

Appendix 2 – Plan of Monitoring Measures

This Appendix to the Environmental Management Plan for the *Odra–Vistula Flood Management Project – Contract 1A.1 Chlewice–Porzecze. Backwater embankment of Odra River at Myśla River and Modernization of Marwicki polder stage I and II* presents monitoring measures referring to the monitoring of the impact of the Task on environment, as well as implementation of mitigating measures indicated in the Appendix 1. The data presented in the tables below constitute a list of monitoring measures which will be implemented by the Contractor and 1A.1 Contract Engineer in the term of the Contract 1A.1.

No.	Issue	Monitoring subject	Place of monitoring	Manner of monitoring	Period and frequency of monitoring	Responsible entity
01 – RULES CONNECTED WITH PROPERTY ACQUISITION						
1.	Land and landscape protection	It is required to ensure the efficient use of the area and minimal transformation of its surface.	All work areas	Visual monitoring, photo documentation	On permanent basis during the whole period of works implementation	Contractor – Site Manager
					On permanent basis during the whole period of works implementation, reporting once a month	Engineer
2.	Land and landscape protection	The stage of conducting construction works must be preceded by preliminary works connected with preparing the area for the development covering, i.a. preparing the places for storing construction materials, site facilities, etc. and allocating and preparing (and agreeing with the road administrators) traffic routes for machines and vehicles.	All work areas	Visual monitoring, photo documentation	On permanent basis during the whole period of works implementation	Contractor – Site Manager
					On permanent basis during the whole period of works implementation, reporting once a month	Engineer
3.	Land and landscape protection	It is necessary to limit as much as possible the area of temporary occupation.	All work areas	Visual monitoring, photo documentation	On permanent basis during the whole period of works implementation	Contractor – Site Manager

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No.	Issue	Monitoring subject	Place of monitoring	Manner of monitoring	Period and frequency of monitoring	Responsible entity
					On permanent basis during the whole period of works implementation, reporting once a month	Engineer
02 – MEASURES TO BE PERFORMED PRIOR TO WORKS COMMENCEMENT						
4.	Soil and ground protection	Prior to the earthworks, it is necessary to remove 20–30 cm thick layer of humus which will be re-used for subsequent land reclamation.	All work areas	Visual monitoring, photo documentation	Once at the stage of preliminary works and on permanent basis during the whole period of works implementation	Contractor – Site Manager
					Once at the stage of preliminary works and on permanent basis during the whole period of works implementation, reporting once a month	Engineer
5.	General conditions concerning nature protection	Before commencement of the works a site survey should be carried out of temporarily and permanently occupied areas, intended for determining of a current location of protected plant species and plant species placed on national and regional red lists of endangered species of plants, and designation of places of potential presence of these species.	All work areas	Visual monitoring, photo documentation, the submission and review of the natural survey results	At the stage of preliminary works	Contractor – phytosociologist/botanist
					Once at the stage of preliminary works	Engineer

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No.	Issue	Monitoring subject	Place of monitoring	Manner of monitoring	Period and frequency of monitoring	Responsible entity
6.	General conditions concerning nature protection	If during site survey or construction works, there are discovered species of plants, animals or fungi under strict or partial species protection, before taking any action, the Contractor must obtain relevant permission required by law (Article 56 section 1 and 2 of the Act of 16 April 2004 on environmental protection or similar legal provisions applicable at the time of preparing and conducting works).	All work areas	Contractor's confirmation of the performance of activities in the annual Report on the Contract execution, attached with copies of potential motions (depending on the natural survey results and data from Contractor's environmental team), reports prepared by experts in natural environment, etc.	At the stage of preliminary works	Contractor – phytosociologist/botanist, ornithologist, herpetologist, chiropterologist, entomologist, water protection expert
					At the stage of preliminary works	Engineer
7.	General conditions concerning nature protection	If it is necessary to relocate species, mentioned in item 6, the Contractor is obliged to plan such action, obtain required permission, effectively conduct such actions and implement other activities required (e.g. drawing-up and submitting reports to the body issuing relevant permission).	All work areas	Contractor's confirmation of the performance of activities in the annual Report on the Contract execution, attached with copies of potential motions (depending on the natural survey results and data from Contractor's environmental team), reports prepared by experts in natural environment, etc.	At the stage of preliminary works	Contractor – phytosociologist/botanist, ornithologist, herpetologist, chiropterologist, entomologist, water protection expert
					At the stage of preliminary works	Engineer

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No.	Issue	Monitoring subject	Place of monitoring	Manner of monitoring	Period and frequency of monitoring	Responsible entity
8.	General conditions concerning nature protection	Works must be carried out with avoidance of any damage to trees and shrubs. Trees and shrubs not intended for cutting out, which grow on the Task implementation area and which are prone to damage due to traffic, equipment transfer, etc. must be protected against damage, for instance, through placing trunk shields made of wooden boards around the entire trunks up to the height of at least 1.5 m. It is also required to secure crowns, trunks and root systems against mechanical damage and drying out.	All work areas	Visual monitoring, photo documentation	On permanent basis during the whole period of works implementation	Contractor – phytosociologist/botanist
					On permanent basis during the whole period of works implementation, reporting once a month	Engineer
9.	General conditions concerning nature protection	If a tree gets damaged, it is necessary to undertake required measures immediately under the Contractor’s environmental team supervision which will limit damage consequences.	All work areas	Visual monitoring, photo documentation	On permanent basis during the whole period of works implementation	Contractor – phytosociologist/botanist
					On permanent basis during the whole period of works implementation, reporting once a month	Engineer
10.	Protection of archaeological values	Prior to the commencement of works, the Contractor shall enable the qualified person to carry out all necessary archeological survey in the places of discovered archeological sites. The above will ensure the protection and removal of valuable objects and other elements of historical value from the working site and will enable the performance of specific works.	All work areas	Visual monitoring, photo documentation, reports	Once at the stage of preliminary works and on permanent basis during the whole period of works implementation	Contractor – archaeologist

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No.	Issue	Monitoring subject	Place of monitoring	Manner of monitoring	Period and frequency of monitoring	Responsible entity
					Once at the stage of preliminary works and on permanent basis during the whole period of works implementation, reporting once a month	Engineer
11.	Human health and safety protection	Before commencement of the works throughout of which there may occur vibrations, which shall constitute inconvenience for the neighbouring inhabitants and cause damage hazard to the buildings located near the works there should be carried out survey of existing buildings with particular focus on cracks and damages, and during the aforementioned works the condition of the buildings should be monitored. In case of stating damage, the Contractor shall be obliged, on the basis of the monitoring results, to restore the technical condition of the buildings.	All work areas	Visual monitoring, photo documentation	On permanent basis during the whole period of works implementation	Contractor – Site Manager
					On permanent basis during the whole period of works implementation, reporting once a month	Engineer
12.	General conditions concerning nature protection	For the time of preparation and implementation of construction works, the Contractor will hire a team of naturalists, which will be responsible for constant environmental supervision of works. The Contractor's environmental team shall include the following experts: phytosociologist/botanist, herpetologist, ornithologist, chiropterologist, entomologist and water protection expert.	All work areas	Contractor's confirmation of the performance of activities in the annual Report on the Contract execution, attached with site inspection records, reports prepared by experts in natural environment, etc.	On permanent basis during the whole period of works implementation	Contractor – phytosociologist/ botanist, ornithologist, herpetologist, chiropterologist, entomologist, water protection expert

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No.	Issue	Monitoring subject	Place of monitoring	Manner of monitoring	Period and frequency of monitoring	Responsible entity
		The Contractor's environmental team will be responsible for the proper implementation of mitigation measures for the environment during works construction. Environmental team experts must be accepted by the Engineer before civil works execution.			On permanent basis during the whole period of works implementation, reporting once a month	Engineer
13.	Sapper supervision	Prior to the commencement of works, the Contractor shall conduct a site inspection on the area of works in terms of the existence of unexploded shells.	All work areas	Visual monitoring, photo documentation, tests with a specialist equipment, sapper supervision report	Once at the stage of preliminary works and on permanent basis during the whole period of works implementation	Contractor – authorised sapper unit
					Once at the stage of preliminary works and on permanent basis during the whole period of works implementation, reporting once a month (Monitoring for implementation of EMP records in the range of sapper supervision)	Engineer
14.	General conditions concerning nature protection – prevent and elimination of invasive species	Prior to commencement of the construction works carry out site inspection of place of works with participation of phytosociologist in order to locate the presence and estimate population of invasive plants (except for <i>impatiens parviflora</i>). After locating and visibly marking in places where invasive plants grow take preventive actions during the implementation investment, which limit spreading of these plants, including, among others, removing humus layer along with invasive plants and transporting them from area of works to the composting plant or neutralizing in any other effective manner. It is unacceptable to mix this humus with humus overgrown with local native vegetation.	All work areas	Visual monitoring, photo documentation, reports	Once at the stage of preliminary works and on permanent basis during the whole period of works implementation	Contractor – Site Manager, phytosociologist/botanist

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No.	Issue	Monitoring subject	Place of monitoring	Manner of monitoring	Period and frequency of monitoring	Responsible entity
					Once at the stage of preliminary works and on permanent basis during the whole period of works implementation, reporting once a month	Engineer
03 – REQUIREMENTS CONCERNING ENSURE THE ACCESS ROUTES TO THE CONSTRUCTION SITES						
15.	Human health and safety protection	The Contractor shall ensure access routes for rescue teams (ambulance, fire brigade, etc.) for the entire time of the works carried out, marking out roads, exits, passages for pedestrians and parking for vehicles used in the building site.	All work areas	Visual monitoring, photo documentation	On permanent basis during the whole period of works implementation	Contractor – Site Manager
					On permanent basis during the whole period of works implementation, reporting once a month	Engineer
16.	General conditions concerning nature protection	During implementation of the Structure: <i>Chlewice–Porzecze. Backwater embankment of Odra River at Myśla River</i> transport, equipment and vehicle traffic must take place, mostly, along the existing road system and on the embankment crown, not interfering with the habitats and areas adjacent to the Task area. During implementation of the following Structure: <i>Modernization of Marwicki polder stage I and II</i> – transport, equipment and vehicle traffic must take place, mostly, along the existing road system and on the roads along the embankment as well as on the embankment crown.	Structures: <i>Chlewice–Porzecze. Backwater embankment of Odra River at Myśla River, Modernization of Marwicki polder stage I and II</i>	Visual monitoring, photo documentation	On permanent basis during the whole period of works implementation	Contractor – Site Manager

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No.	Issue	Monitoring subject	Place of monitoring	Manner of monitoring	Period and frequency of monitoring	Responsible entity
					On permanent basis during the whole period of works implementation, reporting once a month	Engineer
17.	Land and landscape protection	It is not allowed to perform earthworks which permanently deform the relief, with the exception of works involving the construction and modernisation of flood embankments.	All work areas	Visual monitoring, photo documentation	On permanent basis during the whole period of works implementation	Contractor – Site Manager
					On permanent basis during the whole period of works implementation, reporting once a month	Engineer
18.	Human health and safety protection	It is required to ensure human protection against increased vehicle traffic along roads used during construction works. At the time of works performance, the Contractor shall supply, install and operate all temporary safety devices, ensuring the safety of vehicles and pedestrians.	All work areas	Visual monitoring, photo documentation	On permanent basis during the whole period of works implementation	Contractor – Site Manager
					On permanent basis during the whole period of works implementation, reporting once a month	Engineer
19.	Noise protection – sections of the embankment where are located existing roads, which will be used by Contractor	Paved surfaces (e.g. access roads) used for vehicle transportation of construction materials and aggregate should be maintained in good technical condition.	All work areas	Visual monitoring, photo documentation	On permanent basis during the whole period of works implementation	Contractor – Site Manager
					On permanent basis during the whole period of works implementation, reporting once a month	Engineer

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No.	Issue	Monitoring subject	Place of monitoring	Manner of monitoring	Period and frequency of monitoring	Responsible entity
20.	Protection of tangible assets	The Contractor is obliged to prepare photographic documentation of the entire area of conducting the works with particular focus on of the technical condition of roads and the buildings located in the areas close to roads used for transport of construction materials. Before commencement the works the Contractor shall carry out, in the presence of road Operator, site visit on the basis of which there shall be drawn up a roads condition protocol before construction related exploitation. Based on this document, the Contractor shall be obliged to restore roads technical condition.	All work areas	Visual monitoring, photo documentation	Once at the stage of preliminary works and on permanent basis during the whole period of works implementation	Contractor – Site Manager
					Once at the stage of preliminary works and on permanent basis during the whole period of works implementation, reporting once a month	Engineer
21.	Human health and safety protection	Proper marking of access roads. According to valid laws and agreements with Operators of the roads the Contractor shall use the access routes shall be marked. These marking shall be regularly controlled, in the case of destruction or theft of marking the Contractor shall promptly replace it or complete it.	All work areas	Visual monitoring, photo documentation	On permanent basis during the whole period of works implementation	Contractor – Site Manager
					On permanent basis during the whole period of works implementation, reporting once a month	Engineer

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No.	Issue	Monitoring subject	Place of monitoring	Manner of monitoring	Period and frequency of monitoring	Responsible entity
22.	Protection of tangible assets	The Contractor shall be responsible for all damage to the structures, buildings, roads, drainage ditches, culverts, water supply and gas pipe lines, power poles and lines, cables geodetic control network and any type of installations and other types of object such as vertical and horizontal markings, navigation markings, information boards, culture assets etc., caused by the Contractor or their Subcontractors during works performance. The Contractor is also responsible for restoring the flow capacity of drainage ditches and installations in the area of conducted works and used transportation roads, in case of damage caused by works performance and transportation related with works implementation. The Contractor shall immediately repair any occurred damage at their own expense and also, if necessary, shall perform other works ordered by the Engineer.	All work areas	Visual monitoring, photo documentation, obtained permissions and Contractor's correspondence	On permanent basis during the whole period of works implementation	Contractor – Site Manager
					On permanent basis during the whole period of works implementation, reporting once a month	Engineer
23.	Protection of tangible assets	The Contractor is obliged to agree with road managing authority, the traffic organisation and works securing plans. The Contractor is obliged to organise traffic in accordance with the agreed plans (marking and securing of the Works site and marking of de-tours and recommended, related with the traffic organisation change, markings of the roads, etc.).	All work areas	Visual monitoring, photo documentation, obtained permissions and Contractor's correspondence	On permanent basis during the whole period of works implementation	Contractor – Site Manager

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No.	Issue	Monitoring subject	Place of monitoring	Manner of monitoring	Period and frequency of monitoring	Responsible entity
					On permanent basis during the whole period of works implementation, reporting once a month	Engineer
24.	Protection of tangible assets	Prior to Works commencement, the Contractor shall present to the Engineer for approval, traffic organisation and Works securing plans agreed with the managing authorities and the Schedule. Depending on the needs and Works progress, the traffic organisation plans shall be updated by the Contractor on on-going basis.	All work areas	Visual monitoring, photo documentation, obtained permissions and Contractor's correspondence	On permanent basis during the whole period of works implementation	Contractor – Site Manager
					On permanent basis during the whole period of works implementation, reporting once a month	Engineer
25.	Protection of tangible assets	The Contractor shall respect the statutory limitations of loads per vehicle axle during transportation of materials and equipment to and from the construction site. The Contractor shall also obtain any necessary permits from authorities, for transportation of non-typical loads and shall constantly inform the Engineer about each case of such a transportation.	All work areas	Visual monitoring, photo documentation, obtained permissions and Contractor's correspondence	On permanent basis during the whole period of works implementation	Contractor – Site Manager
					On permanent basis during the whole period of works implementation, reporting once a month	Engineer
04 – ORGANIZATION OF THE BACK-UP FACILITIES, WAREHOUSES AND STORAGE YARDS						
26.	Land and landscape protection	Roads, sites and site facilities must be situated in the manner ensuring the preservation of trees and shrubs growing beyond the places necessary for occupation for works construction.	All work areas	Visual monitoring, photo documentation	On permanent basis during the whole period of works implementation	Contractor – Site Manager

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No.	Issue	Monitoring subject	Place of monitoring	Manner of monitoring	Period and frequency of monitoring	Responsible entity
					On permanent basis during the whole period of works implementation, reporting once a month	Engineer
27.	General conditions concerning nature protection	Places of temporary occupation (temporary routes, sites, site facilities, storage sites for construction materials, parking lots and other) must be located outside of the valuable in term of nature areas as indicated by the Contractor's environmental team (in particular, outside natural habitat boundaries, habitats of species of plants and animals under protection in Natura 2000 sites, as well as stands of plants, animals and fungi under legal protection). These areas if possible, must be improved and sealed and equipped with sorbents enabling rapid elimination of the effects of possible leakage of fuel or oil derivative substances.	All work areas	Visual monitoring, photo documentation	On permanent basis during the whole period of works implementation	Contractor – phytosociologist/ botanist, ornithologist, herpetologist, chiropterologist, entomologist, water protection expert
					On permanent basis during the whole period of works implementation, reporting once a month	Engineer
28.	General conditions concerning nature protection	The areas of temporary occupation (temporary routes, sites, site facilities, storage sites for construction materials, parking lots and other) must be located and prepared in accordance with the recommendations of the Contractor's environmental team, approved by the Engineer.	All work areas	Visual monitoring, photo documentation	On permanent basis during the whole period of works implementation	Contractor – phytosociologist/ botanist, ornithologist, herpetologist, chiropterologist, entomologist, water protection expert
					On permanent basis during the whole period of works implementation, reporting once a month	Engineer

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No.	Issue	Monitoring subject	Place of monitoring	Manner of monitoring	Period and frequency of monitoring	Responsible entity
29.	Human health and safety protection	Temporary occupation sites (temporary roads, sites, site facilities, construction material storage, parking, etc.) must be situated as far as possible, from areas under acoustic protection.	All work areas	Visual monitoring, photo documentation	On permanent basis during the whole period of works implementation	Contractor – Site Manager
					On permanent basis during the whole period of works implementation, reporting once a month	Engineer
30.	General conditions concerning nature protection	Places of temporary occupation (temporary routes, sites, site facilities, storage sites for construction materials, parking lots and other) must be located on the internal side of the embankment surrounding Chlewice, ensuring efficient use of the terrain, and after completing the works, it is necessary to clear the area.	Structure: <i>Chlewice–Porzecze. Backwater embankment of Odra River at Myśla River</i>	Visual monitoring, photo documentation	On permanent basis during the whole period of works implementation	Contractor – Site Manager
					On permanent basis during the whole period of works implementation, reporting once a month	Engineer
31.	General waste handling rules	It is not allowed to store and locate site yards in the places where there are shallow ground water in well permeable deposits, peat hollow, in direct neighbourhood of the water of the Mysla River and Odra River, within the borders of natural habitats of animals and plants, subject to protection under Natura 2000, as well as plant, animals and fungi positions subject to legal protection.	All work areas	Visual monitoring, photo documentation, waste handover sheets, transport documentation.	On permanent basis during the whole period of works implementation	Contractor – Site Manager
					On permanent basis during the whole period of works implementation, reporting once a month	Engineer
32.	Soil and surface water protection	Sites dedicated for cars and construction machines maintenance must be improved and equipped with sorbents for the time of works.	All work areas	Visual monitoring, photo documentation	On permanent basis during the whole period of works implementation	Contractor – Site Manager

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No.	Issue	Monitoring subject	Place of monitoring	Manner of monitoring	Period and frequency of monitoring	Responsible entity
					On permanent basis during the whole period of works implementation, reporting once a month	Engineer
33.	Soil and surface water protection	Fuelling up should take place by means of mobile and stationary fuel distribution points with appropriate security measures such as a station with a sorbent for liquidating any leakages and outflows of oil derivative substances to the ground.	All work areas	Visual monitoring, photo documentation	On permanent basis during the whole period of works implementation	Contractor – Site Manager
					On permanent basis during the whole period of works implementation, reporting once a month	Engineer
34.	General conditions concerning nature protection	Places of storage of construction materials, soil, construction equipment and vehicles parking shall be located beyond projection of tree crowns (which were not cut down in connection with construction works).	All work areas	Visual monitoring, photo documentation	On permanent basis during the whole period of works implementation	Contractor – Site Manager
					On permanent basis during the whole period of works implementation, reporting once a month	Engineer
35.	Human health and safety protection	Storing materials used during construction works in the manner securing them against damage and in the manner not posing a risk to the human and property safety, excluding falling over, sliding down or falling down of products and devices.	All work areas	Visual monitoring, photo documentation	On permanent basis during the whole period of works implementation	Contractor – Site Manager
					On permanent basis during the whole period of works implementation, reporting once a month	Engineer

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No.	Issue	Monitoring subject	Place of monitoring	Manner of monitoring	Period and frequency of monitoring	Responsible entity
36.	Human health and safety protection	If hazardous substances and materials are stored on the building site, they must be protected appropriately, preventing the access of unauthorised persons, and information on a hazard must be provided on warning boards.	All work areas	Visual monitoring, photo documentation	On permanent basis during the whole period of works implementation	Contractor – Site Manager
					On permanent basis during the whole period of works implementation, reporting once a month	Engineer
37.	General waste handling rules	The waste generated should be regularly selectively collected in appropriate containers located on dedicated sites, preventing dusting and disseminating of light fractions and then systematically discharged to the landfill.	All work areas	Visual monitoring, photo documentation	On permanent basis during the whole period of works implementation	Contractor – Site Manager
					On permanent basis during the whole period of works implementation, reporting once a month	Engineer
38.	Hazardous waste	Hazardous waste must be collected by the authorized entities only. Until handing over of hazardous waste to the entities with permit for collecting, hazardous waste should be stored in a manner preventing release of hazardous substances to the environment, i.e. in tightly closed containers, in canopied areas with paved and impermeable ground, secured against third party access.	All work areas	Visual monitoring, photo documentation	On permanent basis during the whole period of works implementation	Contractor – Site Manager
					On permanent basis during the whole period of works implementation, reporting once a month	Engineer
39.	Hazardous waste	Hazardous waste storage sites must be allocated beyond flood water area. (Q1% – so called water – once every hundred	All work areas	Visual monitoring, photo documentation	On permanent basis during the whole period of works implementation	Contractor – Site Manager

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No.	Issue	Monitoring subject	Place of monitoring	Manner of monitoring	Period and frequency of monitoring	Responsible entity
		years).			On permanent basis during the whole period of works implementation, reporting once a month	Engineer
40.	General waste handling rules	The waste generated must be managed by the Contractor in compliance with applicable law. The Contractor should ensure the organisation of works guaranteeing waste segregation and their successive collection by authorised entities. The Contractor is obliged to carry out an inspection of construction site to detect any "illegal landfills". The Contractor should also protect the building site against formation of "illegal landfills".	All work areas	Visual monitoring, photo documentation	On permanent basis during the whole period of works implementation	Contractor – Site Manager
					On permanent basis during the whole period of works implementation, reporting once a month	Engineer
41.	General waste handling rules	It is not allowed to store on the building site of any waste connected with repairs and maintenance of equipment, machines and devices used for construction works. Any repairs of machines and servicing must be carried out by specialised companies or persons authorised for such works by the manufacturer (authorised service). Waste generated during such works (i.a. damaged parts, seals, filters, containers after lubricants and fluids, used oils, fluids, etc.) must be collected by contractors of repairs and services and they cannot be stored in the building site. They must be managed in compliance with applicable law.	All work areas	Visual monitoring, photo documentation	On permanent basis during the whole period of works	Contractor – Site Manager

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No.	Issue	Monitoring subject	Place of monitoring	Manner of monitoring	Period and frequency of monitoring	Responsible entity
					On permanent basis during the whole period of works implementation, reporting once a month	Engineer
42.	General waste handling rules	Waste water drained from paved areas and temporary site facilities (e.g. sites for storing fuels and oils, parking lots, containers, etc.) must not transfer pollutions to surface or ground water.	All work areas	Visual monitoring, photo documentation	On permanent basis during the whole period of works	Contractor – Site Manager
					On permanent basis during the whole period of works implementation, reporting once a month	Engineer
43.	General waste handling rules	Site facilities must be equipped with required number of toilets (e.g. portable toilets) and the Contractor's employees should take care of their physiological needs in dedicated places.	All work areas	Visual monitoring, photo documentation	On permanent basis during the whole period of works	Contractor – Site Manager
					On permanent basis during the whole period of works implementation, reporting once a month	Engineer
44.	General waste handling rules	Prior to the commencement of works, the Contractor is obliged to carry out an inspection of the construction site to detect any illegal wastewater discharge into the Myśla River. Domestic sewage generated on the building site facility must be discharged to sealed tanks and then regularly handed over to the sewage treatment plant. If technically feasible, it is allowed to discharge sewage into sewage main connected to the sewage treatment plant.	All work areas	Visual monitoring, photo documentation	On permanent basis during the whole period of works	Contractor – Site Manager
					On permanent basis during the whole period of works implementation, reporting once a month	Engineer

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No.	Issue	Monitoring subject	Place of monitoring	Manner of monitoring	Period and frequency of monitoring	Responsible entity
45.	Handling of sewage	It is necessary to equip all construction sites with a required number of portable toilets and provide training to all the employees with regard to maintaining appropriate hygienic conditions within the area of the construction site and its direct surrounding.	All work areas	Visual monitoring, photo documentation	On permanent basis during the whole period of works implementation	Contractor – Site Manager
					On permanent basis during the whole period of works implementation, reporting once a month	Engineer
46.	Handling of sewage	It is important to ensure regular disposal of domestic sewage previously gathered in sealed and closed tanks.	All work areas	Visual monitoring, photo documentation	On permanent basis during the whole period of works implementation	Contractor – Site Manager
					On permanent basis during the whole period of works implementation, reporting once a month	Engineer
47.	Land and landscape protection	It is necessary to keep order on the building site and ensure correct work organisation.	All work areas	Visual monitoring, photo documentation	On permanent basis during the whole period of works implementation	Contractor – Site Manager
					On permanent basis during the whole period of works implementation, reporting once a month	Engineer
05 – REQUIREMENTS FOR FELLING TREES AND SHRUBS						
48.	General conditions concerning nature protection	It is recommended to conduct three and shrubs felling manually and the process itself should be limited to the necessary minimum.	All work areas	Visual monitoring, photo documentation	On permanent basis during the whole period of works implementation	Contractor – Site Manager
					On permanent basis during the whole period of works implementation, reporting once a month	Engineer

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No.	Issue	Monitoring subject	Place of monitoring	Manner of monitoring	Period and frequency of monitoring	Responsible entity
49.	General conditions concerning nature protection	In the planned tree felling sites due to the rebuilding and construction of embankments, it is necessary to assess if there are not any protected beetle species. If trees occupied by those species are found, it is necessary to secure the species and/or such beetles must be relocated to a different habitat of similar conditions. The works must be carried out under the supervision of an entomologist.	All work areas	Visual monitoring, photo documentation	On permanent basis during the whole period of works implementation	Contractor – entomologist
					On permanent basis during the whole period of works implementation, reporting once a month	Engineer
50.	General conditions concerning nature protection	In order to reduce losses in the species of protected bats which may live in tree hollows, the clearance of trees of circumference exceeding 100 cm should be preceded with a chiropterologist inspection for the purpose of assessing the actual presence of bats in the vicinity of respective types of trees. Tree felling must be carried out under the supervision of a chiropterologist.	All work areas	Visual monitoring, photo documentation	On permanent basis during the whole period of works implementation	Contractor – chiropterologist
					On permanent basis during the whole period of works implementation, reporting once a month	Engineer
51.	General conditions concerning nature protection	Felling of trees and bushes in the scope necessary for the Structure implementation is to be performed outside of the vegetation period and birds breeding period (i.e. from 1st November by the end of February).	Structure: <i>Chlewice–Porzecze. Backwater embankment of Odra River at Myśla River</i>	Visual monitoring, photo documentation	On permanent basis during the whole period of works implementation	Contractor – ornithologist
					On permanent basis during the whole period of works implementation, reporting once a month	Engineer

Environmental Management Plan for the Contract 1A.1 Chlewice - Porzeczce. Backwater embankment of Odra River at Myśla River and Modernization of Marwicki polder stage I and II

No.	Issue	Monitoring subject	Place of monitoring	Manner of monitoring	Period and frequency of monitoring	Responsible entity
52.	General conditions concerning nature protection	Felling of trees and bushes shall be limited to the scope necessary for the implementation of the Structure and performed outside of the vegetation season and birds breeding season (within the period from 1st September to the end of February).	Structure: <i>Modernization of Marwicki polder stage I and II</i>	Visual monitoring, photo documentation	On permanent basis during the whole period of works implementation	Contractor – ornithologist
					On permanent basis during the whole period of works implementation, reporting once a month	Engineer
53.	General conditions concerning nature protection	Felling of trees and bushes (feling must be performed manually) shall be conducted in accordance with the detailed guidelines presented in the decision of RDOŚ in Szczecin on environmental conditions No. 8/2012 of February 27, 2012, included in the Appendix 4 to EMP (pages 3–5, section f, g, h, i, paying particular attention to the necessity of preserving two oaks growing on the slope foot and near the planned embankment). It is necessary to supplement the losses to the landscaped areas in cooperation with the Commune Office in Boleszkowice and local population by planting 60 trees.	Structure: <i>Chlewice–Porzeczce. Backwater embankment of Odra River at Myśla River</i>	Visual monitoring, photo documentation, a document confirming the execution of plantings – note / protocol	On permanent basis during the whole period of felling	Contractor phytosociologist, ornithologist
					On permanent basis during the whole period of felling, reporting once a month	Engineer
06 – REQUIREMENTS AT THE STAGE OF WORKS IMPLEMENTATION						
54.	Land and landscape protection	It is necessary to store lubricating substances and fuels in dedicated sites, with correct tightness degree and equipped with sorbents for neutralising oil derivative substances.	All work areas	Visual monitoring, photo documentation	On permanent basis during the whole period of works implementation	Contractor – Site Manager

Environmental Management Plan for the Contract 1A.1 Chlewice - Porzecz. Backwater embankment of Odra River at Myśla River and Modernization of Marwicki polder stage I and II

No.	Issue	Monitoring subject	Place of monitoring	Manner of monitoring	Period and frequency of monitoring	Responsible entity
					On permanent basis during the whole period of works implementation, reporting once a month	Engineer
55.	Land and landscape protection	Vehicle and construction equipment's traffic should take place on temporary routes, preventing any damage to the nearby vegetation.	All work areas	Visual monitoring, photo documentation	On permanent basis during the whole period of works implementation	Contractor – Site Manager
					On permanent basis during the whole period of works implementation, reporting once a month	Engineer
56.	Land and landscape protection	Machines and vehicles may move only along temporary routes and manoeuvring sites, and, if possible, along fixed routes.	All work areas	Visual monitoring, photo documentation	On permanent basis during the whole period of works implementation	Contractor – phytosociologist
					On permanent basis during the whole period of works implementation, reporting once a month	Engineer
57.	Soil, surface water and air protection	Equipment, machines and vehicles used for construction works must be in working order and meet standards and legal requirements arising from the conditions of authorisation for putting into service (and public road traffic, if applicable), hold approvals and have low emission rates.	All work areas	Visual monitoring, photo documentation	On permanent basis during the whole period of works implementation	Contractor – Site Manager
					On permanent basis during the whole period of works implementation, reporting once a month	Engineer
58.	Soil, surface water and air protection	The type and working order of such equipment must ensure the protection of soil, surface water and groundwater against pollution, dust and gas emission to the air and noise emission.	All work areas	Visual monitoring, photo documentation	On permanent basis during the whole period of works implementation	Contractor – Site Manager

Environmental Management Plan for the Contract 1A.1 Chlewice - Porzecz. Backwater embankment of Odra River at Myśla River and Modernization of Marwicki polder stage I and II

No.	Issue	Monitoring subject	Place of monitoring	Manner of monitoring	Period and frequency of monitoring	Responsible entity
					On permanent basis during the whole period of works implementation, reporting once a month	Engineer
59.	Soil and surface water protection	It is not allowed to repair equipment and machines or exchange oil within the Odra River inter-embankment zone and between the planned backwater embankment of Odra River and the Myśla River, or in the vicinity of areas of natural values, indicated by the Contractor's environmental team.	All work areas	Visual monitoring, photo documentation	On permanent basis during the whole period of works implementation	Contractor – Site Manager
					On permanent basis during the whole period of works implementation, reporting once a month	Engineer
60.	Soil and surface water protection	It is not allowed to fuel up and store fuel within the Odra River inter-embankment zone and between the planned backwater embankment of Odra River and the Myśla River, or in the vicinity of areas of natural value, indicated by the Contractor's environmental team.	All work areas	Visual monitoring, photo documentation	On permanent basis during the whole period of works implementation	Contractor – Site Manager
					On permanent basis during the whole period of works implementation, reporting once a month	Engineer
61.	Soil and surface water protection	It is not allowed to park machines within the Odra River inter-embankment zone and between the planned backwater embankment of Odra River and the Myśla River, or in the vicinity of areas of natural value, indicated by the Contractor's environmental team.	All work areas	Visual monitoring, photo documentation	On permanent basis during the whole period of works implementation	Contractor – Site Manager
					On permanent basis during the whole period of works implementation, reporting once a month	Engineer

Environmental Management Plan for the Contract 1A.1 Chlewice - Porzecze. Backwater embankment of Odra River at Myśla River and Modernization of Marwicki polder stage I and II

No.	Issue	Monitoring subject	Place of monitoring	Manner of monitoring	Period and frequency of monitoring	Responsible entity
62.	Soil and ground protection	Equipment, machines and vehicles used for construction works must be located in dedicated parking places with protecting measures against the spillage of oil derivative substances to the soil and water environment. If such equipment, machines and vehicles are not used, they must be parked in dedicated places.	All work areas	Visual monitoring, photo documentation	On permanent basis during the whole period of works implementation	Contractor – Site Manager
					On permanent basis during the whole period of works implementation, reporting once a month	Engineer
63.	Air protection	It is necessary to apply required organisational and technical measures in order to maintain clean access routes.	All work areas	Visual monitoring, photo documentation	On permanent basis during the whole period of works implementation	Contractor – Site Manager
					On permanent basis during the whole period of works implementation, reporting once a month	Engineer
64.	Air protection	It is required to apply necessary organisational and technical measures in order to limit the emission of dust during transport of construction materials from the areas of their storage to the building site.	All work areas	Visual monitoring, photo documentation	On permanent basis during the whole period of works implementation	Contractor – Site Manager
					On permanent basis during the whole period of works implementation, reporting once a month	Engineer
65.	Air protection	It is necessary to apply required organisational and technical measures in order to limit dust emission during construction works.	All work areas	Visual monitoring, photo documentation	On permanent basis during the whole period of works implementation	Contractor – Site Manager
					On permanent basis during the whole period of works implementation, reporting once a month	Engineer

Environmental Management Plan for the Contract 1A.1 Chlewice - Porzecze. Backwater embankment of Odra River at Myśla River and Modernization of Marwicki polder stage I and II

No.	Issue	Monitoring subject	Place of monitoring	Manner of monitoring	Period and frequency of monitoring	Responsible entity
66.	Air protection	Bulk materials and aggregates to be used during the construction stage shall be secured against their blowing or excessive dusting from their surface both during transportation and storage and when using them to build the embankments, as well as during preparation of concrete mix and loading the mix used for building the anti-filtration screen in the flood embankment.	All work areas	Visual monitoring, photo documentation	On permanent basis during the whole period of works implementation	Contractor – Site Manager
					On permanent basis during the whole period of works implementation, reporting once a month	Engineer
67.	Air protection (Protection against dusting)	Limit dust generation caused by the means of transport by: <ul style="list-style-type: none"> • cleaning vehicle wheels before entering the public roads, • cleaning temporary internal roads surface, • using of vehicles with tilts for transport of dusty materials or transport of powdery materials in packagings, • prevention of contamination of local roads with sand and other material transported by vehicles, • sprinkling of surfaces of internal temporary roads. 	All work areas	Visual monitoring, photo documentation	On permanent basis during the whole period of works implementation	Contractor – Site Manager
					On permanent basis during the whole period of works implementation, reporting once a month	Engineer
68.	Air protection	It is necessary to reduce the work time of motor machines and vehicles.	All work areas	Visual monitoring, photo documentation	On permanent basis during the whole period of works implementation	Contractor – Site Manager

Environmental Management Plan for the Contract 1A.1 Chlewice - Porzecze. Backwater embankment of Odra River at Myśla River and Modernization of Marwicki polder stage I and II

No.	Issue	Monitoring subject	Place of monitoring	Manner of monitoring	Period and frequency of monitoring	Responsible entity
					On permanent basis during the whole period of works implementation, reporting once a month	Engineer
69.	Air protection	Traffic of vehicles and machines as well as earthworks must be minimised to cover only those necessary for the Task implementation.	All work areas	Visual monitoring, photo documentation	On permanent basis during the whole period of works implementation	Contractor – Site Manager
					On permanent basis during the whole period of works implementation, reporting once a month	Engineer
70.	Human health and safety protection	It is necessary to reduce speed limit of vehicles in the vicinity of the building areas.	All work areas	Visual monitoring, photo documentation	On permanent basis during the whole period of works implementation	Contractor – Site Manager
					On permanent basis during the whole period of works implementation, reporting once a month	Engineer
71.	Air protection	In the period of standstill and breaks in work, engines of the equipment, machines and vehicles must be switched off.	All work areas	Visual monitoring, photo documentation	On permanent basis during the whole period of works implementation	Contractor – Site Manager
					On permanent basis during the whole period of works implementation, reporting once a month	Engineer
72.	Land and landscape protection	The area directly adjacent to flood embankments must be cleared upon completing the works.	All work areas	Visual monitoring, photo documentation	On permanent basis during the whole period of works implementation	Contractor – Site Manager
					On permanent basis during the whole period of works implementation, reporting once a month	Engineer
73.	Soil and ground protection	The Contractor should choose a place for depositing humus which will secure it against damage, being driven through and being tamped down.	All work areas	Visual monitoring, photo documentation	On permanent basis during the whole period of works implementation	Contractor – Site Manager

Environmental Management Plan for the Contract 1A.1 Chlewice - Porzeczce. Backwater embankment of Odra River at Myśla River and Modernization of Marwicki polder stage I and II

No.	Issue	Monitoring subject	Place of monitoring	Manner of monitoring	Period and frequency of monitoring	Responsible entity
					On permanent basis during the whole period of works implementation, reporting once a month	Engineer
74.	Soil and ground protection	Humus should be stored and protected in a way enabling its re-use.	All work areas	Visual monitoring, photo documentation	On permanent basis during the whole period of works implementation	Contractor – Site Manager
					On permanent basis during the whole period of works implementation, reporting once a month	Engineer
75.	Land and landscape protection	Upon completion of the construction works, it is necessary to restore temporarily occupied sites to their previous condition (land reclamation). Stored humus should be used for site leveling and then, after preparing the soil for sowing, it must be sown with grass mix, composition of which will be agreed with a fitosociologist / botanist and it must be properly cared for through mowing at least twice a year (from June to September for structure <i>Chlewice–Porzeczce. Backwater embankment of Odra River at Myśla River. Structure: Modernization of Marwicki polder stage I and II</i> the periods for mowing embankments will be determined beyond the bird breeding season.	All work areas	Visual monitoring, photo documentation	After reporting the works to take over	Contractor – phytosociologist/botanist
					After reporting the works to take over	Engineer
76.	Surface water protection	It is not allowed to pipe water coming from excavations into the river and other surface water e.g. oxbow lakes.	All work areas	Visual monitoring, photo documentation , suspension amount monitoring by suspension analyser	At the stage of preliminary works and during works implementation. Monitoring the level of suspension in the water of the channels once a day during implementation of deepening works.	Contractor – water protection expert

Environmental Management Plan for the Contract 1A.1 Chlewice - Porzecz. Backwater embankment of Odra River at Myśla River and Modernization of Marwicki polder stage I and II

No.	Issue	Monitoring subject	Place of monitoring	Manner of monitoring	Period and frequency of monitoring	Responsible entity
					Once a month – control of execution of research, on the basis of Contractor’s reports, note and opinion of the water protection expert	Engineer
77.	Surface water protection	It is necessary to use an appropriate drainage system, ensuring the maintenance of excavations without stagnant water.	All work areas	Visual monitoring, photo documentation , suspension amount monitoring by suspension analyser	At the stage of preliminary works and during works implementation.	Contractor – water protection expert
					On permanent basis during the whole period of works implementation, reporting once a month	Engineer
78.	Land and landscape protection	It is necessary to conduct works by methods limiting land occupation and minimising land conversion.	All work areas	Visual monitoring, photo documentation	On permanent basis during the whole period of works implementation	Contractor – Site Manager
					On permanent basis during the whole period of works implementation, reporting once a month	Engineer
79.	Soil and ground protection	Only vehicles, machines and equipment connected with the performance of works as part of the Task are allowed to be present in the building site and its site facility.	All work areas	Visual monitoring, photo documentation	On permanent basis during the whole period of works implementation	Contractor – Site Manager
					On permanent basis during the whole period of works implementation, reporting once a month	Engineer

Environmental Management Plan for the Contract 1A.1 Chlewice - Porzecze. Backwater embankment of Odra River at Myśla River and Modernization of Marwicki polder stage I and II

No.	Issue	Monitoring subject	Place of monitoring	Manner of monitoring	Period and frequency of monitoring	Responsible entity
80.	Land and surface water protection	The Task shall be designed and implemented in a manner excluding penetration of any pollution, especially oil-based to the land and water, in case of possible leakage or spillage of oil-based substances, the leak shall be immediately removed and neutralized, polluted soil layers shall be managed in accordance with binding regulations.	All work areas	Visual monitoring, photo documentation	Once at the stage of preliminary works and on permanent basis during the whole period of works implementation	Contractor – Site Manager
					Once at the stage of preliminary works and on permanent basis during the whole period of works implementation, reporting once a month	Engineer
81.	Land and surface water protection	In the event of oil derivative substance spillage to surface water, the Contractor is obliged to prompt ensuring of mechanical collection of oil derivative substance from the water surface.	All work areas	Visual monitoring, photo documentation	Once at the stage of preliminary works and on permanent basis during the whole period of works implementation	Contractor – Site Manager
					Once at the stage of preliminary works and on permanent basis during the whole period of works implementation, reporting once a month	Engineer
82.	Land and surface water protection	Within floodplains (inter-embankment zones of the Odra River and the Myśla River), and flood direct risk areas, it is not allowed to fix equipment and machines, including replacement of oils and fuel. Machines may be parked only in dedicated zones.	All work areas	Visual monitoring, photo documentation	On permanent basis during the whole period of works implementation	Contractor – Site Manager
					On permanent basis during the whole period of works implementation, reporting once a month	Engineer

Environmental Management Plan for the Contract 1A.1 Chlewice - Porzecz. Backwater embankment of Odra River at Myśla River and Modernization of Marwicki polder stage I and II

No.	Issue	Monitoring subject	Place of monitoring	Manner of monitoring	Period and frequency of monitoring	Responsible entity
83.	Land and surface water protection	It is necessary to use only materials that are harmless for the environment in the Task implementation period (natural materials or neutral for the environment). Materials, raw materials, fuels, fertilisers, cement and concrete mixtures used must have relevant approvals for use. Earth embankments must be performed from natural materials without the use of hazardous materials or materials harmful to human health.	All work areas	Visual monitoring, photo documentation	On permanent basis during the whole period of works implementation	Contractor – Site Manager
					On permanent basis during the whole period of works implementation, reporting once a month	Engineer
84.	Land and surface water protection	In order to prevent soil contamination, it is necessary to use equipment, machines and vehicles in working order. The Contractor must perform ongoing inspections of the condition of equipment, vehicles and machines as well as eliminate, by means of available organisational measures, a possibility of entering of any contamination to the soil and water environment, including the spillage of fuels, hydraulic oils and oil derivative substances, both during servicing, re-fuelling, transporting as well as the operation of machines, equipment and vehicles.	All work areas	Visual monitoring, photo documentation	On permanent basis during the whole period of works implementation	Contractor – Site Manager
					On permanent basis during the whole period of works implementation, reporting once a month	Engineer
85.	Surface water protection	The soil material which is to be re-used must be stored as far as possible from the river bed and avoiding any damage to the bed and banks.	All work areas	Visual monitoring, photo documentation	On permanent basis during the whole period of works implementation	Contractor – Site Manager

Environmental Management Plan for the Contract 1A.1 Chlewice - Porzecze. Backwater embankment of Odra River at Myśla River and Modernization of Marwicki polder stage I and II

No.	Issue	Monitoring subject	Place of monitoring	Manner of monitoring	Period and frequency of monitoring	Responsible entity
					On permanent basis during the whole period of works implementation, reporting once a month	Engineer
86.	Land and landscape protection	It is necessary to apply utmost care at the time of earthworks in the vicinity of oxbow lakes in order to avoid damaging or changing their structure.	All work areas	Visual monitoring, photo documentation	On permanent basis during the whole period of works implementation	Contractor – phytosociologist/botanist
					On permanent basis during the whole period of works implementation, reporting once a month	Engineer
87.	Surface water protection	It is not allowed in the Structure's work areas to conduct works on the riverside of the embankments for sections specified in the Environmental Decision for <i>Modernization of Marwicki polder stage I and II</i> .	Structure: <i>Modernization of Marwicki polder stage I and II</i>	Visual monitoring, photo documentation	On permanent basis during the whole period of works implementation	Contractor – Site Manager
					On permanent basis during the whole period of works implementation, reporting once a month	Engineer
88.	Groundwater protection	It is not allowed to deposit soil in depressions and oxbow lakes within the entire Task implementation area.	All work areas	Visual monitoring, photo documentation	On permanent basis during the whole period of works implementation	Contractor – Site Manager
					On permanent basis during the whole period of works implementation, reporting once a month	Engineer
89.	Groundwater protection	It is not allowed to deposit soil in Odra River inter-embankment zone.	All work areas	Visual monitoring, photo documentation	On permanent basis during the whole period of works implementation	Contractor – Site Manager
					On permanent basis during the whole period of works implementation, reporting once a month	Engineer

Environmental Management Plan for the Contract 1A.1 Chlewice - Porzecz. Backwater embankment of Odra River at Myśla River and Modernization of Marwicki polder stage I and II

No.	Issue	Monitoring subject	Place of monitoring	Manner of monitoring	Period and frequency of monitoring	Responsible entity
90.	Groundwater protection	It is not allowed to deposit soil in areas of a natural value, indicated by the Contractor's environmental team.	All work areas	Visual monitoring, photo documentation	On permanent basis during the whole period of works implementation	Contractor – Site Manager
					On permanent basis during the whole period of works implementation, reporting once a month	Engineer
91.	Groundwater protection	During driving of sheet pile walls the drainage of wetlands and boggy areas shall be limited to the minimum.	All work areas	Visual monitoring, photo documentation	On permanent basis during the whole period of works implementation	Contractor – Site Manager
					On permanent basis during the whole period of works implementation, reporting once a month	Engineer
92.	Noise protection	Construction works in the areas and immediate vicinity of areas under acoustic protection must be carried out only during the day (from 6 a.m. to 10 p.m.).	All work areas	Visual monitoring, photo documentation	On permanent basis during the whole period of works implementation	Contractor – Site Manager
					On permanent basis during the whole period of works implementation, reporting once a month	Engineer
93.	Noise protection	It is necessary to use the technologies of construction works which are least burdensome in terms of acoustics, maintain good work organisation, correct equipment operation and ensuring correct technical order.	All work areas	Visual monitoring, photo documentation	On permanent basis during the whole period of works implementation	Contractor – Site Manager
					On permanent basis during the whole period of works implementation, reporting once a month	Engineer
94.	Noise protection	It is necessary to avoid simultaneous operation of a big number of equipment units in the same place at the same time.	All work areas	Visual monitoring, photo documentation	On permanent basis during the whole period of works implementation	Contractor – Site Manager

Environmental Management Plan for the Contract 1A.1 Chlewice - Porzecze. Backwater embankment of Odra River at Myśla River and Modernization of Marwicki polder stage I and II

No.	Issue	Monitoring subject	Place of monitoring	Manner of monitoring	Period and frequency of monitoring	Responsible entity
					On permanent basis during the whole period of works implementation, reporting once a month	Engineer
95.	Noise protection	It is necessary to localise standstill sites for machines as far as possible from the areas under noise protection and at the same time as close as possible to the area of works.	All work areas	Visual monitoring, photo documentation	On permanent basis during the whole period of works implementation	Contractor – Site Manager
					On permanent basis during the whole period of works implementation, reporting once a month	Engineer
96.	Noise protection	During the implementation of the structure: <i>Chlewice–Porzecze. Backwater embankment of Odra River at Myśla River</i> , while performing embankments near buildings (embankment M to hectometre 0+50) in order to limit the level of emitted vibrations, it is not allowed to use dynamic devices (vibrating rollers) for soil compaction.	Structure: <i>Chlewice–Porzecze. Backwater embankment of Odra River at Myśla River</i>	Visual monitoring, photo documentation	On permanent basis during the whole period of works implementation	Contractor – Site Manager
					On permanent basis during the whole period of works implementation, reporting once a month	Engineer

Environmental Management Plan for the Contract 1A.1 Chlewice - Porzecze. Backwater embankment of Odra River at Myśla River and Modernization of Marwicki polder stage I and II

No.	Issue	Monitoring subject	Place of monitoring	Manner of monitoring	Period and frequency of monitoring	Responsible entity
97.	General conditions concerning nature protection	It is not allowed to kill animals during earthworks. All the excavations must be protected against animal access and it is necessary to help animals which entered excavations to leave them. In addition, according to the recommendations of herpetologist, if necessary, it is recommended to protect the migration routes of amphibians to water bodies, in order to limit a death rate among amphibians connected with vehicle traffic. It is also necessary to protect all hollows formed in the location of works and within the building sites which are filled with water against amphibian access and breeding in this area – works must be carried out according to the recommendations of a herpetologist.	All work areas	Visual monitoring, photo documentation	On permanent basis during the whole period of works implementation	Contractor – herpetologist
					On permanent basis during the whole period of works implementation, reporting once a month	Engineer
98.	General conditions concerning nature protection	During construction works it is not allowed to destroy plants outside the investment area.	All work areas	Visual monitoring, photo documentation	On permanent basis during the whole period of works implementation	Contractor – Site Manager
					On permanent basis during the whole period of works implementation, reporting once a month	Engineer

Environmental Management Plan for the Contract 1A.1 Chlewice - Porzecze. Backwater embankment of Odra River at Myśla River and Modernization of Marwicki polder stage I and II

No.	Issue	Monitoring subject	Place of monitoring	Manner of monitoring	Period and frequency of monitoring	Responsible entity
99.	General conditions concerning nature protection	The Contractor should provide the schedule for execution of works so that the dates and location of respective stages of construction works are in compliance with requirements of environmental decisions and EMP and so that they do not affect species under protection which are found on the Task implementation area and in its vicinity.	All work areas	Visual monitoring, photo documentation	On permanent basis during the whole period of works implementation	Contractor – Site Manager
					On permanent basis during the whole period of works implementation, reporting once a month	Engineer
100.	General conditions concerning nature protection	The Contractor will obtain required permits for departures from prohibitions in relation to protected species of animals, plants and fungi, issued by RDOŚ/GDOŚ (pursuant to Article 56 section 1 and 2 of the Act of 16 April 2004 on environmental protection or similar legal provisions applicable at the time of preparing and conducting works) – if this will be necessary according to the results of the environmental team).	All work areas	Contractor's periodical reports	On permanent basis during the whole period of works implementation	Contractor – phytosociologist/botanist, entomologist, herpetologist, chiropterologist, water protection expert
					On permanent basis during the whole period of works implementation, reporting once a month	Engineer
101.	General conditions concerning nature protection	During the works on rebuilding of flood embankment of Odra River and building of backwater embankment of Odra River at	All work areas	Visual monitoring, photo documentation	On permanent basis during the whole period of works implementation	Contractor – phytosociologist/botanist

Environmental Management Plan for the Contract 1A.1 Chlewice - Porzecze. Backwater embankment of Odra River at Myśla River and Modernization of Marwicki polder stage I and II

No.	Issue	Monitoring subject	Place of monitoring	Manner of monitoring	Period and frequency of monitoring	Responsible entity
		Myśla River, it is necessary to apply utmost carefulness at the time of earthworks in the vicinity of banks of Odra River embankment and banks of Myśla River embankment. Construction works must be led in the manner avoiding their interference with natural overgrowth on the Odra and Myśla rivers banks or with their beds.			On permanent basis during the whole period of works implementation, reporting once a month	Engineer
102.	General conditions concerning nature protection	Implementation works must be carried out beyond the bird breeding season and plant vegetation season, i.e. from 1st October to the end of March. If it is necessary to commence works in the bird breeding season and plant vegetation season, it is necessary to start works before 1st March in order to avoid breeding of birds and nesting on the area of performing works. Before implementation of the construction works, scaring away of the animals, should be provided. Prior to the commencement of works, the Contractor shall obtain permit referred to in Article 56 of the Act of 16 April 2004 on the environmental protection, issued by a competent RDOŚ / GDOŚ for purposeful scaring away and intruding avifauna within the project area.	Structure: <i>Chlewice–Porzecze. Backwater embankment of Odra River at Myśla River</i>	Visual monitoring, photo documentation Report for the implementation of the decision of the RDOŚ and GDOŚ based on Article 56 of Act of 16 April 2004 on the natural environmental protection.	On permanent basis during the whole period of works implementation	Contractor – ornithologist
					On permanent basis during the whole period of works implementation, reporting once a month	Engineer
103.	General conditions concerning nature protection	Prior to the commencement of earthworks, plants from the entire area at the base of the embankment with a width of 1.0 m on both sides must be mowed and removed.	Structure: <i>Chlewice–Porzecze. Backwater embankment of Odra River at Myśla River</i>	Visual monitoring, photo documentation	On permanent basis during the whole period of works implementation	Contractor – Site Manager

Environmental Management Plan for the Contract 1A.1 Chlewice - Porzecze. Backwater embankment of Odra River at Myśla River and Modernization of Marwicki polder stage I and II

No.	Issue	Monitoring subject	Place of monitoring	Manner of monitoring	Period and frequency of monitoring	Responsible entity
					On permanent basis during the whole period of works implementation, reporting once a month	Engineer
104.	General conditions concerning nature protection	Before removing a layer of humus from the area where embankment will be built, turfs must be routed and soil removed with such turfs outside the works zone.	Structure: <i>Chlewice–Porzecze. Backwater embankment of Odra River at Myśla River</i>	Visual monitoring, photo documentation	On permanent basis during the whole period of works implementation	Contractor – Site Manager
					On permanent basis during the whole period of works implementation, reporting once a month	Engineer
105.	General conditions concerning nature protection	Before commencing the implementation of the structure, the Contractor must obtain permission, referred to in Article 56 of the the Act of 16 April 2004 on environmental protection (or similar provision applicable at the time of preparing and conducting works) issued by a competent Regional Directorate for Environmental Protection and General Directorate of Environmental Protection for purposeful scaring away and disturbing avifauna, under partial and strict protection within the structure impact area.	Structure: <i>Modernization of Marwicki polder stage I and II</i>	Visual monitoring, photo documentation Report for the implementation of the decision of the RDOŚ and GDOŚ based on Article 56 of Act of 16 April 2004 on the natural environmental protection.	On permanent basis during the whole period of works implementation	Contractor – ornithologist
					On permanent basis during the whole period of works implementation, reporting once a month	Engineer
106.	General conditions concerning nature protection	The Contractor is obliged to ensure work organization in a way which will shorten the time of works, aimed at minimising adverse impacts on the animals living within the Task area and within its impact.	All work areas	Visual monitoring, photo documentation	On permanent basis during the whole period of works implementation	Contractor – phytosociologist/botanist, entomologist, herpetologist, chiropterologist, water protection expert
					On permanent basis during the whole period of works implementation, reporting once a month	Engineer

Environmental Management Plan for the Contract 1A.1 Chlewice - Porzecze. Backwater embankment of Odra River at Myśla River and Modernization of Marwicki polder stage I and II

No.	Issue	Monitoring subject	Place of monitoring	Manner of monitoring	Period and frequency of monitoring	Responsible entity
107.	General conditions concerning nature protection	Construction works may be conducted beyond the bird breeding season, i.e. from 1st September to the end of February. Upon having obtained relevant permit issued under Article 56 of the Act of 16 April on environmental protection, also in the bird breeding season (in the event of possible justified necessity of commencing works before the bird breeding season). It is necessary to scare the animals away before starting works.	Structure: <i>Modernization of Marwicki polder stage I and II</i>	Visual monitoring, photo documentation Report for the implementation of the decision of the RDOŚ and GDOŚ based on Article 56 of Act of 16 April 2004 on the natural environmental protection.	On permanent basis during the whole period of works implementation	Contractor – ornithologist
					On permanent basis during the whole period of works implementation, reporting once a month	Engineer
108.	General conditions concerning nature protection	In the event of discovering the breeding sites of protected fauna species within the Task implementation area, it is obligatory to suspend works until such sites are left by these species. It is not allowed to kill animals during earthworks and excavations, and it is necessary to enable the animals to exit such places.	All work areas	Visual monitoring, photo documentation	On permanent basis during the whole period of works implementation	Contractor – herpetologist/botanist, chiropterologist, entomologist
					On permanent basis during the whole period of works implementation, reporting once a month	Engineer
109.	General conditions concerning nature protection	In case of necessity of destroying the habitat of Roman snail <i>Helix pomatia</i> , the species under partial protection, a permit is required as mentioned in the Art. 56 of the Act of April 16, 2004 on nature protection.	Structure: <i>Chlewice–Porzecze. Backwater embankment of Odra River at Myśla River</i>	Quarterly reports for the Engineer on the results of the conducted monitoring of the Contractor. The Engineer submits once a year, on behalf of the PIU, reports to RDOŚ.	On permanent basis during the whole period of works implementation	Contractor – entomologist
					On permanent basis during the whole period of works implementation, reporting once a month	Engineer

Environmental Management Plan for the Contract 1A.1 Chlewice - Porzecze. Backwater embankment of Odra River at Myśla River and Modernization of Marwicki polder stage I and II

No.	Issue	Monitoring subject	Place of monitoring	Manner of monitoring	Period and frequency of monitoring	Responsible entity
110.	General conditions concerning nature protection	<p>The destruction of two nests and habitats of common magpie <i>Pica pica</i>, located on the plot no. 291 district Gryfino I, Gryfino Commune, in relation to the implementation of the structure <i>Modernization of Marwicki polder stage I and II</i>, must be performed with meeting the following conditions:</p> <ul style="list-style-type: none"> • prior to destruction, the nests under consideration must be checked in terms of their settlement, • natural habitats must be destroyed by means of mechanical cutting of trees, • the activities connected with destroying the nests and habitats of the magpie must be carried out beyond the breeding season, • the Applicant must submit a report on the usage of this permission to the Regional Director for Environment Protection in Szczecin by 15 February 2017 (a copy of the permission is included in the Appendix 4 to EMP. 	Structure: <i>Modernization of Marwicki polder stage I and II</i>	Quarterly reports for the Engineer on the results of the conducted monitoring of the Contractor, reports for the needs of RDOŚ informing in the range of using permit	On permanent basis during the whole period of works implementation	Contractor – ornithologist
					On permanent basis during the whole period of works implementation, reporting once a month	Engineer

Environmental Management Plan for the Contract 1A.1 Chlewice - Porzecze. Backwater embankment of Odra River at Myśla River and Modernization of Marwicki polder stage I and II

No.	Issue	Monitoring subject	Place of monitoring	Manner of monitoring	Period and frequency of monitoring	Responsible entity
111.	General conditions concerning nature protection	<p>Intentional scaring away and disturbing house sparrow <i>Passer domesticus</i>, Eurasian tree sparrow <i>Passer montanus</i>, short-toed treecreeper <i>Certhia brahcydactula</i>, common chaffinch <i>Fringilla coelebs</i>, European goldfinch <i>Carduelis carduelis</i> and European greenfinch <i>Carduelis chloris</i> in their breeding season, in the localisation of breeding and young species raising, in connection with the implementation of the structure <i>Chlewice–Porzecze. Backwater embankment of Odra River at Myśla River</i> within Boleszkowice Commune, may happen under the following conditions:</p> <ul style="list-style-type: none"> • scaring away and disturbing the species specified in this permission must take place by means of rattles and also through the presence of people on the investment area, as well as through oscillations, vibrations and noise generated by the operation of vehicles and devices, including construction machines and devices used during the project implementation, • the project must be implemented under the supervision of the environmental team; the personnel supervising the works will control the correctness of works connected with scaring away and disturbing the species, as well as fulfilling the obligations arising from this decision of RDOŚ (permission of 3rd December 2015, ref. no.: WOPN-OG.6401.210.2015.MKP – a copy of the permission is included in the Appendix 3 to EMP) special provisions of law, • partial reports must be submitted to the Regional Director for Environmental Protection in Szczecin on the usage of this permission by 15 January in each year of the permission term and by 15 January 2018 on the entire permission execution. 	Structure: <i>Chlewice–Porzecze. Backwater embankment of Odra River at Myśla River</i>	Quarterly reports for the Engineer on the results of the conducted monitoring of the Contractor, reports for the needs of RDOŚ informing in the range of using permit	On permanent basis during the whole period of works implementation	Contractor – ornithologist

Environmental Management Plan for the Contract 1A.1 Chlewice - Porzecze. Backwater embankment of Odra River at Myśla River and Modernization of Marwicki polder stage I and II

No.	Issue	Monitoring subject	Place of monitoring	Manner of monitoring	Period and frequency of monitoring	Responsible entity
					On permanent basis during the whole period of works implementation, reporting once a month.	Engineer
112.	General conditions concerning nature protection	Due to the protection of the white storks' nests, all the construction works connected with new embankments in Chlewice village and in sectors of embankments that are no more than 200 m far from apparently occupied nests should be carried out outside the nesting period of the white stork falling on 15.III-31.V.	Structure: <i>Chlewice–Porzecze. Backwater embankment of Odra River at Myśla River</i>	Naturalists reports, notes from the field vision	On permanent basis during the whole period of works implementation	Contractor – ornithologist
					On permanent basis during the whole period of works implementation, reporting once a month	Engineer
113.	Limitation of impacts on the protected areas and facilities	During the works construction, the Contractor shall observe standards, restrictions and recommendations as well as respect limitations arising from the existence of areas and facilities formed under the the Act of 16 April 2004 on environmental protection.	All work areas	Naturalists reports, notes from the field vision	On permanent basis during the whole period of works implementation	Contractor – phytosociologist, entomologist, herpetologist, chiropterologist, water protection expert
					On permanent basis during the whole period of works implementation, reporting once a month	Engineer
114.	General conditions concerning nature protection	It is not allowed to make use of substances which could be lethal to animals.	All work areas	Visual monitoring, photo documentation	On permanent basis during the whole period of works implementation	Contractor – Site Manager
					On permanent basis during the whole period of works implementation	Engineer

Environmental Management Plan for the Contract 1A.1 Chlewice - Porzeczce. Backwater embankment of Odra River at Myśla River and Modernization of Marwicki polder stage I and II

No.	Issue	Monitoring subject	Place of monitoring	Manner of monitoring	Period and frequency of monitoring	Responsible entity
115.	General findings concerning cultural heritage and monuments protection	If during construction works or earthworks the Contractor discovers an object likely to be a historic structure, he is obliged to suspend all the works which could damage or destroy discovered object; furthermore, such a person is obliged to secure the object with available protective measures as well as a discovery site; in addition, this person is obliged to notify the Provincial Conservator of Historical Monuments, and if not possible, Boleszkowice Commune Head, Widuchowa Commune Head or Gryfino Commune Head. The Contractor shall also inform the Engineer about the case.	All work areas	Visual monitoring, photo documentation	On permanent basis during the whole period of works implementation	Contractor – Site Manager
					On permanent basis during the whole period of works implementation	Engineer
116.	General findings concerning coming across graves with human skeletons during works construction	In case of coming across human remains (graves with human skeletons), the Contractor is obliged to inform archaeological supervision and the Engineer. Archaeological supervision makes a decision if there is a need, on the part of the Contractor, to inform the Police.	All work areas	Visual monitoring, photo documentation, Reports and notes of the archaeological supervision	On permanent basis during the whole period of works implementation	Contractor – Site Manager
					On permanent basis during the whole period of works implementation	Engineer
117.	General findings concerning cultural heritage and monuments protection	For the purpose of implementing the above EMP conditions related with protection of cultural landscape and monuments, the Contractor will also obtain the permit issued by the Provincial Conservator of Historical Monuments (PCHM) for the performance of archaeological rescue survey.	All work areas	Contractor's periodical reports	On permanent basis during the whole period of works implementation	Contractor – Site Manager

Environmental Management Plan for the Contract 1A.1 Chlewice - Porzecze. Backwater embankment of Odra River at Myśla River and Modernization of Marwicki polder stage I and II

No.	Issue	Monitoring subject	Place of monitoring	Manner of monitoring	Period and frequency of monitoring	Responsible entity
					On permanent basis during the whole period of works implementation	Engineer
118.	Human health and safety protection	Protect health and safety of people, including fire protection – development of HASP (Health and Safety Plan), obtaining acceptance of Engineer for and implementation of HASP plan, which will remain in force until construction works completion. Requirements with regard to fire protection included in HASP should include also prohibition on bonfires and combustion of flammable materials within the construction site area.	All work areas	Visual monitoring, photo documentation, reports	On permanent basis during the whole period of works implementation	Contractor – Site Manager
					On permanent basis during the whole period of works implementation	Engineer
119.	Human health and safety protection	The Contractor will ensure the preparation, implementation after the approval by the Engineer of Building site organisation design.	All work areas	Visual monitoring, photo documentation	Once at the stage of preliminary works and on permanent basis during the whole period of works implementation	Contractor – Site Manager
					Once at the stage of preliminary works and on permanent basis during the whole period of works implementation, reporting once a month	Engineer
120.	Human health and safety protection	The Contractor will ensure the preparation, implementation after the approval by the Engineer of Quality Assurance Plan.	All work areas	Visual monitoring, photo documentation	Once at the stage of preliminary works and on permanent basis during the whole period of works implementation	Contractor – Site Manager
					Once at the stage of preliminary works and on permanent basis during the whole period of works implementation, reporting once a month	Engineer

Environmental Management Plan for the Contract 1A.1 Chlewice - Porzecze. Backwater embankment of Odra River at Myśla River and Modernization of Marwicki polder stage I and II

No.	Issue	Monitoring subject	Place of monitoring	Manner of monitoring	Period and frequency of monitoring	Responsible entity
121.	Human health and safety protection	The Contractor will ensure the preparation, implementation after the approval by the Engineer of the construction site's flood management plan for the time of the works.	All work areas	Visual monitoring, photo documentation	Once at the stage of preliminary works and on permanent basis during the whole period of works implementation	Contractor – Site Manager
					Once at the stage of preliminary works and on permanent basis during the whole period of works implementation, reporting once a month	Engineer
122.	Human health and safety protection	Allocating dangerous zones which pose a risk to human health and life, and marking, with their use, warning boards, securing against unauthorised access.	All work areas	Visual monitoring, photo documentation	Once at the stage of preliminary works and on permanent basis during the whole period of works implementation	Contractor – Site Manager
					Once at the stage of preliminary works and on permanent basis during the whole period of works implementation, reporting once a month	Engineer
123.	Human health and safety protection	Ensuring health and safety in terms of organisation – the Contractor shall ensure and maintain the safety of conducted works.	All work areas	Visual monitoring, photo documentation	On permanent basis during the whole period of works implementation	Contractor – Site Manager
					On permanent basis during the whole period of works implementation, reporting once a month	Engineer
124.	Human health and safety protection	Ensuring health and safety in terms of organisation – The Contractor shall assign the construction area, as far as possible from the residential development areas in order to eliminate excessive noise and vibration emission at the time of the Task implementation.	All work areas	Visual monitoring, photo documentation	On permanent basis during the whole period of works implementation	Contractor – Site Manager

Environmental Management Plan for the Contract 1A.1 Chlewice - Porzecz. Backwater embankment of Odra River at Myśla River and Modernization of Marwicki polder stage I and II

No.	Issue	Monitoring subject	Place of monitoring	Manner of monitoring	Period and frequency of monitoring	Responsible entity
					On permanent basis during the whole period of works implementation, reporting once a month	Engineer
125.	Human health and safety protection	The Contractor shall secure and provide marking in the building site.	All work areas	Visual monitoring, photo documentation	On permanent basis during the whole period of works implementation	Contractor – Site Manager
					On permanent basis during the whole period of works implementation, reporting once a month	Engineer
126.	Human health and safety protection	The Contractor shall mark traffic routes in the building site.	All work areas	Visual monitoring, photo documentation	On permanent basis during the whole period of works implementation	Contractor – Site Manager
					On permanent basis during the whole period of works implementation, reporting once a month	Engineer
127.	Human health and safety protection	The Contractor shall prepare a traffic plan (evacuation plan) for the building terrain and site in emergency (fire, accident, technical failure, etc.), which will be approved by the Engineer prior to the commencement of works.	All work areas	Visual monitoring, photo documentation	Once at the stage of preliminary works and on permanent basis during the whole period of works implementation	Contractor – Site Manager
					Once at the stage of preliminary works and on permanent basis during the whole period of works implementation, reporting once a month	Engineer
128.	Human health and safety protection	Protection of health and safety in relation to applied technical measures by the use of efficient machines and tools subject to periodic service in accordance with the manufacturer's requirements.	All work areas	Visual monitoring, photo documentation	On permanent basis during the whole period of works implementation	Contractor – Site Manager

Environmental Management Plan for the Contract 1A.1 Chlewice - Porzecze. Backwater embankment of Odra River at Myśla River and Modernization of Marwicki polder stage I and II

No.	Issue	Monitoring subject	Place of monitoring	Manner of monitoring	Period and frequency of monitoring	Responsible entity
					On permanent basis during the whole period of works implementation, reporting once a month	Engineer
129.	Human health and safety protection	Protection of health and safety in relation to applied technical measures by the use of machines and tools according to their intended use.	All work areas	Visual monitoring, photo documentation	On permanent basis during the whole period of works implementation	Contractor – Site Manager
					On permanent basis during the whole period of works implementation, reporting once a month	Engineer
130.	Human health and safety protection	Any procedures connected with the maintenance of machines and re-fuelling must be performed within dedicated site facilities which are improved and equipped with relevant sorbents. Site facilities must be equipped with oil derivative substances sorbents throughout the Task implementation period. The Contractor must also provide training to employees within the scope of their correct usage.	All work areas	Visual monitoring, photo documentation	On permanent basis during the whole period of works implementation	Contractor – Site Manager
					On permanent basis during the whole period of works implementation, reporting once a month	Engineer
131.	Human health and safety protection	It is required to ensure ongoing monitoring of a technical condition of machines, correct performance of works and strict adherence to the Occupational Health and Safety regulations in order to eliminate an increased noise level within the works zone and in its immediate vicinity.	All work areas	Visual monitoring, photo documentation	On permanent basis during the whole period of works implementation	Contractor – Site Manager
					On permanent basis during the whole period of works implementation, reporting once a month	Engineer

Environmental Management Plan for the Contract 1A.1 Chlewice - Porzeczce. Backwater embankment of Odra River at Myśla River and Modernization of Marwicki polder stage I and II

No.	Issue	Monitoring subject	Place of monitoring	Manner of monitoring	Period and frequency of monitoring	Responsible entity
132.	Human health and safety protection	The Contractor shall ensure constant visibility conditions during the day and at night of such structures and signs for which it is obligatory for safety reasons.	All work areas	Visual monitoring, photo documentation	On permanent basis during the whole period of works implementation	Contractor – Site Manager
					On permanent basis during the whole period of works implementation, reporting once a month	Engineer
133.	Human health and safety protection	HIV–AIDS prevention. The Contractor shall implement training and programme of raising awareness of spreading HIV–AIDS through an approved service provider and shall take all other measures outlined in the Agreement (General Conditions, Clause 6.7) in order to reduce a risk of HIV transfer among the Contractor's personnel and local population and it shall promote early diagnostics and support for infected people.	All work areas	Visual monitoring, photo documentation	On permanent basis during the whole period of works implementation	Contractor – Site Manager
					On permanent basis during the whole period of works implementation, reporting once a month	Engineer
134.	Soil masses handling and management	If technically feasible and reasonable, soil material yielded from earthworks must be, in the first place, managed on the building site through using it for building and shaping embankments. For the remaining soil material not appropriate for being re-used (e.g. chemically contaminated), the Contractor must manage it in compliance with applicable waste regulations.	All work areas	Visual monitoring, photo documentation	On permanent basis during the whole period of works implementation	Contractor – Site Manager
					On permanent basis during the whole period of works implementation, reporting once a month	Engineer

Environmental Management Plan for the Contract 1A.1 Chlewice - Porzecze. Backwater embankment of Odra River at Myśla River and Modernization of Marwicki polder stage I and II

No.	Issue	Monitoring subject	Place of monitoring	Manner of monitoring	Period and frequency of monitoring	Responsible entity
135.	Soil masses handling and management	Soil material, including peat, extracted during earth works (Structure: <i>Chlewice–Porzecze. Backwater embankment of Odra River at Myśla River</i>) shall be managed at the construction site by use for embankments construction and forming. Peat shall be beforehand mixed with fertile soil layer and then it shall be used in the covering layer of the embankment.	Structure: <i>Chlewice–Porzecze. Backwater embankment of Odra River at Myśla River</i>	Visual monitoring, photo documentation	On permanent basis during the whole period of works implementation	Contractor – Site Manager
					On permanent basis during the whole period of works implementation, reporting once a month	Engineer
136.	Developing Waste management plan	Within 42 days from the moment of Works commencement, the Contractor shall develop and submit to the Engineer the waste management plan concerning waste generated during works implementation, taking into account, among others, guidelines and procedures of waste handling, included in EMP and taking into account the possibility of coming across, during works implementation, hazardous substances, such as crop protection chemicals, oils, lubricates, fuels and others (in both language versions of the document) and the need to inform the police in case of finding other unidentified items and objects potentially hazardous for human health and safety as well as environment condition.	All work areas	Visual monitoring, photo documentation	On permanent basis during the whole period of works implementation	Contractor – Site Manager
					On permanent basis during the whole period of works implementation, reporting once a month	Engineer

Environmental Management Plan for the Contract 1A.1 Chlewice - Porzecze. Backwater embankment of Odra River at Myśla River and Modernization of Marwicki polder stage I and II

No.	Issue	Monitoring subject	Place of monitoring	Manner of monitoring	Period and frequency of monitoring	Responsible entity
137.	Contractor's environmental team	The Contractor's environmental team should be present throughout the whole works construction period.	All work areas	Contractor's confirmation of the performance of activities in the annual Report on the Contract execution, attached with site inspection records, reports prepared by experts in natural environment, etc.	On permanent basis during the whole period of works implementation	Contractor – phytosociologist/botanist, ornithologist, herpetologist, chiropterologist, entomologist, water protection expert
					On permanent basis during the whole period of works implementation, reporting once a month	Engineer
138.	Tasks of the Contractor's environmental team within the Task implementation period	The Contractor's environmental team conducts the inspection of the area of works construction prior to their implementation and during such works.	All work areas	Engineer's confirmation in the annual Engineer's Report, attached with protocols (Minutes of meetings and notes from the site inspection). The Engineer will be responsible for assessing the monitoring, which will be confirmed in the periodic reports of the Engineer.	On permanent basis during the whole period of works implementation	Contractor – phytosociologist, ornithologist, herpetologist, chiropterologist, entomologist, water protection expert
					On permanent basis during the whole period of works implementation, reporting once a month	Engineer

Environmental Management Plan for the Contract 1A.1 Chlewice - Porzecze. Backwater embankment of Odra River at Myśla River and Modernization of Marwicki polder stage I and II

No.	Issue	Monitoring subject	Place of monitoring	Manner of monitoring	Period and frequency of monitoring	Responsible entity
139.	Tasks of the Contractor's environmental team within the Task implementation period	Activities of Contractor's environmental team, should include: <ul style="list-style-type: none"> • current inspection of area covered by construction and tailing works prior to their commencement and inspections during construction along with preparing relevant reports, constituting documentation of proper performance of environmental team and at the same time informing about due implementation of minimising measures, • formulating and reporting to the Engineer requests with regard to the need of minimizing actions (along with their execution) necessary to alleviate unfavourable effects of Task on natural habitats and species being the object of interest of the Community and subject to national legal protection (species protection) that were unforeseeable and/or impossible to disclose at the stage of agreeing on implementation terms of the concerned Task under the procedure aimed at issuance of the decision on environmental conditions, the activities may be implemented only after the Engineer's acceptance. 	All work areas	Contractor's confirmation of the performance of activities in the annual Report on the Contract execution, attached with site inspection records, reports prepared by experts in natural environment, etc.	On permanent basis during the whole period of works implementation	Contractor – phytosociologist/botanist, ornithologist, herpetologist, chiropterologist, entomologist, water protection expert
					On permanent basis during the whole period of works implementation, reporting once a month	Engineer

Environmental Management Plan for the Contract 1A.1 Chlewice - Porzecze. Backwater embankment of Odra River at Myśla River and Modernization of Marwicki polder stage I and II

No.	Issue	Monitoring subject	Place of monitoring	Manner of monitoring	Period and frequency of monitoring	Responsible entity
140.	Tasks of the Contractor's environmental team within the Task implementation period	The Contractor's environmental team prepares required materials and motions for obtaining permission for departure from the prohibitions connected with protected species of plants, fungi and animals under conditions and procedure specified in the Environmental Protection Act of 16 April 2004.	All work areas	Contractor's confirmation of the performance of activities in the annual Report on the Contract execution, attached with site inspection records, reports prepared by experts in natural environment, etc.	On permanent basis during the whole period of works implementation	Contractor – phytosociologist/botanist, ornithologist, herpetologist, chiropterologist, entomologist, water protection expert
					On permanent basis during the whole period of works implementation, reporting once a month	Engineer
141.	Tasks of the Contractor's environmental team within the Task implementation period	The Contractor's environmental team submits periodical reports to the Regional Director of Environmental Protection and reports monthly, quarterly and final, submits to Engineer.	All work areas	Contractor's confirmation of the performance of activities in the annual Report on the Contract execution, attached with site inspection records, reports prepared by experts in natural environment, etc.	On permanent basis during the whole period of works implementation	Contractor – phytosociologist/botanist, ornithologist, herpetologist, chiropterologist, entomologist, water protection expert
					On permanent basis during the whole period of works implementation, reporting once a month	Engineer
142.	Sapper supervision	In the event of discovering unexploded shells the Contractor shall immediately stop the works and evacuate workers as well as notify the police and a licensed sapper unit.	All work areas	Visual monitoring, photo documentation, tests with a specialist equipment, sapper supervision report	Once at the stage of preliminary works and on permanent basis during the whole period of works implementation	Contractor – Site Manager, constant Contractor's sapper supervision

Environmental Management Plan for the Contract 1A.1 Chlewice - Porzecze. Backwater embankment of Odra River at Myśla River and Modernization of Marwicki polder stage I and II

No.	Issue	Monitoring subject	Place of monitoring	Manner of monitoring	Period and frequency of monitoring	Responsible entity
					Once at the stage of preliminary works and on permanent basis during the whole period of works implementation, reporting once a month (Monitoring for implementation of EMP records in the range of sapper supervision)	Engineer
143.	Sapper supervision	The Contractor shall ensure sapper supervision throughout the performance of earthworks, which will consist of on-going inspection and clearance of the terrain from hazardous objects of a military origin and their disposal.	All work areas	Visual monitoring, photo documentation, tests with a specialist equipment, sapper supervision report	Once at the stage of preliminary works and on permanent basis during the whole period of works implementation	Contractor – Site Manager, Contractor’s constant sapper supervision
					Once at the stage of preliminary works and on permanent basis during the whole period of works implementation, reporting once a month (Monitoring for implementation of EMP records in the range of sapper supervision)	Engineer
144.	Land and landscape protection	Slopes and crowns of expanded and constructed flood embankment, after the end of construction works, to be sown with grass mix composition of which shall be agreed on with expert – phytosociologist.	All work areas	Visual monitoring, photo documentation	On permanent basis during the whole period of works implementation	Contractor – Site Manager
					On permanent basis during the whole period of works implementation, reporting once a month	Engineer

Environmental Management Plan for the Contract 1A.1 Chlewice - Porzecze. Backwater embankment of Odra River at Myśla River and Modernization of Marwicki polder stage I and II

No.	Issue	Monitoring subject	Place of monitoring	Manner of monitoring	Period and frequency of monitoring	Responsible entity
145.	Protection of archaeological values	During the works, continuous archaeological supervision will be ensured.	All work areas	Contractor's confirmation of the performance of activities in the annual Report on the Contract execution, attached with site inspection records, reports prepared by experts in natural environment, etc.	On permanent basis during the whole period of works implementation	Contractor – Site Manager
					On permanent basis during the whole period of works implementation, reporting once a month	Engineer
146.	Human health and safety protection	Contractor's OHS supervision shall be responsible for adequate marking of building site according to applicable laws. This marking shall be regularly controlled, in the case of destruction or theft of marking the Contractor shall promptly replace it or supplement it.	All work areas	Visual monitoring, photo documentation	Once at the stage of preliminary works and on permanent basis during the whole period of works implementation	Contractor – Site Manager
					Once at the stage of preliminary works and on permanent basis during the whole period of works implementation, reporting once a month	Engineer

Environmental Management Plan for the Contract 1A.1 Chlewice - Porzecze. Backwater embankment of Odra River at Myśla River and Modernization of Marwicki polder stage I and II

No.	Issue	Monitoring subject	Place of monitoring	Manner of monitoring	Period and frequency of monitoring	Responsible entity
147.	Environment, human health and safety protection	The Contractor is responsible for providing training (completed with a test verifying the knowledge of participants) within EMP rules and conditions and protective indications at the time of construction for its managing personnel and engineering–technical personnel supervising the construction works, which must be prepared with the help of Contractor’s environmental team. The Contractor's employees who will handle fuels and other oil derivative substances should receive training within the protection of soil and water environment and applicable protective measures, including the use of sorbents.	All work areas	Verification of the Contractor’s documents, participation in training	Once at the stage of preliminary works and on permanent basis during the whole period of works implementation	Contractor – Site Manager
					Once at the stage of preliminary works and on permanent basis during the whole period of works implementation, reporting once a month	Engineer
148.	Periodic meetings on implementation of mitigation and monitoring measures	During the implementation of the tasks arising from the EMP monthly team meetings PIO, Engineer and Contractor will take place to discuss and monitor the implementation of mitigation and monitoring measures.	All work areas	Minutes of meetings	On permanent basis during the whole period of works implementation and Defect Notification Period	PIO, Engineer and Contractor
					On permanent basis during the whole period of works implementation and Defect Notification Period, reporting once a month	Engineer
149.	Noise protection	In the areas under acoustic protection and the working sites adjacent to these areas, in order to mitigate the nuisance for	All work areas	Visual monitoring, photo documentation	On permanent basis during the whole period of works implementation	Contractor – Site Manager

Environmental Management Plan for the Contract 1A.1 Chlewice - Porzecze. Backwater embankment of Odra River at Myśla River and Modernization of Marwicki polder stage I and II

No.	Issue	Monitoring subject	Place of monitoring	Manner of monitoring	Period and frequency of monitoring	Responsible entity
		inhabitants and environment, it is allowed to use only pumping engines equipped with soundproof housing.			On permanent basis during the whole period of works implementation, reporting once a month	Engineer
07 – REQUIREMENTS AFTER COMPLETION OF WORKS						
150.	Land and landscape protection	It is necessary to conduct treatment of the areas sown with grass, including, i.a. double mowing of embankment surface (in June and September – for structure <i>Chlewice–Porzecze. Backwater embankment of Odra River at Myśla River</i> and removal of hard overgrowth. Structure: <i>Modernization of Marwicki polder stage I and II</i> mowing will take place beyond the bird breeding season. This activity comprises also the period of reporting defects.	All work areas	Visual monitoring, photo documentation	On permanent basis during the Defect Notification Period	Contractor – Site Manager
					On permanent basis during the Defect Notification Period	Engineer
151.	Human health and safety protection	It is not allowed to plant trees and shrubs on the embankments in the distance of 3 m from the embankment foot.	All work areas	Visual monitoring, photo documentation	On permanent basis during the Defect Notification Period	Contractor – Site Manager
					On permanent basis during the Defect Notification Period	Engineer