**TECHNICAL SPECIFICATION**

for site:

“Emergency strengthening of the banks of Rilska River, District 6, District 27 and District 1 /situated in the area of a section of road III-107 Rila – Rila Monastery/ through the construction of retaining walls”, town of Rila, Municipality of Rila, District Kyustendil

**CONTRACTING AUTHORITY**: Municipality of Rila, per article 161, paragraph 1 of the Spatial Development Plan and Certificate № РД-01-16000146/19.04.2018.

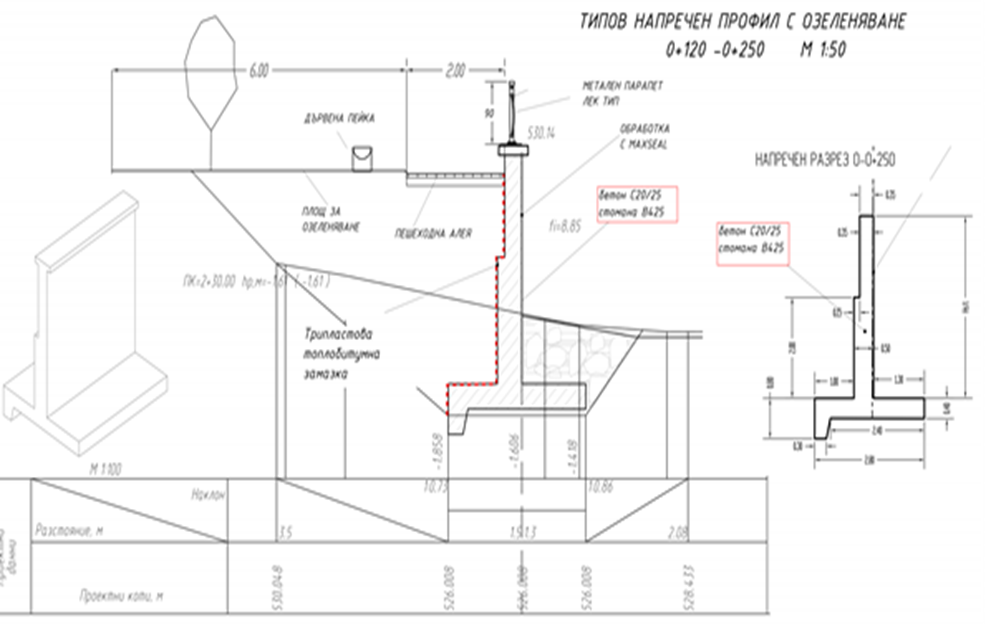
**NB!!!** In pursuance of the Contracting Authority's desire to promote competition, to be added - "or equivalent" wherever standards, technical approvals or specifications and/or other technical standards are specified in the **documentation, samples, annexes and all documents** under this procedure, as well as and where a model, source, process, trademark, patent, type, origin or production is indicated. If somewhere in the project or the documentation for participation there is indicated: specific model, trademark, type, patent, origin, production or others, the Contracting Authority will accept each offer when the participant proves with each relevant document that his proposed solution corresponds in an equivalent way to the requirements set out in the technical specifications and/or projects.

**NB!!! This public procurement covers the implementation of only STAGE 1 of the investment project, namely:**

**Stage 1: Retaining wall L = 297 m. Km.13 + 387 - 13 + 684 right downstream.**

All construction materials should correspond to the requirements of the active Bulgarian state standards, the requirements of the investment projects, Bulgarian state standard, EN or, if they are imported, to be approved for use within the territory of the Republic of Bulgaria and to be of quality, corresponding to the guarantee terms and conditions. Implementation with non-standard materials is not permitted.

1. General conditions. The technical specification is to be considered as integral part of the Contract for performance. Every part of the Technical Specification is to be read as supplement and facilitation for any other part and will be read with it or instead of it, as long as this is appropriate.
   1. For the site, Investment project № 3 of 20.04.2018 has been approved and a Permit for Construction № 3 of 20.04.2018 has been issued by the Chief Architect of the Municipality of Rila. The site is first category, per article 137, paragraph 1, point 1, letter ж of the Spatial Development Plan and article 2, paragraph 7 of Order № 1 for the nomenclature of the types of construction.
2. Project development. The development envisages the construction of retaining walls in the indicated districts of the town of Rila for the strengthening of the right bank of Rilska River in section with length 365 m in the range of km 13+380 to km 13+750 and the left bank of km 13+200 to km 13+500 (247 m). The clear height of the river bottom is 2,80-3,20 m with necessary 2,60 m/2,00 m water column and 0,60 m water stock. In this situation, the walls describing the coastline have been developed without correcting the riverbeds.
   1. In the two sections, there are 3 retaining walls projected:
      1. Wall 1 (Appendix №1) – with length 297 m from the newly built bridge to the bridge for the Hydroelectric power station right downstream;
      2. Wall 2 (Appendix №2) – with length 247 m from the water reservoir to an existing wall with height 4 m;
      3. Wall 3 (Appendix №3) – with length 63 m from the bridge for the Hydroelectric power station to the bridge on road III-107 km 10+950;
   2. The walls are designed to be constructed of reinforced concrete in accordance with the Ordinance on the design of buildings and facilities in earthquake areas from 2007, with seismic coefficient 0,27. The cross-section is optimised for minimum concrete and reinforced costs. The founding is carried out in compacted gravelly soils, according to the Geology. Before commencing the work on the walls, a cleaning of the riverbed of the Rilska River from bushes and trees is planned, as well as the bulldozing of sediments located in the section of the riverbed. The Contractor has to envisage the construction of a ramp to ensure access for the machinery. Cutting down of trees and uprooting of stumps as well as cleaning of the riverbed is envisaged.
   3. Behind the retaining wall in the section 0 + 120-0 + 250 there is a pedestrian alley and landscaping according to the profile:



After the pedestrian alley, landscaping of a strip from 4 to 8 / on average 6 m. / Is planned in the section indicated on the scheme. Landscaping is necessary to perform mainly by grassing and placing trees and low shrubs on profiles in groups. The fertilization should be performed with a minimum of 20 cm. The varieties are 7 types, described in the explanatory note in the section “Landscaping”.

A quantitative account for landscaping and a detailed breakdown of item 19 of the general Quantitative account for the retaining wall has been prepared.

1. General requirements for the construction materials. The construction materials intended for permanent use in the buildings have to be fit for their intended use and have to meet the basic requirements for construction works for an economically justified period of operation and to meet the relevant technical specifications and the national requirements for the intended use. Within the meaning of Regulation (EU) № 305/2011 of the European Parliament and the Council for determining harmonised conditions for marketing of construction materials:

* “construction materials” means every product or kit which is manufactured and placed on the market for permanent use in construction works or in parts of these and whose performance characteristics have an impact on the performance characteristics of the constructions in relation to the essential requirements of the constructions;
* “kit” means construction material placed on the market by a single manufacturer in the form of a set of at least two separate components that must be assembled in order to be used in the constructions;
* “essential characteristics” means those characteristics of the construction material which are relevant for the basic requirements of the constructions;
* “performance characteristics of construction materials” means the performance characteristics related to the relevant essential characteristics, expressed as level, class or in description;

The procedure for application of the technical specifications of the construction materials is in accordance with Regulation № 305/2011, article 5, paragraph 2 and 3 of the Law on Technical Requirements for Products and the Order on the essential requirements for the constructions of the Ministry of Regional Development and Public Works, adopted with Decree of the Council of Ministers № 325 of 06 December 2006 of the Council of Ministers and conformity assessment of the construction materials.

The constructions materials are used in the constructions on the basis of drawn up declarations, indicating the intended use and are accompanied by instructions and safety information in Bulgarian. The declarations are:

* 1. Declaration for the performance characteristics per the requirements of Regulation (EU) № 305/2011 and the sample, provided in Appendix III of Regulation (EU) № 305/2011 in cases when for the construction material there are harmonised European standards or an European Technical Assessment (ETA) is issued. When a declaration for performance characteristics of the construction material has been drawn up, the construction material is affixed with “CE” marking;
  2. Declaration for the characteristics of the construction material, when it is not subject to a harmonised European standard and for it there is no ETA issued. In case of an issued declaration for the characteristics of the construction material the affix “CE” is not put;
  3. Declaration for compliance with the requirements of the investment project when the construction materials are manufactured individually or under request, not through mass production, for the implementation in a single construction;

The declarations should demonstrate relevance with the Bulgarian national requirements related to the intended use or uses, where such are specified.

Only construction materials that possess the appropriate characteristics and only those that are set in the project with the respective technical characteristics, corresponding to the technical rules, norms and standards set by the relevant regulations for design and construction are delivered to the construction site.

Each delivery is controlled by the consultant exercising the construction supervision on the construction site.

The Contractor bears the full responsibility for the realised types of works until the expiration of the guarantee periods for the implementation of the construction installation works, facilities on the construction site. All activities, subject to the current procedure, are to be of high quality and in accordance with the project and the requirements of the normative documentation.

The intended construction and installation works are to be implemented according to the requirements of the Spatial Development Plan, the by-laws and the approved project, respectively they should be implemented and maintained in accordance with the requirements of the regulations, this Documentation and the technical specifications.

Only construction materials are used in the constructions which ensure the fulfilment of the basic requirements to the constructions under article 169, paragraph 1 of the Spatial Development Plan and meet the requirements set by the Law on Technical Requirements for Products and with ordinance per article 9, paragraph 2, point 5 of the same law.

The administration control of the construction materials under article 169a, paragraph 1 of the Spatial Development Plan during the design and construction should be carried out by the relevant bodies under articles 220-223 of the Spatial Development Plan.

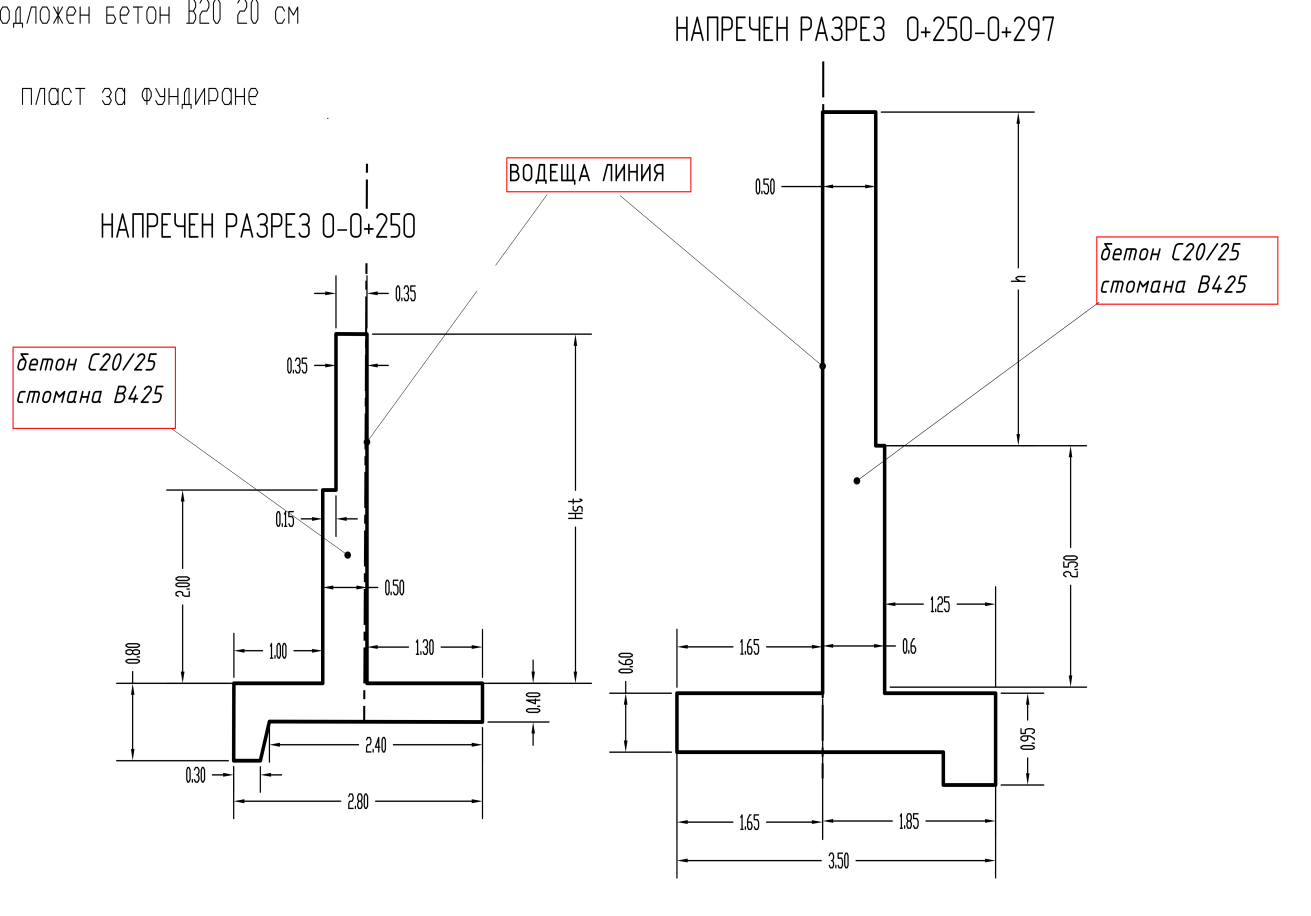
1. Reporting and acceptance of the construction and installation works. All circumstances related to the construction, such as handover and acceptance of the construction site, construction and installation works, are subject to closure, interim and final acts for acceptance of handover of construction and installation works and others and are to be documented by the representatives of the parties to the concluded contracts. In case of refusal or non-appearance, a joint act is to be drawn up, the interested party sends a written invitation to the other party or other parties to draw up the act. If a representative of the invited party does not appear within 24 hours after the deadline, specified in the invitation, the party is replaced by the body that issued the Permit for construction or by an official authorised by him/her.
   1. All prescriptions related the execution of the construction, issued by the authorised persons and the specialised control bodies, shall be entered in the order book of the construction, which is stored at the construction site. The Contractor is obliged to provide and maintain complete supervision of the construction site with which he/she assumes full responsibility for its condition and the relevant stocks until the acceptance of the site by the Contracting Authority. The site should be completed with readiness for commissioning and the quality of the construction and installation works should be in accordance with all applicable regulations.
   2. Guarantee periods – should be equal to the specified in Order № 2 of 31 July 2003 for commissioning of constructions in the Republic of Bulgaria and the minimal guarantee periods for the implementation of construction and installation works, facilities and construction sites.
   3. Poor quality works and poor quality materials and products during the guarantee periods will be corrected and replaced at the expense of the Contractor. The Contractor is obliged to invest in the construction only construction materials which ensure the fulfillment of the essential requirements to the constructions and meet the technical requirements and specifications. During the implementation of the construction and installation works, the minimal requirements for health and safety working conditions during the construction and installation works, the Spatial Development Plan and the by-laws to it, should be observed. The construction should be carried out in accordance with the requirements of the normative acts and the essential requirements for hygiene, protection of human health and life and protection of the environment.
   4. The quality and the quantity of the implemented works can be monitored in any moment. When this cannot be done with the help of the Contractor, a term for attracting external specialists shall be set. In this case, the expenses are covered entirely by the Contractor.
   5. All materials for the construction are delivered with declarations for compliance by the manufacturer, in accordance with the Order on the essential requirements for construction works and conformity assessment of construction products, introducing Directive 89/106/ЕЕС for construction materials. All declarations for compliance, certificates for quality and certificates for origin should be pre-certified by the Bulgarian Chamber of Commerce and Industry. Upon delivery of the materials on site, the mentioned should be accompanied with the necessary declarations and certificates, certified by the Bulgarian Chamber of Commerce and Industry. In case of non-presentation of construction supervision (original) and of the Contracting Authority (copy) of the required documents proving the quality and the origin of the materials, their use in the site will not be permitted. The Contractor is obliged to deliver and put in the construction the needed and relevant to the technical requirements, technical specification and the approved investment project construction materials (construction materials, including asphalt mixtures, elements, details, kits, etc.). The qualities of the materials is proved by the Contractor with protocols of laboratory samples and analysis, conducted by licensed laboratories.
   6. During the offering of the individual types of works, the bidder should anticipate all direct and indirect costs for the execution of the order. The offered price for the execution of the construction and installation works is for the complete execution of the envisaged types and quantities of works.
   7. If, during the construction, hidden works /unforeseen types and qualities of works/, which during the preparation of the current project documentation, could not have been envisaged, they are entirely at the expense of the Contractor.
2. Temporary facilities. The Contractor is obliged to build all temporary facilities, such as bridges, scaffolding, road connections with the roads in the area, approaches, ramps and other necessary for the construction and installation works on the site, as well as their removal after the completion of the work. The area of the temporary read connections after the completion the construction should be re-cultivated and restored in its original form and all temporary facilities should be dismantled and removed.
   1. Signalling for the introduction of temporary organisation of the traffic. The Contractor should create the necessary signalisation for the introduction of the temporary organisation of the traffic inside and around the construction site in strict compliance with the requirements of the contract, the project, the Road and Traffic Act and the current normative regulation. This does not exempt the Contractor from his/her responsibility regarding the type, qualities and attachment of the used means for signalling, as well as the time for their installation and removal on the road.
   2. Protection of roads from pollution. The Contractor should take all necessary measures for the prevention of pollution with mud and other waste of the roads, situated around the construction site and used for the movement of vehicles and equipment related to the construction of the site. He/She should apply effective control over the movement of the cars and the equipment he/she uses as well as for the storage of the materials, waste, etc. on the roads, related to the construction services. The Contractor is obliged to remove at his/her expense all waste stored on these roads and to clean the roadway of all areas contaminated with mud and other waste through his fault, including its washing with water.
3. Specific tasks of the Contractor. The Contractor should carry out all construction and installation works, both as types and quantities, which are described in detail and in the bill of quantities for each item. The same are applied and are integral part of the current technical specification. The unit prices offered by the participants must include all costs related to the quality performance of the specified types of construction and installation works in the described type and scope, including the normatively required labour costs, material costs, mechanisation costs, additional costs, fees, trasnport costs, etc. The unit prices should include all technological activities necessary for the execution of each type of construction and installation work, including the securing of the work site in compliance with the requirements for ensuring safe working conditions for the Contractor's construction staff and for ensuring public safety and temporary traffic organisation, maintenance and cleaning of the construction site, transport costs for delivery of construction materials and labor, collection, treatment, loading and disposal of construction waste, costs for dislocation of the site of the necessary equipment, etc.
4. Basic requirements during construction. The construction and installation works envisaged for the execution are performed in accordance to the technical requirements. The documentation of the performed construction and installation works is carried out through protocols for performed construction and installation works in which the types of works, quantities and unit prices are reflected. Only construction materials are to be used in the construction which are in accordance with the essential requirements to the constructions and to have conformity assessment according to the Law for the Technical Requirements to the Products, respectively to the Order for the essential requirements and conformity assessment of the construction materials. The following basic requirements are to be taken into consideration and observed in the implementation of the individual types of construction and installation works:
   1. Strict observance of the “Rules for performance and acceptance of construction and installation works” (RPACIW) in the relevant sections (earthworks, installation works, concrete works, etc.);
   2. Compliance with the design requirements (if any), standards and requirements of the supplier companies regarding - transport, storage, installation, hydraulic testing, foundation, backfilling and so on. Relevant certificates for conformity of the used materials must be required;
   3. During the construction and installation works, the operational characteristics of the underground communications is to be preserved;
   4. The materials and products used in the performance of individual activities must comply with the type, sort and quality of the relevant standardisation documents. The use of materials and articles without a quality certificate and with unknown technology for their application should not be allowed;
   5. The implementation of the construction and installation works should be agreed with the relevant authorities. The organisation of the traffic during the construction works should be done in compliance with Order №3/16.08.2010 “On the temporary organisation and safety of traffic during construction and installation works on roads and streets”;
   6. The Contractor on the site is obliged before the start of the construction and during the construction itself to take the necessary measures to ensure safety, occupational hygiene and fire safety during the construction and installation works.
   7. Equipment/facilities of the Contractor – The Contractor should be equipped with equipment/facilities that are efficient and appropriate to ensure the satisfactory quality of work and degree of performance of work within the period specified in the documentation. If in cases of inefficient equipment and risk of failure to achieve quality of work and non-compliance with deadlines, the construction supervisor may issue an order to the Contractor to increase efficiency, replacement or change of equipment and the Contractor is obliged to comply with this order;
   8. Any damages caused by the actions or inactions of the Contractor are subject to payment in full;
   9. Temporary/unforeseen works – When the Bill of quantities does not provide for works of a temporary nature, it is assumed that such are included in the unit prices in the Bill of quantities and are not subject to any form of reporting and payment;
   10. After the completion of the construction and installation works and before the organisation of the procedure for establishing the suitability of the construction, the construction site should be cleaned and the surrounding areas - restored /brought to design/.
5. Administrative requirements.
   1. Implementation programme. The Implementation programme should correspond to the implementation of the project and should contain a diagram of all major activities. No later than 5 (five) working days from the end of each month, the Contractor should submit to the construction supervisor an updated programme, which includes at least the following information:
      1. The progress of the work in the past month, compared to the planned;
      2. The planned activities for the next month;
   2. Meetings on the progress of the project. The Contractor is obliged to coordinate with the construction supervisor and the Contracting Authority the dates of periodic meetings regarding the progress of the implementation of the works. The meetings are usually organised no later than 10 days after the end of the previous month and not less than twice a month.
   3. The construction supervisor and the Contracting Authority have the right to uninterrupted access to the construction site and to all documents concerning the implementation of the site. The Contractor is obliged to provide access and provide all required documents by the control authorities. The construction supervisor and the Contracting Authority have the right at any time of the implementation to be informed about the quantity and quality of the materials used and the types of works performed.
   4. All hidden works are accepted by the construction supervisor and a representative of the Contracting Authority and after their permission a subsequent closure is allowed.
6. Implementation of the construction.
   1. Materials – The Contractor should use materials that meet the requirements set out in these technical specifications and the approved investment project. The materials to be used should be new. The use of second-hand materials is not allowed.
   2. Testing – Types and quantities tests carried out according to the timetables set out in these specifications are accepted, unless the Contracting Authority has stated otherwise. In cases where the test results are unsatisfactory, the Contracting Authority may request additional samples. In addition to the tests listed here, the Contracting Authority and the construction supervisor may order additional tests to identify possible hidden deficiencies. The costs of these tests are to be bore by the Contractor if such omissions are proved.
7. Inspection and verification of the volume of the implemented construction and installation works – The Contracting Authority may at any time entrust the qualities and quantities of the performed construction and installation works. If the inspection cannot be carried out with the assistance of the Contractor, a term for external expertise shall be used. In these cases, the costs are at the expense of the Contractor.
   1. The constructor is obliged to compile construction documents and executive documentation of the site subject to this procedure at his own expense, as well as to participate in the procedure for putting the construction into operation.
   2. The constructor is obliged to eliminate at his own expense the shortcomings established during the handover of the construction and the commissioning.
   3. The constructor is obliged to perform a guarantee maintenance of the construction, including elimination of manifested defects during the guarantee periods, determined by the contract for awarding of the public procurement in accordance with the offer.
   4. The guarantee liability for defects assumed by the Contractor may not be for a period shorter than the minimum guarantee periods provided for in Order №2/2003 as of the date of the drawing up of an Acceptance-Transmission Protocol for the site.
8. Available documentation. The Contracting Authority should provide the Contractor with all documents, data and information necessary for the implementation of the activities according to this technical specification, including a complete set of technical/working projects on the relevant parts of the investment site, as well as Quantitative accounts for the types and quantities of construction and installation works.
9. Communication. The working language during the execution of the current order is Bulgarian. The Contractor is obliged to prepare and submit at his own expense all documents in Bulgarian. The site is to be executed in accordance with the current Bulgarian legislation for construction and commissioning of constructions.

**Prepared by:**

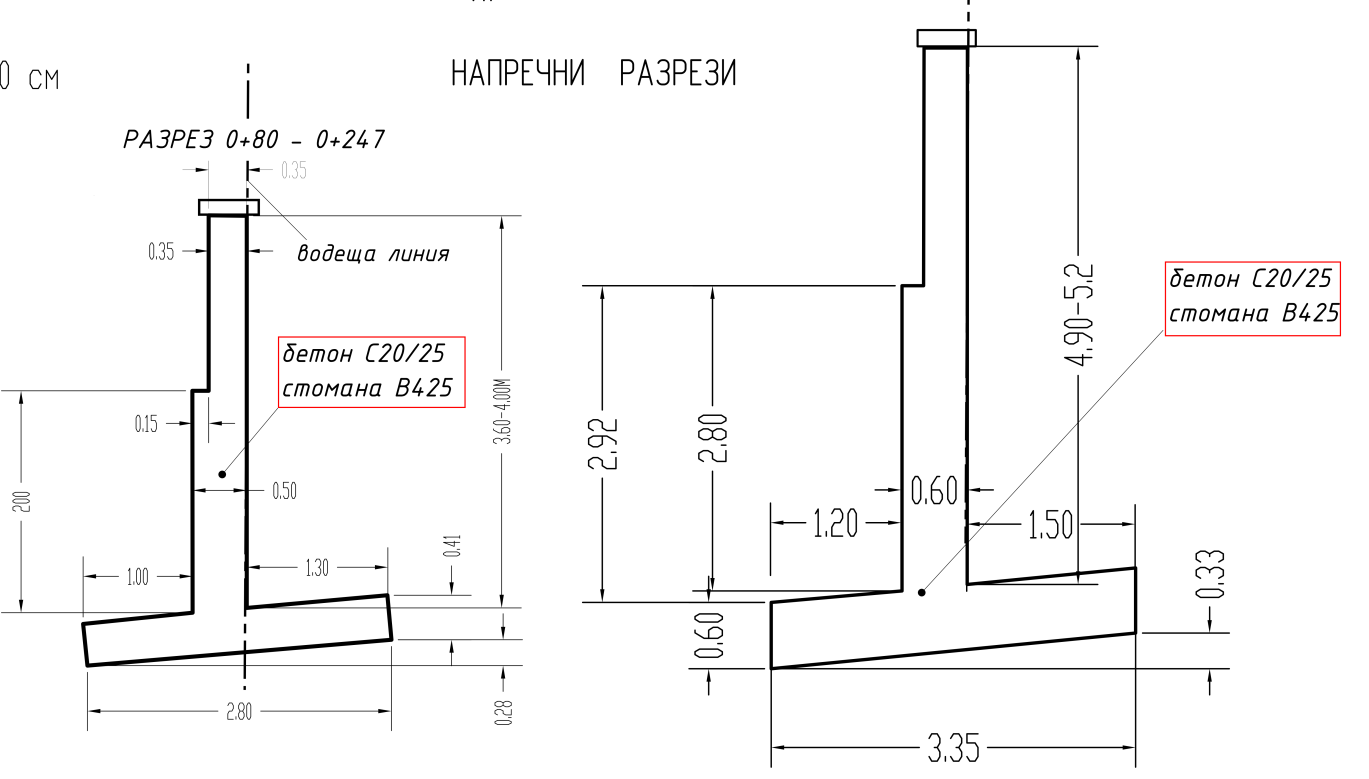
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Appendix №1



Appendix №2



Appendix №3

