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# HYDRAULIC STRUCTURES OF MODERN ARCHITECTURE: PROBLEMS AND SOLUTIONS

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#### **Abstract**

This article hydraulic structures of modern architecture: problems and solutions on the topic be, it gidrotehnik facilities of all types, hydraulic structures design basis and this process of problems and solutions about the word will go.

**Keywords:** Hydraulic structures, to'gonlar, design process, ekspulitatsiya, climate o'zgarishisensorlar and automation, environmental design.

#### Introduction

Hydraulic structures, i.e. water - related technical facilities, water resources management, maternity, irrigation, and other many functions to fulfill in order to be created. Modern architecture and in engineering hydraulic structures, the role is increasingly increased has been. This article describes the hydraulic structures of modern architecture, in their design, problems and solutions seeing out of.

#### THE MAIN PART

Hydraulic Structures current our life o'rni is incomparable. They are our life for the important toe'present resource thicker water management get the opportunity to appear it will. Them using we o'rhodes you want toe'present food food from the product to electrical energy intocha toe'present zaruratlarimizni cover we can. Hydraulic structures to function according to a multiple of the type is. Below them with one by one to introduce we will.

Dams. Dams water collection and management for the designed structures are, their energy to work out and water resources in maintaining an important role to have.

Canal and Irrigation Systems. Channel of the system in the rural economy of water in the transmission for it is used. Modern irrigation systems, for example, drip irrigation, productivity increases.

Water To Bring To Put In Facilities. These water of different sources to get, it to use to prepare is designed facilities. They water clean and safe to coming in for an important role plays.

Hydraulic structures in water resources management and use for important facilities. They water collection, transmission and storage, such as the functions it performs. Design process while, these facilities efficiency and stability for major importance has.

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Hydraulic structures loyihalash jarayoniat various different aspects into account and take should. Design process the following parts we divide can

#### 1. Analysis and Research

Design process, first place, available water resources, climatic conditions and natural environment of the analysis from the starts. This stage is the following see is:

Water availability and its quality, to evaluate.

Flow rate, water level and other hydrological data.

Natural ground and the earth under the water properties.

#### 2. Design

Design process of the second stage of the design work out. This is the stage at a number of aspects into account to be taken should. In particular, the buildings of external appearance and functionality to the location. Materials, structures, solid and goods distribution. Natural environment minimal effects show, water flow change to reduce.

#### 3. Account-books

Design in process account-booksselect to'g'settings applyto isishiet these structures durability increase with a number of its useful work koyfitsentini to increase help will.

#### 4. Legislation and Permits

Hydraulic structures in the design of local and international legislation to comply with to be necessary. Permits and environmental assessments be completed should.

#### 5. Construction and Operation

Design process of the last stage in the facilities construction and operation to the process control is. This stage of the project, according to the facilities construction, qto hit in the process of quality control to and the facilities to use, and the units'mirlash plans worked out out is carried out:

Hydraulic structures in the construction of many muammolar there are. Them an example to make the following, we say we can.

Gidrotexnik structures of the natural ecosystem negative effects display can. Water flow change, local flora and fauna alter can.

Many hydraulic structures outdated technology asoslanmoqda. This while their efficiency decreases and costs increase.

Hydraulic structures located in the territory of the population for many of the problems causing you to be out can, for example, to move, land loss, and others.

Climate change, hydro-technical facilities affected be, can, this, while water resources management in the challenges it poses.

We have the above problem ysolution be can which a qatodar aspects described will pass. Modern architecture and in engineering, green technologies, for example, solar energy and

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wind energy, hydraulic structures to be applied can. Structures in the design of environmental factors into account to take, natural environment with minimal effects to show help will. New materials and technology's introduction to, facilities efficiency increase to help will. For example, 3D printing and manufacturing, sensors and automation application. The population and the public design process involved to, social problems solution in an important role play. Climate change corresponding in hydraulic structures design and management, their long - term stability it provides. Climate change and natural resources sustainable management for advanced management systems implementation to be necessary.

#### Conclusion

Hydraulic structures of modern architecture an integral part of be, their effectiveness and environmental safety of the important role it has. Problems to solve to for innovative solutions and environmental design implementation to be necessary. Also, social participation and rural population of opinion into account them to take, this process has an important role to have. Hydraulic structures design process is complex and many aspects of their own into gets. Water resources effective management and environmental sustainability, ensure to innovative solutions and social participation required. Design in the process, each a stage attention give, hydraulic facilities, a successful operation to is important. Modern hydraulic structures, you the right design and management if, not only water resources, effective management, but also environmental stability both provides.

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