

ACTA No. 63, Julio 17, 1925.

MINUTE No. 63. July 17, 1925.

A las nueve horas del viernes diecisiete de julio de mil novecientos veinticinco la Comisión Unida se reunió en las oficinas de la Sección Americana a llamado del Comisionado Mexicano, estando presentes además de los Comisionados y Secretarios los Ingenieros Consultores de la Comisión y el Sr. L.M. Lawson, Superintendente del Bureau of Reclamation.- El Comisionado Mexicano manifestó que deseaba presentar a la consideración de la Comisión Unida las obras de derivación del Canal Tornillo construidas sobre el Río Bravo en la Isla de San Elizario, Texas, por el U.S. Bureau of Reclamation. Agregó que como estas obras no han sido examinadas hasta ahora por la Comisión Unida y presentan algunas peculiaridades en su dispositivo, deseaba tener una descripción de las obras de par-

del Superintendente del Sistema Río Grande del U.S. Bureau of Reclamation y un dictamen de los Ingenieros Consultores sobre estas obras. El Comisionado Americano dió entrada al caso y aceptó pedir al Sr. Lawson que informara a la Comisión Unida sobre el particular. El Sr. Lawson presentó un informe escrito que se agrega a esta Acta. La Comisión Unida resolvió referir el informe del Sr. Lawson a los Ingenieros Consultores para que estudiaran el caso y presentaran un informe a la Comisión Unida. Los Secretarios entregarán copia de esta acta y de sus anexos a los Ingenieros Consultores.- Se levantó la sesión para reunirse nuevamente a llamado de cualquiera de los Comisionados.

Gustavo P. Servans
Comisionado Mexicano.

Henry Curry
Comisionado Americano.

H. G. de Artearroyo
Secretario Mexicano.

Harriet Lawson

At nine o'clock A.M., July seventeenth nineteen hundred and twenty five, the Joint Commission met in the Offices of the American Section at the call of the Mexican Commissioner; being present the Commissioners, the Secretaries and the Consulting Engineers of the Commission and Mr. L.M. Lawson, Superintendent Bureau of Reclamation. The Mexican Commissioner stated that he wished to submit to the Joint Commission for examination the diversion works of the Tornillo Canal built on the Rio Grande at the Island of San Elizario, Texas, by the U.S. Bureau of Reclamation. He further stated that as such works have not been examined by the Joint Commission; and present certain peculiar features in their arrangement, he wished to have a description of the works by the Superintendent of the Rio Grande Project, U.S. Bureau of Reclamation, and a report of the Consulting Engineers on the subject. The American Commissioner agreed to consider this case and requested Mr. Lawson to inform the Joint Commission on this matter. Mr. Lawson submitted a written report which is attached to this minute. The Joint Commission agreed to refer the report of Mr. Lawson to the Consulting Engineers for investigation and report. The Secretaries will furnish a copy of this minute and exhibit to the Consulting Engineers. Meeting adjourned to meet at the call of either Commissioner.

Henry Curry
American Commissioner.

Gustavo P. Servans
Mexican Commissioner.

Harriet Lawson
American Secretary.

H. G. de Artearroyo

Subject: Construction of Tornillo heading by Bureau of
Reclamation - Rio Grande Project.

LML-hf

El Paso, Texas, July 16, 1925.

The International Boundary Commission,

El Paso, Texas.

Gentlemen:

What is known as the Tornillo district consists of approximately 8,000 acres of irrigable land at the lower end of the Rio Grande Project and one of the last areas to be admitted into the limits of the established project. The Rio Grande is the western and southern boundary line of the area and for the upper one-third of its course, it is in that portion of territory where the river is not the boundary line between the United States and Mexico. For the lower two-thirds of the area, the Rio Grande is the international boundary line.

Various plans were studied and considered for furnishing a water supply to this area including an extension of the constructed Franklin Canal through the town of Fabens.

In October, 1922, a report was made upon the irrigation facilities for this area which included a suggested plan for the construction of a heading, wasteway and canal diversion just south of the town of Fabens. These plans called for the construction of a main intake canal with wasteway and waste gates and diversion structure, permitting the diversion of the irrigation supply from the main canal. The adoption of this type of diversion permitted the collection and recovery of a large amount of the irrigation

supply.

The main canal section, called section "A" which was constructed with a capacity of 600 second feet, included that portion from its take-off at the river to the point where waste water is returned to the river bed. This section will not carry flood discharge which will arrive at this point of the river and your particular attention is called to the fact that no diversion structure was constructed in the river channel.

In the main canal section a concrete, steel, and timber structure was constructed the full width of the canal section in order to control the water to be diverted and pass surplus water for sluicing purposes back to the river channel. This structure also was not constructed with such a capacity as the full river discharge could be passed. In other words, section "A" of the main canal and the diversion structures located in this main canal were not designed or constructed with the anticipation of providing for the full expected river discharge. Below the point where the wasteway reaches the original river channel there existed a large area of low and overflowed land where the river section proper was indefinite in location. To establish a river section low banks were constructed to provide a river channel of greater width than the canal section and to prevent the continued overflow of this area at times of high water. This particular section can be called section "B" and the present location of the river is by no means fixed or permanent in character. Its present location causes a very slight modification of grade so that so far as section "B" is concerned it is the opinion of this office that no great change of river slopes is occasioned by the channel in its present location.

Final construction of the heading was accomplished in the winter of

1922 and 1923.

Concerning the necessity for maintaining the river channel in the vicinity of the intake of the Tornillo Canal, as an open waterway, I am attaching a copy of a letter addressed to one of the interested property owners in the vicinity, Mr. S. B. Johnson, dated May 7, 1924, from which letter it will be noted that this office found objection to the construction of levees by private parties which could prevent surplus water from being discharged around the normal river bed. On February 16th, 1925, in reply to a communication from Mr. Johnson, the same subject was discussed and a statement made that "there is no apparent reason for the property owners to believe that the flood flows can be accommodated in the Tornillo Canal other than the usual surplus, but rather it is evident that a large amount of such flood and surplus water will pass around in such locations as they can find," It is obvious that the Tornillo canal capacity is too limited to take care of such flood waters which may arise in the river at Fabens.

The Bureau of Reclamation during its years of construction activities on the project, and particularly in that section where the river is the international boundary line between the two countries, of the United States and Mexico, has recognized the jurisdiction of the International Boundary Commission. The operations of the Bureau of Reclamation are confined largely to the development and construction of irrigation and drainage features for the lands included in the project. The utilization by diversion of the water supply is, of course, one of the important features but although a number of headings for this purpose are in operation in the stretch of river between El Paso and Fort Quitman, an examination will disclose that

such diversions have been effected without the construction of diversion works in the channel of the Rio Grande. It is believed that no proper exception can be taken to the construction of what is known as the Tornillo heading and main canal. The temporary and limited embankments constructed below that point are wholly within the flood banks of the river and offer no radical change to the regimen of the river in that locality.

This office will be glad to have the International Boundary Commission's decision in reference to the status of the river at the point under consideration. It is of considerable importance not only from a boundary commission's standpoint but from the standpoint of maintaining a free waterway for surplus and flood waters through this area. In this report to you, detailed maps have purposely been omitted because of the fact that your consulting engineers have prepared and have available a complete engineering and map record of the situation.

Very respectfully,

L M LAWSON

Encl.

El Paso, Texas,
May 7, 1924.

Mr. S. B. Johnson,
Fabens, Texas.

My Dear Mr. Johnson:

Replying to your letter of May 5th, concerning the river situation in the vicinity of the intake of the Tornillo Canal, I have noted past correspondence on this subject, and am also informed by reports from our engineering employees, who have kept in touch with this situation.

Some months ago, at the beginning of the irrigation season, I noted that the river channel below the intake of the Tornillo Canal had been blocked by the construction of a levee by private parties, which prevented surplus water from being discharged around this normal river bed. This procedure of course, will tend to fill the channel, and since it never was the expectation of the Bureau of Reclamation to take the entire river flow through the Tornillo Canal, the situation was not improved by this action on the part of the land owners, who were endeavoring to prevent river water from occupying the normal river location. I understand now that the surplus water is being discharged through the river channel, and this should by all means be kept clear of obstruction, because we can reasonably expect a large amount of water in the river during the coming summer which it will not be possible to take through the Tornillo Canal.

I note your suggestions regarding construction of a levee to protect certain low lands, and I will be glad to give this consideration by an inspection on the ground of just what justification the Bureau of Reclamation would have in the performance of this work.

Yours very truly,

L. M. Lawson,
Superintendent.

CC to Mr. Herr.