

DRAFT ENVIRONMENTAL ASSESSMENT

MINIDOKA POWERPLANT REPLACEMENT PROJECT

MINIDOKA PROJECT

IDAHO-WYOMING

MARCH 1991

PACIFIC NORTHWEST REGION

BUREAU OF RECLAMATION

BOISE, IDAHO

RECEIVED
DEC 07 1995

The normal operation of the spillway consists of setting the flashboards in the spring to raise reservoir water levels about 5 feet and flashboard removal in the fall to achieve a lower winter reservoir level.

Water is diverted at the dam into two canal systems, one on each side of the river. The canal system on the north side of the river serves the Gravity Division (Minidoka Irrigation District) of the Minidoka Project, which consists of 72,000 irrigable acres of land adjacent to the towns of Rupert, Heyburn, and Paul. The canal system on the south side serves 48,000 acres near the towns of Burley and Declo and constitutes the South Side Pumping Division (Burley Irrigation District).

The powerplant consists of seven generating units with a total rated capacity of 13.4 megawatts (MW) and an overload capacity of 16.0 MW. Average annual generation is about 95,000,000 kilowatthours (kWh). During maximum generation, the plant will pass 5,035 cfs. Power generated at the plant is a part of the Federal Columbia River Power System and is marketed by the Bonneville Power Administration (BPA).

The powerplant was built in 1908-1909 with units 1-5 installed from 1909-1911. Online operation of the generating units to furnish power and pump irrigation water began in 1909, the first Federal hydroelectric project in the Pacific Northwest to do so. Unit 6 was installed in 1926 and unit 7 in 1942. Recognition of the historic nature of these developments was given on October 29, 1974, when the powerplant and dam were placed on the National Register of Historic Places.

MINIDOKA DAM

4
DEC 07 1995

The bridge and replacement powerplant have been designed to incorporate architectural features similar to the existing powerplant. Because of the historic importance of the existing powerplant, Reclamation has designed and would construct the bridge and powerplant to have similar external features, such as the arches and relief lines, on the sides of these structures. In addition, the concrete used on the bridge side beams and the sides of the replacement powerplant would be colored to closely match the color of the existing powerplant.

D. Cultural Resources

1. Affected Environment

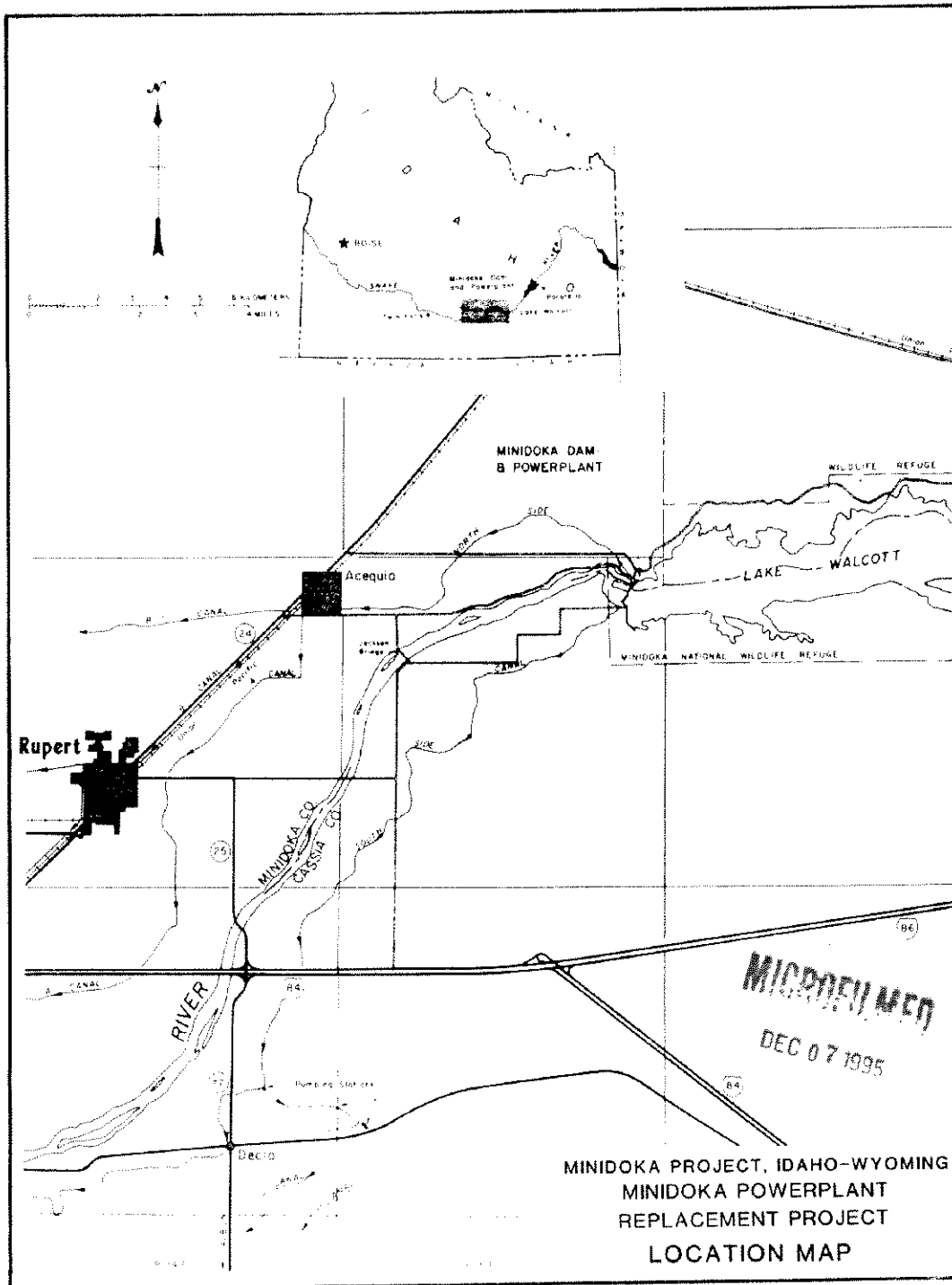
In 1902, the Reclamation Act was passed, and the Minidoka Project was one of the first irrigation projects initiated under that Act in the Pacific Northwest. Minidoka Dam and its associated works were the first features built for the project. The dam was completed in 1906, the carriage facilities in 1907, and the powerplant went into production in 1909. The Minidoka powerplant was the first large Federal hydroelectric plant constructed in the Pacific Northwest. The excess power generated was experimentally marketed for local use. The success of the experiment led to Senator George Norris' use of the project's power marketing strategy as justification for creation of the Rural Electric Administration.

Because of its historical significance, Minidoka Dam and powerplant were listed on the National Register of Historic Places (the National Register) on October 29, 1974. The National Register site boundaries encompass associated structures, including the administration building constructed in 1911, the shop built circa 1929 (herein called the exhibit building), several 1920's storage buildings, the bridge over the North Side Canal leading to the dam, and the headworks for the North Side and South Side Canals.

Some modifications have been made to the powerplant. In 1926, a sixth generator was installed inside the original structure. In 1941-1942, an addition was built onto the original structure to house a 6,000-kilowatt (kW) generator. Two switchyards were added, the transformers were removed from the powerplant deck, and placed in exterior yards; most powerplant control panels were replaced; and new penstock gate operating mechanisms were installed.

The administration and shop/exhibit buildings have been extensively remodeled inside and retain no interior integrity but are largely intact on the exterior. The storage buildings have been remodeled and have limited integrity. The canals and pumping plants are essentially intact.

No archeological surveys have occurred in areas that could be affected by the proposed or alternate plans. A small prehistoric site (10-MA-48) was recorded immediately upstream, which was determined "not eligible" to the National Register. Local informants indicate that artifacts have been collected from plowed fields downstream of the dam and south of the river, and potentially significant sites have been recorded or reported north of the



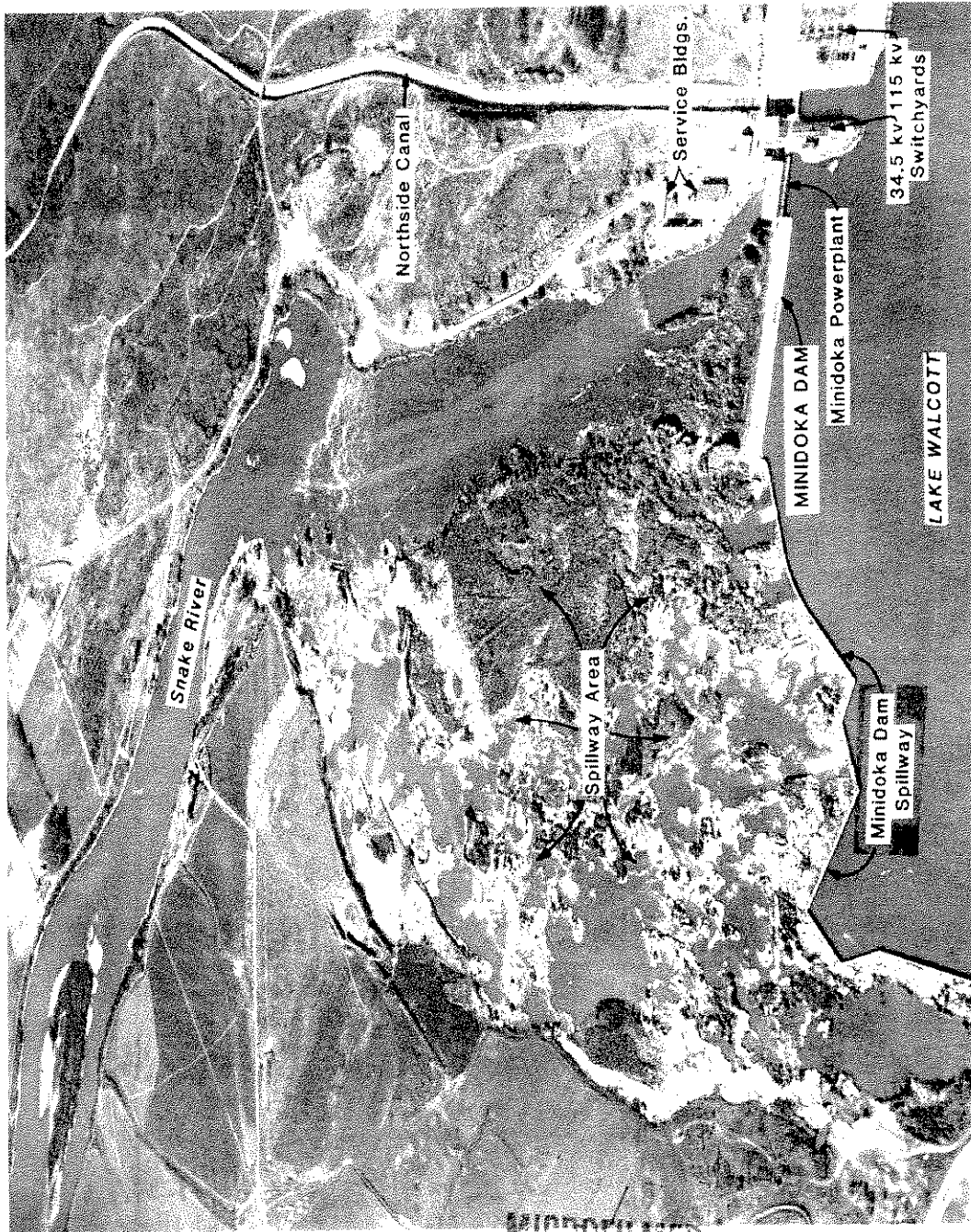


Figure 1

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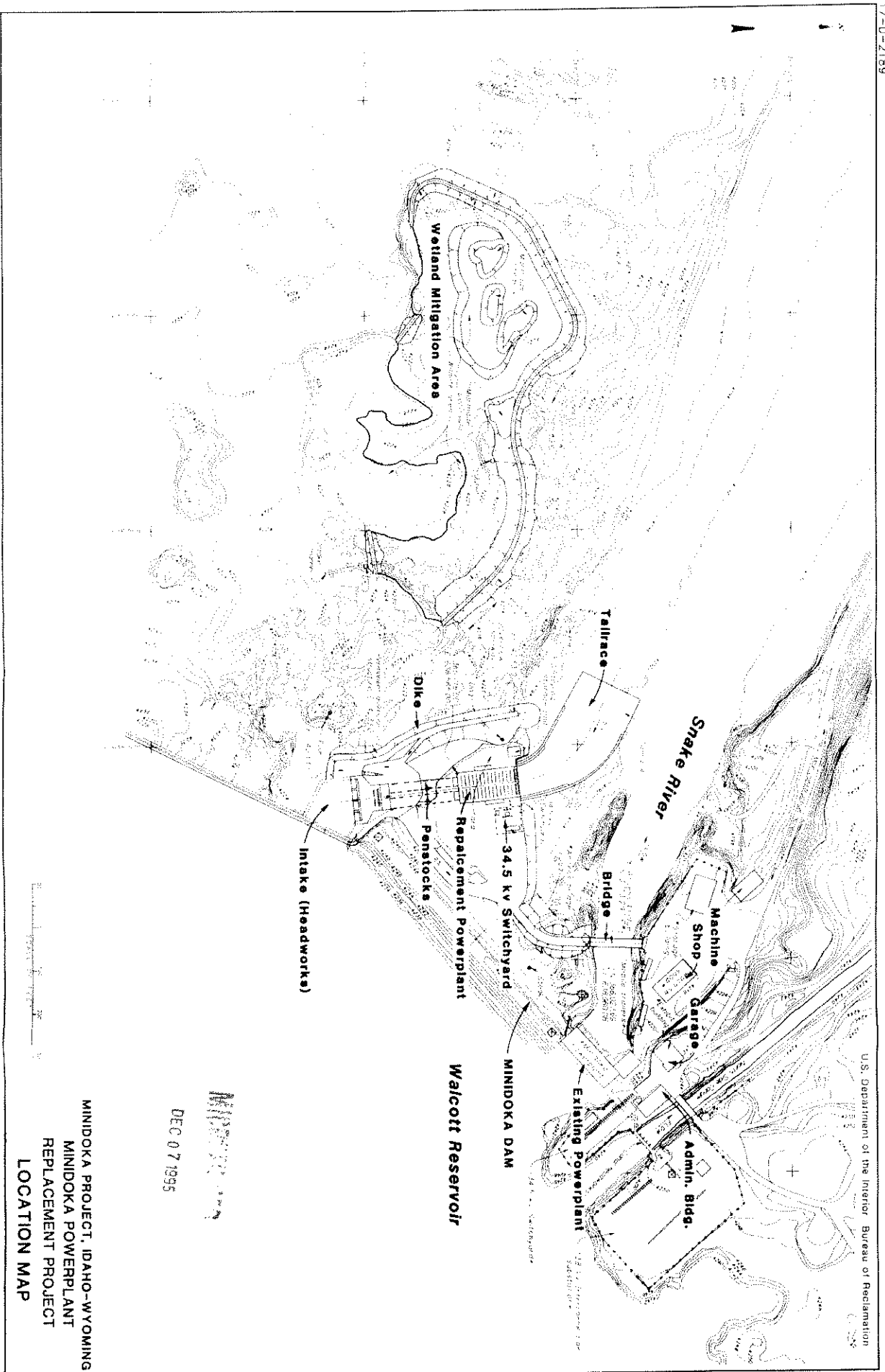
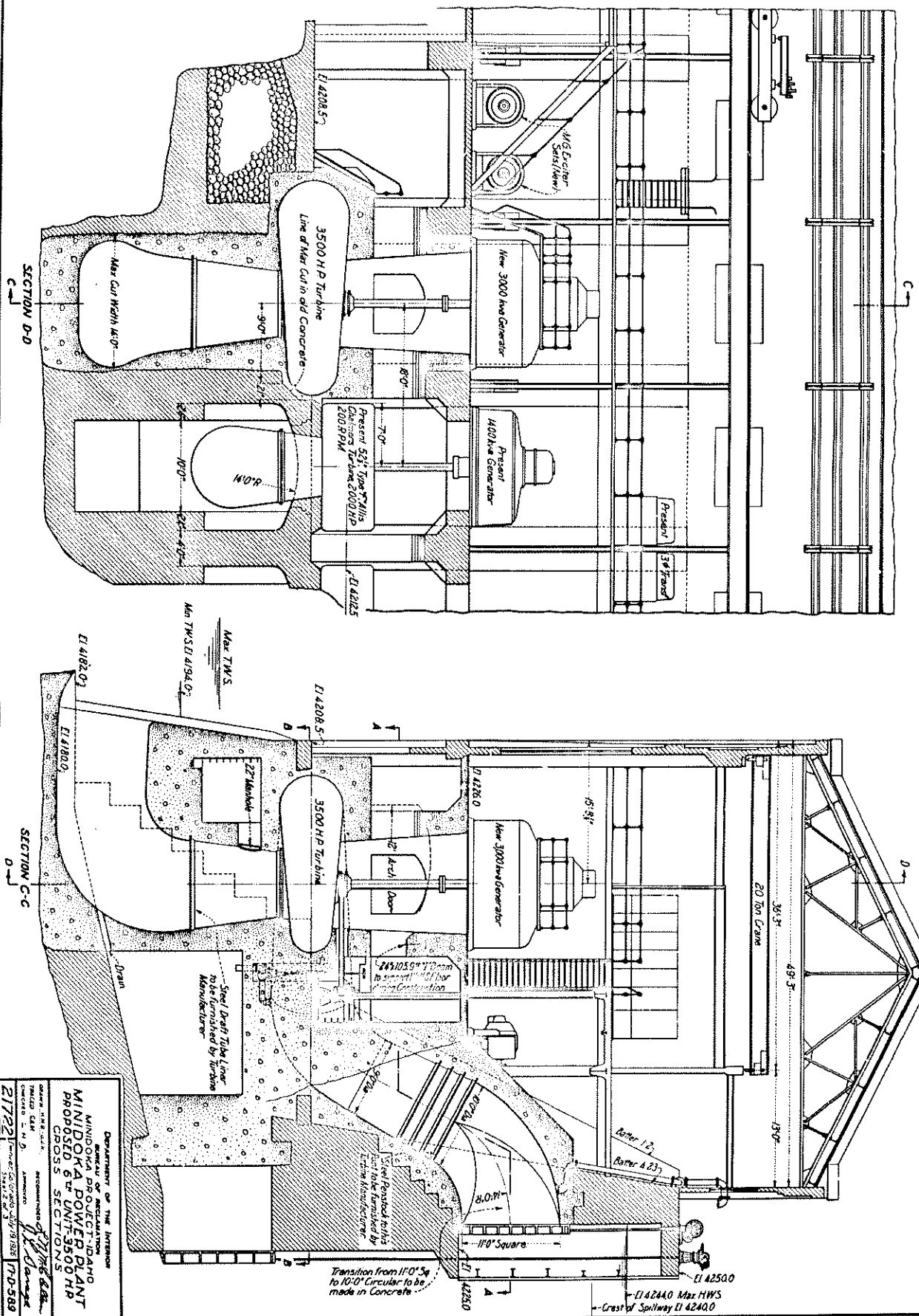
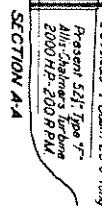
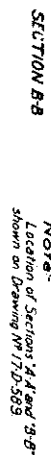


Figure 2





DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
MINDOKA PROTECTION
MINDOKA POWER PLANT
PROPOSED 6 UNIT 3500 HP
PLAN SECTIONS

DRAWN: T. H. R. & N.
CHECKED: C. A. H.
DESIGNED: C. A. H.
APPROVED: *[Signature]*

RECORDED IN: 18-936
DATE: SEP 13, 1956

21721

7D-588

MINIDOKA POWERPLANT owned by the U.S. Bureau of Reclamation and located 11 miles northeast of Rupert in the SE 1/4, NW 1/4, Sec 1, T. 9 S., R. 25 E., B.M.

Water Right No.	Water Right and Date or Decree Name	Decree Date, File No., & Page No. in Decree	Priority Date	Flow in cfs	Subordination Permit License/Decree
01-00217	Twin Falls Canal Co. Decree	6-20-1913, 01-C, p. 8	6-15-1909	2,500	No
01-00218	Twin Falls Canal Co. Decree	6-20-1913, 01-C, p. 8	7-01-1912	200	No
01-04024	Claimed on 3-27-1980		6-16-1927 ¹	825	Probably ^{2,3}
01-04025	Claimed on 3-27-1980		5-07-1942 ¹	1,700	Probably ^{2,3}
01-07056	Permitted on 1-07-1985 Beneficial use due 12-01-2000		8-07-1980	5,875	Yes
Subtotal of non-subordinated water rights (probable amount)				2,700 cfs ^{3,4}	(5,225 cfs maximum)
Total				11,100 cfs	

¹ An adjudicated claim priority date likely will be the verified date the diversion started, not the date the new project construction was decided upon or even started. The dates will be verified in the examination for the adjudication. These claims were refiled on August 11, 1989 for the Snake River Basin Adjudication.

² As mentioned in regard to the American Falls Power Plant, the state established by a ratified constitutional amendment of Article XV, Section 3, on November 6, 1928, the authority to "regulate and limit the use" of water for power purposes. Regardless of the issue spurring the constitutional amendment, the general pattern of subordinating power water rights to subsequent upstream diversions for other than power purposes did not start until 1952. See permit for C.J. Strike (02-02080). The Bureau of Reclamation, however, might forgo claiming non-subordination privileges in its water right claim particularly if the diversion under the claim did not start until after November 6, 1928.

³ It is probable, the Snake River Basin Adjudication Court would rule that the water right owner has given up what could have been "grandfather" rights to a non-subordinated water right that likely would have been approved if they had used the licensing process.

⁴ Idaho Code 42-203B(5) provides that the State can enter into agreements with holders of water rights for power purposes to define that portion of their water rights that are to be non-subordinated to upstream depletions. Such an agreement with Idaho Power Co. in 1984 for the projects below Milner Dam provided for much lower non-subordinated rights than the total of the original water rights. A similar agreement for the American Falls project and the Minidoka Project with Idaho Power Co. and the Bureau of Reclamation would provide a legal basis for the past allowance of upstream diversions including ground water diversions.

28, 12/11/11