土木學會誌

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JOURNAL OF THE JAPAN SOCIETY OF CIVIL ENGINEERS

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OUTLINE OF SEKIYA FLOOD CONTROL CHANNEL WORK—MAINLY RIVER COURSE DESIGN AS THE CENTER By F. Ishii (Page 19)

The Sekiya flood control channel is a flood-way about 300 m wide and about 2 km long located at the western part of city of Niigata to be excavated to fundamentally solve the various problems in and around city of Niigata such as the augumentation of function of Niigata harbor mainly for the purpose of flood control of the old Shinano river in the environment of city of Niigata the prevention of collapse of the west coast of Niigata, the fusion of the city function of city of Niigata which was cut into east and west and various problems around city of Niigata which has become urgent recently.

The present paper introduces the outline of this project and shows the actual rate of flow for 5 years Shaffernak rate of flow forming the river bed and the calculation result of change of river bed in case the wave form of high water level is given, in connection with the specially studied various problems of river bed stability and examines the significance of the planned river bed.

CONSTRUCTION WORK OF 500,000 DWI MITSUI DINOSAUR BUILDING DOCK

By T. Katsuragawa (Page 25)

As the dock of 150,000~300,000 ton class is not adequate to meet the recent demand in Japan, construction of a 500,000 ton class, the largest in the world has come to be required, a dock of 410×72×12.5 m was constructed in Chiba as one of them.

The present paper is a record of the subject dock which was completed in a short period from January, 1967 to February, 1968.

BIRTH OF MODERN MARSHALLING YARD—REPORT ON NEW CONSTRUCTION WORK OF KORIYAMA MARSHALLING YARD By H. Yokoyama and H. Kikuchi (Page 32)

The present paper describes the construction work of Koriyama marshalling yard which has been constructed as a link of chain of the bypass of Omiya Tabata and Shintsuruma marshalling yards system located in Tokyo and is proud of the modern facilities.

The marshalling yard has been constructed between Azuminagamori and Koriyama on Tokyo main line and the operation was started in September, 1968, and safe and effective operation is intended by automatization and introduction of electronic computer.

PROBLEMATICAL POINTS IN MAINTENANCE OF LONG INTAKE STEEL PIPE BURIED UNDER THE SEA BOTTOM—EXISTING STATE OF THE INTAKE STEEL PIPE FOR COOLING THE CONDENSER OF TOKAI ELECTRIC POWER PLANT By S. Tsujimoto, T. Takemura, S. Onishi and Y. Watanabe (Page 41)

By S. Tsujimoto, T. Takemura, S. Onishi and Y. Watanabe (Page 41)
The work stated in 1960 and completed in 1967 and full power operation began, and thus the Tokai electric power plant takes in the cooling water at a rate 16 m³/sec. The present paper describes 2 or 3 problematical points on maintenance of intake steel pipe as an example of water intake under unfavorable ocean condition through the experience of Tokai electric power plant, intending to make it future reference for water intake project not only for the electric power plant but also for the water for various industries.

UNDERGROUND FLOW CONTROL BY MEANS OF WATER-CURTAIN

By K. Akai (Page 49)

This report treats the mechanism of formation of the water-curtain which appears on the seepage from a canal when it encounters with a natural underground flow at the upstream part of the canal. The phenomena are proved by seepage experiments using sand model in the laboratory and also by in-situ tests performed at a shore of the Lake Biwa.

PRESTRESSED CONTINUOUS COMPOSITE GIRDER BRIDGES HAVE DISADVANTAGES OF INVOLVING COMPLEX PROCEDURE IN DESIGN AND TAKING A LONG TIME IN CONSTRUCTION. By Y. Tachibana, T. Mukaiyama, K. Minato (Page 55)

In order to get rid of such disadvantages, non-prestressed continuous composite girder bridge is proposed. The design concept is as follows: The composite section is effective to positive moment, while the slab concrete cannot resist tensile stress for negative moment, therefore, only steel girder with bar reinforcement proves effective, in case an adequate number of shear connectors are provided.

Statical experiment on model beams has been carried out to clarify the several problems in designing this type of bridge

DEVELOPMENT OF DREDGER OF JET-EJECTOR SYSTEM FOR DEPTH OF HIGH DEGREE By H. Azuma (Page 62)

The present paper describes the course of development of subject dredger for which to years were spent and a fund of several hundred million yen was invested, its principal features and the dredging theory. The present dredger is (1) capable to dredge from the depth of high degree, (2) adoptable for all the soil layers excepting rocks, (3) capable to dig a circular bole in any specified layer by changing its setting systems, which are the advantageous points of the dredger.

EFFECT OF WAVE ELIMINATION WORK OF ABSORBING BODY ON WAVE ELI-MINATION By J. Kato and T. Noma (Page 69)

The wave elimination work as an auxiliary facility of nursery is desirable not to interfere with the replacement of sea water as one of the conditions. For this purpose, it is considered to install the wave elimination device only near the still water surface. Here, a wave eliminating body having a friction mechanism is installed near the still water surface, and the general trend of practical wave elimination function is experimentally studied.

OTHERS

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