

[APPENDIX 24]

**THE ORDER
TO COMMENCE CONSTRUCTION**

**STATEMENT BY THE SECRETARY
ON JULY 7, 1930**

437

July 7, 1930.

MEMORANDUM FOR THE PRESS

The Secretary of the Interior announced to-day that construction of the Boulder Canyon project had commenced, immediately on the President's signature of the appropriation bill.

The engineer in charge, Mr. Walker R. Young, and his assistants, were already on the ground waiting telegraphic instructions. The first day's work began the staking out of the railroad and the construction road, surveys of which have already been completed, laying out streets for the town site, and continuation of surveys for the water supply system.

The order which started construction was signed by the Secretary immediately following the President's signature of the appropriation bill, and read as follows:

Order No. 436

HON. ELWOOD MEAD,
Commissioner of Reclamation.

SIR: You are directed to commence construction on Boulder Dam to-day.

Respectfully,

RAY LYMAN WILBUR,
Secretary.

The Secretary stated that the plans and specifications are being carried to completion with all possible expedition, looking to the advertising of bids and the awarding of construction contracts at the earliest possible date. Following the completion of the work begun to-day on the railroad, construction road, town site, and water works, the money appropriated will be used to commence construction of the cofferdams and diversion tunnels.

In announcing the commencement of construction, the Secretary made the following statement:

"The Boulder Dam will signalize our national conquest over the Great American Desert. With dollars, men, and engineering brains we will build a great natural resource. We will make new geography, and start a new era in the southwestern part of the United States. With Imperial Valley no longer menaced by floods, new hope and new financial credit will be given to one of the largest irrigation districts in the West. By increasing the water supply of Los Angeles and the surrounding cities, homes and industries are made possible for many millions of people. A great new source of power forecasts the opening of new mines and the creation of new industries in Arizona, Nevada, and California.

"To bring about this transformation requires a dam higher than any which the engineer has hitherto conceived or attempted to build. It is to be placed in the bottom of a canyon, whose walls rise over 2,000 feet and through which flows a turbulent river, at times carrying a flow equal to the average of the Mississippi at St. Louis.

"The dam is to be built in a region of intense summer heat, amid desert surroundings and where the public lands, in large part, are being surveyed for the first time.

"To build the dam economically and efficiently requires that special attention be given to those factors which influence the health and energy of the workers. A thousand men will be employed over a period of five to eight years. Many of these will have families, and this means that the town to be created near the dam site will have a population of 4,000 to 5,000 people. This town will not be a temporary construction camp. During the time that the dam is under construction, thousands of tourists will each year visit this section. When it has been completed, the lake 100 miles in length above it will draw other thousands because of its scenic beauties. Plans accordingly have been made to lay out a town which will represent the most modern ideas in town planning.

"The water works will be similar in character to those built at Yuma, Ariz., where the conditions of climate and water are similar to those at Boulder Dam.

"From the town site to the dam is about three miles. The town will be connected with the outside world by an automobile road and a railroad about 30 miles in length. It is not necessary that construction of the tunnels to divert the river shall await the completion of these facilities of living and transportation. There is a good road from Las Vegas to the canyon. Much of the equipment needed in tunnel construction can be hauled in over this road. A temporary construction camp can be located on the river and the construction of the tunnels thereby expedited.

"These diversion tunnels will be four in number, each 50 feet in diameter. Because of their size, their excavation will be very much like the operation of a quarry. The greatest problem will be the disposal of the excavated material. Part of it will be needed to build the cofferdams that will be placed in the river, above and below the site of the dam, to keep the water out of the excavation where the foundation of the dam is to be placed.

"The building of the road, the railroad, the tunnels, and the cofferdams will all precede the beginning of the great wedge, over 700 feet high, that is to close this river. While these earlier works are being built the final detailed plans for the dam will be completed. Only engineers who have had considerable familiarity with dams and power development can fully appreciate all that is involved in these plans. The dam is not merely a mass of concrete to hold the water back. It is a complex industrial structure traversed by pipes and corridors, in which will be placed the regulating gates and the valves for the dynamos which will generate a million horsepower of electrical energy and the wasteways for controlling floods.

"Of the initial appropriation of \$10,660,000, \$2,500,000 will be used to build the railroad, \$525,000 will be expended in the construction of waterworks, laying out the town, building streets, sewers, and other conveniences of the town, and in the construction of a main office building for the Government engineers and clerical staff and 25 homes for its permanent employees at the dam.

"The greater part of the 150,000 acres which will be flooded is public land, but scattered through it are small areas of privately owned land, the largest one being in the valley of the Virgin River.

Title to these lands and to whatever mining claims have merit will have to be acquired.

"Five million dollars of the initial estimate is to be used in construction of the tunnels, which will eventually cost \$18,000,000. While the tunnels and the cofferdams are being built all the details of the dam and its power equipment will be worked out. The Reclamation Bureau will have the cooperation of the engineers of the Los Angeles Water and Power Department and the Southern California Edison Co. and its related companies. Confidence is felt that this power equipment will represent the highest efficiency yet achieved in any industrial development of this character.

"The designing of this dam is in competent hands. No organization in any country has had greater experience in such work than the Bureau of Reclamation. Not a single dam of the 125 built by the Reclamation Bureau has failed. Its chief designing engineer, J. L. Savage, is recognized as a genius in his line. He has successively designed three dams which at the time of their construction were the highest in the world. Boulder Dam adds another to this unique record. In addition to the corps of experts on the permanent staff of the bureau, it has as consulting engineers, A. J. Wiley, who has an international reputation and is consulting engineer for the irrigation department of India; L. C. Hill, the designer and resident engineer on the Roosevelt Dam and many monumental works in this and other countries; and D. C. Henny, one of the foremost consulting engineers of the country.

"Because of the exceptional size of the dam and the difficult engineering problems involved, Congress thought it prudent to create a board of five—three engineers and two geologists—who would review the plans and estimates prepared by the Bureau of Reclamation and report direct to the President. The engineers on this board—Gen. Wm. L. Seibert, builder of Gatun Locks at Panama, Daniel W. Mead, and Robert Ridgway—have approved all of the work thus far submitted to them, and will pass judgment on the detailed plans of the dam when these have been completed.

"Boulder Dam will not only be a monumental engineering work, but the laws authorizing it inaugurated the greatest scheme of rural planning yet undertaken in the West. That this scheme shall prove of the greatest possible value to the Nation, it necessitates now a study of all irrigation and power possibilities of the whole basin, and of the different States. Five hundred thousand dollars has been provided this year for studies of secondary projects in the Colorado Basin. This includes \$100,000 for a study of the irrigation possibilities of Utah, Colorado, Wyoming, and New Mexico, the four States above Boulder Dam; \$250,000 for surveys and preparation of plans and estimates for the Parker-Gila project in Arizona; and \$150,000 for continuing the surveys and preparation of plans and estimates for the Palo Verde, Imperial, and Coachella Valleys. Altogether, these investigations will deal with the possible future reclamation of 6,000,000 acres of land, an area equal to that now irrigated in the lower Nile. Consideration must be given to a possible 6,000,000 horsepower electrical development on the river as a whole.

"To bring into harmony the varying views and conflicting interests and to work out of this a properly correlated scheme of development, require ability and experience not alone of the engineer but of the

economist and the statesman. The half century of extensive administrative experience of Commissioner Mead, his record as framer of successful policies, are convincing evidence that this great opportunity for statesmanship is in capable hands.

"R. F. Walter, the chief engineer, who will be Commissioner Mead's right-hand man in this investigation and development, is also prepared, through long years of experience in the West and the exercise of large responsibilities, to deal effectively with the varied and difficult questions which must come up for decision.

"Of one thing the public should be warned and that is the unwisdom of going to the vicinity of the dam site in the expectation of getting work without ample provision to meet the emergency should this expectation fail. The dam site is located in the midst of a great desert with few inhabitants and slight opportunity for other employment than that which it may afford. Employment will develop only as contracts are let and ample notice will be given when opportunities for work present themselves."