Form No. 10-300a (Rev. 10-74)

> UNITED STATES DEPARTMENT OF THE INTERIOR NATIONAL PARK SERVICE

NATIONAL REGISTER OF HISTORIC PLACES INVENTORY -- NOMINATION FORM



CONTINUATION SHEET Description ITEM NUMBER 7 PAGE 3

cross section of the dam has a top width of 20 feet and a maximum base width of 660 feet. The upstream slope is 3 to 1 while the downstream slope is 2 to 1 broken 12 feet above the spillway pool wall by a circular berm 10 feet in width. The 12-foot roadway at the top of the dam is carried across each spillway by means of five-span continuous reinforced concrete arches with 50-foot spans and 5-foot rises. A concrete railing guards the roadway and carries electric wire conduits for lighting the dam, gatehouse and roadway.

The outlet tower is a massive reinforced concrete structure in which are set 12 gates at two different elevations. Water from Lahontan Reservoir, which has an active capacity of 295,000 acre-feet, is let into the central chambers for discharge into the spillway pool via a 9-foot diameter conduit controlled by a hydraulically balanced cylindrical valve at the bottom of the tower. A 6-foot 6-inch diameter steel penstock, also controlled by a cylindrical valve, carries water to the power plant. A concrete penstock and separate outlet at the left or north side of the dam was abandoned in 1924. All of the gates in the tower are controlled by hydraulic oil pressure provided by an electrically operated pump. Access to the gatehouse is by means of a suspension footbridge extending from the top of the dam.

The powerhouse is a rectangular stone and concrete structure containing three generators with a combined capacity of 1,920 kilowatts. The fall from the Truckee Canal, which terminates at Lahontan Dam, was first utilized for hydro-electric generation at the powerhouse. This installation provided power for much of the dam construction (1911-1915). Since completion of the dam, the turbines driving the generators have been supplied by means of the steel penstock from the outlet tower in addition to the penstock from the Truckee Canal. The power plant continues to supply electric power to the surrounding area.

The Lahontan Dam and powerplant retains it original appearance, having undergone only minor modifications since its construction.

The <u>Carson River Diversion Dam</u> is a low concrete gate structure built in 1904 and 1905, to divert water into the canal system used to irrigate the farms in the Newlands Projects. Located on the Carson River five miles northeast of Lahontan Dam, this diversion dam performs a vital water distribution function for hundreds of farms in the Newlands Project. UNITED STATES DEPARTMENT OF THE INTERIOR NATIONAL PARK SERVICE

NATIONAL REGISTER OF HISTORIC PLACES INVENTORY -- NOMINATION FORM



CONTINUATION SHEET Description ITEM NUMBER 7 PAGE 4

Detailed specifications are as follows:

CARSON RIVER DIVERSION DAM

Type: Concrete gate structure

Construction period: 1904-1905

Dimensions (feet):

Height 21 Crest length 241 Crest elevation 4044.75 Volume (cubic yards) 2,700

- Spillway: Twenty-one 5 by 10 foot double leaf slide gates and one 15 by 10 foot gate. Capacity (cubic feet per second) ... 30,000
- Headworks: Three double leaf rising weir gates, each 5 by 15 feet, for V Canal heading (commonly used as underflow gates). Two wood slide gates 7 by 5 feet for T Canal heading.
 - V Canal capacity (c.u. ft. per second)1,500
 - T Canal " " " 450

See attached Bureau of Reclamation drawings.

Carriage Facilities

These principal canals carry waters from the Truckee and Carson Rivers to the storage, power, and diversion works described previously. A description of these facilities will round out an account of the main engineering works in the Newlands Project. Beyond the works described, there are many lesser dams, storage facilities, canals, drains, auxiliary power plants, and feeder systems to the agricultural land being utilized.

The Truckee Canal serves to carry waters from the Truckee River, diverted at Derby Dam, for thirty one miles to the Lahontan Dam.

Detailed specifications are as follows:

TRUCKEE CANAL

Type: Both concrete and earth lined.

Construction period: 1903-1906 Length (miles) 31 Diversion capacity (cubic feet per second) 1,500

NATIONAL REGISTER OF HISTORIC PLACES INVENTORY -- NOMINATION FORM



CONTINUATION SHEET Geographical ITEM NUMBER 10 PAGE 2

UTM References:

Lake Tahoe Dam - 10/746760/4339000

Boca Dam - 10/750340/4363940

Derby Diversion Dam - 11/189850/4384700

Lahontan Dam & Powerplant - A. 11/321950/4370000 B. 11/322750/4370250 C. 11/322400/4369500

Carson River Diversion Dam - 11/328100/4373650

V-Canal Powerplant - 11/336450/4372150

Verbal Boundary Descriptions

<u>Lake Tahoe Dam</u> - The proposed boundary includes the area within a 55' radius from the center of the dam. 0.10 acres

Boca Dam - The proposed boundary includes that area within a 1055' radius from the center of the dam. 80.04 acres

Derby Diversion Dam (on National Register) - The proposed boundary includes that area with a 150' radius from the intersection of the two concrete structures that form the dam proper. 0.52 acres UNITED STATES DEPARTMENT OF THE INTERIOR NATIONAL PARK SERVICE

NATIONAL REGISTER OF HISTORIC PLACES INVENTORY -- NOMINATION FORM



CONTINUATION SHEET Geographical ITEM NUMBER 10 PAGE 3

- Lahontan Dam and Powerplant The nominated property includes the dam and powerplant structures within the area delineated on the accompanying map beginning at Point A 1,000 feet west-southwest of the intersection of the service road and road across the dam to Point B 300 feet northwest of the powerhouse to Point C 350 feet southwest of the intersection of the service road at the other end of the dam. 68.87 acres
- Carson River Diversion Dam The proposed boundary of the nominated property includes the area within a 130 foot radius from the center of the dam. 1.35 acres
- $\frac{V-Canal Powerplant}{extends 30'}$ from all sides of the powerplant. 0.31 acre