

TECHNICAL DESCRIPTION OF HYDRO-TECHNICAL INSTALLATIONS

LOCATION AND THE FACILITY:

The existing business facility, Cultural Center in Mosna is located on cp. No. 2825/2 CO Mosna, municipality of Majdanpek. Floors of the existing facility are P + PK, total gross area 219,00 m².

The existing facility is free-standing, and the basic rooms are event hall and local administration offices. By the facility of Cultural Center at the same cadaster lot there is a facility of another beneficiary that is not subject to reconstruction.

The subject of the design for implementation is reconstruction and redevelopment of the attic area. In the past years, there was the need for space to accommodate the staff for emergency situations. The adaptation of part of the existing facility has been planned to place the fire truck; the area on the floor above the garage is planned for the cloakroom and meeting room for the staff for emergency situations. Extension of the existing hall on the ground floor creates a multifunctional area with the additional contents for various gatherings, events, celebrations and recreation. The hall has the capacity of using a mounting stage, made of prefabricated stage elements to be used occasionally. Adaptation of the floor intended for the office area is planned above one part of the existing facility. The facility has three formed and functional unities that are inter-connected providing various uses depending on the needs of the future beneficiaries. Total floors of the newly-designed structure is GF+1, total net area 508,00 m².

Water-supply system

The existing street water-supply system is PE Ø90mm and operating pressure in the network is between 3,50 and 4,00 bars. Connection to the water-supply network is designed in compliance with the requirements of Public Utility Company. Connection to the street water-supply system is planned through the ring with the valve and separator. The main connector is DN40 and is directed towards the street water-supply system. Distribution from the connection to the water gauge shaft is made of high density PEHD pipes with adequate insulation.

Total floors GF + 1.

The water gauge shaft is located on the lot outside of the structure at 150 cm of the regulation line and includes the water gauge DN 20. A strainer is to be placed in front of the water gauge and the discharge valve behind the water gauge.

The main horizontal distribution is laid under the ground-floor plate. A discharge valve is planned at the beginning of each plumb line.

As a protection against freezing pipes are thermally coated with adequate thermal material.

Since the guaranteed minimal pressure in the network is from 3.5 bars, it is sufficient for undisturbed operations of all users.

The inner distribution of the water-supply network is to be made of PPR SDR11 PN16 plastic pipes and fittings. Plumb lines are distributed evenly and are covered behind the plaster-cardboard panels. Plumb lines include connections for sanitary facilities and kitchens. Each connection contains sector valve with capping and rosette, and each consumer will be provided with gate valve for cold and hot water. Distribution

network in the bathrooms is hidden in the wall. The pipes laid in the wall are not insulated. Hot water supply in the bathrooms with shower is through EGV capacity of 80 l, while the kitchens are provided with the low-placed boilers, capacity of 5 l. Dishwashing machines are also planned to be placed in the kitchens

Sewage system

According to the terms of Public Utility Company BVK, there is no street faeces sewage network in the area of the structure construction; therefore, for the needs of the structure an AB impermeable septic tank was designed.

Septic tank is located at the back part of the lot in the green area. The main soil stack from the structure is connected with the septic tank at the prescribed depth over 80 cm to protect it from freezing.

According to the number of users and their needs, the septic tank is designed in such a way to be emptied every 20 days, total capacity of 21,00 m³.

Septic tank is provided with the ventilation pipe.

Total distribution of the sewage and feces network is made of plastic drain pipes and purpose-made pieces with the decline of 1.5% inside and outside the structure. At the places where the pipes cross with the foundations, it is planned to place the steel pipes. The designed diameter of the main soils stack (drainage pipe) is Ø160mm with the decline of 1,5%.

At the horizontal distribution junction there are 6 feces plumb lines of Ø110 mm with the ventilation outlet on the structure roof, i.e. through ventilation louver on the façade. Rainwater is collected in rainwater gutters and discharged on the ground.

All sanitary facilities are connected to the sewage system through siphons – water-stops.

Sanitary ware and accessories

According to the design sanitary ware in the sanitary facilities is made of ceramics of A class in color selected by the investor. Mono-block toilettes are planned by the design. Connection of the flushing with the water-supply system is through EK valves. The washbasins are with the standing taps connected to the water-supply system with the corresponding EK valves. Connection of the washbasin with the sewage system is through the adjustable chromed siphon. Wall taps with hand shower are planned for the shower baths. Overflow and drain sets for the shower-baths are planned by the design. Standing tap is also planned for the kitchen sink. Sink drain is provided through the plastic drain sets. The dishwasher is connected through the sink.

Responsible designer:

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