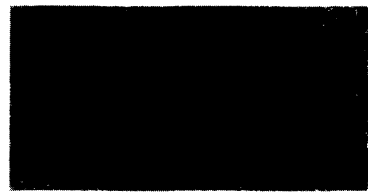


**United States Department of the Interior
Heritage Conservation and Recreation Service**

**National Register of Historic Places
Inventory—Nomination Form**

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



1. Name

historic Kennedy Tailing Wheels

and/or common Kennedy Mine Tailing Wheels

2. Location

street & number Jackson Gate Road _____ not for publication

city, town Jackson _____ vicinity of _____ congressional district 14

state California code 06 county Amador code 005

3. Classification

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

4. Owner of Property

name City of Jackson

street & number 33 Broadway Street

city, town Jackson _____ vicinity of _____ state California 95642

5. Location of Legal Description

courthouse, registry of deeds, etc. Amador County Courthouse, County Recorder

street & number 108 Court Street

city, town Jackson _____ state California 95642

6. Representation in Existing Surveys

title See CONTINUATION SHEET ITEM 6 PAGE 1 has this property been determined eligible? yes no

date _____ federal _____ state _____ county _____ local

depository for survey records

city, town _____ state

7. Description

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

Describe the present and original (if known) physical appearance

The Kennedy Tailing Wheels was a system designed to dispose of tailings (1) resulting from gold mining operations of the Kennedy Mining and Milling Company, Jackson, California. Tailings produced by the stamp mill were conveyed by gravity via two holding dams and flumes to a series of four elevator-tailing wheels; the wheels lifted the tailings over two hills; thence, tailings flowed downslope to an impounding dam. Approximate distance from mill to dam: 0.8 mile.

Original physical appearance--

Officials of the Kennedy Mining and Milling Company learned of a wheel system being used in Montana to lift mining debris to higher elevations. Thereupon, James Spears, a mechanical engineer, was assigned to make a study of the Montana system. He submitted a favorable report and was authorized to design a similar system for the Kennedy Mine. (2: engineering)

Wheels:

The elevations (feet) over the terrain between the stamp mill and an impounding dam site were ascertained to determine the diameter of a wheel, which, in series, was capable of lifting tailing to required heights for clearance over two intervening hills. A diameter of 58 feet was indicated for each wheel. Thus, four wheels lifted tailings a total of 176 feet in height from the first to the last wheels. (2: engineering, & 3)

Construction (2: construction, & 3) was under the supervision of Elbridge Post and William Daughtery, employees of the Kennedy Mine.

Wheel Components were constructed, laid out on a waste dump near the mine, assembled and marked for reassembly. Concurrently, wheel sites were graded, foundations, pits (4) and bents were installed; connecting flumes (5) were built. When these sites were ready wheels were dismantled, hauled by wagon to permanent locations and reassembled. Each wheel was enclosed in a wood frame structure covered with corrugated metal sheeting (6).

Debris holding dams (7) were located southeast of the stamp mill; gravity flumes (7A) carried the debris to the wheels and over the rise (terrain) southeast of Wheel 4 to the impounding dam.

The wheels were completed, early 1914 (8). Completion date was scheduled for 1913; delayed pending delivery of electric motors.

Three men were required to operate the system on a 24-hour schedule: hourly inspections were made over the entire works; wheels were stopped and tailings diverted into holding dams near the stamp mill, if any part of the system failed to function or required some adjustment or repairs; when again made operable, tailings were turned into the flumes; wheels reactivated.

Edward T. Purcell, a wheel operator, was killed, while on duty, January 9, 1930 (9).

Impounding Dam:

A multiarched dam, about 2,100 feet southeast of Wheel 4, was constructed during 1914. (10) It was built entirely of reinforced, poured concrete.

Originally, the dam was 445 feet long by 44 feet high. Some years later additions were made to the dam to increase its capacity to about 7 to 8 acres: length was increased to 600 feet; height increased to 56 to 60 feet. (11 & 12)

8. Significance

Period	Areas of Significance—Check and Justify below			
<input type="checkbox"/> prehistoric	<input type="checkbox"/> archeology-prehistoric	<input type="checkbox"/> community planning	<input type="checkbox"/> landscape architecture	<input type="checkbox"/> religion
<input type="checkbox"/> 1400-1499	<input type="checkbox"/> archeology-historic	<input checked="" type="checkbox"/> conservation	<input type="checkbox"/> law	<input type="checkbox"/> science
<input type="checkbox"/> 1500-1599	<input type="checkbox"/> agriculture	<input type="checkbox"/> economics	<input type="checkbox"/> literature	<input type="checkbox"/> sculpture
<input type="checkbox"/> 1600-1699	<input type="checkbox"/> architecture	<input type="checkbox"/> education	<input type="checkbox"/> military	<input type="checkbox"/> social/
<input type="checkbox"/> 1700-1799	<input type="checkbox"/> art	<input checked="" type="checkbox"/> engineering	<input type="checkbox"/> music	<input type="checkbox"/> humanitarian
<input type="checkbox"/> 1800-1899	<input type="checkbox"/> commerce	<input type="checkbox"/> exploration/settlement	<input type="checkbox"/> philosophy	<input type="checkbox"/> theater
<input checked="" type="checkbox"/> 1900-1980	<input type="checkbox"/> communications	<input checked="" type="checkbox"/> industry	<input type="checkbox"/> politics/government	<input type="checkbox"/> transportation
		<input type="checkbox"/> invention		<input type="checkbox"/> other (specify)

Specific dates 1914

Builder/Architect James Spears

Statement of Significance (In one paragraph)

The Kennedy tailing wheels are significant because:

1. The control of mine tailings in a restraining dam was an attempt in the early 1900s to prevent deposition of mining debris on farm lands; hence, it was a conservation measure to realize better utilization of agricultural lands; miners conceded to the demand of farmers to desist from allowing mining debris from entering upon their properties.

2. The adaptation of an elevator-tailing wheel system to lift tailings a total of 176 feet in elevation over two hills and an approximate distance of 0.8 mile to an impounding dam required ultimate structural engineering skill. This was the Kennedy Mining Company's solution to a stream pollution problem.

3. The successful operation of the tailing wheel system permitted the Kennedy mine and mill to continue operations. This mining company produced the highest yield of gold in Amador County (1); contributed immeasurably to the economy of the county and state.

As early as 1854, the farm lands of Ione and Jackson Valleys suffered damage caused by deposits of mining debris carried by streams from the placer mines; later, hydraulic mining caused similar damage as far as the Sacramento and San Joaquin Valleys; then, the increased activities in quartz mining added the greatest quantities of stamp mill residue to the nearby streams. (2) Dissension arose over stream pollution between miners and farmers: anti-debris associations were organized to oppose the mining companies. the Caminetti Act of 1893 created the California Debris Commission, but enforcement was weak; finally in 1913 litigation forced mining companies to erect facilities to control debris or cease operations. (3,4,5,6) Therefore, the Kennedy Mine's wheel system was in compliance with litigation that compelled gold mine operators to control their debris.

The location of stamp mills were often far removed from potential dam sites to hold mining debris. The Zeile Mine, near Jackson, had to close in 1914 for lack of a disposal area. The Argonaut Mine moved its mill from a location below what is now Highway 49 to the top of the hill where its tailings could be carried to a controlled deposition area. Prior to the wheels, the Kennedy Mine deposited its tailings in an area south of the mill where much of the debris found its way into the North Fork of Jackson Creek. In this situation, the only recourse available to the Kennedy Mine, in order to survive, was the construction of a tailing wheel system. (**) The unique design and construction of the Kennedy tailing wheels surmounted the obstacles of transporting tailings to an otherwise inaccessible deposition area; permitted continued operation of one of the greatest mines in the Mother Lode. (8)

9. Major Bibliographical References

See CONTINUATION SHEET ITEM 9 PAGE 1

10. Geographical Data **UTM NOT VERIFIED**

Acreeage of nominated property 22.48

ACREAGE NOT VERIFIED

Quadrangle name Jackson, California 7.5' (Topog), 1962

Quadrangle scale 1" = 2000'

UMT References

A	<u>110</u>	<u>691481810</u>	<u>41241741810</u>
	Zone	Easting	Northing

B	<u>110</u>	<u>691471810</u>	<u>41241771410</u>
	Zone	Easting	Northing

C	<u>110</u>	<u>691491610</u>	<u>41241771610</u>
---	------------	------------------	--------------------

D	<u>110</u>	<u>691501610</u>	<u>41241741810</u>
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E	<u>110</u>	<u>691451610</u>	<u>41241821410</u>
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F	<u>110</u>	<u>691431610</u>	<u>41241831410</u>
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G	<u> </u>	<u> </u>	<u> </u>
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H	<u> </u>	<u> </u>	<u> </u>
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Verbal boundary description and justification

See CONTINUATION SHEET ITEM 10 PAGE 1

See CONTINUATION SHEET ITEM 10 PAGE 1 Maps

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

state	code	county	code
state	code	county	code

11. Form Prepared By

See CONTINUATION SHEET ITEM 11 PAGE 1

name/title Clyde R. Berriman, Rt. 2 Box 12A-1, Plymouth, California 95669 (209) 245-6536

organization Jackson Park and Recreation Commission date December 2, 1980

street & number 33 Broadway telephone (209) 223-1646

city or town Jackson, California 95642 state CA

12. State Historic Preservation Officer Certification

The evaluated significance of this property within the state is:

national state local

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

State Historic Preservation Officer signature [Signature]
SHPD

title _____ date 5-26-81



UNITED STATES DEPARTMENT OF THE INTERIOR
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DATE ENTERED JUL 7 1981	

CONTINUATION SHEET

ITEM NUMBER 6 PAGE 1

Department of Parks & Recreation (Office of Historic Preservation),
California Inventory of Historic Resources, "Kennedy Wheels",
Jackson Gate Road, Jackson (Amador), (State of California, The
Resources Agency, P. O. Box 2390, Sacramento, 95811, 1976), page 226.

Department of Parks & Recreation, California Historical Landmarks,
"Argonaut & Kennedy Mines" No. 786, Hwy 49 N of Jackson (Amador),
(State of California, The Resources Agency, P. O. Box 2390,
Sacramento 95811, 1979), page 9.

Office of Historic Preservation, Point of Historic Interest (Amador),
"Kennedy Wheels" No. Ama-003, Jackson Gate Road, Jackson (Amador),
(Department of Parks & Recreation, P. O. Box 2390, Sacramento 95811).

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DATE ENTERED	JUL -7 1981

CONTINUATION SHEET

ITEM NUMBER 7 PAGE 1

Present physical appearance--

Wheels:

The operation of the tailing wheels was discontinued in 1942, when the Kennedy Mine was closed in compliance with U. S. Government Order L-208. (13)

The wood frame structures that enclosed the wheels were removed in 1942; exposed wheels to the elements. (14 & 15) First efforts to save the wheels from destruction occurred between 1955 and 1966. (16) Wheels 1 and 4 have been restored to their original condition; Wheels 2 and 3 have collapsed and still remain on the ground in ruins, but salvageable. (17)

Flumes:

The existing flume between Wheels 1 and 2 has been rebuilt. (18 & 19) Original flume concrete piers remain across Sybil Arata property between Wheel 2 and Jackson Gate Road; other flume concrete piers have survived between Wheel 3 and the present Kennedy Tailing Wheel picnic area. (20, 21 & 22)

Dams:

The impounding dam appears as when originally constructed. Condition of concrete: good. Dam retains much run-off from winter rains; vegetation around edges; some tailings still remain in the northern and eastern sections. (23)

From 1935 to 1939, a 1500-ton capacity cyanide processing plant was erected south of the Kennedy Mine to retreat tailings accumulated in the dam. (24, 25 & 26) Remnants of the plant remain: concrete retaining walls and structure foundations.

From 1948 to 1950, tailings were reworked intermittently by a method using a trommel and vibrators to recover fine gold. (27)

Reworked tailings were dumped west, southeast of the cyanide plant. Wind blown, dust-like sand caused an air pollution problem; remedied by the Kennedy Mine Company by covering debris with heavy soil. (28)

Kennedy Tailing Wheels Park--

Plans were initiated in 1972 to develop a parking area, public rest rooms, an information display kiosk and other facilities, for the convenience of visitors, at the Kennedy Tailing Wheels site. The construction project was started in 1976; completed March 14, 1977. (29)

These facilities, necessary parts of the city's interpretive program for the Kennedy Wheels, do not contribute to the historical character of the nominated property.

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INVENTORY -- NOMINATION FORM**

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JUL - 7 1981
DATE ENTERED

CONTINUATION SHEET

ITEM NUMBER 7 PAGE 2

General description of facilities:

Restrooms & storage building:

Dimensions: 30 feet by 30 feet (overall). Restrooms: 22 feet by 22 feet.
Placement: Building stands alone. Stories: one.
Exterior walls: stone, large irregular blocks.
Roof: Shape: pyramidal. Covering: concrete shingles.
Eaves: extend over concrete slab (porch).
Porch (slab flooring) supports: 8 inch by 8 inch wood posts.
Windows: ventilator type openings.

Information display kiosk:

Dimensions: 16 feet by 16 feet; display section: 6 feet by 6 feet.
Exterior walls: stone, large irregular blocks.
Roof: Shape: pyramidal. Covering: concrete shingles. Eaves extend
five feet on all sides; no vertical supports.
Display panels: glass.
Foundation: concrete slab.

Other features:

Parking area.
Entrance & directional signs.
Picnic area and paths, including tables & benches.

See Footnotes: 30 & 31.

Environment:

The Kennedy Tailing Wheels are located in the foothills (1300 feet + elevation from sea level), on the central, western slope of the Sierra Nevada Mountains, California. It is situated in the Foothill or Digger Pine-Chaparral Belt--intermingled: pine-oak, woodland and brushlands; summers rainless, hot and dry; winters moderate, rain and little fog. (33) The North Fork of Jackson Creek flows past the site on the northwest side.

The site is located in a semi-rural neighborhood locally known as Jackson Gate. (34) The neighborhood is sparse in density and primarily residential in character, but intermingled with two small motels, three restaurants and a general store. Buildings are limited to a narrow band alongside Jackson Gate Road; several buildings have historical significance related to the gold rush period. One building dates back to 1850, and others are of the 1860 to 1890 era. The character of the neighborhood has long since been stabilized; however, a housing development company is currently developing a housing project south of the site. (35)

Threats to site: Vandalism, fire and weather.

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INVENTORY -- NOMINATION FORM**

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DATE ENTERED	JUL - 7 1981

CONTINUATION SHEET

ITEM NUMBER 7

PAGE 3

Model of Kennedy Mine headframe and tailing wheels--

Attention is invited to the working models of a Kennedy Mine tailing wheel and headframe. The models were constructed by Robert Post, Sutter Creek, California, on a precision scale of one inch to one foot. Construction was started about 1959; completed sometime in 1970. In 1972, they were sold to Amador County and are now on display in the Carriage House, Jackson Museum, Church Street, Jackson, California. (32)

FOOTNOTES:

¹Undesired minerals and rocks associated with the treatment or crushed ore. Water was added to carry the material to the deposition area.

²Garbarini, 1975: 8-11 (engineering); 12-17 (construction); 18-22 (operation)
Appendix 1: Garbarini's The Tailing Wheels.

Given the diameter of 58 feet for each wheel raised the residue 44 feet, taken from the center of the wheel. A fall of 7/8 inch in one foot from center of the discharge point within the housed area, caused a loss of two feet, which resulted in a net lift of 42 feet, by Wheel 1.

The distance between Wheels 1 and 2 is 80 feet with the connecting flume given a fall of 1/2 inch to one foot. In order to determine the elevation at intake of Wheel 2, a deduction of 3 feet 4 inches was taken from the 42 feet, leaving 38 feet 8 inches. This was a net gain in elevation at this point.

Wheel 2 picked up the load at an elevation of 38 feet 8 inches; raised the tailings another 42 feet, after deducting the loss of two feet caused by the 7/8 inch fall of the flume within the housed area. At the discharge point the elevation was 80 feet 8 inches. These were the deciding factors in maintaining the diameter of the wheels at 58 feet.

A distance of 800 feet separated Wheels 2 & 3; the connecting flumes were given the same 1/2 inch fall to one foot. This resulted in another loss of 33 feet 4 inches and an elevation at the intake of Wheel 3 of 47 feet 4 inches.

Following the same procedures to determine elevations, Wheels 3 & 4 gained the same elevation as Wheels 1 & 2. Thus, a difficult problem was solved to get the debris over the hills and down a slope for storage in the impounding dam.

The structural design of a wheel capable of accomodating heavy loads (tailings and water) was the next problem to solve.

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INVENTORY -- NOMINATION FORM**

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DATE ENTERED

JUL - 7 1981

CONTINUATION SHEET

ITEM NUMBER 7 PAGE 4

FOOTNOTES:

2 (construction)

Bents (frames) were constructed of heavy timbers to support the main bearings and wheel shaft (diameter: 11 inches) and metal hub. Wooden spokes (length: 28 feet) were inserted in the hub and bolted to outer rim of wheel.

Power was furnished each wheel by a laminated, wooden pulley (diameter: 40 feet), a structural part of the wheels. Pulleys were equipped with canvas belts: 3/4 inch thick by 20 inches wide by 125 feet long, weight about 800 pounds; area of contact: about 270 degrees; idlers augmented the power. At the driven end of the belt was a cast iron pulley (diameter: 4 feet) powered by a 25-horse power induction motor. Pionion gear: diameter: 16 inches; speed: 118 rpms. Master gear: diameter: 48 inches. The "wheels" traveled about 14 rpms.

Stationary redwood buckets (number: about 208), dimensions: 6 inches high by 16 inches wide by 13 inches long, were bolted to inside of wheel rim. Buckets were designed to prevent excessive spillage of debris: wheels accomodated approximately 850 tons of tailings (100-stamp mill output), exclusive of water, every 24 hours daily.

³ Appendix 2: See drawings by Kenneth H. Glantz, SITE PLAN, KENNEDY TAILING WHEELS PARK, June 1, 1972: Sheets 4 & 5.

⁴ Appendix 3: Figure 1 (Sketch of pit, Wheel 3).

⁵ Appendix 3: Figure 2 (Sketch of existing flume).

⁶ Appendix 5: Photograph designated "Ed Richardson" (general view of mine structures and housed tailing wheels).

⁷ Appendix 3: Figure 4 (Sketch map of holding dams).

^{7A} Appendix 3: Figure 2 (Flume)

⁸ Amador Dispatch, Jackson California, December 12, 1913.

⁹ Certificate of Death, Amador County Recorder, Jackson, California

¹⁰ Amador Dispatch, Jackson, California, December 14, 1914.

¹¹ Appendix 3: Figure 3A (Profile of dam).
3B (Cross section of dam).
3C (Arch detail).
3D (" ")

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CONTINUATION SHEET

ITEM NUMBER 7 PAGE 5

FOOTNOTES:

¹² Garbarini, 1975: 24.

¹³ Carlson & Clark, 1954: 183.

¹⁴ Amador Dispatch (Section 4), Jackson, California, May 23, 1973: 2-3.

¹⁵ The corrugated metal sheeting that covered the wood frame structures was sold for scrap to aid World War II effort. (14)

¹⁶ Amador Dispatch (Section 4), Jackson, California May 23, 1973: 4-5 and Gertrude O. Smith's article: "Battle to Save Amador Giants Continues" from Amador Dispatch, December 17, 1968 (included in Amador Dispatch) Section 4, May 23, 1973.

¹⁷

Wheel 1:

Restored 1972. Present condition: very good. Restoration included, but not limited to: reconstruction of outer bucket ring; replacement of 18 spokes and metal away braces; replaced wooden foundation blocks with poured concrete; added wood preservative.

Observation (vista) point offers full view of Kennedy Mine headframe, office building and remnants of stampmill (Appendix 5: Photo 14-9).

Wheel 2:

Wheel 2 fell to the ground September 1970. (See Amador Dispatch, Section 4, May 23, 1973: 10 & 11).

Present condition: Bucket rim extant, broken and deteriorated; some buckets intact, others deteriorated and missing; bent upright; main pulley and spokes broken, poor condition; hub; pit condition: good. Motor bases: concrete sections extant, good condition. (See Appendix 5: Photos 14-10 & 14-11).

Wheel 3:

Wheel 3 collapsed winter of 1963. (See Amador Dispatch, Section 4, Jackson, California, May 23, 1973: 9) (Amador Dispatch, December 17, 1968). Present condition: Bucket rim is non-extant. Pulley: broken, deteriorated. Spokes: many missing, others broken, deteriorated; hub. Bent: three structural members remain upright. Pit: fair condition. Motor bases: concrete sections extant; good condition. (See Appendix 5: Photo 12-2. Appendix 3: Figure 6).

8

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INVENTORY -- NOMINATION FORM**

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DATE ENTERED JUL -7 1981

CONTINUATION SHEET

ITEM NUMBER 7

PAGE 6

FOOTNOTES:

Wheel 4:

Restored 1972. Present condition: very good. Restoration included, but not limited to: replacement of the 10 foot 850 pound bearing block, additional sway braces; general overhaul of bucket rim, pulley, spokes and bent. A chain link fence encloses the wheel. See Appendix 5: Photos 11-6 and 11-4. (Appendix 3: Figure 7).

¹⁸ Amador Dispatch (Section 4), Jackson, California, May 23, 1973: 10.

¹⁹ Appendix 5: Photo 10-4 (Flume).

²⁰ Appendix 4: Drawing by Glantz & Gamayo, Tentative Plan for Site Development of KENNEDY WHEELS PARK, Jackson, California, December, 1971.

²¹ Appendix 3: Figure 5 (L. E. Snyder's sketch of remaining flume piers).

²² Appendix 5: Photo 13-6 (Right of way over Sybil Arata's property).

^{22A} Appendix 3: Figure 4 (Holding dams).

²³ Appendix 5: Photo 12-9 (Multiarch dam).
13-1 (Close up of arches).
14-3 (Dam & tailings east end of dam).
14-5 (Dam, downstream side).

²⁴ Appendix 5: Photo 14-1 (Cyanide plant, retaining walls).

²⁵ Carlson & Clark, 1954: 183.

²⁶ Wagner, 1970: 125 (Considered somewhat inaccurate).

²⁷ Carlson & Clark, 1954: 183 & 197.

²⁸ Garbarini, 1975: 24.

²⁹ Notice of Completion, dated March 14, 1977, City of Jackson, California.

City of Jackson's Resolution No. 825 accepting completion of work of building restroom facilities and information kiosk at the Kennedy Tailing Wheels Park and approving engineer's filing notice of completion.

FHR-8-300A
(11/78)

UNITED STATES DEPARTMENT OF THE INTERIOR
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DATE ENTERED JUL - 7 1981

CONTINUATION SHEET

ITEM NUMBER 7 PAGE 7

FOOTNOTES:

³⁰ Appendix 1: Kenneth H. Glantz, Site Plan - Parking & Picnic Area KENNEDY
TAILING WHEELS PARK, City of Jackson, California, June 1, 1972: Sheets 1, 2 & 3.

³¹ Appendix 5: Photo 13-4 (Restrooms & storage building).
13-3 (Kiosk).
13-5 (Parking area & entrance sign).

³² American Gold News, Ione, California, February 1976: 8 & 9.

³³ Storer & Usinger, 1963: 27.

³⁴ California Historical Landmark Number 118.

³⁵ Appendix 6: General Development Plan & Tentative Map of THE WHEELS
(Units 1, 2 & 3) by Developer Wiebe Projects, Inc., Surveyor Toma & Anderson, Jackson,
California. No date.

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INVENTORY -- NOMINATION FORM**

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DATE ENTERED	JUL	- 7 1981

CONTINUATION SHEET

ITEM NUMBER 8

PAGE 1

The Kennedy tailing wheels "are the only remaining tailing wheels in existence in the United States, although tailing wheels were used in South Africa, and some of these may be still in existence." (9)

It would seem that this National Register application should embrace the Kennedy Mine in its entirety: its buildings, structures and the various facilities to conduct a mining operation; nevertheless, the tailing wheel system has been treated herein as an entity unto itself, for these reasons:

The City of Jackson owns the wheels and impounding dam and land upon which they are situated. Sybil Arata, a private citizen of Jackson, California, owns the Kennedy Mine & Mill and land adjacent to the wheels; therefore,

1. The City of Jackson cannot act on behalf of a private individual outside their city limits. (10)

2. Sybil Arata is opposed to having the Kennedy Mine entered on any historic register. (11 & 12)

The City of Jackson would support the creation of a Kennedy Mine historic district. The City of Jackson has a comprehensive plan for the development of the Kennedy Tailing Wheels area; some phases have been completed; other phases will be completed as funds become available. The Department of Parks & Recreation (California) was petitioned in January 1980 to create a state park of this site.

The revitalization of Wheels 1 & 4 has enhanced the impressiveness of the wheels as survivals reminiscent of an earlier period that demanded and got conservation of their natural resources; and, exemplifies structural engineering ingenuity that saved the closing of a great mine.

The Kennedy wheels are impressive. They have attracted the attention of many people; however, their original purpose and correlation to the mining and agricultural industries are, perhaps, little understood by some visitors. The continuation of the restoration program will yield further awareness and understanding of the Mother Lode: in this way, many benefits will accrue: culturally and socially.

**Centrifugal pumps, available during the 1913 era, were not used in the tailings disposal process; these pumps could not stand up to the abrasive action of finely ground rock particles. (6 & 7)

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INVENTORY -- NOMINATION FORM**

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DATE ENTERED	JUL - 7 1981

CONTINUATION SHEET

ITEM NUMBER 8

PAGE 2

FOOTNOTES:

- ¹ Carlson & Clark, 1954: 166.
- ² Garbarini, 1975: 6. (Appendix 1)
- ³ Bean, 1968: 278.
- ⁴ Amador Record, Sutter Creek, California, March 27, 1913.
- ⁵ Amador Dispatch, Jackson, California, March 28, 1913.
- ⁶ Wagner, 1970: 119.
- ⁷ Garbarini, 1975: 8.
- ⁸ Amador Ledger, Progress-News (Echo Supplement), Jackson California, February 13, 1980.
- ⁹ Letter from R. Coke Wood, PhD, Executive Secretary, Conference of California Historical Societies (University of the Pacific, Stockton, California) to Amador County Board of Supervisors, Jackson, California, March 28, 1966.
- ¹⁰ Telephone conversation: Robert L. Van Nort, City Administrator, City of Jackson and Clyde Berriman, Plymouth, California, August 14, 1980.
- ¹¹ Telephone conversation: Sybil Arata, Jackson, California and Clyde Berriman, Plymouth, California, August 14, 1980.
- ¹² The holding dams (Appendix 3, Figure 4) are located on Arata property. These dams have been included herein because they are a part of the tailing wheels system.

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CONTINUATION SHEET

ITEM NUMBER 9

PAGE 1

BIBLIOGRAPHY:

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American Gold News, "Mr. Post and His Model Mining", Ione, California, February 1976, Pages 8 & 9.

Walton Bean, California (New York: McGraw-Hill Book Company, c. 1968), 278.

Denton W. Carlson & William B. Clark, Mines and Mineral Resources of Amador County, California (Reprinted from California Journal of Mines & Geology, Volume 50, Number 1, California Division of Mines, January 1954), 149 - 285.

Department of Parks & Recreation, California Inventory of Historic Resources, "Kennedy Wheels" and "Jackson Gate" (Sacramento, California: The Resources Agency, March 1976), 226.

Department of Parks & Recreation, California Historical Landmarks, "Jackson Gate No. 118" and "Argonaut & Kennedy Mines No. 786" (Sacramento, California: The Resources Agency, March 1976), 82 & 9.

Emmet H. Garbarini (deceased), Kennedy Tailing Wheels (Jackson, California, about 1956-1958).

Original mechanical drawings on heavy paper 45 inches wide by 27 feet long, includes: detailed drawings of the wheels; wheel components (drive wheel, clutch assembly, hub and wooden buckets).

Owner of drawings: Mrs. Emmet H. (Evelyn) Garbarini, 409 Stasal Avenue, Jackson California, 95642.

Evelyn Garbarini, The Kennedy Wheels (Ione, California: Progress-News, 1975), 1 - 28.

Kenneth H. Glantz, Kennedy Tailing Wheels Park (Jackson, California, June 1, 1972):

Drawings and specifications--

- Site Plan - Parking & Picnic Area, Kennedy Tailing Wheel Park - Sheet 1
- Site Plan - Wheels 3 & 4 2
- Site Plan - Wheels 1 & 2 3
- Tailing Wheel Details 4
- Tailing Wheel Support Details 5

Robert F. Heizer & Franklin Fenenga, "Survey of Building Structures of the Sierran Gold Belt --- 1848 - 1870: "Jackson Gate", Geologic Guidebook Along Highway 49 --- Sierran Gold Belt: The Mother Lode Country (Centennial Edition), Division of Mines Bulletin 141 (Ferry Building, San Francisco, California, September 1948), 129.

FHR-8-300A
(11/78)

UNITED STATES DEPARTMENT OF THE INTERIOR
HERITAGE CONSERVATION AND RECREATION SERVICE

**NATIONAL REGISTER OF HISTORIC PLACES
INVENTORY -- NOMINATION FORM**

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RECEIVED JUN 8 1981

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CONTINUATION SHEET

ITEM NUMBER 9 PAGE 2

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Harold R. Sketchley, Soil Survey of the Amador Area, California (USDA Soil Conservation Service & California Agricultural Experiment Station, Series 1961, No. 26, September 1965), 4 & 5, Sheet No. 27.

Tracy I. Storer & Robert L. Usinger, Sierra Nevada Natural History (Berkeley, California: University of California Press c. 1963), 27.

Jack R. Wagner, Gold Mines of California (Berkeley, California: Howell North Books, c. 1970), 110 - 125.

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CONTINUATION SHEET

ITEM NUMBER 10 PAGE 1

Nominated property consists of Assessors's parcels 20 and 28, Book 20, page 2, and parcels 18, 28, and 29, Book 20, page 7, along with connecting access paths, as indicated on enclosed Assessor's parcel maps. These parcels can be roughly defined as below:

Parcel A (18 & 28)* is located in the NW $\frac{1}{4}$ Section 21, T. 6 N., R. 11 E., M.D.B.&M. Starting at the Northwestern corner on the Jackson Gate Road, the boundary line runs southeasterly 350 feet; thence, NE 100 feet; thence, S 63 $^{\circ}$ 484.95 feet; thence S 17 $^{\circ}$ 38' W 465.89 feet; thence northwesterly 865 feet; thence N 19 $^{\circ}$ 57' 191.32 feet; thence 250 feet + to point of beginning.

Parcel B (29)* is located about center of Section 21, T. 6 N., R. 11 E., M.D.B.&M. Starting at the NW corner, the boundary line runs N 88 $^{\circ}$ 54' E 610 feet; thence S 19 $^{\circ}$ 56' E 959.64 feet; thence southwesterly 590 feet + thence N 19 $^{\circ}$ 56' W 1123 feet to point of beginning.

Parcel 28 is located in the NW $\frac{1}{4}$ Section 21, T. 6 N., R. 11 E., M.D.B.&M approximately 300 feet NW of the Jackson Road. Starting at the SE corner of Parcel 28, at the NW end of the access path to Wheels 1 & 2, the boundary line runs northwesterly 158.62 feet; thence northeasterly 127.5 feet; thence southeasterly 164.5 feet; thence 128 feet + to the point of beginning.

Maps -

Jackson Quadrangle, California
7.5 Minute Series (Topographic) Photoinspected 1973
SE/4 Sutter Creek 15' Quadrangle, 1962

* Assessor's Map Bk 20, Pg 02, County of Amador, California

* Assessor's Map Bk 20, Pg 07, County of Amador, California

Kenneth H. Glantz, Kennedy Tailing Wheels Park (Jackson, California, June 1, 1972):
Drawings, site plans. (Appendix 2)

Glantz & Gamayo, Tentative Plan for Site Development of Kennedy Wheels Park
(Jackson, California, December 1971). Shows location of original flume and
wheels, public facilities, picnic areas. (Appendix 4)

Toma & Anderson, General Development Plan & Tentative Map of The Wheels. n.d.
Shows general development plan for The Wheels by Wiebe Projects, Inc., Developer.
(Appendix 6)

FHR-8-300A
(11/78)

UNITED STATES DEPARTMENT OF THE INTERIOR
HERITAGE CONSERVATION AND RECREATION SERVICE

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CONTINUATION SHEET

ITEM NUMBER 10 PAGE 2

MAPS

Jackson Quadrangle, California
7.5 Minute Series (Topographic)

Assessor's Map 20-02, Amador County, California

Assessor's Map 20-07, Amador County, California

UNITED STATES DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE

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CONTINUATION SHEET

ITEM NUMBER 11 PAGE 1

Attached is a copy of the letter to Clyde Berriman, dated February 19, 1980, from the Mayor, City of Jackson, California, that requested Mr. Berriman to prepare the application to nominate the Kennedy Tailing Wheels for entry on the National Register of Historic Places.

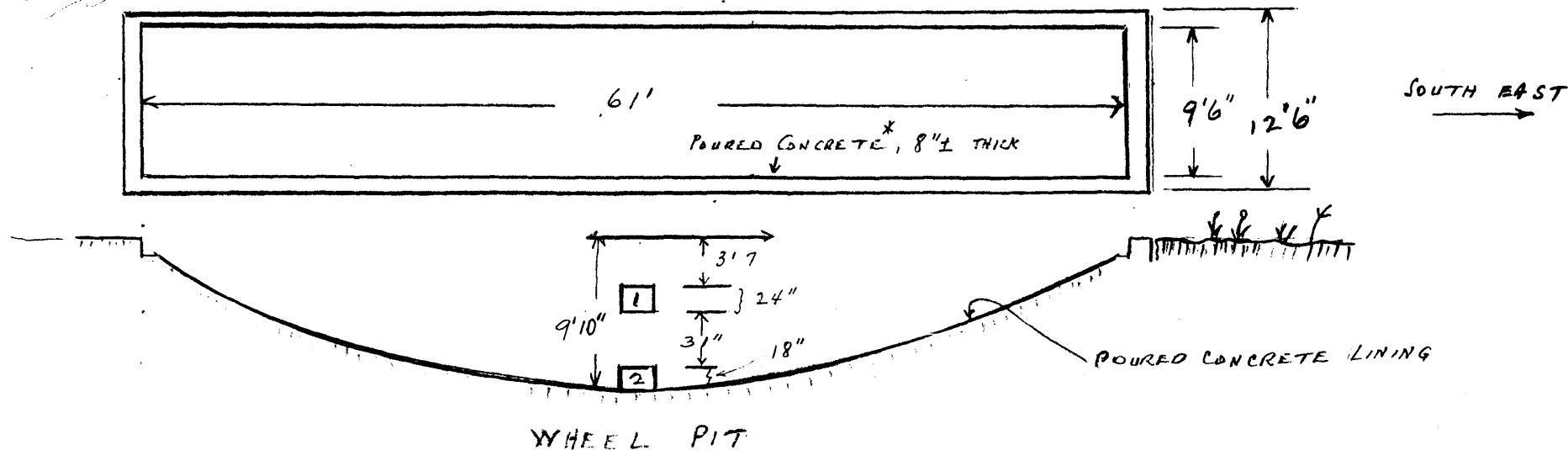
Mr. Berriman is a member of the Amador County Historical Society.

The City of Jackson is the owner of the property being proposed for registration.

KENNEDY TAILING WHEELS - WHEEL #3
WHEEL PIT

0.25

TAILINGS
(SPILLAGE)



DATE WHEEL 3 FELL: 1963-1964.

* AGGREGATES: LOCAL STONE (QUARTZ, ETC.)

SEE PHOTO NO. 12-2 & 14-10

1 = 2' X 2' OPENING ON SOUTH SIDE

2 = 18" X 2' ON SOUTH SIDE

NO OPENINGS ON NORTH SIDE

PURPOSE OF OPENINGS

1 - FLUME ENTRANCE TO WHEEL

2 - DRAINAGE OF WELL (?)

FIG. 1

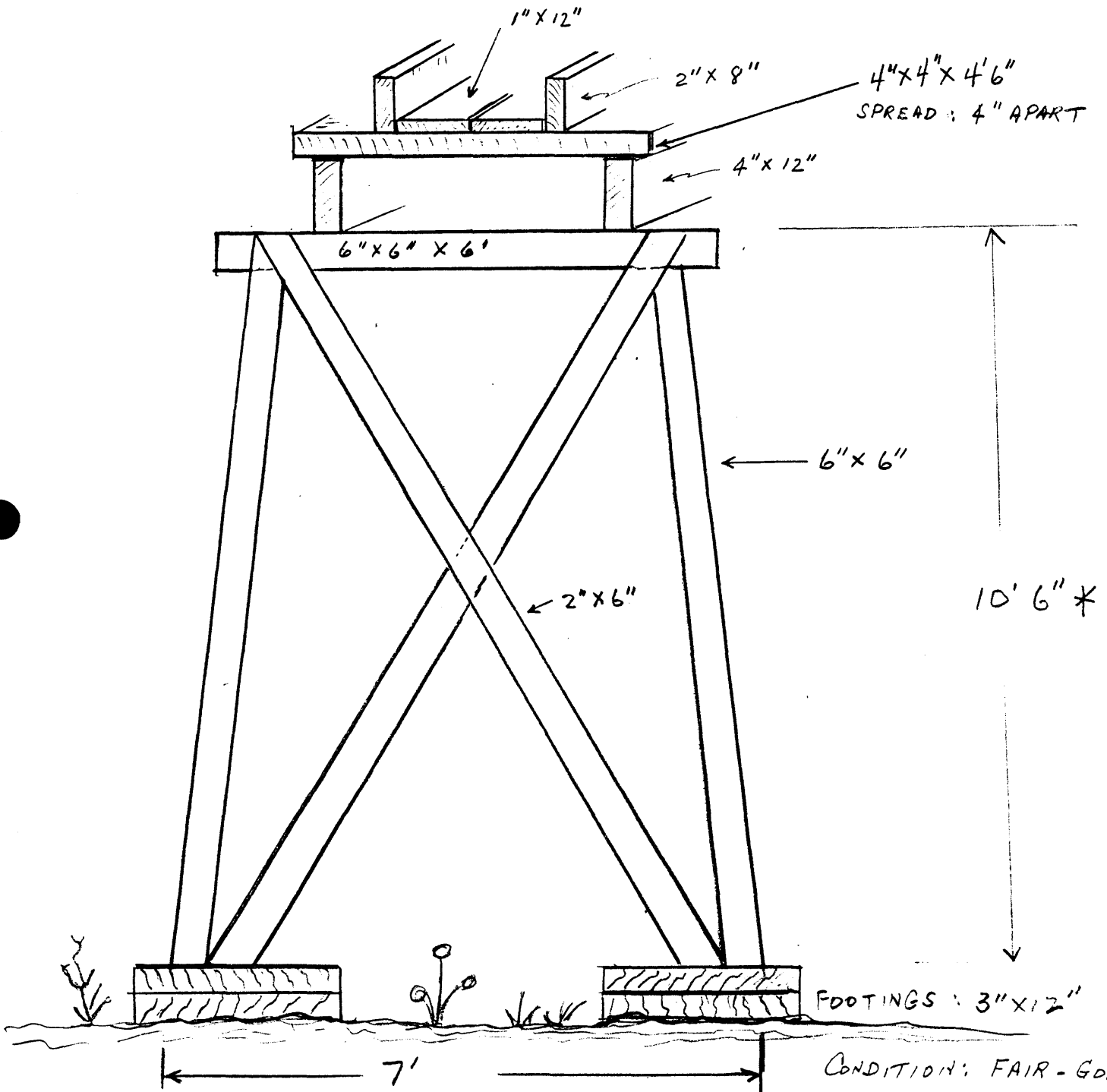
CRB
JUNE 19,
1980

JUL - 7 1981

FIG. 1

KENNEDY TAILING WHEELS

FLUME BETWEEN WHEELS No. 1 & 2



CONDITION: FAIR - GOOD

* HEIGHT VARIES TO CONFORM WITH SLOPE TO MAINTAIN GRADIENT
ONLY REMAINING FLUME AS OF JUNE 1980. JUL - 7 1981
LENGTH OF FLUME: 80' ± (BETWEEN WHEELS 1 & 2).

FIG. 2

CRS
5/21/80

HISTORICAL NOTES

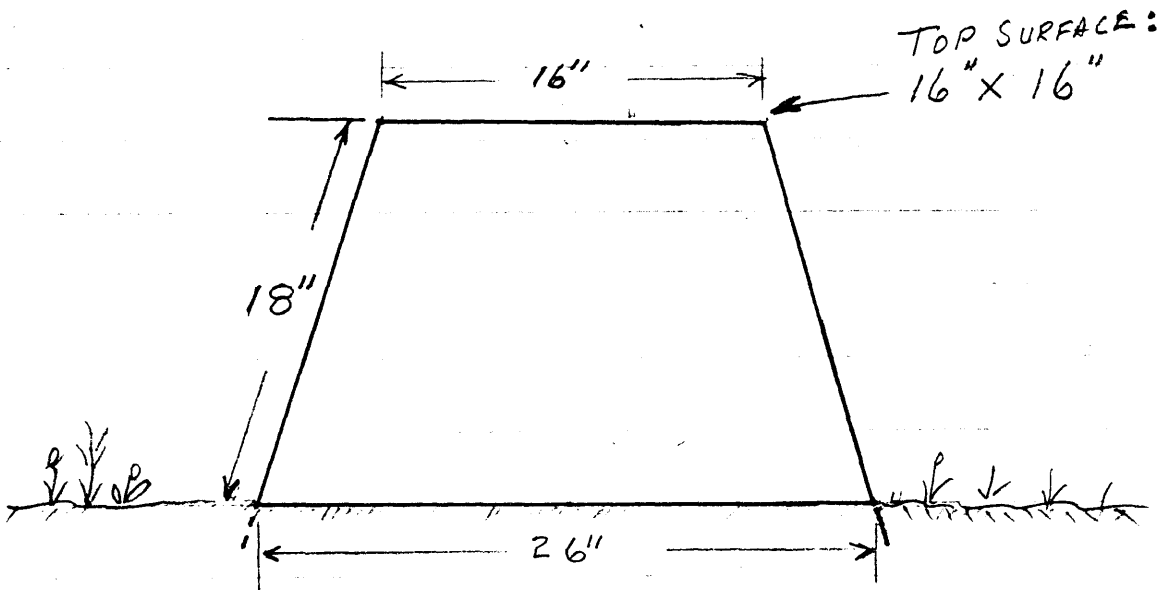
SUBJECT: KENNEDY TAILING WHEELS - FLUME FOOTINGS

SOURCE: ON SITE

NOTES

FLUME FOOTING:

Dimensions --



MATERIAL: POURED CONCRETE

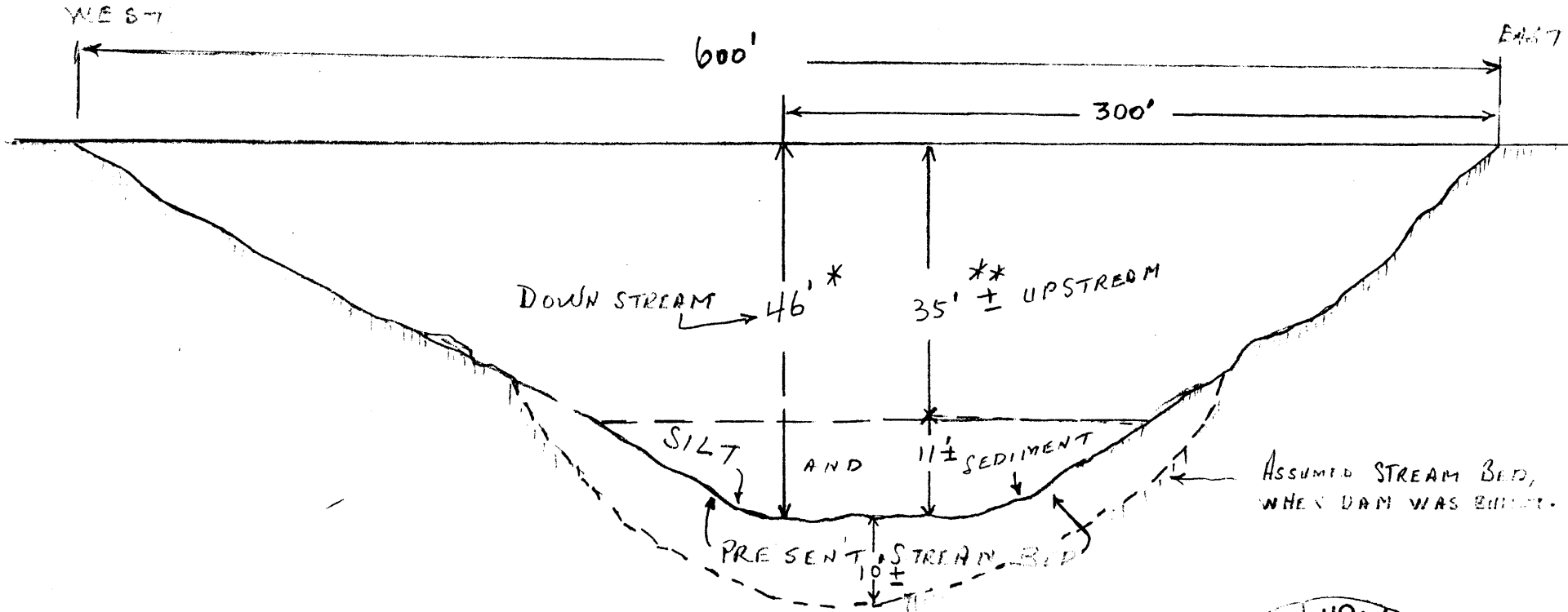
LOCATION OF SKETCHED FOOTING: NORTH SIDE
JACKSON GATE ROAD OPPOSITE PUBLIC FACILITIES BUILDING.

NOTES BY: CRB
August 6, 1980

JUL - 7 1981

FIG. 2B

IMPOUNDING DAM -- KENNEDY TAILING WHEELS
 JUNE 1980



* MEASURED.

** AN APPROXIMATION, BASED ON ATTEMPTED MEASUREMENT TO SEDIMENT.



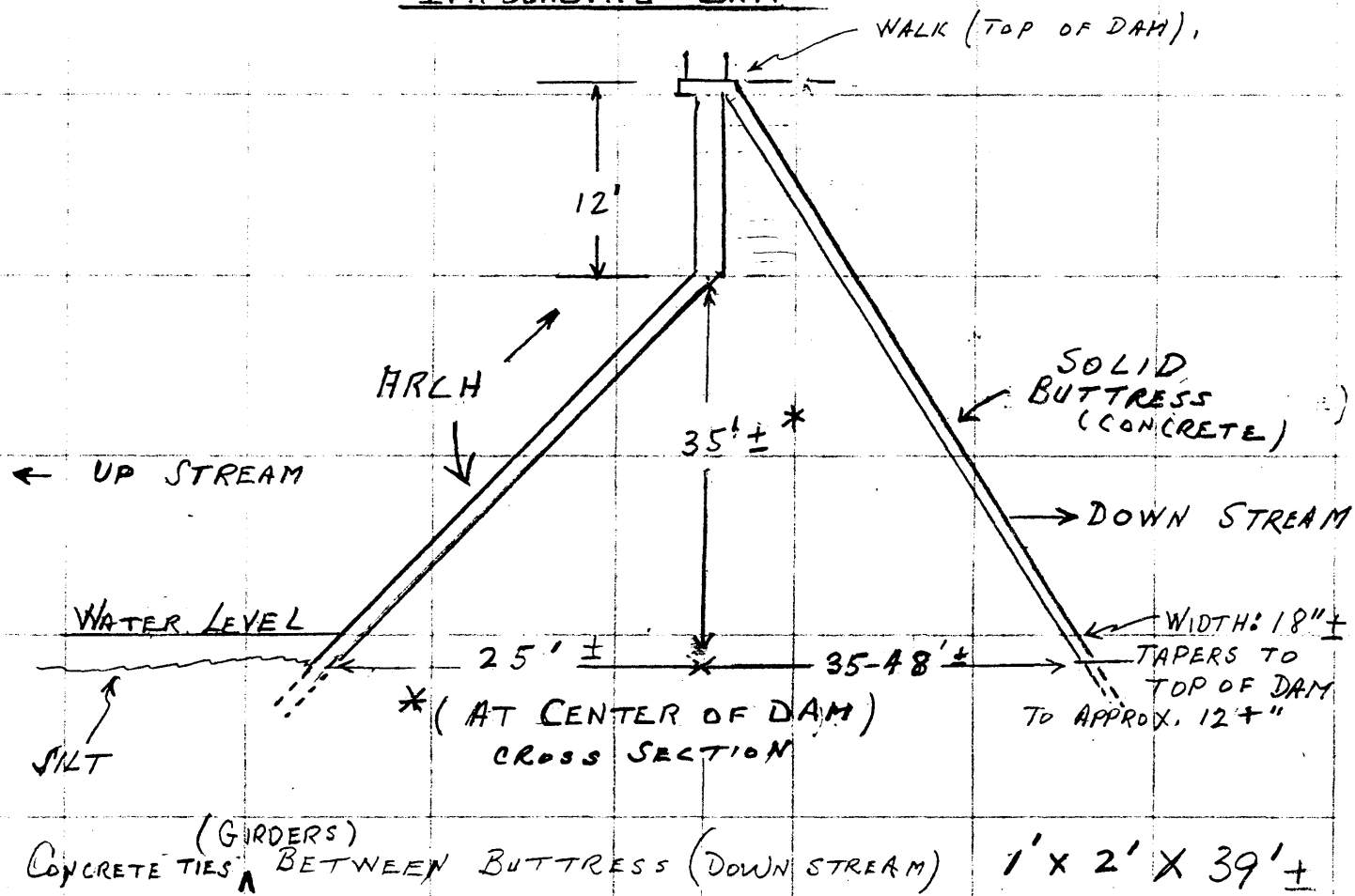
JUL - 7 1981

FIG. 3A

CRB
 6/21/80

FIG. 3A

KENNEDY TAILING WHEELS
IMPOUNDING DAM



GIRDERS: REINFORCED WITH 4 1" STEEL CABLES
 (NOTED IN A BROKEN MEMBER)

PHOTOS: 14-5 & 14-3

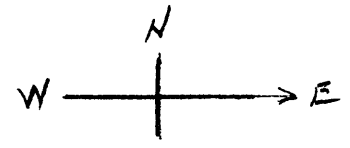
CRB
 6/21/80



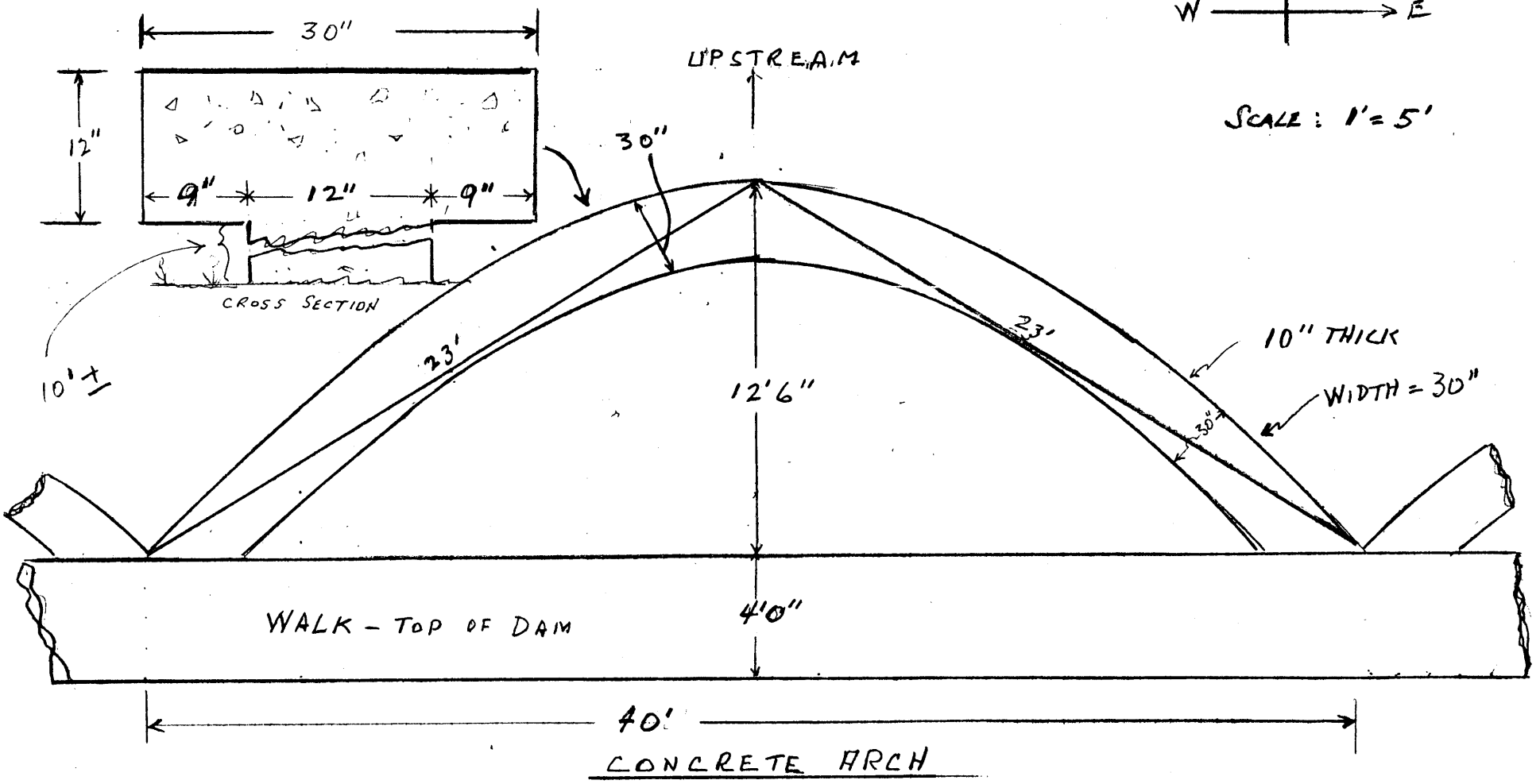
JUL - 7 1981

FIG. 3B

KENNEDY TAILING WHEELS IMPOUNDING (MULTIARCH) DAM



SCALE: 1" = 5'



MATERIAL: POURED CONCRETE
NUMBER OF ARCHES: 14

PHOTOS NUMBERED: 13-1, 14-5
14-3, 12-9

WIDTH OF DAM: 600 FEET.
CAPACITY: 4 OR 5 ACRES ±

14 ARCHES X 40' = 560'
2 1/2 ARCHES X 20' = 40' (EACH END OF DAM)
600'

JUL - 7 1981

FIG. 3C

FIG. 3C

CRB
4/2/80

KENNEDY TAILING WHEELS IMPOUNDING DAM

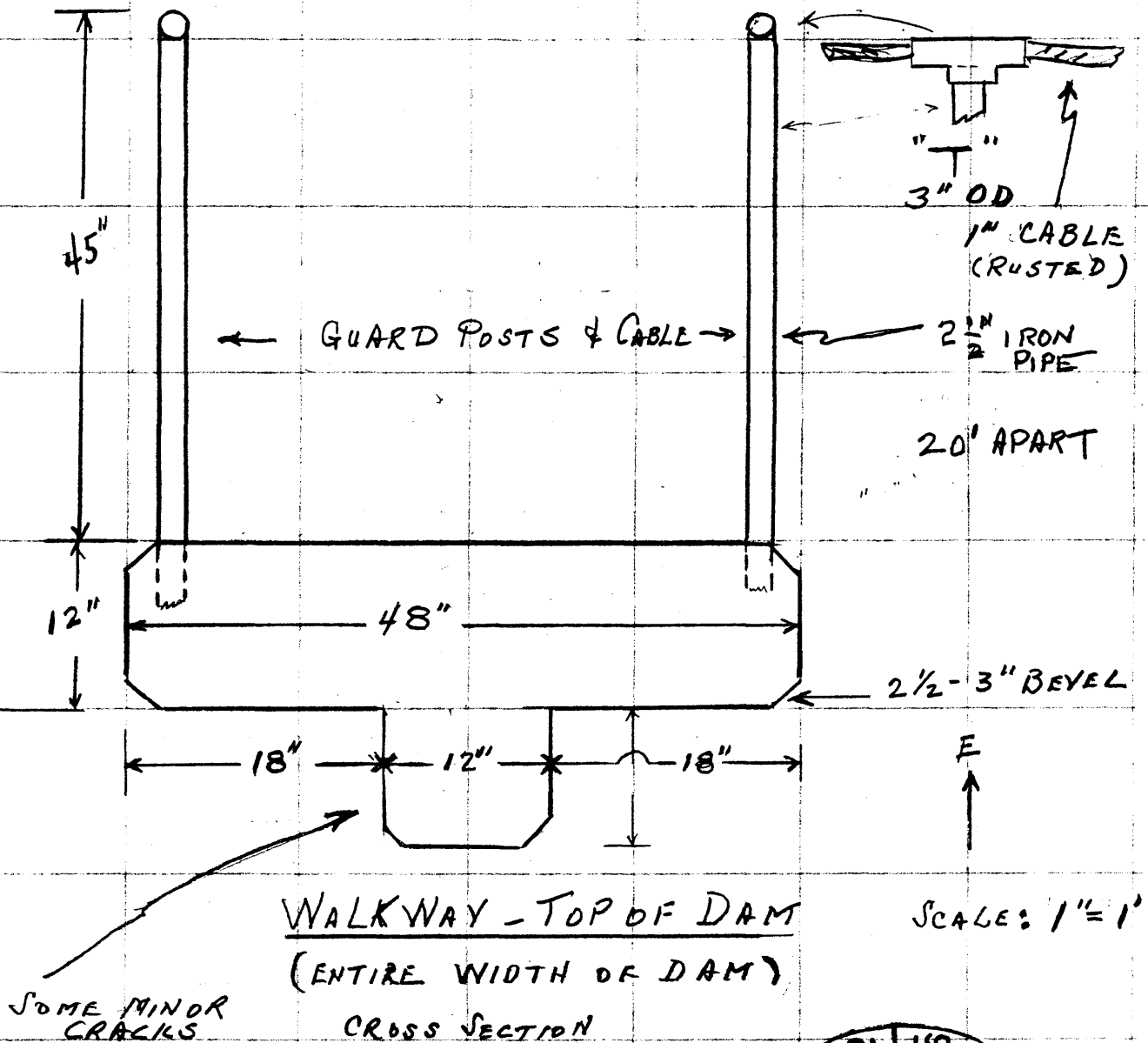
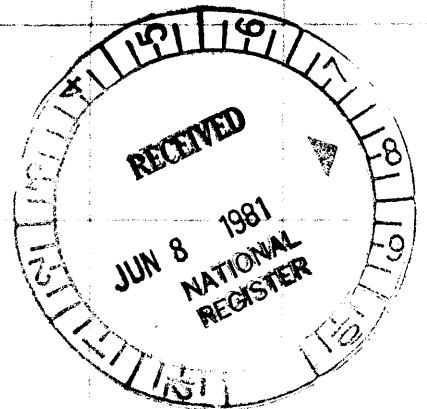


PHOTO: 13-1

CRB
4/7/80



JUL - 7 1981

FIG. 3D

KENNEDY TAILING WHEELS

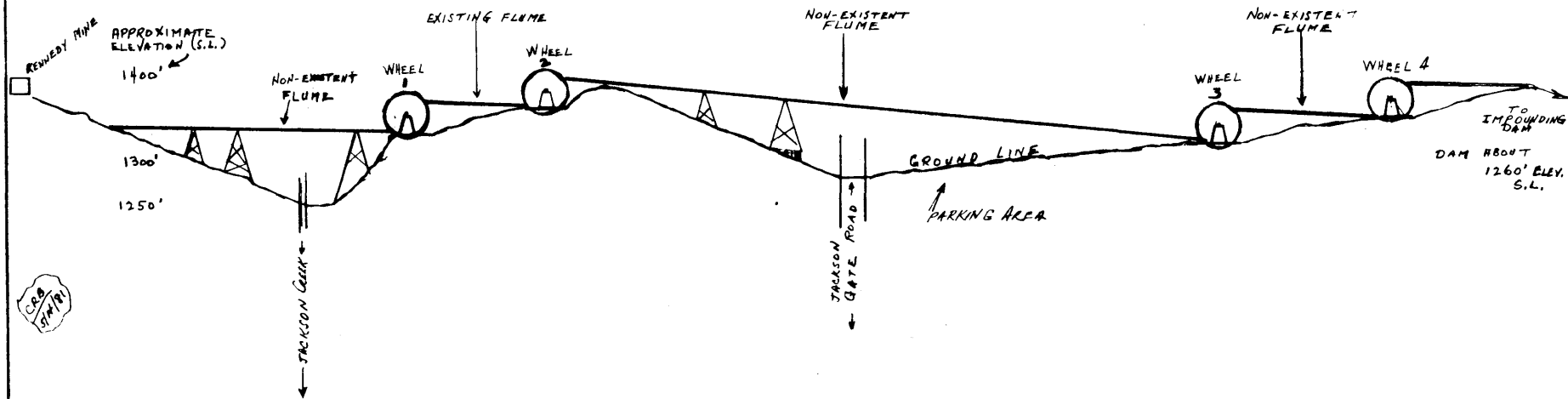
"HOW THE SYSTEM WORKED"

JACKSON, CALIFORNIA

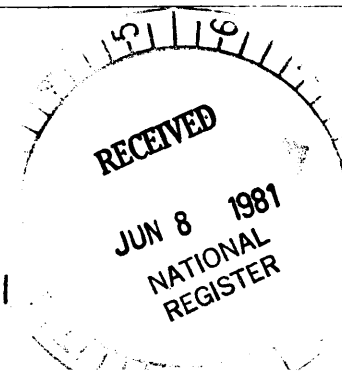
1981

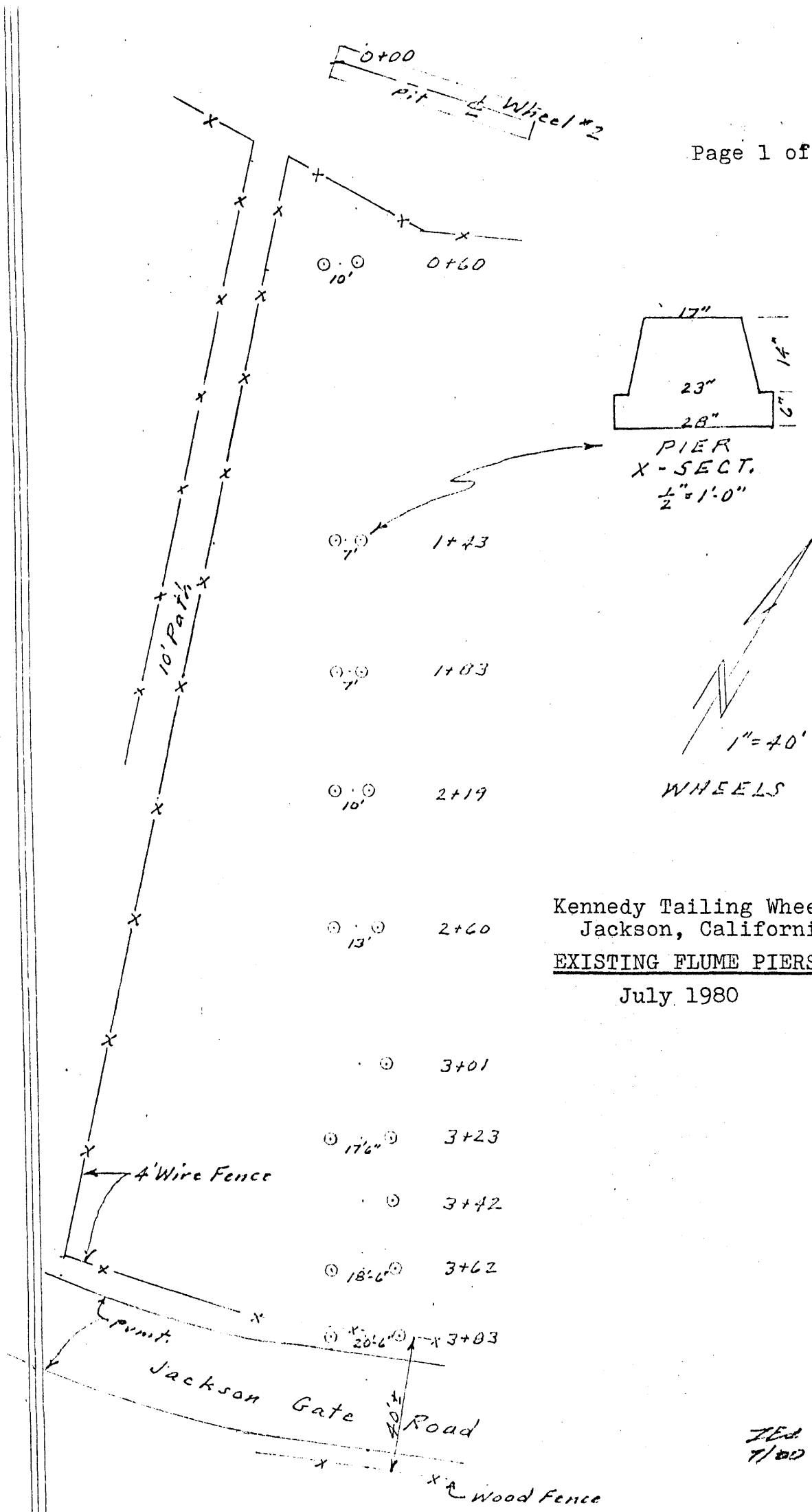
SYSTEM: SE - NW

SCALE: ROUGHLY PROPORTIONAL TO
MEASURED DISTANCE



JUL - 7 1981





Kennedy Tailing Wheels,
 Jackson, California
EXISTING FLUME PIERS
 July 1980

TEL
7/80

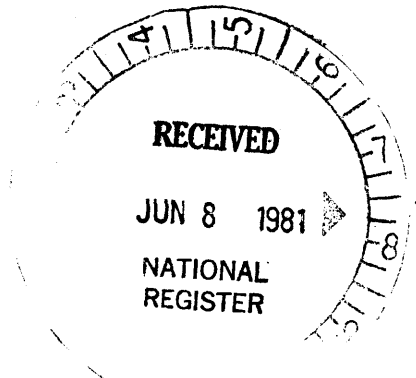
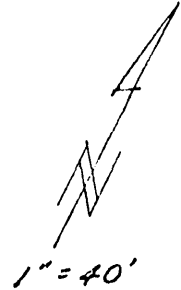


FIG. 5

Jackson Gate Road

3+80 X Wood Fence

Pier 2+58



WHEELS

2+18

13' 1+77

Kennedy Tailing Wheels,
Jackson, California

EXISTING FLUME PIERS

July 1980

12' 1+37

10' 0+96

8' 0+55.5

0+00 Wheel #4 Pit

0+00 Wheel #3 Pit

INSERT

0+4.9 11' 0+50.5
78' 2.5'

4' Wire Fence

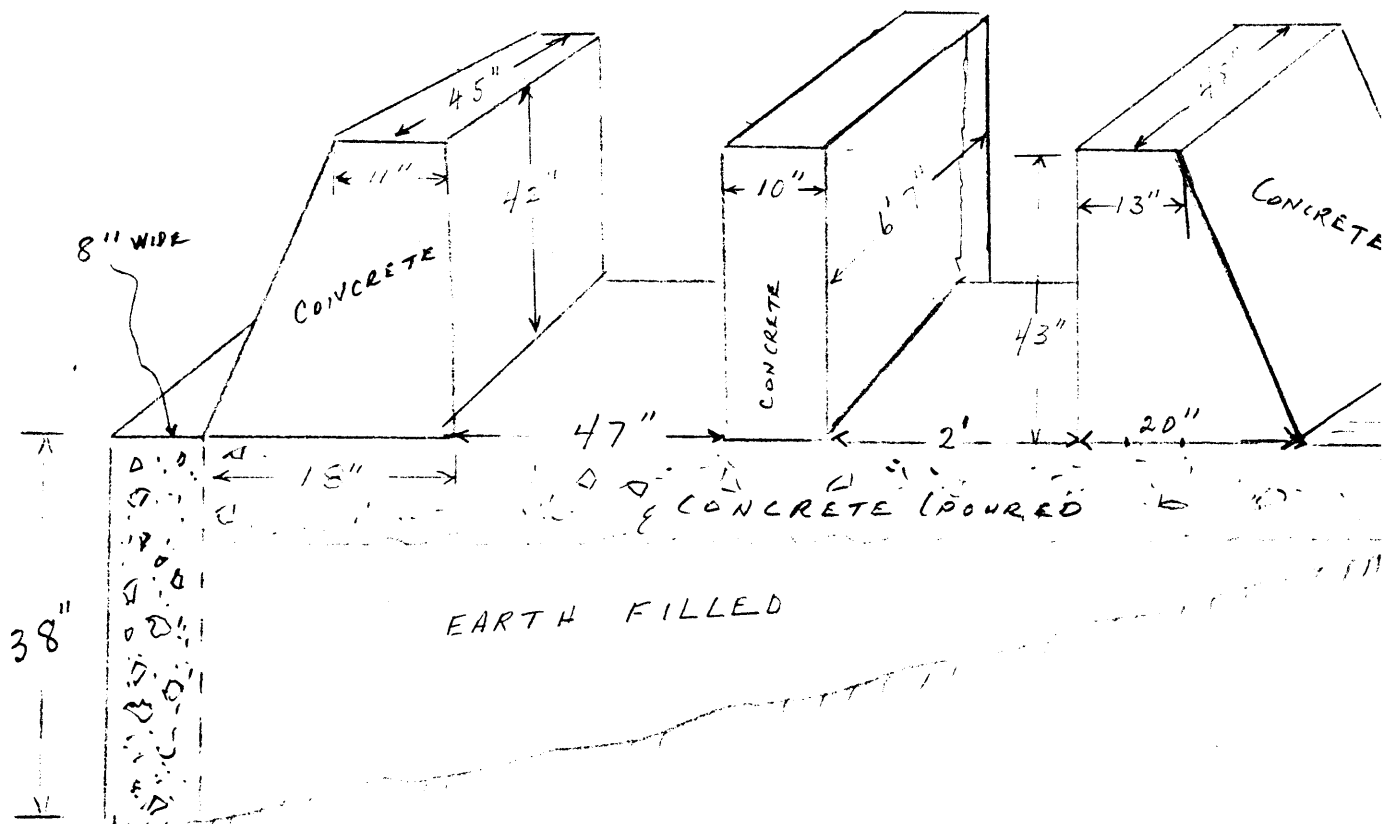
LED
7/80

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MOTOR FOUNDATIONS - WHEEL 3



FOUNDATIONS 16 FEET NW WHEEL 3

SEE PHOTOS NUMBERED 12-2; ALSO, 11-4.

CRB
6/19/80

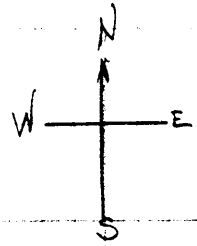


JUL - 7 1981

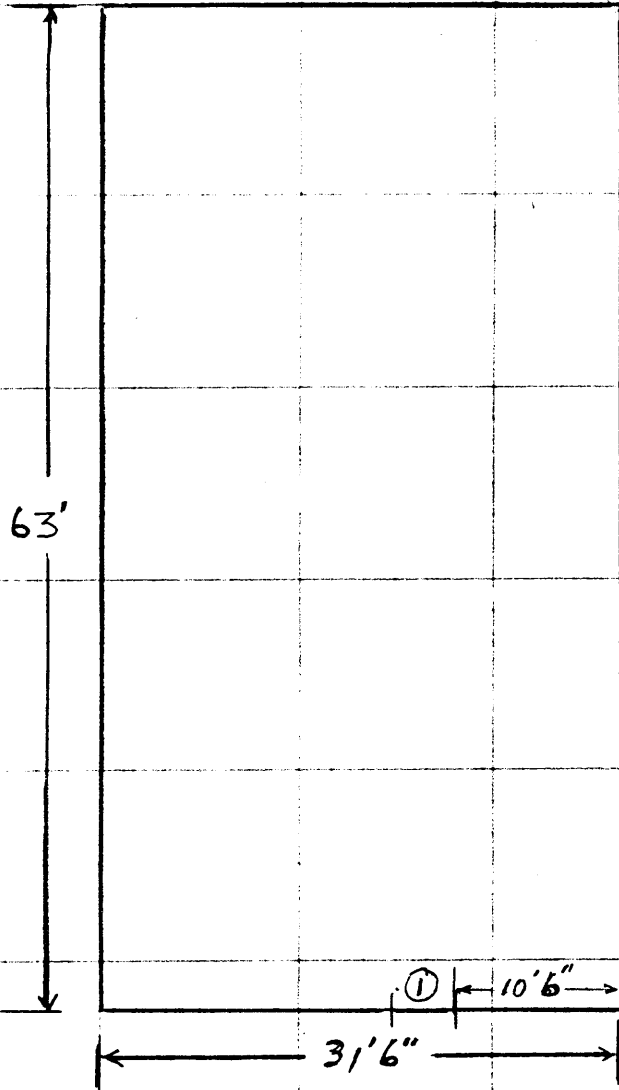
FIG. 6

KENNEDY TAILING WHEELS -
WHEEL NO. 4

SECURITY FENCE



APPLE TREE



① GATE, 3' x 6' chain linked, galvanized with lock.

FENCE, Chain link:

POSTS, 9' - 11' apart, 8' x 2 1/4" OD, GALVANIZED, CAPPED.

CORNER POSTS: 3" OD GALVANIZED.

TOP RAILS: 1 1/2" - OD GALV

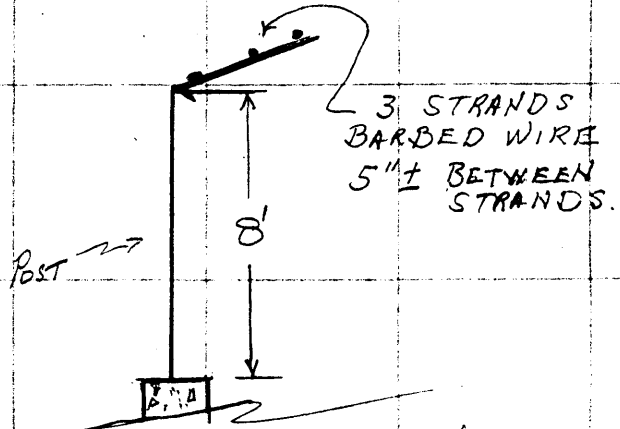
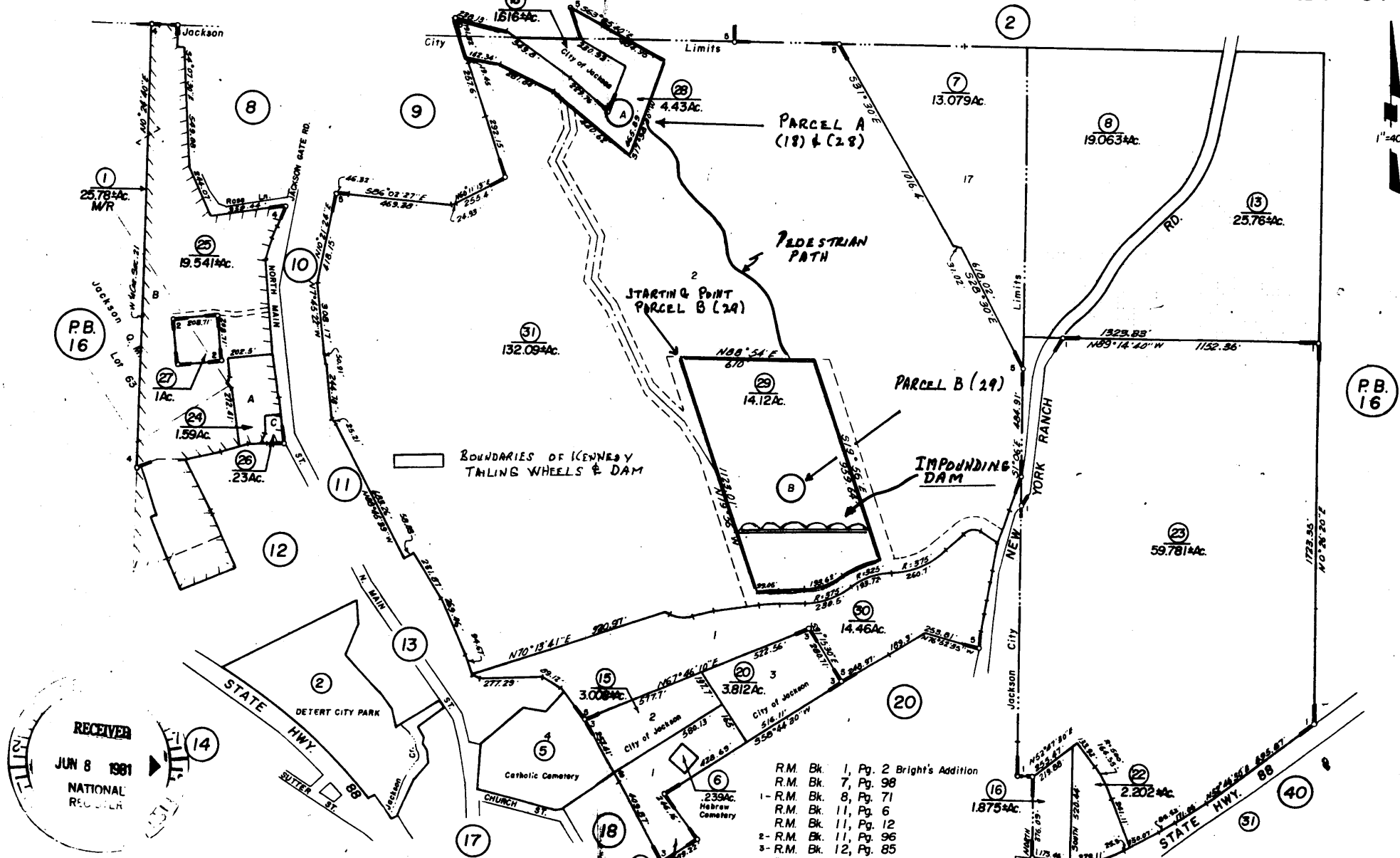


PHOTO NUMBERED: 11-6

CRB
4/7/80

TWO STRANDS BARBED WIRE BOTTOM
JUL - 7 1981 of fence, NEXT TO GROUND.
West side: Easy access to enclosure. FIG. 7

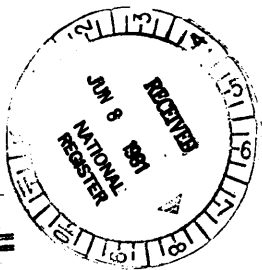


POR. SEC. 16 & 21, T. 6N., R. 11E., M. D. B. & M.

Tax Area Code

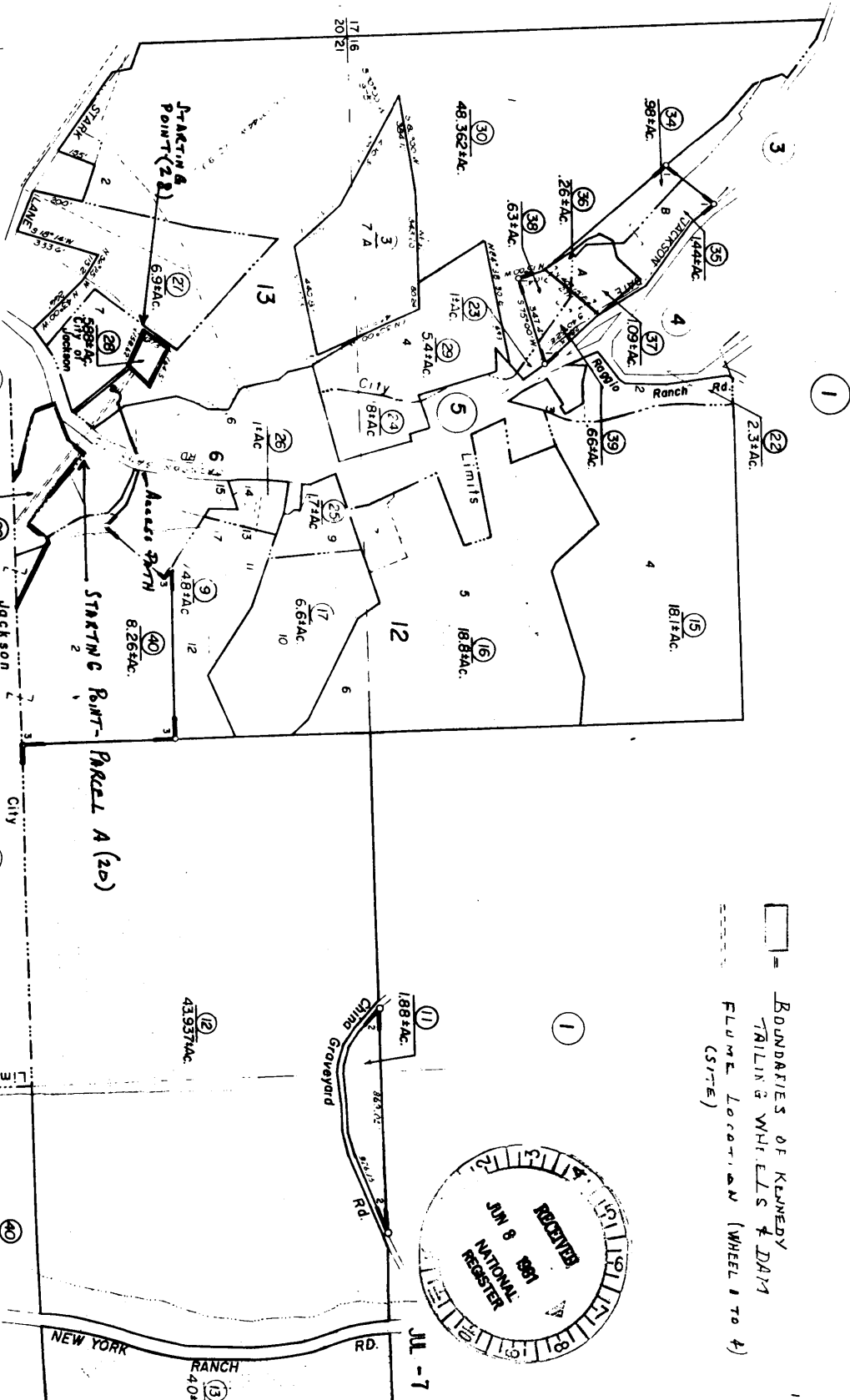
20102

BOUNDARIES OF KENNEDY TRILING WHEELS & DAM FLUME LOCATION (WHEELS 1 TO 4)



JL-7

Pk 16



M/V. DATE, SEC. 20 & 21, RM. Bk. 6, Pg. 96, RM. Bk. 7, Pg. 98, City of Jackson, 1728±Ac., JACKSON, CITY, 7, 188±Ac., CHINA GROVE RD., 284.7±Ac., NEW YORK RD., 43937±Ac., RANCH, 404, Assessor's Map Bk. 20, Pg. 02, County of Amador Calif