



INTERREG IPA CBC Romania – Serbia Programme

Project Title: ENERGY EFFICIENCY – The Premise of a Better Environment in Romania – Serbia Cross Border Area

eMs code RORS13/City of Pancevo/70898/09.06.2017.

MINUTES OF CLARIFICATION MEETING AND THE SITE VISIT

held on 05.02.2018. in Pancevo

for the tender

RORS13/City of Pancevo/TD-06

On behalf of the Contracting Authority (City of Pancevo), Ms Andjela Vila, Project Manager Assistant welcomed the participants and presented the overall context of project implementation. Participants were informed that all the important dates related to the tender can be found in the respective tender dossier.

The participants were informed that the Minutes from this meeting will be published in accordance with the tender dossier.

Andjela Vila presented the Technical manager Olivera Dragas, who will record by dictaphone all questions and answers, and they will be part of the Minutes of meeting and recommended that all questions be sent in writing so they can be issued with all additional information requested for the tender.

Designers have been introduced to answer questions. Nenad Dojčinovic about thermal installations, Ivan Dzivdzanovski regarding electrical installations and Filip Zumberović regarding facade, roof and joinery. Also available for questions are Branka Marić in front of the Secretariat for Investments of the City of Pančevo and Zorica Markov, the individual in charge of technical maintenance of the Sports Hall.

Since there were no administrative questions, all present were directed to meet on site, at the Sports Hall

Question: The description for the facade indicated Panel 1 and panel 2 what does that mean?

The answer:

Filip Zumberovic: A contact facade will go on all concrete elements, and on the sides of the





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building there will be an aluminum ventilating facade. On the other side of the building we have a flat wall, here we have some unevenness that will be sold with distancers, some adjustment to get a flat aluminum ventilating facade.

Olivera Dragas: On this facade, one part is sticking outwards and one part inwards, our goal is to even out the facade, so that the external facade is straight, achieved with the distancers, this difference, which is ten centimeters, may be a little more.

Filip Zumberovic: These are the 2 side facade surfaces, all other concrete elements are repaired and insulated from the outside by the contact facade for the hall. As far as the Annex is concerned, the contact facade is on the annex. These roofs here, they are to be reconstructed and brought to one flat (pointing to the roof of the annex) because one part is added later, there is no concrete slab. In this part there is a reinforced concrete slab and a roof structure on a concrete slab. There is a wooden structure, without a reinforced concrete slab on a steel structure, it is to be brought to one level. Skylights are kept in their dimensions and shape, just put in a new joinery, for glass surfaces is placed aluminum joinery, which is fixed. The existing roof cover is to be changed to the existing construction, it is in the Bill of quantities with all the gaskets of course, tin works, everything is changing, gutters and gutter holders.

Question: So all the glass is to be taken out and aluminum put in?

The answer:

Filip Zumberovic: The glass goes out and new aluminum in.

Concerning the evacuation staircase, reparation of concrete and painting is to be done, there are no other works on the staircase. The flooring works will be done on the entrance floor and the repair of the concrete elements where they are in contact with the front facade.

Question: Can we get an intersection of the details of the facade?

Odgovor:





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Andjela Vila: There is no valid project of a current state of the building. The offer is given on the basis of the tender documentation, and everything else you have to see here on the spot. The amount of work is indicative rather than exact and payment will be made according to the amount of works performed and based on the offer of the unit price

Question: Metal pieces to protect against moisture penetration, around windows and doors, what did you mean?

The answer:

Filip Zumberovic: All the tin metal works need to be replaced

Question: What are the dimensions of these ?

The answer:

Filip Zumberovic: You have that in the Bill of quantities as a lump sum

Question: As far as the facade is concerned, what material is to be used?

The answer:

Filip Zumberovic: Stone wool, aluminum facade with stone wool

Question: Procurement of materials, transport, installation and protection from the moisture content of the southwest facade, on the window panels of demit facade, protection against moisture at the ventilation openings, what is it and how is it given? And where can we see it?

The answer:

Filip Zumberovic: these are metal tin connections, it is given a lump sum.

Andjela Vila: I will repeat once again that there is no valid project of the current state of the building. The offer is given on the basis of the tender documentation, and everything else you can see here on the spot, where you can measure everything. The amount of work is indicative rather than exact and payment will be made according to the amount of works performed and based on the offer of the unit price

Question: Does the facade with composite panels and whether there are any special requirements of the Fire safety commission?

The answer:





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Andjela Vila: There are no special conditions from the Fire safety commission, but everything is to be in accordance with the law for public buildings.

Question: It seems to me that in the documentation stated that the facade is a sheet metal and not a panel, a sheet of 1.5 mm.

The answer:

Filip Zumberovic: Yes, a 1.5 mm sheet, and for the roof are sandwich panels with 100 mm mineral wool fillings on the existing substructure

Question: Can we get a facade and window pattern? Are there single or double windows?

The answer:

Filip Zumberovic: We have no scheme. For the windows it is necessary to keep the existing structure, just replace it with new aluminum, the opening needs to remain the same. The only difference is on the large surface where we remove the glass is placed aluminum joinery fixed.

Question: What is the thickness and type of glass?

The answer:

Filip Zumberovic: Pamplex glass 4.4.1 put into termopan, 4.4.1+16+4.4.1.

Question: Which type, kind and dimensions of the ventilation grilles?

The answer:

Nenad Dojcinovic: They are on the facade for the discharge of air, grilles without automatics. There are fixed bars in the field. Air discharge channels of the stands section, it is a separate part, you have channels for air extraction from the hall, the sports court, and above the stands section where the ventilation is divided, one branch to one side of the facade, the other branch to the other side of the facade, where these grilles are to be put. You will see when we enter the hall itself the way air extraction is resolved, the air from the field itself.





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Ivan Dzivdzanovski: I'm talking about the line, as we have a recuperator, the grilles will be 100% open, entrance of fresh air into the chamber and egress of the wasted air will be done by an ON/OFF switch for the grills with a pole. Inside the chamber is the recuperator, which will have its own grill (with a analog switch).

Question: Do the channels remain the same?

The answer:

Nenad Dojcinovic: Yes, the channels remain the same. Zorica Markov is well aware of the condition of the channel and she will explain the details to you. The extraction of air is solved through the bars on this side and on the other side (pointing to the side walls of the hall). There is one main main line in the middle of the hall, that is, under the terrain and it divides afterwards, one goes there, one here and then merges beneath the platform, this channel needs to be revitalized. It is not currently visible; it has only one access point (showing physical access point). After the revitalization, it will be used in the full capacity of air extraction and after the installation of a new air chamber with recovery, everything will be able to work properly.

Zorica Markov: There is a visual recording of the channels passageway from 2016, showing it is passable but when access is open it can be fully cleaned and used in full capacity

Question: Which material is the channel made from?

The answer:

Nenad Dojčinovic: It is built and it spreads, as well as a tin metal channel. That is the way it was built back then.

Olivera Dragas: Now you need to take out the floor in order to clear the channel and leave the audit bars and put a new floor that allows access. The grids on these walls of the hall are also changing.

Question:

Dismantling an existing roof, do you know which layers are known?

The answer:

Zorica Markov: In my knowledge there is a double metal sheet with insulation between,





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over which is a hydro insulation condor, then bituminous coatings made every 5 years. Twelve years ago, over all this, foil was welded, with a thickness of 2-2.5 mm.

Procurement of materials and assembly of contact molds between the demit facade on the concrete elements of the main building?

The answer:

Filip Zumberovic: On the spot is measured.

Question: Is the SIKA membrane going to the roof?

Odgovor:

Filip Zumberovic: Sandwich pannel 10 cm thickness

Question: Is there no pump type defined for circulation pumps? The substation itself is defined as a set, these things are not defined because we have the freedom to propose and include all the armatures, all that is necessary to start the system?

The answer:

Nenad Dojcinovic: Yes, depending on which heat pump is being offered, some heat pumps come with circulation pumps some, can be with an exchanger or without an exchanger, if you work with glycol, then this part must go with water, if you work with water then this part (showing in drawing) is with water, depending on the construction of the pump itself, then work without an exchanger. This reduces costs.

Question: Does the reinforcement involve an exchanger, and further, and from an exchanger, what is next?

The answer:

Nenad Dojcinovic: If we look at the air chamber that is existing, we can say that this is the existing system (showing in the drawing). This is a completely new system. If we are just changing the air chamber, then we can include this part too.

Question: Extending the holes in the AB channels for setting gutters on layers of facades in the north east facade?

The answer:

Filip Zumberovic: These are gutter holders. I'll show you exactly what this is. Due to the



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installation of the demit facade, the gutters have to be moved slightly from the existing position on the facade and then this hole in the concrete collector has to be expanded so that the gutter holder moves.

Question: Are the nozzles installed instead of anemometers and are adjusted downwards?
The answer:

Nenad Dojcinovic: They do not go in all the places of the anemostats, in some places the anemostats remain in place and in the specified places as indicated in the graphics documentation nozzles are installed instead and directed or adjusted before the system is released.

Question. Is channel insulation foreseen?

The answer:

Nenad Dojcinovic: We did not anticipate the insulation of the channel because it will be done by insulating the concrete beam from the outside and galvanized channels are inside the beam. It is impossible to insulate it inside the beam. It remains as it is, only external fans are changed. The grids on the walls in the lower zone are changing, the grids in the upper zone do not change, but they need to be dismantled, cleaned when the fans are changing.

Questions: Can there be a little explanation regarding power supply?

The answer:

Ivan Dzivdzanovski: This is the existing substation (showing in the drawing), it is assumed that a power supply line is going in. Here, it is necessary to install a power cable, and here a concrete plateau, here heat pumps, and here a distributor cabinet polyester, and from there carry out the power supply of heat pumps and the power supply downstream in the basement of the air chamber, in the immediate vicinity. The cable from the substation will supply the pumps and the chamber.

As far as the control system is concerned, there is a circuit board for automation and electric motors for air chamber control, a system based on PLC, and as an HMI will use the operating panel that will be on the door of the cabinet. Also, we also planned a small box with a small panel, which would be in the security room above, as this is down, and is not





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always available. This smaller panel can be in some other room, but the work version for now is in the room above. The system is PLC, there is no SCADA. Managed by frequency regulators, both fans will have frequency regulators, motor actuators on valves, on / off pumps. We stipulated that cable distribution was resistant to rodents, we anticipated nnk racks. As it is in the Bill of quantities, you're planning a the cable line resistant to rodents. Type of cables as stated, halogen free.

Question: Is it foreseen to automatically switch pump operation, substation / boiler room?
The answer:

Ivan Dzividzanovski: It is predicted that there are 2 sources of heat, as far as the heating possibilities are concerned, the air chamber, one with radiator water, the other is a heat pump.

Question: When the temperature is 0°C outside then the heating from the boiler room is going, at 15°C degrees the pumps are switched on, is this project foreseen / resolved?
The answer:

Ivan Dzividzanovski: Yes, it is your job to optimize this relationship. Since two heat pumps are provided, you will make a sequencer.

Question: Who provides documents for the execution of works?
The answer:

Branka Marić: The Thermal part is going with approval under Article 145. Reconstruction. We received preliminary conditions from the fire safety commission, where it was stated that they do not have special requirements because there are no interventions, what we do is work outside, the heat pump is outside, here we use the existing channels, within the new air chamber. As for the facade, this is investment maintenance, technical description, precondition and calculation of works and obtain a decision on approval under Article 145. We are not going to rehabilitation. The city has provided all the necessary documentation for the execution of the works.

On site visit and Clarification Meeting ended at 14h.

