NPS Form 10-900
(Rev. 8/86)
Utah Word Processor Format (02731)
(Approved 10/87)

OMB No. 1024-0018

United States Department of the Interior
National Park Service

MAR 08 1989

NATIONAL REGISTER

NATIONAL REGISTER OF HISTORIC PLACES
REGISTRATION FORM

This form is for use in nominating or requesting determinations of eligibility for individual properties or districts. See instructions in Guidelines for Completing National Register Forms (National Register Bulletin 16). Complete each item by marking "x" in the appropriate box or by entering the requested information. If an item does not apply to the property being documented, enter "N/A" for "not applicable." For functions, styles, materials, and areas of significance, enter only the categories and subcategories listed in the instructions. For additional space use continuation sheets (Form 10-900a). Type all entries. Use letter quality printer in 12 pitch, using an 85 space line and a 10 space left margin. Use only 25% or greater cotton content bond paper.

1. Name of Property Devil's Gate/Weber Hydroelectric Power Plant Historic District

historic name

other names/site number Weber Power Plant, Weber Station

2. Location

street & number Interstate Highway 84 n/a not for publication

city, town Ogden x vicinity

state Utah code UT county Morgan/Weber code 029/057 zip code 84400

3. Classification

Ownership of Property	Category of Property	No. of Resources within Property	
		contributing	noncontributing
x private	___ building(s)		
___ public-local	x district	7	___ buildings
___ public-State	___ site	___	___ sites
___ public-Federal	___ structure	1	1 structures
	___ object	___	___ objects
		8	1 Total

Name of related multiple property listing:

Electric Power Plants of Utah

No. of contributing resources previously listed in the National Register 0

4. State/Federal Agency Certification

As the designated authority under the National Historic Preservation Act of 1966, as amended, I hereby certify that this _x_ 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 _x_ meets ___does not meet the National Register criteria. ___See continuation sheet.

Mary Ellen — 1.31.89

Signature of certifying official — Date

UTAH STATE HISTORICAL SOCIETY

State or Federal agency and bureau

In my opinion, the property ___meets ___does not meet the National Register criteria. ___See continuation sheet.

Signature of commenting or other official — Date

State or Federal agency and bureau

5. National Park Service Certification

I, hereby, certify that this property is:

✓ entered in the National Register. ___ See continuation sheet — Bruce J. Noble, Jr. — 4/20/89

___ determined eligible for the National Register. ___ See continuation sheet

___ determined not eligible for the National Register.

___ removed from the National Register.

___ other, (explain:) _____

for Signature of the Keeper — Date

6. Functions or Use

Historic Functions (enter categories from instructions)	Current Functions (enter categories from instructions)
Industry/Processing/Extraction: energy facility	Industry/Processing/Extraction: energy facility

7. Description

Architectural Classification (enter categories from instructions)	Materials (enter categories from instructions)
	foundation concrete
Late 19th/Early 20th Cent. American Movements (residences and powerhouse)	walls brick, wood
	roof asphalt
	other n/a

Describe present and historic physical appearance.

(see continuation sheet)

x See continuation sheet

Constructed in 1909-10, the Weber Station Hydroelectric Power Plant is located approximately ten miles southeast of Ogden, Utah. The plant consists of a powerhouse, reinforced-concrete dam (and related structures), concrete and steel conduit, and an operators' camp, within which are two residences and four ancillary structures. Of the ten structures included in the plant site, eight are contributing and two non-contributing. One non-contributing structure--the conduit--has been left out of the district. Thus the historic district is made up of two discontiguous elements, the dam and the powerhouse site. Since its construction, the Weber powerhouse site and dam have sustained alterations, such as the removal of two residences. However, these changes do not compromise the overall integrity of location, setting, design, materials, workmanship, feeling and association. Weber Station continues to represent an early twentieth-century, medium-head hydroelectric power plant.

The Weber Station Hyroelectric Power Plant lies in a narrow stretch of Weber Canyon along the Weber River. Squeezed between the steep canyon wall and the river are three buildings and four outbuildings which comprise the plant site. Until the mid-1970s, a state highway directly above the site provided the northern boundary. Higher on the canyon wall, the Union Pacific Railroad tracks parallel the highway. In the 1970s, western-bound lanes of Interstate 84 superceded the state highway and eastern lanes were constructed on the south side of the Weber River, effectively isolating the camp from direct highway access. Partial rock riprapping and newer metal supports stabilize the embankment behind the camp and below the Interstate. Similar rock riprapping forms a retaining wall along the river. Along the driveway through the camp are a line of shade trees and lights at the top of the rock wall. About 1.75 miles east and upstream from the powerhouse is the reinforced-concrete dam which diverts water into the conduit. On the south side of the dam are an intake house and dam tender's residence, which partially sits over the concrete conduit.

1. Powerhouse

Constructed in 1909-10, the powerhouse sits at the eastern edge of the plant site on the Weber River. Rectangular-shaped, this brick

building has a concrete foundation and a gable, poured concrete roof. The concrete roof is supported on the inside by riveted steel Fink trusses. Along the roof ridge are three round metal ventilators and a metal structure carrying electrical lines. On the north and south facades are concrete capped, unevenly stepped parapet walls which extend above the gable ends. The west parapet has longer steps to compensate for an extension on the west side. Decorative brick work divides the east and west facades into five bays. Originally, the bays contained multipaned windows. However, after an interior fire in 1983, the windows were bricked in and some replaced with 2-light sliders or long 4-light slider windows, placed either vertically or horizontally and often screened. Concrete sills and lintels demarcate the window openings. The central bays on the east and west facades contain entrances. Although constructed with double wooden doors, the eastern bay now has a metal overhead door and screened metal gates. Facing the fenced substation yard, the western door has been altered with concrete block used to fill in the top of the door way. Above the door is a new overdoor with a shed roof and a bricked-in window. At the south end of the western facade are openings for transmission lines, now covered with plywood. Above these openings is a small gabled hood. The north and south facades are divided into three bays, filled originally with windows. Above the bays, in the gable ends, are painted signs reading, "Weber Station Utah Power & Light Co./ 'Efficient Public Service.'" The north side has a central metal door with a fixed 1-light window above it. A metal ladder and protective cage provide access to the roof. The concrete foundation wall on the south facade extends to the river and contains a segmental arched opening for the tailrace as well as the relief valve pipe.

The interior of the powerhouse is divided into four principal areas. The main portion of the plant, roughly comprising the eastern two-thirds of its interior space, is devoted to housing the generating machinery. This apparatus includes one reaction-type turbine (built by the Pelton Water Wheel Company) attached to a 2300 volt Western Electric generator. The turbine is controlled by a hydraulic oil governor. A small 125 volt d.c. generator serves as the exciter for the main generator. A bank of modern switches and gauges is located adjacent to the turbine-generator unit. A 20-ton capacity overhead travelling crane, built by the

Whiting Foundry Equipment Company, services the power generation area. This area also includes a small, modern sound-proof room for plant operators. Rated capacity of the Weber plant is 3.3 megawatts.

The other third of the interior space is taken up by three rooms: the battery room, occupying the southwest corner of the building; a work room, occupying the northwest corner; and a high-tension room between these. The high-tension room no longer contains switches, bus bars, and transformer equipment, as these apparatus are now located outside, adjacent to the west side of the powerhouse.

Although the powerhouse has sustained some alterations, such as filled-in window bays, new windows and door alterations, the building still clearly conveys its historic style and function. Because the changes do not overwhelm the structure's original appearance and because the powerhouse retains the majority of its integrity of location, design, setting, materials, workmanship, feeling and association, it is a contributing element of the Weber Hydroelectric Power Plant Historic District.

2. Transformer and Transmission Apparatus

This equipment consists of steel switchrack, transformers, and transmission towers and poles, all of modern construction. The switchrack and transformers are located adjacent to the powerhouse. Transmission towers and poles are situated around the powerhouse. The transformer and transmission apparatus are non-contributing elements of the Weber Hydroelectric Power Plant Historic District.

3-8. Operators' Camp

Once providing housing for four families, the operators' camp now has only two residences. Three brick cottages were built at the the time of the plant's construction, but two of them have since been demolished. The remaining brick western-most cottage (no. 3) is an irregularily-shaped, brick-veneer structure with asphalt-shingled hip roofs intersecting a central gable-on-hip roof and overhanging eaves. Sitting on a concrete foundation, the house

has a central, interior, brick chimney and either 6/2 or 2/2 double hung windows with concrete sills under segmental arched brick lintels. The front, southern, entrance with a segmental arched lintel has a screened 6-light door and a shed roofed overdoor supported by wooden braces. On the north side is an addition with tongue-in-groove siding, a half-hip roof, 1/1 double hung windows--single and in sets of three--and a 1-light door. A window in the west facade has been removed and replaced with a 2-light slider. Behind this house is a sidewalk and along the rock terraced highway embankment, flowers have been planted. In front of the house are trees and shrubbery. A two-sided wooden shed with an asphalt-shingled shed roof stands just west of the house. As the one window replacement is the only alteration outside the district's period of significance, the cottage retains its historic integrity of location, design, setting, materials, workmanship, feeling and association. This residence is a contributing element in the Weber Hydroelectric Power Plant Historic District.

A lawn with shade trees separates the brick residence and the remaining worker's cottage. This area originally contained two brick dwellings--probably very similar to the existing brick cottage--which were removed in the mid-1970s.

Constructed in 1922, the easternmost cottage (no. 4) is a rectangular-shaped, wood-frame dwelling with an asphalt-shingled hip roof and broad overhanging eaves. Resting on a concrete foundation, the house has drop siding, a central interior brick chimney and exterior brick chimney on the north side. Most of the windows are 1/1 double hung, 2-light sliders or 3-lights in the basement but in the southeast corner are two 12-light windows forming a sunporch. The front, south, entrance has a 2-light door, concrete steps and an iron railing. On the west side is a screened door with concrete steps. A corrugated metal overdoor and a three-sided trellis protect the opening. Foliage obscures much of the south and west facades. Constructed as a single-family residence, the building was at some point used as a duplex. The north facade confirms this as it contains two entrances. Both have concrete steps and iron railings but the screened east door is wood and the west opening has double 10-light French doors and double screen doors. A series of four 4-light casement windows

extend along the east side of the eastern rear porch. Surrounding the south and east sides of the yard is white picket fence. Directly across the driveway, near the river, is a picnic area which includes a concrete table and benches and a stone fireplace. Although this building has sustained some minor alterations outside the district's period of significance, it retains its historic integrity of location, design, setting, materials, workmanship, feeling and association and is a contributing element in the Weber Hydroelectric Power Plant Historic District.

Near the driveway's entrance onto Interstate 84 are a row of four outbuildings. All the one-story structures are of wood-frame construction with corrugated metal siding and roofing. Built before 1936, the eastern-most shed (no. 5) has a gable roof, 9-light fixed windows, double corrugated metal doors and a 6-light entrance in the west facade. The remaining three sheds (nos. 6,7,8) are all identical except that the western structure contains only a single garage bay while the others have two. These buildings had shed roofs, fixed 4-light windows and corrugated metal garage doors facing north. The western one-bay garage (no. 8) was built in 1939, while the other two garages (nos. 6, 7) were constructed in 1923. Erected during the district's period of significance and virtually unaltered, these four outbuildings retain their historic integrity of location, design, setting, materials, workmanship, feeling and association and are all contributing structures to the Weber Hydroelectric Power Plant Historic District.

A 1936 UP&L site map of the Weber Development shows five outbuildings at the east end of the camp. It appears that a two-bay garage/storage building and a 1923 barn located on the east end of the row have been removed. The 1936 map indicates that several other outbuildings on the north edge of the camp were also removed, possibly during construction of Interstate 84.

Other structures adjacent (but not actually ancillary) to the Weber hydroelectric plant include the diversion dam and trashracks of the Davis and Weber Canal Company, located just downstream from the powerhouse. These structures have no direct association with the Weber hydroelectric development.

9. Dam

The Weber dam is located about 1.75 miles upstream from the powerhouse. Basically, the dam is a reinforced concrete structure about 130 ft. long, including fishway, spillway, sluice gate, intake structure, and abutments. Access to the dam is provided by a road leading from a rest area for the east-bound lanes of the Interstate 84. I-84 is situated on the north bank of the Weber River, adjacent to the dam. Hugging the south bank of the river, also adjacent to the dam, are double tracks of the Union Pacific Railroad.

The spillway portion of the dam features three massive concrete piers, each about 12 ft. tall. These three piers are evenly spaced, with one pier located mid way between the other two. Two steel tainter gates are set between the piers. The tops of the tainter gates are attached to cables, which in turn wrap around horizontal shafts mounted on top of the piers. By turning the shafts, the tainter gates are raised and lowered. The south gate is raised by a motor, but the north gate must still be raised by hand power. Crossing the tops of the piers, adjacent to the gate-raising mechanisms, is a walkway consisting of steel grate resting on steel I-beams. A low chain link fence on either side of the walkway serves as a balustrade.

Situated between the north bank of the river and the north pier is a fishway, or fish ladder. The fishway is a concrete structure, integral to the dam, consisting of a series of stepped compartments, about 3 ft. wide, ascending from the downstream side of the dam and leading to the top of the dam. The fishway allows fish to move upstream or downstream past the dam without harm.

Between the south pier and the intake structure is a large wood sluice gate, which when completely lowered extends from the bottom of the dam to a height just below the top of the piers. The sluice gate is raised and lowered by a hand-powered worm gear. The sluice gate allows the reservoir behind the dam to be lowered rapidly.

The southern portion of the Weber dam consists of the intake structure, the dam watchman's residence, and a short section of

reinforced concrete pipeline. The intake structure consists of a large reinforced concrete structure, roughly rectangular in shape. On the upstream side of the intake structure are the trashracks. A slide gate located behind the trashracks allow water through the intake into the conduit. Adjacent to the intake, on its south side, is a short section of reinforced concrete retaining wall, the end of which is embedded in the south bank of the river.

This retaining wall and the intake structure, including the trashracks and slide gate mechanism, are covered by a small, one story, rectangular, wood frame intake house. This structure features a gable roof with metal roofing, tongue-in-groove siding, 1-, 2-, and 4-light fixed windows, and a brick interior chimney covered with stucco. There are two doors on the north side of the building. One of these entrances has a gabled overdoor made of wood. On the south side of the intake house is another door, which opens onto the right-of-way of the Union Pacific Railroad. The intake house is actually slightly irregular in shape. On its south side, about one half of the building extends a few feet further than the other half.

Extending upstream from Weber dam along the south bank of the Weber River is a reinforced concrete retaining wall. This wall was built to prevent the waters of the reservoir from scouring and undermining the road bed of the Union Pacific tracks, which lie only a few feet from the water's edge. The concrete retaining wall for the railroad embankment begins at the south end of the Weber dam and extends upstream for 1,200 ft. Although only a few feet of this structure are visible above the water line, construction drawings show that it is a substantial structure 11 ft. tall and 5 ft. wide, including concrete buttresses.

The Weber dam complex includes one other important structure, the dam watchman's residence. This building is located on the south end of the dam, a few feet downstream from the intake house. Also known as "Buckway's House" after one of the watchmen who lived there, the building is a one-story, wood frame, rectangular structure with a concrete foundation and a stucco-covered brick exterior. The structure also features a gable roof covered with asphalt shingles, a brick interior chimney covered with stucco, and window openings topped by shallow arched lintels. The windows

are now covered with boards. There are doors on both the south and north sides of the building. A small, L-shaped, shed-roofed extension on the north side of the watchman's house rests on top of the conduit leading out of the intake structure. The intake house and the watchman's residence are joined by a wood-frame extension of the watchman's residence, only a few feet in length. The watchman's residence can be entered through the intake house.

The Weber dam has undergone a number of alterations since its original construction in 1908-1909. Originally, it was an Ambursen type structure. Within a few years of its completion, it was determined that the dam as constructed could not accomodate the flood discharge of the Weber River. It was feared that floodwaters held up behind the dam would endanger the tracks of the Union Pacific. In 1916-1917, Utah Power and Light essentially rebuilt the dam in order to enable it to pass flood waters. UP&L removed the original central portion of the dam and installed the main components that are now in place: the three piers, the tainter gates, and the sluice gate. In addition, a concrete apron extending 25 ft. downstream from the toe of the dam was installed to prevent undermining. The apron currently is not visible. Apparently it is now beneath the boulders and gravel lying immediately downstream from the dam. Weber dam has received other minor modifications since 1917, such as the construction of a new walkway and a new intake house, and the installation of steel plates on top of the tainter gates. Aside from these relatively minor modifications the Weber dam retains the integrity of location, setting, association, feeling, materials, workmanship, and design of the 1916-1917 structure.

10. Conduit

The conduit for the Weber Plant consists of two sections: the first is a 74 in. diameter reinforced concrete pipe that extends 125 ft. from the intake at the dam to a point where it connects to a welded steel pipeline which then continues to the Weber powerhouse downstream.

Originally, the concrete pipeline was 2,000 ft. long. This was later shortened to its current length. Originally, the concrete pipe was connected to a 74 in. diameter wood stave pipeline which

ran 7,075 ft. to the powerhouse. In 1949, this wood pipe was replaced with 74 in. diameter welded steel pipe. At that time the majority of the concrete pipe also may have been removed and replaced with steel pipe.

Most of the pipeline lies underground. The remaining concrete pipe is exposed, but the steel pipe is entirely covered except when it crosses the Weber River downstream from the dam. At this point the pipe crosses the river on a 99 ft. long, riveted steel truss bridge, built in 1909 by the American Bridge Company of New York (the manufacturer's plate is still affixed to the west end of the bridge).

The Weber hydroelectric power plant does not have a penstock as in a typical high-head plant. Instead, the steel pipeline leads directly to the reaction turbine in the powerhouse. The head of the Weber plant is approximately 120-140 ft., which along with its turbine design makes it a low- or medium-head plant.

Major alterations to the Weber conduit have been made. The concrete pipeline has been drastically shortened, and the original wood-stave pipeline was replaced with welded steel pipe in 1949. In addition, construction of Interstate 84 has overwhelmed the setting of the original course of the conduit--portions of it, in fact, lie underneath the railway and the Union Pacific tracks. Basically, all that remains of the original conduit is the short section of concrete pipe and the Howe truss bridge. Given these alterations, the Weber conduit lacks integrity of design, materials, workmanship, setting, feeling, and association. The conduit does not contribute to the Weber Plant Historic District and is therefore excluded from the district boundary.

8. Statement of Significance

Certifying official has considered the significance of this property in relation to other properties: ___nationally x statewide ___locally

Applicable National Register Criteria x A x B x C ___D

Criteria Considerations (Exceptions) ___A ___B ___C ___D ___E ___F ___G

Areas of Significance (enter categories from instructions)	Period of Significance	Significant Dates
Industry	1908-1939	1908-1910, 1916-
Engineering		1916-1917, 1923,
		1936, 1939.

Cultural Affiliation
n/a

Significant Person
Harriman, E.H.

Architect/Builder
Dagron, L.L.(engineer)/
O'Neill, J.P.; Moran, P.J.

State significance of property, and justify criteria, criteria considerations, and areas and periods of significance noted above.

(see continuation sheet)

x See continuation sheet

The Weber River Hydroelectric Power Plant is eligible for the National Register under Criteria A, B. and C. Constructed between 1908 and 1910, the plant retains the distinguishing features of a early-twentieth century, medium-head hydroelectric development. At the turn-of-the-century, Utah's urban centers expanded and increased the demand for municipal lighting and public transportation. Requiring more power to operate their electric urban railways and lighting systems, companies sought additional sources of hydroelectric generation. When the great railroad magnate E.H. Harriman bought Utah Light and Railway Company and began modernizing its operations, he ordered the construction of the Weber River power plant. The only remaining hydroelectric power plant built under Harriman's authorization, the Weber River plant is significant for its association with E.H. Harriman. The Weber plant is also significant because it represents the organizational growth of the hydroelectric power industry in Utah. After the turn of the century, large electric power companies began to connect small, previously isolated power stations into widespread networks. Unlike earlier plants, Weber was built to operate as a component in an interconnected electric power system.

Between 1890 and 1910, a combination of factors led to the industrialization of Utah, especially to the urban settlements concentrated near the mouths of canyons on the west slope of the Wasatch Mountains. With industrialization came rapid urban growth which stimulated demands for the necessities of city living, such as public transportation and lighting. These urban improvements required electricity. By the 1890s, technological advancements allowed for the generation of relatively inexpensive electrical power which could be transmitted long distances. Stimulated by

these improvements, power companies and entrepreneurs began acquiring hydroelectric power sites in the nearby canyons to supply electricity for electric streetcar systems, street lighting and domestic use. Numerous firms, mostly centered in Salt Lake City, Provo and Odgen, sprang up with their own power sources to compete for the urban market. By the late 1890s, the competition between the rival power companies stimulated a wave of corporate consolidations. In 1904, a second merger movement occurred, further narrowing the number of competing power companies.

One of the firms created in 1904 was the Utah Light and Railway Company (UL&RC). Formed from the merger of Utah and Light and Power and the Consolidated Railway and Power Company, UL&RC combined streetcar lines in Salt Lake City, electrical power and lighting companies, and gas lighting concerns in both Salt Lake City and Ogden. During the first year of its existence, UL&RC directors consolidated and improved the company's electrical generating system to provide for the efficient transmission of power.

The firm also acquired the water rights for a hydroelectric station near Devil's Gate in Weber Canyon. In the early 1900s, C.K. Bannister, an Ogden engineer involved in the construction of the Pioneer Power plant, had filed on Weber River water near Devil's Gate. In 1900, Bannister began work on an intake structure, a preliminary step in constructing a hydroelectric plant. But, the Union Pacific Railroad, whose railroad bed lay directly adjacent the Weber River, obtained a temporary injunction against the work. Railroad officials apparently feared that a dam in the narrow canyon would harm the railroad bed. When Bannister died, his claims lapsed. Thomas D. Dee and David Eccles, who were associated with Bannister, then sold half of their interests in the site to the Utah Light and Railway Company. These two men were also in the Bonneville Power Company's claim on the water rights but to what extent is unknown. All rights eventually transferred to E.W. Wade, trustee for the Utah Light and Railway Company and the Utah Construction Company. For several years, the construction company improved the site, expending $10,000 by 1906. Most of the work consisted of grading the south side of the river for the pipeline.

In 1906, E.H. Harriman, president of the Union Pacific Railroad Company, acquired control of Utah Light and Railway Company by purchasing sixty percent of the firm's stock. The company name remained the same although the board of directors was reorganized and W.H. Bancroft, Harriman's Rocky Mountain regional representative and vice-president/general manager of the Oregon Short Line, became president. With the purchase of UL&RC, Harriman hoped to create a model electric streetcar operation in Salt Lake City and took immediate steps to upgrade the system with new rails, transmission lines and equipment.

Forseeing the need for more electrical power, UL&RC's new management built a steam plant on the Jordan River and moved to increase the capacity of the Pioneer plant by acquiring the unappropriated water in the Odgen River. This plan, however, met serious opposition as members of the public claimed that taking more water would drain the river during summer months. Company directors abandoned the idea and Harriman authorized the construction of a new hydroelectric plant at Devil's Gate on the Weber River, rights to which he had received with UL&RC. At one time, Harriman may have hoped to electrify his railroad from Ogden to California and a plant in Weber Canyon directly adjacent to his Union Pacific line would have been advantageous to the idea.

In the spring of 1908, construction on the Weber plant began. The plant would provide power for Salt Lake's street railway system as well as power and lighting in Salt Lake and Ogden. The site for the plant lay within the 400-foot Union Pacific right-of-way and a lease agreement was arranged between the two companies. About three miles from the mouth of the canyon, workers constructed an overflow reinforced-concrete dam which diverted water into a concrete conduit seven feet in diameter. The J.P. O'Neill Construction Company of Ogden built the dam and concrete pipe. The location of the Union Pacific Railroad bed adjacent to the river made situating the dam and conduit difficult. It was finally decided to lay the conduit on the south side of the river along the railroad right of way. Without the close association between UL&RC and UP, this probably never would have been allowed. UL&RC officals agreed that the Union Pacific chief engineer would approve all construction plans and that the power company would assume the burden of protecting UP property from damage. This

included construction a 1,200 foot reinforced-concrete buttressed retaining wall behind the dam, along the south bank of the river to prevent the dammed water from washing out the railroad embankment.

From the intake, the concrete pipe extended 2,000 feet down the canyon where it joined a 74 inch wood-stave pipeline that brought water 7,075 feet to the 75 foot double-riveted steel penstock. The firm of P.J. Moran from Salt Lake City constructed the wood stave pipeline. Where the conduit crossed the river, a 99 foot riveted-steel truss designed specially for this situation carried the pipe over the water. Inside the powerhouse, the water, under a head of 135 feet, drove a single turbine-generator producing about 2,500 kilowatts.

Between 1909 and 1910, workers built the powerhouse and finished the camp by erecting three brick operators' residences. A wood-frame house over the gate chamber was also erected as quarters for the dam attendant. By July, the plant was ready for operation but a drought and conflict over water rights delayed start-up until late summer. With the low water, the downstream irrigation company, which had prior water rights, would not allow Utah Light and Railway to divert water to fill the reservoir. In September of 1910, the plant was finally put into operation, sending power to the Salt Lake-Ogden transmission line.

In contrast to earlier hydroelectric plants built in Utah, UL&RC officials intended the Weber station to be a component in a larger organization of power generating facilities. Previously, hydroelectric plants were designed without forethought as to what their place might be in an integrated system. With consolidation of electric power companies, engineers began to figure out how to operate previously discrete power plants together, in a system. In addition, companies such as UL&RC (formed through mergers) also designed new plants (like Weber) to fulfill particular needs of their overall systems. Unlike earlier Utah hydro stations, engineers designed the Weber plant to fit into a larger network of generating plants. The engineers intended the Weber facility to operate at its full capacity on a continual basis. Other plants in Utah Light and Railway's system would adjust their production to meet daily and seasonal fluctuations in demand.

In 1914, after Harriman's death, Union Pacific directors decided to divest the company of its subsidiary firm, Utah Light and Railway. In that year, the streetcar company consolidated with the Salt Lake Light and Traction Company to form the Utah Light and Traction Company. Control of the Weber plant thus passed into the hands of a local company. Shortly after this merger, the new company moved to separate its electric railways from its consumer electrical business and concentrate on operating streetcars. In 1915, Utah Light and Traction Company leased all of its power generating facilities--including the Weber station--to a rival firm, Utah Power and Light Company (UP&L). This company eventually became the dominant entity in the power industry and absorbed Utah Light and Traction, although the final merger did not occur until 1944. By then, the Weber station was a small but steady power producer within a vast electrical generating system.

Throughout UP&L ownership of the Weber plant, it has made numerous alterations to the station. As the facility required round-the-clock supervision and thus at least three operators, UP&L built another wood-frame worker's cottage in 1922. The next year, new outbuildings--two garages and barn--and improvements to the camp grounds graced the site. In the late 1930s, the company constructed several more outbuildings--a garage at the dam in 1937 and a one-stall garage and warehouse in 1939. After 1948, major modifications were made to upgrade the generating capacity of the plant. The wood stave pipeline was replaces with a 74 inch steel pipe, the turbine was rebuilt and the generator was rewound, increasing capacity from 2,500 to 3,500 kilowatts. Another warehouse was added in 1950. In the 1960s, operations were partially automated, allowing for a reduction in the workforce and the removal of two cottages in the mid-1970s. A major flood in 1982 damaged the remaining two cottages and they are presently unused. Due to a fire in 1983, the powerhouse underwent a major renovation, including installation of new controls and transformers, rewinding the generator and filling-in the structures large window openings.

Because of the post-1927 additions made to Weber, the period of significance for the historic district is extended beyond the period of significance outlined in the multiple property nomination form. The post-1927 additions to the plant were

not significant enough to have changed the overall character of the facility, but they were important because they represented the attention that UP&L gave to its power plants in the interest of creating a highly efficient, up-to-date system.

9. Major Bibliographical References

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 # _____

_x_ See continuation sheet

Primary location of additional data:

_x_ State Historic preservation office

___Other State agency

___Federal agency

___Local government

___University

_x_ Other

Specify repository:

Utah Power and Light Company

10. Geographical Data

Acreage of property 3.34 acres

UTM References

	Zone	Easting	Northing		Zone	Easting	Northing
A	1/2	4/2/5/7/7/0	4/5/5/4/2/0/0	B	1/2	4/2/6/0/0/0	4/5/5/4/1/9/0
C	1/2	4/2/8/5/1/0	4/5/5/4/3/1/0	D	1/2	4/2/8/8/7/0	4/5/5/4/3/1/0

___See continuation sheet

Verbal Boundary Description

_x_ See continuation sheet

Boundary Justification

_x_ See continuation sheet

11. Form Prepared By

name/title Mark Fiege/Janet Ore, Consulting Historians

organization for Utah Power and Light Co. date November 1988

street & number 144 South 900 East #10 telephone (801) 532-5456

city or town Salt Lake City state Utah zip code 84102

"A Hydroelectric Development on the Weber River, Utah." Engineering Record 61 (2 April 1910): 456-460.

Cole, Brad and Mike Johnson. Utah State Historic Preservation Office, Structure Site Information Form. "Weber Power Project." 27 March 1988.

Geilman, Julius. "Weber Plant." The Circuit (September 1956): 5.

"Weber History." Undated, typed manuscript in Weber History File, Pioneer Plant, Utah Power and Light Company, Ogden.

University of Utah, Marriott Library Special Collections. Utah Power and Light Photograph Collection. Box 36, Folder 4. Weber Dam Reconstruction Photographs.

Utah Historical Society. Weber Power Plant Historic Photographs.

Utah Power and Light Company. "Utah Light and Traction Company, History of Origin and Development." Unpublished report prepared in connection with Federal Power Commission Request Order dated May 11, 1937.

Utah Power and Light Company, Engineering Files Department. Drawing no. UB-20147. January 1936.

. Drawing no. UC-1506. 21 August 1909.

. Drawing no. UD-1798. 1910.

. Drawing no. UD-8129. 16 June 1915.

. Drawing no. UE-9961. 23 September 1908.

. Drawing no. UE-41798-C. 1964.

, Property Accounting Department, Expenditure Requisition History File, Weber Plant.

, System Operation and Maintenance Department--Technical Support, "Hydro Drawings--Central Files Catalog," n.d.

Verbal Boundary Description:

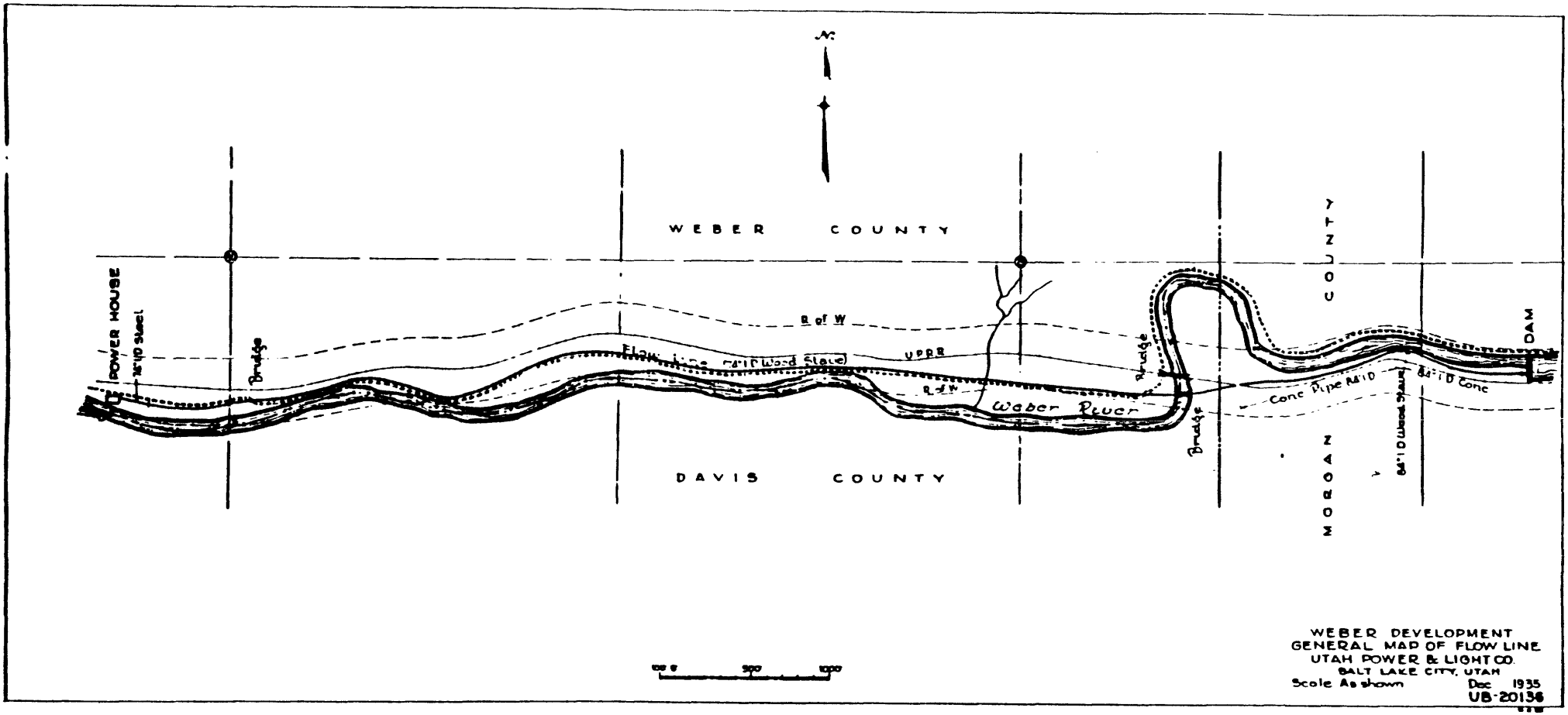
Weber powerhouse component: The Point of Beginning for the Weber historic district boundary is the south gate post at the entrance on the access road into the Weber powerhouse site from the westbound lane of Interstate 80. The boundary proceeds directly S from the gatepost 28 ft. to the north edge of the Weber River. The boundary then follows the N edge of the river E for 994 ft, then turns NW for 50 ft., following the fence line to the existing bin wall on the abutment of the westbound lane of Interstate 84. The boundary then follows the bin wall W for 796.9 ft., continues W 78 ft. from the end of the bin wall to the N gatepost at the entrance, and crosses 12.5 ft. between the gate posts to the Point of Beginning at the south gate post. Acreage for this component is 2.5 acres.

Dam Component: The Point of Beginning for the Weber dam component of the historic district is 5 ft. directly S of the SW corner of the operator's cottage at the dam. Then it proceeds W 20 ft., makes a right angle then proceeds N 12 ft.. After a 90 degree angle, the boundary proceeds W, 10 ft. from the conduit, for 162.5 ft., then makes a right angle and travels N 100 ft. across the Weber River. It turns 90 degrees and proceeds E for 106.25 ft., then proceeds S for 162.5 ft. across the reservoir, 10 ft. behind the intake house, to 5 ft. from the concrete retaining wall. The boundary parallels 5 ft. from the centerline of the concrete retaining wall for 1200 ft. W, cuts 10 ft. across the end of the wall, and follows 5 ft. S of the centerline of the retaining wall 1200 ft. to the intake house. Then the boundary runs W, 5 ft. S of the intake house and residence for 75 ft. to the Point of Beginning. Acreage for the site is .84 acres.

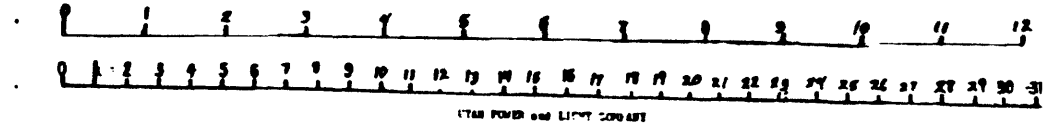
Boundary Justification:

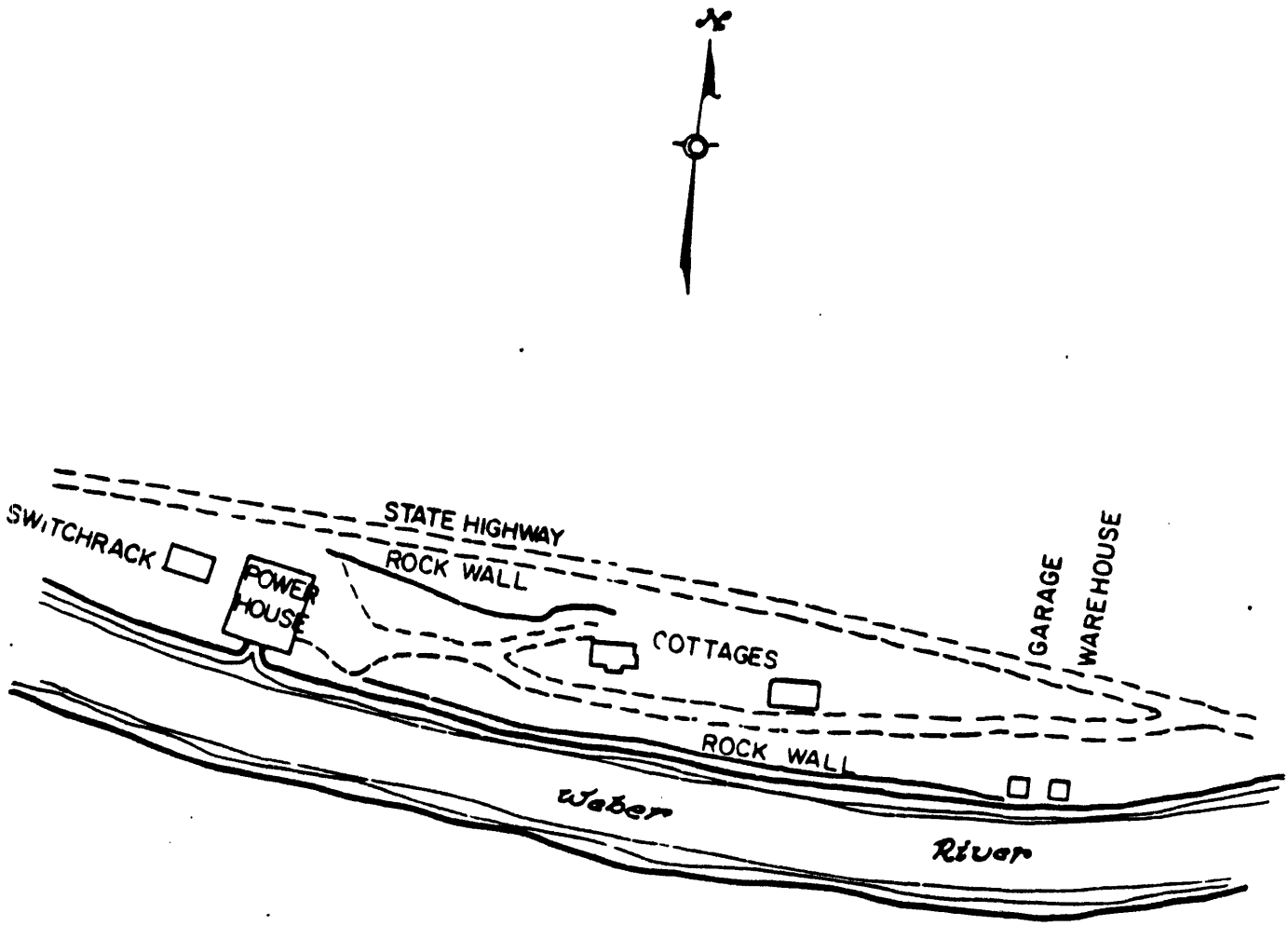
The boundary of the Devil's Gate Hydroelectric Plant Historic District encompasses those structures associated with the operation of the plant, except for the conduit, which has been excluded from the district because it is almost entirely underground and because it is of relatively recent construction. Excluding the conduit from the district leaves two discontiguous components, the dam and the powerhouse site. A discontiguous

district in the case of Devil's Gate is justified because visual continuity between is not a factor of historic significance, the the two sites are geographically separate, and the intervening space lacks significance. The boundary of the powerhouse component of the district was chosen because it encompasses the narrow strip of ground between the Weber River and Interstate 84 upon which the powerhouse and associated buildings are located. The boundary of the dam was chosen because it encompasses the general setting of the dam, between the Union Pacific right-of-way and the access road to the dam.



WEBER DEVELOPMENT
GENERAL MAP OF FLOW LINE
UTAH POWER & LIGHT CO.
SALT LAKE CITY, UTAH
Scale As shown Dec 1935
UB-20136





100' 0 100' 200'

SCALE

DRAWN BY	VRH
TRACED	
CHECKED BY	L.T
CORRECT	

APPROVED: J R Kunz
CIVIL ENGINEER

WEBER DEVELOPMENT
GENERAL MAP

UTAH POWER & LIGHT COMPANY

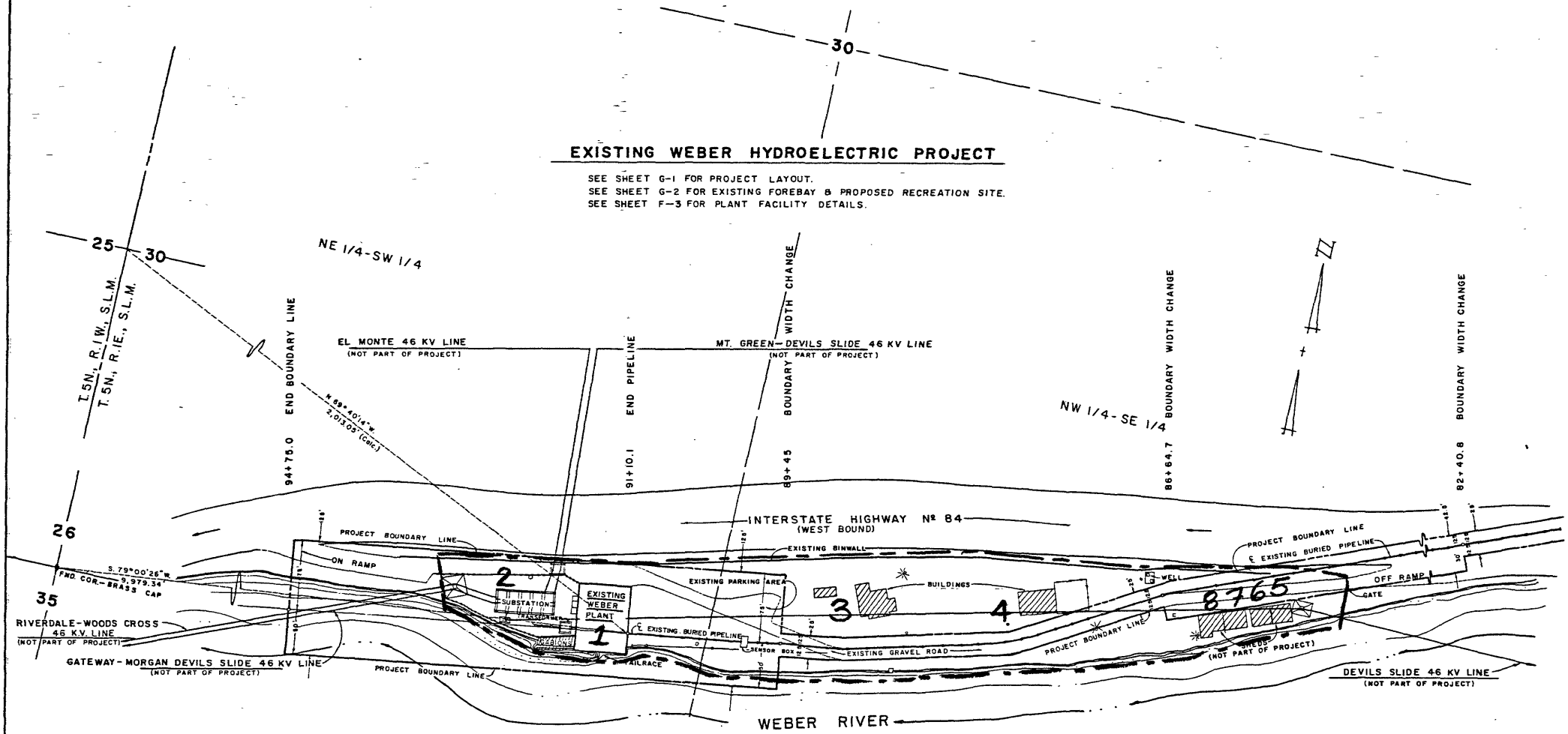
SCALE AS SHOWN

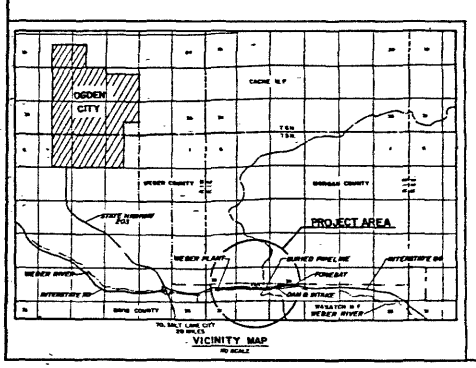
APRIL 9, 1975

UA-20147

EXISTING WEBER HYDROELECTRIC PROJECT

SEE SHEET G-1 FOR PROJECT LAYOUT.
SEE SHEET G-2 FOR EXISTING FOREBAY & PROPOSED RECREATION SITE.
SEE SHEET F-3 FOR PLANT FACILITY DETAILS.





-50 -30 -10
-40 -20 0 50 100 150
SCALE - 1" = 50'

HISTORIC DISTRICT BOUNDARY

Weber Hydro. Plant
Historic District

Leon D. Hoffman states he is by occupation Manager, General Engineering of Utah Power & Light Company, that the project works of the EXISTING WEBER HYDROELECTRIC PROJECT, F.E.R.C. No. 1744-UT are shown on this drawing which was made under his direction and authority, that said project works are accurately represented on this drawing.

Manager, General Engineering

This drawing of the EXISTING WEBER HYDROELECTRIC PROJECT, F.E.R.C. Project No. 1744-UT is a part of the Amendment to the Application for License for a Major Project - Existing Dam - 5MW or less made by the undersigned this _____ day of _____ 1988.

Vice President
Utah Power & Light Company

AMENDMENT TO
EXHIBIT G
APPLICATION FOR LICENSE FOR A MAJOR PROJECT
- EXISTING DAM - 5MW OR LESS FOR THE
EXISTING WEBER HYDROELECTRIC PROJECT - No. 1744
UTAH POWER & LIGHT COMPANY
SALT LAKE CITY, UTAH

PROJECT DRAWING
EXISTING
WEBER HYDROELECTRIC PLANT SITE

FEBRUARY 1988 | PROJECT LOCATION MAP | SHEET G-3

Devil's Gate/Weber Photograph Log:

Devil's Gate/Weber Hydroelectric Plant Historic District
near Ogden, Utah
Mark T. Fiege, photographer
July 1988
original negatives at Utah SHPO

1. Weber powerhouse (no. 1), view to southwest.

2. Powerhouse (no. 1), with switchyard (no. 2) on left, view to northeast.

3. Powerhouse (no. 1) interior, view to south, showing turbine, generator, and overhead travelling crane.

4. Operator's residence (no. 3), view to north.

5. Same, view to southwest.

6. Operator's residence (no. 5), view to southwest.

7. Weber dam (no. 9), view to northeast.