines to begin producing ore in about 1914 (Figure 24).¹¹⁶ It was a steady producer until late 1927, but had low production numbers in its later years.¹¹⁷

The Lower Biddy Mine is located approximately 0.3 miles southwest of Ryan Camp (and connected to it via the DVRR), quashing the need for a separate residential area for mine workers. Hence, most of the structures associated with the mine are industrial in function. The total mine area encompasses 16 acres on the opposite sides of a ridgeline; therefore, surface features of the mine site have been classified into two groups based on geography – those representing the northern mine area and those found in the southern mine area. However, it is germane to note that the features are associated with the same group of continuous underground workings and so they are constituents of one site. Along with the 1 site, the remains of 1 building and 3 structures are discussed below.

Resource Number	Type	Name	Construction Date	Photograph/s
54	Contributing Building	Privy	1914	
55a-t	Contributing Site	Lower Biddy Mine Site	1914	59-60
56	Contributing Structure	Temporary Explosive Storage Structure	1914	61
57a-e	Contributing Structure	Lower Biddy Skip Track	1915	62
58	Contributing Structure	Ore Car Track and Trestle	1915	62

Contributing Building

54. Privy

¹¹⁶ GCE, "Letter to R.C. Baker," 10 March 1915 and 16 April 1915, U.S. Borax Collection, Death Valley National Park Archives.

¹¹⁷ Boyd, Julian, "Annual Report for Ryan, 1926-27," 19 October 1927.

Ryan Historic District

Name of Property

Inyo, CA

County and State

Date: 1914

Property Type: 2 Mineral Extraction

The wooden remains of a privy are located about 20 ft southwest and down slope of a bulldozer road approximately 250 ft south of the north-facing mine area site (see below) on a southwestern facing slope. The building consists of a 6 ft 3 in by 5 ft 4 in collared opening foundation over a 6 ft deep hole (covered by chicken wire for safety purposes). The foundation is composed of a mix of 2x4s and 4x4s with the eastern half open to the hole, and the western half (6 ft by 2 ft 5 in) covered with tongue and groove flooring boards laid east-west and fastened with nails. The privy is built into a slope and so the foundation is supported by native basalt rocks on the north, south, and east sides. A platform measuring 6 ft by 2.5 ft acted as a deck to stand on outside of the actual toileting compartment. The “deck” is comprised of 1x12s and a 2x4 fastened with nails atop several pieces of different sized lumber and sat on the same plane as the inside floor.

The remains of the walls, roof, door, and seat structure of the privy are located downslope of the foundation and were likely blown-down by strong winds. The walls were made of 1x12s and 1x6s about 7 ft tall, and screen suggests a window or vent was present in the structure. A wooden seat cover comprised of 1x6s fastened together and curved was also observed. [REDACTED]

The privy appears to be connected to a southwest projecting waste rock dump via a short 3 ft wide, rock-retained trail. The trail is only partially intact as it was demolished by modern mine closure activity.

Chronology

It is reasonable to surmise that given its central location within the Lower Biddy mining area, the privy was contemporaneous with the mine and may date as early as 1914.

Condition

Although it was blown-down, the privy components seem relatively intact and it is in fair condition.

Contributing Site

55a-t. The Lower Biddy Mine Site – Northern and Southern Areas

Date: 1914

Property Type: 2 Mineral Extraction

Photos: 59-60

The Lower Biddy Mine site is approximately 0.5 miles southwest of Ryan Camp at the terminus of the DVRR (see Resource 40m-r) and encompasses an area of roughly 16 acres. It represents several iterations of borate mining from 1914-1927, including both surface and underground workings. Although it is difficult to parse out temporally specific mine activity with extant features, it appears that surface workings postdate underground activity at the site.¹¹⁸ The Lower

¹¹⁸ This contrasts with the Upper Biddy workings which started as surface quarrying.

Ryan Historic District

Name of Property

Inyo, CA

County and State

Biddy Mine site features are grouped depending on their geographic location (either north or south facing).

[REDACTED]

Contributing Structures

56. Temporary Explosive Storage Structure

Date: 1914

Property Type: 2 Mineral Extraction

Photo: 61

The remains of a temporary storage structure for explosives [REDACTED] consists of a 7 ft square and 2.5 ft high rock foundation that was topped by lumber and sheet metal. Wood pieces covering the foundation are 2x6s cut to 4 ft lengths. [REDACTED] The structure was likely used as a means to store mining-related explosives during work hours for the duration of Lower Biddy McCarthy mining activity in the immediate vicinity. The structure is in good condition.

57a-e. Lower Biddy Skip Track

Date: 1915

Property Type: 1 Transportation, 2 Mineral Extraction

Photo: 62

The Lower Biddy skip track is a 485 ft structure used to bring ore from various levels of the southern facing mine area up to the level of the DVRR grade where it could be loaded onto train cars and transported to the processing center in Death Valley Junction (Figure 25).

The skip track system had several components vertically aligned down a steep slope. Extant features from highest to lowest elevation include the engine and hoist platform, the railroad level loading bins and elevated trackway, ground-level trackway and ore holding bins, transmission line, and a skip track car adjacent to a third loading station with ore bins. The track appears to have terminated at the base of the slope but the terminal point has been eroded away.

[REDACTED]

Chronology

The Lower Biddy skip track was likely constructed around the time that the DVRR line reached the Lower Biddy in 1915. It was used in tandem with the Upper Biddy skip track and is similar in technology. There are very few photographs of the Lower Biddy mine, however the skip track appears in all of them beginning in 1915.¹¹⁹ The skip track was originally powered by a gasoline-

¹¹⁹ "Ore train at Little Biddy Mine, Ryan – 1915," Smitheram Collection, copy on file Death Valley Conservancy Archives.

Ryan Historic District

Name of Property

Inyo, CA

County and State

powered hoist, which was noted as being 25 years old in 1923 when it was replaced by a newer 15-horsepower model.¹²⁰

Condition

Despite its associated ore bins being likely incinerated or disassembled and moved, and the damage from 2000s mine closure activity, the skip track is in fair condition. Many ties are in situ and remaining lumber and hardware is in good condition. Overall the skip track conveys a sense of the elaborate technology required to transport ore from where it was mined upslope to where it was loaded into rail cars.

58. Ore Car Track and Trestle

Date: 1915

Property Type: 2 Mineral Extraction

Photo: 62

An ore car trackway and trestle connects the skip track (Resource 57) to the southwestern mine workings of the Lower Biddy mine. The trackway extends for 490 ft and ranges from 5-10 ft wide (with the average at 5.5 ft wide) following a contour. [REDACTED]

Chronology

The ore car track and trestle are contemporaneous with the Lower Biddy skip track beginning in 1915.

Condition

Despite water erosion, which has cut through the trackway in a few locations, the track and trestle are in good condition.

FILM PRODUCTION SETS

Ryan was used as a filming location for one major motion picture (*Spartacus*, 1960), several episodes of the series *Death Valley Days* (1952-1970), and one episode of the series, *The Twilight Zone* (1960). While an actual set was constructed for the filming of *Spartacus*, both the *Death Valley Days* and *The Twilight Zone* production teams made use of already established buildings and structures described above. The set remains of *Spartacus* are described below.

Resource Number	Type	Name	Construction Date	Photographs
59a-f	Contributing Site	<i>Spartacus</i> Set Remains	1959	63-65

Contributing Site

59a-f. *Spartacus* Set Remains

Date: 1959

¹²⁰ Boyd, Julian, "Agenda for Mr. Zabriskie," 11 September 1923, U.S. Borax Collection, Death Valley National Park Archives.

Ryan Historic District

Name of Property

Inyo, CA

County and State

Property Type: 8 Location Filming

Photos: 63-65

The *Spartacus* set remains archaeological site consists of several components, some which represent individual scenes in the movie: the *Spartacus* Ridge landform, a row of structure poles, the DVRR railroad grade, a collection of set debris, the remains of the guard tower, charcoal remains from a theatrical fire, and the remnants of the chained Spartacus scene.

59a. *Spartacus* Ridge

The *Spartacus* Ridge landform begins at a distance of 200 ft west of Ryan Camp (measured from the Warehouse) and stretches for approximately 900 ft in a westerly direction. It is composed of a water- and wind-eroded sedimentary and metamorphic rock spine with loosely compacted scree slopes. The DVRR southern spur was constructed on the south-facing slope of the ridge (see Resource 40m-r), and other graded footpaths and former ore car trackways lead up the western part of the ridge and through an excavated crevasse to the Lower Biddy Mine northern workings (Resource 55) on the other side (north-facing) of the ridge (Figure 26).

In the opening panorama of *Spartacus*, *Spartacus* Ridge is pictured with actors positioned along the ridge, ore car trackway, and along the railroad grade (Figure 27). This is remarkable given that the landform's slopes and ridges are replete with eroded and loose material providing an unstable and hazardous walking and climbing surface.

While slightly more eroded today, especially in the area of the trackway/footpath, *Spartacus* Ridge appears almost identical to its portrayal in the film. It is in excellent condition, and despite the absence of actors, conveys the expansive backdrop to the motion picture.

59b. Death Valley Railroad Grade/Libyan Mine Road

The DVRR spur that terminates at the Lower Biddy McCarthy mine was used as a Roman road leading through the Libyan mine workings in the film. In a pre-production location scout photo likely taken in 1958-1959, the original railroad ties are clearly visible and in remarkable condition (Figure 54).¹²¹ Since the railroad ties are absent from the road in the opening scene, they were likely removed before filming commenced. In fact, several of the structures in the opening scene appear to contain the railroad ties standing on end. At present many of these ties are observed down the slope abutting the grade.

As described above under Resource 40m-r, the railroad grade measures 10 ft across and is bordered by a cut rock face on its northern edge and a slope (rock-retained for some spans) on its southern flank. Aside from the absence of the structures, the grade appears today as it did at the time of filming and is in good condition.

59c. Structure Remains

¹²¹ "*Spartacus* Scouting Photo," ca. 1958-1959, Margaret Herrick Library, Academy of Motion Picture Arts and Sciences.

Ryan Historic District

Name of Property

Inyo, CA

County and State

[REDACTED] Two structure types are pictured in the film—narrow rectangular-shaped palapas, and a tall, square-shaped guard tower (Figure 28). As observed in screen captures, the palapas or simple, thatched-roof dwellings, open on the sides, were placed along both flanks of the grade. They appear to be constructed of upright dimensional lumber pieces with pole rafters supporting roof thatching. Much of the lumber used in the palapas is found in two concentrations along the railroad grade: along the northern edge structural pieces are leaning up against the rockface and laying down along the shoulder, and along the southern edge of the grade structural elements are found in a sizable scatter down the slope.

The first concentration along the northern grade stretches for 60 ft and contains a 40-ft-long intact palapa roof section composed of 8-ft-tall poles (crosspieces) spaced 3 ft apart and 10-ft to 25-ft-long pole rafters. The crosspieces are anchored to the rock face with wire tied to nails driven into the rock. This is likely why they remain standing. Wire and nails also attached the crosspieces and rafters. The poles are fashioned from tall thin tree trunks or branches and are a variety of widths and lengths with the average width measuring 2.5 in in diameter with a length of 15 ft. A pile of approximately 25 poles lies parallel to the railroad grade along its northern shoulder. Dimensional lumber, 2x12s in 9 and 18 ft lengths, were also observed. All lumber pieces contain nails, nail holes, and/or are wrapped with wire. No remnants of roofing thatch are present.

Another concentration of structural debris perhaps representing the southern palapa is found approximately 15-30 ft down the southern slope of the railroad grade and stretches for 200 ft. Roof poles and dimensional lumber similar to that recorded above is intermixed with what appears to be railroad ties. Since the DVRR ties were removed before filming, they were likely incorporated into the palapa structure as upright roof support posts. In fact, one still photo of the palapa structure appears to contain several battered railroad ties holding up the roof. A line of stakes and nails serving as wire anchors with wire still attached is found along the eastern edge of the grade across from the grade-level concentration and likely served to guy out the palapa structure. Some of the wire is still attached to structure poles and lumber found down the slope.

The remains of the guard tower, another structure pictured in the film, are observed on the southern edge of the grade approximately 50 ft east of the pole structural remains. The guard tower was approximately a 20-ft-high squarish structure composed of what appears to be hardened canvas draped over a wooden platform. The top contained a post-type railing approximately 4 ft tall. In the scene, a guard stands atop the tower. Fragments of concrete are observed along the southern edge of the railroad grade beginning at a point 20 ft west of the fire remains (Resource 59d) and stretching east for approximately 100 ft. The concrete is generally of a grey paste, averaging 1-2 in thick and 4 sq. in. Some of the larger pieces are inscribed with hashtag patterns on the top smooth surface. The largest slab of concrete is rectangular, 6 ft long by 1.5 ft wide, positioned perpendicularly to the grade, and contains a crack down its center. The letters "HOP" are impressed on its surface. Structural posts with wire and metal mesh are located down the slope adjacent to the guard tower remains and likely represent this structure. In addition, large fragments of a fibrous material, much like the consistency of pressed paper pulp, with applied plaster in a stippled pattern, are also observed in the debris. These may be the remnants of the guard tower siding.

Ryan Historic District
Name of Property

Inyo, CA
County and State

The structural remains of the set are in good condition given that much of it remains where it was dumped at the conclusion of filming.

59d. Remains of the Fire

The remains of a fire depicted in the opening sequence are located along the northern edge of DVRR grade [REDACTED] west of the Warehouse building and at the base of a sheer cliff face. In the film, a fire burns against a rock face and is surrounded by stacked rocks that create a short dry-laid rock wall. The remains of this scene are demarked by loosely stacked rocks abutting the cliff face and a concentration of charred wood pieces scattered in an area approximately 3 ft (N/S) by 5 ft (E/W). The charcoal pieces are composed of burnt wood, with the average size being approximately 1 sq. in. The charred wood concentration abuts the cliff base and a 5-ft-long bent metal brace that may have been used to hold fabric along with nails are among the debris. Several chunks of asphalt are also present.

Approximately 10 ft east of the main concentration of charred wood is a scorched cliff face with a 3 ft by 4 ft fire scar. This is the same rock face pictured in the scene as behind the fire. Several loose rocks of the same size and type as the ones constructing the rock wall in the scene are observed, however none are stacked.

Due to the fact that the wall is no longer intact but the fire remains are still present, the condition of the resource is fair.

59e. Chain Scene Remains

In one segment of the Libyan mine scene, Kirk Douglas is chained to a rock face as punishment for his indignation (Figure 29). This scene was shot on the rocky spine of *Spartacus* Ridge approximately 6-10 ft above the DVRR grade level and the exact location has been identified by the physical remnants of the set dressing. Where Spartacus was chained on *Spartacus* Ridge, the art department created and/or drilled 3/4-in-diameter holes, and reinforced the anchor points with a cement-like grout material. Chains were attached to the anchor points and during the scene both of Douglas's arms were chained. The right and left anchor points are located on a rock face at a height of approximately 3 ft 2 in (north) and 4 ft 5 in (south) and are roughly 3 ft 8 in apart. The grout material was applied around the anchor points in a triangular-shaped patch 6 in wide by 7 in in height, is light grey in color and impressed with gravel, apparently for it to blend in with the natural rock face.

An additional drilled hole is located approximately 6 ft west and 2 ft downslope from the chain anchors. It is 1 in in diameter and does not contain any evidence of composite material reinforcement. In fact, it appears to be a historic drill hole likely created when the railroad grade was constructed. As evidenced in the scene, it is likely that the set crew used the pre-existing hole to hang a chain shackle in the background as set dressing. This shackle was not used during the scene.

Evidence of composite material or grout is also observed on the pathway leading up to the chain-scene rock face. In one segment of the film, Peter Ustinov steps up the slope as he approaches

Ryan Historic District

Inyo, CA

Name of Property

County and State

Douglas's chained body. Since the slope is both steep and crumbly, the set designers likely added composite material to the natural rock to increase its safety and stability. Several large fragments of the composite, grey in color with gravel inclusions are still attached to the natural slope, the largest being 1 sq. ft. In addition, some fragments have delaminated and are located in a small concentration along the northern edge of the railroad grade.

Aside from the missing chain hardware, the chain scene feature is in good condition.

[REDACTED]

Chronology

A *Spartacus* scouting crew arrived to Ryan sometime in late 1958 or early 1959 and toured the site for potential filming locales before deciding on a set up along the DVRR grade heading from the camp toward the Lower Biddy McCarthy Mine. After the initial site visit and before filming commenced, the landscape was prepped as a stand-in for ancient salt mines. Sometime during or after the background was prepped in late January 1959, the *Spartacus* production team mobilized to Death Valley. Little is known about the schedule of filming except that it proceeded for eight to fourteen days (depending on the source) with Anthony Mann directing.¹²² Filming concluded at Ryan in early February and the production company both left set pieces in place and dumped them down the slope where they remain today.

ROADS AND TRAILS

The Ryan Historic District contains numerous roads and trails, however only the major thoroughfares will be described in this nomination. The four roads are Ryan Road, Old Ryan Road, the Northern Road, and the Upper Reservoir Road. Several minor roads and trails have been described elsewhere in this nomination as features of other resources.

Resource Number	Type	Name	Construction Date	Photograph/s
60	Contributing Structure	Ryan Road	1914	2-3
61	Contributing Structure	Old Ryan Road	1914	3, 41
62	Contributing Structure	The Northern Road	1914	3, 38, 66
63	Contributing Structure	Upper Reservoir Road	1920	2-3

Contributing Structures

60. Ryan Road

Date: 1914

¹²² "Kubrick Replaces Tony Mann as Director of 'Spartacus'," *Hollywood Reporter*, 16 February 1959.

Ryan Historic District

Name of Property

Inyo, CA

County and State

Property Type: 1 Transportation

Photos: 2-3

Ryan Road is a historic road that allows access to Ryan from Furnace Creek Wash Road and Greenwater/Death Valley (Figure 30). It was initially dirt and has undergone a few iterations of paving since the 1950s. It has generally maintained its original route except for a portion that parallels a deep wash. The road appears to have originally traversed the bottom of the wash but was re-routed as an upper route was constructed. One historic culvert system with two 18-inch galvanized pipes and a retaining wall runs underneath the road and is within district boundaries.

The existing road varies in width from 18-20 ft, equivalent to the historic roadbed and measures 1.5 miles from Furnace Creek Wash Road to the main area of Ryan Camp (the level at which the DVRR grade is located). Approximately 0.2 miles of Ryan Road fall within the district boundaries. The original paved road is a locally-sourced aggregate asphalt approximately 17-20 ft wide and 2-4 in thick. It may contain two or three layers of asphalt in places where road maintenance and repair have been conducted over the years.

Chronology

Ryan Road appears in the earliest photographs of the area.¹²³ Its current route was established by the early 1930s and it appears paved in *The Twilight Zone* episode filmed in 1959.

Condition

In 2015 another layer of asphalt was laid from a point approximately 0.3 miles west of the camp, to the DVRR level. The original asphalt was left intact and is in fair condition beneath the new layer.

61. Old Ryan Road

Date: 1914

Property Type: 1 Transportation

Photo: 3, 41

Much of the modern Ryan Road follows the historical route, however a 0.35 mile section of the original Ryan Road exists on the slope below Ryan Camp and a short portion (200 ft) is within district boundaries (and not on the modern road bed)(see Figure 30). As the original Ryan Road reached a distance of 0.29 miles west of the camp, it crossed a deep wash in a southerly direction (for 370 ft) and then ascended a slope traveling directly eastward for 0.23 miles. It then curved to the south for 260 ft before it met up with the modern route at a point 100 ft below or west of Copenhagen Row (Resource 20). This intersection falls within district boundaries and is approximately 8-10 feet wide. It has a branch to the north (called the Northern Road, see below) but continued up the existing Ryan Road bed before turning eastward toward the bunkhouses and passing by the Building Foundations (Resource 27).

Chronology

¹²³ E.g., Photograph of Ryan looking west from the Black Mesa, ca. 1915, Smitheram Collection, copy on file Death Valley Conservancy Archives.

Ryan Historic District

Name of Property

Inyo, CA

County and State

Old Ryan Road appears in Ryan's earliest panoramic photographs.¹²⁴ When Ryan Road's current route was established in the early 1930s, this leg was no longer used.

Condition

Old Ryan Road is not used and has not been paved or graded, however in the 1960s a modern phone line was buried down its midline. Despite some evidence of disturbance, it is in good condition.

62. The Northern Road

Date: 1914

Property Type: 1 Transportation

Photos: 3, 38, 66

The Northern Road is approximately 0.33 miles long and 8-10 feet wide and branches off from the Old Ryan Road section at a point approximately 320 ft west of the modern Ryan Road and within district boundaries (see Figure 12). It historically followed a contour along the west-facing slopes of the site before meeting up with the DVRR grade. This allowed a route to Ryan Road (and perhaps down to Furnace Creek Wash Road) from the north without having to travel into the camp. Some sections show evidence of rock-retention on the western, downslope flank; however, the rock may have just been moved to the side during road construction as opposed to being purposefully stacked.

Chronology

The Northern Road appears in Ryan's earliest photographs and is one of Ryan's original routes.¹²⁵ After it leaves the boundaries of the Ryan Historic District it parallels the DVRR grade.

Condition

Except for two washouts (roughly 20 ft in length), the road is in good condition. It is no longer used for vehicle traffic.

63. Upper Reservoir Road

Date: 1920

Property Type: 1 Transportation

Photos: 2-3

The Upper Reservoir Road begins approximately 320 ft south of where Ryan Road (Resource 60) meets the DVRR grade in the center of Ryan Camp and connects the Upper Reservoir (Resource 31c) to the rest of the camp. The road is approximately 0.2 miles long and 10-12 feet wide and follows the path of the Baby Gauge trackway (Resource 43a—ascending from the loading area east of the Hotel Complex) for its initial climb. It passes the Baby Gauge Level (Resource 43a) before it makes a steep ascent to the reservoir.

¹²⁴ Photograph of Ryan looking west from the Black Mesa, ca. 1915, Smitheram Collection, copy on file Death Valley Conservancy Archives.

¹²⁵ Ibid.

Ryan Historic District

Name of Property

Inyo, CA

County and State

Chronology

The Upper Reservoir Road was originally constructed to allow access to the Upper Reservoir and likely dates to 1920.¹²⁶ Its original route went from the DVRR level up the slope adjacent to the southern edge of the residential level, but its modern route was in place by 1930.¹²⁷ During the 1960s when water was transported by truck to the Upper Reservoir, the road was widened and graded.

Condition

The road is actively used for water hauling and is in fair condition.

INTEGRITY CONSIDERATIONS

Upon arrival to the Ryan Historic District, visitors often comment that they feel as though they have traveled back in time. This largely due to the tremendous preservation of the district; in fact, when comparing historic photos to modern ones, it is immediately apparent that very little has changed since the mines ceased production and the Death Valley View Hotel closed its doors. An oft overused anecdote that a property appears as though its residents “just walked away” is actually applicable to Ryan: most of the buildings and structures retain their historic fabric and ephemera, both inside and out. The Ryan Historic District unquestionably possesses the seven elements of integrity—location, design, setting, materials, workmanship, feeling, and association. However, the significance of the district transcends its remarkable state of preservation. Ryan is the best remaining example of a 20th century borax mining camp, and perhaps the best remaining example of a company town of any kind of mining in all of California. In addition, in one district, Ryan embodies the broad patterns of history that shaped the development of California and the West: mining, tourism, entertainment, and national defense. Its ability to convey that history through its extant historic resources render it a prime candidate for listing on the National Register of Historic Places.

Location

The Ryan Historic District retains integrity of location in all areas of significance. All the contributing resources remain in their original locations and retain their original orientations and configurations.

Design

The Ryan Historic District retains integrity of design in all areas of significance. Ryan was originally designed as an industrial, commercial, residential, and social hub to serve PCB's Death Valley mines. The two mines within the district's boundaries, the Upper and Lower Biddys, retain many of the structures such as mine workings, skip tracks, dumps, and infrastructure required to determine their primary engineering and operation. The two railroads,

¹²⁶ The southern part of Ryan and the DVRR locomotive from the Lower Biddy Mine, looking northeast, ca. 1920, DV-RYA-076, Death Valley National Park Archives.

¹²⁷ Frasher, Burton, A View of the Death Valley View Hotel from the Upper Biddy Mine, Looking North, 1930, A-1124-1930, Frashers Fotos, copy on file Death Valley Conservancy Archives.

Ryan Historic District

Name of Property

Inyo, CA

County and State

the DVRR and the Baby Gauge, such integral components of the company's plan for the district, are intact enough to reveal their routes and operation.

Most importantly in terms of design, contributing resources within the camp of Ryan retain character-defining elements in the corporate vernacular style purposely chosen by PCB to create a sense of functionality, cohesiveness, and organization throughout the district. In its early years, Ryan consisted of a small nucleus of varied buildings, lined up along the DVRR grade and somewhat haphazardly placed to fit the steep contours of the hillside landscape. Beginning in about 1920, PCB pushed to enlarge and modernize its operations in the Ryan District, resulting in large-scale construction projects. Changes to the site included new building construction, existing building renovations, natural landscape alterations, and updates to infrastructural networks. The company also reorganized the space: commercial, administrative, and industrial buildings and structures were concentrated in the southern half of the camp, while housing, recreational facilities, and the school occupied the northern portion. Improvements and consolidation not only reflected the company's commitment to and investment in its Death Valley mining properties, but it also symbolized company ethos. For company officials and management, efficiency, cleanliness, organization, and cohesiveness equated to increased mining production and profit. The company also underscored its desire to develop a sense of community and encourage worker retention; thus, social centers, family housing, and a school were introduced to those resources already established to serve the industrial workforce. Existing resources within the Ryan Historic District continue to convey PCB's vision and plan for the site.

When PCB converted the Ryan Historic District for tourism purposes, its plan for the site changed; however the design, while adapted to reflect the new function, largely remained the same. The industrial structures so prominent on the landscape became marketable to visitors, and while interiors of buildings underwent renovation, exteriors remained largely unchanged. During the years following the period of significance, resources within the Ryan Historic District have changed very little. While some original buildings and structures have deteriorated or have been removed, the core of the district has been continuously preserved and maintained.

The quality of design is also retained with regards to the film and television production that occurred during the 1950s. During that decade, Hollywood directors and producers chose the Ryan Historic District as a site for location filming. They approached the district with a production plan and adapted its historic features and landscapes to meet their artistic vision. This is especially apparent with the transformation of an industrial mining landscape into an ancient one for the filming of *Spartacus*. Archaeological remains within the district continue to convey the production crew's set design.

Finally, the quality of design is retained with the designation of the Haulage Tunnel as a civil defense shelter and the excavation and supply of an adjacent storage room during the Cold War era. The district's extant shelter and storage room were identified and created according to a national and regional blueprint; the space and its supplies reveal much about the design and execution of civil defense shelters during this period.

Setting

Ryan Historic District

Name of Property

Inyo, CA

County and State

The setting of the Ryan Historic District has changed very little over the years. Its physical environment—geologic formations, plant and animal life, natural and cultural landscapes, and built resources—has remained consistent since the periods of significance. As it abuts Death Valley National Park, there has been no urban development in the vicinity. A high-transmission powerline installed in the 1960s is the only modern structure, and it comports to the multiple powerlines historically found within the district. As the district is situated on the steep western slopes of the Greenwater Range at an elevation of 3000 ft, its features continue to reflect adaptation to the challenging topography. Railroad grades and structures, mining structures, terraces, stairways, construction practices, and infrastructural features were purposely designed to mitigate—and in some cases utilize—the steep contours of the hillside. In addition, the same sweeping views of Death Valley enjoyed by Death Valley View Hotel guests during the tourism period of significance delight visitors to the district today. In fact, the district's remarkable retention of setting rendered it a desired locus for location filming, thus adding to its overall historic significance. Moreover, its remote setting replete with underground workings qualified it as a preferable location for a civil defense shelter during the Cold War. Thus, the Ryan Historic District's physical character is intact.

Materials

All of the built resources and structures within the Ryan Historic District incorporate historical materials from the time of construction. These materials, with the exception of natural materials, were transported to the district via the DVRR. In some cases, entire buildings, such as the Rec Hall and components of the Hotel Complex, were disassembled elsewhere and then reassembled on site with their original materials largely intact. Even buildings continually inhabited by caretakers, such as Houses 1, 2, and 3, retain at least ninety percent of their historic fabric. As previously stated, the Death Valley Conservancy is committed to the long-term preservation, restoration, and protection of Ryan. Its approach to Ryan is "preserve what is left and restore where possible" retaining as many original materials as possible, and when not feasible replacing with those consistent in like and kind.

In addition, the integrity aspect of materials is also present in the district's many archaeological sites. Larger sites, such as Early Ryan, as well as smaller ones, like single building foundations, contain abundant archaeological remains; and they are primarily undisturbed from their time of deposition during the periods of significance associated with mining, tourism, and film and television production. District archaeological sites are largely unexcavated, however what has been uncovered during construction mitigation suggests that many of the sites may have intact buried components. For example, within Ryan Camp excavations have revealed intact DVRR ties, hardware (no rail), and ballast in situ and buried beneath the surface. District archaeological sites' potential to yield information relating to Ryan's historical themes and patterns of events is profound. Thus, they retain the aspect of materials.

Lastly, the civil defense shelter and storage room retain the aspect of materials. Although the shelter was identified within an existing structure, the historic fabric of that structure—the wood lagging and trackway—and the supplies it required to serve as an adequate shelter, such as water barrels, are intact within the Haulage Tunnel. In addition, the adjacent storage room retains its wooden supports, protective curtain, and a majority of its civil defense supplies.

Ryan Historic District
Name of Property

Inyo, CA
County and State

Workmanship

The integrity quality of workmanship is present in all aspects of the Ryan Historic District. Contributing buildings and structures are evidence of vernacular methods of construction and reflect the labor and skill of various artisans, whether stone masons, mining engineers, carpenters, or set designers, present throughout the district's periods of significance. During the mining and tourism eras, PCB generated much of the engineering and design blueprints for the district following its own aesthetic principles; however, local artisans enacted those plans drawing on their own knowledge and traditions. The methods and materials used for building construction, as retained in all district buildings, provide a glimpse into preferred construction techniques. For example, although the predominating paint color scheme within the district is green and white/ivory; the application varies slightly between buildings.

The same is true for many of Ryan's structural elements. For example, the dry-laid rock terraces prevalent throughout the district provide excellent illustrations of workmanship. Although they appear uniform, several distinct styles of rock walls are observable, reflecting the distinct knowledge and traditions of their builders.

Workmanship is also identifiable at the Lower and Upper Biddy mines. Although mostly underground, observable mine workings indicate a use of regional technological practices. For example, square-set stoping, a technique first used in the 1860s by miners on Nevada's Comstock to mine large underground cavities, was employed by miners in the district's mines. Perhaps drawing on their previous mining experience in working with massive ore veins, Ryan's miners enacted prevailing silver mining traditions in the underground borax mines.

The district's two railroads, the DVRR and the Baby Gauge, also provide examples of the immense workmanship required to build and operate narrow gauge rail lines along the steep rocky slopes of the Greenwater Range. Construction practices involved following natural contours when feasible, and grade construction, support, and fabrication when not. The structural remains of elaborately-laid rock retaining walls and intricately designed wooden trestles are vestiges of the quality of workmanship present within district boundaries.

Each contributing resource within the district conveys the unique work of a master; hence, the Ryan Historic District retains the aspect of workmanship.

Feeling

The Ryan Historic District retains the integrity quality of feeling as it continues to evoke a sense of early 20th century Death Valley. This sense actually begins right when turning off of Dante's View Road to approach the district, when several historic buildings amidst an industrial mining landscape come into view. The buildings seem perched on the side of a foreboding slope, with basalt boulders in a frozen cascade from the top of the Black Mesa. Arriving to the central core of the district from Ryan Road, the steep and winding mile-long incline passes by contributing sites and structures on both sides, these resources offering an introduction to what is to come. In addition to the massive bunkhouses, the first building encountered along the route is the Schoolhouse with its intact play yard equipment, its structure so well-preserved that one could

Ryan Historic District

Inyo, CA

Name of Property

County and State

imagine children inside learning their lessons. The road ends at the DVRR level after a final steep climb, where Ryan's previously hidden buildings come into view and the entire scope of the district is revealed.

Each contributing resource—from the iconic green and white painted collection of buildings composing the Hotel Complex to the skip track structure descending the slope from the Upper Bidy to the rusted-out body of the 1912 Cadillac outfitted with flanged wheels in order to ride the rails—retain their original design, materials, and workmanship. The major contributing buildings and structures continue to express the borax company's aesthetics with corporate vernacular architecture in an organized and efficient configuration. When taken in tandem against the backdrop of the physically unchanged setting, district resources provide a rare glimpse into the district's periods of significance. Not only does the Ryan Historic District continue to convey the feeling of life in an early 20th-century mining camp, but it also imparts to modern day visitors what travelers may have experienced in the early days of Death Valley tourism.

Association

The Ryan Historic District retains the integrity aspect of association as it sufficiently conveys the link between contributing resources and the historic patterns of history for which they represent. The district is directly associated with early 20th-century borax mining as conveyed by its resources related to transportation, mineral extraction, residence, commerce, community, and infrastructure property types. It is also associated with Death Valley tourism as represented by the repurposed mining-related resources in addition to those only associated with the tourism property type. In the retention of their character-defining features, district resources continue to convey Ryan as one of the best remaining examples of twentieth-century frontier mining corporate vernacular architecture in California. In addition, resources associated with the film and television production property type continue to convey the practice of Death Valley location filming in the 1950s. Finally, contributing resources associated with civil defense property type continue to convey the district's role in Cold War-era nuclear fallout preparation.

Ryan Historic District
Name of Property

Inyo, CA
County and State

8. Statement of Significance

Applicable National Register Criteria

(Mark "x" in one or more boxes for the criteria qualifying the property for National Register listing.)

- ☒ A. Property is associated with events that have made a significant contribution to the broad patterns of our history.
- ☐ B. Property is associated with the lives of persons significant in our past.
- ☒ C. Property embodies the distinctive characteristics of a type, period, or method of construction or represents the work of a master, or possesses high artistic values, or represents a significant and distinguishable entity whose components lack individual distinction.
- ☒ D. Property has yielded, or is likely to yield, information important in prehistory or history.

Criteria Considerations

(Mark "x" in all the boxes that apply.)

- ☐ A. Owned by a religious institution or used for religious purposes
- ☐ B. Removed from its original location
- ☐ C. A birthplace or grave
- ☐ D. A cemetery
- ☐ E. A reconstructed building, object, or structure
- ☐ F. A commemorative property
- ☐

Ryan Historic District
Name of Property

Inyo, CA
County and State

G. Less than 50 years old or achieving significance within the past 50 years

Areas of Significance

(Enter categories from instructions.)

ARCHEOLOGY: HISTORIC—EUROPEAN

ARCHITECTURE

ART: FILM AND TELEVISION PRODUCTION

COMMERCE

COMMUNITY PLANNING AND DEVELOPMENT

ENGINEERING

ENTERTAINMENT/RECREATION

INDUSTRY

MILITARY: CIVIL DEFENSE

SOCIAL HISTORY

TRANSPORTATION

Period of Significance

1914-1971

Significant Dates

1914: The establishment of Ryan

1928: The opening of the Death Valley View Hotel

1959: The location filming of *Spartacus*

1962: The excavation and stocking of the Ryan fallout shelter

Significant Person

(Complete only if Criterion B is marked above.)

Cultural Affiliation

Architect/Builder

PACIFIC COAST BORAX COMPANY

TODD, A.B., Construction Engineer

Ryan Historic District
Name of Property

Inyo, CA
County and State

Statement of Significance Summary Paragraph (Provide a summary paragraph that includes level of significance, applicable criteria, justification for the period of significance, and any applicable criteria considerations.)

The Ryan Historic District, a mining complex that was repurposed for tourism, location filming, and civil defense, is eligible for inclusion on the National Register of Historic Places under Criterion A (Events), Criterion C (Architecture/Engineering), and Criterion D (Archeology). Constructed and operated by Pacific Coast Borax, the Ryan Historic District meets National Register Criterion A on the local level for its association with the early twentieth-century Death Valley borax mining industry, the nascent Death Valley National Park tourism business, 1950s location filming, and the Cold War-era civil defense program. It is also locally significant under Criterion C for embodying the distinctive, yet cohesive, characteristics of early twentieth-century corporate vernacular-style architecture as well as ingenuity in engineering. Finally, it is locally significant under Criterion D for its immense quantity and pristine quality of archaeological remains that have yielded and will likely yield important information about the Death Valley borax mining industry, tourism, location filming, and the U.S. civil defense program. The period of significance begins with the establishment of the mining camp of Ryan in 1914 and ends with the official decommissioning of the Ryan fallout shelter by the Office of Civil Defense in 1971.

Narrative Statement of Significance (Provide at least **one** paragraph for each area of significance.)

AREAS OF SIGNIFICANCE

Criterion A

The Ryan Historic District is eligible for listing on the National Register under Criterion A for its association with the following Areas of Significance: Industry, Transportation, Commerce, Community Planning and Development, Social History, Entertainment/Recreation, Art: Film and Television Production, and Military: Civil Defense.

Industry (1914-1927)

As with earlier times, during the beginning of the twentieth century, the mining industry continued to play a pivotal role in shaping the economic and social landscape of the American

Ryan Historic District

Inyo, CA

Name of Property

County and State

West, driving population growth and development in western states like California. While most western mining was focused on metals like gold and silver, industrial minerals like borax also contributed to the ongoing success of the industry. The Ryan Historic District provides one of the best remaining examples of an industrial mineral mining operation in the West. The initial development and evolution of the Ryan Historic District beginning in 1914 centered on borax mining and was entirely industrial in origin, with all of its occupants dependent on the borax operations. Ryan was the industrial and residential hub for six borax mines and was the base of operations for the exploration, development, and production of all borax ore originating from the Death Valley deposits during the period 1914-1927. Pacific Coast Borax (PCB), one of the most successful companies in the history of the borax mining industry, relied on the mines associated with the Ryan Historic District as the primary producers of its borax ore. PCB invested in the construction and management of mining equipment, infrastructure, and the work force to realize a profit in the industry and succeeded in extracting nearly \$30 million worth of borates from these mines, making it the most profitable mining venture in all of Death Valley's history.

Today, extant buildings, archaeological sites, and structures within the Ryan Historic District continue to convey its crucial role in the development and success of the Death Valley borax mining industry. Two mines within district boundaries, the Lower and Upper Biddy McCarthys, were among the largest and longest worked; their signatures on the landscape from massive waste rock dumps to ingeniously designed materials handling systems reveal the enormous amount of capital and labor invested in this mining operation. Moreover, Ryan Camp as a company-designed and constructed community exuding cohesiveness and functionality, served as a direct reflection of PCB's company ethos and its desired role as a leader in the borax industry. More information on Ryan Historic District's significance in the area of Industry and those resources directly related to this area can be found in the following sections: Development and Production of Ryan District Mines (Section 8 pages 116-121), The Historic Context of Borax Mining in the United States, 1856-Present (Section 8 pages 139-146), and Property Types Associated with the Historic Context of Borax Mining (Section 8 pages 147-149).

Transportation (1914-1956)

Early twentieth-century transportation in the American West was largely characterized by the expansion of railroads, which connected remote settlements to larger cities and facilitated the movement of goods and people across vast distances. Various transportation networks, including two railroads, linked Ryan and its associated mines to the larger local, regional, and global economy throughout its period of significance. Perhaps the Ryan Historic District's most elaborate, labor-intensive, and substantial transportation network was the Death Valley Railroad (DVRR). This 20-mile-long, narrow-gauge rail line, designed and financed by PCB and constructed by Mexican American workers, traversed the rocky and steeply contoured desert landscape bringing essential goods including water to Ryan residents while transporting borax ore from district mines to the global market. When Ryan's industry changed from mining to tourism, the DVRR was instrumental in transporting tourists to Ryan where they first encountered the vast and striking landscape of Death Valley National Park. The remnants of the DVRR in the form of railroad grades, culverts, elaborately laid retaining walls, and railroad ties

Ryan Historic District

Name of Property

Inyo, CA

County and State

within the Ryan Historic District are the best remaining vestiges of this vital regional transportation network.

An even better-preserved and more unique transportation network associated with the Ryan Historic District is the 24-inch Baby Gauge Railroad (BGRR). This rail line, finished in 1915, provided the means by which to convey borax ore from Ryan's southern mines into Ryan where it was loaded onto DVRR rolling stock and transported to market. When Ryan became a tourist facility in 1928, the BGRR was reconfigured as a tourist train ride, operating commercially until 1949. The BGRR figured prominently in several episodes of *Death Valley Days* filmed on location at Ryan in the 1950s and was used for mining assessment work into the 1960s. The major components of the BGRR such as the Plymouth locomotive and cars, extant track with rail, trestles, and other structures within the Ryan Historic District continue to convey its significance in the transportation category.

More information on Ryan Historic District's significance in the area of Transportation and those resources directly related to this area can be found in the following sections: Development and Use of the Death Valley Railroad (Section 8 pages 121-123), Development and Use of the Baby Gauge Railroad (Section 8 pages 123-124), and Property Types Associated with the Historic Context of Borax Mining: Property Type 1. Transportation Related Resources (Section 8 page 147). The use of the DVRR and BGRR for tourism can be found in From Mining Camp to Desert Resort, 1928-1956 (specifically Section 8 pages 152-153), and The Historic Context of Death Valley Tourism (1925-Present) (Section 8 pages 153-156).

Commerce (1914-1956)

Commerce, or the business of trading goods, services, and commodities, has always been a major force in the development of the American West, fueling economic growth, encouraging settlement, and fostering cultural exchange. From its incipience, the Ryan Historic District has been an active participant in commerce, first with supplying the global market with an industrial commodity and second, providing the service of accommodations to satisfy the growing Death Valley tourism business. From 1914 to 1927 the Ryan mines were the primary source for borax in the United States. Borate ore deposits were discovered, developed, extracted, and transported to the processing center of Death Valley Junction, where they were prepared for mass distribution. When a new borax deposit was found elsewhere and mining shifted away from Ryan in 1927, Pacific Coast Borax seized the opportunity to add the district's extant buildings and infrastructure to their growing roster of hotel properties. Marketed as a year-round resort due to its higher elevation, the Death Valley View Hotel, opened in 1928 and operated on a fulltime basis until 1930 and then seasonally until 1956. Even in the later years when hotel accommodations were only partially utilized, the general store, hotel lunch counter, dining room, and Baby Gauge tourist train continued to provide a much-needed service and undeniable delight to those visiting eastern Death Valley.

The Ryan Historic District's extant resources continue to convey its role in local, regional, and national commerce. Its association with the production of a commodity is apparent—the district sits on a slope dotted with mine openings, and the enormous waste rock dumps of the Upper

Ryan Historic District

Name of Property

Inyo, CA

County and State

Biddy McCarthy loom in the background. Its participation in the tourist business is also obvious as today, the camp most closely resembles the Hotel Era since very little renovation has occurred since its conversion in 1927.

More information on Ryan Historic District's significance in the area of Commerce and those resources directly related to this area can be found in the following sections: Development and Production of Ryan District Mines (Section 8 pages 116-121), The Historic Context of Borax Mining in the United States, 1856-Present (Section 8 pages 139-146), Property Types Associated with the Historic Context of Borax Mining, especially Property Type 2. Mineral Extraction-Related Resources and Property Type 4. Ryan Commercial and Community Resources (Section 8 pages 147-149), From Mining Camp to Desert Resort, 1928-1956 (Section 8 pages 149-153), The Historic Context of Death Valley Tourism (1925-Present) (Section 8 pages 153-156), and Property Types Associated with the Historic Context of Death Valley Tourism (Section 8 pages 156-157).

Community Planning and Development (1914-1927)

The development of Ryan as a company town follows the pattern seen in most mining communities in the West. Upon the discovery of ore, communities were hastily planned with a focus on accommodating basic infrastructure and services essential to the wellbeing of residents amidst challenging and rugged environments. Overtime, with company investment and population growth, the physical layout of the townsite changed, evolving from a small nucleus of buildings to an established settlement with a variety of building types, infrastructure systems, and community services.

This pattern of Community Planning and Development is epitomized by the Ryan Historic District, especially during the mining era (1914-1927). What started as a collection of company-built structures lined up on either side of the DVRR grade and small worker cabins precariously placed up and down the steep slopes on either side, developed in a short span of five years into a widespread settlement with centralized worker housing and boarding facilities, community buildings, and modernized infrastructure systems including electricity, indoor plumbing, and trash disposal. In the 1920s, the district experienced its largest renovation when PCB implemented its vision to create a cohesive, functional community. During this period, it changed the landscape with rock walls and terraces, built uniform appearing worker and management housing, provided community resources such as a hospital and schoolhouse, and expanded existing community buildings like the store, dining room, and kitchen. Perhaps in an effort to retain a transient mining work force in the harsh desert environment, PCB always stressed the importance of creating a cohesive mining community and this ethos is apparent in the district's extant resources.

More information on Ryan Historic District's significance in the area of Community Planning and Development and those resources directly related to this area can be found in the following sections: The Physical Development of a Company Town (Section 8 pages 124-132) and Property Types Associated with the Historic Context of Borax Mining Property Type 3. Ryan Residential Resources, Property Type 4. Ryan Commercial and Community Resources, and

Ryan Historic District

Name of Property

Inyo, CA

County and State

Property Type 5. Infrastructure-Related Resources (Section 8 page 148-149).

Social History (1914-1927)

The social history of early twentieth-century mining camps in the American West reveals a dynamic interplay of immigrant communities, labor struggles, and evolving gender roles amidst the backdrop of rapid industrialization and resource extraction. While mining companies often controlled the work environment and living arrangements of company employees, mining camp residents had a great deal of agency in their lived experience by navigating and challenging social hierarchies, maintaining community bonds, and just going about their daily business. In the Ryan Historic District, while PCB was integral in determining the camp's layout, architecture, and employee work life, the people who lived and worked at Ryan were also crucial shapers of the physical environment as they faced the daily reality of laboring in a harsh climate and in physical and social isolation. Like most mining camps, Ryan had a population composed predominantly of single males, with a smaller number of women and children living in nuclear families. Also like other mining camps, most of Ryan's population were European immigrants; however, other "marginalized" groups such as local Timbisha Shoshone tribal members and itinerant Korean and Pacific Islander miners were also important contributors to the social fabric of the camp. Thus, in the Area of Significance Social History category, Ryan's people—their ethnicities, gender, and ages, household composition, daily work patterns and labor issues, living conditions, recreation—and day-to-day circumstances of life at Ryan enables construction of a picture of a singular community within the context of corporate mining in the western United States from 1914-1927.

More information on Ryan Historic District's significance in the area of Social History and those resources directly related to this area can be found in the following sections: Social History of the Ryan Historic District, 1914-1927 (Section 8 pages 132-139) and Property Types Associated with the Historic Context of Borax Mining (Section 8 page 147-149).

Entertainment/Recreation (1928-1956)

A subcategory of the Entertainment/Recreation Area of Significance is Tourism, highlighting how recreational venues and entertainment facilities have historically drawn visitors and contributed to local economies through tourism. One type of tourism, focused on visiting natural places like national parks, burgeoned in the early twentieth century as Americans sought to explore and appreciate the stunning natural landscapes preserved within these protected areas. Death Valley, even before it became a national monument in 1933, drew visitors with the promise of its extreme environment, variable climate, and spectacular desert landscapes. Coupled with the decline of Death Valley borax mining in the mid-1920s, the increase in tourism caused PCB to form the Death Valley Hotel Company (DVH), pivoting from mining to tourism and adapting its properties accordingly. In 1927, the DVH and Union Pacific RR began running a combination rail-auto tour of Death Valley and the DVRR's terminus at Ryan, as well as its collection of recently-constructed buildings prompted the company to convert the camp into the Death Valley View Hotel.

Ryan Historic District

Name of Property

Inyo, CA

County and State

In the range of available lodging in Death Valley, the Death Valley View Hotel, opened in 1928, was by no means the most luxurious, but it did provide basic and comfortable accommodations at reasonable prices. Plus, it had a tennis court, general store, post office, lunch counter, gas pump, and sweeping views of the valley below. In addition, the Baby Gauge tourist train ride delighted visitors with a seven-mile thrilling and instructive tour through borax mines and along the steep slopes of the Greenwater Range. The Death Valley View Hotel operated on a fulltime basis until 1930 and then seasonally until 1956 providing much needed services throughout the formative years of the now booming Death Valley National Park tourist business.

More information on Ryan Historic District's significance in the area of Entertainment/Recreation, subcategory Tourism and those resources directly related to this area can be found in the following section: From Mining Camp to Desert Resort, 1928-1956 (Section 8 pages 149-157).

Art: Film and Television Production (1952-1959)

Due to its use as a backdrop for location filming in the 1950s, the Ryan Historic District is significant in the area Art: Film and Television Production. From its incipience, California's entertainment industry has always encompassed location filming and Ryan's association to entertainment mirrors similar contemporaneous activity occurring in larger Death Valley and the eastern Sierra. From the early twentieth century to the present day, filmmakers have been drawn to the area's otherworldly scenery, vast desert expanses, and dramatic terrain for various cinematic purposes. Death Valley's surreal landforms were especially adaptable for three genres of film and television—Westerns in emulating the wild, untamed frontier; science fiction in appearing like the imagined terrain on an extraterrestrial world; and historical narrative with settings in rugged, desert and mountain landscapes. Quite significantly, all three genres of film and television are represented in the Ryan Historic District.

During the peak of Death Valley location filming in the 1950s, Ryan was used as a filming location for several episodes of the Western genre television series *Death Valley Days* (1950s), one episode of the television series, *The Twilight Zone* (1960), and one major motion picture (*Spartacus*, 1960). Its involvement in the burgeoning entertainment industry is not surprising given its anachronistic and unique character; in addition, Ryan's location provided a quiet, undeveloped setting and yet was in proximity to the studio production facilities of Southern California. What distinguishes the Ryan Historic District from other Death Valley filming locations is the fact that most of the sets, backdrops, and defining features that drew filmmakers remain extant and largely unchanged. In fact, the set used in the filming of the opening scenes of *Spartacus* was left behind after filming ceased and has been largely untouched since then.

More information on Ryan Historic District's significance in the area of Art: Film and Television Production and those resources directly related to this area can be found in the following section: Hollywood Comes to Ryan: Film and Television Production, 1952-1959 (Section 8 pages 163-186).

Military: Civil Defense (1962-1971)

Ryan Historic District

Inyo, CA

Name of Property

County and State

The Ryan Historic District is significant in the area Military: Civil Defense because of its involvement in the countrywide civil defense program, which identified and stocked regional nuclear fallout shelters. Although beginning after WWII, the national civil defense program peaked in the early 1960s with escalating tensions of the Cold War and building animosity with the Soviet Union. While the threat of a nuclear attack had been looming for years, in 1962 President Kennedy prioritized the civil defense fallout shelter program's National Fallout Shelter Survey. Local government officials were tasked with the identification of shelter spaces and distribution of survival supplies. The lack of appropriate building shelter spaces caused local civil defense coordinators to innovate and a variety of nontraditional spaces, like mines, became potential refuges.

In 1962, the Ryan Haulage Tunnel was identified as a fallout shelter and an adjacent underground room excavated to hold shelter supplies. The shelter was designed to hold at least 820 persons and the storage room stocked with enough shelter supplies—including food, water, and sanitation and medical kits—to sustain shelter inhabitants for a two-week period. The shelter was periodically inspected until its official decommissioning in 1971, when funding and interest in the national civil defense program dwindled. While the Ryan Haulage Tunnel is not the only remaining example of an underground fallout shelter, it is possibly the most intact. Almost all of the original provisions remain in the supplies storage room providing a unique glimpse into this infamous period of American history.

More information on Ryan Historic District's significance in the area of Military: Civil Defense and those resources directly related to this area can be found in the following section: A Refuge During the Cold War: Ryan's Role in Civil Defense, 1962-1971 (Section 8 pages 187-197).

Criterion C

The Ryan Historic District is eligible for listing on the National Register under Criterion C because of its significance in the following areas: Architecture and Engineering.

Architecture (1914-1927)

The Ryan Historic District is significant in the area of Architecture because it provides an excellent example of the distinctive architectural style known as corporate vernacular, reflecting both a unified corporate style and utilitarian adaptations to local climatic and geographical conditions. Corporate vernacular architecture is commonly associated with late-nineteenth and early-twentieth-century company-sponsored towns, and especially those in the mining industry, as employers sought to control and manage workers to promote reliability, and in effect increase mine production.¹²⁸ This is especially true at Ryan, where the harsh environment and remote geographical location caused PCB much difficulty in finding and keeping a steady workforce. Thus, the district's built environment embodies both PCB corporate ethos along with the idiosyncrasies and constraints of mining in Death Valley. Its architecture, both extant and razed,

¹²⁸Alanen, Arnold R., "Corporate Vernacular: Communities and Housing in Michigan's Copper Country," Abstracts: Vernacular Architecture Forum Conferences, 1982-1984, *Perspectives in Vernacular Architecture*, vol. 2, 1986, pp. 215-216, JSTOR, <http://www.jstor.org/stable/3514332>. Accessed 22 Oct. 2023.

Ryan Historic District

Inyo, CA

Name of Property

County and State

also reflects the evolving values of the borax company and its ongoing efforts to ensure the longevity of the mining camp. When the mining camp underwent its hotel conversion, the cohesive and functionally focused corporate vernacular architectural style allowed multiple buildings to be easily adapted into a unified desert resort.

Today, the Ryan Historic District is unparalleled in terms of its unique architectural character. Some character-defining features include wooden framing, corrugated galvanized iron siding and roofing, a two-tone color scheme in green and ivory, gabled roofs, large covered and screened porches, rock-retained terraces, concrete sidewalks, and wooden railings. Its built environment reflects a mix of influences affecting this character, starting in the 1910s with the *ad hoc* placement of both site-built buildings and those moved via the DVRR from elsewhere, continuing with PCB's modernization and creation of a synchronous landscape in the early 1920s, and culminating in the company's conversion of Ryan into the Death Valley View Hotel in the late 1920s. Thus, Architecture as an Area of Significance is applicable beginning with the first building construction in 1914 and ending in 1927 when the property was converted to the Death Valley View Hotel (as it appears today).

More information on the Ryan Historic District's significance in the area of Architecture and those resources directly related to this area can be found in the following section: Architecture (Section 8 pages 157-162).

Engineering (1914-1971)

The Ryan Historic District, like many other mining districts in the American West, is situated on the steep rocky slopes of a mountain range amidst a remote and harsh desert environment. The district is replete with examples of innovative engineering applications especially focused on mitigating this set of geographic challenges. One of the greatest feats involved the movement of borax ore from the mines to Ryan Camp and then from there to the processing center of Death Valley Junction, 20 miles distant. Mining engineers designed systems to either work with gravity, in the case of the massive ore chutes and "gravity" skip track at the Upper Biddy McCarthy, or against it, in the case of the gasoline-powered hoist pulling ore up the Lower Biddy McCarthy skip track. The Baby Gauge RR was critical in the movement of ore from the southern mines—its 24-inch gauge was well-suited to snaking along precarious slopes; even when the track succumbed to rock fall by 1920, engineers figured out a method to overcome this obstacle by driving a haulage tunnel through the mountain. Once at Ryan Camp, ore was stored in large timber ore bins before being loaded onto the DVRR, a narrow-gauge railway specifically designed to navigate extreme topography while pulling heavy loads. The vestiges of this elaborate system of ore movement are just some of the many districtwide contributing features that render it significant in the area of Engineering.

Ingenuity in engineering went beyond industrial applications. Faced with a shortage of building materials, PCB mastered the movement of entire buildings including the store, original boarding house (now the lobby and dining room), and most notably the Rec Hall. While there was no source of incipient water, the camp's waterworks design effectively furnished the entire camp with delivered water via a pump and gravity system, much of which is still in use today.

Ryan Historic District

Name of Property

Inyo, CA

County and State

Wastewater and sewage were carried away from the residential core by thousands of feet of segmented ceramic sewer line able to follow the curvy contours of the terrain. An ammonia ice plant remedied food spoilage issues, and a trackway, much like that used for mining, transported trash—not ore—to the camp's two incinerators solving refuse disposal problems. Finally, with the construction of underground storage adits and native rock-retained terraces PCB added more usable space to the landscape.

Engineering accomplishments are found throughout the district's period of significance, 1914-1971. In addition to the mining era, the Hotel Era, when Ryan's focus changed from industry to hospitality, brought reconfigured spaces: dormitories became hotel rooms, the mess hall a dining room, and the BGRR an amusing tourist ride. Adding to the list of hotel amenities was a standard tennis court—graded, surfaced, and fenced—for guests' enjoyment. Engineering innovation continued during the period of movie and television location filming, as an entire landform including an abandoned railroad track became a Libyan salt mine and slave market as depicted in *Spartacus*. Finally, civil defense program officials brought their own set of blueprints to create a fallout shelter and supplies room in an old mine tunnel.

Information on the Ryan Historic District's significance in the area of Engineering and those resources directly related to this area can be found throughout the document.

Criterion D

The Ryan Historic District is eligible for listing on the National Register under Criterion D in the following Area of Significance: Archeology.

Archeology (1914-1971)

The Ryan Historic District is significant in the area of Archeology for its potential to add to the breadth of knowledge about early twentieth century borax mining, nascent Death Valley tourism, Death Valley film and television location filming, and Cold War-era civil defense fallout shelters. The district has always been privately held and protected resulting in a remarkable state of preservation. The district's 16 archaeological sites along with building- and structure-associated artifact deposits are largely undisturbed; most sites have observable surface artifacts and those that have been tested have buried components as well. The archaeological potential within the district becomes obvious when periodic repair and maintenance of infrastructure requires excavation; for example, in 2015 underground utility work near the Warehouse building revealed a previously unknown coal deposit likely associated with operation of the DVRR's early coal-powered locomotives. Further testing revealed the presence of multiple sections of intact ties buried beneath the district's central core.

Although knowledge pertaining to all the aforementioned categorical Areas of Significance could be expanded with archeological investigation, a few research venues worthy of mention include Community Planning and Development and Social History. The archaeological remains of Ryan Historic District's early residential areas as found within the archaeological sites Early Ryan and the Building Foundations site allow for a more complete picture of how the district

Ryan Historic District

Name of Property

Inyo, CA

County and State

evolved from its inchoate beginnings to a well-established mining camp. Historical records and photographs originating from Ryan's formative years are rare; thus, Ryan's archaeological sites are critical in addressing research questions such as: How did Ryan Camp's buildings and infrastructure develop over time? How did PCB meet the needs of company employees in the early years? What were the living conditions of everyday workers and how did they change over time? In addition, given that most historical documentation was recorded by people in management roles, little is known about the worker experience. Archaeological research could uncover much about the staff, miners, and laborers who lived and worked at Ryan. How did the workers adapt to the remote and harsh Death Valley environment? How did the interaction of personal agency and company control manifest on a daily basis? And finally a bigger question, who were Ryan's workers? While census records identify mostly miners of European-descent, a sole newspaper article suggests that communities of ethnically-diverse miners—Mexicans, Pacific Islanders, and Koreans—worked during the summer months; archaeological research has the potential to identify and study these traditionally marginalized groups. While the answers to these questions can shed light on Ryan's residents in particular, they also have broader implications and the potential to add to the knowledge base pertaining to people living in mining camps throughout the American West.

The *Spartacus* set remains site is one of Ryan Historic District's most recent contributing resources, and interestingly has some of the most potential for expanding the breadth of research in the discipline of archaeology. The archaeology of Hollywood is a burgeoning field referring to the study of film and television production sites, artifacts, and related cultural heritage. It involves examining the material remains of movie sets, props, costumes, and other ephemera associated with the entertainment industry to understand how they were constructed, how they reflect cultural and historical contexts, and how they have been preserved or altered over time. Since movie sets were usually considered ephemeral and often dismantled or repurposed after filming, very few remain. The rarity of the type of archeological site represented by the *Spartacus* set remains as well as its degree of preservation add to the overall district's significance in the area of Archeology.

Another relatively new field is the archaeology of the Cold War, which explores the material culture, landscapes, and sites associated with this geopolitical conflict that lasted roughly from the end of World War II to the dissolution of the Soviet Union in 1991. Archaeological sites associated with military installations, civil defense and shelter systems, the space race, and cultural and political landscapes can yield important information about the technological, political, and cultural dimensions of the conflict. Although fallout shelters were common during the Cold War, a lesser amount were placed in mines and very few retain their stocked supplies. Thus, the Ryan Historic District fallout shelter and intact supplies room offer a unique opportunity to study this complex and influential period in global history.

Information on the Ryan Historic District's significance in the area of Archeology and where archaeological investigations could be particularly helpful in answering key research questions can be found throughout the remainder of the document.

Ryan Historic District
Name of Property

Inyo, CA
County and State

THE RYAN HISTORIC DISTRICT: BORAX MINING, TRANSPORTATION PATTERNS, AND THE PHYSICAL AND SOCIAL DEVELOPMENT OF A COMPANY TOWN, 1914-1927¹²⁹

The initial development and evolution of the Ryan Historic District centered on borax mining and was industrial in origin, with all of its occupants dependent on the borax operations. One company, Pacific Coast Borax (PCB), constructed and managed mining operations and subsequently the work and life of company employees. Today the result is a large, contiguous industrial landscape encompassing multiple mines and their associated equipment, structures, and archaeological features, all linked together by railroad grades and roads. For the sake of logistics and feasibility, this nomination focuses on the historic properties within a 107-acre area, which reflect the historic boundaries of Ryan. Thus, the two Ryan district mines that are directly adjacent to Ryan (the Upper and Lower Biddy McCarthy) are included in the Ryan Historic District. Excluded from the district are four non-contiguous mines, the borate processing center of Death Valley Junction, CA, and sections of the linear features, such as the Death Valley Railroad and the Baby Gauge rail line, and other associated archaeological sites and structures not falling within district boundaries.

Development and Production of the Ryan District Mines

Borax deposits were discovered at elevations averaging 3,200 feet on the steep western slopes of the Greenwater Range of the Funeral Mountains in eastern Death Valley as early as 1883 by agents working under William T. Coleman, a borax merchant and distributor. Borax, known chemically as sodium tetraborate decahydrate ($\text{Na}_2\text{B}_4\text{O}_7 \cdot 10\text{H}_2\text{O}$), is a naturally occurring mineral and a derivative of the chemical element boron. All boron-oxygen compounds are collectively known as borates, but in most popular literature the words “borax” and “borates” are used interchangeably, or “borax” is used to the exclusion of all other terms. Most borates are found in surface geothermal springs and dry lake beds, where they are concentrated by evaporation; the deposits located in the mountains bordering Death Valley were once in dry lake beds that were buried by sediments, then uplifted. Coleman’s men located six of these type of borate deposits with potentially significant underground components and claimed them as the Upper Biddy McCarthy, Lower Biddy McCarthy, Played Out, Grandview, Lizzie V. Oakley, and Widow, collectively known as the Hillside Group. Francis “Borax” Smith, the head of Pacific Coast Borax (PCB), acquired the Hillside Group in 1890, and every year for 30 years, PCB completed the yearly improvement activities required to maintain control of their claims. As a result, all of the Hillside mines were partially assessed and tested, and exploratory shafts were sunk by the time they became the primary focus of PCB’s borax extraction activities around 1913.

¹²⁹ This section as well as those on tourism and architecture were largely derived from the thorough historical research of Mary Ringhoff as presented in her Master’s thesis. See Ringhoff, Mary, *Life and Work in the Ryan District, Death Valley, California, 1914-1930: A Historic Context for a Borax Mining Community*, University of Southern California, Master’s Thesis, 2012.

Ryan Historic District

Name of Property

Inyo, CA

County and State

Since the borax deposits were located on the steep terrain of the Greenwater Range in an isolated area with no direct transportation network, the parent company of PCB, Borax Consolidated, Limited (BCL), organized the Death Valley Railroad (DVRR) to transport ore from the mines to the processing center of Death Valley Junction, CA, 20 miles to the east. In late 1914, workers, who had been grading and laying track for several months, reached the Upper Biddy McCarthy mine and the railroad terminus and nascent camp of Devar, a contraction of "Death Valley Railroad."¹³⁰ Devar was soon renamed Ryan, as most miners transferred to the Hillside Group from PCB's Lila C Mine and the associated camp of Ryan (from then on known as "Old Ryan").

Most of the Ryan mines started out as open quarries, exploiting easily accessible deposits of almost pure colemanite (a borate mineral), but they soon turned to traditional underground methods as they followed mixed deposits of colemanite and ulexite at greater depth. The development history of each of Ryan's mines is discussed below in chronological order of development, with focus on the Upper and Lower Biddy McCarthys as they are included in this nomination document.

Played Out

The Played Out did not necessarily begin producing ore before the Biddy McCarthys, but as it sat about two miles north of them, the DVRR reached it first and it was the first to ship ore to Death Valley Junction. Mining commenced at the Played Out by 1915 and it had a set of wood frame ore bins to load its borax directly onto DVRR trains.¹³¹ It also had its own substantial residential area containing tents, a boarding house, and other buildings, dugouts, and abandoned adits which served as housing for a number of Played Out miners. The work camp was referred to as Colemanite, since that was the closest DVRR stop.

While the Played Out was the first Hillside Group mine to ship ore, it had one of the shorter lifespans of the Ryan mines and never was a significant producer. For comparison purposes, the Played Out produced a total of 12,612 tons of ore in 1916-1917 while the Upper Biddy produced almost 40,000 tons, and the Lower Biddy produced over 25,000 tons.¹³² While the lower production figures indicate that the Played Out's borax deposits were less than substantial, production was also impacted by the mine's reliance on often insufficient electrical power via a two-mile powerline from the Ryan power plant.¹³³ Even after a new powerhouse was installed at Ryan in 1924, mining at the Played Out dwindled, and production basically ceased by 1926.¹³⁴

Upper Biddy McCarthy

The Upper Biddy McCarthy and Lower Biddy McCarthy mines opened up around the same time as the Played Out, and amassed stockpiles of ore awaiting the arrival of the DVRR. By March

¹³⁰ Gower, Harry P. "Correspondence with Ruth Woodman," 14 July 1949, U.S. Borax Collection, Death Valley National Park Archives.

¹³¹ GCE, "Letter to R.C. Baker," 10 March 1915 and 16 April 1915.

¹³² Faulkner, "Annual Report for Ryan 1916-1917."

¹³³ Boyd, "Agenda for Mr. Zabriskie," 11 September 1923.

¹³⁴ Boyd, "Annual Report for Ryan, 1925-1926"; Boyd, "Annual Report for Ryan, 1926-1927."

Ryan Historic District

Inyo, CA

Name of Property

County and State

1915, the Upper Biddy McCarthy had a set of wood frame ore bins so it could load its borax directly onto DVRR trains (Figure 31).¹³⁵ These bins were in the center of Ryan and dominated the community's landscape. In 1916, a skip track using a powered hoist was constructed at the Upper Biddy to move ore from the mine down the steep slope and along a tall trestle to be dumped into the ore bins, which were extended in 1916 (Figure 23).¹³⁶ The powered hoist was replaced by a gravity tram system by 1920 with the track being shifted slightly southerly, and the remnants of the skip track are one of the most visible components of the Upper Biddy McCarthy today, lying in situ above Ryan (Figure 22).

In 1916-1917, the Upper Biddy McCarthy produced 39,871 tons of ore, shipping 10,244 tons of first-class ore and 23,368 of second class (the rest was stockpiled on reserve dumps); approximately 50,000 tons of waste had to be removed to reach it.¹³⁷ The Upper Biddy was the most productive mine at Ryan during that time period. By September 1917, its ore body had been clearly defined, and its waste dump was large enough to necessitate construction of a shed to protect the Baby Gauge railroad line running beneath it.¹³⁸ The Upper Biddy was still being worked as an open quarry as late as November 1917, but soon shifted to underground methods.

In 1919 or early 1920, the Upper Biddy's main tunnel was extended all the way through the ridge for a distance of almost 1,600 feet, bypassing the Baby Gauge curves south of town and allowing quicker access to all of the southern mines.¹³⁹ In 1924, the Upper Biddy received a new power line to connect it to the newly reconfigured Powerhouse; this replaced the existing electrical power line that was installed as early as 1917.¹⁴⁰

By 1925-1926 the Upper Biddy was one of only three Ryan mines still producing ore; 468 tons of ore were mined there in that fiscal year, while the Lower Biddy provided even less at 110, and the Widow provided the vast majority at 47,899. In fiscal year 1926-1927, only 210 tons were mined at the Upper Biddy. Ore reserves remained in place available for future work, but they were not substantial enough to delay PCB's shift of its operations away from Ryan in 1927.

Lower Biddy McCarthy

Although the Lower Biddy McCarthy began producing ore at the same time as the Upper Biddy and the Played Out, it was the last of the three to receive a rail connection and its development was slightly slowed as a result. The DVRR completed a branch from Ryan to the Lower Biddy in the first few months of 1915, and production commenced in earnest (Figure 26). By March 1915, the Lower Biddy McCarthy had a set of wood frame ore bins, and in July of that year, insurance

¹³⁵ GCE, "Letter to R.C. Baker," 10 March 1915 and 16 April 1915.

¹³⁶ Hart Bros., Tibbetts, Heiron & Co., "Borax Consolidated Limited (The Pacific Coast Borax Company of Nevada), Statement of Temporary and Sundry Additions," 30 September 1916.

¹³⁷ Faulkner, "Annual Report for Ryan 1916-1917."

¹³⁸ Ibid.

¹³⁹ Chappell, Gordon, "To Death Valley by Rail: A Brief History of the Death Valley Railroad," in *Proceedings of the Third Death Valley Conference on History and Prehistory, January 30-February 2, 1992* (James Pizarowicz, editor), Death Valley Natural History Association, 1992, 110-111.

¹⁴⁰ Hart Bros., Ellis & Co., "Additions and Betterments for the year ending September 30, 1924"; Faulkner, "Annual Report for Ryan 1916-1917."

Ryan Historic District

Inyo, CA

Name of Property

County and State

records indicated it had two sets of bins. By September 1917 it had acquired another new bin.¹⁴¹ Unlike the Played Out but like the Upper Biddy, the Lower Biddy was close enough to Ryan that it seems not to have had its own work camp as there is no evidence of a real residential area.

In 1916-1917, the Lower Biddy produced 25,124 tons of ore, shipping 7,373 tons of first class and 14,721 of second class; about 7,600 tons of waste were removed to reach it, illustrating how much more accessible the Lower Biddy deposit was than the Upper Biddy's.¹⁴² The Lower Biddy also had a skip track, but in this case it moved ore uphill to the DVRR grade instead of downhill (Figure 25). The skip track employed a gasoline-powered hoist, but by 1923 it had deteriorated much like Ryan's other gasoline engines and generators, which had all been working nonstop since at least early 1917.¹⁴³ Then-superintendent Julian Boyd urgently requested an electrical transmission line from Death Valley Junction to Ryan to replace the old power-generating machinery, which "are old, and are giving constant trouble."¹⁴⁴ It appears that such a line was never built, but the new electric power plant installed in 1924 would have improved the supply of electricity to the camp and its mines.¹⁴⁵

Like the Upper Biddy, the Lower Biddy remained a steady producer until late 1927, but had low numbers in its last years. By 1925-1926 it was one of only three Ryan mines still producing ore, but only 110 tons of ore were mined there in that fiscal year (Figure 24).¹⁴⁶ In fiscal year 1926-1927, only 130 tons were mined.¹⁴⁷ Ore reserves remained in place at the Lower Biddy, available for future work, but as with the Upper Biddy, they were not substantial enough to delay PCB's shift of its mining operations away from Ryan in 1927.

Grandview

Development began at the Grandview, the first mine south of Ryan to be reached by the Baby Gauge Railroad, in 1915. A skip track was constructed at the Grandview in 1916, enabling movement of ore down the steep slope for loading onto Baby Gauge cars. In 1916-1917, the Grandview produced 20,759 tons of ore, shipping 6,032 tons of first class and 12,394 tons of second class.¹⁴⁸ This made the Grandview the third most productive Ryan mine in this time period, after the Upper and Lower Biddys. Like other mines, the Grandview experienced improvements in 1924, chiefly a new tunnel and grade providing a shortcut for the Baby Gauge line (as well as a large amount of borax).¹⁴⁹ It appears that this shortcut was chiefly useful for shipping ore from the highly productive Widow Mine, as work at the Grandview dwindled in favor of a focus on the Widow. By the end of 1926, the Grandview was no longer listed in

¹⁴¹ GCE, "Letter to R.C. Baker," 10 March 1915 and 16 April 1915; Rasor, C.M., "List of insurance values for buildings at or near Ryan, CA, July 1915" (enclosed with letter to C.R. Dudley), 28 July 1915, U.S. Borax Collection, Death Valley National Park Archives; Faulkner, "Annual Report for Ryan 1916-1917."

¹⁴² Faulkner, "Annual Report for Ryan 1916-1917."

¹⁴³ Boyd, "Agenda for Mr. Zabriskie, 11 September 1923"; Faulkner, "Annual Report for Ryan 1916-1917."

¹⁴⁴ Boyd, "Agenda for Mr. Zabriskie," 11 September 1923.

¹⁴⁵ Hart Bros., Ellis & Co., "Additions and Betterments for the year ending September 30, 1924."

¹⁴⁶ Boyd, "Annual Report for Ryan, 1925-1926."

¹⁴⁷ Boyd, "Annual Report for Ryan, 1926-1927."

¹⁴⁸ Faulkner, "Annual Report for Ryan 1916-1917."

¹⁴⁹ Hart Bros., Ellis & Co., "Additions and Betterments for the year ending September 30, 1924."

Ryan Historic District

Name of Property

Inyo, CA

County and State

annual production reports as a producing mine.¹⁵⁰ It retained substantial ore reserves for future operations, but was never again worked.

Lizzie V. Oakley

The Lizzie V. Oakley began production in 1916, presumably shipping ore out as soon as the Baby Gauge line reached it. As it was located roughly equidistant between the Grandview and the Widow, the Oakley seems to have been designated as a locus for activity benefiting all three mines, and had facilities the others did not—a significant work camp containing a wood-framed, corrugated metal-sided boarding house, a warehouse of the same materials, and tents housing workers.¹⁵¹ Additions included a blacksmith shop, supply room, water service (hailed on the Baby Gauge for workers), mule stable, and general camp equipment like tents, beds, and toilet facilities.¹⁵² By the end of 1917, the Lizzie V. Oakley also had electricity thanks to Ryan's new power plant, and may have served as a sort of substation between Ryan and the Widow.¹⁵³

In contrast to all of the improvements, which taken together suggest preparation for significant production work, superintendent H.W. Faulkner noted that a relatively small amount of ore had been extracted during 1916-1917—only 10,212 tons of ore were shipped, of which only 1,405 tons were considered first class.¹⁵⁴ Very little information has been found on work at the Lizzie V. Oakley between 1918 and 1925, the bulk of its producing years; by the end of 1926, the Oakley was no longer listed in annual production reports as a producing mine.¹⁵⁵ It retained substantial ore reserves for future operations, but all work there had been dropped in favor of production at the Widow, and the Upper and Lower Biddys.

Widow

The Widow mine is located the farthest from Ryan, at a distance of approximately 4 miles. Mining commenced there in 1916, but production was limited until the completion of the Baby Gauge in 1918. By 1923, however, the Widow had expanded into the biggest producer at Ryan. According to one source, Ryan's 1923 output was about 9,000 tons a month, with about 60% coming from the Widow; however, the limitations of the small Baby Gauge cars meant "filling the ore bins at Ryan with the Widow trains [was] like trying to fill a bathtub with a spoon."¹⁵⁶

The Widow mine continued to be the highest producer of all the Ryan mines until the district's abandonment in 1927. Its dominance is highlighted in superintendent Julian Boyd's annual report on Ryan mines for 1925-1926, which notes that of the 48,477 tons of ore mined that year, 47,899 tons of it came from the Widow.¹⁵⁷ It also employed a majority of the district's miners:

¹⁵⁰ Boyd, "Annual Report for Ryan, 1925-1926."

¹⁵¹ Chickering, Roger, "Letter to C.R. Dudley," 24 August 1916, U.S. Borax Collection, Death Valley National Park Archives.

¹⁵² Hart Bros., Tibbetts, Heiron & Co., "Borax Consolidated Limited (The Pacific Coast Borax Company of Nevada), Statement of Temporary and Sundry Additions," 30 September 1916.

¹⁵³ Faulkner, "Annual Report for Ryan 1916-1917."

¹⁵⁴ Ibid.

¹⁵⁵ Boyd, "Annual Report for Ryan, 1925-1926."

¹⁵⁶ Boyd, "Agenda for Mr. Zabriskie," 11 September 1923.

¹⁵⁷ Boyd, "Annual Report for Ryan, 1925-1926."

Ryan Historic District

Name of Property

Inyo, CA

County and State

approximately 75 men worked there at one time.¹⁵⁸ During fiscal year 1926-1927, the Widow provided 16,603 tons of the total 16,943 tons produced by all Ryan mines; again, the Upper Biddy, Lower Biddy, and Widow were producing mines, while the Played Out also produced a small amount of ore.¹⁵⁹ Despite the Widow's substantial ore reserves, it was abandoned along with the rest of the Ryan mines when PCB shifted its operations away from Ryan in 1927.

Development and Use of the Death Valley Railroad

As previously mentioned, in 1913 PCB commenced the building of a railroad to connect the Hillside Group with Death Valley Junction, the company's borax processing center. Borax Consolidated, Limited (BCL), the parent company of both PCB and the Tonopah and Tidewater Railroad (T&T) proposed to build a new branch line from the existing T&T, which ran through Death Valley Junction north-south from the Nevada southern goldfields to San Diego. The company surveyed a 17-mile-long route from Horton (on the T&T's branch to PCB's now defunct Lila C Mine) to the Upper Biddy McCarthy mine and planned to pay for construction by issuing new T&T bonds.¹⁶⁰ It filed an application for bond issuance with the California Railroad Commission, which unexpectedly rejected it. The Commission stated the additional bonds would constitute an undue financial burden, resulting in the T&T charging unacceptably high shipping rates.¹⁶¹

Denied its application for a T&T branch, BCL opted to form a new and separate railroad company, the Death Valley Railroad (DVRR). The DVRR was designed as a narrow-gauge (36-inch-wide) line, which was better suited to the demanding curves of the steep mountainous terrain than a standard-gauge (4 feet, 8 1/2 inches wide) line. It was only built for moving ore from the Death Valley mines to Death Valley Junction, and from there on to the T&T for shipping to PCB's refineries in Southern California. The line originated at Death Valley Junction and ran along the Lila C branch for about three miles to the Horton stop, via the addition of a third rail to allow use by both narrow-gauge and standard-gauge cars.¹⁶² From Horton, the narrow-gauge line ran northwest, curved around the north side of the range through Furnace Creek Pass, and then turned south to run along the hillside contours of the Greenwater Range, passing by the Played Out Mine, and continuing to Ryan and the Lower Biddy McCarthy (Figure 32). The total distance from Death Valley Junction to Ryan was a little over 20 miles. The line was originally envisioned as continuing all the way down Furnace Creek Wash to additional borax deposits at Corkscrew Canyon and Monte Blanco, with Ryan as only a temporary terminus. The Hillside Group mines proved rich enough to delay this extension, and the whole plan was dropped when PCB decided to move its operations to the much richer (and more easily accessible) Kramer deposit in Kern County in 1927.

¹⁵⁸ Gower, *50 Years in Death Valley*, 35.

¹⁵⁹ Boyd, "Annual Report for Ryan, 1926-1927."

¹⁶⁰ Myrick, David F., *Railroads of Nevada and Eastern California, Volume II: The Southern Roads*, Berkeley, California, Howell-North Books, 1963, 608.

¹⁶¹ *Ibid.*, 608.

¹⁶² Myrick, 609.

Ryan Historic District

Name of Property

Inyo, CA

County and State

Constructing the first portion of the DVRR route, leaving from the Lila C branch, was straightforward and ran over easy terrain. It was not free of risk, however, as illustrated by an early accident in which the brake chain broke on a flatcar carrying rails, causing the flatcar to break free and coast down the tracks. It killed a worker and collided with a tank car at Death Valley Junction.¹⁶³ The rest of the DVRR route was challenging, winding along steep hillsides requiring major cuts and fills in hard volcanic rock and requiring the construction of five large trestles. Starting in March 1914, the crew of about 225 graders and 100 tracklayers made swift progress for the first ten miles and slowed significantly when they reached the mountains.

The grading crew, primarily composed of Mexican American workers from Los Angeles, used mules pulling road plows and scrapers to shape the route; the bridge crew and steel gang followed immediately behind the graders, building trestles and laying track.¹⁶⁴ Time was of the essence, both because the Lila C was rapidly playing out and because of the workers' fervent wish "to just get through and away from the seven-day week, the hot and dirty tent camp and the lack of recreational or entertainment facilities."¹⁶⁵ Despite the tough conditions, DVRR construction work was an appealing proposition to those looking for work; according to an October 1914 newspaper article, at least five men died of heat exposure during the summer as they were on their way to Death Valley Junction hoping to work on the construction crew.¹⁶⁶

The DVRR crews worked through the heat of summer, finally reaching the Upper Biddy McCarthy in November 1914, meeting the company's goal of completion by Thanksgiving. Sometime in the next few months, crews constructed a wye in the center of Ryan, surrounding the camp's boarding house and Store/Post Office (visible in Figure 13). This triangular junction where three lines came together enabled trains to move from line to line and turn around without a turntable. DVRR crews extended a line down the long end of the wye, not to Furnace Creek Wash as originally envisioned, but to the Lower Biddy McCarthy mine (Figure 26).

According to its 1917 schedule, the Death Valley Railroad ran one round-trip train a day between Death Valley Junction and Ryan, every day but Monday, at an average speed of 15 miles per hour.¹⁶⁷ The train carried ore to Death Valley Junction and pulled supplies to Ryan, including a tank car of water and timber for underground mine support structures. It also furnished the company store with much desired provisions. Lillian Boyer, a Ryan resident in the early 1920s remembered she "had to climb a big hill and walk down a mile of railroad tracks to get to the store, between 8:30 and 9 AM if [she] wanted any meat..." before it sold out.¹⁶⁸ No more than one passenger car would have been required to carry the small number of people traveling to and from Ryan each day, but apparently the train usually did not even have one—Ryan residents were usually expected to just hop onto the ore train's caboose if they wanted to go to Death Valley Junction.¹⁶⁹ Additional trips between Ryan and Death Valley Junction were made

¹⁶³ Chappell, 97.

¹⁶⁴ Gower, *50 Years in Death Valley*, 5.

¹⁶⁵ *Ibid.*, 5-6.

¹⁶⁶ *Inyo Independent* 2 October 1914, cited in Chappell, 103.

¹⁶⁷ Myrick, 609.

¹⁶⁸ Boyer, Lillian, "Notes on Life at Ryan, 1919-1924."

¹⁶⁹ Gower, Harry P. *Some Reminiscences of Death Valley*, ca. 1965, U.S. Borax Collection, Death Valley National Park Archives, 2558/01-0060.

Ryan Historic District

Inyo, CA

Name of Property

County and State

possible by the fitting of a 1912 Cadillac touring car with flanged wheels, allowing it to run on the rails (Figure 17). Ryan residents also made a number of unsanctioned trips on open DVRR cars, usually to Death Valley Junction for dances and other social events.

There were two waypoints between Death Valley Junction and Ryan. The first, Horton, was where the DVRR diverged from the T&T's Lila C branch to run northwest toward the Greenwater Range; the trains only stopped there briefly once Death Valley Junction was fully operational as a rail hub and milling complex. The second was Colemanite, adjacent to the Played Out mine on the steep western slopes of the mountains, about two miles north of Ryan.

The 1920s saw significant improvements to the DVRR along with expansion and improvements at Ryan. Between 1921 and 1926, the company reinforced several wooden trestles that had begun to show signs of deterioration, built a new spur track at Colemanite, and reinforced the eroding edges of the railroad grade with stone walls.¹⁷⁰ In 1927, again confronted with the dangers of a deteriorating trestle, DVRR workers filled the gully it crossed with a huge amount of earthen fill instead of repairing the wooden components.¹⁷¹ This may have taken place at more than one trestle location.

When PCB began the process of moving its operations from Ryan to the Kramer deposit at Boron in 1927, the DVRR largely fell out of use for mining purposes. Occasional trips were made to haul the last vestiges of ore as the mines were cleaned up and closed, but the bulk of traffic there on came in the form of tourist trips to Death Valley.

Development and Use of the Baby Gauge Railroad

About a year after the completion of the DVRR and the commencement of full operations at the Played Out and Biddy McCarthys, PCB began construction of a second rail line, the Baby Gauge Railroad (BGRR) to reach the Grandview, Lizzie V. Oakley, and Widow claims to the south. Like the DVRR, this projected line wound around steep hillside contours on a very challenging route and required significant cutting and grading. Unlike the DVRR, the line was to be 24-inches ("Baby Gauge") rather than 36-inches, and it would carry ore, supplies, and workers only as far north as Ryan (Figure 33).¹⁷² Its total length, after several extensions between 1915 and 1918, was about four miles.

Very little is known about the construction of the BGRR and the question of whether the same crews that built the DVRR built the Baby Gauge is unresolved. Workers began building the line in 1915 and reached the Grandview that year. By 1916, they had extended it to the Lizzie V. Oakley, as that mine began full operation. The Widow mine, the farthest mine south of Ryan, also began operation in 1916, but the BGRR was not completed to it until 1918. In the meantime,

¹⁷⁰ Chappell, 111-112.

¹⁷¹ Ibid, 112.

¹⁷² Ryan assistant superintendent Harry Gower claimed the Baby Gauge was also named after his daughter Mary Lillian, "the baby who grew up within 20 feet of the line" (Gower, *50 Years in Death Valley*, 121). While other railroads used the two-foot gauge, "baby gauge" is not a standard term, so it is capitalized here. Over time, and especially during the later tourist-based years of the Baby Gauge, it was sometimes spelled "Baby Gage" by both company personnel and outside observers. The original spelling is used here.

Ryan Historic District

Inyo, CA

Name of Property

County and State

mule teams hauled the Widow ore for half a mile, to a point where it could be dumped down a slide to the existing railroad terminus at the Oakley.¹⁷³ The BGRR had multiple spurs running to the individual mines and was re-routed in several areas over the years to avoid hazards and to access mining on different levels. At least one of the re-routes, between the Grandview and the Oakley, is over a mile long; the older route, tracks removed, is visible on the slope below the newer upper route. Several trestles were constructed to span deep gullies, and at least two of them appear to have been later additions to avoid sharp curves.

From Ryan, the BGRR originally ran on a precarious wooden trestle hugging the steep slope below the prominent landscape feature known as Poison Rock (Figure 19 shows the trestle; Figure 20). Workers extended the Upper Biddy's main Haulage Tunnel all the way through the ridge below which it sat by 1920, bypassing the original Baby Gauge curves and allowing quicker access to all of the southern mines.¹⁷⁴ They also drove a tunnel under the Grandview mine in 1924 and under the Widow mine in 1925-1926; the addition of the tunnels saved transportation time by providing shortcuts, and produced a significant amount of ore.¹⁷⁵

The BGRR employed both gasoline and battery electric locomotives to pull three-ton ore cars loaded with borax from the Grandview, Oakley, and Widow to Ryan. There, the ore was dumped into loading bins and then unloaded into larger DVRR ore cars for transport to the mill at Death Valley Junction. Early on, the locomotives were likely battery-powered. However, throughout the 1920s and beyond, the primary locomotive was a 1919 gas-powered, 6-ton Plymouth BL manufactured by Plymouth Locomotive Works of Plymouth, Ohio and furnished with a 50-horsepower BUDA BTU four-cylinder Pittsburgh Model engine. According to correspondence dated 11 September 1923, this powerful machine was likely acquired as a used model in 1923 to replace battery locomotives, which were inept at transporting the massive 9,000 tons of ore per month output of the Ryan mines in 1923.¹⁷⁶ The BGRR also carried miners to and from work at the more distant mines, hauled timber and water to mines, and provided equipment and supplies.

Along with the DVRR line, the Baby Gauge fell out of industrial use in 1927 as PCB moved its operations to Boron. Its track and much of its equipment was left intact, and soon saw renewed use as a ride for tourists, to be discussed later.

The Physical Development of a Company Town

The physical layout of the townsite of Ryan changed significantly over time, evolving from a small company-built nucleus of buildings (many of which had been moved from older PCB properties) to a more widespread settlement containing a motley variety of building types, and eventually seeing the greatest changes as PCB modernized its facilities after World War I. Infrastructure systems grew and developed along with Ryan, until eventually electricity was available to most of the camp, some residences had running water and modern plumbing, and trash was dumped in designated locations. Ryan experienced its largest renovation during the

¹⁷³ Gower, "Correspondence with Ruth Woodman," 14 July 1949; Woodman, *She Burns Green!*, 84-85.

¹⁷⁴ Chappell, 110-111.

¹⁷⁵ Woodman, *She Burns Green!*, 84-85.

¹⁷⁶ Chappell, 133.

Ryan Historic District

Name of Property

Inyo, CA

County and State

1920s, as the camp gained many of the character-defining buildings and features onsite today. With PCB shifting its mining focus away from Ryan in the late 1920s, the camp was reconfigured as the Death Valley View Hotel providing fulltime accommodations until 1930 and then limited lodging into the 1950s. Today, the camp most closely resembles the Hotel-era as very little renovation has occurred since the hotel conversion.

Establishment and Early Growth: 1914-1919

The oldest known maps of Ryan are from 1914-1915 and were adapted and revised several times as PCB officials figured out insurance values for the standing structures (Figure 34).¹⁷⁷ They show that the original layout of Ryan's core remained more or less unchanged for years, with residential and commercial/community buildings (like the Store/Post Office and Boarding House) at the wye of the DVRR. At this wye, the DVRR ran north/south and the camp's earliest configuration was oriented in the same direction.

The physical setting dictated the organization of the settlement, as its steep, rocky slopes precluded free placement of buildings. Structures, including tents, had to be placed wherever a flat spot could be found or, more commonly, erected atop a small dry-laid rock and earth platform using the native cobbles. Enclosed by the DVRR wye, the earliest configuration of Ryan Camp contained the Boarding House, Store/Post Office (moved from old Ryan)(Figures 1, 2), a concrete cellar, a coal shed, and a cabin. A blacksmith shop and second smaller shop sat near the south edge of town, next to an entrance to the Upper Bidy mine. At the northwest edge of town, on a flatter slope, sat a corral with an attached shed and stable. This would have housed the camp's mules, used for getting around as well as hauling ore out of the underground mines.

Even at an early date, Ryan had distinctive residential areas; at the north end of town were two frame dwellings which housed the mine superintendent and possibly the assistant superintendent (Figures 7, 35). The larger superintendent's dwelling later served as the camp hospital, although the date at which this began is uncertain; it is not labeled on maps or in insurance lists as the Hospital until June 1919.¹⁷⁸ The dwelling was originally occupied by William Smitheram, and was later occupied by his son Frank Smitheram and his family; by that time, newer housing had been established for the superintendent.¹⁷⁹ Photos show the old hospital had an upper residential level, which the Smitheram family knew as a "mezzanine" sleeping area.¹⁸⁰

Most of the residences were at the south end of town, with twenty-two small cabins stepping precariously up the slope above the Upper Bidy ore bins and the DVRR line (Figure 13). At least ten of these cabins were moved from the Lila C mining camp,¹⁸¹ and were placed in a cluster of tidy rows as well as could be expected on the steep mountainside. More of the cabins as well as other buildings might have been moved from the Lila C, but only ten cabins and the

¹⁷⁷ Todd, A.B., "Hand-drawn map of Ryan buildings (for insurance purposes)," ca. 1914, U.S. Borax Collection, Death Valley National Park Archives, 2558/01-1075; Pacific Coast Borax Company, "Buildings at Ryan, Calif.," July 1915 (site plan).

¹⁷⁸ Pacific Coast Borax Company, "Buildings at Ryan, Calif.," June 1919 (site plan).

¹⁷⁹ Ringhoff, Mary, "Interview with Bill Smitheram," 3 March 2011.

¹⁸⁰ Ibid.

¹⁸¹ GCE, "Letter to R.C. Baker," 10 March 1915.

Ryan Historic District

Inyo, CA

Name of Property

County and State

store are known to have been moved.¹⁸² The footprints of many of these small cabins remain visible today, and the area has been recorded and described in the Descriptions section of this document as “Early Ryan.” At the south end of town, newly constructed buildings included the Boarding House, ore bins, at least two cottages, an office, and one cabin serving as the cook’s residence.¹⁸³ The Boarding House seems to have contained only a kitchen and dining hall, with no living space and is the building that would become the Lobby and Dining Room portion of the Hotel Complex. There was no formal bunkhouse in town at this point, indicating that all workers were living in company cabins, tents, or dugouts and shacks of their own construction.

Ryan had core infrastructure resources from its earliest days, as illustrated by the presence on the 1914-1915 map of a corrugated galvanized iron electric light plant, a corrugated galvanized iron pump house connected to two uphill water tanks via a two-inch pipe, and two additional iron water tanks. The extent of electrical service at this time is unknown, as the historic maps of Ryan are largely for building insurance purposes and do not depict things like power lines. Most likely, the light plant powered some large-scale lights in the area of the ore bins, Boarding House and store, and the miners’ cabins are unlikely to have had electrical power this early. The maps from the next few years show a slowly growing number of outbuildings, like an oil house, coal storage house, cereal warehouse, and machine shops; these would have served to support both the district’s mining activities and day-to-day life in Ryan.

Ryan did not have a water source of its own, so water for domestic and industrial activities was brought in on tank cars on the DVRR every day and dumped into first a steel tank, then the concrete Lower Reservoir. The management of the water supply was a major shaping element in the town and continues to be so today. Originally the water came from Death Valley Junction, but Ryan residents protested its impurities so PCB arranged to bring drinking water in the Tonopah & Tidewater (T&T) from Shoshone. A partition was placed in a communal water tank, so people could draw their drinking water off the Shoshone side and their washing water off the Death Valley Junction side. Annoyed by this inconvenience, assistant superintendent Harry Gower later bored a hole in the partition and had the whole tank filled from the same Death Valley Junction source, letting the rest of Ryan continue to unknowingly draw from the “clean” drinking water side.¹⁸⁴

Having a reliable water supply was also crucial in case a fire broke out, which happened at least twice at Ryan in the 1920s; the town’s isolation meant no immediate assistance would be available if a conflagration occurred. In August 1916, PCB’s insurance agent Roger Chickering noted the high fire risk at Ryan and he strongly supported superintendent Faulkner’s recommendation for the placement of a Pyrene fire extinguisher in each cabin, and water barrels with buckets at the main ore bin, along the skip track leading to the Upper Biddy McCarthy, and on each Baby Gauge trestle.¹⁸⁵ Chickering also suggested the installation of a “portable telephone” about 100 yards below the superintendent’s house so help could be requested from Death Valley Junction. By November 1916, Chickering’s recommendations for fire extinguishers

¹⁸² Ibid.; “Billy Smitheram and store moved from Lila C, 1915,” DV- RYA 23, Death Valley National Park Archives.

¹⁸³ GCE, “Letter to R.C. Baker,” 10 March 1915.

¹⁸⁴ Woodman, “Notes on Julian Boyd Interview,” 19 March 1947.

¹⁸⁵ Chickering, “Letter to C.R. Dudley,” 24 August 1916.

Ryan Historic District

Inyo, CA

Name of Property

County and State

and water barrels had been implemented, but the telephone recommendation had not been addressed.¹⁸⁶

The full extent of Ryan's early residential water system and sewage system is not currently known, as one of the only known mentions is in a late 1916 report of accounts noting the provision of toilets at Ryan and the Oakley camp.¹⁸⁷ Although privies were likely used during the early years, some historic records indicate that privies were plumbed for toilets given Ryan's "splendid drainage."¹⁸⁸ Given the network of ceramic sewer pipe originating from the buildings in Ryan Camp, even pre-1920, sewage and wastewater drained down the slope and into cesspits; the cesspit serving the southern buildings in the camp is within the boundaries of the Ryan Historic District.

Trash disposal posed another ongoing infrastructure challenge. Early Ryan residents probably discarded household trash in close proximity to their homes instead of in designated dumping areas; however, as the camp grew, trash disposal became more organized as reflected by a network of roads and dumps on the western slopes below the camp. In addition, a narrow trackway originating from the kitchen area permitted flammable trash to be hauled by ore car to two incinerators on the western edge of town for immediate removal.

To attest to Ryan's rapid growth, by 1917, Ryan had 54 total buildings, 37 of them insured, including 31 residences and the same communal buildings and outbuildings noted above.¹⁸⁹ The residences were mostly cabins and tent-structures located along each side of the north/south rail line. Improvements included additions to the superintendent's house and the main warehouse, alteration of an older building into an office, and the replacement of some tents with cabins.¹⁹⁰ Ryan's infrastructure improvements also continued, notably with the construction of a new power plant. This supplied the town with a more reliable source of electricity, produced by a Fairbanks Morse engine driving a Westinghouse generator, but necessitated the rearrangement of the existing electrical system for the new high-tension current.¹⁹¹ PCB also built a compressor plant that year, enabling the eventual use of compressed air drills at all of the Ryan mines.

For the remainder of the decade, Ryan continued to grow with the construction of new buildings and structures, additions to existing buildings and the relocation of existing resources (such as the original corral and stable complex) to accommodate the building activity (Figure 36).¹⁹² The most notable building added during these years was the Recreation (Rec) Hall (Figure 10). The Rec Hall, called a club house on the older maps, was not a newly constructed building, but St. Mary's Catholic church that PCB moved to Ryan from the Nevada ghost town of Rhyolite in

¹⁸⁶ Dudley, C.R., "Letter to C.B. Zabriskie re: fire insurance," 4 November 1916, U.S. Borax Archives, Death Valley National Park.

¹⁸⁷ Hart Bros., Tibbetts, Heiron & Co., "Borax Consolidated Limited (The Pacific Coast Borax Company of Nevada), Statement of Temporary and Sundry Additions," 30 September 1916.

¹⁸⁸ Baker, R.C., "Letter to Reid," 28 August 1923, cited in Travis, N.J. and E.J. Cocks, *The Tincal Trail: A History of Borax*, London, Harrap Limited, 170.

¹⁸⁹ Chickering, "Letter to C.R. Dudley," 24 August 1916.

¹⁹⁰ Faulkner, "Annual Report for Ryan 1916-1917."

¹⁹¹ Ibid.

¹⁹² Pacific Coast Borax Company, "Buildings at Ryan California," February 1918.

Ryan Historic District

Name of Property

Inyo, CA

County and State

1919. The church was originally built in 1906 and transporting it from Rhyolite to Ryan must have been an extreme undertaking.¹⁹³ While no documentation of the move has been located, building observations suggest that the 28 by 45 ft building was disassembled into sections, loaded onto flat railcars, transported roughly 50 miles to Death Valley Junction via the railroad, and then freighted to Ryan via the 20-mile run of the DVRR. Once at Ryan, it was reconstructed 25-feet above the railroad grade on the hillside on the northern edge of the camp. Once in place, additions included a roofed porch on the west façade, a stage and dressing rooms on the northern façade, and a bathroom on the south side of the building, adjacent to the vestibule. While it was originally a church, the building served as a recreational center for Ryan, hosting dances, musical and dramatic performances, movies, and even a satellite branch of the Inyo County Library much enjoyed by residents.

Ryan had informal footpaths and trails crisscrossing the town, established through frequent use and following contours of the steep slopes. Some of them were evidently shored up and improved over time, as shown today by small rock retaining walls and footbridges over gullies. The camp's roads were likewise informal until the early 1920s, traversed mainly by trucks and wagons hauling trash, maintaining infrastructure, or doing assessment work around the district and beyond. It was technically possible to reach Death Valley Junction via road, but it was a roundabout route on an unimproved, sandy wagon road via Greenwater Canyon and the Lila C.¹⁹⁴ The road between Ryan and Greenland Ranch, traversed on a regular basis by workers bringing beef and other supplies to the Boarding House and store, was only slightly better. Most of Ryan's freight and passenger traffic came and left by railroad, so it was not until PCB began its significant modifications to the local topography around 1921 that major roads started to be improved and maintained.

Early on, Ryan developed residential areas and private dwellings scattered away from its central core. Starting in 1918, maps show a few habitations on the slopes to the west and northwest of town, and a group of ten neatly-aligned houses moved from Goldfield, Nevada in an area that came to be called "Little Goldfield" by residents.¹⁹⁵ Residential areas of Ryan likely extended far beyond the boundaries of Ryan's official maps and the descriptions of company holdings. In fact, the abundant remains of tent platforms, rock-walled structures, and dugouts across the Ryan Historic District attest to the presence of housing that was not company-sanctioned. This was apparently a much more common housing type than suggested by the official PCB maps and may have been partially prompted by the deteriorated nature of the old cabins the company offered. Harry Gower recalled,

Living and working conditions at Ryan up to 1922, when we began to get some new bunk houses and staff residences, were pretty rough by today's standards though probably no worse than most other mining camps. Some of the men wouldn't even live in the ramshackle old cabins provided, but built for themselves rock huts

¹⁹³ *Rhyolite Herald*, "Rhyolite Churches," Pictorial Edition, March 1909, reprinted in Betsy Ritter, *Life in the Ghost City of Rhyolite, Nevada*, pp.15-16, Sagebrush Press, Morongo Valley, California, 1982 (original 1939).

¹⁹⁴ Gower, "Some Reminiscences of Death Valley," 29; Woodman, "Notes on Julian Boyd Interview," 19 March 1947.

¹⁹⁵ Pacific Coast Borax Company, "Buildings at Ryan California," February 1918.

Ryan Historic District

Name of Property

Inyo, CA

County and State

or lean-tos on the hillside above or in the gulch below town. A stranger would have been amused to see the heads pop up all over the place like prairie dogs when the warning whistle blew before breakfast.¹⁹⁶

Non-company and company housing on the outskirts of town were major components of the Ryan Historic District and given the dearth of historical references to this topic, archaeological investigations will be the best avenue for answering questions about these resources.

Improvements and Consolidation: 1920-1927

After World War I, Ryan's workforce was at a low point but PCB clearly anticipated a big postwar revival of business, as the company pushed to modernize and enlarge its principal operations in the Ryan district. In late 1919, the company constructed three new buildings that were significantly different from those that had been constructed previously: they were a staff house (no longer extant) and two large, two-story bunkhouses containing 44 rooms each (Figure 37). Other than its appearance in historic photographs, not much is known about the staff house or who lived in it; its location was on a flat area just south of Bunkhouse 1 and it was likely two older interconnected buildings rather than just one. The bunkhouses, together able to house 176 men, provided a centralized, company-controlled residential area for the camp's single male workers. By sometime in 1920, the new buildings had steam heat generated by an oil-powered steam-fired boiler just downslope (the Boiler House and boiler are extant); the steam plant also heated a shower house constructed between the two bunkhouses (Figure 6).¹⁹⁷

Once the superintendent's residence, another of Ryan's large buildings, the Hospital was renovated and expanded as early as 1920. According to Superintendent Julian Boyd's recollections, the Hospital was wrecked in 1921, the "year of the big wind."¹⁹⁸ The old hospital was repaired at that time as depicted in a photograph from 1922 (Figure 8).¹⁹⁹ In 1924, the Hospital underwent a major renovation (Figure 9). The new building had basically the same footprint as far as size and orientation, but its first story was modified, and the original roof and "mezzanine" were removed and replaced with a full second story. The building's foundation was shored up with a new rock wall and a porch was constructed all the way around it. The final version of the Hospital had two stories and contained housing for the hospital staff and patients, as well as Ryan employees and guests. In fact, it was never solely a hospital as plans for the building depict the functionality of the various rooms—with only the downstairs rooms ever seemed to be meant to be used as an infirmary, while the upstairs rooms provided accommodations. This is reflected in Lillian Boyer's recollections she and her husband lived upstairs in the Hospital for several months in 1921, while new management cottages on the "Little Mesa" were being constructed. However, when she was ready to give birth to her

¹⁹⁶ Gower, *50 Years in Death Valley*, 34-35.

¹⁹⁷ Todd, A.B., "Pacific Coast Borax Company Heating System for Lodging House, Sup't Res and Office, Ryan, Calif.," January 1920, No. 407 (building plans), Death Valley Conservancy Archives.

¹⁹⁸ Woodman, "Notes on Julian Boyd Interview," 19 March 1947.

¹⁹⁹ Boyer, Albert, "Hospital Ryan, 1922," Boyer Collection, copy on file Death Valley Conservancy Archives.

Ryan Historic District

Name of Property

Inyo, CA

County and State

daughter Laura she moved to Goldfield for two months because Ryan did not have a fulltime doctor.²⁰⁰

The most significant changes to Ryan's layout in its history, occurred between 1921 and 1925. The first modification tackled the town's challenging topography. Having run out of flat spots and room for small platforms, PCB took the direct approach by cutting several large, stepped terraces into the hillside for erection of its new buildings. The new features were reinforced by masonry walls of faced native cobbles, built by at least three stone masons: Dobie Gunnarson, Jourgensen (first name unknown), and Serafin Esteves.²⁰¹ Esteves was a Ryan miner of Basque extraction who later did rockwork at the Furnace Creek Inn and at Zabriskie Point; no additional information has yet been found about the other workers.

The bunkhouses sat on the lowest terrace; the next terrace contained the DVRR grade and some outbuildings; the third supported the new hospital; and the fourth terrace underlay the new houses for supervisory staff (referred to today as Houses 1-3). The Rec Hall's platform was reinforced with a rock wall, probably at this same time. It is not entirely clear which terraces went in at what time. The rock wall supporting the DVRR grade-level terrace may have been constructed later, during the conversion to the Death Valley View Hotel. Buildings removed during and after the terrace construction included the old staff quarters (sometime after February 1922) and a small frame dwelling.²⁰² The feel and character of the town would have changed considerably with the addition of the terraces, connected to each other with stairways and landings that would have aided (though not eliminated), the constant up-and-down travel demanded by Ryan's hillside location.

In 1921, PCB built six new houses for lower-level, but still fairly high-ranking, employees in two different areas, neither of which was in the main terraced area of the camp (Figure 12). Three of the houses were constructed on a finger ridge known as "Little Mesa" (Figure 38). They were nearly identical in layout and style, although there appear to have been small variations in size. Around the same time, PCB constructed three other new houses at the north end of the camp, just west of the DVRR. Their rock platforms stepped west down the slope in a tidy row, aligned with two older houses that had been there since 1918; the older houses may have been improved at this time. The buildings' footprints as shown on the 1918, 1919, 1935, and 1942 maps of Ryan indicate that the older houses were the second and third houses from the east; one new house was placed to their east, and two to their west. According to a 1947 map, this group of five houses was known then as "Copenhagen Row," but it is unknown whether that name was used as early as the 1920s or was an informal later assignation by caretakers or visitors.²⁰³ All eight houses seem to have largely been occupied by families, or at least married couples, whom the company would have seen as a stabilizing influence.

²⁰⁰ Boyer, Lillian, "Notes on Life at Ryan 1919-1924."

²⁰¹ Jourgensen's name is on a box of stonemason's tools in storage at Ryan.

²⁰² The staff quarters are still standing in Boyer, Albert, A photograph of Thelma, Laura, and Lillie Boyer, February 1922, Boyer Collection, copy on file Death Valley Conservancy Archives.

²⁰³ Pacific Coast Borax Company, "Buildings at Ryan, Calif.," March 1947 (site plan).

Ryan Historic District

Name of Property

Inyo, CA

County and State

The addition of these new, company-built residences came at the same time as the removal of most of Ryan's older cabins; by 1922, most of the old cabins from Goldfield and the Lila C that once comprised the bulk of company-provided worker housing had either been demolished or moved. The old staff quarters next to Bunkhouse 1 was also removed at some point after 1922.

Sometime between 1920 and 1922, Ryan received an important new building: a one-room schoolhouse for its children in the southwestern part of the camp (Figure 6). It is not clear whether the school was newly constructed or moved from elsewhere; Bill Smitheram, grandson of William Smitheram, believed it was (like the Rec Hall) moved from Rhyolite.²⁰⁴ Children were being taught for years before the official Schoolhouse arrived, reportedly in one of the management houses, but the Schoolhouse represented the final step in making the company town family-friendly and feasible for year-round occupation by school-aged children. The school had a privy behind it to the north, fully plumbed and possibly even steam heated.

Sometime between 1921 and 1924, Ryan's Store/Post Office and Boarding House (referred to elsewhere in the document as the Hotel Complex) went through major changes (Figures 3, 40). The original store and post office building, set above the ground on wooden posts, had been hauled in from the Lila C where it was constructed before 1910.²⁰⁵ Photographs after 1920 show a much-modified building; its was lowered, angled differently, and longer than the original. Architectural evidence, particularly the presence of two different kinds of roof trusses, indicates that an addition was placed on the northern (front) part of the building. The Boarding House received a large gabled addition to its west side, containing a modern kitchen and storage areas, as well as a concrete addition to its north side which only remained for a few years. A two-story warehouse building was built just north of the Boarding House and across the DVRR wye in 1924, containing storage space on the first floor and living space for kitchen staff on the second floor (pictured in Figure 40, far left). If any of the kitchen staff had once occupied the old staff house, they would have moved to this new building.²⁰⁶

In 1924 or 1925, a fire consumed the houses in which superintendent Boyd and assistant superintendent Gower lived.²⁰⁷ The superintendent's house had stood since at least August 1916, and was added onto over the years to include a separate room for the schoolteacher outside the screened porch. These houses were directly south of House 3 (constructed in early 1924) and with their removal, space was cleared for new upper management dwellings. Thus, in late 1924, four new supervisory staff houses were constructed, two to replace the burnt buildings and the other two on smaller terraces on the hillside above them (Figure 11).²⁰⁸ The two houses on a common terrace (referred to today as House 1 and House 2) housed the superintendent and assistant superintendent. The other two buildings (House 4 and House 5) housed the storekeeper (who would have also been the postmaster) and the surveyor, respectively. Houses 1, 2, and 4 are extant, along with House 3. All four have side-gabled roofs, with variations in size and floorplan

²⁰⁴ Ringhoff, Interview with Bill Smitheram, 3 March 2011.

²⁰⁵ "Store at Ryan Borax Mines, 1915," Pacific Coast Borax Company 23a, Death Valley National Park Archives.

²⁰⁶ An inscription in the concrete of the Warehouse's basement wall bears the date "Mar 22 A.D. 1924."

²⁰⁷ Woodman, "Notes on Julian Boyd Interview," 19 March 1947; Gower, *50 Years in Death Valley*, 38.

²⁰⁸ Pacific Coast Borax Company, "Surveyor's Residence, Ryan, Calif.," Pacific Coast Borax Company, "Floor Plans for Superintendent's Residence No. 50 and Ass't Superintendent's Residence No. 1, Ryan, Calif.," Pacific Coast Borax Company, "Store Keeper's Residence, Ryan, Calif."

Ryan Historic District

Name of Property

Inyo, CA

County and State

but the same basic orientation (long axis-oriented north/south to fit on the terrace, and entrance in the western elevation).

Improvements to Ryan's infrastructure corresponded with the increased building activity of the early 1920s. By the middle of the decade, most of the communal company buildings had indoor plumbing, including bathrooms, and the supervisory staff housing and at least some of the cabins for upper-level employees had running water, electricity, and indoor bathrooms as well.²⁰⁹ The Hospital, bunkhouses, and Shower House all had steam heat generated by an oil-fueled boiler. Outdoor privies were still very common, and cesspits to contain waste runoff dotted the landscape. In 1924, Ryan received a new electric power plant, switchboard, transformers, several power lines, and other infrastructure additions that improved the supply of electricity to the camp.²¹⁰ The new Powerhouse replaced the 1918 one at almost the exact same location, and is extant.

The Dining Room, Kitchen, and Store (Hotel Complex building) are presumed to have had refrigeration added by this point, although onetime Ryan resident Bill Smitheram remembers the building using an old cooling method as late as 1926-1928.²¹¹ It had a "cool room" with one end open to the air, covered by sewn-together burlap sacks. A pipe was run from the reservoir to allow water to drip down the sacks, and a big fan blew the wet air in to cool the food stored there. This cool room, which was later demolished, was likely replaced by a wood-lined refrigerated room, ammonia ice plant, and California cooler installed adjacent to the Kitchen.

PCB established a telephone line from Ryan to Greenland Ranch in late 1923 or early 1924, after Julian Boyd requested one to help organize assessment trips and to save automobile trips by arranging ahead of time for pickups of meat, eggs, and vegetables.²¹² Ryan's connection to the floor of Death Valley was also strengthened by work on the area's road networks. While footpaths remained in heavy use, local roads were graded and widened to allow easier vehicle access around the camp. PCB did most of the road maintenance around Death Valley until it became a National Monument in 1933, with the goal of improving access to its tourist facilities as well as its mining properties.

Social History of the Ryan Historic District, 1914-1927

Ryan is an excellent example of a company-owned and managed frontier mining camp. Such camps dotted the landscape of the rural West as they were often the best means to develop and mine mineral deposits in remote locations. In addition to functional considerations, the camp's layout and architecture reflected PCB's changing self-image, its post-World War I aspirations for cleanliness, modernity, and industrial efficiency. The people who lived and worked at Ryan were also crucial shapers of the physical environment as they faced the daily reality of laboring in a harsh climate and in physical and social isolation. Adapting to their challenging circumstances

²⁰⁹ Boyer, Lillian, "Notes on Life at Ryan, 1919-1924"; Pacific Coast Borax Company, "Floor Plans for Superintendent's Residence No. 50 and Ass't Superintendent's Residence No. 1, Ryan, Calif."

²¹⁰ Hart Bros., Ellis & Co., "Additions and Betterments for the year ending September 30, 1924."

²¹¹ Ringhoff, Interview with Bill Smitheram, 3 March 2011.

²¹² Boyd, "Agenda for Mr. Zabriskie," 11 September 1923.

Ryan Historic District

Name of Property

Inyo, CA

County and State

took several forms, some of which were subtle subversions of company rule, and most of which indirectly functioned to build a strong community. In fact, community-building activities such as the participation in an area baseball league, were highly encouraged by PCB as they were seen as contributing to the contentedness and stability of the workforce (Figures 41, 42).

The bulk of the town's early population came from the Lila C ("Old Ryan"), augmented by new employees who were likely to have come from nearby mining districts in Nevada and California and urban areas like Los Angeles. Like most mining camps, Ryan had a population composed predominantly of single males, with a smaller number of women and children living in nuclear families. Ryan's people—their ethnicities, gender, and ages, household composition, daily work patterns and labor issues, living conditions, recreation—and day-to-day circumstances of life at Ryan enables construction of a picture of a singular community within the context of corporate mining in the western United States.

Population and Demographics

Ryan's population varied over time, ranging between about 150 and 250 people. Superintendent Julian Boyd recalled that during his tenure (1920 to 1927) there was an average of about 155 men working in the mines, with a total population (including women, children, and ancillary staff) of about 200.²¹³ The population was at its lowest point during World War I, when borax mining slowed significantly and the workforce dwindled. By January of 1920, numbers had rebounded and the population was at a probable high point; Ryan and its mines had a population of 252, with the vast majority of its residents single males, numbering 224.²¹⁴ Seven families, consisting of a married couple and their children, were present at Ryan in 1920, as was one married couple without children. Nine women lived in town; eight were part of these families, married and keeping house for their PCB-employed husbands, and the ninth was Nell Eikelman, an unmarried schoolteacher who boarded with one of the families. Thirteen children lived at Ryan in 1920.

A little over half of Ryan's residents (51%) were born in the U.S., while 49% were foreign-born. This is a substantial amount of immigrants, but is not unusual for mining camps of the West. Fifty-six percent of Ryan's foreign-born inhabitants were fairly recent immigrants, arriving in the U.S. between 1901 and 1920, with 29% of them arriving only 1-10 years before the 1920 census. The foreign-born population was very diverse in terms of countries of origin, but almost all hailed from Europe with the British Isles predominating.

Ethnicity

Most historical sources suggest the population of Ryan and its work camps was overwhelmingly of European descent. However, a single newspaper article suggests that PCB supplemented its usual white workforce with Mexican, Korean, and Kanaka (Pacific Islanders/Polynesians, probably from Hawaii) employees during the summer months when many of its regular

²¹³ Woodman, "Notes on Julian Boyd Interview," 19 March 1947.

²¹⁴ "United States Census, 1920," *FamilySearch*, <http://FamilySearch.org>, citing NARA microfilm publication T625, Washington, D.C., National Archives and Records Administration. Accessed 11 October 2023.

Ryan Historic District

Name of Property

Inyo, CA

County and State

employees fled the heat.²¹⁵ These workers were replaced with “Americans” as soon as the latter returned in the winter. This is very intriguing information, suggesting that Ryan had an “invisible” workforce not recorded in official histories of the town. The topic deserves additional research, and archaeological investigations may help shed light on the possible presence of people of different ethnicities at Ryan.

Death Valley’s native occupants, the Timbisha Shoshone, were an important part of the Ryan Historic District; in 1920, 31 people in the Ryan Precinct were enumerated as Indians born in California. All historical sources point to the Timbisha residents of the district living at Furnace Creek, not Ryan proper; former Ryan residents remembered Timbisha children coming to the Ryan school and Timbisha families, particularly that of Tom Wilson, buying goods at the Ryan store, but do not recall any permanent Timbisha residents (Figures 38, 43). Frank Smitheram remembered Tom Wilson as a regular presence at Ryan:

When I was in the employ of the Pacific Coast Borax Company at the Ryan borax mines I met and became friendly with Tom Wilson in about 1918...About once a month Tom would come up to Ryan from the Indian encampment near Furnace Creek. He bought supplies for his people from the borax company’s commissary...Tom would come into the store to purchase sundry items such as shirts, shoes, sox, tobacco, gum, candy, and items for a mule or horse. Tom could neither read nor write and I marveled at his ability to make countless purchases without a shopping list. He always paid cash and after making a series of purchases he would go and sit out on the porch and have a smoke. Then he would come back in and start buying items again. Many times Tom had ten or fifteen cents left over and always bought himself a plug of chewing tobacco. I learned from him that it was his practice to make purchases in the order in which his people gave him the money and their requests. Tom wasn’t infallible but when I go to the market these days to buy more than three items I need a shopping list.²¹⁶

Women’s Experiences

The few women who lived at Ryan confronted the basic challenges as those living in other frontier mining camps: isolation, harsh weather, crude housing, limited food options, and few amenities. Most of the women were married and living at Ryan with their husbands and children. One unmarried woman, the schoolteacher, boarded with a family, in the standard arrangement for small rural schools. In the 1920 census, teacher Nell Eikelman is shown living with the Roberts family. She was one of the only company-approved single woman to have lived at Ryan in its history; the other three known schoolteachers, Eva Walter, Mrs. Whettlin, and Mrs. Ed

²¹⁵“Many Miners Go to Death Valley,” *Reno Evening Gazette*, 12 November 1920.

²¹⁶ Smitheram, Frank, “Tom Wilson, 1940,” Smitheram Family Photo Album, copy on file Death Valley Conservancy Archives.

Ryan Historic District

Name of Property

Inyo, CA

County and State

Griffin, were all married to PCB workers.²¹⁷ The superintendent's house (House 2) had a room and bathroom especially for the teacher, indicating Eikelman would have boarded there after it was built in 1924. Superintendent Boyd lived in the front part of the house alone (his family lived in Hollywood); the teacher's room had its own entrance and was architecturally a separate space.

Official employment for women at Ryan was limited to nurse and schoolteacher positions, the standard "female-appropriate" professions of the time period. However, Ryan's women performed multiple functions as part of the community, from informal teaching to playing music to, in the tourist years, managing a hotel: Pauline Gower, wife of assistant superintendent Gower, was very involved in the management of the Death Valley View Hotel before she and her husband transferred to Death Valley Junction to perform the same task. The primary jobs women performed, however, were caring for children and running a household. This was not easy labor, given the lack of amenities and primitive living conditions, not to mention the long, steep hikes required to get to and from places like the store. Some of the women had as many as three young children (Eva Walter and Lillie Boyer, for example—after leaving Ryan, Boyer would go on to have six more). Pregnancy and birth were daunting challenges in the isolation of Death Valley, and Boyer went to Goldfield alone to have her daughter Laura in 1921.

The women of the camp would have been major shapers of Ryan's cultural landscape, as they controlled the look and feel of their immediate surroundings, and were the primary purchasers of household items. Archaeological investigations would help to shed more light on the realities of daily routines for Ryan's women, and on the measures they took to adapt to life in an isolated town in Death Valley.

Children and School

Ryan's population seems to have always included at least a few children living there full-time, or at least during the school year, with their parents (Figure 39). In January 1920, the town contained 13 children ranging in age from 1 to 10. In order to meet county requirements for a public school (and assure a paycheck for the teacher), there had to be a guaranteed attendance of five and a half kids.²¹⁸ Numbers fluctuated quite a bit throughout the years, and at one time the school-age population was so low that PCB began bringing Timbisha Shoshone children up from Furnace Creek every day to fill the county quota (Figure 38).²¹⁹

School may originally have lasted all day long, but by 1927 it was only in session in the morning, from about 8 AM to 12 PM.²²⁰ When classes were out, Ryan's kids were free to find their own amusements, which they did with relish, accompanied by their pet dogs. Boys and girls played together, roaming the hills around camp and causing much maternal worry about snakes

²¹⁷ Boyer, Lillian, "Notes on Life at Ryan, 1919-1924"; Glasscock, C.B., *Here's Death Valley*, Indianapolis, The Bobbs-Merrill Company, 1940, 60; Ringhoff, Interview with Bill Smitheram, 3 March 2011; Woodman, "Notes on Julian Boyd Interview," 19 March 1947.

²¹⁸ Woodman, *She Burns Green!*, 86; Woodman, "Notes on Julian Boyd Interview," 19 March 1947.

²¹⁹ Ringhoff, Interview with Bill Smitheram, 3 March 2011; Gower, *50 Years in Death Valley*, 60.

²²⁰ Ringhoff, Interview with Bill Smitheram, 3 March 2011.

Ryan Historic District

Name of Property

Inyo, CA

County and State

and broken bones. They played marbles, handball, and games of their own invention; Bill Smitheram remembers contests to see who could find the largest tarantula.²²¹

Sometimes kids roamed even farther afield. It was not unknown for a group of children to climb all the way to the top of the Black Mesa mountain above Ryan, usually without permission. A favorite, though hugely prohibited, activity was hopping on a small rail car that was used to deliver goods from the Warehouse to the Store or Boarding House, and coasting it down a long hill—toward any ore trains that might be arriving.²²² Ryan seems to have been a bit of a wonderland for children, with endless opportunities for exploration and adventure. Child-related artifacts are scattered throughout the district; archaeological research could shed light on children's unique and innovative adaptations to the challenges, such as the harsh climate and social isolation, impacting their lives.

Daily Work Patterns and Labor Issues

As similar is all company towns, the daily routine of most of Ryan's residents was wholly determined by the company work schedule. As other corporations did in other corporate towns, PCB set work hours at the mines and mealtimes at the Boarding House, marking wake-up time, mealtimes, and quitting time with a loud whistle. Ryan miners worked year-round, keeping the mill at Death Valley Junction running 24 hours a day. PCB had a difficult time maintaining a full workforce during the summer months, when temperatures regularly topped 110 degrees even at Ryan's relatively high elevation. It advertised in newspapers as far away as Carson City, NV, and even maintained an employment office in Los Angeles to attract workers.²²³

PCB expected its employees to work eight to ten hours a day, seven days a week, and did not pay travel time to the mines.²²⁴ In 1923, superintendent Boyd requested Sundays off for the workforce; apparently his request was granted, and he was vindicated by the same amount of production with a six-day work week as with a seven-day.²²⁵ It was only a temporary reprieve, however, as PCB claimed the mill at Death Valley Junction had to run constantly to keep the furnaces hot and so a seven-day work week was reinstated and continued until Ryan's shutdown.

Compared to other large underground mining operations of the West, PCB offered low wages especially after WWI. As a result, it encountered many obstacles to retaining a skilled work force. Superintendent Faulkner complained that even "a raise of 25¢ ... in wages, in order to compete with the increase which was general throughout the States and especially at the big copper camps" still "did not prevent a large proportion of our best men leaving under the inducement of the higher wages obtainable elsewhere."²²⁶

²²¹ Ibid.

²²² Gower, *50 Years in Death Valley*, 62.

²²³ Pacific Coast Borax Company, Want ad for storekeeper/bookkeeper for Ryan, 1914, U.S. Borax Collection, Death Valley National Park Archives.

²²⁴ Gower, *50 Years in Death Valley*, 34-35; Ringhoff, Interview with Bill Smitheram, 3 March 2011.

²²⁵ Boyd, "Agenda for Mr. Zabriskie," 11 September 1923; Gower, *50 Years in Death Valley*, 42.

²²⁶ Faulkner, "Annual Report for Ryan 1916-1917."

Ryan Historic District

Name of Property

Inyo, CA

County and State

Workers were responsible for paying for their room and board. In 1926, workers taking company board had \$1.25 a day deducted from their wages to pay for breakfast and supper in the Boarding House and a lunch to take to work.²²⁷ Rent for the family housing was \$5 a month,²²⁸ however, the rental rate for a bunkhouse room is unknown.

Ryan's professional hierarchy was enforced by the company's policies and even by the camp's physical spaces. PCB supervisory staff lived in the central part of the camp, in the largest, newest, and best-equipped houses. Supervisory staff even had their own dining room in the Boarding House and ate there amongst their own instead of with the rest of the employees.

In terms of labor organizing, workers attempted to bargain collectively for better pay and working conditions on a couple of occasions, but their requests were rarely granted. One walk-out of thirty men in 1920 led to a wage increase of 25 cents, however miners attempting to join the International Workers of the World (a radical and highly visible organization known as the IWW, or Wobblies) were forcibly prevented from meeting with union officials.²²⁹ Generally, PCB was intolerant of unionization: strikes were broken, unions were disallowed, and agitators were fired. In addition, Ryan's workforce was perpetually transient and unions "didn't seem to have much to offer to a gang who for the most part wanted only to make a stake and get out."²³⁰ Despite some worker dissatisfaction, Ryan offered a fairly safe and stable work environment with steady wages, board, housing, community buildings, recreational opportunities, and some degree of personal freedom.

Living Conditions and Daily Routine

In its formative years, most of Ryan's single male population lived in the small wooden cabins brought from the Lila C, most of which stepped down the hillside next to the Upper Biddy ore trestle and bins, within easy walking distance of the DVRR, Baby Gauge, and Boarding House (Figure 13). Management houses were larger and were in the northern section of the camp, and non-company residences were spread throughout town, mostly on the flatter slopes to the west, though some were nestled in the rocks above Ryan.

Company accommodations were simple, but seemed to meet the needs of Ryan residents. Conditions at the Boyer family's cabin were typical of the experience of most Ryan residents prior to 1920: "Oil lamps, no water in the house, no electricity and an outside toilet—only \$5.00 a month rent."²³¹ In the case of the Boyers, the house was eventually equipped with electrical power and water, and the company provided firewood for cooking and heat in the winter months. The new buildings constructed from 1920 to 1924 had running water, indoor toilets, and electricity; some (the bunkhouses, Hospital, and the superintendent's residence) had steam heat and the others continued to be heated by wood stoves. Everyone got their mail at the post office,

²²⁷ Jenifer, Frank, "Letter to C.B. Zabriskie," 3 December 1926, U.S. Borax Collection, Death Valley National Park Archives.

²²⁸ Boyer, Lillian, Notes on the back of a photograph of Joseph Boyer taken inside the family cabin, 1919, Boyer Collection, copy on file Death Valley Conservancy Archives.

²²⁹ Faulkner, "Annual Report for Ryan 1916-1917"; Gower, *50 Years in Death Valley*, 35.

²³⁰ Gower, *50 Years in Death Valley*, 36.

²³¹ Boyer, Lillian, "Notes on Life at Ryan, 1919-1924."

Ryan Historic District

Name of Property

Inyo, CA

County and State

run by the storekeeper/postmaster (who at times was also responsible for managing the Boarding House).

Operations at Ryan ran year-round, meaning Death Valley's climate presented significant challenges to everyday life. The most obvious one was the constant threat of dehydration, exposure and heatstroke. The wives and children of some of the company management left Death Valley during the summer for more temperate climates. Other women and children spent the whole year at Ryan, hoping for a breeze through the screened windows like everyone else. All of the dwellings had porches or another designated outdoor area, and sleeping outside would have eased the discomfort of summer a bit. The new post-war buildings had extensive wrap-around screened porches proffering a cooler sleeping environment protected from tarantulas, scorpions and snakes.

It is not known whether the ethnically diverse summer workforce would have had access to company housing and board. These men were likely socially marginal, and are more likely than other segments of the population to have resided in dwellings of their own construction. Archaeological investigation may help shed light on these workers, including whether they were regular seasonal employees and where they would have fit both physically and socially into the community.

In terms of board, PCB supplied the Kitchen and the Store with beef from the herd at Greenland Ranch, evidently making some cuts available for purchase by those who wished to cook their own.²³² Limited livestock and poultry was kept at Ryan, however the bulk of Ryan's food, both canned and fresh, would have been freighted in on the DVRR.²³³ The reliance on canned food was a given because with the lack of refrigeration in the early years, it was very difficult to keep food fresh in the heat of the summer.

Most of the town's food storage, preparation and serving took place at the Kitchen and Dining Room, staffed by cooks, waiters/dishwashers, and at least in 1920, a baker.²³⁴ In the early 1920s, Ryan gained an ice plant and refrigerated room attached to the Kitchen. These technological additions, along with ice boxes and California coolers, greatly improved food preservation capabilities. According to lists of expenses for the Ryan and Death Valley Junction boarding facilities in fiscal years 1923-1924 and 1924-1925, an average of 129 men a day took board at Ryan.²³⁵ The expense lists state it cost over \$300 a year to feed one man at Ryan, which was almost \$30 more than it cost to feed a man for a year at Death Valley Junction, presumably because of the additional transportation and storage expenses.²³⁶

Like any other place, Ryan had its share of births, sickness, injuries, and deaths. Ryan's hospital was equipped with all the standard amenities for basic medical care, and even had an operating

²³² Ibid.

²³³ Woodman, *She Burns Green!*, 85.

²³⁴ "United States Census, 1920," *FamilySearch*, <http://FamilySearch.org>, citing NARA microfilm publication T625, Washington, D.C., National Archives and Records Administration. Accessed 11 October 2023.

²³⁵ Pacific Coast Borax Company, "Expenses for Ryan and Death Valley Boarding Houses, 1923-1925."

²³⁶ Ibid.

Ryan Historic District

Inyo, CA

Name of Property

County and State

room. The Hospital likely served as a triage center: while Ryan had a nurse at least part of the time, doctor visits were less frequent.²³⁷ For example, due to the absence of a full-time doctor, Lillie Boyer went to Goldfield to give birth to her daughter Laura in 1921, living there for three weeks while she waited to go into labor and then recovered afterward.²³⁸ In addition, after falling off the Little Mesa and breaking her arm, Boyer's daughter was taken to Death Valley Junction via the modified 1912 Cadillac to get it set.

There is a record of one birth occurring at Ryan. On 16 February 1926, Marjorie Alice Simmons was born to her father, W.J., a mechanic, and her mother, Frances. The attending physician was listed as G. Hubart Miller, however little else is known about the circumstances of the birth.²³⁹

At least six people died at or near Ryan and were buried in a cemetery near Colemanite (not within district boundaries): Jim Vance, a cook who died of a cerebral hemorrhage in 1918; John W. Brooks, died of heart trouble at Death Valley Junction in 1919 and was buried at the Ryan cemetery; Frank Cornish, a miner killed by a falling rock in 1923; and Timothy Daley, 53, also died in 1923. Also buried is Frank A. McCarthy, a miner who died of cardiac failure and pneumonia in 1924.²⁴⁰ One macabre event occurring at Ryan was the discovery of a headless body near a mine in 1924; the body belonged to a miner, John Smith, and his burial is among the graves in the cemetery.²⁴¹ Today the cemetery contains six visible graves.

The Historic Context of Borax Mining in the United States, 1856-Present

Like many other communities in the American West of the early 20th century, the Ryan Historic District fits into a larger system based on extracting and processing a valuable mineral resource. In this case the resource was borax and its extraction and promotion as an industrial mineral was largely driven by one company—Pacific Coast Borax, later U.S. Borax—and its founder, Francis Marion “Borax” Smith (Figure 44). The proliferation of borax mining in the American West and the rise and success of the Pacific Coast Borax Company is intricately tied to the Ryan Historic District, as it was the major focus and producer that helped to solidify the success of the borax industry worldwide. The Ryan Historic District represents a peak in the institution of historic borax mining both locally and nationally which culminated in the 1850s and continues to this day.

Following the discovery of borax in California in 1856, entrepreneurs sought out borates throughout the western United States, finding numerous rich deposits. In his historical overview of borax mining in California, David J. Beeby divides the industry's development into four overlapping periods based on ore type, location, and technology: the Alkali Lake Period (1856-1874), the Dry Lakes Period (1870-1890), the Colemanite Period (1883-1925), and the Present

²³⁷ Gower, *50 Years in Death Valley*, 113.

²³⁸ Boyer, Lillian, “Notes on Life at Ryan, 1919-1924.”

²³⁹ Majorie Alice Simmons, Standard Certificate of Birth, no. 159 (1926), State of California Department of Public Health – Inyo County, California, copy on file Death Valley Conservancy Archives.

²⁴⁰ “Notes on Ryan death records from Inyo County Recorder,” copy on file Death Valley Conservancy Archives.

²⁴¹ Death certificate for John Smith, July 27, 1924, State of California Department of Public Health – Inyo County, California, copy on file Death Valley Conservancy Archives.

Ryan Historic District

Name of Property

Inyo, CA

County and State

Period (1925-Present).²⁴² While the Ryan Historic District is significant only in its relevance to the Colemanite and Present Periods, it is pertinent to acknowledge both its position in the evolution of borate mining development and production and how it became the pinnacle of historic borate production in the American West.

The Alkali Lake Period (1856-1874): Lake Extraction, Northern California

In 1856, San Francisco physician Dr. John A. Veatch made the first known borate discovery in North America, at Tuscan Springs near Red Bluff in Tehama County, Northern California. While the spring's borates were not of sufficient quality or quantity to justify development, Veatch soon discovered two more sources, the second of which, Borax Lake, was rich enough to warrant filing of a mining claim. This marshy lagoon on the edge of Clear Lake in Lake County, became the nation's first commercial borax operation when Veatch's California Borax Company began mining there in 1864. A largely Chinese workforce employed rudimentary placer gold mining techniques to separate borate crystals from the sediment, with no further refining taking place.²⁴³ In 1868, when Veatch moved his operation to the nearby Lake Hachinhama, the means for separating borate involved evaporating the saline water in shallow pans until the pure crystals could be scraped up and bagged.²⁴⁴

Despite these basic techniques and the relatively low quality and quantity of material at Veatch's Northern California borax deposits, profits were very high; in 1864 Veatch made a 1900% return on his investment.²⁴⁵ U.S. imports of borax dropped significantly based on the presence of the two California sources, and so did the price of the mineral. Lake Hachinhama's borax operation continued until 1874, when the discovery of richer deposits to the east and south shifted the industry elsewhere.²⁴⁶

The Dry Lakes Period (1870-1890): Surface Extraction in Western Nevada and Southern California

Following the success of Veatch's California Borax Co., prospectors fanned out across the West in search of borax. By this point, the mineral had been found to have wide-ranging use as a drug ingredient, cleaning agent, and component in multiple industrial uses (adhesives, paint, and textile production) in addition to its known uses in smithing, ceramic glazing, enameling, and glassmaking. The California operations had proved borax was easily accessible, profitable, and, unlike underground gold or silver, economical to extract and produce. The first discovery of note was made by William Troop on a dry alkali lakebed at Salt Wells, Churchill County, Nevada in 1871 and followed shortly by a far richer discovery at Columbus Marsh (Esmeralda County).²⁴⁷

²⁴² Beeby, David J., "Borate Deposits in California: Past, Present, and Future," in *Industrial Mineral and Extractive Industry Geology* (P.W. Scott and Colin Malcolm Bristow, editors), pp. 87-92, Geologic Society of London, 2002.

²⁴³ Ayres, William Orville, "Borax in America," *Popular Science Monthly* 21 (July 1882), 352; Beeby, 88.

²⁴⁴ Ayres, 356-357; Beeby, 88-89.

²⁴⁵ Beeby, 89.

²⁴⁶ Ayres, 358.

²⁴⁷ Hanks, Henry G., "Report on the Borax Deposits of California and Nevada," *Third Annual Report of the State Mineralogist, Part*, Sacramento, California Division of Mines and Geology, 1883.

Ryan Historic District

Name of Property

Inyo, CA

County and State

Both deposits, owned and worked by the American Borax Company used the extraction and refining techniques that would go on to define borate mining for the next 20 years.

Borax mining had three basic stages: extraction, beneficiation, and refining. Extraction involved the location and removal of borax from the ground surface, as miners raked the white, fluffy clusters of borate crystals, or “cottonballs,” which occur as dry lakebed precipitates, into rows and piles or dug them out from shallow pit excavations. Beneficiation involved improving the borax ore by putting the borate crystals into concentrators, boiling the solution until the borax dissolved, then pouring it into cooling tanks; as it cooled, the borax crystallized onto the sides and bottoms of the tanks, as well as onto plates, wires, or rods. Workers would then drain the tanks and remove and bag the borax crystals for transport. The bagged borax was transported by freight wagon to the railroad, and moved onward to its varied destinations, which were in the San Francisco Bay area in the late nineteenth century and Wilmington in Southern California in the twentieth century. Refining, the final stage, purified the beneficiated borax into a state suitable for industrial use, manufacturing, or for commercial exchange by grinding it into a fine powder or converting it into boric acid for various uses.

Troop’s 1871 Columbus Marsh discovery, in the form of ulexite “cottonballs” on a dry lakebed, was the impetus for a borax boom in western Nevada that for a short time superseded other booms in silver and gold. In the next three years, deposits were claimed at three more alkali flats near Columbus: Teel’s Marsh, Fish Lake Marsh, and Rhodes Marsh. The most productive, or at least best-publicized, borax deposit was at Teel’s Marsh and its developer, Francis Marion “Borax” Smith, was to eventually be the face of and major driving force behind borax mining in all of Death Valley.

Smith arrived in western Nevada and quickly began successfully producing and freighting borax to the U.S. markets. During this period, he employed John Ryan, the namesake of the Ryan Historic District, and received financial backing from William T. Coleman, a wealthy San Francisco merchant and distributor who provided loans for claim acquisition, refinery construction, and other costs, which Smith paid back in borax for him to sell at a profit.²⁴⁸ Coleman was to become the namesake of the borate ore, colemanite, extracted from the mines of the Ryan Historic District.

The next major developments in borax mining happened in Death Valley, California, perceived at the time by European Americans as the most forbidding landscape on earth. Borax had been observed in Death Valley as early as 1873, when prospectors and emigrant parties noticed it, but the deposits were assumed to be in too inhospitable a location to ever be developed. In 1881, homesteaders discovered a large borax deposit on the valley floor; soon William Coleman joined with F.M. Smith to organize the Death Valley Borax and Salt Mining District and commenced locating claims on the new deposit.

Another deposit was discovered 20 miles south, and became the valley’s first borax operation, the Eagle Borax Works. The Eagle Works was producing and shipping borax by late 1882, run

²⁴⁸ Travis and Cocks, 42.

Ryan Historic District

Name of Property

Inyo, CA

County and State

by Isadore Daunet. However, it could not compete with the success of Coleman and Smith's operation, the Harmony Borax Works.²⁴⁹ The Harmony Borax Works was a large operation, employing 30 to 40 Chinese workers as well as local Timbisha Shoshone woodcutters who provided the fuel that kept the huge boiler constantly steaming.²⁵⁰ It used the same basic techniques that Smith and others had used on the Nevada marshes, with a few refinements to improve product quality and volume. The Harmony refinery encountered problems when the summer temperatures on the valley floor averaged 120°F and were too high for the borax to recrystallize out of the refining precipitate; so, the company focused on an additional acquired borax deposit overlooking the dry bed of the Amargosa River just to the east of Death Valley and established a smaller operation there to be worked during the summer.

During this same period, Coleman's local superintendent Rudolph Neuschwander began to develop the Greenland Ranch at Furnace Creek, aiming to use the relatively well-watered land to grow alfalfa for stock feed and vegetables and fruit to augment supplies for the local workers. This ranch (later known as the Furnace Creek Ranch and now The Ranch at Death Valley) became a crucial part of the Death Valley borax industry's infrastructure, and later grew into the tourist hub it is today in the center of Death Valley National Park.

Once Coleman had solved the major problems of the refining process and the local food supply, he still faced the biggest obstacle: Death Valley's distance from established transportation networks. The solution was the primary innovation associated with the Death Valley borax operations: enormous wagons hauled by teams of up to twenty mules (actually eighteen mules and two horses)(Figure 45). This was not the first use of large teams in the West, but it was the most ambitious and best publicized. The manager of the Amargosa and Harmony works decided to try a bigger team and specially engineered wagons capable of hauling over 36 tons of borax and water. Smith later made the image of the 20-Mule Team famous by putting it on every box of borax he sold, and it became synonymous later with both PCB and with Death Valley itself.

Despite Coleman's success in borax production and the surprisingly effective use of the 20-mule teams, his financial empire collapsed in 1888 after years of overextending into many different fields. The last 20-mule team trip from the Harmony Works was in 1888 and Coleman sold all of his borax properties to F.M. Smith, who consolidated them with his own holdings to form Pacific Coast Borax (PCB) in 1890.

The Colemanite Period (1883-1925): Underground Extraction, Death Valley Region

With the success of Death Valley's surface borax operations in 1880s, prospectors began to look to the hills for the presence of a different form of borate, not the sodium calcium borate found in alkali flats and hot springs, but calcium borate found in underground deposits. This form of borate—colemanite—was purer and richer than the ulexite from the salt marshes and existed in outcrops along the hillsides and ranges of the area. Major deposits included one in the Calico Mountains roughly 11 miles north of the railroad station at Daggett, a deposit about 30 miles east

²⁴⁹ Ibid., 52.

²⁵⁰ Woodman, *She Burns Green!*, 29; Travis and Cocks, 53; Lingenfelter, 181.

Ryan Historic District

Inyo, CA

Name of Property

County and State

of Death Valley, the Lila C (later the site of old Ryan), and several other rich deposits found in Death Valley, most notably the Hillside Group associated with the Ryan Historic District.²⁵¹

By 1890, Smith had acquired all of Coleman's borax holdings, and shutting down the Harmony and Amargosa borax works, focused primarily on the Calico deposit. The company established the camp of Borate in a narrow canyon near the main mine, housing 75-120 residents.²⁵² As the first company town established by PCB, Borate served as a model for the later towns to come, old Ryan (inhabited at the Lila C from 1907 to 1914), and Ryan. Many of Borate's buildings were moved to old Ryan and from there to Ryan, and the company control and design that began at Borate were refined and adapted for the later camps as well.

In the late 1890s, with the mines at Borate booming the company constructed the narrow-gauge Borate and Daggett Railroad, to span the 11 miles between Borate and Daggett, where it met the Atlantic and Pacific Railroad. PCB also constructed a calcining plant along the line at a siding it named Marion. The rail line was narrow-gauge from Borate to Marion, then was standard gauge from Marion to Daggett. After extraction and hand-sorting, the raw Borate ores were moved by railcar to Marion for beneficiation, then the concentrated ore was sent to an Alameda facility for refining. To complete the improvements, in 1898 PCB also constructed a new refinery in Bayonne, New Jersey to supply the Eastern market, and began shipping borax there as well.

By 1903 it became clear that the deposit at Borate was playing out, and PCB needed to start developing one of its other deposits. The company decided to turn to the Lila C colemanite deposit, located right outside of Death Valley. It would be the easiest to reach by rail, although that rail line would have to be built. This was the beginning of the Tonopah & Tidewater Railroad, which would eventually open up all of Death Valley for development.

In 1904, Smith and others incorporated the Tonopah & Tidewater Railroad (T&T), envisioning a connection between the California coast and the gold and silver camps around Tonopah, via the rich borax deposit of the Lila C. After many years of backbreaking work by Japanese and then eventually Mexican-American workers, the T&T reached the new Death Valley Junction station and crews completed the seven-mile branch line that ran west from there to the Lila C in August 1907. Death Valley Junction remained a small depot with a few buildings until 1914, when it became PCB's ore processing center.

The Lila C was more than ready for the railroad, as it had been producing ore for almost four years and its basic infrastructure had been in place for nearly as long. Like Borate before it, the camp at the Lila C was a company-owned and controlled community; it was named Ryan after longtime PCB employee John Ryan. This document refers to the town as old Ryan or simply the Lila C, to avoid confusion with current Ryan. Most of the town's buildings were moved from

²⁵¹ Travis and Cocks, 60; Woodman, *She Burns Green!*, 46; Myrick, 823.

²⁵² Woodman, *She Burns Green!*, 46; Smitheram, Bill, "Memories of Old Borate," *San Bernardino County Museum Quarterly* 44(1)(1997), 2.

Ryan Historic District

Name of Property

Inyo, CA

County and State

Borate via the T&T in 1907, with the majority of them arranged on a flat to the west of the slope where the mine was located.²⁵³

In 1908, old Ryan contained many structures including 24 dwellings, a bunkhouse, a boarding house, a store and post office, a store house, a barn, an engine house, a blacksmith shop, two ore bins, a mill, a set of track scales, two headframes, an oil house, and a pump house.²⁵⁴ Most of the structures were wood-framed; the engine house, store and post office, blacksmith shop, mill, oil house, and pump house are noted as having corrugated metal siding.

By 1913, the Lila C deposit was playing out and PCB moved to start developing its Hillside Group of six colemanite claims in the Greenwater Range on the east side of Death Valley. As previously mentioned, a new railroad, the Death Valley Railroad, had to be built to reach the deposits. Since many of PCB's workforce, including Superintendent William Smitheram, relocated from the Lila C and the camp of Ryan, the workers used the same name to identify the new settlement.

As soon as the DVRR was completed, the Lila C ore concentrator was dismantled, moved to Death Valley Junction, and reassembled; a community soon developed at Death Valley Junction as it became the processing center for all the Ryan mines. Another 24-inch railroad, the Baby Gauge, was finished by 1918; in connecting the district's farthest southern mines to Ryan which was connected via the DVRR to Death Valley Junction, the complete borax transportation network was established.

Ryan's first mine superintendent was William Smitheram, but he stepped down in 1916, suffering from late-stage silicosis.²⁵⁵ Smitheram's replacement, a lanky Englishman named Herbert W. Faulkner, oversaw the main period of development in the Ryan district until 1920. Major Julian Boyd, an Australian veteran of the World War I battle of Gallipoli, took over as superintendent in March 1920, and remained in that role until PCB shifted its operations away from Ryan in 1927.²⁵⁶ Harry Gower served as assistant superintendent under both Faulkner and Boyd, and later managed the Death Valley View Hotel.

Despite the impacts of World War I on the global borax supply chain and depletion of the male-dominated mining workforce, by 1920 all components of what we currently refer to as the Ryan Historic District were in place: mines, processing facilities, railroads, roads, and communities. During the Ryan-Death Valley Junction years, PCB continued expanding and improving its operations. In 1922, it acquired another colemanite deposit outside of Death Valley, the Gerstley

²⁵³ Woodman, Ruth, "Notes on visit to Lila C with Harry Gower," 22 February 1947, U.S. Borax Collection, Death Valley National Park Archives, 2558/01-719.

²⁵⁴ Pacific Coast Borax Company, "Map Showing Location of Buildings at Lila-C Mine. Ryan, Inyo Co., Cal. Surveyed Nov. 14, 1907," (includes lists of insurance values of each building as of 1908), U.S. Borax Collection, Death Valley National Park Archives, 2558/01-0806.

²⁵⁵ Ringhoff, Interview with Bill Smitheram, 3 March 2011.

²⁵⁶ Gower, Harry P. "Correspondence with Ruth Woodman," 15 August 1949, U.S. Borax Collection, Death Valley National Park Archives, 2558/01-0935.

Ryan Historic District

Name of Property

Inyo, CA

County and State

near Shoshone, California and development began in 1924.²⁵⁷ Like Ryan, this mine boasted a narrow gauge railroad, although this one connected directly to the T&T at a point 4.1 miles north of Shoshone. Gerstley was never a large operation and closed down in 1927, but it was reopened in the 1940s and was mined intermittently on a small scale until quite recently; its borates were prized by ceramicists.²⁵⁸

In 1923, PCB constructed a new refinery at Wilmington, California, in immediate proximity to the Port of Los Angeles. This gave the company a modern facility in the heart of the West Coast's busiest shipping hub and left the Alameda refinery behind completely. The PCB offices moved down from Oakland to Wilmington, reflecting the company's conviction that the heart of borax operations would continue to be in Southern California. The Wilmington refinery is extant at the Port of Los Angeles and currently owned by Rio Tinto Minerals.

Ryan underwent a significant set of improvements between 1920 and 1925, when PCB replaced many of its older cabins with new bunkhouses, remodeled the Hospital, built new houses for staff, added a schoolhouse, and changed the face of the camp by cutting and reinforcing large terraces stepping down the slope. With the same goals in mind, in 1923-1924, PCB built an ambitious new complex to replace its old buildings at Death Valley Junction. Designed by Alexander Hamilton McCulloch, the U-shaped, Spanish Colonial Revival style civic center complex contained a 200-man dormitory, a general store, dining rooms, kitchen, offices, a hospital area, a pool room, guest quarters, and a theatre and dance hall. Every indication was that Death Valley would be the heart of borax extraction, processing and shipping in the region for years to come, and now PCB had a company town that more than fit the part. But a new discovery in Kern County, California changed its plans.

The Present Period (1925-Present): Underground and Open Pit Extraction at Boron and Death Valley

In 1924-1925, the borax industry saw the most significant change since the discovery of colemanite with the confirmation of an earlier strike on a massive underground deposit of colemanite and other borates in Kern County, California. Homesteaders John and Otelia Suckow made the first find in 1913, hitting colemanite at a depth of about 370 feet when drilling a well; they sunk a shaft in 1924 and began production in the same year.²⁵⁹ This opening prompted exploration by others, leading to PCB's 1925 discovery of a larger deposit of colemanite about three miles to the east. The company initiated development on what would prove to be one enormous, contiguous deposit. Multiple borax companies worked the deposit, but PCB eventually bought out the others for complete ownership of what became known as the Kramer deposit.

The Kramer deposit was first thought to contain an entirely new fibrous form of borate, named rasorite by PCB but later called kernite; further development through the rest of the twentieth

²⁵⁷ Garrett, Donald E., *Borates: Handbook of Deposits, Processing, Properties and Use*, New York, Academic Press, 1998, 152; Beeby, 90.

²⁵⁸ Beeby, 90.

²⁵⁹ Garrett, 79.

Ryan Historic District

Name of Property

Inyo, CA

County and State

century showed that the deposit contained multiple forms of borate, including kernite, colemanite, and ulexite.²⁶⁰ Colemanite, not kernite, was actually the most common type in the deposit. What distinguished the Kramer deposit from earlier colemanite deposits like those at Ryan and the Lila C were its size, shape (lenticular), ore quality, and easy accessibility. Instead of sitting on a steep Death Valley slope, this bedded deposit was on a fairly flat alluvial fan on the Mojave Desert floor, only a few miles from one of the country's busiest rail lines. In 1927, PCB began closing down the mines and camp at Ryan and moved its operations to the town of Boron on the Kramer deposit. By 1928, all of the company's large-scale Death Valley mining activity had ended, with sporadic operations at area deposits continuing until the 1960s.

The mine at Boron has been in continuous operation since 1927, significantly increasing domestic borax production and concurrently reducing the price. New uses for borax continued to be developed, including fiberglass and heat-resistant borosilicate glass products like Pyrex.²⁶¹ In 1956, PCB ended its underground mining and began an open pit excavation which is now the largest surface mine in California. In that same year, PCB became U.S. Borax and Chemical Company (U.S. Borax for short), then was acquired by Rio Tinto Zinc Corporation in 1968. Today the company is known as Rio Tinto Minerals.

In the 1960s, borax mining re-emerged in Death Valley with the Kern County Land Company's purchase of some PCB claims, its merger with an oil company, and the commencement of the first large-scale open pit mine in the Valley at the Boraxo deposit.²⁶² Alarmed by the destruction caused by this mining technique, Congress passed the Mining in the National Parks Act in 1976 to impose a temporary moratorium on surface mining in the National Monument. Death Valley reopened to limited mining in 1980, with new development subject to stricter regulations, and a small amount of mining continued into the 2000s. This work was underground, rather than open pit, and took place primarily in the American Borax Company's Billie Mine, adjacent to the Ryan Historic District. The National Park designation in 1994 imposed more restrictions on mining activity, and while there are still mineral claims held within its boundaries, no mines were active in Death Valley National Park as of 2024. The Billie Mine ceased production in 2005 and became part of the National Park in 2012.

Today, active borax operations in California are dominated by Rio Tinto's open pit mine at Boron (the Kramer deposit) and Searles Valley Minerals Inc.'s surface borax and brine plants at Searles Lake. The world's largest known borax operation is in Turkey and has been mined since the mid-1970s; however, borate production remains a vital component in the economy of Southern California, and new uses for borates continue to be found.

²⁶⁰ Ibid., 79-90.

²⁶¹ Beeby, 90.

²⁶² Hardesty, Donald L., *Historical Evaluation of the Billie Borate Mine, Death Valley, California*, prepared for American Borate Company, Virginia Beach, Virginia, 2007, manuscript on file at Death Valley National Park Archives, 6; Evans, James R., Gary C. Taylor, and John S. Rapp, *Mines and Mineral Deposits in Death Valley National Monument, California*, Special Report 125, Sacramento, California Division of Mines and Geology 1976, U.S. Borax Collection, Death Valley National Park Archives, 2558/01-1352.

Ryan Historic District

Name of Property

Inyo, CA

County and State

Property Types Associated with the Historic Context of Borax Mining

The physical manifestations of historic patterns are best linked to historic contexts through property types. Due to the complexity in historic properties, historic themes, and areas of significance, the use of property types is especially applicable to the Ryan Historic District. The known cultural resources can be classed into nine property types, each placed within its respective historic contexts/themes.

Five property types fall under the historic context of borax mining and its associated themes of transportation patterns and the physical and social development of Ryan, 1914-1927.

Property Type 1. Transportation Related Resources

Transportation-related resources are a major part of the Ryan Historic District. As a crucial part of the history of the Ryan district, the American borax industry, and the Death Valley region, they are significant on both the individual level and as elements that contribute to the significance of the overall district. These resources include railroad lines, roads, and directly associated features like grades, cuts and fills, retaining walls, switches, tunnels, culverts, trestles, and refuse dumps.

The various transportation-related resources of the district fall under five areas of significance: Commerce, Industry, Transportation, Engineering, and Archeology. They are significant on the local level under Criteria A, C, and D. Their period of significance is 1914 to 1927, spanning the time between the completion of the Death Valley Railroad in 1914 and the cessation of the use of the DVRR and the Baby Gauge railroad for industrial purposes in 1927.

Property Type 2. Mineral Extraction-Related Resources

Mineral extraction-related resources are a common part of the Ryan Historic District landscape, reflecting the area's emphasis on borax mining to the exclusion of all other industry. As a crucial part of the history of the Ryan district, the American borax industry, and the Death Valley region, they are important as elements that contribute to the significance of the overall district. These resources include features directly associated with mineral extraction like shafts, adits, and stopes, and include all features and equipment related to this endeavor (ore bins, headframes, support structures, ore cars, internal trackage, gravity trams, skip tracks, slides, tramways, blasting equipment, storage structures, hoist houses, waste rock dumps, artifact scatters, etc.). While most of the features are clearly associated with a particular mine, some served multiple mines. For example, the Powder Magazine at Ryan is likely to have been used for safe storage of explosives that would be used at all the mines, not just for those used at the Upper and Lower Biddy McCarthys.

The various mineral extraction-related resources of the district fall under four areas of significance: Commerce, Industry, Engineering, and Archeology. They are significant on the local level under Criteria A, C, and D. Their period of significance is 1914 to 1927, starting with the first real development and production from the Ryan mines (after the initial location and

Ryan Historic District

Inyo, CA

Name of Property

County and State

improvement work related to PCB's retention of the original 1883 claims) and ending with the last production from the mines in 1927.

Property Type 3. Ryan Residential Resources

This property type includes all residential resources located in the immediate vicinity of Ryan, including neighborhoods on the outskirts like Copenhagen Row and individual worker-built housing. Some residential buildings and sites were built or brought in by PCB and remained under company control, while others existed outside of the company's purview. As a crucial part of the history of the Ryan district, as the most visible and best-known resources in the district, and as examples of the impact of the American borax industry on the Death Valley region, Ryan residential resources are important on an individual level and as elements that contribute to the significance of the overall district. These resources include buildings, structures, dugouts, structural vestiges, tent pads, platforms, footpaths, artifact scatters, privy depressions, and other features. Some are archaeological rather than architectural in nature and should be viewed as part of the cultural landscape shaped by settlement patterns, both "top-down" and "bottom-up."

The various residential resources at Ryan fall under six areas of significance: Architecture, Commerce, Community Planning and Development, Industry, Social History, and Archeology. They are significant on the local level under Criteria A, C, and D. Their period of significance is 1914 to 1927, starting with the establishment of Ryan and ending with the cessation of mining in 1927.

Property Type 4. Ryan Commercial and Community Resources

In addition to residential resources, the Ryan Historic District contained many buildings and features that provided community space, commercial facilities, or both. Examples of this property type include the Schoolhouse, the Rec Hall, the Store/Post Office, and the Dining Room and Kitchen (grouped into the Hotel Complex). These resources are partially defined by what they are not: they are located within Ryan, but are not primarily residential resources. Some of them may have had a secondary residential component, like the Hospital, but providing permanent housing was not their primary function.

All of the known community and commercial resources at Ryan were constructed or brought in by PCB, and remained under company control during Ryan's life as a borax mining community and through the camp's short life as a tourist destination. As a crucial part of the history of the Ryan district, as the most visible and best-known resources in the district, and as examples of the impact of the American borax industry on the Death Valley region, Ryan's community and commercial resources are important on an individual level and as elements that contribute to the significance of the overall district. These resources include buildings, structures, structural vestiges, artifact scatters, and other features. They may be archaeological rather than architectural in nature and should be viewed as part of the cultural landscape.

Ryan Historic District

Name of Property

Inyo, CA

County and State

Ryan's various community and commercial resources fall under six areas of significance: Architecture, Commerce, Community Planning and Development, Industry, Social History, and Archeology. They are significant on the local level under Criteria A, C, and D. The period of significance is 1914 to 1927, starting with the establishment of Ryan and ending with the cessation of mining activity in 1927.

Property Type 5. Infrastructure-Related Resources

Infrastructure-related resources are a common part of the Ryan Historic District landscape, reflecting the support system necessary to both industrial mining operations and residential/commercial occupations. As part of the history of the Ryan district, the American borax industry, and the Death Valley region, they are important as elements that contribute to the significance of the overall district. The infrastructure-related resources include features associated with electrical systems, communication networks, waste disposal, water supply, movement of people and goods within Ryan, and heating systems. Examples are the Powerhouse, power lines, telephone lines, waterworks, footpaths, cesspits, incinerators, incinerator trackway, and other features.

The various infrastructure-related resources of the district fall under five areas of significance: Commerce, Community Planning and Development, Industry, Engineering, and Archeology. They are significant on the local level under Criteria A, C, and D. Their period of significance is 1914 to 1927, starting with the establishment of Ryan's first infrastructure systems and ending with the cessation of mining in 1927.

FROM MINING CAMP TO DESERT RESORT, 1928-1956

Before the district became solely a locus for tourism in 1928, wayward tourists were finding their way to Ryan from an early date, both as purposeful curiosity seekers and as motorists in need of assistance. Harry Gower remembered that "we had, for years as a matter of fact, been reluctantly housing an occasional late arrival at our gates whom we didn't have the heart to send on in the night to an uncertain reception at Shoshone or Beatty 60 miles away."²⁶³ These unexpected stopovers happened often enough that in 1926 Julian Boyd suggested offering meals to visitors for 75 cents and charging \$1.50 for a night's stay in camp to offset costs.²⁶⁴ Gower states, "Our charges were reasonable and most people enjoyed the stopover in a bustling mining camp even though the accommodations were referred to as slightly on the primitive side."²⁶⁵ Guests were housed in "pretty bare rooms" in the Hospital and ate with the miners in the employees' dining room. The growing awareness of tourist traffic foreshadowed the next phase of Ryan's physical development, as PCB moved its mining operations elsewhere and converted the town into a tourist destination.

²⁶³ Gower, *50 Years in Death Valley*, 113.

²⁶⁴ Boyd, Julian, "Agenda for Mr. Baker and Mr. Zabriskie, Ryan, California," 24 October 1926, U.S. Borax Collection, Death Valley National Park Archives, 2558/01-1737.

²⁶⁵ Gower, *50 Years in Death Valley*, 113.

Ryan Historic District

Name of Property

Inyo, CA

County and State

In 1927, as PCB began to shift its operations to the Kramer deposit, another major set of changes took place in the Ryan Historic District's physical layout. The company had formed the Death Valley Hotel Company (DVH) in 1926 and constructed the Furnace Creek Inn as the cornerstone of its tourist interests (Figure 47). Hoping to find a use for Ryan's recently-constructed buildings, DVH decided to convert the camp into the Death Valley View Hotel (Figure 15, 46). To that end, it renovated the two large bunkhouses into guest houses, reconfiguring rooms and adding bathrooms and small lobby areas. The first of the guest houses (Bunkhouse 1) was completely converted by October of 1927.²⁶⁶ Also by that date, workers had remodeled the staff dining room to contain a more elegant dining area and hotel lobby, and connected it to the store building via a covered breezeway. The Lobby/Dining Room, referred to in this document as part of the Hotel Complex, would become the hub of activity for hotel guests and tourists passing through on Union Pacific Railroad auto tours and personal vehicle trips. The Hospital also became guest housing without too many modifications since it already contained a living room, bedrooms, and bathroom facilities for patients and the Hospital staff; guests had also occasionally stayed there for years.

The modifications to the newer buildings were accompanied by a large-scale removal of many of the older ones and the addition of new ones. The most significant change was the removal of the enormous ore bins that had dominated the center of Ryan since 1914, creating an empty space at the heart of the camp. By February 1935, Ryan had only 37 buildings, down from the 73 shown on the June 1919 map.²⁶⁷ Three garages are present, including one converted from a warehouse and another in the same general area once occupied by the original corral and stables.

With the basic facilities for accommodations in place, DVH worked to unify the buildings into a whole by repainting the two large bunkhouses an ochre color like that used at the Furnace Creek Inn, and adding signage (including the large "Death Valley View Hotel" on the old Boarding House/Dining Room, now the hotel Lobby)(Figure 4). It continued to use the Rec Hall as a meeting place, and for festivities and films. The terraced area below the superintendents' houses, on the same level as the DVRR grade, was cleared for parking, and its rock walls were improved. In an attempt to attract guests, a tennis court was added immediately south of Bunkhouse 1. In addition, several now vacant houses, the three "Little Mesa" and five "Copenhagen Row" cabins, were used as guest cottages.

A 1927 DVH brochure promoted Ryan's attractive facilities, revealing PCB's pride in its state-of-the-art mining town (see Figure 48 for a similar brochure):

Ryan, center of borax mines, is a town built with the nice exactness and beautiful efficiency found where housing problems are worked out by an expert unhampered by lack of means.

The cottages, originally for company officials, offer the utmost of comfort and convenience for living in a desert climate. They are

²⁶⁶ Boyd, "Annual Report for Ryan, 1926-1927."

²⁶⁷ Pacific Coast Borax Company, "Buildings at Ryan, Calif.," February 1935 (site plan).

Ryan Historic District

Name of Property

Inyo, CA

County and State

completely furnished, with hot and cold water, electric lights, fuel, bed linen, and silver.

Hotel rooms are in large detached buildings, surrounded by screened verandas. They are steam heated, electric lighted, handsomely furnished and have hot and cold water. Some rooms have fireplaces.

In the community dining room, excellent meals are served at moderate prices. Counter service also.

The general store supplies fresh fruits, vegetables and meats as well as a complete line of staples. Post-office and telephone connect Ryan with the world.

Excellent tennis court, and community recreation hall.²⁶⁸

Accompanying the complete remodel of Ryan into the Death Valley View Hotel, was an adaptation of both railroads to serve tourist purposes. In 1927, the DVH and Union Pacific RR began running a combination rail-auto tour of Death Valley (Figure 49). The tours began using a gasoline-powered railway coach, and in doing so simplified the old system of linking a passenger car to a locomotive (Figure 50).²⁶⁹ This car (Brill No. 5) has been restored to running condition and is currently on display at the Laws Railroad Museum in Bishop, California.

The 24-inch Baby Gauge Railroad was also adapted for tourist use (Figure 21). At least four of the flat cars originally designed to haul supplies were fashioned with cushioned benches. Each car had four rows of benches allowing approximately 8 passengers to ride, for a total of 32 passengers. The Plymouth BL locomotive, purchased by PCB to haul long lines of heavy ore-filled cars, had no trouble pulling tourists along the rail line. The Baby Gauge tourist train ride was purported to take visitors "through the workings of the Borax Mines" providing "a unique, thrilling and instructive tour of 7 miles."²⁷⁰ Tours were given by Bob Gardiner, an Irish employee of Pacific Coast Borax. Harry Gower, mine superintendent described Gardiner as follows:

A main attraction of this [Baby Gauge Railroad], besides its startling scenic and educational value was the charm and brogue of the Irish operator, Bob Gardiner. He went to work for the Company at Ryan in 1915 and promotions from mucker to trammer to brakeman to motorman were rapid and well deserved...It was practically a one-man railroad; for years he sold

²⁶⁸ Death Valley Hotel Company, "Ryan, California," brochure, ca. 1927, copy on file Death Valley Conservancy Archives.

²⁶⁹ Myrick, 614-615; Death Valley Hotel Company, "Furnace Creek Inn," brochure, ca. 1928, copy on file Death Valley Conservancy Archives; Tolford, 7.

²⁷⁰ Death Valley Hotel Company, Brochures, 1935-1942.

Ryan Historic District

Name of Property

Inyo, CA

County and State

the tickets, ran the train acting as his own brakeman, conductor and lecturer.²⁷¹

The conversion of the line into a tourist ride involved more work than just adding seats to flatcars, though; the Baby Gauge line originally started at the tall trestle and earthen fill platform, the Baby Gauge Level, above Ryan's large ore bins, and required re-routing once these features were put out of commission.²⁷² In 1931, PCB replaced much of the DVRR 36-inch gauge line with 24-inch gauge track in central Ryan to allow for easy passenger loading and a turnaround point for the tourist train (Figure 51). DVH charged \$1.50 for each touted thrilling and educational ride, providing the tickets to both hotel guests and day trippers.

In the range of available lodging in Death Valley, the Death Valley View Hotel was by no means the most luxurious, but it did provide basic and comfortable accommodations at reasonable prices. An early advertisement lists the cost of single and double rooms including meals at \$2.50 and \$4.00, respectively.²⁷³ For comparison, the Furnace Creek Inn charged three times as much at \$8.50 and \$14.00 with meals.²⁷⁴ The hillside resort also did not have the benefit of direct access to Death Valley's major attractions or the ability to provide lavish amenities like swimming pools or golf courses, however it had the benefit of cooler summer temperatures and a spectacular view of the valley below.

Unfortunately, the Death Valley View Hotel shut down as a full-time tourist facility after only two years of operation. In addition to the Great Depression looming in the background, a primary factor came with the dissolution of the DVRR in 1930. Rail-auto tours never proved very profitable because most tourists came to Death Valley by car, and the Union Pacific pulled out after a couple of years. DVH ran its own tours for a short time, even transferring the franchise to the Hunter Clarkson Company, but they were largely unsuccessful.²⁷⁵ In its last year, the Death Valley Railroad made a total of \$1,389; when it ceased, it possessed the passenger railway coach, 27 freight cars, and one or two locomotives.²⁷⁶ By 1931, PCB had either sold or transferred the equipment and rolling stock to another company mine in Carlsbad, New Mexico; they also removed all of the rail and at least one of its primary trestles.

With the removal of the railroad, all traffic in and out of Ryan was now by automobile, and all water had to be hauled in by truck from Navel Spring, a water right held by PCB since 1904, four miles distant. The lack of incipient water proved to be a major obstacle to the success of a fulltime hotel. However, it remained open as a base for the very popular Baby Gauge trips and as overflow housing for the Furnace Creek Inn and Ranch. As a 1948 tourist guide attested, "This

²⁷¹ Gower, *50 Years in Death Valley*, 121-122.

²⁷² Chappell, 117-118.

²⁷³ Death Valley Hotel Company, "Ryan, California," copy on file Death Valley Conservancy Archives.

²⁷⁴ Death Valley Hotel Company, "Death Valley," travel brochure for season 1936-1937, [back cover], copy on file Death Valley Conservancy Archives.

²⁷⁵ Gower, Harry P. "Correspondence with Ruth Woodman," 24 August 1949, U.S. Borax Collection, Death Valley National Park Archives; Gower, *50 Years in Death Valley*, 120.

²⁷⁶ Myrick, 611.

Ryan Historic District

Inyo, CA

Name of Property

County and State

hotel is held in readiness to operate as needed.”²⁷⁷ The Death Valley View Hotel was completely full at least once or twice a year, during holidays and heavily attended local events like the wildflower super-bloom and Easter sunrise service, but otherwise saw only sporadic occupancy.

Overflow guests dropped off over time especially with the relinquishment of Death Valley Hotel company properties to the Fred Harvey Company in 1956; the last record of occupancy in the hotel register corresponds to that year. The company also stopped running the Baby Gauge trips in 1949, and from that point used the line only for yearly assessment work on the Ryan-area claims.²⁷⁸ In the late 1950s and early 1960s, PCB (now U.S. Borax) seriously considered rehabilitating and re-opening the Baby Gauge as a tourist attraction, even going so far as to solicit bids for the rehabilitation work and consider partnering with the Fred Harvey company for the line’s operation.²⁷⁹ None of the plans ever came to fruition, and the Baby Gauge line was left to deteriorate in place.

Ryan remained largely unoccupied but at the ready in case the Kramer deposit played out and PCB had to move its mining operations back to Death Valley. After the DVRR was abandoned and the railroad right-of-way removed, Ryan Camp was surveyed to determine its boundaries and land ownership was established by PCB (Figure 52). As illustrated by an ongoing series of insurance maps (1935, 1942, 1947, and 1952), the district’s resources—buildings, sites, structures, and objects—were continuously maintained. Full-time caretakers have lived in the camp for many years, residing in the 1920s superintendents’ houses, hauling water in by truck, hosting approved visitors, conducting repairs, and leaving their own distinctive marks on the site. In 2013, the Ryan Historic District—Ryan Camp and the two patented Upper and Lower Biddy mining claims—was donated to the Death Valley Conservancy guaranteeing the preservation of its contributing resources.

The Historic Context of Death Valley Tourism (1925-Present)

Just because borate mining temporarily ended in Death Valley by the late 1920s, PCB had too much capital invested to abandon the area completely. Thus, the company’s focus pivoted from mining to tourism, as exemplified by the development of the Ryan Historic District in the years after mining ceased. The Death Valley View Hotel fits into a larger pattern emerging in Death Valley and California as a whole—the rise of the tourist industry in the American West.

The expanding popularity of automobile travel in the early nineteenth century had begun to lead to the opening of new transportation routes to remote areas like Death Valley. Some of the first publicity campaigns in the area were by automobile dealers in the 1910s who sold cars by using the Valley’s reputation as a beautiful but deadly place. Each sent intrepid explorers through

²⁷⁷ Hill, Roland L., *I Recommend (Good Places to Go, Eat, Play, and Shop)*, Torrance, California, DeLaney and Company, Inc., 1948, 90.

²⁷⁸ Milas, J.E., “Correspondence with W.M. Childs re: rebuilding Ryan Baby Gauge,” 7 December 1960, U.S. Borax Collection, Death Valley National Park Archives, 2558/01-1723; Myrick, 611.

²⁷⁹ Mattice, V.O., “Correspondence with W.M. Childs and proposal for Ryan Baby Gauge rehab,” 8 December 1960, U.S. Borax Collection, Death Valley National Park Archives, 2558/01-1723; Childs, Wendell M. and George J. Roche, “Summary letter on recommendations for Ryan Baby Gauge railroad project,” 1 June 1961, U.S. Borax Collection, Death Valley National Park Archives, 2558/01-1815.

Ryan Historic District

Name of Property

Inyo, CA

County and State

Death Valley driving its particular model of car, to show its product could handle even the most extreme climates. Publicity for the landscape itself was a by-product, as the drivers documented their journeys and marveled at the sights.²⁸⁰ Writers and filmmakers were not far behind and waxed rhapsodic about the unusual features of Death Valley.²⁸¹ The Automobile Club of Southern California began placing signs on the area's primitive roads and created maps for adventurous drivers. The drama and danger of the Valley continued to be a large part of the appeal, but over time the increased exposure (propelled in large part by PCB's investment in public relations and advertising) shifted public perception toward Death Valley as an attractive, even healthful winter resort destination.

Bob Eichbaum started the first tourist development in Death Valley by obtaining a toll road franchise and constructing the road in 1925-1926. The 38-mile-long route ran from Darwin Falls on the western side of Death Valley to Stovepipe Wells, where he established the Valley's first tourist resort.²⁸² At the same time, Albert Johnson was constructing a massive home in Grapevine Canyon, encouraged by his colorful friend Death Valley Scotty. The architecturally impressive "Scotty's Castle," as it came to be known, drew tourists enamored of Scotty's tall tales and claims of hidden riches. PCB decided it was time to get in on the burgeoning tourist market, and began construction of the upscale, A.C. Martin-designed Furnace Creek Inn in 1926. The company originally considered making Ryan the hub of its tourist facilities, but decided it was too difficult to access and too far from water sources. It opted instead to build the Inn at the mouth of Furnace Creek Wash.

PCB had little trouble transitioning into the tourism business in Death Valley—as historian Richard Lingenfelter put it, "the versatile company simply turned from salt to scenery."²⁸³ It formed the Death Valley Hotel Company (DVH) and made a deal with the Union Pacific Railroad (UPRR) to begin a combination rail-auto tour of Death Valley, using UPRR cars, engines and employees on the T&T and DVRR lines. A 1927 UPRR circular announced the new Death Valley tour: passengers left on the T&T line from Crucero, California, proceeded north to Death Valley Junction, then took the DVRR to Ryan.²⁸⁴ From there, a bus took the tourists to see some of the valley's geological and cultural sights (including the 40-year-old ruins of the Harmony Borax Works), with two nights' stay at the Furnace Creek Inn.

As detailed above, in 1927, PCB converted Ryan into the Death Valley View Hotel. Ryan superintendent Julian Boyd managed the hotel for a short time, handing it off to assistant superintendent Harry Gower and his wife Pauline in 1928; Pauline managed the hotel, while Harry focused on dismantling the remnants of the mine operations.²⁸⁵ Pauline Gower eventually moved to Death Valley Junction to manage the Amargosa Hotel, an additional example of PCB's tourism transformation of its Death Valley properties. In 1924, PCB had commissioned architect Alexander Hamilton McCulloch to design an elaborate civic center and housing facility for mill

²⁸⁰ Lingenfelter, 442-446.

²⁸¹ Ibid., 444-446.

²⁸² Ibid., 451-452.

²⁸³ Ibid., 396.

²⁸⁴ Union Pacific System, "Death Valley Tour, January 1927," Circular No. 1-1927 of the Los Angeles and Salt Lake Railroad Company, copy on file Death Valley Conservancy Archives.

²⁸⁵ Gower, *50 Years in Death Valley*, 117, 128.

Ryan Historic District

Name of Property

Inyo, CA

County and State

and DVRR employees. Located conveniently along the T&T rail line, the sprawling adobe complex built in the Spanish Colonial Revival style was readily repurposed to accommodate tourists. To create more housing, DVH developed the old Greenland Ranch into the Furnace Creek Camp and then Furnace Creek Ranch, providing rustic cabin housing that boasted more affordable rates than those at the Inn.

With the stock market crash of 1929 and subsequent Great Depression, tourist visitation declined in Death Valley overall, as most people lacked the discretionary funds needed for travel (and especially for hotel stays). In 1930, DVH ceased operation of the Death Valley View Hotel as a year-round, stand-alone facility. It kept using the hotel as overflow housing when the Inn and its newly constructed Furnace Creek Camp at Furnace Creek Ranch were overbooked, continuing into the 1950s. The DVRR rails were pulled up and shipped away for use elsewhere. Ryan did experience high tourist visitation, if not overnight stays, thanks to the company's operation of the Baby Gauge rail line as a short sightseeing trip beloved by tourists. The line's precarious route along steep slopes thrilled riders, as shown in a 1938 newspaper account: "As the little train, motivated by a gasoline powered engine, rumbles around the mountainside, one can look down into the wash, up which the road to Dante's View ascends and as automobiles pass up or down that route they appear no larger than Christmas toys from the vantage heights above."²⁸⁶ As previously mentioned, UPRR stopped doing its Death Valley tours in 1930, and after DVH made a few other attempts to keep the rail and auto tours going, those ceased by the mid-1930s.²⁸⁷ Even the Baby Gauge eventually fell out of favor, and the DVH closed it down in 1949.

In 1956, PCB (now U.S. Borax and inheritor of the DVH) entered into an agreement for the Fred Harvey Company to lease and operate its Death Valley hotel properties; ten years later, the Fred Harvey Company purchased the Furnace Creek Inn and Furnace Creek Ranch.²⁸⁸ It did not assume operation of the Death Valley View Hotel and it permanently closed.

Ironically, as early as 1926, PCB's focus on Death Valley as a tourist destination led it to pursue National Park designation. The company had an ally in F.M. Smith's old promotions manager, Stephen T. Mather, who had left the borax industry to work for the Secretary of the Interior in 1915, and became the first director of the National Park Service in 1917.²⁸⁹ Working closely with Horace Albright (who later replaced him as director and whose son incidentally married the daughter of Harry Gower), Mather aimed to improve and expand the National Park system, and never forgot his experiences with the Death Valley borax industry. He was instrumental in the formation of the National Parks as we know them today. In 1927, Mather and Albright met with PCB officials R.C. Baker and C.B. Zabriskie to discuss Death Valley's potential as a tourism destination; the PCB officials expressed their wish that the company's Death Valley holdings be incorporated into the National Park system.²⁹⁰ This did not come to be until 1933, when Death

²⁸⁶ Blewett, Herschel, "Motor Party Thrills to Death Valley Winter Charms," *Los Angeles Evening Herald and Express*, 14 December 1938.

²⁸⁷ Woodman, *She Burns Green!*, XXIV-10.

²⁸⁸ Jensen, Marvin and Bev Malley, "The History of Furnace Creek Ranch and Resort," *Death Valley 49ers Keepsake* No. 52, 2012.

²⁸⁹ Travis and Cocks, 164.

²⁹⁰ *Ibid.*, 166.

Ryan Historic District

Name of Property

Inyo, CA

County and State

Valley became a National Monument following years of PCB advocacy ranging from magazine articles to the development of a radio show, *Death Valley Days*.

Up until that time, PCB managed the majority of the road maintenance in the Valley as part of its tourist trade; after Death Valley achieved National Monument status, California Conservation Corps (CCC) crews did much of the road work and infrastructure development that enabled tourist traffic to increase further. Death Valley did not become a National Park until 1994 as part of the California Desert Protection Act; at this time, it was enlarged by approximately 1.5 million acres. PCB was directly responsible for the initial federal protection of the valley's unique natural and cultural resources, and its employees were important players in the development of the National Park Service in general. Today, over one million people visit Death Valley National Park each year.²⁹¹

Property Types Associated with the Historic Context of Death Valley Tourism

Since many of the properties associated with the Ryan Historic District originated with the mining context but were adaptively reused for tourism purposes, they fall under the property types outlined above and Property Type 6: Tourism-Related Resources.

Property Type 6: Tourism-Related Resources

Starting during Ryan's life as a borax mining community and extending into the 1950s, PCB's pursuit of the tourist trade left its mark on the district's physical environment. Its best-known tourism-related resource was the Baby Gauge railroad, which of course began as an industrial feature and experienced modifications as it became a recreational destination for visitors. Many of Ryan's buildings and parts of its landscape were also affected by their conversion for the tourist trade. This property type covers those resources that gained their significance during Ryan's tourist-focused period; as few extant resources are known to have been built or brought in specifically for visitors after 1927, resources evaluated under this property type will also fall under other property types.

All of the known tourism-related resources at Ryan were constructed or brought in by PCB and its affiliate DVH, and remained under company control during the town's life as a tourist destination. As a crucial part of the history of the Ryan district and as examples of the region-wide shift from borax mining to tourism, Ryan's tourism-related resources are significant on an individual level and as elements that contribute to the significance of the overall district. These resources include buildings, structures, structural vestiges, linear features, equipment, and artifact scatters. They may be archaeological rather than architectural in nature and should be viewed as part of the cultural landscape.

Ryan's various tourism-resources fall under one area of significance: Entertainment/Recreation, subcategory Tourism. They are significant on the local level under Criteria A, C, and D. The

²⁹¹ "Death Valley National Park Visitors Top 1 million for 2022," *inyoregister.com*, 7 Mar 2023, https://www.inyoregister.com/news/death-valley-national-park-visitors-for-2022-top-1-million/article_40834b64-bcf9-11ed-9915-372aa9e8803e.html. Accessed 10 October 2023.

Ryan Historic District

Name of Property

Inyo, CA

County and State

period of significance is 1928 to 1956, starting with the opening of the Death Valley View Hotel in 1928 and ending with the cessation of tourism activity in 1956.

ARCHITECTURE

The Ryan Historic District's distinctive architectural style is best described as corporate vernacular: it reflects both a unified corporate style and utilitarian adaptations to local climatic and geographical conditions. Corporate vernacular architecture is commonly associated with company-sponsored towns, and especially those in the mining industry, as employers sought to control and manage workers to promote reliability, and in effect increase mine production.²⁹² This is especially true at Ryan, where the harsh environment and remote geographical location caused PCB much difficulty in finding and keeping a steady workforce. Thus, the district's built environment embodies both the PCB corporate ethos along with the idiosyncrasies and constraints of mining in Death Valley. Its architecture, both extant and demolished, also reflects the evolving values of the borax company and its ongoing efforts to ensure the longevity of the mining camp.

Today, the Ryan Historic District is unparalleled in terms of its unique architectural character. Its built environment reflects a mix of influences affecting this character, starting with the *ad hoc* placement of both site-built buildings and those moved via the DVRR from elsewhere in the 1910s, continuing with PCB's modernization and creation of a synchronous landscape in the early 1920s, and culminating in the company's conversion of Ryan into the Death Valley View Hotel in the late 1920s. The subsequent years of private ownership and regular maintenance ensured Ryan's survival in an unforgiving climate at a challenging geographical location.

The Pacific Coast Borax Co. and Corporate Vernacular Architecture

PCB was the primary shaper of Ryan's built environment, and initially assembled the town mostly from structures that came from its other properties. The tiny wood-framed, wood sided cabins that housed most of Ryan's employees between 1914 and 1920 came from old Ryan at the Lila C, and many had been at Borate before that (Figure 13). The Store/Post Office also came from old Ryan, and it is likely that many of the small shops, offices, and outbuildings were moved as well (Figures 1, 2). In fact, of the 30-plus structures depicted on the first known map of Ryan, the only ones that were of probable new construction were the Boarding House (later Dining Room), the ore bins, and the large superintendent's house that was later used as a hospital (and then significantly remodeled into the current hospital building) (Figure 35).²⁹³ Most of the larger buildings transported to Ryan were added onto, renovated, or adapted to the landscape of the burgeoning camp.

²⁹²Alanen, Arnold R., "Corporate Vernacular: Communities and Housing in Michigan's Copper Country," Abstracts: Vernacular Architecture Forum Conferences, 1982-1984, *Perspectives in Vernacular Architecture*, vol. 2, 1986, pp. 215-216, JSTOR, <http://www.jstor.org/stable/3514332>. Accessed 22 Oct. 2023.

²⁹³Todd, A.B., "Hand-drawn map of Ryan buildings (for insurance purposes)," ca. 1914, U.S. Borax Collection, Death Valley National Park Archives, 2558/01-1075.

Ryan Historic District

Name of Property

Inyo, CA

County and State

Ryan's first buildings were born of expediency and thrift, reflecting PCB's need to quickly establish a place for its workers to live while they developed the new Death Valley mines. As previously mentioned, the resulting architectural style is best described as corporate vernacular: it reflected both a unified corporate style and utilitarian adaptations to local conditions. Between 1914 and 1920, Ryan's buildings shared several distinguishing traits, most of which were carried over to the newer buildings in the 1920s (Figure 37). The dominant, though far from exclusive, characteristics of Ryan architecture throughout its lifespan were the reuse of old buildings and building materials, post and pier foundations, corrugated metal and wood siding, and gabled roofs covered with corrugated galvanized iron.

The post and pier foundation, in which timber was set directly on the ground, is an architectural element found on almost all of Ryan's buildings. It was a sensible adaptation to Ryan's steeply sloping topography, since for many of the smaller buildings only a partial cut into the hillside was necessary, and the foundation extended to the height necessary to provide a level building surface beyond the cut. Even today, some of the town's buildings are set partly on grade and partly on elevated wooden foundations. Some of the buildings' pier foundations were clad with vertical fascia boards, effectively enclosing the open space underneath the structures.

All of Ryan's buildings were wood-framed, and the early ones were sided with either wood siding or corrugated galvanized iron. Both horizontal and vertical wood siding were used, some in a board and batten configuration. Corrugated galvanized iron eclipsed wood siding by the 1920s, with the removal of the old wooden cabins, and today all of the buildings except the bunkhouses and the Rec Hall are sided and roofed with corrugated galvanized iron. This gave the town a unified industrial feel, with even the small Schoolhouse fully clad in metal. Whether wood or metal, the siding material was generally left unpainted or painted a light color (white/ivory) with a darker color (green) on the door and window frames. Windows and doors featured simple wood surrounds.

Many of Ryan's residential and community buildings, even some small cabins, had a porch or a covered entrance and most of the porches were screened. As early as 1915, the large superintendent's dwelling had a wraparound porch. The visible porch columns on the small cabins, Store/Post Office, and Boarding House were unornamented posts, while those on the superintendent's house/old hospital were turned in a simple Victorian style. Most buildings were accessed by a short set of wooden steps, a necessity on the slopes of the town.

Ryan's roofs were almost entirely gabled and most were front-gabled. Unpainted corrugated galvanized iron was commonly used as a roofing material on large buildings like the Boarding House and Store/Post Office as well as smaller buildings.

One of Ryan's most distinctive buildings, the Rec Hall arrived at Ryan by 1919. As previously discussed, it was originally constructed as a church in Rhyolite, Nevada around 1906 and was brought to Ryan to provide residents with space for dances, movies, plays, and musical performances. The Rec Hall is the only ecclesiastical building in the Ryan Historic District, as well as the only clapboard-sided. Most of the Rec Hall's windows have Gothic-style transoms over double-hung sashes, in a vernacular interpretation of a tall Gothic window. With its belfry

Ryan Historic District

Name of Property

Inyo, CA

County and State

removed, corrugated galvanized iron siding on the northern addition, and its exterior painted in the same two-tone color scheme as the town's other buildings, the Rec Hall was made to fit in with the rest of the town's architecture as much as possible. This building is an excellent illustration of PCB's corporate vernacular approach to Ryan: an older building moved and repurposed to serve the needs of an isolated workforce, in as economical a manner as possible, with modifications to improve its functionality and to incorporate it into the town's architectural style.

During the period from 1920-1925, PCB aimed to create a more visually integrated, physically compact community and so it began a series of modernizing improvements to the core of Ryan Camp (Figure 40). Building on the architectural elements characterizing the early years, the company focused on the construction of new buildings, the renovation of old buildings, the addition of site unifying features, and the removal of most of the old wood-sided cabins.

Almost all of Ryan's extant buildings were constructed during the modernization years. PCB continued its preference for industrial appearing wood-framing with metal siding and roofs, however they started to use concrete for foundations, wall structure, and exterior porches. The first and most prominent new buildings, the two bunkhouses built in 1920, are two-story structures with concrete foundations and second floors built of wood joists and concrete over expanded metal lathe, likely because they were economical and fire resistant.²⁹⁴ Concrete slab screened-porches on the buildings' long sides have simple wooden columns embedded in them to support the overhanging gabled roofs, which have exposed rafter tails. Unlike Ryan's other buildings, the bunkhouses have stucco facing, reflecting the popularity of that material in Southern California during the time period, as well as its suitability for an arid climate. Aside from the exposed rafter tails, the bunkhouses do not have any real ornamentation or characteristics of a particular architectural style. They were designed to be streamlined and simple, with simple wooden door and window surrounds, in keeping with the efficient, utilitarian character of the rest of the town's buildings. A small plumbed washroom sat between the two bunkhouses, combining the stand-alone nature of an outdoor privy with the modern conveniences of plumbing and steam heat. With the move of the bulk of the workforce into the "splendid steam heated concrete bunkhouses,"²⁹⁵ the company was able to boast it had the most modern accommodations of any mining camp in the area.

Concrete was also incorporated into the Warehouse building: its foundation is a concrete slab poured on grade, with a small concrete-walled basement space, and its second story floor is concrete on expanded metal lathe. Completed in March 1924, it contained storage space on the first floor and living space for kitchen staff on the second floor. Like the other buildings, it was wood-framed, gable-roofed and corrugated-galvanized-iron-clad; it is definitely more warehouse than residence in style, with an exterior staircase, and a concrete loading ramp. The trim was painted green, however the metal siding was left unpainted.

²⁹⁴Rabun, J. Stanley, *Structural Analysis of Historic Buildings: Restoration, Preservation, and Adaptive Reuse Applications for Architects and Engineers*, New York, John Wiley & Sons, Inc., 2000, 85.

²⁹⁵ "Many Miners Go to Death Valley," *Reno Evening Gazette*, 12 November 1920.

Ryan Historic District

Name of Property

Inyo, CA

County and State

Other primary buildings newly constructed during this era include the management residences (Houses 1-5), the Schoolhouse and the Powerhouse. Like the bunkhouses and the Warehouse and with the exception of the Powerhouse, they all had the standard Ryan characteristics: post and pier foundation, wood framing, corrugated galvanized iron siding and roofing, and an overhanging gabled roof. The residences each have a screened porch with simple wooden columns (except for House 3), double-hung windows, two-tone color scheme, and post and pier foundations. The Schoolhouse has the classic shape and configuration of a small one-room schoolhouse, even containing a small tower cupola with the iron bell that rang to signal the beginning of the day's lessons. However, the entire building is sided and roofed with corrugated galvanized iron, giving it a distinctly industrial feel and tying it to the rest of Ryan's corporate vernacular architecture. The Powerhouse is only industrial—purposed for housing the source of the camp's electrical system. It has a multi-gabled roof, perhaps reflecting different additions over the years, simple openings and a timber on grade foundation.

PCB also renovated several buildings in the first half of the 1920s. Two of the most substantial renovations occurred with the original superintendent's residence/old hospital and the Store/Post Office and old boarding house (Dining Room and Kitchen). The old hospital was renovated into a new two-story building with medical facilities, a laundry room, a kitchen, and rooms for staff and guests. Its style reflected that of the other buildings at Ryan, with the same characteristics listed above (but with a complete wraparound screened porch, and unornamented wooden porch columns). Ryan's Store/Post Office and Boarding House also went through major changes, including the store's reorientation, placement on a lower post and pier foundation, and an addition to its northern end to make it longer. The Boarding House received a large gabled addition to its west side, containing a modern kitchen, lunch counter, and storage areas. The Boarding House's western addition has the appearance of an independent building with its own roof (which, like the bunkhouses, Warehouse, and Powerhouse addition, has exposed rafter tails), but it is a true addition. This building consisted of two gable roofed buildings, one larger and one smaller. All of the new additions exhibited the same utilitarian style and corrugated galvanized iron siding/roofing material seen on other structures.

To further unify the property, PCB constructed the large, stepped terraces that dominate Ryan's built environment today, reinforcing them with walls of dry-laid, faced native volcanic rock and adding stairways connecting them. Concrete walkways linked buildings on the residential level and were laid on lower terraces to connect the DVRR line to ascending and descending stairways. Wooden railings sat atop each terrace: one painted green and white, was placed at the residential level running the whole length of the terrace, a green one with an X pattern ran along the southern edge of the DVRR level, and a 3-railed green one started on the terrace above the Schoolhouse, continued down the slope on the north side of Ryan Road, and ended just north of the Schoolhouse. The railings have been repaired and replaced over the years with different configurations but are now being restored to their original designs.

By 1925, PCB had completed Ryan's transformation from an almost completely recycled settlement into a mainly new one, boasting fine accommodations for management and convenient, clean rooms for employees. It was nowhere near as grand and unified as Death

Ryan Historic District

Name of Property

Inyo, CA

County and State

Valley Junction, with its Alexander McCulloch-designed, Spanish Colonial Revival style civic center, but it did not have to be—Ryan may have reflected PCB's ideals of order, but it was not the public face of the company, as was Death Valley Junction. The mill town sat at the intersection of the railroad and one of the few automobile routes into the increasingly tourism-oriented Death Valley, and the borax company saw it both as the base for its continuing operations in the area and as a point of corporate and civic pride. Ryan, as modern as it was, still had just one function: housing mine workers. It now had the capability to house more mine workers than the town had ever seen, reflecting PCB's intent to keep mining in Death Valley.

By 1927, though, Ryan's stint as a model borax mining town was at its end as PCB was readying for the move to the Kramer deposit. The Death Valley Hotel company that managed all of PCB's tourist facilities began to shift Ryan from a mining camp to a tourist facility. Because of the recent consolidation and improvements, the only new structure the hotel company built to attract tourists was the tennis court. The majority of the changes to the existing buildings were to the interiors, with the upgrading of one of the old boarding house rooms into a hotel lobby (including the addition of a large fireplace and chimney), and modifications to the houses and Hospital that would be used for guest accommodations. The Hospital's kitchen was removed and the infirmary rooms were redecorated into hotel rooms. The most significant changes were inside the bunkhouses, both of which saw interior reconfigurations to create a small lobby area and indoor bathroom facilities, providing indoor plumbing for the first time. In the southern bunkhouse (Bunkhouse 1), bathrooms were added to each end of the halls and sinks were installed in the guest rooms. The northern bunkhouse (Bunkhouse 2) rooms were reconfigured into mini-suites with full bathrooms, and its furnishings were upgraded. Both bunkhouses' exteriors were painted an ochre color with green trim, matching the paint scheme at the Furnace Creek Inn and the Amargosa Hotel at Death Valley Junction. Their exterior stairs were reconfigured, and landings were added for fire exits. With the addition of indoor plumbing, the Shower House between the two bunkhouses was demolished.

Overall, the character and feeling of Ryan did not change much with its conversion into a hotel, and that was intentional on the part of PCB—after all, it had put a lot of work into modernizing its mining town. Of course, what the company saw as a state-of-the-art mining town ingeniously adapted to a challenging topography and climate, tourists saw as a romantic remnant of the Wild West in a rugged and beautiful setting. Today, Ryan is missing some of its 1920s buildings and its surviving buildings have experienced some alterations; but, the original architectural character of its company-sanctioned buildings is largely, and surprisingly, intact.

Character-Defining Features of the Ryan Historic District

Several character-defining features are important in conveying Ryan's significance as one of the best remaining examples of twentieth-century frontier mining corporate vernacular architecture in California and the West. With their origins in the mining years, these features were incorporated into the architecture of Death Valley View Hotel, allowing Ryan to easily evolve from the mining to the tourist industry.

Ryan Historic District

Name of Property

Inyo, CA

County and State

Wood-framing

Corrugated galvanized iron and minimal wood siding

Unpainted corrugated galvanized iron siding on non-residential buildings

Two tone color scheme

White or ivory painted siding on domestic buildings

Dark green painted trim and door and window casing

Unpainted corrugated galvanized iron roofs

Gabled roofs

Covered porches or entrances, many screened, some with concrete aprons/floors

Concrete foundations and wall structures

Timber on grade and post and pier foundations

Exposed rafter tails

Simple wooden porch columns

Double hung windows

Rock-faced stepped terraces

Wooden railings

Concrete and wooden stairways

Concrete and wooden walkways

Property Type Associated With Architecture

One property type is associated with the Architecture of the Ryan Historic District—Property Type 7: Company Architecture. Unlike the rest of the property types, this one is applicable only to extant architectural resources. This property type will apply to resources associated with other property types falling under other historic contexts.

Property Type 7: Company Architecture

This property type includes all of the district's standing buildings and structures that were either moved, constructed, or renovated under the auspices of PCB and/or DVH. The majority of the district's known extant architectural resources fall under Property Type 7. These resources represent the corporate vernacular architectural expression of the borax company's aspirations, namely maintaining a functional, modern, productive, and economical industrial community. They are important on an individual level, but definitely significant as elements that contribute to the significance of the overall district.

Ryan's company architectural resources fall under one area of significance: Architecture. They are significant on the local level under Criterion C. Their period of significance is 1914 to 1927, starting with the establishment of Ryan and ending with the last PCB architecturally-related construction/renovation in 1927.

To be considered significant, company architectural resources must be demonstrably associated with the history of the Ryan district during the period of significance, and must retain sufficient integrity to be recognizable and interpretable as corporate vernacular architecture. They should also retain, where applicable, the character-defining features outlined above.

Ryan Historic District
Name of Property

Inyo, CA
County and State

HOLLYWOOD COMES TO RYAN: FILM AND TELEVISION PRODUCTION, 1952-1959

Overlapping with the last years of tourist accommodation, Ryan was used as a filming location for one major motion picture (*Spartacus*, 1960), several episodes of the Western genre television series *Death Valley Days* (1950s), and one episode of the television series, *The Twilight Zone* (1960). Its involvement in the burgeoning entertainment industry is not surprising given its anachronistic and unique character; in addition, Ryan's location provided a quiet, undeveloped setting and yet was in proximity to the studio production facilities of Southern California. Ryan's association to entertainment mirrors similar contemporaneous activity occurring in larger Death Valley and the eastern Sierra; from the early 20th century to the present day, filmmakers have been drawn to the area's otherworldly scenery, vast desert expanses, and dramatic terrain for various cinematic purposes. Death Valley's unique landscape has provided a backdrop for silent films telling harrowing tales in the harsh desert such as found in Erick von Stroheim's *Greed* (1924), archetypal Westerns such as *Yellow Sky* (1948), and sci-fi classics like *Robinson Crusoe on Mars* (1964) and more recently, *Star Wars Episode IV: A New Hope* (1977). What distinguishes the Ryan Historic District from other Death Valley filming locations is the fact that most of the sets, backdrops, and defining features that drew filmmakers here remain extant and largely unchanged.

Location Filming in the Ryan Historic District

Although Ryan's initial exposure to the entertainment industry began in the 1920s with the cast and crew of *Greed* arriving to Death Valley via the DVRR, the first actual filming to occur within the district's boundaries was not until the early 1950s. Not surprisingly, Ryan as a film location mirrored, albeit on a smaller scale, that which was happened in the larger Death Valley entertainment industry context, with Ryan simulating first western frontiers, then exotic historical lands, and finally extraterrestrial landscapes. While much of the historical documentation regarding the logistics of filming at Ryan in terms of contracts, schedules, set-up, and cast and crew accommodations has not been located; so, first-hand accounts, photographic documentation, archaeological remains, and the filmed scenes themselves indicate how Ryan was altered to transport viewers to different times and places.

***Death Valley Days* (1952-1975)**

Along with the several feature films shot on location in Death Valley were episodes of a few television series; of these, the producers of *Death Valley Days* more frequently utilized its namesake region in episode production. What started as a radio program in 1930, *Death Valley Days* was the longest-running American television anthology series, airing from 1952 to 1975. The television series was sponsored by Pacific Coast Borax and focused on dramatizing stories based on real events and characters from the "Old West." The initial episodes were about Death Valley and the surrounding region, but the show later expanded to include other places associated with Western figures or imbued with Western lore. The show was hosted by the Old Ranger, Stanley Andrews, and the episodes were interspersed with commercials promoting the

Ryan Historic District

Name of Property

Inyo, CA

County and State

many household uses of borax. Each episode opened with an iconic bugle call and what has been identified as the “location-based establishing shot,” one of the earliest trends in location filming for television in which the first shot of a scene or episode visually alerts the audience to where the scene is taking place.²⁹⁶ Even when television shows were filmed at different locations or entirely within the studio, the location-based establishing shot helped to set the tone for the scene and show and lend some degree of authenticity to the narrative. For *Death Valley Days*, the location-based establishing shot took place in Death Valley and depicted the Twenty Mule Team Borax wagons trudging across the salt pan on their way to deliver borax to the market.

Death Valley Days is significant in that it was the first Western themed radio program (pre-dating the *Lone Ranger* by three years), it was the longest-running Western anthology series, and it was created, written, and later adapted for television by Ruth C. Woodman (1894-1970), a female writer. Born in England, Ruth Woodman attended Vassar College and began copywriting and editing for a New York advertising agency in the 1920s. PCB hired the advertising agency to address its sagging borax sales; the agency suggested that the company develop a radio serial associated with where borax was mined—Death Valley.²⁹⁷ Woodman wrote one episode and was immediately recruited by PCB to create and write *Death Valley Days* with the condition that she conduct field research and base each story on factual narratives and individuals. Woodman accepted the task with sincerity and focused on authenticity and fact-checking in her writing; she traveled to the Death Valley region every summer for fourteen years to interview locals, study its history, and trace down little-known facts and anecdotes which she translated into scripts.²⁹⁸ When asked about her unique method for gathering material for her stories, she once explained

...we developed a technique in which Mr. Cahill, my guide [and longtime PCB employee], would stop at the most prosperous-looking bar in town and announce to the bartender that the author of *Death Valley Days* [sic] was there. The bartender would poke his head out of the door and holler up and down the street. Pretty soon people would start to drift in and tell us wonderful stories of the past. Why, they would even save them from year to year.²⁹⁹

The popular radio series ran from 1930 to 1945, and in 1952 at the request of PCB Woodman adapted her radio serial into a television program, writing the screenplays alone for five years before assuming the role of head copywriter. The first show to premier on 1 October 1952, “How Death Valley Got Its Name,” along with many of the subsequent episodes in the early seasons were direct translations of the radio scripts and focused exclusively on the Death Valley region. The series was filmed by Gene Autry’s Flying A Productions (then McGowan Productions) and

²⁹⁶ Lazzaretto, Christine and Heather Goers, “Filming Locations Associated with the Motion Picture and Television Broadcasting Industries, 1908-1980,” *Planning.lacity.gov*, SurveyLA—Los Angeles Citywide Historic Context Statement, 2019, 25, https://planning.lacity.gov/odocument/e68277d1-b3b8-4a25-9f4a-75638c4a728a/7.1_Entertainment_Industry_Residential_Theme_1908-1980.pdf. Accessed 15 August 2023.

²⁹⁷ Du Brew, Rick, “Story of ‘Death Valley Days’ best of all,” *Redlands Daily Facts*, 23 June 1969, 14.

²⁹⁸ National Park Service, “Ruth Woodman,” www.nps.gov, <https://www.nps.gov/people/ruth-woodman.htm>. Accessed 15 August 2023.

²⁹⁹ Kovitz, Ray, “Author Wrote Death Valley Script Before Seeing Region; Now She’s Leading Authority,” *Los Angeles Times*, 18 August 1952, 26.

Ryan Historic District

Inyo, CA

Name of Property

County and State

occurred at the Flying A and Paramount Studios in Hollywood and on location in Lone Pine and Death Valley.³⁰⁰ Location filming was quite elaborate and consequently expensive: for the first episode, fifty people from the production company were flown to Death Valley and an entire wagon train, props, oxen, horses, and burros were trucked 200 miles from Los Angeles.³⁰¹ Reportedly, actors worked day and night, sometimes in extreme heat. The schedule for each 30-minute episode called for one week of shooting and three weeks of production; however, the filming for multiple episodes shot on location was often piggy-backed together to save travel time and expenses.³⁰² Instead of being broadcast on a single network, *Death Valley Days* was marketed to independent stations and often given for free with advertisements. It was not syndicated and subsequently broadcasted at the discretion of local networks.³⁰³ The series was well-received by general audiences because purportedly “unlike most westerns, it [was] peculiarly suitable for kids of all ages, little fellers and grown ups...it [was] real and honest.”³⁰⁴ That said, it seems that *Death Valley Days* follows the formula of what Christopher Langley identifies as the “adult western” genre; several of the episodes shot at Ryan, for example, have the adult themes of frontier violence, ridicule, deceit, thievery, bigamy, and assault.³⁰⁵

The show was eventually expanded beyond Death Valley to include true stories originating from more general American Western history and folklore. Woodman remained involved in story editing for several years and by the end of her work on *Death Valley Days*, had written over 700 scripts and a historical account of the Pacific Coast Borax Company.³⁰⁶ Reflecting back on her career, Woodman reminisced that she “‘gambled with prospectors and miners, packed in to the desolate Panamint Mountains on horseback, looked down the business end of a shotgun after being mistaken for a claim jumper, explored deserted mines and had several offers of marriage from Death Valley citizens’” in her search for material.³⁰⁷

***Death Valley Days* Location Filming at Ryan**

By the time *Death Valley Days* radio scripts were adapted for television and ready to start filming, Ruth Woodman had become extremely familiar with potential filming locales in Death Valley. Her first visit to Ryan was in the 1930s after mining had ceased and the Death Valley View Hotel operated on a limited basis; thus, Ryan was essentially a ghost town. PCB (then U.S. Borax) ensured the camp was protected and maintained in perpetuity by employing fulltime caretakers, thus it was extremely well-preserved despite its near abandonment. It also had very few “modern” visual intrusions such as building remodels, modern high tension power poles, and paved roads; because it was removed from city, highway, and airplane noise, it was also very quiet. Woodman, with her meticulous attention to detail and desire for authenticity, recognized

³⁰⁰ Ibid.

³⁰¹ Walker, Ellis, “Radio-TV,” *Daily Palo Alto Times*, 23 August 1952, 10.

³⁰² Ibid.

³⁰³ Wystrach, Steve, pers. comm., 5 September 2022.

³⁰⁴ Newton, Dwight, “Day and Night with Radio and Television,” *The San Francisco Examiner*, 22 December 1952, 18.

³⁰⁵ Langley, Christopher, “The Film History of Death Valley: From Jayhawkers to Jawas,” *Death Valley 49ers Keepsake* No. 54, 2014, 44.

³⁰⁶ National Park Service, “Ruth Woodman”; Woodman, Ruth, *The Story of the Pacific Coast Borax Co.*, Borax Consolidated, Ltd., 1951.

³⁰⁷ Ames, Walter, “New Microwave Relay Brings Three ‘Live’ Eastern Shows to Southland at Same Time,” *Los Angeles Times* 30 December 1952, 22.

Ryan Historic District

Name of Property

Inyo, CA

County and State

the filming potential at Ryan, and seven episodes were filmed there in the 1950s: two episodes of Season 1, “Claim Jumpin’ Jennie” (S1E14) and “The Bandits of Panamint” (S1E15); two episodes of Season 2, “Yaller” (S2E10) and “Twelve Pound Nugget” (S2E11); one episode of Season 3, “Million Dollar Wedding” (S3E12); and two episodes of Season 4, “Mr. Bigfoot” (S4E14), and “Escape” (S4E15). Episodes occurring during the same season were filmed and broadcast in tandem, thereby lessening the logistical challenges of repeated travel, transport, and set dressing. Each episode is discussed in more detail below and relevant resources are described in the Description section of this document.

“Claim Jumpin’ Jennie” (S1E14) Airdate: 31 March 1953

In this episode, the title character (Irene Barton) is a disreputable, down-and-out miner in an ongoing dispute with another miner (Buck Hansen) outside of the town of Rhyolite, Nevada. Her prim and proper daughter (Karen Sharpe) arrives unexpectedly assuming that Jennie is a wealthy mine owner, only to be disappointed when she finds out the truth. The episode was directed by Stuart McGowan, written by Ruth Woodman, with Dorothy McCann of McCann-Erickson as the executive producer.³⁰⁸ Episode filming mostly took place outside the Hotel Complex and attached Store building and at the houses that were once on the Little Mesa. While the production design crew set-dressed the porch with props like barrels, buckets, benches, and a “US POST OFFICE” sign, the porch appears on screen much as it does today. In addition, a painted sign above the hotel Lobby door which reads “HOTEL LOBBY DINING ROOM” is still visible. This episode is notable in that the actual townsite of Rhyolite is only 30 miles from Death Valley and still had several structures standing at the time of filming; however, the preservation and architectural landscape at Ryan trumped this potential authenticity. In addition, the Ryan’s Rec Hall building originated from Rhyolite where it served as St Mary’s Catholic church before it was moved.

“The Bandits of Panamint” (S1E15) Airdate: 7 April 1953

In this episode, two outlaws (Rick Vallin and Britt Lomond) are on the run when they discover a rich vein of silver near Panamint City, California. Since they are fugitives, they enlist the help of a local lady (Sheila Ryan) to file the claim; she organizes an exchange of the claim for their freedom with a U.S. Senator (Howard Negley), but they are not sold on the deal. The episode was directed by Stuart McGowan, written by Ruth Woodman, and produced by Dorothy McCann of McCann-Erickson.³⁰⁹ Filming occurred primarily in the southern area of the Ryan, with the rear of the Hotel Complex, the Powerhouse, *Spartacus* Ridge, the Oil Transfer Structure, and the Baby Gauge track behind the Hotel Complex figuring prominently on screen. Two signs are seen in the episode, and one, “OFFICE” placed above the rear of the Lobby, is still on the property. Footage from the episode shows smoke emitting from the Powerhouse; it generated all of Ryan’s electric power until the 1960s, when line power was installed. The crew brought in a horse and carriage for sequences depicting the Senator arriving to the camp; these shots were filmed on the eastern side of the Store where the 1920s-era concrete gas pump

³⁰⁸ “Claim Jumpin’ Jennie,” *IMDb.com*, https://www.imdb.com/title/tt0556578/?ref_=ttpl_ov. Accessed 2 September 2023.

³⁰⁹ “The Bandits of Panamint,” *IMDb.com*, https://www.imdb.com/title/tt0946052/?ref_=ttpl_ov. Accessed 2 September 2023.

Ryan Historic District

Name of Property

Inyo, CA

County and State

foundation is located. This “modern” structure was carefully avoided by the camera’s lens (and as seen in production stills often used as a resting spot for cast and crew).

“Yaller” (S2E10) Airdate: 30 January 1954

In “Yaller,” a young miner (Ray Boyle) working at the Desert Queen Mine is ironically plagued by claustrophobia and his friends (Jan Shepard and Steve Mitchell) try to help him overcome his fears. The episode was directed by Stuart McGowan, written by Ruth Woodman, with Dorothy McCann of McCann-Erickson as the executive producer.³¹⁰ This episode contains several panoramic views of Ryan Camp. Like the other episodes, most of the filming took place on the back porch of the Hotel Complex and Store building; the Lobby was also used with a prop sign that said “PAYMASTER” and “TIMEKEEPER.” The Plymouth BL locomotive with a line of flat cars is shown operating on the Baby Gauge Level and main level of the camp. The Haulage Tunnel with its historic sign “DO NOT STAND UP” is also shown in the episode.

“Twelve Pound Nugget” (S2E11) Airdate: 30 January 1954

In this episode, a betrayed pregnant woman (Helene Marshall) flees to her sister’s (Maura Murphy) house in the remote Nevada mining camp of Gunsight. After giving birth, a local judge (George Cleveland) announces that the local men should visit the “12-pound-nugget” and the woman finally finds true love. The episode was directed by Stuart McGowan, written by Ruth Woodman, with Dorothy McCann of McCann-Erickson as the executive producer.³¹¹ As with the other episodes, filming occurred in the southern portion of Ryan Camp with very few changes to the buildings. Most notably, the front porch of the Store stands in for a general store and is set-dressed with bins, buckets, and other supplies. The Warehouse building and the front of the Lobby were used as backdrops as well.

“Million Dollar Wedding” (S3E12) Airdate 1 March 1955

Taking place at the Anniversary Mine, “Million Dollar Wedding” is a story about a homely woman (played by the gorgeous Virginia Lee) who is courted by a miner (James Best) that was bribed by his friends (Russ Todd and Steve Mitchell) with phony mining stock. He ends up falling in love with her and admitting his deception; the phony mining stock miraculously pays out. The episode was directed by Stuart McGowan, written by Ruth Woodman, with Dorothy McCann of McCann-Erickson as the executive producer.³¹² Like the other episodes, the filming occurred primarily at the rear of the Hotel Complex and the back porch of the Store (Figure 53). In contrast to the other episodes, the Hotel Complex buildings are set as residences as opposed to a general store or mine offices. The production design team outfitted the rear porches with rocking chairs and a clothesline was hung to suggest a domicile. Another prominent feature in this episode is the Plymouth BL locomotive and cars as it is shown descending from the Baby Gauge Level and running along the Baby Gauge track behind the Hotel Complex in several scenes. The three houses that were located on the Little Mesa also figure prominently in this

³¹⁰ “Yaller,” *IMDb.com*, https://www.imdb.com/title/tt0556933/?ref_=ttep_ep10. Accessed 2 September 2023.

³¹¹ “The Twelve Pound Nugget,” *IMDb.com*, https://www.imdb.com/title/tt0959706/?ref_=tplt_ov. Accessed 2 September 2023.

³¹² “Million Dollar Wedding,” *IMDb.com*, https://www.imdb.com/title/tt0556674/?ref_=fn_al_tt_2. Accessed 2 September 2023.

Ryan Historic District

Name of Property

Inyo, CA

County and State

episode as the residence of the married couple. This episode is significant in that it utilizes more on location resources as backdrops, including some buildings not pictured in other episodes. Two buildings that do not appear in other *Death Valley Days* are the outside of the Rec Hall, which poses as the church where the wedding takes place, and the Schoolhouse, in which the bell is shown ringing for the wedding.

“Mr. Bigfoot” (S4E14) Airdate 12 March 1956

Also taking place at the Anniversary Mine, “Mr. Bigfoot” is about a man (Charles G. Martin) ridiculed for his short stature who solicits the aid of a field archeologist (Paul Keast) recording evidence of Bigfoot in the area to help him gain confidence and win the heart of his desired ladyfriend (Ann McCrea). The episode was directed by Stuart McGowan, written by Ruth Woodman, with Dorothy McCann of McCann-Erickson as the executive producer.³¹³ Like the other episodes, most of the filming took place around the Store’s porch and the area in between the Store and the eastern rock face. The Powerhouse, Baby Gauge track, the transformer rack, Warehouse, *Spartacus* Ridge, and the Little Mesa houses are pictured in the episode with very little changes and props. The episode is unique in that it cuts to a nighttime scene with House 1 lit up from the inside.

“Escape” (S4E15) Airdate 30 March 1956

In “Escape,” an unnamed mining camp is clearing out for the summer months with only the mine superintendent (Mark Dana) and his wife (Beverly Tyler) left behind. An escaped fugitive (John Cason) holds them hostage and they must find a way to escape. The episode was directed by Stuart McGowan, written by Ruth Woodman, with Dorothy McCann of McCann-Erickson as the executive producer.³¹⁴ Most of the exterior filming occurred on the side of the Store with the camera view facing south. Storage Adit 1, a building and staircase (now missing), the Plymouth BL locomotive with cars, the Haulage Tunnel, and the Baby Gauge Level trackways are depicted. The episode also includes a panoramic view facing north of Ryan at night with House 1 lit up. Since this episode filmed in tandem with “Mr. Bigfoot,” the night footage was likely recycled. In writing this screenplay, Woodman may have drawn on historical figures associated with Ryan, as the fictional superintendent and real assistant superintendent share the first name Harry.

To celebrate the twenty-fifth anniversary of *Death Valley Days*, PCB and McCann-Erickson Productions held a press tour of Ryan in December 1955. Approximately twenty-five journalists flew into Furnace Creek to tour the region used as a background for the shows. At Ryan they observed the filming of “Escape,” and specifically the background shots in the desert area and sequences involving the Baby Gauge traveling in and out of the Haulage Tunnel.³¹⁵ The press got to meet and interact with Ruth Woodman, “certainly one of the greatest living authorities on Death Valley history,” “dynamic” producer Dorothy McCann, and Beverly Tyler, the star of the

³¹³ “Mr. Bigfoot,” *IMBd.com*, https://www.imdb.com/title/tt0556680/?ref_=ttpl_ov. Accessed 2 September 2023.

³¹⁴ “Escape,” *IMBd.com*, https://www.imdb.com/title/tt0556680/?ref_=ttep_ep15. Accessed 2 September 2023.

³¹⁵ Ames, Walter, “Death Valley Days Has Authentic Backgrounds,” *Los Angeles Times*, 17 December 1955, 21.

Ryan Historic District

Inyo, CA

Name of Property

County and State

episode.³¹⁶ One of the columnists remarked that the “scenery is superb [and] the landscape is so beautiful” that the authenticity of the show should never be questioned.³¹⁷ He penned that Ryan’s mine had been closed for many years, however, “the buildings and equipment are in perfect condition.” Moreover, he reported that viewers preferred real Death Valley landscapes over “phony backdrops”; in fact, “the entire valley and surrounding areas are little changed from olden days,” as “Death Valley remains one of the few places where one never sees an empty beer can or a billboard.”³¹⁸ Also to celebrate its twenty-fifth anniversary and perhaps partly due to this realism in filming, the following year *Death Valley Days* received a special Award of Honor from the Native Daughters of the Golden West for its “faithful, sympathetic and inspirational delineation of events and personalities enriching the glorious history of the State of California.”³¹⁹

“Escape” was the last *Death Valley Days* episode recognized as filmed on location at Ryan. It is not clear exactly why no further episodes utilized Ryan as a backdrop, but starting with Season 5 *Death Valley Days* broadened its thematic and regional focus. Perhaps to appeal to a wider audience, episodes began to feature stories from early California history and the Gold Rush, biopics of famous Western characters like Billy the Kid, tales out of the Pacific Northwest, and events occurring in western frontier towns like Tombstone. Additionally, PCB leased its hotel properties to the Fred Harvey Company in 1956, relinquishing any control over accommodations in Death Valley. The date may be only coincidental, but perhaps one draw of filming in Death Valley included free room and board for the cast and crew as provided by PCB, the show’s sponsor. Finally, the production team may have started to favor movie ranches over Death Valley location filming. Starting as early as the 1930s, movie ranches grew in popularity for their practicality, proximity to the studios, and versatility in settings and backdrops; in addition, transporting cast, crew, and equipment to Death Valley for only a week of shooting when similar backgrounds could be captured at a local movie ranch may not have been cost effective.³²⁰ It is known that *Death Valley Days* shot several episodes on location at Iverson and Melody Ranch in the greater Los Angeles area, and Old Tuscon, Apacheland, and Kanab Movie Ranches in Arizona and Utah.³²¹

***Spartacus* (1960)**

The opening sequence of *Spartacus* was shot on location in the Ryan Historic District. Directed by Stanley Kubrick and starring Kirk Douglas, Laurence Olivier, Jean Simmons, Charles Laughton, and Peter Ustinov, Universal’s *Spartacus* is a major motion picture that relates the historical account of a slave in the deserts of Libya who trained as a gladiator and then led a rebellion against the Roman Republic. The film was a drama of blockbuster proportions, on and off screen. It was a visually stunning masterpiece including 197 minutes of Technirama film with sweeping panoramas, epic battle scenes, elaborately constructed sets, and stellar acting. Behind

³¹⁶ Ibid.

³¹⁷ Pelgram, Bob, “Television and Radio’s Off Mike,” *Valley News*, 20 December 1955, 20.

³¹⁸ Ibid.

³¹⁹ *Los Angeles Times*, 15 October 1956, 46.

³²⁰ Lazzaretto and Goers, 19-21.

³²¹ “Death Valley Days Filming Locations,” *Moviemaps.org*, <https://moviemaps.org/movies/1w9>. Accessed 2 September 2023.

Ryan Historic District

Name of Property

Inyo, CA

County and State

the scenes, professional drama abounded and included disagreements over artistic vision and control, firings and hirings, lengthy production times, and political dissonance. The film is most notable for winning four Academy Awards (Best Supporting Actor for Ustinov, Best Cinematography, Best Art Direction, and Best Costume Design) and a Golden Globe Award for Best Picture - Drama. It was also the highest-grossing film of 1960, and the highest grossing film for Universal at that time. Like the title character, the legacy of *Spartacus* is enduring.

The Making of the Movie

The movie *Spartacus* started as the brainchild of Kirk Douglas, who read Howard Fast's 1951 novel of the same name and, acting as an agent of his production company Bryna Films, was impressed enough to purchase an option on the book. Universal Studios agreed to finance the film for \$4 million dollars after Douglas persuaded Olivier, Laughton, and Ustinov to act in the picture. The signing on of those three actors caused Yul Brynner who was also planning a *Spartacus* film (and actually held the rights to the title) for United Artists, to abandon his project.³²² Lawrence Olivier was originally slated to direct the film, but other obligations left the film directorless. Ed Muhl, Universal's production chief, suggested that Anthony Mann, who was known for his work with westerns, direct the film.³²³ Douglas reflected that he "didn't think [Mann] was the right director, but a bird in the hand..." and so he agreed.³²⁴ Douglas chose to hire Dalton Trumbo as a screenwriter, one of the Hollywood Ten (a group of writers blacklisted due to their association with the Communist Party and refusal to testify before U.S. Congress), knowing that "the revelation of Dalton Trumbo's involvement with *Spartacus* could shut down the entire picture."³²⁵ To hide his association with the film, Trumbo used the pseudonym "Sam Jackson" during production, and Eddie Lewis, one of the film's producers, begrudgingly took credit for much of the writing.³²⁶

Filming began in January 1959 and proceeded (including re-takes) until early 1960, having included location filming in Death Valley, Hearst Castle, and Spain in addition to that done in the studios and back lots of Universal. Three weeks into the project, in what was termed an "abortive start" by the entertainment press, Anthony Mann was replaced by "30-year-old newcomer director" Stanley Kubrick.³²⁷ According to Douglas, the reasoning for this change resulted from Mann being overwhelmed by the scale of the picture and acquiescing directorial control to the overbearing Peter Ustinov. However, according to Mann, egos clashed on the project and he "worked himself into a lather trying to keep peace, and was fired for his efforts."³²⁸ He claimed publicly that he "couldn't take orders from Douglas."³²⁹ He was not the only major player fired early on—German actress Sabina Bethmann cast as the lead female

³²² Douglas, Kirk, *I Am Spartacus! Making a Film, Breaking the Blacklist*, Open Road Integrated Media, 2012, 71.

³²³ Ibid., 75.

³²⁴ Ibid.

³²⁵ Ibid., 81.

³²⁶ Ibid.

³²⁷ Williams, Dick, "Olivier's Return Magnet for Mimes," *Mirror News*, 10 March 1959, 17.

³²⁸ Scott, Vernon, "Kirk Douglas Has Troubles in Producing Spartacus," *The Hanford Sentinel*, 2 May 1959, 13.

³²⁹ "'Spartacus' Change: Tearful Actress Replaced By Star," *The Atlanta Journal*, 19 February 1959, 32.

Ryan Historic District

Name of Property

Inyo, CA

County and State

character Varinia was replaced by the more experienced actress, Jean Simmons, because reportedly it was ““more practical to use an established star.””³³⁰

After he assembled his desired cast and crew, Douglas continued to encounter difficulties in the filming and production of *Spartacus*. On a personal level, the stellar cast included the “world’s most independent performers” and “each [was] a genius in his own right and generally addicted to scene larceny on a grand scale, the old masters resent[ed] taking orders from Douglas.”³³¹ Logistically, health issues plagued the main actors: Jean Simmons missed six weeks of filming due to an unexpected surgery, Tony Curtis injured his Achilles’ tendon and needed a month of recovery, and Douglas was sick with a virus for a couple of weeks.³³² Philosophically, the major filmmakers disagreed over the meaning behind the movie. Stanley Kubrick reportedly tried to make the film as historically accurate as possible, intending to show the true gore and impact of war, where Dalton Trumbo, perhaps drawing on his own experience as an outcast, envisioned *Spartacus* as a revolutionary—an individual able to overthrow an entire empire.³³³ Kirk Douglas also viewed *Spartacus* as a heroic figure, but saw the importance of conveying *Spartacus*’s humanity, his emotions and relationships. In the end, Douglas and Trumbo had the final say in the film’s theme; Kubrick did succeed in his desire to add a final epic battle scene but later commented that during the whole project he was “up against a pretty dumb script.”³³⁴ Douglas, in his autobiography, remarked that Kubrick was “not a good writer...[but] he was great at developing a concept”³³⁵; as to a character assessment, “Stanley Kubrick [was] a talented shit.”³³⁶

In February 1960, Kirk Douglas and Tony Curtis cheekily celebrated the first anniversary of production on *Spartacus*. When asked if Universal executives disapproved of the extensive timeline and budget overages, Douglas declared “never once when I have told them I had to go back for retakes and spectacle scenes has there been one word of disapproval.”³³⁷ One critic wrote that *Spartacus* was “one of the most jinxed pictures ever filmed. Plagued by illness, injury, temperament and replacements, the movie became the most expensive to be made in Hollywood” at a budget of \$12 million.³³⁸ He went on to conclude that “most of it was burned up in 247,834 man-hours of labor. There were 129 bit parts, 4,851 extras and 30 stars and featured players. Several sets cost more than \$100,000 each, constructed by 300 carpenters.”³³⁹

After filming concluded, Universal executives and the Motion Picture Association scrutinized the film for potential inappropriateness and sought to censor some of *Spartacus*’s more provocative scenes involving profane language, crucifixion, purported homosexual innuendo,

³³⁰ Ibid.

³³¹ Scott, “Kirk Douglas,” 13.

³³² Scott, Vernon, “Spartacus, Most Expensive Pic Seen Grossing \$50,000,000,” *Greenville Daily Advocate*, 10 August 1960, 3.

³³³ Cooper, Duncan L., “Dalton Trumbo vs. Stanley Kubrick: The Historical Meaning of *Spartacus*,” in *Spartacus: Film and History* (Martin M. Winkler, editor), Blackwell Publishing, 2007, 57.

³³⁴ Ibid, 57.

³³⁵ Douglas, Kirk, *The Ragman’s Son: An Autobiography*, Simon and Schuster, New York, 332.

³³⁶ Ibid., 333.

³³⁷ “Production Anniversary of ‘Spartacus’ Filming,” *The Times Argus*, 4 February 1960, 20.

³³⁸ Scott, “Spartacus,” 3.

³³⁹ Ibid.

Ryan Historic District

Name of Property

Inyo, CA

County and State

violence and gore, and political dissidence.³⁴⁰ The contract between Universal and Byrna Films gave the studio the final cut before distribution. Douglas recounts that “in one of the most painful episodes in [his] entire career as an actor or producer—before or since—[he] watched helplessly as Universal decided to remove much of the film’s potentially controversial content. Without [his] approval, Universal made *forty-two cuts* to the film.”³⁴¹ The edits went above and beyond adherence to typical production codes. By the time of distribution, studio executives received permission by the Writer’s Guild to include Dalton Trumbo’s name in the credits (and hence publicly breaking the blacklist), and so Douglas argues that several cuts were attempts to cull *Spartacus*’s overt political messages.

Spartacus’s Reception and Legacy

Spartacus premiered in New York City on Wednesday, October 6, 1960 and it equally impressed film critics and the general public. One critic wrote, “The impact of the drama is stupendous. Battle scenes, the gory activities in the gladiatorial arena...stirring feats of equestrianism, massive scenes of revolution in which nearly 10,000 extras take part. ‘Spartacus’ reaches a new high in motion picture production. It predominates the category of classics.”³⁴² The “new high” primarily referred to the film’s innovative cinematography, including the use of the Technirama-70 and the incorporation of grand-scale battles and intricate set designs. Kubrick’s directing was especially effective in its “incredible footage of the [final] battle, so wide that he’d had to shoot from almost half a mile away.”³⁴³ These final scenes, shot from 100-foot-tall towers, had a profound impact on the viewer. One critic wrote that “even as *Spartacus*, the man, made history, so will ‘Spartacus,’ the picture. In every facet, it is breath-taking. The action is superb; the drama and action, tense and spontaneous.”³⁴⁴ Much to the delight of Douglas, *Spartacus*’s initial release grossed \$17 million, the highest grossing film for 1960 and the highest grossing film for Universal at that time.³⁴⁵ It won four Academy Awards and one Golden Globe for Best Motion Picture – Drama. Notably, Douglas was not nominated for any awards in his role as the title character.

In a political context, *Spartacus* played a pivotal role in reshaping the Hollywood studio system during the McCarthy Era. Under pressure from Congress, film studios signed the Waldorf Amendment in 1947, pledging not to hire anyone with Communist affiliations. In 1950, the House Un-American Activities Committee (HUAC) summoned Hollywood actors, directors, and writers to officially testify before Congress as to the identity of possible Communists and Communist sympathizers within the industry. Ten industry members, the “Hollywood Ten,” refused to testify and were jailed, including Dalton Trumbo, who spent a year in incarceration. By the time of *Spartacus*’s production, studio blacklists remained in effect and Trumbo was barred from employment in the entertainment field. Although those associated with *Spartacus* generally knew the role Trumbo had in the making of the film, Douglas openly revealed

³⁴⁰ Douglas, *I Am Spartacus*, 142.

³⁴¹ Ibid., 156, emphasis in original.

³⁴² Gardiner, John, “‘Spartacus’ Story Spectacular Drama,” *The Windsor Star*, 3 November 1960, 27.

³⁴³ Douglas, *The Ragman’s Son*, 326.

³⁴⁴ Gardiner, 27.

³⁴⁵ Wikipedia, “*Spartacus* (film),” *Wikipedia.org*, [https://en.wikipedia.org/wiki/Spartacus_\(film\)](https://en.wikipedia.org/wiki/Spartacus_(film)). Accessed 8 September 2023.

Ryan Historic District

Name of Property

Inyo, CA

County and State

Trumbo's involvement to studio executives in late 1959.³⁴⁶ Initially fearing a film boycott but receiving approval from the Writer's Guild of America, Universal broke with other studios and credited Trumbo with the *Spartacus* screenplay in August 1960, thus officially ending the blacklist.³⁴⁷ Upon learning this, the American Legion as well as columnist Hedda Hopper promoted a boycott of the film; Hopper implored that "that story was sold to Universal from a book written by a Commie and the screen script was written by a Commie, so don't go see it."³⁴⁸ The boycott was largely ineffectual; in an ultimate affirmation of the film's national appeal, newly-elected President John F. Kennedy "sneaked out of the White House in the middle of a snow storm" and crossed a picket line of American Legion protestors to watch the movie in February 1961.³⁴⁹

Thus, *Spartacus* became more than just a classic historical epic; it became symbolic for a new era of cultural consciousness, political change, and social justice. It challenged societal norms, promoted the idea of fighting for justice and freedom, and contributed to the evolution of the film industry itself. Its legacy endures and its iconic line "I am Spartacus" has become a slogan for resistance and solidarity—signifying unity in the face of oppression.

Location Filming at Ryan

The initial scenes of *Spartacus*, where the contentious slave, Spartacus (Douglas), is discovered and purchased by slave-trader, Lentulus Batiatus (Ustinov) in the Libyan mines, were filmed on location at Ryan in an area colloquially referred to as "*Spartacus* Ridge." A scouting crew arrived sometime in late 1958 or early 1959 and toured the site for potential filming locales before deciding on a set up along the DVRR grade heading west from Ryan Camp toward the Lower Biddy McCarthy Mine.

After the initial site visit and before filming commenced, the landscape was prepped as a stand-in for ancient salt mines. Since the scenes were to be shot at the Lower Biddy, a remote desert mine with little modern intrusions, the terrain did not need extensive transformation. One modern feature that did need removal was the remaining DVRR track. A scouting photograph shows intact wooden railroad ties along the grade (the rail was removed in the 1930s)(Figure 54); since these are absent in the scene (and at present), it can be assumed that they were removed during set construction.³⁵⁰ In fact, the ties appear to have been incorporated into several of the structures captured on film.

Aside from archaeological remains, the opening sequence of the film is the only record of exactly how Ryan was transformed into the mines and slave market of Libya. At a very basic level in the opening sequence, the ridge encompassing the "mine" location shows defined footpaths and ladders and was populated with approximately one hundred extras positioned all over the slopes playing the roles of slaves and captors (Figure 27). Due to erosion many of these

³⁴⁶ Douglas, *I Am Spartacus*, 146-147.

³⁴⁷ "Trumbo Gets 'Spartacus' Film Credit," *New York Post*, 8 August 1960, 50.

³⁴⁸ Douglas, *The Ragman's Son*, 332.

³⁴⁹ Douglas, *The Ragman's Son*, 334; Douglas, *I Am Spartacus*, 161-165.

³⁵⁰ "Spartacus Scouting Photo," ca. 1958-1959, Margaret Herrick Library, Academy of Motion Picture Arts and Sciences.

Ryan Historic District

Name of Property

Inyo, CA

County and State

footpaths and trails would have needed restoration at the time of filming; the rocky slopes were likely shored up and loose material removed. In the left foreground a guard stands atop a Roman sentry tower, estimated at over twenty feet tall and seemingly constructed of wood and a composite material; and in the middle of the scene wooden pergolas with thatched roofs line both sides of the grade (Figure 28). These crude structures are composed of square dimensional lumber standing on end (possible railroad ties) holding up long rounded beams and rounded beam rafters with dried palm frond thatching. The structures were fastened together with nails and baling wire; where the pergolas abutted the rocky slopes of the western side of the grade, they were anchored into the rock face. A fire burns inside of an extensive dry-laid rock wall against the western slope in the right part of the scene. A tall wooden framework, constructed of the same rounded beams and poles appears to be connected to the rock wall.

Although there was no associated built structure, the movie company altered the landscape to shoot the scene where Spartacus is chained to a rock outcrop (Figure 29). Two holes were drilled in the rock face to anchor metal wrist restraints and additional drill holes were fitted with chains and shackles as set dressing. The art department reinforced and surrounded those anchor points with a cementitious composite containing gravel inclusions, appearing like the natural substrate. A similar composite material was applied along the steep, rocky outcrop below the ridge where the scene takes place, presumably providing a more stable pathway for Ustinov's character to ascend from the railroad grade to the chained Spartacus, lessening the risk of slipping and injury.

Sometime during or after the background was prepped in late January 1959, the *Spartacus* production team mobilized to Death Valley. Kirk Douglas remembers this undertaking to be as monumental as the film itself: "our *Spartacus* army was finally on the march. The troop movements were massive. Planes, cars, buses, and trucks filled with actors, technicians, equipment handlers, and extras were dispatched in continuous waves to [the] base camp in Death Valley."³⁵¹ The "base camp" was the Furnace Creek Inn and Ranch, approximately fifteen miles and the closest accommodations to Ryan. Little is known about the schedule of filming except that it proceeded for eight to fourteen days (depending on the source) with Anthony Mann directing.³⁵²

Douglas recalls that the Ryan location filming ran very smoothly. He recollects that:

The first week went very well. We shot the opening scene in the mine where Spartacus stops working to help a fellow slave who's collapsed in the grueling heat. Treating him like a rabid dog, the Romans beat him savagely until he snaps—locking his jaw on a soldier's ankle and only letting go after he is beaten into unconsciousness...

Tony [Mann] seemed to have everything well in hand; the rushes [the unedited, raw visual and sound footage from the day's

³⁵¹ Douglas, *I Am Spartacus!*, 97.

³⁵² "Kubrick Replaces Tony Mann as Director of 'Spartacus'," *Hollywood Reporter*, 16 February 1959.

Ryan Historic District

Name of Property

Inyo, CA

County and State

shooting] looked good. We had some disagreement over how animalistic Spartacus should be in resisting the Romans, but nothing that seemed out of the ordinary when starting a new picture. Universal wanted a director who could make this huge train run on time. It seemed they were right about Tony. Things were running smoothly.³⁵³

Filming concluded at Ryan in early February and the production company transported very little of the built sets back to Los Angeles. It opted to dump the majority of wooden set elements down the eastern slope of the railroad grade. Lumber that had been tethered to the rock face was left in place; hero prop rocks seen on camera as being carried in the baskets on the backs of Spartacus and the other slaves were not collected from the rocky slopes where they ended up during filming and remain there today.³⁵⁴

Mann was fired shortly after leaving Ryan, and so it may seem that conflict between the filmmakers arose during the stint in Death Valley. However, Douglas pinpoints the peak in “artistic differences” as occurring after Ryan location filming commenced. Whereas Mann was able to “make this huge train run on time” at Ryan, the “wheels came off the train” when the *Spartacus* team moved to the gladiator school run by Peter Ustinov’s character, Lentulus Batiatus on the backlot of Universal.³⁵⁵ Apparently, Douglas believed that Ustinov controlled too much of the directing process by deviating from the script and over-improvising in the scenes; instead of reigning him in, Mann “was letting him run wild.”³⁵⁶ Douglas felt that this enabling behavior negatively impacted the final product: “the rushes from the second week couldn’t have been more different from the first” in a bad way.³⁵⁷ So on the eleventh day of shooting, February 13, 1959, Mann conceded to depart the film over “creative differences” with his \$75,000 contract honored in full.³⁵⁸

Perhaps the ultimate testament to the quality of Mann’s directing is the fact that the mine footage remained in *Spartacus*’s final cut. When Douglas watched Trumbo’s last series of edits, he was delighted that “Anthony Mann’s beautifully shot opening sequence in the desert...began the film.”³⁵⁹ Kubrick also appreciated the Ryan sequences: “Despite Stanley’s reluctance to use anything he hadn’t shot, even he had to acknowledge that Mann’s footage was excellent. The Death Valley setting translated onto the screen exactly as we had hoped—bleak, desolate terrain where slaves lived short lives of hard labor and hopelessness.”³⁶⁰ Thus, Ryan contributed to the success of *Spartacus* by effectively transporting viewers to a foreign land in the distant past.

³⁵³ Ibid., 98-99.

³⁵⁴ Hero props are props that are detailed pieces and intended for close inspection by the camera. They may also be intended to be held or used by one of the main actors in the film. In this case, the ore mined by the slaves was made of light cork and intricately painted to resemble rock.

³⁵⁵ Douglas, *I Am Spartacus!*, 99.

³⁵⁶ Ibid., 99.

³⁵⁷ Ibid., 99.

³⁵⁸ Ibid., 100-101.

³⁵⁹ Douglas, *The Ragman’s Son*, 138.

³⁶⁰ Ibid., 138.

Ryan Historic District

Name of Property

The Twilight Zone (1959-1964)

Inyo, CA

County and State

In the same year as *Spartacus*, one episode of *The Twilight Zone* “I Shot An Arrow Into the Air,” was filmed on location at Ryan. *The Twilight Zone*, a groundbreaking American science fiction television series created by Rod Serling, made its debut on 2 October 1959 and ran until 19 June 1964. Over the course of its five-year run, this anthology series became a cultural phenomenon, leaving an indelible mark on television and popular culture. Rod Serling, an accomplished writer and television producer, conceived the idea for *The Twilight Zone* as a platform to explore socially relevant issues and controversial topics within the framework of science fiction and fantasy. Serling’s vision was to use the genre to address important themes that might be considered too controversial for traditional television through the lens of eerie storylines and surprising plot twists, all saturated with irony.

Historical Background

Rod Serling, the creator and primary screenwriter for the *The Twilight Zone*, was a World War II veteran and a graduate of Ohio’s Antioch College who started writing radio plays in his early twenties. He transitioned to television in the early 1950s and quickly gained a reputation as a prolific and talented writer. Once his show *Patterns* was produced in the mid-1950s (and earned him his first of six Emmys), he was “a ‘hot’ property.”³⁶¹ His work on *Playhouse 90*, a high-budget, CBS weekly series debuting quality television shows involving established actors, writers, and directors, proved lucrative and earned him more writing accolades. By the time he delivered his first script of the series *The Twilight Zone* to CBS in 1957, Serling was a successful man, both artistically and financially.³⁶²

When the episode finally aired in late 1958 as a part of the *Desilu Playhouse*, the public reception was so positive that CBS ordered the first *The Twilight Zone* pilot.³⁶³ “Where is Everybody?” was quickly written, rehearsed, shot, edited, and screened by potential sponsors; it sold within six hours. Serling narrated the episode himself when no other choice within budgetary limits was satisfactory, and despite his discontent over how the initial episode turned out, it sold the series.³⁶⁴ CBS and Serling agreed that Serling would write eighty percent of the first season’s thirty-six scripts, and his production company, Cayuga Films, would produce the series. Buck Houghton, a veteran producer, was hired, and he assembled a production crew, rented space and facilities at MGM Studios, and selected a choice list of directors. Each episode was given what was—for television at that time—an extremely generous schedule: one full day of rehearsal plus three shooting days.³⁶⁵ Filming started in June 1959 and twenty episodes would be produced before the first episode aired in October of that year. Much to the relief of all involved, *The Twilight Zone* was extremely well-received; its quality earned Serling his fourth Emmy Award the following year.

³⁶¹ Zicree, Marc Scott, *The Twilight Zone Companion*, Toronto, Bantam Books, 1982, 10.

³⁶² *Ibid.*, 13.

³⁶³ *Ibid.*, 20.

³⁶⁴ *Ibid.*, 26.

³⁶⁵ *Ibid.*, 35.

Ryan Historic District

Name of Property

Location Filming in Death Valley

Inyo, CA

County and State

The Twilight Zone's first episode following the pilot was filmed on location in Death Valley in 1959. "The Lonely" presented the story of a man serving a murder sentence alone on an asteroid. He is given a lady robot for company, and he falls in love with her. When he receives a pardon, he is forced to choose between remaining on the asteroid with his robot companion, or leaving his love behind. Buck Houghton recalls how Death Valley was chosen as a filming location: "It was supposed to be an asteroid and look as kooky as possible...Death Valley is about as kooky as you can find. It's barren and deserted. That *must* be the way Mars looks."³⁶⁶ Unfortunately for the cast and crew, filming commenced in mid-June, one of the hottest times of the year. The director, Jack Smight, remembers the toll the heat had on the crew:

The temperature was around 130 degrees. One day the caterer very foolishly served a very heavy meal for lunch, and about eight crew members just dropped in the afternoon. George Clemens [the director of photography] actually fell off the camera crane right into the sand. I thought he was having a heart attack, because he was up on the crane, we were setting up a shot, and he just toppled off.³⁶⁷

The assistant director, Edward Denault, had to do double duty in script work and sound because "everybody was filling in for somebody else because people were just dropping off like flies."³⁶⁸ In addition, every time the makeup artist sprayed the actors with water to simulate sweat, it instantly dried. The problem was solved when the team used a solution of mostly oil, however "[Death Valley] was just too hot."³⁶⁹ The crew abruptly departed for the cool interior sets at MGM after only two days of shooting.

Death Valley proved to be too promising of a backdrop to discourage location filming for long as *The Twilight Zone* crew returned in October to film "I Shot An Arrow Into the Air." Buck Houghton recalls that the weather was no better but they "knew better how to deal with it."³⁷⁰ They took two-hour midday breaks in which they returned to the Furnace Creek Inn (from Ryan) and enjoyed light poolside lunches. He cheekily threatened the crew that no overtime would be granted because even if they had to work longer into the evening, they were working the same number of hours per day without having to "sweat through" the Death Valley heat.³⁷¹

While the crew's positive second experience in Death Valley may have related to their adapted work schedule, it was more likely due to the change in season and specific filming location. The average October temperature for Death Valley in 1959 was around 80 degrees, 20 degrees cooler

³⁶⁶ Ibid., 38, emphasis in original.

³⁶⁷ Ibid., 39.

³⁶⁸ Ibid.

³⁶⁹ Ibid.

³⁷⁰ Ibid., 98.

³⁷¹ Ibid.

Ryan Historic District

Inyo, CA

Name of Property

County and State

than the June average of 100.³⁷² In addition, their filming location the second time was at Ryan, 3,000 feet higher in elevation and 15 degrees cooler than the valley floor. Aside from *Greed*, where von Stroheim preferred the heat to elevate the authenticity of his film, location filming generally occurred during Death Valley's temperate months, such as December (*Death Valley Days*) and January (*Spartacus*).

"I Shot An Arrow Into the Air" (Airdate 15 January 1960)

As previously mentioned, in 1959, the same year that *Spartacus* was filmed in the Ryan Historic District, *The Twilight Zone* production company chose Ryan as a location to film Season 1, Episode 15 of their new series. Written by Rod Serling and produced by Buck Houghton, the episode, called "I Shot an Arrow Into the Air," tells the story of the Arrow One, the supposed first manned aircraft into space. Shortly after takeoff the Arrow One crashes; the three surviving crew members believe that they have crashed on a barren and desolate asteroid and begin fighting for limited resources. After one crewman, Pierson, returns from climbing to the top of a hill and tries to relate what he has seen to the other members via strange markings in the sand, he is subsequently killed. When the last surviving crew member, Corey, manages to scale the mountain himself, he realizes that the peculiar markings were telephone poles and sees a major highway. Ironically, the crew never left Earth and was actually in the Nevada desert.

Stuart Rosenberg directed the episode and the cast included Dewey Martin as Corey, Edward Binns as Col. Donlin, and Ted Otis as Pierson. While the entire episode was filmed in Death Valley, only two exact filming locations have been identified. The ending sequence where the lone survivor, Corey, hikes in the desert and climbs a steep mountain was filmed on *Spartacus* Ridge in the approximate location where *Spartacus* was chained to the rock face. The scene was filmed from on top of *Spartacus* Ridge looking down and to the south towards the chain rock, however the chain anchor points are not readily visible. The camera was also positioned at the chain rock facing north for some of the sequence, but the anchor points were behind the cameraman.

The ending scene when Corey spies the telephone poles and well-travelled highway (with a moving bus and semi-truck) was filmed along the slope right below (and west of) Ryan Camp, and more specifically Bunkhouse 1 (Figure 16). In this scene, the camera points north, away from the camp, capturing the historic powerline and Ryan Road, which was paved by that time. Although no set dressing was needed for the *Spartacus* Ridge scene as it was supposed to emulate desert wilderness, the art department created and installed three highway signs along the western edge of Ryan Road for the closing sequence. A large rectangular painted sign reads "NELSON'S MOTEL/JUST UP AHEAD/EATS/GAS & OIL" and two smaller rectangular signs read "NEVADA/389", and "RENO/37 MILES". Adding to their authenticity is that they contain several bullet holes (a common occurrence in the rural West). It is unclear as to whether the signs were propped up by rocks at their bases (most likely) or installed in the ground. As a testament to

³⁷² "Average Monthly and Annual Temperatures at Death Valley, 1911-2023," *weather.gov*, [https://www.weather.gov/media/vef/Climate/Death%20Valley%20Climate%20Book/Average%20Temperature%20Monthly%20%26%20Annual%20Read%20Out%20\(1911-2023\).pdf](https://www.weather.gov/media/vef/Climate/Death%20Valley%20Climate%20Book/Average%20Temperature%20Monthly%20%26%20Annual%20Read%20Out%20(1911-2023).pdf), Accessed 21 September 2023.

Ryan Historic District

Name of Property

Inyo, CA

County and State

the degree of preservation in the Ryan Historic District, several stacked and loose, moderately-sized rocks appearing in the scene remain in situ.

Significantly, Serling admits that “I Shot An Arrow” was the only time that he was approached in a social setting with the idea for a *The Twilight Zone* episode that excited him. He recalled that “Madelon Champion said to me, ‘What would happen if three guys landed on what they thought was an asteroid and it turned out be outside of Las Vegas? I paid five hundred dollars for that one on the spot. But it never happened again.’”³⁷³ The episode was effective in that it fulfilled the series’ aim of probing deep in into the “motivations, reasons, [and] manifestation of human conduct” set against an unusual thematic background with the characteristic unpredictable ending; however Marc Zicree, *The Twilight Zone* historian, concludes that as with many of the series’ forays into science fiction, it is “utterly ludicrous” because “any astronaut who crash lands on a body within our solar system that has the same gravity and atmosphere as Earth and doesn’t immediately realize he’s on Earth, had better go back to astronaut school.”³⁷⁴ Despite its far-fetched premise, it met Serling’s goals of “handling thought-provoking, adult, meaningful themes without being too arty, too obtuse, [or] too pretentiously intellectual.”³⁷⁵

The Legacy of *The Twilight Zone*

The Twilight Zone broadcasted a total of 156 shows, spread over five seasons. Following the ground-breaking debut of Season 1, Season 2 continued to captivate audiences with its imaginative tales and moral dilemmas, and featured guest appearances by notable actors, such as Agnes Moorhead. The third season marked a period of further experimentation and storytelling techniques as episodes like “It’s A Good Life” and “The Midnight Sun” continued to push the boundaries of science fiction and psychological horror. However, the show began to toll upon Serling’s enthusiasm for writing. He wrote, “I’ve never felt so drained of ideas as I do at this moment...stories used to bubble out of me... [but now] I’ve written so much I feel woozy.”³⁷⁶

Many agree that the quality of *The Twilight Zone* decreased after the third season for several reasons.³⁷⁷ First, CBS delayed its renewal forcing several key creators, such as producer Buck Houghton, to find employment elsewhere. Also, the network shifted its format to an hour length. In addition, fatigued by this time, Rod Serling was no longer a primary contributor. He was especially dismayed when CBS increased the episode length because he envisioned the program as a series of vignettes rather than complicated narratives with deep plot and character development. The hour-long episodes were not well-acclaimed, and so the final season of *Twilight Zone* (the *The* was dropped in Season 4) returned to the half-hour format and featured memorable episodes such as “Nightmare at 20,000 Feet” and “The Masks.” The series continued to explore themes of morality, human nature, and the unknown. After Season 5, CBS decided not to renew the series, but by this point the program had firmly established itself as a television classic.

³⁷³ Zicree, 98.

³⁷⁴ Serling, Rod, “Listening Post and TV Review,” *The Valley Times*, 26 November 1959, 24; Zicree, 98.

³⁷⁵ Serling, 24.

³⁷⁶ Zicree, 214.

³⁷⁷ Zicree, 296-299, 360.

Ryan Historic District
Name of Property

Inyo, CA
County and State

Thus, albeit in a minor way, the Ryan Historic District contributed to the interminable success of the film and television productions that utilized its anachronistically preserved buildings and structures, primitive yet industrial landscapes, and unique, ethereal landforms. Several major entertainment iconic figures—Ruth Woodman, Kirk Douglas, and Rod Serling—and their supporting crews appreciated the distinctiveness of the district and realized its potential for adaptability to fulfill their artistic visions. As with the larger Death Valley, Ryan provided a backdrop for momentous motion picture and television narratives to come to life.

The Historic Context of the Entertainment Industry and the Evolution of Location Filming

From its incipience, California's entertainment industry has always encompassed location filming, or filming outside of the boundaries of a motion picture or television studio lot or production plant.³⁷⁸ In the early 20th century, Southern California drew promising cinematographers attracted to the variety and accessibility of California landscapes; within a day, a filmmaker could capture coastal, mountain, desert, and grassland background scenery. The variability of the landscape also allowed California to stand in as exotic and even otherworldly locations, providing an "authentic" setting within close proximity to urban centers.

The origins of location filming have been tied to the development of two early motion picture genres: actuality films and narrative Westerns.³⁷⁹ Developed in the late 1800s, actuality films were a type of non-fiction documentary utilizing footage of real people, places, and events. At first they were simple, featuring scenes from everyday life, but later became more structured and intentional, and often subsidized by transportation and hospitality companies to promote tourism. The first film shot on location in Death Valley was one such film. In 1909, PCB produced a film entitled, *Trip to Death Valley*, which showcased Death Valley scenery to promote rail tourism to the area. Footage of the recently completed Tonopah and Tidewater Railroad taken along the tracks near the camp of Old Ryan (at the Lila C Mine) was reportedly circulated nationwide by a group of traveling salesmen.³⁸⁰

Narrative Westerns also affected the prevalence of location filming, especially with the requirement that movies adequately depicted the romantic image of the West, as it existed in the early 20th century American psyche. As a reaction to what he viewed as the counterfeit West propagated by Eastern studios, the Chicago filmmaker, William Selig, strove for believability and authenticity in his Western films; he held that effective films could only be shot on location amid real Western landscapes and traveled frequently to the Colorado frontier for movie production.³⁸¹ Although these early Westerns intended to depict the real West, some of the Western landscapes were not exactly authentic. While two of the earliest films claimed to be shot in Death Valley have sweeping Western scenery, inaccuracies in flora and landforms indicate

³⁷⁸ Much of the general historic context of the entertainment industry in Southern California is derived from Lazzaretto and Goers, "Los Angeles Citywide Historic Context: Entertainment Industry, 1908-1980, Theme: Filming Locations Associated with the Motion Picture and Television Broadcasting Industries, 1908-1980." This context was developed to provide guidance in the evaluation of historic resources relating to filming locations in the greater Los Angeles area.

³⁷⁹ Lazzaretto and Goers, 3.

³⁸⁰ Langley, 5.

³⁸¹ Lazzaretto and Goers, 6-7.

Ryan Historic District

Name of Property

Inyo, CA

County and State

that both *Death Valley Scotty's Mine* (1912) and *Chimmie Fadden Out West* (1915) were actually filmed elsewhere.³⁸²

During the major studio era in the 1920s and 1930s, in which the film industry was dominated by eight primary production companies (the “Big Eight”), the preference for location filming was replaced by the desire for mass movie production and increased profits. Studios constructed large-scale facilities and built elaborate back-lots; advances in technology in lighting, cinematography, and set design allowed for filmmakers to bring the “location” to their studios. During this era, the ease of operating out of a centralized studio often trumped the authenticity in film gained from an actual onsite shooting location; however, comedic filmmakers, like Charlie Chaplin, continued to use location filming in their movies as they considered it an important part of the storytelling process.³⁸³ In addition, location filming that did occur during the 1920s and 1930s was no longer confined by genre or subject-matter; it evolved beyond the realm of the actuality film and Western into a means to create theatrical motion pictures replete with dramatic themes and profound visual effects. Sometimes the location became an integral part of the film narrative, if not an additional character.

Erich von Stroheim’s *Greed* (1924) provides an excellent example of the conflict between artistic vision and studio-led mass production, common during this era. Considered one of the greatest silent films ever made, *Greed* was based on Frank Norris’s *McTeague* (1899), a naturalistic novel chronicling the downward spiral of three people overcome by their squalid, debased passion, compulsion, and greed for gold.³⁸⁴ Taking place in the streets of San Francisco, the gold mines of the Sierra Nevada, and culminating with a fatal confrontation on the floor of Death Valley, von Stroheim rejected studio and back lot convenience for the accuracy and realism of on location filming. He insisted on filming in natural non-Hollywood studio locales – using real exteriors in the Sierra Nevada mountains, and interiors and street scenes in San Francisco and Oakland. He shot the climatic Death Valley scenes in the summertime in the sweltering heat of the valley floor and explained his motivations as such:

When I came to the desert sequences which were laid in Death Valley, the company suggested that I’d take them to Oxnard near Los Angeles, where traditionally all desert scenes were and are being taken. But having read the marvelous descriptions of the real Death Valley as Frank Norris had depicted it, I knew that Death Valley did not look like Oxnard and as I had gone as far as I had for the sake of realism I was not going to conform to the company’s desires at the time. I insisted on Death Valley, and Death Valley it was.³⁸⁵

At the time of filming, Death Valley had little infrastructure and accommodations; there were no paved roads or hotels. The Ryan mines were operating, and the Death Valley Railroad provided

³⁸² Langley, 6.

³⁸³ Lazzaretto and Goers, 15.

³⁸⁴ Filmsite Movie Review, “*Greed* (1924),” *filmsite.org*, <https://www.filmsite.org/gree.html>. Accessed 13 Aug 2023.

³⁸⁵ Lennig, Arthur, *Stroheim*, Lexington, University Press of Kentucky, 2000, 213.

Ryan Historic District

Name of Property

Inyo, CA

County and State

transportation to Ryan for over forty cast and crew members, however von Stroheim desired to film on the valley floor and a daily commute between Ryan and filming sites for crew and equipment was not feasible. As a result, living conditions for the several weeks of filming were primitive and amounted to little more than cots under the sparse trees at the undeveloped Furnace Creek Ranch. Von Stroheim later argued that the experience strengthened his movie as “the results [he] achieved through the actual heat and the physical strain were worth the trouble [he] had gone to” because “it would have been impossible to get anything near it in Oxnard.”³⁸⁶

Von Stroheim’s artistic vision and ambition for realism was not appreciated by Goldwyn Pictures Corporation, the studio that eventually released *Greed*.³⁸⁷ His determination to accurately recreate and recapture every detail of every single page of the *McTeague* novel, produced a film that was 47 reels, and approximately nine hours in length.³⁸⁸ The studio head, Irving Thalberg, wanted the film to be of acceptable commercial length and insisted on tremendous editing; with the assistance of his director friend, Rex Ingram, von Stroheim acquiesced and produced a five-hour version. Thalberg was not satisfied and removed von Stroheim from the editing process all together. Eventually Louis Mayer ordered a 10-reel version (two hours and fifteen minutes) awkwardly rewritten and edited by Joseph Farnham.³⁸⁹ In the end, the eccentric director lost his battle with the studio executives; although it still captured the realism and drama afforded by location filming (the Death Valley sequences are largely intact), publicly-released *Greed* was a far-different film than von Stroheim envisioned.

Location Filming Booms

Although there were restrictions on production activity in California during World War II, the practice of location filming boomed in the Post War era. The years following the war witnessed technological innovation in the entertainment industry; coupled with changes in studio finances, production practices, and a demand for movies and television broadcasts, location filming became more doable, efficient, and thus more appealing. In terms of technology, advancements in lighting and film exposure helped control for less than favorable and unpredictable natural and ambient light. New camera lenses with varying focal lengths allowed for greater depth of field, more visual focus, and experimentation with camera angles and views. Studios moved away from back-lot filming due to decreased cost efficiency and toward taking advantage of the varied and expansive natural scenery that only location filming could offer.

Authenticity and realism again became a goal in movie and television filming as audiences had deepened their landscape consciousness. False fronts and fake backgrounds were no longer sufficient to satisfy the entertainment consumer. The popularity of the Western genre of film and television shows in the late 1940s and 1950s initiated the construction of entire towns, termed “movie ranches,” such as Pioneertown (a NRHP listed property), north of Palm Springs. Movie

³⁸⁶ Ibid, 213.

³⁸⁷ Samuel Goldwyn of Goldwyn Pictures Corporation along with von Stroheim Productions originally subsidized the *Greed* project. However, by the time the movie was released in 1924, Goldwyn Pictures joined Louis B. Mayer Studios and the Metro Company to form Metro-Goldwyn-Mayer (MGM), the final production company and distributor of *Greed*.

³⁸⁸ Filmsite Movie Review.

³⁸⁹ Langley, 12.

Ryan Historic District

Name of Property

Inyo, CA

County and State

ranches were especially suited for providing camp and town settings, however the wide sweeping primitive landscapes of the West for outdoor action sequences could only be captured in those natural environments.

Location Filming in Death Valley: Frontiers, Foreign Lands, and Otherworlds

During the Post War Era, Death Valley provided one of the most breathtaking, varied, and extreme landscapes to film and television directors intending to capture the old “West,” exotic lands, and other worldly landscapes. Death Valley gained national monument status in 1933 and due to conservation efforts, it remained largely undeveloped. Modern intrusions such as buildings, paved roads, powerlines, and noise pollution were absent, providing the perfect setting for historical and science fiction narratives. As such, location filming, especially of Western genre films and television shows skyrocketed.

The growing popularity of Death Valley’s raw, primitive, and gritty setting as a filming location can be illustrated by the three classic Westerns, *The Walking Hills*, *3 Godfathers*, and *Yellow Sky*, all filmed on location in 1948. In the Columbia picture, *The Walking Hills* (1949), filmed primarily in the vicinity of the Mesquite Sand Dunes and Stovepipe Wells, Randolph Scott plays one of many disparate treasure hunters digging through sand with the hopes to uncover lost wagons containing ‘49er gold.³⁹⁰ After a fierce sandstorm—its violence captured so effectively by the camera—the wagons are revealed, but ironically devoid of gold. Producer Harry Joe Brown reflected later that Death Valley was “a remarkably rich field for picture making, and so very little has been used before, it has fine freshness for audiences.”³⁹¹ Thus the valley was unspoiled, almost virginal, and through the cinematography of its harsh landscapes fully able to convey the picture’s themes of desperation, delusion, and despair.

Shot in stunning technicolor, MGM’s *3 Godfathers* (1948), directed by John Ford and starring John Wayne, juxtaposed Death Valley’s stark, barren, and primitive landscape with the ultimate symbol of new life, a baby. In the film, three outlaws promise a dying woman that they will return her newborn to civilization, despite the risk to their freedom and their lives.³⁹² Imbued with the stunning vistas captured by cinematographer Winton C. Hoch, the tale is one of redemption, perhaps best illustrated by the sequence of rugged John Wayne cradling a swaddled infant with a towering sand dune in the background. Death Valley provided the backdrop in which the actors could walk, then plod, then stagger across endless sand and salt flats providing visual splendor and abundant sentimentality.

Finally, Twentieth Century Fox’s, *Yellow Sky* (1948), directed by William Wellman and starring Gregory Peck, again played on the harsh and primitive Death Valley environment to enhance its authenticity and entice audiences to experience the real West. The story follows a band of outlaw bank robbers who encounter a seemingly abandoned ghost town, actually inhabited by a woman and her grandfather, who have been successfully mining for gold. Infighting between band members occurs as the gang’s leader falls for the woman, culminating in a violent showdown.

³⁹⁰ *The Walking Hills*, *IMDB.com*, <https://www.imdb.com/title/tt0042033/>. Accessed 15 August 2023.

³⁹¹ Langley, 38.

³⁹² *3 Godfathers*, *IMDB.com*, <https://www.imdb.com/title/tt0040064/>. Accessed 15 August 2023.

Ryan Historic District

Inyo, CA

Name of Property

County and State

Although only one sequence was filmed in Death Valley (the rest were actually filmed in the eastern Sierra near Lone Pine), producers marketed the mystique of Death Valley in the movie's trailer: "It's amazing scenes were filmed in the most desolate yet most fascinating locale in the world...famous Death Valley...and the passions that enflame its characters are just as primitive."³⁹³ According to William Wellman, Jr., the director's son, his father chose Death Valley as a filming location because of its vast desert expanses yet proximity to amenities for the cast and crew: "everything they needed was a short distance away."³⁹⁴

The allure of Death Valley for filming Westerns continued throughout the 1950s and into the 1970s. Christopher Langley, an Inyo County film historian, identifies a shift in the type of Westerns prevailing in these years as moving from simple plots with clearly identifiable "good" versus "bad" characters, to complex storylines geared toward mature audiences and reflecting the broader social and political changes of the period. These films draw on the harsh and unforgiving desert environment to provide the setting for dramatic and brutal conflict between the characters. Several of the films were interwoven with themes found deep in the history of United States: white settlers and the U.S. government's harsh treatment of Native Americans (*War Paint*, 1953), the hatred and divisiveness of the Civil War (*Escape from Fort Bravo*, 1953), and political revolution (*The Professionals*, 1966). Langley argues that the Death Valley locations in these films were used as a stage on which life and death struggles were played out dramatically.³⁹⁵

In many of the Western genre films, Death Valley played itself—or if not itself, a similar "wild" place existing somewhere on the Western frontier. However, Death Valley's unique and varied desert landforms and landscapes were well-suited for representing the exotic lands of epic historical narratives and the other worlds of science fiction. Filmmakers requiring Middle Eastern and African desert settings adapted the undeveloped and arid environments of Death Valley early on—they began arriving to the National Monument in the early 1950s. Audiences were asked to accept that Death Valley could be the home to the ancient civilizations of central Asia, Egypt, and the Middle East as depicted in *King Solomon's Mine* (1950), *The Golden Horde* (1951), *Tarzan's Savage Fury* (1952), *The Egyptian* (1954), *Pharaoh's Curse* (1956), and *Spartacus* (1960). Death Valley, with its flat, barren salt pan, sparsely vegetated rocky slopes, sandy washes, steep narrow canyons, and vast panoramas was indeed a foreign landscape to most urban dwelling audiences. It could easily substitute for exotic lands and far off places because it satisfied the expectations of how audiences imagined the exotic lands to appear. For example, *Spartacus* used early nineteenth-century historic mining landscapes to represent Libyan mines operated during the height of the Roman Empire. Despite stark contrasts in ancient versus industrial mining landscapes, the sequences are quite effective at capturing the labor and toil endured by miners. As Langley writes, "What these movies lacked in historical accuracy and geographic similitude to the real places, they made up for it in entertainment value. They look the way we *expect* they should."³⁹⁶

³⁹³ 20th Century Fox, *Yellow Sky* trailer, 1948.

³⁹⁴ Wellman, William, Jr., pers. comm., 5 September 2022.

³⁹⁵ Langley, 44.

³⁹⁶ Ibid., 53, emphasis in original.

Ryan Historic District

Name of Property

Inyo, CA

County and State

Science fiction filmmakers also played to moviegoers' expectations of how extraterrestrial landscapes could possibly appear; Death Valley's ethereal landscapes could easily pass for the surface of the moon, Mars, or fictional planets in galaxies far, far away. In the 1950s as the United States entered the Space Age, public interest in science fiction and space technology exploded. Science fiction films and television productions played on audience curiosity, hopes, and fears for space technology and its consequences. One of the earliest sci-fi films shot on location in Death Valley was *Rocketship X-M* (1950), which explored the possibility of space travel and its apocalyptic aftermath. A crew of space explorers lands on Mars only to discover that a civilization destroyed itself and was reduced to a population of cavemen, implying that scientific advancement may result in cultural regression. Although campy, the film is notable in its depiction of space technology and travel. In addition, more recent photos from the actual surface of Mars, confirm that the Death Valley "Martian" landscapes were incredibly accurate, more so with the moviemaker's employment of red tinting over black and white film.³⁹⁷

Another film drawing on Death Valley's desolate, desert scenery to transport viewers to Mars is *Robinson Crusoe on Mars* (1964), in which an astronaut crash lands on Mars and is marooned in the harsh environment with little food and water. He discovers that an alien species is using human slaves as miners, rescues one he calls Friday and then eventually escapes the planet. While the plot is rather formulaic, the film is notable in its use of a variety of Death Valley landforms and geological formations to provide an accurate and believable setting. The screenwriter and director were perhaps ahead of their time in scientifically scouting out ideal filming locations they found to be more Mars-like than terrestrial. They studied Death Valley geology to eliminate places showing evidence of water erosion (because they knew that Mars did not have water) and focused more shots on the barren, rocky out slopes. The director noted that while most Westerns were shot on the valley floor, he preferred locations on the hills, crests, and cliffs that were totally devoid of plants.³⁹⁸ The crew even filmed in the bottom of Ubehebe Crater "where thick, powdery ash aggravated climbing and made camera maintenance a hopeless task."³⁹⁹

Combining elements of both science fiction and Western genres, and arguably the most epic and timeless major motion picture franchise to location film in Death Valley is George Lucas's *Star Wars*. The first and third installments, *Star Wars Episode IV: A New Hope* (1977) and *Episode VI: Return of the Jedi* (1983), captivated filmgoers with their engaging storylines, endearing human and non-human characters, state-of-the art pre-CGI special effects, John Williams' thunderous musical scores, and created eternally memorable locations in Death Valley.⁴⁰⁰ While only occupying a fraction of the inaugural film's 125-minute running time, the sand dunes, salt flats, washes, and badlands of Death Valley stood in for the planet Tatooine where R2-D2, C-3PO, Jawas, and Tusken Raiders joined Luke Skywalker, Obiwan Kenobi, and Han Solo for interminable adventure and mayhem. Not only are the film sequences indelibly etched in the minds of generations of moviegoers, they have also forever figuratively marked these Death

³⁹⁷ Ibid., 70.

³⁹⁸ Ibid., 71.

³⁹⁹ Ibid., 73.

⁴⁰⁰ Link TV, "The Technicolor Desert: Cinema and the Mojave," 23 December 2019. <https://www.linktv.org/shows/artbound/the-technicolor-desert-cinema-and-the-mojave>. Accessed 16 August 2023.

Ryan Historic District

Name of Property

Inyo, CA

County and State

Valley locations—Golden Canyon, Artists' Drive, Twenty Mule Team Canyon, and Desolation Canyon, where an elephant was made up as the fantastic Bantha creature, are so abstract, yet so strangely familiar to modern visitors. The National Park Service embraces Death Valley's contribution in the *Star Wars* empire, but is quick to point out that most of the filming done within the park up until the 1980s would no longer be permitted due to modern prohibitions on commercial filming within wilderness.⁴⁰¹ In fact, although limited filming does still occur at present, current governmental regulations and restrictions on filming practices have diminished Death Valley's appeal as a location filming site.

Property Type Associated with the Historic Context of Location Filming

With the exception of the *Spartacus* sets, almost all of the properties appearing on camera during the years location filming occurred in the Ryan Historic District originated with the mining context and were adaptively reused for tourism purposes; therefore, they will fall under the property types outlined above and Property Type 8: Location Filming-Related Resources.

Property Type 8: Location Filming-Related Resources

Spanning the decade of the 1950s, television and film makers utilized Ryan's remote location, well-preserved and anachronistic architecture, and striking industrial landscapes to transport their audiences to other times and places. While much of the location filming had little physical effect on the district's resources, some left lasting impacts on Ryan's landscapes. This property type covers those resources which gained their significance during Ryan's location filming period. While, some extant resources are known to have been built or brought in specifically for filming purposes, other resources evaluated under this property type will also fall under other property types.

As a unique part of the history of the Ryan district and as examples of the region-wide use of Death Valley as a location filming site, Ryan's filming-related resources are important on an individual level and as elements that contribute to the significance of the overall district. These resources include buildings, structures, structural vestiges, linear features, equipment, artifact scatters, and other features. They may be archaeological rather than architectural in nature, and should be viewed as part of the cultural landscape.

Ryan's various location-filming resources fall under one area of significance: Art: Film and Television Production. They are significant on the local level under Criteria A and D. The period of significance is 1952 to 1959, starting with the first known filming of *Death Valley Days* and ending with the filming of *The Twilight Zone*.

⁴⁰¹ National Park Service, "Star Wars in Death Valley," [www.nps.gov](http://www.nps.gov/deva/planyourvisit/star-wars-in-death-valley.htm), <https://www.nps.gov/deva/planyourvisit/star-wars-in-death-valley.htm>. Accessed 16 August 2023.

Ryan Historic District

Name of Property

Inyo, CA

County and State

A REFUGE DURING THE COLD WAR: RYAN'S ROLE IN CIVIL DEFENSE, 1962-1971

In the early 1960s, local county officials representing the National Civil Defense Program directed the construction and stocking of a fallout shelter and storage space in the Ryan Historic District's main Haulage Tunnel. It was one of many such shelters commissioned by the Office of Civil Defense (OCD) as a response to the growing threat of a Soviet nuclear attack on the United States. In cooperation with the Army Corps of Engineers, Inyo County participated in the National Fallout Shelter Survey, an effort by government officials to identify spaces in existing buildings and structures suitable for protection from fallout after the detonation of a nuclear bomb. Once adequate spaces were identified, inspected, and licensed, they were stocked with necessary supplies; periodic inspections continued into the 1970s. Countywide shelters were deemed essential in the protection and safety of the community; Inyo County identified several possible sites countywide and began site inspection and stocking in 1962. The Ryan Haulage Tunnel was approved as an appropriate shelter space, an additional storage space was excavated to hold survival supplies. The shelter and storage spaces were periodically inspected until they were decommissioned in 1971. As described in the Descriptions section, the Haulage Tunnel and adjoining storage space are extant and contain most of the original survival supplies. As many 1960s fallout shelters have been victims of vandalism and theft, the Ryan shelter is unique in its retention of integrity. It is significant as one of the few intact fallout shelters representing this critical time in U.S. history.

Ryan and the Inyo County Civil Defense Program

As a response to the looming threat of nuclear war during the Cold War era, Executive Order 10952, signed by Kennedy in 1961, organized the national civil defense program into eight regions, controlled by the OCD headquarters at the Pentagon. California, along with Nevada, Utah, Arizona, and Hawaii (and the territories of American Samoa and Guam) constituted Region 7 and was managed by a regional office in Santa Rosa. Early on, national civil defense leaders stressed the importance of local control of civil defense practices as efficacious to the program as a whole.⁴⁰² States varied in their degree of involvement in civil defense preparation. The leaders of California, perhaps recognizing its geographic vulnerability, were some of the first to organize a civil defense infrastructure. The California Disaster Office, created by the 1945 California Disaster Act, was responsible for combating emergency situations; as the tensions with the Soviet Union rose, potential nuclear attack became one such situation.

In 1950, the governor of California, Earl Warren, criticized what he viewed as the federal government's lackadaisical attitude on civil defense and opted to organize the state's own preparedness. He commented that "California is on the frontier of the nation...the international situation is grave, and we have felt that we must move immediately to set up a working organization to meet any eventuality."⁴⁰³ Through the California Disaster Council and the Office of Civil Defense, Warren moved "full steam ahead" to "get [the] civil defense machinery

⁴⁰² Rose, Kenneth, *One Nation Underground: The Fallout Shelter in American Culture*, London, New York University Press, 2001, 18.

⁴⁰³ *Los Angeles Times*, 6 Dec 1950, 19.

Ryan Historic District

Name of Property

Inyo, CA

County and State

operating right down to the individual citizen.”⁴⁰⁴ He made provisions to set up block wardens in every city block of the state and corresponding rural areas, took action to accelerate police, fire, and first aid training, and established local disaster councils in 242 of California’s 304 cities and in 53 of the 58 counties.⁴⁰⁵ He also created ten statewide civil defense regions, which were responsible for organizing and managing enacted policies.⁴⁰⁶

The notion that participation at the local level was paramount to the civil defense program’s success influenced most of California’s civil defense policy. In 1958, California legislators passed laws geared towards endowing local governmental officials with more agency in maintaining law and order, and furnishing public services relating to health and safety in the case of a civil defense emergency.⁴⁰⁷ In 1960, Governor Jerry Brown enacted Executive Order 60-CD-2 which allowed for all state and regional employees involved in civil defense activities to be considered governmental workers.⁴⁰⁸ The state, though, came under scrutiny by national leaders in its failure in the ongoing Fallout Shelter Survey. The survey was designed to identify, license, and stock spaces safe from nuclear fallout in the event of an attack. Despite the stressed importance of disaster preparedness, by 1962 none of the 1,200 fallout shelters licensed by California had been stocked with necessary supplies.⁴⁰⁹ Lack of participation by private shelter owners due to liability concerns prompted state officials to include Section 1714.5 of the Civil Code with all of their mailed shelter license applications; this legislation assured that anyone “who owns or maintains any building or premises which have been designated as a shelter from destructive operations or attacks by enemies of the United States” would not be held responsible for “any injuries arising out of the use” of a shelter.⁴¹⁰

Inyo County, along with the counties of San Bernardino, Riverside, and Mono, composed California’s Civil Defense Region 8—a sparsely populated, vast territory deemed suitable for housing refugees from more populated coastal cities.⁴¹¹ As early as 1952, regional municipalities participated in a statewide drill that stimulated an atomic attack. The following year, they collaborated to carry out an evacuation drill in which fourteen small civilian aircraft practiced evacuating bomb casualties from cities because enemy bombs and sabotage would likely destroy key railroads and highways.⁴¹² Governor Brown, perhaps impressed with the region’s participation in the program and its large number of civilian volunteers, visited San Bernardino in September 1961 to update locals on the state of the civil defense program. Addressing a crowd of more than one thousand onlookers he argued that civil defense was progressing however “now

⁴⁰⁴ Ibid.

⁴⁰⁵ Ibid.

⁴⁰⁶ *Los Angeles Times*, 20 Sept 1950, 10.

⁴⁰⁷ Beebe, James W., “Local Government and the H-Bomb: A New California Statute Prepares for Attack,” *American Bar Association Journal*, vol. 44, no. 2, 1958, pp. 149–52. *JSTOR*, <http://www.jstor.org/stable/25720274>. Accessed 30 July 2023, 151.

⁴⁰⁸ Brown, Edmund G., California Executive Order. No. 60- CD-2, 1960.

⁴⁰⁹ *Los Angeles Times*, 20 Sept 1950, 10.

⁴¹⁰ California Disaster Office, “Letter to All Concerned,” 9 March 1962, Death Valley National Park Archives.

⁴¹¹ Landis, Mark, “Civil Defense era had Inland Empire up in arms,” *Daily Bulletin* 4 February 2012, 1. http://www.dailybulletin.com/ci_19892621. Captured 22 July 2015.

⁴¹² Ibid.

Ryan Historic District

Name of Property

Inyo, CA

County and State

the preparation must be made before an attack. We still have time – but not much. Let us make the most of it.”⁴¹³

Unlike California’s urban centers, the rural counties of Region 8 did not have elaborate civil defense built architecture; however, they did contain well-developed underground infrastructure. The potential of mines, tunnels, and caves in providing safe and cost-effective fallout shelters was immediately acknowledged, and one that local administrators exploited. A civil defense director in San Bernardino County noted that “[m]ines and caves stand at the top of the list as good protection from radioactive fallout.”⁴¹⁴ In fact local leaders proclaimed that due to the many mines, their areas were “in much better shape as far as potential shelters [were] concerned than almost anywhere.”⁴¹⁵ Architect-led countywide surveys, like one carried out in San Bernardino in early 1962, inventoried thousands of lateral mine tunnels that would afford “almost perfect protection” from nuclear fallout.⁴¹⁶ The surveys concluded that mines provided the most promise for community fallout shelters because of the large amount of space, close proximity to regional cities, and protection factors that would allow for almost complete shielding.⁴¹⁷

Two of the largest mines in the region, Boron and the Sidewinder, became a prime focus for fallout shelter conversion. At Boron, a property held by U.S. Borax (where borax mining moved to from Ryan in 1927), workers at Edwards Air Force Base and mine employees collaborated to stock the mine with food, water, clothing, radios, and electrical equipment. The large underground facility, equipped with generators, plenty of water, decontamination showers, and the potential for a 200-bed government hospital, could accommodate 15,000 persons.⁴¹⁸ A much smaller operation by comparison, the Sidewinder just outside of Victorville, also underwent a community effort to become a fallout shelter to accommodate 1,000 persons. The local civil defense head enlisted community professionals such as mining engineers, architects, and sanitation experts to clean and map the mine, while county volunteers gathered supplies and assisted in the stocking of the mine. Both mines were privately funded with donations; also, shelter usage when the time came was not free. The Edwards AFB-U.S. Borax project planned to charge families \$1 per person per week, while the Sidewinder operation required that shelter users contribute a certain amount of labor or pay \$100 per person.⁴¹⁹ Pre-registration was also required.⁴²⁰

Along with other counties in California Civil Defense Region 8, Inyo County was early to provide assurance to its citizens that they would be protected in the event of a nuclear attack. It formed the Inyo County Civil Defense Council as early as 1951 with the Inyo road commissioner as the head, and collaborated with Region 8 members in civil defense preparation.⁴²¹ When

⁴¹³ Ibid., 2.

⁴¹⁴ “Mine Shafts to be Studied,” *San Bernardino Sun Telegram*, 11 January 1962.

⁴¹⁵ “Old Mine Tunnels,” *San Bernardino Sun Telegram*, 2 February 1962.

⁴¹⁶ Ibid.

⁴¹⁷ Ibid.

⁴¹⁸ “Mine Ready as Fallout Shelter,” *San Bernardino Sun Telegram*, 8 February 1962.

⁴¹⁹ Ibid.; “Fallout Shelter Registration Proceeds Well,” *San Bernardino Sun Telegram*, 25 December 1962.

⁴²⁰ “Fallout Shelter Registration Proceeds Well,” *San Bernardino Sun Telegram*, 25 December 1962.

⁴²¹ *Los Angeles Times*, 17 Jun 1951, 38.

Ryan Historic District

Name of Property

Inyo, CA

County and State

Kennedy expedited the completion of the National Fallout Shelter Survey in 1962, the county made a concerted effort to inventory and license all potential fallout shelter spaces. Earl Terry, the Inyo County Director of Civil Defense, appealed to local property owners to participate in the program by notification with a form letter and license application.

While the original letter and application to U.S. Borax identifying the Ryan Haulage Tunnel as a fallout shelter have not been recovered, comparable forms sent to the Gospel Charities Foundation of California, which owned and managed Scottys Castle (now part of Death Valley National Park), provide some insight into the shelter licensing process. The letter and attached “Fallout Shelter License or Privilege” form was sent out on 20 November 1962 and addressed to the foundation at their Hollywood headquarters.⁴²² It stated that the Scottys Castle property had been screened for fallout protection as part of the current Federal Fallout Shelter Survey, Marking and Stocking Program. In addition, “preliminary study...indicated that this property qualifie[d] for more detailed review as a potential public fallout shelter that might be used in the event of nuclear attack” and “before it [could] be further evaluated for possible public shelter, it [was] necessary that written permission for its use as a shelter be obtained.” The Civil Defense Director appeals to the property owner’s goodwill when he writes that “your acceptance and signature on these forms will render a valuable public service to your community and the nation” and “your cooperation in this vital and urgent program affecting our individual and national survival will be greatly appreciated.” Included with the letter is an excerpt from the Civil Code releasing fallout shelter property owners of liability and two license forms for Scottys Castle and Scottys Castle Tunnel, potential capacities 307 and 216 respectively, location codes and facility numbers. A second letter to the Manager of Scottys Castle dated 14 December 1962 is almost identical to the first; it’s unknown whether Mr. Terry was following up because of a lack of response, or whether he was unclear as to the actual property owner’s address.⁴²³ Regardless, the license applications are blank, suggesting that the Gospel Charities Foundation did not grant permission for further shelter evaluation.

In late 1962, U.S. Borax also likely received a letter and license form from Earl Terry requesting further evaluation of its Inyo County properties, the Ryan Haulage Tunnel and the Gerstley Mine, Shoshone, CA (Figure 55). Based on its concerted efforts to create fallout shelter space at its Boron mine, U.S. Borax fully cooperated with the countywide civil defense program. This is evident in the Ryan caretaker logbook dated 2 November 1962, where caretaker Jim Gill remarks that he “mine[d] bomb shelter” at Ryan.⁴²⁴ Unfortunately, the location of Ryan caretakers’ logs for 1963 to 1967 are unknown, therefore further information regarding shelter construction and stocking is unknown. However, the “shelter” is extant and retains much of its supplies, as detailed in the Descriptions Section of this document. It is located approximately 300 feet from the eastern portal on the south rib of the Haulage Tunnel and is connected to the main tunnel via a 10 ft wide by 5 ft tall timber-lined opening covered by a black oil cloth. The room measures 6 ft wide by 23 ft long and has a height of 6 ft totaling 828 cubic feet. It has a timber-lined back

⁴²² Terry, Earl, Correspondence with Gospel Charities Foundation of California re:Fallout Shelter License or Privilege Agreement, 20 November 1962, Death Valley National Park Archives, DEVA60758/Folder 54.

⁴²³ Terry, Earl, Correspondence with Manager Scottys Castle re:Fallout Shelter License or Privilege Agreement, 14 December 1962, Death Valley National Park Archives, DEVA60758/Folder 54.

⁴²⁴ Gill, “Friday, November 2, 1962,” Ryan Caretaker Log 1962.

Ryan Historic District

Name of Property

Inyo, CA

County and State

(ceiling), a small ventilation shaft, and it is packed full of shelter provisions, all dated 23 December 1963, suggesting that the shelter was not stocked until a year after it was screened and licensed and construction began.

The abundance of supplies and the fact that there is very little livable space in the excavated room suggests that the actual “fallout shelter” was the complete Haulage Tunnel, and the room served as auxiliary storage space. The federal government’s requirement that fallout shelters had to contain one cubic foot of storage space per person indicates that the Ryan Haulage Tunnel may have been rated for a capacity of at least 820 persons. This number is supported by the quantity of supplies. Using sanitation kits as an example: if 1 sanitation kit was provided for every 50 individuals, then at least 17 kits would be needed in storage. Seventeen sanitation kits remain in the storage space and others may have been removed over time. This might indicate that tunnel capacity may have been even higher. While it may not seem like a large number, given the location this is an astonishing number of people. During its peak mining years in the early 1920s, Ryan’s largest population was about 300. In 1960, no more than 5 people lived there. In addition, Inyo County’s total population in 1960 was 11,684 people for a county of 10,227 sq. miles, that’s roughly 1.14 people per sq. mile.⁴²⁵ Thus, theoretically, the Ryan Haulage Tunnel could shelter all the people in an 800 sq. mi. radius.

As previously mentioned, no records have been found during the years 1963 to 1967, but it can be assumed that the shelter space was periodically inspected pursuant to Phase III instructions of the National Fallout Shelter Survey (see below). It is noted that in 1970, Major Strakler of the Civil Defense Program traveled to inspect the medical and food supplies of the Ryan and Gerstley shelters.⁴²⁶ Due to the pervasive theft of stocked narcotics, civil defense officials were especially interested in the protection of medical supplies; Ryan’s remote location and the fact that the Haulage Tunnel was kept locked and minded by an onsite caretaker, rendered it an especially secure space.

Adhering to national and regional trends, Ryan’s fallout shelter was decommissioned in 1971. Lyn Moore noted in his caretaker logbook dated 15 October 1971 that he accompanied Mrs. Walker, a nurse from Civil Defense, to remove drugs from the medical kits in the Ryan tunnel and Gerstley Mine.⁴²⁷ While Mrs. Walker confiscated the narcotics from the shelter storage area, she left antibiotics, analgesics, first aid supplies, food, sanitation kits, and water drums. While some supplies have been rummaged through and removed over the years, the Ryan shelter storage space contains much of what it did when it was stocked in 1963.⁴²⁸ It’s timeline of construction, stocking, maintenance and eventual decommissioning fits almost exactly with the events of the civil defense era in U.S. history; thus, it is highly significant in that it represents this unique time when impending Cold War nuclear threat was met by a collaborative national and local community response.

⁴²⁵ U.S. Census Bureau, “General Population Characteristics—California, 1960,” *census.gov*, <https://www2.census.gov/library/publications/decennial/1960/population-volume-1/vol-01-06-c.pdf>. Accessed 15 July 2023.

⁴²⁶ Moore, Lyn, “Wednesday, December 2, 1970,” Ryan Caretaker Log 1970, copy on file Death Valley Conservancy Archives.

⁴²⁷ Moore, “Friday, October 15, 1971,” Ryan Caretaker Log 1971.

⁴²⁸ This is not true of the Gerstley shelter, which no longer contains any supplies.

Ryan Historic District

Name of Property

Inyo, CA

County and State

Historic Context of the U.S. Civil Defense Program

The civil defense program in the United States was shaped primarily by the escalating tensions of the Cold War and building animosity with the Soviet Union. The fear of nuclear war and the potential for a nuclear attack on American soil led to the development of civil defense programs aimed at preparing and protecting the civilian population. While the birth of an active civil defense program is often associated with John F. Kennedy's response to the Soviet advances on Berlin and Cuba in the early 1960s, the concept of civil defense in the U.S. can be traced back to World War II when the Office of Civil Defense (OCD) was established in 1941. The OCD was responsible for organizing and coordinating civil defense efforts during the war, including air raid drills, blackout practices, and the establishment of bomb shelters.

After World War II, with the growing threat of nuclear war from the Soviet Union, the United States recognized the need for a more comprehensive civil defense policy.⁴²⁹ In 1950, President Harry Truman signed the Federal Civil Defense Act, which led to the creation of the Federal Civil Defense Administration (FCDA). The FCDA was responsible for coordinating national civil defense efforts. One effort was the "Duck and Cover" campaign, which aimed to educate the public, especially schoolchildren, on how to protect themselves in the event of a nuclear attack. The campaign featured educational films and materials that encouraged people to "duck" under desks or tables and "cover" their head to minimize the impact of a nuclear explosion. Other components of the civil defense program in the 1950s included the CONELRAD (Control of Electromagnetic Radiation) system, implemented to ensure the public could receive emergency information through AM radio frequencies. This system evolved into the Emergency Broadcast System (EBS), which later became the Emergency Alert System (EAS) still used today. Operation Alert was a series of civil defense drills conducted during the 1950s to test the preparedness of the nation for a nuclear attack. These drills involved civilian participation in simulated emergency scenarios to practice evacuation and response procedures.

Many of the components of the early civil defense program concentrated on surviving the initial nuclear detonation in urban centers; however, by the mid-1950s, focus shifted to the effects of residual radiation, or nuclear fallout, on the surviving population, and the construction of fallout shelters especially in suburban areas.⁴³⁰ The Eisenhower Administration resisted the creation of a national fallout shelter program because of concerns of fostering a bad public image on an international scale, but encouraged individuals to build fallout shelters to protect themselves during the aftermath of a nuclear explosion. It created the Office of Civil and Defense Mobilization (OCDM) in 1958 to develop a "national shelter plan" with emphasis on private shelter construction and government stimulation and guidance.⁴³¹ At the time, a fallout shelter was defined as a structure with a "protection factor" (PF) of 5,000 or greater, meaning radiation within the shelter would be 1/5,000th of outside levels; however, due to the difficulty in securing such protected spaces, by 1962, an acceptable PF for a fallout shelter was reduced to 40.⁴³²

⁴²⁹ Rose, 23.

⁴³⁰ Monteyne, David, *Fallout Shelter: Designing for Civil Defense in the Cold War*, Minneapolis, University of Minnesota Press, 2011, 14.

⁴³¹ Rose, 33.

⁴³² Ibid., 31.

Ryan Historic District

Name of Property

Inyo, CA

County and State

Despite government emphasis on the vulnerability of civilians during an enemy attack, due to feasibility and expense concerns, very few Americans constructed private shelters by the end of the 1950s.

While the national civil defense program languished in the 1950s, it was unequivocally revived in the early 1960s by two events: John F. Kennedy's Berlin speech and the Cuban Missile Crisis. As a reaction to the advancing influence of the Soviet Union on Berlin and East Germany in early 1961, President Kennedy delivered a speech to the nation arguing that the American home had been put on the front lines of the Cold War, and security could be found in the fallout shelter.⁴³³ Kennedy insisted that "the lives of those families which are not hit in a nuclear blast and fire can still be saved—if they can be warned to take shelter and if that shelter is available."⁴³⁴ He signed Executive Order 10952 and requested from Congress a \$3.24 billion increase for military and \$207 million to fund a civil defense initiative that would "identify and mark space in existing structures—public and private—that could be used for fall-out shelters in case of attack."⁴³⁵ The Cuban Missile Crisis of 1962, in which the Soviets planned to arm Cuba with nuclear warheads, only increased the urgency of the civil defense program. However, when Kennedy inquired as to the progress of the shelter program in late 1962, he learned that it was far behind schedule; shelter spaces had not been completely surveyed and shelter stocking had only begun three weeks prior.⁴³⁶ In addition, panicked citizens called local civil defense offices only to learn that shelters were non-existent, especially in cities.⁴³⁷ The country remained unprepared for a domestic nuclear attack.

The National Fallout Shelter Survey

In late 1962, Kennedy prioritized the civil defense fallout shelter program's identification of shelter spaces and ordered the distribution of survival supplies, thus stimulating the National Fallout Shelter Survey. Beginning in 1961, this survey became the backbone of U.S. civil defense planning in its efforts to identify appropriate public and private fallout shelter spaces in existing buildings and structures in all U.S. communities.⁴³⁸ Led by the Army Corps of Engineers and the Navy Bureau of Yards and Docks, the National Fallout Shelter Survey was realized in three phases. The primary purpose of Phase I operations was to identify potential fallout shelter areas in all public and private buildings having a fallout protection factor of 20 or higher, and capacity for at least 50 persons.⁴³⁹ Architects and engineering contractors gathered information about existing structures through previously collected data, such as building permits, plans, and insurance maps, and the data was used to calculate potential shelter capability and capacity in each building. Phase I was completed by March 1962 with the OCD locating at least 70 million shelter spaces.⁴⁴⁰

⁴³³ Ibid., 4.

⁴³⁴ Ibid., 3.

⁴³⁵ Ibid., 2.

⁴³⁶ Ibid., 194.

⁴³⁷ Ibid., 198-200.

⁴³⁸ Monteyne, 37.

⁴³⁹ Department of Defense, Office of Civil Defense, *Annual Report of the Office of Civil Defense, 1962*, 1962, 17.

⁴⁴⁰ Ibid., 6.

Ryan Historic District

Name of Property

Inyo, CA

County and State

Phase II operations included detailed onsite surveys of buildings identified in Phase I as suitable for fallout shelters, devising means for improving the shelter potential of buildings that have a less than 100 fallout protection factor, and surveying selected special facilities such as caves, mines, and tunnels for shelter suitability.⁴⁴¹ Shelters which passed inspection were licensed, marked (with fallout shelter signs), and stocked. This phase was often relegated to local civil defense officials who were expected to contact building owners, coordinate volunteers, and direct the warehousing and movement of supplies.⁴⁴² A special government form, Fallout Shelter License or Privilege, was sent to property owners and allowed the temporary access by the public to specified shelter space in emergencies, and required the posting and maintenance of shelter signs, maintenance of shelter supplies and equipment on the premises, and federal and local government inspection. Issues of liability quickly arose and a letter explaining the absence of liability on the property owner's part often accompanied the license application. In fact, thirty states, including California, legislated to provide immunity to the owners of real property providing fallout shelter space to the community.⁴⁴³ This was successful as 88% of approached private property owners signed licenses.⁴⁴⁴

Phase II was completed by 1963, and Phase III was a lengthier operation, involving the annual inspection of shelter spaces and updated planning for their use by community members. Local officials, led by a local civil defense director, crafted Community Shelter Plans (CSP) to ensure that the community received exact instructions of where to go and what to do in the event of a nuclear bomb; mapped routes for accessing shelters were often printed in local phone directories.⁴⁴⁵ Since responsibility was relegated to local government, specific details on the stocking and upkeep of fallout shelters is difficult to ascertain. However, interest in fallout shelters diminished by the late 1960s and by the mid-1970s, rancid shelter supplies, such as nutritive biscuits, were removed without replacement.⁴⁴⁶ A brief revitalization of the civil defense fallout shelter program occurred during the 1980s Reagan-era, but concern for national and natural disaster preparedness was prioritized.⁴⁴⁷ In fact the OCD became the Federal Emergency Management Agency (FEMA) in 1979.

Fallout Shelter Requirements

By the mid 1960s, there were enough new urban buildings incorporating fallout shelters to be used as prototypes for civil defense architecture.⁴⁴⁸ The NRHP-listed property, the Abo Elementary School in Artesia, New Mexico, a windowless concrete bunker constructed entirely underground is one such example. More often though, shelters were incorporated into parts of already-built buildings in cities; subterranean spaces, such as basements and parking garages were found to be particularly suitable.⁴⁴⁹ Although parameters were eventually relaxed to expand

⁴⁴¹ Ibid., 18.

⁴⁴² Monteyne, 54.

⁴⁴³ Department of Defense, *Annual Report* 1962, 20; California Disaster Office, "Letter to All Concerned."

⁴⁴⁴ Monteyne, 55.

⁴⁴⁵ Monteyne, 78.

⁴⁴⁶ Monteyne, 274.

⁴⁴⁷ Ibid.

⁴⁴⁸ Monteyne, 189.

⁴⁴⁹ Ibid., 192.

Ryan Historic District

Inyo, CA

Name of Property

County and State

the number of available shelter spaces, initially, fallout shelters marked and stocked under the survey had to meet certain requirements. They had to have a protection factor of at least 100, space for at least 50 persons which translated to a minimum of 10 square feet per person in adequately ventilated shelters and 500 cubic feet in unventilated spaces. In addition, all shelters had to contain one cubic foot of secure storage space per person.⁴⁵⁰

Civil defense officials quickly recognized the adaptability of mines, tunnels, and caves as fallout shelter spaces in rural settings. A report prepared for the OCD in 1965 entitled *An Evaluation of the Shelter Potential in Mines, Caves, and Tunnels* concluded that

The extensive use of mines could constitute an important element in civil defense programs (especially those with budget restrictions) not only because they meet basic life-saving criteria as often being located outside expected blast areas and always providing at least minimum fallout protections for survival, but because they also offer considerable hardness at low cost and protection of health from radiation effects, and [because of their low visibility,] they tend to avoid or reduce domestic debate and unfavorable international responses.⁴⁵¹

More specifically, mines were thought to have a protection factor of at least 1000, they offered some blast and a high degree of thermal protection, and most importantly (according to the study), were low cost.⁴⁵² The report goes on to state that the most suitable mines were the industrial mineral type such as limestone, salt, gypsum, and sandstone because they often occur in stable ground with large, excavated chambers. Mine surveys commenced in the 1950s, and the 1965 report lists fallout shelter space potential at one billion square feet.⁴⁵³ The most suitable mines were immediately available, clean, pleasant, well-lighted, and with space for 150,000 persons.⁴⁵⁴ The well-established industrial mines were also cheap to adapt as shelters at \$0.025 per cubic foot of space with many at potentially a zero cost.⁴⁵⁵ Most adaptable mines were located in eastern states; by 1964, Region 7 including Arizona, Nevada, California, and Utah only contained approximately 46,000 stocked shelter spaces (or space for 46,000 persons), merely 5% of the country's total.⁴⁵⁶

Shelter Supplies

Phase II of the National Fallout Shelter Survey included stocking of the identified and licensed shelter spaces with standardized supplies. The OCD decreed that shelter must be stocked with supplies ready for use from the moment they are placed in the shelter with essential items

⁴⁵⁰ Department of Defense, *Annual Report*, 1962, 17.

⁴⁵¹ Krupka, Robert A., *An Evaluation of the Shelter Potential in Mines, Caves, and Tunnels*, prepared for the Office of Civil Defense, Hudson Institute, Inc., 1965, 1.

⁴⁵² *Ibid.*, 2; Monteyne, 121.

⁴⁵³ Krupka, iii.

⁴⁵⁴ *Ibid.*, 40.

⁴⁵⁵ *Ibid.*, 36.

⁴⁵⁶ *Ibid.*, 33-35. This is likely due to the larger number of underground metal, as opposed to industrial, mines.

Ryan Historic District

Inyo, CA

Name of Property

County and State

including food, water, and sanitation, medical, and radiological kits. The federal government developed, procured, and distributed these survival items to local governments who then were responsible for placing them in the licensed shelters and assuring their security, maintenance, and availability for emergency use. Provisions were expected to be usable for at least five years and considered adequate to sustain life and maintain occupants in a condition to resume an active and productive life upon emergence.⁴⁵⁷

To accommodate fifty sheltered persons for a two-week period, a fallout shelter space was required to contain (Figure 56):⁴⁵⁸

- 10 double poly-ethylene lined lightweight metal drums, each holding 17 1/2 gallons of water
- 10 cases of survival biscuits, packaged in hermetically sealed cans amounting to 5 pounds of food per weight per shelter occupant. The biscuits would remain usable for as long as 15 years after storage.
- 1 sanitation kit, consisting of a 17 1/2 gallon fiber drum with a polyethylene liner packed with a toilet seat, toilet paper, aseptic chemicals, sanitary napkins, a waterless hand cleaner, plastic drinking cups for individual use, and other items. The empty water drums would serve as additional waste containers.
- 1 medical kit with items designed to save lives and alleviate suffering by (1) preventing disease and checking its transmission, (2) controlling emotional stress, and (3) treating disease symptoms to alleviate suffering and prevent complications. Such items included aspirin, antibiotics, phenobarbital, surgical soap, iodine, bandages, tongue depressors, cotton swabs, forceps, syringes, and thermometers among other medical items. Since the kit contained phenobarbital, a narcotic, the OCD advised special measures to be taken to insure secure storage of the supplies.⁴⁵⁹
- 1 radiological kit (not delivered to all shelters) containing a low-range beta-gamma discriminating survey meter for monitoring food, water, and personnel, a high-range survey meter for monitoring inside and outside the shelter, two dosimeters to measure personnel exposure, and a dosimeter charger.

By 1972, all survival supplies in federal warehouses were exhausted and so the OCD, now called the Defense Civil Preparedness Agency (DCPA), discontinued its federal stocking program, except for the radiological monitoring kits.⁴⁶⁰ At the close of that year, 105,722 public fallout shelters nationwide were stocked with general survival supplies sufficient to accommodate 65.4 million persons for two weeks.⁴⁶¹ Civil defense policy pivoted to a focus on maintenance, care, and inspection of supplies at the local level and guidance on preserving supplies in place and disposal of deteriorating supplies.

By the 1970s, after years of publicity and expenditure most Americans were largely apathetic to civil defense and many were unaware of the location of their nearest fallout shelter.⁴⁶² Natural disasters like earthquakes and fires were a much more sinister threat than nuclear war thus disaster preparedness became more of a focus by regional municipalities. Once the pride of local communities, fallout shelters sustained deterioration and vandalism. For example, Victorville's

⁴⁵⁷ Department of Defense, *Annual Report*, 1962, 23.

⁴⁵⁸ *Ibid.*, 23-32.

⁴⁵⁹ Department of Defense, Office of Civil Defense, *Fallout Shelter Medical Kit*, Federal Civil Defense Guide Part d, Chapter 2 Appendix 8, 1967, 3.

⁴⁶⁰ Department of Defense, Civil Preparedness Agency, *Civil Preparedness—A New Dual Mission, Annual Report 1972*, 1972, 22.

⁴⁶¹ Department of Defense, Office of Civil Defense, *Annual Report of the Office of Civil Defense*, 1969, 38.

⁴⁶² "Civil Defense Still All but Ignored by Public," *Los Angeles Times*, 21 March 1971.

Ryan Historic District

Name of Property

Inyo, CA

County and State

Sidewinder Mine hailed as “the best equipped community nuclear fallout shelter in the state” was so frequently burglarized and vandalized that by mid-1973 there was “almost nothing left to take or destroy.”⁴⁶³ The mine was deemed more of a liability than an asset, and plans were made to permanently close the portal. In fact, such was the fate of most Cold War era fallout shelters.

Property Type Associated with the Historic Context of Civil Defense

Only two properties have been identified as associated with the civil defense historic context. One originated with the mining context and was adapted for civil defense after 1962 and the other was created specifically for civil defense purposes; therefore, one will fall under multiple property types as well as Property Type 9.

Property Type 9: Civil Defense-Related Resources

During the Cold War-era, regional officials identified Ryan underground resources as being potential community refuges from nuclear fallout, should the need arise. This was one example of a national pattern of civil defense preparedness. While the identification and definition of existing spaces as shelters left no physical impact in the Ryan Historic District, one extant resource is known to have been built explicitly for this purpose.

As a unique part of the history of the Ryan district and as example of the region and nationwide use of established properties for civil defense preparedness, Ryan’s civil defense related resources are important on an individual level and as elements that contribute to the significance of the overall district. These resources include structures and their associated artifacts.

Ryan’s civil defense resources fall under one area of significance: Military: Civil Defense. They are significant on the local level under Criteria A and D. The period of significance is 1962 to 1971, starting with the first known construction of the fallout shelter storage room and ending with the shelter’s decommissioning.

DISTRICT COMPARISONS

It is difficult to find historic properties that have the depth and complexity, as well as the integrity, of the Ryan Historic District. Most mining districts listed on the NRHP such as the Empire Mine SP and Bodie SP in California, and the Kennecott Mines as part of the Wrangell-St Elias National Park in Alaska, are solely mining properties and significant in their association with the metals mining industry. The Ryan Historic District is unique in its association with the mining of industrial minerals, specifically borax. Especially when considering that the other Pacific Coast Borax-affiliated mining camps—Borate, old Ryan at the Lila C, and Boron—have very little remaining historic integrity, the Ryan Historic District is easily identifiable as the best remaining example of a borax mining camp in all of California and the West. In an additional contrast to comparable mining districts, the Ryan Historic District is significant in that it has its origin in the mining industry but was repurposed in response the rise of other industries: tourism,

⁴⁶³ “Once a Mine,” *San Bernardino Sun Telegram*, 21 April 1973.

Ryan Historic District

Name of Property

Inyo, CA

County and State

entertainment, and defense. With the Ryan Historic District, the broader patterns of history that make up the rich California past intersect within one property. In addition, its corporate vernacular architecture is the only remaining example of this distinctive style designed and created by one company, PCB. Finally, the district's extensive archaeological deposits have the potential to address ongoing research in areas such as social and technological adaptation to the remote and harsh location, women's and ethnic history in Death Valley, the process of set building and development for Hollywood location filming, and the implementation of a national civil defense program on the local level. Lastly, the Ryan Historic District is unique in that it is privately held—the commitment of the Death Valley Conservancy to maintain and mindfully preserve its resources guarantees that these resources will continue to convey to contemporary visitors the sense of another time and place in the epic history of Death Valley.

Ryan Historic District
Name of Property

Inyo, CA
County and State

9. Major Bibliographical References

Bibliography (Cite the books, articles, and other sources used in preparing this form.)

3 *Godfathers*. IMDB.com. <https://www.imdb.com/title/tt0040064/>. Accessed 15 August 2023.

Alanen, Arnold R. "Corporate Vernacular: Communities and Housing in Michigan's Copper Country." Abstracts: Vernacular Architecture Forum Conferences, 1982-1984, *Perspectives in Vernacular Architecture*, vol. 2, 1986, pp. 215-216. JSTOR, <http://www.jstor.org/stable/3514332>. Accessed 22 October 2023.

Ames, Walter. "Death Valley Days Has Authentic Backgrounds." *Los Angeles Times*, 17 December 1955, 21.

Ames, Walter. "New Microwave Relay Brings Three 'Live' Eastern Shows to Southland at Same Time." *Los Angeles Times*, 30 December 1952, 22.

"Average Monthly and Annual Temperatures at Death Valley, 1911-2023." *weather.gov*, [https://www.weather.gov/media/vef/Climate/Death%20Valley%20Climate%20Book/Average%20Temperature%20Monthly%20%26%20Annual%20Read%20Out%20\(1911-2023\).pdf](https://www.weather.gov/media/vef/Climate/Death%20Valley%20Climate%20Book/Average%20Temperature%20Monthly%20%26%20Annual%20Read%20Out%20(1911-2023).pdf). Accessed 21 September 2023.

Ayres, William Orville. "Borax in America." *Popular Science Monthly* 21 (July 1882), 352.

Beebe, James W. "Local Government and the H-Bomb: A New California Statute Prepares for Attack." *American Bar Association Journal*, vol. 44, no. 2, 1958, pp. 149-52. JSTOR, <http://www.jstor.org/stable/25720274>. Accessed 30 July 2023.

Beeby, David J. "Borate Deposits in California: Past, Present, and Future." In *Industrial Mineral and Extractive Industry Geology* (P.W. Scott and Colin Malcolm Bristow, editors), pp. 87-92. London: Geologic Society of London, 2002.

Blewett, Herschel. "Motor Party Thrills to Death Valley Winter Charms." *Los Angeles Evening Herald and Express*, 14 December 1938.

Boyd, Julian. "Agenda for Mr. Baker and Mr. Zabriskie, Ryan, California," 24 October 1926. U.S. Borax Collection, Death Valley National Park Archives, 2558/01-1737.

---. "Agenda for Mr. Zabriskie," 11 September 1923. U.S. Borax Collection, Death Valley National Park Archives, 2558/01-0807.

---. "Annual Report for Ryan, 1925-26," 31 October 1926. U.S. Borax Collection, Death Valley National Park Archives.

Ryan Historic District

Name of Property

Inyo, CA

County and State

---. "Annual Report for Ryan, 1926-27," 19 October 1927. U.S. Borax Collection, Death Valley National Park Archives.

Boyer, Lillian, "Notes on Life at Ryan, 1919-1924." Boyer Collection. Copy on file Death Valley Conservancy Archives.

---. Notes on the back of a photograph of Joseph Boyer taken inside the family cabin, 1919. Boyer Collection. Copy on file Death Valley Conservancy Archives.

Brown, Edmund G. California Executive Order. No. 60-CD-2. 1960.

California Disaster Office. "Letter to All Concerned," 9 March 1962. Death Valley National Park Archives, DEVA60758/Folder 54.

Chappell, Gordon. "To Death Valley by Rail: A Brief History of the Death Valley Railroad." In *Proceedings of the Third Death Valley Conference on History and Prehistory, January 30-February 2, 1992* (James Pisarowicz, editor), pp. 89-131. Death Valley Natural History Association, 1992.

Chickering, Roger. "Letter to C.R. Dudley," 24 August 1916. U.S. Borax Collection, Death Valley National Park Archives.

Childs, Wendell M. and George J. Roche. "Summary letter on recommendations for Ryan Baby Gauge railroad project," 1 June 1961. U.S. Borax Collection, Death Valley National Park Archives, 2558/01-1815.

"Civil Defense Still All but Ignored by Public." *Los Angeles Times*, 21 March 1971.

"Claim Jumpin' Jennie." *IMDb.com*, https://www.imdb.com/title/tt0556578/?ref_=ttpl_ov. Accessed 2 September 2023.

Cooper, Duncan L. "Dalton Trumbo vs. Stanley Kubrick: The Historical Meaning of *Spartacus*." In *Spartacus: Film and History* (Martin M. Winkler, editor), pp. 56-64, Blackwell Publishing, 2007.

Death certificate for John Smith, July 27, 1924. State of California Department of Public Health – Inyo County, California. Copy on file Death Valley Conservancy Archives.

"Death Valley Days Filming Locations." *Moviemaps.org*, <https://moviemaps.org/movies/1w9>. Accessed 2 September 2023.

Death Valley Hotel Company. Brochures, 1935-1942. Copy on file Death Valley Conservancy Archives.

Ryan Historic District

Name of Property

Inyo, CA

County and State

---. "Death Valley." Travel brochure for Season 1936-1937, [back cover]. Copy on file Death Valley Conservancy Archives.

---. "Ryan, California," ca. 1927. Copy on file Death Valley Conservancy Archives.

---. "Ryan, California," n.d., Copy on file Death Valley Conservancy Archives.

"Death Valley National Park Visitors Top 1 million for 2022." *inyoregister.com*, 7 Mar 2023, https://www.inyoregister.com/news/death-valley-national-park-visitors-for-2022-top-1-million/article_40834b64-bcf9-11ed-9915-372aa9e8803e.html. Accessed 10 October 2023.

Douglas, Kirk. *I Am Spartacus! Making a Film, Breaking the Blacklist*. Open Road Integrated Media, 2012.

---. *The Ragman's Son: An Autobiography*. Simon and Schuster, 1988.

Du Brew, Rick. "Story of 'Death Valley Days' best of all." *Redlands Daily Facts*, 23 June 1969, 14.

Dudley, C.R. "Letter to C.B. Zabriskie re: fire insurance," 4 November 1916. U.S. Borax Collection, Death Valley National Park Archives.

Department of Defense, Civil Preparedness Agency. *Civil Preparedness—A New Dual Mission, Annual Report 1972*. 1972.

Department of Defense, Office of Civil Defense. *Annual Report of the Office of Civil Defense, 1962*. 1962.

---. *Annual Report of the Office of Civil Defense, 1969*. 1969.

---. *Fallout Shelter Medical Kit*, Federal Civil Defense Guide Part d, Chapter 2 Appendix 8, 1967.

Faulkner, Herbert. "Annual Report for Ryan 1916-1917," 28 Nov 1917. U.S. Borax Collection, Death Valley National Park Archives.

Filmsite Movie Review. "Greed (1924)." *filmsite.org*, <https://www.filmsite.org/gree.html>. Accessed 13 August 2023.

"Escape." *IMDb.com*, https://www.imdb.com/title/tt0556608/?ref_=ttep_ep15. Accessed 2 September 2023.

Ryan Historic District

Name of Property

Inyo, CA

County and State

Evans, James R. Gary C. Taylor and John S. Rapp. *Mines and Mineral Deposits in Death Valley National Monument, California*. Special Report 125. Sacramento, California Division of Mines and Geology, 1976. U.S. Borax Collection, Death Valley National Park Archives, 2558/01-1352.

"Fallout Shelter Registration Proceeds Well." *San Bernardino Sun Telegram*, 25 December 1962.

Garrett, Donald E. *Borates: Handbook of Deposits, Processing, Properties and Use*. New York, Academic Press, 1998.

GCE. "Letter to R.C. Baker," 10 March 1915. U.S. Borax Collection, Death Valley National Park Archives.

---. "Letter to R.C. Baker," 16 April 1915. U.S. Borax Collection, Death Valley National Park Archives.

Gill, James. "Friday, November 2, 1962." Ryan Caretaker Log 1962. Copy on file Death Valley Conservancy Archives.

---. "Tuesday, March 13, 1962." Ryan Caretaker Log 1962. Copy on file Death Valley Conservancy Archives.

Glasscock, C.B. *Here's Death Valley*. Indianapolis, The Bobbs-Merrill Company, 1940.

Gower, Harry P. *50 Years in Death Valley: Memoirs of a Borax Man*. San Bernardino, California. Death Valley 49ers, 1969.

---. "Correspondence with F.M. Jenifer re: update on ongoing construction at the Furnace Creek Inn, and notes on conversion of Ryan into the Death Valley View Hotel," 6 October 1928. U.S. Borax Collection, Death Valley National Park Archives, 2558/01-1295.

---. "Correspondence with F.M. Jenifer re: number of guests at all properties in March 1937, and request for repairs (including some at Ryan)," 30 March 1937. U.S. Borax Collection, Death Valley National Park Archives, 2558/01-1298.

---. "Correspondence with F.M. Jenifer re: repeated request for repairs," 15 September 1937. U.S. Borax Collection, Death Valley National Park Archives, 2558/01-1298.

---. "Correspondence with Ruth Woodman," 14 July 1949. U.S. Borax Collection, Death Valley National Park Archives.

---. "Correspondence with Ruth Woodman," 15 August 1949. U.S. Borax Collection, Death Valley National Park Archives, 2558/01-0935.

Ryan Historic District

Name of Property

Inyo, CA

County and State

---. "Correspondence with Ruth Woodman," 24 August 1949. U.S. Borax Collection, Death Valley National Park Archives.

---. "Death Valley View Hotel, Ryan, Calif." 20 Mar 1946. U.S. Borax Collection, Death Valley National Park Archives.

---. "I Remember Ryan." *U.S. Borax Pioneer* Vol. 6 No.12, December 1965.

---. *Some Reminiscences of Death Valley*, ca. 1965. U.S. Borax Collection, Death Valley National Park Archives, 2558/01-0060.

Hanks, Henry G. Report on the Borax Deposits of California and Nevada. *Third Annual Report of the State Mineralogist, Part 2*. Sacramento, California Division of Mines and Geology, 1883.

Hardesty, Donald L. *Historical Evaluation of the Billie Borate Mine, Death Valley, California*. Prepared for American Borate Company, Virginia Beach, Virginia, 2007. Manuscript on file at Death Valley National Park Archives.

Hart Bros., Ellis & Co. "Additions and Betterments for the year ending 30th September 1924." U.S. Borax Collection, Death Valley National Park Archives.

Hart Bros., Tibbetts, Heiron & Co. "Borax Consolidated Limited (The Pacific Coast Borax Company of Nevada), Statement of Temporary and Sundry Additions (Death Valley) Charged to Profit and Loss Account," 30 September 1916. U.S. Borax Collection, Death Valley National Park Archives.

Hill, Roland L. *I Recommend (Good Places to Go, Eat, Play, and Shop)*. Torrance, California, DeLaney and Company, Inc., 1948.

"I Shot an Arrow Into the Air." *The Twilight Zone*, Season 1, Episode 15, CBS, Airdate 15 January 1960.

Jensen, Marvin and Bev Malley. "The History of Furnace Creek Ranch and Resort." *Death Valley 49ers Keepsake* No. 52, 2012.

Kovitz, Ray. "Author Wrote Death Valley Script Before Seeing Region; Now She's Leading Authority." *Los Angeles Times*, 18 August 1952, 26.

Krupka, Robert A. *An Evaluation of the Shelter Potential in Mines, Caves, and Tunnels*. Prepared for the Office of Civil Defense, Hudson Institute, Inc., 1965.

"Kubrick Replaces Tony Mann as Director of 'Spartacus'." *Hollywood Reporter*, 16 February 1959.

Ryan Historic District

Name of Property

Inyo, CA

County and State

Landis, Mark. "Civil Defense era had Inland Empire up in arms." *Daily Bulletin*, 4 February 2012. http://www.dailybulletin.com/ci_19892621. Captured 22 July 2015.

Langley, Christopher. "The Film History of Death Valley: From Jayhawkers to Jawas." *Death Valley 49ers Keepsake* No. 54, 2014.

Lazzaretto, Christine and Heather Goers. "Filming Locations Associated with the Motion Picture and Television Broadcasting Industries, 1908-1980." *Planning.lacity.gov*, SurveyLA—Los Angeles Citywide Historic Context Statement, 2019, https://planning.lacity.gov/odocument/e68277d1-b3b8-4a25-9f4a-75638c4a728a/7.1_Entertainment_Industry_Residential_Theme_1908-1980.pdf. Accessed 15 August 2023.

Lennig, Arthur. *Stroheim*. Lexington, University Press of Kentucky, 2000.

Link TV. "The Technicolor Desert: Cinema and the Mojave." 23 December 2019, <https://www.linktv.org/shows/artbound/the-technicolor-desert-cinema-and-the-mojave>. Accessed 16 August 2023.

Lingenfelter, Richard. *Death Valley and the Amargosa: A Land of Illusion*. Berkeley, University of California Press, 1986.

Los Angeles Times, 20 Sept 1950, 10.

Los Angeles Times, 6 Dec 1950, 19.

Los Angeles Times, 17 Jun 1951, 38.

Los Angeles Times, 15 October 1956, 46.

Majorie Alice Simmons, Standard Certificate of Birth, no. 159 (1926). State of California Department of Public Health – Inyo County, California. Copy on file Death Valley Conservancy Archives.

"Many Miners Go to Death Valley." *Reno Evening Gazette*, 11 November 1920.

Mattice, V.O. "Correspondence with W.M. Childs and proposal for Ryan Baby Gauge rehab," 8 December 1960. U.S. Borax Collection, Death Valley National Park Archives, 2558/01-1723.

Milas, J.E. "Correspondence with W.M. Childs re: rebuilding Ryan Baby Gauge," 7 December 1960. U.S. Borax Collection, Death Valley National Park Archives, 2558/01-1723.

"Million Dollar Wedding." *IMBd.com*, https://www.imdb.com/title/tt0556674/?ref_=fn_al_tt_2. Accessed 2 September 2023.

Ryan Historic District

Name of Property

Inyo, CA

County and State

“Mine Ready as Fallout Shelter.” *San Bernardino Sun Telegram*, 8 February 1962.

“Mine Shafts to be Studied.” *San Bernardino Sun Telegram*, 11 January 1962.

Monteyne, David. *Fallout Shelter: Designing for Civil Defense in the Cold War*. University of Minnesota Press, 2011.

Moore, Lyn. “Wednesday, December 2, 1970.” Ryan Caretaker Log 1970. Copy on file Death Valley Conservancy Archives.

---. “Friday, October 15, 1971.” Ryan Caretaker Log 1971. Copy on file Death Valley Conservancy Archives.

“Mr. Bigfoot.” *IMDb.com*, https://www.imdb.com/title/tt0556680/?ref_=ttpl_ov. Accessed 2 September 2023.

Myrick, David F. *Railroads of Nevada and Eastern California, Volume II: The Southern Roads*. Berkeley, California, Howell-North Books, 1963.

National Park Service. “Ruth Woodman.” *www.nps.gov*, <https://www.nps.gov/people/ruth-woodman.htm>. Accessed 15 August 2023.

---. “*Star Wars* in Death Valley.” *www.nps.gov*, <https://www.nps.gov/deva/planyourvisit/star-wars-in-death-valley.htm>. Accessed 16 August 2023.

Newton, Dwight. “Day and Night with Radio and Television.” *The San Francisco Examiner*, 22 December 1952, 18.

“Notes on Ryan death records from Inyo County Recorder.” Copy on file Death Valley Conservancy Archives. Accessed 5 June 2023.

“Old Mine Tunnels.” *San Bernardino Sun Telegram*, 2 February 1962.

“Once a Mine.” *San Bernardino Sun Telegram*, 21 April 1973.

Pacific Coast Borax Company. “Buildings at Ryan, Calif.” July 1915 (site plan) with hand corrected insurance values October 1915. Copy on file Death Valley Conservancy Archives.

---. “Buildings at Ryan, Calif.” August 1916. Copy on file Death Valley Conservancy Archives.

---. “Buildings at Ryan California.” February 1918 (handwritten corrections April 1919). Copy on file Death Valley Conservancy Archives.

---. “Buildings at Ryan, Calif.” June 1919 (site plan) with hand-corrected insurance values March 1920. Copy on file Death Valley Conservancy Archives.

Ryan Historic District

Name of Property

Inyo, CA

County and State

---. "Buildings at Ryan, Calif." February 1935 (site plan) with hand-corrected insurance values December 1941. Copy on file Death Valley Conservancy Archives.

---. "Buildings at Ryan, Calif." Revised to February 1942 (site plan and building list). Copy on file Death Valley Conservancy Archives.

---. "Buildings at Ryan, Calif." March 1947 (site plan), Los Angeles, March & McLennan Engineering Dept. Copy on file Death Valley Conservancy Archives.

---. "Buildings at Ryan, Calif." January 1952 (site plan), Los Angeles, Behrendt-Levy Insurance Agency Engineering Dept. Copy on file Death Valley Conservancy Archives.

---. "Floor Plan of Hospital to be Erected at Ryan, Calif." ca. 1920. Copy on file Death Valley Conservancy Archives.

---. "Floor Plans for Superintendent's Residence No. 50 and Ass't Superintendent's Residence No. 1, Ryan, Calif." Copy on file Death Valley Conservancy Archives. Accessed 15 December 2023.

---. "Map Showing Location of Buildings at Lila-C Mine. Ryan, Inyo Co., Cal. Surveyed Nov. 14, 1907." (Includes lists of insurance values of each building as of 1908). U.S. Borax Collection, Death Valley National Park Archives, 2558/01-0806.

---. "Second Floor Plan of Proposed Hospital and Staff House, Ryan, Calif." ca. 1920. Copy on file Death Valley Conservancy Archives.

---. "Store Keeper's Residence, Ryan, Calif." May 1925. Copy on file Death Valley Conservancy Archives.

---. "Structures at Ryan, California." Revised to February 1942 (site plan and building list). Copy on file Death Valley Conservancy Archives.

---. "Surveyor's Residence, Ryan, Calif." November 1924. Copy on file Death Valley Conservancy Archives.

---. "Expenses for Ryan and Death Valley Boarding Housing 1923-1925." U.S. Borax Collection, Death Valley National Park Archives.

---. "Guest House No. 3 [sic], Ryan, Calif. 1st and 2nd Floors Identical." ca. 1928. Copy on file Death Valley Conservancy Archives.

---. Want ad for storekeeper/bookkeeper for Ryan, 1914. U.S. Borax Collection, Death Valley National Park Archives.

Ryan Historic District

Name of Property

Inyo, CA

County and State

Palazzo, Robert P. *Ghost Towns of Death Valley*. Charleston, Arcadia Publishing, 2014.

---. *Post Offices and Postmasters of Inyo County, California, 1866-1966*. Fernley, CA, Douglas McDonald, 2005.

Pelgram, Bob. "Television and Radio's Off Mike." *Valley News*, 20 December 1955, 20.

"Production Anniversary of 'Spartacus' Filming." *The Times Argus*, 4 February 1960, 20.

Rabun, J. Stanley. *Structural Analysis of Historic Buildings: Restoration, Preservation, and Adaptive Reuse Applications for Architects and Engineers*. New York, John Wiley & Sons, Inc., 2000.

Rasor, C.M. "List of insurance values for buildings at or near Ryan, CA, July 1915" (enclosed with letter to C.R. Dudley), 28 July 1915. U.S. Borax Collection, Death Valley National Park Archives.

Rhyolite Herald. "Rhyolite Churches." Pictorial Edition, March 1909, reprinted in Betsy Ritter, *Life in the Ghost City of Rhyolite, Nevada*, pp.15-16, 1939). Reprint Morongo Valley, California, Sagebrush Press, 1982.

Ringhoff, Mary. Interview with Bill Smitheram, 3 March 2011. Copy on file at Death Valley Conservancy Archives.

---. *Life and Work in the Ryan District, Death Valley, California, 1914-1930: A Historic Context for a Borax Mining Community*. University of Southern California, Master's Thesis, 2012.

Rose, Kenneth. *One Nation Underground: The Fallout Shelter in American Culture*. London, New York University Press, 2001.

Scholl, C.A. Correspondence to W.M. Childs dated August 11, 1960 regarding the Ryan Baby Gage. U.S. Borax Collection, Box 37 File 75.09, Death Valley National Park Archives.

Scott, Vernon. "Kirk Douglas Has Troubles in Producing Spartacus." *The Hanford Sentinel*, 2 May 1959, 13.

---. "Spartacus, Most Expensive Pic Seen Grossing \$50,000,000." *Greenville Daily Advocate*, 10 August 1960, 3.

Serling, Rod. "Listening Post and TV Review." *The Valley Times*, 26 November 1959, 24.

Smitheram, Bill. Memories of Old Borate. *San Bernardino County Museum Quarterly* 44(1), pp. 1-7, 1997.

Ryan Historic District

Name of Property

Inyo, CA

County and State

Smitheram, Frank. "Tom Wilson, 1940." Smitheram Family Photo Album, Copy on file Death Valley Conservancy Archives.

Spartacus. Directed by Stanley Kubrick, Universal Pictures, 1960.

"'Spartacus' Change: Tearful Actress Replaced By Star." *The Atlanta Journal*, 19 February 1959, 32.

Terry, Earl. Correspondence with Gospel Charities Foundation of California re:Fallout Shelter License or Privilege Agreement, 20 November 1962. Death Valley National Park Archives, DEVA60758/Folder 54.

---. Correspondence with Manager Scottys Castle re:Fallout Shelter License or Privilege Agreement, 14 December 1962. Death Valley National Park Archives, DEVA60758/Folder 54.

"The Bandits of Panamint." *IMBb.com*, https://www.imdb.com/title/tt0946052/?ref_=ttpl_ov. Accessed 2 September 2023.

"The Twelve Pound Nugget." *IMBd.com*, https://www.imdb.com/title/tt0959706/?ref_=ttpl_ov. Accessed 2 September 2023.

The Walking Hills. IMDb.com, <https://www.imdb.com/title/tt0042033/>. Accessed 15 August 2023.

Todd, A.B., Construction Engineer. "Pacific Coast Borax, Lodging Houses for 176 Men, Ryan, Calif." 15 December 1918, No. 403 Building Plan. Copy on file Death Valley Conservancy Archives.

---. "Hand-drawn map of Ryan buildings (for insurance purposes)." ca. 1914. U.S. Borax Collection, Death Valley National Park Archives, 2558/01-1075.

---. "Pacific Coast Borax Company Heating System for Lodging House, Sup't Res and Office, Ryan, Calif." January 1920, No. 407 (building plans). Copy on file Death Valley Conservancy Archives.

Travis, N.J. and E.J. Cocks. *The Tincal Trail: A History of Borax*. London, Harrap Limited.

"Trumbo Gets 'Spartacus' Film Credit." *New York Post*, 8 August 1960, 50.

Union Pacific System. "Death Valley Tour, January 1927." Circular No. 1-1927 of the Los Angeles and Salt Lake Railroad Company. Copy on file Death Valley Conservancy Archives.

"United States Census, 1920." *FamilySearch.org*. <http://FamilySearch.org>, citing NARA microfilm publication T625, Washington, D.C., National Archives and Records Administration. Accessed 11 October 2023.

Ryan Historic District
Name of Property

Inyo, CA
County and State

U.S. Census Bureau. "General Population Characteristics—California, 1960." *census.gov*, <https://www2.census.gov/library/publications/decennial/1960/population-volume-1/vol-01-06-c.pdf>. Accessed 15 July 2023.

Walker, Ellis. "Radio-TV." *Daily Palo Alto Times*, 23 August 1952, 10.

Wikipedia. "*Spartacus* (film)." *Wikipedia.org*, [https://en.wikipedia.org/wiki/Spartacus_\(film\)](https://en.wikipedia.org/wiki/Spartacus_(film)). Accessed 8 September 2023.

Williams, Dick. "Olivier's Return Magnet for Mimes." *Mirror News*, 10 March 1959, 17.

Woodman, Ruth. "Notes on Julian Boyd Interview," 19 March 1947. U.S. Borax Collection, Death Valley National Park Archives.

---. "Notes on visit to Lila C with Harry Gower," 22 February 1947. U.S. Borax Collection, Death Valley National Park Archives, 2558/01-719.

---. *She Burns Green!": The Story of the Pacific Coast Borax Company*. Unpublished 1951 draft. U.S. Borax Collection, Death Valley National Park Archives.

---. *The Story of the Pacific Coast Borax Co.* Borax Consolidated, Ltd., 1951.

"Yaller." *IMDb.com*, https://www.imdb.com/title/tt0556933/?ref_=ttep_ep10. Accessed 2 September 2023.

Yellow Sky trailer, 20th Century Fox, 1948.

Zicree, Marc Scott. *The Twilight Zone Companion*. Toronto, Bantam Books, 1982.

Photographs

"1927 Ryan Elementary School." Copy on file Death Valley Conservancy Archives.

A public relations photograph of the Baby Gauge Railroad, view north, ca. 1916. DV-RYA-44, Death Valley National Park Archives.

"Billy Smitheram and store moved from Lila C, 1915." DV-RYA-23, Death Valley National Park Archives.

"Borax Mines at Ryan, California, ca. 1925." Herbert Summer Collection P.42086, James R. Parks Library and Archives.

Boyer, Albert. "1922, Town was taken from top of Funeral Range 1." Boyer Collection. Copy on file Death Valley Conservancy Archives.

Ryan Historic District

Name of Property

Inyo, CA

County and State

---. A photograph depicting the earliest cabins at Ryan, view east, ca. 1919. Boyer Collection. Copy on file Death Valley Conservancy Archives.

---. A photograph of Thelma, Laura, and Lillie Boyer, February 1922. Boyer Collection. Copy on file Death Valley Conservancy Archives.

---. "Cadillac with flange wheels to drive on R.R. tracks, Jos & Thelma" ca. 1921. Boyer Collection. Copy on file Death Valley Conservancy Archives.

---. "Hospital Ryan, 1922." Boyer Collection. Copy on file Death Valley Conservancy Archives.

---. "New hospital under construction," ca. 1924. Boyer Collection. Copy on file Death Valley Conservancy Archives.

---. "New staff houses from below," ca. 1925. Boyer Collection. Copy on file Death Valley Conservancy Archives.

---. "Ryan from mountain, our house," ca. 1922. Boyer Collection. Copy on file Death Valley Conservancy Archives.

---. "Ryan from top of Funeral Range," 1922. Boyer Collection. Copy on file Death Valley Conservancy Archives.

---. "School Play Yard," ca. 1921. Boyer Collection. Copy on file Death Valley Conservancy Archives.

---. "Store before they removed the stilts," ca. 1920. Boyer Collection. Copy on file Death Valley Conservancy Archives.

---. Photograph of the Hospital Under Construction, ca. 1924. Boyer Collection. Copy on file Death Valley Conservancy Archives.

---. Photograph showing Ryan from the mountain, view south, ca. 1922. Boyer Collection. Copy on file Death Valley Conservancy Archives.

---. South-facing view of the Lower Reservoir, Ryan Road, and Trackway, ca. 1922. Boyer Collection. Copy on file Death Valley Conservancy Archives.

---. View of House 2 from DVRR level, ca. 1925. Boyer Collection. Copy on file Death Valley Conservancy Archives.

Frasher, Burton. A photograph showing Ryan from downslope, view southeast, 1941. F-2763-1941, Pomona, Frashers Fotos. Copy on file Death Valley Conservancy Archives.

Ryan Historic District

Name of Property

Inyo, CA

County and State

---. A View of the Death Valley View Hotel from the Upper Biddy Mine, Looking North, 1930. A-1124-1930, Pomona, Frashers Fotos. Copy on file Death Valley Conservancy Archives.

---. "Guesthouses, Death Valley View Hotel, Ryan Death Valley, Calif." ca. 1930. Pomona, Frashers Fotos. Copy on file Death Valley Conservancy Archives.

---. "'Poison Rock,' Death Valley View Hotel, Ryan, Death Valley, Calif." ca. 1930. Frashers Pomona, Frashers Fotos. Copy on file Death Valley Conservancy Archives.

---. "Post Office, Store, and Dining Room, Ryan, Calif." ca. 1925. DV-RYA-08, Death Valley National Park Archives.

"Motor coach passengers at Ryan, 1929." DV-RYA-44E. Death Valley National Park Archives.

Overview of Ryan, southwest view, ca. 1921. TICOR/Pierce Collection, CHS-14222, USC Digital Archive 2004, California Historical Society.

Photograph depicting House 3 under construction, view west, 1924, Rosenloecher Collection, Death Valley Conservancy Archives.

Photograph of House 3, northeast view, ca. 1971. DV-RYA 65, Kern Collection, Death Valley National Park Archives.

Photograph of Ryan Camp from the Lower Biddy, looking northeast, ca. 1916. Ryan-USB-1924-1. Copy on file Death Valley Conservancy Archives.

Photograph of Ryan looking west from the Black Mesa, ca. 1915. Smitheram Collection. Copy on file Death Valley Conservancy Archives.

"Million Dollar Wedding," ca. 1954. Production Still, *Death Valley Days*. Copy on file Death Valley Conservancy Archives.

Ryan, northeastern view, ca. 1920-1921. RAM 2117, Eastern California Museum.

Ryan Overview, ca. 1965. DV-RYA 45A, Death Valley National Park Archives.

"Ryan Postcard," ca. 1925. Pape 2 ECM2000.4.2, Pape Collection, Eastern California Museum.

Smitheram, William. "Leaning Rock – Ryan," ca. 1916. Smitheram Family Photo Album. Copy on file with Death Valley Conservancy Archives.

Southwest view of Ryan from Hospital with snow, ca. 1918, DV-RYA-27, Death Valley National Park Archives.

Ryan Historic District

Name of Property

Inyo, CA

County and State

"*Spartacus* Scouting Photo," ca. 1958-1959. Margaret Herrick Library, Academy of Motion Picture Arts and Sciences.

"Store at Ryan Borax Mines, 1915." Pacific Coast Borax Company 23a, Death Valley National Park Archives.

"The Lower Biddy," ca. 1925. Frank A. Schilling Collection, LS_4392, James R. Parks Library and Archives.

"The Pacific Coast Borax Mine in Death Valley," ca. 1925. Frank A. Schilling Collection LS_4391, James R. Parks Library and Archives.

The southern part of Ryan and the DVRR locomotive from the Lower Biddy Mine, looking northeast, ca. 1920. DV-RYA-076, Death Valley National Park Archives.

Upper Biddy hoist, n.d. (ca. 1924). BOM 6, Death Valley National Park Archives.

Upper Biddy skip track and east part of Ryan from trestle, ca. 1919. DV-RYA-06, Death Valley National Park Archives.

View of Bunkhouse 2, ca. 1990. Moore Collection. Copy on file Death Valley Conservancy Archives.

View of Ryan from the Upper Biddy, ca. 1919. DV-RYA-07, Death Valley National Park Archives.

View of Ryan from the Upper Biddy, ca. 1919. DV-RYA-09, Death Valley National Park Archives.

"View of Ryan looking north, 1915." DV-RYA-01A, Death Valley National Park Archives.

View of Store and Ore Bins, ca. 1924. Rosenloecher Collection. Copy on file Death Valley Conservancy Archives.

Warehouse, ca. 1925. Schilling Collection, Eastern California Museum.

Willard, Stephen H. "137-Balanced Rock, Ryan, Cal," ca. 1928. The rear of the postcard is addressed to John P. Dobbins, postmarked "Death Valley, 2 May 1929." Copy on file Death Valley Conservancy Archives.

Ryan Historic District

Name of Property

Inyo, CA

County and State

Previous documentation on file (NPS):

- ☐ preliminary determination of individual listing (36 CFR 67) has been requested
☐ previously listed in the National Register
☐ previously determined eligible by the National Register
☐ designated a National Historic Landmark
☐ recorded by Historic American Buildings Survey # _____
☐ recorded by Historic American Engineering Record # _____
☐ recorded by Historic American Landscape Survey # _____

Primary location of additional data:

- ☐ State Historic Preservation Office
☐ Other State agency
☒ Federal agency (Death Valley National Park Library and Archives)
☐ Local government
☐ University
☒ Other
Name of repository: Death Valley Conservancy Archives, Ryan, CA

Historic Resources Survey Number (if assigned): _____

10. Geographical Data

Acreage of Property 107

Use either the UTM system or latitude/longitude coordinates

Latitude/Longitude Coordinates

Datum: WGS84

[REDACTED]

Verbal Boundary Description (Describe the boundaries of the property.)

[REDACTED]

Boundary Justification (Explain why the boundaries were selected.)

District boundaries were selected using Ryan's historic boundaries as defined by Pacific Coast Borax when it filed for the purchase of associated land parcels from the government after the DVRR right-of-way was abandoned (see Figure 51). The district also extends onto the adjoining patented mining claims of the Upper Biddy McCarthy and Lower Biddy McCarthy to include significant contributing resources as well as the extensive underground workings found therein.

Ryan Historic District
Name of Property

Inyo, CA
County and State

11. Form Prepared By

name/title: Jessica L.K. Smith, Ph.D., RPA (Director of Archaeology,
Death Valley Conservancy); contributions by Mary Ringhoff (Senior Associate,
Architectural Resources Group)
street & number: 100 Ryan Road
city or town: Death Valley state: CA zip code: 92328
e-mail: jessicalksmith@ryancamp.org
telephone: (760) 263-4900
date: April 2024; Revised July 2024

Paperwork Reduction Act Statement: This information is being collected for nominations 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. 460 et seq.). We may not conduct or sponsor and you are not required to respond to a collection of information unless it displays a currently valid OMB control number.

Estimated Burden Statement: Public reporting burden for each response using this form is estimated to be between the Tier 1 and Tier 4 levels with the estimate of the time for each tier as follows:

Tier 1 – 60-100 hours
Tier 2 – 120 hours
Tier 3 – 230 hours
Tier 4 – 280 hours

The above estimates include time for reviewing instructions, gathering and maintaining data, and preparing and transmitting nominations. Send comments regarding these estimates or any other aspect of the requirement(s) to the Service Information Collection Clearance Officer, National Park Service, 1201 Oakridge Drive Fort Collins, CO 80525.

Ryan Historic District
Name of Property

Inyo, CA
County and State

Additional Documentation

Submit the following items with the completed form:

- **Maps:** A **USGS map** or equivalent (7.5 or 15 minute series) indicating the property's location.
- **Sketch map** for historic districts and properties having large acreage or numerous resources. Key all photographs to this map.
- **Additional items:** (Check with the SHPO, TPO, or FPO for any additional items.)

Photographs

Submit clear and descriptive photographs. The size of each image must be 1600x1200 pixels (minimum), 3000x2000 preferred, at 300 ppi (pixels per inch) or larger. Key all photographs to the sketch map. Each photograph must be numbered and that number must correspond to the photograph number on the photo log. For simplicity, the name of the photographer, photo date, etc. may be listed once on the photograph log and doesn't need to be labeled on every photograph.

Photo Log

Name of Property:	Ryan Historic District
City or Vicinity:	Death Valley
County:	Inyo
State:	California
Photographer:	Jessica Smith, Scott Smith, Death Valley Conservancy
Date Photographed:	January-April 2024

Description of Photograph(s) and number, include description of view indicating direction of camera:

1 of 66

CA_Inyo_RyanHistoricDistrict_0001

An overview of the Ryan Historic District, view northeast.

2 of 66

CA_Inyo_RyanHistoricDistrict_0002

An overview of the Ryan Historic District's northern resources, view east. The district appears much as it did in 1930 (see Figure 15).

Ryan Historic District

Name of Property

Inyo, CA

County and State

3 of 66

CA_Inyo_RyanHistoricDistrict_0003

An overview of the Ryan Historic District, taken from the Upper Biddy McCarthy Mine, view northwest. Not much has changed since 1930 (see Figure 46).

4 of 66

CA_Inyo_RyanHistoricDistrict_0004

[REDACTED]

5 of 66

CA_Inyo_RyanHistoricDistrict_0005

The Hotel Complex (Resource 1) with the Store, Lobby, and Kitchen (from left to right). The roofs of Houses 1 and 2 are in the foreground. View southwest.

6 of 66

CA_Inyo_RyanHistoricDistrict_0006

The Hotel Complex (Resource 1) with the Store, Lobby, and Kitchen (from left to right). Poison Rock (Resource 23) and the non-contributing Gerstley Shed (Resource 19) are at left. View southwest.

7 of 66

CA_Inyo_RyanHistoricDistrict_0007

The south façade of the Hotel Complex (Resource 1) with the Kitchen, Lobby, and Store (from left to right). View east.

8 of 66

CA_Inyo_RyanHistoricDistrict_0008

The east façade of the Store/Post Office (Resource 1a). The post office door was the second from the left. One fuel pump platform (Resource 35) and the BGRR rail (Resource 43) are also visible. View northwest.

9 of 66

CA_Inyo_RyanHistoricDistrict_0009

The screened front porch of the lobby portion of the Hotel Complex (Resource 1b), view northwest. The flanged wheels are from the 1912 Cadillac modified to run on the DVRR (Resource 37).

10 of 66

CA_Inyo_RyanHistoricDistrict_0010

The Hotel Complex Lobby (Resource 1b) was referred to as the "Boarding House" from 1914-1927. The fireplace was added during the hotel conversion. Interior, view southwest.

Ryan Historic District

Name of Property

Inyo, CA

County and State

11 of 66

CA_Inyo_RyanHistoricDistrict_0011

The original check-in desk for the Death Valley View Hotel is located along the north wall of the Hotel Complex Lobby (Resource 1b). Room occupancy and accommodation information is listed on hotel registry cards and the hotel room keys are found hanging nearby (not pictured).

Together with the "Dining Room," the Lobby was referred to as the "Boarding House" from 1914-1927. Interior, view west.

12 of 66

CA_Inyo_RyanHistoricDistrict_0012

The Kitchen section of the Hotel Complex (Resource 1c), view southwest. The attached enclosed porch contains an ice plant, refrigerated food storage room, and a California cooler. The rail pictured in the right foreground allowed kitchen staff to hand tram kitchen refuse to the incinerator (Resource 32).

13 of 66

CA_Inyo_RyanHistoricDistrict_0013

The southeastern corner of the Kitchen interior, including the ice box. The window in the southern wall is a remnant of the original Kitchen exterior wall before one of many additions in the 1920s. Interior, view southeast.

14 of 66

CA_Inyo_RyanHistoricDistrict_0014

The interior of the refrigerated food storage room, located in the enclosed porch adjacent to the Kitchen (Resource 1c), view south. Temperatures were maintained by circulating cooled water originating from the ice plant next door.

15 of 66

CA_Inyo_RyanHistoricDistrict_0015

The ammonia ice plant is the most northern volume of the Kitchen (Resource 1c) and located next to the refrigerated food storage room in the enclosed porch adjacent to the Kitchen. The forms for the ice blocks are pictured at left. Interior, view east.

16 of 66

CA_Inyo_RyanHistoricDistrict_0016

The east façade of the Warehouse (Resource 2), Storage Adit 1 (Resource 4), incinerator trackway (Resource 32), and Weathervane (Resource 39), view west. A portion of the DVRR wye paralleled the incinerator trackway and a large coal deposit unearthed in front of the Warehouse in 2016 suggests that the area was once a locus for locomotive maintenance.

17 of 66

CA_Inyo_RyanHistoricDistrict_0017

The west and south façades of the Warehouse (Resource 2) and the remains of the Oil House (Resource 28), view north.

Ryan Historic District

Name of Property

Inyo, CA

County and State

18 of 66

CA_Inyo_RyanHistoricDistrict_0018

The north façade of the Powerhouse (Resource 3), view southeast. The concrete pads held the power generating equipment and associated machinery. The original rock-retained BGRR rail line (pre-1920) runs along the ridge in the background.

19 of 66

CA_Inyo_RyanHistoricDistrict_0019

The south and east facades of the Powerhouse (Resource 3), view northwest. The DVRR grade leading to the Lower Biddy mine (Resource 40m-r), the oil transfer structure (Resource 41, above the Powerhouse roofline), and the reddish dirt remains of the cooling tower foundation/basin (Resource 30, mid-right) are also pictured.

20 of 66

CA_Inyo_RyanHistoricDistrict_0020

[REDACTED]

21 of 66

CA_Inyo_RyanHistoricDistrict_0021

Storage Adit 2 (Resource 5) and Storage Adit 3 (Resource 6, to the right of Storage Adit 2 and slightly out of view) below Poison Rock (Resource 23), view south. Storage Adit 2 housed the DVRR-modified Cadillac into the late 1920s and was called the “Cadillac Garage” on several historic plans. These resources appear as they did when photographed historically (see Figure 14).

22 of 66

CA_Inyo_RyanHistoricDistrict_0022

The north façade of the Schoolhouse and the schoolyard (Resource 8), view northeast. The bell in the cupola is rung by a string in the interior.

23 of 66

CA_Inyo_RyanHistoricDistrict_0023

The interior of the Schoolhouse (Resource 8), view northwest. The original wallpaper features children playing on the beach.

24 of 66

CA_Inyo_RyanHistoricDistrict_0024

The Boiler House (Resource 9) provided many of the district’s buildings with steam heat, view northwest.

25 of 66

CA_Inyo_RyanHistoricDistrict_0025

The west façade of Bunkhouse 1, view southeast.

Ryan Historic District

Name of Property

Inyo, CA

County and State

26 of 66

CA_Inyo_RyanHistoricDistrict_0026

The south façade of Bunkhouse 1 (Resource 10) and the remains of the tennis court (Resource 26), view northeast. The bunkhouse's southern stairs, landing, and balcony were restored using historic and period-appropriate materials in 2017. The one power pole within district boundaries representing the non-contributing modern powerline (Resource 38) is pictured at left.

27 of 66

CA_Inyo_RyanHistoricDistrict_0027

The second-story, west-facing porch of Bunkhouse 1 (Resource 10), view northeast. The porch was originally screened.

28 of 66

CA_Inyo_RyanHistoricDistrict_0028

Bunkhouse 2 (Resource 11), view east.

29 of 66

CA_Inyo_RyanHistoricDistrict_0029

The second-story eastern balcony of Bunkhouse 2 (Resource 11) was originally screened and retains its original paint, view northeast. The ochre and green paint scheme was chosen by PCB during the hotel conversion to match its other hotel properties.

30 of 66

CA_Inyo_RyanHistoricDistrict_0030

An interior view of one of the typical hotel rooms located on the upper floor, west-facing side of Bunkhouse 2, view northwest. Bunkhouse 2 rooms were larger than those of Bunkhouse 1 and contained en suite bathrooms. All finishes, fixtures, and furniture are original.

31 of 66

CA_Inyo_RyanHistoricDistrict_0031

The Hospital (Resource 12), view northeast. The building is one of the oldest in the district and has gone through several renovations; it was originally the superintendent's residence, then became a hospital and staff quarters, until finally becoming tourist accommodations in 1927. The railroad-grade level shed (Resource 18) and remnant DVRR track (Resource 40f-l) are pictured at left.

32 of 66

CA_Inyo_RyanHistoricDistrict_0032

An interior view of Death Valley View Hotel Room 1, located on the upper floor, southeast corner of the Hospital (Resource 12), view northwest. All finishes, fixtures, furniture, and flooring (linoleum rugs over tongue and groove) are original.

Ryan Historic District

Name of Property

Inyo, CA

County and State

33 of 66

CA_Inyo_RyanHistoricDistrict_0033

The Rec Hall (Resource 13), view northeast. The building was originally a church in Rhyolite, NV, but was relocated to the Ryan Historic District in 1919 to serve as a recreation hall and community center. Restoration work commenced on the building in 2019 and is ongoing.

34 of 66

CA_Inyo_RyanHistoricDistrict_0034

The interior of the Rec Hall (Resource 13) taken from the balcony, view north. The stage was added shortly after the building's arrival to the district in 1919.

35 of 66

CA_Inyo_RyanHistoricDistrict_0035

House 1 (Resource 14, right) and House 2 (Resource 15, left) housed the assistant superintendent and superintendent and were constructed in 1924 along with the rock-retained terrace, staircase, railings, and walkways. The railings have been restored using original and period-appropriate materials. View northeast.

36 of 66

CA_Inyo_RyanHistoricDistrict_0036

House 3 (Resource 16) was constructed in early 1924 and likely contains materials, such as the turned porch posts, recycled from other district buildings, view southeast.

37 of 66

CA_Inyo_RyanHistoricDistrict_0037

House 4 (Resource 17, center) and the remains of House 5 (Resource 25), view southeast.

38 of 66

CA_Inyo_RyanHistoricDistrict_0038

[REDACTED]

39 of 66

CA_Inyo_RyanHistoricDistrict_0039

[REDACTED]

40 of 66

CA_Inyo_RyanHistoricDistrict_0040

The "Little Mesa" (Resource 22) once held three management houses. The remains of the houses can be found on the bluff as well as down its slopes. Two Fresno scrapers used for road construction and land leveling are pictured at right. The garage foundation (Resource 29) is located between the Little Mesa and Ryan Road and the north façade of the Schoolhouse (Resource 8) and incinerator trackway (Resource 32) are pictured at the left. View southwest from the upper story of Bunkhouse 1.

Ryan Historic District

Name of Property

Inyo, CA

County and State

41 of 66

CA_Inyo_RyanHistoricDistrict_0041

[REDACTED]

42 of 66

CA_Inyo_RyanHistoricDistrict_0042

[REDACTED]

43 of 66

CA_Inyo_RyanHistoricDistrict_0043

[REDACTED]

44 of 66

CA_Inyo_RyanHistoricDistrict_0044

Dry-laid rock wall terraces and concrete staircases with wooden railings (Resource 33) are character-defining features of the district. This concrete staircase is located south of the Hospital and was damaged by tree roots. The tree has since been removed. House 4 (Resource 17) is shown at top. The railing is not original—a project to restore historically-accurate railing using original and period-appropriate materials is ongoing. View east.

45 of 66

CA_Inyo_RyanHistoricDistrict_0045

The chassis of the modified 1912 Cadillac (Resource 37) sits along a remaining section of DVRR track behind the Hotel Complex. The oil transfer structure (Resource 41) is along the DVRR grade at left. View west.

46 of 66

CA_Inyo_RyanHistoricDistrict_0046

The Ryan Weathervane (Resource 39), view northeast.

47 of 66

CA_Inyo_RyanHistoricDistrict_0047

The Plymouth BL locomotive and attached car (Resource 45) and the locomotive storage adit (Resource 42). View south.

48 of 66

CA_Inyo_RyanHistoricDistrict_0048

The interior of the locomotive storage adit (Resource 42), view south.

49 of 66

CA_Inyo_RyanHistoricDistrict_0049

A trestle (Resource 43d) along the original route of the Baby Gauge Railroad line, view southeast.

Ryan Historic District

Inyo, CA

Name of Property

County and State

50 of 66

CA_Inyo_RyanHistoricDistrict_0050

The Haulage Tunnel (Resource 44) was originally an adit for the Upper Biddy McCarthy mine complex, but was extended in 1920 to provide a thoroughfare for the Baby Gauge. The rail is extant however recent flooding has buried it at the portal. The wooden platform (Resource 53) is pictured in the upper mid-ground right. View southeast.

51 of 66

CA_Inyo_RyanHistoricDistrict_0051

[REDACTED]

52 of 66

CA_Inyo_RyanHistoricDistrict_0052

An overview of the Upper Biddy Mine complex with the skip track (top right), one utility pole (top far right), and trackway, natural chute, and waste rock dump. The Baby Gauge railroad level, Haulage Tunnel, and rail segment leading to the Hotel Complex (constructed to load BGRR cars with tourists) are also shown. View southeast.

53 of 66

CA_Inyo_RyanHistoricDistrict_0053

The wooden dugout (Resource 46) at the Upper Biddy McCarthy mine likely functioned as a break room, view south.

54 of 66

CA_Inyo_RyanHistoricDistrict_0054

[REDACTED]

55 of 66

CA_Inyo_RyanHistoricDistrict_0055

The elevated portion of the skip track (Resource 49), view southeast. The Upper Biddy trackway and trestle (Resource 50) is pictured left of the skip track.

56 of 66

CA_Inyo_RyanHistoricDistrict_0056

[REDACTED]

57 of 66

CA_Inyo_RyanHistoricDistrict_0057

[REDACTED]

58 of 66

CA_Inyo_RyanHistoricDistrict_0058

The ceramic sewer line (Resource 34) runs westerly down Ryan Wash from Ryan Camp towards the Lower Biddy McCarthy mine, where it emptied into a cesspit. View northeast.

Ryan Historic District

Name of Property

Inyo, CA

County and State

59 of 66

CA_Inyo_RyanHistoricDistrict_0059

[REDACTED]

60 of 66

CA_Inyo_RyanHistoricDistrict_0060

[REDACTED]

61 of 66

CA_Inyo_RyanHistoricDistrict_0061

[REDACTED]

62 of 66

CA_Inyo_RyanHistoricDistrict_0062

[REDACTED]

63 of 66

CA_Inyo_RyanHistoricDistrict_0063

The archaeological remains the set of *Spartacus* (Resource 59) are observed along *Spartacus* Ridge and the DVRR grade west of Ryan Camp, view west. For the opening scene of the film actors were placed all over the ridges and slopes of the landform (see Figure 27).

64 of 66

CA_Inyo_RyanHistoricDistrict_0064

[REDACTED]

65 of 66

CA_Inyo_RyanHistoricDistrict_0065

Two holes with cement/grout filler (circled) indicate where Kirk Douglas was chained to a rock in the chain scene of *Spartacus* (Resource 59e, see Figure 29). View west.

66 of 66

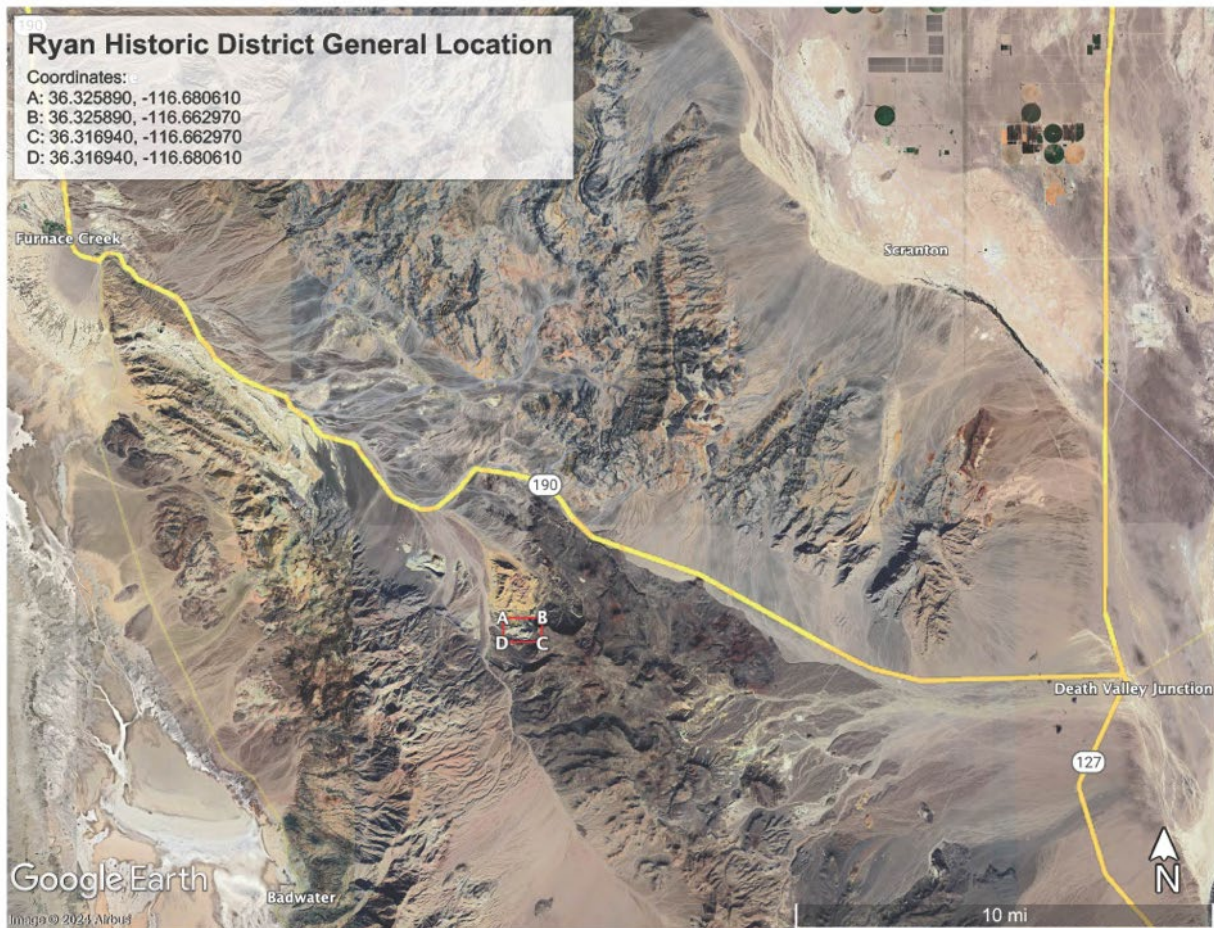
CA_Inyo_RyanHistoricDistrict_0066

The Northern Road (Resource 62) branches off from Ryan Road and parallels the DVRR grade as it leaves Ryan Camp to the north, view north.

Ryan Historic District
Name of Property

Inyo, CA
County and State

Location Map



Ryan Historic District

Name of Property

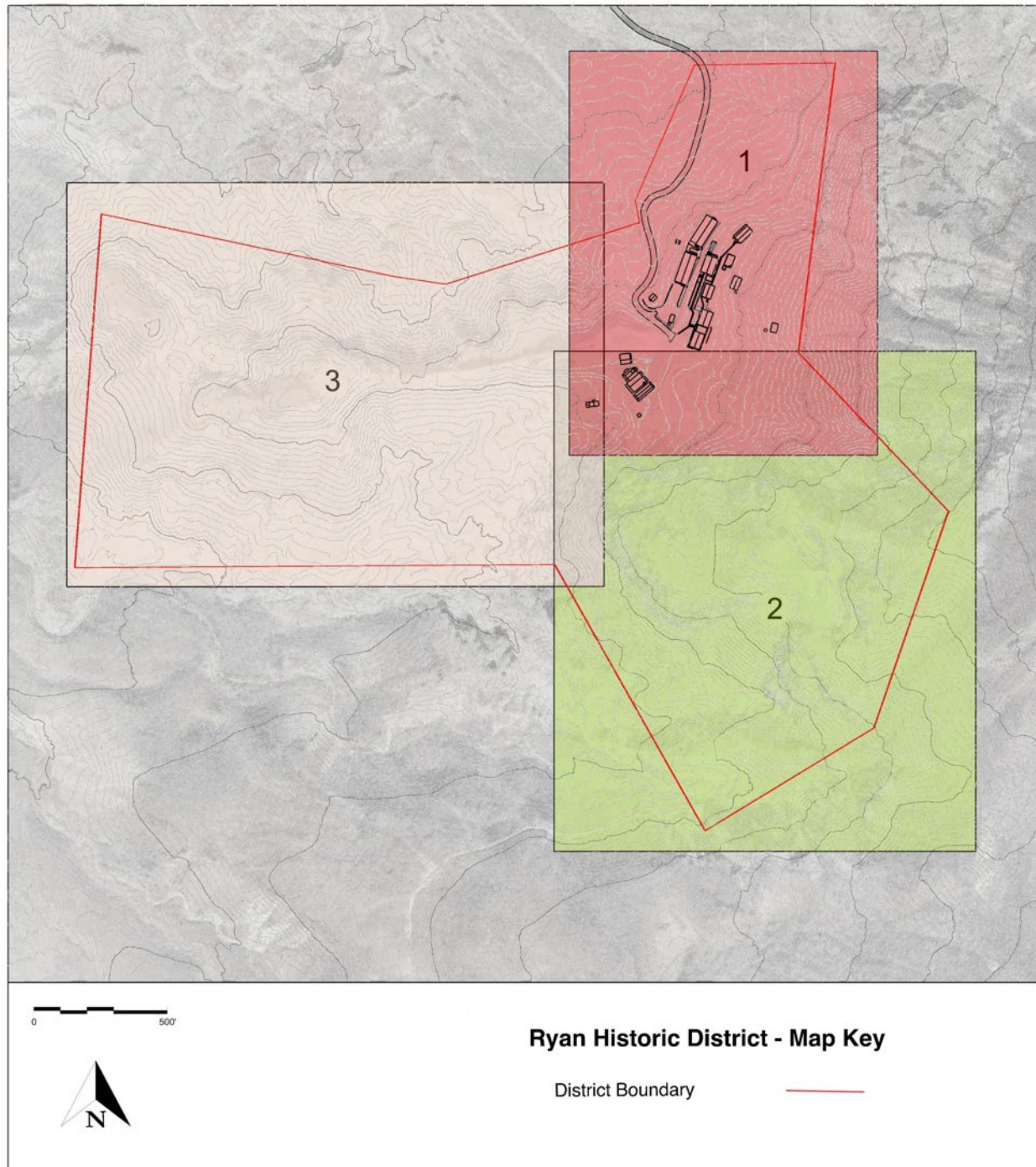
Inyo, CA

County and State

Boundary Detail Map

[REDACTED]

District Location Sketch Map Key



Ryan Historic District
Name of Property

Inyo, CA
County and State

Sketch Maps

[REDACTED]

Photo Keys

[REDACTED]

Ryan Historic District

Name of Property

Inyo, CA

County and State

Figures

Figure 1. The store at the Lila C Mine ("old Ryan") was moved to Ryan to serve the same purpose, ca. 1914. (Pacific Coast Borax Company 23a, National Park Service)



Figure 2. The store building at Ryan after a windstorm, ca. 1916. The building was moved from the Lila C, where it served the same purpose. (Pacific Coast Borax Company 59a 001, National Park Service)



Ryan Historic District

Name of Property

Inyo, CA

County and State

Figure 3. The Store/Post Office and Dining Room, looking south, ca. 1925. The massive ore bins at left were removed in 1927 during the hotel conversion. Storage Adit 2, which housed the modified 1912 Cadillac is left of the Store and one of the fuel pumps is left of the DVRR tracks. (DV-RYA-08, Frashers Fotos, National Park Service)



Figure 4. The Hotel Complex at the Death Valley View Hotel, early 1950s. (DV-RYA-35A, National Park Service)



Ryan Historic District

Name of Property

Inyo, CA

County and State

Figure 5. The Powerhouse in the 1950s continued to provide electricity to the Ryan Historic District (east façade view west). (Death Valley Conservancy)



Ryan Historic District

Name of Property

Inyo, CA

County and State

Figure 6. The western buildings of the camp including the Schoolhouse (with children), Boiler House and solar water heater (far left), Bunkhouses 1 and 2, Shower House in between the bunkhouses (non-extant), Hospital (top right), and staff housing (non-extant, middle right), ca. 1923. (img056-Crop3, Rosenloecher Collection, copy on file Death Valley Conservancy)



Ryan Historic District
Name of Property

Inyo, CA
County and State

Figure 7. One of the earliest photographs of Ryan, ca. 1914-1915, view northeast. The large building was the superintendent's residence, later the Hospital. (Pacific Coast Borax Company 33a, National Park Service)

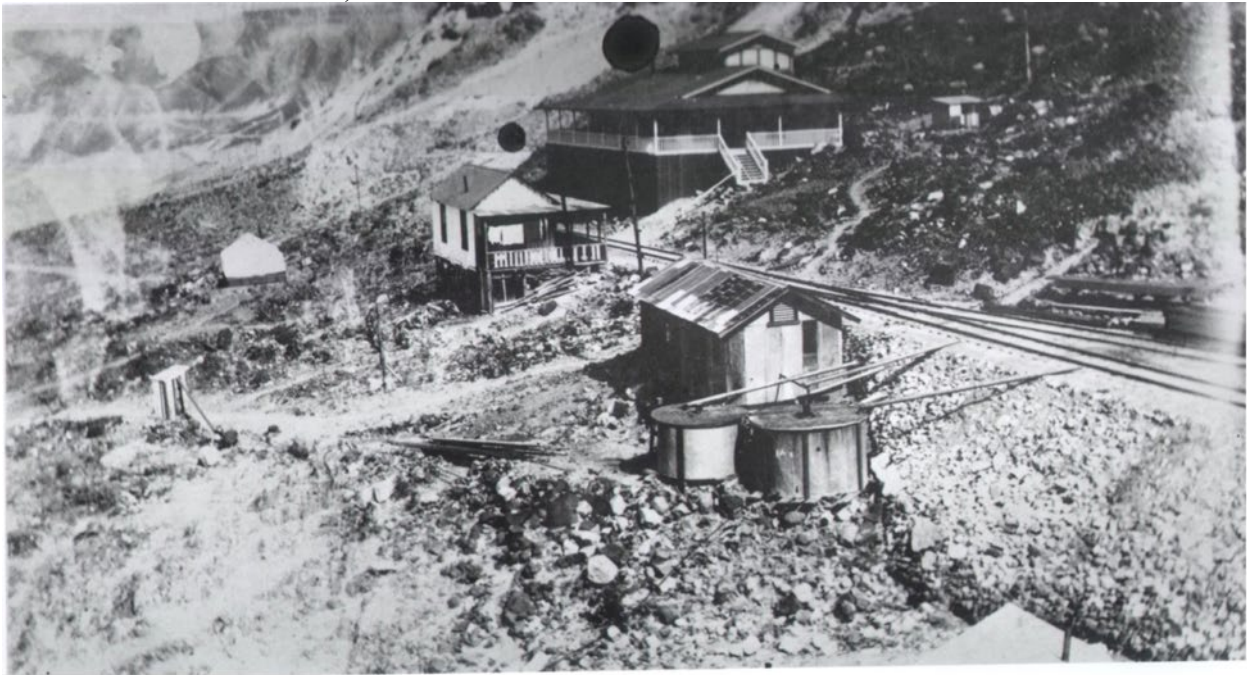


Figure 8. The Hospital before its major renovation, 1922. (DV-RYA 05B, National Park Service)



Ryan Historic District
Name of Property

Inyo, CA
County and State

Figure 9. The Hospital under construction, with the railroad-grade level shed (Resource 18) along the rock wall to its left, 1924. The dry-laid rock terraces and railings and House 5 (in the background) were also being finished at this time. (Boyer Collection, copy on file Death Valley Conservancy Archives)



Ryan Historic District

Name of Property

Inyo, CA

County and State

Figure 10. Ryan, view northeast, 1919, after the arrival of St. Mary's Catholic Church from the nearby ghost town of Rhyolite, NV (pictured background center). At Ryan, it functioned as a club house and recreation hall. The tent foundation (Resource 27c) is all that remains of one of the two tents pictured at left. (Boyer Collection, copy on file Death Valley Conservancy Archives)



Figure 11. Houses 1 (far right) and House 2 (center) are under construction in this photograph, ca. 1924. House 3 (at left) was already finished at this time. The terraces and railings are also under construction. (Rosenloecher Collection, copy on file Death Valley Conservancy)

Ryan Historic District
Name of Property

Inyo, CA
County and State



Figure 12. A view of Ryan Camp, looking southwest, ca. 1922. The five Copenhagen Row houses are at the bottom and the three Little Mesa houses are pictured middle (one is marked by an X). The two houses to the right of the Bunkhouse 2 and in between Copenhagen Row and the

Ryan Historic District

Name of Property

Inyo, CA

County and State

Little Mesa are now building foundations described under Resource 27. The Northern Road is visible at the bottom right. (Boyer Collection, copy on file Death Valley Conservancy Archives)



Figure 13. A view of Ryan from the Upper Biddy McCarthy mine looking down the earliest iteration of the skip track, view west, ca. 1917. The Store and the Dining Room/Boarding House (at left middle) are not yet connected and the cabins and tents of “Early Ryan” are visible middle right. (DV-RYA 07, National Park Service)

Ryan Historic District
Name of Property

Inyo, CA
County and State



Figure 14. Poison Rock, the DVRR tracks, and Storage Adit 2 (the former Cadillac garage), view south, ca. 1930. Storage Adit 3 is adjacent to Storage Adit 2 but is not visible from this angle. (National Park Service)

Ryan Historic District
Name of Property

Inyo, CA
County and State



Figure 15. The Death Valley View Hotel, with tennis court, ca. 1930, view northeast. The Upper Reservoir is the highest structure pictured and the Lower Reservoir is to the right of the tennis court. (Frashers Fotos, copy on file Death Valley Conservancy Archives)

Ryan Historic District
Name of Property

Inyo, CA
County and State



Figure 16. Screenshot of *The Twilight Zone*, "I Shot an Arrow into the Air," showing Ryan Road (at right), the powerpole (now only a stump) and signs. The actor is standing on the area described under Resource 27.

Ryan Historic District

Name of Property

Inyo, CA

County and State



Figure 17. The modified 1912 Cadillac outfitted with flange wheels to drive on the DVRR. (Boyer Collection, copy on file Death Valley Conservancy Archives)

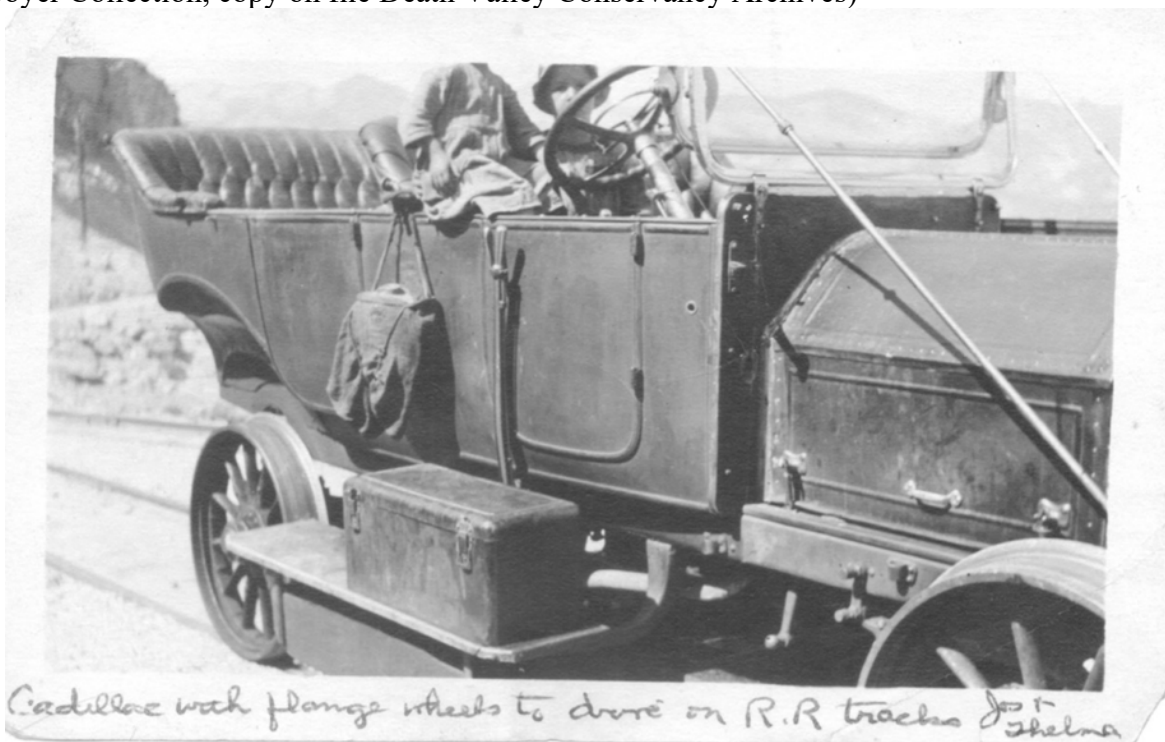


Figure 18. Ansel Adams visited Ryan in 1952 and took several photographs including this one of the Weathervane, which he included in his 1954 manuscript, *Death Valley*. (Photograph 19, Adams and Newhall)

Ryan Historic District
Name of Property

Inyo, CA
County and State



19. WEATHER VANE, RYAN

Figure 19. The Store and Dining Room ("Boarding House") in the early 1920s. The DVRR track and the incinerator trackway are at right and another leg of the DVRR track is at left. The third

Ryan Historic District

Name of Property

Inyo, CA

County and State

leg of the DVRR wye is behind the buildings. (P. 42086, Herbert Summer Collection, James R. Parks Library and Archives)



Figure 20. A Baby Gauge RR locomotive and cars filled with borax ore heading north into Ryan, ca. 1916. (DV-RYA 44A, National Park Service)



Ryan Historic District

Name of Property

Inyo, CA

County and State

Figure 21. The Plymouth BL locomotive operated by Bob Gardiner transporting tourists on the Baby Gauge RR, ca. 1935. The rock shed (Resource 43e) that protected the train from Upper Biddy waste rock prior to the extension of the Haulage Tunnel (ca. 1919) is in the background at left. (BGR 14, National Park Service)



Ryan Historic District

Name of Property

Inyo, CA

County and State

Figure 22. The Upper Bidby McCarthy mine skip track (1920 “gravity tram”)(Resource 49) is at center, ore and waste trackway, trestle with natural chute, waste rock dump, and rock fence (below the trestle)(Resource 50), and utility poles network at right on ridge (Resource 51), ca. 1920. This is the second and extant skip track; the previous iteration (ca. 1916) lined up with the hoist (inside the building at the top of the hill). (BOM 6, National Park Service)



Ryan Historic District

Name of Property

Inyo, CA

County and State

Figure 23. The original Upper Bidy skip track was driven by a hoist at the top of the hill. It was reconfigured about 1920 to be a gravity tram. (DV-RYA 06, National Park Service)



Ryan Historic District
Name of Property

Inyo, CA
County and State

Figure 24. The Lower Biddy McCarthy Mine (at left) and *Spartacus* Ridge, ca. 1925. (LS_4392 Schilling Collection, James R. Parks Library and Archives)



Ryan Historic District

Name of Property

Inyo, CA

County and State

Figure 25. Looking up (and north) the Lower Bidly McCarthy skip track, ca. 1917. (BOM12A, National Park Service)



Ryan Historic District
Name of Property

Inyo, CA
County and State

Figure 26. The DVRR heading to Lower Biddy McCarthy Mine, at left, looking west, ca. 1915. The train skirts what would be later termed "*Spartacus Ridge*." (DVRR 05, National Park Service)



Ryan Historic District

Name of Property

Inyo, CA

County and State

Figure 27. A publicity still of the opening scene of *Spartacus* with the cast on *Spartacus* Ridge and the DVRR grade. (Margaret Herrick Library, Academy of Motion Picture Arts and Sciences)



Ryan Historic District

Name of Property

Inyo, CA

County and State

Figure 28. Screenshot of the opening sequence of *Spartacus* showing *Spartacus* Ridge, view west. The palapa structural posts appear to be recycled DVRR ties.



Figure 29. Kirk Douglas as Spartacus is chained to the rock on *Spartacus* Ridge with Peter Ustinov looking on. (Margaret Herrick Library, Academy of Motion Picture Arts and Sciences)



Ryan Historic District

Name of Property

Inyo, CA

County and State

Figure 30. Ryan Road's ascent into the Ryan Historic District from the west, ca. 1920s. Old Ryan Road (center) was already abandoned by this time. (MCCU 36-148-Willard, Eastern California Museum)



Ryan Historic District

Name of Property

Inyo, CA

County and State

Figure 31. The ore bins, centrally located in the camp, allowed DVRR cars (below) to be filled with borax ore from the Baby Gauge cars (above) originating from the Upper Biddy and the southern mines. (DV-RYA 44C, National Park Service)



Figure 32. The DVRR winding its way along the steep western slopes of the Greenwater Range on approach to Ryan, n.d. (TRA 35, National Park Service)



Ryan Historic District
Name of Property

Inyo, CA
County and State

Figure 33. Harry Gower, Assistant Superintendent, with his daughter Mary Lillian, on the Baby Gauge RR tracks, 1926. He claimed that the railroad was named after Mary Lillian, whose nickname was "Baby." (BGR 5, National Park Service)



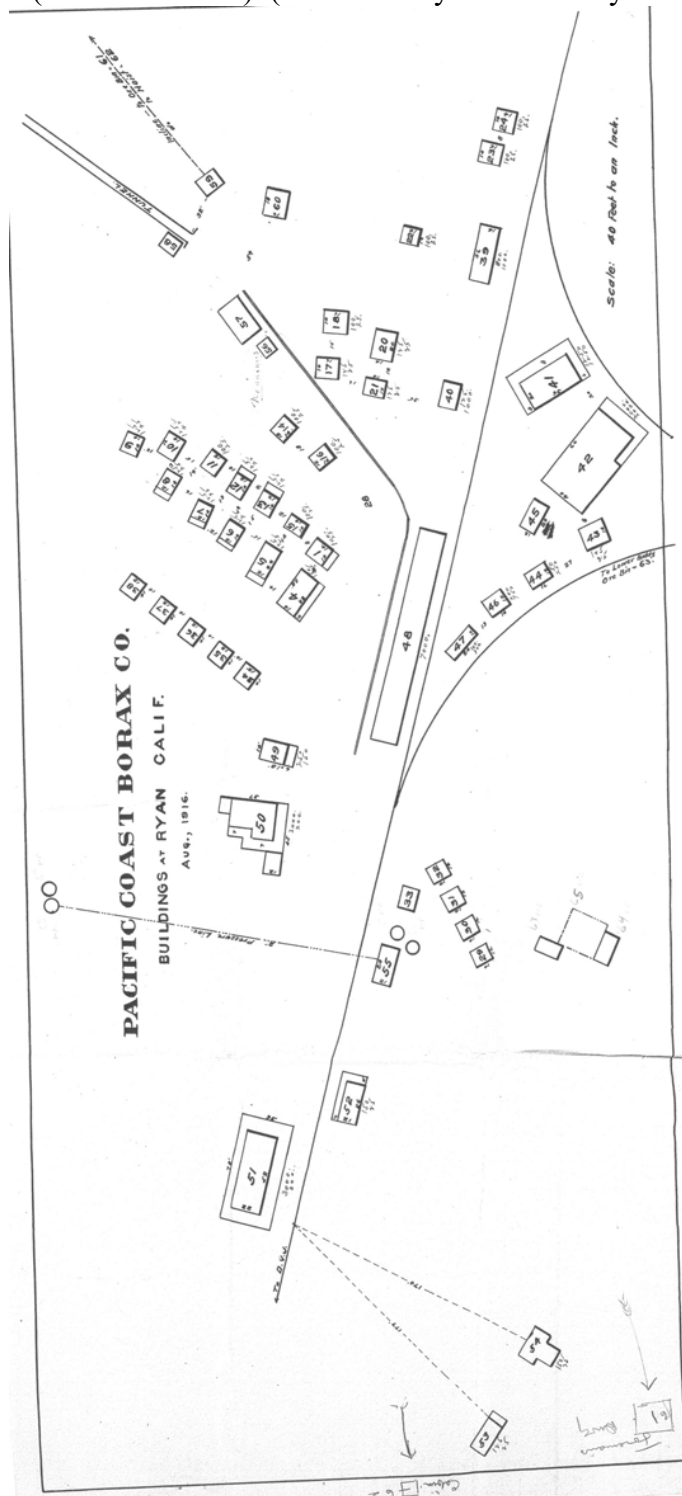
Ryan Historic District

Inyo, CA

Name of Property

County and State

Figure 34. One of Ryan's earliest site plans, dated August 1916. Current district resources depicted are the Hospital (marked with 51), building foundations site (marked with 53 and 54), Early Ryan (1-16 and 34-38), Haulage Tunnel, Store (marked with 41), and Dining Room/Boarding House (marked with 42). (Death Valley Conservancy Archives)



Ryan Historic District
Name of Property

Inyo, CA
County and State

Figure 35. An early image of the northern buildings of camp, ca. 1915, view north. The superintendent's house (which later became the Hospital) is right of the DVRR tracks. At the time, electricity was generated from a "Light Plant." (DV-RYA-01A, National Park Service)



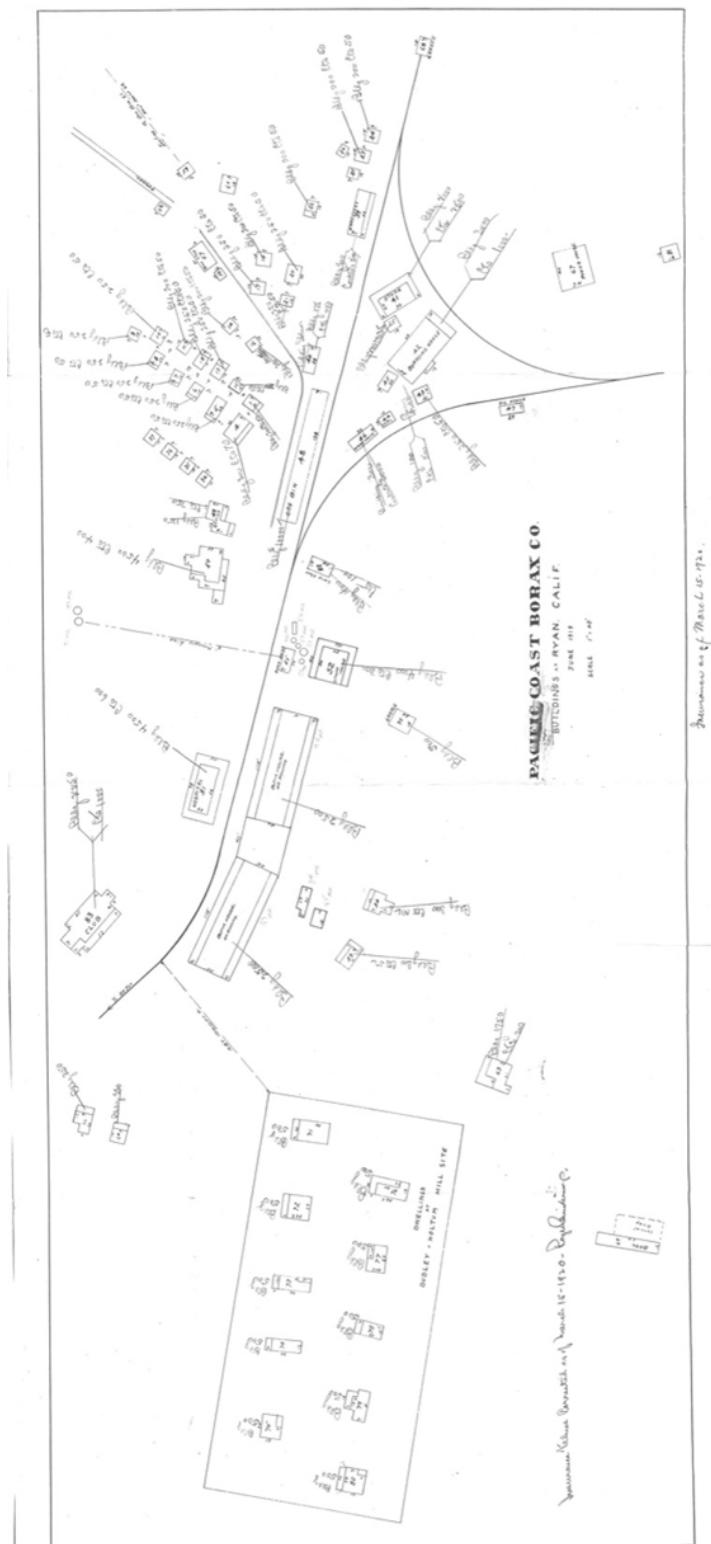
Ryan Historic District

Name of Property

Inyo, CA

County and State

Figure 36. A site plan showing the buildings at Ryan at the beginning of PCB's era of improvements and consolidation, ca. 1919-1920. (Death Valley Conservancy Archives)



Ryan Historic District

Name of Property

Inyo, CA

County and State

Figure 37. The beginnings of PCB's improvements and consolidation phase of construction in the Ryan Historic District, early 1920s, looking north. Note that the former superintendent's house is now the Hospital, but not fully renovated. The two bunkhouses (to the left of the DVRR tracks) and the Rec Hall (behind the Hospital) are present. The DVRR switch with track to the left allowed a tanker car to dump water in the Lower Reservoir (not pictured). (DV-RYA-05A, Death Valley National Park Archives)



Figure 38. Local Timbisha Shoshone tribal members are pictured in the Ryan schoolyard, ca. 1922. In the background are the three Little Mesa houses (non-extant). (Boyer Collection, copy on file Death Valley Conservancy Archives)



Ryan Historic District
Name of Property

Inyo, CA
County and State

Figure 39. The Ryan school kids on the carousel, 1927. The teacher, Eva Walter, was also the mother of three of the children. The Union Pacific tour guide and bus driver, Jack Jones, is at right. (Death Valley Conservancy)



Ryan Historic District

Name of Property

Inyo, CA

County and State

Figure 40. Ryan in 1925 when it was nearing the end of the improvements and consolidation phase (and after PCB finished construction of all district buildings), view north. The backs of the Store/Post Office, Dining Room/Boarding House, and Kitchen buildings (from right to left) after they were joined are center. (LS 4391, James R. Parks Library and Archives)



Figure 41. In a demonstration of community—the Ryan baseball team, with mine superintendent Major Julian Boyd front center. (Boyer Collection, copy on file Death Valley Conservancy Archives)



Ryan Historic District

Name of Property

Inyo, CA

County and State

Figure 42. Women participated in community activities at Ryan as evidenced by the women's baseball team. (Palazzo, 117)



Ryan Historic District
Name of Property

Inyo, CA
County and State

Figure 43. Tom Wilson, a member of the Timbisha Shoshone Tribe, and his family outside of the eastern porch of the Store/Post Office. (Boyer Collection, copy on file Death Valley Conservancy Archives)



Ryan Historic District

Name of Property

Inyo, CA

County and State

Figure 44. Francis Marion "Borax" Smith, the founder of the Pacific Coast Borax Company.
(National Park Service)



Ryan Historic District

Name of Property

Inyo, CA

County and State

Figure 45. A set of twenty-mule team wagons in front of the Harmony Borax Works, Death Valley, 1880s. (Farquhar Collection, Bancroft Library)



Ryan Historic District

Inyo, CA

Name of Property

County and State

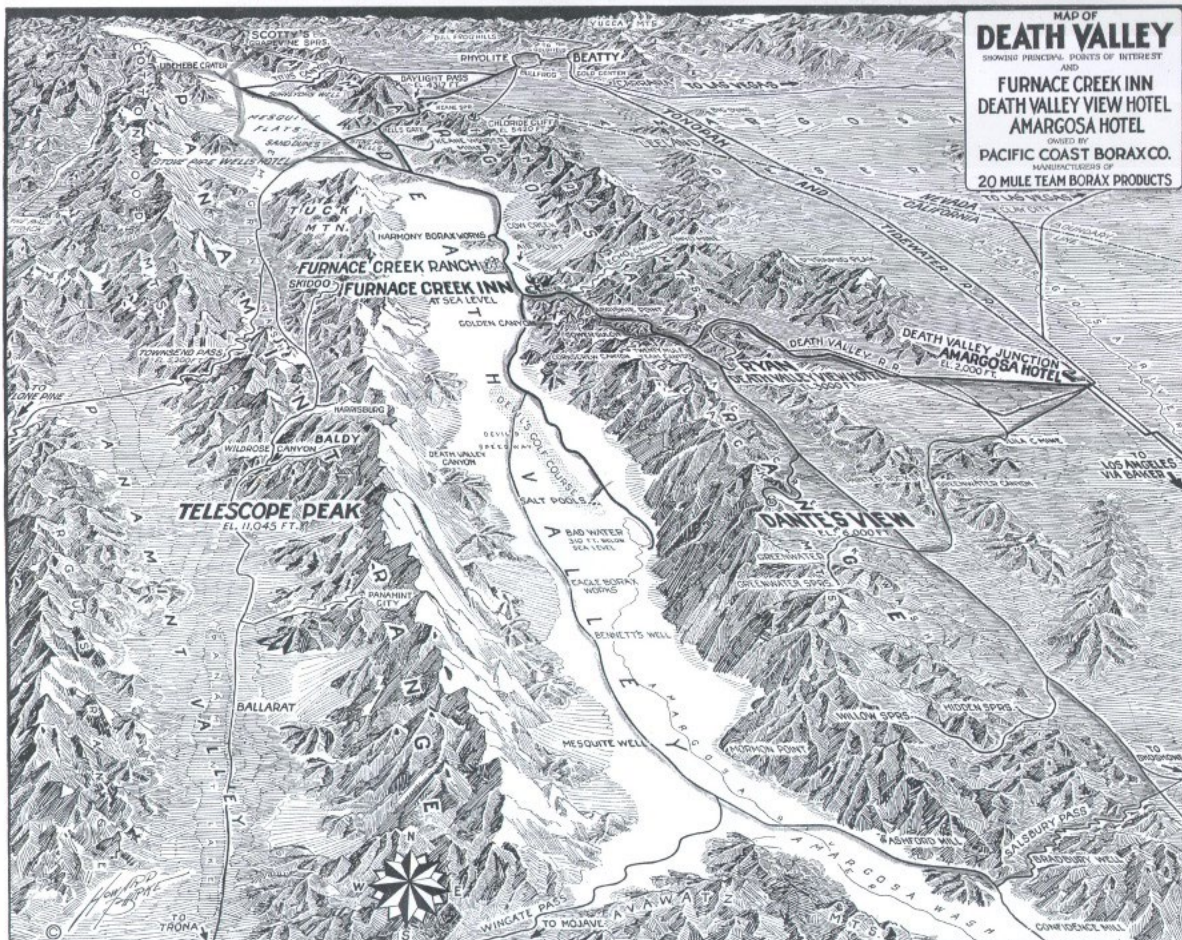
Figure 46. The Death Valley View Hotel, looking northwest, ca. 1930. Note the fuel pump (Resource 35) in the lower left in front of the Store's porch. (1124 Frashers Fotos, copy on file Death Valley Conservancy Archives)



Ryan Historic District
Name of Property

Inyo, CA
County and State

Figure 47. Tourist map of Death Valley created and distributed by the Death Valley Hotel Company, promoting its lodging facilities and highlighting points of interest, ca. 1928. (Death Valley Conservancy)



Ryan Historic District

Name of Property

Inyo, CA

County and State

Figure 48. A travel brochure for the Death Valley View Hotel, ca. 1927. (Death Valley Conservancy Archives)



Ryan Historic District

Name of Property

Inyo, CA

County and State

Figure 49. Union Pacific sponsored tours arrived to Ryan via the DVRR, before departing by motorcoach to see Death Valley, view south, ca. 1928. (DV-RYA 44E, National Park Service)



Figure 50. A Union Pacific publicity photo with the gasoline-powered Brill Car in front of the Warehouse, ca. 1928. (DVR 04, National Park Service)



Ryan Historic District

Name of Property

Inyo, CA

County and State

Figure 51. The BGRR loaded with tourists, 1940s, view north. The rail line was re-routed to allow tourists to board adjacent to the Hotel Complex. (Death Valley Conservancy)



Ryan Historic District
Name of Property

Inyo, CA
County and State

Figure 53. The filming of *Death Valley Days*, “Million Dollar Wedding,” on the side and back porch of the Hotel Complex—Store, 1954. (Death Valley Conservancy)



Ryan Historic District

Name of Property

Inyo, CA

County and State

Figure 54. *Spartacus* scouting photograph, ca. 1958-1959, showing the intact ties on the DVRR grade, before they were used for set construction. (Margaret Herrick Library, Academy of Motion Picture Arts and Sciences)



Ryan Historic District

Name of Property

Inyo, CA

County and State

Figure 55. A view of the Hotel Complex, Baby Gauge Level, and Upper Bidby McCarthy Mine in the 1960s, about the time the Haulage Tunnel (center at the bottom of the skip track) was identified as a civil defense shelter, and an adjacent supplies room excavated. (DV-RYA 71, National Park Service)



Ryan Historic District

Name of Property

Inyo, CA

County and State

Figure 56. Supplies for a 50-person capacity fallout shelter as determined by the Office of Civil Defense in 1962. The Ryan civil defense supplies storage room within the Haulage Tunnel contains most of these items.



Ryan Historic District
Name of Property

Inyo, CA
County and State

Photographs

1 of 66

CA_Inyo_RyanHistoricDistrict_0001

An overview of the Ryan Historic District, view northeast.



Ryan Historic District
Name of Property

Inyo, CA
County and State

2 of 66

CA_Inyo_RyanHistoricDistrict_0002

An overview of the Ryan Historic District's northern resources, view east. The district appears much as it did in 1930 (see Figure 15).



Ryan Historic District
Name of Property

Inyo, CA
County and State

3 of 66

CA_Inyo_RyanHistoricDistrict_0003

An overview of the Ryan Historic District, taken from the Upper Bidby McCarthy Mine, view northwest. Not much has changed since 1930 (see Figure 46).



Ryan Historic District
Name of Property

Inyo, CA
County and State

4 of 66

CA_Inyo_RyanHistoricDistrict_0004
[REDACTED]

5 of 66

CA_Inyo_RyanHistoricDistrict_0005

The Hotel Complex (Resource 1) with the Store/Post Office, Lobby, and Kitchen (from left to right). The roofs of Houses 1 and 2 are in the foreground. View southwest.



Ryan Historic District
Name of Property

Inyo, CA
County and State

6 of 66

CA_Inyo_RyanHistoricDistrict_0006

The Hotel Complex (Resource 1) with the Store/Post Office, Lobby, and Kitchen (from left to right). Poison Rock (Resource 23) and the non-contributing Gerstley Shed (Resource 19) are in the background at left. View southwest.



Ryan Historic District
Name of Property

Inyo, CA
County and State

7 of 66

CA_Inyo_RyanHistoricDistrict_0007

The south façade of the Hotel Complex (Resource 1) with the Kitchen, Lobby, and Store/Post Office (from left to right). View east.



Ryan Historic District
Name of Property

Inyo, CA
County and State

8 of 66

CA_Inyo_RyanHistoricDistrict_0008

The east façade of the Store/Post Office (Resource 1a). The post office door was the second from the left as evidenced by the mail slot. One fuel pump platform (Resource 35) and the BGRR rail (Resource 43) are also visible. View northwest.



Ryan Historic District
Name of Property

Inyo, CA
County and State

9 of 66

CA_Inyo_RyanHistoricDistrict_0009

The screened front porch of the lobby portion of the Hotel Complex (Resource 1b), view northwest. The flanged wheels are from the 1912 Cadillac modified to run on the DVRR (Resource 37).



Ryan Historic District
Name of Property

Inyo, CA
County and State

10 of 66

CA_Inyo_RyanHistoricDistrict_0010

The Hotel Complex Lobby (Resource 1b) was referred to as the “Boarding House” from 1914-1927. The fireplace was added during the hotel conversion. Interior, view southwest.



Ryan Historic District

Name of Property

11 of 66

CA_Inyo_RyanHistoricDistrict_0011

Inyo, CA

County and State

The original check-in desk for the Death Valley View Hotel is located along the north wall of the Hotel Complex Lobby (Resource 1b). Room occupancy and accommodation information is listed on hotel registry cards and the hotel room keys are found hanging nearby (not pictured). Together with the "Dining Room," the Lobby was referred to as the "Boarding House" from 1914-1927. Interior, view west.



Ryan Historic District
Name of Property

Inyo, CA
County and State

12 of 66

CA_Inyo_RyanHistoricDistrict_0012

The Kitchen section of the Hotel Complex (Resource 1c), view southwest. The attached enclosed porch contains an ice plant, refrigerated food storage room, and a California cooler. The rail pictured in the right foreground allowed kitchen staff to hand tram kitchen refuse to the incinerator (Resource 32).



Ryan Historic District
Name of Property

Inyo, CA
County and State

13 of 66

CA_Inyo_RyanHistoricDistrict_0013

The southeastern corner of the Kitchen interior, including the ice box. The window in the southern wall is a remnant of the original Kitchen exterior wall before one of many additions in the 1920s. Interior, view southeast.



Ryan Historic District
Name of Property

Inyo, CA
County and State

14 of 66

CA_Inyo_RyanHistoricDistrict_0014

The interior of the refrigerated food storage room, located in the enclosed porch adjacent to the Kitchen (Resource 1c), view south. Temperatures were maintained by circulating cooled water originating from the ice plant next door.



Ryan Historic District
Name of Property

Inyo, CA
County and State

15 of 66

CA_Inyo_RyanHistoricDistrict_0015

The ammonia ice plant is the most northern volume of the Kitchen (Resource 1c) and located next to the refrigerated food storage room in the enclosed porch adjacent to the Kitchen. The forms for the ice blocks are pictured at left. Interior, view east.



Ryan Historic District
Name of Property

Inyo, CA
County and State

16 of 66

CA_Inyo_RyanHistoricDistrict_0016

The east façade of the Warehouse (Resource 2), Storage Adit 1 (Resource 4), incinerator trackway (Resource 32), and Weathervane (Resource 39), view west. A portion of the DVRR wye paralleled the incinerator trackway and a coal deposit unearthed in front of the Warehouse in 2016 suggests that the area was once a locus for locomotive maintenance.



Ryan Historic District
Name of Property

Inyo, CA
County and State

17 of 66

CA_Inyo_RyanHistoricDistrict_0017

The west and south façades of the Warehouse (Resource 2) and the remains of the Oil House (Resource 28), view north.



Ryan Historic District
Name of Property

Inyo, CA
County and State

18 of 66

CA_Inyo_RyanHistoricDistrict_0018

The north façade of the Powerhouse (Resource 3), view southeast. The concrete pads held the power generating equipment and associated machinery. The original rock-retained BGRR rail line (pre-1920) runs along the ridge in the background.



Ryan Historic District
Name of Property

Inyo, CA
County and State

19 of 66

CA_Inyo_RyanHistoricDistrict_0019

The south and east facades of the Powerhouse (Resource 3), view northwest. The DVRR grade leading to the Lower Biddy mine (Resource 40m-r), the oil transfer structure (Resource 41, above the Powerhouse roofline), and the concrete remains of the cooling tower foundation/basin with red fill material (Resource 30, mid-right) are also pictured.



20 of 66

CA_Inyo_RyanHistoricDistrict_0020

[REDACTED]

Ryan Historic District
Name of Property

Inyo, CA
County and State

21 of 66

CA_Inyo_RyanHistoricDistrict_0021

Storage Adit 2 (Resource 5) and Storage Adit 3 (Resource 6, to the right of Storage Adit 2 and slightly out of view) below Poison Rock (Resource 23), view south. Storage Adit 2 housed the DVRR-modified Cadillac into the late 1920s and was called the “Cadillac Garage” on several historic plans. These resources appear as they did when photographed historically (see Figure 14).



Ryan Historic District
Name of Property

Inyo, CA
County and State

22 of 66

CA_Inyo_RyanHistoricDistrict_0022

The north façade of the Schoolhouse and the schoolyard (Resource 8), view northeast. The bell in the cupola is rung by a string in the interior.



Ryan Historic District
Name of Property

Inyo, CA
County and State

23 of 66

CA_Inyo_RyanHistoricDistrict_0023

The interior of the Schoolhouse (Resource 8), view northwest. The original wallpaper features children playing on the beach.



Ryan Historic District
Name of Property

Inyo, CA
County and State

24 of 66

CA_Inyo_RyanHistoricDistrict_0024

The Boiler House (Resource 9) provided many of the district's buildings with steam heat, view northwest.



Ryan Historic District
Name of Property

Inyo, CA
County and State

25 of 66

CA_Inyo_RyanHistoricDistrict_0025

The west façade of Bunkhouse 1 (Resource 10), view southeast.



Ryan Historic District
Name of Property

Inyo, CA
County and State

26 of 66

CA_Inyo_RyanHistoricDistrict_0026

The south façade of Bunkhouse 1 (Resource 10) and the remains of the tennis court (Resource 26), view northwest. The bunkhouse's southern stairs, landing, and balcony were restored using historic and period-appropriate materials in 2017. The one power pole within district boundaries representing the non-contributing modern powerline (Resource 38) is pictured at left.



Ryan Historic District
Name of Property

Inyo, CA
County and State

27 of 66

CA_Inyo_RyanHistoricDistrict_0027

The second-story, west-facing balcony of Bunkhouse 1 (Resource 10), view northeast. The porch was originally screened.



Ryan Historic District
Name of Property

Inyo, CA
County and State

28 of 66

CA_Inyo_RyanHistoricDistrict_0028

Bunkhouse 2 (Resource 11), view east.



Ryan Historic District
Name of Property

Inyo, CA
County and State

29 of 66

CA_Inyo_RyanHistoricDistrict_0029

The second-story eastern balcony of Bunkhouse 2 (Resource 11) was originally screened and retains its original paint, view northeast. The ochre and green paint scheme was chosen by PCB during the hotel conversion to match its other hotel properties.



Ryan Historic District
Name of Property

Inyo, CA
County and State

30 of 66

CA_Inyo_RyanHistoricDistrict_0030

An interior view of one of the typical hotel rooms located on the upper floor, west-facing side of Bunkhouse 2, view northwest. Bunkhouse 2 rooms were larger than those of Bunkhouse 1 and contained en suite bathrooms and steam heat. All finishes, fixtures, and furniture are original.



Ryan Historic District
Name of Property

Inyo, CA
County and State

31 of 66

CA_Inyo_RyanHistoricDistrict_0031

The Hospital (Resource 12), view northeast. The building is one of the oldest in the district and has gone through several renovations; it was originally the superintendent's residence, then became a hospital and staff quarters, until finally becoming tourist accommodations in 1927. The railroad-grade level shed (Resource 18) and remnant DVRR track (Resource 40f-1) are pictured at left.



Ryan Historic District
Name of Property

Inyo, CA
County and State

32 of 66

CA_Inyo_RyanHistoricDistrict_0032

An interior view of Death Valley View Hotel Room 1, located on the upper floor, southeast corner of the Hospital (Resource 12), view northwest. All finishes, fixtures, furniture, and flooring (linoleum rugs over wood) are original.



Ryan Historic District
Name of Property

Inyo, CA
County and State

33 of 66

CA_Inyo_RyanHistoricDistrict_0033

The Rec Hall, view northeast. The building was originally a church in Rhyolite, NV, but was relocated to the Ryan Historic District in 1919 to serve as a recreation hall and community center. Restoration work commenced on the building in 2019 and is ongoing.



Ryan Historic District
Name of Property

Inyo, CA
County and State

34 of 66

CA_Inyo_RyanHistoricDistrict_0034

The interior of the Rec Hall (Resource 13) taken from the balcony, view north. The stage was added shortly after the building's arrival to the district in 1919.



Ryan Historic District
Name of Property

Inyo, CA
County and State

35 of 66

CA_Inyo_RyanHistoricDistrict_0035

House 1 (Resource 14, right) and House 2 (Resource 15, left) housed the assistant superintendent and superintendent and were constructed in 1924 along with the rock-retained terrace, staircase, railings, and walkways. The railings have been restored using original and period-appropriate materials. View northeast.



Ryan Historic District
Name of Property

Inyo, CA
County and State

36 of 66

CA_Inyo_RyanHistoricDistrict_0036

House 3 (Resource 16) was constructed in early 1924 and likely contains materials, such as the turned porch posts, recycled from other district buildings, view southeast.



Ryan Historic District
Name of Property

Inyo, CA
County and State

37 of 66

CA_Inyo_RyanHistoricDistrict_0037

House 4 (Resource 17, center) and the remains of House 5 (Resource 25), view southeast.



Ryan Historic District
Name of Property

Inyo, CA
County and State

38 of 66

CA_Inyo_RyanHistoricDistrict_0038
[REDACTED]

39 of 66

CA_Inyo_RyanHistoricDistrict_0039
[REDACTED]

40 of 66

CA_Inyo_RyanHistoricDistrict_0040

The “Little Mesa” (Resource 22) once held three management houses. The remains of the houses can be found on the bluff as well as down its slopes. Two Fresno scrapers used for road construction and land leveling are pictured at right. The garage foundation (Resource 29) is located between the Little Mesa and Ryan Road and the north façade of the Schoolhouse (Resource 8) and incinerator trackway (Resource 32) are pictured at the left. View southwest from the upper story of Bunkhouse 1.



Ryan Historic District
Name of Property

Inyo, CA
County and State

41 of 66
CA_Inyo_RyanHistoricDistrict_0041
[REDACTED]

42 of 66
CA_Inyo_RyanHistoricDistrict_0042
[REDACTED]

43 of 66
CA_Inyo_RyanHistoricDistrict_0043
[REDACTED]

Ryan Historic District
Name of Property

Inyo, CA
County and State

44 of 66

CA_Inyo_RyanHistoricDistrict_0044

Dry-laid rock wall terraces and concrete staircases with wooden railings (Resource 33) are character-defining features of the district. This concrete staircase is located south of the Hospital and was damaged by tree roots. The tree has since been removed. House 4 (Resource 17) is shown at top. The railing is not original—a project to restore historically-accurate railing using original and period-appropriate materials is ongoing. View east.



Ryan Historic District
Name of Property

Inyo, CA
County and State

45 of 66

CA_Inyo_RyanHistoricDistrict_0045

The chassis of the modified 1912 Cadillac (Resource 37) sits along a remaining section of DVRR track behind the Hotel Complex. The oil transfer structure (Resource 41) is along the DVRR grade at left. View west.



Ryan Historic District
Name of Property

Inyo, CA
County and State

46 of 66

CA_Inyo_RyanHistoricDistrict_0046

The Ryan Weathervane (Resource 39), view northeast.



Ryan Historic District
Name of Property

Inyo, CA
County and State

47 of 66

CA_Inyo_RyanHistoricDistrict_0047

The Plymouth BL locomotive and attached car (Resource 45) and the locomotive storage adit (Resource 42). View south.



Ryan Historic District
Name of Property

Inyo, CA
County and State

48 of 66

CA_Inyo_RyanHistoricDistrict_0048

The interior of the locomotive storage adit (Resource 42), view south.



Ryan Historic District
Name of Property

Inyo, CA
County and State

49 of 66

CA_Inyo_RyanHistoricDistrict_0049

A trestle (Resource 43d) along the original route of the Baby Gauge Railroad line, view southeast.



Ryan Historic District
Name of Property

Inyo, CA
County and State

50 of 66

CA_Inyo_RyanHistoricDistrict_0050

The Haulage Tunnel (Resource 44) was originally an adit for the Upper Biddy McCarthy mine complex, but was extended in 1920 to provide a thoroughfare for the Baby Gauge. The rail is extant however recent flooding has buried it at the portal. The wooden platform (Resource 53) is pictured in the upper mid-ground right. View southeast.



Ryan Historic District
Name of Property

Inyo, CA
County and State

51 of 66

CA_Inyo_RyanHistoricDistrict_0051
[REDACTED]

52 of 66

CA_Inyo_RyanHistoricDistrict_0052

An overview of the Upper Biddy Mine complex with the skip track (top right), one utility pole (top, far right), and trackway, natural chute, and waste rock dump. The Baby Gauge railroad level, Haulage Tunnel, and rail segment leading to the Hotel Complex (constructed to load BGRR cars with tourists) are also shown. View southeast.



Ryan Historic District
Name of Property

Inyo, CA
County and State

53 of 66

CA_Inyo_RyanHistoricDistrict_0053

The wooden dugout (Resource 46) at the Upper Bidby McCarthy mine likely functioned as a break room, view south.



Ryan Historic District
Name of Property

Inyo, CA
County and State

54 of 66

CA_Inyo_RyanHistoricDistrict_0054

[REDACTED]

55 of 66

CA_Inyo_RyanHistoricDistrict_0055

The elevated portion of the skip track (Resource 49), view southeast. The Upper Biddy trackway and trestle (Resource 50) is pictured left of the skip track.



Ryan Historic District
Name of Property

Inyo, CA
County and State

56 of 66

CA_Inyo_RyanHistoricDistrict_0056
[REDACTED]

57 of 66

CA_Inyo_RyanHistoricDistrict_0057
[REDACTED]

58 of 66

CA_Inyo_RyanHistoricDistrict_0058

The ceramic sewer line (Resource 34) runs westerly down Ryan Wash from Ryan Camp towards the Lower Biddy McCarthy mine, where it emptied into a cesspit. View northeast.



Ryan Historic District
Name of Property

Inyo, CA
County and State

59 of 66
CA_Inyo_RyanHistoricDistrict_0059
[REDACTED]

60 of 66
CA_Inyo_RyanHistoricDistrict_0060
[REDACTED]

61 of 66
CA_Inyo_RyanHistoricDistrict_0061
[REDACTED]

62 of 66
CA_Inyo_RyanHistoricDistrict_0062
[REDACTED]

Ryan Historic District
Name of Property

Inyo, CA
County and State

63 of 66

CA_Inyo_RyanHistoricDistrict_0063

The archaeological remains the set of *Spartacus* (Resource 59) are observed along *Spartacus* Ridge and the DVRR grade west of Ryan Camp, view west. For the opening scene of the film actors were placed all over the ridges and slopes of the landform (see Figure 27).



64 of 66

CA_Inyo_RyanHistoricDistrict_0064
[REDACTED]

Ryan Historic District
Name of Property

Inyo, CA
County and State

65 of 66

CA_Inyo_RyanHistoricDistrict_0065

Two holes with cement/grout filler (circled) indicate where Kirk Douglas was chained to a rock in the chain scene of *Spartacus* (Resource 59e, see Figure 29). View west.



Ryan Historic District
Name of Property

Inyo, CA
County and State

66 of 66

CA_Inyo_RyanHistoricDistrict_0066

The Northern Road (Resource 62) branches off from Ryan Road and parallels the DVRR grade as it leaves Ryan Camp to the north, view north.

