

(English text of Minute No. 187 dated December 20, 1947)

INTERNATIONAL BOUNDARY AND WATER COMMISSION
UNITED STATES AND MEXICO

El Paso, Texas
December 20, 1947

MINUTE NO. 187

DETERMINATIONS AS TO SITE AND REQUIRED CAPACITIES
OF THE LOWEST MAJOR INTERNATIONAL STORAGE DAM TO
BE BUILT ON THE RIO GRANDE, IN ACCORDANCE WITH THE
PROVISIONS OF ARTICLE 5 OF THE TREATY CONCLUDED
FEBRUARY 3, 1944.

The Commission met at the offices of the United States Section at El Paso, Texas, on December 20, 1947 at 10:00 a.m., to formulate decisions in accordance with the provisions of Article 5 of the Water Treaty of February 3, 1944, with respect to the most feasible site for the lowest major international storage dam to be built on the Rio Grande in accordance with said treaty, the maximum feasible reservoir capacity, the conservation storage capacity required by each country and the capacities required for silt retention and flood control at that site.

The development of the necessary data upon which to base these recommendations may be summarized as follows:

For several years prior to the negotiation of the Water Treaty, the two Sections of the Commission in collaboration with other agencies of their respective Governments had carried on preliminary studies and investigations, both jointly and independently, of potential dam sites and of feasible and required reservoir capacities on the Rio Grande. The data obtained from these studies and investigations served as a basis for the negotiation of the treaty. Following the signing of the treaty on February 3, 1944, these studies and investigations were continued and intensified in accordance with detailed recommendations of two Joint Engineering Conferences held at El Paso and Ciudad Juárez in August, 1945, and at Mexico City in March, 1946.

Among other findings, the aforementioned Joint Engineering Conference at Mexico City, whose report was subsequently approved by both Governments with certain understandings, found that the only adequate site for the lowest international storage dam on the Rio Grande is in the Falcón-Salineño region, about 15 to 19 miles (24 to 30 kilometers) upstream from the towns of Roma, Texas and San Pedro de Roma, Tamaulipas. The Conference recommended certain additional studies and investigations to determine the relative advantages of the Salineño and Falcón sites from the standpoints of geology, availability of suitable materials and cost of construction; and certain additional hydrographic

studies

studies and investigations to complete the necessary data for determination of required capacities at either site.

Pursuant to the recommendations of the Joint Engineering Conference at Mexico City, a geological examination of the Falcón and Salineño sites was made in February 1947 by Mr. Roger Rhoades, Chief of the Geology Section, Division of Engineering and Geological Control and Research, Bureau of Reclamation, for the United States Section, and Dr. Paul Waitz, Consulting Geologist of the Ministry of Hydraulic Resources, for the Mexican Section. In their Joint Report to the Commission, under date of February 8, 1947, Mr. Rhoades and Dr. Waitz set forth their finding of a preponderance of geologic advantages at the Falcón site.

Also pursuant to the recommendations of the Joint Engineering Conference, joint studies and examinations of construction materials for the Falcón and Salineño sites were made in June, 1947 by Mr. Loyd W. Hamilton, Materials Engineer, Bureau of Reclamation, for the United States Section, and Mr. Raúl Sandoval, Materials Engineer, Ministry of Hydraulic Resources, for the Mexican Section. In their Joint Report to the Commission, under date of July 2, 1947, Messrs. Hamilton and Sandoval set forth their finding that, from the standpoint of construction materials, the Falcón site is more economical than the Salineño site.

Cost estimates were also made in accordance with the recommendations of the Joint Engineering Conference, for dams of various types and capacities at the Falcón and Salineño sites, resulting in a finding of substantial advantage of the former site, from the standpoint of construction costs.

The hydrographic studies and investigations recommended by the Joint Engineering Conference were continued and completed by the two Sections of the Commission, both jointly and independently. These included many river operation studies to determine required capacities.

Following the completion of the aforementioned examinations, studies, investigations, and estimates, the data and conclusions reached therefrom were carefully reviewed by the technical advisers of each Section. On behalf of the United States, review was made by Mr. Walker R. Young, Chief Engineer, Bureau of Reclamation; Colonel Henry Hutchings, Jr., Division Engineer, Southwestern Division, Corps of Engineers, and Technical Advisers R. J. Tipton of Denver, Colorado and Alfred Tamm of Harlingen, Texas. On behalf of Mexico, review was made by Andrew Weiss, Chief Engineer of the Technical Consultants of the Ministry of Hydraulic Resources, and by the Technical Advisers of the Mexican Section, Antonio Coria, Assistant Chief Engineer of the Technical Consultants of Hydraulic Resources, Aurelio Benassini, Assistant Chief Engineer of Irrigation and

River Control of Hydraulic Resources; Oscar Vega Arguelles, Director General of Irrigation Studies and Design of Hydraulic Resources; and Andrés García Quintero, Director General of Hydrology of Hydraulic Resources.

On the basis of the several pertinent studies and investigations and of the findings and recommendations of the technical advisers and consultants of each Section, the Principal Engineers prepared and submitted to the Commission, under date of December 18, 1947, their "Joint Report on the Capacities for the Lowest Major International Reservoir on the Rio Grande", the English and Spanish texts of which are attached hereto as Exhibits Nos. 1 and 1-A.

Also attached hereto, as Exhibit No. 2, is the map entitled "Rio Grande International Storage Dams Project - Treaty of 1944 - Location Map - Falcón Damsite - Lowest Storage Dam" dated December 20, 1947, signed by the Commissioners and the Principal Engineers, and referred to below in the resolution adopted by the Commissioners.

The Commission carefully reviewed the pertinent data and adopted the following resolution:

"Pursuant to the provisions of Article 5 of the Water Treaty concluded February 3, 1944, the Commission hereby makes the following determinations, subject to the approval of the two Governments:

- "1. Because of the preponderance of its advantages from the standpoints of geology, availability and suitability of construction materials, and of cost of construction, the most feasible site for the lowest international storage dam to be built on the Rio Grande, in accordance with the provisions of the aforementioned Water Treaty, is that known as the 'Falcón site', the exact location of which is shown on the map entitled 'Rio Grande International Storage Dams Project - Treaty of 1944 - Location Map - Falcón Damsite - Lowest Storage Dam' dated December 20, 1947, signed by the Commissioners and the Principal engineers.
- "2. The requirements for conservation storage capacity for each country and for silt retention and flood control at the Falcón site are those set forth in the Principal Engineers' 'Joint

Report on the Capacities for the Lowest Major International Reservoir on the Rio Grande' dated December 18, 1947, which is hereby approved in its entirety."

The meeting then adjourned.

s/ L. M. Lawson
Commissioner of the United States

s/ D. Herrera J.
Commissioner of Mexico

s/ George H. Winters
Secretary of the United States Section

s/ Luz H. G. de Partearroyo ←
Acting Secretary of the Mexican Section