

Appendix 2. Plan of Monitoring Measures

This Appendix to the Environmental Management Plan (EMP) for the **Works Contract 3A.1 - Modernization of Vistula embankments in Cracow**, comprising **Works Contract 3A.1/1** and **Works Contract 3A.1/2**, specifies the terms and conditions for the implementation of the Contract in terms of monitoring measures. **The costs and the schedule of implementation of these measures should be included in the bid.**

Definitions of the table in Appendix 2 of the EMP:

1. The measures enlisted to in the table of Appendix 2 EMP refer to the monitoring of the implementation of mitigation measures as referred to in Appendix 1 thereto (quoted there literally in the *Monitoring Subject* column);
2. Unless otherwise stated, the definition **Contract Area / Implementation area for Works Contract 3A.1/1 / Implementation area for Works Contract 3A.1/2** refers to the area of performance of any preparatory works, main works (including Permanent and Temporary Works) and any other works related to removal of faults and defects or completion of unfinished works enlisted in the Take-over Certificate or reported in the Defects Liability Period, Guarantee and Warranty together with the area of necessary temporary acquisition;
3. Unless otherwise stated, the definition **Contract Implementation Period / Implementation Period for Works Contract 3A.1/1 / Implementation Period for Works Contract 3A.1/2** refers to the period of performing any preparatory works, main works (including Permanent and Temporary Works) and any other works related to removal of faults and defects or completion of unfinished works enlisted in the Take-over Certificate or reported in the Defects Liability Period, Guarantee and Warranty;
4. Unless otherwise stated, the definition **Contractor's Team** in the column *the Party in charge* refers personally to the EMP Coordinator in the Contractor's Team (referred to in item 103 of Appendix 1 to the EMP), co-operating with the Site Manager and the remaining part of the Contractor's Team (including the environmental experts team and archaeological experts team);
5. Unless otherwise stated, the definition **Engineer's Team** in the column *the Party in charge* refers personally to the Environmental Management Expert in the Contract Engineer's Team, co-operating with the relevant Supervision Inspectors and the remaining part of the Engineer's Team.
6. The decisions on environmental conditions and decisions modifying the EDs were issued without an environmental impact assessment procedure, therefore the EDs and decisions modifying the EDs do not include any list with detailed conditions. Recommendations for Works Contracts under this EMP concerning environmental protection are included in justification to the ED/decisions modifying the EDs. As a consequence, there is no possibility to insert a column into a table with reference to specific point of the ED/decision modifying the ED.

No.	Issue	Mitigation Measure	Place of monitoring	Entity responsible	Timing and frequency of monitoring	Manner of monitoring activities
A. REQUIREMENTS ON SCHEDULE OF WORKS						
1	Schedule of works	<p>EMP conditions on the schedule of works</p> <p>When setting work schedules and at the stage of their implementation, the EMP conditions regarding the dates and time of conducting various types of work should be taken into account, described in detail in the consecutive items of the table, including, but not limited to:</p> <ul style="list-style-type: none"> a) acceptable hours of works (see item 67); b) acceptable dates for removing (felling) trees and shrubs (see items 28 and 29); c) dates of environmental inspection before the removal (felling) of trees (see item 29); d) the optimal date for conducting works within the root mass of trees and shrubs (see item 33); e) dates of inspections related to ensuring the protection of small animals on the site (see items 39 and 40); f) agreeing deadlines for carrying out land reclamation works (see item 49); g) deadlines for reporting the implementation of the EMP (see item 98). 	3A.1 Contract area	The Contractor's Team/Site Manager	Prior to commencement of the Contract implementation period and during Contract implementation (including, inter alia, prior to the commencement of works and during performance of the works) - on an ongoing basis, not less than once per week	<p>Review of work schedules.</p> <p>Ongoing control of compliance with the EMP terms quoted in item 1 of Appendix 1 (as specified in the descriptions for these items in this table).</p>
				The Engineer's Team	Prior to commencement of the Contract implementation period and during Contract implementation (including, inter alia, prior to the commencement of works and during performance of the works) - on an ongoing basis, not less than once per month	<p>Ongoing monitoring of compliance with the EMP terms quoted in item 1 of Appendix 1 (as specified in the descriptions for these items in this table).</p> <p>Review of the documentation submitted by the Contractor to the Engineer.</p>
2	Schedule of works	<p>EMP conditions on activities to be carried out before or at the initial stage of works</p> <p>Any work associated with modernization of the embankments shall be done only within boundaries of the designed Contract area. When setting work schedules and at the stage of their implementation, the EMP conditions should be taken into account regarding activities to be carried out before or at the initial stage of works, described in detail in the following items of the table, including, but not limited to:</p> <ul style="list-style-type: none"> a) conditions for building and equipping the construction site facilities, service roads and sites (see items 13, 14, 15, 16, 17, 18, 19, 46, 60, 63, 64, 65, 66, 67, 68, 69, 70, 71, 81, 82, 85, 86, 87, 92, 93). b) conditions for the road access to the construction site (see items 3, 4, 5, 6, 7, 8, 9, 10, 11); c) the condition for removing and securing the topsoil/mineral soil (see items 26, 27, 28, 29, 30, 31); d) the condition for securing trees and shrubs unintended for removal (felling) (see item 35 and 36); e) conditions for the implementation of environmental inventories (see item 42 and 43); f) the condition for securing the construction site against the entry of small animals (see item 46); g) the condition for obtaining decisions authorizing exceptions to the principles of species protection of plants, fungi and animals (see item 53, 54); h) conditions for the development of selected documents (see items 24, 56, 84, 89, 94, 100, 104, 105, 106, 108); i) conditions for documentation of technical condition of buildings and infrastructure facilities (see item 8, 91); j) the condition for explosive ordnance survey of the site (see item 90); k) the condition for inventory of illegal landfills and waste disposal (see item 88); l) the condition for compliance with the opinion of the heritage conservator (see item 97, 98, 99); m) the condition for obtaining the Engineer's approval for the appointed person to be an EMP coordinator and the composition of the team of environmental experts, the team of archaeological experts, and the team of sappers(see items 103, 104, 105, 106); n) the condition for training on the guidelines of the EMP implementation (see item 102); o) conditions related to demolition of engineering objects and fences (see items 122, 123, 124). 	3A.1 Contract area with access roads and their neighborhood	The Contractor's Team/Site Manager	During the Contract implementation period (including, inter alia, prior to the commencement of works and during performance of the works) - on an ongoing basis, not less than once per week	<p>Review of work schedules.</p> <p>Ongoing control of compliance with the EMP terms quoted in item 2 of Appendix 1 (as specified in the descriptions for these items in this table).</p>
				The Engineer's Team	During the Contract implementation period (including, inter alia, prior to the commencement of works and during performance of the works) - on an ongoing basis, not less than once per month	<p>Review of the documentation submitted by the Contractor to the Engineer.</p> <p>Ongoing monitoring of compliance with the EMP terms quoted in item 2 of Appendix 1 (as specified in the descriptions for these items in this table).</p>

No.	Issue	Mitigation Measure	Place of monitoring	Entity responsible	Timing and frequency of monitoring	Manner of monitoring activities
B. REQUIREMENTS ON ROAD ACCESS TO THE CONTRACT AREA						
3	Earth surface protection	<p>Conditions for using access roads to the Contract area</p> <p>The following conditions apply to the use of access roads to the Contract area:</p> <p>a) access to the <i>Contract area</i> should base on the existing roads;</p> <p>b) the Contractor shall ensure proper marking of all access roads to the <i>Contract area</i>, in accordance with applicable law and arrangements with relevant Road Managers. These markings will be regularly inspected, and in the event of their destruction or theft, the Contractor will immediately take action to restore or complement them;</p> <p>c) the aforementioned requirements shall be also applied by the Contractor in the scope of organizing the water transportation.</p>	Access roads to 3A.1 Contract area with their neighborhood	The Contractor's Team/Site Manager	During the Contract implementation period (including, inter alia, prior to the commencement of works and during performance of the works) - on an ongoing basis, not less than once per week	Visual monitoring, photo documentation. Control of the progress of works on the subject arrangements and their compliance with the requirements of the EMP. Review of the Contractor's documentation on the traffic management and on service of the Contract area.
				The Engineer's Team	During the Contract implementation period (including, inter alia, prior to the commencement of works and during performance of the works) - on an ongoing basis, not less than once per month	Visual monitoring, photo documentation. Review of the documentation submitted by the Contractor to the Engineer.
4	Health and safety protection, Protection of tangible assets	<p>Conditions for using access roads to the Contract area</p> <p>The Contractor shall ensure protection of people against increased traffic volume on roads used during construction works. During the contract period, the Contractor will provide, install and operate all temporary safety devices (e.g. traffic lights, information boards, safety barriers), thus ensuring the safety of vehicles and pedestrians;</p> <p>The Contractor shall apply and observe any regulations and rules for in-land navigation when using water transportation for the works.</p>	Access roads to 3A.1 Contract area with their neighborhood	The Contractor's Team/Site Manager	During the Contract implementation period (including, inter alia, prior to the commencement of works and during performance of the works) - on an ongoing basis, not less than once per week	Visual monitoring, photo documentation. Review of the Contractor's documentation on the traffic management and on service of the Contract area.
				The Engineer's Team	During the Contract implementation period (including, inter alia, prior to the commencement of works and during performance of the works) - on an ongoing basis, not less than once per month	Visual monitoring, photo documentation. Review of the documentation submitted by the Contractor to the Engineer.
5	Earth surface protection	<p>Conditions for using access roads to the Contract area</p> <p>Compacted surfaces used by the cars transporting construction materials and aggregate should be kept in a proper technical condition (including technological roads and access roads);</p>	Access roads to 3A.1 Contract area with their neighborhood	The Contractor's Team/Site Manager	During the Contract implementation period (including, inter alia, prior to the commencement of works and during performance of the works) - on an ongoing basis, not less than once per week	Visual monitoring, photo documentation. Review of the Contractor's documentation on the traffic management and on service of the Contract area.
				The Engineer's Team	During the Contract implementation period (including, inter alia, prior to the commencement of works and during performance of the works) - on an ongoing basis, not less than once per month	Visual monitoring, photo documentation. Review of the documentation submitted by the Contractor to the Engineer.

No.	Issue	Mitigation Measure	Place of monitoring	Entity responsible	Timing and frequency of monitoring	Manner of monitoring activities
6	Health and safety protection, Protection of tangible assets, earth surface protection	<p>Conditions for using access roads to the Contract area</p> <p>The Contractor shall comply with the statutory load limits on the axle when transporting materials and equipment to and from the <i>Contract area</i>. The Contractor shall obtain all necessary permits for the transport of non-standard loads and shall notify the Engineer of any such transport on a continuous basis;</p>	Access roads to 3A.1 Contract area with their neighborhood	The Contractor's Team/Site Manager	During the Contract implementation period (including, inter alia, prior to the commencement of works and during performance of the works) - on an ongoing basis, not less than once per week	Visual monitoring, photo documentation. Control of the progress of works on the subject arrangements and their compliance with the requirements of the EMP. Review of the Contractor's documentation on the traffic management and on service of the Contract area.
				The Engineer's Team	During the Contract implementation period (including, inter alia, prior to the commencement of works and during performance of the works) - on an ongoing basis, not less than once per month	Visual monitoring, photo documentation. Review of the documentation submitted by the Contractor to the Engineer.
7	Health and safety protection, Protection of tangible assets, earth surface protection	<p>Conditions for using access roads to the Contract area</p> <p>The Contractor will be liable for any damage to civil structures and buildings, roads, drainage ditches, culverts, water and gas pipelines, power poles and lines, cables, geodetic control network spots and installations of any kind, and other types of objects such as vertical and horizontal markings, navigation markings, information boards, cultural heritage structure, etc., caused by it or its subcontractors, service providers and suppliers during implementation of the Contract. The Contractor is also responsible for restoring the flow of ditches and drainage systems in the area of works and used transport roads, in the event of damages caused by the performance of works and transport connected with the works. The Contractor shall immediately repair any damage at their own expense and, if necessary, carry out other work ordered by the Engineer;</p>	Access roads to 3A.1 Contract area with their neighborhood	The Contractor's Team/Site Manager	During the Contract implementation period (including, inter alia, prior to the commencement of works and during performance of the works) - on an ongoing basis, not less than once per week	Visual monitoring, photo documentation. Review of the Contractor's documentation on the traffic management and on service of the Contract area.
				The Engineer's Team	During the Contract implementation period (including, inter alia, prior to the commencement of works and during performance of the works) - on an ongoing basis, not less than once per month	Visual monitoring, photo documentation. Review of the documentation submitted by the Contractor to the Engineer.
8	Earth surface protection	<p>Conditions for using access roads to the Contract area</p> <p>a) the Contractor is obliged to provide photo documentation of the entire Contract area and of access roads, with particular reference to the technical condition of roads and buildings located in the vicinity of the roads for transporting construction materials. The completed documentation should be described with the place and the date of development thereof;</p> <p>b) prior to the commencement of works, the Contractor shall carry out site inspections in the presence of Road Administrators, subsequently to which the protocols of the condition of access roads to the <i>Contract area</i> shall be developed. Based on the protocols, the Contractor will be obliged to restore the technical condition of the roads.</p>	Access roads to 3A.1 Contract area with their neighborhood	The Contractor's Team/Site Manager	During the Contract implementation period (including, inter alia, prior to the commencement of works and during performance of the works) - on an ongoing basis, not less than once per week	Visual monitoring, photo documentation. Review of the Contractor's documentation on the traffic management and on service of the Contract area.
				The Engineer's Team	During the Contract implementation period (including, inter alia, prior to the commencement of works and during performance of the works) - on an ongoing basis, not less than once per month	Visual monitoring, photo documentation. Review of the documentation submitted by the Contractor to the Engineer.
9	Health and safety protection, Protection of tangible assets, earth surface protection	<p>Conditions for using access roads to the Contract area</p> <p>a) the Contractor is obliged to agree with Road Administrators and Navigation Route Administrators the plan of traffic organization and work security. The Contractor is obliged to carry out the traffic management according to agreed designs (marking and securing of the <i>Contract area</i>, marking of detours and recommended marking of roads, related to the change in traffic management etc.);</p> <p>b) prior to the commencement of works, the Contractor shall submit to the Engineer for approval the plan of traffic organization and work security as agreed upon with Road</p>	Access roads to 3A.1 Contract area with their neighborhood	The Contractor's Team/Site Manager	During the Contract implementation period (including, inter alia, prior to the commencement of works and during performance of the works) - on an ongoing basis, not less than once per week	Visual monitoring, photo documentation. Control of the progress of works on the subject arrangements and their compliance with the requirements of the EMP. Review of the Contractor's documentation on the traffic management and on service of the Contract area.

No.	Issue	Mitigation Measure	Place of monitoring	Entity responsible	Timing and frequency of monitoring	Manner of monitoring activities
		Administrators as well as the traffic management schedule. Depending on the needs and progress of works, traffic management plans should be updated by the Contractor on a regular basis.		The Engineer's Team	During the Contract implementation period (including, inter alia, prior to the commencement of works and during performance of the works) - on an ongoing basis, not less than once per month	Visual monitoring, photo documentation. Review of the documentation submitted by the Contractor to the Engineer.
10	Health and safety protection, Protection of tangible assets, earth surface protection	Conditions for using access roads to the Contract area The Contractor is obliged to provide access routes for ambulances and fire brigades throughout the whole period of works, to designate roads, exits and pedestrian crossings and parking spaces for vehicles used on site.	Access roads to 3A.1 Contract area with their neighborhood	The Contractor's Team/Site Manager	During the Contract implementation period (including, inter alia, prior to the commencement of works and during performance of the works) - on an ongoing basis, not less than once per week	Visual monitoring, photo documentation. Review of the Contractor's documentation on the traffic management and on service of the Contract area.
				The Engineer's Team	During the Contract implementation period (including, inter alia, prior to the commencement of works and during performance of the works) - on an ongoing basis, not less than once per month	Visual monitoring, photo documentation. Review of the documentation submitted by the Contractor to the Engineer.
11	Protection of tangible assets, earth surface protection, water protection, Protection of animate nature	Additional conditions regarding access roads to the Contract area Delivery of materials and traffic of vehicles, machines and equipment servicing the construction site should be carried out on existing hardened public roads and within the navigation route in the first place.	Access roads to 3A.1 Contract area with their neighborhood	The Contractor's Team/Site Manager	During the Contract implementation period (including, inter alia, prior to the commencement of works and during performance of the works) - on an ongoing basis, not less than once per week	Visual monitoring, photo documentation. Review of the Contractor's documentation on the traffic management and on service of the Contract area.
				The Engineer's Team	During the Contract implementation period (including, inter alia, prior to the commencement of works and during performance of the works) - on an ongoing basis, not less than once per month	Visual monitoring, photo documentation. Review of the documentation submitted by the Contractor to the Engineer.
12	Protection of tangible assets, earth surface protection, water protection, Protection of animate nature	Setting out new access roads to the Contract implementation area When necessary to make an additional access road to the <i>Contract area</i> , it should be outlined as the shortest possible section, outside the areas of high natural value. Planned locations of access roads should be agreed with the team of environmental experts (including, among others, a phytosociologist) and submitted along with the abovementioned agreements, for the approval by the Engineer. The aforementioned establishments also refer to potential new locations of reloading yards associated with the use of water transportation for deliveries of soil.	Access roads to 3A.1 Contract area with their neighborhood	The Contractor's Team/Site Manager/The Environmental Team-phytosociologist	During the Contract implementation period (including, inter alia, prior to the commencement of works and during performance of the works) - on an ongoing basis, not less than once per week	Visual monitoring, photo documentation. Review of the Contractor's documentation on the traffic management and on service of the Contract area. Control of the participation of and arrangements made by required experts.
				The Engineer's Team	During the Contract implementation period (including, inter alia, prior to the commencement of works and during performance of the works) - on an ongoing basis, not less than once per month	Visual monitoring, photo documentation. Control of the participation of required experts. Review of the documentation submitted by the Contractor to the Engineer.

No.	Issue	Mitigation Measure	Place of monitoring	Entity responsible	Timing and frequency of monitoring	Manner of monitoring activities
C. REQUIREMENTS ON LOCATIONS OF SITE FACILITIES AND SERVICE ROADS AND YARDS						
13	Water and soil protection, Protection of animate nature	<p>Obligation to build site facilities, service roads and yards</p> <p>Construction site facilities, service roads and yards must be completed prior to the commencement of construction works.</p> <p>Construction site's facilities are used to store construction materials, for garaging, refueling and repairing vehicles, machines and equipment, and to provide location of social facilities (locker rooms, office, workshop, portable sanitary cabins) and waste containers.</p> <p>The area of construction site's facilities, where machines and vehicles shall move, shall be protected. The subbase side sealed on using insulation materials assuring protection for the soil shall be separated for service and refueling of machines.</p> <p>Equipment for site facilities should meet, among others, conditions provided for in items 46, 60, 63, 64, 65, 66, 67, 68, 69, 70, 71, 81, 82, 85, 86, 87, 92, 93.</p> <p>When planning the abovementioned facilities of the construction site their space should be limited to the necessary minimum.</p>	3A.1 Contract area	The Contractor's Team/Site Manager	During the Contract implementation period (including, inter alia, prior to the commencement of works and during performance of the works) - on an ongoing basis, not less than once per week	Review of the Contractor's documentation on site facilities management. Visual monitoring, photo documentation.
				The Engineer's Team	During the Contract implementation period (including, inter alia, prior to the commencement of works and during performance of the works) - on an ongoing basis, not less than once per month	Visual monitoring, photo documentation. Review of the documentation submitted by the Contractor to the Engineer.
14	Earth surface protection, habitat protection, protection of the soil and water environment, protection of acoustic climate	<p>Conditions for the location of construction site facilities, yards, storage/disposal sites, etc.</p> <p>Materials storage place, social facilities and parking space for machines and equipment should be located:</p> <ul style="list-style-type: none"> a) in the areas with the lowest natural values, taking into account the principle of minimizing land take and transformation of its area and the obligation of land reclamation after completion of works, b) outside the immediate vicinity of flood waters of the river and outside the areas where water may be contaminated, c) outside the embanked area, d) at a distance of not less than 100 m from existing watercourses, water reservoirs and wetlands; e) in the areas ensuring no impact of noise on acoustically protected areas; f) all construction site facilities shall be located beyond valuable habitats, outside the areas of medium and high ornithological value and outside habitats of amphibians and beavers; <p>The locations intended for site facilities and the abovementioned components of the construction site should be agreed with a team of environmental experts (including a phytosociologist and zoologists) and presented for the Engineer's approval together with establishments.</p>	3A.1 Contract area with neighborhood	The Contractor's Team/Site Manager/The Environmental Team	During the Contract implementation period (including, inter alia, prior to the commencement of works and during performance of the works) - on an ongoing basis, not less than once per week	Review of the Contractor's documentation on site facilities management. Visual monitoring, photo documentation. Control of the participation of and arrangements made by required experts.
				The Engineer's Team	During the Contract implementation period (including, inter alia, prior to the commencement of works and during performance of the works) - on an ongoing basis, not less than once per month	Visual monitoring, photo documentation. Review of the documentation submitted by the Contractor to the Engineer. Control of the participation of required experts.
15	Earth surface protection, habitat protection, protection of the soil and water environment	<p>Conditions for location of site facilities, yards, storage yards, etc.</p> <p>It is allowed to locate site facilities for the left backwater embankment of the River Dlubnia between a part of Bardosa Street and the existing embankment.</p>	Works Contract 3A.1/1 – implementation area	The Contractor's Team/Site Manager/The Environmental Team	During the Works Contract 3A.1/1 implementation period (including, inter alia, prior to the commencement of works and during performance of the works) - on an ongoing basis, not less than once per week	Review of the Contractor's documentation on site facilities management. Visual monitoring, photo documentation. Control of the participation of and arrangements made by required experts.
				The Engineer's Team	During the Works Contract 3A.1/1 implementation period (including, inter alia, prior to the commencement of works and during performance of the works) - on an ongoing basis, not less than once per month	Visual monitoring, photo documentation. Review of the documentation submitted by the Contractor to the Engineer.

No.	Issue	Mitigation Measure	Place of monitoring	Entity responsible	Timing and frequency of monitoring	Manner of monitoring activities
16	Earth surface protection, habitat protection, protection of the soil and water environment	<p>Conditions for location of site facilities, yards, storage yards, etc.</p> <p>It is allowed to locate equipment bases and material storage sites in the following places:</p> <p>- Section 1: left embankment of the Vistula River at km 0+950 – 1+000, right embankment of the Dłubnia River at km 0+350 – 0+450, left embankment of the Dłubnia River at 0+600 – 0+700;</p> <p>- Section 2: left embankment of the Vistula River at km 0+000 – 0+250 and 2+600 – 2+780;</p>	Works Contract 3A.1/1 – implementation area	The Contractor's Team/Site Manager/The Environmental Team	During the Works Contract 3A.1/1 implementation period (including, inter alia, prior to the commencement of works and during performance of the works) - on an ongoing basis, not less than once per week	<p>Review of the Contractor's documentation on site facilities management.</p> <p>Visual monitoring, photo documentation.</p> <p>Control of the participation of and arrangements made by required experts.</p>
				The Engineer's Team	During the Works Contract 3A.1/1 implementation period (including, inter alia, prior to the commencement of works and during performance of the works) - on an ongoing basis, not less than once per month	<p>Visual monitoring, photo documentation.</p> <p>Review of the documentation submitted by the Contractor to the Engineer.</p>
17	Earth surface protection, habitat protection, protection of the soil and water environment	<p>Conditions for location of site facilities, yards, storage yards, etc.</p> <p>It is allowed to locate equipment bases and material storage sites for Section 3 in the following places:</p> <p>- right embankment of the Vistula River at km 0+950 – 1+070, km 3+690 – 3+795, 5+900 – 6+300, 7+900 – 8+150, 8+960 – 9+060.</p>	Works Contract 3A.1/2 – implementation area	The Contractor's Team/Site Manager/The Environmental Team	During the Works Contract 3A.1/2 implementation period (including, inter alia, prior to the commencement of works and during performance of the works) - on an ongoing basis, not less than once per week	<p>Review of the Contractor's documentation on site facilities management.</p> <p>Visual monitoring, photo documentation.</p> <p>Control of the participation of and arrangements made by required experts.</p>
				The Engineer's Team	During the Works Contract 3A.1/2 implementation period (including, inter alia, prior to the commencement of works and during performance of the works) - on an ongoing basis, not less than once per month	<p>Visual monitoring, photo documentation.</p> <p>Review of the documentation submitted by the Contractor to the Engineer.</p>
18	Protection of animate nature, water protection, earth surface protection	<p>Conditions for the location of service roads</p> <p>Service roads should be located:</p> <p>a) at setting the roads out beyond the areas of the highest environmental value one shall observe a rule of acquiring the minimum required area of the aforementioned land;</p> <p>b) it is banned to set technological roads across or in a close vicinity of the habitats: Alluvial forests (91E0, 91F0). In case of the works connected with the rehabilitation of the embankment in the vicinity of the habitats, any works shall be performed only within the scope of its redevelopment and with precautions taken to prevent damaging adjacent Alluvial trees.</p> <p>c) It is banned to set technological roads in the area of Mesophile grassland habitat (code 6510);</p> <p>d) at the maximum extent possible outside the embanked area;</p> <p>e) at the maximum possible distance from existing watercourses, water reservoirs and wetlands;</p> <p>f) new transport roads should not be set within 1 m off of tree trunks and shrubs;</p> <p>g) in the first place on existing roads, including existing roads linear to and on flood banks.</p> <p>The locations intended for service roads should be agreed with a team of environmental experts (including a phytosociologist) and presented for the Engineer's approval together with expert agreements.</p>	3A.1 Contract area	The Contractor's Team/Site Manager/The Environmental Team	During the Contract implementation period (including, inter alia, prior to the commencement of works and during performance of the works) - on an ongoing basis, not less than once per week	<p>Review of the Contractor's documentation on site facilities management.</p> <p>Visual monitoring, photo documentation.</p> <p>Control of the participation of and arrangements made by required experts.</p>
				The Engineer's Team	During the Contract implementation period (including, inter alia, prior to the commencement of works and during performance of the works) - on an ongoing basis, not less than once per month	<p>Visual monitoring, photo documentation.</p> <p>Review of the documentation submitted by the Contractor to the Engineer.</p> <p>Control of the participation of required experts.</p>
19	Protection of animate nature, water protection, earth surface protection	<p>Conditions for location of technological roads</p> <p>Due to the identified stand of hermit beetle within the left embankment of the Dłubnia river at km 0+000 – 0+185, the technological road shall be set behind the embankment.</p>	Works Contract 3A.1/1 – implementation area	The Contractor's Team/Site Manager/The Environmental Team	During the Works Contract 3A.1/1 implementation period (including, inter alia, prior to the commencement of works and during performance of the works) - on an ongoing basis, not less than once per week	<p>Review of the Contractor's documentation on site facilities management.</p> <p>Visual monitoring, photo documentation.</p> <p>Control of the participation of and arrangements made by required experts.</p>

No.	Issue	Mitigation Measure	Place of monitoring	Entity responsible	Timing and frequency of monitoring	Manner of monitoring activities
				The Engineer's Team	During the Works Contract 3A.1/1 implementation period (including, inter alia, prior to the commencement of works and during performance of the works) - on an ongoing basis, not less than once per month	Visual monitoring, photo documentation. Review of the documentation submitted by the Contractor to the Engineer. Control of the participation of required experts.
20	Earth surface protection, Water and soil protection	<p>Economical use of the site and limitation of works within the embanked area</p> <p>In the whole Contract area, economical use of the site should be ensured as well as a minimum transformation of its area.</p> <p>All works related to the implementation of the Contract should be carried out to the maximum extent possible outside the areas of the existing embanked area.</p>	3A.1 Contract area	The Contractor's Team/Site Manager	During the Contract implementation period - on an ongoing basis, not less than once per week	Visual monitoring, photo documentation.
				The Engineer's Team	During the Contract implementation period - on an ongoing basis, not less than once per month	Visual monitoring, photo documentation. Review of the documentation submitted by the Contractor to the Engineer.
21	Earth surface protection, water and soil protection	<p>Economical use of the site - materials storage place</p> <p>When outlining storage spaces, their number and area should be limited to the extent necessary for the current works or activities.</p> <p>In the case the areas intended for storage of materials become empty, such areas should be reused as far as possible for further storage of materials.</p>	3A.1 Contract area	The Contractor's Team/Site Manager	During the Contract implementation period - on an ongoing basis, not less than once per week	Visual monitoring, photo documentation.
				The Engineer's Team	During the Contract implementation period - on an ongoing basis, not less than once per month	Visual monitoring, photo documentation. Review of the documentation submitted by the Contractor to the Engineer.
22	Land acquisition for permanent acquisition	<p>Buy-outs and compensation</p> <p>Buy-outs and compensation as well as assistance for the Contract Affected Persons (pursuant to Land Acquisition and Resettlement Action Plan).</p>	3A.1 Contract area	PIO/Contractor's Team /Engineer	During the Contract implementation period (inter alia prior to the commencement of works - until the condition is met) - on an ongoing basis, not less than once per month	Review of the Contractor's documentation on buy-outs and compensation.
				The Engineer's Team	During the Contract implementation period (inter alia prior to the commencement of works - until the condition is met) - on an ongoing basis, not less than once per month	Review of the documentation submitted by the Contractor to the Engineer.
23	Land acquisition for temporary acquisition	<p>Payment of compensation</p> <p>Payment of compensation by the Contractor for temporary acquisition prior to the commencement of works (in accordance with the Land Acquisition and Resettlement Action Plan).</p>	3A.1 Contract area	PIU/Contractor's Team /Engineer	During the Contract implementation period (inter alia prior to the commencement of works - until the condition is met) - on an ongoing basis, not less than once per month	Review of the Contractor's documentation on buy-outs and compensation.
				The Engineer's Team	During the Contract implementation period (inter alia prior to the commencement of works - until the condition is met) - on an ongoing basis, not less than once per month	Review of the documentation submitted by the Contractor to the Engineer.

No.	Issue	Mitigation Measure	Place of monitoring	Entity responsible	Timing and frequency of monitoring	Manner of monitoring activities
D. REQUIREMENTS ON THE QUALITY AND MANAGEMENT OF SOILS						
24	Water and soil protection	<p>Management of the soils from within the construction site</p> <p>Soils located on the construction site (including earth masses) should first be used on the construction site. The remaining excess of soil should be managed in accordance with the design documentation. The procedure for dealing with soil constituting waste should be presented in the Waste Management Plan prepared by the Contractor and submitted to the Engineer for approval prior to the commencement of works (in accordance with item 84 – Preparation of a Waste Management Plan (WMP)).</p>	3A.1 Contract area	The Contractor's Team/Site Manager	During the Contract implementation period - on an ongoing basis, not less than once per week	Visual monitoring, photo documentation. Assessment of progress of work on this document and its compliance with the EMP requirements.
				The Engineer's Team	During the Contract implementation period - on an ongoing basis, not less than once per month	Visual monitoring, photo documentation. Review of the documentation submitted by the Contractor to the Engineer.
25	Water and soil protection, Protection of animate nature	<p>Soil extraction</p> <p>It is banned to quarry natural materials in the area of Mesophile grassland habitat (code 6510). On the stage of obtaining the ED and decisions modifying the ED, extraction of soil has been initially determined from the following deposits:</p> <ul style="list-style-type: none"> - deposit no. 1 - the Vistula river chainage about km 82+500, right bank, embanked area. Only a small part of this deposit can be used to extract non-cohesive ground above the groundwater water-table. The deposit can be used for embankment at Section 3; - deposit no. 4 - the Vistula river chainage about km 88+900 left bank, embanked area. Expected extraction up to 3 m below ground level. The deposit can be used for embankment at Section 1; - deposit no. 6 - the Vistula river chainage about km 93+700 left bank, embanked area. Expected extraction up to 3 m both cohesive and non-cohesive ground. The deposit can be used for embankment at Section 2; - deposit no. 7 – Brzegi – acquisition of material from existing gravel pit. The ground will be purchased from Krakowski Zakład Eksploatacji Kruszyw [Aggregate Extraction Plant of Cracow] and transported to the place of embedding. The majority of material to be embedded will be derived from the Brzegi deposit. The deposit can be used for all of the sections. <p>According to the extraction plan for deposits no. 1, 4, and 6, the contractor is be obliged – after completing the works – to shape slopes at edges of the extraction pit – inclination of 1:2.5, including top-soiling and sowing.</p>	3A.1 Contract area	The Contractor's Team/Site Manager/The Environmental Team	During the Contract implementation period - on an ongoing basis, not less than once per week	Control of extraction sites and their compliance with the EMP requirements. Visual monitoring, photo documentation. Control of the participation of and arrangements made by required experts
				The Engineer's Team	During the Contract implementation period - on an ongoing basis, not less than once per month	Visual monitoring, photo documentation. Review of the documentation submitted by the Contractor to the Engineer. Control of the participation of required experts.
E. REQUIREMENTS ON PROCEEDING WITH TOPSOIL/MINERAL SOIL						
26	Soil protection, Protection of animate nature	<p>Collecting the top layer of soil</p> <p>In order to protect the layer of topsoil from the Contract area:</p> <ul style="list-style-type: none"> a) prior to the commencement of earthworks in a given area, it should be inspected for the presence of protected species; b) prior to the commencement of construction works in individual parts of the Contract area, a layer of fertile soil (i.e. topsoil) should be removed, with a thickness of about 0.15 m (this condition applies to all locations in the Contract area where the existing topsoil layer could be degraded in relation to conducting the works, traffic and operating the vehicles, machinery and equipment, storing the materials, etc.); c) The earthworks shall be carried out under the supervision of a naturalist. 	3A.1 Contract area	The Contractor's Team/Site Manager/The Environmental Team	During the Contract implementation period (including, inter alia, prior to the commencement of works and during performance of the works) - on an ongoing basis, not less than once per week	Review of the documentation on the site facilities management and proceeding with the topsoil layer. Visual monitoring, photo documentation. Control of the participation of and arrangements made by required experts.
				The Engineer's Team	During the Contract implementation period (including, inter alia, prior to the commencement of works and during performance of the works) - on an ongoing basis, not less than once per month	Visual monitoring, photo documentation. Review of the documentation submitted by the Contractor to the Engineer. Control of the participation of required experts.

No.	Issue	Mitigation Measure	Place of monitoring	Entity responsible	Timing and frequency of monitoring	Manner of monitoring activities
27	Soil protection, Protection of animate nature	<p>Storing of topsoil</p> <p>The collected top-soil shall be stored as follows:</p> <p>a) The removed layer of top-soil shall be stored in piles beyond the area of earthworks in a way allowing for its re-use for the purpose of land reinstatement.</p> <p>b) A precise location of top-soil piles shall be priorly agreed with an expert of the Environmental Team to avoid degradation of natural habitats and stands of protected species, and affecting the health of trees and shrubs adversely, by storage of top-soil.</p> <p>c) Stored top-soil piles shall be protected against pollutions, passing-over, condensation, storage of construction materials, etc.</p> <p>d) Stored top-soil piles shall be kept – until their re-use for the final shaping of the embankment and adjacent land – in proper humidity in a way allowing for re-embedding – it shall be systematically sprinkled, with frequency depending on weather conditions.</p>	3A.1 Contract area	The Contractor's Team/Site Manager/The Environmental Team	During the Contract implementation period (including, inter alia during performance of the works) - on an ongoing basis, not less than once per week	Review of the documentation on the site facilities management and proceeding with the topsoil layer. Visual monitoring, photo documentation. Control of the participation of and arrangements made by required experts.
				The Engineer's Team	During the Contract implementation period (including, inter alia during performance of the works) - on an ongoing basis, not less than once per month	Visual monitoring, photo documentation. Review of the documentation submitted by the Contractor to the Engineer. Control of the participation of required experts.
28	Soil protection, Protection of animate nature	<p>Use of topsoil</p> <p>Upon the completion of construction works the topsoil should be used to restore the fertile soil layer at a further construction phase.</p>	3A.1 Contract area	The Contractor's Team/Site Manager/The Environmental Team	During the Contract implementation period (including, inter alia during performance of the works) - on an ongoing basis, not less than once per week	Review of the documentation on the site facilities management and proceeding with the topsoil layer. Visual monitoring, photo documentation. Control of the participation of and arrangements made by required experts.
				The Engineer's Team	During the Contract implementation period (including, inter alia during performance of the works) - on an ongoing basis, not less than once per month	Visual monitoring, photo documentation. Review of the documentation submitted by the Contractor to the Engineer. Control of the participation of required experts.
29	Earth surface protection, soil protection.	<p>Collecting the mineral soil layer</p> <p>After removing the topsoil, the uncovered slopes of the existing embankments shall be profiled using so-called benching technique that involves removal of a 0.5 m thick layer of ground, on average.</p>	3A.1 Contract area	The Contractor's Team/Site Manager	During the Contract implementation period (including, inter alia during performance of the works) - on an ongoing basis, not less than once per week	Review of the documentation on the site facilities management and proceeding with the topsoil layer. Visual monitoring, photo documentation..
				The Engineer's Team	During the Contract implementation period (including, inter alia during performance of the works) - on an ongoing basis, not less than once per month	Visual monitoring, photo documentation. Review of the documentation submitted by the Contractor to the Engineer.
30	Soil protection, Protection of animate nature	<p>Storing the mineral soil</p> <p>The collected mineral soil shall be stored as follows:</p> <p>a) The removed layer of mineral soil shall be stored in piles beyond the area of earthworks;</p> <p>b) A precise location of mineral soil piles shall be priorly agreed with an expert of the Environmental Team (including phytosociologist and zoologist) to avoid degradation of natural habitats and stands of protected species, and affecting the health of trees and shrubs adversely, by storage of mineral soil;</p>	3A.1 Contract area	The Contractor's Team/Site Manager/The Environmental Team	During the Contract implementation period (including, inter alia during performance of the works) - on an ongoing basis, not less than once per week	Review of the documentation on the site facilities management and proceeding with the topsoil layer. Visual monitoring, photo documentation. Control of the participation of and arrangements made by required experts.

No.	Issue	Mitigation Measure	Place of monitoring	Entity responsible	Timing and frequency of monitoring	Manner of monitoring activities
		<p>c) Stored soil piles shall be protected against pollutions, passing-over, condensation, storage of construction materials, etc.;</p> <p>d) Stored soil piles shall be kept – until their re-use for the final shaping of the embankment and adjacent land – in proper humidity in a way allowing for re-embedding – it shall be systematically sprinkled, with frequency depending on weather conditions.</p>		The Engineer's Team	During the Contract implementation period (including, inter alia during performance of the works) - on an ongoing basis, not less than once per month	<p>Visual monitoring, photo documentation.</p> <p>Review of the documentation submitted by the Contractor to the Engineer.</p> <p>Control of the participation of required experts.</p>
31	Earth surface protection, soil protection.	<p>Use of mineral soil</p> <p>The stored mineral soil should be used at later stages of construction.</p>	3A.1 Contract area	The Contractor's Team/Site Manager	During the Contract implementation period (including, inter alia during performance of the works) - on an ongoing basis, not less than once per week	<p>Review of the documentation on the site facilities management and proceeding with the topsoil layer.</p> <p>Visual monitoring, photo documentation.</p>
				The Engineer's Team	During the Contract implementation period (including, inter alia during performance of the works) - on an ongoing basis, not less than once per month	<p>Visual monitoring, photo documentation.</p> <p>Review of the documentation submitted by the Contractor to the Engineer.</p>
F. REQUIREMENTS ON REMOVING (FELLING) TREES AND SHRUBS						
32	Protection of animate nature	<p>Permissible date of removing (felling) trees and shrubs</p> <p>Removal (felling) of trees and shrubs should be scheduled for the period from the beginning of October to the end of February.</p> <p>In case it would be necessary to perform felling within the hatching period, the works may be performed provided that an ornithological inspection would be done (inspection by an expert ornithologist), which would verify that the birds' nests or breeding sites will not be destroyed due to the removal (felling).</p>	3A.1/2 Contract area	The Contractor's Team/Site Manager/The Environmental Team - ornithologist	During the Contract implementation period - on an ongoing basis, not less than once per week	<p>Review of work schedules.</p> <p>Visual monitoring, photo documentation.</p> <p>Control of the participation of and arrangements made by required experts.</p>
				The Engineer's Team	During the Contract implementation period - on an ongoing basis, not less than once per month	<p>Visual monitoring, photo documentation.</p> <p>Review of the documentation submitted by the Contractor to the Engineer.</p> <p>Control of the participation of required experts.</p>
33	Protection of animate nature	<p>Permissible date of removing (felling) trees and shrubs</p> <p>According to the permit no. 988/17 dated October 31, 2017, removal of 3 trees that grow in the embankment body in the area of Fort 50a Lasówka shall be performed beyond the hatching period from October 16 till the end of February.</p>	Works Contract 3A.1/2 – implementation area	The Contractor's Team/Site Manager/The Environmental Team - ornithologist	During the Works Contract 3A.1/2 implementation period - on an ongoing basis, not less than once per week	<p>Review of work schedules.</p> <p>Visual monitoring, photo documentation.</p> <p>Control of the participation of and arrangements made by required experts.</p>
				The Engineer's Team	During the Works Contract 3A.1/2 implementation period - on an ongoing basis, not less than once per month	<p>Visual monitoring, photo documentation.</p> <p>Review of the documentation submitted by the Contractor to the Engineer.</p> <p>Control of the participation of required experts.</p>

No.	Issue	Mitigation Measure	Place of monitoring	Entity responsible	Timing and frequency of monitoring	Manner of monitoring activities
34	Protection of animate nature	<p>Environmental supervision before and during the removal (felling) of trees with diameter over 40 cm</p> <p>In the case of removing trees with diameter over 40 cm, the following rules apply:</p> <p>a) removal (felling) of trees with diameter above 40 cm should be preceded by the inspection of these trees for the presence of protected species of invertebrates and bats, carried out by an expert entomologist and by an expert chiropterologist, in not more than 1 week before felling of the tree;</p> <p>b) in case protected species of invertebrates and/or bats in trees planned for removal (felling) are detected, the experts will schedule acceptable deadlines and ways to carry out felling, as well as determine the methods of dealing with the wood inhabited by protected animal species. The deadlines for removal (felling) as scheduled by the experts can not violate the conditions specified in items 32, 33 - Permissible date of removal (felling) of trees and shrubs. For trees in which bats have been found, the optimal date for felling is the period from September 1 to October 31;</p> <p>c) removal (felling) of trees with diameter above 40 cm will be carried out under the direct supervision of the abovementioned expert entomologist and expert chiropterologist;</p> <p>d) in case representatives of protected invertebrate species and/or bats are found in the trees subject to removal (felling), the experts shall determine the treatment methods for the wood inhabited by protected animal species and the way to reduce the death rate of identified representatives of protected animals;</p> <p>e) relocation of protected species of invertebrates and/or bats from trees planned for removal (felling) and/or from trees subject to removal (felling) can only take place under the direct supervision of the above mentioned expert entomologist and expert chiropterologist;</p> <p>f) in case protected species of invertebrates and/or bats in trees planned for removal (felling) or trees subject to removal (felling) are detected, an administrative decision required by law should be obtained to allow for exceptions to the prohibitions applicable to protected animal species (if required in a given case).</p>	3A.1 Contract area	The Contractor's Team/Site Manager/The Environmental Team	During the Contract implementation period - on an ongoing basis, not less than once per week	Visual monitoring, photo documentation. Control of the participation of and arrangements made by required experts.
				The Engineer's Team	During the Contract implementation period - on an ongoing basis, not less than once per month	Visual monitoring, photo documentation. Review of the documentation submitted by the Contractor to the Engineer. Control of the participation of required experts.
G. REQUIREMENTS ON PROTECTING TREES AND SHRUBS NOT INTENDED FOR REMOVAL (FELLING)						
35	Protection of animate nature	<p>Protection of tree trunks not intended for removal (felling)</p> <p>Prior to the commencement of construction works, tree trunks exposed to mechanical damage should be wrapped in wood at least to the height of 1.5 m from the ground level (the bottom part of the boards should be supported on the ground). A flexible material (e.g. thick straw mats) should be placed between the cloaking and the tree trunk surface, in order to secure the trunk against scratching.</p> <p>The wooden cloaking should be attached to the trunk (e.g. with wire bands or steel tape) in a way that does not harm the tree.</p> <p>During the Contract implementation period, the condition of tree trunks exposed to damage should be monitored on an ongoing basis and the protection should be maintained in a proper condition.</p> <p>After the completion of works trunk protection should be removed.</p> <p>Works near root systems and trunks should be done by hand. It is not allowed to leave the root blocks uncovered for a long time to prevent them from drying out. In case of damaging a tree one shall immediately implement necessary curing measures, which would limit the effects of the damage. Those works shall be performed under supervision of a naturalist.</p>	3A.1 Contract area	The Contractor's Team/Site Manager/The Environmental Team	During the Contract implementation period (including, inter alia, prior to the commencement of works and during performance of the works) - on an ongoing basis, not less than once per week	Visual monitoring, photo documentation.
				The Engineer's Team	During the Contract implementation period (including, inter alia, prior to the commencement of works and during performance of the works) - on an ongoing basis, not less than once per month	Visual monitoring, photo documentation. Review of the documentation submitted by the Contractor to the Engineer.
36	Protection of animate nature	<p>Protection of tree trunks not intended for removal (felling)</p> <p>During the works in the area of potential hermit beetle stands in the willows (left embankment of the Dłubnia river km 0+000 – 0+185) the trees shall be protected with a temporary barrier from the temporary road's side, and the trunks shall be wrapped with straw mats (the trees shall be protected against burying or damaging by using the shields made of straw mats and wooden fences).</p>	Works Contract 3A.1/1 – implementation area	The Contractor's Team/Site Manager/The Environmental Team – dendrologist	During the Works Contract 3A.1/1 implementation period (including, inter alia, prior to the commencement of works and during performance of the works) - on an ongoing basis, not less than once per week	Visual monitoring, photo documentation.
				The Engineer's Team	During the Works Contract 3A.1/1 implementation period (including, inter alia, prior to the commencement of works and during performance of the works) - on an ongoing basis, not less than once per month	Visual monitoring, photo documentation. Review of the documentation submitted by the Contractor to the Engineer.

No.	Issue	Mitigation Measure	Place of monitoring	Entity responsible	Timing and frequency of monitoring	Manner of monitoring activities
37	Protection of animate nature	<p>Protection of the areas under crowns of trees and shrubs</p> <p>Construction works should be carried out in a way that does not harm trees and shrubs that have not been intended for removal (felling).</p> <p>At a distance of less than 1 m from the edge of the protrusion of the crown of trees and shrubs not intended for removal (felling), it is forbidden to:</p> <ul style="list-style-type: none"> a) outline roads and service yards, parking spaces and other elements that may influence the increase in tamping and changes in soil aeration; b) allow for traffic, stopover and parking of vehicles, machines and equipment; c) store earth masses (including topsoil) and construction materials (in particular bulk materials); d) smoke or use fire, use devices or machines generating high temperature, which may cause drying of tree crowns. <p>The storage of cement, aggregates, oils, fuels and binders is prohibited at a distance of less than 10 m from trunks of trees and shrubs not intended for removal.</p> <p>The method of forming and compacting for the embankments in the vicinity of trees and shrubs not intended for removal shall be agreed with an expert dendrologist, and the results of the findings should be submitted to the Engineer for approval.</p>	3A.1 Contract area	The Contractor's Team/Site Manager/The Environmental Team – dendrologist	During the Contract implementation period (including, inter alia, prior to the commencement of works and during performance of the works) - on an ongoing basis, not less than once per week	<p>Review of the documentation on the site facilities management.</p> <p>Visual monitoring, photo documentation.</p> <p>Control of the participation of and arrangements made by required experts.</p>
				The Engineer's Team	During the Contract implementation period (including, inter alia, prior to the commencement of works and during performance of the works) - on an ongoing basis, not less than once per month	<p>Visual monitoring, photo documentation.</p> <p>Review of the documentation submitted by the Contractor to the Engineer.</p> <p>Control of the participation of required experts.</p>
38	Protection of animate nature	<p>Preventive cutting of branches of trees exposed to damage</p> <p>In the case of exposure of tree boughs and branches to mechanical damage by working or moving vehicles, machines and equipment, preventive cutting of tree branches exposed to damage should be carried out.</p> <p>These pruning cuts - under the supervision of an expert dendrologist - cannot disturb the natural structure of trees (they cannot cover more than 1/3 of the green mass), they should ensure stability and statics of trees (pruning must be even on each side of the crown).</p>	3A.1 Contract area	The Contractor's Team/Site Manager/The Environmental Team – dendrologist	During the Contract implementation period - on an ongoing basis, not less than once per week	<p>Visual monitoring, photo documentation.</p> <p>Control of the participation of and arrangements made by required experts.</p>
				The Engineer's Team	During the Contract implementation period - on an ongoing basis, not less than once per month	<p>Visual monitoring, photo documentation.</p> <p>Review of the documentation submitted by the Contractor to the Engineer.</p> <p>Control of the participation of required experts.</p>
39	Protection of animate nature	<p>Carrying out works within root blocks of trees and shrubs</p> <p>Works in the vicinity of root blocks of trees and shrubs not intended for removal (felling) should only be carried out manually, subject to the following conditions:</p> <ul style="list-style-type: none"> a) skeletal roots (with a diameter of over 4 cm) should not be cut off; b) excavations should be carried out no closer than 2 m from the trunk; c) the time of root exposure to drying should be shortened to the minimum (while maintaining the conditions referred to in item 40 - Securing of exposed roots of trees and shrubs); d) the suitable period for carrying out the work in question is from October to April, e) it is prohibited to store any materials, soil or construction waste near tree trunks. 	3A.1 Contract area	The Contractor's Team/Site Manager/The Environmental Team – dendrologist	During the Contract implementation period - on an ongoing basis, not less than once per week	Visual monitoring, photo documentation.
				The Engineer's Team	During the Contract implementation period - on an ongoing basis, not less than once per month	<p>Visual monitoring, photo documentation.</p> <p>Review of the documentation submitted by the Contractor to the Engineer.</p>
40	Protection of animate nature	<p>Securing of exposed roots of trees and shrubs</p> <p>Exposed roots of trees and shrubs not intended for removal (felling) should be covered with straw or jute mats. At positive temperatures, these mats should be abundantly moistened with water (to prevent drying of the roots), while at negative temperatures these mats should be dry (to avoid freezing of the roots).</p>	3A.1 Contract area	The Contractor's Team/Site Manager/The Environmental Team – dendrologist	During the Contract implementation period - on an ongoing basis, not less than once per week	Visual monitoring, photo documentation.
				The Engineer's Team	During the Contract implementation period - on an ongoing basis, not less than once per month	<p>Visual monitoring, photo documentation.</p> <p>Review of the documentation submitted by the Contractor to the Engineer.</p>

No.	Issue	Mitigation Measure	Place of monitoring	Entity responsible	Timing and frequency of monitoring	Manner of monitoring activities
41	Protection of animate nature	<p>Securing of damaged trees and shrubs</p> <p>In case aboveground parts of trees and shrubs not intended for removal have been damaged, the necessary care measures should be carried out immediately, relevant for the place and type of damage.</p> <p>In case of root damage, the ends should be trimmed off and the roots secured with a fungicide.</p> <p>The abovementioned activities should be performed in consultation with the team of environmental experts (expert dendrologist), and after they have been completed, the Engineer should be provided with an opinion on the aforementioned team regarding the assessment of the activities.</p>	3A.1 Contract area	The Contractor's Team/Site Manager/The Environmental Team – dendrology	During the Contract implementation period - on an ongoing basis, not less than once per week	Visual monitoring, photo documentation. Control of the participation of and arrangements/opinions made by required experts.
				The Engineer's Team	During the Contract implementation period - on an ongoing basis, not less than once per month	Visual monitoring, photo documentation. Review of the documentation submitted by the Contractor to the Engineer. Control of the participation of required experts.
H. REQUIREMENTS ON SECURING PROTECTED NATURAL RESOURCES						
42	Protection of animate nature	<p>One-time nature inventory of the area of works before the commencement of works</p> <p>Prior to the commencement of works, a one-time nature inventory of the Contract area, performed by a team of environmental experts, referred to in item 104 - Providing a team of environmental experts.</p> <p>The purpose of the inventory is to determine the current distribution of natural habitats and habitats and sites of protected species of flora and fauna, including ongoing revision of information on the subject as included in the WCIS (drawn up in 2016, together with later supplements – for Sections 1, 2, and 3, and drawn up in 2017 for construction of the left embankment of the Dłubnia River) and nature inventories of the area.</p> <p>If the presence of natural habitats and habitats or protected sites of plant and animal species in the Contract area has been confirmed, it is necessary to perform follows:</p> <ul style="list-style-type: none"> a) in the case of natural habitats - further actions should be agreed with a competent environmental team's expert, and the results of the findings should be submitted to the Engineer for approval; b) in the case of habitats or sites of protected species - perform the actions referred to in item 53 - Obtaining a decision allowing for exceptions to the principles of species protection of plants, fungi and animals for the habitats and sites of protected species indicated in the WCIS and in item 54 – Obtaining a decision allowing for exceptions to the principles of species protection of plants, fungi and animals for newly detected habitats and sites of protected species; e.g. in case of a habitat of beaver one shall obtain from the RDOŚ in Cracow a departure from a ban related to disturbance and scaring of e.g. beavers during the performance. Beavers may inhabit the embanked area and sites grown with trees and shrubs in vicinity of the embankments c) identified representatives of protected species (e.g.: amphibians, reptiles, birds) should be relocated outside the Contract site to a place with similar habitat conditions, sufficiently far away from the Contract site, so that animals cannot return to this area until the work has been completed. All work will require an appropriate administrative decision in accordance with the procedure indicated in item - b) above. (before relocating amphibians, one must obtain the permit of the owner or of the administrator of the reservoir, watercourse or terrain to which they will be transferred to); d) potential works connected with removal of amphibians' breeding habitats shall be performed only from the beginning of November till the end of February. 	3A.1 Contract area	The Contractor's Team/Site Manager/The Environmental Team	During the Contract implementation period (including, inter alia, prior to the commencement of works and during performance of the works) - on an ongoing basis, not less than once per week	Visual monitoring, photo documentation. Control of the participation of and arrangements made by required experts. Control of the progress of obtaining and submitting of required administrative decisions.
				The Engineer's Team	During the Contract implementation period (including, inter alia, prior to the commencement of works and during performance of the works) - on an ongoing basis, not less than once per month	Visual monitoring, photo documentation. Review of the documentation submitted by the Contractor to the Engineer. Control of the participation of required experts.
43	Protection of animate nature	<p>Valuable nature habitats:</p> <ul style="list-style-type: none"> a) It is banned to introduce any measures aimed to drain the area of the Vistula oxbow lakes, especially the oxbow lake near Brzegi. Draining works could impact the habitats of variable moisture content or wet formed in this area adversely. 	Works Contract 3A.1/1 implementation area	The Contractor's Team/Site Manager/The Environmental Team	During the Works Contract 3A.1/1 implementation period - on an ongoing basis, not less than once per week	Visual monitoring, photo documentation. Control of the participation of and arrangements made by required experts.

No.	Issue	Mitigation Measure	Place of monitoring	Entity responsible	Timing and frequency of monitoring	Manner of monitoring activities
		<p>b) In case of the Alluvial forest at km 0+250 – 0+350 (Section 2) that grows on both sides of the embankment, any works shall be performed only within the scope of its redevelopment. It is banned to set technological roads or locate construction site's facilities in the area of the mentioned habitat. Moreover, all the works shall be performed using best effort to prevent damaging of adjacent trees.</p>		The Engineer's Team	During the Works Contract 3A.1/1 implementation period - on an ongoing basis, not less than once per month	<p>Visual monitoring, photo documentation.</p> <p>Review of the documentation submitted by the Contractor to the Engineer.</p> <p>Control of the participation of required experts.</p>
44	Protection of animate nature	<p>Valuable nature habitats:</p> <p>a) No works shall be performed in the areas of the valuable habitats of Alluvial forests (91E0, 91F0). It is recommended to take precautions when planning works in this area to prevent damaging of the habitats;</p> <p>b) It is banned to perform any works in the area of Mesophile grassland habitat (code 6510).</p>	3A.1 Contract area	The Contractor's Team/Site Manager/The Environmental Team - phytosociologist	During the Contract implementation period - on an ongoing basis, not less than once per week	<p>Visual monitoring, photo documentation.</p> <p>Control of the participation of and arrangements made by required experts.</p>
				The Engineer's Team	During the Contract implementation period - on an ongoing basis, not less than once per month	<p>Visual monitoring, photo documentation.</p> <p>Review of the documentation submitted by the Contractor to the Engineer.</p> <p>Control of the participation of required experts.</p>
45	Protection of animate nature	<p>Limiting the time of the Contract completion</p> <p>The Contractor should ensure such organization of works as to shorten the duration of the Contract as much as possible and in this way minimize the adverse impact of works on animals living in the area of the Contract and in its neighborhood.</p>	3A.1 Contract area	The Contractor's Team/Site Manager	During the Contract implementation period (including, inter alia, prior to the commencement of works and during performance of the works) - on an ongoing basis, not less than once per week	<p>Review of work schedules.</p> <p>Visual monitoring, photo documentation.</p>
				The Engineer's Team	During the Contract implementation period (including, inter alia, prior to the commencement of works and during performance of the works) - on an ongoing basis, not less than once per month	<p>Visual monitoring, photo documentation.</p> <p>Review of the documentation submitted by the Contractor to the Engineer.</p>
46	Protection of animate nature	<p>Securing the Contract area against small animals entering the site</p> <p>a) Works should be performed in such a way as to avoid killing animals;</p> <p>b) Works shall be performed in a way avoiding provision of water pits;</p> <p>c) Any work providing risk for amphibians – performed in vicinity of amphibians' breeding habitats currently identified by the environmental supervision – may be done only at application of temporary herpetological fences protecting the works site against the occurrence of amphibians;</p> <p>d) If amphibians are found within the construction site, they should be caught and moved to a replacement habitat, sufficiently far away from the site. The list of such habitats shall be attached to the application for derogation from prohibited activities against the protected species;</p> <p>e) During the migration amphibians gathering at the fencing shall be caught and transferred to the area beyond the site, i.e. to a side opposite to the one, where amphibians were identified. One shall allow the animal to move in the selected direction;</p> <p>f) After completing the works the temporary fencing shall be removed;</p> <p>g) In case of performing the works in locations, where amphibians are present from March to October, adult specimens of amphibians, their eggs and larvae shall be caught and moved based upon the decision of RDOŚ in Cracow on derogation from prohibited activities against the protected species of amphibians. Potential filling of habitats in shall be done in autumn and winter (November – February).</p>	3A.1 Contract area	The Contractor's Team/Site Manager/The Environmental Team – herpetologist and theriologist	<p>During the Contract implementation period - on an ongoing basis, not less than once per week.</p> <p>During migration of amphibians inspect the fencing 2 times a day (in the morning and in the evening).</p>	<p>Visual monitoring, photo documentation.</p> <p>Control of the participation of and arrangements made by required experts.</p>
				The Engineer's Team	During the Contract implementation period - on an ongoing basis, not less than once per month	<p>Visual monitoring, photo documentation.</p> <p>Review of the documentation submitted by the Contractor to the Engineer.</p> <p>Control of the participation of required experts.</p>

No.	Issue	Mitigation Measure	Place of monitoring	Entity responsible	Timing and frequency of monitoring	Manner of monitoring activities
47	Protection of animate nature	<p>Inspection of places that could be traps for small animals</p> <p>Every day in the morning inspect excavations and other places that can be traps for animals: amphibians, reptiles, small mammals.</p> <p>In the periods from March 1 to May 15 and from the September 15 to October 15, a second inspection should also be carried out every day in the late afternoon.</p> <p>Trapped animals should be collected and released outside the Contract implementation area, to the place appropriate for a given species, which should be determined with the environmental team's expert.</p> <p>The last inspection for the presence of animals in the excavations should be carried out immediately before backfilling the excavations.</p> <p>Inspections should be carried out under the guidance and in accordance with the guidelines of an expert herpetologist and an expert theriologist, who will also coordinate and indicate the places of release of trapped animal species.</p> <p>All wells, excavations and other anthropogenic structures which may be a trap for amphibians and small mammals should be secured according to the guidelines and under the guidance of the abovementioned expert herpetologist and the expert theriologist.</p>	3A.1 Contract area	The Contractor's Team/Site Manager/The Environmental Team – herpetologist and theriologist	<p>During the Contract implementation period - on an ongoing basis, every day.</p> <p>From March 1 to May 15 and from September 15 to October 15 – two times a day, in the morning and in the evening.</p>	<p>Visual monitoring, photo documentation.</p> <p>Control of the participation of and arrangements made by required experts.</p>
				The Engineer's Team	<p>During the Contract implementation period - on an ongoing basis, not less than once per month</p>	<p>Visual monitoring, photo documentation.</p> <p>Review of the documentation submitted by the Contractor to the Engineer.</p> <p>Control of the participation of required experts.</p>
48	Protection of animate nature	<p>Ongoing liquidation of marginal water deposits in the Contract area</p> <p>During the Contract performance, it is necessary to permanently eliminate marginal water deposits in places which may interfere with ongoing or scheduled works, as well as in places where ongoing or scheduled traffic of vehicles, machines and equipment is to be run.</p> <p>This measure aims to prevent the settlement of protected amphibian species in the Contract area during the performance of works. This activity should be carried out in consultation with a herpetologist, who will also supervise if the procedures are followed.</p>	3A.1 Contract area	The Contractor's Team/Site Manager/The Environmental Team - herpetologist	<p>During the Contract implementation period - on an ongoing basis, not less than once per week</p>	<p>Visual monitoring, photo documentation.</p>
				The Engineer's Team	<p>During the Contract implementation period - on an ongoing basis, not less than once per month</p>	<p>Visual monitoring, photo documentation.</p> <p>Review of the documentation submitted by the Contractor to the Engineer.</p>
49	Protection of animate nature	<p>Ensuring the possibility of safe migration of amphibians</p> <p>Works should be carried out in a manner that ensures the safe migration of amphibians, including the migration through designed internal roads within the Contract area. Detailed rules for meeting this condition should be agreed with a herpetologist, who will also supervise if the procedures are followed.</p> <p>The abovementioned agreements with the herpetologist should be submitted to the Engineer for approval.</p>	3A.1 Contract area	The Contractor's Team/Site Manager/The Environmental Team – herpetologist	<p>During the Contract implementation period - on an ongoing basis, not less than once per week</p>	<p>Visual monitoring, photo documentation.</p> <p>Control of the participation of and arrangements made by required experts.</p>
				The Engineer's Team	<p>During the Contract implementation period - on an ongoing basis, not less than once per month</p>	<p>Visual monitoring, documentation.</p> <p>Review of the documentation submitted by the Contractor to the Engineer.</p> <p>Control of the participation of required experts.</p>
50	Protection of animate nature	<p>Trapping and relocating small animals from the Contract area</p> <p>If small animals are reported to inhabit the Contract area (amphibians, reptiles, small non-flying mammals, bats), in places where works may pose a threat to their life or health, they should be trapped and relocated from the Contract area to the appropriate habitats, located beyond the impact of the works.</p> <p>These actions should be performed under the supervision of a competent environmental expert (herpetologist, theriologist and/or chiropterologist).</p>	3A.1 Contract area	The Contractor's Team/Site Manager/The Environmental Team-herpetologist, theriologist, chiropterologist	<p>During the Contract implementation period - on an ongoing basis, not less than once per week</p>	<p>Visual monitoring, photo documentation.</p> <p>Control of the participation of and arrangements made by required experts.</p>
				The Engineer's Team	<p>During the Contract implementation period - on an ongoing basis, not less than once per month</p>	<p>Visual monitoring, photo documentation.</p> <p>Review of the documentation submitted by the Contractor to the Engineer.</p> <p>Control of the participation of required experts.</p>

No.	Issue	Mitigation Measure	Place of monitoring	Entity responsible	Timing and frequency of monitoring	Manner of monitoring activities
51	Protection of animate nature	<p>Fighting alien invasive plant species</p> <p>During the works, alien invasive plant species should be removed (at least twice a year, in the entire Contract area), until they disappear and are replaced with local vegetation.</p> <p>Removal of alien invasive plant species should be done by pulling out the plants (along with the root ball), transporting and then disposing of them.</p> <p>The actions should be carried out in accordance with detailed instructions specified by the expert phytosociologist.</p>	3A.1 Contract area	The Contractor's Team/Site Manager/The Environmental Team- phytosociologist	During the Contract implementation period - on an ongoing basis, not less than once per week	Visual monitoring, photo documentation. Control of the participation of and arrangements made by required experts.
				The Engineer's Team	During the Contract implementation period - on an ongoing basis, not less than once per month	Visual monitoring, photo documentation. Review of the documentation submitted by the Contractor to the Engineer. Control of the participation of required experts.
52	Protection of animate nature	<p>Ongoing inspections of the team of environmental experts during the Contract implementation period</p> <p>The works and other works performed during the Contract implementation period should be carried out under the ongoing supervision of a team of environmental experts (referred to in item 104).</p> <p>These experts should, among others, carry out regular inspections of the entire area of the Contract (at least once a month) and submit their comments and recommendations to the Contractor's staff responsible for carrying out works in accordance with the EMP conditions.</p> <p>The notes from the inspections should be made in writing, attached to the monthly reports on the implementation of the EMP conditions (referred to in item 108 - Reporting the implementation status of the EMP).</p>	3A.1 Contract area	Contractor/Site manager/The Environmental Team	During the Contract implementation period - on an ongoing basis, not less than once per week	Visual monitoring, photo documentation. Control of the participation of and arrangements made by required experts.
				The Engineer's Team	During the Contract implementation period - on an ongoing basis, not less than once per month	Visual monitoring, photo documentation. Review of the documentation submitted by the Contractor to the Engineer. Control of the participation of required experts.
53	Protection of animate nature	<p>Obtaining a decision allowing for exceptions to the principles of species protection of plants, fungi and animals for the habitats and sites of protected species shown in the Works Contract Information Sheet</p> <p>In respect of the resources of protected plant fungi and animals species, as shown in the WCIS, the following actions should be performed before the commencement of construction works:</p> <p>a) The Contractor shall obtain and submit to the Engineer for approval a written opinion of the team of environmental experts including the specification of:</p> <ul style="list-style-type: none"> • the extent of the possible impact of the works on the identified natural resources, and • the need to obtain the decision referred to in item b herein, <p>and then, if it proves necessary in the light of the abovementioned opinion, the Contractor shall carry out the activities referred to in items b-d (hereunder);</p> <p>b) before taking any actions that may lead to the destruction of habitats and sites or flushing out the representatives of protected species, the Contractor is required to obtain the administrative decision required by law, allowing for exceptions to the binding prohibitions regarding protected species of plants, fungi and animals, e.g. in case of a habitat of beaver one shall obtain from the RDOŚ in Cracow a departure from a ban related to disturbance and scaring of e.g. beavers during the performance. Beavers may inhabit the embanked area and sites grown with trees and shrubs in vicinity of the embankments;</p> <p>c) the Engineer should be notified of the decision obtained;</p> <p>d) the Contractor is obliged to precisely and timely implement the conditions contained in the abovementioned decision.</p>	3A.1 Contract area	The Contractor's Team/Site Manager/The Environmental Team	During the Contract implementation period (including, inter alia, prior to the commencement of works and during performance of the works) - on an ongoing basis, not less than once per week	Visual monitoring, photo documentation. Control of the participation of and arrangements made by required experts. Control of the progress of obtaining and submitting of required administrative decisions.
				The Engineer's Team	During the Contract implementation period (including, inter alia, prior to the commencement of works and during performance of the works) - on an ongoing basis, not less than once per month	Visual monitoring, photo documentation. Review of the documentation submitted by the Contractor to the Engineer. Control of the participation of required experts.

No.	Issue	Mitigation Measure	Place of monitoring	Entity responsible	Timing and frequency of monitoring	Manner of monitoring activities
54	Protection of animate nature	<p>Obtaining a decision allowing for exceptions to the principles of species protection of plants, fungi and animals for new detected habitats and sites of protected species</p> <p>If prior to the commencement or during the performance of construction works in the Contract area, the presence of habitats or sites of protected species of flora and fauna has been reported (other than the sites referred to in item 53 - Obtaining a decision allowing for exceptions to the principles of species protection of plants, fungi and animals for the habitats and sites of protected species shown in the WCIS), then the Contractor shall undertake measures listed under item 53.</p>	3A.1 Contract area	The Contractor's Team/Site Manager/The Environmental Team	During the Contract implementation period (including, inter alia, prior to the commencement of works and during performance of the works) - on an ongoing basis, not less than once per week	<p>Visual monitoring, photo documentation.</p> <p>Control of the participation of and arrangements made by required experts.</p> <p>Control of the progress of obtaining and submitting of required administrative decisions.</p>
				The Engineer's Team	During the Contract implementation period (including, inter alia, prior to the commencement of works and during performance of the works) - on an ongoing basis, not less than once per month	<p>Visual monitoring, photo documentation.</p> <p>Review of the documentation submitted by the Contractor to the Engineer.</p> <p>Control of the participation of required experts.</p>
55	Protection of animate nature	<p>Relocation of protected species</p> <p>Prepare a report and photo documentation on the activities related to the relocation/destruction of existing plant or animal species. The report should be consistent with the guidelines indicated in the administrative decisions obtained.</p> <p>The report should state at least the type and quantity of relocated species, indicate the places from which and to which they will be relocated, the manner of relocation and the time.</p>	3A.1 Contract area	The Contractor's Team/Site Manager/The Environmental Team	During the Contract implementation period (including, inter alia, prior to the commencement of works and during performance of the works) - on an ongoing basis, not less than once per week	<p>Visual monitoring, photo documentation.</p> <p>Control of the participation of and arrangements made by required experts.</p>
				The Engineer's Team	During the Contract implementation period (including, inter alia, prior to the commencement of works and during performance of the works) - on an ongoing basis, not less than once per month	<p>Visual monitoring, photo documentation.</p> <p>Review of the documentation submitted by the Contractor to the Engineer.</p> <p>Control of the participation of required experts.</p>
I. REQUIREMENTS ON REINSTATEMENT OF THE SITE AFTER THE COMPLETION OF CONSTRUCTION WORKS						
56	Protection of animate nature	<p>Reinstatement of topsoil layer and green areas and tidying up the site after completion of works</p> <p>After completion of works:</p> <ol style="list-style-type: none"> 1) construction facilities, service roads and sites should be dismantled, whilst road slabs and sand collected from ballast should be transported away from the Contract area to the place specified beforehand (accepted by the Engineer); 2) in the areas occupied in connection with the implementation of the Contract (within the boundaries of the Contract area), appropriate agrotechnical measures should be taken (soil loosening, fertilization, etc.), in order to prepare the reinstatement of the fertile soil layer; 3) in the areas acquired in connection with the implementation of the Contract (within the boundaries of the Contract area) the fertile soil layer should be reinstated (including the use of the topsoil collected from the area of works); 4) treatments facilitating the restoration of green areas should be performed (including seeding and planting trees [in accordance with the design documentation], using only native plant species, compatible with local habitat conditions); 5) proper care of the reinstated green areas should be ensured (until the end of the Defect, Guarantee and Warranty Period) 	3A.1 Contract area	The Contractor's Team/Site Manager/The Environmental Team – phytosociologist and dendrologist	During the Contract implementation period - on an ongoing basis, not less than once per week	<p>Visual monitoring, photo documentation.</p> <p>Control of the participation of required experts.</p>

No.	Issue	Mitigation Measure	Place of monitoring	Entity responsible	Timing and frequency of monitoring	Manner of monitoring activities
		6) tidy up the Contract area; 7) the area of works and the adjacent land shall be restored to its initial condition, as a result of the traffic of machines and means of transport. Activities described in items 2, 3, 4, and 5 (above) should be performed under the supervision of expert phytosociologist and expert dendrologist, including: a) agreement of the exact dates of works; b) agreement of the composition and quantitative proportions of seed mixtures planned for sowing; c) agreement of conditions for preparation of soil; d) agreement of the principles of caring for the recreated green areas; e) submission of the results of the above agreements to the Engineer for approval; f) supervision over the implementation of activities supporting the recreation of green areas and supervision over the care of these areas (until the end of the Defects Notification Period, Guarantee and Warranty). Activities related to the recreation of the topsoil layer and the restoration of green areas referred to in this item of the EMP should be commenced as soon as their implementation is possible.		The Engineer's Team	During the Contract implementation period - on an ongoing basis, not less than once per month	Visual monitoring, photo documentation. Review of the documentation submitted by the Contractor to the Engineer. Control of the participation of required experts.
57	Protection of animate nature	Caring for grasslands Caring for grasslands in the first growing season after planting consists in; <ul style="list-style-type: none"> • fertilizing, lawns should be supplied with mineral fertilizers as needed (no more than 3-5 kg NPK/are/year). Mixtures of fertilizers should be prepared in such a way as to supply the grass with ingredients required in particular seasons: <ul style="list-style-type: none"> ○ in spring, the lawn requires a mixture with dominating nitrogen, ○ from the middle of summer nitrogen should be reduced, increasing the dose of potassium and phosphorus, ○ the final fertilization should not contain nitrogen, but potassium and phosphorus. • seeding, • mowing: <ul style="list-style-type: none"> ○ the first mowing should be carried out when the grass is about 10 cm high and should be cut to a height of 6 cm, ○ subsequent mowing should take place at such intervals so that the grass does not exceed 15 cm in height, ○ the last pre-winter mowing should be carried out 1 month before the expected cold weather (for the climate of Poland the first half of October may be adopted), ○ after each mowing, cut grass should be removed from all surfaces and harvested hay should be stored outside the construction site, • it is necessary to maintain adequate soil moisture. Mowing of grasslands in subsequent growing seasons should be carried out twice a year.	3A.1 Contract area	Contractor/Site Manager/Environmental Team – phytosociologist	During the Contract implementation period - on an ongoing basis, not less than once per week	Visual monitoring, photo documentation. Control of the participation of required experts.
				The Engineer's Team	During the Contract implementation period - on an ongoing basis, not less than once per month	Visual monitoring, photo documentation. Review of the documentation submitted by the Contractor to the Engineer. Control of the participation of required experts.
J. REQUIREMENTS ON THE PREVENTION OF THE ENVIRONMENTAL POLLUTION						
58	Water and soil protection, Health and safety protection, Protection of animate nature	The use of construction materials in accordance with regulations and standards, and harmless to the environment Only construction materials that are not harmful to the environment (natural, environmentally friendly or neutral) should be used for the implementation of the Contract. One shall not apply substances that may be lethal to the present animals, except for substances necessary for proper operations of construction machines. The materials, raw materials, fuels, fertilizers, cement-concrete mixes used should be certified and approved for use. Earth structures should be made of natural materials, without the use of hazardous materials or harmful to health. Mineral materials, possibly geotextiles, should be used for the construction/extension of embankments, but only those that are not a source of emission of harmful substances to the soil and water environment.	3A.1 Contract area	The Contractor's Team/Site Manager	During the Contract implementation period - on an ongoing basis, not less than once per week	Visual monitoring, photo documentation.
				The Engineer's Team	During the Contract implementation period - on an ongoing basis, not less than once per month	Visual monitoring, photo documentation. Review of the documentation submitted by the Contractor to the Engineer.

No.	Issue	Mitigation Measure	Place of monitoring	Entity responsible	Timing and frequency of monitoring	Manner of monitoring activities
59	Water and soil protection	<p>Technical efficiency and inspections of vehicles, machines and equipment</p> <p>In order to prevent contamination of soil and water, only technically efficient vehicles, machines and equipment should be used to carry out the works.</p> <p>The Contractor should carry out ongoing inspections of the efficiency of vehicles, machines and equipment and eliminate with any resources available any permeating of contamination to soil and water, including in particular spilling of fuel, hydraulic oils and petroleum substances, both during operating, refueling, transport, as well as the work of vehicles, machines and equipment.</p>	3A.1 Contract area	The Contractor's Team/Site Manager	During the Contract implementation period - on an ongoing basis, not less than once per week	Visual monitoring, photo documentation.
				The Engineer's Team	During the Contract implementation period - on an ongoing basis, not less than once per month	Visual monitoring, photo documentation. Review of the documentation submitted by the Contractor to the Engineer.
60	Water and soil protection	<p>Conditions on the location of the sites for collection and production of construction materials</p> <p>Construction materials, in particular bulk materials, should be collected only on compacted surfaces within the construction site. These materials cannot be collected at a distance of less than 100 m from existing watercourses.</p> <p>Analogous conditions apply to the places of production of construction materials (cement mixes, prefabricates, aggregates, etc.).</p>	3A.1 Contract area	The Contractor's Team/Site Manager	During the Contract implementation period (including, inter alia, prior to the commencement of works and during performance of the works) - on an ongoing basis, not less than once per week	Review of the documentation on the construction site management. Visual monitoring, photo documentation.
				The Engineer's Team	During the Contract implementation period (including, inter alia, prior to the commencement of works and during performance of the works) - on an ongoing basis, not less than once per month	Visual monitoring, photo documentation. Review of the documentation submitted by the Contractor to the Engineer.
61	Water protection	<p>Reducing time and number of drainage and the ban to dispose of water from excavations directly to watercourses</p> <p>The time for carrying out drainage should be reduced to the minimum and such methods should be applied to reduce the amount of pumped water and ensure its protection against contamination.</p> <p>The water pumped out from the excavations cannot be directly disposed to watercourses due to high content of suspension.</p> <p>Before disposing to watercourses the water should be purified of suspension, through the use of sedimentation tanks.</p> <p>Suspensions produced during the treatment shall be managed in a way compliant with their classification; thus eliminating the possibility of transferring them to the water-course or storing them in places, where submerging or flooding is possible.</p>	3A.1 Contract area	The Contractor's Team/Site Manager	During the Contract implementation period - on an ongoing basis, not less than once per week	Visual monitoring, photo documentation.
				The Engineer's Team	During the Contract implementation period - on an ongoing basis, not less than once per month	Visual monitoring, photo documentation. Review of the documentation submitted by the Contractor to the Engineer.
62	Protection of animate nature, water protection	<p>The ban to interfere with watercourse beds and riverside zone</p> <p>During the Contract implementation period it is not allowed to interfere with the beds and banks of the watercourses (e.g. the ban of traffic of vehicles, machines and equipment, the ban to contaminate, devastate, store materials, etc.)</p> <p>Any works shall be performed in such a way as do not contribute to drain the area of the Vistula oxbow lakes..</p>	3A.1 Contract area	The Contractor's Team/Site Manager	During the Contract implementation period - on an ongoing basis, not less than once per week	Visual monitoring, photo documentation.
				The Engineer's Team	During the Contract implementation period - on an ongoing basis, not less than once per month	Visual monitoring, photo documentation. Review of the documentation submitted by the Contractor to the Engineer.
63	Protection of animate nature, earth surface protection	<p>Conditions for movement of vehicles, machines and equipment in the Contract area</p> <p>Movement of vehicles, machines and equipment shall be carried out only:</p> <p>a) within the site area; b) on existing roads; c) on service roads and yards; d) on internal roads (after they have been built).</p>	3A.1 Contract area	The Contractor's Team/Site Manager	During the Contract implementation period - on an ongoing basis, not less than once per week	Visual monitoring, photo documentation.
				The Engineer's Team	During the Contract implementation period - on an ongoing basis, not less than once per month	Visual monitoring, photo documentation. Review of the documentation submitted by the Contractor to the Engineer.

No.	Issue	Mitigation Measure	Place of monitoring	Entity responsible	Timing and frequency of monitoring	Manner of monitoring activities
64	Water and soil protection	<p>Parking place for machines and vehicles after finishing work</p> <p>Machines and vehicles shall be parked, every day after finishing work, in places intended for parking in the site facility area.</p> <p>After parking periods of machines during their stoppage for works, prior to their start-up and use, one shall inspect the parking site to control potential leakage of operating fluids.</p>	3A.1 Contract area	The Contractor's Team/Site Manager	During the Contract implementation period - on an ongoing basis, not less than once per week	Visual monitoring, photo documentation.
				The Engineer's Team	During the Contract implementation period - on an ongoing basis, not less than once per month	Visual monitoring, photo documentation. Review of the documentation submitted by the Contractor to the Engineer.
65	Water and soil protection	<p>Sealing of the ground intended for movement of vehicles, machines and equipment on the construction site.</p> <p>The site area intended for movement of vehicles, machines and equipment shall be sealed from the ground .</p>	3A.1 Contract area	The Contractor's Team/Site Manager	During the Contract implementation period - on an ongoing basis, not less than once per week	Visual monitoring, photo documentation.
				The Engineer's Team	During the Contract implementation period - on an ongoing basis, not less than once per month	Visual monitoring, photo documentation. Review of the documentation submitted by the Contractor to the Engineer.
66	Water and soil protection	<p>The ban to carry out maintenance activities and repairs of vehicles, machines and equipment beyond the construction site</p> <p>Maintenance of vehicles, machines and equipment (including exchange of oils, liquids, etc.) may be carried out only in designated places on the construction site, meeting the conditions specified in item 67 - Designation and sealing of garages and maintenance of vehicles, machines and equipment.</p>	3A.1 Contract area	The Contractor's Team/Site Manager	During the Contract implementation period - on an ongoing basis, not less than once per week	Visual monitoring, photo documentation. Control of the participation of required experts.
				The Engineer's Team	During the Contract implementation period - on an ongoing basis, not less than once per month	Visual monitoring, photo documentation. Review of the documentation submitted by the Contractor to the Engineer. Control of the participation of required experts.
67	Water and soil protection	<p>Designation and sealing of garages and maintenance of vehicles, machines and equipment</p> <p>Places intended for maintenance of vehicles, machines and equipment (including garaging, refueling and technical service yards, etc.) should be designated and properly marked on the construction site.</p> <p>The above-mentioned places intended for maintenance of vehicles, machines and equipment should be periodically (until completion of the construction) lined with impermeable insulating materials, protecting the substrate against penetration of solid or liquid contaminants.</p> <p>When determining the location, safe distance from flowing and standing water tanks should be taken into account, among others.</p> <p>The detailed location of the above places should be agreed in advance with a team of environmental experts (including an expert phytosociologist and an expert zoologist).</p>	3A.1 Contract area	The Contractor's Team/Site Manager/The Environmental Team – phytosociologist, zoologist	During the Contract implementation period - on an ongoing basis, not less than once per week	Visual monitoring, photo documentation. Control of the participation of required experts.
				The Engineer's Team	During the Contract implementation period - on an ongoing basis, not less than once per month	Visual monitoring, photo documentation. Review of the documentation submitted by the Contractor to the Engineer. Control of the participation of required experts.
68	Water and soil protection	<p>Ensuring the discharge of water from parking yards and roads to sewage systems</p> <p>Parking yards for equipment and access roads should be made with a slope ensuring discharge of rainwater and snowmelt and wastewater to sewage devices or other receivers, to avoid penetration of any contaminants into the ground or surface water.</p>	3A.1 Contract area	The Contractor's Team/Site Manager	During the Contract implementation period - on an ongoing basis, not less than once per week	Visual monitoring, photo documentation.
				The Engineer's Team	During the Contract implementation period - on an ongoing basis, not less than once per month	Visual monitoring, photo documentation. Review of the documentation submitted by the Contractor to the Engineer.

No.	Issue	Mitigation Measure	Place of monitoring	Entity responsible	Timing and frequency of monitoring	Manner of monitoring activities
69	Water and soil protection	A stand with a sorbent near the service and parking yards for vehicles, machines and equipment In the vicinity of the places intended for servicing vehicles, machines and equipment (including garaging, refueling and technical service yards, etc.) it is necessary to ensure adequate quantities of sorbents, used for liquidation of oil leaks and outflows of petroleum derivatives.	3A.1 Contract area	The Contractor's Team/Site Manager	During the Contract implementation period - on an ongoing basis, not less than once per week	Visual monitoring, photo documentation.
				The Engineer's Team	During the Contract implementation period - on an ongoing basis, not less than once per month	Visual monitoring, photo documentation. Review of the documentation submitted by the Contractor to the Engineer.
70	Water and soil protection	Guidelines for refueling of vehicles, machines and equipment Refueling should be carried out using mobile or stationary fuel distribution points, with appropriate safeguards, such as a stand with a sorbent used for liquidation of leaks and outflows of petroleum derivatives.	3A.1 Contract area	The Contractor's Team/Site Manager	During the Contract implementation period - on an ongoing basis, not less than once per week	Visual monitoring, photo documentation.
				The Engineer's Team	During the Contract implementation period - on an ongoing basis, not less than once per month	Visual monitoring, photo documentation. Review of the documentation submitted by the Contractor to the Engineer.
71	Water and soil protection	Guidelines for washing and cleaning of vehicles, machines and equipment It is forbidden to mark places or wash vehicles near watercourses, i.e. at a distance of less than 100 m, water reservoirs, as well as places where water stagnation has formed (conditions specified in items 14, 15, 16, 17 - Conditions for the location of construction site facilities, yards, storage/disposal sites, etc.).	3A.1 Contract area	The Contractor's Team/Site Manager/The Environmental Team	During the Contract implementation period - on an ongoing basis, not less than once per week	Visual monitoring, photo documentation.
				The Engineer's Team	During the Contract implementation period - on an ongoing basis, not less than once per month	Visual monitoring, photo documentation. Review of the documentation submitted by the Contractor to the Engineer.
72	Water and soil protection	Prevention of leaks from vehicles, machines and equipment Maintenance of vehicles, machines and equipment used in the Contract area (including, among others, cleaning of the equipment after concreting works) are allowed only in designated places on the construction site, adequately secured against the possibility of contamination of the ground and waters and equipped in such way as to enable the immediate removal of any contamination.	3A.1 Contract area	The Contractor's Team/Site Manager	During the Contract implementation period - on an ongoing basis, not less than once per week	Visual monitoring, photo documentation.
				The Engineer's Team	During the Contract implementation period - on an ongoing basis, not less than once per month	Visual monitoring, photo documentation. Review of the documentation submitted by the Contractor to the Engineer.
73	Water and soil protection	Proceedings in the case of emission of petroleum derivatives In the event of the emission of petroleum derivatives into the environment (including soil and water) the following measures should be taken: a) take immediate action to prevent the spread of contamination, by means of available resources (e.g. sorbents); b) immediately remove the soil contaminated as a result, in accordance with applicable regulations; c) in case of major failures, use the procedures described in item 95 – Emergency notification rules.	3A.1 Contract area	The Contractor's Team/Site Manager	During the Contract implementation period – preventive on a regular basis, not less than once a week and each time in the event of circumstances covered by the condition	Visual monitoring, photo documentation. Control of the implementation of required procedures. Control of the submission of documents to the Engineer.
				The Engineer's Team	During the Contract implementation period - on an ongoing basis, not less than once per month and each time in the event of circumstances covered by the condition	Visual monitoring, photo documentation. Review of the documentation submitted by the Contractor to the Engineer.

No.	Issue	Mitigation Measure	Place of monitoring	Entity responsible	Timing and frequency of monitoring	Manner of monitoring activities
74	Acoustic climate protection	Reducing time of works to daytime. Construction works should be carried out in a daytime, i.e. from 6:00 am to 10:00 pm.	3A.1 Contract area	The Contractor's Team/Site Manager	During the Contract implementation period - on an ongoing basis, not less than once per week	Visual monitoring, photo documentation.
				The Engineer's Team	During the Contract implementation period - on an ongoing basis, not less than once per month	Visual monitoring, photo documentation. Review of the documentation submitted by the Contractor to the Engineer.
75	Acoustic climate protection	Reducing time of works to daytime Where housing is close to the embankment (construction of the left backwater embankment at the Dłubnia River) construction works should be carried out only in a daytime from 6:00 am to 6:00 pm.	Works Contract 3A.1/1 Implementation area for the construction of the left backwater embankment at the Dłubnia River	The Contractor's Team/Site Manager	During the construction of the left backwater embankment at the River Dłubnia (Works Contract 3A.1/1) - on an ongoing basis, not less than once per week	Visual monitoring, photo documentation.
				The Engineer's Team	During the construction of the left backwater embankment at the River Dłubnia (Works Contract 3A.1/1) - on an ongoing basis, not less than once per month	Visual monitoring, photo documentation. Review of the documentation submitted by the Contractor to the Engineer.
76	Acoustic climate protection	Reducing noise of vehicles, machines and equipment During the Contract implementation period only technically efficient vehicles, machines and equipment shall be used, with noise emission (acoustic power) compliant with the binding regulations and which does not result in exceeding the environmental quality standards in the scope of permissible noise levels. In case any inefficient vehicles, machines and equipment, which can generate a higher noise level in their neighborhood, are found, they should be immediately replaced with the efficient ones.	3A.1 Contract area	The Contractor's Team/Site Manager	During the Contract implementation period - on an ongoing basis, not less than once per week	Visual monitoring, photo documentation.
				The Engineer's Team	During the Contract implementation period - on an ongoing basis, not less than once per month	Visual monitoring, photo documentation. Review of the documentation submitted by the Contractor to the Engineer.
77	Acoustic climate protection	Reducing noise of pump sets In the case of carrying out works in the acoustically protected areas or in their vicinity, in order to reduce their inconvenience to residents, only such pump sets shall be used which are equipped with a soundproof housing which ensures the reduction of the noise levels to be compliant with the applicable regulations and standards (regarding permissible noise levels in the environment).	3A.1 Contract area	The Contractor's Team/Site Manager	During the Contract implementation period - on an ongoing basis, not less than once per week	Visual monitoring, photo documentation.
				The Engineer's Team	During the Contract implementation period - on an ongoing basis, not less than once per month	Visual monitoring, photo documentation. Review of the documentation submitted by the Contractor to the Engineer.
78	Acoustic climate protection	Control of noise level in acoustically protected areas In the case of works carried out in acoustically protected areas or in their vicinity, the noise level shall be constantly monitored and, depending on the needs, appropriate technical and organizational measures ensuring noise reduction to be compliant with applicable regulations and standards (regarding permissible noise levels in the environment) should be applied.	3A.1 Contract area	The Contractor's Team/Site Manager	During the Contract implementation period - on an ongoing basis, not less than once per week	Visual monitoring, photo documentation.
				The Engineer's Team	During the Contract implementation period - on an ongoing basis, not less than once per month	Visual monitoring, photo documentation. Review of the documentation submitted by the Contractor to the Engineer.

No.	Issue	Mitigation Measure	Place of monitoring	Entity responsible	Timing and frequency of monitoring	Manner of monitoring activities
79	Air protection, Acoustic climate protection	<p>Limiting the power consumption of vehicles, machines and equipment</p> <p>Vehicles, machines and equipment shall be used with low power consumption and switch off power/engines during the break in operation.</p> <p>Operating time of vehicles, machines and equipment shall be reduced to the necessary minimum.</p>	3A.1 Contract area	The Contractor's Team/Site Manager	During the Contract implementation period - on an ongoing basis, not less than once per week	Visual monitoring, photo documentation.
				The Engineer's Team	During the Contract implementation period - on an ongoing basis, not less than once per month	Visual monitoring, photo documentation. Review of the documentation submitted by the Contractor to the Engineer.
80	Air protection	<p>Limiting air pollution with exhaust fumes</p> <p>In order to reduce the negative impact on the condition of the air:</p> <p>a) only technically efficient vehicles, machines and equipment should be used, with the required approvals to reduce the emission of gaseous and particulate substances into the atmosphere;</p> <p>b) a place should be provided for free maneuvers of vehicles, such as yards;</p> <p>c) it is necessary to limit the movement of vehicles, machines and devices to the necessary minimum, as well as to limit the speed of traffic on the construction site;</p> <p>d) it is necessary to minimize the idling time of engines and to follow the instructions on shutting down the machines and equipment during breaks in operation;</p> <p>e) vehicles should be parked with the engine turned off.</p>	3A.1 Contract area	The Contractor's Team/Site Manager	During the Contract implementation period - on an ongoing basis, not less than once per week	Visual monitoring, photo documentation.
				The Engineer's Team	During the Contract implementation period - on an ongoing basis, not less than once per month	Visual monitoring, photo documentation. Review of the documentation submitted by the Contractor to the Engineer.
81	Air protection	<p>Limiting dusting from the construction site</p> <p>When carrying out construction works, the effects of secondary dusting should be limited by maintaining a high work culture, in particular by:</p> <p>a) regular cleaning of the construction site;</p> <p>b) applying the necessary technical and organizational measures to limit the emission of dust from the construction site, including storage places for construction materials causing dusting;</p> <p>c) spraying dusty site surfaces in dry periods, during transportation.</p>	3A.1 Contract area	The Contractor's Team/Site Manager	During the Contract implementation period - on an ongoing basis, not less than once per week	Visual monitoring, photo documentation.
				The Engineer's Team	During the Contract implementation period - on an ongoing basis, not less than once per month	Visual monitoring, photo documentation. Review of the documentation submitted by the Contractor to the Engineer.
82	Health and safety protection, Air protection	<p>Keeping the roads clean</p> <p>In order to keep the roads clean and prevent dusting on the roads the following steps should be taken:</p> <p>a) the Contractor shall apply all available technical means and organize works to minimize the dusting and pollution of access roads to the Contract area.</p> <p>b) the contractor shall apply protection on trucks delivering loose materials that may dust during the delivery (tarpaulins, sheets or covers of other type_;</p> <p>c) at entrances to the construction site for heavy equipment the Contractor shall assemble stations, where soil or mud shall be initially removed from wheels of the vehicles;</p> <p>d) the contractor shall clear lanes of public roads off of pollutions coming from the construction site due to the traffic of vehicles, machines and devices associated with implementation of the Contract in order to prevent secondary dusting by soil brought by wheels of vehicles providing services to the site.</p>	3A.1 Contract area	The Contractor's Team/Site Manager	During the Contract implementation period - on an ongoing basis, not less than once per week	Visual monitoring, photo documentation.
				The Engineer's Team	During the Contract implementation period - on an ongoing basis, not less than once per month	Visual monitoring, photo documentation. Review of the documentation submitted by the Contractor to the Engineer.
83	Air protection	<p>Ban to burn fires and burn down materials, waste, litter, etc.</p> <p>It is forbidden to burn fires and burn down materials, waste and litter, etc. in the Contract area.</p>	3A.1 Contract area	The Contractor's Team/Site Manager	During the Contract implementation period - on an ongoing basis, not less than once per week	Visual monitoring, photo documentation.
				The Engineer's Team	During the Contract implementation period - on an ongoing basis, not less than once per month	Visual monitoring, photo documentation. Review of the documentation submitted by the Contractor to the Engineer.

No.	Issue	Mitigation Measure	Place of monitoring	Entity responsible	Timing and frequency of monitoring	Manner of monitoring activities
K. REQUIREMENTS ON WASTE MANAGEMENT						
84	Water and soil protection	Development of a Waste Management Plan (WMP) Prior to the commencement of works the Contractor shall develop and submit a Waste Management Plan for the Engineer's approval, specifying the way of handling waste expected to be generated during the works and taking into account, among others, conditions for waste management included in the EMP.	3A.1 Contract area	The Contractor's Team/Site Manager	During the Contract implementation period (inter alia prior to the commencement of works - until the condition is met) - on an ongoing basis, not less than once per week	Assessment of progress of work on the subject document and its compliance with the EMP requirements. Control of submitting a document to the Engineer.
				The Engineer's Team	During the Contract implementation period (inter alia prior to the commencement of works - until the condition is met) - on an ongoing basis, not less than once per month	Review of the documentation submitted by the Contractor to the Engineer.
85	Water and soil protection, air protection	Guidelines for waste management Waste generated during the Contract implementation period shall be: a) segregated and stored selectively in sealed containers or in separate and adapted places, in conditions preventing dusting and dispersing of light fractions and their negative impact on the environment; b) ensure gradual waste reception by entities authorized to handle it; c) it is prohibited to store any materials, soil and construction waste near tree trunks.	3A.1 Contract area	The Contractor's Team/Site Manager/The Environmental Team – dendrologist	During the Contract implementation period - on an ongoing basis, not less than once per week	Visual monitoring, photo documentation.
				The Engineer's Team	During the Contract implementation period - on an ongoing basis, not less than once per month	Visual monitoring, photo documentation. Review of the documentation submitted by the Contractor to the Engineer.
86	Water and soil protection	Guidelines for handling of hazardous waste Hazardous waste should be segregated and stored separately in special sealed containers placed in the sealed, paved area that is marked and secured against access by third parties, until it is handed over to entities authorized to handle it.	3A.1 Contract area	The Contractor's Team/Site Manager	During the Contract implementation period - on an ongoing basis, not less than once per week	Visual monitoring, photo documentation.
				The Engineer's Team	During the Contract implementation period - on an ongoing basis, not less than once per month	Visual monitoring, photo documentation. Review of the documentation submitted by the Contractor to the Engineer.
87	Water and soil protection	Guidelines for handling of domestic waste Domestic waste should be collected on the compacted (paved) area on the site in sealed septic tanks, content of which will be handed over to entities authorized to handle it.	3A.1 Contract area	The Contractor's Team/Site Manager	During the Contract implementation period - on an ongoing basis, not less than once per week	Visual monitoring, photo documentation.
				The Engineer's Team	During the Contract implementation period - on an ongoing basis, not less than once per month	Visual monitoring, photo documentation. Review of the documentation submitted by the Contractor to the Engineer.
88	Water and soil protection	Preventing illegal dumping of litter and waste Prior to the commencement of works the Contractor shall investigate the area for possible illegal landfills of litter and waste. In case of identifying illegal landfills of litter and waste, the Contractor shall clear such areas through the removal of waste and delivering it to the treatment site. During the performance of the Contract the Contractor shall secure the Contract area against possible formation of such landfills.	3A.1 Contract area	The Contractor's Team/Site Manager	During the Contract implementation period (inter alia prior to the commencement of works - until the condition is met) - on an ongoing basis, not less than once per week	Visual monitoring, photo documentation.
				The Engineer's Team	During the Contract implementation period (inter alia prior to the commencement of works - until the condition is met) - on an ongoing basis, not less than once per month	Visual monitoring, photo documentation. Review of the documentation submitted by the Contractor to the Engineer.

No.	Issue	Mitigation Measure	Place of monitoring	Entity responsible	Timing and frequency of monitoring	Manner of monitoring activities
L. REQUIREMENTS ON HEALTH AND SAFETY PROTECTION						
89	Health and safety protection	<p>Development of documents related to safety in the Contract area</p> <p>In the Contract area it is necessary to maintain order and ensure proper organization of works.</p> <p>Prior to the commencement of works, the Contractor will develop and then obtain the Engineer's approval for the following documents related to safety on the construction site (description in Chapter 6.15 of the EMP):</p> <ul style="list-style-type: none"> a) Construction Site Organization Plan; b) Waste management plan (Waste MP); c) Quality assurance plan (general and detailed ones for particular types of works); d) Flood protection plan for the site for the performance time; e) Health and Safety Plan (BIOZ Plan); f) Contractor's Environmental and Social Management Plan (C-ESMP). 	3A.1 Contract area	The Contractor's Team/Site Manager	During the Contract implementation period (inter alia prior to the commencement of works - until the condition is met) - on an ongoing basis, not less than once per week	<p>Visual monitoring, photo documentation.</p> <p>Control of the progress of work on the subject documents and their compliance with the EMP requirements.</p> <p>Control of the submission of documents to the Engineer.</p>
				The Engineer's Team	During the Contract implementation period (inter alia prior to the commencement of works - until the condition is met) - on an ongoing basis, not less than once per month	<p>Visual monitoring, photo documentation.</p> <p>Review of the documentation submitted by the Contractor to the Engineer.</p>
90	Health and safety protection	<p>Sapper recognition and supervision in the Contract area</p> <p>In order to minimize the risk related to the possible occurrence of dangerous objects of military origin in the area of the Contract, the Contractor shall ensure:</p> <ul style="list-style-type: none"> a) Prior to commencement of the works – recognition in the Contract area in terms of occurrence of unexploded shells and misfires (a report with results of the aforementioned sapper recognition shall be submitted for the Engineer's acceptance); b) during the works – sapper supervision of works (carried out by the team of sappers), consisting in the ongoing checking and clearing of the Contract area of dangerous objects of military origin along with their utilization; c) in the case of finding dangerous objects of military origin in the Contract area - implementation of procedures described in item 96 Conditions for handling unexploded ordnance or misfires. 	3A.1 Contract area	The Contractor's Team/Site Manager/The Environmental Team – sapper	During the Contract implementation period (inter alia prior to the commencement of works - until the condition is met) - on an ongoing basis, not less than once per week	<p>Visual monitoring, photo documentation.</p> <p>Control of the participation of required experts.</p> <p>Control of the implementation of required procedures.</p> <p>Control of the submission of documents to the Engineer.</p>
				The Engineer's Team	During the Contract implementation period (inter alia prior to the commencement of works - until the condition is met) - on an ongoing basis, not less than once per month	<p>Visual monitoring, photo documentation.</p> <p>Control of the participation of required experts.</p> <p>Review of the documentation submitted by the Contractor to the Engineer.</p>
91	Health and safety protection, Protection of tangible assets	<p>Documentation and monitoring of the technical condition of buildings exposed to tremor and vibrations</p> <p>Before starting works during which tremors and vibrations threatening the local residents as well as nearby buildings and infrastructure facilities may occur, the Contractor will carry out an inventory of the existing buildings and facilities, with particular reference to cracks and damages.</p> <p>During the performance of the aforementioned works, the Contractor will monitor the condition of these buildings and facilities on a regular basis.</p>	3A.1 Contract area	The Contractor's Team/Site Manager	During the Contract implementation period (inter alia prior to the commencement of works - until the condition is met) - on an ongoing basis, not less than once per week	<p>Visual monitoring, photo documentation.</p> <p>Control of the submission of documents to the Engineer.</p>
				The Engineer's Team	During the Contract implementation period (inter alia prior to the commencement of works - until the condition is met) - on an ongoing basis, not less than once per month	<p>Visual monitoring, photo documentation.</p> <p>Review of the documentation submitted by the Contractor to the Engineer.</p>
92	Health and safety protection,	<p>Implementation of guidelines on work safety requirements</p> <p>The Contractor will ensure the implementation of detailed guidelines on work safety requirements, including in terms of:</p> <ul style="list-style-type: none"> a) development of the construction site, including hazardous areas; b) storage and transport; c) electrical installations and devices; d) machines and technical equipment; e) work at heights; f) earthworks; g) selected renovation and demolition works; contained in applicable legal regulations. 	3A.1 Contract area	The Contractor's Team/Site Manager – H&S supervision	During the Contract implementation period (inter alia prior to the commencement of works - until the condition is met) - on an ongoing basis, not less than once per week	<p>Visual monitoring, photo documentation.</p>
				The Engineer's Team	During the Contract implementation period (inter alia prior to the commencement of works - until the condition is met) - on an ongoing basis, not less than once per month	<p>Visual monitoring, photo documentation.</p> <p>Review of the documentation submitted by the Contractor to the Engineer.</p>

No.	Issue	Mitigation Measure	Place of monitoring	Entity responsible	Timing and frequency of monitoring	Manner of monitoring activities
93	Health and safety protection,	<p>Ensuring hygienic conditions</p> <p>In the Contract area, it is necessary to ensure the necessary number of portable toilets and ensure their use by employees, as well as ensure the training of all employees in maintaining appropriate hygiene conditions within the construction site and its immediate neighborhood.</p>	3A.1 Contract area	The Contractor's Team/Site Manager – H&S supervision	During the Contract implementation period - on an ongoing basis, not less than once per week	Visual monitoring, photo documentation.
				The Engineer's Team	During the Contract implementation period - on an ongoing basis, not less than once per month	Visual monitoring, photo documentation. Review of the documentation submitted by the Contractor to the Engineer.
M. REQUIREMENTS ON EXTRAORDINARY THREATS TO THE ENVIRONMENT						
94	Health and safety protection,	<p>Proceeding rules related to the flood risk</p> <p>In connection with the flood risk, the Contractor will prepare and submit to the Engineer's approval a document entitled: "Flood protection plan for the construction site, taking into account local hydrological and meteorological conditions in the vicinity of the construction site".</p> <p>In the event of a flood, the Contractor will follow the procedures described in the above mentioned document.</p>	3A.1 Contract area	The Contractor's Team/Site Manager	During the Contract implementation period (inter alia prior to the commencement of works - until the condition is met) - on an ongoing basis, not less than once per week	Control of the progress of work on the subject documents and their compliance with the EMP requirements. Control of the submission of documents to the Engineer. Control of compliance with applicable procedures in the event of a flood.
				The Engineer's Team	During the Contract implementation period (inter alia prior to the commencement of works - until the condition is met) - on an ongoing basis, not less than once per month	Review of the documentation submitted by the Contractor to the Engineer.
95	Health and safety protection,	<p>Guidelines on notifying of emergency</p> <p>In the event of emergency (other than a flood), accident, breakdown, etc., the Contractor is obliged to take the following actions:</p> <p>a) immediately notify relevant services (Fire Brigade, Ambulance Service, Police, etc.);</p> <p>b) until the arrival of the relevant services, take the necessary actions to reduce the risk of loss of personnel, property and environment (as agreed with the relevant services, if possible);</p> <p>c) notify the Engineer and the Employer;</p> <p>d) after the arrival of the relevant services, act strictly according to their guidelines and instructions.</p>	3A.1 Contract area	The Contractor's Team/Site Manager	During the Contract implementation period – preventive on a regular basis, not less than once a week, and each time in the event of circumstances covered by the condition	Visual monitoring, photo documentation. Control of the implementation of required procedures. Control of the submission of documents to the Engineer.
				The Engineer's Team	During the Contract implementation period - on an ongoing basis, not less than once per month, and each time in the event of circumstances covered by the condition	Visual monitoring, photo documentation. Review of the documentation submitted by the Contractor to the Engineer.
96	Health and safety protection,	<p>Guidelines for handling unexploded ordnance or misfires</p> <p>In the case of finding unexploded ordnance or misfires to the Contractor shall:</p> <p>a) immediately stop the works in a given site;</p> <p>b) assure evacuation of employees from the explosion risk zone;</p> <p>c) immediately notify the sapper supervision team and the Police, and then follow the guidelines obtained from them;</p> <p>d) notify the Engineer and the Employer.</p> <p>Under no circumstances can unexploded ordnance or misfires be picked up, dug out, buried, relocated, thrown to fire or water, etc.</p>	3A.1 Contract area	The Contractor's Team/Site Manager/The Environmental Team - sapper	During the Contract implementation period – preventive on a regular basis, not less than once a week, and each time in the event of circumstances covered by the condition	Visual monitoring, photo documentation. Control of the implementation of required procedures. Control of the submission of documents to the Engineer.
				The Engineer's Team	During the Contract implementation period - on an ongoing basis, not less than once per month, and each time in the event of circumstances covered by the condition	Visual monitoring, photo documentation. Review of the documentation submitted by the Contractor to the Engineer.

No.	Issue	Mitigation Measure	Place of monitoring	Entity responsible	Timing and frequency of monitoring	Manner of monitoring activities
N. REQUIREMENTS ON PROTECTION OF CULTURAL HERITAGE						
97	Conservation of heritage	<p>The opinion of the heritage conservator</p> <p>On the left bank of the Dłubnia River there is an archaeological supervision zone (Opinion of the Municipal Heritage Conservator dated April 21, 2017, ref. no.: KZ-03.4120.6.303.2017.EB); thus, the Contractor is obliged to assure archaeological supervision during the earthworks.</p>	<p>Works Contract 3A.1/1 - Implementation area for the construction of the left backwater embankment at the Dłubnia River with surrounding sites</p>	The Contractor's Team/Site Manager/The Environmental Team – archaeologist	During implementation of the Contract for the construction of the left embankment of the Dłubnia River (Works Contract 3A.1/1) (inter alia prior to the commencement of works - until the condition is met) - on an ongoing basis, not less than once per week	Verifying the observance of establishments made under the Conservator's permit.
				The Engineer's Team	During implementation of the Contract for the construction of the left embankment of the Dłubnia River (Works Contract 3A.1/1) (inter alia prior to the commencement of works - until the condition is met) - on an ongoing basis, not less than once per month	Review of the documentation submitted by the Contractor to the Engineer.
98	Conservation of heritage	<p>The opinion of the heritage conservator</p> <p>The Municipal Heritage Conservator (note dated November 22, 2016, ref. no.: KZ-03.4120.6.172.2016.MC) has accepted the presented design solutions that expect to:</p> <ul style="list-style-type: none"> - raise the embankment crest without its extension and without locating a pedestrian-bicycle way on the crest along the section adjacent to the fort; - apply the third type of embankment cross section along the section of the embankment in the fort area (km 2+926 – 3+144) due to conservation reason; - develop a membrane from the crest of the embankment into the ground to a depth of 6 m at km 2+925 – 3+142. <p>Moreover, to construct a part of the embankment within Fort 50a Lasówka, that is entered into the heritage register under No A-973, it will be necessary to log 3 trees that grow in the embankment body in the mentioned fort area. The additional permit was required for the above works (Permit No. 988/17 dated October 31, 2017), and it imposed additional obligations:</p> <ul style="list-style-type: none"> - works connected with logging shall be performed outside the hatching period from October 16 till the end of February; - as a replacement for logged plants 3 black locusts shall be planted (between European ash and black locust) to supplement the row along Golikówka Street, that forms a masking factor for a military lateral route leading to the Fort 50a Lasówka. The planted locusts must have well developed root systems, straight trunks of a girth of at least 16-18 cm, regularly formed crowns and other parameters following the standards used in ornamental tree nurseries; - the deadline for replacement planting is the end of 2019; - the Office of Municipal Heritage Conservator in Cracow shall be informed about completion of the works within 14 days from the performance. <p>Any works shall be carried out under archaeological supervision.</p> <p>The Contractor shall be obliged to comply with the arrangements ensuing from the Conservator's permit.</p>	<p>Works Contract 3A.1/2 - Implementation area with neighborhood</p>	The Contractor's Team/Site Manager/The Environmental Team – archaeologist	During implementation of Section 3 (Works Contract 3A.1/2) (inter alia prior to the commencement of works - until the condition is met) - on an ongoing basis, not less than once per week	Control of compliance with the arrangements contained in the opinion of the Heritage Conservator of 5 March 2015.
				The Engineer's Team	During implementation of Section 3 (Works Contract 3A.1/2) (inter alia prior to the commencement of works - until the condition is met) - on an ongoing basis, not less than once per month	Review of the documentation submitted by the Contractor to the Engineer.
99	Conservation of heritage	<p>The opinion of the heritage conservator</p> <p>In accordance with the opinion of the Municipal Heritage Conservator dated July 19, 2017, ref. no.: KZ-03.4120.6.172.2016.MC, and with a resolution of the Podgórze Precinct Board dated 11/29/2016, ref. no.: XXXVI/404/2016, a historic shrine shall be left within the embanked area. Its location shall be slightly</p>	<p>Works Contract 3A.1/2 – implementation area with</p>	The Contractor's Team/Site Manager/The Environmental Team – archaeologist	During implementation of Section 3 (Works Contract 3A.1/2) (inter alia prior to the commencement of works - until the condition is met) - on an ongoing basis, not less than once per week	Verifying the observance of establishments made under the Conservator's permit.

No.	Issue	Mitigation Measure	Place of monitoring	Entity responsible	Timing and frequency of monitoring	Manner of monitoring activities
		corrected, so it would not be placed within the embankment body.	<i>surrounding sites</i>	The Engineer's Team	During implementation of <i>Section 3 (Works Contract 3A.1/2)</i> (inter alia prior to the commencement of works - until the condition is met) - on an ongoing basis, not less than once per month	Review of the documentation submitted by the Contractor to the Engineer.
100	Conservation of heritage	<p>Providing archaeological supervision</p> <p>The Contractor shall be obliged to assure an ongoing archaeological supervision for the time of earthworks.</p> <p>To this end, the Contractor shall:</p> <ul style="list-style-type: none"> a) prepare a relevant action plan in this regard; b) ensure the participation of a team of archaeologists who conduct ongoing supervision of earthworks; c) if necessary, obtain the permission required by law to conduct archaeological research from the competent heritage conservator. 	3A.1 Contract area	The Contractor's Team/Site Manager/The Environmental Team – archaeologist	During the Contract implementation period (inter alia prior to the commencement of works - until the condition is met) - on an ongoing basis, not less than once per week	<p>Control of the progress of work on the subject documents and their compliance with the EMP requirements.</p> <p>Control of the submission of documents to the Engineer.</p> <p>Control of compliance with applicable procedures in the event of a flood.</p>
				The Engineer's Team	During the Contract implementation period (inter alia prior to the commencement of works - until the condition is met) - on an ongoing basis, not less than once per month	Review of the documentation submitted by the Contractor to the Engineer.
101	Conservation of heritage	<p>Guidelines on the conduct in the case of uncovering mobile monuments or archaeological sites</p> <p>If during the works an object is uncovered which may be or certainly is a historic monument or has a historical value, the Contractor is obliged to:</p> <ul style="list-style-type: none"> a) immediately stop any work in a given site that may damage or destroy uncovered objects; b) secure (by means of available sources) uncovered objects and the place where they were found against being destroyed, damaged or stolen; c) immediately notify the team of archaeologists and the Engineer; d) take further security measures, agreed with the team of archaeologists and the Engineer; e) facilitate and ensure carrying out documentary activities, archaeological research and other necessary activities indicated by an expert team of archaeologists and/or administrative authorities responsible for preserving the historic substance; f) after completing the activities and research listed in items d) and e) uncovered mobile monuments should be relocated to appropriate institutions indicated by a team of archaeological experts and/or administrative authorities responsible for protecting the historic substance (in accordance with the applicable regulations and the content of the Permit referred to in item 100 c) – Providing archaeological supervision) . g) in the case of immobile monuments, after completing the activities and research listed in items d) and e) the guidelines should be implemented regarding further treatment of the uncovered historic substance, established by a team of archaeological experts and/or administrative authorities responsible for protecting the historic substance (in accordance with applicable regulations and the content of the Permit referred to in item 100 c) - Providing archaeological supervision). 	3A.1 Contract area	The Contractor's Team/Site Manager/The Environmental Team – archaeologist	During the Contract implementation period – preventive on a regular basis, not less than once a week, and each time in the event of circumstances covered by the condition	<p>Visual monitoring, photo documentation.</p> <p>Control of the participation of required experts.</p> <p>Control of the implementation of required procedures.</p> <p>Control of the submission of documents to the Engineer.</p>
				The Engineer's Team	During the Contract implementation period - on an ongoing basis, not less than once per month, and each time in the event of circumstances covered by the condition	<p>Visual monitoring, photo documentation.</p> <p>Control of the participation of required experts.</p> <p>Review of the documentation submitted by the Contractor to the Engineer.</p>

No.	Issue	Mitigation Measure	Place of monitoring	Entity responsible	Timing and frequency of monitoring	Manner of monitoring activities
o. REQUIREMENTS ON THE CONTRACTOR'S STAFF ENGAGED IN THE IMPLEMENTATION OF THE EMP						
102	Implementation and reporting of the EMP	<p>Training of the Contractor's staff in the scope of the EMP implementation</p> <p>The Contractor is obliged to train their managerial and engineering and technical staff on the rules and methods of implementation of these EMP terms which, in accordance with Appendix 1 and Appendix 2 to the EMP, are assigned to the Contractor. These trainings should be completed with a test of participants' knowledge.</p> <p>In the monthly reports submitted to the Engineer, the Contractor shall provide information on the state of training of the Contractor's staff in the scope of the EMP terms of the in the current reporting period.</p>	3A.1 Contract area	The Contractor's Team/Site Manager	During the Contract implementation period - on an ongoing basis, not less than once per week	Checking the completion of a training by all required persons currently working on the Contract and forwarding the findings to the Site Manager.
				The Engineer's Team	During the Contract implementation period - on an ongoing basis, not less than once per month	Review of information on the training of the Contractor's staff submitted to the Engineer together with the Contractor's monthly reports. Random controls on the knowledge of the terms and conditions of the EMP by the persons currently working on the Contract in the Contractor's team.
103	Implementation and reporting of the EMP	<p>Appointment of the EMP coordinator in the Contractor's team</p> <p>In the Contractor's team, a person shall be appointed to coordinate and supervise actions related to the implementation of the EMP.</p> <p>The responsibilities of the person shall include :</p> <ul style="list-style-type: none"> a) supervising the implementation of individual EMP terms in the subsequent stages of the Contract implementation; b) ongoing monitoring of the status of implementation of individual terms of Appendix 1 and Appendix 2 to the EMP in the Contract area; c) ongoing informing of the Contractor's management team on the obligations arising from the EMP at the particular stage of works, as well as on the issues arising during the implementation of the EMP; d) cooperation with the rest of the Contractor's team (including a team of environmental experts, a team of archaeologists, and a sapper supervision team) in the scope of ensuring the implementation of the EMP; e) preparation of statements and reports (kick-off, monthly, quarterly, ad-hoc, final report, reports to the RDOŚ in Cracow - only to the extent resulting from the decisions obtained at the implementation stage, e.g. exceptions, if they result in the need to make the report to the authorities; f) cooperation with people responsible for the implementation of the EMP from the Engineer's team and from the Employer's team. <p>The person appointed to perform the abovementioned role shall require the Engineer's approval.</p>	3A.1 Contract area	The Engineer's Team	During the Contract implementation period - on an ongoing basis, not less than once per month	Control of the presence of the required person in the Contractor's team Review of the documentation submitted by the Contractor to the Engineer.

No.	Issue	Mitigation Measure	Place of monitoring	Entity responsible	Timing and frequency of monitoring	Manner of monitoring activities
104	Implementation and reporting of the EMP	<p>Providing of a team of environmental experts Any works during the Contract implementation shall be performed under a constant environmental supervision.</p> <p>Throughout the whole Contract implementation period the Contractor shall provide the team of environmental experts, composed of the representatives of the following specializations:</p> <ul style="list-style-type: none"> a) botanist - phytosociologist (natural habitats and protected plant species); b) dendrologist (rule for tree care and protection); c) zoologist - an expert in the field of invertebrates; d) zoologist - herpetologist (amphibians and reptiles); e) zoologist - ornithologist (birds); f) zoologist - chiropterologist (bats); g) zoologist - theriologist (non-flying mammals) <p>Each specialist shall have carried out at least two natural supervisions in their professional carrier.</p> <p>Monthly and quarterly reports shall be prepared on the activities performed by the Environmental Team of the Contractor as a part of their environmental supervision.</p> <p>The Environmental Team of the Contractor will be required over the entire duration of the implementation phase to supervise the proper performance of works in the context of their potential adverse impact on protected natural habitats and protected species, the proper place of conducting the works with the view of protected habitats and species, proper implementation of preventive measures to fauna (trapping, relocation), and all other activities in the field of environmental protection.</p> <p>These experts will be involved in the implementation of selected mitigation and monitoring measures specified in the EMP.</p> <p>The members of the team of environmental experts requires the Engineer's approval.</p> <p>One member of the team of environmental experts may combine at most two specializations listed above in items a-g.</p> <p>Being involved in the work on other OVFM Project contracts or on any other projects cannot limit the availability of the experts for this Contract.</p> <p>Before the commencement of works, the Contractor will submit a Quality Assurance Plan regarding the activities of the team of environmental experts to the Engineer's approval.</p>	3A.1 Contract area	The Contractor's Team/Site Manager	During the Contract implementation period - on an ongoing basis, not less than once per week	Control of the participation of environmental experts in the implementation of ongoing mitigation and monitoring measures (in the scope relevant to the current stage of works) and forwarding the findings to the Site Manager.
				The Engineer's Team	During the Contract implementation period - on an ongoing basis, not less than once per month	Review of the documentation submitted by the Contractor to the Engineer. Ongoing inspections of the fulfilment of current duties by environmental experts in the Contractor's team.
105	Implementation and reporting of the EMP	<p>Providing a team of archaeological experts</p> <p>Throughout the whole Contract implementation period the Contractor shall provide the team of archaeological experts.</p> <p>These experts will be involved in the implementation of selected mitigation measures specified in the EMP.</p> <p>Depending on the needs, the team of archaeological experts can consist of one or more people with the appropriate professional licenses. The personnel composition of the team of archaeologists requires the approval of the Engineer. Being involved in the work on other OVFM Project contracts or on any other projects cannot limit the availability of the experts for this Contract.</p> <p>Before the commencement of works, the Contractor will submit a Quality Assurance Plan regarding the activities of the team of archaeological experts to the Engineer's approval.</p>	3A.1 Contract area	The Contractor's Team/Site Manager	During the Contract implementation period - on an ongoing basis, not less than once per week	Control of the participation of archaeological experts in the implementation of ongoing mitigation and monitoring activities (in the scope relevant to the current stage of works) and forwarding the findings to the Site Manager.
				The Engineer's Team	During the Contract implementation period - on an ongoing basis, not less than once per month	Review of the documentation submitted by the Contractor to the Engineer. Ongoing inspections of the fulfilment of current duties by expert archaeologists in the Contractor's team.
106	Implementation and reporting of the EMP	<p>Providing of a sapper supervision team</p> <p>Throughout the whole Contract implementation period the Contractor shall provide the sapper supervision team.</p> <p>This team will be involved in the implementation of selected mitigation measures specified in the EMP.</p> <p>Depending on the needs, the team of sappers can consist of one or more people with the appropriate professional licenses. The personnel composition of the team of sappers requires the approval of the Engineer. Being involved in the work on other OVFM Project contracts or on any other projects cannot limit the availability of the experts for this Contract.</p> <p>Prior to the commencement of works, the Contractor will submit to the Engineer for approval a Quality Assurance Plan for the sapper supervision team.</p>	3A.1 Contract area	The Contractor's Team/Site Manager	During the Contract implementation period (inter alia prior to the commencement of works - until the condition is met) - on an ongoing basis, not less than once per week	Control of the participation of sapper supervision in the implementation of ongoing mitigation and monitoring activities (in the scope relevant to the current stage of works) and forwarding the findings to the Site Manager.
				The Engineer's Team	During the Contract implementation period (inter alia prior to the commencement of works - until the condition is met) - on an ongoing basis, not less than once per month	Review of the documentation submitted by the Contractor to the Engineer. Ongoing inspections of the fulfilment of current duties by sappers in the Contractor's team.

No.	Issue	Mitigation Measure	Place of monitoring	Entity responsible	Timing and frequency of monitoring	Manner of monitoring activities
107	Implementation and reporting of the EMP	<p>Discussing the implementation of the EMP during working meetings and Site Meetings</p> <p>During the Contract implementation period monthly meetings of the representatives of the PIU, the Engineer and the Contractor will be held to discuss and control the implementation of mitigation and monitoring measures specified in the EMP.</p> <p>Notwithstanding the above, updated requirements and problems related to the implementation of the EMP will be discussed at all Site Meetings.</p>	3A.1 Contract area	The Contractor's Team/Site Manager/The Environmental Team	During the Contract implementation period (inter alia prior to the commencement of works - until the condition is met) - on an ongoing basis, not less than once per week	Control of the meetings and discussing issues related to the implementation of the EMP on the Site Meetings. Forwarding of findings to the Site Manager.
				The Engineer's Team	During the Contract implementation period (inter alia prior to the commencement of works - until the condition is met) - on an ongoing basis, not less than once per month	Control of the meetings and discussing issues related to the implementation of the EMP on the Site Meetings. Review of the documentation submitted by the Contractor to the Engineer.
P. REQUIREMENTS ON REPORTING						
108	Implementation and reporting of the EMP	<p>Reporting the implementation status of the EMP</p> <p>During the Contract implementation period, the Contractor will submit monthly reports on the implementation of the conditions specified in the EMP (in the form of a checklist together with the necessary attachments, including reports on the implementation of environmental supervision) to the Engineer.</p> <p>A template of the above-mentioned report (checklist) will be developed by the Contractor and submitted to the Engineer for approval.</p> <p>Depending on the circumstances, the Engineer may request the Contractor to submit additional reports regarding, among others, emerging critical situations, including accidents, and implementation of selected EMP items, etc.</p> <p>In addition, the Contractor is obliged to make a kick-off report, quarterly, ad-hoc, final reports and reports to the RDOŚ (Regional Directorate for Environmental Protection) in Cracow - only to the extent resulting from the decisions obtained at the implementation stage, e.g. exceptions, if they result in the need to make the report to the authorities.</p>	3A.1 Contract area	The Contractor's Team/Site Manager/The Environmental Team	During the Contract implementation period (inter alia prior to the commencement of works - until the condition is met) - on an ongoing basis, not less than once per week	Control of the progress of development and submission of required reports and information to the Engineer. Quality control of submitted reports and information.
				The Engineer's Team	During the Contract implementation period (inter alia prior to the commencement of works - until the condition is met) - on an ongoing basis, not less than once per month	Review of the documentation submitted by the Contractor to the Engineer.
Q. REQUIREMENTS AFTER THE COMPLETION OF WORKS						
109	Protection of soils and earth surface	<p>Cleaning works, reinstatement of the area to the initial state</p> <p>The area covered by the works due to the movement of machines and vehicles as well as the areas adjacent thereto should be cleaned and restored to its initial state.</p>	3A.1 Contract area	The Contractor's Team/Site Manager	During the Contract implementation period (each time at the stage of checking and acceptance of construction works - until the condition is met) - on an ongoing basis, not less than once a week	Visual monitoring, photo documentation.
				The Engineer's Team	During the Contract implementation period (each time at the stage of checking and acceptance of construction works - until the condition is met) - on an ongoing basis, not less than once a month	Visual monitoring, photo documentation. Review of the documentation submitted by the Contractor to the Engineer.

No.	Issue	Mitigation Measure	Place of monitoring	Entity responsible	Timing and frequency of monitoring	Manner of monitoring activities
110	Protection of soils and earth surface, protection of animate nature	<p>Top-soiling, sowing, mowing the grass</p> <p>After completing the construction works, all of the earth surface will be top-soiled and sown with grass in accordance with the activities detailed in item 49 - Reinstatement of a topsoil layer and green areas and tidying up the site after completion of works and in item 50 - Caring for grasslands.</p> <p>During the performance and the use of the Works Contract one shall provide curing measures within sites sown with grass mix, which include e.g. mowing twice a year, and removal of hard lichens. This measure covers the performance period, as well as the Defects Notification Period and the Warranty Period.</p>	3A.1 Contract area	The Contractor's Team/Site Manager/The Environmental Team - phytosociologist	During the Contract implementation period (each time at the stage of checking and acceptance of construction works - until the condition is met) - on an ongoing basis, not less than once a week	Visual monitoring, photo documentation.
				The Engineer's Team	During the Contract implementation period (each time at the stage of checking and acceptance of construction works - until the condition is met) - on an ongoing basis, not less than once a month	Visual monitoring, photo documentation. Review of the documentation submitted by the Contractor to the Engineer.
111	Protection of soils and earth surface,	<p>Management, maintenance, repairs of roads</p> <p>The Contractor is obliged to remove defects/damages to roads used under this Contract during the Contract Implementation Period.</p> <p>During the operating period, roads and technological lanes must be properly maintained/managed through appropriate winter care for the road in accordance with the existing weather conditions. Gravel/dirt roads - unevenness should be levelled, if necessary.</p>	3A.1 Contract area	The Contractor's Team/Site Manager	During the Contract implementation period (each time at the stage of checking and acceptance of construction works - until the condition is met) - on an ongoing basis, not less than once a week	Visual monitoring, photo documentation.
				The Engineer's Team	During the Contract implementation period (each time at the stage of checking and acceptance of construction works - until the condition is met) - on an ongoing basis, not less than once a month.	Visual monitoring, photo documentation. Review of the documentation submitted by the Contractor to the Engineer.
R. REMAINING ESHS REQUIREMENTS						
112	ESHS issues	<p>Obligation to observe ESHS requirements and conditions</p> <p>The Contractor shall be obliged to apply and observe all ESHS policy requirements and conditions (the ones related to environmental, social and health and safety issues) as determined in the Contract documents, in the WBG's Environmental, Health and Safety (EHS) Guidelines (see: description in Chapter 6.14 of the EMP), in the ESHS Code of Conduct (developed on the stage of filing a bid – see: description in Chapter 6.14 of the EMP), in documents of the Contractor listed in item no. 89 (above); and as results from the legal acts binding in the territory of Poland (including the Labour Code, the Construction Law, and others).</p> <p>The ESHS requirements and conditions determined in reference to the Contractor and its personnel in the aforementioned sources (regardless of the legal cooperation form) are also valid in the scope relevant for a given case for Contractor's subcontractors and their personnel and their subcontractors.</p>	3A.1 Contract area	The Contractor's Team/Site Manager/H&S Supervisor	During implementation of the Contract; constant ,monitoring.	Site visit, verification of the Contractor's documentation.
				The Engineer's Team	During implementation of the Contract; constant ,monitoring	Review of the documentation submitted by the Contractor to the Engineer.
113	ESHS issues	<p>Assurance of safety in case of accidents at work</p> <p>The Contractor shall be obliged to assure such conditions for implementation of the Contract (including performance conditions) to avoid accidents engaging any people associated with implementation of the Contract (including the staff of e.g.: the Contractor, the Engineer, the Investor, the PCU, subcontractors, suppliers, and others) and third parties.</p> <p>In case an accident occurs the Contractor shall immediately assure proper treatment for injured people, notify relevant services and provide them with access to the site, and secure the place in a way assuring safety to the aforementioned services and other people, who may be present in the area of the event.</p> <p>Regardless of the aforementioned actions the Contractor shall immediately inform the Engineer about all accidents and near misses related to implementation of the Contract (both: on site, as well as in any other location), in accordance with binding procedures determined in the Contract documents (see: item no. 120).</p>	3A.1 Contract area	The Contractor's Team/Site Manager/H&S Supervisor	During implementation of the Contract; constant ,monitoring.	Site visit, verification of the Contractor's documentation.
				The Engineer's Team	During implementation of the Contract; constant ,monitoring	Review of the documentation submitted by the Contractor to the Engineer.

No.	Issue	Mitigation Measure	Place of monitoring	Entity responsible	Timing and frequency of monitoring	Manner of monitoring activities
114	ESHS issues	<p>Provision of H&S Expert in the Contractor's team</p> <p>The Contractor shall be obliged to assure a permanent H&S supervision throughout the performance, and the supervisor shall take care for observing the H&S rules determined in the Contract documents and in the binding provisions of national law. Members and qualifications of the H&S supervising team need to be in compliance with Polish provisions of the labour law.</p>	3A.1 Contract area	The Contractor's Team/Site Manager/H&S Supervisor	During implementation of the Contract; constant ,monitoring.	Ongoing inspection for fulfilling current liabilities by the experts of the Contractor's team.
				The Engineer's Team	During implementation of the Contract; constant ,monitoring	Review of the documentation submitted by the Contractor to the Engineer.
115	ESHS issues	<p>Educational actions related to H&S rules and regulations</p> <p>The H&S Supervising team shall implement trainings and an awareness programme for the Contractor's staff in reference to the H&S rules and regulations on site.</p> <p>Those actions shall be implemented throughout the performance period, at least once per 12 months.</p> <p>They shall take a form of informational, educational and awareness campaigns related to H&S issues in the scope corresponding with the current stage of Contract implementation.</p>	3A.1 Contract area	The Contractor's Team/Site Manager/H&S Supervisor	During implementation of the Contract; constant ,monitoring.	<p>Site visit, controlling the acknowledgement of H&S rules and regulations, verification of the Contractor's documentation</p> <p>Inspecting the compliance of Contractor's actions with substantial conditions determined under the contract.</p>
				The Engineer's Team	During implementation of the Contract; constant ,monitoring	Review of the documentation submitted by the Contractor to the Engineer.
116	ESHS issues	<p>Assurance of safety for people in case of sexual harassment and mobbing</p> <p>The Contractor shall be obliged to assure such conditions of Contract implementation to avoid cases of sexual harassment or mobbing towards the Contractor's personnel and subcontractors, any other people associated with implementation of the Contract, and any third parties.</p> <p>If cases of sexual harassment or mobbing occur, the Contractor shall undertake measures to immediately stop the aforementioned behavior, and subsequently it shall immediately take disciplinary measures determined by the law and internal regulations of the company in relation to perpetrators, and shall provide the victims of such behavior with any necessary help and support in the scope corresponding with the case.</p> <p>Regardless of the aforementioned actions the Contractor shall immediately inform the Engineer about any cases of sexual harassment or mobbing, in accordance with binding procedures determined in the Contract documents (see: item no. 120).</p>	3A.1 Contract area	The Contractor's Team/Site Manager/Expert for Preventing Cases of Sexual Harassment and Mobbing	During implementation of the Contract; constant ,monitoring.	<p>Site visit, verification of the Contractor's documentation</p> <p>Inspecting the compliance of Contractor's actions with substantial conditions determined under the contract.</p>
				The Engineer's Team	During implementation of the Contract; constant ,monitoring	Review of the documentation submitted by the Contractor to the Engineer.
117	ESHS issues	<p>Educational actions to prevent cases of sexual harassment and/or mobbing</p> <p>The Contractor shall implement trainings and an awareness programme for the Contractor's Staff in reference to the prevention of cases of sexual harassment and mobbing.</p> <p>Those actions shall be implemented throughout the performance period, at least once per 12 months.</p> <p>They shall take a form of informational, educational and awareness campaigns related to sexual harassment and mobbing.</p> <p>The measures shall be implemented by an expert having proper substantial qualifications in that scope, who would remain a member of the Contractor's team.</p>	3A.1 Contract area	The Contractor's Team/Site Manager/Expert for Preventing Cases of Sexual Harassment and Mobbing	During implementation of the Contract; constant ,monitoring.	<p>Site visit, controlling the knowledge of preventing cases of sexual harassment and mobbing.</p> <p>Inspecting the compliance of Contractor's actions with substantial conditions determined under the Contract.</p>
				The Engineer's Team	During implementation of the Contract; constant ,monitoring	Review of the documentation submitted by the Contractor to the Engineer.

No.	Issue	Mitigation Measure	Place of monitoring	Entity responsible	Timing and frequency of monitoring	Manner of monitoring activities
118	ESHS issues	<p>Assurance of proper conditions of work and payment for the personnel</p> <p>The Contractor shall be obliged to secure proper conditions of works and payment for the personnel associated with implementation of the Contract, fully in accordance with provisions of the labour law binding in Poland (and especially with the Labour Code), including the following, e.g.:</p> <ul style="list-style-type: none"> – the Contractor shall assure equal treatment in case of payment for the employees performing the same work, without consideration of sex, sexual orientation, and age; – people employed at the Contract shall not be harassed due to sex, sexual orientation and age; – the Contractor may employ only such a young employee, who is 15 years old, completed at least 8-years of primary school, and provided a doctor's statement confirming that a work of a given type is not risky for his/hers health; – the Contractor – adequately to the potential and conditions, and in accordance with Polish provisions of the Labour Code – shall secure the living and social needs of the employees on the work site; – the Contractor shall be obliged to facilitate the employees in improving their professional qualifications. 	3A.1 Contract area	The Contractor's Team/Site Manager/H&S Supervisor	During implementation of the Contract; constant ,monitoring.	Site visit, verification of the Contractor's documentation Inspecting the compliance of Contractor's actions with substantial conditions determined under the Contract.
				The Engineer's Team	During implementation of the Contract; constant ,monitoring	Review of the documentation submitted by the Contractor to the Engineer.
119	ESHS issues	<p>Educational actions related to the provision of claims referring to the conditions of work and payment</p> <p>The Contractor shall inform all people employed due to implementation of the Contract about a possibility of providing claims related to the conditions of work and payment, and shall develop an information leaflet with necessary data on provision of claims and applications, in which it would assure about e.g. the absence of repercussion for a person notifying about an issue; and that leaflet would be provided to those people.</p> <p>Contents of the aforementioned leaflet shall be agreed with the Engineer.</p>	3A.1 Contract area	The Contractor's Team/Site Manager/H&S Supervisor	During implementation of the Contract; constant ,monitoring.	Site visit, controlling the knowledge of filing claims in reference to conditions of work and payment, verification of the Contractor's documentation. Inspecting the compliance of Contractor's actions with substantial conditions determined under the Contract.
				The Engineer's Team	During implementation of the Contract; constant ,monitoring	Review of the documentation submitted by the Contractor to the Engineer.
120	ESHS issues	<p>Development and implementation of procedures related to the ongoing provision of information on ESHS issues</p> <p>In the period not longer than 30 days from the commencement date of the Contract, the Engineer shall develop and provide the Contractor with a set of procedures related to the ongoing provision of information related to the following:</p> <ul style="list-style-type: none"> – exceptional hazards (i.e. emergency and crisis situations discussed in section 5.12 of the EMP); – accidents and near misses; – cases of sexual harassment and mobbing; – claims of the personnel related to the conditions of work and payment. <p>The Contractor shall immediately inform the Engineer about any issues in that scope, in accordance with the conditions determined under the valid contractual procedures.</p>	3A.1 Contract area	The Contractor's Team/Site Manager/H&S Supervisor	During implementation of the Contract; constant ,monitoring.	Site visit, verification of the Contractor's documentation Inspecting the compliance of Contractor's actions with substantial conditions determined under the Contract.
				The Engineer's Team	During implementation of the Contract; constant ,monitoring	Review of the documentation submitted by the Contractor to the Engineer.
121	ESHS issues	<p>Guidelines on HIV–AIDS prevention</p> <p>The Contractor shall, via an approved service provider, implement a program to raise awareness of HIV-AIDS type diseases (including appropriate training) and will take all other measures to reduce the risk of HIV spreading among the Contractor's personnel and the local community. These activities should be performed in accordance with the detailed guidelines set out in the Bidding Documents.</p>	3A.1 Contract area	The Contractor's Team/Site Manager - H&S supervision	During the Contract implementation period (inter alia prior to the commencement of works and during works) - on an ongoing basis, not less than once per month	Inspecting the compliance of Contractor's actions with substantial conditions determined under the Contract.

No.	Issue	Mitigation Measure	Place of monitoring	Entity responsible	Timing and frequency of monitoring	Manner of monitoring activities
				The Engineer's Team	During the Contract implementation period (inter alia prior to the commencement of works and during works) - on an ongoing basis, not less than once per month.	Review of the documentation submitted by the Contractor to the Engineer.
S. REQUIREMENTS RELATED TO DEMOLITION OF ENGINEERING OBJECTS AND FENCES						
122	Protection of soils and earth surface, Protection of animate nature, water protection, protection of landscape	Environmental protection in the performance area The Contractor shall be obliged to include environmental protection in the performance area, and especially the protection of soil, greenery, natural lay of land, and water relations.	3A.1 Contract area	The Contractor's Team/Site Manager/The Environmental Team	During the Contract implementation period - on an ongoing basis, not less than once per week	Visual monitoring, photo documentation.
				The Engineer's Team	During the Contract implementation period - on an ongoing basis, not less than once per month	Visual monitoring, photo documentation. Review of the documentation submitted by the Contractor to the Engineer.
123	Protection of soils and earth surface, Protection of animate nature, water protection, protection of landscape	Limitation of using and transforming the environmental elements At the performance it is allowed to use and transform the environmental elements only to such an extent that is necessary to provide demolition of engineering objects and fences.	3A.1 Contract area	The Contractor's Team/Site Manager/The Environmental Team	During the Contract implementation period - on an ongoing basis, not less than once per week	Visual monitoring, photo documentation.
				The Engineer's Team	During the Contract implementation period - on an ongoing basis, not less than once per month	Visual monitoring, photo documentation. Review of the documentation submitted by the Contractor to the Engineer.
124	Protection of soils and earth surface, Protection of animate nature, water protection, protection of landscape	Removal of damages If the protection of environmental elements is not possible, the Contractor shall be obliged to repair the damage done.	3A.1 Contract area	The Contractor's Team/Site Manager/The Environmental Team	During the Contract implementation period - on an ongoing basis, not less than once per week	Visual monitoring, photo documentation.
				The Engineer's Team	During the Contract implementation period - on an ongoing basis, not less than once per month	Visual monitoring, photo documentation. Review of the documentation submitted by the Contractor to the Engineer.