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PROJECT ENVIRONMENTAL AND SOCIAL COMMITMENTS REGISTER

Rev	Status	Date	Status Description	Issued by	Checked by	Approved by
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TANAP PROJECT ENVIRONMENTAL and SOCIAL COMMITMENTS REGISTER¹

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				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
1	0-1	Design	Influence on Highways	According to the internal circular of General Directorate of Highways dated 31.01.2007 and numbered 2007/6, for every kind of activity to be conducted in highway expropriation borders or in 50 m distance to Highway Border Line, permit of General Directorate of Highways will be received. A Protocol will be signed with the relevant Regional Directorate for the activities to be performed on horizontal and parallel crossings at points that NGP and highway cross and required permits will be obtained. Traffic safety will be maintained for the activities to be conducted in line within 50 m to the highway and the signing projects will be prepared as an appendix of the Protocol to be signed with the related Regional Directorate.	<ul style="list-style-type: none"> - The principles of 31. Article of Regulation on Facilities to be Established Adjacent to Highways will be complied. Related with the areas that connection roads or facilities will be constructed on study sites, the articles of Regulation on Facilities to be Established Adjacent to Highways will also be complied. - Traffic Law numbered 2918 and related regulations will be complied during all the transportations and also, a Traffic Management Plan will be prepared in coordination with the related Regional Directorates and it will be submitted to the related regional directorates. - During construction, operation, transportation of materials, and all detonation works to be conducted, the structure of highways and related facilities won't be damaged, in case of damage; the loss will be paid by company within the protocol to be signed 	All Regional Directorates of Highways	<ul style="list-style-type: none"> - For road crossings and horizontal passages of NGP near roads, Protocol to be signed - Project approval before construction of engineering structures for existing highway crossings - Permit to be taken for new connections to the Roads before construction according to the Traffic Law numbered 2918. - Quarries and borrow pits in the NGP corridor will be taken into consideration and necessary pre-cautions for the pipeline not to be affected negatively during operation will be taken. 	TANAP	-	-	-	-	-	-	Chp. 2.8.4 Chp. 10.3 App.-4.3
				For the crossing points of the NGP route with the available structures and projects (bridge, historical bridge and other engineering structures), finalization will be carried out in contact with General Directorate of Highways and Protocol will be signed for appropriate passage based on the conditions of the route. In the places that bridge is available with horizontal crossings, the opinion of Chief Engineering Branch of Regional Directorate's Engineering Structures Department will be received. 1/5,000 and 1/1,000 scaled projects of crossings of NGP and existing highway		Department of Operations	<ul style="list-style-type: none"> - For available and planned highways crossing with the NGP, the principles provided from General Directorate of Highways, Department of Operations will be followed for the works and operation to be conducted (Ref. Annex 4.3). 								
						Regional Directorate of Public Private Sector Association	<ul style="list-style-type: none"> Since the NGP route is located in <u>Izmir-Istanbul Highway</u> expropriation corridor, according to the opinion of the Regional Directorate of Public Private Sector Association (Ref. App.-4.3), every kind of pre, application, detailed, typical cross section, operation projects for the areas that have crossings with highway, will be provided to Regional Directorate of Public-Private Sector Association, their validation will be received and protocol will be signed in case of necessity. 								

¹ This Register is derived from ESIA (TNP-REP-ENV-GEN-002) Appendix 4.5. If the Project has a new activity, the impacts of the activity will be added in this list.

² Environmental components mean surroundings in which a project operates, including air, water, land, natural resources, flora, fauna, humans and their interrelation.

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				<p>network will be submitted for the opinion and approval of the General Directorate of Highways, these crossings will be transmitted via major engineering structures, and opinion and approval of General Directorate of Highways will be received for the design of engineering structures.</p> <p>Every type of engineering structures required to be constructed on the crossing points that NGP cuts roads horizontally (structures as minimum 10 m concrete enveloping at both sides starting from the banquette; etc.) will be designed and their Projects will be had approved by the related Regional Directorate of Highways. Every kind of investment will be provided and their construction will be conducted in the framework of the protocol to be signed with the related Regional Directorate of Highways.</p> <p>At motorways that NGP crosses horizontally design will be performed in the way that the NGP will be at least 500 m away from motorway axis and will have least number of crossings with motorway for the safety of the motorway. In case NGP crosses with the projects under design, positive opinions of Regional Directorate will be received in each step of the projects' front, application details and cross-sections for the areas that cross and in case of necessity, protocol will be signed.</p> <p>At crossing points of the NGP route with the existing structures and projects of highways (bridge, historical bridge and other engineering structures), agreement will be made with General Directorate of Highways and appropriate transmission protocol will be signed according to the route. Based on the</p>	<p>with the Regional Directorates.</p> <p>- During the transportation of all substances under the category of dangerous substances, the articles of "Regulation on Transportation of Dangerous Substances on Highway will be complied.</p> <p>- In the parts that NGP and highway route go in parallel, the route will pass out of the borders of expropriation and safety area.</p>	<p>Department of Engineering Structures (Chief Engineering Departments in the Regional Directorates)</p>	<p>- For Historical Bridges in Bursa-14 and Kars-18 Regional Directorates' Territory, at the crossing points of NGP, opinions of the Reg. Direct. to be taken</p> <p>- Taking into consideration that on route, there may be other bridges available that are not in inventory, the Project will be conducted in compliance with Law on Cultural and Natural Entities Protection numbered 2863 and principles mentioned in EIA Application File under title" III.1.7 Architectural and Archaeological Heritage".</p>								
						<p>1- İSTANBUL-1 Regional Directorate of Highways</p> <p>2- KAYSERİ-6 Regional Directorate of Highways</p>	<p>1-</p> <p>- Opinion of the Regional Directorate will be received again during the construction of the Project for <u>Kınalı-Tekirdağ-Savaştepe-Çanakkale Highway</u> which is in design phase</p> <p>- Based on internal circular of General Directorate of Highways dated 31.01.2007and numbered 2007/6, route will pass out of expropriation borders in parts that NGP route is in parallel with highway. Horizontal transmissions will be conducted out of crossroad areas, perpendicular to the road axis as much as possible and via horizontal drilling at points determined together with experts from Regional Directorate in the scope of protocol.</p> <p>2-</p> <p>- All transmissions of NGP and road route will be conducted within the scope of protocol via pneumatic transmissions. For the activities to be conducted within the route that passes 50 m inside of highway, protocol will be signed with Regional Directorate, permits will be obtained, the traffic safety will be prevented and protocol appendix signing projects will be conducted.</p> <p>- At the crossings close to historical bridges (bridge protection area will be equal to bridge length), the opinion of Regional Directorate will be received.</p>								

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				Internal Circular of General Directorate of Highways dated 31.01.2007 and numbered 2007/6, at parts that NGP and highway routes go in parallel, pipeline will pass out of expropriation borders and safety site. Horizontal transmissions will be conducted out of crossroad areas, perpendicular to the road axis as much as possible and via horizontal drilling at points determined together with experts from Regional Directorate in the scope of protocol. At parts that NGP route crosses roads and goes in parallel with roads out of expropriation borders, necessary pre-cautions will be taken in order to maintain highway safety. Necessary signings will be placed during activities being conducted at parts that lines go very close or cross, structure integrity of the road won’t be damaged, all necessary pre-cautions by means of traffic safety, live and property safety will be taken. In order not to have any difficulty during the Project studies of applications such as vertical and horizontal axis change of roads, crossroad construction and platform widening at points that NGP and highways are in parallel or cross; all the necessary pre-cautions will be taken throughout the 500 m corridor parallel to the highway. Applications that may inhibit the activities of facilities of the institution in the study corridor of NGP (Sub-district directorate, hospital, historical bridge, plent sites, quarries, storage areas, etc.) will be avoided and activities will be held in coordination with authority on every subject that interest General Directorate of Highways. The principles of Article 31 of the Regulation on Facilities to be Established Adjacent to Highways will be complied.		3- ERZURUM-12 Regional Directorate of Highways 4- BURSA-14 Regional Directorate of Highways	<p>- At parts the route passes close to borrow pits registered for Regional Directorate, safety distance will be provided since production via detonation will be conducted in the pits and route won’t pass through the registered pits.</p> <p>- In case that a connection road is needed, crossroad distance, vision distance, structure distance and other Fundamentals will be complied in accordance with the articles of Regulation on Facilities to be Established Adjacent to Highways and Article 17 and Article 18 of Traffic Law numbered 2918.</p> <p>- The additional vehicle load may be observed on roads that highways are used during construction and operation phases, will be provided in detail as vehicle type and count and will be informed calculated as % increase.</p> <p>3-</p> <p>- Activities will be conducted not interrupting the operation of the borrow pits registered on Regional Directorate.</p> <p>4-</p> <p>- The pipeline route will be revised in the way it will pass out of the expropriation border.</p> <p>- Because the construction works of Gebze-Orhangazi-Izmir Highway Project are continuing, opinion of Regional Directorate of Public-Private Sector Association was received. (Ref. App-4.3). As mentioned in the opinions, every kind of pre, application, detail, typical cross section, operation etc. projects for the areas that have crossing with highways, will be provided to Regional Directorate of Public-Private Sector Association and their approval will be received and protocol will be signed in case of necessity.</p> <p>5-</p> <p>- In order not to have any difficulty during the Project studies of applications such as vertical and horizontal axis</p>								

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						5- SİVAS-16 Regional Directorate of Highways	change of roads, crossroad construction and platform widening at points that NGP and highways are in parallel or cross; all the necessary pre-cautions will be taken throughout the 500 m corridor parallel to the highway.								
2	0-1	Design	Influence on Railways	At points that natural gas pipeline (NGP) crosses railway route, in case that the natural gas pipeline passes under the route, steel resistant against corrosion and pressure will be stick into the pipe with at least 1.5 m depth (at least 4m in high speed train lines) to protection pipe upper level via horizontal drilling method. NGP will be placed in parallel in protection box or pipe underground with minimum 80 cm pipeline upper level depth from the ending altitude of the platform side slope. Minimum 25 m corridor width in the corridors without excavation and backfilling (12.5 m on right and 12.5 m on left starting from main line axis) and additionally; 10 m service road will be determined from the appropriate side of the line (right or left) and 5 m safety distance will be left from the outer line on the other side. At the rugged areas with excavation and backfilling, additionally to the distance between the side slope stakes of both sides, 10 m distance with servicing purpose will be kept in one side starting from the end of the planned structure and 2 m safety distance will be kept on the other side. Considering double line construction on speed train lines, for the railway corridor width, minimum 50 m corridor width in corridors without excavation and backfilling, additionally, 10 m service line will be left from the	-	General Directorate of State Railways Enterprises	<ul style="list-style-type: none"> - At points that natural gas pipeline (NGP) crosses railway route, in case that the natural gas pipeline passes under the route, steel resistant against corrosion and pressure will be stick into the pipe with at least 1.5 m depth (at least 4m in high speed train lines) to protection pipe upper level via horizontal drilling method. - NGP will be placed in parallel in protection box or pipe underground with minimum 80 cm pipeline upper level depth from the ending altitude of the platform side slope. - Necessary pre-cautions will be taken in order to protect traffic safety. - All costs including damages which may occur during and after construction including structuring the displacements of the pipes to pass under the route in case of necessity as a result of any decision made by General Directorate of State Railways Enterprises will be compensated by related person or institution; and this issue will be agreed with the General Directorate and a protocol including terms of passage cost payment for once will be arranged and pipeline passage will be performed. - During the parallel passage of natural gas pipeline to conventional line; <p>Minimum 25 m corridor width in the corridors without excavation and</p>	TANAP	-	-	-	-	-	-	Chp. 2.8.4 Chp. 10.3 App.-4.3

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				appropriate side of the line (right or left) and in any case, 10 m safety distance will be left from the outer line. In rugged areas with excavation and backfilling, addition to the distance between the side slope stakes on both sides, 10 m service distance starting from the end of the planned structure will be kept on an appropriate side and 10 m safety distance will be left on the other side. Necessary pre-cautions will be taken in order to protect traffic safety. The protocol that includes the rules explaining that all costs including damages may occur during and after construction, structuring the displacements of the pipes to pass under the route in case of necessity as a result of any decision made by General Directorate of State Railways Enterprises will be paid by related person or institution; agreement with TRGR will be provided on the issue and transmission cost will be received for once will be arranged and pipeline will be placed.			<p>backfilling (12.5 m on right and 12.5 m on left starting from main line axis) and additionally; 10 m service road will be determined from the appropriate side of the line (right or left) and 5 m safety distance will be left from the outer line on the other side.</p> <p>At the rugged areas with excavation and backfilling, additionally to the distance between the side slope stakes of both sides, 10 m distance with servicing purpose will be kept in one side starting from the end of the planned structure and 2 m safety distance will be kept on the other side.</p> <p>By means of railway security;</p> <p>- At places that existing TRGR corridor is wider than 25 m, for the facilities that may cause danger by means of live and real property related with combustible and explosive substances, according to Obligatory Standard Notification numbered TS 11939/January 2001 of Ministry of Industry and Trading , starting from the ownership borders of TRGR , a closeness distance of 10 m will be kept for covered or underground tanks (the safety distances of underground tanks are measured from safety valve) and a distance of 15 m will be kept for above ground tanks.</p> <p>- At the places the existing TRGR corridor is narrower than 25 m, starting from 25 m to be provided by planning, a closeness distance of 10 m will be provided for covered and underground tanks (the safety distances of underground tanks are measured from safety valve) and 15 m will be provided for above ground tanks.</p> <p>- Considering double line construction on speed train lines, for the railway corridor width;</p>								

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							<div>Minimum 50 m corridor width in corridors without excavation and backfilling, additionally, 10 m service line will be left from the appropriate side of the line (right or left) and in any case, 10 m safety distance will be left from the outer line.</div> <div>In rugged areas with excavation and backfilling, addition to the distance between the side slope stakes on both sides, 10 m service distance starting from the end of the planned structure will be kept on an appropriate side and 10 m safety distance will be left on the other side.</div>								
						General Directorate of Infrastructure Investments	<div>- The issues specified in Chapter 2.8.4.1 concerning railway crossings that intercept the NGP route which are specified in Chapter 10 shall be complied with.</div> <div>- The positive letter of opinion received from General Directorate of Civil Aviation on Sivas (Nuri Demirağ) Airport existing in the vicinity of NGP route, is provided in App-4.3 and the issues specified in the concerned correspondence shall be complied with.</div> <div>- The correspondence concerning the Ardahan Airport in the vicinity of the NGP route is provided in App.-4.3, and in relation to this issue, activities shall be performed in cooperation with the General Directorate of Infrastructure Investments, obtaining the required permits.</div> <div>- In relation to the Eskişehir (Anadolu University) Airport in the vicinity of the NGP route, the opinion of the General Directorate of Infrastructure Investments is given in App. 4.3, and in accordance to this, activities shall be performed in cooperation with the General Directorate of Civil Aviation and the required permits shall be taken.</div>								

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							<p>- In relation to the Military Airports in the vicinity of the NGP route, activities concerning the military zones specified in App. 4.3 and detailed in Chapter 7.3.1.8 shall be performed in compliance with the opinions given by the Ministry of National Defense and the Turkish General Staff.</p> <p>- In the projects being carried out by the General Directorate of Infrastructure Investments, at points where the NGP route crosses the railway line, if the NGP crosses under the railway route, the protection pipe shall pass through steel guide pipe resistant to corrosion and pressure by horizontal drilling method, so that there is a depth of at least 5 m from the platform level to the upper level of the protection pipe.</p> <p>- At the points where the natural gas pipeline crosses the railway lines, which are under the responsibility of the General Directorate of Infrastructure Investments, the sub-ballast and sub-base layers, which are the layers under the ballast, shall be protected against the effects of water by taking the necessary precautions, and taking into consideration the slope ditch and the drainage structures of the railway platform side, For the railway sections at cut level, a minimum height of 310 cm shall be ensured between the top level of the rail and the culvert slab top level H, which will protect the natural gas pipe from dynamic impacts. In addition, the static calculation of the top slab thickness of the culvert structure protecting the natural gas pipe shall be made according to the European Union Standards EN and UIC 71 x 1,33 railway project load and dynamic coefficient as well as taking into account , the horizontal and vertical clean gauge spaces to be left for the maintenance</p>								

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							and repair of the natural gas pipeline, the diameter of the gas pipe and the addition of the thicknesses of the granular drainage material to be constructed under the natural gas pipe. - An agreement shall be reached with the General Directorate of Infrastructure Investments through a protocol concerning the crossing points of the railways and airports.								
3	0-1	Design	Influence on Other Pipelines	All the pre-cautions related with health, safety and protection of pipeline predicted by the Project owner/operator will be taken related with the existing and planned pipeline where go in close with the NGP within the Project. Before the activities of land preparation and construction of the Project are initiated, with the information provided in design on existing pipeline borders, will be identified on-site and in order to prevent the minimum distance required between, the horizontal direction changes where bending will be made, will be finalized. Heavy construction machines will pass above existing pipelines only at points determined with pipeline operator, otherwise, only the existing and new access roads will be used. At places with areal restriction, readjustments will be conducted on narrowing the determined construction corridor study borders of NGP. Topsoil and excavation soil that will come out during the land preparation and construction activities won't be stored in route corridor of the existing line in case an agreement is not conducted as opposite. In case the lines are in parallel at side slopes, in order not to damage the stability of the existing line due to excavation works to be conducted, NGP will pass above the existing line, only in special cases, will pass below the line. If any damage is observed, the existing line will be	-	Transit Petroleum Pipelines Department	- Technical data on natural gas pipeline will be provided before construction phase and Project approval will be received and the studies will be conducted within the frame of protocol to be signed with BOTAS. - The relevant provisions of the Technical Safety and Environment Regulation on Construction and Operation of the Crude Petroleum and Natural Gas Pipeline Installations of the General Directorate of the Petroleum Transmission through Pipelines Co. (BOTAŞ), published in the Official Gazette dated 06.01.2011, No. 27807 shall be fulfilled	TANAP	-	-	-	-	-	-	Chp. 2.8.4 Chp. 10.3 App.-4.3

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				reinstated according to an agreement to be made with the operator of the line. At horizontal crossing, the existing line won't be damaged mechanically, activities will be performed below the line in the way that no damage will be given to the cathodic protection of the line in safety distance, and crossing angle will be kept close to 90° as much as possible and at least 45°.											
4	0-1	Design	Influence on Cable Lines	Within the Project, the lines existing on the NGP route construction corridor won't be damaged. At horizontal crossings, the crossing angles will be tried to be kept around 90° as much as possible and at least 45°. At crossings that high voltage transmission lines exist, the cathodic protection of the pipeline will be taken into consideration.	-	-	-	TANAP	-	-	-	-	-	-	Chp. 2.8.4
5	0-1	Design	Influence on Overhead Energy Transmission Line	Within the Project, at the overhead energy transmission line crossings on the NGP route, minimum tolerable impact of induced current on line will be evaluated. At horizontal crossings, crossing angle will kept close to 90° as much as possible, at least, 60°.	-	-	-	TANAP	-	-	-	-	-	-	Chp. 2.8.4
6	0-1	Design	Influence on Mining Sites	-	-	General Directorate of Mining Affairs	- Protocols signed related with the mining sites on natural gas pipeline route and MIGEM contact records are provided in App.-4.3. - In order to assess whether the activities in geothermal license areas intercepting the project route will be effected, when/as required, for the final decision concerning this, the necessary permits shall be obtained from the concerned governorates within the context of the amendment (Official Gazette dated 30.05.2014, No. 29015) of Article 27/A, paragraph 3 of the Regulation on Implementation of the Law on Geothermal Springs and Natural	TANAP	-	-	-	-	-	-	Chp. 2.8.4 Chp. 10.3 App.-4.3

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							Mineral Waters, published in the Official Gazette dated 01.12.2007, No. 26727.								
7	2	Entire Project	Air/Climate	-	<p>According to IFC Guidelines[1], the annual emissions of GHG during the operation (>100,000 tonnes CO2eq per year) of the TANAP project will be significant and should be quantified and reported annually.</p> <p>In addition, according to the Regulation on the Monitoring of Greenhouse Gas Emissions, it is stated that the total thermal power is as equal or more than 20 MW, the CO2 emissions needs to be reported to the MoEU as of 2016. Therefore the CO2 emissions from CSTs should be quantified and reported annually.</p>	-	-	TANAP	GHG Emission Monitoring	Annual	Emission Report	Ministry of Environ. and Urbaniz. as of 2016	Pollution Prevention Plan	-	Chapter 8
8	1	High and medium impact areas along the route (Ref. Appendix 4.5 of the ESIA)	Soil	<p>During the land preparation and construction phases of the Project, first of all, vegetable soil (topsoil) will be stripped if available during the clearing works of the construction corridor, construction of temporary above ground installations and new access roads. The vegetable soil stripped will be stored in the construction corridor in an appropriate area with a slope value not more than 5% according to the Regulation on the Control of Excavation Soil, Construction and Demolition Wastes that came into force by being published in Official Gazette dated 18.03.2004 and numbered 25406. The vegetable soil won't be stored in river beds, storage period will be kept as short as possible. Special methods will be applied for preventing vegetable soil loss, protecting soil</p>	<p>Further soil studies will be required to in the form of collecting actual site data identify:</p> <p>The site specific areas with high erosion potential by providing the data required for USLE calculation.</p> <p>To have information full characteristics of the soil in high and medium impact areas to be able to develop the reinstatement and erosion specification</p> <p>To verify the findings of the ESIA in relation to high and medium impacts areas and identify additional high and medium impacts areas if available on the Aol</p>	1- ERZURUM-13. Regional Directorate of Forestry and Water Affairs	<p>1-</p> <p>- In the Project area, the top 10-20 cm depth of the soil, which is the most fertile part, shall be stripped and shall be stored at suitable spaces to be used in restoration and rehabilitation after the works are completed.</p> <p>- Ecological restoration and rehabilitation works shall be carried out in the construction corridor, opened following the construction works, in the new roads and improved roads and in other areas, the natural structure of which have been shattered, and the necessary precautions for erosion during construction and operation shall be taken. the bottom soil taken out in the excavation studies during construction works shall be arranged in accordance with the natural landscape of the region, the topsoil that had been stripped and stored at the initial stage of the activities shall be used in ecological</p>	TANAP	Soil characterizati on Survey	Once	Survey Report	TANAP	Constructio n Managemen t Plan Erosion, Reinstat. and Landscaping Plan	Geotechnical Studies	Chapter 8

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9	1	Entire Project	Soil	<p>texture and fertility in habitats with sensitive and limited topsoil and ecologically sensitive areas. The losses that may be observed during the storage period of the vegetable soil will be prevented as much as possible and the soil quality will be protected. If the vegetable soil will be kept uncovered for a long time, the topsoil will be made to be covered by plants that grow fast. The vegetable soil stripped will be stored being compacted in order to prevent anaerobic conditions to occur and being covered via geotextile etc. materials if necessary in order to prevent the soil from losing its properties. After the construction is completed, levelling studies will be conducted on the land where the route construction corridor and temporary facilities are located while generating required drainage systems both underground and on surface at points where necessary and the vegetable soil stored separately, will be spread as top this stage erosion protection measures will be taken. During the reinstatement studies, bio-restoration works will be conducted for revegetation. Within this concept, the coverage percentage of plant cover will be tried to be increased via using seed types and plant species appropriate for area and purpose. By this way, the vegetable soil will be recovered in nature.</p> <p>In the cases that it is compulsory the NGP to pass through potential erosion sites (plains, hills, valleys, etc.), the vegetable soil stripped as a result of trench excavation in the lands with erosion risk, will be re-spread and re-growth of plants will be provided. With this method, erosion occurrence will be</p>	Implement soil erosion control measures as detailed in Erosion, Reinstatement and Landscaping Plan	<p>2- KARS Provincial Directorate of Food, Agriculture and Livestock</p> <p>3- YOZGAT Provincial Directorate of Food, Agriculture and Livestock</p> <p>4- KIRŞEHİR Provincial Directorate of Food, Agriculture and Livestock</p> <p>5- KÜTAHYA Provincial</p>	<p>restoration works to be carried out, and in the re-vegetation works trees, small trees, shrubs and the herbaceous species consistent with the natural vegetation, which are preferred by the target species and important wild animal species of the area and which can establish food and shelter shall be used. At areas with high slope, in order to minimize the damage to the environment, road construction shall be conducted with crusher excavators and it shall be ensured that the excavation material shall be carefully transferred, not letting them fall down the slope. At places where the Ardahan Provincial Branch Directorate of the 13. Regional Directorate of the Ministry of Forestry and Water Affairs deems necessary, art structures (retaining wall, cement pipes, etc.) shall be made. In new road construction, opinion of the Ardahan Provincial Branch Directorate shall be taken, provided that the provisions of the applicable legislations are met.</p> <p>2- During the stage of opening the pipeline route and of trenching, vegetative soil (top soil layer) shall be stored and laid on the pipeline route and levelled.</p> <p>3- Top layers of soil will be stripped during excavation works and when the works is completed, this stripped soil that is rich by means of nutrient elements will be spread and sustainable production will be provided.</p> <p>4- Pre-cautions will be taken during the construction and operation phases of the Project in order not to damage the agricultural lands.</p> <p>5- Within the frame of the Law on Soil Conservation and Land Use numbered 5403, no damage shall be given to the environment and other lands and water resources and the environment shall not be polluted during the activities to be carried out within the scope of the Project.</p>	TANAP	<p>Records of excessive slope instability or soil erosion</p> <p>Delineate unique or sensitive areas that require specific soil handling or mitigation prior to construction</p> <p>Monitor specific soil handling and mitigation during construction in unique or sensitive areas</p> <p>Regularly inspect the stability of slopes and any soil and terrain units that are considered to be unique</p> <p>Inspect and maintain erosion and sediment control structures during and after construction; remove structures that are no longer required</p> <p>Implement a post-construction monitoring</p>	Contin.	Inspection Report	TANAP	Construction Management Plan Erosion, Reinstat. and Landscaping Plan		

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				minimized. In case of necessity, in the area, after open and closed drainage systems are constructed, applications such as hydroseeding, jute matting, secchi terrace, gabion wall, diversion channel and in-channel slope breaker will be applied all together or separately. Furthermore, in the valleys including stream beds and surface drainage systems where the Project route crosses with water resources, erosion will be prevented via rip-rap application and slope protection. During backfilling, for the parts with gully erosion on the route, the 20-30 cm part on top will be covered by rocks. At places where the NGP route and activity areas cross, are in parallel or are close with water resources (stream crossings, dry stream beds, areas with surface drainage system, irrigation channel crossings, etc.), sediment filters and holding mechanisms will be used in order to stop surface runoff and to keep the sediments before they enter any water course. In order to inhibit water with sediment inflow, sediment inhibiting barriers such as silt fences, hay bale block or j-hay stacks will be installed in the direction of water flow depending on water amount and characteristics of the area (soil texture, slope, plant cover, etc.). Silt fences, hay bales and hay stacks will be renewed when they are fulfilled or damaged or the sediments accumulated will be collected within certain periods of time and will be disposed in appropriate licensed disposal facilities. Approval of the Regional Directorates of State Hydraulic Works will be received related with the flood prevention studies to be conducted within the Project.		Directorate of Food, Agriculture and Livestock 6- BURSA Provincial Directorate of Food, Agriculture and Livestock 7- EDİRNE Provincial Directorate of Food, Agriculture and Livestock	6- Soil Conservation Projects that includes pre-cautions that will prevent soil loss and land deterioration that may outcome in agricultural lands during usage of agricultural lands for non-agricultural purposes will be prepared and will be taken into application after it is approved by governorship. 7- - During the construction phase of the Project, the vegetative soil arising as a result of excavation activities shall be used (top and bottom soils shall be separately scraped). - In soil scraping, work machines that will minimize compression shall be used. - Suitable drainage systems shall be made to prevent changes that may arise in soil hydrology. - During excavations and filling, the characteristics of the surrounding lands shall be taken into consideration and the landslide and erosion effects shall be eliminated. - During the Project activities, all kinds of contamination of water resources shall be prevented. - Damage shall not be given to the surrounding pasture lands. - Measures to conserve agricultural lands shall be complied with.		programme to assess soil structure and quality that can affect its capability for revegetation by locally native species Assess the revegetation and stability of slopes and any soil and terrain units that are considered to be unique Implement further mitigation and corrective actions as required						
10	1	Entire Project	Soil		Disturb soils only within the designated right of way (ROW) working strip and additional work areas, and new access roads			CC/EPC/ TANAP	Site Inspection Record of deviations from the delineated ROW and additional work areas Records of flooding or altered drainage patterns by the ROW or access roads	Contin.	Inspection Report	TANAP	Construction Management Plan		Chapter 8 Chapter 11
11	1	Entire Project	Soil		Minimize the development of new access roads			CC/ EPC TANAP	Site Inspection	Contin.	Inspection Report	TANAP	Construction Management Plan		Chapter 8 Chapter 11

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12	1	Entire Project	Soil		Reduce construction work areas where practical for site conditions, particularly in areas which are unique or which support rare habitats/species.			CC/ EPC/ TANAP	Site Inspection	Contin.	Inspection Report	TANAP	Construction Management Plan		Chapter 8 Chapter 11
13	1	Entire Project	Soil		Strip and salvage topsoil during construction in accordance with typical drawings			CC/ EPC/TANAP	Site Inspection Amount of removed or replaced soil Construction monitoring reports indicate appropriate soil handling was conducted	Contin.	Inspection Report	TANAP	Construction Management Plan		Chapter 8 Chapter 11
14	1	Entire Project	Soil		Minimize double handling of top soil			CC/ EPC/TANAP	Site Inspection	Contin.	Inspection Report	TANAP	Construction Management Plan		Chapter 8 Chapter 11
15	1	Entire Project	Soil		Incorporate organic material into topsoil which is deficient of organic matter at the time of stripping, clearing and stockpiling to limit wind erosion and compaction and to improve water-holding capacity			CC/ EPC/ TANAP	Site Inspection	Contin.	Inspection Report	TANAP	Construction Management Plan		Chapter 8 Chapter 11
16	1	Entire Project	Soil		Prevent vehicle travel on the pipeline ROW as much as practical during reclamation and operation to allow vegetation to establish			CC/ EPC TANAP	Site Inspection	Contin.	Inspection Report	TANAP	Construction Management Plan Traffic Management Plan		Chapter 8 Chapter 11
17	1	Entire Project	Soil		Plan construction to limit the time required from topsoil stripping until reinstatement.			CC/ EPC/ TANAP	Site Inspection	Contin.	Inspection Report	TANAP	Construction Management Plan		Chapter 8 Chapter 11
18	1	Entire Project	Soil		Use measures to prevent mixing of topsoil with subsoil (including use of			CC/ EPC/ TANAP	Site Inspection	Contin.	Inspection Report	TANAP	Construction		Chapter 8 Chapter 11

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					geotextile where required e.g. at restricted spaces)								Managemen t Plan		
19	1	Entire Project	Soil		A Pollution Prevention Plan will be in place including the mitigation measures against soil pollution.			CC/ EPC/ TANAP	Site Inspection Records of soil contamination remaining after construction	Contin.	Inspection Report	TANAP	Constructio n Managemen t Plan Pollution Prevention Plan		Chapter 8 Chapter 11
20	1	Entire Project	Visual Aesthetics	During the land preparation and construction phase of the project, due to all of the activities to be performed in the Project route construction corridor and in the above ground facilities, in order to reinstate the damaged landscape elements, studies of bio-restoration, environmental rehabilitation will be conducted. After the works of recontouring of the site and spreading the topsoil, bio-restoration activities will be initiated both for preventing the negative impacts of pipeline visually and for providing the security of the pipeline in terms of visual and physical aspects. Together with the bio-restoration works, erosion preventing methods will be used. In order to protect sensitive plant species in ecologically sensitive areas Special Area Regaining in Nature Plan will be prepared with related experts during the pre-construction period and all the activities will be performed in accordance with these plans. The principles to be indicated in Erosion, Reinstatement and Landscaping Plan to be prepared within the Project will be complied.	Maximize opportunities to retain existing landform screening, i.e. site levelling will be avoided, if possible, if existing hollows or mounds may be used to integrate built features within the landform	1- BALIKESİR -25. Regional Directorate of State Hydraulic Works	1- The structures available on points that route pointed on approved projects passes, will be reinstated after the pipeline is placed.	CC/ EPC/ TANAP	Monitoring programmes will be implemented to ensure adequate reclamation and revegetation of project related disturbances has occurred.	Contin.	Inspection at site by TANAP	TANAP	Pollution Prevention Plan Emergency Response Plan Waste Managemen t Plan Erosion, Reinstateme nt and Landscaping Plan		Chapter 8 Chapter 11
21	1	Entire Project	Visual Aesthetics		New landform screening (e.g. bunds and mounds) will be introduced where this might complement the existing landform character.			CC/ EPC/ TANAP	Monitoring programmes will be implemented to ensure adequate reclamation and revegetation of project related disturbances has occurred.	Contin.	Inspection at site by TANAP	TANAP			Chapter 8
22	1	Stations	Visual Aesthetics		TANAP and/or EPC contractors will develop a site-specific landscape plan for each site that will identify specific measures to reduce landscape and visual impact. This plan will address architectural measures such as colour schemes, opportunities for landform screening and landscape planting. Required permits will be obtained from the related Regional			CC/ EPC/ TANAP	Issuing of Landscape Plan to the EPCs	Contin.	N/A	TANAP	Erosion, Reinstateme nt and Landscaping Plan		Chapter 8 Chapter 11

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				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
23	1	Stations	Visual Aesthetics	Directorates of Forestry for the trees required to be cut in the areas where temporary facilities exist or on the route of the construction corridor within the Project. Based on the forest development plans, the tree amount to be cut and their areal coverage will be determined by the related Sub-District	Construction Contractors will be required to ensure that site clearance and reinstatement activities and building colour schemes are consistent with the requirements of the site specific landscape plans as advised by TANAP.			CC/ EPC/ TANAP	Implementati on of Landscape plan by EPCs	Contin.	Inspection at site by TANAP	TANAP	Erosion, Reinstateme nt and Landscaping Plan		Chapter 8 Chapter 11
24	1	Entire Project	Visual Aesthetics	Directorate of Forestry as a result of the investigations and evaluations to be performed on-site. During the clearing activities on-site, necessary precautions will be taken in order not to damage the plant cover, trees and shrubberies out of the route construction corridor borders and around temporary study areas. The timbers that are reusable will be stored in an appropriate area near the route construction corridor and will be recycled by giving to the users in the region in cooperation of the Project owner and Sub-District Directorate.	Number of the trees to be cut for the Project should be replaced with the new ones. In addition, during permitting phase for the route of pipeline which passes through forest areas, the worth of the trees to be cut are paid to the Provincial Regional Directorates of Forest at least for one three. Within the scope of Social and Environmental Investment Programme of TANAP, a project will be developed for additional tree planting. Then, throughout the project, 1:3 ratio for tree planting is aimed to be met.			CCCC/ EPC/ TANAP	Monitoring of reforestation activities	N/A	Monitorin g Results	TANAP	Biorestorati on Monitoring Plan	Erosion, Reinstatement and Landscaping Plan	Chapter 8 Chapter 11
25	2	Stations	Visual Aesthetics		Visual impact assessment studies will be performed in CST1, CST3 and CST 7.			TANAP	Monitoring programmes will be implemented to ensure adequate reclamation and revegetation of project related disturbances has occurred.	N/A	Visual Impact Assessme nt Report	TANAP	Pollution Prevention Plan Emergency Response Plan Waste Managemen t Plan Erosion, Reinstateme nt and Landscaping Plan		Chapter 8 Chapter 11
26	3	Stations	Visual Aesthetics		Maximize opportunities to retain existing landform screening, i.e. site levelling will be avoided, if possible, if existing hollows or mounds may be used to integrate built			TANAP	N/A	N/A	Visual Impact Assessme nt Report	TANAP	N/A		Chapter 8

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				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
					<p>features within the landform;</p> <p>A landscaping plan will be developed for the decommissioning phase</p> <p>The structures will be demolished and the areas will be reinstated. Site specific reinstatement plans (or rehabilitation plans) and WMP for disposal of the debris should be considered.</p>										
27	All	Entire Project	Surface water	The streams and rivers on Project route won't be interfered. Permits shall be obtained from the General Directorate of the State Hydraulic Works for surface water utilization. Surface water and groundwater resources, water tanks and distribution lines used for potable and fresh water purposes will be protected against pollution and necessary pre-cautions will be taken for this purpose. Activities will be conducted not causing any damage on resources, fountains and water points on NGP route and any damage which may be caused on water points, facilities and groundwater due to the wrong application, will be compensated by the operator. In any case that the activities that will be conducted on river protection band of surface water resources are available in lists of App-1 and App-2 of the	·Discharge of wastewater to surface water resources after treatment in compliance with the applicable regulatory requirements (Ref. Chapter 4 and Chapter 8.1.9 and Chapter 11)	1- BURSA-2 Regional Directorate of Forestry and Water Affairs	1- - In any case that the activities that will be conducted on river protection band of surface water resources are available in lists of App-1 and App-2 of Regulation of Conservation of Wetlands (Official Gazette dated 17.05.2005 and numbered 25818), Wetland Activity Permit will be obtained. - The positive decision received from General Directorate of Nature Conservation and National Parks on wetlands located on TANAP Project route, is provided in App.-4.3.	TANAP/CC/ EPC	Regular sampling and analysis and measurements of treated wastewater will be done at the discharge point in certain periods defined by the regulations.	Monthly/More frequently if required by TANAP	Analysis Reports	TANAP	Pollution Prevention Plan		Chapter 8 Chapter 11
28	1	Entire Project	Surface water	Regulation on Conservation of Wetlands which came into force by being published in Official Gazette dated 17.05.2005 and numbered 25818, Wetland Activity Permit will be obtained. The articles of Regulation on Conservation of Wetlands will be complied during the activities to be held in borders of Balıkesir	Avoid vehicle crossings to the extent practicable across the watercourse	2-ÇANAKKALE-3 Regional Directorate of Forestry and Water Affairs	2- -In wetlands, activities will be conducted within the articles of the related legislations. The articles of Regulation on Conservation of Wetlands will be complied during the activities to be held in borders of Balıkesir Province, Gönen Stream, Manyas Kuş Lake Buffer Zone, in lake protection band of Çanakkale Province, Biga District Kocabaş Stream, in Wetland Area of Edirne Province, Meriç River and other wetlands and positive opinions of other relevant authorities will be received within	TANAP/CC/ EPC	Site Inspection	N/A	Site inspection reports	TANAP	CC/CC/ EPC Method Statements, Pollution Prevention Plan, Construction Impacts Management Plan		Chapter 8 Chapter 11
29	1	Entire Project	Surface water		·Limit construction activities to periods of low flow where practicable, when sediments are minimal			TANAP/CC/ EPC	Site Inspection	N/A	Site inspection reports	TANAP	CC/CC/ EPC Method Statements, Pollution Prevention Plan, Construction Impacts Management Plan		Chapter 8 Chapter 11

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				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
30	1	Entire Project	Surface water	Province, Gönen stream, Manyas Bird Lake Buffer Zone, in lake protection band of Çanakkale Province, Biga District Kocabaş Stream, in Wetland Area of Edirne Province, Meriç River and other wetlands and positive opinions of other relevant authorities will be received within legislations. Furthermore, according to Aquatic Products Law numbered 1380, permits required for protection of wetlands and water areas that are or may be located on pipeline route will be obtained, breeding facilities won't be impacted, otherwise, an agreement will be achieved with breeding facility owners. The fish farms that may be using water from rivers won't be damaged. Solid-liquid wastes won't be discharged into streams and groundwater on Project route corridor. During the excavation works to be conducted in streams within the Project, causing turbulence in water resources will be prevented and the pipes will be covered via concrete. Flow regime of the bed will be paid attention not to be damaged, after the activities are complete, the stream bed will be reinstated protecting its natural conditions. If explosion is conducted necessarily during the construction phase of the Project, in case the direction of the fresh water flow changes and the resources that provide water for residential areas are impacted, the damnification will be compensated by the activity owner.	·Design and install buried pipeline and river crossings in accordance with applicable best practices, typical drawings	3- ANKARA-9 Regional Directorate of Forestry and Water Affairs	legislations. 3- - In case the route is revised, the new version will be informed. - During the activities to be held within the Project, the articles of Regulation on Conservation of Wetlands and related regulations will be complied.	TANAP/CC/ EPC	Site Inspection	N/A	Site inspection reports	TANAP	CC/CC/ EPC Method Statements, Pollution Prevention Plan, Construction Impacts Management Plan		Chapter 8 Chapter 11
31	1	Entire Project	Surface water	Law numbered 1380, permits required for protection of wetlands and water areas that are or may be located on pipeline route will be obtained, breeding facilities won't be impacted, otherwise, an agreement will be achieved with breeding facility owners. The fish farms that may be using water from rivers won't be damaged. Solid-liquid wastes won't be discharged into streams and groundwater on Project route corridor. During the excavation works to be conducted in streams within the Project, causing turbulence in water resources will be prevented and the pipes will be covered via concrete. Flow regime of the bed will be paid attention not to be damaged, after the activities are complete, the stream bed will be reinstated protecting its natural conditions. If explosion is conducted necessarily during the construction phase of the Project, in case the direction of the fresh water flow changes and the resources that provide water for residential areas are impacted, the damnification will be compensated by the activity owner. River and wetland crossings of the NGP will be constructed in compliance with the crossing design parameters indicated in Chapter 2.8.4. At the river crossings on route, the NGP will be placed at least 2.00 m below	· Use either trenchless or isolation methods as required by ESIA and engineering specifications (Posof River, Bas River, Karasu River, Yenice River, Kocaçayı-Manyas after confirmation with engineering)	4- RİZE-12. Regional Directorate of Forestry and Water Affairs 5- General Directorate of State Hydraulic Works	- Gölbaşı Special Environment Protection Zone is located 21 km North side of TANAP Project route and the Project isn't expected to have any impact on the mentioned area. 4- -Regulation on Conservation of Wetlands will be complied 5- - Any activity won't be performed on streams and rivers with details provided in 7.3.1.4 on TANAP Project route - At points where the NGP crosses the facilities belonging to the Regional Directorate of the State Hydraulic Works, the detailed designs to be prepared by the TANAP Natural Gas Co. shall be approved by the concerned Regional Directorates and a "protocol" identifying the works to be carried out shall be made individually and separately made with the 1-3-5-8-11-12-19-24-25th Regional Directorates of the State Hydraulic Works. - During the implementation of the project, activities will be carried out in coordination with the relevant Regional	TANAP/CC/ EPC	Site Inspection	N/A	Site inspection reports	TANAP	CC/CC/ EPC Method Statements, Pollution Prevention Plan, Construction Impacts Management Plan Typical Drawings i.e. BCH-DXG-PPL-PLG-001 BCH-DXG-PPL-PLG-012 BCH-DXG-PPL-PLG-014 BCH-DXG-PPL-PLG-015 BCH-DXG-PPL-PLG-019 BCH-DXG-PPL-PLG-020 BCH-DXG-PPL-PLG-'005 BCH-DXG-PPL-PLG-'001		Chapter 8 Chapter 11

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				stream thalweg elevation, pipe will be protected by 0.5 m thick concrete blocks and stream input and output points will be marked. Before the activities are initiated, related <u>Regional Directorate of State Hydraulic Works</u> will be contacted.			Directorates and crossing detailed design shall be prepared and for crossings from irrigation projects at construction and operation phases, and river, drainage canal, berm, etc. crossings and submitted for the approval of the relevant Regional Directorate.						BCH-DXG-PPL-PLG-'002 'BCH-DXG-PPL-PLG-004		
32	1	Entire Project	Surface water	Hydraulic calculations will be conducted for river crossings; projects for crossings will be prepared and will be submitted for the approval of the Regional Directorate of State Hydraulic Works. For the engineering structures as channels, flumes, pipes, stream beds, drainage and discharge channels that cross natural gas pipeline, detailed projects will be designed taking their ground elevations into consideration theoretically and these projects will be submitted to State Hydraulic Works for approval. The structures available on points passed indicated on approved detail projects, will be reinstated following the pipeline laying is complete. At these crossings, the width of unreclaimed stream beds that do not have projects at cadaster and the width of reclaimed drainage and discharge channels with the projects on ground will be taken into consideration. In case of transmission above stream beds, the elevation won't be lowered under the top of bridge or bottom level of pipeline and the cross section won't be narrowed. At the surface water crossings throughout the pipeline route, necessary permits will be obtained signing protocol with Regional Directorate and the Circular of Stream Beds and Flooding numbered 2006/27 will be complied. Activities that will be conducted in order to prevent any possible flooding event will be submitted to Regional Directorate for approval. Protocol will be signed with the related Regional Directorate of State Hydraulic Works for the crossings	·Ensure all equipment working in or near watercourses is clean and free of fluid leaks	6- BURSA-1 Regional Directorate of State Hydraulic Works	6- - Hydraulic calculations will be conducted for river crossings; crossing detailed designs will be prepared and submitted for the approval of authority.	TANAP/CC/-EPC	Site Inspection	N/A	Site inspection reports	TANAP	CC/CC/ EPC Method Statements, Pollution Prevention Plan, Construction Impacts Management Plan		Chapter 8 Chapter 11
33	1	Entire Project	Surface water		· Use appropriate sediment and erosion control techniques (e.g., silt fences) during construction		- At each phase of activity the provisions and prohibitions of the Regulation on Control of Water Pollution concerning the potable water conservation catchment basins shall be complied with.	TANAP/CC/ EPC	Site Inspection Recorded sediment loading due to project related activities	N/A	Site inspection reports	TANAP	CC/CC/ EPC Method Statements, Pollution Prevention Plan, Construction Impacts Management Plan		Chapter 8 Chapter 11
34	1	Entire Project	Surface water		· Restore and stabilize channel banks immediately after backfilling to prevent bank erosion		- Concerning the plan to shift the pipeline to downstream of the planned pond (Darıtarla, Kovalidere), studies shall be performed in coordination with the Regional Directorate to get its approval and opinion and to reach an agreement. - The NGP passes through the permeable material site of the Kızkayaı Dam and the necessary precautions shall be taken by the activity owner.	TANAP/CC/ EPC	Site Inspection	N/A	Site inspection reports	TANAP	CC/CC/ EPC Method Statements, Pollution Prevention Plan, Construction Impacts Management Plan		Chapter 8 Chapter 11
35	1	Entire Project	Surface water		· Use clean, native materials during bed and bank restoration works		- Concerning the shifting of pipe stack yard to the outside of the “Güllüce irrigation” area, coordination shall be established with the Regional Directorate, to get its approval and opinion and to reach an agreement.	TANAP/CC/ EPC	Site Inspection	N/A	Site inspection reports	TANAP	CC/CC/ EPC Method Statements, Pollution Prevention Plan, Construction Impacts Management Plan		Chapter 8 Chapter 11
	1	Entire Project	Surface water		· Use only existing roads, designated access roads and previously			TANAP/CC/ EPC	Site Inspection	N/A	Site inspection reports	TANAP	CC/CC/ EPC Method Statements, Pollution		Chapter 8 Chapter 11

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				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
36				in design phase. For the crossings with irrigation facilities in operation, Project details will be provided from the Regional Directorate and projects will be developed accordingly, pre-cautions needed for not interrupting the operation will be taken, as the Project for route is being developed, the opinion of Regional Directorate will be received and in construction phase, activities will be conducted in these areas under the supervision of the Regional Directorate. Permanent facilities won't be constructed on stream beds with base flow or dry stream beds, natural stream beds and flows won't be interfered, waste-excavate etc. won't be spilled. Related with potable water networks and sewage networks of residential areas and villages located on NGP route, <u>Special Provincial Directorate of Water and Channels</u> will be contacted before the land preparation-construction activities of the Project are initiated and the mentioned facilities won't be damaged and in cases of obligation, possible damages will be minimized and displacements will be conducted as soon as possible in order not to aggrieve the public.	disturbed/cleared sites for Project facilities		7- -In order not to damage the existing and planned channels and pipes in irrigation areas, natural gas pipes will be placed in the way its upper level will be at least in 2.00 m depth from the natural terrain. -At the river crossings on route, the natural gas pipeline will be placed at least 2.00 m below stream thalweg elevation, pipe will be protected with concrete blocks and stream input and output points will be marked. 8- - The application projects will be designed in the way that the pipeline will pass with its upper elevation in minimum 3 m depth from natural terrain and with 3 m depth from thalweg elevation at stream, drainage and discharge channel crossing points. At these crossings, the width of unreclaimed stream beds that do not have projects at cadaster and the width of reclaimed drainage and discharge channels with projects on ground will be taken into consideration.						Prevention Plan, Constructio n Impacts Managemen t Plan		
37	1	Entire Project	Surface water		- Use common corridors for both pipelines and roads in order to minimize area disturbances	7- EDİRNE-11 Regional Directorate of State Hydraulic Works	- For the river crossings it shall be ensured that the pipes pass at least 2 m deeper than the river's thalweg elevation - In river crossings, the flood protection measures (berm, massive wall, etc.) shall be taken by the activity owner and if there is a flood protection facility of	TANAP/CC/ EPC	Site Inspection	N/A	Site inspection reports	TANAP	CC/CC/ EPC Method Statements, Pollution Prevention Plan, Constructio n Impacts Managemen t Plan		Chapter 8 Chapter 11
38	1	Entire Project	Surface water		- Monitor watercourse turbidity during construction and take corrective actions where required			TANAP/CC/ EPC	Turbidity Monitoring	During water crossings	Analysis Report	TANAP	CC/CC/ EPC Method Statements		Chapter 8

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				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
39	1	Entire Project	Surface water		· Prevent turbid water from re-entering the watercourse to the extent practicable using natural or mechanized filtration processes	8- BALIKESİR-25 Regional Directorate of State Hydraulic Works	the State Hydraulic Works, no damage shall be given to such a facility.	TANAP/CC/EPC	Sampling and analysis	During water crossings	Analysis Report	TANAP	CC/CC/ EPC Method Statements		Chapter 8 Chapter 11
40	1	Entire Project	Surface water		· Plan hydrostatic testing so that the opportunities for water re-use are maximized		- The planned Natural Gas Pipeline shall pass without damaging the Merekler Regulator and the Power House of the Algözü Hydroelectric Power Plant Project in operation and the tail water from the Power House to the Posof River.	TANAP/ CC/EPC	Check hydrotest procedure to include water re-use	Continuous /Commissioning	Approval of Hydrotest procedure	TANAP	Hydrotesting Plan		Chapter 8 Chapter 11
41	1	Entire Project	Surface water		· Separate domestic wastewater from hazardous, oily water discharges			TANAP/CC/EPC	Check drainage site plans ensuring wastewater segregation	Continuous /Commissioning	Approval of site drainage plans	TANAP	Project design Specifications		Chapter 8 Chapter 11
42	1	Entire Project	Surface water		· Avoid construction of facilities in a manner that avoids natural channel features		- The planned Natural Gas Pipeline shall pass and be constructed without preventing the route passage of the Bayır Hydroelectric Power Plant Project, which is planned to be constructed in the future and is currently at the feasibility stage.	TANAP/CC/EPC	Site Inspection	N/A	Site inspection reports	TANAP	CC/CC/ EPC Method Statements, Pollution Prevention Plan, Construction Impacts Management Plan		Chapter 8 Chapter 11
43	1	Entire Project	Surface water		· Minimize gravel entering streams during road maintenances			TANAP/ EPC	Site Inspection	N/A	Site inspection reports	TANAP	CC/CC/ EPC Method Statements, Pollution Prevention Plan, Construction Impacts Management Plan		Chapter 8 Chapter 11
44	1	Entire Project	Surface water		· Install and maintain appropriate erosion control measures such as silt fences around all riparian disturbance areas and watercourse crossings		10- - On the routes where the NGP passes through irrigation areas, the irrigation pipes are laid at 1.50-2.00 m depth and the NGP will be placed below this depth so that it won't damage irrigation pipes. The responsibility of the damages that may occur in the irrigation projects during laying the NGP belongs to the activity owner. - Concerning planning the NGP route such that it passes through an elevation higher than 1693,90 m ² , which is the maximum water elevation of the Özlüce Lake, coordination shall be established with the Regional Directorate, obtaining	TANAP/ CC/EPC	Visual Inspection	Continuous during water crossings	Site Inspection Report	TANAP	CC/CC/ EPC Method Statements Erosion, Reinstatement and Landscaping Plan		Chapter 8 Chapter 11
45	1	Entire Project	Surface water		· Implement a re-growth of riparian vegetation programme			TANAP/ EPC	Visual Inspection	Continuous during water crossings	Site Inspection Report	TANAP	CC/CC/ EPC Method Statements		Chapter 8 Chapter 11

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				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
						9- KARS-24 Regional Directorate of State Hydraulic Works	its approval and opinion to reach an agreement.						Erosion, Reinstatement and Landscaping Plan		
46	1	Entire Project	Surface water		· Record all volumes of water withdrawal from natural resources for project related activities for demonstration of no exceedance of the allowance		11- -The pipeline will be placed 150 cm below and will be covered with concrete cloth at the stream bed crossings on route.	TANAP/ CC/ EPC	recording of water withdrawal amounts	Monthly	Monthly Reports	TANAP	Permitting Document for Water Withdrawal from Local Authorities		Chapter 8 Chapter 11
47	1	Entire Project	Surface water		· Obtain applicable water abstraction permits		-Permanent facilities won't be constructed on stream beds with base flow or dry stream beds, natural stream beds and flows won't be interfered, waste-excavate etc. won't be spilled.	TANAP/ CC/ EPC	Permitting	N/A	Monthly Reports	TANAP	Permitting Document for Water Withdrawal from Local Authorities		Chapter 8 Chapter 11
49	1	Entire Project	Surface water		· Install temporary vehicle crossings/bridges		-Starting from Kızılırmak river bed axis, during crossing an area of total 400 m width, covering 200 m to the left and 200 m to the right of the bed axis, no facilities or fixed facilities shall be constructed, and all precautions shall be taken.	TANAP/ CC/ EPC	Visual Inspection	Continuous during water crossings	Site Inspection Report	TANAP	CC/CC/ EPC Method Statements, PPP		Chapter 8 Chapter 11
	1	Entire Project	Surface water		· Restrict fuelling/refilling, chemical handling activities in close vicinity of the watercourses			TANAP/ CC/ EPC	Visual Inspection	Continuous during water crossings	Site Inspection Report	TANAP	CC/CC/ EPC Method Statements, PPP		Chapter 8 Chapter 11
50	1	Entire Project	Surface water		· Plan construction to consider seasonal sensitivities listed in Construction Impacts Management Plan			TANAP/ CC/ EPC	Issuing the water crossing program considering seasonal sensitivities	Continuous during water crossings	Approval of Water Crossing Program	TANAP	CC/CC/ EPC Method Statements, Construction Plan, Construction Impacts Management Plan		Chapter 8 Chapter 11
51	1	Entire Project	Surface water		· Strictly prohibit fishing by project personnel at watercourses		- At points where the planned Natural Gas pipeline crosses streams and dried creeks, crossing shall be provided by art structures that will not disrupt the natural bed of the creek and the flow direction of water. -In case the planned pipeline remains within the protection areas to be specified in the future within the scope of the “Communique on Identification of the Protection Areas of the Aquifers and Springs Supplying Drinking Water”	TANAP/ CC/ EPC	Visual Inspection	Continuous during water crossings	Site Inspection Report	TANAP	CC/CC/ EPC Method Statements, Construction Impacts Management Plan		Chapter 8 Chapter 11
52	1	Entire Project	Surface water		· Implement special construction mitigations to protect sensitive species listed in Construction Impacts Management Plan			TANAP/ CC/ EPC	Visual Inspection	Continuous during water crossings	Site Inspection Report	TANAP	CC/CC/ EPC Method Statements, Construction Impacts		Chapter 8 Chapter 11

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				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
							enforced by publication in the Official Gazette dated 10.10.2012 and No. 28437, the activity owner shall accept all requirements in relation to such protection areas and shall take the necessary measures.						Managemen t Plan		
53	1	Entire Project	Surface water		<ul style="list-style-type: none"> Measures to minimise scour and reduce sediment load will be implemented at locations where hydrotest water is discharged to watercourses and discharge velocities have the potential to create erosion (e.g. controlled rate of discharge and use of energy dissipaters, displacement of geotextile mats or other physical erosion prevention measures). However, at locations where hydrotest water discharge causes erosion, eroded areas will be reinstated (Ref. 8.1.9 for hydrotest discharge quality management). 	10 TRABZON-22 Regional Directorate of State Hydraulic Works	<ul style="list-style-type: none"> The Yenice Dam is a dam aiming to provide Drinking and Irrigation Water and to protect the drinking water, the protection measures that may be taken in the future shall be complied with. 	TANAP/ CC/ EPC	Visual Inspection Hydrotest Procedure,	Continuous during water crossings	Site Inspection Report	TANAP	CC/CC/ EPC Method Statements, Hydrotestin g Plan, Reinstateme nt and Erosion Control Plans, PPP		Chapter 8 Chapter 11
54	1	Entire Project	Surface water		<ul style="list-style-type: none"> Water conservation initiatives will also be undertaken with the aim to limit the water consumption during the construction activities, like the water use for mitigation of dust suspension (e.g. by means of specific staff training to a rational use of water, commensurate with the actual needs) 		<ul style="list-style-type: none"> -Concerning NGP crossing of the transmission line of the 4 Eylül Dam that is being operated by the Sivas Municipality and that provides the drinking-utilization water of the province, works shall be performed in coordination with the Sivas Municipality. 	TANAP/ CC/ EPC	Water Consumption Monitoring Resource Consumption Minimization Plan Preparation	Continuous during water crossings	Site Inspection Report Water Consumpt ion Records	TANAP	CC/CC/ EPC Method Statements, Constructio n Impacts Managemen t Plan		Chapter 8 Chapter 11
55	1	Entire Project	Surface water		<ul style="list-style-type: none"> The construction traffic will cross watercourses possibly via a culvert, which will be sized so as not to restrict the flow in the watercourse and allow fish and other aquatic organisms to pass through 		<ul style="list-style-type: none"> - During the construction phase, no damage shall be given to the springs providing potable water and all applicable laws, statutes and regulations shall be complied with. 	TANAP/ CC/ EPC	Visual Inspection	Continuous during water crossings	Site Inspection Report	TANAP	CC/CC/ EPC Method Statements, Constructio n Impacts Managemen t Plan, PPP		Chapter 8 Chapter 11
56	1	Entire Project	Surface water		<ul style="list-style-type: none"> Construction of the surface water crossings will seek to ensure minimal impacts from interrupting river flow by identifying downstream users and determining 	11- ANKARA-5 Regional Directorate of State Hydraulic Works		TANAP/ CC/ EPC	Surveys to identify downstream users	Before planning for water crossing	Survey Report	TANAP	CC/CC/ EPC Method Statements, Constructio n Impacts		Chapter 8 Chapter 11

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				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
					their river water supply needs and by using measures such as channel diversions to ensure minimal interruption to flow.								Managemen t Plan,		
57	1	Entire Project	Surface water		· Visual monitoring of turbidity will be undertaken at river crossings while works are being undertaken at that river.			TANAP/ CC/ EPC	Visual Inspection	Continuous during water crossings	Site Inspection Report	TANAP	CC/CC/ EPC Method Statements, Constructio n Impacts Managemen t Plan, PPP		Chapter 8 Chapter 11
58	1	Entire Project	Surface water		Implement measures against sedimentation as defined in Chapter 8.1			TANAP/ CC/ EPC	Visual Inspection Turbidity monitoring	Continuous during water crossings	Site Inspection Report	TANAP	CC/CC/ EPC Method Statements, Constructio n Impacts Managemen t Plan, PPP		Chapter 8 Chapter 11
59	2	Stations	Surface water		· Discharge of wastewater to surface water resources after treatment in compliance with the applicable regulatory requirements (Ref. Chapter 4 and Chapter 8.1.9 and Chapter 11)			TANAP/OPE RATOR	Sampling and analysis	Monthly	Analysis Report	TANAP	Operating Procedures, PPP		Chapter 8 Chapter 11
60	2	Stations	Surface water		·Ensure all equipment working in or near watercourses is clean and free of fluid leaks	12- KAYSERİ-12 Regional Directorate of State Hydraulic Works		TANAP/OPE RATOR	N/A	N/A	N/A	N/A	Operating Procedures, PPP		Chapter 8 Chapter 11
61	2	Stations	Surface water		·Separate domestic wastewater from hazardous, oily water discharges			TANAP/OPE RATOR	Check drainage site plans ensuring wastewater segregation	N/A	N/A	N/A	Site Plans		Chapter 8 Chapter 11
62	2	Stations	Surface water		· Restrict fuelling/refilling, chemical handling activities in close vicinity of the watercourses			TANAP/OPE RATOR	Visual Inspection	N/A	Inspection reports	TANAP	Operating Procedures, PPP		Chapter 8 Chapter 11
63	2	Stations	Surface water		· Strictly prohibit fishing at watercourses			TANAP/OPE RATOR	N/A	N/A	N/A	N/A	Operating Procedures, PPP		Chapter 8 Chapter 11
64	2	Stations	Surface water/GW		· Record all volumes of water withdrawal from natural resources for			TANAP/OPE RATOR	Withdrawal records	Monthly	Monthly Reports	TANAP	Operating Procedures		Chapter 8

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					project related activities for demonstration of no exceedance of the allowance								Permitting Document		Chapter 11
65	2	Stations	Surface water/GW		· Water conservation initiatives will also be undertaken with the aim to limit the water consumption during the operation activities, (e.g. by means of specific staff training to a rational use of water, commensurate with the actual needs)			TANAP/OPE RATOR	Water Consumption Monitoring Resource Consumption Minimization Plan Preparation	N/A	Water Consump. Records	TANAP	Operating Procedures		Chapter 8 Chapter 11

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				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
66	3	Entire Project	Surface water		<p>Discharge of wastewater to surface water resources after treatment in compliance with the applicable regulatory requirements (Ref. Chapter 4 and Chapter 8.1.9 and Chapter 11)</p> <p>Avoid vehicle crossings across the watercourse</p> <p>Limit decommission activities at the water crossings to periods of low flow, when sediments are minimal</p> <p>Use appropriate sediment and erosion control techniques (e.g., silt fences) during construction</p> <p>Restore and stabilize channel banks immediately after backfilling to prevent bank erosion</p> <p>Monitor watercourse turbidity during decommissioning (tappings at crossings) and take corrective actions where required. Prevent turbid water from re-entering the watercourse using natural or mechanized filtration processes</p> <p>Implement a re-growth of riparian vegetation programme</p> <p>Strictly prohibit fishing at watercourses</p> <p>Implement special construction mitigations to protect sensitive species</p> <p>Apply Waste Management Plan and Pollution Prevention Plan</p> <p>Measures to minimise scour and reduce sediment load will</p> <p>Water conservation initiatives will also be undertaken with the aim to limit the water consumption during the decommissioning activities, like the water</p>	<p>13- SIVAS-19 Provincial Directorate of Environment and Urbanization</p> <p>14- ERZURUM-8 Provincial Directorate of Environment and Urbanization</p> <p>15- BAYBURT Provincial Directorate of Public Health</p>		TANAP/DEC OM. CONTRACTOR(S).	TO BE DETAILED	TO BE DETAILED	TO BE DETAILED	TO BE DETAILED	Decom.Procedures, PPP, WMP, Reinstat. and Erosion Control Plan, Construction Impacts Management Plan		Chapter 8 Chapter 11

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				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
					use for mitigation of dust suspension (e.g. by means of specific staff training to a rational use of water, commensurate with the actual needs) Recording public access and use of watercourse crossing locations										
67	1	Entire Project	Groundwater	Permits shall be obtained from the General Directorate of the State Hydraulic Works for groundwater utilization.	· Water conservation initiatives will be undertaken with the aim to limit the potable water consumption (e.g. by means of specific staff training to a rational use of water resource).	Ministry of Forestry and Water Affairs/ General Directorate of State Hydraulic Works	- Related articles of Groundwater Law numbered 167 and other relevant legislations will be complied. - Solid-liquid waste won't be discharged into the groundwater and Regulation on Protection of Groundwater against Pollution and Deterioration will be complied.	TANAP/ CC/ EPC	Water Consumption Monitoring Resource Consumption Minimization Plan Preparation	Monthly	Monthly Reports Water Consump. Records	TANAP	Constructio n Impacts Managemen t Plan		Chapter 8 Chapter 11

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				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
68	1	Entire Project	Groundwater		· Water quality and sustainability will be monitored periodically to confirm that the supply meets the needs of the project and does not impact adversely on other known users.		- A protocol shall be made with the 25th Regional Directorate before the identification of probable adverse impacts of the TANAP Natural Gas Pipeline on groundwater aquifers (especially pollution that may arise due to gas leaks) and the works to be done during a probable pollution and the construction phase of the project concerning YAS Certified Wells which are on the Pipeline route and which will be cancelled.	TANAP/ CC/ EPC	recording of water withdrawal amounts	Monthly	Monthly Reports	TANAP	Constructio n Impacts Managemen t Plan		Chapter 8 Chapter 11
69	1	Entire Project	Groundwater		· Use best practices for well drilling, well completion, and well abandonment.			TANAP/ CC/ EPC	N/A	N/A	N/A	N/A	CC/CC/ EPC Method Statements		Chapter 8 Chapter 11
70	1	Entire Project	Groundwater		First priority is to use surface water for hydrotesting, if this is not possible groundwater resources can be used with permission and ensuring no impact on public use and environmental sensitivities.			TANAP/ CC/ EPC	Hydrotest Procedure	N/A	N/A	TANAP	CC/CC/ EPC Method Statements, Hydrotestin g Plan, Constructio n Impacts Managemen t Plan		Chapter 8 Chapter 11
71	1	Entire Project	Groundwater		· Obtain all required permits to use groundwater resources			TANAP/ CC/ EPC	Permit Documents	Continuous	Permit Documents	TANAP	CC/CC/ EPC Method Statements Permit Documents		Chapter 8 Chapter 11
72	1	Entire Project	Groundwater		Implement well drilling best practice training programme for all project well drillers			TANAP/ CC/ EPC	Training Program	N/A	Monthly Reports with Training Records	TANAP	Employment and Training Managemen t Plan		Chapter 8 Chapter 11
73	1	Erzurum, Eskişehir, Edirne	Groundwater		With regard to the areas in which high impacts (Ref. Chapter 8.1.5) have been individuated, as the excavation and trenching operation could modify groundwater flow patterns, an understanding of hydrogeology settings and groundwater flows in the aquifer with shallow groundwater to be crossed should be addressed. In alleviating drainage problems, proper considerations should be taken of the placement of drainage systems and where the cuts and fills			TANAP/ CC/ EPC	Preparation of Hydrogeologic al reports	N/A	N/A	TANAP	CC/CC/ EPC Method Statements, Constructio n Impacts Managemen t Plan		Chapter 8 Chapter 11

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					have the least detrimental effects.										
74	1	Entire Project	Groundwater		Conducting additional hydrogeological and groundwater quality assessments at locations where groundwater is planned to be used as potable water			TANAP/ CC/ EPC	hydrogeological and groundwater quality assessment	As required	hydrogeological and groundwater quality assessment Report	TANAP	Construction Impacts Management Plan, PPP		Chapter 8 Chapter 11
75	2	Stations	Groundwater		Water quality and sustainability will be monitored periodically to confirm that the supply meets the needs of the project and does not impact adversely on other known users.			TANAP/OPE RATOR	Water Sustainability Report	Annual	N/A	TANAP	Operating Procedures		Chapter 8 Chapter 11
76	2	Stations	Groundwater		Water conservation initiatives will be undertaken with the aim to limit the potable water consumption			TANAP/OPE RATOR	Water Consumption Monitoring Resource Consumption Minimization Plan	Monthly	Monthly Reports Water Consumption Records	TANAP	Operating Procedures		Chapter 8 Chapter 11
77	2	Stations	Groundwater		Obtain all required permits to use groundwater resources			TANAP	Permit Documents	Continuous	N/A	TANAP	Operating Procedures Permitting Document		Chapter 8 Chapter 11
78	2	Stations	Groundwater		Record all project related groundwater withdrawal			TANAP	Water Consumption Monitoring Resource Consumption Minimization Plan	Monthly	Monthly Reports Water Consumption Records	TANAP	Operating Procedures		Chapter 8 Chapter 11
79	1	Entire Project	Potable and Fresh Water	If the potable water for the personnel is planned to be supplied via tankers in locations without water network, necessary permits will be obtained from the related authority for supplying fresh water via tankers, otherwise activities won't be initiated and the articles of	The potable water would be obtained by buying water in demijohns and the utilization water would be obtained from the municipal water systems at the settlements near the camp areas.	1- BURSA Provincial Directorate of Public Health	1- - If the potable and freshwater for the personnel will be purchased from market, the need will be supplied by water in dispenser size with permit from	TANAP/ CC/ EPC	Water Consumption Monitoring	Continuous	Water Consumption Records	TANAP			Chapter 8 Chapter 11

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				Regulation on Water Intended for Human Consumption that came into force by being published in the Official Gazette dated 17.02.2005 and numbered 25730 will be complied. According to the relevant Regulation, the resources and reservoirs will be protected, the water pipelines won't be damaged and Public Sanitation Law numbered 1593 will be complied. If the potable and fresh water for the personnel will be purchased from market, the need will be supplied by bottled water in dispenser size obtaining permit from the related Directorate of Public Health. Potable water of personnel will be analyzed periodically according to the Regulation on Water Intended for Human Consumption during land preparation-construction and operation phases and the water that is not in compliance with the mentioned regulation won't be used. Microbiological and chemical analyses of water to be used as potable and fresh water for the personnel to work within the Project will be held out by authorized bodies periodically and healthy water supply will be provided. In case the potable water of the personnel is needed to be collected in storage tanks, water tanks will be in compliance with sanitary conditions. During the construction phase, the resources providing potable water won't be damaged, and all by-law and regulations in force will be complied. Potable and fresh water will be protected, potable and fresh water supply networks won't be damaged, activities will be conducted away from the cemeteries, employees will be provided with healthy water during the construction activities. Sanitary conditions predicted for the disposal of polluting elements which may be generated due to the Project activities and possible hazardous impacts that the Project activities may have on environmental and public health, will be in compliance with the related law and regulations. Pre-cautions will be taken against negative impacts that may be observed on public and environment especially for	Where there is no water system, the utilization water would we obtained from fountains, by transporting from village water systems or by drilling underground wells.		related Directorate of Public Health. When the potable water and utilization water for the workers are supplied from the network, the necessary permits from the concerned Municipality shall be taken. If fresh water for the personnel is planned to be supplied via tankers in locations without water network, necessary permits will be obtained from related authority for supplying fresh water via tankers, on the other hand, activities won't be initiated and the articles of Regulation on Water Intended for Human Consumption that came into force by being published in Official Gazette dated 17.02.2005 and numbered 25730 will be complied. Fresh water of personnel will be analyzed periodically according to Regulation on Water Intended for Human Consumption during land preparation, construction and operation phases and the water that is not in compliance with the mentioned regulation won't be used. In case the fresh water to be used by the personnel is supposed to be collected in tanks, the water tanks will meet hygiene requirements.								
80	1	Entire Project	Potable and Fresh Water	Potable water during the land preparation and construction phase of the project would be obtained in compliance with the provisions of the Turkish Ministry of Health's 17.02.2005 dated and 25730 numbered "Regulation about Waters for Human Consumption" and General Hygiene Law No 1593.	Microbiological and chemical analysis of potable and fresh water will be done periodically by authorized institutions.		TANAP/ CC/ EPC	Analysis and Permitting to check compliance with regulations	Continuous	Analysis Reports	TANAP		Statements in Regulations	Chapter 8 Chapter 11	
81	2		Potable and Fresh Water	Potable water will be supplied by buying water in demijohns and the consumption water can be obtained from the municipal water systems at the settlements near the camp areas. Where there is no water system, the consumption water would we obtained from fountains, by transporting from village water systems or by drilling underground wells. If a well is drilled necessary permissions would be obtained from the State Hydraulic Works.	The potable and fresh water that would be used in the operation phase of the project would be obtained in compliance with the provisions of the Turkish Ministry of Health's 17.02.2005 dated and numbered "Regulation about Waters for Human Consumption" and General Hygiene Law No 1593.		2- ERZİNCAN Provincial Directorate of Public Health	2- Water in compliance with the provisions of the Regulation on Water for Human Consumption shall be provided, the provided water shall be regularly and continuously disinfected and it shall be ensured that this water is analyzed according to the Regulation.	TANAP	Permit Documents	N/A	N/A	TANAP	Permit Documents	Chapter 8 Chapter 11

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				protection of the potable and natural water resources.	established during operation phase of the project, an approval shall be obtained according to Wastewater Treatment/ Deep Sea Discharge Plant Project Approval Circular dated 15.03.2012 and numbered 2012/9. Additionally, Environmental Permission Certificate shall be obtained from the relevant Provincial Directorate of Environment and Urbanization for the discharge of the treated wastewater according to the provisions of the "Regulation for The Permissions and Licenses to be Obtained According to the Environment Law" numbered 27214 and dated 29.04.2009 and provisions indicated in the amendments of this regulation.										
82	1	Entire Project	Wastewater	Domestic wastewater to be generated by the personnel who will work during the land preparation-construction, operation and decommissioning phases of the Project, will be treated in package treatment plants and will be discharged into the closest receiving body according to the Regulation on Control of Water Pollution that came into force by being published in Official Gazette dated 31.12.2004 and numbered 25687 and, the IFC Standards. The water accumulating in excavation channels during construction period of the Project will be pumped, will be precipitated in sedimentation tanks and will be discharged into the closest receiving body in accordance with the Regulation on Control of Water Pollution. The sediment precipitated will be transported to the closest disposal facility. The treatment plants that will be installed for the treatment of the	Domestic waste waters produced would be collected in package waste water treatment facilities building in camp site and treated. The treated water would be discharged to the closest receiving environment after meeting the standards in Regulation on Water Pollution Control.	1- Ministry of Environment and Urbanization/ General Directorate of Environmental Management	1- -The surface drainage water to be collected from compressor stations and wastewater to be generated by personnel will be disposed in compliance with Regulation on Control of Water Pollution. -The treatment plants that will be installed for the treatment of the wastewater to be generated due to activities will be had approved within the scope of Wastewater Treatment/Deep Sea Discharge Facility Project Approval Circular.	TANAP/ CC/ EPC	Analysis to check regulatory compliance	Monthly/Mo re frequent if required by TANAP	Analysis Reports	TANAP		Statements in Regulations	Chapter 8 Chapter 11

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				wastewater to be generated due to the activities will be approved within the scope of the Wastewater Treatment/Deep Sea Discharge Facility Project Approval Circular. In case domestic wastewater is to be accumulated in cesspools, the cesspool to be installed will be in compliance with the Regulation on the Construction of Septic Tanks where sewerage system cannot be implemented. Domestic wastewater to be collected in pits covered via impermeable membrane will not be discharged into any receiving environment, these wastes will be disposed at the closest treatment plant via sewage trucks and the wastewater discharge contract to be signed with treatment plant will be provided to the Provincial Directorate. Within the Project, according to the Regulation on Permits and Licenses Required by Environmental Law that came into force by being published in Official Gazette dated 29.04.2009 and numbered 27214, Environmental Permit on wastewater discharge will be obtained.											
83	1	Onshore	Hydrotest Water	The process wastewater to be generated during hydrostatic tests during construction period will be treated with appropriate methods and will be discharged into the closest receiving body according to the Regulation on Control of Water Pollution and IFC Standards. When the hydrotest water is needed to be transferred throughout the pipeline, metal pipeline facility will be constructed in order to prevent leakage and water loss and in case an elevation difference is observed between testing parts, additional tank and pumping system will be installed, The chemical composition of the water transferred from one part to the other will be controlled, improved when necessary and filtering will be applied. If there are concerns about the quality of the hydrotesting water and in cases that water remain in pipeline for long time, chemical treatment will be conducted in order to prevent biological	The water to be used for the hydrostatic test process is planned to be supplied from surface water. If surface water resources are not available groundwater wells after obtaining required permits from the Regional Directorate of State Hydraulic Works will be used.			TANAP/ CC/ EPC	Permitting Records of amount of water consumption records during hydrostatic testing	N/A	Permitting Documents	TANAP			Chapter 8 Chapter 11
84	1	Onshore	Hydrotest Water		Wastewater of hydrotesting will be treated and discharged to the closest receiving environment after satisfying the parameter given in RWPC and hydrotest water discharge standards in IFC			TANAP/ CC/ EPC	Hydrotest Procedure Analysis to check regulatory compliance	N/A	Analysis Reports	TANAP	Waste Management Plan PPP Hydrotesting Plan		Chapter 8 Chapter 11

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				<p>reproduction. Furthermore, in order to protect the inner surface of pipeline, corrosion-preventing chemical addition will be performed. Chemical addition will be performed under control and water will be controlled periodically, its composition will be kept in certain ranges and will be analyzed before discharge.</p> <p>During the activities to be held offshore, any liquid waste substance won't be spilled into the sea.</p> <p>In case marine discharge of the process wastewater to be generated due to the hydrostatic tests to be conducted offshore is the only applicable alternative, sea discharge plan will be prepared and discharge won't be conducted into shallow coastal waters. Also, the principles to be indicated in Pollution Prevention Plan and Waste Management Plan to be prepared within Project will be complied.</p>											
85	1	Entire Project	Landslide	<p>In cases that it is compulsory the NGP route to cross through landslide areas, in the area with landslide risk that may be dangerous for the construction activities, permanent stabilization pre-cautions will be taken during the reinstatement works. In the regions with landslide, after the land levelling works, open and closed drainage systems will be generated at points where necessary both underground and above ground and the soil stripped before construction will be spread on ground and the plant cover will be made to re-grow. As pre-cautions of decreasing and preventing flow and sliding events at regions with landslide, jute matting, wooden fences and gabion wall, rip-rap application at coastal areas will be conducted together or separately. In the areas with flow and sliding</p>	<p>Route diversion to avoid landslide areas. Where diversion is not possible site specific design and construction measures will be implemented as per the typical drawings and alignment sheets. Ensure slope stability and earth flow with reinstatement jute-mating, wooden fence, gabion wall, slope breakers, division channels etc.</p>			TANAP/ CC/ EPC	Monitoring design documentation, alignment sheets	N/A	N/A	TANAP	Routing/ design Management Procedures, CC/EPC Construction Method Statements, Reinstatement and Erosion Control Plan		Chapter 8 Chapter 11

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				events, diversion channels and in-channel slope breakers will be constructed.											
86	1	Entire Project	Karst	-	Route diversion to avoid karst areas. Where diversion is not possible site specific design and construction measures will be implemented as per typical drawings and alignment sheets. Major areas identified for karst are given in Appendix 1-3 Specific measures would include drainage control, prevention of new water flows into the soil, trench breaks to minimize flows of down-slope section of the trench with potential for escaping into the soil and gypsum at low points along the pipeline.			TANAP/ CC/ EPC	Monitoring design documentation, alignment sheets	N/A	N/A	TANAP	Routing/design Management Procedures, CC/EPC Construction Method Statements, Reinstatement and Erosion Control Plan		Chapter 8 Chapter 11
87	1	Entire Project	Seismicity and faults	Active fault line crossings of the NGP will be constructed in compliance with the crossing design parameters indicated in Chapter 2.8.4. Within the Project, at active fault line crossings of the NGP route, crossing angle according to active fault zone categories will be chosen in the way that it will compensate the dominant tension in case the fault line changes location. Special design pipes will be used for fault lines under A and B categories, in case the fault line changes location, special excavation and backfilling activities that protect minimum bending and area to be used when the pipe is applied tension, will be conducted. Heating insulation and water drainage pre-cautions that prevent the soil to be solidified due to the freezing water will be taken. Furthermore, precautions as	Route diversion to avoid fault areas. Where diversion is not possible site specific design and construction measures will be implemented as per typical drawings and alignment sheets. Conduct additional studies indicated in Table 8.1.3 A. 8.1.3 5 Recommended site investigations for fault rupture hazard along the route.			TANAP/ CC/ EPC	Monitoring design documentation, alignment sheets	N/A	N/A	TANAP	Routing/design Management Procedures, CC/EPC Construction Method Statements		Chapter 8 Chapter 11

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				trench bottom width to be several times bigger than standard trench width, choosing material of pipe padding with appropriate particle size, laying geotextile material between backfilling material and natural terrain and covering the pipe with a special material of polyethylene shall be taken. Certain crossing parameters will be determined based on the results of paleo-seismic research and the following pipe tension analyses.											
88	1	Entire Project	High groundwater table	-	Route diversion to avoid high groundwater areas. See Pollution Prevention Plan for the management of impacts on groundwater and Section 8.1.5 and map in Appendix 1-3. Where diversion is not possible site specific design and construction measures will be implemented as per typical drawings and alignment sheets.			TANAP/ CC/ EPC	Monitoring design documentation, alignment sheets	N/A	N/A	TANAP	Routing/design Management Procedures, CC/EPC Construction Method Statements		Chapter 8 Chapter 11
89	1	Entire Project	Liquefaction	As a general principle, settlement after liquefaction in pipeline projects is permitted to be maximum 30 cm. According to this acceptance, in cases that calculated settlement values in alluvial sites with liquefaction risk are higher than 30 cm, it will be appropriate to strengthen the ground via methods such as vibration, etc. or to improve the ground via methods such as jet-grout, injection, etc.	Specific areas for liquefaction are given in Appendix1-3. Route diversion to avoid liquefaction areas. Where diversion is not possible site specific design and construction measures will be implemented as per typical drawings and alignment sheets. Further geotechnical assessments for verification of liquefaction potential at the areas identified with high potential of liquefaction	-	-	TANAP/ CC/ EPC	Monitoring design documentation, alignment sheets	N/A	N/A	TANAP	Routing/design Management Procedures, CC/EPC Construction Method Statements		Chapter 8 Chapter 11
90	1	Construction Camps	Energy Use	The electrical energy that will be required during the land preparation-construction and operation phases of the Project will be supplied from national network obtaining required	The electrical energy will be supplied to these areas through the connection to the national grid. These connections will require a permitting process. These			TANAP/ CC/ EPC	Permit Documents	N/A	N/A	TANAP	Permit Documents		Chapter 8 Chapter 11

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				connection permits. In case of electricity cut off, the generators will be used. Furthermore, the principles indicated in Supply and Delivery Management Plan to be prepared within the Project will be complied.	permitting processes will be completed before the connection to the National Grid is established.										
91	2	Stations	Energy Use		During operation phase of the project, electricity needed for lighting and similar purposes at the above ground installations would be obtained from the national grid after completing the required permitting process.			TANAP/OPE RATOR	Permit Documents	N/A	N/A	TANAP	Permit Documents		Chapter 8 Chapter 11
92	All	Construction Camps Stations	Resource Consumption	<p>Fuel needed for construction machines and vehicles to be used during land preparation- construction and operation phases of the Project will be supplied from gas stations in the surrounding. During the construction phase of the Project, in case of necessity, fuel tanks will be located in camp sites and needed fuel will be transported to these tanks via tankers. In order to prevent any fuel spill from the tanks into the soil, tanks will be placed into concrete flooding pools.</p> <p>The natural gas that will be needed for gas turbines in compressor stations during the operation phase will be supplied from natural gas pipeline planned within the Project. In the compressor stations, diesel tanks will be kept ready in order to be used for generators in cases of emergency. Furthermore, the principles indicated in Supply and Delivery Management Plan to be prepared within the Project will be complied.</p>	<p>The resource consumption will be minimized through:</p> <ul style="list-style-type: none"> -Employee awareness Use of energy saving equipment Use of vehicles at good conditions 			TANAP/ CC/ EPC	<p>Maintenance Programs</p> <p>Training Program</p> <p>Monitoring Program</p>	N/A	Monthly Reports with Training Records and Maintenance Schedules	TANAP	Employment and Training Plan		Chapter 8 Chapter 11
93	1	Entire Project	Use of Resource and Infrastructure	The aggregate and concrete required for construction works of NGP and above ground installations, will be supplied from permitted/licensed quarries, crushing-screening facilities and batch plants in the	The aggregate material needed would be procured from the nearby sand, gravel and stone. In case it is required to open new quarries the construction contractor will obtain	1- General Directorate of Highways	1- - If the borrow pits of General Directorate of Highways will be used for the determination of borrow pits to be used throughout NGP construction route, necessary permits will be obtained from	TANAP	Permitting	N/A	Permitting Documents	TANAP	Construction Impacts Management Plan Procurement and Supply		Chapter 8 Chapter 11

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				surrounding. In case there are not facilities in the surrounding and the necessity cannot be met, installation of new facilities in the construction site will be evaluated within the scope of the EIA Regulation and required permits will be obtained. Furthermore, the principles indicated in Supply and Delivery Management Plan and Aggregate Management Plan to be prepared within the Project will be complied.	necessary permits and licences to open and operate the quarry. The requirements of the Turkish EIA regulation will be followed during the permitting process. TANAP will have the right to inspect and audit these quarries to be compliant with the project and regulatory requirements.	2- ARDAHAN Special Provincial Administration	related Regional Directorates. - Related with the Borrow pits to be used during construction and operation phases, required distance conditions will be complied at places allocated for service or benefit of public and in lands owned by real entities used for mining activities based on 123. Article of “Implementation Regulation of Mining Activities”. - If any connection road will be needed for the transportation of materials during construction and operation phases, protocol will be signed with related Regional Directorate. 2- - The materials necessary for filling, excavation and construction works to be performed within the project, shall be supplied from licensed stone quarries, sand/pebble quarries, etc.						Management Plan Aggregate Management Plan		
94	1	Camp Sites	Camp Site	Lightening and ventilation of social equipment and shelters will be provided, camp sites will be set up in locations that is not windy (stormy), will not be affected by natural disasters such as avalanche, landslide and flooding. Hygienic conditions will be achieved in the social facilities and disinfection will be conducted by the companies that have permits according to the Regulation on Principles and Fundamentals on Usage of Biocidal Substances.	If a new camp location would be needed for construction, all relevant E&S studies including the site surveys will be undertaken and the environmental assessment report will be prepared.	Sivas Provincial Directorate of Public Health	Social facilities shall be established at the camp site. Lightening and ventilation of social equipment and shelters will be provided, camp sites will be set up in locations that is not windy (stormy), won't be affected by natural disasters such as avalanche, landslide and flooding.	TANAP/ CC/ EPC	Permitting	N/A	Permitting Documents	TANAP	Construction Impacts Management Plan		Chapter 8 Chapter 11
95	1	Entire Project	Maintenance Stages	-	All work shall be performed under a Permit to Work system to ensure the control centre operators are fully aware of equipment being in and out of service and that any work will be performed to the necessary procedures. Permits to work will describe the work to be performed, the procedures to be followed, and the equipment and special			TANAP/ CC/ EPC	Maintenance Programs Training Program	Contin.	Maintenance Schedules	TANAP	Employment and Training Plan		Chapter 8 Chapter 11

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					precautions to be employed.										
96	All	Entire Project	Health Protection Strip	<p>Required responsibilities identified within the Regulation on Enterprise Opening and Operating Licenses that came into force by being published in the Official Gazette dated 10.08.2005 and numbered 25902 will be carried out. Health Protection Band distances cannot be defined out of borders of ownership and the areas to be expropriated will be determined based on the health protection band. Furthermore, according to the Article 6 of the Regulation, activities won't be initiated before opening and operating licenses are received. Health protection band will be generated around the facilities such as camp sites, block valve, compressor and pigging stations that will be installed on NGP route and necessary pre-cautions will be taken for the health protection band not to be violated. In case the pipeline passes close to the residential areas, safety pre-cautions will be taken, safety distance will be provided on both sides of the pipeline, construction will not be permitted on these areas. Health protection band distances will be signed on master plans by the related Development Directorate and related authorities.</p>	<p>The distances of health strip defined for the project will be:</p> <ul style="list-style-type: none"> Pipeline: 7 m from edge of the pipeline Compressor stations: 75 m from compressor units Metering stations: 30 m from the metering units Pigging stations: 30 m from pigging facilities Block valve stations: 20 m from the block valves 	<p>1- General Directorate of Highways</p> <p>2- GÜMÜŞHANE Provincial Directorate of Public Health</p> <p>3- BURSA Provincial Directorate of Public Health</p> <p>4- Secretary General of BURSA Special Provincial Administration</p> <p>5- EDİRNE Provincial Directorate of Public Health</p>	<p>1- Every kind of facility, building, structures, etc. to be constructed will be located according to the health protection band distance to be determined.</p> <p>2- Concerning the Health Protection Band distances, the issues specified in the correspondence dated 12.05.14 of the Turkish Public Health Institution Directorate (Ref. App.-4.3), the precautions specified in the legislations for protection of human, public and environmental health shall be complied with.</p> <p>3- Health protection band distances (Ref. App.-4.3), specified as per the Regulation on Licenses for Trading and Working, will be conserved by being marked on public improvement plans by related directorate of public improvement and related authorities.</p> <p>4- Required responsibilities identified within the Regulation on Business and Operating Licenses that came into force by being published in Official Gazette dated 10.08.2005 and numbered 25902 will be carried out. Health Protection Band distances cannot be defined out of borders of ownership and the areas to be expropriated will be determined based on health protection band. Furthermore, according to the 6. Article of the regulation, activities won't be initiated before business and operating licenses are received.</p> <p>5- Business and Operation Licenses will be received for facilities to be constructed within Project and a health protection band distance in compliance with the legislations will be provided in the surrounding.</p>	TANAP/ CC/ EPC	<p>Monitoring Program</p> <p>Auditing Program</p>	Continuous	Auditing Reports	TANAP	Construction Management Plan		Chapter 8 App.-4.3
97	All	Entire Project	Seismic Activity Risk	-	Emergency systems will be included in the pipeline design: i.e. emergency shutdown systems, venting and relief systems, fire			TANAP	Training Program	Continuous	Training Records	TANAP	Emergency Response Plan	Emergency Response Procedures	Chapter 8 Chapter 11

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					and gas detection, leak detection system								Employment and Training Plan		
98	All	Entire Project	Natural Hazard Risk	-	Emergency systems will be included in the pipeline design: i.e. emergency shutdown systems, venting and relief systems, fire and gas detection, leak detection system	-	-	TANAP	Training Program	Continuous	Training Records	TANAP	Emergency Response Plan Employment and Training Plan	Emergency Response Procedures	Chapter 8 Chapter 11
99	All	Entire Project	Terrorist Attack/Sabotage Risk	-	There will be security alarm system in communicating with local and main control centres. These centres should be communicating with the relevant security forces. Communication with the local security forces Security procedures to be developed during construction and operations Emergency systems included in the pipeline design: i.e. emergency shutdown systems, venting and relief systems, fire and gas detection, leak detection system	-	-	TANAP	Training Program	Continuous	Training Records	TANAP	Emergency Response Plan Employment and Training Plan	Emergency Response Procedures	Chapter 8 Chapter 11
100	1	Stations	Gaseous Emissions	In order to minimize the emissions to be caused by the vehicles to be used for activities, vehicles with their examination and exhaust gas emission measurements conducted will be used, the vehicles will be controlled periodically, the vehicles requiring maintenance will be taken under repair and other vehicles will be used until their maintenance is over, in cases vehicles are not needed, they won't be used according to the articles of the Regulation on Exhaust Gas Emission Control and	A preventative maintenance program (LDAR program) to minimize fugitive emissions will be implemented before the operating of the compressor/metering stations			TANAP/ CC/ EPC	LDAR Survey	Once	Mainten ance Program Records	TANAP	Survey Report		Chapter 8 Chapter 11
101	1	Entire Project	Gaseous Emissions		Use low emission vehicles wherever possible			TANAP/ CC/ EPC	Visual Inspection	N/A	N/A	TANAP	CC/CC/ EPC Method Statements Pollution Prevention Plan		Chapter 8 Chapter 11

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102	1	Entire Project	Gaseous Emissions	Diesel Quality that came into force by being published in Official Gazette dated 30.11.2013 and numbered 28837. Also, the principles to be indicated in Pollution Prevention Plan and Waste Management Plan to be prepared within the Project will be complied.	Use vehicles that were checked legally for their exhaust emissions.			TANAP/ CC/ EPC	Exhaust Emission Certificate	N/A	N/A	TANAP	CC/CC/ EPC Method Statements Pollution Prevention Plan		Chapter 8 Chapter 11
103	1	Entire Project	Gaseous Emissions		Restrict third party vehicle access to project related activities			TANAP/ CC/ EPC	Visual Inspection	N/A	N/A	TANAP	CC/CC/ EPC Method Statements Pollution Prevention Plan		Chapter 8 Chapter 11
104	1	Entire Project	Gaseous Emissions		Implement regular maintenance programmes for vehicles and equipment			TANAP/ CC/ EPC	Visual Inspection	N/A	N/A	TANAP	CC/CC/ EPC Method Statements Pollution Prevention Plan		Chapter 8 Chapter 11
105	1	Entire Project	Gaseous Emissions		Restrict excessive idling of vehicles or equipment			TANAP/ CC/ EPC	Visual Inspection	N/A	N/A	TANAP	CC/CC/ EPC Method Statements Pollution Prevention Plan		Chapter 8 Chapter 11
106	2	Stations	Gaseous Pollutant Emission	-	Natural Gas Combustion	1- ERZURUM-13 Regional Directorate of Forestry and Water Affairs	1- - To minimize the exhaust emissions originating from all vehicles and equipment, precautions such as conducting the exhaust examinations at the specified times, using fuel compliant with the standards, and making the maintenance of the vehicles periodically as well as not operating the vehicles needlessly shall be taken and the relevant provisions in the legislations shall be complied with.	TANAP/OPE RATOR	Obtain Air Emission Permit and conduct required air emission monitoring for SOx, Nox, CO, PM	Monthly	Emission Report	TANAP	Operating Procedures		Chapter 8 Chapter 11
107	2	Stations	Gaseous Pollutant Emission		Efficient Combustion			TANAP/OPE RATOR	Obtain Air Emission Permit and conduct required air emission monitoring for SOx, Nox, CO, PM	Monthly	Emission Report	TANAP	Operating Procedures		Chapter 8 Chapter 11
108	1	Entire Project	Dust Emission	In order to prevent and minimize the dust emission to be observed from the excavation, backfilling and works of loading, transportation, unloading and storage of excavation materials,	Implement dust control and dust suppression techniques	1- ERZURUM-13 Regional Directorate of Forestry and Water Affairs	1- - To minimize dust in the area, precautions shall be taken such as irrigation at the emission source, conducting loading and unloading operations without scattering, covering	TANAP/ CC/ EPC	Visual Inspection	N/A	N/A	TANAP	CC/CC/ EPC Method Statements Pollution Prevention Plan		Chapter 8 Chapter 11

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109	1	Entire Project	Dust Emission	and due to the explosion works to be conducted on route in case of necessity during land preparation and construction phases of the Project, pre-cautions such as irrigation at emission source, loading and unloading without blowing, covering vehicles by cloth on top during transportation, and keeping top of material humid by a ratio of 10% etc. will be taken. Since the dust emission to occur during the explosion won't remain continuously, its impact on air quality will be instantaneous. The sizes of particulate matters that will be distributed in atmosphere via explosion will be much bigger than the particulate matters to be distributed due to other activities. So that, a portion of particulate matter to outcome due to explosion will precipitate and atmospheric transportation will be at a low level. Dust management will be maintained by spraying the areas with water where explosion is going to be performed before the activity. During the dry season without precipitation, starting from the activities of vegetable soil stripping, the Project construction area will be humidified periodically and dust generation will be minimized. During all phases of the Project, the limit values indicated in the Regulation on Air Quality Assessment and Management Appendix-I that came into force by being published in Official Gazette dated 06.06.2008 and numbered 26898 won't be exceeded, the articles of Regulation on Industrial Air Pollution Control that came into force by being published in Official Gazette dated 03.07.2009 and numbered 27277 will be complied and required environmental permits will be obtained within related regulations.	Maintain roads on a regular basis to prevent excessive dust generation		vehicles with canvas during material transportation and maintaining the transportation roads at %10 moisture and wetting them regularly, and the provisions of the related legislations shall be complied with.	TANAP/ CC/ EPC	Visual Inspection	N/A	N/A	TANAP	CC/CC/ EPC Method Statements Pollution Prevention Plan		Chapter 8 Chapter 11
110	1	Entire Project	Dust Emission		Enforce speed limits along access roads and ROW			TANAP/ CC/ EPC	Inspection	N/A	N/A	TANAP	CC/CC/ EPC Method Statements TANAP HSE Procedures		Chapter 8 Chapter 11
111	1	Ardahan, Erzurum, Sivas	Dust Emission		Monitor the dust impact at Putka Gölbaşı Ardahan, Erzurum Marshland, Bataklıkdüzü Sivas before and during construction in order to ensure effectiveness of defined standard mitigation measures			TANAP/ CC/ EPC	Dust monitoring	Daily	Emission Report	TANAP	CC/CC/ EPC Method Statements Pollution Prevention Plan		Chapter 8 Chapter 11
112	3	Entire Project	Dust Emission		Implement dust control and dust suppression techniques Maintain roads on a regular basis to prevent excessive dust generation Use low emission vehicles wherever possible Use vehicles that were checked legally for their exhaust emissions. Restrict third party vehicle access to project related activities Implement regular maintenance programmes for vehicles and equipment Restrict excessive idling of vehicles or equipment Enforce speed limits along access roads and ROW			TANAP/DEC OMMISSIONING CONTRACTOR	TO BE DETAILED	TO BE DETAILED	TO BE DETAILED	TO BE DETAILED	Decommissioning Procedures		Chapter 8 Chapter 11

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				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
113	1	Entire Project	Air Quality	-	Implement air quality monitoring programmes to assess the air quality during the Project development Investigate any dust or air quality complaints that arise from construction activities			TANAP/ CC/ EPC	Monitoring Air Quality	Continuous	Monthly Reports	TANAP	Pollution Prevention Plan		Chapter 8 Chapter 11
114	1	Entire Project	Excavation Waste	The excavation soil that will outcome during the excavation works that will be conducted for the construction of above ground installations and pipe laying within the Project, will be stored in construction corridor in an appropriate location where it won't be mixed up with topsoil stripped and won't inhibit the vehicle traffic. In case it is appropriate, a portion of excavation soil will be used for	The waste material which is occurred from excavation works during the land preparation and construction phase will not be emptied to the rivers that flows or dry, related to "the River Beds and Floods Decree" Numbered 2006/27 from Prime Ministry.	1- General Directorate of Forestry 2- BALIKESİR-25 Regional Directorate of State Hydraulic Works	1- - Waste, excavation or any material that will come out during construction of the mentioned Project won't be spilled onto forest areas. 2- - On the river beds that are within the route corridor, it shall be ensured that during the route works, the excavation materials (digging, debris, etc.) will not interrupt the free flow directions of the rivers, not cause pooling on the river beds and not disrupt the stability of the river beds.	TANAP/ CC/ EPC	Visual Inspection Auditing	N/A	Inspection Report Audit Report	TANAP	Pollution Prevention Plan Waste Management Plan Construction Impacts Management Plan		Chapter 8 Chapter 11
115	1	Entire Project	Excavation Waste	pipe pedding/padding and backfilling purposes, a portion will be used for rehabilitation of roads and land levelling purposes. Excavation wastes and excavation residual materials that are not qualified to be used, will be transported to the recycling/landfill areas that the relevant authority will suggest. Construction and demolition wastes that will outcome during the decommissioning phase as the aboveground installations are being uninstalled will be brought to the storage areas that municipalities will suggest in municipal adjacent areas and to the storage areas that governorships will suggest out of municipal adjacent areas. The storage areas where excavation wastes that won't be used that will outcome during excavations will be determined during construction phase and storage will be conducted after governorship permit is obtained. During the excavation works to be conducted, activities will be performed in accordance with the Regulation on the Control of	The following provisions indicated in the Regulation on Control of Excavation Soil and Construction Debris regarding the storage of the top soil would be respected; <ul style="list-style-type: none"> The top soil shall be stored in an appropriate area to prevent from being scattered by wind or water streams or other factors, from being mixed with foreign materials and from being deteriorating with respect to original characteristics and necessary protection measures shall be taken. The area where the top soil would be stored shall not have more than 5% inclination. During the storage of the top soil, possible losses shall be prevented and the quality of the soil shall be maintained. 	3- YOZGAT Provincial Directorate of Food, Agriculture and Livestock 4- KÜTAHYA Provincial Directorate of Environment and Urbanization	3- - The opinions of all the Regional Directorates of the State Hydraulic Works shall be taken concerning the excavation dumping sites and unsuitable places shall not be used. 4- - The areas that the excavation wastes that will not be used will be stored will	TANAP/ CC/ EPC	Visual Inspection Auditing	N/A	Inspection Report Audit Report	TANAP	Pollution Prevention Plan Waste Management Plan		Chapter 8 Chapter 11

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				Excavation Soil, Construction and Demolition Wastes that came into force by being published in Official Gazette dated 18.03.2004 and numbered 25406.According to the 9. Article of the Regulation, producers of excavation soil and construction/demolition wastes are responsible from waste management in order to minimize the negative impacts of wastes on environmental and public health based on articles of the regulation. The facilities have to obtain the required permits and approvals during the phases of generation, transportation and storage of wastes. Furthermore, they cannot spill their wastes into locations except the recycling or storage facilities where municipality or administration permits. Waste, excavation or any material that will come out during construction of the mentioned Project won't be spilled into stream beds and forest areas. During the excavation works to be conducted within the Project, activities will be conducted in accordance with the Regulation on Control of Soil Contamination and Contaminated Lands by Point Sources that came into force by being published in Official Gazette dated 08.06.2010 and numbered 27605.	<ul style="list-style-type: none"> If the top soil shall be kept exposed for a long time, it will be ensured that surface is covered with fast growing plants. <p>Also the provisions of the Regulation on Control of Soil Pollution and Contaminated Lands by Point Sources would be complied with.</p>	5- YOZGAT Provincial Directorate of Environment and Urbanization	be determined during construction phase and storage will be conducted after permit is obtained from the Governorship. 5- Soil and excavations to be generated due to excavations will be disposed appropriately.								
	All	Entire Project	Solid Waste	Domestic solid wastes to be generated by the personnel who will work during land preparation-construction, operation and decommissioning phases of the Project, will be accumulated in covered impermeable tanks located in various points in camp sites and will be delivered to the solid waste storage system of the nearest municipality periodically. During all phases of the Project, collection, storage, recycling and disposal of the solid wastes will be held in accordance with the Regulation on Solid Waste Control that came into force by being published in Official Gazette	Domestic solid waste from the personnel would be collected in closed containers and at certain intervals would be transported to the solid waste collection system belonging to the nearest municipality and be disposed of.			TANAP/ CC/ EPC	Visual Inspection Auditing	N/A	Inspection Report Audit Report	TANAP	Pollution Prevention Plan Waste Management Plan		Chapter 8 Chapter 11

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116				dated 14.03.1991 and numbered 20814. During the activities to be held offshore, any solid waste won't be spilled into the sea. Also, the principles to be indicated in Pollution Prevention Plan and Waste Management Plan to be prepared within the Project will be complied.											
117	All	Entire Project	Packaging Waste	Recyclable packaging wastes (paper, cardboard, plastic, glass, etc.) among solid wastes to be generated during the land preparation-construction, operation and decommissioning phases of the Project will be collected in covered containers located in various points in camp sites separately from non-recyclable domestic solid wastes (food wastes, etc. organic wastes) and will be delivered to the licensed recycling companies. Non-recyclable wastes will be disposed to licensed disposal sites. During each step of the Project, collection, storage, recycling, and disposal of packaging wastes will be held out in compliance with the Regulation on Packaging Waste Control that came into force by being published in Official Gazette dated 24.08.2011 and numbered 28035. During the activities to be conducted offshore, no solid waste will be spilled into the sea. Also, the principles to be indicated in Pollution Prevention Plan and Waste Management Plan to be prepared within the Project will be complied.	The packing paper, plastic and glass bottles i.e. packaging wastes will be collected separate from other wastes without considering material used and the source of the material and should be sent to licensed recycling facilities according to Article 23 of the Regulation on Control of Packaging Waste. The collection of these packaging materials and their disposal would be done in compliance with the provisions of the Regulation on Control of Packaging Waste.			TANAP/ CC/ EPC	Visual Inspection Auditing	N/A	Inspection Report Audit Report	TANAP	Pollution Prevention Plan Waste Management Plan		Chapter 8 Chapter 11
118	All	Entire Project	Waste Batteries and Accumulators	End of life batteries and accumulators that will be generated during the land preparation-construction, operation and decommissioning phases of the Project, will be collected in covered containers located on an impermeable ground separate from domestic wastes and will be disposed by delivering to the collection points determined by the municipalities	The maintenance process of the vehicles to be used in project would be done in authorized services. However, when it is not possible, the maintenance procedure will be carried within the facility. In cases where the maintenance process of the vehicles used in the project are carried out			TANAP/ CC/ EPC	Visual Inspection Auditing	N/A	Inspection Report Audit Report	TANAP	Pollution Prevention Plan Waste Management Plan		Chapter 8 Chapter 11

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				or companies that trade and distribute batteries or accumulators according to Article 13 of the Regulation on Waste Batteries and Accumulators Control that came into force by being published in Official Gazette dated 31.08.2004 and numbered 25569. Also, the principles to be indicated in Pollution Prevention Plan and Waste Management Plan to be prepared within Project will be complied.	within the facility, possible waste batteries that come out would be stored in a closed containers with a leak-proof floor according to the Regulation on Control of Waste Batteries and Accumulators and batteries shall be delivered to the collection points established by the municipalities or by the companies distributing or selling batteries and waste accumulators (vehicle batteries) shall be delivered to the temporary storage areas established by the companies distributing or selling accumulator products and maintenance companies. Within the scope of the project, provisions of the Regulation on Control of Waste Batteries and Accumulators and amendments of this regulation shall be complied with										
119	All	Entire Project	Medical Wastes	The medical wastes to be generated during the land preparation-construction, operation and decommissioning phases of the Project will be collected in red plastic bags with “International Biodanger” sign and “WARNING! MEDICAL WASTE” phrase on both faces that are resistant against tearing, puncturing, exploding and transportation, made of original medium concentration polyethylene raw material, produced as impermeable, double bottom stitching, with double layer thickness of 100 micron and with a minimum capacity of 10 kilogram according to the Regulation on Medical Waste Control that came into force by being published in Official Gazette dated 22.07.2005 and	Medical wastes collected according to the points indicated in the regulations, would be disposed of by delivering to the nearest health institution or municipal medical waste collection system. Medical waste that are produced under the project shall be regularly recorded according to the Regulation on Control of Medical Waste, shall be sent to the Provincial Directorate of Environment and Urbanization, these information shall be kept for at least three years and be kept open to			TANAP/ CC/ EPC	Visual Inspection Auditing	N/A	Inspection Report Audit Report	TANAP	Pollution Prevention Plan Waste Management Plan		Chapter 8 Chapter 11

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				principles to be indicated in Pollution Prevention Plan and Waste Management Plan to be prepared within Project will be complied.											
120	All	Entire Project	Waste Oil	The waste oil to be generated due to the maintenance-repair works required to be conducted onsite during land preparation-construction, operation and decommissioning phases of the Project, will be stored temporarily in covered and impermeable tanks/containers located on impermeable ground separated according to the categories, National Waste Transportation form will be filled up and will be delivered to the treatment and disposal facilities with environmental license via transporters with transportation license according to the Regulation on Waste Oil Control that came into force by being published in Official Gazette dated 30.07.2008 and numbered 26952.In case the oil type used is not changed, after the waste oil category analyses are conducted once by the waste producer company, Waste Oil Declaration Form will be filled and will be submitted to the related Governorship (Provincial Directorate of Environment and Urbanization) until February of the following year. Waste vegetable oil that will be generated by the cafeterias of the camp sites within the Project will be accumulated in impermeable cans, containers or tanks resistant against corrosion both on outer and inner surfaces, separately from other wastes and will be delivered to the licensed recycling or disposal facilities via transporters with license according to the Regulation on Waste Vegetable Oil Control that came into force by being published in Official Gazette dated, 19.04.2005 and numbered. During the waste oil delivery,	The maintenance process of the vehicles to be used in project would be done in authorized services. However, when it is not possible, the maintenance procedure will be carried within the facility. If any waste oil is produced, the waste oil shall be collected in a closed temporary waste storage area with leak-proof floor and covered with a shelter. The oil collected would be given to a licensed waste oil recovery company according to the Regulation on Control of Waste Oil.			TANAP/ CC/ EPC	Visual Inspection Auditing	N/A	Inspection Report Audit Report	TANAP	Pollution Prevention Plan Waste Managemen t Plan		Chapter 8 Chapter 11

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				National Waste Transportation form will be used and after each transport, a copy will be submitted to Governorship (Provincial Directorate of Environment and Urbanization) and these documents will be kept for five years in the facility. In case a leakage or pollution is observed in Project site, necessary pre-cautions will be taken in compliance with the Regulation on Control of Soil Contamination and Contaminated Lands by Point Sources that came into force by being published in Official Gazette dated 08.06.2010 and numbered 27605. Also, the principles to be indicated in Pollution Prevention Plan and Waste Management Plan to be prepared within Project will be complied.											
121	All	Entire Project	Rubber Tire Wastes	Waste tires to be generated in case the tires of vehicles and construction equipment is needed to be changed onsite during land preparation- construction and operation phases of the Project, will be collected separately from other wastes and will be disposed via licensed transporters in accordance with the Regulation on End of Life Tires Control that came into force by being published in Official Gazette dated 25.11.2006 and numbered. Also, the principles to be indicated in Pollution Prevention Plan and Waste Management Plan to be prepared within Project will be complied.	The maintenance activities of the vehicles and construction machines will be done in authorized services. If there is a need to change the tires of these vehicles and machines, the end of life tires that come out would be sent to tire distribution companies or to the authorized transporters indicated in the regulation. All provisions in the Regulation on the Control of End of Life Tires will be respected.			TANAP/ CC/ EPC	Visual Inspection Auditing	N/A	Inspection Report Audit Report	TANAP	Pollution Prevention Plan Waste Management Plan		Chapter 8 Chapter 11
	All	Entire Project	Hazardous Wastes	Hazardous wastes which may be generated during the land preparation-construction, operation and decommissioning phases of the Project will be stored temporarily in a covered environment in the way that they won't be exposed to the chemical reactions, being collected in categories in impermeable caps with hazardous waste sign on them and will be delivered to the	In TANAP Project the storage of hazardous wastes will be done according to following provisions indicated in Regulation on Control of Hazardous Wastes: <ul style="list-style-type: none"> A record shall be kept on the amount of the waste and packaging and labelling of the waste shall be 	1- Ministry of Environment and Urbanization/ General Directorate of Environmental Management	1- - The grounds of places where the maintenance, repair, oil change, fuel supply works of machineries and equipment to be used within Project, will be impermeable, will be covered on top in order not to be affected by rain	TANAP/ CC/ EPC	Visual Inspection Auditing	N/A	Inspection Report Audit Report	TANAP	Pollution Prevention Plan Waste Management Plan		Chapter 8 Chapter 11

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				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
122				licensed hazardous waste disposal facilities via licensed companies in accordance with the Regulation on Control of Hazardous Wastes that came into force by being published in Official Gazette dated 14.03.2005 and numbered 25755. Hazardous wastes generated will be recorded and will be packed and labelled according to the international standards required by the licensed recycling or disposal facility that the wastes will be sent. Related with the hazardous wastes generated, every year, Waste Declaration Form will be filled including the information of the previous year using the web based program prepared by the Ministry latest until the March of the following year, the form will be approved, will be printed and the copy will be kept for five years. In order to prevent pollution that may outcome due to the reasons such as spill of hazardous wastes accidentally and etc., the location will be reinstated latest in a month from the time of occurrence depending on the type of waste and all expenses will be paid. Governorship (Provincial Directorate of Environment and Urbanization) will be informed about the accident and the report including information on accident date, place, type and amount of waste, reason of accident, waste disposal process and rehabilitation of accident location will be submitted to Governorship. Also, the principles to be indicated in Pollution Prevention Plan and Waste Management Plan to be prepared within Project will be complied.	<ul style="list-style-type: none">according to the internationally accepted standards required by the environmentally licensed recycling or disposal facility which will receive the waste.The Waste Declaration Form indicated in the regulation shall be filled and approved every year by the end of March with the previous year's information using the web based program prepared by the Ministry of Environment and Urbanization and a copy shall be stored for five years.The waste would be temporarily stored in durable, leak-proof, safe containers at international standards placed on a concrete area away from the buildings of the camp, there will be hazardous waste labels on the containers, the quantity and the stored date would be indicated on the container, if the containers are damaged, the waste would be transferred to other containers having the same specifications, containers would always be kept closed, and they would be stored so that the waste does not chemically react.All the measures shall be taken for the health and safety of the employees responsible for the collection, transportation and temporary storage of the waste within the facility.In order to prevent pollution that happens as a result of accidental spill or by deliberate actions, depending on the type		and necessary pre-cautions will be taken.								

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				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
					<p>of the waste, location of the incident would be brought to its original condition by latest within a month from the time of the incident and all the expenses for this shall be borne.</p> <ul style="list-style-type: none"> Also, when waste are spilled by accident or deliberately and in other similar cases, office of the governor shall be informed and a report detailing the accident date, accident location, type and quantity of the waste, cause of the accident, the waste disposal action and rehabilitation of the accident location shall be submitted to the office of the governor 										
123	1	Entire Project	Noise and Vibration	During the land preparation and construction phases of the Project, noise and vibration will be generated due to the	<input type="checkbox"/> Use high efficiency mufflers on all construction equipment	ERZURUM-13 Regional Directorate of Forestry and Water Affairs	Works should be terminated between 22:00-06:00 hours and the first 3 hours after sun rise and the last 3 hours before sunset works with high noise levels shall not be conducted so that the target species and the sensitive species are not affected. Outside these times, the necessary sensitiveness shall be displayed in order to minimize the effects of noise on human health and fauna, and the relevant provisions in the legislations shall be complied with.	TANAP/ CC/ EPC	Visual Inspection	N/A	N/A	TANAP	CC/CC/ EPC Method Statements		Chapter 8 Chapter 11
124	1	Entire Project	Noise and Vibration	construction machines (excavator, loader, grader, dozer, trencher, crane, side-boom, etc.), explosions in case of necessity, hydrostatic tests and other activities to be performed on route. Furthermore, during the	<input type="checkbox"/> Maintain equipment on a regular basis			TANAP/ CC/ EPC	Visual Inspection	N/A	N/A	TANAP	CC/CC/ EPC Method Statements Pollution Prevention Plan		Chapter 8 Chapter 11
125	1	Entire Project	Noise and Vibration	operation phase of the Project, noise will be generated in above ground installations and during maintenance and repair works. Since the construction activities will be conducted during	<input type="checkbox"/> Use quieter methods and equipment when possible			TANAP/ CC/ EPC	Visual Inspection	N/A	N/A	TANAP	CC/CC/ EPC Method Statements Pollution Prevention Plan		Chapter 8 Chapter 11
126	1	Entire Project	Noise and Vibration	daytime, noise generation will be limited. In order to prevent noise generation; noise insulation materials will be used during the land preparation-construction phases; noise screens/barriers will be used when necessary in	<input type="checkbox"/> Replace or repair parts generating excessive noise			TANAP/ CC/ EPC	Visual Inspection	N/A	N/A	TANAP	CC/CC/ EPC Method Statements Pollution Prevention Plan		Chapter 8 Chapter 11
127	1	Entire Project	Noise and Vibration	compressor stations during the operation phase. During the land preparation-construction and operation phases of the Project, the environmental noise limit values provided in Appendix-VII Table 4, Table 5 and Table 6 of	<input type="checkbox"/> Restrict excessive idling of project related equipment and vehicles.			TANAP/ CC/ EPC	Visual Inspection	N/A	N/A	TANAP	CC/CC/ EPC Method Statements Pollution Prevention Plan		Chapter 8 Chapter 11

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128	1	Entire Project	Noise and Vibration	Regulation on Environmental Noise Assessment and Management that came into force being published in Official Gazette dated 04.07.2010 and numbered 27601 won't be exceeded and required permits within the related regulations will be obtained. During the activities to be conducted within the Project, the noise generation will be minimized taking necessary pre-cautions within the pre-cautions to be taken by	▫ Maintain project access roads to reduce noise associated with vibration and vehicle noise			TANAP/ CC/ EPC	Visual Inspection	N/A	N/A	TANAP	CC/CC/ EPC Method Statements Pollution Prevention Plan		Chapter 8 Chapter 11
129	1	Entire Project	Noise and Vibration	institutions/organizations indicated in Article 8, rules need to be complied in highway vehicles indicated in Article 9, rules to be complied about equipment to be used outdoors indicated in Article 13of	▫ Deploy temporary noise barriers near sensitive areas			TANAP/ CC/ EPC	Visual Inspection	N/A	N/A	TANAP	CC/CC/ EPC Method Statements Pollution Prevention Plan		Chapter 8 Chapter 11
130	1	Entire Project	Noise and Vibration	Regulation on the Environmental Noise Assessment and Management. During the works, vehicles with their examination exhaust gas measurements and maintenances conducted will be used. In order the employees to be protected from health and safety risks that may outcome due to the noise exposure, especially aural risks, necessary pre-cautions will be taken based on the Regulation on Protection of Employees from Risks Associated with Noise that came into force by being published in Official Gazette dated 28.07.2013 and numbered 28721. In order to prevent the dangerous effects of noise on employees working on-site, personnel protecting equipment that minimize the noise in the way that it does not exceed the permitted noise exposure level (87 dBA). Within this scope, the employee will be provided with ear protectors in accordance with (b) band of the Article 13 of the Regulation on Work Health and Safety that came into force by being published in Official Gazette dated 09.12.2003 and numbered 25311 and the Regulation on	▫Do not locate project related noise emitting infrastructure near areas inhabited by human and other sensitive receptors			TANAP/ CC/ EPC	Visual Inspection	N/A	N/A	TANAP	CC/CC/ EPC Method Statements Pollution Prevention Plan		Chapter 8 Chapter 11
131	1	Entire Project	Noise and Vibration		Conduct project construction during daylight hours and not during normal sleeping hours			TANAP/ CC/ EPC	Visual Inspection	N/A	N/A	TANAP	CC/CC/ EPC Method Statements Pollution Prevention Plan		Chapter 8 Chapter 11
	1	Erzurum, Ardahan	Noise and Vibration		particular attention will be paid to the implementation of noise suppression measures (standard mitigations) if the construction activities of the pipeline, camp site and pipe stock yards in Putka-Gölbasi area will be done in the migration period for migrant birds (from March to May and from September to November) particular attention will be paid to the implementation of noise suppression measures (standard mitigations) if the construction activities of the pipeline in Erzurum Marsh area will be done in the migration period for <i>Vanellus gregarius</i> (from March to April and from September to November) to monitoring the impact due to the increase of			TANAP/ CC/ EPC	Noise Measurement	Daily	Noise Emission Report	TANAP	CC/CC/ EPC Method Statements Pollution Prevention Plan	Preconstruction surveys findings on biodiversity to confirm the construction seasonal constraints	Chapter 8 Chapter 11

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132				Usage of Personnel Protecting Equipment in Workplaces that came into force by being published in Official Gazette dated 02.07.2013 and numbered 28695 and this equipment will be used by employee. In case the noise and vibration measurement results to be conducted in the building closest to the Project area after the planned Project is initiated is observed to exceed the limit values provided in the Regulation on Environmental Noise Assessment and Management, pre-cautions to reduce noise will be taken.	noise level on protected area Putka-Golbasi and Erzurum Marsh ambient noise level will be monitored before (as blank) and during construction.										
133	1	Entire Project	Noise and Vibration		Implement noise monitoring Programs during the Project development Investigate noise emission complaints that arise from construction activities			TANAP/ CC/ EPC	Monitoring Noise Emission	Daily	Monitoring Results	TANAP	Pollution Prevention Plan		Chapter 8 Chapter 11
134	2	Stations	Noise and Vibration		Maintain equipment on a regular basis Use quieter methods and equipment when possible Replace or repair parts generating excessive noise			TANAP/OPE RATOR	Maintenance Program	TO BE DETAILED	TO BE DETAILED	TANAP	Operating and Maintenance Procedures		Chapter 8 Chapter 11
135	3	Entire Project	Noise and Vibration		Use high efficiency mufflers on all construction equipment Maintain equipment on a regular basis Use quieter methods and equipment when possible Replace or repair parts generating excessive noise Restrict excessive idling of project related equipment and vehicles. Maintain project access roads to reduce noise associated with vibration and vehicle noise Deploy temporary noise barriers near sensitive areas			TANAP/DECOMMISSIONING CONTRACTOR	TO BE DETAILED	TO BE DETAILED	TO BE DETAILED	TO BE DETAILED	Decommissioning Procedures		Chapter 8 Chapter 11

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				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
					Do not locate project related noise emitting infrastructure near areas inhabited by human receptors Conduct project construction during daylight hours and not during normal sleeping hours										
136	1	Compressor Stations and Camp Sites at Ardahan, Kars, Erzurum, Gümüşhane, Erzincan, Edirne and Çanakkale provinces.	Habitats	The construction works conducted in ecologically sensitive areas will constantly be monitored within the Project. Construction activities such as explosion will be prevented from being performed in ecologically sensitive areas and in locations close to species, construction corridor will be narrowed, the working personnel will be trained on subjects to be paid attention. Wetlands and rivers feeding these areas won't be visited as the vehicles, construction equipment to be used within the Project are being washed, are parked or stand-by; reeds, meadows, pastures and similar natural areas won't be smashed by trucks. Necessary pre-cautions for not damaging the ecological balance at stream, river and creek crossings within the Project. The nests of the birds that breed during the land preparation-	In order to minimise the habitat loss and nuisances, temporary working areas should be minimized as much as possible especially during the construction of the compressor station in Ardahan province and during the camp site activities and the Block valve, pigging, metering stations construction in Ardahan, Kars, Erzurum, Gümüşhane, Erzincan, Edirne and Çanakkale provinces.	1- ERZURUM-13. Regional Directorate of Forestry and Water Affairs	1- - As 7 taxa of the species existing in the Project area and its surroundings, those specified to be near threatened (NT), vulnerable (VU), endangered (EN), critically endangered (CR) according to the IUCN conservation status categories shall be conserved in accordance with the Ecosystem Assessment Report prepared within the scope of the Project and attached in Annex-2.4, and it shall be ensured that the seeds of these taxa are harvested, dried and sorted out at the maturing stage, that they are sent to the Turkish Seed Gene Bank, and the delivery documents are communicated to the Ardahan Provincial Branch Directorate of the Ministry of Forestry and Water Affairs, 13. Regional Directorate.	CC/ EPC TANAP	Site Plans	N/A	Site Plans	TANAP	Constructio n Impacts managemen t Plan	Site Plans, Typical Drawings, CC/ CC/ EPC Method Statements	Chapter 8.2, Chapter 11
137	1	Entire Project	Fauna	Necessary pre-cautions for not damaging the ecological balance at stream, river and creek crossings within the Project. The nests of the birds that breed during the land preparation-	Facilitate wildlife crossing of ROW during construction by providing trench and window breaks, particularly at identified intersections with wildlife movement corridors		- Works should be terminated between 22:00-06:00 hours and the first 3 hours after sun rise and the last 3 hours before sunset works with high noise levels shall not be conducted so that the target species and the sensitive species are not affected. Outside these times, the necessary sensitiveness shall be displayed in order to minimize the effects of noise on human health and fauna, and the relevant provisions in the legislations shall be complied with.	CC/ EPC TANAP	Inspections	Weekly	Inspection Reports	TANAP	Constructio n Impacts managemen t Plan	Site Plans, Typical Drawings, CC/CC/ EPC Method Statements	Chapter 8.2, Chapter 11
138	1	Entire Project	Fauna	construction activities of the Project will not be damaged. Construction activities won't be conducted during the breeding season of the target species of wood grouse, Caucasian black grouse and other poultry in Posof Wildlife Development Zone near the pipeline route. In case explosion is required within the Project, explosion won't be performed between 15 March-16 June that is the travelling and	Minimize traffic and speed of traffic to prevent vehicle-wildlife collisions as well as dust generation and air emissions			CC/ EPC TANAP	Inspections	Weekly	Inspection Reports	TANAP	Constructio n Impacts managemen t Plan	Site Plans, Typical Drawings, CC/CC/ EPC Method Statements	Chapter 8.2, Chapter 11
139	1	Entire Project	Fauna		Minimize habitat loss		- It shall be ensured that all kinds of solid and liquid wastes that may form during the construction and operation phases are disposed of in accordance	CC/ EPC TANAP	Inspections	Weekly	Inspection Reports	TANAP	Constructio n Impacts managemen t Plan	Site Plans, Typical Drawings, CC/CC/ EPC Method Statements	Chapter 8.2, Chapter 11

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140	1	Entire Project	Fauna	breeding season of immigrant birds. In case explosion is required to be performed in Posof Wildlife Development Zone, opinions of the related authorities will be received. Since the natural vegetation in agricultural lands is used as nesting areas by animals, these areas will be interfered at minimum level during the construction activities. In order not to interfere with the breeding season of fish species, in case the river crossing constructions are designed as open channels, the constructions will be performed during dry period between August and November. During the operation phase of the Project, bio-restoration will be monitored	Minimize habitat fragmentation		with the provisions of the relevant legislations, they shall absolutely not be disposed within the area, and the necessary precautions shall be taken so that in the areas where wastes are temporarily stored they do not contaminate the water resources of wild life and the drinking waters. Concerning waste management, the relevant provisions in the legislations shall be complied with.	CC/ EPC TANAP	Inspections	Weekly	Inspection Reports	TANAP	Constructio n Impacts managemen t Plan	Site Plans, Typical Drawings, CC/CC/ EPC Method Statements	Chapter 8.2, Chapter 11
141	1	Entire Project	Fauna	periodically in ecologically sensitive areas and in cases that bio-restoration fails, seeds of sensitive species will be stored or will be supplied from the closest seed source or gene research center. For the ecologically	Minimize habitat alteration		- The necessary sensitivity shall be displayed concerning using the existing roads and not making new roads unless it is necessary for transportation. When it is necessary that new roads are made and the old ones are arranged, passages, culverts and ecological corridors are established on the slopes to facilitate the motility of wild life.	CC/ EPC TANAP	Inspections	Weekly	Inspection Reports	TANAP	Constructio n Impacts managemen t Plan	Site Plans, Typical Drawings, CC/CC/ EPC Method Statements	Chapter 8.2, Chapter 11
142	1	Entire Project	Fauna	sensitive areas to be protected in the surroundings of the Project route all related national and international legislations and international contracts of which Turkey is a party will be complied. The principles to be indicated in Erosion, Reinstatement and Landscaping Plan to be prepared within the Project will be complied.	Prevent disturbances due to noise from machinery		- Before the construction phase, all personnel who will work within the scope of the project shall be informed on the sensitivities of the target species and other wild animals of the area and on the Terrestrial Game Law No. 4915 and the relevant Regulations, the precautions necessary concerning compliance of the personnel with the provisions of the legislations, and the non-compliant personnel shall be communicated to the concerned Branch Directorate.	CC/ EPC TANAP	Inspections	Weekly	Inspection Reports	TANAP	Constructio n Impacts managemen t Plan	Site Plans, Typical Drawings, CC/CC/ EPC Method Statements	Chapter 8.2, Chapter 11
143	1	Entire Project	Fauna		Habitat loss and decreased habitat effectiveness, particularly of roosting, nesting and foraging areas		- Notices and warning plates, the content and dimensions specified by the Ardahan Branch Directorate, shall be placed at points of the Posof Wild Life Development Zone (YHGS) specified together with the Branch Directorate, concerning the target species and gaming.	CC/ EPC TANAP	Inspections	Weekly	Inspection Reports	TANAP	Constructio n Impacts managemen t Plan	Site Plans, Typical Drawings, CC/CC/ EPC Method Statements	Chapter 8.2, Chapter 11
144	1	Entire Project	Fauna		Provide temporary barriers to prevent wildlife from crossing heavily used working areas and from accessing to waste disposal areas		- Upon the written request of the Branch Directorate, support shall be given concerning printing written and visual material (banners, brochures, books, magazines, etc.) in all projects, in which the administration participates, concerning introduction, harvesting methods and cultivation on agricultural land of the medical-aromatic and edible plant species in the Posof YHGS to local	CC/ EPC TANAP	Inspections	Weekly	Inspection Reports	TANAP	Constructio n Impacts managemen t Plan	Site Plans, Typical Drawings, CC/CC/ EPC Method Statements	Chapter 8.2, Chapter 11
145	1	Entire Project	Fauna		Indicate high wildlife use areas with signage along main access roads where potential exists for vehicle/wildlife collision			CC/ EPC TANAP	Inspections	Weekly	Inspection Reports	TANAP	Constructio n Impacts managemen t Plan	Site Plans, Typical Drawings, CC/CC/ EPC Method Statements	Chapter 8.2, Chapter 11
146	1	Entire Project	Fauna		Enforce speed limits along main access roads and along the ROW			CC/ EPC TANAP	Inspections	Weekly	Inspection Reports	TANAP	Constructio n Impacts managemen t Plan Traffic Managemen t Plan	Site Plans, Typical Drawings, CC/CC/ EPC Method Statements	Chapter 8.2, Chapter 11
147	1	Entire Project	Fauna		Transport Project workforce by bus/minibus to reduce traffic volumes			CC/ EPC TANAP	Inspections	Weekly	Inspection Reports	TANAP	Constructio n Impacts managemen t Plan	Site Plans, Typical Drawings, CC/CC/ EPC	Chapter 8.2, Chapter 11

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					and ease enforcement on speed limits		communities.							Method Statements	
148	1	Entire Project	Fauna		Minimize corridor widths to be used for access.		- The General Directorate of Nature Conservation and National Parks may specify additional requirements to TANAP concerning issues such as working area, working method, substitution of the lost habitat, habitat rehabilitation, and monitoring and feeding target species.	CC/ EPC TANAP	Inspections	Weekly	Inspection Reports	TANAP	Constructio n Impacts managemen t Plan	Site Plans, Typical Drawings, CC/ CC/ EPC Method Statements	Chapter 8.2, Chapter 11
149	1	Entire Project	Fauna		Use existing corridors for main access roads and ROW		2- - Construction works won't be conducted during breeding periods of target species as Wood Grouse, Caucasian Black Grouse and other poultry in Posof Wildlife Development Area.	CC/ EPC TANAP	Inspections	Weekly	Inspection Reports	TANAP	Constructio n Impacts managemen t Plan	Site Plans, Typical Drawings, CC/CC/ EPC Method Statements	Chapter 8.2, Chapter 11
150	1	Entire Project	Fauna		Prohibiting weapons/ hunting for Project personnel, including subcontractors, both on site and while travelling to and from Project work areas		- In case explosion is needed within Project, explosion won't be performed among 15 March-16 June that is the travelling and breeding period of migratory birds. In case explosion is required to be performed in Posof Wildlife Development Area, related authority opinions will be received.	CC/ EPC TANAP	Inspections	Weekly	Inspection Reports	TANAP	Constructio n Impacts managemen t Plan	Site Plans, Typical Drawings, CC/CC/ EPC Method Statements	Chapter 8.2, Chapter 11
151	1	Entire Project	Fauna		Maintain vegetated buffers wherever possible along known wildlife travel corridors (i.e., watercourses)		3- Transmission of TANAP Project route through Saros Bay Special Environment Protection Zone and 1. Degree Natural Protection Area was found appropriate and the related letter is provided in App.-4.3).	CC/ EPC TANAP	Inspections	Weekly	Inspection Reports	TANAP	Constructio n Impacts managemen t Plan	Site Plans, Typical Drawings, CC/CC/ EPC Method Statements	Chapter 8.2, Chapter 11
152	1	Entire Project	Fauna		Provide temporary noise barriers near sensitive areas			CC/ EPC TANAP	Inspections	Weekly	Inspection Reports	TANAP	Constructio n Impacts managemen t Plan	Site Plans, Typical Drawings, CC/CC/ EPC Method Statements	Chapter 8.2, Chapter 11
153	1	Entire Project	Fauna		Implement dust control measures on access roads and the ROW		4- - 2013-2014 Central Hunting Commission decisions of the Ministry will be complied during the construction phase throughout NGP route.	CC/ EPC TANAP	Inspections	Weekly	Inspection Reports	TANAP	Constructio n Impacts managemen t Plan	Site Plans, Typical Drawings, CC/ EPC Method Statements	Chapter 8.2, Chapter 11
154	1	Entire Project	Fauna		Avoid construction during nesting and reproduction seasons of sensitive wildlife	3- General Directorate of Investments and Enterprises	- During the construction and operation phases of the Project, the precautions to be taken to eliminate the impacts on Biological Diversity (Flora and Fauna) as specified in the EIA Report, the precautions to be taken in relation to the pipelines that pass through the	CC/ EPC TANAP	Inspections	Weekly	Inspection Reports	TANAP	Constructio n Impacts managemen t Plan	Site Plans, Typical Drawings, CC/ EPC Method Statements	Chapter 8.2, Chapter 11
155	1	Entire Project	Fauna		Suspend vegetation clearing and construction activities if an occupied denning or nesting site of keystone species is			CC/ EPC TANAP	Inspections	Weekly	Inspection Reports	TANAP	Constructio n Impacts managemen t Plan	Site Plans, Typical Drawings, CC/	Chapter 8.2, Chapter 11

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					encountered until authorisation is granted from the appropriate environmental staff.	4- General Directorate of Nature Conservation and National Parks	protected areas shall be complied with, and the required permit procedures shall be completed. In addition, the preventive and protective measures specified in the Report for the endemic flora and fauna species shall be complied with.							EPC Method Statements	
156	1	Entire Project	Fauna		Implement fauna observation programme during construction of pipeline for : Wildlife road kills from Project vehicles unauthorised impacts to wildlife occurring from personnel actions Changes to wildlife habitat Changes in animal abundance, distribution and habitat use Changes in abundance of any rare species of mammals, birds, reptilians, amphibians arthropods, fish, and freshwater invertebrates Decrease in biodiversity		5- Central Hunting Commission decisions, International agreements and Land Hunting Law will be complied. 6- - In case any natural asset (fossil residual, underground cave, etc.) is found on TANAP Project route, Natural Assets Protection Branch will be informed. - In case there is a change of route within the scope of the project within the route within the province borders in the Natural Protected Areas, a new permit shall be obtained from the Erzurum Regional Commission for Protecting Natural Assets.	CC/ EPC TANAP	Fauna Observation Programme	Continuous	Monthly Reports	TANAP	Constructio n Impacts managemen t Plan	Site Plans, Typical Drawings, CC/ EPC Method Statements	Chapter 8.2, Chapter 11
157	1	Entire Project	Mammals		Make workers aware of the ecological sensitivities of the areas. An expert ecologist shall be present during the vegetation clearance at ecologically sensitive areas to ensure that necessary precautions are taken if species in concern are met.	5- RiZE-12 Regional Directorate of Forestry and Water Affairs 6- ERZURUM Provincial Directorate of Environment and Urbanization	7- Necessary pre-cautions will be taken for the environmental impacts of the Project during construction phase and after the construction phase to be minimized and for the fauna and flora structure not to be impacted.	CC/ EPC TANAP	Fauna Observation Programme		Monthly Reports	TANAP	Constructio n Impacts managemen t Plan	Site Plans, Typical Drawings, CC/ EPC Method Statements	Chapter 8.2, Chapter 11

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158	1	Entire Project	Mammals		A particular attention should be paid in the construction work of compressor station of Ardahan and Sivas to prevent any potential disturbance to the bezoar goat (<i>Capra aegragus</i>) and minimise the nuisances of the temporary working areas by taken the minimum measures as follows: equipment will be selected with lower sound power levels; engine cover will be kept closed when the equipment is in operation in order to minimize the noise; engines will not be left in operating mode when they are not used; fencing of decommissioning areas will be done.	7- SIVAS Provincial Directorate of Public Health		CC/ EPC TANAP	Fauna Observation Programme		Monthly Reports	TANAP	Constructio n Impacts managemen t Plan	Site Plans, Typical Drawings, CC/ EPC Method Statements	Chapter 8.2, Chapter 11
159	1	Entire Project	Birds		Check for bird nests prior to vegetation clearance and make workers aware of the ecological sensitivities of the areas and, an expert ecologist shall be present during the vegetation clearance at ecologically sensitive areas to ensure that necessary precautions .are taken if species in concern are met. ..			CC/ EPC TANAP	Fauna Observation Programme		Monthly Reports	TANAP	Constructio n Impacts managemen t Plan	Site Plans, Typical Drawings, CC/ EPC Method Statements	Chapter 8.2, Chapter 11
160	1	Entire Project	Birds		Particular attention should be paid to the Montagu's harrier (<i>Circus pygargus</i>) in Ankara and Ardahan regions because it nests in tall vegetation on the ground. Apart from avoiding construction works during the nesting period (April - June),) to the extent practicable, key management practices include moving nestlings to safe places during			CC/ EPC TANAP	Fauna Observation Programme		Monthly Reports	TANAP	Constructio n Impacts managemen t Plan	Site Plans, Typical Drawings, CC/ EPC Method Statements	Chapter 8.2, Chapter 11

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					construction works, and leaving areas unharvested area around the vicinity of nests to prevent chick mortality.										
161	1		Birds		In order to minimise the habitat loss and nuisances to the extent practicable, temporary working areas should be minimized as much as possible and construction activities should be timed to avoid the peak breeding and migratory periods for birds to reduce the chances of disturbances and chick mortalities especially in the following areas:			CC/ EPC TANAP	Fauna Observation Programme		Monthly Reports	TANAP	Constructio n Impacts managemen t Plan	Site Plans, Typical Drawings, CC/ EPC Method Statements	Chapter 8.2, Chapter 11
162	1	Ardahan	Birds		- in Ardahan province where velvet scoter breeds (May-June);			CC/ EPC TANAP	Fauna Observation Programme		Monthly Reports	TANAP	Constructio n Impacts managemen t Plan	Site Plans, Typical Drawings, CC/ EPC Method Statements	Chapter 8.2, Chapter 11
163	1	Erzurum	Birds		- In Erzurum Marshlands during sociable lapwing spring and autumn migration periods (March-April and September-November).			CC/ EPC TANAP	Fauna Observation Programme		Monthly Reports	TANAP	Constructio n Impacts managemen t Plan	Site Plans, Typical Drawings, CC/ EPC Method Statements	Chapter 8.2, Chapter 11
164	1	Erzurum , Kars	Reptiles		Construction activities should be carried out in Erzurum and Kars minimising the habitat loss and disturbance, minimizing the temporary working area and checking for the SCC species (Wagner's viper, Uzzell's lizard, Unisexual lizard or white-bellied lizard) prior to vegetation clearance in the habitats E4.4 (Calciophilus alpine and subalpine grasslands) and E1.2E (Irano-Anatolian Steppes). Construction activities should be also timed to the extent practicable to avoid the peak reproductive periods			CC/ EPC TANAP	Fauna Observation Programme		Monthly Reports	TANAP	Constructio n Impacts managemen t Plan	Site Plans, Typical Drawings, CC/ EPC Method Statements	Chapter 8.2, Chapter 11

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				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
					and the wintering time (March-August and November-January) to reduce the chances of disturbances.										
165	1	KP 36+500 in Ardahan province	Amphibians		In particular the pipeline route from the Georgian border to KP 36+500 in Ardahan province should be regarded with a major importance for Caucasian salamander (<i>Mertensiella caucasica</i>). As standard mitigation measures, construction activities should be timed to the extent practicable to avoid the peak reproductive periods to reduce the chances of disturbances (June-September - Tarkhnishvili and Serbinova, 1993) and mortalities especially in the above mentioned areas.			CC/ EPC TANAP	Fauna Observation Programme		Monthly Reports	TANAP	Constructio n Impacts managemen t Plan	Site Plans, Typical Drawings, CC/ EPC Method Statements	Chapter 8.2, Chapter 11
166	1	Entire Project	Terrestrial Invertebrates		Special attention should be paid on the dust lifting during construction activities by irrigation procedures, since dust emission could originate reduction in the visibility and disturbance to the lepidopters’ flight.			CC/ EPC TANAP	Inspections	Weekly	Inspection Reports	TANAP	Constructio n Impacts managemen t Plan	Site Plans, Typical Drawings, CC/ EPC Method Statements	Chapter 8.2, Chapter 11
167	1	Entire Project	Terrestrial Invertebrates		Emissions from vehicle exhausts used for transport of workers, construction material, vehicles and equipment will be minimised through good practices e.g. proper maintenance, restriction on idling and running of vehicle engines only if necessarily, therefore it is considered that vehicle and equipment type and			CC/ EPC TANAP	Inspections	Weekly	Inspection Reports	TANAP	Constructio n Impacts managemen t Plan	Site Plans, Typical Drawings, CC/ EPC Method Statements	Chapter 8.2, Chapter 11

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					mode of operation will not cause air quality significant alterations and air quality standards breaching.										
168	1	Entire Project	Terrestrial Invertebrates		Similarly to the good practices applied to reduce emissions of air pollutants mentioned above, noise emissions from vehicles and equipment will be minimised through the selection of only inherently quite devices, appropriate maintenance and replacement of any equipment found to be emitting excessive noise levels due to a faulty silencer, ill-fitting or broken engine covers or other reasons.			CC/ EPC TANAP	Inspections	Weekly	Inspection Reports	TANAP	Constructio n Impacts managemen t Plan	Site Plans, Typical Drawings, CC/ EPC Method Statements	Chapter 8.2, Chapter 11
169	1	Entire Project	Terrestrial Invertebrates		<p>The following specific mitigation measures are recommended from KP 42+400 to KP 43+300 and at KP 280+400</p> <ul style="list-style-type: none">Special attention should be paid on the dust lifting during construction activities, since dust emission could originate reduction in the visibility and disturbance to the lepidopters' flight and the damage of larval food plants due to dust and particulate fallout and emission of air pollutants (NOx, SO2).Frequent mist spraying should be applied on dusty areas. The frequency of spraying will depend upon local conditions such as rainfall, temperature, wind			CC/ EPC TANAP	Inspections	Continuous	Inspection Reports	TANAP	Constructio n Impacts managemen t Plan		Chapter 8.2, Chapter 11

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					speed and humidity. The amount of mist spraying should be just enough to dampen the material without over-watering which could result in surface water runoff.										
170	1	Entire Project	Freshwater Fish/Aquatic Invertebrates		Site-specific working methods and construction drawings will be developed for water passages. These methods will contain procedures to protect water passages against pollution, minimize sedimentation, mitigate the impact on vegetation along the water passages, and restore the water passages to the condition before the construction.			CC/ EPC TANAP	Inspections	Weekly	Inspection Reports	TANAP	Constructio n Impacts managemen t Plan	Site Plans, Typical Drawings, CC/ EPC Method Statements	Chapter 8.2, Chapter 11
171	1	Entire Project	Freshwater Fish/Aquatic Invertebrates		River water should not flow over the water pie or canal so it will enter and exit at normal river change level;			CC/ EPC TANAP	Inspections	Weekly	Inspection Reports	TANAP	Constructio n Impacts managemen t Plan	Site Plans, Typical Drawings, CC/ EPC Method Statements	Chapter 8.2, Chapter 11
172	1	Entire Project	Freshwater Fish/Aquatic Invertebrates		Potential impact of the waterway passages on the fish species will be mitigated by avoiding construction works during the spawning season. If it is not possible, more attention will be paid and higher level of inspection and monitoring will be conducted where fish spawn.			CC/ EPC TANAP	Inspections Results of monitoring programme for fisheries and aquatic resources loss	Weekly	Inspection Reports	TANAP	Constructio n Impacts managemen t Plan	Site Plans, Typical Drawings, CC/ EPC Method Statements, Construction Plan, Preconstructio n Survey Reports on Biodiversity	Chapter 8.2, Chapter 11
173	1	Entire Project	Freshwater Fish/Aquatic Invertebrates		Moreover, in order to reduce the demand of freshwater for the hydrotesting and other project activities, the possibility of water re-use should be evaluated where practicable			CC/ EPC TANAP	Inspections Check hydrotest procedure to include water re-use	Weekly	Inspection Reports Approval of Hydrotest procedure	TANAP	Constructio n Impacts managemen t Plan	Site Plans, Typical Drawings, CC/ EPC Method Statements	Chapter 8.2, Chapter 11

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				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
174	1	Entire Project	Freshwater Fish/Aquatic Invertebrates		<p>Minimize riparian vegetation removals. If removal is necessary it is recommended to use proper clearing techniques and protect retained vegetation.</p> <p>If removal of vegetation is necessary it is recommended to re-plant riparian vegetation to pre-construction or better conditions (e.g., trees for shade to cool water and provide overhead cover). To restore pre-construction conditions, where necessary:</p> <p>re-instate native soils or replace soil with topsoil/suitable planting medium;</p> <p>if necessary, include soil/seedbank salvage, vegetation transplant or bio-engineering (e.g., live stakes, cuttings) techniques;</p> <p>use only native species compatible with site conditions.</p> <p>Construction works will be conducted during the time when flow is low, if possible and will be conducted in a limited timeframe;</p>			CC/ EPC TANAP	Visual Inspection	Weekly	Inspection Reports	TANAP	Constructio n Impacts managemen t Plan	CC/ EPC Method Statements	Chapter 8.2, Chapter 11
175	1	Entire Project	Freshwater Fish/Aquatic Invertebrates		<p>Standard mitigation measures should be specifically applied in the river crossings listed in Table 8.2.10.2 3: Rivers with high Impact for the species potentially present.</p> <p>remove fish from isolated in-water work zones if necessary</p>			CC/ EPC TANAP	Visual Inspection	Weekly	Inspection Reports	TANAP	Constructio n Impacts managemen t Plan	CC/ EPC Method Statements	Chapter 8.2, Chapter 11

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					A particular attention should be paid in the crossings of Koca river and Simav stream where two critically endangered species (Cobitis puncticulata and Oxynoemacheilus simavica) are potentially present and Critical Habitats are potentially determined										
176	1	Entire Project	Flora		Transport Project workforce by bus/minibus to reduce traffic volumes, where possible.			CC/ EPC TANAP	Transportatio n Plans	N/A	N/A	N/A	Constructio n Impacts managemen t Plan, Transportati on managemen t Plan, Traffic managemen t Plan	Site Plans, Typical Drawings, CC/ EPC Method Statements	Chapter 8.2, Chapter 11
177	1	Entire Project	Flora		Use of the existing corridors/roads to maximum extend.			CC/ EPC TANAP	Transportatio n Plans	N/A	N/A	N/A	Constructio n Impacts managemen t Plan, Transportati on managemen t Plan, Traffic managemen t Plan	Site Plans, Typical Drawings, CC/ EPC Method Statements	Chapter 8.2, Chapter 11
178	1	Entire Project	Flora		Avoid using sensitive areas if extra land is required for project activities			CC/ EPC TANAP	Pre-construction E&S assessments before extra land take	when required	E&S Assessme nt Reports	TANAP	Constructio n Impacts managemen t Plan	Site Plans, Typical Drawings, CC/ EPC Method Statements	Chapter 8.2, Chapter 11
179	1	Entire Project	Flora		Plan construction to complete works in shorter periods at sensitive areas			CC/ EPC TANAP	N/A	N/A	N/A	N/A	Constructio n Impacts managemen t Plan, Constructio n Programme	Site Plans, Typical Drawings, CC/ EPC Method Statements	Chapter 8.2, Chapter 11
180	1	Entire Project	Flora		Reduce construction width (30 m) at sensitive areas listed in			CC/ EPC TANAP	Implement reduced width ROW	N/A	N/A	N/A	Constructio n Impacts managemen t Plan,	Site Plans, Typical Drawings, CC/	Chapter 8.2, Chapter 11

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					Construction Impacts Management Plan.				specifications /drawings				Construction Programme, CC/ EPC Method Statements	EPC Method Statements	
181	1	Entire Project	Flora		Implement Special Method statements for construction and reinstatement at special/sensitive areas listed in Construction Impacts Management Plan.			CC/ EPC TANAP		N/A	N/A	N/A	Construction Impacts management Plan, Construction Programme, CC/ EPC Method Statements	Site Plans, Typical Drawings, CC/ EPC Method Statements	Chapter 8.2, Chapter 11
182	1	Ardahan, Kütahya	Flora		High impacts are identified only for Group 2 (vulnerable species, not predominantly of steppe/grassland habitats) and are limited to two areas within the provinces of Ardahan and Kütahya for a total area of 2 hectares. The SCC species potentially present in these areas are Centaurea hedgei, Reseda armena var. armena, Centaurea macrocephala, Lathyrus karsianus and Tanacetum coccineum ssp. chamaemelifolium in the province of Ardahan and Astragalus densifolius subsp. ayashensis and Onosma briquetii in Kütahya. Considering the impacts and the sensitivity of the component, a pre-construction survey of the Project footprint will be performed by expert botanists in suitable habitats within the identified selected species range in order to identify the presence of populations or individuals of terrestrial flora SCC. In case individuals of			CC/ EPC TANAP	Preconstruction survey	N/A	Preconst. Survey Report	TANAP	Construction Impacts management Plan, Construction Programme, CC/ EPC Method Statements	Site Plans, Typical Drawings, CC/ EPC Method Statements	Chapter 8.2, Chapter 11

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					perennial species are found within the Project footprint, mitigation measures by transplant to a similar habitat/microhabitat outside the route will be taken. The translocation should take place preferably during dormancy period of the vegetation In order to ensure the long term survival of the species, whenever a SCC population is identified along the Project route, a sufficient amount of seeds should be collected, if present. The seeds will be donated to a local gene bank for long term conservation and scientific research.										
183	1	Entire Project	Flora		<p>In case the presence of populations of SCC species ranked as critically endangered (CR) is confirmed within the footprint of the Project, with preconstruction surveys additional conservation measures will be taken. Structured reintroduction projects on selected CR species particularly impacted by the project will be considered.</p> <p>Part of the seeds temporarily stored in seed banks and vegetative propagules collected during the preconstruction survey will be used in order to start an ex situ cultivation for the reintroduction of populations in suitable habitats within the species range. The reintroduction plan should include the following phase: research</p>			CC/ EPC TANAP	Preconstruction survey	N/A	Preconst. Survey Report	TANAP	Construction Impacts management Plan, Construction Programme, CC/ EPC Method Statements	Site Plans, Typical Drawings, CC/ EPC Method Statements	Chapter 8.2, Chapter 11

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				<p>lines crossing the route will be closed and redirected to new drainage lines. In case the NGP route passes through the pasture lands, request for changing the appropriation will be made to the Provincial Commission of Pasture Land within the scope of the Article 14 of Pasture Law numbered 4342, necessary permits will be obtained and land rehabilitation projects will be designed for the mentioned crossings as well. In case Agricultural Reform Application Areas are located on the route, necessary permits will be obtained according to the Law numbered 3083 on Agricultural Reform on Land Arrangement in Irrigational Areas, Law on Improvement and Inoculation of Olive Orchards numbered 3573 and Aquatic Products Law numbered 1380. Since the Aquatic Products Law numbered 1380 includes principles on protection, production and control of the water products, pre-cautions that will protect the living, breeding, preservation and production of water products will be taken, the substances that are harmful for production tools won’t be spilled in waters, in production locations or surrounding. During the application of the Project, the plan notes indicated on the Environmental Master Plans will be complied. During the activities within the Project to be conducted close to the military zones, the articles of Military Restricted Zones and Safety Areas Law numbered 2965 and Regulation on Military Restricted Zones and Safety Zones numbered 5949 will be complied.</p> <p>During the application of the Project, all residential areas where the NGP will pass through will be determined, the areas of private ownership will be expropriated, real property</p>		<p>Secretary General of Special Provincial Administration</p> <p>8- BAYBURT Provincial Directorate of Environment and Urbanization</p> <p>9- BAYBURT Provincial Directorate of Food, Agriculture and Livestock</p>	<p>Establishment and Operation Permit will be received according to the articles of Regulation on Business and Operating Licenses.</p> <p>- Activities as construction of facilities, sand and gravel quarries, stone quarries etc. during construction activities will be initiated after the necessary permits will be obtained from authorities within the articles of relevant legislation.</p> <p>- At the project implementation phase, in issues concerning the Administration, coordination shall be established with the relevant Directorates of the Administration</p> <p>8- All regulations within the scope of Environmental Legislation and all commitments provided in Project will be complied.</p> <p>9- Sub-paragraph 8 (a) (7) of Pasture Regulation, published in the Official Gazette dated 25.02.2011 numbered 27857 within the scope of Pastures Law No. 4342 contains the following provision: "(Supplementary sub-paragraph: Article 2 / Regulation, Official Gazette No. 27857 - 25.02.2011) Upon the request of the energy Market Regulation Board, the objective for which a pasture or a summer pasture or a winter quarter has been allocated may be modified if such pasture or summer pasture or winter pasture is considered necessary in respect of petroleum transmission operations or electricity or natural gas market operations pursuant to the provisions of Electricity Market Law No. 4628 of 20.02.2001 and Natural Gas Market Law No. 4646 of 18.04.2001, and Petroleum Market Law No. 5015 of 04.12.2003 after obtaining an investment project, a report specifying the reason, a license, and the layout plan of the requested area which shall be marked on a 1/5000 map or an EIA report in respect of any investment requiring an EIA report from the appropriate directorate or directorate-general as well as other</p>								

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				owners won't be aggrieved, in case of necessity, their loss will be compensated. Furthermore, the principles indicated in the Land Acquisition and Expropriation Plan to be prepared within the Project will be complied.			information and documents which may be required by the committee. A security in an amount designated by the committee shall have been deposited and the agreement shall have been executed in order to commence works in case of any investment involving recycling." In order to qualify for being considered under Law no 5403 on Soil Conservation and Land Utilization, paragraph (9) (6) of Regulation No. 2009/15154, which was published in the Official Gazette dated 24.07.2009 numbered 27298, stipulates that: "Any application for the utilization of an agricultural land for any purpose other than the specified purposes as well as a 1/10,000 cadastral map or sketch, a 1/25,000 map showing the land's location and coordinates of the land shall be filed with a municipality if the land is located within the boundaries of the urban area. If it is located outside the boundaries of the urban area, the application shall be filed with the appropriate provincial special administration or any agency authorized to draw up plans. Such applications shall be conveyed by appropriate entities to the provincial office." The official opinion of the Directorate will be obtained and a soil conservation project will be prepared in addition to the documents mentioned above prior to the commencement of the investment.								
						10- GİRESUN Provincial Directorate of Food,	10- - Aquatic Products Law numbered 1380 and Regulation on Control of Water Pollution will be complied with in all the works carried out on the field at every phase of the project. - In case the works carried out on the field at every phase of the project coincide with agricultural land, works shall not be initiated for the agricultural land coinciding with the project area until the permits required by the Soil Conservation and Land Use Law numbered 5403 and relevant legislations are obtained. Furthermore, in case a Soil Conservation Project is required, the activities won't be initiated before the projects are prepared and submitted to								

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						13- YOZGAT Provincial Directorate of Food, Agriculture and Livestock	<p>- In case the natural gas pipeline route passes through pasture areas, required permits within Pastures Law numbered 4342 will be obtained and land rehabilitation projects will be designed for mentioned crossings.</p> <p>- In case Agricultural Reform Application Areas are located on route, necessary permits will be obtained according to the law numbered 3083.</p> <p>- All legislations, enforced based on the Pastures Law, No. 4342, concerning pastures, summer pastures and winter quarters and public-owned meadows and grazing areas shall be complied with.</p> <p>- All legislations, enforced based on the Soil Conservation and Land Use Law, No. 5403, covering the procedures and principles in relation to identification of the responsibilities, duties and authorities concerning identification, classification of land and soil resources in accordance with scientific principles, preparation of land use plans, assessment of the social, economic and environmental dimensions in the conservation and development process by participatory methods, prevention of non-purpose use and misuse, and establishment of methods to ensure conservation shall be complied with.</p> <p>- The provisions of the Law on Preventing Intrusion or Possession of Immovable Property, No. 3091 shall not be violated.</p> <p>14-</p> <p>- Within the scope of the project, before the Project activities are initiated a further permit shall be obtained from the Directorate for the route corridor within the project activity area passing the provincial borders, for agricultural land within the scope of the Law on Soil Conservation and Land Use, No. 5403 in order to enable using agricultural land for non-agricultural uses, for land having pasture characteristics as per the relevant provisions of the Pasture Law, No. 4342 for changes in characteristics. Within the scope of the Law on Soil Conservation and Land Use, No. 5403, a</p>								

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						14- ERZURUM Provincial Directorate of Food, Agriculture and Livestock	<p>Soil Conservation Project will be prepared if necessary in order to prevent adverse effects on agricultural land due to activities carried out on land belonging to individuals and in areas that are within the scope of special law. When using the right of property belonging to the State, private property of the Treasury, and the land owned by real and judicial persons, the necessary precautions for not preventing wholly, partially or temporarily the vegetative production function, and the industrial, socio-economic and ecological functions of the soil. In addition, at the project implementation phase, necessary precautions for eliminating the adverse effects polluting and deteriorating the soil, originating from the project shall also be taken. as per Article 14 of the Pasture Law, No. 4342, claim will be made for change of appropriation purpose for the pastures and areas that can be characterized as pasture on the route.</p> <p>- Concerning the project area, the issues specified in the study report sent to the Ministry of Food, Agriculture and Livestock, the General Directorate of Vegetative Production and the General Directorate of Agricultural Reform shall be fulfilled.</p> <p>15- The provisions of Environmental Law numbered 2872 and the pertinent regulations will be complied.</p> <p>16- All temporary and permanent facilities (pipeline, compressor stations, pigging stations, measurement stations, social facilities, construction sites, etc.) constructed in the jurisdiction area of the Administration within the scope of the Project shall be informed to the Administration and the required permits shall be obtained.</p> <p>17-</p> <p>- Before the construction works are started, an application shall be made to the Agricultural Infrastructure and Land</p>								

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						<div>15- ERZİNCAN Provincial Directorate of Environment and Urbanization</div> <div>16- YOZGAT Secretary General of Special Provincial Administration</div> <div>17- ANKARA Provincial Directorate of Food, Agriculture and Livestock</div>	<div>Assessment Branch Directorate together with :</div> <div>- 2 approved title deed document showing the possession of the claimed area on the Project route;</div> <div>- 2 approved 1/5.000 town map, showing the coordinate valued area calculation (based on 3 degrees segment) and parcels, in compliance with cadastral technique, on which cadastral possession is recorded</div> <div>- A CD containing a map showing coordinate valued area calculation prepared by a map drawing program and the surrounding parcels and the Google earth file with km extension of the related region and 2 approved outputs of the Google earth file,</div> <div>- Approved map section showing the relation with approved development plans (master plan, implementary development plan and local zoning plan, etc.)</div> <div>and the necessary permits shall be taken.</div> <div>18- During the application of the Project, all the residential areas the route will pass will be determined and the areas of private property will be expropriated, the real state owner won't be aggrieved, in case of necessity, their damnification will be relieved.</div> <div>19-</div> <div>- Within the scope of the Project, on the agricultural lands within the Project area, before the implementation of all the activities specified in the Project, information, documents and projects required by the legislations within the scope of the Law on Soil Conservation and Land Use, No. 5403, including vegetative top soil scraping, shall be presented to the Provincial Directorate</div>								

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						<div>18- BURSA Provincial Directorate of Environment and Urbanization</div> <div>19- BURSA Provincial Directorate of Food, Agriculture and Livestock</div>	<div>of Food, Agriculture and Livestock and implementation shall not be initiated until permits for non-agricultural use are obtained.</div> <div>- Within the scope of the Law on Agricultural Reform Concerning Land Regulation on Irrigation Areas, No. 3083, opinion of the Ministry shall be asked for Adaköy and Taşköprü villages, Mustafakemalpaşa District, Bursa Province, for which aggregation was announced by the Decision of the Council of Ministers</div> <div>- Pasture areas shall be assessed within the scope of the Pasture Law, No. 4342, and an application shall be given to the Directorate for appropriation change and they shall be used after the appropriation change is issued.</div> <div>- In case there are olive groves within the Project area (possession registered as olive groove or having olive trees on), the necessary permits shall be obtained within the Law on Improvement of Olive Cultivation and Inoculation of the Wilds, No. 3573 (as amended by law no. 4086).</div> <div>20- Within the scope of the Project, if the NGP crosses archeological sites, agricultural lands and pastures on the route in the Susurluk, Manyas and Gönen districts of the Balıkesir Province, the required permits from the relevant institutions shall be taken; if the route passes through the Manyas Lake conservation zones, the required permits shall be taken. Furthermore, the permits required by the legislations in force shall be obtained, the necessary precautions for conservation and improvement of the environment shall be taken.</div> <div>21- Required responsibilities within Regulation on Business and Operating Licenses that came into force by being published in Official Gazette dated 10.08.2005 and numbered 25902 will be carried out.</div> <div>23-</div>								

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						<div>20- BALIKESİR Provincial Directorate of Environment and Urbanization</div> <div>21- ÇANAKKALE Secretary General of Special Provincial Administration</div> <div>23- ANKARA Metropolitan Municipality</div>	<div>- Settlement and plan decisions shall be complied with during project routing, expropriation shall be carried out, when carrying out expropriation in residential and development areas with safety concerns a buffer zone shall be established and the area shall be expropriated as a whole, not only the line axis, and when the projects of the pipeline become clear, at the last stage, opinion of the Metropolitan Municipality shall be taken.</div> <div>- Information exchange shall be established with the Municipalities of the districts through which the pipeline passes.</div> <div>24-</div> <div>- During the implementation of the Project, environmental pollution shall not be produced within the borders of the municipal adjacent area and the plan notes specified in the 1/100.000 scaled Environmental Master Plan shall be complied with.</div> <div>- Within the scope of the Project, the issues concerning the approved 1/5.000 scaled Local Zoning Master Plan Karapazar Köyü-Akkaya Locality-11 map section, parcel 1509 shall be taken into account.</div> <div>- During the implementation phase of the Project, the issues concerning the development plans approved as Industrial Area in the İmişehir region by the Provincial Administration Board dated 20.07.1999 and No. 1999/1780, shall be taken into account in accordance with the assessments in the correspondences with the Municipality, given in App. 4.3.</div> <div>- A project shall be made with the Odunpazarı Municipality in accordance with the assessments in the correspondences with the Municipality, given in App. 4.3.</div> <div>- Concerning the Project, it was stated with the correspondence of the Tepebaşı Municipality dated 17.09.2013 and No.</div>								

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						24- ESKİŞEHİR Metropolitan Municipality	<p>11434/18874 (see App. 4.3) that the identification of the route protecting the existing texture in the 2 km corridor is suitable and that there is no planning or project work concerning the part of the line within the municipality border, and coordination shall be established with the Municipality within the scope of the Project.</p> <p>- Within the scope of the Project, positive opinion was given in the correspondence of the Sivrihisar Organized Industry Directorate dated 14.01.2014 and No. 2014/1 (see App. 4.3) concerning Sivrihisar, of the İnönü and Sivrihisar industrial areas, planned as industrial area in the 1/100.000 scaled Provincial Environmental Plan, and the activities shall be performed considering the mentioned industrial areas.</p> <p>25- In order to get the usage right on the agricultural lands and pasture parcels in the areas where the route passes, applications shall be made within the scope of the Pasture Law No. 4342 and the Regulation enforced based on this Law for areas with pasture characteristics and the Law on Soil Conservation and Land Use, No. 5403 and the Regulation enforced based on this Law for agricultural lands and the necessary permits shall be obtained.</p> <p>26- Environmental Law numbered 2872, Regulation on Control of Water Pollution, Regulation on Control of Hazardous Wastes, Regulation on Solid Waste Control, Prime Ministry circular published in Official Gazette dated 09.09.2006 and numbered 26284 and other relevant legislations will be complied.</p> <p>27- Within the scope of the project, the decisions of the upper scale planning shall be complied with.</p> <p>28- Necessary permits within the scope</p>								

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						<div>25- ARDAHAN Provincial Directorate of Food, Agriculture and Livestock</div> <div>26- General Directorate of State Hydraulic Works</div> <div>27- ARDAHAN Special</div>	<p>of Law on the Soil Conservation and Land Use numbered 5403; Pastures Law numbered 4342, Law on Agricultural Reform on Land Arrangement in Irrigational Areas numbered 3083 and Aquatic Products Law numbered 1380 will be obtained.</p> <p>29- Responsibilities identified by Law on the Soil Conservation and Land Use numbered 5403, Pastures Law numbered 4342, Law on Agricultural Reform on Land Arrangement in Irrigational Areas numbered 3083 and Aquatic Products Law numbered 1380 and by-laws, regulations and legislations of these laws will be met and the construction works will not be initiated before the necessary permits will be obtained.</p> <p>30- Within the scope of Article 14 of the Pastures Law, No. 4342, no activities shall be performed until appropriation change is made; and in addition, a pasture recycling project shall be prepared.</p> <p>31- Before the construction activities of the Project are initiated, permits within the scope of the Law on Soil Conservation and Land Use, No. 5403, the Pastures Law, no. 4342 and the Fisheries Law, No. 1380 shall be taken and a Soil Conservation Project shall be prepared.</p> <p>32-</p> <p>- Within the scope of the Pastures Law numbered 4342, Pasture Commission will be applied for changing the appropriation purpose together with its annexes as per Article 14 of the Law if there is a pasture on the route</p> <p>- During the construction and operation phases of the Project, the provisions of the Law on Soil Conservation and Land Use, No. 5403, the Pastures Law, no. 4342 and the Fisheries Law, No. 1380 shall be complied with, and all</p>								

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						<div>Provincial Administration</div> <div>28- KIRŞEHİR Provincial Directorate of Food, Agriculture and Livestock</div> <div>29- KIRIKKALE Provincial Directorate of Public Health</div> <div>30- ESKİŞEHİR Provincial Directorate of Food, Agriculture and Livestock</div> <div>31- BİLECİK Provincial Directorate of Food, Agriculture and Livestock</div> <div>32- KÜTAHYA Provincial Directorate of Food, Agriculture and Livestock</div>	<div>precautions necessary not to damage the agricultural lands, agricultural products, Fishery Farming Facilities and water resources in the surroundings shall be taken.</div> <div>33- Concerning use of the immovable properties existing on the pipeline route for non-agricultural uses, the permits required by laws shall be taken from the Directorate (the Law on Soil Conservation and Land Use, No. 5403, the Pasture Law, No. 4342, the Fisheries Law, No. 1380, the Fisheries Regulation and the Law on Improvement of Olive Cultivation and Inoculation of the Wilds, No. 3573 (as amended by Law No. 4086)).</div> <div>34- During the land preparation and operation phases of the Project, all permits and precautions envisaged by the legislations in force by the concerned institutions/establishments shall be taken.</div> <div>35- In the activities performed within the scope of the Project, the necessary permits as required by the Law on Soil Conservation and Land Use, No. 5403, the Law on Improvement of Olive Cultivation and Inoculation of the Wilds, No. 3573 (as amended by Law No. 4086), the Pasture Law, No. 4342, and the Fisheries Law, No. 1380 shall be taken.</div> <div>36- In the activities carried out within the scope of the Project, the Directorate shall be informed on whether agricultural lands coinciding with the pipeline could be used for agriculture; if the agricultural lands are used for non-agriculture purposes, technical information and documents covering the size of the line to be used for non-agriculture purposes, the facilities to be installed on the line and the total</div>								

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						<div>33- BALIKESİR Provincial Directorate of Food, Agriculture and Livestock</div> <div>34- ÇANAKKALE Provincial Directorate of Environment and Urbanization</div> <div>35- ÇANAKKALE Provincial Directorate of Food, Agriculture and Livestock</div> <div>36- TEKİRDAĞ Provincial Directorate of Food,</div>	<p>agricultural area to be used for non-agriculture purposes shall be submitted to the Directorate.</p> <p>37- The applicable legislations related to duties and responsibilities of the Metropolitan Municipality shall be complied with.</p>								

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					related Stakeholder Engagement Activities;	Metropolitan Municipality 5- BALIKESİR Metropolitan Municipality 6- TEKİRDAĞ Metropolitan Municipality 7- ARDAHAN Provincial Directorate of Environment and Urbanization	2020” shall be complied with. 5- - Before the Project is realized, the pipeline coordinates and the above ground installations shall be informed and an application shall be made to the Metropolitan Municipality. - The permits for buildings requiring Trading and Operation Licenses shall be taken. 6- The Environment Law No. 2872 and the Regulations thereof shall be complied with. 7- The Environmental Plan of scale 1/100.000 and the provisions of the Plan shall be complied with.								
189	1	Entire Project	Traffic and Mobility	The pipes that will be stored in pipe yards in order to decrease the cost and accelerate the period will be brought to the site via sea route, railway and highway. For the carriage and transportation that will be conducted to the Project site, the highways available will be used mostly and new roads will be constructed for the points without access. Archaeology, natural reservoirs, sensitive ecological areas, erosion sensitivity and water resources will be taken into consideration for the determination of the new roads. The new roads to be opened will be designed with sufficient slope and with	Existing roads will be used to provide access to the construction RoW and various AGIs. The access roads are used on a temporary basis to transport personnel, equipment, vehicles, heavy trucks, and materials to project work areas. New access roads will be required in some areas, particularly the mountainous areas. New access roads will be designed with adequate slope and cross-fall drainage to channel storm water safely to off-road soakaways, thereby	1- General Directorate of Highways	1- - Company is responsible of every kind of works which are planned in the scope of Project activities that may affect the traffic safety of the roads. - Every kind of security pre-cautions related with traffic for entrance-exit from highways and all transportations to be conducted during construction and operation phases will be taken by Project Owner Company based on the opinions of Regional Directorate.	CC/ EPC TANAP	Visual Inspection Assessment Report for New Access Roads	Contin.	Inspection Report Road Assessment Report	TANAP	Traffic Management Plan		Chapter 8 Chapter 11

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				horizontal slope that will provide rain water drainage to the channels out of the roads. Some of the roads to be opened will remain permanent. The existing roads and bridges to be used will be improved for safe carriage and transportation in case of necessity in cooperation with authorities and by obtaining relevant permits. During the decommissioning phase of the Project, the roads damaged will be repaired and reinstated. Traffic Management Plan will be prepared in order to maintain traffic safety of the road and to prevent the risks which may outcome due to the fact that the traffic load available will increase during the land preparation and construction phases of the Project and this plan will be reorganized for operation and decommissioning phases. The additional vehicle load, vehicle type and count that may be observed in the highway to be used during the land preparation-construction and operation phases of the Project will be determined, will be calculated as % and will be declared. During the carriage of all materials under dangerous substances category, the articles of the “Regulation on Transportation of Hazardous Substances by Road” will be complied. In the roads used, the tonnage restriction will be complied, necessary signings will be placed for traffic order and safety and the company will be responsible from all kind of activities that may affect the traffic safety of the roads, every kind of pre-caution in terms of traffic safety will be taken at the entrance and exit points of the roads, during all transportations the Highway Traffic Law numbered 2918 and relevant regulations will be complied with, and also, the Traffic Management Plan to be prepared will be submitted to the related Regional	preventing erosion or siltation.	2- ERZURUM-13 Regional Directorate of Forestry and Water Affairs	2- - The necessary sensitivity shall be displayed concerning using the existing roads and not making new roads unless it is necessary for transportation. When it is necessary that new roads are made and the old ones are arranged, passages, culverts and ecological corridors are established on the slopes to facilitate the motility of wild life.								
190	1	Entire Project	Traffic and Mobility		A survey will be conducted to assess the existing and post conditions of the roads to be used by the construction, if they require upgrading activities and to ensure that they are returned to previous or better conditions after construction.			CC/ EPC TANAP	Road survey	Contin.	Survey Report	TANAP	Traffic Management Plan		Chapter 8 Chapter 11
191	1	Entire Project	Traffic and Mobility		Preparation of environmental impact assessment surveys for new access roads	3- TEKİRDAĞ Metropolitan Municipality	3- - Within the scope of the Project, during the works to be performed on the road sections connecting Şarköy District Kızılcaterzi neighborhood and Çanakkale Province Gelibolu District Kavak Village within Tekirdağ provincial borders, traffic measures will be taken in accordance with the highway standards and the traffic flow between the mentioned settlements shall not be intervened.	CC/ EPC TANAP	Assessment report for new access roads	Contin.	Survey Report	TANAP	Traffic Management Plan		Chapter 8 Chapter 11
192	1	Entire Project	Traffic and Mobility		Access to settlements will always be guaranteed either through diversions or by allowing the passage of vehicles and livestock at certain hours through the use of proper materials (e.g. steel plates) over the trenches; when restrictions to access are unavoidable, appropriate alternative solutions will be agreed with local authorities;			CC/ EPC TANAP	Visual Inspection	Contin.	Site Inspection Report	TANAP	Traffic Management Plan		Chapter 8 Chapter 11
193	1	Entire Project	Traffic and Mobility		Access to properties will be guaranteed or appropriate alternative accesses will be agreed with owners or users;			CC/ EPC TANAP	Visual Inspection	Contin.	Site Inspection Report	TANAP	Traffic Management Plan		Chapter 8 Chapter 11
194	1	Entire Project	Traffic and Mobility		Local communities will be informed on planned road closures or disruption with at least 72 hours’ notice in advance through official communication and signs;			CC/ EPC TANAP	Notification of local Communities	During road closures or disruption	Notification Correspondences	TANAP	Community Relations Plan Stakeholder Engagement Plan		Chapter 8 Chapter 11
195	1	Entire Project	Traffic and Mobility		· Easy-to-read signs will be used to indicate any type of diversion or of traffic changes related to project activities;		4- - When the pipeline route coincides with the existing roads, the necessary works shall be performed taking into account thereof and works shall be carried within this context.	CC/ EPC TANAP	Visual Inspection	Contin.	Site Inspection Report	TANAP	Traffic Management Plan		Chapter 8 Chapter 11

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196	1	Entire Project	Traffic and Mobility	Directorates and activities will be conducted in coordination with them. During the transportation of materials, all laws and regulations which came into force within the scope of the Highway	·Temporary traffic control and appropriate signs will be used to highlight warnings and to improve safety;	4- ERZURUM Metropolitan Municipality	5- - Within the scope of the project, for the activities to be performed at the interception of the roads of the Administration’s road network and the Project route line, permit shall be obtained from the Administration signing a protocol, land road interceptions shall be suitably passed, tonnage limitation shall be complied with in case the roads of the Administration’s road network are used during construction, the necessary corrections and markings shall be made with respect to traffic order and safety, and TANAP shall be responsible for all activities that may influence the traffic safety of the road.	CC/ EPC TANAP	Visual Inspection	Contin.	Site Inspection Report	TANAP	Traffic Management Plan		Chapter 8 Chapter 11
197	1	Entire Project	Traffic and Mobility	Traffic Law numbered 2918 will be complied, in case the roads are damaged, all cost will be paid. Before the land preparation-construction phase of the Project is initiated,	·Temporary traffic control will be used in intersections and junctions where a higher road accident risk is identified;			CC/ EPC TANAP	Visual Inspection	Contin.	Site Inspection Report	TANAP	Traffic Management Plan		Chapter 8 Chapter 11
198	1	Entire Project	Traffic and Mobility	“Transmission Road Pre-Permit Certificate” will be obtained according to the Traffic Law numbered 2918 and the articles of the Regulation on Facilities to be Established Adjacent to Highways be complied with. In	Intersections between temporary roads and access roads will be designed so to be traffic-safe, especially for heavy-load vehicles;			CC/ EPC TANAP	Visual Inspection	Contin.	Site Inspection Report	TANAP	Traffic Management Plan		Chapter 8 Chapter 11
199	1	Entire Project	Traffic and Mobility	case connection roads are constructed within the Project, positive opinion and approval of General Directorate of Highways will be received for the projects on main road connection point,	Authorities will be notified when the oversize heavy vehicles will be required and vehicles will be escorted;			CC/ EPC TANAP	Notification of local authorities	Contin. when the oversize vehicles are required	Notification Correspondences	TANAP	Traffic Management Plan		Chapter 8 Chapter 11
200	1	Entire Project	Traffic and Mobility	available crossroads will be used and Transmission Road Permit Certificate will be obtained from Regional Directorates. For the connection roads, rules on crossroad distance, visibility distance, structure approach	Frequently used roads will be inspected on a regular basis to ensure that they are not damaged, or to implement repair activities when necessary;	5- YOZGAT Special Provincial Administration	6- - The articles of Highway Traffic Law numbered 2918,Regulation on Highway Traffic that came into force by being published in Official Gazette dated 18.07.1997 and numbered 23053 and Regulation on Facilities to be Constructed and Operated near Highway that came into force by being published in Official Gazette dated 15.05.1997 will be complied.	CC/ EPC TANAP	Visual Inspection	Contin.	Site Inspection Report	TANAP	Traffic Management Plan		Chapter 8 Chapter 11
	1	Entire Project	Traffic and Mobility	distance and other rules will be met in compliance with Article 17and Article 18 of Traffic Law and articles of Regulation on Facilities to be Established	·Transport during night-time will be avoided to the extent possible, in order to prevent road accidents;			CC/ EPC TANAP	Arrangement of transportation periods	Contin.	Transportation Schedules	TANAP	Traffic Management Plan		Chapter 8 Chapter 11
201	1	Entire Project	Traffic and Mobility	Adjacent to Highways. During all explosion and material transport activities to be conducted during the land preparation-construction and operation phases of the Project, highway structure and related facilities won’t be	Related Turkish legislation on speed limits depending on the type of vehicles and roads shall be obeyed. where practicable			CC/ EPC TANAP	Training of the employees on requirements	Contin.	Training Records	TANAP	Traffic Management Plan Employment and Training Plan		Chapter 8 Chapter 11
202	1	Entire Project	Traffic and Mobility	damaged, in case of damage, the damage will be compensated within the protocol to be signed with Regional Directorates. Furthermore, the principles indicated in Traffic (Transportation) Management Plan and Carriage Management	Trainings will be provided to the adults and children in the settlement areas along and around the pipeline route in order to increase traffic awareness within the scope of the Traffic Management Plan;			CC/ EPC TANAP	Training of all employees	Contin.	Training Records	TANAP	Traffic Management Plan		Chapter 8 Chapter 11

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203	All	Entire Project	Traffic and Mobility	Plan to be prepared within Project will be complied.	All drivers will adhere to TANAP driving rules and appropriate training will be provided;	6- BURSA Special Provincial Administration	and safety and Project owner will be responsible of each kind of activity effecting the traffic safety of the highway	TANAP	Training of all employees	Contin.	Training Records	TANAP	Employment and Training Plan		Chapter 8 Chapter 11
204	3	Entire Project	Traffic and Mobility		<p>A survey will be conducted to assess the existing and post conditions of the roads to be used by the construction, An additional survey will be conducted to understand whether the access roads used require upgrading activities and to ensure that they are returned to previous or better conditions after construction.</p> <p>Access to properties will be guaranteed or appropriate alternative accesses will be agreed with owners or users; Local communities will be informed on planned road closures or disruption with at least 72 hours' notice in advance through official communication and signs; Easy-to-read signs will be used to indicate any type of diversion or of traffic changes related to project activities; Temporary traffic control and appropriate signs will be used to highlight warnings and to improve safety; Temporary traffic control will be used in intersections and junctions where a higher road accident risk is identified; Intersections between temporary roads and access roads will be designed so to be traffic-safe, especially for heavy-load vehicles; Authorities will be notified when the oversize heavy vehicles will be</p>		7- Road safety will be prevented at crossing points and the company will be responsible of all works that will affect the traffic safety.	TO BE DETAILED	TO BE DETAILED	TO BE DETAILED	TO BE DETAILED	TANAP	Decommissioning Procedures		Chapter 8 Chapter 11

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					<p>required and vehicles will be escorted; Frequently used roads will be inspected on a regular basis to ensure that they are not damaged, or to implement repair activities when necessary; Transport during night-time will be avoided to the extent possible, in order to prevent road accidents; All drivers will adhere to TANAP driving rules and appropriate training will be provided; Related Turkish legislation on speed limits depending on the type of vehicles and roads shall be obeyed. Transport of the Project staff will be organized to reduce the number of vehicles needed (i.e. use of busses/minibuses and collective means of transport) to the extent possible; Trainings will be provided to the adults and children in the settlement areas along and around the pipeline route in order to increase traffic awareness within the scope of the Traffic Management Plan;</p>	7- İSTANBUL-1 Regional Directorate of Highways									
205	1	Entire Project	Infrastructures and Utility Distribution		<p>Specific studies will be performed to ensure that utility networks used for Project activities are capable of sustaining the additional uses needed for Project purposes;</p>	1- General Directorate of State Hydraulic Works	1- Damages to facilities belonging to the State Hydraulic Works that may occur shall be indemnified by the activity owner.	CC/ EPC TANAP	Road infrastructure survey	Contin.	Survey Report	TANAP	Constructio n Impacts Managemen t Plan		Chapter 8 Chapter 11
206	1	Entire Project	Infrastructures and Utility Distribution		<p>Specific studies on waste management facilities and landfills used during construction activities will be performed to ensure that they are capable of sustaining additional pressure brought by Project without affecting</p>	2- BURSA-1 Regional Directorate of State Hydraulic Works	2- - Activities will be conducted not damaging the water resources, wells on NGP, damages that may be observed in water resources, facilities and groundwater due to wrong application	CC/ EPC TANAP	Waste facilities infrastructure survey	Contin.	Survey Report	TANAP	Waste Managemen t Plan		Chapter 8 Chapter 11

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					current waste management services;	3- SIVAS-19 Regional Directorate of State Hydraulic Works	will be indemnified by the activity owner company.								
207	1	Entire Project	Infrastructures and Utility Distribution		· Any damage to utility distribution networks will be repaired promptly in accordance with the network owner or operator;		- The activity owner shall take into account the interaction between the irrigation network of the State Hydraulic Works and the pipeline route passing from the irrigation areas.	CC/ EPC TANAP	N/A	Contin.	N/A	TANAP			Chapter 8 Chapter 11
208	1	Entire Project	Infrastructures and Utility Distribution		· Any unplanned disruption of utility distribution services will be managed through a specific contingency plan which includes prompt communication to local communities, written information to explain event occurred and repair measures needed, continuous communication channel with local authorities and communities, and all actions necessary in accordance with utility distribution owner or operator until disruption is solved;		- Detailed designs will be prepared for the crossings from the facilities of the State Hydraulic Works (including irrigation projects) and submitted to the approval of Regional Directorates. 3-	CC/ EPC TANAP	N/A	Contin.	N/A	TANAP			Chapter 8 Chapter 11
209	1	Entire Project	Infrastructures and Utility Distribution		· Any planned disruption of utility distribution services will be communicated to local authorities and local communities with at least 72 hours' notice in advance; where planned disruptions are expected to last more than 12 hours, a specific risk analysis will be performed to assess impacts expected on local communities and to identify additional mitigation measures;		- For the crossings with irrigation facilities in operation, Project details will be provided from Regional Directorate and projects will be developed accordingly, pre-cautions needed for not interrupting the operation will be taken, as the Project for route is being developed the opinion of Regional Directorate will be received and in construction phase, activities will be conducted in these areas under the supervision of Regional Directorate. - Activities that will be conducted in order to prevent any possible flooding event will be submitted to Regional Directorate for approval.	CC/ EPC TANAP	N/A	Contin.	N/A	TANAP			Chapter 8 Chapter 11
210	1	Entire Project	Infrastructures and Utility Distribution		· Access to utility distribution networks for Project needs will be agreed with affected land owners or land users;		4- - Passages over and under the canals, pipes and maintenance roads of the natural gas pipeline shall be made with	CC/ EPC TANAP	N/A	Contin.	N/A	TANAP	Community Relation Plan Stakeholder Engagement Plan		Chapter 8 Chapter 11

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211	2	Entire Project	Infrastructures and Utility Distribution		<p>Any damage to utility distribution networks will be repaired promptly in accordance with the network owner or operator;</p> <p>Any unplanned disruption of utility distribution services will be managed through a specific contingency plan which includes prompt communication to local communities, written information to explain event occurred and repair measures needed, continuous communication channel with local authorities and communities, and all actions necessary in accordance with utility distribution owner or operator until disruption is solved;</p> <p>Any planned disruption of utility distribution services will be communicated to local authorities and local communities with at least 72 hours' notice in advance; where planned disruptions are expected to last more than 12 hours, a specific risk analysis will be performed to assess impacts expected on local communities and to identify additional mitigation measures;</p>	4- BALIKESİR-25 Regional Directorate of State Hydraulic Works	<p>art constructs, which are sized according to the criteria of the State Hydraulic Works and which have been submitted to and approved by the 25th Regional Directorate of the State Hydraulic Works.</p> <p>5-</p> <p>- In case of any flooding event, all necessary pre-cautions will be taken by the activity owner.</p> <p>6-</p> <p>- The deep water discharge wells, outhouses, the energy transmission lines that provide energy for wells in cooperative irrigation areas on natural gas pipeline route won't be damaged and in case is damaged, the damage shall be met by the activity owner</p> <p>- Since there are projects of State Hydraulic Works available in the Project area, necessary pre-cautions will be taken during and after the activities to be conducted and the activity owner will be responsible of all kind of damage and harm may be caused during activities.</p>	TANAP	TO BE DETAILED	TO BE DETAILED	TO BE DETAILED	TANAP	Operating Procedures		Chapter 8 Chapter 11

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212	3	Entire Project	Infrastructures and Utility Distribution		<p>Specific studies on waste management facilities and landfills used during construction activities will be performed to ensure that they are capable of sustaining additional pressure brought by Project without affecting current waste management services;</p> <p>Any damage to utility distribution networks will be repaired promptly in accordance with the network owner or operator;</p> <p>Any unplanned disruption of utility distribution services will be managed through a specific contingency plan which includes prompt communication to local communities, written information to explain event occurred and repair measures needed, continuous communication channel with local authorities and communities, and all actions necessary in accordance with utility distribution owner or operator until disruption is solved;</p> <p>Any planned disruption of utility distribution services will be communicated to local authorities and local communities with at least 72 hours' notice in advance; where planned disruptions are expected to last more than 12 hours, a specific risk analysis will be performed to assess impacts expected on local communities and to identify additional mitigation measures;</p>	<p>5- KARS-24 Regional Directorate of State Hydraulic Works</p> <p>6- ERZURUM-8 Regional Directorate of State Hydraulic Works</p> <p>7- BALIKESİR Metropolitan Municipality</p>	<p>- In the Regions the cooperative wells shall not be damaged, and in case any damage occurs, new wells shall be opened.</p> <p>- Application shall be made to the Municipality especially for infrastructure crossings and crossings at transportation constructs and rights of the Municipality.</p> <p>- At points where the route passes through regions under the responsibility of the Municipality, the limiting/preventing factors and the issues that shall be given attention, if exists, and the issues concerning safety-life safety (those under the responsibility of the Municipality) shall be informed to the Municipality.</p> <p>- The legislations concerning the conservation of the potable water basins and resources of the Municipality shall be complied with.</p> <p>- In case local development plan areas which have been previously approved, continuing and which probably remain in the Project area arise, the Administration shall not hold responsibility in a conflict. In case construction site and similar temporary or permanent buildings are made in the jurisdiction and responsibility area of the Administration, the concerned Ministry and the concerned Administrations shall be informed, and permits shall be taken from the concerned Administrations.</p>	TO BE DETAILED	TO BE DETAILED	TO BE DETAILED	TO BE DETAILED	TANAP	Decommissioning Procedures		Chapter 8 Chapter 11

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							<p>- In the area where the project route passes through (Şarköy, Kızılcaerzi Neighborhood), in case the road is displaced in the future infrastructure and superstructure works, all kinds of taxes, charges, duties and displacement expenses shall be met by TANAP Natural Gas Co.</p> <p>- Since the area where the project route passes is subject to the development plans including the proposed “Pumping Station of the Kızılcaerzi Village Natural Gas Cycle Plant, Water Intake / Discharge Pipelines and Float Facilities”, approved by the Ministry of Environment and Urbanization (General Directorate of Spatial Planning), positive opinion of the Şarköy Municipality was taken with the correspondence dated 16.07.2014 and No. 91135896/9372631 given in Annex 4.3 concerning this issue. Consequently, works shall be conducted considering the subject area.</p> <p>- Concerning the crossings in Tekirdağ province, procedures will be carried out within the knowledge of technical personnel of the Tekirdağ Metropolitan Municipality Water and Sewage Administration (TESKİ) and all legal rights of TESKİ shall be preserved.</p> <p>9-</p> <p>- In the activities carried out within the scope of the Project, the irrigation canals made in previous years and the earth irrigation canals made by the farmers on their own shall not be damaged; if any damage occurs, they shall be repaired and maintained.</p> <p>10-</p>								

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						8- TEKİRDAĞ Metropolitan Municipality	<p>- Attention shall be given to waterworks and sewage systems on the route.</p> <p>- The damages to waterworks and sewage systems and pipelines belonging to the Administration shall be repaired and the Administration shall be informed.</p> <p>- Attention shall be given to the road and transportation network belonging to the Administration within the route and it shall be repaired in case damage occurs.</p> <p>- Attention shall be given to the licensed basalt and crushing/screening plant areas within the route.</p> <p>11-</p> <p>- Within the scope of the Project, suitable construction techniques for passage shall be used so that the Sema Regulator and the transmission canal of the Hydraulic Power Plant Project, for which a “EIA is not necessary” decision has been given and which is intercepted at 1087+000 km and at about 120-125 m west of the NGP route, is nor harmed.</p> <p>12-</p> <p>- During the Pipeline Laying works, potable-fresh water resources, reservoirs, networks of the villages existing on the route won’t be damaged, in case of damage, necessary repairs will be conducted. When required, the health protection bands distances and the contents of the related regulations will be complied.</p>								

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							13- - The asphalt road, stabilized road, crude road, irrigation canal, drainage (potable water) and force main (potable water) service projects shall not be damage; in case they are damaged, the necessary repairs shall be made. 14- - The potable water, irrigation and sewage networks under the responsibility of the administration in provincial borders won't be damaged and in case of necessity, repair will be conducted by the company as soon as possible. - The damages may be caused on roads, culverts and other engineering structures in responsibility area of the authority will be compensated. 15- - Potable water resources located on the natural gas pipeline route will be conserved. 16- - On the village roads passage lines of the NGP route, the natural gas pipes shall be reduced down to an adequate depth, the route on which activity is being carried out shall immediately be opened to traffic so that the roads								

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						14- ERZİNCAN Special Provincial Administration	Provincial Administration network won't be damaged. - On natural gas pipeline route, potable water lines of residential areas and villages (Cihangazi, Düzağaç, Göynücek, Donbayçayırı, Yeşilçukurca, Yenyüregil, Yeni Dodurga and Karaçayır) and sewer lines (Cihangazi, Düzağaç, Göynücek and Yenyüregil) are available. Directorate of Water and Channels Services will be contacted before the construction activities of the Project are initiated and the mentioned facilities won't be damaged and in cases of obligation, possible damages will be minimized and displacements will be conducted as soon as possible in order not to aggrieve the public. - If available, the approved public improvement plans will be complied in Project corridor. In case there is an inconsistency available between public settlement plans and the Project, and in cases of obligation, necessary public improvement changes will be submitted for approval of related directorate together with opinions of related authorities. Furthermore, licenses will be received for each structure requiring license								
						15- GÜMÜŞHANE Provincial Directorate of Public Health									
						16- GÜMÜŞHANE Special Provincial Administration	23- - The natural gas pipeline route crosses some irrigation channels and village road in the region perpendicularly and necessary permits during excavation works will be obtained from the Road and Transportation Services Directorate. The mentioned structures won't be damaged. - Even if there is no project installed by the Administration on the Project area, if there are potable water resources,								

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						<p>20- KIRŞEHİR Special Provincial Directorate</p> <p>21- ESKİŞEHİR Provincial Directorate of Public Health</p> <p>22- BİLECİK Special Provincial Administration</p>	<p>29- - Investments and projects of the authority located on natural gas pipeline route will be taken into consideration.</p> <p>30- Concerning the road network intercepted by or parallel to the project route, in order to prevent the damages to the existing village roads and potable water networks, road pass permits shall be obtained from the Administration, works shall be performed in coordination with the Administration, alternative roads routes shall be identified during the works, and damages shall be corrected by TANAP.</p> <p>31- According to Regulation on Water Intended for Human Consumption, the resources and reservoirs will be protected, the potable and fresh water transmission lines, resources and reservoirs shall not be damaged, cemeteries will be protected and Public Sanitation Law numbered 1593 will be complied with.</p> <p>32- The irrigation and infrastructure facilities constructed by State Hydraulic Works and directorates of Special Provincial Administration will be protected.</p>								

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						31- YOZGAT Provincial Directorate of Public Health 32- BURSA Provincial Directorate of Food, Agriculture and Livestock									
213	1	Entire Project	Opportunities for Local Economy		· In order to increase the project's Local Benefits, the Company will aim to procure goods, services and materials from local businesses to the extent possible;			CC/ EPC/TANAP	N/A	Contin.	N/A	TANAP	Procurement and Supply Management Plan		Chapter 8 Chapter 11
214	1	Entire Project	Opportunities for Local Economy		· A strategy for the procurement of goods, services and materials will be prepared by contractors, including a demand-and-supply analysis, in order to identify to what extent local sources can contribute to procurement needs and to implement tailored measures to support local businesses;			CC/ EPC/TANAP	N/A	Contin.	N/A	TANAP	Procurement and Supply Management Plan		Chapter 8 Chapter 11
215	1	Entire Project	Opportunities for Local Economy		The Contractors will provide information on procurement, tendering, and contracting processes with a transparent and clear approach, to ensure that equal access to opportunities is guaranteed. Information			CC/ EPC/TANAP	Information of local businesses	Contin.	N/A	TANAP	Procurement and Supply Management Plan		Chapter 8 Chapter 11

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					on procurement opportunities will be given to local businesses through communication with Chambers of Commerce, Industry Associations, Local authorities and other appropriate parties;										
216	All	Entire Project	Opportunities for Local Economy		· Local companies identified as able to provide goods, materials and services in the during the strategic analysis will be conducted directly providing information on tendering opportunities;			CC/ EPC/ TANAP	Analysis to identify local companies	Contin.	N/A	TANAP	Procurement and Supply Management Plan		Chapter 8 Chapter 11
217	1	Entire Project	Opportunities for Local Economy		· All contractors and Subcontractors will have to comply to the TANAP Policies for their procurement activities;			CC/ EPC/ TANAP	N/A	Contin.	N/A	TANAP	Procurement and Supply Management Plan		Chapter 8 Chapter 11
218	2	Entire Project	Opportunities for Local Economy		In order to increase the project's Local Benefits, the Company will aim to procure goods, services and materials from local businesses to the extent possible; A strategy for the procurement of goods, services and materials will be prepared, including a demand-and-supply analysis, in order to identify to what extent local sources can contribute to procurement needs and to implement tailored measures to support local businesses; The Company will provide information on procurement, tendering, and contracting processes with a transparent and clear approach, to ensure that equal access to opportunities is guaranteed; Information on procurement opportunities will be given to local businesses, through			TANAP/CC/ EPC	TO BE DETAILED	TO BE DETAILED	TO BE DETAILED	TANAP	Operating Procedures		Chapter 8 Chapter 11

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					communication with Chambers of Commerce, Industry Associations, Local authorities and other appropriate parties; Local companies identified as able to provide goods, materials and services in the strategic analysis will be conducted directly providing information on tendering opportunities; All Contractors and Subcontractors will have to comply to theTANAP Policies for their procurement activities;										
219	3	Entire Project	Opportunities for Local Economy		In order to increase the project's Local Benefits, the Company will aim to procure goods, services and materials from local businesses to the extent possible; A strategy for the procurement of goods, services and materials will be prepared, including a demand-and-supply analysis, in order to identify to what extent local sources can contribute to procurement needs and to implement tailored measures to support local businesses; The Company will provide information on procurement, tendering, and contracting processes with a transparent and clear approach, to ensure that equal access to opportunities is guaranteed;			TO BE DETAILED	TO BE DETAILED	TO BE DETAILED	TO BE DETAILED	TANAP	Decommissioning Procedures		Chapter 8 Chapter 11

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					Information on procurement opportunities will be given to local businesses, through communication with Chambers of Commerce, Industry Associations, Local authorities and other appropriate parties; Local companies identified as able to provide goods, materials and services in the strategic analysis will be conducted directly providing information on tendering opportunities; All contractors and subcontractors will have to comply to the TANAP Policies for their procurement activities;										
220	1	Entire Project	Changes to Local Employment Conditions		· The Company aims at employing local workers to the extent possible, in order to increase the Project's Local Benefits;			CC/ EPC/ TANAP	Set targets for local employment	Contin.	Employment Records	TANAP	Employment and Training Plan		Chapter 8 Chapter 11
221	1	Entire Project	Changes to Local Employment Conditions		· TANAP will perform a Human Resource Analysis studyto understand what work skills are available locally and what actions should be implemented to increase local employment opportunities;			CC/ EPC/ TANAP	Set targets for local employment	Contin.	Employment Records	TANAP	Employment and Training Plan		Chapter 8 Chapter 11
222	1	Entire Project	Changes to Local Employment Conditions		· The recruitment processes will be transparent, public and non-discriminatory, providing equal opportunities with respect to ethnicity, religion, language, gender and sexuality;			CC/ EPC/ TANAP	Set targets for local employment	Contin.	Employment Records	TANAP	Employment and Training Plan		Chapter 8 Chapter 11

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				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
223	1	Entire Project	Changes to Local Employment Conditions		· The Contractor will provide clear information on the recruitment process, with particular emphasis on informing local communities of employment opportunities through different channels such as settlement heads, and local associations. Communication material such as posters, and brochures will be distributed locally;			CC/ EPC TANAP	Set targets for local employment	Contin.	Employment Records	TANAP	Employment and Training Plan		Chapter 8 Chapter 11
224	1	Entire Project	Changes to Local Employment Conditions		· The recruitment process will be monitored by third party organizations or institutions to ensure that it is done according to the Turkish legal requirements and Management Plans;			CC/ EPC TANAP	Set targets for local employment	Contin.	Employment Records	TANAP	Employment and Training Plan		Chapter 8 Chapter 11
225	1	Entire Project	Changes to Local Employment Conditions		Two copies of contracts will be prepared in compliance with the existing legal requirements which are signed mutually and a copy is provided to the future employee.			CC/ EPC TANAP	Set targets for local employment	Contin.	Employment Records	TANAP	Employment and Training Plan		Chapter 8 Chapter 11
226	1	Entire Project	Changes to Local Employment Conditions		· Training needs for the employees will be identified and workers will receive the compulsory trainings and will not start working before completing induction training;			CC/ EPC TANAP	Implementation of training programs	Contin.	N/A	TANAP	Employment and Training Plan		Chapter 8 Chapter 11
227	1	Entire Project	Changes to Local Employment Conditions		· Workers will receive the work-place and work-task specific trainings; a regular training program will be planned and implemented throughout the entire phase;			CC/ EPC TANAP	Training of workers	Contin.	Training Records	TANAP	Employment and Training Plan		Chapter 8 Chapter 11
228	1	Entire Project	Changes to Local Employment Conditions		· Training will be provided by appropriate people (professional trainers or experienced employee);			CC/ EPC TANAP	Training activities	Contin.	Training Records	TANAP	Employment and Training Plan		Chapter 8 Chapter 11

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229	2	Entire Project	Changes to Local Employment Conditions		<p>The Company aims at employing local workers to the extent possible, in order to increase the Project's Local Benefits;</p> <p>TANAP will perform a Human Resource Analysis studyto understand what work skills are available locally and what actions should be implemented to increase local employment opportunities;</p> <p>The recruitment processes will be transparent, public and non-discriminatory, providing equal opportunities with respect to ethnicity, religion, language, gender and sexuality;</p> <p>The Contractor will provide clear information on the recruitment process, with particular emphasis on informing local communities of employment opportunities through different channels such as settlement heads, , and local associations. Communication material such as posters and brochures will be distributed locally;</p> <p>The recruitment process will be monitored by third party organizations or institutions to ensure that it is done according to the Turkish legal requirements and Management Plans;</p> <p>Job descriptions will be clearly communicated in advance and will contain information on working conditions.</p> <p>Two copies of contracts will be prepared in compliance with the existing legal requirements which is signed mutually and a copy is provided to the future employee.</p>			TANAP	TO BE DETAILED	TO BE DETAILED	TO BE DETAILED	TANAP	Operating Procedures		Chapter 8 Chapter 11

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				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
					<p>Training needs for the employees will be identified and workers will receive the compulsory trainings and will not start working before completing induction training;</p> <p>Workers will receive the work-place and work-task specific trainings; a regular training program will be planned and implemented throughout the entire phase;</p> <p>Training will be provided by appropriate people (professional trainers or experienced employee);</p> <p>All employment records will be kept and reported regularly to the TANAP;</p>										
230	3	Entire Project	Changes to Local Employment Conditions		<p>The Company aims at employing local workers to the extent possible, in order to increase the Project's Local Benefits;</p> <p>TANAP will perform a Human Resource Analysis study to understand what work skills are available locally and what actions should be implemented to increase local employment opportunities;</p> <p>The recruitment processes will be transparent, public and non-discriminatory, providing equal opportunities with respect to ethnicity, religion, language, gender and sexuality;</p> <p>The Company will provide clear information on the recruitment process, with particular emphasis on informing local communities of employment opportunities through different channels such as settlement heads, and local associations.</p> <p>Communication material</p>			TO BE DETAILED	TO BE DETAILED	TO BE DETAILED	TO BE DETAILED	TANAP	Decommissioning Procedures		Chapter 8 Chapter 11

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					<p>such as posters and brochures will be distributed locally;</p> <p>The recruitment process will be monitored by third party NGOs to ensure that it is done according to the Turkish legal requirements and Management Plans;</p> <p>Job descriptions will be clearly communicated in advance and will contain information on working conditions.</p> <p>Two copies of contracts will be prepared in compliance with the existing legal requirements which are signed mutually and a copy is provided to the all employees.</p> <p>The temporary nature of work opportunities will be highlighted during all recruitment phases to ensure that people manage salary wisely and understand consequences of leaving a previous job or farming activities to work on the Project;</p> <p>Job vacancies created during the construction phase will be communicated locally through systems used during the recruitment process;</p> <p>Training needs for the employees will be identified and workers will receive the compulsory trainings and will not start working before completing induction training;</p> <p>All employment records will be kept and reported regularly to the TANAP;</p>										
231	1	Entire Project	Livelihood from farming activities		<p>Access to properties will be guaranteed or appropriate alternative accesses solutions that are</p>			CC/ EPC/ TANAP	Auditing and Visual Inspection	Contin.	Audit and site inspection report	TANAP	Constructio n Impacts Managemen t Plan		Chapter 8 Chapter 11

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				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
					agreed with users will be implemented;										
232	1	Entire Project	Livelihood from farming activities		· The existing irrigation networks affected by Project activities will be mapped and appropriate technical solutions will be implemented to reduce possible interferences; if interferences are unavoidable, appropriate alternative solutions will be agreed with irrigation water users;			CC/ EPC/ TANAP	Mapping	Contin.	Report on affected irrigation systems	TANAP	Constructio n Impacts Managemen t Plan		Chapter 8 Chapter 11
233	1	Entire Project	Livelihood from farming activities		· Any damage given to irrigation channels will be repaired promptly in accordance with the channel users and relevant authorities;			CC/ EPC/ TANAP	Auditing	Contin.	Audit Report	TANAP	Constructio n Impacts Managemen t Plan		Chapter 8 Chapter 11
234	1	Entire Project	Livelihood from farming activities		· Any unplanned disruption of irrigation channels will be managed through a specific contingency plan which includes prompt communication to local communities, and implementation of all actions necessary in accordance channel users until disruption is solved;			CC/ EPC/ TANAP	Auditing	Contin.	Audit Report	TANAP	Constructio n Impacts Managemen t Plan		Chapter 8 Chapter 11
235	1	Entire Project	Livelihood from farming activities		· Existing wells affected by Project activities will be mapped to assess interferences with Project activities; in case closure of wells or limitation to access are unavoidable, appropriate alternative solutions will be agreed with well users;			CC/ EPC/ TANAP	Mapping	Contin.	Report on affected wells	TANAP	Constructio n Impacts Managemen t Plan		Chapter 8 Chapter 11
236	1	Entire Project	Livelihood from farming activities		· All temporarily used lands for Project activities will be reinstated to previous conditions in order to allow previous agriculture activities;			CC/ EPC/ TANAP	Visual Inspection	Contin.	Site Inspection Report	TANAP	Reinstateme nt Action Plan		Chapter 8 Chapter 11

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237	1	Entire Project	Livelihood from livestock activities		· Transhumance paths will be identified during pre-construction activities to ensure that interferences with Project activities are reduced to a minimum; where interferences are unavoidable appropriate alternative solutions will be agreed with affected local communities;			CC/ EPC/ TANAP	Pre-construction report on social conditions	Contin.	Pre-construction report	TANAP			Chapter 8 Chapter 11
238	1	Entire Project	Livelihood from livestock activities		· Trenches and project areas will be perimetred with stock-proof fence if the trench is filled with water and appropriate signals in order to reduce animal and human injuring risks;			CC/ EPC/ TANAP	Site Plans Visual Inspection	Contin.	Site Inspection Report	TANAP			Chapter 8 Chapter 11
239	1	Entire Project	Local healthcare services and facilities	Within the Project, necessary health equipment and first aid materials will be kept available, the articles of Regulation on Workers Health and Work Safety will be complied; the articles of Regulation on Medical Waste Control will be complied for the disposal of medical wastes to be generated as a result of the medicals services to be provided for employees.	· Assessment of all healthcare facilities in the Aol will be performed to ensure that Project activities do not limit access to the structures; if limitations are unavoidable, the Company will agree with local authorities on alternative solutions to guarantee healthcare access to communities;	BURSA Provincial Directorate of Public Health	Care shall be taken for the areas of the Durhasan Health House on the 316 m2 immovable property in the Büyükşehir Province, Durhasan village, parcel No. 1317, Deveci Konağı Health House on the 1.351 m2 immovable property in the Mustafa Kemal Paşa Province, Deveci Konağı village, parcel No. 672 and the Karaorman Health House on the 1.280 m2 immovable property in Karaorman village, parcel No. 739 and the Çatalsöğüt Health House in the Harmancık Province, Çatalsöğüt village.	CC/ EPC/ TANAP	Preparation of report on conditions of healthcare facilities	Contin.	Report on conditions of healthcare facilities	TANAP	Construction Impacts Management Plan		Chapter 8 Chapter 11
240	1	Entire Project	Local healthcare services and facilities		· Campsites will be provided with health facilities equipped to deal with emergency procedures and routine medical operations, so as to avoid pressure on existing healthcare facilities to the extent possible;			CC/ EPC/ TANAP	Site Plans Auditing-Mobilization Audit	Contin.	Audit Report	TANAP	Construction Impacts Management Plan		Chapter 8 Chapter 11
241	1	Entire Project	Local healthcare services and facilities		· The Contractor will liaise with local health authorities to ensure that any critical issues are communicated promptly and that agreed solutions are found;			CC/ EPC/ TANAP	Liaison with local healthcare facilities	Contin.	N/A	TANAP	Construction Impacts Management Plan		Chapter 8 Chapter 11

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242	1	Entire Project	Local healthcare services and facilities		· Access to settlements will always be guaranteed either through diversions or by allowing the passage of vehicles at certain hours through the use of steel plates over the trenches;			CC/ EPC/ TANAP	Visual Inspection	Contin.	Site Inspection Report	TANAP	Construction Impacts Management Plan		Chapter 8 Chapter 11
243	3	Entire Project	Local healthcare services and facilities		Assessment of all healthcare facilities in the Aol will be performed to ensure that Project activities do not limit access to the structures; if limitations are unavoidable, the Company will agree with local authorities on alternative solutions to guarantee healthcare access to communities; Assessment of all healthcare facilities in the Aol will be performed to determine which facilities should be used for emergencies and medical treatments that cannot be dealt by internal healthcare facilities; attention will be paid so as to avoid impacts on users of these facilities; The Company will liaise with local health authorities to ensure that any critical issues are communicated promptly and that agreed solutions are found; Access to settlements will always be guaranteed either through diversions or by allowing the passage of vehicles at certain hours through the use of steel plates over the trenches			TO BE DETAILED	TO BE DETAILED	TO BE DETAILED	TO BE DETAILED	TANAP	Decommissioning Procedures		Chapter 8 Chapter 11

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244	1	Entire Project	Human health and safety	During the construction and operation phases of the project, required pre-cautions will be taken against fire and explosions that may affect the environmental and public health negatively. Labor Law numbered 4857 and by-laws and regulations that came into force according to this law will be complied. By laws and regulations on employee health and safety will be complied during the construction and operation phases of the Project. All pre-cautions will be taken in accordance with the related law and regulations about health and safety within the Project.	· TANAP will comply with the Voluntary Principles on Security and Human Rights;	1- BALIKESİR-25. Regional Directorate of State Hydraulic Works	1- As there will be explosion activities in the project, in the explosions in the activity area, such explosions will be in compliance with the explosion legislations and will be controlled. The impact of an explosion on the specified constructs shall be identified in detail and the necessary precautions shall be taken. In case the direction of the spring waters change or the flow or the springs that provide water to settlements are affected, the damnification concerning the provision of the required water shall be relieved by the activity owner.	TANAP	Third Party Monitoring	Contin.	Monitoring Report	TANAP			Chapter 8 Chapter 11
245	1	Entire Project	Human health and safety	Dust and gas emission to be generated by the construction machines and vehicles within the Project will be disposed taking pre-cautions according to the Regulation on Conservation of Air Quality, speed limits and dust control will be paid attention on access roads in residential areas close to the NGP route, roads will be wetted periodically via water-tenders and signs showing the NGP route will be installed along the roads. Pipes transported to the construction area will be aligned on side of the route construction corridor. Furthermore, the principles indicated in the Environmental and Social Management and Action Plans to be prepared within the Project will be complied.	· Workers will be subject to legal health screening before employment contracts are signed and if necessary will be provided with required immunisation treatments; all health information will be dealt with confidentially;	2- ARDAHAN Provincial Directorate of Environment and Urbanization	- In case explosion is needed within Project, explosion won't be performed among 15 March and 16 June which is the travelling and breeding period of migratory birds. In case explosion is required to be performed in Posof Wildlife Development Area, related authority opinions will be received.	CC/ EPC/ TANAP	Medical Surveillance	Contin.	Surveillance Report	TANAP	Employment and Training Plan		Chapter 8 Chapter 11
246	1	Entire Project	Human health and safety		· Random drug and alcohol tests of the workforce will be performed, recorded and audited;		3-	CC/ EPC/ TANAP	Random Tests Alcohol and drug policy	Contin.	Test Results	TANAP	Employment and Training Plan		Chapter 8 Chapter 11
247	1	Entire Project	Human health and safety		· Health awareness training will be provided to workers, during induction and periodically throughout their employment; training will include information on communicable diseases.	3- BURSA Provincial Directorate of Public Health	- Necessary pre-cautions will be taken against fire and explosions that may affect environmental and public health negatively during the construction and operation phases of the Project. Labor Law numbered 4857 and by-laws and regulations that came into force according to this law will be complied.	CC/ EPC/ TANAP	Training of workers	Contin.	Training Records	TANAP	Employment and Training Plan		Chapter 8 Chapter 11
248	1	Entire Project	Human health and safety		· Campsites will be provided with health facilities equipped to deal with emergency procedures and routine medical operations;		- Within the scope of the Project, explosives shall not be stored in the Project area.	CC/ EPC/ TANAP	Site Plans	Contin.	N/A	TANAP	Construction Impacts Management Plan		Chapter 8 Chapter 11
249	1	Entire Project	Human health and safety	Explosion; during the land preparation-construction studies of the Project, the rocky areas which cannot be excavated via construction equipment, so that require explosion will be determined by the constructors and the explosion activities will	· All wastes will be segregated and recycling procedures will be set up; licensed domestic solid waste disposal areas will be identified through communication with the local authorities; licensed hazardous waste disposal	4- GÜMÜŞHANE Provincial Directorate of Public Health	4- - The project shall be realized taking into account the risks to public and environmental health in case of an earthquake, since the Region is in the 1st degree seismic zone according to the data given in the Seismic Region Map of Turkey. 5- - At the parts where the pipeline passes	CC/ EPC/ TANAP	Site Plans Waste Bins Segregation Areas	Contin.	Waste Records from authorities	TANAP	Pollution Prevention Plan Waste Management Plan		Chapter 8 Chapter 11

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				be conducted with the written approval of the related authority with the suitable explosion design prepared together with the explosion expert. In case explosion is required to be performed within the Project, explosion won't be performed between the dates of 15 March-16	area are identified through communication with the local authorities; temporary site waste storage areas will be identified and arranged in compliance with local regulations.	5- EDİRNE Provincial Directorate of Public Health	close to the residential areas, all safety pre-cautions concerning public and environmental health shall be taken, safety distance in compliance with the related legislations shall be provided on both sides of the pipeline, structuring will not be permitted on these areas. - Pre-cautions related with health and work safety of the workers will be taken in accordance with relevant law and regulations within the Project.								
250	1	Entire Project	Human health and safety	June when the immigration birds travel and breed. During the activities to be performed within the Project, By Law on Fundamentals and Principles on Production, Import, Transport, Storage, Marketing, Usage, Extermination and Examination of Hunting Equipment and Similar Objects with Explosive Substances Left out of Sole Trade that came into force by being published in Official Gazette dated 29.09.1987 and numbered 19589 will be complied. During the activities to be conducted within the Project, explosion won't be conducted in Noise Sensitive Areas indicated in the "Regulation on Environmental Noise Assessment and Management" and Ecologically	If the related camp site is near to the Province, the medical waste disposal facilities in the province should be checked. If exists, contract should be done with related authorized medical waste collection contractor.		6- - Sanitary conditions predicted for the disposal of polluting elements may be generated due to Project activities and possible hazardous impacts Project activities may have on environmental and public health will be in compliance with related law and regulations.	CC/ EPC/ TANAP	Agreement with licensed disposal facilities	Contin.	Agreement Documentation	TANAP	Pollution Prevention Plan Waste Management Plan		Chapter 8 Chapter 11
251	1	Entire Project	Human health and safety	Sensitive Areas. During the explosion activities, highway structures and related structures won't be damaged, in case of	· Catering providers will conserve, prepare and serve food according to national regulations and international standards; catering operations will be regularly inspected and non-compliances will be reported promptly;		- Legislations and regulations on employee health and safety will be complied during construction and operation phases of the Project. - Necessary pre-cautions against negative impacts may be observed on public and environment by means of potable water and natural water resources will be taken.	CC/ EPC/ TANAP	Visual Inspection	Contin.	Site Inspection Report	TANAP			Chapter 8 Chapter 11
252	1	Entire Project	Human health and safety		· Measures for preventing zoonotic disease transmission will be implemented;	6- GİRESUN Provincial Directorate of Public Health		CC/ EPC/ TANAP	Medical Surveillance	Contin.	Medical Surveillance Records	TANAP			Chapter 8 Chapter 11

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253	2	Entire Project	Human health and safety	damage, the damage will be compensated by the company within the protocol to be signed with the related Provincial Directorates. All the explosion activities will be performed under control, in order to minimize the negative effects caused by the factors generating aerial shock and noise, optimum charge and compacting in all explosion holes will be taken into consideration, pre-crushing system will be used in order to minimize the effects such as dust, noise, etc. in areas where explosion will be conducted and the other required pre-cautions will be taken.	All employees will adhere to Company driving rules and appropriate training will be provided; The company will comply to the Voluntary Principles on Security and Human Rights; Workers will be subject to legal health screening before employment contracts are signed and if necessary will be provided with required immunisation treatments; all health information will be dealt with confidentially; Random drug and alcohol tests of the workforce will be performed, recorded and audited; Health awareness training will be provided to workers, during induction and periodically throughout their employment; training will include information on communicable diseases. Catering providers will conserve, prepare and serve food according to national regulations and international standards; catering operations will be regularly inspected and non-compliances will be reported promptly; Measures for preventing zoonotic disease transmission will be implemented; Emissions of pollutants in air and wastewater comply with national regulations and international standards	7- SİVAS Provincial Directorate of Environment and Urbanization 8- SİVAS Provincial Directorate of Public Health	- In the activities carried out within the scope of the project, relevant legislations, particularly the General Hygiene Law, No. 1593, the Labor Law, No. 4857 and the Environment Law, No. 2872 and the applicable statutes and regulations based on thereof shall be complied with. 7- - All necessary precautions specified in Chapter 8.1, Annex 5.2 and Annex 5.12 against the probable effects of the project on settlement areas shall be taken. 8- - Microbiological and chemical analyses of water to be used as potable and fresh water for the personnel to work within the Project will be held out by authorized bodies periodically and healthy water supply will be provided. - Within the Project, necessary health equipment and first aid materials will be kept available, the articles of Regulation on Workers Health and Work Safety will be complied; the articles of Regulation on Medical Waste Control will be complied for the disposal of medical wastes to be generated as a result of medicals services to be provided for employees. 9- - Pre-cautions preventing the areas used as cemeteries from being damaged will be taken. - Hygienic conditions will be achieved in social facilities and disinfection will be conducted by companies that have permits according to Regulation on Principles and Fundamentals on Usage of	TANAP	TO BE DETAILED	TO BE DETAILED	TO BE DETAILED	TANAP	Operating Procedures		Chapter 8 Chapter 11

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254	3	Entire Project	Human health and safety		Trainings will be provided to the adults and children in the settlement areas along and around decommissioning areas in order to increase traffic awareness within the scope of the Traffic Management Plan; Transport during night-time will be avoided to the extent possible, in order to prevent road accidents; All drivers will adhere to TANAP driving rules and appropriate training will be provided; Related Turkish legislation on speed limits depending on the type of vehicles and roads shall be obeyed. Project areas will be perimetred with fence if the trench is filled with water and appropriate signs to reduce human injuring risks; trespassing of fenced areas will be prohibited and security personnel will control these areas; The company will comply to the Voluntary Principles on Security and Human Rights; Workers will be subject to legal health screening before employment contracts are signed and if necessary will be provided with required immunisation treatments; all health information will be dealt with confidentially; Random drug and alcohol tests of the workforce will be performed, recorded and audited; Health awareness training will be provided to workers, during induction and periodically throughout their employment; training will include information on	9- ESKİŞEHİR Provincial Directorate of Public Health 									

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					reduced through the watering of demolition areas and roads, especially unpaved ones.										
255	1	Entire Project	Local Education Services		▫ Assessment of all schooling facilities in the Aol will be performed to ensure that Project activities do not limit access to the structures and that disturbance to school activities is avoided; if limitations occurred and disturbance is unavoidable, the Contractor will prepare a site specific risk assessment and will agree with local authorities on alternative solutions;			CC/ EPC/ TANAP	Pre-construction report on social conditions	Continuous	Pre-construction report	TANAP			Chapter 8 Chapter 11
256	1	Entire Project	Local Education Services		▫ The Contractor will liaise with local education facilities to ensure that Project activities do not interfere with transport of students to schools; if limitations are unavoidable, the Company will agree with local authorities on alternative solutions;			CC/ EPC/ TANAP	Liaison with local education facilities	Continuous	Liaison Records	TANAP			Chapter 8 Chapter 11
257	1	Entire Project	Local Education Services		Special attention will be paid in the Traffic Management Plan to identify areas where there is a higher presence of children (i.e. schools,			CC/ EPC/ TANAP	Visual Inspection	Continuous	Site Inspection Report	TANAP	Traffic Management Plan		Chapter 8 Chapter 11

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					school bus stops) to ensure that all necessary mitigation measures are implemented to reduce the risk of road accidents;										
258	3	Entire Project	Local Education Services		<p>Assessment of all schooling facilities in the Aol will be performed to ensure that Project activities do not limit access to the structures and that disturbance to school activities is avoided; if limitations occurred and disturbance is unavoidable, the Company will prepare a site specific risk assessment and will agree with local authorities on alternative solutions;</p> <p>The Company will liaise with local education facilities to ensure that Project activities do not interfere with transport of students to schools; if limitations are unavoidable, the Company will agree with local authorities on alternative solutions;</p> <p>Special attention will be paid in the Traffic Management Plan to identify areas where there is a higher presence of children (i.e. schools, school bus stops) to ensure that all necessary mitigation measures are implemented to reduce the risk of road accidents;</p>			TO BE DETAILED	TO BE DETAILED	TO BE DETAILED	TO BE DETAILED	TANAP	Decommissioning Procedures		Chapter 8 Chapter 11
259	1	Entire Project	Increase of Tensions and Conflicts		TANAP aims at employing local workers to the extent possible, in order to increase the Project's Local Benefits, thus reducing the perception in communities that benefits are not distributed locally;			CC/ EPC/ TANAP	Set targets for local employment		Employment Records	TANAP	Employment and Training Plan		Chapter 8 Chapter 11

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260	1	Entire Project	Increase of Tensions and Conflicts		The Contractors and subcontractors will provide clear information on the recruitment process, with particular emphasis on informing local communities of employment opportunities through different channels such as settlement heads, local associations. Communication material such as posters, and brochures will be distributed locally;			CC/ EPC/ TANAP	Employment Policy	Continuous	Employment Policy	TANAP	Employment and Training Plan		Chapter 8 Chapter 11
261	1	Entire Project	Increase of Tensions and Conflicts		The recruitment processes will be transparent, public and non-discriminatory, providing equal opportunities with respect to ethnicity, religion, language, gender and sexuality;			CC/ EPC/ TANAP	Employment Policy	Continuous	Employment Policy	TANAP	Employment and Training Plan		Chapter 8 Chapter 11
262	1	Entire Project	Increase of Tensions and Conflicts		The Contractors will prepare of Code of Conduct containing rules that workers are to follow both during working hours and in camp sites; recommendations on behaviour during free-time will also be provided; the Code of Conduct will be provided together with the contract and will be further explained during induction training;			CC/ EPC TANAP	Auditing of subcontractors	Continuous	Audit report	TANAP			Chapter 8 Chapter 11
263	1	Entire Project	Increase of Tensions and Conflicts		Training on community relations will be provided to workers during induction and regularly throughout their employment; workers will be informed on the code of conduct to keep according to local customs and on approach to be used when interacting with local communities and individuals;			CC/ EPC TANAP	Training of employees	Continuous	Training Records	TANAP	Employment and Training Plan		Chapter 8 Chapter 11

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264	2	Entire Project	Increase of Tensions and Conflicts		<p>TANAP aims at employing local workers to the extent possible, in order to increase the Project's Local Benefits, thus reducing the perception in communities that benefits are not distributed locally;</p> <p>The Contractors will provide clear information on the recruitment process, with particular emphasis on informing local communities of employment opportunities through different channels such as settlement heads, local associations. Communication material such as posters, and brochures will be distributed locally;</p> <p>The recruitment processes will be transparent, public and non-discriminatory, providing equal opportunities with respect to ethnicity, religion, language, gender and sexuality; In order to increase the project's Local Benefits, the Company will aim to procure goods, services and materials from local businesses to the extent possible;</p> <p>The Contractor will prepare of Code of Conduct containing rules that workers are to follow both working hours; recommendations on behaviour during free-time will also be provided; the Code of Conduct will be provided together with the contract and will be further explained during induction training;</p> <p>Training on community relations will be provided to workers during induction and regularly throughout their</p>			CC / EPC/TANAP	TO BE DETAILED	TO BE DETAILED	TO BE DETAILED	TANAP	Operating Procedures		Chapter 8 Chapter 11

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265	3	Entire Project	Increase of Tensions and Conflicts		opportunities with respect to ethnicity, religion, language, gender and sexuality; In order to increase the project's Local Benefits, the Company will aim to procure goods, services and materials from local businesses to the extent possible; The Company will prepare of Code of Conduct containing rules that workers are to follow during working hours; recommendations on behaviour during free-time will also be provided; the Code of Conduct will be provided together with the contract and will be further explained during induction training; Training on community relations will be provided to workers during induction and regularly throughout their employment; workers will be informed on the code of conduct to keep according to local customs and on approach to be used when interacting with local communities and individuals; All resettlement and compensation activities will be performed in a transparent, clear and non-discriminatory manner, as indicated in the Resettlement Action Plan			TO BE DETAILED	TO BE DETAILED	TO BE DETAILED	TO BE DETAILED	TANAP	Decommissioning Procedures		Chapter 8 Chapter 11
266	1	Entire Project	Disturbances and nuisances to daily activities		· Training on community relations will be provided to workers during induction and regularly throughout their employment; workers will be informed on the code of conduct to keep according to local customs and on approach to be			CC/ EPC/ TANAP	Training of workers	Continuous	Training Records	TANAP	Employment and Training Plan		Chapter 8 Chapter 11

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					used when interacting with local communities and individuals;										
267	1	Entire Project	Disturbances and nuisances to daily activities		· Entertainment and recreation activities will be organized for workers in campsites to encourage workers to stay within the camp and to avoid loitering and inappropriate behaviours in surrounding settlements;			CC/ EPC/ TANAP	Organization of entertainment activities	Continuous	Activity Records	TANAP	Employment and Training Plan		Chapter 8 Chapter 11
268	2	Entire Project	Disturbances and nuisances to daily activities		Noise and vibration risk assessments will be performed for residential areas close to construction activities; The Contractor will prepare of Code of Conduct containing rules that workers are to follow both working hours; recommendations on behaviour during free-time will also be provided; the Code of Conduct will be provided together with the contract and will be further explained during induction training; Training on community relations will be provided to workers during induction and regularly throughout their employment; workers will be informed on the code of conduct to keep according to local customs and on approach to be used when interacting with local communities and individuals;			CC/ EPC/TANAP	TO BE DETAILED	TO BE DETAILED	TO BE DETAILED	TANAP	Operating Procedures		Chapter 8 Chapter 11

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269	3	Entire Project	Disturbances and nuisances to daily activities		Noise and vibration risk assessments will be performed for residential areas close to construction activities; Night-time activities will be kept to a minimum to reduce disturbance to local communities due to noise and vibration emissions; if night-time construction activities are necessary, local authorities and local communities will be informed with 48 hours’ notice in advance; Emissions of dust will be limited through road watering, especially on unpaved roads; Specific studies will be performed to ensure that freshwater needed and wastewater produced by Project activities does not reduce access to water used for daily activities such as laundry; if interferences are unavoidable, the Contractor will consult with local authorities and with irrigation users to agree on alternative solutions; The Contractor will prepare of Code of Conduct containing rules that workers are to follow during working hours; recommendations on behaviour during free-time will also be provided; the Code of Conduct will be provided together with the contract and will be further explained during induction training; Training on community relations will be provided to workers during induction and regularly throughout their employment; workers will be informed on the code			TO BE DETAILED	TO BE DETAILED	TO BE DETAILED	TO BE DETAILED	TANAP	Decommissioning Procedures		Chapter 8 Chapter 11

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					of conduct to keep according to local customs and on approach to be used when interacting with local communities and individuals;										
270	1	Entire Project	Influence on Local Population		· TANAP aims at employing local workers to the extent possible, in addition to increasing the Project's Local Benefit, this will reduce the need for people to in-migrate and out-migrate;			CC/ EPC/ TANAP	Set targets for local employment		Employment Records	TANAP	Employment and Training Plan		Chapter 8 Chapter 11
271	1	Entire Project	Influence on Local Population		· Workers will be accommodated in campsites to reduce pressure on existing settlements; workers will not be hosted together with families and are therefore likely to return to home settlements once the construction phase is concluded, increasing the overall reversibility of in-migration and out-migration events;			CC/ EPC/ TANAP	N/A	Continuous	N/A	TANAP	Employment and Training Plan		Chapter 8 Chapter 11
272	1	Entire Project	Influence on Local Population		· The temporary nature of work opportunities will be clearly communicated during the recruitment process, to avoid critical issues once the employment ends			CC/ EPC/ TANAP	N/A	Continuous	N/A	TANAP	Employment and Training Plan		Chapter 8 Chapter 11
273	3	Entire Project	Influence on Local Population		The Contractor aims at employing local workers to the extent possible, in addition to increasing the Project's Local Benefits this will reduce the need for people to in-migrate and out-migrate; No recruitment activities will be performed in work areas, to avoid informal arrival of people in these areas in search of work opportunities; The temporary nature of			TO BE DETAILED	TO BE DETAILED	TO BE DETAILED	TO BE DETAILED	TANAP	Decommissioning Procedures		Chapter 8 Chapter 11

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					work opportunities will be clearly communicated during the recruitment process, to avoid critical issues once the employment ends.										
274	1	Entire Project	Intangible cultural heritage		The Company will liaise with local Authorities to identify if Project activities can interfere with traditional celebrations or festivities; alternative solutions will be agreed with local authorities			CC/ EPC/ TANAP	Liaison with local Authorities	Continuous	N/A	TANAP	Constructio n Impacts Managemen t Plan		Chapter 8 Chapter 11
275	1	Entire Project	Intangible cultural heritage		The Company will liaise with local Authorities to identify if Project activities restrict access to elements of traditional culture; alternative solutions will be agreed with local authorities			CC/ EPC/ TANAP	Liaison with local Authorities	Continuous	N/A	TANAP	Constructio n Impacts Managemen t Plan		Chapter 8 Chapter 11
276	1	Entire Project	Intangible cultural heritage		The Contractor will prepare of Code of Conduct containing rules that workers are to follow both during working hours and in camp sites; recommendations on behaviour during free-time will also be provided; the Code of Conduct will be provided together with the contract and will be further explained during induction training			CC/ EPC/ TANAP	Auditing of subcontractor s	Continuous	Audit report	TANAP			Chapter 8 Chapter 11
277	1	Entire Project	Intangible cultural heritage		· Training on community relations will be provided to workers during induction and regularly throughout their employment; workers will be informed on the code of conduct to keep according to local customs and on approach to be used when interacting			CC/ EPC/ TANAP	Training of employees	Continuous	Training Records	TANAP	Employment and Training Plan		Chapter 8 Chapter 11

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					with local communities and individuals;										
278	3	Entire Project	Intangible cultural heritage		<p>The Company will liaise with local Authorities to identify if Project activities can interfere with traditional celebrations or festivities; alternative solutions will be agreed with local authorities;</p> <p>The Company will liaise with local Authorities to identify if Project activities restrict access to elements of traditional culture; alternative solutions will be agreed with local authorities;</p> <p>The Contractor will prepare of Code of Conduct containing rules that workers are to follow during working hours; the Code of Conduct will be provided together with the contract and will be further explained during induction training;</p> <p>Training on community relations will be provided to workers during induction and regularly throughout their employment; workers will be informed on the code of conduct to keep according to local customs and on approach to be used when interacting with local communities and individuals</p>			TO BE DETAILED	TO BE DETAILED	TO BE DETAILED	TO BE DETAILED	TANAP	Decommissioning Procedures		Chapter 8 Chapter 11
279	All	Entire Project	Archaeological Areas	In the pre-construction stage and during construction activities, the issues specified in the decisions taken by the Regional Boards for Preservation of Cultural and Natural Assets shall be complied with. Before the start of construction activities, the necessary applications shall be made and the necessary permits	Follow the requirements of Cultural Heritage Management Plan	1- General Directorate of Cultural Assets and Museums	1- - A total of 161 archaeological/immovable cultural heritage sites within the scope of the Law No. 2863 have been identified within the project areas and environs and in some of these areas identified by the concerned Conservation District Board of Directorates, current	TANAP/CC/EPC	Salvage excavations where required Liaison with Museum Directorates	Contin.	As Required	TANAP	Cultural Heritage Management Plan		Chapter 8 Chapter 11

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				shall be taken, in accordance with the opinions of the Regional Boards for Preservation of Cultural and Natural Assets. In the pre-construction stage and during construction activities, works and procedures shall be carried out in accordance with the opinions and decisions of the Regional Boards for Preservation of Cultural and Natural Assets. During the excavation works to be performed in areas where cultural and natural entities exist on the Project route, according to the Law numbered 2863 on Cultural and Natural Entities Protection, in order not to damage the mobile and immobile, registered and unregistered, cultural and natural entities, in case of finding a cultural or natural entities, the activities will be paused and relevant authorities will be informed according to the Article 4 titled as “Declaration Obligation”. Activities related with the cultural entities which may be found on the Project route within the Project, will be performed within the frame of the protocol signed with General Directorate of Cultural Entities and Museums. The excavation works to be conducted in the areas where cultural and natural entities were found on the route, will be carried out together with the archaeologists. In case any fossil residual, underground cave etc. and any natural asset is found on the Project route, relevant Natural Assets Protection Branch will be informed. In the parts where archaeological sites are closer to the pipeline route than 200 m, explosion won’t be conducted. Furthermore, the principles indicated in the Cultural Heritage Management Plan to be prepared within the Project will be complied.		2- General Directorate of Highways ISTANBUL 1. Regional Directorate of General Directorate of Highways	<p>registration studies are continuing. In this context, within the scope of the project, the issues specified in the decisions taken by the Regional Preservation Boards shall be complied with, activities shall be carried out in accordance with the decisions and opinions of the concerned Regional Preservation Boards and in case a culture asset is found during the activities in the project area, activities shall be ceased as per Article 4 of the Law No.2863, informing the closest Museum Directorate or the local authorities.</p> <p>- Concerning the Dardanelles crossing of the project, the issues specified in the communication of the General Directorate of Cultural Assets and Museums, dated 12.06.2014, No. 115152 shall be complied with (See App. 4.3).</p> <p>2- In order not to damage the registered or un-registered cultural entities requiring protection, and in case of coming across any cultural entity, related authorities will be informed according to the 4. Article titled as “Notification Obligation” of law numbered 2863.</p>								

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280	1	Offshore	Sediment		Considering the high level of Mercury in 6 investigated stations located within the Project corridor, a detailed sediment characterization in the identified critical areas would be carried. If the characterization confirms the high presence of Mercury in the area, in order to avoid the risk of correlate this pollution with the future presence of the pipeline, this issue should be notified to local authority.	Ministry of Environment and Urbanization/ General Directorate of Environmental Management	<p>Before the pipeline construction phase, sampling will be conducted at 18 points described below. The samples will be gathered from sediment (particle size analysis, lithological information) and bottom layer (RWPC-Table 4). Minimum subjects to be considered as the locations of sampling stations are being determined:</p> <ul style="list-style-type: none"> One from each point that the lines 0.5 sea miles, 1 sea mile and 3 sea miles away from terrain towards the sea in parallel with the coast cross the natural gas pipeline on both of the shores (Europe and Asia) (total of 6 points). Once in every 0.5 sea miles away from each point described above in the direction of dominant flow and in the opposite direction of dominant flow (total of 12 points). All the sampling stations will be coded and their coordinates will be recorded. In order to determine the impacts of the activities conducted, monitoring will be conducted via monitoring frequencies and monitoring stations indicated by Ministry during and after construction. 	EPC/ TANAP	Monitoring of mercury concentration in the sediment	Pre-Construction	Sediment Quality Assessment Report (WRP-REP-ENV-DAR-006) and Surface Sediment Metal Level Investigation Report (WRP-REP-PPL-DAR-021)	TANAP	Pollution Prevention Plan		
281	1	Offshore	Offshore habitat		Construction activities with high underwater noise levels will be avoided when cetaceans are detected in the vicinity of the construction site.			EPC/ TANAP	Construction Plan	Contin.	Monthly Reports	TANAP	Construction Impacts Management Plan ,Pollution Prevention Plan		
282	1	Offshore	Seawater	Dredging won't be conducted during the offshore construction works within the Project. However, in case dredging becomes necessary after detailed studies, representative dredging samples shall be taken and analyzed by laboratories with Proficiency/Pre-Proficiency Licenses:	Preparation of hydrotest water disposal procedure if the hydrotest water is to be discharged to the sea	Ministry of Environment and Urbanization/ General Directorate of Environmental Management	Coastal Facility is defined as “the facility that performs activities that may cause pollution of sea by petroleum and other hazardous substances in regions on shore or close to shore, including open sea facilities and pipelines” in Law on Emergency Response and Compensation of Losses in Pollution of Marine Environment by Petroleum and Other Hazardous Substances numbered 5312	EPC/ TANAP	Preparation of hydrotest water discharge plan and getting the permits, Sampling and analysis according to the plan	N/A	N/A	TANAP	PPP, Construction Impacts Management Plan, Permit Documents		Chapter 8 Chapter 11

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283	1	Offshore	Seawater	<ul style="list-style-type: none"> According to the criteria specified in App.-3B of the Regulation on the General Principles of Waste Management, enforced upon publication in the Official Gazette dated 05.07.2008 and No. 26927. 	The pipe laying activities should be conducted adopting all the possible technical measures to avoid the suspension and dispersion of sediments		and its Application Regulation. Within this frame, both during the construction to be conducted in sea and after the pipeline is taken into operation, risk evaluation and emergency action plan should be prepared taking marine traffic into consideration. Within this concept, the institutions/organizations authorized by Ministry will be made to prepare risk evaluation and emergency action plan and after the ministry approval is received, construction activities will be initiated and the facility will be taken into operation.	EPC/ TANAP	Construction Planning Turbidity Monitoring	Contin.	Monthly Reports	TANAP	Construction Impacts Management Plan		
284	1	Offshore	Seawater	<ul style="list-style-type: none"> In case the representative dredging samples are found to be hazardous according to the analysis in App.-3B of the Regulation on the General Principles of Waste Management, these shall be recovered/disposed of in accordance with the provisions of the Regulation on Control of Hazardous Wastes. For the procedures to be followed in case the dredging representative samples are found to be non-hazardous in the analysis given in Annex-3B of the Regulation on the General Principles of Waste Management, the provisions of the Notification on Recovery of Some Non-Hazardous Wastes, enforced by publication in the Official Gazette dated 17.06.2011, No. 27967 shall be applied. 	Dumping of sediment is not scheduled in the Project, in case it is necessary further analysis on sediment will be carried out according to the Regulation on Control of Hazardous Wastes Annex-11.A and specific studies for the identification of the dumping areas will be conducted.			EPC/ TANAP	Monitoring programme will be implemented for the analysis of the sediments in case of dumping into the sea	Pre-construction Contin.	Sediment Quality Assessment Report (WRP-REP-ENV-DAR-006) and Surface Sediment Metal Level Investigation Report (WRP-REP-PPL-DAR-021)	TANAP	Pollution Prevention Plan		
285	1	Offshore	Seawater	<ul style="list-style-type: none"> In case regular storage is planned as the disposal method, analysis shall be made in accordance with the criteria specified in Annex-2 of the Regulation on Landfill of Wastes, enforced by publication in the Official Gazette dated 26.03.2010, No. 27533 and shall be disposed of according the result of such analysis. 	No pollutant liquid without treatment or solid substances will be disposed of into the sea			EPC/ TANAP	Site Inspection	Contin.	Site Inspection Report	TANAP	Pollution Prevention Plan		
286	1	Offshore	Seawater		Necessary precautions for the construction wastes not to drop into the sea will be taken			EPC/ TANAP	Site Inspection	Contin.	Site Inspection Report	TANAP	Pollution Prevention Plan		
287	1	Offshore	Seawater	<p>During the activities to be performed in sea, any solid and liquid waste won't be spilled into the sea. During the construction works, necessary pre-cautions for the construction wastes not to drop into the sea will be taken.</p> <p>The wastes of marine vessels to be used during the construction to be constructed in sea, will be delivered to licensed waste receiving facilities/waste receiving vessels via agreement</p>	With reference to the hydrostatic testing environmental friendly, non-toxic and biodegradable chemicals should be used. In addition once completed the test the wastewater will not be discharged in the sea without prior treatment			EPC/ TANAP	Site Inspection Hydrotest Procedure	Contin.	Site Inspection Report, Analysis Reports	TANAP	Hydrotesting Plan, Pollution Prevention Plan		

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				and with the permit of related Provincial Directorate of Environment and Urbanization according to Regulation on Waste Collection from the Ships and Control of Wastes (published in the Official Gazette dated 26.12.2004 and numbered 25862, which is amended by the Regulation published in the Official Gazette dated 18.03.2010 and numbered 27525).											
288	1	Offshore-Coastal	Sea grass		, Detail assessment should be done to identify the presence and distribution of sea grass in the Local Study Area. Detailed information should allow to optimize the final route of the pipeline in order to avoid as much as possible the destruction of sea grasses, most of which are a remarkable habitat and in order to minimize the unavoidable impacts of suspended sediment in the LSA.			EPC/ TANAP	Survey	Pre-construction	Benthic Habitat Assessment Report (WRP-REP-PPL-DAR-022)	TANAP	Construction Impacts Management Plan	Monitoring Plan approved by Ministry of Env. & Urb. (TNP-REP-ENV-GEN-006)	Chapter 8 Chapter 11
289	1	Offshore-Coastal	Sea grass		According to the results of the sea grass distribution map, if necessary, a modelling of the sediment dispersion during the pipe laying should be elaborated.			EPC/ TANAP	Modelling of the sediment dispersion	Pre-construction	Sediment Plume Modeling Report (WRP-REP-ENV-DAR-001)	TANAP	Construction Impacts Management Plan		Chapter 8 Chapter 11
290	1	Offshore	Marine Traffic	Risk Evaluation and Emergency Action Plan will be prepared by institutions/organizations authorized by the Ministry taking into consideration the marine traffic of the region as well in order to be applied during the land preparation-construction, operation and decommissioning phases of the Project within the scope of the Law numbered 5312 on Response in Emergency Situations due to the Sea Environment being Polluted by Petroleum and Other Hazardous Substances and Compensation of the Damages and its Application Regulation and after the approval	During the construction, standard schedules concerning the maritime traffic will be obtained and the construction of the sea crossing will accordingly be planned, managed and monitored;			EPC/ TANAP	Liaison with Authorities	Contin.	Liaison Records	TANAP	Construction Impacts Management Plan		Chapter 8 Chapter 11
291	1	Offshore	Marine Traffic		To avoid the interruption of random traffic and the consequences in terms of occupational health and safety, a constant contact should be established with the Istanbul and Çanakkale Port and Sea Traffic Authorities; the			TANAP/ EPC	Liaison with Authorities	Contin.	Liaison Records	TANAP	Construction Impacts Management Plan		Chapter 8 Chapter 11

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292	1	Offshore	Fishing and tourism activities	Ministry of Culture and Tourism will be informed before the construction activities are initiated in Balıkesir Manyas Kızık Thermal Tourism Center and Bursa Mustafakemalpaşa Tümbüldek Thermal Tourism Center crossings of the NGP.	Local authorities and local communities will be informed and consulted on impacts on fishing and tourism activities due to project activities and planned mitigation measures during the pre-construction meetings and Stakeholder Engagement Activities; agreed solutions will be found and compensation measures will be eventually identified.	1- Ministry of Culture and Tourism / General Directorate of Investments and Enterprises	<p>1-</p> <p>- Route crossing on Eskişehir Kızılınler Thermal Tourism Center was revised so that it won't affect the thermal tourism center negatively and the positive opinion received from the General Directorate of Investments and Enterprises is given in App-4.3.</p> <p>- Since as a result of the revisions made the route doesn't currently pass through the borders of Kars Sarıkamış Winter Sports Tourism Center, positive decision received from the General Directorate of Investments and Enterprises for that part of the route is given in App-4.3.</p> <p>- For the part of the route revised in the manner that will pass from the northern end of the area registered as Tourism Facility Area in “Balıkesir Manyas Kızık Thermal Tourism Center Environmental Master Plan”, the positive decision given by the General Directorate of Investments and Enterprises is attached in App-4.3 and when the construction activities are initiated, Ministry of Culture and Tourism will be informed.</p> <p>- The fact that a revision cannot be conducted at Bursa Mustafakemalpaşa Tümbüldek Thermal Tourism Center crossing of the route was informed to the General Directorate of Investments and Enterprises via a justification letter. Route corridor in the subject area in Bursa Mustafakemalpaşa Tümbüldek Thermal Tourism Center which is registered with plan decision as “Tourism Facility Area and Golfing Area” was decided to be appropriate by General Directorate of Investments and Enterprises as per the opinion given in App. 4.3 and when the construction activities are initiated, Ministry of Culture and Tourism will be informed.</p> <p>- Concerning the aforementioned Eskişehir Kızılınler Thermal Tourism Center, Bursa Mustafakemalpaşa</p>	TANAP/CC/EPC	Liaison with Authorities	Contin.	Liaison Records	TANAP	Construction Impacts Management Plan	Chapter 8 Chapter 11 App.-4.3
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				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
						<p>1- Secretary General of KÜTAHYA Special Provincial Administration</p> <p>2- KÜTAHYA Provincial Directorate of Environment and Urbanization</p> <p>3- ERZURUM Provincial Directorate of Food, Agriculture and Livestock</p> <p>4- ARDAHAN Provincial Directorate of Food, Agriculture and Livestock</p> <p>5- ESKİŞEHİR Provincial Directorate of Food, Agriculture and Livestock</p>	<p>1- - The trout farms located in the Domaniç province, in the Aksu and Büklerler villages and registered on the 1/5.000 master plan will not be damaged.</p> <p>2- - The fish farms that use water from rivers won't be damaged.</p> <p>3- - Fishery products production areas of the pipeline route within the provincial borders (rivers, creeks, streams, etc.) shall be protected as per Fisheries Law No. 1380 and the Fisheries Regulation, precautions to protect the life, reproduction, maintenance and production of the existing fisheries in these waters from loss shall be taken.</p> <p>4- - For places within the scope of the Fishery Products Law, No. 1380, the necessary permits shall be obtained as per Article 7 of this Law.</p> <p>5- - During the Project activities, all kinds of precautions for not damaging reproduction and production of fishery products within the scope of Article 9 of the Fisheries Law shall be taken (not changing, filling, drying, nor partially or fully deforming the beds of fishery production and reproduction places on the route lines, not disposing stones, soil, debris thereon, etc., not carrying out actions that may adversely affect reproduction and production), concerning the waste waters that will be</p>								

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						6- KÜTAHYA Provincial Directorate of Food, Agriculture and Livestock 									

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				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
							with such wetlands shall be complied with.								
293	0	Offshore Anatolian Landfall	Seawater	-	-	Ministry of Environment & Urbanization	Implementation of Monitoring Plan approved by Ministry of Environment & Urbanization and submission of assessment report at the end of the monitoring studies	EPC	Sampling and analysis of parameters given in Table 6 of Monitoring Plan approved by Ministry of Env. & Urb. (TNP-REP-ENV-GEN-006) and submission of satellite imagery of the area to Ministry of Env. & Urb. in 1 month before the start of construction activities	Once before the start of construction activities	Offshore Monitoring Report	TANAP	Construction Impacts Management Plan	Monitoring Plan approved by Ministry of Env. & Urb. (TNP-REP-ENV-GEN-006)	Chapter 8 Chapter 11
294	0	Offshore European Landfall	Seawater	-	-	Ministry of Environment & Urbanization	Implementation of Monitoring Plan approved by Ministry of Environment & Urbanization and submission of assessment report at the end of the monitoring studies	EPC	Sampling and analysis of parameters given in Table 7 of Monitoring Plan approved by Ministry of Env. & Urb. (TNP-REP-ENV-GEN-006) and submission of satellite imagery of the area to Ministry of Env. & Urb. in 1 month before the start of construction activities	Once before the start of construction activities	Offshore Monitoring Report	TANAP	Construction Impacts Management Plan	Monitoring Plan approved by Ministry of Env. & Urb. (TNP-REP-ENV-GEN-006)	Chapter 8 Chapter 11
295	1	Offshore	Seawater	-	-	Ministry of Environment & Urbanization	Implementation of Monitoring Plan approved by Ministry of Environment & Urbanization and submission of	EPC	Sampling and analysis of parameters given in Table	During the implementation of trenching	Offshore Monitoring Report	TANAP	Construction Impacts	Monitoring Plan approved by Ministry of Env. & Urb.	Chapter 8 Chapter 11

RefNo	Ph.	Specific Location (and KP)	Environmental Component ²	Project Commitment					Monitoring				Mang. Plan	Addition. Docum.	ESIA Chapter
				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
		Anatolian Landfall					assessment report at the end of the monitoring studies		8 of Monitoring Plan approved by Ministry of Env. & Urb. (TNP-REP-ENV-GEN-006) and submission of analysis results to Ministry of Env. & Urb. Between 5th and 8th days after activty is started, Samples will be taken and if the activity lasts longer than 15 days, new sampling and analysis studies will be done for each parameter. If the activity lasts longer than 3 months, new satellite imagery will be submitted for every three months.	and backfilling			Managemen t Plan	(TNP-REP-ENV-GEN-006)	
296	1	Offshore European Landfall	Seawater	-	-	Ministry of Environment & Urbanization	Implementation of Monitoring Plan approved by Ministry of Environment & Urbanization and submission of assessment report at the end of the monitoring studies	EPC	Sampling and analysis of parameters given in Table 9 of Monitoring Plan approved by Ministry of Env. & Urb. (TNP-REP-ENV-GEN-006) and submission of analysis results to Ministry of Env. & Urb. Between 5th and 8th days	During the implementa tion of trenching and backfilling	Offshore Monitorin g Report	TANAP	Constructio n Impacts Managemen t Plan	Monitoring Plan approved by Ministry of Env. & Urb. (TNP-REP-ENV-GEN-006)	Chapter 8 Chapter 11

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				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
									after activity is started, Samples will be taken and if the activity lasts longer than 15 days, new sampling and analysis studies will be done for each parameter. If the activity lasts longer than 3 months, new satellite imagery will be submitted for every three months.						
297	2	Offshore Anatolian Landfall	Seawater	-	-	Ministry of Environment & Urbanization	Implementation of Monitoring Plan approved by Ministry of Environment & Urbanization and submission of assessment report at the end of the monitoring studies	EPC	Sampling and analysis of parameters given in Table 10 of Monitoring Plan approved by Ministry of Env. & Urb. (TNP-REP-ENV-GEN-006) and submission of satellite imagery of the area to Ministry of Env. & Urb. in 1 year after the end of construction activities	Once after the start of construction activities	Offshore Monitoring Report	TANAP	Construction Impacts Management Plan	Monitoring Plan approved by Ministry of Env. & Urb. (TNP-REP-ENV-GEN-006)	Chapter 8 Chapter 11
298	2	Offshore European Landfall	Seawater	-	-	Ministry of Environment & Urbanization	Implementation of Monitoring Plan approved by Ministry of Environment & Urbanization and submission of assessment report at the end of the monitoring studies	EPC	Sampling and analysis of parameters given in Table 10 of Monitoring Plan approved by Ministry of Env. & Urb. (TNP-REP-ENV-GEN-006)	Once after the end of construction activities	Offshore Monitoring Report	TANAP	Construction Impacts Management Plan	Monitoring Plan approved by Ministry of Env. & Urb. (TNP-REP-ENV-GEN-006)	Chapter 8 Chapter 11

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				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
									and submission of satellite imagery of the area to Ministry of Env. & Urb. in 1 year ater the end of construction activities						
299	2	Offshore Anatolian Landfall	Fauna	=	-	Ministry of Environment & Urbanization	Implementation of Monitoring Plan approved by Ministry of Environment & Urbanization and submission of assessment report at the end of the monitoring studies	EPC	Submission of visual imagery of the area representing the ecosystem obtained by ROV or diver to Ministry of Env. & Urb. in 1 year ater the end of construction activities	Once between 2 nd and 4 th week after the end of constructio n activities	Offshore Monitorin g Report	TANAP	Constructio n Impacts Managemen t Plan	Monitoring Plan approved by Ministry of Env. & Urb. (TNP-REP-ENV-GEN-006)	Chapter 8 Chapter 11
300	2	Offshore European Landfall	Fauna	=	-	Ministry of Environment & Urbanization	Implementation of Monitoring Plan approved by Ministry of Environment & Urbanization and submission of assessment report at the end of the monitoring studies	EPC	Submission of visual imagery of the area representing the ecosystem obtained by ROV or diver to Ministry of Env. & Urb. in 1 year ater the end of construction activities	Once between 2 nd and 4 th week after the end of constructio n activities	Offshore Monitorin g Report	TANAP	Constructio n Impacts Managemen t Plan	Monitoring Plan approved by Ministry of Env. & Urb. (TNP-REP-ENV-GEN-006)	Chapter 8 Chapter 11
301	2	Offshore Anatolian Landfall	Flora	=	-	Ministry of Environment & Urbanization	Implementation of Monitoring Plan approved by Ministry of Environment & Urbanization and submission of assessment report at the end of the monitoring studies	EPC	Submission of visual imagery of the area representing the ecosystem obtained by ROV or diver to Ministry of Env. & Urb. in 1 year ater the end of construction activities	Once between 2 nd and 4 th week after the end of constructio n activities	Offshore Monitorin g Report	TANAP	Constructio n Impacts Managemen t Plan	Monitoring Plan approved by Ministry of Env. & Urb. (TNP-REP-ENV-GEN-006)	Chapter 8 Chapter 11

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				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
302	2	Offshore European Landfall	Flora	-	-	Ministry of Environment & Urbanization	Implementation of Monitoring Plan approved by Ministry of Environment & Urbanization and submission of assessment report at the end of the monitoring studies	EPC	Submission of visual imagery of the area representing the ecosystem obtained by ROV or diver to Ministry of Env. & Urb. in 1 year ater the end of construction activities	Once between 2 nd and 4 th week after the end of construction activities	Offshore Monitorin g Report	TANAP	Constructio n Impacts Managemen t Plan	Monitoring Plan approved by Ministry of Env. & Urb. (TNP-REP-ENV-GEN-006)	Chapter 8 Chapter 11
303	1-2	003+186-003+921 Critical Habitat (CH1)	Flora <i>Reseda armena var. armena</i>	-	Closed Construction Period: 1 June-1 July Pre-Construction * The seeds of <i>Reseda armena var. armena</i> shall be collected near the ROW between 15 July-30 August. * The top soil shall be scraped at a depth of 10-15 cm minimum and shall be stored in the ROW. * The seeds of the non-endemic native plants of the region shall be collected. Post-Construction * The collected seeds of <i>Reseda armena var. armena</i> species shall be planted according to the methodology and to the (38 T 318801.90-4603885.95/ 38 T 318738.00-4603635.00/38 T 318773.00-4603531.00/38 T 318649.00-4603478.00) coordinates between September-November. * The seeds of non-endemic native plants shall be planted on the ROW for erosion control in dip slopes.	-	-	CC	Methodology Please refer Chapter 5.1.8 of Biorestoration Monitoring Plan Achivement Criteria The data obtained by comparison of the species' population ratio (%) with its situation in natural habitat (observation of healthy population development) Frequency Once in each germination , flowering and mature seed periods, three times per year	Period 1. Germinatio n (First March-May period after seeding) 2. Flowering (In June-August) 3. Seed maturation (In July-September) Frequency Once in each germination , flowering and mature seed periods, three times per year	Interim First-Findings in Monthly Report & Annual Biorestora tion Monitorin g Report	TANAP	Biorestorati on Monitoring Plan	BAP; Specification for Reinstatement	-

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				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
304	1-2	003+186-003+921 Critical Habitat (CH1)	Species Diversity	-	Pre-Construction * The top soil shall be scraped at a depth of 10-15 cm minimum and shall be stored in the ROW. * To control erosion at sloping areas, seeds of the non-endemic natural plants of the region should be collected. Post-Construction * To control erosion at sloping areas, seeds of the non-endemic natural plants of the region should be planted on the ROW.	-	-	CC	Methodology Please refer Chapter 5.1.6 of Biorestoretion Monitoring Plan Achievement Criteria The species diversity of the area has recovered by 20% in the first year following the spread of the top soil	Period June-July Frequency Biennially	Interim First-Findings in Monthly Report & Annual Biorestoretion Monitorin g Report	TANAP	Biorestorati on Monitoring Plan	BAP; Specification for Reinstatement	-
305	1-2	003+186-003+921 Critical Habitat (CH1)	Vegetation Cover	-	Pre-Construction * The top soil shall be scraped at a depth of 10-15 cm minimum and shall be stored in the ROW. * To control erosion at sloping areas, seeds of the non-endemic natural plants of the region should be collected. Post-Construction * To control erosion at sloping areas, seeds of the non-endemic natural plants of the region should be planted on the ROW.	-	-	CC	Methodology Please refer Chapter 5.1.5 of Biorestoretion Monitoring Plan Achievement Criteria The vegetative cover of the area has recovered by 20% in the first year following the spread of the top soil	Period June-July Frequency Annually	Interim First-Findings in Monthly Report & Annual Biorestoretion Monitorin g Report	TANAP	Biorestorati on Monitoring Plan	BAP; Specification for Reinstatement	-
306	1-2	004+126-004+237 Critical Habitat	Flora <i>Reseda armena var. armen</i>	-	Closed Construction Period: 1 June-1 July Pre-Construction * The seeds of <i>Reseda armena var. armena</i> shall	-	-	CC	Methodology Please refer Chapter 5.1.8 of Biorestoretion	Period Germinatio n (First March-May	Interim First-Findings in Monthly Report & Annual	TANAP	Biorestorati on Monitoring Plan	BAP; Specification for Reinstatement	-

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				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
		(CH2)			<p>be collected near the ROW between 15 July-30 August.</p> <p>* The top soil shall be scraped at a depth of 10-15 cm minimum and shall be stored in the ROW.</p> <p>* The seeds of the non-endemic native plants of the region shall be collected.</p> <p>Post-Construction</p> <p>* The collected seeds of <i>Reseda armena</i> var. <i>armena</i> species shall be planted according to the methodology and to the (38 T 318421.00-4603425.00 / 38 T 318351.00-4603438.00) coordinates between September-November.</p> <p>* The seeds of non-endemic native plants shall be planted on the ROW for erosion control in dip slopes.</p>				<p>Monitoring Plan</p> <p>Achievement Criteria</p> <p>The data obtained by comparison of the species' population ratio (%) with its situation in natural habitat (observation of healthy population development)</p>	<p>period after seeding)</p> <p>2. Flowering (In June-August)</p> <p>3. Seed maturation (In July-September)</p> <p>Frequency</p> <p>Once in each germination , flowering and mature seed periods, three times per year</p>	<p>Biorestoration Monitoring Report</p>				
307	1-2	004+126-004+237 Critical Habitat (CH2)	Species Diversity	-	<p>Pre-Construction</p> <p>* The top soil shall be scraped at a depth of 10-15 cm minimum and shall be stored in the ROW.</p> <p>* To control erosion at sloping areas, seeds of the non-endemic natural plants of the region should be collected.</p> <p>Post-Construction</p> <p>* To control erosion at sloping areas, seeds of the non-endemic natural plants of the region should be planted on the ROW.</p>	-	-	CC	<p>Methodology</p> <p>Please refer Chapter 5.1.6 of Biorestation Monitoring Plan</p> <p>Achievement Criteria</p> <p>The species diversity of the area has recovered by 20% in the first year following the</p>	<p>Period</p> <p>June-July</p> <p>Frequency</p> <p>Biennially</p>	<p>Interim First-Findings in Monthly Report & Annual Biorestation Monitoring Report</p>	TANAP	Biorestation Monitoring Plan	BAP; Specification for Reinstatement	-

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				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
									spread of the top soil						
308	1-2	004+126-004+237 Critical Habitat (CH2)	Vegetation Cover	-	Pre-Construction * The top soil shall be scraped at a depth of 10-15 cm minimum and shall be stored in the ROW. * To control erosion at sloping areas, seeds of the non-endemic natural plants of the region should be collected. Post-Construction * To control erosion at sloping areas, seeds of the non-endemic natural plants of the region should be planted on the ROW.	-	-	CC	Methodology Please refer Chapter 5.1.5 of Biorestation Monitoring Plan Achievement Criteria The vegetative cover of the area has recovered by 20% in the first year following the spread of the top soil	Period June-July Frequency Annually	Interim First-Findings in Monthly Report & Annual Biorestation Monitoring Report	TANAP	Biorestation Monitoring Plan	BAP; Specification for Reinstatement	-
309	1-2	20+977-23+277 Critical Habitat (CH3)	Flora <i>Centaurea macrocephala</i>	-	Closed Construction Period: 1 June-1 July Pre-Construction * The seeds of <i>Centaurea macrocephala</i> species shall be collected near the ROW between 15 July-30 August. * The top soil shall be scraped at a depth of 10-15 cm minimum and shall be stored in the ROW. Post-Construction * The habitat shall be rehabilitated. * The collected seeds of <i>Centaurea macrocephala</i> species shall be planted according to the methodology and to the (38 T 315863.00-	-	-	CC	Methodology Please refer Chapter 5.1.8 of Biorestation Monitoring Plan Achievement Criteria The data obtained by comparison of the species' population ratio (%) with its situation in natural habitat (observation of healthy	Period 1. Germination (First March-May period after seeding) 2. Flowering (In June-August) 3. Seed maturation (In August - September) Frequency Once in each germination , flowering and mature	Interim First-Findings in Monthly Report & Annual Biorestation Monitoring Report	TANAP	Biorestation Monitoring Plan	BAP; Specification for Reinstatement	-

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				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
					4592192.00 / 38 T315851.00-4592099.00 / 38 T 315844.00-4591982.00) coordinates between September-November.				population development)	seed periods, three times per year					
310	1-2	20+977-23+277 Critical Habitat (CH3)	Flora <i>Lilium kesselringianum</i>	-	<p>Closed Construction Period: 1 June-1 July</p> <p>Pre-Construction</p> <p>* The bulbs of <i>Lilium kesselringianum</i> shall be collected before or during the top soil scraping and shall be stored near the ROW.</p> <p>* The top soil shall be scraped at a depth of 10-15 cm minimum and shall be stored in the ROW.</p> <p>Post-Construction</p> <p>* The habitat shall be rehabilitated.</p> <p>*The bulbs of <i>Lilium kesselringianum</i> shall be planted to the ROW according to the methodology to the ROW, after the construction.</p>	-	-	CC	<p>Methodology</p> <p>Please refer Chapter 5.1.8 of Biorestation Monitoring Plan</p> <p>Achievement Criteria</p> <p>The data obtained by comparison of the species' population ratio (%) with its situation in natural habitat (observation of healthy population development)</p>	<p>Period</p> <p>1. Germination (First May - June period after seeding)</p> <p>2. Flowering (In June-July)</p> <p>3. Bulb maturation (In July-August)</p> <p>Frequency</p> <p>Once in each germination , flowering and mature seed periods, three times per year</p>	Interim First-Findings in Monthly Report & Annual Biorestation Monitoring Report	TANAP	Biorestation Monitoring Plan	BAP; Specification for Reinstatement	-
311	1-2	20+977-23+277 Critical Habitat (CH3)	Species Diversity	-	<p>Pre-Construction</p> <p>* The top soil shall be scraped at a depth of 10-15 cm minimum and shall be stored in the ROW.</p> <p>* To control erosion at sloping areas, seeds of the non-endemic natural plants of the region should be collected.</p>	-	-	CC	<p>Methodology</p> <p>Please refer Chapter 5.1.6 of Biorestation Monitoring Plan</p> <p>Achievement Criteria</p>	<p>Period</p> <p>June-July</p> <p>Frequency</p> <p>Biennially</p>	Interim First-Findings in Monthly Report & Annual Biorestation Monitoring Report	TANAP	Biorestation Monitoring Plan	BAP; Specification for Reinstatement	-

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				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
					Post-Construction * To control erosion at sloping areas, seeds of the non-endemic natural plants of the region should be planted on the ROW.				The species diversity of the area has recovered by 30% in the first year following the spread of the top soil						
312	1-2	20+977-23+277 Critical Habitat (CH3)	Vegetation Cover	-	Pre-Construction * The top soil shall be scraped at a depth of 10-15 cm minimum and shall be stored in the ROW. * To control erosion at sloping areas, seeds of the non-endemic natural plants of the region should be collected. Post-Construction * To control erosion at sloping areas, seeds of the non-endemic natural plants of the region should be planted on the ROW.	-	-	CC	Methodology Please refer Chapter 5.1.5 of Biorestoration Monitoring Plan Achievement Criteria The vegetative cover of the area has recovered by 40% in the first year following the spread of the top soil	Period June-July Frequency Annually	Interim First-Findings in Monthly Report & Annual Biorestoration Monitoring Report	TANAP	Biorestorati on Monitoring Plan	BAP; Specification for Reinstatement	-
313	1-2	63+303-64+123 Critical Habitat (CH5)	Flora <i>Lathyrus karsianus</i>	-	Closed Construction Period: 1 June-15 July Pre-Construction * The top soil shall be scraped at a depth of 10-15 cm with the plants on it as tufts (including <i>Sanguisorba sp.</i>), and shall be stored near the ROW, and shall be irrigated once every two weeks. * The seeds of <i>Lathyrus karsianus</i> species shall be collected near the ROW between 1 July-1 August. Post-Construction	-	-	CC	Methodology Please refer Chapter 5.1.8 Achievement Criteria The data obtained by comparison of the species' population ratio (%) with its situation in natural habitat (observation of healthy	Period 1. Germination (First May - June period after seeding) 2. Flowering (In June-July) 3. Seed maturation (In July-August)	Interim First-Findings in Monthly Report & Annual Biorestoration Monitoring Report	TANAP	Biorestorati on Monitoring Plan	BAP; Specification for Reinstatement	-

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				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
					* The collected seeds of <i>Lathyrus karsianus</i> species shall be planted according to the methodology and to the (38 T 314559.00-4563256.00 / 38 T 314462.00-4563212.00 / 38 T 314357.00-4563161.00) coordinates between September-November.				population development)	Frequency Once in each germination , flowering and mature seed periods, three times per year					
314	1-2	63+303-64+123 Critical Habitat (CH5)	Flora <i>Tanacetum coccineum</i> ssp. <i>chamaemelifolium</i>	-	Closed Construction Period: 1 June-15 July Pre-Construction * The top soil shall be scraped at a depth of 10-15 cm with the plants on it as tufts (including <i>Sanguisorba</i> sp.), and shall be stored near the ROW, and shall be irrigated once every two weeks. * The seeds of <i>Tanacetum coccineum</i> ssp. <i>chamaemelifolium</i> species shall be collected near the ROW between 15 July-15 August. Post-Construction * The collected seeds of <i>Tanacetum coccineum</i> ssp. <i>chamaemelifolium</i> species shall be planted according to the methodology and to the (38 T 314559.00-4563256.00 / 38 T 314462.00-4563212.00 / 38 T 314357.00-4563161.00) coordinates between September-November.	-	-	CC	Methodology Please refer Chapter 5.1.8 of Biorestation Monitoring Plan Achievement Criteria The data obtained by comparison of the species' population ratio (%) with its situation in natural habitat (observation of healthy population development)	Period 1. Germination (First May - June period after seeding) 2. Flowering (In June-August) 3. Seed maturation (In July-September) Frequency Once in each germination , flowering and mature seed periods, three times per year	Interim First-Findings in Monthly Report & Annual Biorestation Monitoring Report	TANAP	Biorestation Monitoring Plan	BAP; Specification for Reinstatement	-
315	1-2	63+303-64+123 Critical Habitat (CH5)	Species Diversity	-	Pre-Construction * The top soil shall be scraped at a depth of 10-15 cm minimum and shall be stored in the ROW.	-	-	CC	Methodology Please refer Chapter 5.1.6 of Biorestation	Period June-July Frequency	Interim First-Findings in Monthly Report & Annual	TANAP	Biorestation Monitoring Plan	BAP; Specification for Reinstatement	-

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				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
					<p>* To control erosion at sloping areas, seeds of the non-endemic natural plants of the region should be collected.</p> <p>Post-Construction</p> <p>* To control erosion at sloping areas, seeds of the non-endemic natural plants of the region should be planted on the ROW.</p>				<p>Monitoring Plan</p> <p>Achievement Criteria</p> <p>The species diversity of the area has recovered by 30% in the first year following the spread of the top soil</p>	Biennially	Biorestation Monitoring Report				
316	1-2	63+303-64+123 Critical Habitat (CH5)	Vegetation Cover	-	<p>Pre-Construction</p> <p>* The top soil shall be scraped at a depth of 10-15 cm minimum and shall be stored in the ROW.</p> <p>* To control erosion at sloping areas, seeds of the non-endemic natural plants of the region should be collected.</p> <p>Post-Construction</p> <p>* To control erosion at sloping areas, seeds of the non-endemic natural plants of the region should be planted on the ROW.</p>	-	-	CC	<p>Methodology</p> <p>Please refer Chapter 5.1.5 of Biorestation Monitoring Plan</p> <p>Achievement Criteria</p> <p>The vegetative cover of the area has recovered by 40% in the first year following the spread of the top soil</p>	<p>Period</p> <p>June-July</p> <p>Frequency</p> <p>Annually</p>	Interim First-Findings in Monthly Report & Annual Biorestation Monitoring Report	TANAP	Biorestation Monitoring Plan	BAP; Specification for Reinstatement	-
317	1-2	175+427-177+015 Critical Habitat (CH12)	<p>Flora</p> <p><i>Hieracium sarykamyschense</i></p>	-	<p>Closed Construction Period: 1 June-1 July</p> <p>Pre-Construction</p> <p>* The top soil shall be scraped at a depth of 10-15 cm minimum and shall be stored in the ROW.</p> <p>*The seeds of <i>Hieracium sarykamyschense</i> species shall be collected near the</p>	-	-	CC	<p>Methodology</p> <p>Please refer Chapter 5.1.8 of Biorestation Monitoring Plan</p> <p>Achievement Criteria</p>	<p>Period</p> <p>1. Germination (First May - June period after seeding)</p> <p>2. Flowering (In July)</p>	Interim First-Findings in Monthly Report & Annual Biorestation Monitoring Report	TANAP	Biorestation Monitoring Plan	BAP; Specification for Reinstatement	-

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				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
					<p>ROW between 15 July-15 August.</p> <p>Post-Construction</p> <p>* The collected seeds of <i>Hieracium sarykamyschense</i> species shall be planted according to the methodology and to the (38 T 295146.00-4471939.00 / 38 T 295058.00-4471934.00 / 38 T 294888.00-4471917.00 / 38 T 294809.00-4471910.00 / 38 T 294403.00-4471874.00) coordinates between September-November.</p>				The data obtained by comparison of the species' population ratio (%) with its situation in natural habitat (observation of healthy population development)	3. Seed maturation (In August-September)					
318	1-2	175+427-177+015 Critical Habitat (CH12)	Species Diversity	-	<p>Pre-Construction</p> <p>* The top soil shall be scraped at a depth of 10-15 cm minimum and shall be stored in the ROW.</p> <p>* To control erosion at sloping areas, seeds of the non-endemic natural plants of the region should be collected.</p> <p>Post-Construction</p> <p>* To control erosion at sloping areas, seeds of the non-endemic natural plants of the region should be planted on the ROW.</p>	-	-	CC	<p>Methodology</p> <p>Please refer Chapter 5.1.6 of Biorestation Monitoring Period</p> <p>Achievement</p> <p>The species diversity of the area has recovered by 30% in the first year following the spread of the top soil</p>	<p>Period</p> <p>June-July</p> <p>Frequency</p> <p>Biennially</p>	Interim First-Findings in Monthly Report & Annual Biorestation Monitoring Report	TANAP	Biorestation Monitoring Plan	BAP; Specification for Reinstatement	-
319	1-2	175+427-177+015 Critical Habitat (CH12)	Vegetation Cover	-	<p>Pre-Construction</p> <p>* The top soil shall be scraped at a depth of 10-15 cm minimum and shall be stored in the ROW.</p> <p>* To control erosion at sloping areas, seeds of the non-endemic natural plants of the region should be collected.</p>	-	-	CC	<p>Methodology</p> <p>Please refer Chapter 5.1.5 of Biorestation Monitoring Plan</p>	<p>Period</p> <p>June-July</p> <p>Frequency</p> <p>Annually</p>	Interim First-Findings in Monthly Report & Annual Biorestation Monitoring Report	TANAP	Biorestation Monitoring Plan	BAP; Specification for Reinstatement	-

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				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
					Post-Construction * To control erosion at sloping areas, seeds of the non-endemic natural plants of the region should be planted on the ROW.				Achievement Criteria The vegetative cover of the area has recovered by 40% in the first year following the spread of the top soil						
320	1-2	188+572-194+015 Critical Habitat (CH13)	Flora <i>Lathyrus karsianus</i>	-	Closed Construction Period: 1 June-1 July Pre-Construction * The top soil shall be scraped at a depth of 10-15 cm minimum and shall be stored in the ROW. * The seeds of <i>Lathyrus karsianus</i> species shall be collected near the ROW between 1 July-1 August. Post-Construction * The collected seeds of <i>Lathyrus karsianus</i> species shall be planted according to the methodology and to the (38 T 283458.00-4464029.00 / 38 T 283095.00-4463628.00 / 38 T 282935.00-4463512.00 / 38 T 282714.00-4463366.00 / 38 T 282416.00-4463214.00) coordinates between September-November.	-	-	CC	Methodology Please refer Chapter 5.1.8 of Biorestoration Monitoring Plan Achievement Criteria The data obtained by comparison of the species' population ratio (%) with its situation in natural habitat (observation of healthy population development)	Period 1. Germination (First May - June period after seeding) 2. Flowering (In June - July) 3. Seed maturation (In July - August) Frequency Once in each germination , flowering and mature seed periods, three times per year	Interim First-Findings in Monthly Report & Annual Biorestoration Monitoring Report	TANAP	Biorestoration Monitoring Plan	BAP; Specification for Reinstatement	-
321	1-2	188+572-194+015 Critical Habitat (CH13)	Flora <i>Hieracium sarykamyschense</i>	-	Closed Construction Period: 1 June-1 July Pre-Construction * The top soil shall be scraped at a depth of 10-15 cm minimum and shall	-	-	CC	Methodology Please refer Chapter 5.1.8 of Biorestoration	Period 1. Germination (First May - June	Interim First-Findings in Monthly Report & Annual	TANAP	Biorestoration Monitoring Plan	BAP; Specification for Reinstatement	-

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				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
					<p>be stored in the ROW.</p> <p>* The seeds of <i>Hieracium sarykamyschense</i> species shall be collected near the ROW between 1 July-1 August.</p> <p>Post-Construction</p> <p>* The collected seeds of <i>Hieracium sarykamyschense</i> species shall be planted according to the methodology and to the (38 T 283458.00-4464029.00 / 38 T 283095.00-4463628.00 / 38 T 282935.00-4463512.00 / 38 T 282714.00-4463366.00 / 38 T 282416.00-4463214.00) coordinates between September-November.</p>				<p>Monitoring Plan</p> <p>Achievement Criteria</p> <p>The data obtained by comparison of the species' population ratio (%) with its situation in natural habitat (observation of healthy population development)</p>	<p>period after seeding)</p> <p>2. Flowering (In July)</p> <p>3. Seed maturation (In August - September)</p> <p>Frequency</p> <p>Once in each germination , flowering and mature seed periods, three times per year</p>	<p>Biorestoration Monitorin g Report</p>				
322	1-2	188+572-194+015 Critical Habitat (CH13)	Species Diversity	-	<p>Pre-Construction</p> <p>* The top soil shall be scraped at a depth of 10-15 cm minimum and shall be stored in the ROW.</p> <p>* To control erosion at sloping areas, seeds of the non-endemic natural plants of the region should be collected.</p> <p>Post-Construction</p> <p>* To control erosion at sloping areas, seeds of the non-endemic natural plants of the region should be planted on the ROW.</p>	-	-	CC	<p>Methodology</p> <p>Please refer Chapter 5.1.6 of Biorestoration Monitoring Plan</p> <p>Achievement Criteria</p> <p>The species diversity of the area has recovered by 30% in the first year following the spread of the top soil</p>	<p>Period</p> <p>June-July</p> <p>Frequency</p> <p>Biennially</p>	<p>Interim First-Findings in Monthly Report & Annual Biorestoration Monitorin g Report</p>	TANAP	Biorestorati on Monitoring Plan	BAP; Specification for Reinstatement	-
323	1-2	188+572-194+015	Vegetation Cover	-	<p>Pre-Construction</p> <p>* The top soil shall be scraped at a depth of 10-</p>	-	-	CC	<p>Methodology</p> <p>Please refer Chapter 5.1.5 of</p>	<p>Period</p> <p>June-July</p>	<p>Interim First-Findings in Monthly</p>	TANAP	Biorestorati on Monitoring Plan	BAP; Specification for Reinstatement	-

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				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
		Critical Habitat (CH13)			<p>15 cm minimum and shall be stored in the ROW.</p> <p>* To control erosion at sloping areas, seeds of the non-endemic natural plants of the region should be collected.</p> <p>Post-Construction</p> <p>* To control erosion at sloping areas, seeds of the non-endemic natural plants of the region should be planted on the ROW.</p>				<p>Biorestation Monitoring Plan</p> <p>Achievement Criteria</p> <p>The vegetative cover of the area has recovered by 40% in the first year following the spread of the top soil</p>	<p>Frequency</p> <p>Annually</p>	<p>Report & Annual Biorestation Monitoring Report</p>				
324	1-2	<p>215+900-220+656</p> <p>Critical Habitat (CH15)</p>	<p>Flora</p> <p><i>Salvia huberi</i></p>	-	<p>Closed Construction Period: 1 March-15 July</p> <p>Pre-Construction</p> <p>* The top soil shall be scraped at a depth of 10-15 cm minimum and shall be stored in the ROW. *</p> <p>* The seeds of <i>Salvia huberi</i> species shall be collected from the ROW between 1 July-1 August.</p> <p>Post-Construction</p> <p>* The collected seeds of <i>Salvia huberi</i> species shall be planted according to the methodology and to the (38 T 269181.00-4448569.00 / 38 T 269044.00-4448457.00 / 38 T268916.00-4448352.00 / 38 T 268806.00-4448262.00) coordinates between September-November.</p> <p>* Terracing shall be carried out to prevent erosion.</p>	-	-	CC	<p>Methodology</p> <p>Please refer Chapter 5.1.8 of Biorestation Monitoring</p> <p>Achievement Criteria</p> <p>The data obtained by comparison of the species' population ratio (%) with its situation in natural habitat (observation of healthy population development)</p>	<p>Period</p> <p>1. Germination (First May - June period after seeding)</p> <p>2. Flowering (In May-August)</p> <p>3. Seed maturation (In July-September)</p> <p>Frequency</p> <p>Once in each germination , flowering and mature seed periods, three times per year</p>	<p>Interim First-Findings in Monthly Report & Annual Biorestation Monitoring Report</p>	TANAP	Biorestation Monitoring Plan	BAP; Specification for Reinstatement	-

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				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
325	1-2	215+900-220+656 Critical Habitat (CH15)	Flora <i>Cephalaria sparsipilosa</i>	-	<p>Closed Construction Period: 1 March-15 July</p> <p>Pre-Construction</p> <p>* The top soil shall be scraped at a depth of 10-15 cm minimum and shall be stored in the ROW. * The seeds of <i>Eryngium wanaturi</i> species shall be collected from the ROW between 15 July-15 August.</p> <p>Post-Construction</p> <p>The collected seeds of <i>Eryngium wanaturi</i>, species shall be planted according to the methodology and to the (38 T 269181.00-4448569.00 / 38 T 269044.00-4448457.00 / 38 T268916.00-4448352.00 / 38 T 268806.00-4448262.00) coordinates between September-November. Terracing shall be carried out to prevent erosion.</p>	-	-	CC	<p>Methodology</p> <p>Please refer Chapter 5.1.8 of Biorestation Monitoring</p> <p>Achievement Criteria</p> <p>The data obtained by comparison of the species' population ratio (%) with its situation in natural habitat (observation of healthy population development)</p>	<p>Period</p> <p>1. Germination (First May - June period after seeding)</p> <p>2. Flowering (In July-August)</p> <p>3. Seed maturation (In August-September)</p> <p>Frequency</p> <p>Once in each germination , flowering and mature seed periods, three times per year</p>	Interim First-Findings in Monthly Report & Annual Biorestation Monitoring Report	TANAP	Biorestation Monitoring Plan	BAP; Specification for Reinstatement	-
326	1-2	215+900-220+656 Critical Habitat (CH15)	Flora <i>Eryngium wanaturi</i>	-	<p>Closed Construction Period: 1 March-15 July</p> <p>Pre-Construction</p> <p>* The top soil shall be scraped at a depth of 10-15 cm minimum and shall be stored in the ROW. * The seeds of <i>Cousinia bicolor</i> species shall be collected from the ROW between 15 July-15 August.</p> <p>Post-Construction</p> <p>* The collected seeds of <i>Cousinia bicolor</i>, species shall be planted according to the methodology and to</p>	-	-	CC	<p>Methodology</p> <p>Please refer Chapter 5.1.8 of Biorestation Monitoring</p> <p>Achievement Criteria</p> <p>The data obtained by comparison of the species' population ratio (%) with its situation in natural habitat</p>	<p>Period</p> <p>1. Germination (First May - June period after seeding)</p> <p>2. Flowering (In July-August)</p> <p>3. Seed maturation (In August-September)</p>	Interim First-Findings in Monthly Report & Annual Biorestation Monitoring Report	TANAP	Biorestation Monitoring Plan	BAP; Specification for Reinstatement	-

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				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
					the (38 T 269181.00-4448569.00 / 38 T 269044.00-4448457.00 / 38 T268916.00-4448352.00 / 38 T 268806.00-4448262.00) coordinates between September-November. Terracing shall be carried out to prevent erosion.				(observation of healthy population development)	Frequency Once in each germination , flowering and mature seed periods, three times per year					
327	1-2	215+900-220+656 Critical Habitat (CH15)	Flora <i>Cousinia bicolor</i>		Closed Construction Period: 1 March-15 July Pre-Construction * The top soil shall be scraped at a depth of 10-15 cm minimum and shall be stored in the ROW. * The seeds of <i>Cousinia bicolor</i> species shall be collected from the ROW between 15 July-15 August. Post-Construction * The collected seeds of <i>Cousinia bicolor</i> , species shall be planted according to the methodology and to the (38 T 269181.00-4448569.00 / 38 T 269044.00-4448457.00 / 38 T268916.00-4448352.00 / 38 T 268806.00-4448262.00) coordinates between September-November. Terracing shall be carried out to prevent erosion.	-	-	CC	Methodology Please refer Chapter 5.1.8 of Biorestation Monitoring Achievement Criteria The data obtained by comparison of the species' population ratio (%) with its situation in natural habitat (observation of healthy population development)	Period 1. Germination (First May - June period after seeding) 2. Flowering (In June-August) 3. Seed maturation (In July-September) Frequency Once in each germination , flowering and mature seed periods, three times per year	Interim First-Findings in Monthly Report & Annual Biorestation Monitoring Report	TANAP	Biorestation Monitoring Plan	BAP; Specification for Reinstatement	-
328	1-2	215+900-220+656 Critical Habitat (CH15)	Species Diversity		Pre-Construction * The top soil shall be scraped at a depth of 10-15 cm minimum and shall be stored in the ROW.	-	-	CC	Methodology Please refer Chapter 5.1.6 of Biorestation Monitoring	Period June-July Frequency	Interim First-Findings in Monthly Report & Annual Biorestora	TANAP	Biorestation Monitoring Plan	BAP; Specification for Reinstatement	-

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				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
					<p>* To control erosion at sloping areas, seeds of the non-endemic natural plants of the region should be collected.</p> <p>Post-Construction</p> <p>* To control erosion at sloping areas, seeds of the non-endemic natural plants of the region should be planted on the ROW.</p>				<p>Achievement Criteria</p> <p>The species diversity of the area has recovered by 30% in the first year following the spread of the top soil</p>	Biennially	tion Monitorin g Report				
329	1-2	215+900-220+656 Critical Habitat (CH15)	Vegetation Cover	-	<p>Pre-Construction</p> <p>* The top soil shall be scraped at a depth of 10-15 cm minimum and shall be stored in the ROW.</p> <p>* To control erosion at sloping areas, seeds of the non-endemic natural plants of the region should be collected.</p> <p>Post-Construction</p> <p>* To control erosion at sloping areas, seeds of the non-endemic natural plants of the region should be planted on the ROW.</p>	-	-	CC	<p>Methodology</p> <p>Please refer Chapter 5.1.5 of Biorestation Monitoring</p> <p>Achievement Criteria</p> <p>The vegetative cover of the area has recovered by 25% in the first year following the spread of the top soil</p>	<p>Period</p> <p>June-July</p> <p>Frequency</p> <p>Annually</p>	Interim First-Findings in Monthly Report & Annual Biorestoration Monitorin g Report	TANAP	Biorestorati on Monitoring Plan	BAP; Specification for Reinstatement	-
330	1-2	233+187-233+802 Critical Habitat (CH16)	Flora <i>Cousinia bicolor</i>	-	<p>Pre-Construction</p> <p>* The top soil shall be scraped at a depth of 10-15 cm minimum and shall be stored in the ROW.</p> <p>* The seeds of <i>Cousinia bicolor</i> species shall be collected from the ROW between 15 July-15 August.</p> <p>Post-Construction</p> <p>* The collected seeds of <i>Cousinia bicolor</i> species shall be planted according</p>	-	-	CC	<p>Methodology</p> <p>Please refer Chapter 5.1.8 of Biorestation Monitoring Plan</p> <p>Achievement Criteria</p> <p>The data obtained by comparison of the species'</p>	<p>Period</p> <p>1. Germinatio n (First May - June period after seeding)</p> <p>2. Flowering (In June-August)</p> <p>3. Seed maturation</p>	Interim First-Findings in Monthly Report & Annual Biorestoration Monitorin g Report	TANAP	Biorestorati on Monitoring Plan	BAP; Specification for Reinstatement	-

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				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
					to the methodology and to the (38 T 255187.77-4440651.70 / 38 T 255020.00-4440629.00 / 38 T 254965.00-4440596.00 / 38 T 254901.00-4440558.00 / 38 T 254835.00-4440523.00) coordinates between September-November.				population ratio (%) with its situation in natural habitat (observation of healthy population development)	(In July-September) Frequency Once in each germination , flowering and mature seed periods, three times per year					
331	1-2	233+187-233+802 Critical Habitat (CH16)	Species Diversity		Pre-Construction * The top soil shall be scraped at a depth of 10-15 cm minimum and shall be stored in the ROW. * To control erosion at sloping areas, seeds of the non-endemic natural plants of the region should be collected. Post-Construction * To control erosion at sloping areas, seeds of the non-endemic natural plants of the region should be planted on the ROW.	-	-	CC	Methodology Please refer Chapter 5.1.6 of Biorestation Monitoring Plan Achievement Criteria The species diversity of the area has recovered by 20% in the first year following the spread of the top soil	Period June-July Frequency Biennially	Interim First-Findings in Monthly Report & Annual Biorestation Monitoring Report	TANAP	Biorestation Monitoring Plan	BAP; Specification for Reinstatement	-
332	1-2	233+187-233+802 Critical Habitat (CH16)	Vegetation Cover		Pre-Construction * The top soil shall be scraped at a depth of 10-15 cm minimum and shall be stored in the ROW. * To control erosion at sloping areas, seeds of the non-endemic natural plants of the region should be collected.	-	-	CC	Methodology Please refer Chapter 5.1.5 of Biorestation Monitoring Plan Achievement Criteria	Period June-July Frequency Annually	Interim First-Findings in Monthly Report & Annual Biorestation Monitoring Report	TANAP	Biorestation Monitoring Plan	BAP; Specification for Reinstatement	-

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				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
					Post-Construction * To control erosion at sloping areas, seeds of the non-endemic natural plants of the region should be planted on the ROW.				The vegetative cover of the area has recovered by 20% in the first year following the spread of the top soil						
333	1-2	ROUTE CHANGE 307+380-313+386 Critical Habitat (CH17)	Flora <i>Lepidium caespitosum</i>		Closed Construction Period: March and 15 September-30 October Pre-Construction The collected seeds of <i>Lepidium caespitosum</i> species shall be planted according to the methodology to the ROW between September-November. Post-Construction The riparian vegetation, aquatic and semi aquatic areas shall be rehabilitated. * The collected seeds of <i>Lepidium caespitosum</i> species shall be planted according to the methodology to the ROW between September-November.	-	-	CC	Methodology Please refer Chapter 5.1.8 of Biorestation Monitoring Plan Achievement Criteria The data obtained by comparison of the species' population ratio (%) with its situation in natural habitat (observation of healthy population development)	Period 1. Germination (First May - June period after seeding) 2. Flowering (In May - June) 3. Seed maturation (In June-July) Frequency Once in each germination , flowering and mature seed periods, three times per year	Interim First-Findings in Monthly Report & Annual Biorestation Monitorin g Report	TANAP	Biorestation Monitoring Plan	BAP; Specification for Reinstatement	-
334	1-2	ROUTE CHANGE 307+380-313+386 Critical Habitat (CH17)	Species Diversity		Pre-Construction * The top soil shall be scraped at a depth of 10-15 cm minimum and shall be stored in the ROW. * To control erosion at sloping areas, seeds of the non-endemic natural	-	-	CC	Methodology Please refer Chapter 5.1.6 of Biorestation Monitoring Plan	Period June-July Frequency Biennially	Interim First-Findings in Monthly Report & Annual Biorestation	TANAP	Biorestation Monitoring Plan	BAP; Specification for Reinstatement	-

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				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
					plants of the region should be collected. Post-Construction * To control erosion at sloping areas, seeds of the non-endemic natural plants of the region should be planted on the ROW.				Achievement Criteria The species diversity of the area has recovered by 20% in the first year following the spread of the top soil		Monitoring Report				
335	1-2	ROUTE CHANGE 307+380-313+386 Critical Habitat (CH17)	Vegetation Cover	-	Pre-Construction * The top soil shall be scraped at a depth of 10-15 cm minimum and shall be stored in the ROW. * To control erosion at sloping areas, seeds of the non-endemic natural plants of the region should be collected. Post-Construction * To control erosion at sloping areas, seeds of the non-endemic natural plants of the region should be planted on the ROW.	-	-	CC	Methodology Please refer Chapter 5.1.5 of Biorestation Monitoring Plan Achievement Criteria The vegetative cover of the area has recovered by 40% in the first year following the spread of the top soil	Period June-July Frequency Annually	Interim First-Findings in Monthly Report & Annual Biorestation Monitoring Report	TANAP	Biorestation Monitoring Plan	BAP; Specification for Reinstatement	-
336	1-2	371+311-371+400 Critical Habitat (CH18)	Flora <i>Thymus canoviridis</i>	-	Pre-Construction * If the construction works start in March 2015; the seeds of <i>Thymus canoviridis</i> species shall be collected near the ROW between 15 July-15 August. * The <i>Thymus canoviridis</i> species individuals shall be collected as tufts and shall be transferred to the (37 S 642551.00-423058.00)	-	-	CC	Methodology Please refer Chapter 5.1.8 of Biorestation Monitoring Plan Achievement Criteria The data obtained by comparison of	Period 1. Germination (First May - June period after seeding) 2. Flowering (In July - August) 3. Seed maturation	Interim First-Findings in Monthly Report & Annual Biorestation Monitoring Report	TANAP	Biorestation Monitoring Plan	BAP; Specification for Reinstatement	-

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				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
					<p>coordinates between 15 July-15 August.</p> <p>* The top soil shall be scraped at a depth of 10-15 cm minimum and shall be stored in the ROW.</p> <p>Post-Construction</p> <p>* The collected seeds of <i>Thymus canoviridis</i> species shall be planted according to the methodology and to the ROW between September-November.</p> <p>* The translocated individual of the <i>Thymus canoviridis</i> species as tufts shall be planted to the ROW between September-November.</p> <p>Gypsum rocks stored nearby the construction site shall be spread over the ROW.</p>				the species’ population ratio (%) with its situation in natural habitat (observation of healthy population development)	(In August-September)					
337	1-2	371+311-371+400 Critical Habitat (CH18)	Species Diversity		<p>Pre-Construction</p> <p>* The top soil shall be scraped at a depth of 10-15 cm minimum and shall be stored in the ROW.</p> <p>* To control erosion at sloping areas, seeds of the non-endemic natural plants of the region should be collected.</p> <p>Post-Construction</p> <p>* To control erosion at sloping areas, seeds of the non-endemic natural plants of the region should be planted on the ROW.</p>	-	-	CC	<p>Methodology</p> <p>Please refer Chapter 5.1.6 of Biorestation Monitoring Plan</p> <p>Achievement Criteria</p> <p>The species diversity of the area has recovered by 30% in the first year following the spread of the top soil</p>	<p>Period</p> <p>June-July</p> <p>Frequency</p> <p>Biennially</p>	Interim First-Findings in Monthly Report & Annual Biorestoration Monitoring Report	TANAP	Biorestorati on Monitoring Plan	BAP; Specification for Reinstatement	-

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				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
338	1-2	371+311-371+400 Critical Habitat (CH18)	Vegetation Cover	-	Pre-Construction * The top soil shall be scraped at a depth of 10-15 cm minimum and shall be stored in the ROW. * To control erosion at sloping areas, seeds of the non-endemic natural plants of the region should be collected. Post-Construction * To control erosion at sloping areas, seeds of the non-endemic natural plants of the region should be planted on the ROW.	-	-	CC	Methodology Please refer Chapter 5.1.5 of Biorestation Monitoring Plan Achievement Criteria The vegetative cover of the area has recovered by 20% in the first year following the spread of the top soil	Period June-July Frequency Annually	Interim First-Findings in Monthly Report & Annual Biorestation Monitoring Report	TANAP	Biorestation Monitoring Plan	BAP; Specification for Reinstatement	-
339	1-2	435+077-437+304 Critical Habitat (CH21)	Flora <i>Salvia huberi</i>	-	Pre-Construction * The top soil shall be scraped at a depth of 10-15 cm minimum and shall be stored in the ROW. * The seeds of <i>Salvia huberi</i> species shall be collected between 1 July-1 August. Post-Construction * The collected seeds of <i>Salvia</i> species shall be planted according to the methodology and to (37 S 591511.00-4418898.00 / 37 S 590974.00-4418942.00 / 37 S 590452.00-4418838.00/ 37 S 589846.00-4418931.00) coordinates to the ROW between September-November.	-	-	CC	Methodology Please refer Chapter 5.1.8 of Biorestation Monitoring Plan Achievement Criteria The data obtained by comparison of the species' population ratio (%) with its situation in natural habitat (observation of healthy population development)	Period 1. Germination (First May - June period after seeding) 2. Flowering (In May - August) 3. Seed maturation (In July-September) Frequency Once in each germination , flowering and mature seed periods,	Interim First-Findings in Monthly Report & Annual Biorestation Monitoring Report	TANAP	Biorestation Monitoring Plan	BAP; Specification for Reinstatement	-

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				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
										three times per year					
340	1-2	435+077-437+304 Critical Habitat (CH21)	Flora <i>Cousinia halyensis</i>	-	Pre-Construction * The top soil shall be scraped at a depth of 10-15 cm minimum and shall be stored in the ROW. * The seeds of <i>Cousinia halyensis</i> species shall be collected between 15 July-15 August Post-Construction * The collected seeds of <i>Cousinia halyensis</i> species shall be planted according to the methodology and to (37 S 591511.00-4418898.00 / 37 S 590974.00-4418942.00 / 37 S 590452.00-4418838.00/ 37 S 589846.00-4418931.00) coordinates to the ROW between September-November.	-	-	CC	Methodology Please refer Chapter 5.1.8 of Biorestation Monitoring Plan Achievement Criteria The data obtained by comparison of the species' population ratio (%) with its situation in natural habitat (observation of healthy population development)	Period 1. Germination (First May - June period after seeding) 2. Flowering (In June - August) 3. Seed maturation (In July-September) Frequency Once in each germination , flowering and mature seed periods, three times per year	Interim First-Findings in Monthly Report & Annual Biorestation Monitoring Report	TANAP	Biorestation Monitoring Plan	BAP; Specification for Reinstatement	-
341	1-2	435+077-437+304 Critical Habitat (CH21)	Species Diversity	-	Pre-Construction * The top soil shall be scraped at a depth of 10-15 cm minimum and shall be stored in the ROW. * To control erosion at sloping areas, seeds of the non-endemic natural plants of the region should be collected. Post-Construction	-	-	CC	Methodology Please refer Chapter 5.1.6 of Biorestation Monitoring Plan Achievement Criteria The species diversity of the area has	Period June-July Frequency Biennially	Interim First-Findings in Monthly Report & Annual Biorestation Monitoring Report	TANAP	Biorestation Monitoring Plan	BAP; Specification for Reinstatement	-

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				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
					* To control erosion at sloping areas, seeds of the non-endemic natural plants of the region should be planted on the ROW.				recovered by 20% in the first year following the spread of the top soil						
342	1-2	435+077-437+304 Critical Habitat (CH21)	Vegetation Cover	-	Pre-Construction * The top soil shall be scraped at a depth of 10-15 cm minimum and shall be stored in the ROW. * To control erosion at sloping areas, seeds of the non-endemic natural plants of the region should be collected. Post-Construction * To control erosion at sloping areas, seeds of the non-endemic natural plants of the region should be planted on the ROW.	-	-	CC	Methodology Please refer Chapter 5.1.5 of Biorestoreation Monitoring Plan Achievement Criteria The vegetative cover of the area has recovered by 20% in the first year following the spread of the top soil	Period June-July Frequency Annually	Interim First-Findings in Monthly Report & Annual Biorestoreation Monitorin g Report	TANAP	Biorestorati on Monitoring Plan	BAP; Specification for Reinstatement	-
343	1-2	453+943-456+605 Critical Habitat (CH22)	Flora <i>Isatis glauca ssp. sivasica</i>	-	Pre-Construction * The seeds of <i>Isatis glauca ssp. sivasica</i> species shall be collected between 15 July-15 August. * 20 cm of top soil of the ROW (which is ant's nest depth) shall be scraped together with rocks and stones 15 days before the construction works and shall be stored near the ROW. Post-Construction * The collected seeds of <i>Isatis glauca ssp. sivasica</i> species shall be planted according to the	-	-	CC	Methodology Please refer Chapter 5.1.8 of Biorestoreation Monitoring Plan Achievement Criteria The data obtained by comparison of the species' population ratio (%) with its situation in natural habitat	Period 1. Germinatio n (First May - June period after seeding) 2. Flowering (In June) 3. Seed maturation (In July) Frequency Once in each	Interim First-Findings in Monthly Report & Annual Biorestoreation Monitorin g Report	TANAP	Biorestorati on Monitoring Plan	BAP; Specification for Reinstatement	-

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				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
					methodology and to the (37 S 576028.17-4425766.25 / 37 S 576523.38-4425039.53 / 37 S 576546.39-4423957.85) coordinates to the ROW between September-November. * Terracing shall be carried out to prevent erosion.				(observation of healthy population development)	germination , flowering and mature seed periods, three times per year					
344	1-2	453+943-456+605 Critical Habitat (CH22)	Species Diversity	-	Pre-Construction * The top soil shall be scraped at a depth of 10-15 cm minimum and shall be stored in the ROW. * To control erosion at sloping areas, seeds of the non-endemic natural plants of the region should be collected. Post-Construction * To control erosion at sloping areas, seeds of the non-endemic natural plants of the region should be planted on the ROW.	-	-	CC	Methodology Please refer Chapter 5.1.6 of Biorestation Monitoring Plan Achievement Criteria The species diversity of the area has recovered by 20% in the first year following the spread of the top soil	Period June-July Frequency Biennially	Interim First-Findings in Monthly Report & Annual Biorestation Monitoring Report	TANAP	Biorestation Monitoring Plan	BAP; Specification for Reinstatement	-
345	1-2	453+943-456+605 Critical Habitat (CH22)	Vegetation Cover	-	Pre-Construction * The top soil shall be scraped at a depth of 10-15 cm minimum and shall be stored in the ROW. * To control erosion at sloping areas, seeds of the non-endemic natural plants of the region should be collected. Post-Construction * To control erosion at sloping areas, seeds of the non-endemic natural	-	-	CC	Methodology Please refer Chapter 5.1.5 of Biorestation Monitoring Plan Achievement Criteria The vegetative cover of the area has recovered by 20% in the	Period June-July Frequency Annually	Interim First-Findings in Monthly Report & Annual Biorestation Monitoring Report	TANAP	Biorestation Monitoring Plan	BAP; Specification for Reinstatement	-

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				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
					plants of the region should be planted on the ROW.				first year following the spread of the top soil						
346	1-2	520+252-523+585 Critical Habitat (CH23)	Flora <i>Tanacetum densum ssp. sivasicum</i>	-	<p>Closed Construction Period: 1 May - 1 June</p> <p>Pre-Construction * The seeds of <i>Tanacetum densum ssp. sivasicum</i> species shall be collected between 1 July-1 August.</p> <p>* 20 cm of top soil of the ROW (which is ant's nest depth) shall be scraped together with rocks and stones 15 days before the construction works and shall be stored near the ROW.</p> <p>Post-Construction * The collected seeds of <i>Tanacetum densum ssp. sivasicum</i> species shall be planted according to the methodology and to the (37 S 523732.00-4427059.00 / 37 S 523091.00-4426900.00 / 37 S 522478.00-4426726.00 / 37 S 522307.00-4426273.00 / 37 S 521915.00-4425841.00) coordinates to the ROW between September-November. * The seeds of non-endemic native plants shall be collected and planted on the ROW for erosion control in dip slopes.</p>	-	-	CC	<p>Methodology Please refer Chapter 5.1.8 of Biorestation Monitoring Plan</p> <p>Achievement Criteria The data obtained by comparison of the species' population ratio (%) with its situation in natural habitat (observation of healthy population development)</p>	<p>Period 1. Germination (First May - June period after seeding) 2. Flowering (In June - August) 3. Seed maturation (In July-September)</p> <p>Frequency Once in each germination , flowering and mature seed periods, three times per year</p>	Interim First-Findings in Monthly Report & Annual Biorestation Monitoring Report	TANAP	Biorestation Monitoring Plan	BAP; Specification for Reinstatement	-
347	1-2	520+252-523+585 Critical Habitat (CH23)	Species Diversity	-	<p>Pre-Construction * The top soil shall be scraped at a depth of 10-</p>	-	-	CC	<p>Methodology Please refer Chapter 5.1.6 of Biorestation</p>	<p>Period June-July</p>	Interim First-Findings in Monthly Report &	TANAP	Biorestation Monitoring Plan	BAP; Specification for Reinstatement	-

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				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
					15 cm minimum and shall be stored in the ROW. * To control erosion at sloping areas, seeds of the non-endemic natural plants of the region should be collected. Post-Construction * To control erosion at sloping areas, seeds of the non-endemic natural plants of the region should be planted on the ROW.				Monitoring Plan Achievement Criteria The species diversity of the area has recovered by 20% in the first year following the spread of the top soil	Frequency Biennially	Annual Biorestation Monitoring Report				
348	1-2	520+252-523+585 Critical Habitat (CH23)	Vegetation Cover		Pre-Construction * The top soil shall be scraped at a depth of 10-15 cm minimum and shall be stored in the ROW. * To control erosion at sloping areas, seeds of the non-endemic natural plants of the region should be collected. Post-Construction * To control erosion at sloping areas, seeds of the non-endemic natural plants of the region should be planted on the ROW.	-	-	CC	Methodology Please refer Chapter 5.1.5 of Biorestation Monitoring Plan Achievement Criteria The vegetative cover of the area has recovered by 20% in the first year following the spread of the top soil	Period June-July Frequency Annually	Interim First-Findings in Monthly Report & Annual Biorestation Monitoring Report	TANAP	Biorestation Monitoring Plan	BAP; Specification for Reinstatement	-
349	1-2	539+798-545+703 Critical Habitat (CH24)	Flora <i>Tanacetum albipannosum</i>		Closed Construction Period: 1 May - 1 June Pre-Construction * The top soil shall be scraped at a depth of 10-15 cm minimum and shall be stored in the ROW. * * The seeds of <i>Tanacetum albipinnosum</i> species shall	-	-	CC	Methodology Please refer Chapter 5.1.8 of Biorestation Monitoring Plan	Period 1. Germination (First May - June period after seeding) 2. Flowering	Interim First-Findings in Monthly Report & Annual Biorestation Monitoring Report	TANAP	Biorestation Monitoring Plan	BAP; Specification for Reinstatement	-

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				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
					<p>be collected between 1 July-1 August.</p> <p>Post-Construction</p> <p>* The collected seeds of <i>Tanacetum albipinnosum</i> species shall be planted according to the methodology and to the (37 T 507164.00-4428721.00 / 37 T 506251.00-4428878.00 / 37 T 506682.00-4428782.00 / 37 T 506043.00-429193.00 / 37 T 505799.00-4429399.00 / 37 T 505458.00-4429587.00 / 37 T 505096.00-4429820.00 / 37 T 504828.00-429928.00 / 37 T 504424.00-4429977.00 / 37 T 504079.00-4430096.00 / 37 T 503882.00-4430442.00 / 37 T 503699.00-4430709.00 / 37 T 503404.00-4430891.00 / 37 T 503049.00-4431161.00 / 37 T 502769.00-4431335.00 / 37 T 502556.29-4431464.16) coordinates to the ROW between September-November.</p>				<p>Achievement Criteria</p> <p>The data obtained by comparison of the species' population ratio (%) with its situation in natural habitat (observation of healthy population development)</p>	<p>(In June - August)</p> <p>3. Seed maturation (In July-August)</p> <p>Frequency</p> <p>Once in each germination , flowering and mature seed periods, three times per year</p>					
350	1-2	539+798-545+703 Critical Habitat (CH24)	Species Diversity		<p>Pre-Construction</p> <p>* The top soil shall be scraped at a depth of 10-15 cm minimum and shall be stored in the ROW.</p> <p>* To control erosion at sloping areas, seeds of the non-endemic natural plants of the region should be collected.</p>	-	-	CC	<p>Methodology</p> <p>Please refer Chapter 5.1.6 of Biorestation Monitoring Plan</p> <p>Achievement Criteria</p>	<p>Period</p> <p>June-July</p> <p>Frequency</p> <p>Biennially</p>	Interim First-Findings in Monthly Report & Annual Biorestation Monitoring Report	TANAP	Biorestation Monitoring Plan	BAP; Specification for Reinstatement	-

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				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
					Post-Construction * To control erosion at sloping areas, seeds of the non-endemic natural plants of the region should be planted on the ROW.				The species diversity of the area has recovered by 20% in the first year following the spread of the top soil						
351	1-2	539+798-545+703 Critical Habitat (CH24)	Vegetation Cover		Pre-Construction * The top soil shall be scraped at a depth of 10-15 cm minimum and shall be stored in the ROW. * To control erosion at sloping areas, seeds of the non-endemic natural plants of the region should be collected. Post-Construction * To control erosion at sloping areas, seeds of the non-endemic natural plants of the region should be planted on the ROW.			CC	Methodology Please refer Chapter 5.1.5 of Biorestoretion Monitoring Plan Achievement Criteria The vegetative cover of the area has recovered by 10% in the first year following the spread of the top soil	Period June-July Frequency Annually	Interim First-Findings in Monthly Report & Annual Biorestoretion Monitoring Report	TANAP	Biorestoretion Monitoring Plan	BAP; Specification for Reinstatement	
352	1-2	566+417-567+117 Critical Habitat (CH25)	Flora <i>Isatis undulata</i>		Closed Construction Period: 1 June - 1 July Pre-Construction * The top soil shall be scraped at a depth of 10-15 cm minimum and shall be stored in the ROW. * The seeds of <i>Isatis undulata</i> species shall be collected between 1 July-1 August. Post-Construction * The collected seeds of <i>Isatis undulata</i> species shall be planted according			CC	Methodology Please refer Chapter 5.1.8 of Biorestoretion Monitoring Achievement Criteria The data obtained by comparison of the species' population ratio (%) with its situation in	Period 1. Germination (First May - June period after seeding) 2. Flowering (In April - May) 3. Seed maturation (In May-June) Frequency Once in each	Interim First-Findings in Monthly Report & Annual Biorestoretion Monitoring Report	TANAP	Biorestoretion Monitoring Plan	BAP; Specification for Reinstatement	

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				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
					to the methodology and to the (37 T 484208.00-4434554.00 / 37 T 484039.00-4434704.00 / 37 T 483877.00-4434805.00 / 37 T 483732.00-4434817.00) coordinates to the ROW between September-November.				natural habitat (observation of healthy population development)	germination , flowering and mature seed periods, three times per year					
353	1-2	566+417-567+117 Critical Habitat (CH25)	Species Diversity		<p>Pre-Construction</p> <p>* The top soil shall be scraped at a depth of 10-15 cm minimum and shall be stored in the ROW.</p> <p>* To control erosion at sloping areas, seeds of the non-endemic natural plants of the region should be collected.</p> <p>Post-Construction</p> <p>* To control erosion at sloping areas, seeds of the non-endemic natural plants of the region should be planted on the ROW.</p>	-	-	CC	<p>Methodology</p> <p>Please refer Chapter 5.1.6 of Biorestation Monitoring Plan</p> <p>Achievement Criteria</p> <p>The species diversity of the area has recovered by 20% in the first year following the spread of the top soil</p>	<p>Period</p> <p>June-July</p> <p>Frequency</p> <p>Biennially</p>	Interim First-Findings in Monthly Report & Annual Biorestation Monitoring Report	TANAP	Biorestation Monitoring Plan	BAP; Specification for Reinstatement	-
354	1-2	566+417-567+117 Critical Habitat (CH25)	Vegetation Cover		<p>Pre-Construction</p> <p>* The top soil shall be scraped at a depth of 10-15 cm minimum and shall be stored in the ROW.</p> <p>* To control erosion at sloping areas, seeds of the non-endemic natural plants of the region should be collected.</p> <p>Post-Construction</p> <p>* To control erosion at sloping areas, seeds of the non-endemic natural</p>	-	-	CC	<p>Methodology</p> <p>Please refer Chapter 5.1.5 of Biorestation Monitoring Plan</p> <p>Achievement Criteria</p> <p>The vegetative cover of the area has recovered by 20% in the</p>	<p>Period</p> <p>June-July</p> <p>Frequency</p> <p>Annually</p>	Interim First-Findings in Monthly Report & Annual Biorestation Monitoring Report	TANAP	Biorestation Monitoring Plan	BAP; Specification for Reinstatement	-

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				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
					plants of the region should be planted on the ROW.				first year following the spread of the top soil						
355	1-2	590+940-592+418 Critical Habitat (CH26)	Flora <i>Cochleria sintenisii</i>	-	Closed Construction Period: 1 June - 1 July Pre-Construction * The top soil shall be scraped at a depth of 10-15 cm minimum and shall be stored in the ROW. * The seeds of <i>Cochleria sintenisii</i> species shall be collected between 1 July-1 August. Post-Construction * The collected seeds of <i>Cochleria sintenisii</i> species shall be planted according to the methodology and to the (37 S 467562.00-4423758.00 / 37 S 467327.00-4423540.00 / 37 S 467222.00-4423461.00 / 37 S 467060.00-4423369.00 / 37 S 466640.00-4423271.00) coordinates to the ROW between September-November.	-	-	CC	Methodology Please refer Chapter 5.1.8 of Biorestation Monitoring Achievement Criteria The data obtained by comparison of the species' population ratio (%) with its situation in natural habitat (observation of healthy population development)	Period 1. Germination (First May - June period after seeding) 2. Flowering (In June - August) 3. Seed maturation (In July-September) Frequency Once in each germination , flowering and mature seed periods, three times per year	Interim First-Findings in Monthly Report & Annual Biorestation Monitoring Report	TANAP	Biorestation Monitoring Plan	BAP; Specification for Reinstatement	-
356	1-2	590+940-592+418 Critical Habitat (CH26)	Species Diversity	-	Pre-Construction * The top soil shall be scraped at a depth of 10-15 cm minimum and shall be stored in the ROW. * To control erosion at sloping areas, seeds of the non-endemic natural plants of the region should be collected. Post-Construction * To control erosion at sloping areas, seeds of the non-endemic natural	-	-	CC	Methodology Please refer Chapter 5.1.6 of Biorestation Monitoring Plan Achievement Criteria The species diversity of the area has recovered by 20% in the	Period June-July Frequency Biennially	Interim First-Findings in Monthly Report & Annual Biorestation Monitoring Report	TANAP	Biorestation Monitoring Plan	BAP; Specification for Reinstatement	-

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RefNo	Ph.	Specific Location (and KP)	Environmental Component ²	Project Commitment					Monitoring				Mang. Plan	Addition. Docum.	ESIA Chapter
				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
					plants of the region should be planted on the ROW.				first year following the spread of the top soil						
357	1-2	590+940-592+418 Critical Habitat (CH26)	Vegetation Cover		Pre-Construction * The top soil shall be scraped at a depth of 10-15 cm minimum and shall be stored in the ROW. * To control erosion at sloping areas, seeds of the non-endemic natural plants of the region should be collected. Post-Construction * To control erosion at sloping areas, seeds of the non-endemic natural plants of the region should be planted on the ROW.			CC	Methodology Please refer Chapter 5.1.5 of Biorestation Monitoring Plan Achievement Criteria The vegetative cover of the area has recovered by 20% in the first year following the spread of the top soil	Period June-July Frequency Annually	Interim First-Findings in Monthly Report & Annual Biorestation Monitoring Report	TANAP	Biorestation Monitoring Plan	BAP; Specification for Reinstatement	
358	1-2	607+000-610+060 Critical Habitat (CH27)	Flora <i>Cochleria sintenisii</i>		Closed Construction Period: 1 June - 1 July Pre-Construction * The top soil shall be scraped at a depth of 10-15 cm minimum and shall be stored in the ROW. Post-Construction * The collected seeds of <i>Cochleria sintenisii</i> species shall be planted according to the methodology and to the (37 S 453088.00-4425551.00 / 37 S 453333.00-4425592.00 / 37 S 454270.00-4426118.00 / 37 S 454520.00-4426018.00 / 37 S 454806.00-4425766.00 / 37 S 454909.00-			CC	Methodology Please refer Chapter 5.1.8 of Biorestation Monitoring Achievement Criteria The data obtained by comparison of the species' population ratio (%) with its situation in natural habitat (observation of healthy population development)	Period 1. Germination (First May - June period after seeding) 2. Flowering (In June - August) 3. Seed maturation (In July-September) Frequency Once in each germination , flowering and mature seed periods,	Interim First-Findings in Monthly Report & Annual Biorestation Monitoring Report	TANAP	Biorestation Monitoring Plan	BAP; Specification for Reinstatement	

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				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
					4425685.00) coordinates to the ROW between September-November.					three times per year					
359	1-2	607+000-610+060 Critical Habitat (CH27)	Species Diversity	-	Pre-Construction * The top soil shall be scraped at a depth of 10-15 cm minimum and shall be stored in the ROW. * To control erosion at sloping areas, seeds of the non-endemic natural plants of the region should be collected. Post-Construction * To control erosion at sloping areas, seeds of the non-endemic natural plants of the region should be planted on the ROW.	-	-	CC	Methodology Please refer Chapter 5.1.6 of Biorestation Monitoring Plan Achievement Criteria The species diversity of the area has recovered by 20% in the first year following the spread of the top soil	Period June-July Frequency Biennially	Interim First-Findings in Monthly Report & Annual Biorestation Monitoring Report	TANAP	Biorestation Monitoring Plan	BAP; Specification for Reinstatement	-
360	1-2	607+000-610+060 Critical Habitat (CH27)	Vegetation Cover	-	Pre-Construction * The top soil shall be scraped at a depth of 10-15 cm minimum and shall be stored in the ROW. * To control erosion at sloping areas, seeds of the non-endemic natural plants of the region should be collected. Post-Construction * To control erosion at sloping areas, seeds of the non-endemic natural plants of the region should be planted on the ROW.	-	-	CC	Methodology Please refer Chapter 5.1.5 of Biorestation Monitoring Plan Achievement Criteria The vegetative cover of the area has recovered by 10% in the first year following the spread of the top soil	Period June-July Frequency Annually	Interim First-Findings in Monthly Report & Annual Biorestation Monitoring Report	TANAP	Biorestation Monitoring Plan	BAP; Specification for Reinstatement	-

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RefNo	Ph.	Specific Location (and KP)	Environmental Component ²	Project Commitment					Monitoring				Mang. Plan	Addition. Docum.	ESIA Chapter
				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
361	1-2	616+751-628+103 Critical Habitat (CH28)	Flora <i>Bellevaia crassa</i>	-	<p>Closed Construction Period: 1 June - 1 July</p> <p>Pre-Construction</p> <p>* The top soil shall be scraped at a depth of 10-15 cm minimum and shall be stored in the ROW. * The bulbs of <i>Bellevaia crassa</i> species shall be collected from the ROW between 1 July-1 August.</p> <p>Post-Construction</p> <p>* The collected individuals or bulbs of the <i>Bellevaia crassa</i> species shall be planted on the ROW.</p>	-	-	CC	<p>Methodology</p> <p>Please refer Chapter 5.1.8 of Biorestation Monitoring</p> <p>Achievement Criteria</p> <p>The data obtained by comparison of the species' population ratio (%) with its situation in natural habitat (observation of healthy population development)</p>	<p>Period</p> <p>1. Germination (First May - June period after seeding) 2. Flowering (In June) 3. Bulb maturation (In July)</p> <p>Frequency</p> <p>Once in each germination , flowering and mature seed periods, three times per year</p>	Interim First-Findings in Monthly Report & Annual Biorestation Monitoring Report	TANAP	Biorestation Monitoring Plan	BAP; Specification for Reinstatement	-
362	1-2	616+751-628+103 Critical Habitat (CH28)	Flora <i>Asperula capitellata</i>	-	<p>Closed Construction Period: 1 June - 1 July</p> <p>Pre-Construction</p> <p>* The top soil shall be scraped at a depth of 10-15 cm minimum and shall be stored in the ROW. * The seeds of the <i>Asperula capitellata</i> species shall be collected between 1 July-1 August.</p> <p>Post-Construction</p> <p>* The collected seeds of <i>Asperula capitellata</i> species shall be planted according to the methodology and to the (37 S 443666.00-4421745.00/ 37 S443405.00-4421480.00/ 37 S 443357.00-4421037.00/ 37 S</p>	-	-	CC	<p>Methodology</p> <p>Please refer Chapter 5.1.8 of Biorestation Monitoring</p> <p>Achievement Criteria</p> <p>The data obtained by comparison of the species' population ratio (%) with its situation in natural habitat (observation of healthy population development)</p>	<p>Period</p> <p>1. Germination (First May - June period after seeding) 2. Flowering (In May - July) 3. Seed maturation (In June-August)</p> <p>Frequency</p> <p>Once in each germination , flowering and mature seed periods, three times per year</p>	Interim First-Findings in Monthly Report & Annual Biorestation Monitoring Report	TANAP	Biorestation Monitoring Plan	BAP; Specification for Reinstatement	-

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				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
					442990.00-4420861.00/ 37 S 442507.00-4421031.00/ 37 S 441965.00-4421153.00/ 37 S 441483.00-4421840.00/ 37 S 440156.00-4422101.00/ 37 S 438720.00-4422064.00/ 37 S 439346.52-4422147.31) coordinates to the ROW between September-November.										
363	1-2	616+751-628+103 Critical Habitat (CH28)	Flora <i>Cochlearia sintenisii</i>		Closed Construction Period: 1 June - 1 July Pre-Construction * The top soil shall be scraped at a depth of 10-15 cm minimum and shall be stored in the ROW. * The seeds of the <i>Cochleria sintenisii</i> species shall be collected between 1 July-1 August. Post-Construction * The collected seeds of <i>Cochleria sintenisii</i> species shall be planted according to the methodology and to the (37 S 443666.00-4421745.00/ 37 S443405.00-4421480.00/ 37 S 443357.00-4421037.00/ 37 S 442990.00-4420861.00/ 37 S 442507.00-4421031.00/ 37 S 441965.00-4421153.00/ 37 S 441483.00-4421840.00/ 37 S 440156.00-4422101.00/ 37 S 438720.00-4422064.00/ 37 S 439346.52-4422147.31) coordinates to the ROW between September-November.	-	-	CC	Methodology Please refer Chapter 5.1.8 of Biorestation Monitoring Achievement Criteria The data obtained by comparison of the species' population ratio (%) with its situation in natural habitat (observation of healthy population development) Period 1. Germination (First May-June period after seeding) 2. Flowering (In June-August) 3. Seed maturation (July-September) Frequency Once in each germination , flowering and mature seed periods, three times per year		Interim First-Findings in Monthly Report & Annual Biorestation Monitoring Report	TANAP	Biorestation Monitoring Plan	BAP; Specification for Reinstatement	-

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RefNo	Ph.	Specific Location (and KP)	Environmental Component ²	Project Commitment					Monitoring				Mang. Plan	Addition. Docum.	ESIA Chapter
				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
364	1-2	616+751-628+103 Critical Habitat (CH28)	Flora <i>Thymus cappadocicus</i> var. <i>pruinus</i>	-	<p>Closed Construction Period: 1 June - 1 July</p> <p>Pre-Construction</p> <p>* The top soil shall be scraped at a depth of 10-15 cm minimum and shall be stored in the ROW. * The seeds of the <i>Thymus cappadocicus</i> var. <i>pruinus</i> species shall be collected between 1 July-1 August.</p> <p>Post-Construction</p> <p>* <i>Thymus cappadocicus</i> var. <i>pruinus</i> species shall be planted according to the methodology and to the (37 S 443666.00-4421745.00/ 37 S443405.00-4421480.00/ 37 S 443357.00-4421037.00/ 37 S 442990.00-4420861.00/ 37 S 442507.00-4421031.00/ 37 S 441965.00-4421153.00/ 37 S 441483.00-4421840.00/ 37 S 440156.00-4422101.00/ 37 S 438720.00-4422064.00/ 37 S 439346.52-4422147.31) coordinates to the ROW between September-November.</p>	-	-	CC	<p>Methodology</p> <p>Please refer Chapter 5.1.8 of Biorestation Monitoring</p> <p>Achievement Criteria</p> <p>The data obtained by comparison of the species' population ratio (%) with its situation in natural habitat (observation of healthy population development)</p>	<p>Period</p> <p>1. Germination (First May-June period after seeding) 2. Flowering (In June-July) 3. Seed maturation (In July-August)</p> <p>Frequency</p> <p>Once in each germination, flowering and mature seed periods, three times per year</p>	Interim First-Findings in Monthly Report & Annual Biorestation Monitoring Report	TANAP	Biorestation Monitoring Plan	BAP; Specification for Reinstatement	-
365	1-2	616+751-628+103 Critical Habitat (CH28)	Flora <i>Achillea sintenisii</i>	-	<p>Closed Construction Period: 1 June - 1 July</p> <p>Pre-Construction</p> <p>* The top soil shall be scraped at a depth of 10-15 cm minimum and shall be stored in the ROW. * The seeds of the <i>Achillea sintenisii</i> species shall be</p>	-	-	CC	<p>Methodology</p> <p>Please refer Chapter 5.1.8 of Biorestation Monitoring</p> <p>Achievement Criteria</p>	<p>Period</p> <p>1. Germination (First May-June period after seeding) 2. Flowering (In May-July) 3. Seed maturation</p>	Interim First-Findings in Monthly Report & Annual Biorestation Monitoring Report	TANAP	Biorestation Monitoring Plan	BAP; Specification for Reinstatement	-

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				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
					<p>collected between 15 July-15 August.</p> <p>Post-Construction</p> <p>* The collected seeds of <i>Achillea sintenisii</i> species shall be planted according to the methodology and to the (37 S 443666.00-4421745.00/ 37 S443405.00-4421480.00/ 37 S 443357.00-4421037.00/ 37 S 442990.00-4420861.00/ 37 S 442507.00-4421031.00/ 37 S 441965.00-4421153.00/ 37 S 441483.00-4421840.00/ 37 S 440156.00-4422101.00/ 37 S 438720.00-4422064.00/ 37 S 439346.52-4422147.31) coordinates to the ROW between September-November.</p>				The data obtained by comparison of the species’ population ratio (%) with its situation in natural habitat (observation of healthy population development)	(In June-August) Frequency Once in each germination , flowering and mature seed periods, three times per year					
366	1-2	616+751-628+103 Critical Habitat (CH28)	Species Diversity		<p>Pre-Construction</p> <p>* The top soil shall be scraped at a depth of 10-15 cm minimum and shall be stored in the ROW.</p> <p>* To control erosion at sloping areas, seeds of the non-endemic natural plants of the region should be collected.</p> <p>Post-Construction</p> <p>* To control erosion at sloping areas, seeds of the non-endemic natural plants of the region should be planted on the ROW.</p>	-	-	CC	<p>Methodology</p> <p>Please refer Chapter 5.1.6 of Biorestation Monitoring Plan</p> <p>Achievement Criteria</p> <p>The species diversity of the area has recovered by 20% in the first year following the spread of the top soil</p>	<p>Period</p> <p>June-July</p> <p>Frequency</p> <p>Biennially</p>	Interim First-Findings in Monthly Report & Annual Biorestation Monitoring Report	TANAP	Biorestorati on Monitoring Plan	BAP; Specification for Reinstatement	-

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				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
367	1-2	616+751-628+103 Critical Habitat (CH28)	Vegetation Cover	-	Pre-Construction * The top soil shall be scraped at a depth of 10-15 cm minimum and shall be stored in the ROW. * To control erosion at sloping areas, seeds of the non-endemic natural plants of the region should be collected. Post-Construction * To control erosion at sloping areas, seeds of the non-endemic natural plants of the region should be planted on the ROW.	-	-	CC	Methodology Please refer Chapter 5.1.5 of Biorestation Monitoring Plan Achievement Criteria The species diversity of the area has recovered by 20% in the first year following the spread of the top soil	Period June-July Frequency Annually	Interim First-Findings in Monthly Report & Annual Biorestation Monitoring Report	TANAP	Biorestation Monitoring Plan	BAP; Specification for Reinstatement	-
368	1-2	634+738-636+286 Critical Habitat (CH29)	Flora <i>Isatis undulata</i>	-	Closed Construction Period: 1 June - 1 July Pre-Construction * The top soil shall be scraped at a depth of 10-15 cm minimum and shall be stored in the ROW. * Seeds of <i>Isatis undulata</i> and <i>Cochleria sintenisii</i> species shall be collected near the ROW, from the (37 S 431034.20-4418698.72) coordinates between 1 July-1 August. Post-Construction * The collected seeds of <i>Isatis undulata</i> and <i>Cochleria sintenisii</i> species shall be planted according to the methodology and to the (37 S 431163.69-4418762.97 / 37 S 431439.06-4419180.05 / 37 S 431767.75-4419424.63) coordinates to the ROW between	-	-	CC	Methodology Please refer Chapter 5.1.8 of Biorestation Monitoring Achievement Criteria The data obtained by comparison of the species' population ratio (%) with its situation in natural habitat (observation of healthy population development)	Period 1. Germination (First May-June period after seeding) 2. Flowering (In April-May) 3. Seed maturation (In May-June) Frequency Once in each germination, flowering and mature seed periods, three times per year	Interim First-Findings in Monthly Report & Annual Biorestation Monitoring Report	TANAP	Biorestation Monitoring Plan	BAP; Specification for Reinstatement	-

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				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
					September-November. Terracing shall be carried out to prevent erosion on the dip slopes.										
369	1-2	634+738-636+286 Critical Habitat (CH29)	Flora <i>Cochlearia sintenisii</i>	-	<p>Closed Construction Period: 1 June - 1 July</p> <p>Pre-Construction</p> <p>* The top soil shall be scraped at a depth of 10-15 cm minimum and shall be stored in the ROW.</p> <p>* Seeds of <i>Cochleria sintenisii</i> species shall be collected near the ROW, from the (37 S 431034.20-4418698.72) coordinates between 1 July-1 August.</p> <p>Post-Construction</p> <p>* The collected seeds of <i>Cochleria sintenisii</i> species shall be planted according to the methodology and to the (37 S 431163.69-4418762.97 / 37 S 431439.06-4419180.05 / 37 S 431767.75-4419424.63) coordinates to the ROW between September-November. Terracing shall be carried out to prevent erosion on the dip slopes.</p>	-	-	CC	<p>Methodology</p> <p>Please refer Chapter 5.1.8 of Biorestation Monitoring</p> <p>Achievement Criteria</p> <p>The data obtained by comparison of the species' population ratio (%) with its situation in natural habitat (observation of healthy population development)</p>	<p>Period</p> <p>1. Germination (First May-June period after seeding)</p> <p>2. Flowering (In June-August)</p> <p>3. Seed maturation (In July-September)</p> <p>Frequency</p> <p>Once in each germination , flowering and mature seed periods, three times per year</p>	Interim First-Findings in Monthly Report & Annual Biorestation Monitoring Report	TANAP	Biorestation Monitoring Plan	BAP; Specification for Reinstatement	-
370	1-2	634+738-636+286 Critical Habitat (CH29)	Species Diversity	-	<p>Pre-Construction</p> <p>* The top soil shall be scraped at a depth of 10-15 cm minimum and shall be stored in the ROW.</p> <p>* To control erosion at sloping areas, seeds of the non-endemic natural plants of the region should be collected.</p>	-	-	CC	<p>Methodology</p> <p>Please refer Chapter 5.1.6 of Biorestation Monitoring Plan</p>	<p>Period</p> <p>June-July</p> <p>Frequency</p> <p>Biennially</p>	Interim First-Findings in Monthly Report & Annual Biorestation Monitoring Report	TANAP	Biorestation Monitoring Plan	BAP; Specification for Reinstatement	-

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				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
					Post-Construction * To control erosion at sloping areas, seeds of the non-endemic natural plants of the region should be planted on the ROW.				Achievement Criteria The species diversity of the area has recovered by 20% in the first year following the spread of the top soil						
371	1-2	634+738-636+286 Critical Habitat (CH29)	Vegetation Cover	-	Pre-Construction * The top soil shall be scraped at a depth of 10-15 cm minimum and shall be stored in the ROW. * To control erosion at sloping areas, seeds of the non-endemic natural plants of the region should be collected. Post-Construction * To control erosion at sloping areas, seeds of the non-endemic natural plants of the region should be planted on the ROW.	-	-	CC	Methodology Please refer Chapter 5.1.5 of Biorestation Monitoring Plan Achievement Criteria The species diversity of the area has recovered by 20% in the first year following the spread of the top soil	Period June-July Frequency Annually	Interim First-Findings in Monthly Report & Annual Biorestation Monitoring Report	TANAP	Biorestation Monitoring Plan	BAP; Specification for Reinstatement	-
372	1-2	636+388-636+967 Critical Habitat (CH30)	Flora <i>Isatis undulata</i>	-	Closed Construction Period: 1 June - 1 July Pre-Construction * The top soil shall be scraped at a depth of 10-15 cm minimum and shall be stored in the ROW. * The seeds of <i>Isatis undulata</i> species shall be collected between 1 July-1 August. Post-Construction * The collected seeds of <i>Isatis undulata</i> species shall be planted according	-	-	CC	Methodology Please refer Chapter 5.1.8 of Biorestation Monitoring Achievement Criteria The data obtained by comparison of the species' population ratio (%) with its situation in	Period 1. Germination (First May-June period after seeding) 2. Flowering (In April-May) 3. Seed maturation (In May-June) Frequency Once in each	Interim First-Findings in Monthly Report & Annual Biorestation Monitoring Report	TANAP	Biorestation Monitoring Plan	BAP; Specification for Reinstatement	-

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RefNo	Ph.	Specific Location (and KP)	Environmental Component ²	Project Commitment					Monitoring				Mang. Plan	Addition. Docum.	ESIA Chapter
				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
					to the methodology and to the (37 S 430808.10-4418378.12 / 37 S 430612.02-4418232.81) coordinates to the ROW between September-November. Terracing shall be carried out to prevent erosion on the dip slopes.				natural habitat (observation of healthy population development)	germination , flowering and mature seed periods, three times per year					
373	1-2	636+388-636+967 Critical Habitat (CH30)	Flora <i>Cochlearia sintenisii</i>	-	<p>Closed Construction Period: 1 June - 1 July</p> <p>Pre-Construction</p> <p>* The top soil shall be scraped at a depth of 10-15 cm minimum and shall be stored in the ROW.</p> <p>* The seeds of <i>Cochleria sintenisii</i> species shall be collected between 1 July-1 August.</p> <p>Post-Construction</p> <p>* The collected seeds of <i>Cochleria sintenisii</i> species shall be planted according to the methodology and to the (37 S 430808.10-4418378.12 / 37 S 430612.02-4418232.81) coordinates to the ROW between September-November. Terracing shall be carried out to prevent erosion on the dip slopes.</p>	-	-	CC	<p>Methodology</p> <p>Please refer Chapter 5.1.8 of Biorestation Monitoring</p> <p>Achievement Criteria</p> <p>The data obtained by comparison of the species' population ratio (%) with its situation in natural habitat (observation of healthy population development)</p>	<p>Period</p> <p>1. Germination (First May-June period after seeding)</p> <p>2. Flowering (In June-August)</p> <p>3. Seed maturation (In July-September)</p> <p>Frequency</p> <p>Once in each germination , flowering and mature seed periods, three times per year</p>	Interim First-Findings in Monthly Report & Annual Biorestation Monitoring Report	TANAP	Biorestation Monitoring Plan	BAP; Specification for Reinstatement	-
374	1-2	636+388-636+967 Critical Habitat (CH30)	Species Diversity	-	<p>Pre-Construction</p> <p>* The top soil shall be scraped at a depth of 10-15 cm minimum and shall be stored in the ROW.</p> <p>* To control erosion at sloping areas, seeds of the</p>	-	-	CC	<p>Methodology</p> <p>Please refer Chapter 5.1.6 of Biorestation Monitoring Plan</p>	<p>Period</p> <p>June-July</p> <p>Frequency</p> <p>Biennially</p>	Interim First-Findings in Monthly Report & Annual Biorestation	TANAP	Biorestation Monitoring Plan	BAP; Specification for Reinstatement	-

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				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
					<p>non-endemic natural plants of the region should be collected.</p> <p>Post-Construction</p> <p>* To control erosion at sloping areas, seeds of the non-endemic natural plants of the region should be planted on the ROW.</p>				<p>Achievement Criteria</p> <p>The species diversity of the area has recovered by 20% in the first year following the spread of the top soil</p>		Monitoring Report				
375	1-2	636+388-636+967 Critical Habitat (CH30)	Vegetation Cover		<p>Pre-Construction</p> <p>* The top soil shall be scraped at a depth of 10-15 cm minimum and shall be stored in the ROW.</p> <p>* To control erosion at sloping areas, seeds of the non-endemic natural plants of the region should be collected.</p> <p>Post-Construction</p> <p>* To control erosion at sloping areas, seeds of the non-endemic natural plants of the region should be planted on the ROW.</p>	-	-	CC	<p>Methodology</p> <p>Please refer Chapter 5.1.5 of Biorestitution Monitoring Plan</p> <p>Achievement Criteria</p> <p>The vegetative cover of the area has recovered by 10% in the first year following the spread of the top soil</p>	<p>Period</p> <p>June-July</p> <p>Frequency</p> <p>Annually</p>	Interim First-Findings in Monthly Report & Annual Biorestitution Monitoring Report	TANAP	Biorestitution Monitoring Plan	BAP; Specification for Reinstatement	-
376	1-2	654+103-656+98 Critical Habitat (CH32)	Flora <i>Gypsophila heteropoda ssp. minutiflora</i>		<p>Closed Construction Period: 1 May - 1 June</p> <p>Pre-Construction</p> <p>* The top soil shall be scraped at a depth of 10-15 cm minimum and shall be stored in the ROW.</p> <p>* The seeds of <i>Gypsophila heteropoda ssp. minutiflora</i> species shall be collected between 1 June-20 July.</p>	-	-	CC	<p>Methodology</p> <p>Please refer Chapter 5.1.8 of Biorestitution Monitoring</p> <p>Achievement Criteria</p> <p>The data obtained by comparison of the species'</p>	<p>Period</p> <p>1. Germination (First May-June period after seeding) 2. Flowering (In May-July) 3. Seed maturation (In June-August)</p>	Interim First-Findings in Monthly Report & Annual Biorestitution Monitoring Report	TANAP	Biorestitution Monitoring Plan	BAP; Specification for Reinstatement	-

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RefNo .	Ph.	Specific Location (and KP)	Environmental Component ²	Project Commitment					Monitoring				Mang. Plan	Addition. Docum.	ESIA Chapter
				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
					Post-Construction * The collected seeds of <i>Gypsophila heteropoda ssp. minutiflora</i> , species shall be planted according to the methodology and to the (37 S 416467.82-4414801.73/ 37 S 416377.69-4414800.92/37 S 416306.80-4414801.76/37 S 416251.56-4414800.98/37 S 416084.26-4414800.34/37 S 415833.94-4414800.57/ 37 S 415591.47-4414801.24 /37 S 413891.73-4414797.64) coordinates to the ROW between September-November.				population ratio (%) with its situation in natural habitat (observation of healthy population development)	Frequency Once in each germination , flowering and mature seed periods, three times per year					
377	1-2	654+103-656+98 Critical Habitat (CH32)	Flora <i>Astragalus zaraensis</i>	-	Closed Construction Period: 1 May - 1 June Pre-Construction * The top soil shall be scraped at a depth of 10-15 cm minimum and shall be stored in the ROW. * The seeds of <i>Astragalus zaraensis</i> species shall be collected between 15 June-15 July. Post-Construction * The collected seeds of <i>Astragalus zaraensis</i> , species shall be planted according to the methodology and to the (37 S 416467.82-4414801.73/ 37 S 416377.69-4414800.92/37 S 416306.80-4414801.76/37 S 416251.56-4414800.98/37 S 416084.26-4414800.34/37 S 415833.94-4414800.57/ 37	-	-	CC	Methodology Please refer Chapter 5.1.8 of Biorestoreation Monitoring Achievement Criteria The data obtained by comparison of the species' population ratio (%) with its situation in natural habitat (observation of healthy population development)	Period 1. Germination (First May-June period after seeding) 2. Flowering (In June) 3. Seed maturation (In July) Frequency Once in each germination , flowering and mature seed periods, three times per year	Interim First-Findings in Monthly Report & Annual Biorestoreation Monitoring Report	TANAP	Biorestoreation Monitoring Plan	BAP; Specification for Reinstatement	-

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RefNo	Ph.	Specific Location (and KP)	Environmental Component ²	Project Commitment					Monitoring				Mang. Plan	Addition. Docum.	ESIA Chapter
				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
					S 415591.47-4414801.24 /37 S 413891.73-4414797.64) coordinates to the ROW between September-November.										
378	1-2	654+103-656+98 Critical Habitat (CH32)	Flora <i>Chrysocamela noeana</i>	-	<p>Closed Construction Period: 1 May - 1 June</p> <p>Pre-Construction</p> <p>* The top soil shall be scraped at a depth of 10-15 cm minimum and shall be stored in the ROW.</p> <p>* The seeds of <i>Chrysocamela noeana</i> species shall be collected between1 June-20 July. Some of the collected seeds of <i>Chrysocamela noeana</i> species shall be given to the seed gene bank.</p> <p>Post-Construction</p> <p>* The collected seeds of <i>Chrysocamela noeana</i>, species shall be planted according to the methodology and to the (37 S 416467.82-4414801.73/ 37 S 416377.69-4414800.92/37 S 416306.80-4414801.76/37 S 416251.56-4414800.98/37 S 416084.26-4414800.34/37 S 415833.94-4414800.57/ 37 S 415591.47-4414801.24 /37 S 413891.73-4414797.64) coordinates to the ROW between September-November.</p>	-	-	CC	<p>Methodology</p> <p>Please refer Chapter 5.1.8 of Biorestation Monitoring</p> <p>Achievement Criteria</p> <p>The data obtained by comparison of the species’ population ratio (%) with its situation in natural habitat (observation of healthy population development)</p>	<p>Period</p> <p>1. Germination (First May-June period after seeding)</p> <p>2. Flowering (April-May)</p> <p>3. Seed maturation (In May-June)</p> <p>Frequency</p> <p>Once in each germination , flowering and mature seed periods, three times per year</p>	Interim First-Findings in Monthly Report & Annual Biorestation Monitorin g Report	TANAP	Biorestorati on Monitoring Plan	BAP; Specification for Reinstatement	-
379	1-2	654+103-656+98 Critical Habitat (CH32)	Flora <i>Minuartia corymbulosa var. gypsophiloides</i>	-	<p>losed Construction Period: 1 May - 1 June</p> <p>Pre-Construction</p>	-	-	CC	<p>Methodology</p> <p>Please refer Chapter 5.1.8 of</p>	<p>Period</p> <p>1. Germination (First May-June</p>	Interim First-Findings in Monthly Report &	TANAP	Biorestorati on Monitoring Plan	BAP; Specification for Reinstatement	-

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RefNo .	Ph.	Specific Location (and KP)	Environmental Component ²	Project Commitment					Monitoring				Mang. Plan	Addition. Docum.	ESIA Chapter
				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
					<p>* The top soil shall be scraped at a depth of 10-15 cm minimum and shall be stored in the ROW.</p> <p>* The seeds of <i>Minuartia corymbulosa</i> var. <i>gypsophiloides</i> species shall be collected between 15 June-15 July.</p> <p>Post-Construction</p> <p>* The collected seeds of <i>Minuartia corymbulosa</i> var. <i>gypsophiloides</i>, species shall be planted according to the methodology and to the (37 S 416467.82-4414801.73/ 37 S 416377.69-4414800.92/37 S 416306.80-4414801.76/37 S 416251.56-4414800.98/37 S 416084.26-4414800.34/37 S 415833.94-4414800.57/ 37 S 415591.47-4414801.24 /37 S 413891.73-4414797.64) coordinates to the ROW between September-November.</p>				<p>Biorestation Monitoring</p> <p>Achievement Criteria</p> <p>The data obtained by comparison of the species' population ratio (%) with its situation in natural habitat (observation of healthy population development)</p>	<p>period after seeding)</p> <p>2. Flowering (In August)</p> <p>3. Seed maturation (In September)</p> <p>Frequency</p> <p>Once in each germination , flowering and mature seed periods, three times per year</p>	Annual Biorestation Monitoring Report				
380	1-2	654+103-656+98 Critical Habitat (CH32)	Flora <i>Achillea sintenisii</i>	-	<p>Closed Construction Period: 1 May - 1 June</p> <p>Pre-Construction</p> <p>* The top soil shall be scraped at a depth of 10-15 cm minimum and shall be stored in the ROW.</p> <p>* The seeds of <i>Achillea sintenisii</i> species shall be collected between 15 June-15 July.</p> <p>Post-Construction</p> <p>* The collected seeds of <i>Achillea sintenisii</i> species shall be planted according to the methodology and to the (37 S 416467.82-</p>	-	-	CC	<p>Methodology</p> <p>Please refer Chapter 5.1.8 of Biorestation Monitoring</p> <p>Achievement Criteria</p> <p>The data obtained by comparison of the species' population ratio (%) with its situation in natural habitat</p>	<p>Period</p> <p>1. Germination (First May-June period after seeding)</p> <p>2. Flowering (In May-July)</p> <p>3. Seed maturation (In June-August)</p> <p>Frequency</p> <p>Once in each germination , flowering and mature</p>	Interim First-Findings in Monthly Report & Annual Biorestation Monitoring Report	TANAP	Biorestation Monitoring Plan	BAP; Specification for Reinstatement	-

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				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
					4414801.73/ 37 S 416377.69-4414800.92/37 S 416306.80-4414801.76/37 S 416251.56-4414800.98/37 S 416084.26-4414800.34/37 S 415833.94-4414800.57/ 37 S 415591.47-4414801.24 /37 S 413891.73-4414797.64) coordinates to the ROW between September-November.				(observation of healthy population development)	seed periods, three times per year					
381	1-2	654+103-656+98 Critical Habitat (CH32)	Flora <i>Centaurea sivasica</i>		<p>Closed Construction Period: 1 May - 1 June</p> <p>Pre-Construction</p> <p>* The top soil shall be scraped at a depth of 10-15 cm minimum and shall be stored in the ROW. * The seeds of <i>Centaurea sivasica</i> species shall be collected between 15 June-15 July.</p> <p>Post-Construction</p> <p>* The collected seeds of <i>Centaurea sivasica</i>, species shall be planted according to the methodology and to the (37 S 416467.82-4414801.73/ 37 S 416377.69-4414800.92/37 S 416306.80-4414801.76/37 S 416251.56-4414800.98/37 S 416084.26-4414800.34/37 S 415833.94-4414800.57/ 37 S 415591.47-4414801.24 /37 S 413891.73-4414797.64) coordinates to the ROW between September-November.</p> <p>* Gypsum rocks stored nearby the construction site shall be spread over the ROW.</p>	-	-	CC	<p>Methodology</p> <p>Please refer Chapter 5.1.8 of Biorestation Monitoring</p> <p>Achievement Criteria</p> <p>The data obtained by comparison of the species' population ratio (%) with its situation in natural habitat (observation of healthy population development)</p>	<p>Period</p> <p>1. Germination (First May-June period after seeding) 2. Flowering (In June-July) 3. Seed maturation (In July-August)</p> <p>Frequency</p> <p>Once in each germination , flowering and mature seed periods, three times per year</p>	Interim First-Findings in Monthly Report & Annual Biorestation Monitoring Report	TANAP	Biorestation Monitoring Plan	BAP; Specification for Reinstatement	-

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				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
382	1-2	654+103-656+98 Critical Habitat (CH32)	Flora <i>Gypsophila aucheri</i>	-	<p>Closed Construction Period: 1 May - 1 June</p> <p>Pre-Construction</p> <p>* The top soil shall be scraped at a depth of 10-15 cm minimum and shall be stored in the ROW. * The seeds of <i>Gypsophila aucheri</i> species shall be collected between 15 June-15 July.</p> <p>Post-Construction</p> <p>* The collected seeds of <i>Gypsophila aucheri</i> species shall be planted according to the methodology and to the (37 S 416467.82-4414801.73/ 37 S 416377.69-4414800.92/37 S 416306.80-4414801.76/37 S 416251.56-4414800.98/37 S 416084.26-4414800.34/37 S 415833.94-4414800.57/ 37 S 415591.47-4414801.24 /37 S 413891.73-4414797.64) coordinates to the ROW between September-November.</p>	-	-	CC	<p>Methodology</p> <p>Please refer Chapter 5.1.8 of Biorestation Monitoring</p> <p>Achievement Criteria</p> <p>The data obtained by comparison of the species’ population ratio (%) with its situation in natural habitat (observation of healthy population development)</p>	<p>Period</p> <p>1. Germination (First May-June period after seeding) 2. Flowering (In June-July) 3. Seed maturation (In July-August)</p> <p>Frequency</p> <p>Once in each germination , flowering and mature seed periods, three times per year</p>	Interim First-Findings in Monthly Report & Annual Biorestation Monitoring Report	TANAP	Biorestation Monitoring Plan	BAP; Specification for Reinstatement	-
383	1-2	654+103-656+98 Critical Habitat (CH32)	Flora <i>Isatis glauca ssp. sivasica</i>	-	<p>Closed Construction Period: 1 May - 1 June</p> <p>Pre-Construction</p> <p>* The top soil shall be scraped at a depth of 10-15 cm minimum and shall be stored in the ROW. * The seeds of <i>Isatis glauca ssp. sivasica</i> species shall be collected between 15 June-15 July. Some of the collected seeds of <i>Isatis glauca ssp. sivasica</i></p>	-	-	CC	<p>Methodology</p> <p>Please refer Chapter 5.1.8 of Biorestation Monitoring</p> <p>Achievement Criteria</p> <p>The data obtained by comparison of</p>	<p>Period</p> <p>1. Germination (First May-June period after seeding) 2. Flowering (In June) 3. Seed maturation (In July)</p> <p>Frequency</p>	Interim First-Findings in Monthly Report & Annual Biorestation Monitoring Report	TANAP	Biorestation Monitoring Plan	BAP; Specification for Reinstatement	-

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				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
					<p>species shall be given to the seed gene bank.</p> <p>Post-Construction</p> <p>* The collected seeds of <i>Isatis glauca ssp. sivasica</i> species shall be planted according to the methodology and to the (37 S 416467.82-4414801.73/ 37 S 416377.69-4414800.92/37 S 416306.80-4414801.76/37 S 416251.56-4414800.98/37 S 416084.26-4414800.34/37 S 415833.94-4414800.57/ 37 S 415591.47-4414801.24 /37 S 413891.73-4414797.64) coordinates to the ROW between September-November.</p>				the species' population ratio (%) with its situation in natural habitat (observation of healthy population development)	Once in each germination , flowering and mature seed periods, three times per year					
384	1-2	654+103-656+98 Critical Habitat (CH32)	Flora <i>Scorzonera aucherana</i>		<p>Closed Construction Period: 1 May - 1 June</p> <p>Pre-Construction</p> <p>* The top soil shall be scraped at a depth of 10-15 cm minimum and shall be stored in the ROW. * The seeds of <i>Scorzonera aucherana</i>, species shall be collected between 15 June-15 July.</p> <p>Post-Construction</p> <p>* The collected seeds of <i>Scorzonera aucherana</i>, species shall be planted according to the methodology and to the (37 S 416467.82-4414801.73/ 37 S 416377.69-4414800.92/37 S 416306.80-4414801.76/37 S 416251.56-4414800.98/37 S 416084.26-4414800.34/37 S</p>			CC	<p>Methodology</p> <p>Please refer Chapter 5.1.8 of Biorestation Monitoring</p> <p>Achievement Criteria</p> <p>The data obtained by comparison of the species' population ratio (%) with its situation in natural habitat (observation of healthy population development)</p>	<p>Period</p> <p>1. Germination (First May-June period after seeding) 2. Flowering (In June-July) 3. Seed maturation (In July-August)</p> <p>Frequency</p> <p>Once in each germination , flowering and mature seed periods, three times per year</p>	Interim First-Findings in Monthly Report & Annual Biorestation Monitorin g Report	TANAP	Biorestation Monitoring Plan	BAP; Specification for Reinstatement	

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				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
					415833.94-4414800.57/ 37 S 415591.47-4414801.24 /37 S 413891.73-4414797.64) coordinates to the ROW between September-November.										
385	1-2	654+103-656+98 Critical Habitat (CH32)	Flora <i>Scrophularia lepidota</i>	-	Closed Construction Period: 1 May - 1 June Pre-Construction * The top soil shall be scraped at a depth of 10-15 cm minimum and shall be stored in the ROW. * The seeds of <i>Scrophularia lepidota</i> species shall be collected between 15 June-15 July. Post-Construction * The collected seeds of <i>Scrophularia lepidota</i> , species shall be planted according to the methodology and to the (37 S 416467.82-4414801.73/ 37 S 416377.69-4414800.92/37 S 416306.80-4414801.76/37 S 416251.56-4414800.98/37 S 416084.26-4414800.34/37 S 415833.94-4414800.57/ 37 S 415591.47-4414801.24 /37 S 413891.73-4414797.64) coordinates to the ROW between September-November.	-	-	CC	Methodology Please refer Chapter 5.1.8 of Biorestation Monitoring Achievement Criteria The data obtained by comparison of the species' population ratio (%) with its situation in natural habitat (observation of healthy population development) Period 1. Germination (First May-June period after seeding) 2. Flowering (In May-June) 3. Seed maturation (In June-July) Frequency Once in each germination , flowering and mature seed periods, three times per year	Interim First-Findings in Monthly Report & Annual Biorestation Monitoring Report	TANAP	Biorestation Monitoring Plan	BAP; Specification for Reinstatement	-	
386	1-2	654+103-656+98 Critical Habitat (CH32)	Flora <i>Thesium stelleroides</i>	-	Closed Construction Period: 1 May - 1 June Pre-Construction * The top soil shall be scraped at a depth of 10-15 cm minimum and shall be stored in the ROW. * The seeds of <i>Thesium stelleroides</i> species shall	-	-	CC	Methodology Please refer Chapter 5.1.8 of Biorestation Monitoring Period 1. Germination (First May-June period after seeding) 2. Flowering (In June)	Interim First-Findings in Monthly Report & Annual Biorestation Monitoring Report	TANAP	Biorestation Monitoring Plan	BAP; Specification for Reinstatement	-	

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				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
					<p>be collected between 15 June-15 July.</p> <p>Post-Construction</p> <p>* The collected seeds of <i>Thesium stelleroides</i> species shall be planted according to the methodology and to the (37 S 416467.82-4414801.73/ 37 S 416377.69-4414800.92/37 S 416306.80-4414801.76/37 S 416251.56-4414800.98/37 S 416084.26-4414800.34/37 S 415833.94-4414800.57/ 37 S 415591.47-4414801.24 /37 S 413891.73-4414797.64) coordinates to the ROW between September-November.</p>				<p>Achievement Criteria</p> <p>The data obtained by comparison of the species' population ratio (%) with its situation in natural habitat (observation of healthy population development)</p>	<p>3. Seed maturation (In July)</p> <p>Frequency</p> <p>Once in each germination , flowering and mature seed periods, three times per year</p>					
387	1-2	654+103-656+98 Critical Habitat (CH32)	Species Diversity	-	<p>Pre-Construction</p> <p>* The top soil shall be scraped at a depth of 10-15 cm minimum and shall be stored in the ROW.</p> <p>* To control erosion at sloping areas, seeds of the non-endemic natural plants of the region should be collected.</p> <p>Post-Construction</p> <p>* To control erosion at sloping areas, seeds of the non-endemic natural plants of the region should be planted on the ROW.</p>	-	-	CC	<p>Methodology</p> <p>Please refer Chapter 5.1.6 of Biorestitution Monitoring Plan</p> <p>Achievement Criteria</p> <p>The species diversity of the area has recovered by 20% in the first year following the spread of the top soil</p>	<p>Period</p> <p>June-July</p> <p>Frequency</p> <p>Biennially</p>	<p>Interim First-Findings in Monthly Report & Annual Biorestitution Monitoring Report</p>	TANAP	Biorestitution Monitoring Plan	BAP; Specification for Reinstatement	-
388	1-2	654+103-656+98 Critical Habitat (CH32)	Vegetation Cover	-	<p>Pre-Construction</p> <p>* The top soil shall be scraped at a depth of 10-</p>	-	-	CC	<p>Methodology</p> <p>Please refer Chapter 5.1.5 of Biorestitution</p>	<p>Period</p> <p>June-July</p>	<p>Interim First-Findings in Monthly Report &</p>	TANAP	Biorestitution Monitoring Plan	BAP; Specification for Reinstatement	-

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				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
					<p>15 cm minimum and shall be stored in the ROW.</p> <p>* To control erosion at sloping areas, seeds of the non-endemic natural plants of the region should be collected.</p> <p>Post-Construction</p> <p>* To control erosion at sloping areas, seeds of the non-endemic natural plants of the region should be planted on the ROW.</p>				<p>Monitoring Plan</p> <p>Achievement Criteria</p> <p>The vegetative cover of the area has recovered by 20% in the first year following the spread of the top soil</p>	<p>Frequency</p> <p>Annually</p>	<p>Annual Biorestation Monitoring Report</p>				
389	1-2	658+103-658+534 Critical Habitat (CH33)	Flora <i>Gypsophila heteropoda ssp. minutiflora</i>	-	<p>Closed Construction Period: 1 May - 1 June</p> <p>Pre-Construction</p> <p>* The top soil shall be scraped at a depth of 10-15 cm minimum and shall be stored in the ROW. * The seeds of <i>Gypsophila heteropoda ssp. minutiflora</i> between 1 June-20 July.</p> <p>Post-Construction</p> <p>* The collected seeds of <i>Gypsophila heteropoda ssp. minutiflora</i> species shall be planted according to the methodology and to the (37 S 412591.57-4414507.49/ 37 S 412429.08-4414443.13/ 37 S 412246.27-4414412.27) coordinates to the ROW between September-November.</p>	-	-	CC	<p>Methodology</p> <p>Please refer Chapter 5.1.8 of Biorestation Monitoring</p> <p>Achievement Criteria</p> <p>The data obtained by comparison of the species' population ratio (%) with its situation in natural habitat (observation of healthy population development)</p>	<p>Period</p> <p>1. Germination (First May-June period after seeding) 2. Flowering (May-July) 3. Seed maturation (In June-August)</p> <p>Frequency</p> <p>Once in each germination , flowering and mature seed periods, three times per year</p>	<p>Interim First-Findings in Monthly Report & Annual Biorestation Monitoring Report</p>	TANAP	Biorestation Monitoring Plan	BAP; Specification for Reinstatement	-
390	1-2	658+103-658+534 Critical Habitat (CH33)	Flora <i>Astragalus zaraensis</i>	-	<p>Closed Construction Period: 1 May - 1 June</p> <p>Pre-Construction</p>	-	-	CC	<p>Methodology</p> <p>Please refer Chapter 5.1.8 of</p>	<p>Period</p> <p>1. Germination (First May-June</p>	<p>Interim First-Findings in Monthly</p>	TANAP	Biorestation Monitoring Plan	BAP; Specification for Reinstatement	-

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				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
					<p>* The top soil shall be scraped at a depth of 10-15 cm minimum and shall be stored in the ROW.</p> <p>* The seeds of <i>Astragalus zaraensis</i> species shall be collected between 15 June-15 July.</p> <p>Post-Construction</p> <p>* The collected seeds of <i>Astragalus zaraensis</i> species shall be planted according to the methodology and to the (37 S 412591.57-4414507.49/ 37 S 412429.08-4414443.13/ 37 S 412246.27-4414412.27) coordinates to the ROW between September-November.</p>				<p>Biorestation Monitoring</p> <p>Achievement Criteria</p> <p>The data obtained by comparison of the species' population ratio (%) with its situation in natural habitat (observation of healthy population development)</p>	<p>period after seeding)</p> <p>2. Flowering (In June)</p> <p>3. Seed maturation (In July)</p> <p>Frequency</p> <p>Once in each germination , flowering and mature seed periods, three times per year</p>	Report & Annual Biorestation Monitoring Report				
391	1-2	658+103-658+534 Critical Habitat (CH33)	Flora <i>Chrysocamela noeana</i>	-	<p>Closed Construction Period: 1 May - 1 June</p> <p>Pre-Construction</p> <p>* The top soil shall be scraped at a depth of 10-15 cm minimum and shall be stored in the ROW.</p> <p>* The seeds of <i>Chrysocamela noeana</i> species shall be collected between 1 June-20 July* Some of the collected seeds of <i>Chrysocamela noeana</i> species shall be given to the seed gene bank.</p> <p>Post-Construction</p> <p>* The collected seeds of <i>Chrysocamela noeana</i> species shall be planted according to the methodology and to the (37 S 412591.57-4414507.49/ 37 S 412429.08-4414443.13/ 37 S 412246.27-4414412.27)</p>	-	-	CC	<p>Methodology</p> <p>Please refer Chapter 5.1.8 of Biorestation Monitoring</p> <p>Achievement Criteria</p> <p>The data obtained by comparison of the species' population ratio (%) with its situation in natural habitat (observation of healthy population development)</p>	<p>Period</p> <p>1. Germination (First May-June period after seeding)</p> <p>2. Flowering (In April-May)</p> <p>3. Seed maturation (In May-June)</p> <p>Frequency</p> <p>Once in each germination , flowering and mature seed periods, three times per year</p>	Interim First-Findings in Monthly Report & Annual Biorestation Monitoring Report	TANAP	Biorestation Monitoring Plan	BAP; Specification for Reinstatement	-

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				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
					coordinates to the ROW between September-November.										
392	1-2	658+103-658+534 Critical Habitat (CH33)	Flora <i>Minuartia corymbulosa</i> var. <i>gypsophiloides</i>	-	Closed Construction Period: 1 May - 1 June Pre-Construction * The top soil shall be scraped at a depth of 10-15 cm minimum and shall be stored in the ROW. * The seeds of <i>Minuartia corymbulosa</i> var. <i>gypsophiloides</i> shall be collected between 15 June-15 July. Post-Construction * The collected seeds of <i>Minuartia corymbulosa</i> var. <i>gypsophiloides</i> species shall be planted according to the methodology and to the (37 S 412591.57-4414507.49/ 37 S 412429.08-4414443.13/ 37 S 412246.27-4414412.27) coordinates to the ROW between September-November.	-	-	CC	Methodology Please refer Chapter 5.1.8 of Biorestation Monitoring Achievement Criteria The data obtained by comparison of the species' population ratio (%) with its situation in natural habitat (observation of healthy population development)	Period 1. Germination (First May-June period after seeding) 2. Flowering (In May-July) 3. Seed maturation (In June-August) Frequency Once in each germination , flowering and mature seed periods, three times per year	Interim First-Findings in Monthly Report & Annual Biorestation Monitoring Report	TANAP	Biorestation Monitoring Plan	BAP; Specification for Reinstatement	-
393	1-2	658+103-658+534 Critical Habitat (CH33)	Flora <i>Achillea sintenisii</i>	-	Closed Construction Period: 1 May - 1 June Pre-Construction * The top soil shall be scraped at a depth of 10-15 cm minimum and shall be stored in the ROW. * The seeds of <i>Achillea sintenisii</i> species shall be collected between 15 June-15 July. Post-Construction * The collected seeds of <i>Achillea sintenisii</i> species shall be planted according	-	-	CC	Methodology Please refer Chapter 5.1.8 of Biorestation Monitoring Achievement Criteria The data obtained by comparison of the species' population ratio (%) with its situation in	Period 1. Germination (First May-June period after seeding) 2. Flowering (In June-July) 3. Seed maturation (In July-August) Frequency Once in each germination	Interim First-Findings in Monthly Report & Annual Biorestation Monitoring Report	TANAP	Biorestation Monitoring Plan	BAP; Specification for Reinstatement	-

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				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
					to the methodology and to the (37 S 412591.57-4414507.49/ 37 S 412429.08-4414443.13/ 37 S 412246.27-4414412.27) coordinates to the ROW between September-November.				natural habitat (observation of healthy population development)	, flowering and mature seed periods, three times per year					
394	1-2	658+103-658+534 Critical Habitat (CH33)	Flora <i>Centaurea sivasica</i>	-	<p>Closed Construction Period: 1 May - 1 June</p> <p>Pre-Construction</p> <p>* The top soil shall be scraped at a depth of 10-15 cm minimum and shall be stored in the ROW.</p> <p>* The seeds of <i>Centaurea sivasica</i> species shall be collected between 15 June-15 July.</p> <p>Post-Construction</p> <p>* The collected seeds of <i>Centaurea sivasica</i>, species shall be planted according to the methodology and to the (37 S 412591.57-4414507.49/ 37 S 412429.08-4414443.13/ 37 S 412246.27-4414412.27) coordinates to the ROW between September-November.</p>	-	-	CC	<p>Methodology</p> <p>Please refer Chapter 5.1.8 of Biorestation Monitoring</p> <p>Achievement Criteria</p> <p>The data obtained by comparison of the species' population ratio (%) with its situation in natural habitat (observation of healthy population development)</p>	<p>Period</p> <p>1. Germination (First May-June period after seeding)</p> <p>2. Flowering (In June-July)</p> <p>3. Seed maturation (In July-August)</p> <p>Frequency</p> <p>Once in each germination , flowering and mature seed periods, three times per year</p>	Interim First-Findings in Monthly Report & Annual Biorestation Monitoring Report	TANAP	Biorestation Monitoring Plan	BAP; Specification for Reinstatement	-
395	1-2	658+103-658+534 Critical Habitat (CH33)	Flora <i>Gypsophila aucheri</i>	-	<p>Closed Construction Period: 1 May - 1 June</p> <p>Pre-Construction</p> <p>* The top soil shall be scraped at a depth of 10-15 cm minimum and shall be stored in the ROW.</p> <p>* The seeds of <i>Gypsophila aucheri</i> species shall be collected between 15 June-15 July.</p> <p>Post-Construction</p>	-	-	CC	<p>Methodology</p> <p>Please refer Chapter 5.1.8 of Biorestation Monitoring</p> <p>Achievement Criteria</p> <p>The data obtained by comparison of the species'</p>	<p>Period</p> <p>1. Germination (First May-June period after seeding)</p> <p>2. Flowering (In June-July)</p> <p>3. Seed maturation (In July-August)</p> <p>Frequency</p>	Interim First-Findings in Monthly Report & Annual Biorestation Monitoring Report	TANAP	Biorestation Monitoring Plan	BAP; Specification for Reinstatement	-

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				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
					* The collected seeds of <i>Gypsophila aucheri</i> species shall be planted according to the methodology and to the (37 S 412591.57-4414507.49/ 37 S 412429.08-4414443.13/ 37 S 412246.27-4414412.27) coordinates to the ROW between September- November.				population ratio (%) with its situation in natural habitat (observation of healthy population development)	Once in each germination , flowering and mature seed periods, three times per year					
396	1-2	658+103-658+534 Critical Habitat (CH33)	Flora <i>Isatis glauca ssp. sivasica</i>	-	<p>Closed Construction Period: 1 May - 1 June</p> <p>Pre-Construction</p> <p>* The top soil shall be scraped at a depth of 10-15 cm minimum and shall be stored in the ROW.</p> <p>* The seeds of <i>Isatis glauca ssp. sivasica</i> species shall be collected between 15 June-15 July. Some of the collected seeds of <i>Isatis glauca ssp. sivasica</i> species shall be given to the seed gene bank.</p> <p>Post-Construction</p> <p>* The collected seeds of <i>Isatis glauca ssp. sivasica</i> species shall be planted according to the methodology and to the (37 S 412591.57-4414507.49/ 37 S 412429.08-4414443.13/ 37 S 412246.27-4414412.27) coordinates to the ROW between September- November.</p>	-	-	CC	<p>Methodology</p> <p>Please refer Chapter 5.1.8 of Biorestation Monitoring</p> <p>Achievement Criteria</p> <p>The data obtained by comparison of the species' population ratio (%) with its situation in natural habitat (observation of healthy population development)</p>	<p>Period</p> <p>1. Germination (First May-June period after seeding)</p> <p>2. Flowering (In June)</p> <p>3. Seed maturation (In July)</p> <p>Frequency</p> <p>Once in each germination , flowering and mature seed periods, three times per year</p>	Interim First-Findings in Monthly Report & Annual Biorestation Monitorin g Report	TANAP	Biorestorati on Monitoring Plan	BAP; Specification for Reinstatement	-
397	1-2	658+103-658+534 Critical Habitat (CH33)	Flora <i>Scorzonera aucherana</i>	-	<p>Closed Construction Period: 1 May - 1 June</p> <p>Pre-Construction</p> <p>* The top soil shall be scraped at a depth of 10-15 cm minimum and shall be stored in the ROW.</p> <p>* The seeds of <i>Scorzonera</i></p>	-	-	CC	<p>Methodology</p> <p>Please refer Chapter 5.1.8 of Biorestation Monitoring</p>	<p>Period</p> <p>1. Germination (First May-June period after seeding)</p> <p>2. Flowering (In June-July)</p>	Interim First-Findings in Monthly Report & Annual Biorestation	TANAP	Biorestorati on Monitoring Plan	BAP; Specification for Reinstatement	-

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				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
					<i>aucherana</i> species shall be collected between 15 June-15 July. Post-Construction * The collected seeds of <i>Scorzonera aucherana</i> species shall be planted according to the methodology and to the (37 S 412591.57-4414507.49/ 37 S 412429.08-4414443.13/ 37 S 412246.27-4414412.27) coordinates to the ROW between September-November.				Achievement Criteria The data obtained by comparison of the species' population ratio (%) with its situation in natural habitat (observation of healthy population development)	3. Seed maturation (In July-August) Frequency Once in each germination , flowering and mature seed periods, three times per year	Monitoring Report				
398	1-2	658+103-658+534 Critical Habitat (CH33)	Flora <i>Scrophularia lepidota</i>	-	Closed Construction Period: 1 May - 1 June Pre-Construction * The top soil shall be scraped at a depth of 10-15 cm minimum and shall be stored in the ROW. * The seeds of <i>Scrophularia lepidota</i> , species shall be collected between 15 June-15 July. Post-Construction * The collected seeds of <i>Scrophularia lepidota</i> , species shall be planted according to the methodology and to the (37 S 412591.57-4414507.49/ 37 S 412429.08-4414443.13/ 37 S 412246.27-4414412.27) coordinates to the ROW between September-November.	-	-	CC	Methodology Please refer Chapter 5.1.8 of Biorestation Monitoring Achievement Criteria The data obtained by comparison of the species' population ratio (%) with its situation in natural habitat (observation of healthy population development)	Period 1. Germination (First May-June period after seeding) 2. Flowering (In May-June) 3. Seed maturation (In June-July) Frequency Once in each germination , flowering and mature seed periods, three times per year	Interim First-Findings in Monthly Report & Annual Biorestation Monitoring Report	TANAP	Biorestation Monitoring Plan	BAP; Specification for Reinstatement	-
399	1-2	658+103-658+534	Flora <i>Thesium stelleroides</i>	-	Closed Construction Period: 1 May - 1 June Pre-Construction	-	-	CC	Methodology Please refer Chapter 5.1.8	Period 1. Germination	Interim First-Findings in	TANAP	Biorestation	BAP; Specification	-

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				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
		Critical Habitat (CH33)			<p>* The top soil shall be scraped at a depth of 10-15 cm minimum and shall be stored in the ROW.</p> <p>* The seeds of <i>Thesium stelleroides</i> species shall be collected between 15 June-15 July.</p> <p>Post-Construction</p> <p>* The collected seeds of <i>Thesium stelleroides</i> species shall be planted according to the methodology and to the (37 S 412591.57-4414507.49/ 37 S 412429.08-4414443.13/ 37 S 412246.27-4414412.27) coordinates to the ROW between September-November.</p>				<p>of Biorestation Monitoring</p> <p>Achievement Criteria</p> <p>The data obtained by comparison of the species' population ratio (%) with its situation in natural habitat (observation of healthy population development)</p>	<p>n (First May - June period after seeding)</p> <p>2. Flowering (In June)</p> <p>3. Seed maturation (In July)</p> <p>Frequency</p> <p>Once in each germination , flowering and mature seed periods, three times per year</p>	<p>Monthly Report & Annual Biorestation Monitoring Report</p>		Monitoring Plan	for Reinstatement	
400	1-2	658+103-658+534 Critical Habitat (CH33)	Species Diversity	-	<p>Pre-Construction</p> <p>* The top soil shall be scraped at a depth of 10-15 cm minimum and shall be stored in the ROW.</p> <p>* To control erosion at sloping areas, seeds of the non-endemic natural plants of the region should be collected.</p> <p>Post-Construction</p> <p>* To control erosion at sloping areas, seeds of the non-endemic natural plants of the region should be planted on the ROW.</p>	-	-	CC	<p>Methodology</p> <p>Please refer Chapter 5.1.6 of Biorestation Monitoring Plan</p> <p>Achievement Criteria</p> <p>The species diversity of the area has recovered by 20% in the first year following the spread of the top soil</p>	<p>Period</p> <p>June-July</p> <p>Frequency</p> <p>Biennially</p>	<p>Interim First-Findings in Monthly Report & Annual Biorestation Monitoring Report</p>	TANAP	Biorestation Monitoring Plan	BAP; Specification for Reinstatement	-
401	1-2	658+103-658+534	Vegetation Cover	-	<p>Pre-Construction</p> <p>* The top soil shall be scraped at a depth of 10-</p>	-	-	CC	<p>Methodology</p> <p>Please refer Chapter 5.1.5</p>	<p>Period</p> <p>June-July</p>	<p>Interim First-Findings in</p>	TANAP	Biorestation	BAP; Specification	-

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				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
		Critical Habitat (CH33)			<p>15 cm minimum and shall be stored in the ROW.</p> <p>* To control erosion at sloping areas, seeds of the non-endemic natural plants of the region should be collected.</p> <p>Post-Construction</p> <p>* To control erosion at sloping areas, seeds of the non-endemic natural plants of the region should be planted on the ROW.</p>				<p>of Biorestation Monitoring Plan</p> <p>Achievement Criteria</p> <p>The vegetative cover of the area has recovered by 20% in the first year following the spread of the top soil</p>	<p>Frequency</p> <p>Annually</p>	<p>Monthly Report & Annual Biorestation Monitoring Report</p>		Monitoring Plan	for Reinstatement	
402	1-2	662+456-662+559 Critical Habitat (CH34)	Flora <i>Gypsophila heteropoda ssp. minutiflora</i>	-	<p>Closed Construction Period: 1 May - 1 June</p> <p>Pre-Construction</p> <p>* The top soil shall be scraped at a depth of 10-15 cm minimum and shall be stored in the ROW.</p> <p>* The seeds of <i>Gypsophila heteropoda ssp. minutiflora</i> between 1 June-20 July.</p> <p>Post-Construction</p> <p>* The collected seeds of <i>Gypsophila heteropoda ssp. minutiflora</i> species shall be planted according to the methodology and to the (37 S 408394.58-4414398.36/ 37 S 408331.00-4414381.37) coordinates to the ROW between September-November.</p>	-	-	CC	<p>Methodology</p> <p>Please refer Chapter 5.1.8 of Biorestation Monitoring</p> <p>Achievement Criteria</p> <p>The data obtained by comparison of the species' population ratio (%) with its situation in natural habitat (observation of healthy population development)</p>	<p>Period</p> <p>1. Germination (First May-June period after seeding)</p> <p>2. Flowering (In May-July)</p> <p>3. Seed maturation (In June-August)</p> <p>Frequency</p> <p>Once in each germination , flowering and mature seed periods, three times per year</p>	<p>Interim First-Findings in Monthly Report & Annual Biorestation Monitoring Report</p>	TANAP	Biorestation Monitoring Plan	BAP; Specification for Reinstatement	-
403	1-2	662+456-662+559 Critical Habitat (CH34)	Flora <i>Astragalus zaraensis</i>	-	<p>Closed Construction Period: 1 May - 1 June</p> <p>Pre-Construction</p>	-	-	CC	<p>Methodology</p> <p>Please refer Chapter 5.1.8 of</p>	<p>Period</p> <p>1. Germination (First May-June</p>	<p>Interim First-Findings in Monthly</p>	TANAP	Biorestation Monitoring Plan	BAP; Specification for Reinstatement	-

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				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
					<p>* The top soil shall be scraped at a depth of 10-15 cm minimum and shall be stored in the ROW.</p> <p>* The seeds of <i>Astragalus zaraensis</i> between 15 June-15 July.</p> <p>Post-Construction</p> <p>* The collected seeds of <i>Astragalus zaraensis</i> species shall be planted according to the methodology and to the (37 S 408394.58-4414398.36/ 37 S 408331.00-4414381.37) coordinates to the ROW between September-November.</p>				<p>Biorestation Monitoring</p> <p>Achievement Criteria</p> <p>The data obtained by comparison of the species' population ratio (%) with its situation in natural habitat (observation of healthy population development)</p>	<p>period after seeding)</p> <p>2. Flowering (In June ayında)</p> <p>3. Seed maturation (In July)</p> <p>Frequency</p> <p>Once in each germination , flowering and mature seed periods, three times per year</p>	Report & Annual Biorestation Monitoring Report				
404	1-2	662+456-662+559 Critical Habitat (CH34)	Flora <i>Astragalus zaraensis</i>	-	<p>Closed Construction Period: 1 May - 1 June</p> <p>Pre-Construction</p> <p>* The top soil shall be scraped at a depth of 10-15 cm minimum and shall be stored in the ROW.</p> <p>* The seeds of <i>Chrysocamela noeana</i> species shall be collected between 1 June-20 July</p> <p>* Some of the collected seeds of <i>Chrysocamela noeana</i> species shall be given to the seed gene bank.</p> <p>Post-Construction</p> <p>* The collected seeds of <i>Chrysocamela noeana</i> species shall be planted according to the methodology and to the (37 S 408394.58-4414398.36/ 37 S 408331.00-4414381.37) coordinates to the ROW</p>	-	-	CC	<p>Methodology</p> <p>Please refer Chapter 5.1.8 of Biorestation Monitoring</p> <p>Achievement Criteria</p> <p>The data obtained by comparison of the species' population ratio (%) with its situation in natural habitat (observation of healthy population development)</p>	<p>Period</p> <p>1. Germination (First May-June period after seeding)</p> <p>2. Flowering (In April-May)</p> <p>3. Seed maturation (In May-June)</p> <p>Frequency</p> <p>Once in each germination , flowering and mature seed periods, three times per year</p>	Interim First-Findings in Monthly Report & Annual Biorestation Monitoring Report	TANAP	Biorestation Monitoring Plan	BAP; Specification for Reinstatement	-

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				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
					between September-November.										
405	1-2	662+456-662+559 Critical Habitat (CH34)	Flora <i>Minuartia corymbulosa</i> var. <i>gypsophiloides</i>	-	<p>Closed Construction Period: 1 May - 1 June</p> <p>Pre-Construction</p> <p>* The top soil shall be scraped at a depth of 10-15 cm minimum and shall be stored in the ROW. * The seeds of <i>Minuartia corymbulosa</i> var. <i>gypsophiloides</i> species shall be collected between 15 June-15 July.</p> <p>Post-Construction</p> <p>* The collected seeds of <i>Minuartia corymbulosa</i> var. <i>gypsophiloides</i> shall be planted according to the methodology and to the (37 S 408394.58-4414398.36/ 37 S 408331.00-4414381.37) coordinates to the ROW between September-November.</p>	-	-	CC	<p>Methodology</p> <p>Please refer Chapter 5.1.8 of Biorestation Monitoring</p> <p>Achievement Criteria</p> <p>The data obtained by comparison of the species' population ratio (%) with its situation in natural habitat (observation of healthy population development)</p>	<p>Period</p> <p>1. Germination (First May-June period after seeding) 2. Flowering (In August) 3. Seed maturation (In September)</p> <p>Frequency</p> <p>Once in each germination , flowering and mature seed periods, three times per year</p>	Interim First-Findings in Monthly Report & Annual Biorestation Monitoring Report	TANAP	Biorestation Monitoring Plan	BAP; Specification for Reinstatement	-
406	1-2	662+456-662+559 Critical Habitat (CH34)	Flora <i>Achillea sintenisii</i>	-	<p>Closed Construction Period: 1 May - 1 June</p> <p>Pre-Construction</p> <p>* The top soil shall be scraped at a depth of 10-15 cm minimum and shall be stored in the ROW. * The seeds of <i>Achillea sintenisii</i> species shall be collected between 15 June-15 July.</p> <p>Post-Construction</p> <p>* The collected seeds of <i>Achillea sintenisii</i> species shall be planted according to the methodology and to the (37 S 408394.58-</p>	-	-	CC	<p>Methodology</p> <p>Please refer Chapter 5.1.8 of Biorestation Monitoring</p> <p>Achievement Criteria</p> <p>The data obtained by comparison of the species' population ratio (%) with its situation in natural habitat</p>	<p>Period</p> <p>1. Germination (First May-June period after seeding) 2. Flowering (In May-July) 3. Seed maturation (In June-August)</p> <p>Frequency</p> <p>Once in each germination , flowering and mature</p>	Interim First-Findings in Monthly Report & Annual Biorestation Monitoring Report	TANAP	Biorestation Monitoring Plan	BAP; Specification for Reinstatement	-

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				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
					4414398.36/ 37 S 408331.00-4414381.37) coordinates to the ROW between September-November.				(observation of healthy population development)	seed periods, three times per year					
407	1-2	662+456-662+559 Critical Habitat (CH34)	Flora <i>Centaurea sivasica</i>		<p>Closed Construction Period: 1 May - 1 June</p> <p>Pre-Construction</p> <p>* The top soil shall be scraped at a depth of 10-15 cm minimum and shall be stored in the ROW. * The seeds of <i>Centaurea sivasica</i> species shall be collected between 15 June-15 July.</p> <p>Post-Construction</p> <p>* The collected seeds of <i>Centaurea sivasica</i> species shall be planted according to the methodology and to the (37 S 408394.58-4414398.36/ 37 S 408331.00-4414381.37) coordinates to the ROW between September-November.</p>			CC	<p>Methodology</p> <p>Please refer Chapter 5.1.8 of Biorestoration Monitoring</p> <p>Achievement Criteria</p> <p>The data obtained by comparison of the species' population ratio (%) with its situation in natural habitat (observation of healthy population development)</p>	<p>Period</p> <p>1. Germination (First May-June period after seeding) 2. Flowering (In June-July) 3. Seed maturation (In July-August)</p> <p>Frequency</p> <p>Once in each germination , flowering and mature seed periods, three times per year</p>	Interim First-Findings in Monthly Report & Annual Biorestoration Monitoring Report	TANAP	Biorestoration Monitoring Plan	BAP; Specification for Reinstatement	
408	1-2	662+456-662+559 Critical Habitat (CH34)	Flora <i>Gypsophila aucheri</i>		<p>Closed Construction Period: 1 May - 1 June</p> <p>Pre-Construction</p> <p>* The top soil shall be scraped at a depth of 10-15 cm minimum and shall be stored in the ROW. * The seeds of <i>Gypsophila aucheri</i> species shall be collected between 15 June-15 July.</p> <p>Post-Construction</p>			CC	<p>Methodology</p> <p>Please refer Chapter 5.1.8 of Biorestoration Monitoring</p> <p>Achievement Criteria</p> <p>The data obtained by comparison of the species' population</p>	<p>Period</p> <p>1. Germination (First May-June period after seeding) 2. Flowering (In June-July) 3. Seed maturation (In July-August)</p> <p>Frequency</p>	Interim First-Findings in Monthly Report & Annual Biorestoration Monitoring Report	TANAP	Biorestoration Monitoring Plan	BAP; Specification for Reinstatement	

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				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
					* The collected seeds of <i>Gypsophila aucheri</i> species shall be planted according to the methodology and to the (37 S 408394.58-4414398.36/ 37 S 408331.00-4414381.37) coordinates to the ROW between September-November.				ratio (%) with its situation in natural habitat (observation of healthy population development)	Once in each germination , flowering and mature seed periods, three times per year					
409	1-2	662+456-662+559 Critical Habitat (CH34)	Flora <i>Isatis glauca ssp. sivasica</i>	-	Closed Construction Period: 1 May - 1 June Pre-Construction * The top soil shall be scraped at a depth of 10-15 cm minimum and shall be stored in the ROW. * The seeds of <i>Isatis glauca ssp. sivasica</i> species shall be collected between 15 June-15 July. Some of the collected seeds of <i>Isatis glauca ssp. sivasica</i> species shall be given to the seed gene bank. Post-Construction * The collected seeds of <i>Isatis glauca ssp. sivasica</i> species shall be planted according to the methodology and to the (37 S 408394.58-4414398.36/ 37 S 408331.00-4414381.37) coordinates to the ROW between September-November.	-	-	CC	Methodology Please refer Chapter 5.1.8 of Biorestitution Monitoring Achievement Criteria The data obtained by comparison of the species' population ratio (%) with its situation in natural habitat (observation of healthy population development)	Period 1. Germination (First May-June period after seeding) 2. Flowering (In June) 3. Seed maturation (In July) Frequency Once in each germination , flowering and mature seed periods, three times per year	Interim First-Findings in Monthly Report & Annual Biorestitution Monitoring Report	TANAP	Biorestitution Monitoring Plan	BAP; Specification for Reinstatement	-
410	1-2	662+456-662+559 Critical Habitat (CH34)	Flora <i>Scorzonera aucherana</i>	-	Closed Construction Period: 1 May - 1 June Pre-Construction * The top soil shall be scraped at a depth of 10-15 cm minimum and shall be stored in the ROW. * The seeds of <i>Scorzonera aucherana</i> species shall	-	-	CC	Methodology Please refer Chapter 5.1.8 of Biorestitution Monitoring	Period 1. Germination (First May-June period after seeding) 2. Flowering (In June-July)	Interim First-Findings in Monthly Report & Annual Biorestitution	TANAP	Biorestitution Monitoring Plan	BAP; Specification for Reinstatement	-

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RefNo	Ph.	Specific Location (and KP)	Environmental Component ²	Project Commitment					Monitoring				Mang. Plan	Addition. Docum.	ESIA Chapter
				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
					<p>be collected between 15 June-15 July.</p> <p>Post-Construction</p> <p>* The collected seeds of <i>Scorzonera aucherana</i> species shall be planted according to the methodology and to the (37 S 408394.58-4414398.36/ 37 S 408331.00-4414381.37) coordinates to the ROW between September-November.</p>				<p>Achievement Criteria</p> <p>The data obtained by comparison of the species' population ratio (%) with its situation in natural habitat (observation of healthy population development)</p>	<p>3. Seed maturation (In July-August)</p> <p>Frequency</p> <p>Once in each germination , flowering and mature seed periods, three times per year</p>	Monitorin g Report				
411	1-2	662+456-662+559 Critical Habitat (CH34)	Flora <i>Scrophularia lepidota</i>	-	<p>Closed Construction Period: 1 May - 1 June</p> <p>Pre-Construction</p> <p>* The top soil shall be scraped at a depth of 10-15 cm minimum and shall be stored in the ROW.</p> <p>* The seeds of <i>Scrophularia lepidota</i> species shall be collected between 15 June-15 July.</p> <p>Post-Construction</p> <p>* The collected seeds of <i>Scrophularia lepidota</i> species shall be planted according to the methodology and to the (37 S 408394.58-4414398.36/ 37 S 408331.00-4414381.37) coordinates to the ROW between September-November.</p>	-	-	CC	<p>Methodology</p> <p>Please refer Chapter 5.1.8 of Biorestation Monitoring</p> <p>Achievement Criteria</p> <p>The data obtained by comparison of the species' population ratio (%) with its situation in natural habitat (observation of healthy population development)</p>	<p>Period</p> <p>1. Germination (First May-June period after seeding)</p> <p>2. Flowering (In May-June)</p> <p>3. Seed maturation (In June-July)</p> <p>Frequency</p> <p>Once in each germination , flowering and mature seed periods, three times per year</p>	Interim First-Findings in Monthly Report & Annual Biorestation Monitorin g Report	TANAP	Biorestorati on Monitoring Plan	BAP; Specification for Reinstatement	-
412	1-2	662+456-662+559 Critical Habitat (CH34)	Flora <i>Thesium stelleroides</i>	-	<p>Closed Construction Period: 1 May - 1 June</p> <p>Pre-Construction</p> <p>* The top soil shall be scraped at a depth of 10-15 cm minimum and shall</p>	-	-	CC	<p>Methodology</p> <p>Please refer Chapter 5.1.8 of Biorestation Monitoring</p>	<p>Period</p> <p>1. Germination (First May-June period after seeding)</p>	Interim First-Findings in Monthly Report & Annual Biorestora	TANAP	Biorestorati on Monitoring Plan	BAP; Specification for Reinstatement	-

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				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
					<p>be stored in the ROW. * The seeds of <i>Thesium stelleroides</i> species shall be collected between 15 June-15 July.</p> <p>Post-Construction * The collected seeds of <i>Thesium stelleroides</i> species shall be planted according to the methodology and to the (37 S 408394.58-4414398.36/ 37 S 408331.00-4414381.37) coordinates to the ROW between September-November.</p>				<p>Achievement Criteria The data obtained by comparison of the species' population ratio (%) with its situation in natural habitat (observation of healthy population development)</p>	<p>2. Flowering (In June) 3. Seed maturation (In July)</p> <p>Frequency Once in each germination , flowering and mature seed periods, three times per year</p>	tion Monitorin g Report				
413	1-2	662+456-662+559 Critical Habitat (CH34)	Species Diversity	-	<p>Pre-Construction * The top soil shall be scraped at a depth of 10-15 cm minimum and shall be stored in the ROW. * To control erosion at sloping areas, seeds of the non-endemic natural plants of the region should be collected.</p> <p>Post-Construction * To control erosion at sloping areas, seeds of the non-endemic natural plants of the region should be planted on the ROW.</p>	-	-	CC	<p>Methodology Please refer Chapter 5.1.6 of Biorestation Monitoring Plan</p> <p>Achievement Criteria The species diversity of the area has recovered by 20% in the first year following the spread of the top soil</p>	<p>Period June-July</p> <p>Frequency Biennially</p>	Interim First-Findings in Monthly Report & Annual Biorestation Monitorin g Report	TANAP	Biorestorati on Monitoring Plan	BAP; Specification for Reinstatement	-
414	1-2	662+456-662+559 Critical Habitat (CH34)	Vegetation Cover	-	<p>Pre-Construction * The top soil shall be scraped at a depth of 10-15 cm minimum and shall be stored in the ROW. * To control erosion at sloping areas, seeds of the non-endemic natural</p>	-	-	CC	<p>Methodology Please refer Chapter 5.1.5 of Biorestation Monitoring Plan</p>	<p>Period June-July</p> <p>Frequency Annually</p>	Interim First-Findings in Monthly Report & Annual Biorestora tion	TANAP	Biorestorati on Monitoring Plan	BAP; Specification for Reinstatement	-

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				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
					plants of the region should be collected. Post-Construction * To control erosion at sloping areas, seeds of the non-endemic natural plants of the region should be planted on the ROW.				Achievement Criteria The vegetative cover of the area has recovered by 20% in the first year following the spread of the top soil		Monitoring Report				
415	1-2	663+309-663+812 Critical Habitat (CH35)	Flora <i>Gypsophila heteropoda ssp. minutiflora</i>		Closed Construction Period: 1 May - 1 June Pre-Construction * The top soil shall be scraped at a depth of 10-15 cm minimum and shall be stored in the ROW. * The seeds of <i>Gypsophila heteropoda ssp. minutiflora</i> species shall be collected near the ROW between 1 June-20 July. Post-Construction * The collected seeds of <i>Gypsophila heteropoda ssp. minutiflora</i> species shall be planted according to the methodology and to the (37 S 407582.00-4414160.00/ 37 S 407486.00-4414130.00) coordinates between September-November. * Terracing shall be carried out.			CC	Methodology Please refer Chapter 5.1.8 of Biorestation Monitoring Achievement Criteria The data obtained by comparison of the species' population ratio (%) with its situation in natural habitat (observation of healthy population development)	Period 1. Germination (First May-June period after seeding) 2. Flowering (In May-July) 3. Seed maturation (In June-August) Frequency Once in each germination , flowering and mature seed periods, three times per year	Interim First-Findings in Monthly Report & Annual Biorestation Monitoring Report	TANAP	Biorestation Monitoring Plan	BAP; Specification for Reinstatement	
416	1-2	663+309-663+812 Critical Habitat (CH35)	Flora <i>Astragalus zaraensis</i>		Closed Construction Period: 1 May - 1 June Pre-Construction * The top soil shall be scraped at a depth of 10-15 cm minimum and shall be stored in the ROW. * The seeds of <i>Astragalus zaraensis</i> species shall be			CC	Methodology Please refer Chapter 5.1.8 of Biorestation Monitoring	Period 1. Germination (First May-June period after seeding) 2. Flowering (In June)	Interim First-Findings in Monthly Report & Annual Biorestation	TANAP	Biorestation Monitoring Plan	BAP; Specification for Reinstatement	

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RefNo .	Ph.	Specific Location (and KP)	Environmental Component ²	Project Commitment					Monitoring				Mang. Plan	Addition. Docum.	ESIA Chapter
				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
					<p>collected near the ROW between 15 June-15 July. The <i>Astragalus zaraensis</i> species individuals shall be removed as and shall be transferred to the (37 S 407182.00-4414267.00) coordinates.</p> <p>Post-Construction</p> <p>* The collected seeds of <i>Astragalus zaraensis</i> species shall be planted according to the methodology and to the (37 S 407582.00-4414160.00/ 37 S 407486.00-4414130.00) coordinates between September-November.</p> <p>* Terracing shall be carried out.</p>				<p>Achievement Criteria</p> <p>The data obtained by comparison of the species’ population ratio (%) with its situation in natural habitat (observation of healthy population development)</p>	<p>3. Seed maturation (In July)</p> <p>Frequency</p> <p>Once in each germination , flowering and mature seed periods, three times per year</p>	Monitorin g Report				
417	1-2	663+309-663+812 Critical Habitat (CH35)	Flora <i>Chrysocamela noeana</i>	-	<p>Closed Construction Period: 1 May - 1 June</p> <p>Pre-Construction</p> <p>* The top soil shall be scraped at a depth of 10-15 cm minimum and shall be stored in the ROW.</p> <p>* The seeds of <i>Chrysocamela noeana</i> species shall be collected near the ROW between 1 June-20 July. Some of the collected seeds of <i>Chrysocamela noeana</i> species shall be given to the seed gene bank.</p> <p>Post-Construction</p> <p>* The collected seeds of <i>Chrysocamela noeana</i> species shall be planted according to the methodology and to the (37 S 407582.00-4414160.00/ 37 S 407486.00-4414130.00) coordinates between</p>	-	-	CC	<p>Methodology</p> <p>Please refer Chapter 5.1.8 of Biorestoreation Monitoring</p> <p>Achievement Criteria</p> <p>The data obtained by comparison of the species’ population ratio (%) with its situation in natural habitat (observation of healthy population development)</p>	<p>Period</p> <p>1. Germinatio n (First May-June period after seeding)</p> <p>2. Flowering (In April-May)</p> <p>3. Seed maturation (In May-June)</p> <p>Frequency</p> <p>Once in each germination , flowering and mature seed periods, three times per year</p>	Interim First-Findings in Monthly Report & Annual Biorestoreation Monitorin g Report	TANAP	Biorestorati on Monitoring Plan	BAP; Specification for Reinstatement	-

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				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
					September-November. * Terracing shall be carried out.										
418	1-2	663+309-663+812 Critical Habitat (CH35)	Flora <i>Minuartia corymbulosa</i> var. <i>gypsophiloides</i>	-	<p>Closed Construction Period: 1 May - 1 June</p> <p>Pre-Construction</p> <p>* The top soil shall be scraped at a depth of 10-15 cm minimum and shall be stored in the ROW. * The seeds of <i>Minuartia corymbulosa</i> var. <i>gypsophiloides</i> species shall be collected near the ROW between 15 June-15 July.</p> <p>Post-Construction</p> <p>* The collected seeds of <i>Minuartia corymbulosa</i> var. <i>gypsophiloides</i> species shall be planted according to the methodology and to the (37 S 407582.00-4414160.00/ 37 S 407486.00-4414130.00) coordinates between September-November. * Terracing shall be carried out.</p>	-	-	CC	<p>Methodology</p> <p>Please refer Chapter 5.1.8 of Biorestoration Monitoring</p> <p>Achievement Criteria</p> <p>The data obtained by comparison of the species' population ratio (%) with its situation in natural habitat (observation of healthy population development)</p>	<p>Period</p> <p>1. Germination (First May-June period after seeding) 2. Flowering (In August) 3. Seed maturation (In September)</p> <p>Frequency</p> <p>Once in each germination , flowering and mature seed periods, three times per year</p>	Interim First-Findings in Monthly Report & Annual Biorestation Monitorin g Report	TANAP	Biorestorati on Monitoring Plan	BAP; Specification for Reinstatement	-
419	1-2	663+309-663+812 Critical Habitat (CH35)	Flora <i>Achillea sintenisii</i>	-	<p>Closed Construction Period: 1 May - 1 June</p> <p>Pre-Construction</p> <p>* The top soil shall be scraped at a depth of 10-15 cm minimum and shall be stored in the ROW. * The seeds of <i>Achillea sintenisii</i> species shall be collected near the ROW between 15 June-15 July. The <i>Achillea sintenisii</i> species individuals shall be removed as tufts and shall be transferred to the (37 S</p>	-	-	CC	<p>Methodology</p> <p>Please refer Chapter 5.1.8 of Biorestoration Monitoring</p> <p>Achievement Criteria</p> <p>The data obtained by comparison of the species' population ratio (%) with</p>	<p>Period</p> <p>1. Germination (First May-June period after seeding) 2. Flowering (In May-July) 3. Seed maturation (In June-August)</p> <p>Frequency</p> <p>Once in each</p>	Interim First-Findings in Monthly Report & Annual Biorestation Monitorin g Report	TANAP	Biorestorati on Monitoring Plan	BAP; Specification for Reinstatement	-

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				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
					407182.00-4414267.00) coordinates. Post-Construction * The collected seeds of <i>Achillea sintenisii</i> species shall be planted according to the methodology and to the (37 S 407582.00-4414160.00/ 37 S 407486.00-4414130.00) coordinates between September-November. * Terracing shall be carried out.				its situation in natural habitat (observation of healthy population development)	germination , flowering and mature seed periods, three times per year					
420	1-2	663+309-663+812 Critical Habitat (CH35)	Flora <i>Centaurea sivasica</i>	-	Closed Construction Period: 1 May - 1 June Pre-Construction * The top soil shall be scraped at a depth of 10-15 cm minimum and shall be stored in the ROW. * The seeds of <i>Centaurea sivasica</i> species shall be collected near the ROW between 15 June-15 July. Post-Construction * The collected seeds of <i>Centaurea sivasica</i> species shall be planted according to the methodology and to the (37 S 407582.00-4414160.00/ 37 S 407486.00-4414130.00) coordinates between September-November. * Terracing shall be carried out.	-	-	CC	Methodology Please refer Chapter 5.1.8 of Biorestation Monitoring Achievement Criteria The data obtained by comparison of the species' population ratio (%) with its situation in natural habitat (observation of healthy population development)	Period 1. Germination (First May-June period after seeding) 2. Flowering (In June-July) 3. Seed maturation (In July-August) Frequency Once in each germination , flowering and mature seed periods, three times per year	Interim First-Findings in Monthly Report & Annual Biorestation Monitoring Report	TANAP	Biorestation Monitoring Plan	BAP; Specification for Reinstatement	-
421	1-2	663+309-663+812 Critical Habitat (CH35)	Flora <i>Gypsophila aucheri</i>	-	Closed Construction Period: 1 May - 1 June Pre-Construction * The top soil shall be scraped at a depth of 10-15 cm minimum and shall be stored in the ROW.	-	-	CC	Methodology Please refer Chapter 5.1.8 of Biorestation Monitoring	Period 1. Germination (First May-June period after seeding) 2. Flowering	Interim First-Findings in Monthly Report & Annual Biorestation	TANAP	Biorestation Monitoring Plan	BAP; Specification for Reinstatement	-

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				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
					<p>* The seeds of <i>Gypsophila aucheri</i> species shall be collected near the ROW between 15 June-15 July.</p> <p>Post-Construction</p> <p>* The collected seeds of <i>Gypsophila aucheri</i> species shall be planted according to the methodology and to the (37 S 407582.00-4414160.00/ 37 S 407486.00-4414130.00) coordinates between September-November.</p> <p>* Terracing shall be carried out.</p>				<p>Achievement Criteria</p> <p>The data obtained by comparison of the species' population ratio (%) with its situation in natural habitat (observation of healthy population development)</p>	<p>(In June-July)</p> <p>3. Seed maturation (In July-August)</p> <p>Frequency</p> <p>Once in each germination , flowering and mature seed periods, three times per year</p>	Monitoring Report				
422	1-2	663+309-663+812 Critical Habitat (CH35)	Flora <i>Isatis glauca ssp. sivasica</i>		<p>Closed Construction Period: 1 May - 1 June</p> <p>Pre-Construction</p> <p>* The top soil shall be scraped at a depth of 10-15 cm minimum and shall be stored in the ROW.</p> <p>* The seeds of <i>Isatis glauca ssp. sivasica</i> species shall be collected near the ROW between 15 June-15 July. Some of the collected seeds of <i>Isatis glauca ssp. sivasica</i> species shall be given to the seed gene bank.</p> <p>Post-Construction</p> <p>* The collected seeds of <i>Isatis glauca ssp. sivasica</i> species shall be planted according to the methodology and to the (37 S 407582.00-4414160.00/ 37 S 407486.00-4414130.00) coordinates between September-November.</p> <p>* Terracing shall be carried out.</p>			CC	<p>Methodology</p> <p>Please refer Chapter 5.1.8 of Biorestation Monitoring</p> <p>Achievement Criteria</p> <p>The data obtained by comparison of the species' population ratio (%) with its situation in natural habitat (observation of healthy population development)</p>	<p>Period</p> <p>1. Germination (First May-June period after seeding)</p> <p>2. Flowering (In June)</p> <p>3. Seed maturation (In July)</p> <p>Frequency</p> <p>Once in each germination , flowering and mature seed periods, three times per year</p>	Interim First-Findings in Monthly Report & Annual Biorestation Monitoring Report	TANAP	Biorestation Monitoring Plan	BAP; Specification for Reinstatement	

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				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
423	1-2	663+309-663+812 Critical Habitat (CH35)	Flora <i>Scorzonera aucherana</i>	-	<p>Closed Construction Period: 1 May - 1 June</p> <p>Pre-Construction</p> <p>* The top soil shall be scraped at a depth of 10-15 cm minimum and shall be stored in the ROW.</p> <p>* The seeds of <i>Scorzonera aucherana</i> species shall be collected near the ROW between 15 June-15 July. The <i>Scorzonera aucherana</i> species individuals shall be removed as tufts and shall be transferred to the (37 S 407182.00-4414267.00) coordinates.</p> <p>Post-Construction</p> <p>* The collected seeds of <i>Scorzonera aucherana</i> species shall be planted according to the methodology and to the (37 S 407582.00-4414160.00/ 37 S 407486.00-4414130.00) coordinates between September-November.</p> <p>* Terracing shall be carried out.</p>	-	-	CC	<p>Methodology</p> <p>Please refer Chapter 5.1.8 of Biorestation Monitoring</p> <p>Achievement Criteria</p> <p>The data obtained by comparison of the species' population ratio (%) with its situation in natural habitat (observation of healthy population development)</p>	<p>Period</p> <p>1. Germination (First May-June period after seeding)</p> <p>2. Flowering (In June-July)</p> <p>3. Seed maturation (In July-August)</p> <p>Frequency</p> <p>Once in each germination , flowering and mature seed periods, three times per year</p>	Interim First-Findings in Monthly Report & Annual Biorestation Monitoring Report	TANAP	Biorestation Monitoring Plan	BAP; Specification for Reinstatement	-
424	1-2	663+309-663+812 Critical Habitat (CH35)	Flora <i>Scrophularia lepidota</i>	-	<p>Closed Construction Period: 1 May - 1 June</p> <p>Pre-Construction</p> <p>* The top soil shall be scraped at a depth of 10-15 cm minimum and shall be stored in the ROW.</p> <p>* The seeds of <i>Scrophularia lepidota</i> species shall be collected near the ROW between 15 June-15 July.</p> <p>Post-Construction</p> <p>* The collected seeds of <i>Scrophularia lepidota</i></p>	-	-	CC	<p>Methodology</p> <p>Please refer Chapter 5.1.8 of Biorestation Monitoring</p> <p>Achievement Criteria</p> <p>The data obtained by comparison of the species' population ratio (%) with its situation in</p>	<p>Period</p> <p>1. Germination (First May-June period after seeding)</p> <p>2. Flowering (In June-July)</p> <p>3. Seed maturation (In July-August)</p> <p>Frequency</p> <p>Once in each germination</p>	Interim First-Findings in Monthly Report & Annual Biorestation Monitoring Report	TANAP	Biorestation Monitoring Plan	BAP; Specification for Reinstatement	-

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				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
					according to the methodology and to the (37 S 407582.00-4414160.00/ 37 S 407486.00-4414130.00) coordinates between September-November. * Terracing shall be carried out.				natural habitat (observation of healthy population development)	, flowering and mature seed periods, three times per year					
425	1-2	663+309-663+812 Critical Habitat (CH35)	Flora <i>Thesium stelleroides</i>	-	Closed Construction Period: 1 May - 1 June Pre-Construction * The top soil shall be scraped at a depth of 10-15 cm minimum and shall be stored in the ROW. * The seeds of <i>Thesium stelleroides</i> species shall be collected near the ROW between 15 June-15 July. Post-Construction * The collected seeds of <i>Thesium stelleroides</i> species shall be planted according to the methodology and to the (37 S 407582.00-4414160.00/ 37 S 407486.00-4414130.00) coordinates between September-November. * Terracing shall be carried out.	-	-	CC	Methodology Please refer Chapter 5.1.8 of Biorestation Monitoring Achievement Criteria The data obtained by comparison of the species’ population ratio (%) with its situation in natural habitat (observation of healthy population development) Period 1. Germination (First May-June period after seeding) 2. Flowering (In June) 3. Seed maturation (In July) Frequency Once in each germination , flowering and mature seed periods, three times per year	Interim First-Findings in Monthly Report & Annual Biorestation Monitoring Report	TANAP	Biorestation Monitoring Plan	BAP; Specification for Reinstatement	-	
426	1-2	663+309-663+812 Critical Habitat (CH35)	Species Diversity	-	Pre-Construction * The top soil shall be scraped at a depth of 10-15 cm minimum and shall be stored in the ROW. * To control erosion at sloping areas, seeds of the non-endemic natural plants of the region should be collected. Post-Construction	-	-	CC	Methodology Please refer Chapter 5.1.6 of Biorestation Monitoring Plan Achievement Criteria The species diversity of Period June-July Frequency Biennially	Interim First-Findings in Monthly Report & Annual Biorestation Monitoring Report	TANAP	Biorestation Monitoring Plan	BAP; Specification for Reinstatement	-	

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				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
					* To control erosion at sloping areas, seeds of the non-endemic natural plants of the region should be planted on the ROW.				the area has recovered by 20% in the first year following the spread of the top soil						
427	1-2	663+309-663+812 Critical Habitat (CH35)	Vegetation Cover	-	Pre-Construction * The top soil shall be scraped at a depth of 10-15 cm minimum and shall be stored in the ROW. * To control erosion at sloping areas, seeds of the non-endemic natural plants of the region should be collected. Post-Construction * To control erosion at sloping areas, seeds of the non-endemic natural plants of the region should be planted on the ROW.	-	-	CC	Methodology Please refer Chapter 5.1.5 of Biorestitution Monitoring Plan Achievement Criteria The vegetative cover of the area has recovered by 20% in the first year following the spread of the top soil	Period June-July Frequency Annually	Interim First-Findings in Monthly Report & Annual Biorestitution Monitoring Report	TANAP	Biorestitution Monitoring Plan	BAP; Specification for Reinstatement	-
428	1-2	687+002-687+037 Critical Habitat (CH36)	Flora <i>Gypsophila heteropoda ssp. minutiflora</i>	-	Closed Construction Period: 1 May - 1 June Pre-Construction * 10-15 cm of top soil of the ROW shall be scraped and stored in the ROW. * The seeds of <i>Gypsophila heteropoda ssp. minutiflora</i> species shall be collected near the ROW between 1 June-20 June. Post-Construction * The collected seeds of <i>Gypsophila heteropoda ssp. minutiflora</i> species shall be planted according to the methodology and to the (37 S 386751.62-	-	-	CC	Methodology Please refer Chapter 5.1.8 of Biorestitution Monitoring Achievement Criteria The data obtained by comparison of the species' population ratio (%) with its situation in natural habitat (observation	Period 1. Germination (First May-June period after seeding) 2. Flowering (In May-July) 3. Seed maturation (In June-August) Frequency Once in each germination , flowering and mature	Interim First-Findings in Monthly Report & Annual Biorestitution Monitoring Report	TANAP	Biorestitution Monitoring Plan	BAP; Specification for Reinstatement	-

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				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
					4408725.89) coordinates between September-November.				of healthy population development)	seed periods, three times per year					
429	1-2	687+002-687+037 Critical Habitat (CH36)	Flora <i>Astragalus zaraensis</i>	-	<p>Closed Construction Period: 1 May - 1 June</p> <p>Pre-Construction</p> <p>* 10-15 cm of top soil of the ROW shall be scraped and stored in the ROW. * The seeds of <i>Astragalus zaraensis</i> species shall be collected near the ROW between 15 June-15 July</p> <p>* The <i>Astragalus zaraensis</i> species individuals shall be removed as tufts from the (37 S 386761.62 4408728.69) coordinates and shall be transferred to the (37 S 386759.46-4408680.42) coordinates.</p> <p>* The individuals of the <i>Achillea sintenisii</i> species shall be transferred to the (37 S 386759.46-4408680.42) coordinates.</p> <p>Post-Construction</p> <p>* The collected seeds of <i>Astragalus zaraensis</i> species shall be planted according to the methodology and to the (37 S 386751.62-4408725.89) coordinates between September-November. * The transferred individuals of the <i>Astragalus zaraensis</i> species shall be planted to the (37 S 386761.62-4408728.69) coordinates.</p>	-	-	CC	<p>Methodology</p> <p>Please refer Chapter 5.1.8 of Biorestoration Monitoring</p> <p>Achievement Criteria</p> <p>The data obtained by comparison of the species' population ratio (%) with its situation in natural habitat (observation of healthy population development)</p>	<p>Period</p> <p>1. Germination (First May-June period after seeding) 2. Flowering (In June) 3. Seed maturation (In July)</p> <p>Frequency</p> <p>Once in each germination , flowering and mature seed periods, three times per year</p>	Interim First-Findings in Monthly Report & Annual Biorestoration Monitoring Report	TANAP	Biorestoration Monitoring Plan	BAP; Specification for Reinstatement	-

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				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
430	1-2	687+002-687+037 Critical Habitat (CH36)	Flora <i>Chrysocamela noeana</i>	-	<p>Closed Construction Period: 1 May - 1 June</p> <p>Pre-Construction</p> <p>* 10-15 cm of top soil of the ROW shall be scraped and stored in the ROW. * The seeds of <i>Chrysocamela noeana</i> shall be collected near the ROW between 1 June-20 June.</p> <p>* Some of the collected seeds of <i>Chrysocamela noeana</i> species shall be given to the seed gene bank.</p> <p>Post-Construction</p> <p>* The collected seeds of <i>Chrysocamela noeana</i> species shall be planted according to the methodology and to the (37 S 386751.62-4408725.89) coordinates between September-November.</p>	-	-	CC	<p>Methodology</p> <p>Please refer Chapter 5.1.8 of Biorestation Monitoring</p> <p>Achievement Criteria</p> <p>The data obtained by comparison of the species' population ratio (%) with its situation in natural habitat (observation of healthy population development)</p>	<p>1. Germination (First May-June period after seeding)</p> <p>2. Flowering (In April-May)</p> <p>3. Seed maturation (In May-June)</p> <p>Frequency</p> <p>Once in each germination , flowering and mature seed periods, three times per year</p>	Interim First-Findings in Monthly Report & Annual Biorestation Monitoring Report	TANAP	Biorestation Monitoring Plan	BAP; Specification for Reinstatement	-
431	1-2	687+002-687+037 Critical Habitat (CH36)	Flora <i>Minuartia corymbulosa</i> var. <i>gypsophiloides</i>	-	<p>Closed Construction Period: 1 May - 1 June</p> <p>Pre-Construction</p> <p>* 10-15 cm of top soil of the ROW shall be scraped and stored in the ROW. * The seeds of <i>Minuartia corymbulosa</i> var. <i>gypsophiloides</i> species shall be collected near the ROW between 15 June-15 July.</p> <p>Post-Construction</p> <p>* The collected seeds of <i>Minuartia corymbulosa</i> var. <i>gypsophiloides</i> species shall be planted according to the</p>	-	-	CC	<p>Methodology</p> <p>Please refer Chapter 5.1.8 of Biorestation Monitoring</p> <p>Achievement Criteria</p> <p>The data obtained by comparison of the species' population ratio (%) with its situation in natural habitat (observation</p>	<p>Period</p> <p>1. Germination (First May-June period after seeding)</p> <p>2. Flowering (In August)</p> <p>3. Seed maturation (In September)</p> <p>Frequency</p> <p>Once in each germination , flowering</p>	Interim First-Findings in Monthly Report & Annual Biorestation Monitoring Report	TANAP	Biorestation Monitoring Plan	BAP; Specification for Reinstatement	-

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				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
					methodology and to the (37 S 386751.62-4408725.89) coordinates between September-November.				of healthy population development)	and mature seed periods, three times per year					
432	1-2	687+002-687+037 Critical Habitat (CH36)	Flora <i>Achillea sintenisii</i>	-	<p>Closed Construction Period: 1 May - 1 June</p> <p>Pre-Construction</p> <p>* 10-15 cm of top soil of the ROW shall be scraped and stored in the ROW. * The seeds of <i>Achillea sintenisii</i> species shall be collected near the ROW between 15 June-15 July.</p> <p>* The individuals of the <i>Achillea sintenisii</i> species shall be transferred to the (37 S 386759.46-4408680.42) coordinates.</p> <p>Post-Construction</p> <p>* The collected seeds of <i>Achillea sintenisii</i> species shall be planted according to the methodology and to the (37 S 386751.62-4408725.89) coordinates between September-November.</p>	-	-	CC	<p>Methodology</p> <p>Please refer Chapter 5.1.8 of Biorestation Monitoring</p> <p>Achievement Criteria</p> <p>The data obtained by comparison of the species' population ratio (%) with its situation in natural habitat (observation of healthy population development)</p>	<p>Period</p> <p>1. Germination (First May-June period after seeding)</p> <p>2. Flowering (In May-July)</p> <p>3. Seed maturation (In June-August)</p> <p>Frequency</p> <p>Once in each germination , flowering and mature seed periods, three times per year</p>	Interim First-Findings in Monthly Report & Annual Biorestation Monitoring Report	TANAP	Biorestation Monitoring Plan	BAP; Specification for Reinstatement	-
433	1-2	687+002-687+037 Critical Habitat (CH36)	Flora <i>Centaurea sivasica</i>	-	<p>Closed Construction Period: 1 May - 1 June</p> <p>Pre-Construction</p> <p>* 10-15 cm of top soil of the ROW shall be scraped and stored in the ROW. * The seeds of <i>Centaurea sivasica</i>, species shall be collected near the ROW between 15 June-15 July.</p> <p>Post-Construction</p>	-	-	CC	<p>Methodology</p> <p>Please refer Chapter 5.1.8 of Biorestation Monitoring</p> <p>Achievement Criteria</p> <p>The data obtained by comparison of</p>	<p>Period</p> <p>1. Germination (First May-June period after seeding)</p> <p>2. Flowering (In June-July)</p> <p>3. Seed maturation (In July-August)</p>	Interim First-Findings in Monthly Report & Annual Biorestation Monitoring Report	TANAP	Biorestation Monitoring Plan	BAP; Specification for Reinstatement	-

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				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
					* The collected seeds of <i>Centaurea sivasica</i> species shall be planted according to the methodology and to the (37 S 386751.62-4408725.89) coordinates between September-November.				the species' population ratio (%) with its situation in natural habitat (observation of healthy population development)	Frequency Once in each germination , flowering and mature seed periods, three times per year					
434	1-2	687+002-687+037 Critical Habitat (CH36)	Flora <i>Astragalus aytachii</i>		Closed Construction Period: 1 May - 1 June Pre-Construction * 10-15 cm of top soil of the ROW shall be scraped and stored in the ROW. * The seeds of <i>Astragalus aytatchii</i> species shall be collected near the ROW between 15 June-15 July; Post-Construction * The collected seeds of <i>Astragalus aytatchii</i> species shall be planted according to the methodology and to the (37 S 386751.62-4408725.89) coordinates between September-November.			CC	Methodology Please refer Chapter 5.1.8 of Biorestation Monitoring Achievement Criteria The data obtained by comparison of the species' population ratio (%) with its situation in natural habitat (observation of healthy population development)	Period 1. Germination (First May-June period after seeding) 2. Flowering (In June-July) 3. Seed maturation (In June-July) Frequency Once in each germination , flowering and mature seed periods, three times per year	Interim First-Findings in Monthly Report & Annual Biorestation Monitoring Report	TANAP	Biorestation Monitoring Plan	BAP; Specification for Reinstatement	
435	1-2	687+002-687+037 Critical Habitat (CH36)	Species Diversity		Pre-Construction * The top soil shall be scraped at a depth of 10-15 cm minimum and shall be stored in the ROW. * To control erosion at sloping areas, seeds of the non-endemic natural plants of the region should be collected.			CC	Methodology Please refer Chapter 5.1.6 of Biorestation Monitoring Plan	Period June-July Frequency Biennially	Interim First-Findings in Monthly Report & Annual Biorestation Monitoring Report	TANAP	Biorestation Monitoring Plan	BAP; Specification for Reinstatement	

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				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
					Post-Construction * To control erosion at sloping areas, seeds of the non-endemic natural plants of the region should be planted on the ROW.				Achievement Criteria The species diversity of the area has recovered by 20% in the first year following the spread of the top soil						
436	1-2	687+002-687+037 Critical Habitat (CH36)	Vegetation Cover	-	Pre-Construction * The top soil shall be scraped at a depth of 10-15 cm minimum and shall be stored in the ROW. * To control erosion at sloping areas, seeds of the non-endemic natural plants of the region should be collected. Post-Construction * To control erosion at sloping areas, seeds of the non-endemic natural plants of the region should be planted on the ROW.	-	-	CC	Methodology Please refer Chapter 5.1.5 of Biorestation Monitoring Plan Achievement Criteria The vegetative cover of the area has recovered by 20% in the first year following the spread of the top soil	Period June-July Frequency Annually	Interim First-Findings in Monthly Report & Annual Biorestoration Monitoring Report	TANAP	Biorestation Monitoring Plan	BAP; Specification for Reinstatement	-
437	1-2	687+313-687+352 Critical Habitat (CH37)	Flora <i>Gypsophila heteropoda ssp. minutiflora</i>	-	Closed Construction Period: 1 May - 1 June Pre-Construction * 10-15 cm of top soil of the ROW shall be scraped and stored in the ROW. * The seeds of <i>Gypsophila heteropoda ssp. minutiflora</i> species shall be collected between 1 June-20 June. Post-Construction * The collected seeds of <i>Gypsophila heteropoda</i>	-	-	CC	Methodology Please refer Chapter 5.1.8 of Biorestation Monitoring Achievement Criteria The data obtained by comparison of the species' population ratio (%) with	Period 1. Germination (First May-June period after seeding) 2. Flowering (In May-July) 3. Seed maturation (In June-August) Frequency	Interim First-Findings in Monthly Report & Annual Biorestoration Monitoring Report	TANAP	Biorestation Monitoring Plan	BAP; Specification for Reinstatement	-

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					<i>ssp. minutiflora</i> species shall be planted according to the methodology to the ROW between September-November.				its situation in natural habitat (observation of healthy population development)	Once in each germination , flowering and mature seed periods, three times per year					
438	1-2	687+313-687+352 Critical Habitat (CH37)	Flora <i>Astragalus zaraensis</i>	-	<p>Pre-Construction</p> <p>* 10-15 cm of top soil of the ROW shall be scraped and stored in the ROW.</p> <p>* The seeds of <i>Astragalus zaraensis</i> species shall be collected near the ROW between 15 June-15 July.</p> <p>* The <i>Astragalus zaraensis</i> species individuals shall be removed as tufts and shall be transferred to the (37 S 386463.44-4408686.64) coordinates.</p> <p>Post-Construction</p> <p>* The collected seeds of <i>Astragalus zaraensis</i> species shall be planted according to the methodology between September-November.</p> <p>* The removed individuals of the <i>Astragalus zaraensis</i> species as tufts shall be planted where the terracing shall be carried out to prevent erosion and shall be irrigated until they root again.</p>	-	-	CC	<p>Methodology</p> <p>Please refer Chapter 5.1.8 of Biorestation Monitoring</p> <p>Achievement Criteria</p> <p>The data obtained by comparison of the species’ population ratio (%) with its situation in natural habitat (observation of healthy population development)</p>	<p>Period</p> <p>1. Germination (First May-June period after seeding)</p> <p>2. Flowering (In June)</p> <p>3. Seed maturation (In July)</p> <p>Frequency</p> <p>Once in each germination , flowering and mature seed periods, three times per year</p>	Interim First-Findings in Monthly Report & Annual Biorestation Monitoring Report	TANAP	Biorestation Monitoring Plan	BAP; Specification for Reinstatement	-
439	1-2	687+313-687+352 Critical Habitat (CH37)	Flora <i>Chrysocamela noeana</i>	-	<p>Closed Construction Period: 1 May - 1 June</p> <p>Pre-Construction</p> <p>* 10-15 cm of top soil of the ROW shall be scraped and stored in the ROW.</p>	-	-	CC	<p>Methodology</p> <p>Please refer Chapter 5.1.8 of Biorestation Monitoring</p>	<p>Period</p> <p>1. Germination (First May-June period after seeding)</p>	Interim First-Findings in Monthly Report & Annual Biorestora	TANAP	Biorestation Monitoring Plan	BAP; Specification for Reinstatement	-

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				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
					<p>* The seeds of <i>Chrysocamela noeana</i> species shall be collected between 1 June-20 June. Some of the collected seeds of <i>Chrysocamela noeana</i> species shall be given to the seed gene bank.</p> <p>Post-Construction</p> <p>* The collected seeds of <i>Chrysocamela noeana</i>, s species shall be planted according to the methodology and between September-November.</p>				<p>Achievement Criteria</p> <p>The data obtained by comparison of the species’ population ratio (%) with its situation in natural habitat (observation of healthy population development)</p>	<p>2. Flowering (In April-May) 3. Seed maturation (In May-June)</p> <p>Frequency</p> <p>Once in each germination , flowering and mature seed periods, three times per year</p>	tion Monitorin g Report				
440	1-2	687+313-687+352 Critical Habitat (CH37)	Flora <i>Minuartia corymbulosa</i> var. <i>gypsophiloides</i>	-	<p>Closed Construction Period: 1 May - 1 June</p> <p>Pre-Construction</p> <p>* 10-15 cm of top soil of the ROW shall be scraped and stored in the ROW. * The seeds of <i>Minuartia corymbulosa</i> var. <i>gypsophiloides</i> species shall be collected near the ROW between 15 June-15 July.</p> <p>Post-Construction</p> <p>* The collected seeds of <i>Minuartia corymbulosa</i> var. <i>gypsophiloides</i>, species shall be planted according to the methodology and between September-November.</p>	-	-	CC	<p>Methodology</p> <p>Please refer Chapter 5.1.8 of Biorestation Monitoring</p> <p>Achievement Criteria</p> <p>The data obtained by comparison of the species’ population ratio (%) with its situation in natural habitat (observation of healthy population development)</p>	<p>Period</p> <p>1. Germinatio n (First May-June period after seeding) 2. Flowering (In August) 3. Seed maturation (In September)</p> <p>Frequency</p> <p>Once in each germination , flowering and mature seed periods, three times per year</p>	Interim First-Findings in Monthly Report & Annual Biorestora tion Monitorin g Report	TANAP	Biorestorati on Monitoring Plan	BAP; Specification for Reinstatement	-
441	1-2	687+313-687+352 Critical Habitat (CH37)	Flora <i>Achillea sintenisii</i>	-	<p>Closed Construction Period: 1 May - 1 June</p> <p>Pre-Construction</p>	-	-	CC	<p>Methodology</p> <p>Please refer Chapter 5.1.8 of</p>	<p>Period</p> <p>1. Germinatio n (First</p>	Interim First-Findings in	TANAP	Biorestorati on Monitoring Plan	BAP; Specification for Reinstatement	-

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				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
					<p>* 10-15 cm of top soil of the ROW shall be scraped and stored in the ROW.</p> <p>* The seeds of <i>Achillea sintenisii</i> species shall be collected near the ROW between 15 June-15 July.</p> <p>* The <i>Achillea sintenisii</i> species individuals shall be removed as tufts and shall be transferred to the (37 S 386463.44-4408686.64) coordinates.</p> <p>Post-Construction</p> <p>* The collected seeds of <i>Achillea sintenisii</i> species shall be planted according to the methodology to the ROW between September-November.</p> <p>* The removed individuals of the <i>Achillea sintenisii</i>, species as tufts shall be planted where the terracing shall be carried out to prevent erosion and shall be irrigated until they root again.</p>				<p>Biorestation Monitoring</p> <p>Achievement Criteria</p> <p>The data obtained by comparison of the species' population ratio (%) with its situation in natural habitat (observation of healthy population development)</p>	<p>May-June period after seeding)</p> <p>2. Flowering (In May-July)</p> <p>3. Seed maturation (In June-August)</p> <p>Frequency</p> <p>Once in each germination , flowering and mature seed periods, three times per year</p>	<p>Monthly Report & Annual Biorestation Monitoring Report</p>				
442	1-2	687+313-687+352 Critical Habitat (CH37)	Flora <i>Centaurea sivasica</i>	-	<p>Closed Construction Period: 1 May - 1 June</p> <p>Pre-Construction</p> <p>* 10-15 cm of top soil of the ROW shall be scraped and stored in the ROW.</p> <p>* The seeds of <i>Centaurea sivasica</i> species shall be collected near the ROW between 15 June-15 July.</p> <p>Post-Construction</p> <p>* The collected seeds of <i>Centaurea sivasica</i> species shall be planted according to the methodology</p>	-	-	CC	<p>Methodology</p> <p>Please refer Chapter 5.1.8 of Biorestation Monitoring</p> <p>Achievement Criteria</p> <p>The data obtained by comparison of the species' population ratio (%) with its situation in natural habitat</p>	<p>Period</p> <p>1. Germination (First May-June period after seeding)</p> <p>2. Flowering (In June-July)</p> <p>3. Seed maturation (In July-August)</p> <p>Frequency</p> <p>Once in each germination , flowering and mature</p>	<p>Interim First-Findings in Monthly Report & Annual Biorestation Monitoring Report</p>	TANAP	Biorestation Monitoring Plan	BAP; Specification for Reinstatement	-

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				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
					between September-November.				(observation of healthy population development)	seed periods, three times per year					
443	1-2	687+313-687+352 Critical Habitat (CH37)	Flora <i>Astragalus aytachii</i>	-	<p>Closed Construction Period: 1 May - 1 June</p> <p>Pre-Construction</p> <p>* 10-15 cm of top soil of the ROW shall be scraped and stored in the ROW. * The seeds of <i>Astragalus aytatchii</i> species shall be collected near the ROW between 15 June-15 July.</p> <p>Post-Construction</p> <p>* The collected seeds of <i>Astragalus aytatchii</i> species shall be planted according to the methodology between September-November.</p>	-	-	CC	<p>Methodology</p> <p>Please refer Chapter 5.1.8 of Biorestation Monitoring</p> <p>Achievement Criteria</p> <p>The data obtained by comparison of the species' population ratio (%) with its situation in natural habitat (observation of healthy population development)</p>	<p>Period</p> <p>1. Germination (First May-June period after seeding) 2. Flowering (In June-July) 3. Seed maturation (In June-July)</p> <p>Frequency</p> <p>Once in each germination , flowering and mature seed periods, three times per year</p>	Interim First-Findings in Monthly Report & Annual Biorestation Monitorin g Report	TANAP	Biorestorati on Monitoring Plan	BAP; Specification for Reinstatement	-
444	1-2	687+313-687+352 Critical Habitat (CH37)	Species Diversity	-	<p>Pre-Construction</p> <p>* The top soil shall be scraped at a depth of 10-15 cm minimum and shall be stored in the ROW.</p> <p>* To control erosion at sloping areas, seeds of the non-endemic natural plants of the region should be collected.</p> <p>Post-Construction</p> <p>* To control erosion at sloping areas, seeds of the non-endemic natural</p>	-	-	CC	<p>Methodology</p> <p>Please refer Chapter 5.1.6 of Biorestation Monitoring Plan</p> <p>Achievement Criteria</p> <p>The species diversity of the area has recovered by 20% in the first year</p>	<p>Period</p> <p>June-July</p> <p>Frequency</p> <p>Biennially</p>	Interim First-Findings in Monthly Report & Annual Biorestation Monitorin g Report	TANAP	Biorestorati on Monitoring Plan	BAP; Specification for Reinstatement	-

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				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
					plants of the region should be planted on the ROW.				following the spread of the top soil						
445	1-2	687+313-687+352 Critical Habitat (CH37)	Vegetation Cover	-	<p>Pre-Construction</p> <p>* The top soil shall be scraped at a depth of 10-15 cm minimum and shall be stored in the ROW.</p> <p>* To control erosion at sloping areas, seeds of the non-endemic natural plants of the region should be collected.</p> <p>Post-Construction</p> <p>* To control erosion at sloping areas, seeds of the non-endemic natural plants of the region should be planted on the ROW.</p>	-	-	CC	<p>Methodology</p> <p>Please refer Chapter 5.1.5 of Biorestation Monitoring Plan</p> <p>Achievement Criteria</p> <p>The vegetative cover of the area has recovered by 20% in the first year following the spread of the top soil</p>	<p>Period</p> <p>June-July</p> <p>Frequency</p> <p>Annually</p>	Interim First-Findings in Monthly Report & Annual Biorestoration Monitoring Report	TANAP	Biorestation Monitoring Plan	BAP; Specification for Reinstatement	-
446	1-2	703+938-704+476 Critical Habitat (CH38)	Flora <i>Gypsophila heteropoda ssp. minutiflora</i>	-	<p>Closed Construction Period: 1 May - 1 June</p> <p>Pre-Construction</p> <p>* The top soil shall be scraped at a depth of 10-15 cm minimum and shall be stored in the ROW.</p> <p>* The seeds of <i>Gypsophila heteropoda ssp. minutiflora</i> species shall be collected near the ROW between 1 June-20 June.</p> <p>Post-Construction</p> <p>* The collected seeds of <i>Gypsophila heteropoda ssp. minutiflora</i> species shall be planted according to the methodology and to the (37 S 369839.96-4408605.07/ 37 S 369786.46-4408543.51/37 S 370048.89-4408740.47)</p>	-	-	CC	<p>Methodology</p> <p>Please refer Chapter 5.1.8 of Biorestation Monitoring</p> <p>Achievement Criteria</p> <p>The data obtained by comparison of the species' population ratio (%) with its situation in natural habitat (observation of healthy population development)</p>	<p>Period</p> <p>1. Germination (First May-June period after seeding)</p> <p>2. Flowering (In May-July)</p> <p>3. Seed maturation (In June-August)</p> <p>Frequency</p> <p>Once in each germination , flowering and mature seed periods,</p>	Interim First-Findings in Monthly Report & Annual Biorestoration Monitoring Report	TANAP	Biorestation Monitoring Plan	BAP; Specification for Reinstatement	-

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				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
					coordinates between September-November.					three times per year					
447	1-2	703+938-704+476 Critical Habitat (CH38)	Flora <i>Astragalus zaraensis</i>	-	<p>Closed Construction Period: 1 May - 1 June</p> <p>Pre-Construction</p> <p>* The top soil shall be scraped at a depth of 10-15 cm minimum and shall be stored in the ROW.</p> <p>* The seeds of <i>Astragalus zaraensis</i> species shall be collected near the ROW between 15 June-15 July.</p> <p>* The <i>Astragalus zaraensis</i> species individuals shall be removed as tufts and shall be transferred to the (37 S 370016.63-4408569.92 /37 S 370096.00-4408596.00) coordinates.</p> <p>Post-Construction</p> <p>* The collected seeds of <i>Astragalus zaraensis</i> species shall be planted according to the methodology and to the (37 S 369839.96-4408605.07/ 37 S 369786.46-4408543.51/37 S 370048.89-4408740.47) coordinates between September-November.</p> <p>* The removed individuals of the <i>Astragalus zaraensis</i> species as tufts shall be planted where the terracing shall be carried out to prevent erosion and shall be irrigated until they root again.</p>	-	-	CC	<p>Methodology</p> <p>Please refer Chapter 5.1.8 of Biorestation Monitoring</p> <p>Achievement Criteria</p> <p>The data obtained by comparison of the species' population ratio (%) with its situation in natural habitat (observation of healthy population development)</p>	<p>Period</p> <p>1. Germination (First May-June period after seeding)</p> <p>2. Flowering (In June)</p> <p>3. Seed maturation (In July)</p> <p>Frequency</p> <p>Once in each germination , flowering and mature seed periods, three times per year</p>	Interim First-Findings in Monthly Report & Annual Biorestation Monitoring Report	TANAP	Biorestation Monitoring Plan	BAP; Specification for Reinstatement	-
448	1-2	703+938-704+476 Critical Habitat (CH38)	Flora <i>Chrysocamela noeana</i>	-	<p>Closed Construction Period: 1 May - 1 June</p> <p>Pre-Construction</p>	-	-	CC	<p>Methodology</p> <p>Please refer Chapter 5.1.8 of</p>	<p>Period</p> <p>1. Germination (First May-June</p>	Interim First-Findings in Monthly	TANAP	Biorestation Monitoring Plan	BAP; Specification for Reinstatement	-

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RefNo .	Ph.	Specific Location (and KP)	Environmental Component ²	Project Commitment					Monitoring				Mang. Plan	Addition. Docum.	ESIA Chapter
				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
					<p>* The top soil shall be scraped at a depth of 10-15 cm minimum and shall be stored in the ROW.</p> <p>* The seeds of <i>Chrysocamela noeana</i> species shall be collected near the ROW between 1 June-20 June.</p> <p>* Some of the collected seeds of <i>Chrysocamela noeana</i> species shall be given to the seed gene bank.</p> <p>Post-Construction</p> <p>* The collected seeds of <i>Chrysocamela noeana</i> species shall be planted according to the methodology and to the (37 S 369839.96-4408605.07/ 37 S 369786.46-4408543.51/37 S 370048.89-4408740.47) coordinates between September-November.</p>				<p>Biorestation Monitoring</p> <p>Achievement Criteria</p> <p>The data obtained by comparison of the species’ population ratio (%) with its situation in natural habitat (observation of healthy population development)</p>	<p>period after seeding)</p> <p>2. Flowering (In April-May)</p> <p>3. Seed maturation (In May-June)</p> <p>Frequency</p> <p>Once in each germination , flowering and mature seed periods, three times per year</p>	<p>Report & Annual Biorestation Monitoring Report</p>				
449	1-2	703+938-704+476 Critical Habitat (CH38)	Flora <i>Minuartia corymbulosa</i> var. <i>gypsophiloides</i>	-	<p>Closed Construction Period: 1 May - 1 June</p> <p>Pre-Construction</p> <p>* The top soil shall be scraped at a depth of 10-15 cm minimum and shall be stored in the ROW.</p> <p>* The seeds of <i>Minuartia corymbulosa</i> var. <i>gypsophiloides</i> species shall be collected near the ROW between 15 June-15 July.</p> <p>Post-Construction</p> <p>* The collected seeds of <i>Minuartia corymbulosa</i> var. <i>gypsophiloides</i> species shall be planted according to the methodology and to the</p>	-	-	CC	<p>Methodology</p> <p>Please refer Chapter 5.1.8 of Biorestation Monitoring</p> <p>Achievement Criteria</p> <p>The data obtained by comparison of the species’ population ratio (%) with its situation in natural habitat (observation of healthy</p>	<p>Period</p> <p>1. Germination (First May-June period after seeding)</p> <p>2. Flowering (In August)</p> <p>3. Seed maturation (In September)</p> <p>Frequency</p> <p>Once in each germination , flowering and mature seed periods,</p>	<p>Interim First-Findings in Monthly Report & Annual Biorestation Monitoring Report</p>	TANAP	Biorestation Monitoring Plan	BAP; Specification for Reinstatement	-

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				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
					(37 S 369839.96-4408605.07/ 37 S 369786.46-4408543.51/37 S 370048.89-4408740.47) coordinates between September-November.				population development)	three times per year					
450	1-2	703+938-704+476 Critical Habitat (CH38)	Flora <i>Achillea sintenisii</i>	-	Closed Construction Period: 1 May - 1 June Pre-Construction * The top soil shall be scraped at a depth of 10-15 cm minimum and shall be stored in the ROW. * The seeds of <i>Achillea sintenisii</i> species shall be collected near the ROW between 15 June-15 July; * The <i>Achillea sintenisii</i> species individuals shall be removed as tufts and shall be transferred to the (37 S 370016.63-4408569.92 /37 S 370096.00-4408596.00) coordinates. Post-Construction * The collected seeds of <i>Achillea sintenisii</i> species shall be planted according to the methodology and to the (37 S 369839.96-4408605.07/ 37 S 369786.46-4408543.51/37 S 370048.89-4408740.47) coordinates between September-November. * The removed individuals of the <i>Achillea sintenisii</i> , species as tufts shall be planted where the terracing shall be carried out to prevent erosion and shall be irrigated until they root again.	-	-	CC	Methodology Please refer Chapter 5.1.8 of Biorestitution Monitoring Achievement Criteria The data obtained by comparison of the species’ population ratio (%) with its situation in natural habitat (observation of healthy population development) Period 1. Germination (First May-June period after seeding) 2. Flowering (In May-July) 3. Seed maturation (In June-August) Frequency Once in each germination , flowering and mature seed periods, three times per year	Interim First-Findings in Monthly Report & Annual Biorestitution Monitoring Report	TANAP	Biorestitution Monitoring Plan	BAP; Specification for Reinstatement	-	
451	1-2	703+938-704+476 Critical Habitat (CH38)	Flora <i>Centaurea sivasica</i>	-	Closed Construction Period: 1 May - 1 June Pre-Construction	-	-	CC	Methodology Please refer Chapter 5.1.8 of	Period 1. Germination (First May-June	Interim First-Findings in Monthly	TANAP	Biorestitution Monitoring Plan	BAP; Specification for Reinstatement	-

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				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
					<p>* The top soil shall be scraped at a depth of 10-15 cm minimum and shall be stored in the ROW.</p> <p>* The seeds of <i>Centaurea sivasica</i> shall be collected near the ROW between 15 June-15 July.</p> <p>Post-Construction</p> <p>* The collected seeds of <i>Centaurea sivasica</i> species shall be planted according to the methodology and to the (37 S 369839.96-4408605.07/ 37 S 369786.46-4408543.51/37 S 370048.89-4408740.47) coordinates between September-November.</p>				<p>Biorestation Monitoring</p> <p>Achievement Criteria</p> <p>The data obtained by comparison of the species' population ratio (%) with its situation in natural habitat (observation of healthy population development)</p>	<p>period after seeding)</p> <p>2. Flowering (In June-July)</p> <p>3. Seed maturation (In July-August)</p> <p>Frequency</p> <p>Once in each germination , flowering and mature seed periods, three times per year</p>	Report & Annual Biorestation Monitoring Report				
452	1-2	703+938-704+476 Critical Habitat (CH38)	Flora <i>Astragalus aytachii</i>		<p>Closed Construction Period: 1 May - 1 June</p> <p>Pre-Construction</p> <p>* The top soil shall be scraped at a depth of 10-15 cm minimum and shall be stored in the ROW.</p> <p>* The seeds of <i>Astragalus aytatchii</i> species shall be collected near the ROW between 15 June-15 July.</p> <p>Post-Construction</p> <p>* The collected seeds of <i>Astragalus aytatchii</i> species shall be planted according to the methodology and to the (37 S 369839.96-4408605.07/ 37 S 369786.46-4408543.51/37 S 370048.89-4408740.47) coordinates between September-November.</p>	-	-	CC	<p>Methodology</p> <p>Please refer Chapter 5.1.8 of Biorestation Monitoring</p> <p>Achievement Criteria</p> <p>The data obtained by comparison of the species' population ratio (%) with its situation in natural habitat (observation of healthy population development)</p>	<p>Period</p> <p>1. Germination (First May-June period after seeding)</p> <p>2. Flowering (In June-July)</p> <p>3. Seed maturation (In June-July)</p> <p>Frequency</p> <p>Once in each germination , flowering and mature seed periods, three times per year</p>	Interim First-Findings in Monthly Report & Annual Biorestation Monitoring Report	TANAP	Biorestation Monitoring Plan	BAP; Specification for Reinstatement	-

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				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
453	1-2	703+938-704+476 Critical Habitat (CH38)	Flora <i>Onobrychis stenostcahya ssp. krausei</i>	-	<p>Closed Construction Period: 1 May - 1 June</p> <p>Pre-Construction</p> <p>* The top soil shall be scraped at a depth of 10-15 cm minimum and shall be stored in the ROW.</p> <p>* The seeds of <i>Onobrychis stenostcahya ssp. krausei</i> species shall be collected near the ROW between 15 June-15 July.</p> <p>Post-Construction</p> <p>* The collected seeds of <i>Onobrychis stenostcahya ssp. krausei</i> species shall be planted according to the methodology and to the (37 S 369839.96-4408605.07/ 37 S 369786.46-4408543.51/37 S 370048.89-4408740.47) coordinates between September-November.</p>	-	-	CC	<p>Methodology</p> <p>Please refer Chapter 5.1.8 of Biorestation Monitoring</p> <p>Achievement Criteria</p> <p>The data obtained by comparison of the species' population ratio (%) with its situation in natural habitat (observation of healthy population development)</p>	<p>Period</p> <p>1. Germination (First May-June period after seeding)</p> <p>2. Flowering (In June)</p> <p>3. Seed maturation (In July)</p> <p>Frequency</p> <p>Once in each germination , flowering and mature seed periods, three times per year</p>	Interim First-Findings in Monthly Report & Annual Biorestation Monitoring Report	TANAP	Biorestation Monitoring Plan	BAP; Specification for Reinstatement	-
454	1-2	703+938-704+476 Critical Habitat (CH38)	Flora <i>Isatis glauca ssp. sivasica</i>	-	<p>Closed Construction Period: 1 May - 1 June</p> <p>Pre-Construction</p> <p>* The top soil shall be scraped at a depth of 10-15 cm minimum and shall be stored in the ROW.</p> <p>* The seeds <i>Isatis glauca ssp. sivasica</i> species shall be collected near the ROW between 15 June-15 July.</p> <p>* Some of the collected seeds of <i>Isatis glauca ssp. sivasica</i> species shall be given to the seed gene bank.</p> <p>Post-Construction</p> <p>* The collected seeds of <i>Isatis glauca ssp. sivasica</i> species shall be planted according to the methodology and to the</p>	-	-	CC	<p>Methodology</p> <p>Please refer Chapter 5.1.8 of Biorestation Monitoring</p> <p>Achievement Criteria</p> <p>The data obtained by comparison of the species' population ratio (%) with its situation in natural habitat (observation of healthy</p>	<p>Period</p> <p>1. Germination (First May-June period after seeding)</p> <p>2. Flowering (In June)</p> <p>3. Seed maturation (In July)</p> <p>Frequency</p> <p>Once in each germination , flowering and mature seed periods, three times per year</p>	Interim First-Findings in Monthly Report & Annual Biorestation Monitoring Report	TANAP	Biorestation Monitoring Plan	BAP; Specification for Reinstatement	-

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				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
					(37 S 369839.96-4408605.07/ 37 S 369786.46-4408543.51/37 S 370048.89-4408740.47) coordinates between September-November.				population development)						
455	1-2	703+938-704+476 Critical Habitat (CH38)	Flora <i>Achillea sipikorensis</i>	-	<p>Closed Construction Period: 1 May - 1 June</p> <p>Pre-Construction</p> <p>* The top soil shall be scraped at a depth of 10-15 cm minimum and shall be stored in the ROW.</p> <p>* The seeds of <i>Achillea sipikorensis</i> species shall be collected near the ROW between 15 June-15 July.</p> <p>* The <i>Achillea sipikorensis</i> species individuals shall be removed as tufts and shall be transferred to the (37 S 370016.63-4408569.92 /37 S 370096.00-4408596.00) coordinates.</p> <p>Post-Construction</p> <p>* The collected seeds of <i>Achillea sipikorensis</i> species shall be planted according to the methodology and to the (37 S 369839.96-4408605.07/ 37 S 369786.46-4408543.51/37 S 370048.89-4408740.47) coordinates between September-November.</p> <p>* The removed individuals of <i>Achillea sipikorensis</i> species as tufts shall be planted where the terracing shall be carried out to prevent erosion and shall be irrigated until they root again.</p>	-	-	CC	<p>Methodology</p> <p>Please refer Chapter 5.1.8 of Biorestation Monitoring</p> <p>Achievement Criteria</p> <p>The data obtained by comparison of the species' population ratio (%) with its situation in natural habitat (observation of healthy population development)</p>	<p>Period</p> <p>1. Germination (First May-June period after seeding)</p> <p>2. Flowering (In June-July)</p> <p>3. Seed maturation (In July-August)</p> <p>Frequency</p> <p>Once in each germination , flowering and mature seed periods, three times per year</p>	Interim First-Findings in Monthly Report & Annual Biorestation Monitorin g Report	TANAP	Biorestorati on Monitoring Plan	BAP; Specification for Reinstatement	-

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				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
456	1-2	703+938-704+476 Critical Habitat (CH38)	Species Diversity	-	Pre-Construction * The top soil shall be scraped at a depth of 10-15 cm minimum and shall be stored in the ROW. * To control erosion at sloping areas, seeds of the non-endemic natural plants of the region should be collected. Post-Construction * To control erosion at sloping areas, seeds of the non-endemic natural plants of the region should be planted on the ROW.	-	-	CC	Methodology Please refer Chapter 5.1.6 of Biorestation Monitoring Plan Achievement Criteria The species diversity of the area has recovered by 20% in the first year following the spread of the top soil	Period June-July Frequency Biennially	Interim First-Findings in Monthly Report & Annual Biorestation Monitoring Report	TANAP	Biorestation Monitoring Plan	BAP; Specification for Reinstatement	-
457	1-2	703+938-704+476 Critical Habitat (CH38)	Vegetation Cover	-	Pre-Construction * The top soil shall be scraped at a depth of 10-15 cm minimum and shall be stored in the ROW. * To control erosion at sloping areas, seeds of the non-endemic natural plants of the region should be collected. Post-Construction * To control erosion at sloping areas, seeds of the non-endemic natural plants of the region should be planted on the ROW.	-	-	CC	Methodology Please refer Chapter 5.1.5 of Biorestation Monitoring Plan Achievement Criteria The vegetative cover of the area has recovered by 20% in the first year following the spread of the top soil	Period June-July Frequency Annually	Interim First-Findings in Monthly Report & Annual Biorestation Monitoring Report	TANAP	Biorestation Monitoring Plan	BAP; Specification for Reinstatement	-
458	1-2	712+066-712+279 Critical Habitat (CH39)	Flora <i>Astragalus zaraensis</i>	-	Closed Construction Period: 1 May - 1 June Pre-Construction * The top soil shall be scraped at a depth of 10-15 cm minimum and shall	-	-	CC	Methodology Please refer Chapter 5.1.8 of Biorestation Monitoring	Period 1. Germination (First May-June period after seeding)	Interim First-Findings in Monthly Report & Annual	TANAP	Biorestation Monitoring Plan	BAP; Specification for Reinstatement	-

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				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
					<p>be stored in the ROW. * The seeds of <i>Astragalus zaraensis</i> species shall be collected near the ROW between 15 June-15 July.</p> <p>Post-Construction</p> <p>* The collected seeds of <i>Astragalus zaraensis</i> species shall be planted according to the methodology and to the (37 S 362348.79-4410413.51/ 37 S 362385.09-4410392.30/37 S 362445.47-4410357.19/37 S 362483.09-4410335.10) coordinates between September-November.</p>				<p>Achievement Criteria</p> <p>The data obtained by comparison of the species' population ratio (%) with its situation in natural habitat (observation of healthy population development)</p>	<p>2. Flowering (In June) 3. Seed maturation (In July)</p> <p>Frequency</p> <p>Once in each germination , flowering and mature seed periods, three times per year</p>	Biorestoration Monitoring Report				
459	1-2	712+066-712+279 Critical Habitat (CH39)	Flora <i>Chrysocamela noeana</i>		<p>Closed Construction Period: 1 May - 1 June</p> <p>Pre-Construction</p> <p>* The top soil shall be scraped at a depth of 10-15 cm minimum and shall be stored in the ROW. * The seeds of <i>Chrysocamela noeana</i> species shall be collected near the ROW between 1 June-20 June.</p> <p>* Some of the collected seeds of <i>Chrysocamela noeana</i> species shall be given to the seed gene bank.</p> <p>Post-Construction</p> <p>* The collected seeds of <i>Chrysocamela noeana</i> species shall be planted according to the methodology and to the (37 S 362348.79-4410413.51/ 37 S 362385.09-4410392.30/37 S 362445.47-</p>			CC	<p>Methodology</p> <p>Please refer Chapter 5.1.8 of Biorestation Monitoring</p> <p>Achievement Criteria</p> <p>The data obtained by comparison of the species' population ratio (%) with its situation in natural habitat (observation of healthy population development)</p>	<p>Period</p> <p>1. Germination (First May-June period after seeding) 2. Flowering (In April-May) 3. Seed maturation (In May-June)</p> <p>Frequency</p> <p>Once in each germination , flowering and mature seed periods, three times per year</p>	Interim First-Findings in Monthly Report & Annual Biorestation Monitoring Report	TANAP	Biorestation Monitoring Plan	BAP; Specification for Reinstatement	

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				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
					4410357.19/37 S 362483.09-4410335.10) coordinates between September-November.										
460	1-2	712+066-712+279 Critical Habitat (CH39)	Flora <i>Minuartia corymbulosa</i> <i>var. gypsophiloides</i>	-	<p>Closed Construction Period: 1 May - 1 June</p> <p>Pre-Construction</p> <p>* The top soil shall be scraped at a depth of 10-15 cm minimum and shall be stored in the ROW. * The seeds of <i>Minuartia corymbulosa</i> <i>var. gypsophiloides</i> species shall be collected near the ROW between 15 June-15 July.</p> <p>Post-Construction</p> <p>* The collected seeds of <i>Minuartia corymbulosa</i> <i>var. gypsophiloides</i> species shall be planted according to the methodology and to the (37 S 362348.79-4410413.51/ 37 S 362385.09-4410392.30/37 S 362445.47-4410357.19/37 S 362483.09-4410335.10) coordinates between September-November.</p>	-	-	CC	<p>Methodology</p> <p>Please refer Chapter 5.1.8 of Biorestation Monitoring</p> <p>Achievement Criteria</p> <p>The data obtained by comparison of the species' population ratio (%) with its situation in natural habitat (observation of healthy population development)</p>	<p>Period</p> <p>1. Germination (First May-June period after seeding) 2. Flowering (In August) 3. Seed maturation (In September)</p> <p>Frequency</p> <p>Once in each germination , flowering and mature seed periods, three times per year</p>	Interim First-Findings in Monthly Report & Annual Biorestation Monitorin g Report	TANAP	Biorestorati on Monitoring Plan	BAP; Specification for Reinstatement	-
461	1-2	712+066-712+279 Critical Habitat (CH39)	Flora <i>Achillea sintenisii</i>	-	<p>Closed Construction Period: 1 May - 1 June</p> <p>Pre-Construction</p> <p>* The top soil shall be scraped at a depth of 10-15 cm minimum and shall be stored in the ROW. * The seeds of <i>Achillea sintenisii</i> species shall be collected near the ROW between 15 June-15 July.</p>	-	-	CC	<p>Methodology</p> <p>Please refer Chapter 5.1.8 of Biorestation Monitoring</p> <p>Achievement Criteria</p> <p>The data obtained by comparison of</p>	<p>1. Germination (First May-June period after seeding) 2. Flowering (In May-July) 3. Seed maturation (In June-August)</p> <p>Frequency</p>	Interim First-Findings in Monthly Report & Annual Biorestation Monitorin g Report	TANAP	Biorestorati on Monitoring Plan	BAP; Specification for Reinstatement	-

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				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
					Post-Construction * The collected seeds of <i>Achillea</i> species shall be planted according to the methodology and to the (37 S 362348.79-4410413.51/ 37 S 362385.09-4410392.30/37 S 362445.47-4410357.19/37 S 362483.09-4410335.10) coordinates between September-November.				the species' population ratio (%) with its situation in natural habitat (observation of healthy population development)	Once in each germination , flowering and mature seed periods, three times per year					
462	1-2	712+066-712+279 Critical Habitat (CH39)	Species Diversity	-	Pre-Construction * The top soil shall be scraped at a depth of 10-15 cm minimum and shall be stored in the ROW. * To control erosion at sloping areas, seeds of the non-endemic natural plants of the region should be collected. Post-Construction * To control erosion at sloping areas, seeds of the non-endemic natural plants of the region should be planted on the ROW.	-	-	CC	Methodology Please refer Chapter 5.1.6 of Biorestation Monitoring Plan Achievement Criteria The species diversity of the area has recovered by 20% in the first year following the spread of the top soil	Period June-July Frequency Biennially	Interim First-Findings in Monthly Report & Annual Biorestation Monitoring Report	TANAP	Biorestation Monitoring Plan	BAP; Specification for Reinstatement	-
463	1-2	712+066-712+279 Critical Habitat (CH39)	Vegetation Cover	-	Pre-Construction * The top soil shall be scraped at a depth of 10-15 cm minimum and shall be stored in the ROW. * To control erosion at sloping areas, seeds of the non-endemic natural plants of the region should be collected. Post-Construction	-	-	CC	Methodology Please refer Chapter 5.1.5 of Biorestation Monitoring Plan Achievement Criteria The vegetative cover of the	Period June-July Frequency Annually	Interim First-Findings in Monthly Report & Annual Biorestation Monitoring Report	TANAP	Biorestation Monitoring Plan	BAP; Specification for Reinstatement	-

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				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
					* To control erosion at sloping areas, seeds of the non-endemic natural plants of the region should be planted on the ROW.				area has recovered by 20% in the first year following the spread of the top soil						
464	1-2	717+244-717+345 Critical Habitat (CH40)	Flora <i>Achillea sintenisii</i>	-	<p>Closed Construction Period: 1 May - 1 June</p> <p>Pre-Construction</p> <p>* The top soil shall be scraped at a depth of 10-15 cm minimum and shall be stored in the ROW.</p> <p>* The seeds of <i>Achillea sintenisii</i> species shall be collected near the ROW between 15 June-15 July.</p> <p>Post-Construction</p> <p>The collected seeds of <i>Achillea sintenisii</i> species shall be planted according to the methodology and to the (37 S 357833.67-4411319.36/37 S 357807.42-4411296.16/37 S 357783.72-4411275.56) coordinates between September-November.</p>	-	-	CC	<p>Methodology</p> <p>Please refer Chapter 5.1.8 of Biorestation Monitoring</p> <p>Achievement Criteria</p> <p>The data obtained by comparison of the species' population ratio (%) with its situation in natural habitat (observation of healthy population development)</p>	<p>Period</p> <p>1. Germination (First May-June period after seeding)</p> <p>2. Flowering (In May-July)</p> <p>3. Seed maturation (In June-August)</p> <p>Frequency</p> <p>Once in each germination , flowering and mature seed periods, three times per year</p>	Interim First-Findings in Monthly Report & Annual Biorestation Monitorin g Report	TANAP	Biorestorati on Monitoring Plan	BAP; Specification for Reinstatement	-
465	1-2	717+244-717+345 Critical Habitat (CH40)	Flora <i>Gypsophila aucheri</i>	-	<p>Closed Construction Period: 1 May - 1 June</p> <p>Pre-Construction</p> <p>* The top soil shall be scraped at a depth of 10-15 cm minimum and shall be stored in the ROW.</p> <p>* The seeds of <i>Gypsophila aucheri</i>, species shall be collected near the ROW between 15 June-15 July.</p> <p>Post-Construction</p> <p>* The collected seeds of <i>Gypsophila aucheri</i> species</p>	-	-	CC	<p>Methodology</p> <p>Please refer Chapter 5.1.8 of Biorestation Monitoring</p> <p>Achievement Criteria</p> <p>The data obtained by comparison of the species' population ratio (%) with</p>	<p>Period</p> <p>1. Germination (First May-June period after seeding)</p> <p>2. Flowering (In June-July)</p> <p>3. Seed maturation (In July-August)</p> <p>Frequency</p>	Interim First-Findings in Monthly Report & Annual Biorestation Monitorin g Report	TANAP	Biorestorati on Monitoring Plan	BAP; Specification for Reinstatement	-

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				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
					shall be planted according to the methodology and to the (37 S 357833.67-4411319.36/37 S 357807.42-4411296.16/37 S 357783.72-4411275.56) coordinates between September-November.				its situation in natural habitat (observation of healthy population development)	Once in each germination , flowering and mature seed periods, three times per year					
466	1-2	717+244-717+345 Critical Habitat (CH40)	Flora <i>Gypsophila heteropoda ssp. minutiflora</i>	-	<p>Closed Construction Period: 1 May - 1 June</p> <p>Pre-Construction</p> <p>* The top soil shall be scraped at a depth of 10-15 cm minimum and shall be stored in the ROW.</p> <p>* The seeds of <i>Gypsophila heteropoda ssp. minutiflora</i> species shall be collected near the ROW between 1 June-20 June.</p> <p>Post-Construction</p> <p>* The collected seeds of <i>Gypsophila heteropoda ssp. minutiflora</i> species shall be planted according to the methodology and to the (37 S 357833.67-4411319.36/37 S 357807.42-4411296.16/37 S 357783.72-4411275.56) coordinates between September-November.</p>	-	-	CC	<p>Methodology</p> <p>Please refer Chapter 5.1.8 of Biorestation Monitoring</p> <p>Achievement Criteria</p> <p>The data obtained by comparison of the species’ population ratio (%) with its situation in natural habitat (observation of healthy population development)</p>	<p>Period</p> <p>1. Germination (First May-June period after seeding)</p> <p>2. Flowering (In May-July)</p> <p>3. Seed maturation (In June-August)</p> <p>Frequency</p> <p>Once in each germination , flowering and mature seed periods, three times per year</p>	Interim First-Findings in Monthly Report & Annual Biorestation Monitoring Report	TANAP	Biorestation Monitoring Plan	BAP; Specification for Reinstatement	-
467	1-2	717+244-717+345 Critical Habitat (CH40)	Flora <i>Onosma sintenisii</i>	-	<p>Closed Construction Period: 1 May - 1 June</p> <p>Pre-Construction</p> <p>* The top soil shall be scraped at a depth of 10-15 cm minimum and shall be stored in the ROW.</p> <p>* The seeds of <i>Onosma sintenisii</i> species shall be</p>	-	-	CC	<p>Methodology</p> <p>Please refer Chapter 5.1.8 of Biorestation Monitoring</p> <p>Achievement Criteria</p>	<p>Period</p> <p>1. Germination (First May-June period after seeding)</p> <p>2. Flowering (In May-July)</p> <p>3. Seed maturation</p>	Interim First-Findings in Monthly Report & Annual Biorestation Monitoring Report	TANAP	Biorestation Monitoring Plan	BAP; Specification for Reinstatement	-

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				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
					<p>collected near the ROW between 15 June-15 July.</p> <p>* Some of the collected seeds of <i>Onosma sintenisii</i> species shall be given to the seed gene bank.</p> <p>Post-Construction</p> <p>The collected seeds of <i>Onosma sintenisii</i> species shall be planted according to the methodology and to the (37 S 357833.67-4411319.36/37 S 357807.42-4411296.16/37 S 357783.72-4411275.56) coordinates between September-November.</p>				<p>The data obtained by comparison of the species’ population ratio (%) with its situation in natural habitat (observation of healthy population development)</p>	<p>(In July-August)</p> <p>Frequency</p> <p>Once in each germination , flowering and mature seed periods, three times per year</p>					
468	1-2	717+244-717+345 Critical Habitat (CH40)	Flora <i>Centaurea sivasica</i>	-	<p>Closed Construction Period: 1 May - 1 June Pre-Construction</p> <p>* The top soil shall be scraped at a depth of 10-15 cm minimum and shall be stored in the ROW.</p> <p>* The seeds of <i>Centaurea sivasica</i> species shall be collected near the ROW between 15 June-15 July.</p> <p>Post-Construction</p> <p>* The collected seeds of <i>Centaurea sivasica</i> species shall be planted according to the methodology and to the (37 S 357833.67-4411319.36/37 S 357807.42-4411296.16/37 S 357783.72-4411275.56) coordinates between September-November.</p>	-	-	CC	<p>Methodology</p> <p>Please refer Chapter 5.1.8 of Biorestation Monitoring</p> <p>Achievement Criteria</p> <p>The data obtained by comparison of the species’ population ratio (%) with its situation in natural habitat (observation of healthy population development)</p>	<p>Period</p> <p>1. Germination (First May-June period after seeding)</p> <p>2. Flowering (In June-July)</p> <p>3. Seed maturation (In July-August)</p> <p>Frequency</p> <p>Once in each germination , flowering and mature seed periods, three times per year</p>	<p>Interim First-Findings in Monthly Report & Annual Biorestation Monitoring Report</p>	TANAP	Biorestation Monitoring Plan	BAP; Specification for Reinstatement	-

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				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
469	1-2	717+244-717+345 Critical Habitat (CH40)	Species Diversity	-	Pre-Construction * The top soil shall be scraped at a depth of 10-15 cm minimum and shall be stored in the ROW. * To control erosion at sloping areas, seeds of the non-endemic natural plants of the region should be collected. Post-Construction * To control erosion at sloping areas, seeds of the non-endemic natural plants of the region should be planted on the ROW.	-	-	CC	Methodology Please refer Chapter 5.1.6 of Biorestation Monitoring Plan Achievement Criteria The species diversity of the area has recovered by 20% in the first year following the spread of the top soil	Period June-July Frequency Biennially	Interim First-Findings in Monthly Report & Annual Biorestation Monitoring Report	TANAP	Biorestation Monitoring Plan	BAP; Specification for Reinstatement	-
470	1-2	717+244-717+345 Critical Habitat (CH40)	Vegetation Cover	-	Pre-Construction * The top soil shall be scraped at a depth of 10-15 cm minimum and shall be stored in the ROW. * To control erosion at sloping areas, seeds of the non-endemic natural plants of the region should be collected. Post-Construction * To control erosion at sloping areas, seeds of the non-endemic natural plants of the region should be planted on the ROW.	-	-	CC	Methodology Please refer Chapter 5.1.5 of Biorestation Monitoring Plan Achievement Criteria The vegetative cover of the area has recovered by 20% in the first year following the spread of the top soil	Period June-July Frequency Annually	Interim First-Findings in Monthly Report & Annual Biorestation Monitoring Report	TANAP	Biorestation Monitoring Plan	BAP; Specification for Reinstatement	-
471	1-2	723+424-723+679 Critical Habitat (CH41)	Flora <i>Gypsophila heteropoda ssp. minutiflora</i>	-	Closed Construction Period: 1 May - 1 June Pre-Construction * The top soil shall be scraped at a depth of 10-15 cm minimum and shall be stored in the ROW.	-	-	CC	Methodology Please refer Chapter 5.1.8 of Biorestation Monitoring	Period 1. Germination (First May-June period after seeding)	Interim First-Findings in Monthly Report & Annual	TANAP	Biorestation Monitoring Plan	BAP; Specification for Reinstatement	-

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				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
					<p>* The seeds of <i>Gypsophila heteropoda ssp. minutiflora</i> species shall be collected near the ROW between 1 June-20 June.</p> <p>Post-Construction</p> <p>* The collected seeds of <i>Gypsophila heteropoda ssp. minutiflora</i> species shall be planted according to the methodology and to the (37 S 352322.75-4408468.34/37 S 352395.20-4408471.60/37 S 352452.02-4408473.12) coordinates between September-November.</p> <p>* Terracing shall be carried out .</p>				<p>Achievement Criteria</p> <p>The data obtained by comparison of the species’ population ratio (%) with its situation in natural habitat (observation of healthy population development)</p>	<p>2. Flowering (In May-July)</p> <p>3. Seed maturation (In June-August)</p> <p>Frequency</p> <p>Once in each germination , flowering and mature seed periods, three times per year</p>	Biorestore tion Monitorin g Report				
472	1-2	723+424-723+679 Critical Habitat (CH41)	Flora <i>Astragalus zaraensis</i>	-	<p>Closed Construction Period: 1 May - 1 June Pre-Construction</p> <p>* The top soil shall be scraped at a depth of 10-15 cm minimum and shall be stored in the ROW.</p> <p>* The seeds of <i>Astragalus zaraensis</i> species shall be collected near the ROW between 15 June-15 July.</p> <p>Post-Construction</p> <p>* The collected seeds of <i>Astragalus zaraensis</i> species shall be planted according to the methodology and to the (37 S 352322.75-4408468.34/37 S 352395.20-4408471.60/37 S 352452.02-4408473.12) coordinates between September-November.</p>	-		CC	<p>Methodology</p> <p>Please refer Chapter 5.1.8 of Biorestore tion Monitoring</p> <p>Achievement Criteria</p> <p>The data obtained by comparison of the species’ population ratio (%) with its situation in natural habitat (observation of healthy population development)</p>	<p>Period</p> <p>1. Germinatio n (First May-June period after seeding)</p> <p>2. Flowering (In June)</p> <p>3. Seed maturation (In July)</p> <p>Frequency</p> <p>Once in each germination , flowering and mature seed periods, three times per year</p>	Interim First- Findings in Monthly Report & Annual Biorestore tion Monitorin g Report	TANAP	Biorestore tion Monitoring Plan	BAP; Specification for Reinstatement	-

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				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
					* Terracing shall be carried out.										
473	1-2	723+424-723+679 Critical Habitat (CH41)	Flora <i>Minuartia corymbulosa</i> var. <i>gypsophiloides</i>	-	<p>Closed Construction Period: 1 May - 1 June Pre-Construction</p> <p>* The top soil shall be scraped at a depth of 10-15 cm minimum and shall be stored in the ROW. * The seeds of <i>Minuartia corymbulosa</i> var. <i>gypsophiloides</i> species shall be collected near the ROW between 15 June-15 July.</p> <p>Post-Construction</p> <p>* The collected seeds of <i>Minuartia corymbulosa</i> var. <i>gypsophiloides</i> species shall be planted according to the methodology and to the (37 S 352322.75-4408468.34/37 S 352395.20-4408471.60/37 S 352452.02-4408473.12) coordinates between September-November.</p> <p>* Terracing shall be carried out.</p>	-	-	CC	<p>Methodology</p> <p>Please refer Chapter 5.1.8 of Biorestation Monitoring</p> <p>Achievement Criteria</p> <p>The data obtained by comparison of the species' population ratio (%) with its situation in natural habitat (observation of healthy population development)</p>	<p>Period</p> <p>1. Germination (First May-June period after seeding) 2. Flowering (In August) 3. Seed maturation (In September)</p> <p>Frequency</p> <p>Once in each germination , flowering and mature seed periods, three times per year</p>	Interim First-Findings in Monthly Report & Annual Biorestation Monitoring Report	TANAP	Biorestation Monitoring Plan	BAP; Specification for Reinstatement	-
474	1-2	723+424-723+679 Critical Habitat (CH41)	Flora <i>Achillea sintenisii</i>	-	<p>Closed Construction Period: 1 May - 1 June Pre-Construction</p> <p>* The top soil shall be scraped at a depth of 10-15 cm minimum and shall be stored in the ROW. * The seeds of <i>Achillea sintenisii</i> species shall be collected near the ROW between 15 June-15 July.</p> <p>Post-Construction</p>	-	-	CC	<p>Methodology</p> <p>Please refer Chapter 5.1.8 of Biorestation Monitoring</p> <p>Achievement Criteria</p> <p>The data obtained by comparison of</p>	<p>Period</p> <p>1. Germination (First May-June period after seeding) 2. Flowering (In May-July) 3. Seed maturation (In June-August)</p>	Interim First-Findings in Monthly Report & Annual Biorestation Monitoring Report	TANAP	Biorestation Monitoring Plan	BAP; Specification for Reinstatement	-

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				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
					<p>* The collected seeds of <i>Achillea sintenisii</i> species shall be planted according to the methodology and to the (37 S 352322.75-4408468.34/37 S 352395.20-4408471.60/37 S 352452.02-4408473.12) coordinates between September-November.</p> <p>* Terracing shall be carried out.</p>				the species' population ratio (%) with its situation in natural habitat (observation of healthy population development)	Frequency	Once in each germination , flowering and mature seed periods, three times per year				
475	1-2	723+424-723+679 Critical Habitat (CH41)	Flora <i>Gypsophila aucheri</i>		<p>Closed Construction Period: 1 May - 1 June Pre-Construction</p> <p>* The top soil shall be scraped at a depth of 10-15 cm minimum and shall be stored in the ROW. * The seeds of <i>Gypsophila aucheri</i> species shall be collected near the ROW between 15 June-15 July.</p> <p>Post-Construction</p> <p>* The collected seeds of <i>Gypsophila aucheri</i> species shall be planted according to the methodology and to the (37 S 352322.75-4408468.34/37 S 352395.20-4408471.60/37 S 352452.02-4408473.12) coordinates between September-November.</p> <p>* Terracing shall be carried out.</p>	-	-	CC	<p>Methodology</p> <p>Please refer Chapter 5.1.8 of Biorestation Monitoring</p> <p>Achievement Criteria</p> <p>The data obtained by comparison of the species' population ratio (%) with its situation in natural habitat (observation of healthy population development)</p>	<p>Period</p> <p>1. Germination (First May-June period after seeding) 2. Flowering (In June-July) 3. Seed maturation (In July-August)</p> <p>Frequency</p> <p>Once in each germination , flowering and mature seed periods, three times per year</p>	Interim First-Findings in Monthly Report & Annual Biorestation Monitoring Report	TANAP	Biorestation Monitoring Plan	BAP; Specification for Reinstatement	-
476	1-2	723+424-723+679 Critical Habitat (CH41)	Flora <i>Onosma sintenisii</i>		<p>Closed Construction Period: 1 May - 1 June Pre-Construction</p> <p>* The top soil shall be scraped at a depth of 10-15 cm minimum and shall be stored in the ROW. * The seeds of <i>Onosma sintenisii</i> species shall be collected near the ROW between 15 June-15 July.</p>	-	-	CC	<p>Methodology</p> <p>Please refer Chapter 5.1.8 of Biorestation Monitoring</p> <p>Achievement Criteria</p>	<p>Period</p> <p>1. Germination (First May-June period after seeding) 2. Flowering (In May-July) 3. Seed maturation</p>	Interim First-Findings in Monthly Report & Annual Biorestation Monitoring Report	TANAP	Biorestation Monitoring Plan	BAP; Specification for Reinstatement	-

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RefNo	Ph.	Specific Location (and KP)	Environmental Component ²	Project Commitment					Monitoring				Mang. Plan	Addition. Docum.	ESIA Chapter
				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
					<p>* Some of the collected seeds of <i>Onosma sintenisii</i> species shall be given to the seed gene bank.</p> <p>Post-Construction</p> <p>* The collected seeds of , <i>Onosma sintenisii</i> species shall be planted according to the methodology and to the (37 S 352322.75-4408468.34/37 S 352395.20-4408471.60/37 S 352452.02-4408473.12) coordinates between September-November.</p> <p>* Terracing shall be carried out.</p>				The data obtained by comparison of the species' population ratio (%) with its situation in natural habitat (observation of healthy population development)	(In July-August) Frequency Once in each germination , flowering and mature seed periods, three times per year					
477	1-2	723+424-723+679 Critical Habitat (CH41)	Species Diversity	-	<p>Pre-Construction</p> <p>* The top soil shall be scraped at a depth of 10-15 cm minimum and shall be stored in the ROW.</p> <p>* To control erosion at sloping areas, seeds of the non-endemic natural plants of the region should be collected.</p> <p>Post-Construction</p> <p>* To control erosion at sloping areas, seeds of the non-endemic natural plants of the region should be planted on the ROW.</p>	-	-	CC	<p>Methodology</p> <p>Please refer Chapter 5.1.6 of Biorestitution Monitoring Plan</p> <p>Achievement Criteria</p> <p>The species diversity of the area has recovered by 20% in the first year following the spread of the top soil</p>	<p>Period</p> <p>June-July</p> <p>Frequency</p> <p>Biennially</p>	Interim First-Findings in Monthly Report & Annual Biorestitution Monitoring Report	TANAP	Biorestitution Monitoring Plan	BAP; Specification for Reinstatement	-
478	1-2	723+424-723+679 Critical Habitat (CH41)	Vegetation Cover	-	<p>Pre-Construction</p> <p>* The top soil shall be scraped at a depth of 10-15 cm minimum and shall be stored in the ROW.</p> <p>* To control erosion at sloping areas, seeds of the</p>	-	-	CC	<p>Methodology</p> <p>Please refer Chapter 5.1.5 of Biorestitution Monitoring Plan</p>	<p>Period</p> <p>June-July</p> <p>Frequency</p>	Interim First-Findings in Monthly Report & Annual Biorestitution	TANAP	Biorestitution Monitoring Plan	BAP; Specification for Reinstatement	-

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				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
					non-endemic natural plants of the region should be collected. Post-Construction * To control erosion at sloping areas, seeds of the non-endemic natural plants of the region should be planted on the ROW.				Achievement Criteria The vegetative cover of the area has recovered by 20% in the first year following the spread of the top soil	Annually	tion Monitorin g Report				
479	1-2	732+873-732+959 Critical Habitat (CH42)	Flora <i>Astragalus zaraensis</i>	-	Closed Construction Period: 1 May - 1 June Pre-Construction * The top soil shall be scraped at a depth of 10-15 cm minimum and shall be stored in the ROW. * The seeds of <i>Astragalus zaraensis</i> species shall be collected near the ROW between 15 June-15 July. * The species individuals shall be removed as tufts and shall be transferred to the (37 S 343055.79-4409365.90) coordinates. Post-Construction The collected seeds of <i>Astragalus zaraensis</i> species shall be planted according to the methodology between September-November. * The removed individuals of the species as tufts shall be planted to the ROW.	-	-	CC	Methodology Please refer Chapter 5.1.8 of Biorestoreation Monitoring Achievement Criteria The data obtained by comparison of the species' population ratio (%) with its situation in natural habitat (observation of healthy population development)	Period 1. Germinatio n (First May-June period after seeding) 2. Flowering (In June) 3. Seed maturation (In July) Frequency Once in each germination , flowering and mature seed periods, three times per year	Interim First-Findings in Monthly Report & Annual Biorestora tion Monitorin g Report	TANAP	Biorestorati on Monitoring Plan	BAP; Specification for Reinstatement	-
480	1-2	732+873-732+959 Critical Habitat (CH42)	Flora <i>Achillea sintenisii</i>	-	Closed Construction Period: 1 May - 1 June Pre-Construction * The top soil shall be scraped at a depth of 10-	-	-	CC	Methodology Please refer Chapter 5.1.8 of	Period 1. Germinatio n (First May-June	Interim First-Findings in Monthly Report &	TANAP	Biorestorati on Monitoring Plan	BAP; Specification for Reinstatement	-

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RefNo	Ph.	Specific Location (and KP)	Environmental Component ²	Project Commitment					Monitoring				Mang. Plan	Addition. Docum.	ESIA Chapter
				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
					<p>15 cm minimum and shall be stored in the ROW.</p> <p>* The seeds of <i>Achillea sintenisii</i> species shall be collected near the ROW between 15 June-15 July.</p> <p>* The species individuals shall be removed as tufts and shall be transferred to the (37 S 343055.79-4409365.90) coordinates.</p> <p>Post-Construction</p> <p>The collected seeds of <i>Achillea sintenisii</i> species shall be planted according to the methodology between September-November. * The removed individuals of the species as tufts shall be planted to the ROW.</p>				<p>Biorestation Monitoring</p> <p>Achievement Criteria</p> <p>The data obtained by comparison of the species' population ratio (%) with its situation in natural habitat (observation of healthy population development)</p>	<p>period after seeding)</p> <p>2. Flowering (In May-July)</p> <p>3. Seed maturation (In June-August)</p> <p>Frequency</p> <p>Once in each germination , flowering and mature seed periods, three times per year</p>	Annual Biorestation Monitoring Report				
481	1-2	732+873-732+959 Critical Habitat (CH42)	Species Diversity	-	<p>Pre-Construction</p> <p>* The top soil shall be scraped at a depth of 10-15 cm minimum and shall be stored in the ROW.</p> <p>* To control erosion at sloping areas, seeds of the non-endemic natural plants of the region should be collected.</p> <p>Post-Construction</p> <p>* To control erosion at sloping areas, seeds of the non-endemic natural plants of the region should be planted on the ROW.</p>	-	-	CC	<p>Methodology</p> <p>Please refer Chapter 5.1.6 of Biorestation Monitoring Plan</p> <p>Achievement Criteria</p> <p>The species diversity of the area has recovered by 20% in the first year following the spread of the top soil</p>	<p>Period</p> <p>June-July</p> <p>Frequency</p> <p>Biennially</p>	Interim First-Findings in Monthly Report & Annual Biorestation Monitoring Report	TANAP	Biorestation Monitoring Plan	BAP; Specification for Reinstatement	-
482	1-2	732+873-732+959 Critical Habitat (CH42)	Vegetation Cover	-	<p>Pre-Construction</p> <p>* The top soil shall be scraped at a depth of 10-15 cm minimum and shall be stored in the ROW.</p>	-	-	CC	<p>Methodology</p> <p>Please refer Chapter 5.1.5 of Biorestation</p>	<p>Period</p> <p>June-July</p>	Interim First-Findings in Monthly Report &	TANAP	Biorestation Monitoring Plan	BAP; Specification for Reinstatement	-

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				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
					<p>* To control erosion at sloping areas, seeds of the non-endemic natural plants of the region should be collected.</p> <p>Post-Construction</p> <p>* To control erosion at sloping areas, seeds of the non-endemic natural plants of the region should be planted on the ROW.</p>				Monitoring Plan	Frequency Annually	Annual Biorestoreta tion Monitorin g Report				
483	1-2	736+589-736+754 Critical Habitat (CH43)	Flora <i>Onosma sintenisii</i>	-	<p>Closed Construction Period: 1 May - 1 June</p> <p>Pre-Construction</p> <p>* The top soil shall be scraped at a depth of 10-15 cm minimum and shall be stored in the ROW.</p> <p>* The seeds of <i>Onosma sintenisii</i> species shall be collected near the ROW between 15 June-15 July.</p> <p>* The <i>Onosma sintenisii</i> species individuals shall be collected transferred to the (37 S 339751.11-4407877.07) coordinates.</p> <p>* Some of the collected seeds of <i>Onosma sintenisii</i> species shall be given to the seed gene bank.</p> <p>Post-Construction</p> <p>* The collected seeds of <i>Onosma sintenisii</i> species shall be planted according to the methodology and to the (37 S 339593.61-4408086.60/ 37 S 339650.73-4408112.15) coordinates between September-November.</p> <p>* The translocated <i>Onosma sintenisii</i> species</p>	-	-	CC	<p>Methodology</p> <p>Please refer Chapter 5.1.8 of Biorestoreta tion Monitoring</p> <p>Achievement Criteria</p> <p>The data obtained by comparison of the species’ population ratio (%) with its situation in natural habitat (observation of healthy population development)</p>	<p>Period</p> <p>1. Germinatio n (First May-June period after seeding)</p> <p>2. Flowering (In May-July)</p> <p>3. Seed maturation (In July-August)</p> <p>Frequency</p> <p>Once in each germination , flowering and mature seed periods, three times per year</p>	Interim First-Findings in Monthly Report & Annual Biorestoreta tion Monitorin g Report	TANAP	Biorestoreta tion Monitoring Plan	BAP; Specification for Reinstatement	-

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				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
					individuals shall be planted to the ROW.										
484	1-2	736+589-736+754 Critical Habitat (CH43)	Flora <i>Isatis glauca ssp. sivasica</i>	-	<p>Closed Construction Period: 1 May - 1 June Pre-Construction</p> <p>* The top soil shall be scraped at a depth of 10-15 cm minimum and shall be stored in the ROW. * The seeds of <i>Isatis glauca ssp. sivasica</i> species shall be collected near the ROW between 15 June-15 July. * Some of the collected seeds of <i>Isatis glauca ssp. sivasica</i> species shall be given to the seed gene bank.</p> <p>Post-Construction</p> <p>* The collected seeds of <i>Isatis glauca ssp. sivasica</i> species shall be planted according to the methodology and to the (37 S 339593.61-4408086.60/ 37 S 339650.73-4408112.15) coordinates between September-November.</p>	-	-	CC	<p>Methodology</p> <p>Please refer Chapter 5.1.8 of Biorestation Monitoring</p> <p>Achievement Criteria</p> <p>The data obtained by comparison of the species' population ratio (%) with its situation in natural habitat (observation of healthy population development)</p>	<p>Period</p> <p>1. Germination (First May-June period after seeding) 2. Flowering (In June) 3. Seed maturation (In July)</p> <p>Frequency</p> <p>Once in each germination , flowering and mature seed periods, three times per year</p>	Interim First-Findings in Monthly Report & Annual Biorestation Monitoring Report	TANAP	Biorestation Monitoring Plan	BAP; Specification for Reinstatement	-
485	1-2	736+589-736+754 Critical Habitat (CH43)	Flora <i>Achillea sintenisii</i>	-	<p>Closed Construction Period: 1 May - 1 June Pre-Construction</p> <p>* The top soil shall be scraped at a depth of 10-15 cm minimum and shall be stored in the ROW. * The seeds <i>Achillea sintenisii</i> species shall be collected near the ROW between 15 June-15 July.</p> <p>* The <i>Achillea sintenisii</i> species individuals shall be collected and shall be transferred to the (37 S 339751.11-4407877.07) coordinates.</p>	-	-	CC	<p>Methodology</p> <p>Please refer Chapter 5.1.8 of Biorestation Monitoring</p> <p>Achievement Criteria</p> <p>The data obtained by comparison of the species' population ratio (%) with its situation in</p>	<p>Period</p> <p>1. Germination (First May-June period after seeding) 2. Flowering (In May-July) 3. Seed maturation (In June-August)</p> <p>Frequency</p> <p>Once in each germination</p>	Interim First-Findings in Monthly Report & Annual Biorestation Monitoring Report	TANAP	Biorestation Monitoring Plan	BAP; Specification for Reinstatement	-

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				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
					Post-Construction * The collected seeds of <i>Achillea sintenisii</i> species shall be planted according to the methodology and to the (37 S 339593.61-4408086.60/ 37 S 339650.73-4408112.15) coordinates between September-November. * The translocated <i>Achillea sintenisii</i> species individuals shall be planted to the ROW.				natural habitat (observation of healthy population development)	, flowering and mature seed periods, three times per year					
486	1-2	736+589-736+754 Critical Habitat (CH43)	Species Diversity	-	Pre-Construction * The top soil shall be scraped at a depth of 10-15 cm minimum and shall be stored in the ROW. * To control erosion at sloping areas, seeds of the non-endemic natural plants of the region should be collected. Post-Construction * To control erosion at sloping areas, seeds of the non-endemic natural plants of the region should be planted on the ROW.	-	-	CC	Methodology Please refer Chapter 5.1.6 of Biorestation Monitoring Plan Achievement Criteria The species diversity of the area has recovered by 20% in the first year following the spread of the top soil	Period June-July Frequency Biennially	Interim First-Findings in Monthly Report & Annual Biorestation Monitoring Report	TANAP	Biorestation Monitoring Plan	BAP; Specification for Reinstatement	-
487	1-2	736+589-736+754 Critical Habitat (CH43)	Vegetation Cover	-	Pre-Construction * The top soil shall be scraped at a depth of 10-15 cm minimum and shall be stored in the ROW. * To control erosion at sloping areas, seeds of the non-endemic natural plants of the region should be collected.	-	-	CC	Methodology Please refer Chapter 5.1.5 of Biorestation Monitoring Plan Achievement Criteria	Period June-July Frequency Annually	Interim First-Findings in Monthly Report & Annual Biorestation Monitoring Report	TANAP	Biorestation Monitoring Plan	BAP; Specification for Reinstatement	-

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				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
					Post-Construction * To control erosion at sloping areas, seeds of the non-endemic natural plants of the region should be planted on the ROW.				The vegetative cover of the area has recovered by 20% in the first year following the spread of the top soil						
488	1-2	744+689-744+834 Critical Habitat (CH44)	Flora <i>Achillea sintenisii</i>		Closed Construction Period: 1 May - 15 July Pre-Construction * The top soil shall be scraped at a depth of 10-15 cm minimum and shall be stored in the ROW. * The seeds of <i>Achillea sintenisii</i> species shall be collected near the ROW between 15 June-15 July Post-Construction * The collected seeds of <i>Achillea sintenisii</i> species shall be planted according to the methodology and to the (37 S 332486.75-4408322.38/37 S 332507.73-4408280.80/37 S 332517.23-4408261.61) coordinates between September-November.			CC	Methodology Please refer Chapter 5.1.8 of Biorestoreation Monitoring Achievement Criteria The data obtained by comparison of the species' population ratio (%) with its situation in natural habitat (observation of healthy population development)	Period 1. Germination (First May-June period after seeding) 2. Flowering (In May-July) 3. Seed maturation (In June-August) Frequency Once in each germination , flowering and mature seed periods, three times per year	Interim First-Findings in Monthly Report & Annual Biorestoreation Monitorin g Report	TANAP	Biorestorati on Monitoring Plan	BAP; Specification for Reinstatement	
489	1-2	744+689-744+834 Critical Habitat (CH44)	Flora <i>Chrysocamela noeana</i>		Closed Construction Period: 1 May - 15 July Pre-Construction * The top soil shall be scraped at a depth of 10-15 cm minimum and shall be stored in the ROW. * The seeds of <i>Chrysocamela noeana</i> species shall be collected near the ROW between 1 June-20 June. Some of the collected seeds of <i>Chrysocamela noeana</i>			CC	Methodology Please refer Chapter 5.1.8 of Biorestoreation Monitoring Achievement Criteria The data obtained by comparison of	Period 1. Germination (First May-June period after seeding) 2. Flowering (In April-May) 3. Seed maturation (In May-June)	Interim First-Findings in Monthly Report & Annual Biorestoreation Monitorin g Report	TANAP	Biorestorati on Monitoring Plan	BAP; Specification for Reinstatement	

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				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
					<p>species shall be given to the seed gene bank.</p> <p>Post-Construction</p> <p>* The collected seeds of <i>Chrysocamela noeana</i>, species shall be planted according to the methodology and to the (37 S 332486.75-4408322.38/37 S 332507.73-4408280.80/37 S 332517.23-4408261.61) coordinates between September-November.</p>				the species’ population ratio (%) with its situation in natural habitat (observation of healthy population development)	Frequency Once in each germination , flowering and mature seed periods, three times per year					
490	1-2	744+689-744+834 Critical Habitat (CH44)	Flora <i>Astragalus zaraensis</i>	-	<p>Closed Construction Period: 1 May - 15 July Pre-Construction</p> <p>* The top soil shall be scraped at a depth of 10-15 cm minimum and shall be stored in the ROW. * The seeds of <i>Astragalus zaraensis</i> species shall be collected near the ROW between 15 June-15 July</p> <p>* The <i>Astragalus zaraensis</i> species individuals shall be removed as and shall be transferred to the (37 S 332575.24-4408252.16) coordinates</p> <p>Post-Construction</p> <p>* The collected seeds of <i>Astragalus zaraensis</i>, species shall be planted according to the methodology and to the (37 S 332486.75-4408322.38/37 S 332507.73-4408280.80/37 S 332517.23-4408261.61) coordinates between September-November.</p> <p>* The removed individuals of the <i>Astragalus zaraensis</i> species as tufts shall be</p>	-	-	CC	<p>Methodology</p> <p>Please refer Chapter 5.1.8 of Biorestation Monitoring</p> <p>Achievement Criteria</p> <p>The data obtained by comparison of the species’ population ratio (%) with its situation in natural habitat (observation of healthy population development)</p>	<p>Period</p> <p>1. Germination (First May-June period after seeding) 2. Flowering (In June) 3. Seed maturation (In July)</p> <p>Frequency</p> <p>Once in each germination , flowering and mature seed periods, three times per year</p>	Interim First-Findings in Monthly Report & Annual Biorestation Monitoring Report	TANAP	Biorestation Monitoring Plan	BAP; Specification for Reinstatement	-

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				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
					planted, where the terracing shall be carried out to prevent erosion and shall be irrigated until they root again.										
491	1-2	744+689-744+834 Critical Habitat (CH44)	Flora <i>Cousinia sivasica</i>	-	<p>Closed Construction Period: 1 May - 15 July Pre-Construction</p> <p>* The top soil shall be scraped at a depth of 10-15 cm minimum and shall be stored in the ROW.</p> <p>* The seeds of <i>Cousinia sivasica</i> species shall be collected near the ROW between 15 June-15 July.</p> <p>* Some of the collected seeds of <i>Cousinia sivasica</i> species shall be given to the seed gene bank.</p> <p>Post-Construction</p> <p>* The collected seeds of <i>Cousinia sivasica</i>, species shall be planted according to the methodology and to the (37 S 332486.75-4408322.38/37 S 332507.73-4408280.80/37 S 332517.23-4408261.61) coordinates between September-November.</p>	-	-	CC	<p>Methodology</p> <p>Please refer Chapter 5.1.8 of Biorestation Monitoring</p> <p>Achievement Criteria</p> <p>The data obtained by comparison of the species' population ratio (%) with its situation in natural habitat (observation of healthy population development)</p>	<p>Period</p> <p>1. Germination (First May-June period after seeding)</p> <p>2. Flowering (In June-August)</p> <p>3. Seed maturation (In July-September)</p> <p>Frequency</p> <p>Once in each germination , flowering and mature seed periods, three times per year</p>	Interim First-Findings in Monthly Report & Annual Biorestation Monitoring Report	TANAP	Biorestation Monitoring Plan	BAP; Specification for Reinstatement	-
492	1-2	744+689-744+834 Critical Habitat (CH44)	Species Diversity	-	<p>Pre-Construction</p> <p>* The top soil shall be scraped at a depth of 10-15 cm minimum and shall be stored in the ROW.</p> <p>* To control erosion at sloping areas, seeds of the non-endemic natural plants of the region should be collected.</p> <p>Post-Construction</p> <p>* To control erosion at sloping areas, seeds of the non-endemic natural</p>	-	-	CC	<p>Methodology</p> <p>Please refer Chapter 5.1.6 of Biorestation Monitoring Plan</p> <p>Achievement Criteria</p> <p>The species diversity of the area has recovered by 20% in the</p>	<p>Period</p> <p>June-July</p> <p>Frequency</p> <p>Biennially</p>	Interim First-Findings in Monthly Report & Annual Biorestation Monitoring Report	TANAP	Biorestation Monitoring Plan	BAP; Specification for Reinstatement	-

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				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
					plants of the region should be planted on the ROW.				first year following the spread of the top soil						
493	1-2	744+689-744+834 Critical Habitat (CH44)	Vegetation Cover		<p>Pre-Construction</p> <p>* The top soil shall be scraped at a depth of 10-15 cm minimum and shall be stored in the ROW.</p> <p>* To control erosion at sloping areas, seeds of the non-endemic natural plants of the region should be collected.</p> <p>Post-Construction</p> <p>* To control erosion at sloping areas, seeds of the non-endemic natural plants of the region should be planted on the ROW.</p>			CC	<p>Methodology</p> <p>Please refer Chapter 5.1.5 of Biorestation Monitoring Plan</p> <p>Achievement Criteria</p> <p>The vegetative cover of the area has recovered by 20% in the first year following the spread of the top soil</p>	<p>Period</p> <p>June-July</p> <p>Frequency</p> <p>Annually</p>	Interim First-Findings in Monthly Report & Annual Biorestation Monitoring Report	TANAP	Biorestation Monitoring Plan	BAP; Specification for Reinstatement	
494	1-2	805+749-805+816 Critical Habitat (CH46)	Flora <i>Cousinia halysensis</i>		<p>Closed Construction Period: 1 May - 15 June Pre-Construction</p> <p>* The top soil shall be scraped at a depth of 10-15 cm minimum and shall be stored in the ROW.</p> <p>* The seeds of <i>Cousinia halysensis</i> species shall be collected between 15 June-15 July.</p> <p>Post-Construction</p> <p>* The collected seeds of <i>Cousinia halysensis</i> species shall be planted according to the methodology and to the (37 S 277036.02-4415687.53) coordinates ROW between September-November.</p>			CC	<p>Methodology</p> <p>Please refer Chapter 5.1.8 of Biorestation Monitoring</p> <p>Achievement Criteria</p> <p>The data obtained by comparison of the species' population ratio (%) with its situation in natural habitat (observation of healthy population development)</p>	<p>Period</p> <p>1. Germination (First May-June period after seeding) 2. Flowering (In June-August) 3. Seed maturation (In July-September)</p> <p>Frequency</p> <p>Once in each germination, flowering and mature seed</p>	Interim First-Findings in Monthly Report & Annual Biorestation Monitoring Report	TANAP	Biorestation Monitoring Plan	BAP; Specification for Reinstatement	

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				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
										periods, three times per year					
495	1-2	805+749-805+816 Critical Habitat (CH46)	Species Diversity	-	Pre-Construction * The top soil shall be scraped at a depth of 10-15 cm minimum and shall be stored in the ROW. * To control erosion at sloping areas, seeds of the non-endemic natural plants of the region should be collected. Post-Construction * To control erosion at sloping areas, seeds of the non-endemic natural plants of the region should be planted on the ROW.	-	-	CC	Methodology Please refer Chapter 5.1.6 of Biorestoration Monitoring Plan Achievement Criteria The species diversity of the area has recovered by 20% in the first year following the spread of the top soil	Period June-July Frequency Biennially	Interim First-Findings in Monthly Report & Annual Biorestoration Monitoring Report	TANAP	Biorestoration Monitoring Plan	BAP; Specification for Reinstatement	-
496	1-2	805+749-805+816 Critical Habitat (CH46)	Vegetation Cover	-	Pre-Construction * The top soil shall be scraped at a depth of 10-15 cm minimum and shall be stored in the ROW. * To control erosion at sloping areas, seeds of the non-endemic natural plants of the region should be collected. Post-Construction * To control erosion at sloping areas, seeds of the non-endemic natural plants of the region should be planted on the ROW.	-	-	CC	Methodology Please refer Chapter 5.1.5 of Biorestoration Monitoring Plan Achievement Criteria The vegetative cover of the area has recovered by 20% in the first year following the spread of the top soil	Period June-July Frequency Annually	Interim First-Findings in Monthly Report & Annual Biorestoration Monitoring Report	TANAP	Biorestoration Monitoring Plan	BAP; Specification for Reinstatement	-

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				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
497	1-2	805+842-806+143 Critical Habitat (CH47)	Flora <i>Cousinia halysensis</i>	-	<p>Closed Construction Period: 1 May - 15 June Pre-Construction</p> <p>* The top soil shall be scraped at a depth of 10-15 cm minimum and shall be stored in the ROW.</p> <p>* The seeds of <i>Cousinia halysensis</i> species shall be collected between 15 June-15 July.</p> <p>Post-Construction</p> <p>* The collected seeds of <i>Cousinia halysensis</i> species shall be planted according to the methodology and to the (37 S 276937.99-4415685.90/37 S 276803.30-4415655.66/37 S 276720.58-4415638.33) coordinates ROW between September-November.</p>	-	-	CC	<p>Methodology</p> <p>Please refer Chapter 5.1.8 of Biorestation Monitoring</p> <p>Achievement Criteria</p> <p>The data obtained by comparison of the species' population ratio (%) with its situation in natural habitat (observation of healthy population development)</p>	<p>Period</p> <p>1. Germination (First May-June period after seeding)</p> <p>2. Flowering (In June-August)</p> <p>3. Seed maturation (In July-September)</p> <p>Frequency</p> <p>Once in each germination, flowering and mature seed periods, three times per year</p>	Interim First-Findings in Monthly Report & Annual Biorestation Monitoring Report	TANAP	Biorestation Monitoring Plan	BAP; Specification for Reinstatement	-
498	1-2	805+842-806+143 Critical Habitat (CH47)	Species Diversity	-	<p>Pre-Construction</p> <p>* The top soil shall be scraped at a depth of 10-15 cm minimum and shall be stored in the ROW.</p> <p>* To control erosion at sloping areas, seeds of the non-endemic natural plants of the region should be collected.</p> <p>Post-Construction</p> <p>* To control erosion at sloping areas, seeds of the non-endemic natural plants of the region should be planted on the ROW.</p>	-	-	CC	<p>Methodology</p> <p>Please refer Chapter 5.1.6 of Biorestation Monitoring Plan</p> <p>Achievement Criteria</p> <p>The species diversity of the area has recovered by 20% in the first year following the spread of the top soil</p>	<p>Period</p> <p>June-July</p> <p>Frequency</p> <p>Biennially</p>	Interim First-Findings in Monthly Report & Annual Biorestation Monitoring Report	TANAP	Biorestation Monitoring Plan	BAP; Specification for Reinstatement	-

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				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
499	1-2	805+842-806+143 Critical Habitat (CH47)	Vegetation Cover	-	<p>Pre-Construction</p> <p>* The top soil shall be scraped at a depth of 10-15 cm minimum and shall be stored in the ROW.</p> <p>* To control erosion at sloping areas, seeds of the non-endemic natural plants of the region should be collected.</p> <p>Post-Construction</p> <p>* To control erosion at sloping areas, seeds of the non-endemic natural plants of the region should be planted on the ROW.</p>	-	-	CC	<p>Methodology</p> <p>Please refer Chapter 5.1.5 of Biorestation Monitoring Plan</p> <p>Achievement Criteria</p> <p>The vegetative cover of the area has recovered by 20% in the first year following the spread of the top soil</p>	<p>Period</p> <p>June-July</p> <p>Frequency</p> <p>Annually</p>	Interim First-Findings in Monthly Report & Annual Biorestation Monitoring Report	TANAP	Biorestation Monitoring Plan	BAP; Specification for Reinstatement	-
500	1-2	948+615-949+002 Critical Habitat (CH50)	Flora <i>Cousinia halysensis</i>	-	<p>Closed Construction Period: 1 May - 1 June Pre-Construction</p> <p>* The top soil shall be scraped at a depth of 10-15 cm minimum and shall be stored in the ROW.</p> <p>* The seeds of <i>Cousinia halysensis</i> species shall be collected between 15 June-15 July.</p> <p>Post-Construction</p> <p>* The collected seeds of <i>Cousinia halysensis</i> species shall be planted according to the methodology and to the (36 S 663165.43-4391184.04/ 36 S 663018.07-4391201.63/ 36 S 662922.53-4391149.88)</p>	-	-	CC	<p>Methodology</p> <p>Please refer Chapter 5.1.8 of Biorestation Monitoring</p> <p>Achievement Criteria</p> <p>The data obtained by comparison of the species' population ratio (%) with its situation in natural habitat (observation of healthy</p>	<p>Period</p> <p>1. Germination (First May-June period after seeding)</p> <p>2. Flowering (In June-August)</p> <p>3. Seed maturation (In July-September)</p> <p>Frequency</p> <p>Once in each germination , flowering and mature seed periods,</p>	Interim First-Findings in Monthly Report & Annual Biorestation Monitoring Report	TANAP	Biorestation Monitoring Plan	BAP; Specification for Reinstatement	-

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				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
					coordinates between September-November.				population development)	three times per year					
501	1-2	948+615-949+002 Critical Habitat (CH50)	Species Diversity	-	Pre-Construction * The top soil shall be scraped at a depth of 10-15 cm minimum and shall be stored in the ROW. * To control erosion at sloping areas, seeds of the non-endemic natural plants of the region should be collected. Post-Construction * To control erosion at sloping areas, seeds of the non-endemic natural plants of the region should be planted on the ROW.	-	-	CC	Methodology Please refer Chapter 5.1.6 of Biorestation Monitoring Plan Achievement Criteria The species diversity of the area has recovered by 30% in the first year following the spread of the top soil	Period June-July Frequency Biennially	Interim First-Findings in Monthly Report & Annual Biorestation Monitoring Report	TANAP	Biorestation Monitoring Plan	BAP; Specification for Reinstatement	-
502	1-2	948+615-949+002 Critical Habitat (CH50)	Vegetation Cover	-	Pre-Construction * The top soil shall be scraped at a depth of 10-15 cm minimum and shall be stored in the ROW. * To control erosion at sloping areas, seeds of the non-endemic natural plants of the region should be collected. Post-Construction * To control erosion at sloping areas, seeds of the non-endemic natural plants of the region should be planted on the ROW.	-	-	CC	Methodology Please refer Chapter 5.1.5 of Biorestation Monitoring Plan Achievement Criteria The vegetative cover of the area has recovered by 30% in the first year following the spread of the top soil	Period June-July Frequency Annually	Interim First-Findings in Monthly Report & Annual Biorestation Monitoring Report	TANAP	Biorestation Monitoring Plan	BAP; Specification for Reinstatement	-

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				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
503	1-2	996+630-997+352 Critical Habitat (CH51)	Flora <i>Cousinia halysensis</i>	-	<p>Closed Construction Period: 1 May - 1 June Pre-Construction</p> <p>* The top soil shall be scraped at a depth of 10-15 cm minimum and shall be stored in the ROW.</p> <p>* The seeds of <i>Cousinia halysensis</i> species shall be collected between 15 June-15 July.</p> <p>Post-Construction</p> <p>* The collected seeds of <i>Cousinia halysensis</i> species shall be planted according to the methodology and to the (36 S 617215.12-4393683.66/36 S 616926.44-4393808.19/36 S 616741.98-4393948.53) coordinates between September-November.</p>	-	-	CC	<p>Methodology</p> <p>Please refer Chapter 5.1.8 of Biorestation Monitoring</p> <p>Achievement Criteria</p> <p>The data obtained by comparison of the species' population ratio (%) with its situation in natural habitat (observation of healthy population development)</p>	<p>Period</p> <p>1. Germination (First May-June period after seeding)</p> <p>2. Flowering (June-August)</p> <p>3. Seed maturation (July-September)</p> <p>Frequency</p> <p>Once in each germination, flowering and mature seed periods, three times per year</p>	Interim First-Findings in Monthly Report & Annual Biorestation Monitoring Report	TANAP	Biorestation Monitoring Plan	BAP; Specification for Reinstatement	-
504	1-2	996+630-997+352 Critical Habitat (CH51)	Species Diversity	-	<p>Pre-Construction</p> <p>* The top soil shall be scraped at a depth of 10-15 cm minimum and shall be stored in the ROW.</p> <p>* To control erosion at sloping areas, seeds of the non-endemic natural plants of the region should be collected.</p> <p>Post-Construction</p> <p>* To control erosion at sloping areas, seeds of the non-endemic natural plants of the region should be planted on the ROW.</p>	-	-	CC	<p>Methodology</p> <p>Please refer Chapter 5.1.6 of Biorestation Monitoring Plan</p> <p>Achievement Criteria</p> <p>The species diversity of the area has recovered by 30% in the first year following the spread of the top soil</p>	<p>Period</p> <p>June-July</p> <p>Frequency</p> <p>Biennially</p>	Interim First-Findings in Monthly Report & Annual Biorestation Monitoring Report	TANAP	Biorestation Monitoring Plan	BAP; Specification for Reinstatement	-

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				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
505	1-2	996+630-997+352 Critical Habitat (CH52)	Vegetation Cover	-	Pre-Construction * The top soil shall be scraped at a depth of 10-15 cm minimum and shall be stored in the ROW. * To control erosion at sloping areas, seeds of the non-endemic natural plants of the region should be collected. Post-Construction * To control erosion at sloping areas, seeds of the non-endemic natural plants of the region should be planted on the ROW.	-	-	CC	Methodology Please refer Chapter 5.1.5 of Biorestation Monitoring Plan Achievement Criteria The vegetative cover of the area has recovered by 30% in the first year following the spread of the top soil	Period June-July Frequency Annually	Interim First-Findings in Monthly Report & Annual Biorestation Monitoring Report	TANAP	Biorestation Monitoring Plan	BAP; Specification for Reinstatement	-
506	1-2	1034+862-1035+061 Critical Habitat (CH51)	Flora <i>Cousinia halysensis</i>	-	Closed Construction Period: 1 May - 1 June Pre-Construction * The top soil shall be scraped at a depth of 10-15 cm minimum and shall be stored in the ROW. * The seeds of <i>Cousinia halysensis</i> species shall be collected between 15 June-15 July. Post-Construction * The collected seeds of <i>Cousinia halysensis</i> species shall be planted according to the methodology and to the (36 S 584017.01-4395503.88/ 36 S 583929.05-4395490.21) coordinates between September-November.	-	-	CC	Methodology Please refer Chapter 5.1.8 of Biorestation Monitoring Achievement Criteria The data obtained by comparison of the species' population ratio (%) with its situation in natural habitat (observation of healthy population development)	Period 1. Germination (First May-June period after seeding) 2. Flowering (In June-August) 3. Seed maturation (In July-September) Frequency Once in each germination, flowering and mature seed periods, three times per year	Interim First-Findings in Monthly Report & Annual Biorestation Monitoring Report	TANAP	Biorestation Monitoring Plan	BAP; Specification for Reinstatement	-

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				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
507	1-2	1034+862-1035+061 Critical Habitat (CH52)	Flora <i>Thymus leucostomus</i>	-	<p>Closed Construction Period: 1 May - 1 June Pre-Construction</p> <p>* The top soil shall be scraped at a depth of 10-15 cm minimum and shall be stored in the ROW.</p> <p>* The seeds of <i>Thymus leucostomus</i> species shall be collected between 15 June-15 July.</p> <p>Post-Construction</p> <p>* The collected seeds of <i>Thymus leucostomus</i> species shall be planted according to the methodology and to the (36 S 584017.01-4395503.88/ 36 S 583929.05-4395490.21) coordinates between September-November.</p>	-	-	CC	<p>Methodology</p> <p>Please refer Chapter 5.1.8 of Biorestation Monitoring</p> <p>Achievement Criteria</p> <p>The data obtained by comparison of the species' population ratio (%) with its situation in natural habitat (observation of healthy population development)</p>	<p>Period</p> <p>1. Germination (First May-June period after seeding)</p> <p>2. Flowering (In May-June)</p> <p>3. Seed maturation (In June-July)</p> <p>Frequency</p> <p>Once in each germination, flowering and mature seed periods, three times per year</p>	Interim First-Findings in Monthly Report & Annual Biorestation Monitoring Report	TANAP	Biorestation Monitoring Plan	BAP; Specification for Reinstatement	-
508	1-2	1034+862-1035+061 Critical Habitat (CH52)	Species Diversity	-	<p>Pre-Construction</p> <p>* The top soil shall be scraped at a depth of 10-15 cm minimum and shall be stored in the ROW.</p> <p>* To control erosion at sloping areas, seeds of the non-endemic natural plants of the region should be collected.</p> <p>Post-Construction</p> <p>* To control erosion at sloping areas, seeds of the non-endemic natural plants of the region should be planted on the ROW.</p>	-	-	CC	<p>Methodology</p> <p>Please refer Chapter 5.1.6 of Biorestation Monitoring Plan</p> <p>Achievement Criteria</p> <p>The species diversity of the area has recovered by 30% in the first year following the spread of the top soil</p>	<p>Period</p> <p>June-July</p> <p>Frequency</p> <p>Biennially</p>	Interim First-Findings in Monthly Report & Annual Biorestation Monitoring Report	TANAP	Biorestation Monitoring Plan	BAP; Specification for Reinstatement	-

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				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
509	1-2	1034+862-1035+061 Critical Habitat (CH52)	Vegetation Cover	-	Pre-Construction * The top soil shall be scraped at a depth of 10-15 cm minimum and shall be stored in the ROW. * To control erosion at sloping areas, seeds of the non-endemic natural plants of the region should be collected. Post-Construction * To control erosion at sloping areas, seeds of the non-endemic natural plants of the region should be planted on the ROW.	-	-	CC	Methodology Please refer Chapter 5.1.5 of Biorestation Monitoring Plan Achievement Criteria The vegetative cover of the area has recovered by 30% in the first year following the spread of the top soil	Period June-July Frequency Annually	Interim First-Findings in Monthly Report & Annual Biorestation Monitoring Report	TANAP	Biorestation Monitoring Plan	BAP; Specification for Reinstatement	-
510	1-2	1035+348-1035+567 Critical Habitat (CH53)	Flora <i>Cousinia halysensis</i>	-	Closed Construction Period: 1 May - 1 June Pre-Construction * The top soil shall be scraped at a depth of 10-15 cm minimum and shall be stored in the ROW. * The seeds of <i>Cousinia halysensis</i> species shall be collected between 15 June-15 July. Post-Construction The collected seeds of <i>Cousinia halysensis</i> species shall be planted according to the methodology and to the (36 S 583553.69-4395479.62/36 S 583442.02-4395487.31) coordinates between September-November.	-	-	CC	Methodology Please refer Chapter 5.1.8 of Biorestation Monitoring Achievement Criteria The data obtained by comparison of the species' population ratio (%) with its situation in natural habitat (observation of healthy population development)	Period 1. Germination (First May-June period after seeding) 2. Flowering (In June-August) 3. Seed maturation (In July-September) Frequency Once in each germination, flowering and mature seed periods, three times per year	Interim First-Findings in Monthly Report & Annual Biorestation Monitoring Report	TANAP	Biorestation Monitoring Plan	BAP; Specification for Reinstatement	-

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				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
511	1-2	1035+348-1035+567 Critical Habitat (CH53)	Flora <i>Thymus leucostomus</i>	-	<p>Closed Construction Period: 1 May - 1 June Pre-Construction</p> <p>* The top soil shall be scraped at a depth of 10-15 cm minimum and shall be stored in the ROW.</p> <p>* The seeds of <i>Thymus leucostomus</i> species shall be collected between 15 June-15 July.</p> <p>Post-Construction</p> <p>* The collected seeds of <i>Thymus leucostomus</i> species shall be planted according to the methodology and to the (36 S 583553.69-4395479.62/36 S 583442.02-4395487.31) coordinates between September-November.</p>	-	-	CC	<p>Methodology</p> <p>Please refer Chapter 5.1.8 of Biorestation Monitoring</p> <p>Achievement Criteria</p> <p>The data obtained by comparison of the species' population ratio (%) with its situation in natural habitat (observation of healthy population development)</p>	<p>Period</p> <p>1. Germination (First May-June period after seeding)</p> <p>2. Flowering (In May-June)</p> <p>3. Seed maturation (In June-July)</p> <p>Frequency</p> <p>Once in each germination, flowering and mature seed periods, three times per year</p>	Interim First-Findings in Monthly Report & Annual Biorestation Monitoring Report	TANAP	Biorestation Monitoring Plan	BAP; Specification for Reinstatement	-
512	1-2	1035+348-1035+567 Critical Habitat (CH53)	Species Diversity	-	<p>Pre-Construction</p> <p>* The top soil shall be scraped at a depth of 10-15 cm minimum and shall be stored in the ROW.</p> <p>* To control erosion at sloping areas, seeds of the non-endemic natural plants of the region should be collected.</p> <p>Post-Construction</p> <p>* To control erosion at sloping areas, seeds of the non-endemic natural plants of the region should be planted on the ROW.</p>	-	-	CC	<p>Methodology</p> <p>Please refer Chapter 5.1.6 of Biorestation Monitoring Plan</p> <p>Achievement Criteria</p> <p>The species diversity of the area has recovered by 30% in the first year following the spread of the top soil</p>	<p>Period</p> <p>June-July</p> <p>Frequency</p> <p>Biennially</p>	Interim First-Findings in Monthly Report & Annual Biorestation Monitoring Report	TANAP	Biorestation Monitoring Plan	BAP; Specification for Reinstatement	-

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				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
513	1-2	1035+348-1035+567 Critical Habitat (CH53)	Vegetation Cover	-	Pre-Construction * The top soil shall be scraped at a depth of 10-15 cm minimum and shall be stored in the ROW. * To control erosion at sloping areas, seeds of the non-endemic natural plants of the region should be collected. Post-Construction * To control erosion at sloping areas, seeds of the non-endemic natural plants of the region should be planted on the ROW.	-	-	CC	Methodology Please refer Chapter 5.1.5 of Biorestoration Monitoring Plan Achievement Criteria The vegetative cover of the area has recovered by 30% in the first year following the spread of the top soil	Period June-July Frequency Annually	Interim First-Findings in Monthly Report & Annual Biorestoration Monitoring Report	TANAP	Biorestoration Monitoring Plan	BAP; Specification for Reinstatement	-
514	1-2	1144+988-1145+800 Critical Habitat (CH54)	Flora <i>Cousinia halysensis</i>	-	Closed Construction Period: 1 May - 1 June Pre-Construction * The top soil shall be scraped at a depth of 10-15 cm minimum and shall be stored in the ROW. * The seeds of <i>Cousinia halysensis</i> species shall be collected between 15 June-15 July. Post-Construction The collected seeds of <i>Cousinia halysensis</i> species shall be planted according to the methodology and to the (36 S 484883.24-4376744.59/36 S 484666.23-4376765.52/36 S 484422.25-4376788.47) coordinates between September-November.	-	-	CC	Methodology Please refer Chapter 5.1.8 of Biorestoration Monitoring Achievement Criteria The data obtained by comparison of the species' population ratio (%) with its situation in natural habitat (observation of healthy population development)	Period 1. Germination (First May-June period after seeding) 2. Flowering (In June-August) 3. Seed maturation (In July-September) Frequency Once in each germination , flowering and mature seed periods, three times per year	Interim First-Findings in Monthly Report & Annual Biorestoration Monitoring Report	TANAP	Biorestoration Monitoring Plan	BAP; Specification for Reinstatement	-

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				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
515	1-2	1144+988-1145+800 Critical Habitat (CH54)	Species Diversity	-	<p>Pre-Construction</p> <p>* The top soil shall be scraped at a depth of 10-15 cm minimum and shall be stored in the ROW.</p> <p>* To control erosion at sloping areas, seeds of the non-endemic natural plants of the region should be collected.</p> <p>Post-Construction</p> <p>* To control erosion at sloping areas, seeds of the non-endemic natural plants of the region should be planted on the ROW.</p>	-	-	CC	<p>Methodology</p> <p>Please refer Chapter 5.1.6 of Biorestation Monitoring Plan</p> <p>Achievement Criteria</p> <p>The species diversity of the area has recovered by 30% in the first year following the spread of the top soil</p>	<p>Period</p> <p>June-July</p> <p>Frequency</p> <p>Biennially</p>	Interim First-Findings in Monthly Report & Annual Biorestation Monitoring Report	TANAP	Biorestation Monitoring Plan	BAP; Specification for Reinstatement	-
516	1-2	1144+988-1145+800 Critical Habitat (CH54)	Vegetation Cover	-	<p>Pre-Construction</p> <p>* The top soil shall be scraped at a depth of 10-15 cm minimum and shall be stored in the ROW.</p> <p>* To control erosion at sloping areas, seeds of the non-endemic natural plants of the region should be collected.</p> <p>Post-Construction</p> <p>* To control erosion at sloping areas, seeds of the non-endemic natural plants of the region should be planted on the ROW.</p>	-	-	CC	<p>Methodology</p> <p>Please refer Chapter 5.1.5 of Biorestation Monitoring Plan</p> <p>Achievement Criteria</p> <p>The vegetative cover of the area has recovered by 30% in the first year following the</p>	<p>Period</p> <p>June-July</p> <p>Frequency</p> <p>Annually</p>	Interim First-Findings in Monthly Report & Annual Biorestation Monitoring Report	TANAP	Biorestation Monitoring Plan	BAP; Specification for Reinstatement	-

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				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
									spread of the top soil						
517	1-2	1155+228-1155+398 Critical Habitat (CH55)	Flora <i>Cousinia halysensis</i>	-	<p>Closed Construction Period: 1 May - 1 June Pre-Construction</p> <p>* The top soil shall be scraped at a depth of 10-15 cm minimum and shall be stored in the ROW. * The seeds of <i>Cousinia halysensis</i> species shall be collected between 15 June-15 July.</p> <p>Post-Construction</p> <p>* The collected seeds of <i>Cousinia halysensis</i> species shall be planted according to the methodology and to the (36 S 475038.74-4376991.91/36 S 474951.33-4376999.24) coordinates between September-November.</p>	-	-	CC	<p>Methodology</p> <p>Please refer Chapter 5.1.8 of Biorestation Monitoring</p> <p>Achievement Criteria</p> <p>The data obtained by comparison of the species' population ratio (%) with its situation in natural habitat (observation of healthy population development)</p>	<p>Period</p> <p>1. Germination (First May-June period after seeding) 2. Flowering (June-August) 3. Seed maturation (July-September)</p> <p>Frequency</p> <p>Once in each germination , flowering and mature seed periods, three times per year</p>	Interim First-Findings in Monthly Report & Annual Biorestation Monitoring Report	TANAP	Biorestation Monitoring Plan	BAP; Specification for Reinstatement	-
518	1-2	1155+228-1155+398 Critical Habitat (CH55)	Flora <i>Thymus leucostomus</i>	-	<p>Closed Construction Period: 1 May - 1 June Pre-Construction</p> <p>* The top soil shall be scraped at a depth of 10-15 cm minimum and shall be stored in the ROW. * The seeds of <i>Thymus leucostomus</i> species shall be collected between 15 June-15 July.</p> <p>Post-Construction</p> <p>* The collected seeds of <i>Thymus leucostomus</i> species shall be planted according to the methodology and to the (36 S 475038.74-4376991.91/36 S</p>	-	-	CC	<p>Methodology</p> <p>Please refer Chapter 5.1.8 of Biorestation Monitoring</p> <p>Achievement Criteria</p> <p>The data obtained by comparison of the species' population ratio (%) with its situation in natural habitat (observation</p>	<p>Period</p> <p>1. Germination (First May-June period after seeding) 2. Flowering (In May-June) 3. Seed maturation (In June-July)</p> <p>Frequency</p> <p>Once in each germination , flowering and mature</p>	Interim First-Findings in Monthly Report & Annual Biorestation Monitoring Report	TANAP	Biorestation Monitoring Plan	BAP; Specification for Reinstatement	-

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				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
					474951.33-4376999.24) coordinates between September-November.				of healthy population development)	seed periods, three times per year					
519	1-2	1155+228-1155+398 Critical Habitat (CH55)	Species Diversity		<p>Pre-Construction</p> <p>* The top soil shall be scraped at a depth of 10-15 cm minimum and shall be stored in the ROW.</p> <p>* To control erosion at sloping areas, seeds of the non-endemic natural plants of the region should be collected.</p> <p>Post-Construction</p> <p>* To control erosion at sloping areas, seeds of the non-endemic natural plants of the region should be planted on the ROW.</p>	-	-	CC	<p>Methodology</p> <p>Please refer Chapter 5.1.6 of Biorestoreation Monitoring Plan</p> <p>Achievement Criteria</p> <p>The species diversity of the area has recovered by 30% in the first year following the spread of the top soil</p>	<p>Period</p> <p>June-July</p> <p>Frequency</p> <p>Biennially</p>	Interim First-Findings in Monthly Report & Annual Biorestoreation Monitorin g Report	TANAP	Biorestorati on Monitoring Plan	BAP; Specification for Reinstatement	-
520	1-2	1155+228-1155+398 Critical Habitat (CH55)	Vegetation Cover		<p>Pre-Construction</p> <p>* The top soil shall be scraped at a depth of 10-15 cm minimum and shall be stored in the ROW.</p> <p>* To control erosion at sloping areas, seeds of the non-endemic natural plants of the region should be collected.</p> <p>Post-Construction</p> <p>* To control erosion at sloping areas, seeds of the non-endemic natural plants of the region should be planted on the ROW.</p>	-	-	CC	<p>Methodology</p> <p>Please refer Chapter 5.1.5 of Biorestoreation Monitoring Plan</p> <p>Achievement Criteria</p> <p>The vegetative cover of the area has recovered by 30% in the first year following the spread of the top soil</p>	<p>Period</p> <p>June-July</p> <p>Frequency</p> <p>Annually</p>	Interim First-Findings in Monthly Report & Annual Biorestoreation Monitorin g Report	TANAP	Biorestorati on Monitoring Plan	BAP; Specification for Reinstatement	-

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				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
521	1-2	ROUTE CHANGE Critical Habitat (CH56)	Flora <i>Thymus leucostomus</i>	-	<p>Closed Construction Period: 1 May - 1 June Pre-Construction</p> <p>* The top soil shall be scraped at a depth of 10-15 cm minimum and shall be stored in the ROW.</p> <p>* The seeds of <i>Thymus leucostomus</i> species shall be collected between 15 June-15 July.</p> <p>Post-Construction</p> <p>* The collected seeds of <i>Thymus leucostomus</i> species shall be planted according to the methodology and to the (36 S 418710.48-4367664.42/ 36 S 418619.59-4367673.73) coordinates between September-November.</p>	-	-	CC	<p>Methodology</p> <p>Please refer Chapter 5.1.8 of Biorestation Monitoring</p> <p>Achievement Criteria</p> <p>The data obtained by comparison of the species' population ratio (%) with its situation in natural habitat (observation of healthy population development)</p>	<p>Period</p> <p>1. Germination (First May-June period after seeding)</p> <p>2. Flowering (In May-June)</p> <p>3. Seed maturation (In June-July)</p> <p>Frequency</p> <p>Once in each germination, flowering and mature seed periods, three times per year</p>	Interim First-Findings in Monthly Report & Annual Biorestation Monitoring Report	TANAP	Biorestation Monitoring Plan	BAP; Specification for Reinstatement	-
522	1-2	ROUTE CHANGE Critical Habitat (CH56)	Species Diversity	-	<p>Pre-Construction</p> <p>* The top soil shall be scraped at a depth of 10-15 cm minimum and shall be stored in the ROW.</p> <p>* To control erosion at sloping areas, seeds of the non-endemic natural plants of the region should be collected.</p> <p>Post-Construction</p> <p>* To control erosion at sloping areas, seeds of the non-endemic natural plants of the region should be planted on the ROW.</p>	-	-	CC	<p>Methodology</p> <p>Please refer Chapter 5.1.6 of Biorestation Monitoring Plan</p> <p>Achievement Criteria</p> <p>The species diversity of the area has recovered by 30% in the first year following the spread of the top soil</p>	<p>Period</p> <p>June-July</p> <p>Frequency</p> <p>Biennially</p>	Interim First-Findings in Monthly Report & Annual Biorestation Monitoring Report	TANAP	Biorestation Monitoring Plan	BAP; Specification for Reinstatement	-

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				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
523	1-2	ROUTE CHANGE Critical Habitat (CH56)	Vegetation Cover	-	Pre-Construction * The top soil shall be scraped at a depth of 10-15 cm minimum and shall be stored in the ROW. * To control erosion at sloping areas, seeds of the non-endemic natural plants of the region should be collected. Post-Construction * To control erosion at sloping areas, seeds of the non-endemic natural plants of the region should be planted on the ROW.	-	-	CC	Methodology Please refer Chapter 5.1.5 of Biorestation Monitoring Plan Achievement Criteria The vegetative cover of the area has recovered by 30% in the first year following the spread of the top soil	Period June-July Frequency Annually	Interim First-Findings in Monthly Report & Annual Biorestation Monitoring Report	TANAP	Biorestation Monitoring Plan	BAP; Specification for Reinstatement	-
524	1-2	ROUTE CHANGE 1229+052-1229+504 Critical Habitat (CH57)	Flora <i>Scutellaria yildirimli</i>	-	Closed Construction Period: 1 May - 30 June Pre-Construction * The top soil shall be scraped at a depth of 10-15 cm minimum and shall be stored in the ROW. * The seeds of <i>Scutellaria yildirimli</i> species shall be collected between 1 June-1 July. Post-Construction * The collected seeds of <i>Scutellaria yildirimli</i> species shall be planted according to the methodology and to the (36 S 405549.00-4363042.00/36 S 405621.85-4363058.29/36 S 405679.83-4363074.44/36 S 405784.91-4363093.32/36 S 405844.76-4363108.21/36 S 405912.62-4363121.76)	-	-	CC	Methodology Please refer Chapter 5.1.8 of Biorestation Monitoring Achievement Criteria The data obtained by comparison of the species' population ratio (%) with its situation in natural habitat (observation of healthy population development)	Period 1. Germination (First May-June period after seeding) 2. Flowering (In June-September) 3. Seed maturation (In August-October) Frequency Once in each germination , flowering and mature seed periods, three times per year	Interim First-Findings in Monthly Report & Annual Biorestation Monitoring Report	TANAP	Biorestation Monitoring Plan	BAP; Specification for Reinstatement	-

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				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
					coordinates between September-November.										
525	1-2	ROUTE CHANGE 1229+052-1229+504 Critical Habitat (CH57)	Flora <i>Achillea ketenoglui</i>	-	<p>Closed Construction Period: 1 May - 30 June Pre-Construction</p> <p>* The top soil shall be scraped at a depth of 10-15 cm minimum and shall be stored in the ROW.</p> <p>* The seeds of <i>Achillea ketenoglui</i> species shall be collected between 1 June-1 July.</p> <p>* Some of the collected seeds of <i>Achillea ketenoglui</i> species shall be given to the seed gene bank.</p> <p>Post-Construction</p> <p>* The collected seeds of <i>Achillea ketenoglui</i> species shall be planted according to the methodology and to the (36 S 405549.00-4363042.00/36 S 405621.85-4363058.29/36 S 405679.83-4363074.44/36 S 405784.91-4363093.32/36 S 405844.76-4363108.21/36 S 405912.62-4363121.76) coordinates between September-November.</p>	-	-	CC	<p>Methodology</p> <p>Please refer Chapter 5.1.8 of Biorestation Monitoring</p> <p>Achievement Criteria</p> <p>The data obtained by comparison of the species' population ratio (%) with its situation in natural habitat (observation of healthy population development)</p>	<p>Period</p> <p>1. Germination (First May-June period after seeding)</p> <p>2. Flowering (In May)</p> <p>3. Seed maturation (In June)</p> <p>Frequency</p> <p>Once in each germination , flowering and mature seed periods, three times per year</p>	Interim First-Findings in Monthly Report & Annual Biorestation Monitoring Report	TANAP	Biorestation Monitoring Plan	BAP; Specification for Reinstatement	-
526	1-2	ROUTE CHANGE 1229+052-1229+504 Critical Habitat (CH57)	Flora <i>Astragalus physodes ssp. acikirensis</i>	-	<p>Closed Construction Period: 1 May - 30 June Pre-Construction</p> <p>* The top soil shall be scraped at a depth of 10-15 cm minimum and shall be stored in the ROW.</p> <p>* The seeds of <i>Astragalus physodes ssp. acikirensis</i> species shall be collected between 15 May-15 June.</p> <p>Some of the collected</p>	-	-	CC	<p>Methodology</p> <p>Please refer Chapter 5.1.8 of Biorestation Monitoring</p> <p>Achievement Criteria</p>	<p>Period</p> <p>1. Germination (First May-June period after seeding)</p> <p>2. Flowering (In May-June)</p> <p>3. Seed maturation</p>	Interim First-Findings in Monthly Report & Annual Biorestation Monitoring Report	TANAP	Biorestation Monitoring Plan	BAP; Specification for Reinstatement	-

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				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
					seeds of <i>Astragalus physodes ssp. acikirensis</i> species shall be given to the seed gene bank. Post-Construction * The collected seeds of <i>Astragalus physodes ssp. acikirensis</i> species shall be planted according to the methodology and to the (36 S 405549.00-4363042.00/36 S 405621.85-4363058.29/36 S 405679.83-4363074.44/36 S 405784.91-4363093.32/36 S 405844.76-4363108.21/36 S 405912.62-4363121.76) coordinates between September-November.				The data obtained by comparison of the species' population ratio (%) with its situation in natural habitat (observation of healthy population development)	(In June-July) Frequency Once in each germination , flowering and mature seed periods, three times per year					
527	1-2	ROUTE CHANGE 1229+052-1229+504 Critical Habitat (CH57)	Flora <i>Minuartia corymbulosa</i> var. <i>gypsophiloides</i>	-	Closed Construction Period: 1 May - 30 June Pre-Construction * The top soil shall be scraped at a depth of 10-15 cm minimum and shall be stored in the ROW. * The seeds of <i>Minuartia corymbulosa</i> var. <i>gypsophiloides</i> species shall be collected between 15 July-15 August. Some of the collected seeds of <i>Minuartia corymbulosa</i> var. <i>gypsophiloides</i> species shall be given to the seed gene bank. Post-Construction * The collected seeds of <i>Minuartia corymbulosa</i> var. <i>gypsophiloides</i> species shall be planted according to the methodology and to the (36 S 405549.00-4363042.00/36 S 405621.85-4363058.29/36	-	-	CC	Methodology Please refer Chapter 5.1.8 of Biorestoreation Monitoring Achievement Criteria The data obtained by comparison of the species' population ratio (%) with its situation in natural habitat (observation of healthy population development)	Period 1. Germination (First May-June period after seeding) 2. Flowering (In August) 3. Seed maturation (In September) Frequency Once in each germination , flowering and mature seed periods, three times per year	Interim First-Findings in Monthly Report & Annual Biorestoreation Monitoring Report	TANAP	Biorestoreation Monitoring Plan	BAP; Specification for Reinstatement	-

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				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
					S 405679.83-4363074.44/36 S 405784.91-4363093.32/36 S 405844.76-4363108.21/36 S 405912.62-4363121.76) coordinates between September-November.										
528	1-2	ROUTE CHANGE 1229+052-1229+504 Critical Habitat (CH57)	Flora <i>Astragalus kochakii</i>	-	<p>Closed Construction Period: 1 May - 30 June Pre-Construction</p> <p>* The top soil shall be scraped at a depth of 10-15 cm minimum and shall be stored in the ROW.</p> <p>* The seeds of <i>Astragalus kochakii</i> species shall be collected between 1 June-1 July.</p> <p>* Some of the collected seeds of <i>Astragalus kochakii</i> species shall be given to the seed gene bank.</p> <p>Post-Construction</p> <p>* The collected seeds of <i>Astragalus kochakii</i> species shall be planted according to the methodology and to the (36 S 405549.00-4363042.00/36 S 405621.85-4363058.29/36 S 405679.83-4363074.44/36 S 405784.91-4363093.32/36 S 405844.76-4363108.21/36 S 405912.62-4363121.76) coordinates between September-November.</p>	-	-	CC	<p>Methodology</p> <p>Please refer Chapter 5.1.8 of Biorestation Monitoring</p> <p>Achievement Criteria</p> <p>The data obtained by comparison of the species' population ratio (%) with its situation in natural habitat (observation of healthy population development)</p>	<p>Period</p> <p>1. Germination (First May-June period after seeding)</p> <p>2. Flowering (In June-July)</p> <p>3. Seed maturation (In July-August)</p> <p>Frequency</p> <p>Once in each germination , flowering and mature seed periods, three times per year</p>	Interim First-Findings in Monthly Report & Annual Biorestation Monitoring Report	TANAP	Biorestation Monitoring Plan	BAP; Specification for Reinstatement	-
529	1-2	ROUTE CHANGE 1229+052-1229+504 Critical Habitat (CH57)	Flora <i>Cyathobasis fruticulosa</i>	-	<p>Closed Construction Period: 1 May - 30 June Pre-Construction</p> <p>* The top soil shall be scraped at a depth of 10-15 cm minimum and shall be stored in the ROW.</p>	-	-	CC	<p>Methodology</p> <p>Please refer Chapter 5.1.8 of Biorestation Monitoring</p>	<p>Period</p> <p>1. Germination (First May-June period after seeding)</p>	Interim First-Findings in Monthly Report & Annual Biorestation	TANAP	Biorestation Monitoring Plan	BAP; Specification for Reinstatement	-

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				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
					<p>* The seeds of <i>Cyathobasis fruticulosa</i> species shall be collected between 1 July-1 August. Some of the collected seeds of <i>Cyathobasis fruticulosa</i> species shall be given to the seed gene bank.</p> <p>Post-Construction</p> <p>* The collected seeds of <i>Cyathobasis fruticulosa</i> species shall be planted according to the methodology and to the (36 S 405549.00-4363042.00/36 S 405621.85-4363058.29/36 S 405679.83-4363074.44/36 S 405784.91-4363093.32/36 S 405844.76-4363108.21/36 S 405912.62-4363121.76) coordinates between September-November.</p>				<p>Achievement Criteria</p> <p>The data obtained by comparison of the species' population ratio (%) with its situation in natural habitat (observation of healthy population development)</p>	<p>2. Flowering (In July-August)</p> <p>3. Seed maturation (In August-September)</p> <p>Frequency</p> <p>Once in each germination , flowering and mature seed periods, three times per year</p>	tion Monitorin g Report				
530	1-2	ROUTE CHANGE 1229+052-1229+504 Critical Habitat (CH57)	Flora <i>Onobrychis paucijuga</i>		<p>Closed Construction Period: 1 May - 30 June Pre-Construction</p> <p>* The top soil shall be scraped at a depth of 10-15 cm minimum and shall be stored in the ROW.</p> <p>* The seeds of <i>Onobrychis paucijuga</i> species shall be collected between 1 June-1 July.</p> <p>* Some of the collected seeds of <i>Onobrychis paucijuga</i> species shall be given to the seed gene bank.</p> <p>Post-Construction</p> <p>* The collected seeds of <i>Onobrychis paucijuga</i>, species shall be planted according to the methodology and to the</p>			CC	<p>Methodology</p> <p>Please refer Chapter 5.1.8 of Biorestoreation Monitoring</p> <p>Achievement Criteria</p> <p>The data obtained by comparison of the species' population ratio (%) with its situation in natural habitat (observation of healthy population development)</p>	<p>Period</p> <p>1. Germination (First May-June period after seeding)</p> <p>2. Flowering (In May-July)</p> <p>3. Seed maturation (In June-August)</p> <p>Frequency</p> <p>Once in each germination , flowering and mature seed periods, three times per year</p>	Interim First-Findings in Monthly Report & Annual Biorestoreation Monitorin g Report	TANAP	Biorestoreation Monitoring Plan	BAP; Specification for Reinstatement	

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				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
					(36 S 405549.00-4363042.00/36 S 405621.85-4363058.29/36 S 405679.83-4363074.44/36 S 405784.91-4363093.32/36 S 405844.76-4363108.21/36 S 405912.62-4363121.76) coordinates between September-November.										
531	1-2	ROUTE CHANGE 1229+052-1229+504 Critical Habitat (CH57)	Flora <i>Thymus leucostomus</i>	-	Closed Construction Period: 1 May - 30 June Pre-Construction * The top soil shall be scraped at a depth of 10-15 cm minimum and shall be stored in the ROW. * The seeds of <i>Thymus leucostomus</i> species shall be collected between 15 June-15 July. Post-Construction * The collected seeds of <i>Thymus leucostomus</i> species shall be planted according to the methodology and to the (36 S 405549.00-4363042.00/36 S 405621.85-4363058.29/36 S 405679.83-4363074.44/36 S 405784.91-4363093.32/36 S 405844.76-4363108.21/36 S 405912.62-4363121.76) coordinates between September-November.	-	-	CC	Methodology Please refer Chapter 5.1.8 of Biorestoreation Monitoring Achievement Criteria The data obtained by comparison of the species’ population ratio (%) with its situation in natural habitat (observation of healthy population development) Period 1. Germination (First May-June period after seeding) 2. Flowering (In May-June) 3. Seed maturation (In June-July) Frequency Once in each germination , flowering and mature seed periods, three times per year	Interim First-Findings in Monthly Report & Annual Biorestoreation Monitorin g Report	TANAP	Biorestorati on Monitoring Plan	BAP; Specification for Reinstatement	-	
532	1-2	ROUTE CHANGE 1229+052-1229+504 Critical Habitat (CH57)	Species Diversity	-	Pre-Construction * The top soil shall be scraped at a depth of 10-15 cm minimum and shall be stored in the ROW. * To control erosion at sloping areas, seeds of the non-endemic natural	-	-	CC	Methodology Please refer Chapter 5.1.6 of Biorestoreation Monitoring Plan Period June-July Frequency Biennially	Interim First-Findings in Monthly Report & Annual Biorestorea tion	TANAP	Biorestorati on Monitoring Plan	BAP; Specification for Reinstatement	-	

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				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
					plants of the region should be collected. Post-Construction * To control erosion at sloping areas, seeds of the non-endemic natural plants of the region should be planted on the ROW.				Achievement Criteria The species diversity of the area has recovered by 20% in the first year following the spread of the top soil		Monitoring Report				
533	1-2	ROUTE CHANGE 1229+052-1229+504 Critical Habitat (CH57)	Vegetation Cover	-	Pre-Construction * The top soil shall be scraped at a depth of 10-15 cm minimum and shall be stored in the ROW. * To control erosion at sloping areas, seeds of the non-endemic natural plants of the region should be collected. Post-Construction * To control erosion at sloping areas, seeds of the non-endemic natural plants of the region should be planted on the ROW.	-	-	CC	Methodology Please refer Chapter 5.1.5 of Biorestation Monitoring Plan Achievement Criteria The vegetative cover of the area has recovered by 30% in the first year following the spread of the top soil	Period June-July Frequency Annually	Interim First-Findings in Monthly Report & Annual Biorestation Monitoring Report	TANAP	Biorestation Monitoring Plan	BAP; Specification for Reinstatement	-
534	1-2	1369+450 - 1370+286 Critical Habitat (CH58)	Flora <i>Thymus leucostomus</i>	-	Closed Construction Period: 1 May - 1 June Pre-Construction * The top soil shall be scraped at a depth of 10-15 cm minimum and shall be stored in the ROW. * The seeds of <i>Thymus leucostomus</i> species shall be collected between 15 June-15 July.	-	-	CC	Methodology Please refer Chapter 5.1.8 of Biorestation Monitoring Achievement Criteria	Period 1. Germination (First May-June period after seeding) 2. Flowering (In May-June) 3. Seed maturation	Interim First-Findings in Monthly Report & Annual Biorestation Monitoring Report	TANAP	Biorestation Monitoring Plan	BAP; Specification for Reinstatement	-

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				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
					Post-Construction * The collected seeds of <i>Thymus leucostomus</i> species shall be planted according to the methodology and to the (36 S 279214.33-4394348.83/36 S 278842.86-4394361.93/36 S 278571.49-4394453.64) coordinates between September-November.				The data obtained by comparison of the species' population ratio (%) with its situation in natural habitat (observation of healthy population development)	(In June-July) Frequency Once in each germination , flowering and mature seed periods, three times per year					
535	1-2	1369+450 - 1370+286 Critical Habitat (CH58)	Species Diversity	-	Pre-Construction * The top soil shall be scraped at a depth of 10-15 cm minimum and shall be stored in the ROW. * To control erosion at sloping areas, seeds of the non-endemic natural plants of the region should be collected. Post-Construction * To control erosion at sloping areas, seeds of the non-endemic natural plants of the region should be planted on the ROW.	-	-	CC	Methodology Please refer Chapter 5.1.6 of Biorestation Monitoring Plan Achievement Criteria The species diversity of the area has recovered by 30% in the first year following the spread of the top soil	Period June-July Frequency Biennially	Interim First-Findings in Monthly Report & Annual Biorestation Monitoring Report	TANAP	Biorestation Monitoring Plan	BAP; Specification for Reinstatement	-
536	1-2	1369+450 - 1370+286 Critical Habitat (CH58)	Vegetation Cover	-	Pre-Construction * The top soil shall be scraped at a depth of 10-15 cm minimum and shall be stored in the ROW. * To control erosion at sloping areas, seeds of the non-endemic natural plants of the region should be collected. Post-Construction	-	-	CC	Methodology Please refer Chapter 5.1.5 of Biorestation Monitoring Plan Achievement Criteria The vegetative	Period June-July Frequency Annually	Interim First-Findings in Monthly Report & Annual Biorestation Monitoring Report	TANAP	Biorestation Monitoring Plan	BAP; Specification for Reinstatement	-

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				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
					* To control erosion at sloping areas, seeds of the non-endemic natural plants of the region should be planted on the ROW.				cover of the area has recovered by 30% in the first year following the spread of the top soil						
537	1-2	1373+026 - 1373+225 Critical Habitat (CH59)	Flora <i>Salvia tchihatcheffii</i>	-	<p>Closed Construction Period: 1 May - 1 June Pre-Construction</p> <p>* The top soil shall be scraped at a depth of 10-15 cm minimum and shall be stored in the ROW. * The seeds of <i>Salvia tchihatcheffii</i> species shall be collected between 1 June-1 July. The <i>Salvia tchihatcheffii</i> species individuals shall be collected as tufts and shall be transferred to the (36 S 276899.00-4396448.00) coordinates.</p> <p>Post-Construction</p> <p>* The collected seeds of <i>Salvia tchihatcheffii</i> species shall be planted according to the methodology and to the (36 S 276971.00-4396421.00/ 36 S 276939.00-4396478.00) coordinates between September-November.</p> <p>* The translocated individuals of the <i>Salvia tchihatcheffii</i> species as tufts shall be where the terracing shall be carried out to prevent erosion and shall be irrigated until they root again.</p>	-	-	CC	<p>Methodology</p> <p>Please refer Chapter 5.1.8 of Biorestation Monitoring</p> <p>Achievement Criteria</p> <p>The data obtained by comparison of the species' population ratio (%) with its situation in natural habitat (observation of healthy population development)</p>	<p>Period</p> <p>1. Germination (First May-June period after seeding) 2. Flowering (In May-June) 3. Seed maturation (In June-July)</p> <p>Frequency</p> <p>Once in each germination , flowering and mature seed periods, three times per year</p>	Interim First-Findings in Monthly Report & Annual Biorestation Monitorin g Report	TANAP	Biorestorati on Monitoring Plan	BAP; Specification for Reinstatement	-
538	1-2	1373+026 - 1373+225 Critical Habitat (CH59)	Species Diversity	-	<p>Pre-Construction</p> <p>* The top soil shall be scraped at a depth of 10-</p>	-	-	CC	<p>Methodology</p> <p>Please refer Chapter 5.1.6 of</p>	<p>Period</p> <p>June-July</p>	Interim First-Findings in Monthly	TANAP	Biorestorati on Monitoring Plan	BAP; Specification for Reinstatement	-

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				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
					15 cm minimum and shall be stored in the ROW. * To control erosion at sloping areas, seeds of the non-endemic natural plants of the region should be collected. Post-Construction * To control erosion at sloping areas, seeds of the non-endemic natural plants of the region should be planted on the ROW.				Biorestoretion Monitoring Plan Achievement Criteria The species diversity of the area has recovered by 15% in the first year following the spread of the top soil	Frequency Biennially	Report & Annual Biorestoretion Monitoring Report				
539	1-2	1373+026 - 1373+225 Critical Habitat (CH59)	Vegetation Cover		Pre-Construction * The top soil shall be scraped at a depth of 10-15 cm minimum and shall be stored in the ROW. * To control erosion at sloping areas, seeds of the non-endemic natural plants of the region should be collected. Post-Construction * To control erosion at sloping areas, seeds of the non-endemic natural plants of the region should be planted on the ROW.	-	-	CC	Methodology Please refer Chapter 5.1.5 of Biorestoretion Monitoring Plan Achievement Criteria The vegetative cover of the area has recovered by 15% in the first year following the spread of the top soil	Period June-July Frequency Annually	Interim First-Findings in Monthly Report & Annual Biorestoretion Monitoring Report	TANAP	Biorestoretion Monitoring Plan	BAP; Specification for Reinstatement	-
540	1-2	1378+873 - 1379+216 Critical Habitat (CH60)	Flora <i>Cephalaria aytachii</i>		Closed Construction Period: 1 May - 1 June Pre-Construction * The top soil shall be scraped at a depth of 10-15 cm minimum and shall be stored in the ROW. * The seeds of <i>Cephalaria aytachii</i> , species shall be	-	-	CC	Methodology Please refer Chapter 5.1.8 of Biorestoretion Monitoring	Period 1. Germination (First May-June period after seeding) 2. Flowering (In June-September)	Interim First-Findings in Monthly Report & Annual Biorestoretion	TANAP	Biorestoretion Monitoring Plan	BAP; Specification for Reinstatement	-

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				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
					collected between 1 July-August. Post-Construction * The collected seeds of <i>Cephalaria aytachii</i> , species shall be planted according to the methodology to the ROW and to the (36 S 272726.00-4399906.00/36 S 272758.00-4399896.00) coordinates between September-November. * Terracing shall be carried out to prevent erosion.				Achievement Criteria The data obtained by comparison of the species’ population ratio (%) with its situation in natural habitat (observation of healthy population development)	3. Seed maturation (In September) Frequency Once in each germination , flowering and mature seed periods, three times per year	Monitorin g Report				
541	1-2	1378+873 - 1379+216 Critical Habitat (CH60)	Flora <i>Gypsophila osmangaziensis</i>	-	Closed Construction Period: 1 May - 1 June Pre-Construction * The top soil shall be scraped at a depth of 10-15 cm minimum and shall be stored in the ROW. * The seeds of <i>Gypsophila osmangaziensis</i> species shall be collected between 1 July-August. Post-Construction * The collected seeds of <i>Gypsophila osmangaziensis</i> species shall be planted according to the methodology to the ROW and to the (36 S 272726.00-4399906.00/36 S 272758.00-4399896.00) coordinates between September-November. * Terracing shall be carried out to prevent erosion.	-	-	CC	Methodology Please refer Chapter 5.1.8 of Biorestation Monitoring Achievement Criteria The data obtained by comparison of the species’ population ratio (%) with its situation in natural habitat (observation of healthy population development)	Period 1. Germinatio n (First May-June period after seeding) 2. Flowering (In August) 3. Seed maturation (In September) Frequency Once in each germination , flowering and mature seed periods, three times per year	Interim First-Findings in Monthly Report & Annual Biorestation Monitorin g Report	TANAP	Biorestorati on Monitoring Plan	BAP; Specification for Reinstatement	-
542	1-2	1378+873 - 1379+216 Critical Habitat (CH60)	Flora <i>Alyssum niveum</i>	-	Closed Construction Period: 1 May - 1 June Pre-Construction * The top soil shall be scraped at a depth of 10-	-	-	CC	Methodology Please refer Chapter 5.1.8 of	Period 1. Germinatio n (First May-June	Interim First-Findings in Monthly Report &	TANAP	Biorestorati on Monitoring Plan	BAP; Specification for Reinstatement	-

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				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
					<p>15 cm minimum and shall be stored in the ROW. * The seeds of <i>Alyssum niveum</i> species shall be collected between 15 July-15 August.</p> <p>Post-Construction</p> <p>* The collected seeds of <i>Alyssum niveum</i> species shall be planted according to the methodology to the ROW and to the (36 S 272726.00-4399906.00/36 S 272758.00-4399896.00) coordinates between September-November.</p> <p>* Terracing shall be carried out to prevent erosion.</p>				<p>Biorestation Monitoring</p> <p>Achievement Criteria</p> <p>The data obtained by comparison of the species' population ratio (%) with its situation in natural habitat (observation of healthy population development)</p>	<p>period after seeding) 2. Flowering (In May) 3. Seed maturation (In June)</p> <p>Frequency</p> <p>Once in each germination , flowering and mature seed periods, three times per year</p>	Annual Biorestation Monitoring Report				
543	1-2	1378+873 - 1379+216 Critical Habitat (CH60)	<p>Flora</p> <p><i>Scabiosa hololeuca</i></p>		<p>Closed Construction Period: 1 May - 1 June Pre-Construction</p> <p>* The top soil shall be scraped at a depth of 10-15 cm minimum and shall be stored in the ROW. * The seeds of <i>Scabiosa hololeuca</i> species shall be collected between 1 July-August.</p> <p>Post-Construction</p> <p>* The collected seeds of <i>Scabiosa hololeuca</i> species shall be planted according to the methodology to the ROW and to the (36 S 272726.00-4399906.00/36 S 272758.00-4399896.00) coordinates between September-November.</p> <p>* Terracing shall be carried out to prevent erosion.</p>	-	-	CC	<p>Methodology</p> <p>Please refer Chapter 5.1.8 of Biorestation Monitoring</p> <p>Achievement Criteria</p> <p>The data obtained by comparison of the species' population ratio (%) with its situation in natural habitat (observation of healthy population development)</p>	<p>Period</p> <p>1. Germination (First May-June period after seeding) 2. Flowering (In May-June) 3. Seed maturation (In June-July)</p> <p>Frequency</p> <p>Once in each germination , flowering and mature seed periods, three times per year</p>	Interim First-Findings in Monthly Report & Annual Biorestation Monitoring Report	TANAP	Biorestation Monitoring Plan	BAP; Specification for Reinstatement	-

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				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
544	1-2	1378+873 - 1379+216 Critical Habitat (CH60)	Flora <i>Salvia tchihatcheffii</i>	-	<p>Closed Construction Period: 1 May - 1 June Pre-Construction</p> <p>* The top soil shall be scraped at a depth of 10-15 cm minimum and shall be stored in the ROW.</p> <p>* The seeds of <i>Salvia tchihatcheffii</i> species shall be collected between 15 July-15 August.</p> <p>Post-Construction</p> <p>* The collected seeds of <i>Salvia tchihatcheffii</i> species shall be planted according to the methodology to the ROW and to the (36 S 272726.00-4399906.00/36 S 272758.00-4399896.00) coordinates between September-November.</p> <p>* Terracing shall be carried out to prevent erosion.</p>	-	-	CC	<p>Methodology</p> <p>Please refer Chapter 5.1.8 of Biorestation Monitoring</p> <p>Achievement Criteria</p> <p>The data obtained by comparison of the species' population ratio (%) with its situation in natural habitat (observation of healthy population development)</p>	<p>Period</p> <p>1. Germination (First May-June period after seeding)</p> <p>2. Flowering (In May-June)</p> <p>3. Seed maturation (In June-July)</p> <p>Frequency</p> <p>Once in each germination, flowering and mature seed periods, three times per year</p>	Interim First-Findings in Monthly Report & Annual Biorestation Monitoring Report	TANAP	Biorestation Monitoring Plan	BAP; Specification for Reinstatement	-
545	1-2	1378+873 - 1379+216 Critical Habitat (CH60)	Species Diversity	-	<p>Pre-Construction</p> <p>* The top soil shall be scraped at a depth of 10-15 cm minimum and shall be stored in the ROW.</p> <p>* To control erosion at sloping areas, seeds of the non-endemic natural plants of the region should be collected.</p> <p>Post-Construction</p> <p>* To control erosion at sloping areas, seeds of the non-endemic natural plants of the region should be planted on the ROW.</p>	-	-	CC	<p>Methodology</p> <p>Please refer Chapter 5.1.6 of Biorestation Monitoring Plan</p> <p>Achievement Criteria</p> <p>The species diversity of the area has recovered by 20% in the first year following the spread of the top soil</p>	<p>Period</p> <p>June-July</p> <p>Frequency</p> <p>Biennially</p>	Interim First-Findings in Monthly Report & Annual Biorestation Monitoring Report	TANAP	Biorestation Monitoring Plan	BAP; Specification for Reinstatement	-

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				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
546	1-2	1378+873 - 1379+216 Critical Habitat (CH60)	Vegetation Cover	-	<p>Pre-Construction</p> <p>* The top soil shall be scraped at a depth of 10-15 cm minimum and shall be stored in the ROW.</p> <p>* To control erosion at sloping areas, seeds of the non-endemic natural plants of the region should be collected.</p> <p>Post-Construction</p> <p>* To control erosion at sloping areas, seeds of the non-endemic natural plants of the region should be planted on the ROW.</p>	-	-	CC	<p>Methodology</p> <p>Please refer Chapter 5.1.5 of Biorestation Monitoring Plan</p> <p>Achievement Criteria</p> <p>The vegetative cover of the area has recovered by 20% in the first year following the spread of the top soil</p>	<p>Period</p> <p>June-July</p> <p>Frequency</p> <p>Annually</p>	Interim First-Findings in Monthly Report & Annual Biorestation Monitoring Report	TANAP	Biorestation Monitoring Plan	BAP; Specification for Reinstatement	-
547	1-2	1437+587 - 1438+972 Critical Habitat (CH61)	<p>Flora</p> <p><i>Erodium sibthorpiatum</i> ssp. <i>sibthorpiatum</i></p>	-	<p>Closed Construction Period: 1 May - 1 June Pre-Construction</p> <p>* The top soil shall be scraped at a depth of 10-15 cm minimum and shall be stored in the ROW.</p> <p>Post-Construction</p> <p>* The collected seeds of <i>Erodium sibthorpiatum</i> ssp. <i>sibthorpiatum</i> species shall be planted according to the methodology and to the (35 S 732388.00-4404501.00/35 S 732171.00-4404907.00/35 S 731635.00-4405086.00) coordinates to the ROW between September-November.</p>	-	-	CC	<p>Methodology</p> <p>Please refer Chapter 5.1.8 of Biorestation Monitoring</p> <p>Achievement Criteria</p> <p>The data obtained by comparison of the species' population ratio (%) with its situation in natural habitat (observation of healthy population development)</p>	<p>Period</p> <p>1. Germination (First May-June period after seeding)</p> <p>2. Flowering (In July-September)</p> <p>3. Seed maturation (In August-October)</p> <p>Frequency</p> <p>Once in each germination, flowering and mature seed periods, three times per year</p>	Interim First-Findings in Monthly Report & Annual Biorestation Monitoring Report	TANAP	Biorestation Monitoring Plan	BAP; Specification for Reinstatement	-

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				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
548	1-2	1437+587 - 1438+972 Critical Habitat (CH61)	Flora <i>Astragalus densifolius ssp. ayashensis</i>	-	<p>Closed Construction Period: 1 May - 1 June Pre-Construction</p> <p>* The top soil shall be scraped at a depth of 10-15 cm minimum and shall be stored in the ROW.</p> <p>Post-Construction</p> <p>* The collected seeds of <i>Erodium sibthorpiatum ssp. sibthorpiatum</i> species shall be planted according to the methodology and to the (35 S 732388.00-4404501.00/35 S 732171.00-4404907.00/35 S 731635.00-4405086.00) coordinates to the ROW between September-November.</p>	-	-	CC	<p>Methodology</p> <p>Please refer Chapter 5.1.8 of Biorestoreation Monitoring</p> <p>Achievement Criteria</p> <p>The data obtained by comparison of the species' population ratio (%) with its situation in natural habitat (observation of healthy population development)</p>	<p>Period</p> <p>1. Germination (First May-June period after seeding)</p> <p>2. Flowering (In June-July)</p> <p>3. Seed maturation (In August-October)</p> <p>Frequency</p> <p>Once in each germination , flowering and mature seed periods, three times per year</p>	Interim First-Findings in Monthly Report & Annual Biorestoreation Monitorin g Report	TANAP	Biorestorati on Monitoring Plan	BAP; Specification for Reinstatement	-
549	1-2	1437+587 - 1438+972 Critical Habitat (CH61)	Species Diversity	-	<p>Pre-Construction</p> <p>* The top soil shall be scraped at a depth of 10-15 cm minimum and shall be stored in the ROW.</p> <p>* To control erosion at sloping areas, seeds of the non-endemic natural plants of the region should be collected.</p> <p>Post-Construction</p> <p>* To control erosion at sloping areas, seeds of the non-endemic natural plants of the region should be planted on the ROW.</p>	-	-	CC	<p>Methodology</p> <p>Please refer Chapter 5.1.6 of Biorestoreation Monitoring Plan</p> <p>Achievement Criteria</p> <p>The species diversity of the area has recovered by 20% in the first year following the</p>	<p>Period</p> <p>June-July</p> <p>Frequency</p> <p>Biennially</p>	Interim First-Findings in Monthly Report & Annual Biorestoreation Monitorin g Report	TANAP	Biorestorati on Monitoring Plan	BAP; Specification for Reinstatement	-

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									spread of the top soil						
550	1-2	1437+587 - 1438+972 Critical Habitat (CH61)	Vegetation Cover	-	Pre-Construction * The top soil shall be scraped at a depth of 10-15 cm minimum and shall be stored in the ROW. * To control erosion at sloping areas, seeds of the non-endemic natural plants of the region should be collected. Post-Construction * To control erosion at sloping areas, seeds of the non-endemic natural plants of the region should be planted on the ROW.	-	-	CC	Methodology Please refer Chapter 5.1.5 of Biorestation Monitoring Plan Achievement Criteria The vegetative cover of the area has recovered by 20% in the first year following the spread of the top soil	Period June-July Frequency Annually	Interim First-Findings in Monthly Report & Annual Biorestation Monitoring Report	TANAP	Biorestation Monitoring Plan	BAP; Specification for Reinstatement	-
551	1-2	1484+122 - 1484+503 Critical Habitat (CH62)	Flora <i>Onosma briquetii</i>	-	Closed Construction Period: 1 May - 1 June Pre-Construction * The top soil shall be scraped at a depth of 10-15 cm minimum and shall be stored in the ROW. Post-Construction * The collected seeds of <i>Onosma briquetii</i> species shall be planted according to the methodology and to the (35 S 692106.00-4399251.00/35 S 691979.00-4399305.00/35 S 691815.00-4399375.00) coordinates to the ROW between September-November.	-	-	CC	Methodology Please refer Chapter 5.1.8 of Biorestation Monitoring Achievement Criteria The data obtained by comparison of the species' population ratio (%) with its situation in natural habitat (observation of healthy population development)	Period 1. Germination (First May-June period after seeding) 2. Flowering (In July) 3. Seed maturation (In August) Frequency Once in each germination , flowering and mature seed periods, three times per year	Interim First-Findings in Monthly Report & Annual Biorestation Monitoring Report	TANAP	Biorestation Monitoring Plan	BAP; Specification for Reinstatement	-

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552	1-2	1484+122 - 1484+503 Critical Habitat (CH62)	Species Diversity	-	Pre-Construction * The top soil shall be scraped at a depth of 10-15 cm minimum and shall be stored in the ROW. * To control erosion at sloping areas, seeds of the non-endemic natural plants of the region should be collected. Post-Construction * To control erosion at sloping areas, seeds of the non-endemic natural plants of the region should be planted on the ROW.	-	-	CC	Methodology Please refer Chapter 5.1.6 of Biorestation Monitoring Plan Achievement Criteria The species diversity of the area has recovered by 20% in the first year following the spread of the top soil	Period June-July Frequency Biennially	Interim First-Findings in Monthly Report & Annual Biorestation Monitoring Report	TANAP	Biorestation Monitoring Plan	BAP; Specification for Reinstatement	-
553	1-2	1484+122 - 1484+503 Critical Habitat (CH62)	Vegetation Cover	-	Pre-Construction * The top soil shall be scraped at a depth of 10-15 cm minimum and shall be stored in the ROW. * To control erosion at sloping areas, seeds of the non-endemic natural plants of the region should be collected. Post-Construction * To control erosion at sloping areas, seeds of the non-endemic natural plants of the region should be planted on the ROW.	-	-	CC	Methodology Please refer Chapter 5.1.5 of Biorestation Monitoring Plan Achievement Criteria The vegetative cover of the area has recovered by 20% in the first year following the spread of the top soil	Period June-July Frequency Annually	Interim First-Findings in Monthly Report & Annual Biorestation Monitoring Report	TANAP	Biorestation Monitoring Plan	BAP; Specification for Reinstatement	-

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554	1-2	1500+178 - 1505+242 Critical Habitat (CH63)	Flora <i>Alyssum dudleyi</i>	-	Closed Construction Period: 1 May - 1 June Pre-Construction * The top soil shall be scraped at a depth of 10-15 cm minimum and shall be stored in the ROW. * The seeds of <i>Alyssum dudleyi</i> species shall be collected between 1 June-1 July. Post-Construction * The collected seeds of <i>Alyssum dudleyi</i> species shall be planted according to the methodology and to the (35 S 677213.00-4403775.00/ 35 S 677793.00-4403410.00) coordinates.	-	-	CC	Methodology Please refer Chapter 5.1.8 of Biorestitution Monitoring Achievement Criteria The data obtained by comparison of the species’ population ratio (%) with its situation in natural habitat (observation of healthy population development) Period 1. Germination (First May-June period after seeding) 2. Flowering (In May-June) 3. Seed maturation (In July-August) Frequency Once in each germination , flowering and mature seed periods, three times per year	Interim First-Findings in Monthly Report & Annual Biorestitution Monitoring Report	TANAP	Biorestitution Monitoring Plan	BAP; Specification for Reinstatement	-	
555	1-2	1500+178 - 1505+242 Critical Habitat (CH63)	Flora <i>Dianthus goekayi</i>	-	Closed Construction Period: 1 May - 1 June Pre-Construction * The top soil shall be scraped at a depth of 10-15 cm minimum and shall be stored in the ROW. * The seeds of <i>Dianthus goekayi</i> species shall be collected between 15 June-15 July. Post-Construction * The collected seeds of <i>Dianthus goekayi</i> species shall be planted according to the methodology and to the (35 S 677213.00-4403775.00/ 35 S	-	-	CC	Methodology Please refer Chapter 5.1.8 of Biorestitution Monitoring Achievement Criteria The data obtained by comparison of the species’ population ratio (%) with its situation in natural habitat (observation Period 1. Germination (First May-June period after seeding) 2. Flowering (In June-September) 3. Seed maturation (In June-September) Frequency Once in each germination , flowering and mature	Interim First-Findings in Monthly Report & Annual Biorestitution Monitoring Report	TANAP	Biorestitution Monitoring Plan	BAP; Specification for Reinstatement	-	

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					677793.00-4403410.00) coordinates.				of healthy population development)	seed periods, three times per year					
556	1-2	1500+178 - 1505+242 Critical Habitat (CH63)	Species Diversity		<p>Pre-Construction</p> <p>* The top soil shall be scraped at a depth of 10-15 cm minimum and shall be stored in the ROW.</p> <p>* To control erosion at sloping areas, seeds of the non-endemic natural plants of the region should be collected.</p> <p>Post-Construction</p> <p>* To control erosion at sloping areas, seeds of the non-endemic natural plants of the region should be planted on the ROW.</p>	-	-	CC	<p>Methodology</p> <p>Please refer Chapter 5.1.6 of Biorestoreation Monitoring Plan</p> <p>Achievement Criteria</p> <p>The species diversity of the area has recovered by 20% in the first year following the spread of the top soil</p>	<p>Period</p> <p>June-July</p> <p>Frequency</p> <p>Biennially</p>	Interim First-Findings in Monthly Report & Annual Biorestoreation Monitorin g Report	TANAP	Biorestorati on Monitoring Plan	BAP; Specification for Reinstatement	-
557	1-2	1500+178 - 1505+242 Critical Habitat (CH63)	Vegetation Cover		<p>Pre-Construction</p> <p>* The top soil shall be scraped at a depth of 10-15 cm minimum and shall be stored in the ROW.</p> <p>* To control erosion at sloping areas, seeds of the non-endemic natural plants of the region should be collected.</p> <p>Post-Construction</p> <p>* To control erosion at sloping areas, seeds of the non-endemic natural plants of the region should be planted on the ROW.</p>	-	-	CC	<p>Methodology</p> <p>Please refer Chapter 5.1.5 of Biorestoreation Monitoring Plan</p> <p>Achievement Criteria</p> <p>The vegetative cover of the area has recovered by 20% in the first year following the spread of the top soil</p>	<p>Period</p> <p>June-July</p> <p>Frequency</p> <p>Annually</p>	Interim First-Findings in Monthly Report & Annual Biorestoreation Monitorin g Report	TANAP	Biorestorati on Monitoring Plan	BAP; Specification for Reinstatement	-

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558	1-2	003+186-003+921 Critical Habitat (CH1)	Fauna <i>Mertensiella caucasica</i>	-	<p>Closed Construction Period: 1 June-1 July Pre-Construction * The top soil shall be scraped at a depth of 10-15 cm and shall be stored in the ROW. * If <i>Mertensiella caucasica</i> species will be observed in the ROW, the construction works cannot be done before the April, because this species is going to hibernation. * At the beginning of April, a field study should be carried out by experts, and if this species will be observed, individuals should be carried to the appropriate and close aquatic areas by specialists according to the methodology.</p> <p>Post-Construction</p> <p>* If <i>Mertensiella caucasica</i> species is observed in the area, it should be ensured that the habitat is restored by restoring the stones and rocks in and near the aquatic environment.</p>	-	-	CC	<p>Methodology: Basic Principles This species, living in wooded areas near the creeks, is widely present in Georgia and north-eastern part of Turkey. The population of the species is generally rare. They hide under rocks and plants during the daytime. In order to determine the presence and population of <i>Mertensiella caucasica</i> in the critical habitat, counting of the individuals should be performed in first 3 years successively and then in 5th, 7th and 10th year. If the individuals of <i>Mertensiella caucasica</i> are not determined in at least one of the counting years, the counting should be continued for at least 2 more periods.</p> <p>Salamender Monitoring Methodology Leaf-Litter Bag Searches Leaf-litter search searches are special method for salamenders, it is difficult to observe the individuals due to hardness of viewing species. It is widely used technique to observe individuals in the litters located near the creeks (Peterson and Cummins, 1974). It is a proven method for the inventory studies near the creeks (Waldron et al., 2003). Basic Design</p>	<p>Period April - May</p> <p>Frequency 1 day in 15 days</p>	Interim First-Findings in Monthly Report & Annual Biorestoration Monitoring Report	TANAP	Biorestorati on Monitoring Plan	BAP; Specification for Reinstatement	-

RefNo .	Ph.	Specific Location (and KP)	Environmental Component ²	Project Commitment					Monitoring				Mang. Plan	Addition. Docum.	ESIA Chapter
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									The observations should be performed for 1 day at the rocky areas and bushes near creeks at 150m distance from each side of the construction corridor. Leaf-litter bag search should be done in the same day. Rectangular plastic net (generally size of 70cm x 70cm, with mesh size of 1.9cm) is the main material used in this technique. First, small stones and litters are placed onto the net and the edges of the net are connected via fiber or cable to form the bag. The prepared bags are put near the creeks along the transect line. After the couple of weeks familiarization periof of the animal, each bag are dipped into a bucket filled with water and checked after dipping out. The bag is dipped into the buckect for several times and water is poured onto the bag. Individuals are taken out of the bag. Bags are placed near the creeks again. In order to determine the presence and population situation of the species, total of 10 leaf-litter bags should be placed (5 for each side of the construction corridor) along the transect line with 30m apart.						

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									In order not to count the same individuals, ventral pattern photographing technique should be used, which is a proven technique to distinguish different salamander species (Hagstrom, 1973). During the site studies, even in relatively small populations, it is hard to distinguish the species by naked eye. Therefore, the photographs of the individuals should be taken. The individuals should be laid flat during taking photographs. These studies should be performed by an expert on zoology and an assistant researcher. Achievement Criteria: Detection of 1-3 individuals each year						
559	1-2	003+186-003+921 Critical Habitat (CH1)	Fauna <i>Zygaena armena</i>	-	Closed Construction Period: 1 June-1 July Pre-Construction * If the construction works start in March 2015, the seeds of <i>Coronilla</i> and <i>Onobrychis</i> species, which are the feeding plants of <i>Zygaena armena</i> shall be collected near the ROW between 15 July-30 August. * The top soil shall be scraped at a depth of 10-15 cm and shall be stored near the ROW. Post-Construction * The collected seeds of <i>Coronilla</i> and <i>Onobrychis</i> species shall be planted according to the methodology and to the (38 T 318801.90-4603885.95/ 38 T 318738.00-4603635.00/38 T 318773.00-4603531.00/38 T 318649.00-4603478.00) coordinates between September-November.	-	-	CC	Methodology: Basic Principles In order to determine the presence and population of species in the critical habitat, counting of the individuals should be performed in first 3 years successively and then in 5th, 7th and 10th year successively. If the individuals of species are not determined in at least one of the counting years, the counting should be continued for at least 2 more periods. Period Between 15 July - 30 August Frequency 2 days in 15 days		Interim First-Findings in Monthly Report & Annual Biorestoration Monitoring Report	TANAP	Biorestorati on Monitoring Plan	BAP; Specification for Reinstatement	-

RefNo .	Ph.	Specific Location (and KP)	Environmental Component ²	Project Commitment					Monitoring				Mang. Plan	Addition. Docum.	ESIA Chapter
				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
									The monitoring should be done by the same team in at least first 3 years in order to have standard evaluation. In the first year of monitoring of the species in the critical habitat, vegetation status of the area should be observed. The presence of species of <i>Coronilla</i> and <i>Onobrychis</i> genus, which are feeding plants of the species, should be detected along the construction corridor in the critical habitat. The counting of feeding plants should be done and the numbers should be recorded in the first 3 years. If the vegetation cover and presence of feeding plants are not at desired level in the monitoring years, the monitoring should be extended for 1 more year. The determination if the vegetation cover and species diversity are at desired level should be done by a botanic expert. The photographs of the critical habitat and individuals should be taken during the monitoring. The weather conditions (temperature, cloudness and wind), number of individuals, the day of monitoring, name of the expert etc. should be						

RefNo .	Ph.	Specific Location (and KP)	Environmental Component ²	Project Commitment					Monitoring				Mang. Plan	Addition. Docum.	ESIA Chapter
				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
									written onto the survey form. These studies should be performed by an expert on zoology and an assistant researcher. Adult Butterfly Monitoring Scheme Methodology The counting of the species should be done along the 400m long transect line. Slow walking at the same speed should be performed along the transect for 45-60 minutes. The area covering 2.5 m length in left and right sides and 5 m length in front and back of the observer is the counting area and the individuals in this area should be counted. The individuals in the counting area should be counted by observing. Each individual should be counted for one time. The hours when butterflys area most active are 3.5 hours after sunrise and 3.5 hours before sunset. Thus, monitoring hours should be between hours 09:30 - 17:30. The weather temperature of the monitoring day should be above 13°C. If the weather temperature is between 13-17°C, the weather should be sunny and cloud cover should be 50% or less. If the weather temperature is above 17°C, cloud cover can						

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									<p>be more than 50%. The wind should be 5 or less according to Beafort scale which is accepted as wind causing movement of medium sized tree branches and leafs of small trees.</p> <p>Achievement Criteria: -Vegetation cover of species of <i>Coronilla</i> and <i>Onobrychis</i> genus in the ROW should be; -at least %10 in the 1. year -at least %20 in the 2. year -at least %40 in the 3. year -at least %60 in the 5. year of the vegetation cover of the areas adjacent to ROW</p> <p>-Population of the <i>Zygaena armena species</i> should be; -“rare” in the end of 1. year -“low” in the end of 2. And other monitoring years.</p>						
560	1-2	004+126-004+237 Critical Habitat (CH2)	Fauna <i>Mertensiella caucasica</i>	-	<p>Closed Construction Period: 1 June-1 July Pre-Construction * The top soil shall be scraped at a depth of 10-15 cm and shall be stored near the ROW. * If <i>Mertensiella caucasica</i> species will be observed in the ROW, the construction works cannot be done before the April, because this species is going to hibernation. * At the beginning of April, a field study should be carried out by experts, and if this species will be observed, individuals should be carried to the appropriate and close aquatic areas by specialists according to the methodology.</p> <p>Post-Construction * If <i>Mertensiella caucasica</i> species is observed in the area, it should be ensured that</p>	-	-	CC	<p>Methodology: Basic Principles This species, living in wooded areas near the creeks, is widely present in Georgia and north-eastern part of Turkey. The population of the species is generally rare. They hide under rocks and plants during the daytime. In order to determine the presence and population of <i>Mertensiella caucasica</i> in the critical habitat, counting of the individuals</p>	<p>Period April - May</p> <p>Frequency 1 day in 15 days</p>	Interim First-Findings in Monthly Report & Annual Biorestoration Monitorin g Report	TANAP	Biorestorati on Monitoring Plan	BAP; Specification for Reinstatement	-

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					the habitat is restored by restoring the stones and rocks in and near the aquatic environment.				should be performed in first 3 years successively and then in 5 th , 7 th and 10 th year. If the individuals of <i>Mertensiella caucasica</i> are not determined in at least one of the counting years, the counting should be continued for at least 2 more periods. Salamender Monitoring Methodology Leaf-Litter Bag Searches The observations should be performed for 1 day at the rocky areas and bushes near creeks at 150m distance from each side of the construction corridor. Leaf-litter bag search should be done in the same day. Rectangular plastic net (generally size of 70cm x 70cm, with mesh size of 1.9cm) is the main material used in this technique. First, small stones and litters are placed onto the net and the edges of the net are connected via fiber or cable to form the bag. The prepared bags are put near the creeks along the transect line. After the couple of weeks familiarization periof of the animal, each bag are dipped into a bucket filled with water and checked after dipping out. The bag is dipped into the bucket for several times and water is						

RefNo	Ph.	Specific Location (and KP)	Environmental Component ²	Project Commitment					Monitoring				Mang. Plan	Addition. Docum.	ESIA Chapter
				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
									<p>poured onto the bag. Individuals are taken out of the bag. Bags are placed near the creeks again. In order to determine the presence and population situation of the species, total of 10 leaf-litter bags should be placed (5 for each side of the construction corridor) along the transect line with 30m apart.</p> <p>In order not to count the same individuals, ventral pattern photographing technique should be used, which is a proven technique to distinguish different salamander species (Hagstrom, 1973). During the site studies, even in relatively small populations, it is hard to distinguish the species by naked eye. Therefore, the photographs of the individuals should be taken. The individuals should be laid flat during taking photographs. These studies should be performed by an expert on zoology and an assistant researcher.</p> <p>Achievement Criteria: Detection of 1-3 individuals each year</p>						
561	1-2	004+126-004+237 Critical Habitat (CH2)	Fauna <i>Zygaena armena</i>	-	Closed Construction Period: 1 June-1 July Pre-Construction * If the construction works start in March 2015, the seeds of <i>Coronilla</i> and <i>Onobrychis</i> species, which are the feeding	-	-	CC	Methodology: Basic Principles In order to determine the presence and population of species in the	Period Between 15 July - 30 August	Interim First-Findings in Monthly	TANAP	Biorestorati on Monitoring Plan	BAP; Specification for Reinstatement	-

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				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
					plants of <i>Zygaena armena</i> shall be collected near the ROW between 15 July-30 August. * The top soil shall be scraped at a depth of 10-15 cm and shall be stored near the ROW. Post-Construction * The collected seeds of <i>Coronilla</i> and <i>Onobrychis</i> species shall be planted according to the methodology and to the (38 T 318421.00-4603425.00 / 38 T 318351.00-4603438.00) coordinates between September-November.				critical habitat, counting of the individuals should be performed in first 3 years successively and then in 5th, 7th and 10th year successively. If the individuals of species are not determined in at least one of the counting years, the counting should be continued for at least 2 more periods. The monitoring should be done by the same team in at least first 3 years in order to have standard evaluation. In the first year of monitoring of the species in the critical habitat, vegetation status of the area should be observed. The presence of species of <i>Coronilla</i> and <i>Onobrychis</i> genus, which are feeding plants of the species, should be detected along the construction corridor in the critical habitat. The counting of feeding plants should be done and the numbers should be recorded in the first 3 years. If the vegetation cover and presence of feeding plants are not at desired level in the monitoring years, the monitoring should be extended for 1 more year. The determination if the vegetation cover and species diversity are at desired level should be	Frequency 2 days in 15 days	Report & Annual Biorestation Monitoring Report				

RefNo .	Ph.	Specific Location (and KP)	Environmental Component ²	Project Commitment					Monitoring				Mang. Plan	Addition. Docum.	ESIA Chapter
				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
									done by a botanic expert. The photographs of the critical habitat and individuals should be taken during the monitoring. The weather conditions (temperature, cloudness and wind), number of individuals, the day of monitoring, name of the expert etc. should be written onto the survey form. These studies should be performed by an expert on zoology and an assistant researcher. Adult Butterfly Monitoring Scheme Methodology The counting of the species should be done along the 400m long transect line. Slow walking at the same speed should be performed along the transect for 45-60 minutes. The area covering 2.5 m length in left and right sides and 5 m length in front and back of the observer is the counting area and the individuals in this area should be counted. The individuals in the counting area should be counted by observing. Each individual should be counted for one time. The hours when butterflys area most active are 3.5 hours after sunrise and 3.5 hours before sunset. Thus, monitoring						

RefNo .	Ph.	Specific Location (and KP)	Environmental Component ²	Project Commitment					Monitoring				Mang. Plan	Addition. Docum.	ESIA Chapter
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									hours should be between hours 09:30 - 17:30. The weather temperature of the monitoring day should be above 13°C. If the weather temperature is between 13-17°C, the weather should be sunny and cloud cover should be 50% or less. If the weather temperature is above 17°C, cloud cover can be more than 50%. The wind should be 5 or less according to Beafort scale which is accepted as wind causing movement of medium sized tree branches and leafs of small trees. Achievement Criteria: -Vegetation cover of species of <i>Coronilla</i> and <i>Onobrychis</i> genus in the ROW should be; -at least %10 in the 1. year -at least %20 in the 2. year -at least %40 in the 3. year -at least %60 in the 5. year of the vegetation cover of the areas adjacent to ROW -Population of the <i>Zygaena armena</i> species should be; -“rare” in the end of 1. year -“low” in the end of 2. And other monitoring years.						

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				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
562	1-2	20+977-23+277 Critical Habitat (CH3)	Fauna <i>Tipula n.sp</i>	-	Closed Construction Period: 1 June-1 July Pre-Construction * The top soil shall be scraped at a depth of 10-15 cm and shall be stored near the ROW.	-	-	CC	Methodology: Basic Principles This species mostly lives in the wet meadows. In order to determine the presence and population of species in the critical habitat, counting of the individuals should be performed in first 3 years successively and then in 5th, 7th and 10th year successively. If the individuals of species are not determined in at least one of the counting years, the counting should be continued for at least 2 more periods. If the vegetation cover is not at desired level in the monitoring years, the monitoring should be extended for 1 more year. The determination if the vegetation cover and species diversity are at desired level should be done by a botanic expert. These studies should be performed by an expert on zoology and an assistant researcher. Monitoring Methodology The weather conditions (temperature, cloudness and wind), number of individuals, the day of monitoring, name of the expert etc. should be written onto the survey form. The individuals in the critical	Period Between 1 June - 25 July Frequency 2 Once in every 2 weeks	Interim First-Findings in Monthly Report & Annual Biorestoration Monitoring Report	TANAP	Biorestorati on Monitoring Plan	BAP; Specification for Reinstatement	-

RefNo .	Ph.	Specific Location (and KP)	Environmental Component ²	Project Commitment					Monitoring				Mang. Plan	Addition. Docum.	ESIA Chapter
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									habitat should be observed along the 400m long 2 transect lines. The samples of <i>Tipula</i> sp. should be captured by using sweep net. The monitoring should be done by slow walking at the same speed along the transect lines for 60-90 minutes between hours 09.30-17.30. No monitoring should be done at bad weather conditions (high winds, rainy, cloudy). The wind should be 5 or less according to Beafort scale which is accepted as wind causing movement of medium sized tree branches and leafs of small trees. The individuals in the counting area should be counted by observing. Each individual should be counted for one time. The photographs of the critical habitat and individuals should be taken during the monitoring. Achievement Criteria: -Vegetation cover of ROW should be; -at least %10 in the 1. year -at least %20 in the 2. year -at least %40 in the 3. year -at least %60 in the 5. year of the vegetation cover of the areas adjacent to ROW -Population of the <i>Tipula n.sp</i>						

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				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
									should be “high” during the monitoring years.						
563	1-2	20+977-23+277 Critical Habitat (CH3)	Fauna <i>Erebia ottomana</i>	-	<p>Closed Construction Period: 1 June-1 July</p> <p>Pre-Construction</p> <p>* The top soil shall be scraped at a depth of 10-15 cm and shall be stored near the ROW.</p> <p>* The areas which <i>Poaceae</i> is very dense (between 20+725-21+078 / 22+235-22+615 KP's) shall be harvested and shall be stored near the ROW.</p> <p>Post-Construction</p> <p>* Harvested herbaceous plants shall be laid on the ROW.</p>	-	-	CC	<p>Methodology:</p> <p>Basic Principles</p> <p>In order to determine the presence and population of species in the critical habitat, counting of the individuals should be performed in first 3 years successively and then in 5th, 7th and 10th year successively. If the individuals of species are not determined in at least one of the counting years, the counting should be continued for at least 2 more periods.</p> <p>In the first year of monitoring of the species in the critical habitat, vegetation status of the area should be observed. The presence of species of <i>Festuca</i> and species of <i>Poaceae</i> family, which are feeding plants of the species, should be detected along the construction corridor in the critical habitat. The counting of feeding plants should be done and the numbers should be recorded in the first 3 years. If the vegetation cover and presence of feeding plants are not at desired level in the monitoring years, the monitoring should be extended for 1 more year.</p>	<p>Period</p> <p>Between 15 July - 30 August</p> <p>Frequency</p> <p>Once in every 2 weeks</p>	Interim First-Findings in Monthly Report & Annual Bioresta tion Monitorin g Report	TANAP	Biorestorati on Monitoring Plan	BAP; Specification for Reinstatement	-

RefNo .	Ph.	Specific Location (and KP)	Environmental Component ²	Project Commitment					Monitoring				Mang. Plan	Addition. Docum.	ESIA Chapter
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									The determination if the vegetation cover and species diversity are at desired level should be done by a botanic expert. These studies should be performed by an expert on butterflies and an assistant researcher. The photographs of the critical habitat and individuals should be taken during the monitoring. The weather conditions (temperature, cloudness and wind), number of individuals, the day of monitoring, name of the expert etc. should be written onto the survey form. Adult Butterfly Monitoring Scheme Methodology The counting of the species should be done along the 400m long transect line. Slow walking at the same speed should be performed along the transect for 45-60 minutes. The area covering 2.5 m length in left and right sides and 5 m length in front and back of the observer is the counting area and the individuals in this area should be counted. The individuals in the counting area should be counted by observing. Each individual should be counted for one time.						

RefNo .	Ph.	Specific Location (and KP)	Environmental Component ²	Project Commitment					Monitoring				Mang. Plan	Addition. Docum.	ESIA Chapter
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									The hours when butterflys area most active are 3.5 hours after sunrise and 3.5 hours before sunset. Thus, monitoring hours should be between hours 09:30 - 17:30. The weather temperature of the monitoring day should be above 13°C. If the weather temperature is between 13-17°C, the weather should be sunny and cloud cover should be 50% or less. If the weather temperature is above 17°C, cloud cover can be more than 50%. The wind should be 5 or less according to Beafort scale which is accepted as wind causing movement of medium sized tree branches and leafs of small trees. Achievement Criteria: -Vegetation cover of species of Festuca and Poaceae family in the ROW should be; -at least %20 in the 1. year -at least %40 in the 2. year -at least %50 in the 3. year -at least %60 in the 5. year of the vegetation cover of the areas adjacent to ROW -Population of the <i>Erebia ottomana</i> species should be; -“rare” in the end of 1. year						

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									-“low” in the end of 2. and other monitoring years.						
564	1-2	23+947-27+358 Critical Habitat (CH4)	Fauna <i>Prometheomys schaposchnikowi</i>	-	<p>Closed Construction Period: 15 May-15 August</p> <p>Pre-Construction</p> <p>*The area should be restricted between 15 May-15 August because this period is a breeding period for <i>Prometheomys schaposchnikowi</i>.</p> <p>*The top soil between 23+670-27+081 KP’s should be scraped at a depth of 10-15 cm after 15 August.</p> <p>*<i>Prometheomys schaposchnikowi</i> individuals should be carried to the appropriate and close areas by specialists according to the methodology.</p> <p>*When the nest gallery system is being excavated, the nest material and the stored food found in the nest should also be carried to the new transferred nesting area and should be placed inside the gallery entrance so that the members can take them in their new nests they are building.</p> <p>Post-Construction</p> <p>-</p>	-	-	CC	<p>Methodology:</p> <p>Basic Principles</p> <p>In order to determine the presence and population of <i>Prometheomys schaposchnikowi</i> in the critical habitat, counting of the individuals should be performed in first 3 years successively and then in 5th, 7th and 10th year. If the individuals of species are not determined in at least one of the counting years, the counting should be continued for at least 2 more periods.</p> <p>Monitoring Methodology</p> <p>Vegetation cover and species diversity in the first year is expected to be 30% and 40%, respectively. Nest mounds in the critical habitat should be observed for the presence of <i>Prometheomys schaposchnikowi</i> . New nests should be observed to determined the population situation. In order to determine new nests, 400m long 3 transects at the start, center and end of the critical habitat should be monitored. New nest mounds in 5 m distance to the transect lines should be counted and new mounds should be marked with stakes in each</p>	<p>Period</p> <p>June - July</p> <p>Frequency</p> <p>Twice in a year</p>	Interim First-Findings in Monthly Report & Annual Biorestoration Monitoring Report	TANAP	Biorestoration Monitoring Plan	BAP; Specification for Reinstatement	-

RefNo	Ph.	Specific Location (and KP)	Environmental Component ²	Project Commitment					Monitoring				Mang. Plan	Addition. Docum.	ESIA Chapter
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									transect. The marked mounds should be accepted as centre and each new mounds in 10m distance to the center are considered as new individuals. The count of individuals are determined at the end of survey in three transects. The areas where individuals are determined are shown in maps. The name of expert, date and time, new nest location should be recorded for each observation. These studies should be performed by an expert on zoology and two assistant researcher. Achievement Criteria: Detection of; - 1-2 individuals in each transect in the 1. Year - 2-4 individuals in each transect in the 2. Year - 5-8individuals in each transect in the 3. Year - 8-12 individuals in each transect in the 5. Year - 13-20 individuals in each transect in the 7. Year - 20 and above individuals in each transect in the 10. Year						
565	1-2	63+303-64+123 Critical Habitat (CH5)	Fauna <i>Phengaris nausithous</i>	-	Closed Construction Period: 1 June-15 July Pre-Construction * The top soil shall be scraped at a depth of 10-15 cm with the plants on it as tufts (including <i>Sanguisorba sp.</i>), and shall be stored near the ROW, and shall be irrigated once every two weeks. * Stones and rocks of 30 cm or larger on the soil shall be stored nearby the construction site, without mixing them with the top soil.	-	-	CC	Methodology: Basic Principles In order to determine the presence and population of species in the critical habitat, counting of the individuals should be performed in first 3 years successively and then in 5th, 7th	Period -Adult individual monitoring between 1 July - 30 August in the 1., 2., 3., 5., 7. and 10. year -Larvae monitoring between 20	Interim First-Findings in Monthly Report & Annual Biorestorage tion	TANAP	Biorestorati on Monitoring Plan	BAP; Specification for Reinstatement	-

RefNo .	Ph.	Specific Location (and KP)	Environmental Component ²	Project Commitment					Monitoring				Mang. Plan	Addition. Docum.	ESIA Chapter
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					<p>* Herbaceous plants shall be harvested and stored near the ROW.</p> <p>Post-Construction</p> <p>* The removed individuals of the species as tufts shall be planted on the ROW and shall be irrigated until they root again.</p> <p>* The stones and rocks shall be re-organized on top of the soil for ants nesting at the end of the excavation according to the methodology.</p> <p>* The harvested plants, containing eggs shall be transferred to the area and spread on the soil.</p> <p>* The creek rehabilitation shall be done between the (62+845-62+910) KP's.</p>				<p>and 10th year successively. If the individuals of species are not determined in at least one of the counting years, the counting should be continued for at least 2 more periods.</p> <p>In the first year of monitoring of the species in the critical habitat, vegetation status of the area should be observed. The presence of <i>Sanguisorba sp.</i>, which are feeding plants of the species, should be detected along the construction corridor in the critical habitat. The counting of feeding plants should be done and the numbers should be recorded in the first 3 years.</p> <p>If the vegetation cover and presence of feeding plants are not at desired level in the monitoring years, the monitoring should be extended for 1 more year.</p> <p>The determination if the vegetation cover and species diversity are at desired level should be done by a botanic expert. It should be monitored that the stones with 30cm and larger those were placed near ROW were taken into the ROW and dumped 5-10cm into the soil.</p> <p>These studies should be performed by an expert on</p>	<p>August - 15 September in the 1., 2., 3. years</p> <p>Frequency Once in every 2 weeks</p>	Monitoring Report				

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									zoology and an assistant researcher. The photographs of the critical habitat and individuals should be taken during the monitoring. The weather conditions (temperature, cloudness and wind), number of individuals, the day of monitoring, name of the expert etc. should be written onto the survey form. Adult Butterfly Monitoring Scheme Methodology The counting of the species should be done along the 400m long transect line. Slow walking at the same speed should be performed along the transect for 45-60 minutes. The area covering 2.5 m length in left and right sides and 5 m length in front and back of the observer is the counting area and the individuals in this area should be counted. The individuals in the counting area should be counted by observing. Each individual should be counted for one time. The hours when butterflys area most active are 3.5 hours after sunrise and 3.5 hours before sunset. Thus, monitoring hours should be between hours 09:30 - 17:30. The weather temperature of the monitoring						

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									day should be above 13°C. If the weather temperature is between 13-17°C, the weather should be sunny and cloud cover should be 50% or less. If the weather temperature is above 17°C, cloud cover can be more than 50%. The wind should be 5 or less according to Beafort scale which is accepted as wind causing movement of medium sized tree branches and leafs of small trees. Butterfly Larvae Monitoring Methodology and Basic Principles Larvae observations and countings will provide information on the presence of species. Although the count of larvae does not provide sufficient information on the prediction of population size of the species, it will give information about the population during the monitoring. Although the count of larvae does not provide sufficient information on the prediction of population size of the species, it will give information about the population during the monitoring. These studies should be performed by an expert on						

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									zoology and an assistant researcher. The vegetation status of the critical habitat should be observed before the larvae observation and count. The presence of Sanguisorba sp., which are feeding plants of the species, should be detected along the construction corridor in the critical habitat. The determination if the vegetation cover and species diversity are at desired level should be done by a botanic expert. If the vegetation cover and presence of feeding plants are not at desired level in the monitoring years, the monitoring should be extended for 1 more year. The feeding plant of the species should be observed and counted along the construction corridor in the critical habitat. The location of feeding plants in the critical habitat should be recorded with GPS. The location of feeding plants in the critical habitat should be shown in a map. In the first year of the monitoring, the determined feeding plants should be observed and if there is larvae on them, larvae should be counted and their location						

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									should be shown in a map. In the second year of monitoring, the feeding plants determined in the first year should be observed and also new feeding plants should be observed in the critical habitat, if there is larvae on them, larvae should be counted and their location should be shown in a map. In the third year of monitoring, the feeding plants determined in the previous years should be observed and also new feeding plants should be observed in the critical habitat, if there is larvae on them, larvae should be counted and their location should be shown in a map. No monitoring should be done at bad weather conditions (high winds, rainy, cloudy). The photographs of the critical habitat and larvae of the species should be taken. The details on the monitoring day should be recorded onto larvae survey form. Achievement Criteria: -Vegetation cover of <i>Sanguisorba sp.</i> in the ROW should be; -at least %20 in the 1. year -at least %40 in the 2. year -at least %50 in the 3. year -at least %60 in the 5. year						

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									of the vegetation cover of the areas adjacent to ROW -Population of the <i>Phengaris nausithous</i> species should be; -“rare” in the end of 1. year -“low” in the end of 2. and other monitoring years. -The number of nests (especially <i>Myrmica</i> species) under stones on ROW should be; -at least %10 in the 1. year -at least %30 in the 2. year -at least %50 in the 3. year -at least %70 in the 5. year of the number of nests in the areas adjacent to ROW.						
566	1-2	63+303-64+123 Critical Habitat (CH5)	Fauna <i>Tipula n.sp</i>	-	Closed Construction Period: 1 June-15 July Pre-Construction * The top soil shall be scraped at a depth of 10-15 cm with the plants on it as tufts, and shall be stored near the ROW, and shall be irrigated once every two weeks. * Herbaceous plants shall be harvested and stored near the ROW. Post-Construction * * The harvested plants, containing eggs shall be transferred to the area and spread on the soil. * The creek rehabilitation shall be done between the (62+845-62+910) KP's.	-	-	CC	Methodology: Basic Principles In order to determine the presence and population of species in the critical habitat, counting of the individuals should be performed in first 3 years successively and then in 5th, 7th and 10th year successively. If the individuals of species are not determined in at least one of the counting years, the counting should be continued for at least 2 more periods. If the vegetation cover is not at desired level in the monitoring years, the monitoring should be extended for 1 more year.	Period 1 June - 25 July Frequency In every 2 weeks	Interim First-Findings in Monthly Report & Annual Biorestoreta tion Monitorin g Report	TANAP	Biorestorati on Monitoring Plan	BAP; Specification for Reinstatement	-

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									The determination if the vegetation cover and species diversity are at desired level should be done by a botanic expert. These studies should be performed by an expert on zoology and an assistant researcher. Monitoring Methodology The weather conditions (temperature, cloudness and wind), number of individuals, the day of monitoring, name of the expert etc. should be written onto the survey form. The observation of the species should be done along the 400m long 2 transect lines in the critical habitat. The samples of <i>Tipula</i> sp. should be captured by using sweep net. The monitoring should be done by slow walking at the same speed along the transect lines for 60-90 minutes between hours 09.30-17.30. No monitoring should be done at bad weather conditions (high winds, rainy, cloudy). The wind should be 5 or less according to Beafort scale which is accepted as wind causing movement of medium sized tree branches and leafs of small trees. The individuals in the counting area should be counted by						

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									observing. Each individual should be counted for one time. The photographs of the critical habitat and individuals should be taken during the monitoring. Achievement Criteria: -Vegetation cover of ROW should be; -at least %20 in the 1. year -at least %40 in the 2. year -at least %50 in the 3. year -at least %60 in the 5. year. - Population of the Tipula n.sp should be “high” during the monitoring years.						
567	1-2	63+303-64+123 Critical Habitat (CH5)	Fauna <i>Erebia ottomana</i>	-	Closed Construction Period: 1 June-15 July Pre-Construction * The top soil shall be scraped at a depth of 10-15 cm with the plants on it as tufts, and shall be stored near the ROW, and shall be irrigated once every two weeks. * Herbaceous plants shall be harvested and stored near the ROW. Post-Construction * The removed individuals of the species as tufts shall be planted on the ROW and shall be irrigated until they root again. * The harvested plants, containing eggs shall be transferred to the area and spread on the soil. * The creek rehabilitation shall be done between the (62+845-62+910) KP's.	-	-	CC	Methodology: Basic Principles In order to determine the presence and population of species in the critical habitat, counting of the individuals should be performed in first 3 years successively and then in 5th, 7th and 10th year successively. If the individuals of species are not determined in at least one of the counting years, the counting should be continued for at least 2 more periods. In the first year of monitoring of the species in the critical habitat, vegetation status of the area should be observed. The presence of Festuca species, which are feeding plants of the species, should	Period Between 15 July - 30 August Frequency 3 times in a year	Interim First-Findings in Monthly Report & Annual Biorestoretion Monitorin g Report	TANAP	Biorestorati on Monitoring Plan	BAP; Specification for Reinstatement	-

RefNo .	Ph.	Specific Location (and KP)	Environmental Component ²	Project Commitment					Monitoring				Mang. Plan	Addition. Docum.	ESIA Chapter
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									detected along the construction corridor in the critical habitat. The counting of species of <i>Festuca</i> and species of <i>Poaceae</i> family, which are feeding plants of the species, should be done along the construction corridor in the critical habitat in first 3 years. If the vegetation cover and presence of feeding plants are not at desired level in the monitoring years, the monitoring should be extended for 1 more year. The determination if the vegetation cover and species diversity are at desired level should be done by a botanic expert. These studies should be performed by an expert on butterflies and an assistant researcher. The photographs of the critical habitat and individuals should be taken during the monitoring. The weather conditions (temperature, cloudness and wind), number of individuals, the day of monitoring, name of the expert etc. should be written onto the survey form. Butterfly Monitoring Scheme Methodology The counting of the species should be done						

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									along the 400m long transect line. Slow walking at the same speed should be performed along the transect for 45-60 minutes. The area covering 2.5 m length in left and right sides and 5 m length in front and back of the observer is the counting area and the individuals in this area should be counted. The individuals in the counting area should be counted by observing. Each individual should be counted for one time. The hours when butterflys area most active are 3.5 hours after sunrise and 3.5 hours before sunset. Thus, monitoring hours should be between hours 09:30 - 17:30. The weather temperature of the monitoring day should be above 13°C. If the weather temperature is between 13-17°C, the weather should be sunny and cloud cover should be 50% or less. If the weather temperature is above 17°C, cloud cover can be more than 50%. The wind should be 5 or less according to Beafort scale which is accepted as wind causing movement of medium sized tree branches and leafs of small trees.						

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				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
									Achievement Criteria: -Vegetation cover of species of Festuca and Poaceae family in the ROW should be; -at least %20 in the 1. year -at least %40 in the 2. year -at least %50 in the 3. year -at least %60 in the 5. Year -Population of the <i>Erebia ottomana</i> species should be; -“rare” in the end of 1. year -“low” in the end of 2. and other monitoring years.						
568	1-2	85+741-87+983 Critical Habitat (CH6)	Fauna <i>Phengaris nausithous</i>	-	Pre-Construction * Top soil shall be scraped at a depth of 10-15 cm with the plants on it as tufts (including <i>Sanguisorba</i> sp.), and shall be stored near the ROW, and shall be irrigated once every two weeks. * The seeds of <i>Sanguisorba</i> , which is the feeding plant of <i>Phengaris nausithous</i> , shall be collected near the ROW. * Stones and rocks of 30 cm or larger on the soil shall be stored nearby the construction site, without mixing them with the top soil. Post-Construction * The removed individuals of the species as tufts shall be planted on the ROW and shall be irrigated until they root again. * The stones and rocks shall be re-organized on top of the soil for ants nesting at the end of the excavation according to the methodology.	-	-	CC	Methodology: Basic Principles In order to determine the presence and population of species in the critical habitat, counting of the individuals should be performed in first 3 years successively and then in 5th, 7th and 10th year successively. If the individuals of species are not determined in at least one of the counting years, the counting should be continued for at least 2 more periods. In the first year of monitoring of the species in the critical habitat, vegetation status of the area should be observed. The presence of <i>Sanguisorba</i> sp., which are feeding plants of the species, should be detected along the construction	Period -Adult individual monitoring between 1 July - 30 August in the 1., 2., 3., 5., 7. and 10. year -Larvae monitoring between 20 August - 15 September in the 1., 2., 3. years Frequency Once in every 2 weeks	Interim First-Findings in Monthly Report & Annual Biorestoration Monitoring Report	TANAP	Biorestoration Monitoring Plan	BAP; Specification for Reinstatement	-

RefNo .	Ph.	Specific Location (and KP)	Environmental Component ²	Project Commitment					Monitoring				Mang. Plan	Addition. Docum.	ESIA Chapter
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									corridor in the critical habitat. The counting of feeding plants should be done and the numbers should be recorded in the first 3 years. If the vegetation cover and presence of feeding plants are not at desired level in the monitoring years, the monitoring should be extended for 1 more year. The determination if the vegetation cover and species diversity are at desired level should be done by a botanic expert. It should be monitored that the stones with 30cm and larger those were placed near ROW were taken into the ROW and dumped 5-10cm into the soil. These studies should be performed by an expert on zoology and an assistant researcher. The photographs of the critical habitat and individuals should be taken during the monitoring. The weather conditions (temperature, cloudness and wind), number of individuals, the day of monitoring, name of the expert etc. should be written onto the survey form. Adult Butterfly Monitoring Scheme Methodology The counting of the species						

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									should be done along the 400m long transect line. Slow walking at the same speed should be performed along the transect for 45-60 minutes. The area covering 2.5 m length in left and right sides and 5 m length in front and back of the observer is the counting area and the individuals in this area should be counted. The individuals in the counting area should be counted by observing. Each individual should be counted for one time. The hours when butterflys area most active are 3.5 hours after sunrise and 3.5 hours before sunset. Thus, monitoring hours should be between hours 09:30 - 17:30. The weather temperature of the monitoring day should be above 13°C. If the weather temperature is between 13-17°C, the weather should be sunny and cloud cover should be 50% or less. If the weather temperature is above 17°C, cloud cover can be more than 50%. The wind should be 5 or less according to Beafort scale which is accepted as wind causing movement of medium sized tree branches and leafs of small trees.						

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									Butterfly Larvae Monitoring Methodology and Basic Principles Larvae observations and countings will provide information on the presence of species.Although the count of larvae does not provide sufficient information on the prediction of population size of the species, it will give information about the population during the monitoring. These studies should be performed by an expert on zoology and an assistant researcher. The vegetation status of the critical habitat should be observed before the larvae observation and count. The presence of Sanguisorba sp., which are feeding plants of the species, should be detected along the construction corridor in the critical habitat. The determination if the vegetation cover and species diversity are at desired level should be done by a botanic expert. If the vegetation cover and presence of feeding plants are not at desired level in the monitoring years, the monitoring should be extended for 1 more year.						

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									The feeding plant of the species should be observed and counted along the construction corridor in the critical habitat. The location of feeding plants in the critical habitat should be recorded with GPS. The location of feeding plants in the critical habitat should be shown in a map. In the first year of the monitoring, the determined feeding plants should be observed and if there is larvae on them, larvae should be counted and their location should be shown in a map. In the second year of monitoring, the feeding plants determined in the first year should be observed and also new feeding plants should be observed in the critical habitat, if there is larvae on them, larvae should be counted and their location should be shown in a map. In the third year of monitoring, the feeding plants determined in the previous years should be observed and also new feeding plants should be observed in the critical habitat, if there is larvae on them, larvae should be counted and their location should be shown in a map. No monitoring should be done at bad weather conditions (high						

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RefNo .	Ph.	Specific Location (and KP)	Environmental Component ²	Project Commitment					Monitoring				Mang. Plan	Addition. Docum.	ESIA Chapter
				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
									winds, rainy, cloudy). The photographs of the critical habitat and larvae of the species should be taken. The details on the monitoring day should be recorded onto larvae survey form. Achievement Criteria: -Vegetation cover of <i>Sanguisorba</i> sp. in the ROW should be; -at least %20 in the 1. year -at least %40 in the 2. year -at least %50 in the 3. year -at least %60 in the 5. year. -Population of the <i>Phengaris nausithous</i> species should be; -“rare” in the end of 1. year -“low” in the end of 2. and other monitoring years. -The number of nests (especially <i>Myrmica</i> species) under stones on ROW should be; -at least %10 in the 1. year -at least %30 in the 2. year -at least %50 in the 3. year -at least %70 in the 5. year of the number of nests in the areas adjacent to ROW.						
569	1-2	116+376-116+983 Critical Habitat (CH7)	Fauna <i>Phengaris nausithous</i>	-	Pre-Construction * The top soil in the shall be scraped at a depth of 10-15 cm with the plants on it as tufts (including <i>Sanguisorba</i> sp.) and shall be stored near the ROW, and shall be irrigated once every two weeks. * The seeds of <i>Sanguisorba</i> , which is the feeding plant of <i>Phengaris nausithous</i> , shall be collected near the ROW.	-	-	CC	Methodology: Basic Principles In order to determine the presence and population of species in the critical habitat, counting of the individuals should be performed in	Period -Adult individual monitoring between 1 July - 30 August in the 1., 2., 3., 5., 7. and 10. year	Interim First-Findings in Monthly Report & Annual Biorestoretion	TANAP	Biorestorati on Monitoring Plan	BAP; Specification for Reinstatement	-

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					<p>* Stones and rocks of 30 cm or larger on the soil shall be stored nearby the construction site, without mixing them with the top soil.</p> <p>Post-Construction</p> <p>* The removed individuals of the species as tufts shall be planted on the ROW and shall be irrigated until they root again.</p> <p>* The stones and rocks shall be re-organized on top of the soil for ants nesting at the end of the excavation according to the methodology.</p>				<p>first 3 years successively and then in 5th, 7th and 10th year successively. If the individuals of species are not determined in at least one of the counting years, the counting should be continued for at least 2 more periods. In the first year of monitoring of the species in the critical habitat, vegetation status of the area should be observed. The presence of Sanguisorba sp., which are feeding plants of the species, should be detected along the construction corridor in the critical habitat. The counting of feeding plants should be done and the numbers should be recorded in the first 3 years. If the vegetation cover and presence of feeding plants are not at desired level in the monitoring years, the monitoring should be extended for 1 more year. The determination if the vegetation cover and species diversity are at desired level should be done by a botanic expert. It should be monitored that the stones with 30cm and larger those were placed near ROW were taken into the ROW and dumped 5-10cm into the soil.</p>	<p>-Larvae monitoring between 20 August - 15 September in the 1., 2., 3. years</p> <p>Frequency Once in every 2 weeks</p>	Monitoring Report				

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									These studies should be performed by an expert on zoology and an assistant researcher. The photographs of the critical habitat and individuals should be taken during the monitoring. The weather conditions (temperature, cloudness and wind), number of individuals, the day of monitoring, name of the expert etc. should be written onto the survey form. Adult Butterfly Monitoring Scheme Methodology The counting of the species should be done along the 400m long transect line. Slow walking at the same speed should be performed along the transect for 45-60 minutes. The area covering 2.5 m length in left and right sides and 5 m length in front and back of the observer is the counting area and the individuals in this area should be counted. The individuals in the counting area should be counted by observing. Each individual should be counted for one time. The hours when butterflys area most active are 3.5 hours after sunrise and 3.5 hours before sunset. Thus, monitoring hours should be						

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									between hours 09:30 - 17:30. The weather temperature of the monitoring day should be above 13° C. If the weather temperature is between 13-17° C, the weather should be sunny and cloud cover should be 50% or less. If the weather temperature is above 17° C, cloud cover can be more than 50%. The wind should be 5 or less according to Beafort scale which is accepted as wind causing movement of medium sized tree branches and leafs of small trees. Butterfly Larvae Monitoring Methodology and Basic Principles Larvae observations and countings will provide information on the presence of species.Although the count of larvae does not provide sufficient information on the prediction of population size of the species, it will give information about the population during the monitoring. These studies should be performed by an expert on zoology and an assistant researcher. The vegetation status of the critical habitat should be observed before the larvae						

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									observation and count. The presence of Sanguisorba sp., which are feeding plants of the species, should be detected along the construction corridor in the critical habitat. The determination if the vegetation cover and species diversity are at desired level should be done by a botanic expert. If the vegetation cover and presence of feeding plants are not at desired level in the monitoring years, the monitoring should be extended for 1 more year. The feeding plant of the species should be observed and counted along the construction corridor in the critical habitat. The location of feeding plants in the critical habitat should be recorded with GPS. The location of feeding plants in the critical habitat should be shown in a map. In the first year of the monitoring, the determined feeding plants should be observed and if there is larvae on them, larvae should be counted and their location should be shown in a map. In the second year of monitoring, the feeding plants determined in the first year should be observed and also new feeding						

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									plants should be observed in the critical habitat, if there is larvae on them, larvae should be counted and their location should be shown in a map. In the third year of monitoring, the feeding plants determined in the previous years should be observed and also new feeding plants should be observed in the critical habitat, if there is larvae on them, larvae should be counted and their location should be shown in a map. No monitoring should be done at bad weather conditions (high winds, rainy, cloudy). The photographs of the critical habitat and larvae of the species should be taken. The details on the monitoring day should be recorded onto larvae survey form. Achievement Criteria: -Vegetation cover of Sanguisorba sp. in the ROW should be; -at least %20 in the 1. year -at least %40 in the 2. year -at least %50 in the 3. year -at least %60 in the 5. year. -Population of the <i>Phengaris nausithous</i> species should be; -“rare” in the end of 1. year -“low” in the end of 2. and other						

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									monitoring years. -The number of nests (especially <i>Myrmica</i> species) under stones on ROW should be; -at least %10 in the 1. year -at least %30 in the 2. year -at least %50 in the 3. year -at least %70 in the 5. year of the number of nests in the areas adjacent to ROW.						
570	1-2	117+052-117+620 Critical Habitat (CH8)	Fauna <i>Phengaris nausithous</i>	-	Pre-Construction * The top soil in the shall be scraped at a depth of 10-15 cm with the plants on it as tufts (including <i>Sanguisorba</i> sp.) and shall be stored near the ROW, and shall be irrigated once every two weeks. * The seeds of <i>Sanguisorba</i> , which is the feeding plant of <i>Phengaris nausithous</i> , shall be collected near the ROW. * Stones and rocks of 30 cm or larger on the soil shall be stored nearby the construction site, without mixing them with the top soil. Post-Construction * The removed individuals of the species as tufts shall be planted on the ROW and shall be irrigated until they root again. * The stones and rocks shall be re-organized on top of the soil for ants nesting at the end of the excavation according to the methodology.	-	-	CC	Methodology: Basic Principles In order to determine the presence and population of species in the critical habitat, counting of the individuals should be performed in first 3 years successively and then in 5th, 7th and 10th year successively. If the individuals of species are not determined in at least one of the counting years, the counting should be continued for at least 2 more periods. In the first year of monitoring of the species in the critical habitat, vegetation status of the area should be observed. The presence of <i>Sanguisorba</i> sp., which are feeding plants of the species, should be detected along the construction corridor in the critical habitat. The counting of feeding plants should be done and the numbers should be recorded in the first 3 years.	Period -Adult individual monitoring between 1 July - 30 August in the 1., 2., 3., 5., 7. and 10. year -Larvae monitoring between 20 August - 15 September in the 1., 2., 3. years Frequency Once in every 2 weeks	Interim First-Findings in Monthly Report & Annual Biorestoration Monitoring Report	TANAP	Biorestorati on Monitoring Plan	BAP; Specification for Reinstatement	-

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									If the vegetation cover and presence of feeding plants are not at desired level in the monitoring years, the monitoring should be extended for 1 more year. The determination if the vegetation cover and species diversity are at desired level should be done by a botanic expert. It should be monitored that the stones with 30cm and larger those were placed near ROW were taken into the ROW and dumped 5-10cm into the soil. These studies should be performed by an expert on zoology and an assistant researcher. The photographs of the critical habitat and individuals should be taken during the monitoring. The weather conditions (temperature, cloudness and wind), number of individuals, the day of monitoring, name of the expert etc. should be written onto the survey form. Adult Butterfly Monitoring Scheme Methodology The counting of the species should be done along the 400m long transect line. Slow walking at the same speed should be performed along						

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				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
									the transect for 45-60 minutes. The area covering 2.5 m length in left and right sides and 5 m length in front and back of the observer is the counting area and the individuals in this area should be counted. The individuals in the counting area should be counted by observing. Each individual should be counted for one time. The hours when butterflys area most active are 3.5 hours after sunrise and 3.5 hours before sunset. Thus, monitoring hours should be between hours 09:30 - 17:30. The weather temperature of the monitoring day should be above 13°C. If the weather temperature is between 13-17°C, the weather should be sunny and cloud cover should be 50% or less. If the weather temperature is above 17°C, cloud cover can be more than 50%. The wind should be 5 or less according to Beafort scale which is accepted as wind causing movement of medium sized tree branches and leafs of small trees. Butterfly Larvae Monitoring Methodology and Basic Principles Larvae observations and						

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									countings will provide information on the presence of species.Although the count of larvae does not provide sufficient information on the prediction of population size of the species, it will give information about the population during the monitoring. These studies should be performed by an expert on zoology and an assistant researcher. The vegetation status of the critical habitat should be observed before the larvae observation and count. The presence of Sanguisorba sp., which are feeding plants of the species, should be detected along the construction corridor in the critical habitat. The determination if the vegetation cover and species diversity are at desired level should be done by a botanic expert. If the vegetation cover and presence of feeding plants are not at desired level in the monitoring years, the monitoring should be extended for 1 more year. The feeding plant of the species should be observed and counted along the construction corridor in the critical habitat.						

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									The location of feeding plants in the critical habitat should be recorded with GPS. The location of feeding plants in the critical habitat should be shown in a map. In the first year of the monitoring, the determined feeding plants should be observed and if there is larvae on them, larvae should be counted and their location should be shown in a map. In the second year of monitoring, the feeding plants determined in the first year should be observed and also new feeding plants should be observed in the critical habitat, if there is larvae on them, larvae should be counted and their location should be shown in a map. In the third year of monitoring, the feeding plants determined in the previous years should be observed and also new feeding plants should be observed in the critical habitat, if there is larvae on them, larvae should be counted and their location should be shown in a map. No monitoring should be done at bad weather conditions (high winds, rainy, cloudy). The photographs of the critical habitat and larvae of the species should be taken.						

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									<p>The details on the monitoring day should be recorded onto larvae survey form.</p> <p>Achievement Criteria: Detection of individuals of species and “low” population level</p>						
571	1-2	165+360-165+581 Critical Habitat (CH9)	<p>Fauna <i>Darevskia uzzelli</i></p>	-	<p>Closed Construction Period: Closed prior to 15th of July</p> <p>Pre-Construction * The top soil shall be scraped at a depth of 10-15 cm and shall be stored near the ROW. * <i>Darevskia uzzelli</i> individuals shall be carried to the appropriate and close areas by specialists according to the methodology at the beginning of the July. * Stones and rocks of 30 cm or larger on the soil shall be stored nearby the construction site, without mixing them with the top soil.</p> <p>Post-Construction * The stored stones and rocks shall be spread by embedding them in 5-10 cm soil (in accordance with the original)</p>	-	-	CC	<p>Methodology: Basic Principles The distribution of <i>Darevskia uzzelli</i> is very narrow and its population is generally rare. They live in forests or rocky areas with sparse vegetation. In order to determine the presence and population of species in the critical habitat, counting of the individuals should be performed in first 3 years successively and then in 5th, 7th and 10th year successively. If the individuals of species are not determined in at least one of the counting years, the counting should be continued for at least 2 more periods.</p> <p>Reptilian Monitoring Methodology Transect Surveys Ideally, transect survey should meet the following assumptions: Transect lines should be selected arbitrarily. All samples on the transect lines should be observed. Individuals should not be counted more than once in or</p>	<p>Period -Adult individual monitoring between 1 July - 30 August in the 1., 2., 3., 5., 7. and 10. year -Larvae monitoring between 20 August - 15 September in the 1., 2., 3. years</p> <p>Frequency Once in every 2 weeks</p>	Interim First-Findings in Monthly Report & Annual Biorestoration Monitoring Report	TANAP	Biorestorati on Monitoring Plan	BAP; Specification for Reinstatement	-

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				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
									between the transect lines. Experts should do the observations on linear pattern during transect surveys. Experts should walk for one hour and do observations along transects in the critical habitat. Natural shelters (stone or other materials) should not be included in this one hour. Surveys should be done between 09:00-16:00 since ectotherm are expected to be active and observable between these hours. Experts observe within the area of 1m in each side of transect, also high quality habitats (where natural shelters are located) can be included in 10m each side of transect. The rocks, stones or other materials whose underneath was observed should be replaced to their original location to minimize the disturbance. The individuals should only be captured to verify identity. Samples may be needed to identify the rare species those are difficult to be identified. The time spent for the identification are not included in the survey duration. The following information should be recorded for identification: Expert, day and time, species,						

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				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
									identification method, age of captured individual (infant, pre-adult adult), surface type (stone, stock, naked surface) and location in transect. Natural shelter surveys should be done along the transect line not to re-count the individuals. These studies should be performed by an expert on zoology and an assistant researcher. Achievement Criteria: Detection of individuals of species and “rare” population level						
572	1-2	165+360-165+581 Critical Habitat (CH9)	Fauna <i>Darevskia unisexualis</i>	-	Closed Construction Period: Closed prior to 15th of July Pre-Construction * The top soil shall be scraped at a depth of 10-15 cm and shall be stored near the ROW. * <i>Darevskia unisexualis</i> individuals shall be carried to the appropriate and close areas by specialists according to the methodology at the beginning of the July. * Stones and rocks of 30 cm or larger on the soil shall be stored nearby the construction site, without mixing them with the top soil. Post-Construction * The stored stones and rocks shall be spread by embedding them in 5-10 cm soil (in accordance with the original)	-	-	CC	Methodology: Basic Principles The distribution of <i>Darevskia unisexualis</i> is very narrow and its population is generally rare. They live in forests or rocky areas with sparse vegetation. In order to determine the presence and population of species in the critical habitat, counting of the individuals should be performed in first 3 years successively and then in 5th, 7th and 10th year successively. If the individuals of species are not determined in at least one of the counting years, the counting should be continued for at least 2 more periods. Reptilian Monitoring Methodology	Period Between June - July Frequency Once in a month	Interim First-Findings in Monthly Report & Annual Biorestoration Monitoring Report	TANAP	Biorestorati on Monitoring Plan	BAP; Specification for Reinstatement	-

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									Experts should do the observations on linear pattern during transect surveys. Experts should do the observations on linear pattern during transect surveys. Experts should walk for one hour and do observations along transects in the critical habitat. Natural shelters (stone or other materials) should not be included in this one hour. Surveys should be done between 09:00-16:00 since ectotherm are expected to be active and observable between these hours. Experts observe within the area of 1m in each side of transect, also high quality habitats (where natural shelters are located) can be included in 10m each side of transect. The rocks, stones or other materials whose underneath was observed should be replaced to their original location to minimize the disturbance. The individuals should only be captured to verify identity. Samples may be needed to identify the rare species those are difficult to be identified. The time spent for the identification are not included in the survey duration. The following information should be recorded for						

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				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
									identification: Expert, day and time, species, identification method, age of captured individual (infant, pre-adult adult), surface type (stone, stock, naked surface) and location in transect. Natural shelter surveys should be done along the transect line not to re-count the individuals. These studies should be performed by an expert on zoology and an assistant researcher. Achievement Criteria: Detection of individuals of species and “rare” population level						
573	1-2	168+015-168+169 Critical Habitat (CH10)	Fauna <i>Darevskia uzzelli</i>	-	Closed Construction Period: Closed prior to 15th of July Pre-Construction * The top soil shall be scraped at a depth of 10-15 cm and shall be stored near the ROW. * <i>Darevskia uzzelli</i> individuals shall be carried to the appropriate and close areas by specialists according to the methodology at the beginning of the July. * Stones and rocks of 30 cm or larger on the soil shall be stored nearby the construction site, without mixing them with the top soil. Post-Construction * The stored stones and rocks shall be spread by embedding them in 5-10 cm soil (in accordance with the original)	-	-	CC	Methodology: Basic Principles The distribution of <i>Darevskia uzzelli</i> is very narrow and its population is generally rare. They live in forests or rocky areas with sparse vegetation. In order to determine the presence and population of species in the critical habitat, counting of the individuals should be performed in first 3 years successively and then in 5th, 7th and 10th year successively. If the individuals of species are not determined in at least one of the counting years, the counting should be continued for at least 2 more periods.	Period Between June - July Frequency Once in a year	Interim First-Findings in Monthly Report & Annual Biorestoration Monitoring Report	TANAP	Biorestorati on Monitoring Plan	BAP; Specification for Reinstatement	-

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									Reptilian Monitoring Methodology Transect Surveys Ideally, transect survey should meet the following assumptions: Transect lines should be selected arbitrarily. All samples on the transect lines should be observed. Individuals should not be counted more than once in or between the transect lines. Experts should do the observations on linear pattern during transect surveys. Experts should walk for one hour and do observations along transects in the critical habitat. Natural shelters (stone or other materials) should not be included in this one hour. Surveys should be done between 09:00-16:00 since ectotherm are expected to be active and observable between these hours. Experts observe within the area of 1m in each side of transect, also high quality habitats (where natural shelters are located) can be included in 10m each side of transect. The rocks, stones or other materials whose underneath was observed should be replaced to their original location to minimize the disturbance.						

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									The individuals should only be captured to verify identity. Samples may be needed to identify the rare species those are difficult to be identified. The time spent for the identification are not included in the survey duration. The following information should be recorded for identification: Expert, day and time, species, identification method, age of captured individual (infant, pre-adult adult), surface type (stone, stock, naked surface) and location in transect. Natural shelter surveys should be done along the transect line not to re-count the individuals. These studies should be performed by an expert on zoology and an assistant researcher. Achievement Criteria: Detection of individuals of species and “rare” population level						
574	1-2	168+015-168+169 Critical Habitat (CH10)	Fauna <i>Darevskia unisexualis</i>	-	Closed Construction Period: Closed prior to 15th of July Pre-Construction * The top soil shall be scraped at a depth of 10-15 cm and shall be stored near the ROW. * <i>Darevskia unisexualis</i> individuals shall be carried to the appropriate and close areas by specialists according to the methodology at the beginning of the July. * Stones and rocks of 30 cm or larger on the soil shall be stored nearby the construction site, without mixing them with the top soil.	-	-	CC	Methodology: Basic Principles The distribution of <i>Darevskia unisexualis</i> is very narrow and its population is generally rare. They live in forests or rocky areas with sparse vegetation. In order to determine the presence and population of species in the	Period May - July Frequency Once in a year	Interim First-Findings in Monthly Report & Annual Biorestation Monitoring Report	TANAP	Biorestation Monitoring Plan	BAP; Specification for Reinstatement	-

RefNo .	Ph.	Specific Location (and KP)	Environmental Component ²	Project Commitment					Monitoring				Mang. Plan	Addition. Docum.	ESIA Chapter
				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
					<p>Post-Construction</p> <p>* The stored stones and rocks shall be spread by embedding them in 5-10 cm soil (in accordance with the original)</p>				<p>critical habitat, counting of the individuals should be performed in first 3 years successively and then in 5th, 7th and 10th year successively. If the individuals of species are not determined in at least one of the counting years, the counting should be continued for at least 2 more periods.</p> <p>Reptilian Monitoring Methodology</p> <p>Experts should do the observations on linear pattern during transect surveys. Experts should do the observations on linear pattern during transect surveys. Experts should walk for one hour and do observations along transects in the critical habitat. Natural shelters (stone or other materials) should not be included in this one hour. Surveys should be done between 09:00-16:00 since ectotherm are expected to be active and observable between these hours. Experts observe within the area of 1m in each side of transect, also high quality habitats (where natural shelters are located) can be included in 10m each side of transect. The rocks, stones or other materials whose underneath was observed should be replaced to their original</p>						

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									location to minimize the disturbance. The individuals should only be captured to verify identity. Samples may be needed to identify the rare species those are difficult to be identified. The time spent for the identification are not included in the survey duration. The following information should be recorded for identification: Expert, day and time, species, identification method, age of captured individual (infant, pre-adult adult), surface type (stone, stock, naked surface) and location in transect. Natural shelter surveys should be done along the transect line not to re-count the individuals. These studies should be performed by an expert on zoology and an assistant researcher. Achievement Criteria: Detection of 1 or more individuals in the critical habitat and visible areas						
575	1-2	170+015-175+015 Critical Habitat (CH11)	Fauna <i>Otis tarda</i>	-	Pre-Construction * The members and breeding activities in April-May should be investigated. Consequently, in case members in reproductive activity are observed, construction activities should not be starteded, studies accompanied by an expert should be carried out to wait for the offspring hatching from the egg, and it should be ensured that the members are removed from the area only after the young ones start	-	-	CC	Methodology: Basic Principles In order to determine the presence and population of species in the critical habitat, counting of the individuals should be performed in first 3 years successively and then in 5th, 7th and 10th year Period May - July Frequency Once in a year	Interim First-Findings in Monthly Report & Annual Biorestorati on Monitorin g Report	TANAP	Biorestorati on Monitoring Plan	BAP; Specification for Reinstatement	-	

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					<p>going around with their mother.</p> <p>* The top soil shall be scraped at a depth of 10-15 cm and shall be stored near the ROW.</p> <p>Post-Construction</p> <p>* Reinstatement of all habitats to baseline conditions existing prior to construction activities.</p>				<p>successively. If the individuals of species are not determined in at least one of the counting years, the counting should be continued for at least 2 more periods.</p> <p>Monitoring Methodology</p> <p>Transect survey methodology should be used in the monitoring in the critical habitat.</p> <p>Transect line should cover the entire critical habitat.</p> <p>Transect survey should be done by two experts and each 1 km section of critical habitat should be surveyed in an hour. Experts should walk in 50 m distance at left and right side of ROW and entire area that is visible should be observed. Surveys should be started in early hours like 08:00.</p> <p>These studies should be performed by an expert on zoology and an assistant researcher.</p> <p>If individuals are observed, information on the aim of area usage and counts of individuals should be recorded on the survey form.</p>						
576	1-2	175+427-177+015 Critical Habitat (CH12)	Fauna <i>Eulasia chrysopyga</i>	-	<p>Closed Construction Period: 1 June-1 July</p> <p>Pre-Construction</p> <p>* The top soil shall be scraped at a depth of 10-15 cm and shall be stored near the ROW.</p>	-	-	CC	<p>Methodology:</p> <p>Basic Principles</p> <p>In order to determine the presence and population of species in the critical habitat, counting of the individuals should be performed in first 3 years</p>	<p>Period</p> <p>May</p> <p>Frequency</p> <p>Once in a year</p>	Interim First-Findings in Monthly Report & Annual Biorestoration	TANAP	Biorestoration Monitoring Plan	BAP; Specification for Reinstatement	-

RefNo .	Ph.	Specific Location (and KP)	Environmental Component ²	Project Commitment					Monitoring				Mang. Plan	Addition. Docum.	ESIA Chapter
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									successively and then in 5th, 7th and 10th year successively. If the individuals of species are not determined in at least one of the counting years, the counting should be continued for at least 2 more periods. Monitoring Methodology The vegetation status of the critical habitat should be observed before the monitoring of the species. The presence of species of Compositae (Asteraceae) family, which are resting and feeding plants of the species, should be detected along the construction corridor in the critical habitat. The determination if the vegetation cover and species diversity are at desired level should be done by a botanic expert. If the vegetation cover and presence of feeding plants are not at desired level in the monitoring years, the monitoring should be extended for 1 more year. The individuals in the critical habitat should be observed along the 400m long 2 transect lines. The samples of species should be captured by using sweep net. The monitoring should be done by slow walking at the same speed along the transect lines		Monitorin g Report				

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				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
									for 60 minutes between hours 09.30-17.30. No monitoring should be done at bad weather conditions (high winds, rainy, cloudy). The wind should be 5 or less according to Beafort scale which is accepted as wind causing movement of medium sized tree branches and leafs of small trees. The individuals in the counting area should be counted by observing. Each individual should be counted for one time. The photographs of the critical habitat and individuals should be taken during the monitoring. These studies should be performed by an expert on zoology and an assistant researcher. The weather conditions (temperature, cloudness and wind), number of individuals, the day of monitoring, name of the expert etc. should be written onto the survey form. Achievement Criteria: Detection of species of Compositae (Asteraceae) family on transect and detection of Eulasia chrysopyga on these plants at “rare” population level						

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				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
577	1-2	188+572-194+015 Critical Habitat (CH13)	Fauna <i>Eulasia chrysopyga</i>	-	Closed Construction Period: 1 June-1 July Pre-Construction * The top soil shall be scraped at a depth of 10-15 cm and shall be stored near the ROW. Post-Construction	-	-	CC	Methodology: Basic Principles In order to determine the presence and population of species in the critical habitat, counting of the individuals should be performed in first 3 years successively and then in 5th, 7th and 10th year successively. If the individuals of species are not determined in at least one of the counting years, the counting should be continued for at least 2 more periods. Monitoring Methodology The vegetation status of the critical habitat should be observed before the monitoring of the species. The presence of species of Compositae (Asteraceae) family, which are resting and feeding plants of the species, should be detected along the construction corridor in the critical habitat. The determination if the vegetation cover and species diversity are at desired level should be done by a botanic expert. If the vegetation cover and presence of feeding plants are not at desired level in the monitoring years, the monitoring should be extended for 1 more year. The individuals in the critical habitat should be observed	Period Between June - July Frequency Once in a year	Interim First-Findings in Monthly Report & Annual Biorestoration Monitoring Report	TANAP	Biorestoration Monitoring Plan	BAP; Specification for Reinstatement	-

RefNo .	Ph.	Specific Location (and KP)	Environmental Component ²	Project Commitment					Monitoring				Mang. Plan	Addition. Docum.	ESIA Chapter
				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
									along the 400m long 5 transect lines. The samples of species should be captured by using sweep net. The monitoring should be done by slow walking at the same speed along the transect lines for 60 minutes between hours 09.30-17.30. No monitoring should be done at bad weather conditions (high winds, rainy, cloudy). The wind should be 5 or less according to Beafort scale which is accepted as wind causing movement of medium sized tree branches and leafs of small trees. The photographs of the critical habitat and individuals should be taken during the monitoring. These studies should be performed by an expert on zoology and an assistant researcher. The weather conditions (temperature, cloudness and wind), number of individuals, the day of monitoring, name of the expert etc. should be written onto the survey form. Achievement Criteria: Detection of species of Compositae (Asteraceae) family on transect and detection of Eulasia chrysopyga on these plants at						

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									“rare” population level						
578	1-2	188+572-194+015 Critical Habitat (CH13)	Fauna <i>Phengaris nausithous</i>	-	<p>Closed Construction Period: 1 June-1 July</p> <p>Pre-Construction</p> <p>* The top soil shall be scraped at a depth of 10-15 cm and shall be stored near the ROW.</p> <p>* Tall plants belonging to the <i>Compositae</i>, <i>Labiatae</i>, <i>Leguminosae</i> families in the area shall be harvested at the end of August, at the end of the vegetation period from the ROW and shall be stored nearby the construction site.</p> <p>* Stones and rocks of 30 cm or larger on the soil shall be stored nearby the construction site, without mixing them with the top soil.</p> <p>Post-Construction</p> <p>* The stored stones and rocks shall be spread on top of the soil for ants nesting at the end of the excavation according to the methodology.</p> <p>* The harvested plants, containing eggs shall be transferred to the area and spread on the soil.</p>	-	-	CC	<p>Methodology:</p> <p>Basic Principles</p> <p>In order to determine the presence and population of species in the critical habitat, counting of the individuals should be performed in first 3 years successively and then in 5th, 7th and 10th year successively. If the individuals of species are not determined in at least one of the counting years, the counting should be continued for at least 2 more periods.</p> <p>In the first year of monitoring of the species in the critical habitat, vegetation status of the area should be observed. The presence of <i>Sanguisorba</i> sp., which are feeding plants of the species, should be detected along the construction corridor in the critical habitat. The counting of feeding plants should be done and the numbers should be recorded in the first 3 years. If the vegetation cover and presence of feeding plants are not at desired level in the monitoring years, the monitoring should be extended for 1 more year. The determination if the vegetation</p>	<p>Period</p> <p>Between June - July</p> <p>Frequency</p> <p>Once in a year</p>	<p>Interim First-Findings in Monthly Report & Annual Biorestoration Monitoring Report</p>	TANAP	Biorestoration Monitoring Plan	BAP; Specification for Reinstatement	-

RefNo .	Ph.	Specific Location (and KP)	Environmental Component ²	Project Commitment					Monitoring				Mang. Plan	Addition. Docum.	ESIA Chapter
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									cover and species diversity are at desired level should be done by a botanic expert. It should be monitored that the stones with 30cm and larger those were placed near ROW were taken into the ROW and dumped 5-10cm into the soil. These studies should be performed by an expert on zoology and an assistant researcher. The photographs of the critical habitat and individuals should be taken during the monitoring. The weather conditions (temperature, cloudness and wind), number of individuals, the day of monitoring, name of the expert etc. should be written onto the survey form. Adult Butterfly Monitoring Scheme Methodology The counting of the species should be done along the 400m long transect line. Slow walking at the same speed should be performed along the transect for 45-60 minutes. The area covering 2.5 m length in left and right sides and 5 m length in front and back of the observer is the counting area and the individuals in this area should be counted. The individuals in the counting						

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									area should be counted by observing. Each individual should be counted for one time. The hours when butterflys area most active are 3.5 hours after sunrise and 3.5 hours before sunset. Thus, monitoring hours should be between hours 09:30 - 17:30. The weather temperature of the monitoring day should be above 13°C. If the weather temperature is between 13-17°C, the weather should be sunny and cloud cover should be 50% or less. If the weather temperature is above 17° C, cloud cover can be more than 50%. The wind should be 5 or less according to Beafort scale which is accepted as wind causing movement of medium sized tree branches and leafs of small trees. Butterfly Larvae Monitoring Methodology and Basic Principles Larvae observations and countings will provide information on the presence of species.Althoug h the count of larvae does not provide sufficient information on the prediction of population size of the species, it will give information about the						

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									population during the monitoring. These studies should be performed by an expert on zoology and an assistant researcher. The vegetation status of the critical habitat should be observed before the larvae observation and count. The presence of Sanguisorba sp., which are feeding plants of the species, should be detected along the construction corridor in the critical habitat. The determination if the vegetation cover and species diversity are at desired level should be done by a botanic expert. If the vegetation cover and presence of feeding plants are not at desired level in the monitoring years, the monitoring should be extended for 1 more year. The feeding plant of the species should be observed and counted along the construction corridor in the critical habitat. The location of feeding plants in the critical habitat should be recorded with GPS. The location of feeding plants in the critical habitat should be shown in a map. In the first year of the monitoring, the determined feeding plants should be						

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									observed and if there is larvae on them, larvae should be counted and their location should be shown in a map. In the second year of monitoring, the feeding plants determined in the first year should be observed and also new feeding plants should be observed in the critical habitat, if there is larvae on them, larvae should be counted and their location should be shown in a map. In the third year of monitoring, the feeding plants determined in the previous years should be observed and also new feeding plants should be observed in the critical habitat, if there is larvae on them, larvae should be counted and their location should be shown in a map. No monitoring should be done at bad weather conditions (high winds, rainy, cloudy). The photographs of the critical habitat and larvae of the species should be taken. The details on the monitoring day should be recorded onto larvae survey form. Achievement Criteria: -Vegetation cover of Sanguisorba sp. in the ROW should be; -at least %20 in the 1. year						

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									-at least %40 in the 2. year -at least %50 in the 3. year -at least %60 in the 5. Year -Population of the <i>Phengaris nausithous</i> species should be; -“rare” in the end of 1. year -“low” in the end of 2. and other monitoring years. -The number of nests (especially <i>Myrmica</i> species) under stones on ROW should be; -at least %10 in the 1. year -at least %30 in the 2. year -at least %50 in the 3. year -at least %70 in the 5. year of the number of nests in the areas adjacent to ROW.						
579	1-2	188+572-194+015 Critical Habitat (CH13)	Fauna <i>Zonitis nigriventris</i>	-	Closed Construction Period: 1 June-1 July Pre-Construction * The top soil shall be scraped at a depth of 10-15 cm and shall be stored near the ROW. * Tall plants belonging to the <i>Compositae</i> , <i>Labiatae</i> , <i>Leguminosae</i> families in the area shall be harvested at the end of August, at the end of the vegetation period from the ROW and shall be stored nearby the construction site. Post-Construction * The harvested plants, containing eggs shall be transferred to the area and spread on the soil.	-	-	CC	Methodology: Basic Principles In order to determine the presence and population of species in the critical habitat, counting of the individuals should be performed in first 3 years successively and then in 5th, 7th and 10th year successively. If the individuals of species are not determined in at least one of the counting years, the counting should be continued for at least 2 more periods. The vegetation status of the critical habitat should be observed before the monitoring of the species. The presence of species of	Period -Adult individual monitoring between 1 July - 30 August in the 1., 2., 3., 5., 7. and 10. year -Larvae monitoring between 20 August - 15 September in the 1., 2., 3. years Frequency Once in every two weeks	Interim First-Findings in Monthly Report & Annual Biorestoration Monitoring Report	TANAP	Biorestorati on Monitoring Plan	BAP; Specification for Reinstatement	-

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									Compositae, Labiatae, Leguminosae family, which are resting and feeding plants of the species, should be detected along the construction corridor in the critical habitat. The determination if the vegetation cover and species diversity are at desired level should be done by a botanic expert. If the vegetation cover and presence of plants are not at desired level in the monitoring years, the monitoring should be extended for 1 more year. These studies should be performed by an expert on zoology and an assistant researcher. The photographs of the critical habitat and individuals should be taken during the monitoring. The weather conditions (temperature, cloudness and wind), number of individuals, the day of monitoring, name of the expert etc. should be written onto the survey form. The individuals in the critical habitat should be observed along the 400m long 5 transect lines. The samples of species should be captured by using sweep net. The monitoring should be done by slow walking at the same						

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									speed along the transect lines for 60 minutes between hours 09.30-17.30. No monitoring should be done at bad weather conditions (high winds, rainy, cloudy). The wind should be 5 or less according to Beafort scale which is accepted as wind causing movement of medium sized tree branches and leafs of small trees. The samples should be collected to determine if the species is critical or not. Achievement Criteria: - No invasive plant species on ROW - Vegetation cover of species of Compositae, Labiatae, Leguminosae family in the ROW should be; -at least %20 in the 1. year -at least %40 in the 2. year -at least %50 in the 3. year -at least %60 in the 5. Year - Population of the <i>Zonitis nigriventris</i> species should be at least “low” in the monitoring years.						
580	1-2	203+945-204+724 Critical Habitat (CH14)	Fauna <i>Zonitis nigriventris</i>	-	Closed Construction Period: 1 June-1 July Pre-Construction * The top soil shall be scraped at a depth of 10-15 cm and shall be stored near the ROW. * Tall plants belonging to the <i>Compositae</i> , <i>Labiatae</i> , <i>Leguminosae</i> families in the area shall be harvested at the end of August, at the end of the vegetation period from the ROW and shall be stored nearby the construction site.	-	-	CC	Methodology: Basic Principles In order to determine the presence and population of species in the critical habitat, counting of the individuals should be performed in first 3 years successively and then in 5th, 7th Period Between 1 June - 30 July Frequency Twice in a year	Interim First-Findings in Monthly Report & Annual Biorestoreation	TANAP	Biorestorati on Monitoring Plan	BAP; Specification for Reinstatement	-	

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				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
					Post-Construction * The harvested plants, containing eggs shall be transferred to the area and spread on the soil.				and 10th year successively. If the individuals of species are not determined in at least one of the counting years, the counting should be continued for at least 2 more periods. The vegetation status of the critical habitat should be observed before the monitoring of the species. The presence of species of Compositae, Labiatae, Leguminosae family, which are resting and feeding plants of the species, should be detected along the construction corridor in the critical habitat. The determination if the vegetation cover and species diversity are at desired level should be done by a botanic expert. If the vegetation cover and presence of plants are not at desired level in the monitoring years, the monitoring should be extended for 1 more year. These studies should be performed by an expert on zoology and an assistant researcher. The photographs of the critical habitat and individuals should be taken during the monitoring. The weather conditions (temperature, cloudness and wind), number of individuals, the day of		Monitorin g Report				

RefNo .	Ph.	Specific Location (and KP)	Environmental Component ²	Project Commitment					Monitoring				Mang. Plan	Addition. Docum.	ESIA Chapter
				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
									monitoring, name of the expert etc. should be written onto the survey form. The individuals in the critical habitat should be observed along the 400m long 1 transect line. The samples of species should be captured by using sweep net. The monitoring should be done by slow walking at the same speed along the transect lines for 60 minutes between hours 09.30-17.30. No monitoring should be done at bad weather conditions (high winds, rainy, cloudy). The wind should be 5 or less according to Beafort scale which is accepted as wind causing movement of medium sized tree branches and leafs of small trees. The photographs of the critical habitat and individuals should be taken during the monitoring. These studies should be performed by an expert on zoology and an assistant researcher. The weather conditions (temperature, cloudness and wind), number of individuals, the day of monitoring, name of the expert etc. should be written onto the survey form. Achievement Criteria:						

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									- No invasive plant species on ROW - Vegetation cover of species of Compositae, Labiatae, Leguminosae family in the ROW should be; -at least %20 in the 1. year -at least %40 in the 2. year -at least %50 in the 3. year -at least %60 in the 5. Year - Population of the <i>Zonitis nigriventris</i> species should be at least “low” in the monitoring years.						
581	1-2	215+900-220+656 Critical Habitat (CH15)	Fauna <i>Montivipera wagneri</i>	-	Closed Construction Period: 1 June-1 July Pre-Construction * The top soil shall be scraped at a depth of 10-15 cm and shall be stored near the ROW. * <i>Montivipera wagneri</i> individuals shall be carried to the appropriate and close areas by specialists according to the methodology and to the (38 T 268212.00-4446232.00) coordinates at the begining of the July. * Stones and rocks of 30 cm or larger on the soil shall be stored nearby the construction site, without mixing them with the top soil. Post-Construction * The stored stones and rocks shall be spread to the ROW by embedding them in 5-10 cm soil, in accordance with the methodology.	-	-	CC	Methodology: Basic Principles In order to determine the presence and population of species in the critical habitat, counting of the individuals should be performed in first 3 years successively and then in 5th, 7th and 10th year successively. If the individuals of species are not determined in at least one of the counting years, the counting should be continued for at least 2 more periods. Reptilian Monitoring Methodology Transect Surveys Ideally, transect survey should meet the following assumptions: Transect lines should be selected arbitrarily. All samples on the transect lines should be observed. Individuals	Period Between 1 June - 30 July Frequency Twice in a year	Interim First-Findings in Monthly Report & Annual Biorestoration Monitoring Report	TANAP	Biorestorati on Monitoring Plan	BAP; Specification for Reinstatement	-

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				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
									should not be counted more than once in or between the transect lines. Expports should do the survey 12 m apart from each other along the linear transect line. 500m long transects at the start, center and end of the critical habitat should be monitored for 90 minutes at early hours between 06:00-10:00. Experts observe within the area of 1m in each side of transect, also high quality habitats (where natural shelters are located) can be included in 10m each side of transect. In daytime hours, natural shelters should be observed between hours 10::00-16:00. The rocks, stones or other materials whose underneath was observed should be replaced to their original location to minimize the disturbance. The head of captured individuals should be photographed from side and top and they should be let free. Photographs are compared and re-counting of the same individuals should be avoided. The following information should be recorded for identification: Expert, day and time, species, identification method, age of captured						

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									individual (infant, pre-adult adult), surface type (stone, stock, naked surface) and location in transect. These studies should be performed by an expert on herpetology and an assistant researcher. Achievement Criteria: Presence of nests under rocks and stones on ROW, detection of individuals of species, at least “rare” population level						
582	1-2	215+900-220+656 Critical Habitat (CH15)	Fauna <i>Polyommatus merhaba</i>	-	<p>Closed Construction Period: 1 June-1 July Pre-Construction * The top soil shall be scraped at a depth of 10-15 cm and shall be stored near the ROW. * The seeds of <i>Onobrychis</i> and <i>Astragalus</i> flora species shall be collected from the ROW between 15 July - 30 August. * Stones and rocks of 30 cm or larger on the soil shall be stored nearby the construction site, without mixing them with the top soil.</p> <p>Post-Construction * The stored stones and rocks shall be spread to the ROW by embedding them in 5-10 cm soil, in accordance with the methodology.</p>	-	-	CC	<p>Methodology: Basic Principles In order to determine the presence and population of species in the critical habitat, counting of the individuals should be performed in first 3 years successively and then in 5th, 7th and 10th year successively. If the individuals of species are not determined in at least one of the counting years, the counting should be continued for at least 2 more periods. Monitoring Methodology In the first year of monitoring of the species in the critical habitat, vegetation status of the area should be observed. The presence of species of <i>Onobrychis</i> and <i>Astragalus</i>, which are feeding plants of the species, should be detected along</p>	<p>Period May - June - July</p> <p>Frequency Once in a month</p>	Interim First-Findings in Monthly Report & Annual Biorestoration Monitoring Report	TANAP	Biorestorati on Monitoring Plan	BAP; Specification for Reinstatement	-

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									the construction corridor in the critical habitat. The number of individuals of feeding plants should be recorded in first 3 years. If the vegetation cover and presence of feeding plants are not at desired level in the monitoring years, the monitoring should be extended for 1 more year. The determination if the vegetation cover and species diversity are at desired level should be done by a botanic expert. It should be monitored that the stones with 30cm and larger those were placed near ROW were taken into the ROW and dumped 5-10cm into the soil. These studies should be performed by an expert on zoology and an assistant researcher. The photographs of the critical habitat and individuals should be taken during the monitoring. The weather conditions (temperature, cloudness and wind), number of individuals, the day of monitoring, name of the expert etc. should be written onto the survey form. Adult Butterfly Monitoring Scheme Methodology Adult individuals of the species						

RefNo .	Ph.	Specific Location (and KP)	Environmental Component ²	Project Commitment					Monitoring				Mang. Plan	Addition. Docum.	ESIA Chapter
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									should be counted on 4 transect lines those will be determined in the critical habitat by walking for 45-60 minutes. The hours when butterflys area most active are 3.5 hours after sunrise and 3.5 hours before sunset. Thus, monitoring hours should be between hours 09:30 - 17:30. The weather temperature of the monitoring day should be above 13°C. If the weather temperature is between 13-17°C, the weather should be sunny and cloud cover should be 50% or less. If the weather temperature is above 17°C, cloud cover can be more than 50%. The wind should be 5 or less according to Beafort scale which is accepted as wind causing movement of medium sized tree branches and leafs of small trees. The area covering 2.5 m length in left and right sides and 5 m length in front and back of the observer is the counting area and the individuals in this area should be counted. The individuals in the counting area should be counted by observing. Each individual should be counted for one time.						

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				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
									<p>Achievement Criteria: -Vegetation cover of Onobrychis and Astragalus in the ROW should be; -at least %10 in the 1. year -at least %25 in the 2. year -at least %40 in the 3. year -at least %60 in the 5. Year</p> <p>-Population of the <i>Polyommatus merhaba</i> species should be; -“rare” in the end of 1. year -“low” in the end of 2. and other monitoring years.</p> <p>-The number of nests (especially <i>Myrmica</i> species) under stones on ROW should be; -at least %10 in the 1. year -at least %30 in the 2. year -at least %50 in the 3. year -at least %70 in the 5. year of the number of nests in the areas adjacent to ROW.</p>						
583	1-2	307+380-313+386 Critical Habitat (CH17)	Fauna <i>Vanellus gregarius</i>	-	<p>Closed Construction Period: March, and between 15 September-30 October * The top soil shall be scraped at a depth of 10-15 cm and shall be stored near the ROW.</p> <p>Post-Construction</p> <p>* The riparian vegetation, aquatic and semi aquatic areas shall be rehabilitated.</p>	-	-	CC	<p>Methodology: Basic Principles In order to determine the presence and population of species in the critical habitat, counting of the individuals should be performed in first 3 years successively and then in 5th, 7th and 10th year successively. If the individuals of species are not determined in at least one of the counting years, the counting should be continued for</p>	<p>Period Between 15 July - 30 August</p> <p>Frequency Once in fifteen days</p>	Interim First-Findings in Monthly Report & Annual Biorestration Monitoring Report	TANAP	Biorestorati on Monitoring Plan	BAP; Specification for Reinstatement	-

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				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
									at least 2 more periods. This species has a regional distribution in the world and has quite low population. The majority of the population are seen in open grasslands in Russia and Kazakhstan. They put three to five eggs into ground nests. They elect their Insects and other small prey from pasture lands or farmlands. There is continuing decline in their population due to habitat fragmentation and loss. They use our country as migration route during migration season. Monitoring Methodology Site observations and counting should be done at the points in the critical habitat during migration seasons March and September for one day. Vantage point survey technique should be used in the observations. 3 vantage points should be determined to do the observation and counting. The observations should be done for 45 minutes at each point in the period 2 hours after sunrise. Binoculars and telescope should be used during the observations. These studies should be performed by an						

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RefNo .	Ph.	Specific Location (and KP)	Environmental Component ²	Project Commitment					Monitoring				Mang. Plan	Addition. Docum.	ESIA Chapter
				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
									expert on zoology and an assistant researcher. The following information on the observed individuals should be recorded onto survey form; the aim of area usage, counts, duration of area usage. Achievement Criteria: Detection of 1 or more individuals in the observation area						
584	1-2	389+036-392+485 Critical Habitat (CH19)	Fauna <i>Polyommatus antiodolus</i>	-	Pre-Construction * 20 cm of top soil of the ROW (which is ant's nest depth) shall be scraped 15 days before the construction works and shall be stored near the ROW. * The stones and rocks shall be stored nearby the construction site. * The seeds of the plants of the <i>Onobrychis</i> and <i>Astragalus</i> genus, which are the food plants of the larvae, shall be collected between 15 July - 30 August. Post-Construction * Stone and rock restoration shall be done according to the methodology * The collected seeds of the <i>Onobrychis</i> and <i>Astragalus</i> plants shall be planted to the ROW and to the (37 S 625818.65-4418259.08 /37 S 626292.01-4418397.42 / 37 S 626832.86-4418541.91 /37 S 627342.77-4418689.28 / 37 S 628381.92-4419157.26) coordinates between September-November.	-	-	CC	Methodology: Basic Principles In order to determine the presence and population of species in the critical habitat, counting of the individuals should be performed in first 3 years successively and then in 5th, 7th and 10th year successively. If the individuals of species are not determined in at least one of the counting years, the counting should be continued for at least 2 more periods. Monitoring Methodology In the first year of monitoring of the species in the critical habitat, vegetation status of the area should be observed. The presence of species of <i>Onobrychis</i> , <i>Astragalus</i> and <i>Ononis spinosa</i> , which are feeding plants of the species, should be detected along the construction corridor in the critical habitat.	Period March and 15 th of September-30 th of October Frequency Twice a year	Interim First-Findings in Monthly Report & Annual Biorestoration Monitorin g Report	TANAP	Biorestorati on Monitoring Plan	BAP; Specification for Reinstatement	-

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									The number of individuals of feeding plants should be recorded in first 3 years. If the vegetation cover and presence of feeding plants are not at desired level in the monitoring years, the monitoring should be extended for 1 more year. The determination if the vegetation cover and species diversity are at desired level should be done by a botanic expert. It should be monitored that the stones with 30cm and larger those were placed near ROW were taken into the ROW and dumped 5-10cm into the soil. These studies should be performed by an expert on zoology and an assistant researcher. Adult Butterfly Monitoring Scheme Methodology Adult individuals of the species should be counted on 5 transect lines those will be determined in the critical habitat by walking for 45-60 minutes. The hours when butterflys area most active are 3.5 hours after sunrise and 3.5 hours before sunset. Thus, monitoring hours should be between hours 09:30 - 17:30. The weather temperature of the monitoring						

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									day should be above 13°C. If the weather temperature is between 13-17°C, the weather should be sunny and cloud cover should be 50% or less. If the weather temperature is above 17°C, cloud cover can be more than 50%. The wind should be 5 or less according to Beafort scale which is accepted as wind causing movement of medium sized tree branches and leafs of small trees. The area covering 2.5 m length in left and right sides and 5 m length in front and back of the observer is the counting area and the individuals in this area should be counted. The individuals in the counting area should be counted by observing. Each individual should be counted for one time. The photographs of the critical habitat and individuals should be taken during the monitoring. The weather conditions (temperature, cloudness and wind), number of individuals, the day of monitoring, name of the expert etc. should be written onto the survey form. Achievement Criteria:						

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RefNo .	Ph.	Specific Location (and KP)	Environmental Component ²	Project Commitment					Monitoring				Mang. Plan	Addition. Docum.	ESIA Chapter
				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
									-Vegetation cover of <i>Onobrychis</i> , <i>Astragalus</i> and <i>Ononis spinosa</i> in the ROW should be; -at least %10 in the 1. year -at least %20 in the 2. year -at least %40 in the 3. year -at least %60 in the 5. Year -Population of the <i>Polyommatus antidolus</i> species should be; -“rare” in the end of 1. year -“low” in the end of 2. and other monitoring years. -The number of nests (especially <i>Myrmica</i> species) under stones on ROW should be; -at least %10 in the 1. year -at least %30 in the 2. year -at least %50 in the 3. year -at least %70 in the 5. year of the number of nests in the areas adjacent to ROW.						
585	1-2	395+974-396+824 Critical Habitat (CH20)	Fauna <i>Zonitis nigriventris</i>	-	Pre-Construction * The top soil shall be scraped at a depth of 10-15 cm and shall be stored near the ROW. * Tall plants belonging to the <i>Compositae</i> , <i>Labiatae</i> , <i>Leguminosae</i> families in the area shall be harvested at the end of August, at the end of the vegetation period and shall be stored nearby the construction site. Post-Construction * The harvested plants, containing eggs shall be transferred to the area and spread on the soil.	-	-	CC	Methodology: Basic Principles In order to determine the presence and population of species in the critical habitat, counting of the individuals should be performed in first 3 years successively and then in 5th, 7th and 10th year successively. If the individuals of species are not determined in at least one of the counting years, the counting should be continued for	Period Adult Survey between 10 July - 30 August Frequency In every 15 days	Interim First-Findings in Monthly Report & Annual Biorestoration Monitoring Report	TANAP	Biorestoration Monitoring Plan	BAP; Specification for Reinstatement	-

RefNo .	Ph.	Specific Location (and KP)	Environmental Component ²	Project Commitment					Monitoring				Mang. Plan	Addition. Docum.	ESIA Chapter
				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
									at least 2 more periods. The vegetation status of the critical habitat should be observed before the monitoring of the species. The presence of species of Compositae, Labiatae, Leguminosae family, which are resting and feeding plants of the species, should be detected along the construction corridor in the critical habitat. The determination if the vegetation cover and species diversity are at desired level should be done by a botanic expert. If the vegetation cover and presence of plants are not at desired level in the monitoring years, the monitoring should be extended for 1 more year. These studies should be performed by an expert on zoology and an assistant researcher. The photographs of the critical habitat and individuals should be taken during the monitoring. The weather conditions (temperature, cloudness and wind), number of individuals, the day of monitoring, name of the expert etc. should be written onto the survey form. The individuals in the critical habitat should be observed						

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									along the 400m long 1 transect line. The samples of species should be captured by using sweep net. The monitoring should be done by slow walking at the same speed along the transect lines for 60 minutes between hours 09.30-17.30. No monitoring should be done at bad weather conditions (high winds, rainy, cloudy). The wind should be 5 or less according to Beafort scale which is accepted as wind causing movement of medium sized tree branches and leafs of small trees. The samples should be collected to determine if the species is critical or not. Achievement Criteria: - No invasive plant species on ROW - Vegetation cover of species of Compositae, Labiatae, Leguminosae family in the ROW should be; -at least %20 in the 1. year -at least %40 in the 2. year -at least %50 in the 3. year -at least %60 in the 5. Year - Population of the <i>Zonitis nigriventris</i> species should be at least “low” in the monitoring years.						

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586	1-2	453+943-456+605 Critical Habitat (CH22)	Fauna <i>Polyommatus actis</i>	-	Pre-Construction * The seeds of <i>Onobrychis</i> and <i>Astragalus</i> species shall be collected near the ROW between 15 July-15 August. * 20 cm of top soil of the ROW (which is ant's nest depth) shall be scraped together with rocks and stones 15 days before the construction works and shall be stored near the ROW. Post-Construction * The collected seeds of <i>Onobrychis</i> and <i>Astragalus</i> species shall be planted according to the methodology and to the (37 S 576028.17-4425766.25 / 37 S 576523.38-4425039.53 / 37 S 576546.39-4423957.85) coordinates on the ROW between September-November. * The stones and rocks shall be re-organized on top of the soil according to the methodology.	-	-	CC	Methodology: Basic Principles In order to determine the presence and population of species in the critical habitat, counting of the individuals should be performed in first 3 years successively and then in 5th, 7th and 10th year successively. If the individuals of species are not determined in at least one of the counting years, the counting should be continued for at least 2 more periods. In the first year of monitoring of the species in the critical habitat, vegetation status of the area should be observed. The presence of species of <i>Onobrychis</i> , <i>Astragalus</i> , <i>Coronilla</i> and <i>Fabaceae</i> , which are resting and feeding plants of the species, should be detected along the construction corridor in the critical habitat. The number of individuals of feeding plants should be recorded in first 3 years. If the vegetation cover and presence of plants are not at desired level in the monitoring years, the monitoring should be extended for 1 more year. The determination if the vegetation cover and species diversity are at desired level should be	Period Between 1 June - 30 July Frequency Twice in a year	Interim First-Findings in Monthly Report & Annual Biorestoration Monitoring Report	TANAP	Biorestorati on Monitoring Plan	BAP; Specification for Reinstatement	-

RefNo .	Ph.	Specific Location (and KP)	Environmental Component ²	Project Commitment					Monitoring				Mang. Plan	Addition. Docum.	ESIA Chapter
				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
									done by a botanic expert. It should be monitored that the stones with 30cm and larger those were placed near ROW were taken into the ROW and dumped 5-10cm into the soil. These studies should be performed by an expert on zoology and an assistant researcher. The weather conditions (temperature, cloudness and wind), number of individuals, the day of monitoring, name of the expert etc. should be written onto the survey form. Adult Butterfly Monitoring Scheme Methodology Adult individuals of the species should be counted on 2 transect lines those will be determined in the critical habitat by walking for 45-60 minutes. The hours when butterflys area most active are 3.5 hours after sunrise and 3.5 hours before sunset. Thus, monitoring hours should be between hours 09:30 - 17:30. The weather temperature of the monitoring day should be above 13°C. If the weather temperature is between 13-17°C, the weather should be sunny and cloud cover should be 50% or less. If the						

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									weather temperature is above 17° C, cloud cover can be more than 50%. The wind should be 5 or less according to Beafort scale which is accepted as wind causing movement of medium sized tree branches and leafs of small trees. The area covering 2.5 m length in left and right sides and 5 m length in front and back of the observer is the counting area and the individuals in this area should be counted. The individuals in the counting area should be counted by observing. Each individual should be counted for one time. The photographs of the critical habitat and individuals should be taken during the monitoring. Achievement Criteria: -Vegetation cover of <i>Onobrychis</i> , <i>Astragalus</i> , <i>Coronilla</i> and <i>Fabaceae</i> in the ROW should be; -at least %10 in the 1. year -at least %20 in the 2. year -at least %40 in the 3. year -at least %60 in the 5. Year -Population of the <i>Polyommatus actis</i> species should be; -“rare” in the end of 1. year -“low” in the end of 2. and other						

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				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
									monitoring years. -The number of nests (especially <i>Myrmica</i> species) under stones on ROW should be; -at least %10 in the 1. year -at least %30 in the 2. year -at least %50 in the 3. year -at least %70 in the 5. year of the number of nests in the areas adjacent to ROW.						
587	1-2	520+252-523+585 Critical Habitat (CH23)	Fauna <i>Polyommatus actis</i>	-	Closed Construction Period: 1 May-1 June Pre-Construction * The seeds of <i>Onobrychis</i> and <i>Astragalus</i> species shall be collected between 1 July-1 August. * 20 cm of top soil of the ROW (which is ant's nest depth) shall be scraped together with rocks and stones 15 days before the construction works and shall be stored near the ROW. Post-Construction * The collected seeds of <i>Onobrychis</i> and <i>Astragalus</i> species shall be planted according to the methodology and to the (37 S 523732.00-4427059.00 / 37 S 523091.00-4426900.00 / 37 S 522478.00-4426726.00 / 37 S 522307.00-4426273.00 / 37 S 521915.00-4425841.00) coordinates to the ROW between September-November. * The stones and rocks shall be re-organized on top of the soil according to the methodology.	-	-	CC	Methodology: Basic Principles In order to determine the presence and population of species in the critical habitat, counting of the individuals should be performed in first 3 years successively and then in 5th, 7th and 10th year successively. If the individuals of species are not determined in at least one of the counting years, the counting should be continued for at least 2 more periods. In the first year of monitoring of the species in the critical habitat, vegetation status of the area should be observed. The presence of species of <i>Onobrychis</i> , <i>Astragalus</i> , <i>Coronilla</i> and <i>Fabaceae</i> , which are resting and feeding plants of the species, should be detected along the construction corridor in the critical habitat. The number of individuals of feeding plants	Period Between 20 June - 20 August Frequency In every 15 days	Interim First-Findings in Monthly Report & Annual Biorestoration Monitoring Report	TANAP	Biorestorati on Monitoring Plan	BAP; Specification for Reinstatement	-

RefNo .	Ph.	Specific Location (and KP)	Environmental Component ²	Project Commitment					Monitoring				Mang. Plan	Addition. Docum.	ESIA Chapter
				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
									should be recorded in first 3 years. If the vegetation cover and presence of plants are not at desired level in the monitoring years, the monitoring should be extended for 1 more year. The determination if the vegetation cover and species diversity are at desired level should be done by a botanic expert. It should be monitored that the stones with 30cm and larger those were placed near ROW were taken into the ROW and dumped 5-10cm into the soil. These studies should be performed by an expert on zoology and an assistant researcher. The weather conditions (temperature, cloudness and wind), number of individuals, the day of monitoring, name of the expert etc. should be written onto the survey form. Adult Butterfly Monitoring Scheme Methodology Adult individuals of the species should be counted on 400m logn 3 transect lines those will be determined in the critical habitat by walking for 45-60 minutes. The hours when butterflys area most active are 3.5 hours after sunrise and 3.5						

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				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
									hours before sunset. Thus, monitoring hours should be between hours 09:30 - 17:30. The weather temperature of the monitoring day should be above 13°C. If the weather temperature is between 13-17°C, the weather should be sunny and cloud cover should be 50% or less. If the weather temperature is above 17°C, the weather should be more than 50%. The wind should be 5 or less according to Beafort scale which is accepted as wind causing movement of medium sized tree branches and leafs of small trees. The area covering 2.5 m length in left and right sides and 5 m length in front and back of the observer is the counting area and the individuals in this area should be counted. The individuals in the counting area should be counted by observing. The photographs of the critical habitat and individuals should be taken during the monitoring. Achievement Criteria: -Vegetation cover of <i>Onobrychis</i> , <i>Astragalus</i> , <i>Coronilla</i> and <i>Fabaceae</i> in the ROW should be; -at least %10 in the 1. year						

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				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
									-at least %20 in the 2. year -at least %40 in the 3. year -at least %60 in the 5. Year -Population of the <i>Polyommatus actis</i> species should be; -“rare” in the end of 1. year -“low” in the end of 2. and other monitoring years. -The number of nests (especially <i>Myrmica</i> species) under stones on ROW should be; -at least %10 in the 1. year -at least %30 in the 2. year -at least %50 in the 3. year -at least %70 in the 5. year of the number of nests in the areas adjacent to ROW.						
588	1-2	637+009-637+035 Critical Habitat (CH31)	Fauna <i>Hexatoma n. sp.</i>	-	Pre-Construction * The top soil shall be scraped at a depth of 10-15 cm and shall be stored near the ROW. Post-Construction * The riparian vegetation shall be restored and aquatic and semi-aquatic areas shall be re-created.	-	-	CC	Methodology: Basic Principles In order to determine the presence and population of species in the critical habitat, counting of the individuals should be performed in first 3 years successively and then in 5th, 7th and 10th year successively. If the individuals of species are not determined in at least one of the counting years, the counting should be continued for at least 2 more periods. Monitoring Methodology The river crossing and riparian vegetation status of the crossing in the critical habitat	Period Between 20 June - 20 August Frequency In every 15 days	Interim First-Findings in Monthly Report & Annual Biorestoration Monitoring Report	TANAP	Biorestorati on Monitoring Plan	BAP; Specification for Reinstatement	-

RefNo .	Ph.	Specific Location (and KP)	Environmental Component ²	Project Commitment					Monitoring				Mang. Plan	Addition. Docum.	ESIA Chapter
				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
									should be observed before the monitoring of the species. If the vegetation cover and presence of plants are not at desired level in the monitoring years, the monitoring should be extended for 1 more year. The determination if the vegetation cover and species diversity are at desired level should be done by a botanic expert. These studies should be performed by an expert on zoology and an assistant researcher. The photographs of the critical habitat and individuals should be taken during the monitoring. The weather conditions (temperature, cloudness and wind), number of individuals, the day of monitoring, name of the expert etc. should be written onto the survey form. Transect surveys should be done along the riparian vegetation in the critical habitat for 45 minutes between hours 09:30 - 17:30. The samples of species should be captured by using sweep net. No monitoring should be done at bad weather conditions (high winds, rainy, cloudy). The wind should be 5 or less according to Beafort scale						

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RefNo .	Ph.	Specific Location (and KP)	Environmental Component ²	Project Commitment					Monitoring				Mang. Plan	Addition. Docum.	ESIA Chapter
				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
									<p>which is accepted as wind causing movement of medium sized tree branches and leafs of small trees. The samples should be collected to determine if the species is critical or not.</p> <p>Achievement Criteria:</p> <p>- Water flow in the river is at the same level before construction</p> <p>- Vegetation cover in the ROW should be;</p> <p>-at least %20 in the 1. year</p> <p>-at least %40 in the 2. year</p> <p>-at least %50 in the 3. year</p> <p>-at least %60 in the 5. Year</p> <p>-Population of the <i>Hexatoma n. sp.</i> species should be;</p> <p>-“rare” in the end of 1. year</p> <p>-“low” in the end of 2. and other monitoring years.</p>						
589	1-2	637+009-637+035 Critical Habitat (CH31)	Fauna <i>Tipula n.sp</i>	-	<p>Pre-Construction</p> <p>* The top soil shall be scraped at a depth of 10-15 cm and shall be stored near the ROW.</p> <p>Post-Construction</p> <p>* The riparian vegetation shall be restored and aquatic and semi-aquatic areas shall be re-created.</p>	-	-	CC	<p>Methodology:</p> <p>Basic Principles</p> <p>In order to determine the presence and population of species in the critical habitat, counting of the individuals should be performed in first 3 years successively and then in 5th, 7th and 10th year successively. If the individuals of species are not determined in at least one of the counting years, the counting should be continued for at least 2 more periods.</p>	<p>Period</p> <p>Between 1 May - 25 June</p> <p>Frequency</p> <p>In every 2 weeks</p>	Interim First-Findings in Monthly Report & Annual Biorestoration Monitorin g Report	TANAP	Biorestorati on Monitoring Plan	BAP; Specification for Reinstatement	-

RefNo .	Ph.	Specific Location (and KP)	Environmental Component ²	Project Commitment					Monitoring				Mang. Plan	Addition. Docum.	ESIA Chapter
				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
									Monitoring Methodology The river crossing and riparian vegetation status of the crossing in the critical habitat should be observed before the monitoring of the species. If the vegetation cover and presence of plants are not at desired level in the monitoring years, the monitoring should be extended for 1 more year. The determination if the vegetation cover and species diversity are at desired level should be done by a botanic expert. These studies should be performed by an expert on zoology and an assistant researcher. The weather conditions (temperature, cloudness and wind), number of individuals, the day of monitoring, name of the expert etc. should be written onto the survey form. Transect surveys should be done along the riparian vegetation in the critical habitat for 45 minutes between hours 09:30 - 17:30. The samples of species should be captured by using sweep net. No monitoring should be done at bad weather conditions (high winds, rainy, cloudy).						

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RefNo .	Ph.	Specific Location (and KP)	Environmental Component ²	Project Commitment					Monitoring				Mang. Plan	Addition. Docum.	ESIA Chapter
				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
									The wind should be 5 or less according to Beafort scale which is accepted as wind causing movement of medium sized tree branches and leafs of small trees. The individuals in the counting area should be counted by observing. Each individual should be counted for one time. The photographs of the critical habitat and individuals should be taken during the monitoring. Achievement Criteria: - Water flow in the river is at the same level before construction - Vegetation cover in the ROW should be; -at least %10 in the 1. year -at least %20 in the 2. year -at least %40 in the 3. year -at least %60 in the 5. Year -Population of the <i>Tipula n.sp.</i> species should be; -“rare” in the end of 1. year -“low” in the end of 2. and other monitoring years.						
590	1-2	654+103-656+981 Critical Habitat (CH32)	Fauna <i>Tipula n.sp</i>	-	Closed Construction Period: 1 May-1 June Pre-Construction * The top soil shall be scraped at a depth of 10-15 cm and shall be stored near the ROW. Post-Construction *The stored top soil should be laid back in 3 months at the latest. *Habitat should be restored.	-	-	CC	Methodology: Basic Principles In order to determine the presence and population of species in the critical habitat, counting of the individuals should be performed in first 3 years successively and then in 5th, 7th	Period Between 20 May - 15 July Frequency In every 2 weeks	Interim First-Findings in Monthly Report & Annual Biorestoreation	TANAP	Biorestorati on Monitoring Plan	BAP; Specification for Reinstatement	-

RefNo .	Ph.	Specific Location (and KP)	Environmental Component ²	Project Commitment					Monitoring				Mang. Plan	Addition. Docum.	ESIA Chapter
				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
									and 10th year successively. If the individuals of species are not determined in at least one of the counting years, the counting should be continued for at least 2 more periods. Monitoring Methodology The river crossing and riparian vegetation status of the crossing in the critical habitat should be observed before the monitoring of the species. If the vegetation cover and presence of plants are not at desired level in the monitoring years, the monitoring should be extended for 1 more year. The determination if the vegetation cover and species diversity are at desired level should be done by a botanic expert. These studies should be performed by an expert on zoology and an assistant researcher. The weather conditions (temperature, cloudness and wind), number of individuals, the day of monitoring, name of the expert etc. should be written onto the survey form. The individuals in the critical habitat should be observed along the 3 transect lines. The samples of species should be captured by		Monitorin g Report				

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RefNo .	Ph.	Specific Location (and KP)	Environmental Component ²	Project Commitment					Monitoring				Mang. Plan	Addition. Docum.	ESIA Chapter
				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
									using sweep net. No monitoring should be done at bad weather conditions (high winds, rainy, cloudy). The wind should be 5 or less according to Beafort scale which is accepted as wind causing movement of medium sized tree branches and leafs of small trees. The individuals in the counting area should be counted by observing. Each individual should be counted for one time. The photographs of the critical habitat and individuals should be taken during the monitoring. Achievement Criteria: - Water flow in the river is at the same level before construction - Vegetation cover in the ROW should be; -at least %10 in the 1. year -at least %20 in the 2. year -at least %40 in the 3. year -at least %60 in the 5. Year -Population of the <i>Tipula n.sp.</i> species should be; -“rare” in the end of 1. year -“low” in the end of 2. and other monitoring years.						
591	1-2	658+103-658+534 Critical Habitat (CH33)	Fauna <i>Tipula n.sp</i>	-	Closed Construction Period: 1 May-1 June Pre-Construction * The top soil shall be scraped at a depth of 10-15 cm and shall be stored near the ROW. Post-Construction	-	-	CC	Methodology: Basic Principles In order to determine the presence and population of species in the critical habitat,	Period Between 20 May - 15 July	Interim First-Findings in Monthly Report &	TANAP	Biorestorati on Monitoring Plan	BAP; Specification for Reinstatement	-

RefNo .	Ph.	Specific Location (and KP)	Environmental Component ²	Project Commitment					Monitoring				Mang. Plan	Addition. Docum.	ESIA Chapter
				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
					*The stored top soil should be laid back in 3 months at the latest. *Habitat should be restored.				counting of the individuals should be performed in first 3 years successively and then in 5th, 7th and 10th year successively.If the individuals of species are not determined in at least one of the counting years, the counting should be continued for at least 2 more periods. Monitoring Methodology The river crossing and riparian vegetation status of the crossing in the critical habitat should be observed before the monitoring of the species. If the vegetation cover and presence of plants are not at desired level in the monitoring years, the monitoring should be extended for 1 more year. The determination if the vegetation cover and species diversity are at desired level should be done by a botanic expert. These studies should be performed by an expert on zoology and an assistant researcher. The weather conditions (temperature, cloudness and wind), number of individuals, the day of monitoring, name of the expert etc. should be written onto the survey form. The individuals in the critical	Frequency In every 2 weeks	Annual Biorestoration Monitoring Report				

RefNo .	Ph.	Specific Location (and KP)	Environmental Component ²	Project Commitment					Monitoring				Mang. Plan	Addition. Docum.	ESIA Chapter
				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
									habitat should be observed along the transect line. The samples of species should be captured by using sweep net. No monitoring should be done at bad weather conditions (high winds, rainy, cloudy). The wind should be 5 or less according to Beafort scale which is accepted as wind causing movement of medium sized tree branches and leafs of small trees. The individuals in the counting area should be counted by observing. Each individual should be counted for one time. The photographs of the critical habitat and individuals should be taken during the monitoring. Achievement Criteria: - Water flow in the river is at the same level before construction - Vegetation cover in the ROW should be; -at least %10 in the 1. year -at least %20 in the 2. year -at least %40 in the 3. year -at least %60 in the 5. Year -Population of the <i>Tipula n.sp.</i> species should be; -“rare” in the end of 1. year -“low” in the end of 2. and other monitoring years.						

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RefNo .	Ph.	Specific Location (and KP)	Environmental Component ²	Project Commitment					Monitoring				Mang. Plan	Addition. Docum.	ESIA Chapter
				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
592	1-2	662+456-662+559 Critical Habitat (CH34)	Fauna <i>Tipula n.sp</i>	-	<p>Closed Construction Period: 1 May-1 June</p> <p>Pre-Construction</p> <p>* The top soil shall be scraped at a depth of 10-15 cm and shall be stored near the ROW.</p> <p>Post-Construction</p> <p>*The stored top soil should be laid back in 3 months at the latest.</p> <p>*Habitat should be restored.</p>	-	-	CC	<p>Methodology:</p> <p>Basic Principles</p> <p>In order to determine the presence and population of species in the critical habitat, counting of the individuals should be performed in first 3 years successively and then in 5th, 7th and 10th year successively. If the individuals of species are not determined in at least one of the counting years, the counting should be continued for at least 2 more periods.</p> <p>Monitoring Methodology</p> <p>The river crossing and riparian vegetation status of the crossing in the critical habitat should be observed before the monitoring of the species. If the vegetation cover and presence of plants are not at desired level in the monitoring years, the monitoring should be extended for 1 more year. The determination if the vegetation cover and species diversity are at desired level should be done by a botanic expert. These studies should be performed by an expert on zoology and an assistant researcher. The weather conditions (temperature, cloudness and wind), number of individuals, the day of</p>	<p>Period</p> <p>Between 20 May - 15 July</p> <p>Frequency</p> <p>In every 2 weeks</p>	Interim First-Findings in Monthly Report & Annual Biorestoration Monitoring Report	TANAP	Biorestorati on Monitoring Plan	BAP; Specification for Reinstatement	-

RefNo .	Ph.	Specific Location (and KP)	Environmental Component ²	Project Commitment					Monitoring				Mang. Plan	Addition. Docum.	ESIA Chapter
				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
									monitoring, name of the expert etc. should be written onto the survey form. The individuals in the critical habitat should be observed along the transect line. The samples of species should be captured by using sweep net. No monitoring should be done at bad weather conditions (high winds, rainy, cloudy). The wind should be 5 or less according to Beafort scale which is accepted as wind causing movement of medium sized tree branches and leafs of small trees. The individuals in the counting area should be counted by observing. Each individual should be counted for one time. The photographs of the critical habitat and individuals should be taken during the monitoring. Achievement Criteria: - Water flow in the river is at the same level before construction - Vegetation cover in the ROW should be; -at least %10 in the 1. year -at least %20 in the 2. year -at least %40 in the 3. year -at least %60 in the 5. Year -Population of the <i>Tipula n.sp.</i> species should be;						

RefNo .	Ph.	Specific Location (and KP)	Environmental Component ²	Project Commitment					Monitoring				Mang. Plan	Addition. Docum.	ESIA Chapter
				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
									-“rare” in the end of 1. year -“low” in the end of 2. and other monitoring years.						
593	1-2	663+309-663+812 Critical Habitat (CH35)	Fauna <i>Tipula n.sp</i>	-	Closed Construction Period: 1 May-1 June Pre-Construction * The top soil shall be scraped at a depth of 10-15 cm and shall be stored near the ROW. Post-Construction *The stored top soil should be laid back in 3 months at the latest. *Habitat should be restored.	-	-	CC	Basic Principles In order to determine the presence and population of species in the critical habitat, counting of the individuals should be performed in first 3 years successively and then in 5th, 7th and 10th year successively. If the individuals of species are not determined in at least one of the counting years, the counting should be continued for at least 2 more periods. Monitoring Methodology The river crossing and riparian vegetation status of the crossing in the critical habitat should be observed before the monitoring of the species. If the vegetation cover and presence of plants are not at desired level in the monitoring years, the monitoring should be extended for 1 more year. The determination if the vegetation cover and species diversity are at desired level should be done by a botanic expert. These studies should be performed by an expert on zoology and an assistant researcher.	Period Between 20 May - 15 July Frequency In every 2 weeks	Interim First-Findings in Monthly Report & Annual Biorestoration Monitoring Report	TANAP	Biorestoration Monitoring Plan	BAP; Specification for Reinstatement	-

RefNo .	Ph.	Specific Location (and KP)	Environmental Component ²	Project Commitment					Monitoring				Mang. Plan	Addition. Docum.	ESIA Chapter
				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
									The weather conditions (temperature, cloudness and wind), number of individuals, the day of monitoring, name of the expert etc. should be written onto the survey form. The individuals in the critical habitat should be observed along the transect line. The samples of species should be captured by using sweep net. No monitoring should be done at bad weather conditions (high winds, rainy, cloudy). The wind should be 5 or less according to Beafort scale which is accepted as wind causing movement of medium sized tree branches and leafs of small trees. The individuals in the counting area should be counted by observing. Each individual should be counted for one time. The photographs of the critical habitat and individuals should be taken during the monitoring. Achievement Criteria: - Water flow in the river is at the same level before construction - Vegetation cover in the ROW should be; -at least %10 in the 1. year -at least %20 in the 2. year -at least %40 in the 3. year						

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RefNo	Ph.	Specific Location (and KP)	Environmental Component ²	Project Commitment					Monitoring				Mang. Plan	Addition. Docum.	ESIA Chapter
				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
									-at least %60 in the 5. Year -Population of the <i>Tipula n.sp.</i> species should be; -“rare” in the end of 1. year -“low” in the end of 2. and other monitoring years.						
594	1-2	687+002-687+037 Critical Habitat (CH36)	Fauna <i>Dismachus safranboluticus</i>	-	<p>Closed Construction Period: 1 May-1 June Pre-Construction * Herbaceous plants shall be harvested and 10-15 cm of top soil of the ROW shall be scraped and stored near the ROW.</p> <p>Post-Construction * Harvested herbaceous plants, which carried <i>Dismachus safranboluticus's</i> eggs, shall be laid on the top soil.</p>	-	-	CC	<p>Methodology: Basic Principles In order to determine the presence and population of species in the critical habitat, counting of the individuals should be performed in first 3 years successively and then in 5th, 7th and 10th year successively. If the individuals of species are not determined in at least one of the counting years, the counting should be continued for at least 2 more periods.</p> <p>Monitoring Methodology The vegetation status of the critical habitat should be observed before the monitoring of the species. The presence of species of Poaceae family, which are resting and feeding plants of the species, should be detected along the construction corridor in the critical habitat. The determination if the vegetation cover and species diversity are at desired level should be done by a botanic expert. If the vegetation cover and presence of</p>	<p>Period Between 15 May - 30 June</p> <p>Frequency Once in every 2 weeks</p>	Interim First-Findings in Monthly Report & Annual Biorestoration Monitoring Report	TANAP	Biorestorati on Monitoring Plan	BAP; Specification for Reinstatement	-

RefNo .	Ph.	Specific Location (and KP)	Environmental Component ²	Project Commitment					Monitoring				Mang. Plan	Addition. Docum.	ESIA Chapter
				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
									Poaceae species are not at desired level in the monitoring years, the monitoring should be extended for 1 more year. The weather conditions (temperature, cloudness and wind), number of individuals, the day of monitoring, name of the expert etc. should be written onto the survey form. The individuals in the critical habitat should be observed along the transect line. The samples of species on the Poaceae plants should be captured by using sweep net. Transect surveys should be done along the critical habitat for 30 minutes between hours 09:30 - 17:30. No monitoring should be done at bad weather conditions (high winds, rainy, cloudy). The wind should be 5 or less according to Beafort scale which is accepted as wind causing movement of medium sized tree branches and leafs of small trees. These studies should be performed by an expert on zoology and an assistant researcher. The photographs of the critical habitat and individuals should be taken during the monitoring.						

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				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
									Achievement Criteria: - No invasive plant species on ROW - Vegetation cover of species of Poaceae family in the ROW should be; -at least %20 in the 1. year -at least %40 in the 2. year -at least %50 in the 3. year -at least %60 in the 5. Year - Population of the <i>Dysmachus safranboluticus</i> species should be; -“rare” in the end of 1. year -“low” in the end of 2. and other monitoring years.						
595	1-2	687+313-687+352 Critical Habitat (CH37)	Fauna <i>Dysmachus safranboluticus</i>	-	Closed Construction Period: 1 May-1 June Pre-Construction * Herbaceous plants shall be harvested and 10-15 cm of top soil of the ROW shall be scraped and stored near the ROW. Post-Construction * Harvested herbaceous plants, which carried <i>Dysmachus safranboluticus</i> 's eggs, shall be laid on the top soil.	-	-	CC	Methodology: Basic Principles In order to determine the presence and population of species in the critical habitat, counting of the individuals should be performed in first 3 years successively and then in 5th, 7th and 10th year successively. If the individuals of species are not determined in at least one of the counting years, the counting should be continued for at least 2 more periods. Monitoring Methodology The vegetation status of the critical habitat should be observed before the monitoring of the species. The presence of species of Poaceae family, which are resting and feeding plants of	Period Between 15 May - 30 June Frequency Once in every 2 weeks	Interim First-Findings in Monthly Report & Annual Biorestoretion Monitorin g Report	TANAP	Biorestorati on Monitoring Plan	BAP; Specification for Reinstatement	-

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				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
									the species, should be detected along the construction corridor in the critical habitat. The determination if the vegetation cover and species diversity are at desired level should be done by a botanic expert. If the vegetation cover and presence of Poaceae species are not at desired level in the monitoring years, the monitoring should be extended for 1 more year. The weather conditions (temperature, cloudness and wind), number of individuals, the day of monitoring, name of the expert etc. should be written onto the survey form. The individuals in the critical habitat should be observed along the transect line. The samples of species on the Poaceae plants should be captured by using sweep net. Transect surveys should be done along the critical habitat for 30 minutes between hours 09:30 - 17:30. No monitoring should be done at bad weather conditions (high winds, rainy, cloudy). The wind should be 5 or less according to Beafort scale which is accepted as wind causing movement of medium sized tree branches						

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				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
									and leafs of small trees. These studies should be performed by an expert on zoology and an assistant researcher. The photographs of the critical habitat and individials should be taken during the monitoring. Achievement Criteria: - No invasive plant species on ROW - Vegetation cover of species of Poaceae family in the ROW should be; -at least %20 in the 1. year -at least %40 in the 2. year -at least %50 in the 3. year -at least %60 in the 5. Year - Population of the <i>Dysmachus safranboluticus</i> species should be; -“rare” in the end of 1. year -“low” in the end of 2. and other monitoring years.						
596	1-2	749+987-753+060 Critical Habitat (CH45)	Fauna <i>Dysmachus safranboluticus</i>	-	Pre-Construction * The top soil shall be scraped at a depth of 10-15 cm and shall be stored near the ROW. * Herbaceous plants shall be harvested and stored near the ROW. Post-Construction * Harvested herbaceous plants, which carried <i>Dysmachus safranboluticus</i> 's eggs, shall be laid on the top soil.	-	-	CC	Methodology: Basic Principles In order to determine the presence and population of species in the critical habitat, counting of the individuals should be performed in first 3 years successively and then in 5th, 7th and 10th year successively. If the individuals of species are not determined in at least one of the counting years, the counting should be continued for	Period Between 15 May - 30 June Frequency Once in every 2 weeks	Interim First-Findings in Monthly Report & Annual Biorestoration Monitorin g Report	TANAP	Biorestorati on Monitoring Plan	BAP; Specification for Reinstatement	-

RefNo .	Ph.	Specific Location (and KP)	Environmental Component ²	Project Commitment					Monitoring				Mang. Plan	Addition. Docum.	ESIA Chapter
				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
									at least 2 more periods. Monitoring Methodology The vegetation status of the critical habitat should be observed before the monitoring of the species. The presence of species of Poaceae family, which are resting and feeding plants of the species, should be detected along the construction corridor in the critical habitat. The determination if the vegetation cover and species diversity are at desired level should be done by a botanic expert. If the vegetation cover and presence of Poaceae species are not at desired level in the monitoring years, the monitoring should be extended for 1 more year. The weather conditions (temperature, cloudness and wind), number of individuals, the day of monitoring, name of the expert etc. should be written onto the survey form. The individuals in the critical habitat should be observed along the 400m long 3 transect lines. The samples of species on the Poaceae plants should be captured by using sweep net. Transect surveys should be done along the critical habitat						

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				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
									for 60-90 minutes between hours 09:30 - 17:30. No monitoring should be done at bad weather conditions (high winds, rainy, cloudy). The wind should be 5 or less according to Beafort scale which is accepted as wind causing movement of medium sized tree branches and leafs of small trees. These studies should be performed by an expert on zoology and an assistant researcher. The photographs of the critical habitat and individuals should be taken during the monitoring. Achievement Criteria: - No invasive plant species on ROW - Vegetation cover of species of Poaceae family in the ROW should be; -at least %20 in the 1. year -at least %40 in the 2. year -at least %50 in the 3. year -at least %60 in the 5. Year - Population of the <i>Dysmachus safranboluticus</i> species should be; -“rare” in the end of 1. year -“low” in the end of 2. and other monitoring years.						
597	1-2	805+749-805+816 Critical Habitat (CH46)	Fauna <i>Hexatoma n. sp.</i>	-	Closed Construction Period: 1 May-15 June Pre-Construction * The top soil shall be scraped at a depth of 10-15 cm and shall be stored near the ROW.	-	-	CC	Methodology: General Principles In order to determine the presence and	Period Between 1 May - 25 June	Interim First-Findings in	TANAP	Biorestorati on	BAP; Specification	-

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				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
					<p>* <i>Juncus</i> species individuals shall be removed and transferred at the (37 S 276993.99-4415718.69) coordinates.</p> <p>Post-Construction</p> <p>* Riparian vegetation, aquatic and semi aquatic vegetation shall be restored.</p> <p>* <i>Juncus</i> species removed individuals shall be transferred on the ROW.</p>				population of species in the critical habitat, counting of the individuals should be performed in first 3 years successively and then in 5th, 7th and 10th year successively. If the individuals of species are not determined in at least one of the counting years, the counting should be continued for at least 2 more periods.	Frequency Twice in a year	Monthly Report & Annual Bioresta- tion Monitorin- g Report		Monitoring Plan	for Reinstatement	
									<p>Monitoring Methodology</p> <p>It should be observed that the <i>Juncus</i> species those were taken out of ROW before construction activities are taken into ROW. If the vegetation cover and presence of plants are not at desired level in the monitoring years, the monitoring should be extended for 1 more year.</p> <p>The determination if the vegetation cover and species diversity are at desired level should be done by a botanic expert. The weather conditions (temperature, cloudness and wind), number of individuals, the day of monitoring, name of the expert etc. should be written onto the survey form.</p> <p>The individuals in the critical habitat should be observed along the transect line. The samples of <i>Hexatoma</i> n. sp.</p>						

RefNo .	Ph.	Specific Location (and KP)	Environmental Component ²	Project Commitment					Monitoring				Mang. Plan	Addition. Docum.	ESIA Chapter
				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
									should be captured by using sweep net. Transect surveys should be done along the critical habitat for 45 minutes between hours 09:30 - 17:30. No monitoring should be done at bad weather conditions (high winds, rainy, cloudy). The wind should be 5 or less according to Beafort scale which is accepted as wind causing movement of medium sized tree branches and leafs of small trees. These studies should be performed by an expert on zoology and an assistant researcher. The photographs of the critical habitat and individuals should be taken during the monitoring. Achievement Criteria: - <i>Juncus sp.</i> should be in ROW - Vegetation cover in the ROW should be; -at least %20 in the 1. year -at least %30 in the 2. year -at least %40 in the 3. year -at least %70 in the 5. Year - Population of the <i>Hexatoma n. sp.</i> species should be; -“rare” in the end of 1. year -“low” in the end of 2. and other monitoring years.						

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				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
598	1-2	805+842-806+143 Critical Habitat (CH47)	Fauna <i>Hexatoma n. sp.</i>	-	<p>Closed Construction Period: 1 May-15 June</p> <p>Pre-Construction</p> <p>* The top soil shall be scraped at a depth of 10-15 cm and shall be stored near the ROW.</p> <p>* <i>Juncus</i> species individuals shall be removed and transferred at the (37 S 276993.99-4415718.69) coordinates.</p> <p>Post-Construction</p> <p>* Riparian vegetation, aquatic and semi aquatic vegetation shall be restored.</p> <p>* <i>Juncus</i> species removed individuals shall be transferred on the ROW.</p>	-	-	CC	<p>Methodology:</p> <p>General Principles</p> <p>In order to determine the presence and population of species in the critical habitat, counting of the individuals should be performed in first 3 years successively and then in 5th, 7th and 10th year successively. If the individuals of species are not determined in at least one of the counting years, the counting should be continued for at least 2 more periods.</p> <p>Monitoring Methodology</p> <p>It should be observed that the <i>Juncus</i> species those were taken out of ROW before construction activities are taken into ROW. If the vegetation cover and presence of plants are not at desired level in the monitoring years, the monitoring should be extended for 1 more year. The determination if the vegetation cover and species diversity are at desired level should be done by a botanic expert. The weather conditions (temperature, cloudness and wind), number of individuals, the day of monitoring, name of the expert etc. should be written onto the survey form. The individuals in the critical</p>	<p>Period</p> <p>Between 1 May - 25 June</p> <p>Frequency</p> <p>Twice in a year</p>	<p>Interim First-Findings in Monthly Report & Annual Biorestoration Monitoring Report</p>	TANAP	Biorestoration Monitoring Plan	BAP; Specification for Reinstatement	-

RefNo .	Ph.	Specific Location (and KP)	Environmental Component ²	Project Commitment					Monitoring				Mang. Plan	Addition. Docum.	ESIA Chapter
				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
									habitat should be observed along the transect line. The samples of Hexatoma n. sp. should be captured by using sweep net. Transect surveys should be done along the critical habitat for 45 minutes between hours 09:30 - 17:30. No monitoring should be done at bad weather conditions (high winds, rainy, cloudy). The wind should be 5 or less according to Beafort scale which is accepted as wind causing movement of medium sized tree branches and leafs of small trees. These studies should be performed by an expert on zoology and an assistant researcher. The photographs of the critical habitat and individuals should be taken during the monitoring. Achievement Criteria: - <i>Juncus sp.</i> should be in ROW - Vegetation cover in the ROW should be; -at least %20 in the 1. year -at least %30 in the 2. year -at least %40 in the 3. year -at least %70 in the 5. Year - Population of the <i>Hexatoma n. sp.</i> species should be; -“rare” in the end of 1. year -“low” in the end of 2. and						

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				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
									other monitoring years.						
599	1-2	818+756-818+768 Critical Habitat (CH48)	Fauna <i>Hilara n. sp.</i> 3	-	Pre-Construction * The riparian vegetation at the creek bank between the (815+368-815+380) KP's shall be scraped at a depth of 10-15 cm as a layer and stored at the creek side. Post-Construction * The riparian vegetation shall be restored between the (815+368-815+380) KP's and the creek flow shall be provided again.	-	-	CC	Methodology: Basic Principles In order to determine the presence and population of species in the critical habitat, counting of the individuals should be performed in first 3 years successively and then in 5th, 7th and 10th year successively. If the individuals of species are not determined in at least one of the counting years, the counting should be continued for at least 2 more periods. Monitoring Methodology The river crossing and riparian vegetation status of the crossing in the critical habitat should be observed before the monitoring of the species. Water should be following in the creek bed which is flying area of the species. If the water flow and riparian vegetation cover are not at desired level in the monitoring years, the monitoring should be extended for 1 more year. The weather conditions (temperature, cloudness and wind), number of individuals, the day of monitoring, name of the expert etc. should be	Period Between 1 May - 25 June Frequency Twice in a year	Interim First-Findings in Monthly Report & Annual Biorestoration Monitoring Report	TANAP	Biorestorati on Monitoring Plan	BAP; Specification for Reinstatement	-

RefNo .	Ph.	Specific Location (and KP)	Environmental Component ²	Project Commitment					Monitoring				Mang. Plan	Addition. Docum.	ESIA Chapter
				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
									written onto the survey form. Transect surveys should be done along the riparian vegetation in the critical habitat for 45 minutes between hours 09:30 - 17:30. The samples of Hilara sp. flying over the creek should be captured by using sweep net. No monitoring should be done at bad weather conditions (high winds, rainy, cloudy). The wind should be 5 or less according to Beafort scale which is accepted as wind causing movement of medium sized tree branches and leafs of small trees. These studies should be performed by an expert on zoology and an assistant researcher. The photographs of the critical habitat and individuals should be taken during the monitoring. Achievement Criteria: - Water flow in the river is at the same level before construction - Riparian vegetation cover in the ROW should be; -at least %50 in the 1. year -at least %70 in the 2. year -at least %80 in the 3. year -at least %90 in the 5. Year -Population of the <i>Hilara n. sp.</i>						

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				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
									3 species should be; -“low” in the end of 1. year -“high” in the end of 2. and other monitoring years.						
600	1-2	849+409-849+612 Critical Habitat (CH49)	Fauna <i>Dioctria n. sp. 2</i>		Pre-Construction * The top soil shall be scraped at a depth of 10-15 cm and shall be stored near the ROW. Post-Construction	-	-	CC	Methodology: Basic Principles In order to determine the presence and population of species in the critical habitat, counting of the individuals should be performed in first 3 years successively and then in 5th, 7th and 10th year successively. If the individuals of species are not determined in at least one of the counting years, the counting should be continued for at least 2 more periods. Monitoring Methodology The vegetation status of the critical habitat should be observed before the monitoring of the species. The presence of species of Poaceae family, which are resting and feeding plants of the species, should be detected along the construction corridor in the critical habitat. The determination if the vegetation cover and species diversity are at desired level should be done by a botanic expert. If the vegetation cover and presence of Poaceae species are not at desired level in the monitoring years, the	Period Between 1 June - 30 July Frequency Once in every week	Interim First-Findings in Monthly Report & Annual Biorestoration Monitoring Report	TANAP	Biorestorati on Monitoring Plan	BAP; Specification for Reinstatement	-

RefNo .	Ph.	Specific Location (and KP)	Environmental Component ²	Project Commitment					Monitoring				Mang. Plan	Addition. Docum.	ESIA Chapter
				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
									monitoring should be extended for 1 more year. The weather conditions (temperature, cloudness and wind), number of individuals, the day of monitoring, name of the expert etc. should be written onto the survey form. The individuals in the critical habitat should be observed along the transect line. The samples of species on the Poaceae plants should be captured by using sweep net. Transect surveys should be done along the critical habitat for 45-60 minutes between hours 09:30 - 17:30. No monitoring should be done at bad weather conditions (high winds, rainy, cloudy). The wind should be 5 or less according to Beafort scale which is accepted as wind causing movement of medium sized tree branches and leafs of small trees. These studies should be performed by an expert on zoology and an assistant researcher. The photographs of the critical habitat and individuals should be taken during the monitoring. Achievement Criteria: - No invasive plant species on ROW						

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RefNo .	Ph.	Specific Location (and KP)	Environmental Component ²	Project Commitment					Monitoring				Mang. Plan	Addition. Docum.	ESIA Chapter
				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
									- Vegetation cover of species of Poaceae family in the ROW should be; -at least %20 in the 1. year -at least %40 in the 2. year -at least %50 in the 3. year -at least %60 in the 5. Year - Population of the <i>Dioctria n. sp.</i> 2 species should be; -“rare” in the end of 1. year -“low” in the end of 2. and other monitoring years.						
601	1-2	849+409-849+612 Critical Habitat (CH49)	Fauna <i>Dysmachus safranboluticus</i>	-	Pre-Construction * The top soil shall be scraped at a depth of 10-15 cm and shall be stored near the ROW. * Herbaceous plants shall be harvested at the (846+021-846+224) KP's and stored near the ROW. Post-Construction * Harvested herbaceous plants, which carried the eggs of <i>Dysmachus safranboluticus</i> , shall be laid on the top soil.	-	-	CC	Methodology: Basic Principles In order to determine the presence and population of species in the critical habitat, counting of the individuals should be performed in first 3 years successively and then in 5th, 7th and 10th year successively. If the individuals of species are not determined in at least one of the counting years, the counting should be continued for at least 2 more periods. Monitoring Methodology The vegetation status of the critical habitat should be observed before the monitoring of the species. The presence of species of Poaceae family, which are resting and feeding plants of the species, should be detected along the construction corridor in the critical habitat.	Period Between 15 May - 30 June Frequency Twice in a year	Interim First-Findings in Monthly Report & Annual Biorestoration Monitoring Report	TANAP	Biorestorati on Monitoring Plan	BAP; Specification for Reinstatement	-

RefNo .	Ph.	Specific Location (and KP)	Environmental Component ²	Project Commitment					Monitoring				Mang. Plan	Addition. Docum.	ESIA Chapter
				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
									The determination if the vegetation cover and species diversity are at desired level should be done by a botanic expert. If the vegetation cover and presence of Poaceae species are not at desired level in the monitoring years, the monitoring should be extended for 1 more year. The weather conditions (temperature, cloudness and wind), number of individuals, the day of monitoring, name of the expert etc. should be written onto the survey form. The individuals in the critical habitat should be observed along the transect line. The samples of species on the Poaceae plants should be captured by using sweep net. Transect surveys should be done along the critical habitat for 45-60 minutes between hours 09:30 - 17:30. No monitoring should be done at bad weather conditions (high winds, rainy, cloudy). The wind should be 5 or less according to Beafort scale which is accepted as wind causing movement of medium sized tree branches and leafs of small trees. These studies should be performed by an						

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RefNo .	Ph.	Specific Location (and KP)	Environmental Component ²	Project Commitment					Monitoring				Mang. Plan	Addition. Docum.	ESIA Chapter
				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
									expert on zoology and an assistant researcher. The photographs of the critical habitat and individuals should be taken during the monitoring. Achievement Criteria: - No invasive plant species on ROW - Vegetation cover of species of Poaceae family in the ROW should be; -at least %20 in the 1. year -at least %40 in the 2. year -at least %50 in the 3. year -at least %60 in the 5. Year - Population of the <i>Dysmachus safranboluticus</i> species should be; -“rare” in the end of 1. year -“low” in the end of 2. and other monitoring years.						
602	1-2	1378+873 - 1379+216 Critical Habitat (CH60)	Fauna <i>Dioctria n. sp. 1</i>	-	Closed Construction Period: 1 May-1 June Pre-Construction * The top soil shall be scraped at a depth of 10-15 cm and shall be stored near the ROW. Post-Construction * The stored top soil shall be laid again in 3 months.	-	-	CC	Methodology: Basic Principles In order to determine the presence and population of species in the critical habitat, counting of the individuals should be performed in first 3 years successively and then in 5th, 7th and 10th year successively. If the individuals of species are not determined in at least one of the counting years, the counting should be continued for at least 2 more periods. Monitoring Methodology	Period Between 15 May - 30 June Frequency Twice in a year	Interim First-Findings in Monthly Report & Annual Biorestation Monitoring Report	TANAP	Biorestation Monitoring Plan	BAP; Specification for Reinstatement	-

RefNo .	Ph.	Specific Location (and KP)	Environmental Component ²	Project Commitment					Monitoring				Mang. Plan	Addition. Docum.	ESIA Chapter
				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
									The vegetation status of the critical habitat should be observed before the monitoring of the species. The presence of species of Poaceae family, which are resting and feeding plants of the species, should be detected along the construction corridor in the critical habitat. The determination if the vegetation cover and species diversity are at desired level should be done by a botanic expert. If the vegetation cover and presence of Poaceae species are not at desired level in the monitoring years, the monitoring should be extended for 1 more year. The weather conditions (temperature, cloudness and wind), number of individuals, the day of monitoring, name of the expert etc. should be written onto the survey form. The individuals in the critical habitat should be observed along the transect line. The samples of species on the Poaceae plants should be captured by using sweep net. Transect surveys should be done along the critical habitat for 45-60 minutes between hours 09:30 - 17:30.						

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RefNo .	Ph.	Specific Location (and KP)	Environmental Component ²	Project Commitment					Monitoring				Mang. Plan	Addition. Docum.	ESIA Chapter
				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
									No monitoring should be done at bad weather conditions (high winds, rainy, cloudy). The wind should be 5 or less according to Beafort scale which is accepted as wind causing movement of medium sized tree branches and leafs of small trees. These studies should be performed by an expert on zoology and an assistant researcher. The photographs of the critical habitat and individuals should be taken during the monitoring. Achievement Criteria: - No invasive plant species on ROW - Vegetation cover of species of Poaceae family in the ROW should be; -at least %20 in the 1. year -at least %40 in the 2. year -at least %50 in the 3. year -at least %60 in the 5. Year - Population of the <i>Dioctria n. sp. 1</i> species should be; -“rare” in the end of 1. year -“low” in the end of 2. and other monitoring years.						
603	1-2	1746+722 - 1748+567 Critical Habitat (CH64)	Fauna <i>Phalacrocorax carbo</i>	-	Closed Construction Period: 01 February-30 March Pre-Construction * The top soil shall be scraped at a depth of 10-15 cm and shall be stored near the ROW. Post-Construction * The top soil shall be scraped at a depth of 10-15 cm and shall be stored near the ROW.	-	-	CC	Methodology: Basic Principles In order to determine the presence and population of species in the critical habitat, counting of the individuals should be	Period February - March	Interim First-Findings in Monthly Report & Annual Biorestore	TANAP	Biorestorati on Monitoring Plan	BAP; Specification for Reinstatement	-

RefNo .	Ph.	Specific Location (and KP)	Environmental Component ²	Project Commitment					Monitoring				Mang. Plan	Addition. Docum.	ESIA Chapter
				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
									performed in first 3 years successively and then in 5th, 7th and 10th year successively. If the individuals of species are not determined in at least one of the counting years, the counting should be continued for at least 2 more periods. Monitoring Methodology The species agglomerate in this area in January-February for wintering. Thus, site observations and counting should be done at the points in February-March for one day. Vantage point survey technique should be used in the observations. The observations should be done for 45 minutes at each point in the period 2 hours after sunrise. Binoculars and telescope should be used during the observations. These studies should be performed by an expert on zoology and an assistant researcher. The following information on the observed individuals should be recorded onto survey form; the aim of area usage, counts, duration of area usage. Achievement Criteria: Detection of 30 individuals in the observation area during	Frequency Twice in a year	tion Monitorin g Report				

RefNo	Ph.	Specific Location (and KP)	Environmental Component ²	Project Commitment					Monitoring				Mang. Plan	Addition. Docum.	ESIA Chapter
				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
									wintering counting						
604	1-2	1746+722 - 1748+567 Critical Habitat (CH64)	Fauna <i>Phalacrocorax pygmeus</i>	-	<p>Closed Construction Period: 01 February-30 March</p> <p>Pre-Construction * The top soil shall be scraped at a depth of 10-15 cm and shall be stored near the ROW.</p> <p>Post-Construction * The top soil shall be scraped at a depth of 10-15 cm and shall be stored near the ROW.</p>	-	-	CC	<p>Methodology: Basic Principles In order to determine the presence and population of species in the critical habitat, counting of the individuals should be performed in first 3 years successively and then in 5th, 7th and 10th year successively. If the individuals of species are not determined in at least one of the counting years, the counting should be continued for at least 2 more periods.</p> <p>Monitoring Methodology The species agglomerate in this area in January-March and use the critical habitat for wintering. Thus, site observations and counting should be done at the points in February-March for one day. Vantage point survey technique should be used in the observations. The observations should be done for 45 minutes at each point in the period 2 hours after sunrise. Binoculars and telescope should be used during the observations. These studies should be performed by an expert on zoology and an</p>	<p>Period February - March</p> <p>Frequency Twice in a year</p>	Interim First-Findings in Monthly Report & Annual Biorestoration Monitoring Report	TANAP	Biorestorati on Monitoring Plan	BAP; Specification for Reinstatement	-

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				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
									assistant researcher. The following information on the observed individuals should be recorded onto survey form; the aim of area usage, counts, duration of area usage. Achievement Criteria: Detection of 10 individuals in the observation area during wintering counting						
605	1-2	1751+367 - 1751+767 Critical Habitat (CH65)	Fauna <i>Spermophilus citellus</i>	-	Pre-Construction * The top soil shall be scraped at a depth of 10-15 cm and shall be stored near the ROW. * If the construction works start in March 2015; and if <i>Spermophilus citellus</i> individuals will be seen, they shall be carried to the appropriate and close areas by specialists according to the methodology. Post-Construction * The stored top soil shall be laid again in 3 months. * If <i>Spermophilus citellus</i> individuals will be seen, they shall be carried to the appropriate and close areas by specialists according to the methodology.	-	-	CC	Methodology: Basic Principles In order to determine the presence and population of species in the critical habitat, counting of the individuals should be performed in first 3 years successively and then in 5th, 7th and 10th year successively. If the individuals of species are not determined in at least one of the counting years, the counting should be continued for at least 2 more periods. Monitoring Methodology This species is widely present in grasslands shorter than 10-15cm in steppes. In order to determine the presence and population of species in the critical habitat, nest holes should be observed. If nests are observed, Tomahawk trap technique should be used. The presence of the species in the critical habitat should	Period Between May - June Frequency Twice in a year	Interim First-Findings in Monthly Report & Annual Biorestoration Monitorin g Report	TANAP	Biorestorati on Monitoring Plan	BAP; Specification for Reinstatement	-

RefNo .	Ph.	Specific Location (and KP)	Environmental Component ²	Project Commitment					Monitoring				Mang. Plan	Addition. Docum.	ESIA Chapter
				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
									be determined by the surveys done in the entire critical habitat. Even though this species was not observed in the inventory studies before, their presence is expected since appropriate distribution and habitat conditions are observed. 15 tomahawk trap should be placed if the track of the species is observed and the survey should be done for 2 trap-days. The traps should be placed at 08:00 which is the starting hour of species activity and taken away before sunset. The tails of captured individuals should be painted with acetate pen to prevent re-counting. These studies should be performed by an expert on zoology and an assistant researcher. The monitoring should be done by the same team in at least first 3 years in order to have standard evaluation. Achievement Criteria: Detection of nest holes and individuals in the area						
606	1-2	1798+567 - 1798+767 Critical Habitat (CH66)	Fauna <i>Myomimus roachi</i>	-	Pre-Construction * The top soil shall be scraped at a depth of 10-15 cm and shall be stored near the ROW. * If the construction works start in March 2015; and if <i>Myomimus roachi</i> individuals will be seen, they shall be	-	-	CC	Methodology: Basic Principles In order to determine the presence and population of species in the critical habitat, counting of the individuals should be	Period May	Interim First-Findings in Monthly Report & Annual Biorestora	TANAP	Biorestorati on Monitoring Plan	BAP; Specification for Reinstatement	-

RefNo .	Ph.	Specific Location (and KP)	Environmental Component ²	Project Commitment					Monitoring				Mang. Plan	Addition. Docum.	ESIA Chapter
				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
					<div>carried to the appropriate and close areas by specialists according to the methodology.</div> <div>Post-Construction * The stored top soil shall be laid again in 3 months. * If <i>Myomimus roachi</i> individuals will be seen, they shall be carried to the appropriate and close areas by specialists according to the methodology.</div>				<div>performed in first 3 years successively and then in 5th, 7th and 10th year successively. If the individuals of species are not determined in at least one of the counting years, the counting should be continued for at least 2 more periods.</div> <div>Monitoring Methodology In order to determine the presence and population of species in the critical habitat, sherman trap technique should be used. The traps are placed around the trunk of old oaks. At least 50 traps should be placed during the study and the duration of the study should be at least 2 trap-days. Traps should be placed just before the sunset and should be taken away just after the sunrise The tails of captured individuals should be painted with acetate pen to prevent re-counting. These studies should be performed by an expert on zoology and an assistant researcher. The monitoring should be done by the same team in at least first 3 years in order to have standard evaluation.</div> <div>Achievement Criteria: Capturing 1 individual around critical habitat</div>	Frequency Once in a year	tion Monitorin g Report				

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607	1-2	1810+871 - 1815+289 Critical Habitat (CH67)	Fauna <i>Phalacrocorax carbo</i>	-	<p>Closed Construction Period: 01 February-30 March</p> <p>Pre-Construction * The top soil shall be scraped at a depth of 10-15 cm and shall be stored near the ROW.</p> <p>Post-Construction * The stored top soil shall be laid again in 3 months. * The habitat shall be rehabilitated.</p>	-	-	CC	<p>Methodology: Basic Principles In order to determine the presence and population of species in the critical habitat, counting of the individuals should be performed in first 3 years successively and then in 5th, 7th and 10th year successively. If the individuals of species are not determined in at least one of the counting years, the counting should be continued for at least 2 more periods.</p> <p>Monitoring Methodology The species agglomerate in this area in January-February for wintering. Thus, site observations and counting should be done at the points in February-March for one day. Vantage point survey technique should be used in the observations. The observations should be done for 45 minutes at each point in the period 2 hours after sunrise. Binoculars and telescope should be used during the observations. These studies should be performed by an expert on zoology and an assistant researcher. The following information on the observed individuals should be recorded onto survey form; the</p>	<p>Period February - March</p> <p>Frequency Twice in a year</p>	Interim First-Findings in Monthly Report & Annual Biorestoration Monitoring Report	TANAP	Biorestoration Monitoring Plan	BAP; Specification for Reinstatement	-

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									aim of area usage, counts, duration of area usage. Achievement Criteria: Counting 150 or more individuals in a counting day						
608	1-2	1810+871 - 1815+289 Critical Habitat (CH67)	Fauna <i>Microcarbo</i> (= <i>Phalacrocorax</i>)	-	Closed Construction Period: 01 February-30 March Pre-Construction * The top soil shall be scraped at a depth of 10-15 cm and shall be stored near the ROW. Post-Construction * The stored top soil shall be laid again in 3 months. * The habitat shall be rehabilitated.	-	-	CC	Methodology: Basic Principles In order to determine the presence and population of species in the critical habitat, counting of the individuals should be performed in first 3 years successively and then in 5th, 7th and 10th year successively. If the individuals of species are not determined in at least one of the counting years, the counting should be continued for at least 2 more periods. Monitoring Methodology The species agglomerate in this area in January-March and use the critical habitat for wintering. Thus, site observations and counting should be done at the points in February-March for one day. Vantage point survey technique should be used in the observations. The observations should be done for 45 minutes at each point in the period 2 hours after sunrise. Binoculars and telescope should be used during the observations. These studies should be	Period February - March Frequency Twice in a year	Interim First-Findings in Monthly Report & Annual Biorestoration Monitoring Report	TANAP	Biorestorati on Monitoring Plan	BAP; Specification for Reinstatement	-

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									<p>performed by an expert on zoology and an assistant researcher. The following information on the observed individuals should be recorded onto survey form; the aim of area usage, counts, duration of area usage.</p> <p>Achievement Criteria: Counting 50 or more individuals in a counting day</p>						
609	1-2	1810+871 - 1815+289 Critical Habitat (CH67)	Fauna <i>Cygnus olor</i>	-	<p>Closed Construction Period: 01 February-30 March</p> <p>Pre-Construction * The top soil shall be scraped at a depth of 10-15 cm and shall be stored near the ROW.</p> <p>Post-Construction * The stored top soil shall be laid again in 3 months. * The habitat shall be rehabilitated.</p>	-	-	CC	<p>Methodology: Basic Principles In order to determine the presence and population of species in the critical habitat, counting of the individuals should be performed in first 3 years successively and then in 5th, 7th and 10th year successively. If the individuals of species are not determined in at least one of the counting years, the counting should be continued for at least 2 more periods.</p> <p>Bird Monitoring Methodology The species use the critical habitat for wintering. Thus, site observations and counting should be done at the points in January-February for one day. Vantage point survey technique should be used in the observations. The observations should be done for 45 minutes at each point in the period 2</p>	<p>Period Between January - February</p> <p>Frequency Twice in a year</p>	Interim First-Findings in Monthly Report & Annual Biorestoration Monitoring Report	TANAP	Biorestoration Monitoring Plan	BAP; Specification for Reinstatement	-

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									hours after sunrise. These studies should be performed by an expert on zoology and an assistant researcher. The following information on the observed individuals should be recorded onto survey form; the aim of area usage, counts, duration of area usage. Achievement Criteria: Counting 2,000 or more individuals in a counting day						
610	1-2	1810+871 - 1815+289 Critical Habitat (CH67)	Fauna <i>Cygnus cygnus</i>	-	Closed Construction Period: 01 February-30 March Pre-Construction * The top soil shall be scraped at a depth of 10-15 cm and shall be stored near the ROW. Post-Construction * The stored top soil shall be laid again in 3 months. * The habitat shall be rehabilitated.	-	-	CC	Methodology: Basic Principles In order to determine the presence and population of species in the critical habitat, counting of the individuals should be performed in first 3 years successively and then in 5th, 7th and 10th year successively. If the individuals of species are not determined in at least one of the counting years, the counting should be continued for at least 2 more periods. Bird Monitoring Methodology The species use the critical habitat for wintering. Thus, site observations and counting should be done at the points in January-February for one day. Vantage point survey technique should be used in the observations. The	Period Between January - February Frequency Twice in a year	Interim First-Findings in Monthly Report & Annual Biorestoretion Monitorin g Report	TANAP	Biorestorati on Monitoring Plan	BAP; Specification for Reinstatement	-

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				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
									observations should be done for 45 minutes at each point in the period 2 hours after sunrise. Binoculars and telescope should be used during the observations. These studies should be performed by an expert on zoology and an assistant researcher. The following information on the observed individuals should be recorded onto survey form; the aim of area usage, counts, duration of area usage. Achievement Criteria: Counting 2,000 or more individuals in a counting day						
611	1-2	1810+871 - 1815+289 Critical Habitat (CH67)	Fauna <i>Pelecanus onocrotalus</i>	-	Closed Construction Period: 01 February-30 March Pre-Construction * The top soil shall be scraped at a depth of 10-15 cm and shall be stored near the ROW. Post-Construction * The stored top soil shall be laid again in 3 months. * The habitat shall be rehabilitated.	-	-	CC	Methodology: Basic Principles In order to determine the presence and population of species in the critical habitat, counting of the individuals should be performed in first 3 years successively and then in 5th, 7th and 10th year successively. If the individuals of species are not determined in at least one of the counting years, the counting should be continued for at least 2 more periods. Monitoring Methodology The species use the critical habitat for wintering. Thus, site observations and counting should be done at the	Period Between January - February Frequency Between January - February	Interim First-Findings in Monthly Report & Annual Biorestoretion Monitorin g Report	TANAP	Biorestorati on Monitoring Plan	BAP; Specification for Reinstatement	-

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									<p>points in February - March for one day. Vantage point survey technique should be used in the observations. The observations should be done for 45 minutes at each point in the period 2 hours after sunrise. Binoculars and telescope should be used during the observations. These studies should be performed by an expert on zoology and an assistant researcher. The following information on the observed individuals should be recorded onto survey form; the aim of area usage, counts, duration of area usage.</p> <p>Achievement Criteria: Counting 50 or more individuals in a counting day</p>						
612	1-2	Kura River (72+666-72+711) Freshwater Critical Habitats (FCH1)	-	-	<p>*No activities should be carried out in the spawning periods (end of April-begining of July).</p> <p>*Control sediment release into the river bed.</p> <p>*Minimize construction activities to avoid or minimize soil erosion, sedimentation and impacts to riparian vegetation at the crossing.</p> <p>*Avoid impacts and removal to gravel areas at the crossing.</p> <p>*Install silt screens and sediment traps prior to initiating construction crossing activities and maintain the screens and traps during the crossing</p>	-	-	CC	<p>Methodology: 1. Habitat Control (Comparison of situations before and after construction period) 2. The presence of bentic and fish species of aquatic species (Comparison of situations before and after construction period)</p> <p>Achievement Criteria:</p>	<p>Period At the end of July-beginning of August</p> <p>Frequency Once per year</p>	Interim First-Findings in Monthly Report & Annual Biorestoration Monitorin g Report	TANAP	Biorestorati on Monitoring Plan	BAP; Specification for Reinstatement	-

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				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
					to prevent or minimize downstream sedimentation.				1. Situation of the habitat is similar to previous situation 2. Situation of coastal region which contain riparian vegetation is similar and/or close to previous conditions after construction 3. There is no significant change in population densities of determined aquatic species and their diversity after construction						
613	1-2	Kura River (72+666-72+711) Freshwater Critical Habitats (FCH1)	Distribution of Individuals of Freshwater Fauna	-	-	-	-	CC	Methodology: Fish species will be captured once a year (in summer period) by electroshock in shallow regions and by fyke net in deeper regions in order to determine the fish species' population densities in construction region before activities have started, after the relevant data has been obtained captured species will be released again. Achievement Criteria: There is no significant change in population densities of	Period At the end of July-beginning of August Frequency Once per year	Interim First-Findings in Monthly Report & Annual Biorestoration Monitoring Report	TANAP	Biorestorati on Monitoring Plan	BAP; Specification for Reinstatement	-

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				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
									determined aquatic species in river and their diversity after construction						
614	1-2	Unknown Creek (167+465-167-586) Freshwater Critical Habitats (FCH2)			*No activities should be carried out in the spawning periods (end of April-begining of July). *Control sediment release into the river bed. *Minimize construction activities to avoid or minimize soil erosion, sedimentation and impacts to riparian vegetation at the crossing. *Avoid impacts and removal to gravel areas at the crossing. *Install silt screens and sediment traps prior to initiating construction crossing activities and maintain the screens and traps during the crossing to prevent or minimize downstream sedimentation.				Methodology: 1. Habitat Control (Comparison of situations before and after construction period) 2. The presence of bentic and fish species of aquatic species (Comparison of situations before and after construction period) Achievement Criteria: 1. Situation of the habitat is similar to previous situation 2. Situation of coastal region which contain riparian vegetation is similar and/or close to previous conditions after construction 3. There is no significant change in population densities of determined aquatic species and their diversity after construction 4. Situation of the bottom structure is similar and/or close to previous situation	Period In breeding period; May-July Frequency Once per year	Interim First-Findings in Monthly Report & Annual Biorestoration Monitorin g Report	TANAP	Biorestorati on Monitoring Plan	BAP; Specification for Reinstatement	

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				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
									5. Using this area during the breeding season by fish species						
615	1-2	Unknown Creek (167+465-167-586) Freshwater Critical Habitats (FCH2)	Distribution of Individuals of Freshwater Fauna					CC	Methodology: Fish species will be captured once a year (in breeding period, May July) by electroshock, after the relevant data (species and individual numbers) has been obtained captured species will be released again after construction period Achievement Criteria: There is no significant change in population densities of determined aquatic species in river and their diversity after construction	Period In breeding period; May-July Frequency Once per year	Interim First-Findings in Monthly Report & Annual Biorestoration Monitoring Report	TANAP	Biorestoration Monitoring Plan	BAP; Specification for Reinstatement	
616	1-2	Süngütaş River (221+192-221+226) Freshwater Critical Habitats (FCH3)			*No activities should be carried out in the spawning periods (end of April-begining of July). *Control sediment release into the river bed. *Minimize construction activities to avoid or minimize soil erosion, sedimentation and impacts to riparian vegetation at the crossing. *Avoid impacts and removal to gravel areas at the crossing. *Install silt screens and sediment traps prior to initiating construction crossing activities and maintain the screens and traps during the crossing				Methodology: 1. Habitat Control (Comparison of situations before and after construction period) 2. The presence of bentic and fish species of aquatic species (Comparison of situations before and after construction period) Achievement Criteria:	Period In breeding period; May-July Frequency Once per year	Interim First-Findings in Monthly Report & Annual Biorestoration Monitoring Report	TANAP	Biorestoration Monitoring Plan	BAP; Specification for Reinstatement	

RefNo	Ph.	Specific Location (and KP)	Environmental Component ²	Project Commitment					Monitoring				Mang. Plan	Addition. Docum.	ESIA Chapter
				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
					to prevent or minimize downstream sedimentation.				1. Situation of the habitat is similar to previous situation 2. Situation of coastal region which contain riparian vegetation is similar and/or close to previous conditions after construction 3. There is no significant change in population densities of determined aquatic species and their diversity after construction 4. Situation of the bottom structure is similar and/or close to previous situation 5. Using this area during the breeding season by fish species						
617	1-2	Süngütaş River (221+192-221+226) Freshwater Critical Habitats (FCH3)	Distribution of Individuals of Freshwater Fauna	-	-	-	-	CC	Methodology: Fish species will be captured once a year (in breeding period, May July) by electroshock, after the relevant data (species and individual numbers) has been obtained captured species will be released again after construction period Achievement Criteria:	Period In breeding period; May-July Frequency Once per year	Interim First-Findings in Monthly Report & Annual Bioresta- tion Monitorin g Report	TANAP	Biorestorati on Monitoring Plan	BAP; Specification for Reinstatement	-

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				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
									There is no significant change in population densities of determined aquatic species in river and their diversity after construction						
618	1-2	Kızılıararkı River (270+699-270+715) Freshwater Critical Habitats (FCH4)			<p>*No activities should be carried out in the spawning periods (end of April-begining of July).</p> <p>*Control sediment release into the river bed.</p> <p>*Minimize construction activities to avoid or minimize soil erosion, sedimentation and impacts to riparian vegetation at the crossing.</p> <p>*Avoid impacts and removal to gravel areas at the crossing.</p> <p>*Install silt screens and sediment traps prior to initiating construction crossing activities and maintain the screens and traps during the crossing to prevent or minimize downstream sedimentation.</p>			CC	<p>Methodology:</p> <p>1. Habitat Control (Comparison of situations before and after construction period)</p> <p>2. The presence of bentic and fish species of aquatic species (Comparison of situations before and after construction period)</p> <p>Achievement Criteria:</p> <p>1. Situation of the habitat is similar to previous situation</p> <p>2. Situation of coastal region which contain riparian vegetation is similar and/or close to previous conditions after construction</p> <p>3. There is no significant change in population densities of determined aquatic species and their diversity after construction</p> <p>4. Situation of the bottom</p>	<p>Period</p> <p>In breeding period; May-July</p> <p>Frequency</p> <p>Once per year</p>	<p>Interim First-Findings in Monthly Report & Annual Biorestorati on Monitorin g Report</p>	TANAP	Biorestorati on Monitoring Plan	BAP; Specification for Reinstatement	

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									structure is similar and/or close to previous situation 5. Using this area during the breeding season by fish species						
619	1-2	Kızıllararkı River (270+699-270+715) Freshwater Critical Habitats (FCH4)	Distribution of Individuals of Freshwater Fauna	-	-	-	-	CC	Methodology: Fish species will be captured once a year (in breeding period, May-July) by electroshock, after the relevant data (species and individual numbers) has been obtained captured species will be released again after construction period Achievement Criteria: There is no significant change in population densities of determined aquatic species in river and their diversity after construction	Period In breeding period; May-July Frequency Once per year	Interim First-Findings in Monthly Report & Annual Biorestoration Monitoring Report	TANAP	Biorestoration Monitoring Plan	BAP; Specification for Reinstatement	-
620	1-2	Büyükdere River (281+421-281+434) Freshwater Critical Habitats (FCH5)	-	-	*No activities should be carried out in the spawning periods (end of April-begining of July). *Control sediment release into the river bed. *Minimize construction activities to avoid or minimize soil erosion, sedimentation and impacts to riparian vegetation at the crossing. *Avoid impacts and removal to gravel areas at the crossing. *Install silt screens and sediment traps prior to	-	-	CC	Methodology: 1. Habitat Control (Comparison of situations before and after construction period) 2. The presence of bentic and fish species of aquatic species (Comparison of situations before and after	Period In breeding period; May-July Frequency Once per year	Interim First-Findings in Monthly Report & Annual Biorestoration Monitoring Report	TANAP	Biorestoration Monitoring Plan	BAP; Specification for Reinstatement	-

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					initiating construction crossing activities and maintain the screens and traps during the crossing to prevent or minimize downstream sedimentation.				construction period) Achievement Criteria: 1. Situation of the habitat is similar to previous situation 2. Situation of coastal region which contain riparian vegetation is similar and/or close to previous conditions after construction 3. There is no significant change in population densities of determined aquatic species and their diversity after construction 4. Situation of the bottom structure is similar and/or close to previous situation 5. Using this area during the breeding season by fish species						
621	1-2	Büyükdere River (281+421-281+434) Freshwater Critical Habitats (FCH5)	Distribution of Individuals of Freshwater Fauna	-	-	-	-	CC	Methodology: Fish species will be captured once a year (in breeding period, May-July) by electroshock, after the relevant data (species and individual numbers) has been obtained captured species will be released again after	Period In breeding period; May-July Frequency Once per year	Interim First-Findings in Monthly Report & Annual Biorestoration Monitoring Report	TANAP	Biorestoration Monitoring Plan	BAP; Specification for Reinstatement	-

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				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
									construction period Achievement Criteria: There is no significant change in population densities of determined aquatic species and their diversity after construction						
622	1-2	Abitçayırılığı River (333+917-333+932) Freshwater Critical Habitats (FCH6)	-		*No activities should be carried out in the spawning periods (end of April-begining of July). *Control sediment release into the river bed. *Minimize construction activities to avoid or minimize soil erosion, sedimentation and impacts to riparian vegetation at the crossing. *Avoid impacts and removal to gravel areas at the crossing. *Install silt screens and sediment traps prior to initiating construction crossing activities and maintain the screens and traps during the crossing to prevent or minimize downstream sedimentation.	-	-	CC	Methodology: 1. Habitat Control (Comparison of situations before and after construction period) 2. The presence of bentic and fish species of aquatic species (Comparison of situations before and after construction period) Achievement Criteria: 1. Situation of the habitat is similar to previous situation 2. Situation of coastal region which contain riparian vegetation is similar and/or close to previous conditions after construction 3. There is no significant change in population densities of determined aquatic	Period In breeding period; May-July Frequency Once per year	Interim First-Findings in Monthly Report & Annual Biorestoration Monitoring Report	TANAP	Biorestoration Monitoring Plan	BAP; Specification for Reinstatement	-

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				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
									species and their diversity after construction 4. Situation of the bottom structure is similar and/or close to previous situation 5. Using this area during the breeding season by fish species						
623	1-2	Abitçayırılığ River (333+917-333+932) Freshwater Critical Habitats (FCH6)	Distribution of Individuals of Freshwater Fauna	-	-	-	-	CC	Methodology: Fish species will be captured once a year (in breeding period, May-July) by electroshock, after the relevant data (species and individual numbers) has been obtained captured species will be released again after construction period Achievement Criteria: There is no significant change in population densities of determined aquatic species and their diversity after construction	Period In breeding period; May-July Frequency Once per year	Interim First-Findings in Monthly Report & Annual Biorestoration Monitoring Report	TANAP	Biorestorati on Monitoring Plan	BAP; Specification for Reinstatement	-
624	1-2	Baş River (355+704-355+733) Freshwater Critical Habitats (FCH7)	-	-	*No activities should be carried out in the spawning periods (end of April-begining of July). *Control sediment release into the river bed. *Minimize construction activities to avoid or minimize soil erosion, sedimentation and impacts	-	-	CC	Methodology: 1. Habitat Control (Comparison of situations before and after construction period) 2. The presence of bentic and fish	Period In breeding period; May-July Frequency Once per year	Interim First-Findings in Monthly Report & Annual Biorestoration	TANAP	Biorestorati on Monitoring Plan	BAP; Specification for Reinstatement	-

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					to riparian vegetation at the crossing. *Avoid impacts and removal to gravel areas at the crossing. *Install silt screens and sediment traps prior to initiating construction crossing activities and maintain the screens and traps during the crossing to prevent or minimize downstream sedimentation.				species of aquatic species (Comparison of situations before and after construction period) Achievement Criteria: 1. Situation of the habitat is similar to previous situation 2. Situation of coastal region which contain riparian vegetation is similar and/or close to previous conditions after construction 3. There is no significant change in population densities of determined aquatic species and their diversity after construction 4. Situation of the bottom structure is similar and/or close to previous situation 5. Using this area during the breeding season by fish species		Monitoring Report				
625	1-2	Baş River (355+704-355+733) Freshwater Critical Habitats (FCH7)	Distribution of Individuals of Freshwater Fauna	-	-	-	-	CC	Methodology: Fish species will be captured once a year (in breeding period, May-July) by electroshock, after the relevant data (species and individual	Period In breeding period; May-July Frequency Once per year	Interim First-Findings in Monthly Report & Annual Biorestation Monitoring Report	TANAP	Biorestation Monitoring Plan	BAP; Specification for Reinstatement	-

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									numbers) has been obtained captured species will be released again after construction period Achievement Criteria: There is no significant change in population densities of determined aquatic species and their diversity after construction						
626	1-2	Karasu River (375+027-375+177) Freshwater Critical Habitats (FCH8)	-	-	*No activities should be carried out in the spawning periods (end of April-begining of July). *Control sediment release into the river bed. *Minimize construction activities to avoid or minimize soil erosion, sedimentation and impacts to riparian vegetation at the crossing. *Avoid impacts and removal to gravel areas at the crossing. *Install silt screens and sediment traps prior to initiating construction crossing activities and maintain the screens and traps during the crossing to prevent or minimize downstream sedimentation.	-	-	CC	Methodology: 1. Habitat Control (Comparison of situations before and after construction period) 2. The presence of bentic and fish species of aquatic species (Comparison of situations before and after construction period) Achievement Criteria: 1. Situation of the habitat is similar to previous situation 2. Situation of coastal region which contain riparian vegetation is similar and/or close to previous conditions after construction	Period At the end of July-beginning of August Frequency Once per year	Interim First-Findings in Monthly Report & Annual Biorestoration Monitoring Report	TANAP	Biorestorati on Monitoring Plan	BAP; Specification for Reinstatement	-

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									3. There is no significant change in population densities of determined aquatic species and their diversity after construction						
627	1-2	Karasu River (375+027-375+177) Freshwater Critical Habitats (FCH8)	Distribution of Individuals of Freshwater Fauna	-	-	-	-	CC	Methodology: Fish species will be captured once a year (in summer period) by electroshock in shallow regions and by fyke net in deeper regions in order to determine the fish species' population densities in construction region before activities have started, after the relevant data has been obtained captured species will be released again. Achievement Criteria: There is no significant change in population densities of determined aquatic species and their diversity after construction	Period At the end of July-beginning of August Frequency Once per year	Interim First-Findings in Monthly Report & Annual Biorestoration Monitoring Report	TANAP	Biorestoration Monitoring Plan	BAP; Specification for Reinstatement	-
628	1-2	Değirmendere River (506+877-506+891) Freshwater Critical	-	-	*No activities should be carried out in the spawning periods (end of April-begining of July). *Control sediment release into the river bed. *Minimize construction activities to avoid or	-	-	CC	Methodology: 1. Habitat Control (Comparison of situations before and after construction period)	Period In breeding period; May-July Frequency Once per year	Interim First-Findings in Monthly Report & Annual Biorestora	TANAP	Biorestoration Monitoring Plan	BAP; Specification for Reinstatement	-

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				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
		Habitats (FCH9)			minimize soil erosion, sedimentation and impacts to riparian vegetation at the crossing. *Avoid impacts and removal to gravel areas at the crossing. *Install silt screens and sediment traps prior to initiating construction crossing activities and maintain the screens and traps during the crossing to prevent or minimize downstream sedimentation.				2. The presence of bentic and fish species of aquatic species (Comparison of situations before and after construction period) Achievement Criteria: 1. Situation of the habitat is similar to previous situation 2. Situation of coastal region which contain riparian vegetation is similar and/or close to previous conditions after construction 3. There is no significant change in population densities of determined aquatic species and their diversity after construction 4. Situation of the bottom structure is similar and/or close to previous situation 5. Using this area during the breeding season by fish species		tion Monitoring Report				
629	1-2	Değirmendere River (506+877-506+891) Freshwater Critical Habitats (FCH9)	Distribution of Individuals of Freshwater Fauna	-	-	-	-	CC	Methodology: Fish species will be captured once a year (in breeding period, May July) by electroshock,	Period In breeding period; May-July Frequency Once per year	Interim First-Findings in Monthly Report & Annual Biorestation	TANAP	Biorestation Monitoring Plan	BAP; Specification for Reinstatement	-

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				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
									after the relevant data (species and individual numbers) has been obtained captured species will be released again after construction period Achievement Criteria: There is no significant change in population densities of determined aquatic species and their diversity after construction		Monitoring Report				
630	1-2	Unknown Creek-Öğütlü Village (510+622-510+634) Freshwater Critical Habitats (FCH10)	Fauna <i>Oxyneomacheilus kosswigi</i>		<i>*No activities should be carried out for Salmonid between December-November; for Oxyneomacheilus kosswigi between May-June in the spawning periods (end of April-begining of July). *Control sediment release into the river bed. *Minimize construction activities to avoid or minimize soil erosion, sedimentation and impacts to riparian vegetation at the crossing. *Avoid impacts and removal to gravel areas at the crossing. *Install silt screens and sediment traps prior to initiating construction crossing activities and maintain the screens and traps during the crossing to prevent or minimize downstream sedimentation.</i>	-	-	CC	Methodology: 1. Habitat Control (Comparison of situations before and after construction period) 2. The presence of bentic and fish species of aquatic species (Comparison of situations before and after construction period) Achievement Criteria: 1. Situation of the habitat is similar to previous situation 2. Situation of coastal region which contain riparian vegetation is similar and/or close to previous	Period In breeding period for O. kosswigi; May-July Frequency Once per year	Interim First-Findings in Monthly Report & Annual Biorestoration Monitoring Report	TANAP	Biorestoration Monitoring Plan	BAP; Specification for Reinstatement	-

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				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
									conditions after construction 3. There is no significant change in population densities of O. kosswigi and their diversity after construction 4. Situation of the bottom structure is similar and/or close to previous situation 5. Using this area during the breeding season, especially by Oxynemacheilus kosswigi						
631	1-2	Unknown Creek-Öğütlü Village (510+622-510+634) Freshwater Critical Habitats (FCH10)	Fauna <i>Salmo trutta</i> (Syn: <i>Salmo macrostigma</i>)		*No activities should be carried out for Salmonid between December-November; for <i>Oxynemacheilus kosswigi</i> between May-June in the spawning periods (end of April-begining of July). *Control sediment release into the river bed. *Minimize construction activities to avoid or minimize soil erosion, sedimentation and impacts to riparian vegetation at the crossing. *Avoid impacts and removal to gravel areas at the crossing. *Install silt screens and sediment traps prior to initiating construction crossing activities and maintain the screens and traps during the crossing to prevent or minimize downstream sedimentation.	-	-	CC	Methodology: 1. Habitat Control (Comparison of situations before and after construction period) 2. The presence of bentic and fish species of aquatic species (Comparison of situations before and after construction period) Achievement Criteria: 1. Situation of the habitat is similar to previous situation 2. Situation of coastal region which contain riparian vegetation is similar and/or close to previous	Period In breeding period for S. trutta; November-December Frequency Once per year	Interim First-Findings in Monthly Report & Annual Biorestoration Monitoring Report	TANAP	Biorestorati on Monitoring Plan	BAP; Specification for Reinstatement	-

RefNo	Ph.	Specific Location (and KP)	Environmental Component ²	Project Commitment					Monitoring				Mang. Plan	Addition. Docum.	ESIA Chapter
				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
									conditions after construction 3. There is no significant change in population densities of S. trutta and their diversity after construction 4. Situation of the bottom structure is similar and/or close to previous situation 5. Using this area during the breeding season, especially by S. trutta						
632	1-2	Unknown Creek-Öğütlü Village (510+622-510+634) Freshwater Critical Habitats (FCH10)	Distribution of Individuals of Freshwater Fauna	-	-	-	-	CC	Methodology: Fish species will be captured twice a year (in breeding period for Cyprinidae and Balitoridae, May July; in breeding period for Salmonidae, November December) by electroshock, after the relevant data (species and individual numbers) has been obtained captured species will be released again after construction period Achievement Criteria: There is no significant change in population densities of determined	Period In breeding period for Cyprinidae and Balitoridae, May-July; in breeding period for Salmonidae , November-December Frequency 2 times per year	Interim First-Findings in Monthly Report & Annual Biorestoration Monitoring Report	TANAP	Biorestoration Monitoring Plan	BAP; Specification for Reinstatement	-

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				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
									aquatic species and their diversity after construction						
633	1-2	Hafik (713+204-713+286) Freshwater Critical Habitats (FCH11)	Fauna <i>Gobio obtusirostris</i>		<p>-</p> <p>*No activities should be carried out in the spawning periods (April-July).</p> <p>*Control sediment release into the river bed.</p> <p>*Minimize construction activities to avoid or minimize soil erosion, sedimentation and impacts to riparian vegetation at the crossing.</p> <p>*Avoid impacts and removal to gravel areas at the crossing.</p> <p>*Install silt screens and sediment traps prior to initiating construction crossing activities and maintain the screens and traps during the crossing to prevent or minimize downstream sedimentation.</p>	-	-	CC	<p>Methodology:</p> <p>1. Habitat Control (Comparison of situations before and after construction period)</p> <p>2. The presence of bentic and fish species of aquatic species (Comparison of situations before and after construction period)</p> <p>Achievement Criteria:</p> <p>1. Situation of the habitat is similar to previous situation</p> <p>2. Situation of coastal region which contain riparian vegetation is similar and/or close to previous conditions after construction</p> <p>3. There is no significant change in population densities of G. obtusirostris and their diversity after construction</p> <p>4. Situation of the bottom structure is similar and/or close to previous situation</p> <p>5. Using this area during</p>	<p>Period</p> <p>In breeding period for G. obtusirostris, May-July</p> <p>Frequency</p> <p>Once per year</p>	Interim First-Findings in Monthly Report & Annual Biorestoration Monitoring Report	TANAP	Biorestoration Monitoring Plan	BAP; Specification for Reinstatement	-

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				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
									the breeding season, especially by G. obtusirostris						
634	1-2	Hafik (713+204-713+286) Freshwater Critical Habitats (FCH11)	Distribution of Individuals of Freshwater Fauna	-	-	-	-	CC	Methodology: Fish species will be captured once a year (in breeding period, May-July) by electroshock, after the relevant data (species and individual numbers) has been obtained captured species will be released again after construction period Achievement Criteria: There is no significant change in population densities of determined aquatic species and their diversity after construction	Period In breeding period; May-July Frequency Once per year	Interim First-Findings in Monthly Report & Annual Bioresta tion Monitorin g Report	TANAP	Biorestorati on Monitoring Plan	BAP; Specification for Reinstatement	-
635	1-2	Yıldız River (766+754-766+774) Freshwater Critical Habitats (FCH12)	-	-	*No activities should be carried out in the spawning periods (April-July). *Control sediment release into the river bed. *Minimize construction activities to avoid or minimize soil erosion, sedimentation and impacts to riparian vegetation at the crossing. *Avoid impacts and removal to gravel areas at the crossing. *Install silt screens and sediment traps prior to initiating construction crossing activities and maintain the screens and	-	-	CC	Methodology: 1. Habitat Control (Comparison of situations before and after construction period) 2. The presence of bentic and fish species of aquatic species (Comparison of situations before and after construction period) Period At the end of July-beginning of August Frequency Once per year	Period At the end of July-beginning of August Frequency Once per year	Interim First-Findings in Monthly Report & Annual Bioresta tion Monitorin g Report	TANAP	Biorestorati on Monitoring Plan	BAP; Specification for Reinstatement	-

RefNo	Ph.	Specific Location (and KP)	Environmental Component ²	Project Commitment					Monitoring				Mang. Plan	Addition. Docum.	ESIA Chapter
				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
					traps during the crossing to prevent or minimize downstream sedimentation.				Achievement Criteria: 1. Situation of the habitat is similar to previous situation 2. Situation of coastal region which contain riparian vegetation is similar and/or close to previous conditions after construction 3. There is no significant change in population densities of determined aquatic species and their diversity after construction						
636	1-2	Yıldız River (766+754-766+774) Freshwater Critical Habitats (FCH12)	Distribution of Individuals of Freshwater Fauna	-	-	-	-	CC	Methodology: Fish species will be captured once a year (in breeding period, May-July) by electroshock, after the relevant data (species and individual numbers) has been obtained captured species will be released again after construction period Achievement Criteria: There is no significant change in population densities of determined aquatic species and their diversity after construction	Period In breeding period; May-July Frequency Once per year	Interim First-Findings in Monthly Report & Annual Biorestoration Monitoring Report	TANAP	Biorestoration Monitoring Plan	BAP; Specification for Reinstatement	-

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RefNo	Ph.	Specific Location (and KP)	Environmental Component ²	Project Commitment					Monitoring				Mang. Plan	Addition. Docum.	ESIA Chapter
				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
637	1-2	Delice River (986+945-986+432) Freshwater Critical Habitats (FCH13)	Fauna <i>Cobitis simplicispinna</i>	-	<p>*No activities should be carried out in the spawning periods (April-June).</p> <p>*Control sediment release into the river bed.</p> <p>*Minimize construction activities to avoid or minimize soil erosion, sedimentation and impacts to riparian vegetation at the crossing.</p> <p>*Avoid impacts and removal to gravel areas at the crossing.</p> <p>*Install silt screens and sediment traps prior to initiating construction crossing activities and maintain the screens and traps during the crossing to prevent or minimize downstream sedimentation.</p>	-	-	CC	<p>Methodology:</p> <p>1. Habitat Control (Comparison of situations before and after construction period)</p> <p>2. The presence of bentic and fish species of aquatic species (Comparison of situations before and after construction period)</p> <p>Achievement Criteria:</p> <p>1. Situation of the habitat is similar to previous situation</p> <p>2. Situation of coastal region which contain riparian vegetation is similar and/or close to previous conditions after construction</p> <p>3. There is no significant change in population densities of <i>C. simplicispinna</i> and their diversity after construction</p> <p>4. Situation of the bottom structure is similar and/or close to previous situation</p> <p>5. Using this area during the breeding season,</p>	<p>Period</p> <p>In breeding period for <i>C. simplicispinna</i>; May-July</p> <p>Frequency</p> <p>Once per year</p>	<p>Interim First-Findings in Monthly Report & Annual Biorestoration Monitoring Report</p>	TANAP	Biorestorati on Monitoring Plan	BAP; Specification for Reinstatement	-

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				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
									especially by C. simplicispinna						
638	1-2	Delice River (986+945-986+432) Freshwater Critical Habitats (FCH13)	Distribution of Individuals of Freshwater Fauna	-	-	-	-	CC	Methodology: Fish species will be captured once a year (in breeding period, May July) by electroshock, after the relevant data (species and individual numbers) has been obtained captured species will be released again after construction period Achievement Criteria: There is no significant change in population densities of determined aquatic species and their diversity after construction	Period In breeding period; May-July Frequency Once per year	Interim First-Findings in Monthly Report & Annual Biorestoration Monitoring Report	TANAP	Biorestoration Monitoring Plan	BAP; Specification for Reinstatement	-
639	1-2	Kılıçözü River (1040+654-1040+663) Freshwater Critical Habitats (FCH14)	Fauna <i>Cobitis simplicispinna</i>	-	*No activities should be carried out in the spawning periods (April-June) *Control sediment release into the river bed. *Manage all construction activities to the maximum extent possible in order to avoid or minimize soil erosion, sedimentation and impacts to aquatic and riparian vegetation at the crossing.	-	-	CC	Methodology: 1. Habitat Control (Comparison of situations before and after construction period) 2. The presence of bentic and fish species of aquatic species (Comparison of situations before and after construction period) Achievement Criteria:	Period In breeding period for C. simplicispinna; May-July Frequency Once per year	Interim First-Findings in Monthly Report & Annual Biorestoration Monitoring Report	TANAP	Biorestoration Monitoring Plan	BAP; Specification for Reinstatement	-

RefNo	Ph.	Specific Location (and KP)	Environmental Component ²	Project Commitment					Monitoring				Mang. Plan	Addition. Docum.	ESIA Chapter
				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
									1. Situation of the habitat is similar to previous situation 2. Situation of coastal region which contain riparian vegetation is similar and/or close to previous conditions after construction 3. There is no significant change in population densities of C. simplicispinna and their diversity after construction 4. Situation of the bottom structure is similar and/or close to previous situation 5. Using this area during the breeding season, especially by C. simplicispinna						
640	1-2	Kılıçözü River (1040+654-1040+663) Freshwater Critical Habitats (FCH14)	Distribution of Individuals of Freshwater Fauna	-	-	-	-	CC	Methodology: Fish species will be captured once a year (in breeding period, May July) by electroshock, after the relevant data (species and individual numbers) has been obtained captured species will be released again after construction period Achievement Criteria:	Period In breeding period; May-July Frequency Once per year	Interim First-Findings in Monthly Report & Annual Biorestoration Monitoring Report	TANAP	Biorestoration Monitoring Plan	BAP; Specification for Reinstatement	-

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				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
									There is no significant change in population densities of determined aquatic species and their diversity after construction						
641	1-2	Kızılırmak River (1093+394-1093+484) Freshwater Critical Habitats (FCH15)			*No activities should be carried out in the spawning periods (April-June). *Control sediment release into the river bed. *Minimize construction activities to avoid or minimize soil erosion, sedimentation and impacts to riparian vegetation at the crossing. *Avoid impacts and removal to gravel areas at the crossing. *Install silt screens and sediment traps prior to initiating construction crossing activities and maintain the screens and traps during the crossing to prevent or minimize downstream sedimentation.			CC	Methodology: 1. Habitat Control (Comparison of situations before and after construction period) 2. The presence of bentic and fish species of aquatic species (Comparison of situations before and after construction period) Achievement Criteria: 1. Situation of the habitat is similar to previous situation 2. Situation of coastal region which contain riparian vegetation is similar and/or close to previous conditions after construction 3. There is no significant change in population densities of determined aquatic species and their diversity after construction	Period At the end of July-beginning of August Frequency Once per year	Interim First-Findings in Monthly Report & Annual Biorestoration Monitoring Report	TANAP	Biorestoration Monitoring Plan	BAP; Specification for Reinstatement	

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				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
642	1-2	Kızılırmak River (1093+394-1093+484) Freshwater Critical Habitats (FCH15)	Distribution of Individuals of Freshwater Fauna	-	-	-	-	CC	Methodology: Fish species will be captured once a year (in summer period) by electroshock in shallow regions and by fyke net in deeper regions in order to determine the fish species' population densities in construction region before activities have started, after the relevant data has been obtained captured species will be released again. Achievement Criteria: There is no significant change in population densities of determined aquatic species and their diversity after construction	Period At the end of July-beginning of August Frequency Once per year	Interim First-Findings in Monthly Report & Annual Biorestoration Monitoring Report	TANAP	Biorestoration Monitoring Plan	BAP; Specification for Reinstatement	-
643	1-2	Sakarya River (1222+948-1222+983) Freshwater Critical Habitats (FCH16)	-	-	*No activities should be carried out in the spawning periods (April-June). *Control sediment release into the river bed. *Minimize construction activities to avoid or minimize soil erosion, sedimentation and impacts to riparian vegetation at the crossing. *Avoid impacts and removal to gravel areas at the crossing. *Install silt screens and sediment traps prior to initiating construction	-	-	CC	Methodology: 1. Habitat Control (Comparison of situations before and after construction period) 2. The presence of bentic and fish species of aquatic species (Comparison of situations before and after	Period At the end of July-beginning of August Frequency Once per year	Interim First-Findings in Monthly Report & Annual Biorestoration Monitoring Report	TANAP	Biorestoration Monitoring Plan	BAP; Specification for Reinstatement	-

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				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
					crossing activities and maintain the screens and traps during the crossing to prevent or minimize downstream sedimentation.				construction period) Achievement Criteria: 1. Situation of the habitat is similar to previous situation 2. Situation of coastal region which contain riparian vegetation is similar and/or close to previous conditions after construction 3. There is no significant change in population densities of determined aquatic species and their diversity after construction						
644	1-2	Sakarya River (1222+948-1222+983) Freshwater Critical Habitats (FCH16)	Distribution of Individuals of Freshwater Fauna	-	-	-	-	CC	Methodology: Fish species will be captured once a year (in summer period) by electroshock in shallow regions and by fyke net in deeper regions in order to determine the fish species' population densities in construction region before activities have started, after the relevant data has been obtained captured species will be released again. Achievement Criteria:	Period At the end of July-beginning of August Frequency Once per year	Interim First-Findings in Monthly Report & Annual Biorestoration Monitoring Report	TANAP	Biorestoration Monitoring Plan	BAP; Specification for Reinstatement	-

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				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
									There is no significant change in population densities of determined aquatic species and their diversity after construction						
645	1-2	Seydi Stream (1321+758-1321780) Freshwater Critical Habitats (FCH17)	Fauna <i>Cobitis simplicispinna</i>		*No activities should be carried out in the spawning periods (April-June). *Control sediment release into the river bed. *Minimize construction activities to avoid or minimize soil erosion, sedimentation and impacts to riparian vegetation at the crossing. *Avoid impacts and removal to gravel areas at the crossing. *Install silt screens and sediment traps prior to initiating construction crossing activities and maintain the screens and traps during the crossing to prevent or minimize downstream sedimentation.	-	-	CC	Methodology: 1. Habitat Control (Comparison of situations before and after construction period) 2. The presence of bentic and fish species of aquatic species (Comparison of situations before and after construction period) Achievement Criteria: 1. Situation of the habitat is similar to previous situation 2. Situation of coastal region which contain riparian vegetation is similar and/or close to previous conditions after construction 3. There is no significant change in population densities of C. simplicispinna and their diversity after construction 4. Situation of the bottom structure is	Period In breeding period for C. simplicispinna; May-July Frequency Once per year	Interim First-Findings in Monthly Report & Annual Biorestation Monitoring Report	TANAP	Biorestation on Monitoring Plan	BAP; Specification for Reinstatement	-

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				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
									similar and/or close to previous situation 5. Using this area during the breeding season, especially by C. simplicispinna						
646	1-2	Seydi Stream (1321+758-1321780) Freshwater Critical Habitats (FCH17)	Fauna <i>Gobio obtusirostris</i>		*No activities should be carried out in the spawning periods (April-June). *Control sediment release into the river bed. *Minimize construction activities to avoid or minimize soil erosion, sedimentation and impacts to riparian vegetation at the crossing. *Avoid impacts and removal to gravel areas at the crossing. *Install silt screens and sediment traps prior to initiating construction crossing activities and maintain the screens and traps during the crossing to prevent or minimize downstream sedimentation.	-	-	CC	Methodology: 1. Habitat Control (Comparison of situations before and after construction period) 2. The presence of bentic and fish species of aquatic species (Comparison of situations before and after construction period) Achievement Criteria: 1. Situation of the habitat is similar to previous situation 2. Situation of coastal region which contain riparian vegetation is similar and/or close to previous conditions after construction 3. There is no significant change in population densities of G. obtusirostris and their diversity after construction 4. Situation of the bottom structure is similar and/or	Period In breeding period for G. obtusirostris; May-July Frequency Once per year	Interim First-Findings in Monthly Report & Annual Biorestoration Monitoring Report	TANAP	Biorestoration Monitoring Plan	BAP; Specification for Reinstatement	-

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				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
									close to previous situation 5. Using this area during the breeding season, especially by G. obtusirostris						
647	1-2	Seydi Stream (1321+758-1321780) Freshwater Critical Habitats (FCH17)	Distribution of Individuals of Freshwater Fauna	-	-	-	-	CC	Methodology: Fish species will be captured once a year (in breeding period, May-July) by electroshock, after the relevant data (species and individual numbers) has been obtained captured species will be released again after construction period Achievement Criteria: There is no significant change in population densities of determined aquatic species and their diversity after construction	Period In breeding period; May-July Frequency Once per year	Interim First-Findings in Monthly Report & Annual Biorestoration Monitoring Report	TANAP	Biorestoration Monitoring Plan	BAP; Specification for Reinstatement	-
648	1-2	Seydi Creek (1329+399-1329+429) Freshwater Critical Habitats (FCH18)	Fauna <i>Cobitis simplicispinna</i>	-	*No activities should be carried out in the spawning periods (April-June). *Control sediment release into the river bed. *Minimize construction activities to avoid or minimize soil erosion, sedimentation and impacts to riparian vegetation at the crossing. *Avoid impacts and removal to gravel areas at the crossing.	-	-	CC	Methodology: 1. Habitat Control (Comparison of situations before and after construction period) 2. The presence of bentic and fish species of aquatic species (Comparison of situations before and	Period In breeding period for C. simplicispinna; May-July Frequency Once per year	Interim First-Findings in Monthly Report & Annual Biorestoration Monitoring Report	TANAP	Biorestoration Monitoring Plan	BAP; Specification for Reinstatement	-

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				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
					*Install silt screens and sediment traps prior to initiating construction crossing activities and maintain the screens and traps during the crossing to prevent or minimize downstream sedimentation.				after construction period) Achievement Criteria: 1. Situation of the habitat is similar to previous situation 2. Situation of coastal region which contain riparian vegetation is similar and/or close to previous conditions after construction 3. There is no significant change in population densities of C. simplicispinna and their diversity after construction 4. Situation of the bottom structure is similar and/or close to previous situation 5. Using this area during the breeding season, especially by C. simplicispinna						
649	1-2	Seydi Creek (1329+399-1329+429) Freshwater Critical Habitats (FCH18)	Fauna <i>Gobio obtusirostris</i>	-	*No activities should be carried out in the spawning periods (April-June). *Control sediment release into the river bed. *Minimize construction activities to avoid or minimize soil erosion, sedimentation and impacts to riparian vegetation at the crossing. *Avoid impacts and removal to gravel areas at the crossing. *Install silt screens and sediment traps prior to	-	-	CC	Methodology: 1. Habitat Control (Comparison of situations before and after construction period) 2. The presence of bentic and fish species of aquatic species (Comparison of situations before and after	Period In breeding period for G. obtusirostri s; May-July Frequency Once per year	Interim First-Findings in Monthly Report & Annual Biorestoration Monitorin g Report	TANAP	Biorestorati on Monitoring Plan	BAP; Specification for Reinstatement	-

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				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
					initiating construction crossing activities and maintain the screens and traps during the crossing to prevent or minimize downstream sedimentation.				construction period) Achievement Criteria: 1. Situation of the habitat is similar to previous situation 2. Situation of coastal region which contain riparian vegetation is similar and/or close to previous conditions after construction 3. There is no significant change in population densities of G. obtusirostris and their diversity after construction 4. Situation of the bottom structure is similar and/or close to previous situation 5. Using this area during the breeding season, especially by G. obtusirostris						
650	1-2	Seydi Creek (1329+399-1329+429) Freshwater Critical Habitats (FCH18)	Fauna <i>Chondrostoma angoranse</i>	-	*No activities should be carried out in the spawning periods (April-June). *Control sediment release into the river bed. *Minimize construction activities to avoid or minimize soil erosion, sedimentation and impacts to riparian vegetation at the crossing. *Avoid impacts and removal to gravel areas at the crossing. *Install silt screens and sediment traps prior to initiating construction	-	-	CC	Methodology: 1. Habitat Control (Comparison of situations before and after construction period) 2. The presence of bentic and fish species of aquatic species (Comparison of situations before and after	Period In breeding period for C. angoranse; May-July Frequency Once per year	Interim First-Findings in Monthly Report & Annual Biorestoration Monitoring Report	TANAP	Biorestoration Monitoring Plan	BAP; Specification for Reinstatement	-

RefNo .	Ph.	Specific Location (and KP)	Environmental Component ²	Project Commitment					Monitoring				Mang. Plan	Addition. Docum.	ESIA Chapter
				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
					crossing activities and maintain the screens and traps during the crossing to prevent or minimize downstream sedimentation.				construction period) Achievement Criteria: 1. Situation of the habitat is similar to previous situation 2. Situation of coastal region which contain riparian vegetation is similar and/or close to previous conditions after construction 3. There is no significant change in population densities of C. angoranse and their diversity after construction 4. Situation of the bottom structure is similar and/or close to previous situation 5. Using this area during the breeding season, especially by C. angoranse						
651	1-2	Seydi Creek (1329+399-1329+429) Freshwater Critical Habitats (FCH18)	Distribution of Individuals of Freshwater Fauna	-	-	-	-	CC	Methodology: Fish species will be captured once a year (in breeding period, May July) by electroshock, after the relevant data (species and individual numbers) has been obtained captured species will be released again after construction period	Period In breeding period; May-July Frequency Once per year	Interim First-Findings in Monthly Report & Annual Biorestoration Monitorin g Report	TANAP	Biorestorati on Monitoring Plan	BAP; Specification for Reinstatement	-

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				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
									Achievement Criteria: There is no significant change in population densities of determined aquatic species and their diversity after construction						
652	1-2	Tributary of Uludere (1375+754 - 1375+770) Freshwater Critical Habitats (FCH19)	Fauna <i>Gobio obtusirostris</i>		*No activities should be carried out in the spawning periods (April-June). *Control sediment release into the river bed. *Minimize construction activities to avoid or minimize soil erosion, sedimentation and impacts to riparian vegetation at the crossing. *Avoid impacts and removal to gravel areas at the crossing. *Install silt screens and sediment traps prior to initiating construction crossing activities and maintain the screens and traps during the crossing to prevent or minimize downstream sedimentation.	-	-	CC	Methodology: 1. Habitat Control (Comparison of situations before and after construction period) 2. The presence of bentic and fish species of aquatic species (Comparison of situations before and after construction period) Achievement Criteria: 1. Situation of the habitat is similar to previous situation 2. Situation of coastal region which contain riparian vegetation is similar and/or close to previous conditions after construction 3. There is no significant change in population densities of G. obtusirostris and their diversity after construction	Period In breeding period for G. obtusirostris; May-July Frequency Once per year	Interim First-Findings in Monthly Report & Annual Biorestoration Monitoring Report	TANAP	Biorestorati on Monitoring Plan	BAP; Specification for Reinstatement	-

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				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
									4. Situation of the bottom structure is similar and/or close to previous situation 5. Using this area, especially G. obtusirostris during the breeding season						
653	1-2	Tributary of Uludere (1375+754 - 1375+770) Freshwater Critical Habitats (FCH19)	Distribution of Individuals of Freshwater Fauna	-	-	-	-	CC	Methodology: Fish species will be captured once a year (in breeding period, May-July) by electroshock, after the relevant data (species and individual numbers) has been obtained captured species will be released again after construction period Achievement Criteria: There is no significant change in population densities of determined aquatic species and their diversity after construction	Period In breeding period; May-July Frequency Once per year	Interim First-Findings in Monthly Report & Annual Biorestoration Monitoring Report	TANAP	Biorestoration Monitoring Plan	BAP; Specification for Reinstatement	-
654	1-2	Tributary of Kocasu Stream-Soğucak (1467+963 - 1468+019) Freshwater Critical Habitats (FCH20)	Fauna <i>Oxyneomacheilus simavica</i>	-	*No activities should be carried out in the spawning periods (April-June). *Control sediment release into the river bed. *Manage all construction activities to the maximum extent possible in order to avoid or minimize soil erosion, sedimentation and impacts to aquatic	-	-	CC	Methodology: 1. Habitat Control (Comparison of situations before and after construction period) 2. The presence of bentic and fish species of	Period In breeding period for O. simavica; May-July Frequency Once per year	Interim First-Findings in Monthly Report & Annual Biorestoration Monitoring Report	TANAP	Biorestoration Monitoring Plan	BAP; Specification for Reinstatement	-

RefNo .	Ph.	Specific Location (and KP)	Environmental Component ²	Project Commitment					Monitoring				Mang. Plan	Addition. Docum.	ESIA Chapter
				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
					and riparian vegetation at the crossing.				aquatic species (Comparison of situations before and after construction period) Achievement Criteria: 1. Situation of the habitat is similar to previous situation 2. Situation of coastal region which contain riparian vegetation is similar and/or close to previous conditions after construction 3. There is no significant change in population densities of O. simavica and their diversity after construction 4. Situation of the bottom structure is similar and/or close to previous situation 5. Using this area during the breeding season especially by O. simavica						
655	1-2	Tributary of Kocasu Stream- Soğucak (1467+963 - 1468+019) Freshwater Critical Habitats (FCH20)	Distribution of Individuals of Freshwater Fauna	-	-	-	-	CC	Methodology: Fish species will be captured once a year (in breeding period, May July) by electroshock, after the relevant data (species and individual numbers) has	Period In breeding period; May-July Frequency Once per year	Interim First-Findings in Monthly Report & Annual Biorestoration Monitoring Report	TANAP	Biorestoration Monitoring Plan	BAP; Specification for Reinstatement	-

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				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
									been obtained captured species will be released again after construction period Achievement Criteria: There is no significant change in population densities of determined aquatic species and their diversity after construction						
656	1-2	Aliova Stream (1562+671 - 1562+704) Freshwater Critical Habitats (FCH21)	Fauna <i>Oxyneomacheilus simavica</i>		*No activities should be carried out in the spawning periods (April-June). *Control sediment release into the river bed. *Minimize construction activities to avoid or minimize soil erosion, sedimentation and impacts to riparian vegetation at the crossing. *Avoid impacts and removal to gravel areas at the crossing. *Install silt screens and sediment traps prior to initiating construction crossing activities and maintain the screens and traps during the crossing to prevent or minimize downstream sedimentation.			CC	Methodology: 1. Habitat Control (Comparison of situations before and after construction period) 2. The presence of bentic and fish species of aquatic species (Comparison of situations before and after construction period) Achievement Criteria: 1. Situation of the habitat is similar to previous situation 2. Situation of coastal region which contain riparian vegetation is similar and/or close to previous conditions after construction 3. There is no significant	Period In breeding period for O. simavica; May-July Frequency Once per year	Interim First-Findings in Monthly Report & Annual Biorestoration Monitoring Report	TANAP	Biorestoration Monitoring Plan	BAP; Specification for Reinstatement	

RefNo	Ph.	Specific Location (and KP)	Environmental Component ²	Project Commitment					Monitoring				Mang. Plan	Addition. Docum.	ESIA Chapter
				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
									change in population densities of O. simavica and their diversity after construction 4. Situation of the bottom structure is similar and/or close to previous situation 5. Using this area during the breeding season especially by O. simavica						
657	1-2	Aliova Stream (1562+671 - 1562+704) Freshwater Critical Habitats (FCH21)	Distribution of Individuals of Freshwater Fauna	-	-	-	-	CC	Methodology: Fish species will be captured once a year (in breeding season) by electroshock in shallow regions and by fyke net in deeper regions in order to determine the fish species' population densities in construction region before activities have started, after the relevant data has been obtained captured species will be released again. Achievement Criteria: There is no significant change in population densities of determined aquatic species and their diversity after construction	Period In breeding period; May-July Frequency Once per year	Interim First-Findings in Monthly Report & Annual Biorestoration Monitoring Report	TANAP	Biorestoration Monitoring Plan	BAP; Specification for Reinstatement	-

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				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
658	1-2	Sarp Creek (1574+842 - 1574+862) Freshwater Critical Habitats (FCH22)	Fauna <i>Cobitis fahirae</i>		<p>*No activities should be carried out in the spawning periods (April-June).</p> <p>*Control sediment release into the river bed.</p> <p>*Manage all construction activities to the maximum extent possible in order to avoid or minimize soil erosion, sedimentation and impacts to aquatic and riparian vegetation at the crossing.</p>			CC	<p>Methodology:</p> <p>1. Habitat Control (Comparison of situations before and after construction period)</p> <p>2. The presence of bentic and fish species of aquatic species (Comparison of situations before and after construction period)</p> <p>Achievement Criteria:</p> <p>1. Situation of the habitat is similar to previous situation</p> <p>2. Situation of coastal region which contain riparian vegetation is similar and/or close to previous conditions after construction</p> <p>3. There is no significant change in population densities of <i>C. fahirae</i> and their diversity after construction</p> <p>4. Situation of the bottom structure is similar and/or close to previous situation</p> <p>5. Using this area during the breeding season</p>	<p>Period</p> <p>In breeding period for <i>C. fahirae</i>; May-July</p> <p>Frequency</p> <p>Once per year</p>	<p>Interim First-Findings in Monthly Report & Annual Biorestoration Monitoring Report</p>	TANAP	Biorestorati on Monitoring Plan	BAP; Specification for Reinstatement	

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				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
									especially by C. fahirae						
659	1-2	Sarp Creek (1574+842 - 1574+862) Freshwater Critical Habitats (FCH22)	Distribution of Individuals of Freshwater Fauna	-	-	-	-	CC	Methodology: Fish species will be captured once a year (in breeding period, May July) by electroshock, after the relevant data (species and individual numbers) has been obtained captured species will be released again after construction period Achievement Criteria: There is no significant change in population densities of determined aquatic species and their diversity after construction	Period In breeding period; May-July Frequency Once per year	Interim First-Findings in Monthly Report & Annual Biorestoration Monitoring Report	TANAP	Biorestoration Monitoring Plan	BAP; Specification for Reinstatement	-
660	1-2	Simav Stream (1599+266 - 1599+339) Freshwater Critical Habitats (FCH23)	Fauna <i>Oxyneomacheilus simavica</i>	-	*No activities should be carried out in the spawning periods (April-June). *Control sediment release into the river bed. *Manage all construction activities to the maximum extent possible in order to avoid or minimize soil erosion, sedimentation and impacts to aquatic and riparian vegetation at the crossing.	-	-	CC	Methodology: 1. Habitat Control (Comparison of situations before and after construction period) 2. The presence of bentic and fish species of aquatic species (Comparison of situations before and after construction period) Achievement Criteria:	Period In breeding period for O. simavica; May-July Frequency Once per year	Interim First-Findings in Monthly Report & Annual Biorestoration Monitoring Report	TANAP	Biorestoration Monitoring Plan	BAP; Specification for Reinstatement	-

RefNo .	Ph.	Specific Location (and KP)	Environmental Component ²	Project Commitment					Monitoring				Mang. Plan	Addition. Docum.	ESIA Chapter
				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
									1. Situation of the habitat is similar to previous situation 2. Situation of coastal region which contain riparian vegetation is similar and/or close to previous conditions after construction 3. There is no significant change in population densities of O. simavica and their diversity after construction 4. Situation of the bottom structure is similar and/or close to previous situation 5. Using this area during the breeding season especially by O. simavica						
661	1-2	Simav Stream (1599+266 - 1599+339) Freshwater Critical Habitats (FCH23)	Distribution of Individuals of Freshwater Fauna	-	-	-	-	CC	Methodology: Fish species will be captured once a year (in breeding season) by electroshock in shallow regions and by fyke net in deeper regions in order to determine the fish species' population densities in construction region before activities have started, after the relevant data has been obtained	Period In breeding period; May-July Frequency Once per year	Interim First-Findings in Monthly Report & Annual Biorestoration Monitoring Report	TANAP	Biorestorati on Monitoring Plan	BAP; Specification for Reinstatement	-

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				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
									captured species will be released again. Achievement Criteria: There is no significant change in population densities of determined aquatic species and their diversity after construction						
662	1-2	Mürvetler Stream (1614+378 - 1614+403) Freshwater Critical Habitats (FCH24)	Fauna <i>Oxyneomacheilus simavica</i>		*No activities should be carried out in the spawning periods (April-June). *Control sediment release into the river bed. *Minimize construction activities to avoid or minimize soil erosion, sedimentation and impacts to riparian vegetation at the crossing. *Avoid impacts and removal to gravel areas at the crossing. *Install silt screens and sediment traps prior to initiating construction crossing activities and maintain the screens and traps during the crossing to prevent or minimize downstream sedimentation.	-	-	CC	Methodology: 1. Habitat Control (Comparison of situations before and after construction period) 2. The presence of bentic and fish species of aquatic species (Comparison of situations before and after construction period) Achievement Criteria: 1. Situation of the habitat is similar to previous situation 2. Situation of coastal region which contain riparian vegetation is similar and/or close to previous conditions after construction	Period In breeding period for O. simavica, C. fahirae and C. puncticulata; May-July Frequency Once per year	Interim First-Findings in Monthly Report & Annual Biorestoration Monitoring Report	TANAP	Biorestoration Monitoring Plan	BAP; Specification for Reinstatement	-

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				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
									3. There is no significant change in population densities of <i>O. simavica</i> , <i>C. fahirae</i> and <i>C. puncticulata</i> and their diversity after construction 4. Situation of the bottom structure is similar and/or close to previous situation 5. Using this area during the breeding season especially by <i>O. simavica</i> , <i>C. fahirae</i> and <i>C. puncticulata</i>						
663	1-2	Mürvetler Stream (1614+378 - 1614+403) Freshwater Critical Habitats (FCH24)	Fauna <i>Cobitis puncticulata</i>		*No activities should be carried out in the spawning periods (April-June). *Control sediment release into the river bed. *Minimize construction activities to avoid or minimize soil erosion, sedimentation and impacts to riparian vegetation at the crossing. *Avoid impacts and removal to gravel areas at the crossing. *Install silt screens and sediment traps prior to initiating construction crossing activities and maintain the screens and traps during the crossing to prevent or minimize downstream sedimentation.	-	-	CC	Methodology: 1. Habitat Control (Comparison of situations before and after construction period) 2. The presence of bentic and fish species of aquatic species (Comparison of situations before and after construction period) Achievement Criteria: 1. Situation of the habitat is similar to	Period In breeding period for <i>O. simavica</i> , <i>C. fahirae</i> and <i>C. puncticulata</i> ; May-July Frequency Once per year	Interim First-Findings in Monthly Report & Annual Biorestoration Monitoring Report	TANAP	Biorestoration Monitoring Plan	BAP; Specification for Reinstatement	-

RefNo .	Ph.	Specific Location (and KP)	Environmental Component ²	Project Commitment					Monitoring				Mang. Plan	Addition. Docum.	ESIA Chapter
				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
									previous situation 2. Situation of coastal region which contain riparian vegetation is similar and/or close to previous conditions after construction 3. There is no significant change in population densities of <i>O. simavica</i> , <i>C. fahirae</i> and <i>C. puncticulata</i> and their diversity after construction 4. Situation of the bottom structure is similar and/or close to previous situation 5. Using this area during the breeding season especially by <i>O. simavica</i> , <i>C. fahirae</i> and <i>C. puncticulata</i>						
664	1-2	Mürvetler Stream (1614+378 - 1614+403) Freshwater Critical Habitats (FCH24)	Fauna <i>Cobitis fahirae</i>	-	*No activities should be carried out in the spawning periods (April-June). *Control sediment release into the river bed. *Minimize construction activities to avoid or minimize soil erosion, sedimentation and impacts to riparian vegetation at the crossing.	-	-	CC	Methodology: 1. Habitat Control (Comparison of situations before and after construction period) 2. The presence of bentic and fish species of	Period In breeding period for <i>O. simavica</i> , <i>C. fahirae</i> and <i>C. puncticulata</i> ; May-July Frequency Once per year	Interim First-Findings in Monthly Report & Annual Biorestation Monitoring Report	TANAP	Biorestation Monitoring Plan	BAP; Specification for Reinstatement	-

RefNo .	Ph.	Specific Location (and KP)	Environmental Component ²	Project Commitment					Monitoring				Mang. Plan	Addition. Docum.	ESIA Chapter
				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
					*Avoid impacts and removal to gravel areas at the crossing. *Install silt screens and sediment traps prior to initiating construction crossing activities and maintain the screens and traps during the crossing to prevent or minimize downstream sedimentation.				aquatic species (Comparison of situations before and after construction period) Achievement Criteria: 1. Situation of the habitat is similar to previous situation 2. Situation of coastal region which contain riparian vegetation is similar and/or close to previous conditions after construction 3. There is no significant change in population densities of <i>O. simavica</i> , <i>C. fahirae</i> and <i>C. puncticulata</i> and their diversity after construction 4. Situation of the bottom structure is similar and/or close to previous situation 5. Using this area during the breeding season especially by <i>O. simavica</i> , <i>C. fahirae</i> and <i>C. puncticulata</i>						

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				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
665	1-2	Mürvetler Stream (1614+378 - 1614+403) Freshwater Critical Habitats (FCH24)	Distribution of Individuals of Freshwater Fauna	-	-	-	-	CC	Methodology: Fish species will be captured once a year (in breeding season) by electroshock in shallow regions and by fyke net in deeper regions in order to determine the fish species' population densities in construction region before activities have started, after the relevant data has been obtained captured species will be released again. Achievement Criteria: There is no significant change in population densities of determined aquatic species and their diversity after construction	Period In breeding period; May-July Frequency Once per year	Interim First-Findings in Monthly Report & Annual Biorestoration Monitoring Report	TANAP	Biorestoration Monitoring Plan	BAP; Specification for Reinstatement	-
666	1-2	Manyas-Kocacay Stream (1622+338 - 1622+397) Freshwater Critical Habitats (FCH25)	Fauna <i>Cobitis puncticulata</i>	-	*No activities should be carried out in the spawning periods (April-June). *Control sediment release into the river bed. *Manage all construction activities to the maximum extent possible in order to avoid or minimize soil erosion, sedimentation and impacts to aquatic and riparian vegetation at the crossing.	-	-	CC	Methodology: 1. Habitat Control (Comparison of situations before and after construction period) 2. The presence of bentic and fish species of aquatic species (Comparison of situations before and	Period In breeding period; May-July Frequency Once per year	Interim First-Findings in Monthly Report & Annual Biorestoration Monitoring Report	TANAP	Biorestoration Monitoring Plan	BAP; Specification for Reinstatement	-

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				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
									after construction period) Achievement Criteria: 1. Situation of the habitat is similar to previous situation 2. Situation of coastal region which contain riparian vegetation is similar and/or close to previous conditions after construction 3. There is no significant change in population densities of <i>C. fahirae</i> and <i>C. punctulata</i> and their diversity after construction 4. Situation of the bottom structure is similar and/or close to previous situation 5. Using this area during the breeding season especially by <i>C. fahirae</i> and <i>C. punctulata</i>						
667	1-2	Manyas-Kocacay Stream (1622+338 - 1622+397) Freshwater Critical Habitats (FCH25)	Fauna <i>Cobitis fahirae</i>	-	*No activities should be carried out in the spawning periods (April-June). *Control sediment release into the river bed. *Manage all construction activities to the maximum extent possible in order to avoid or minimize soil erosion, sedimentation	-	-	CC	Methodology: 1. Habitat Control (Comparison of situations before and after construction period) 2. The presence of	Period In breeding period; May-July Frequency Once per year	Interim First-Findings in Monthly Report & Annual Bioresta tion	TANAP	Biorestorati on Monitoring Plan	BAP; Specification for Reinstatement	-

RefNo .	Ph.	Specific Location (and KP)	Environmental Component ²	Project Commitment					Monitoring				Mang. Plan	Addition. Docum.	ESIA Chapter
				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
					and impacts to aquatic and riparian vegetation at the crossing.				bentic and fish species of aquatic species (Comparison of situations before and after construction period) Achievement Criteria: 1. Situation of the habitat is similar to previous situation 2. Situation of coastal region which contain riparian vegetation is similar and/or close to previous conditions after construction 3. There is no significant change in population densities of <i>C. fahirae</i> and <i>C. puncticulata</i> and their diversity after construction 4. Situation of the bottom structure is similar and/or close to previous situation 5. Using this area during the breeding season especially by <i>C. fahirae</i> and <i>C. puncticulata</i>		Monitorin g Report				
668	1-2	Manyas-Kocacay Stream (1622+338 -	Distribution of Individuals of Freshwater Fauna	-	-	-	-	CC	Methodology: Fish species will be captured once a year (in	Period In breeding period for <i>C. fahirae</i> and <i>C.</i>	Interim First-Findings in	TANAP	Biorestorati on	BAP; Specification	-

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RefNo	Ph.	Specific Location (and KP)	Environmental Component ²	Project Commitment					Monitoring				Mang. Plan	Addition. Docum.	ESIA Chapter
				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
		1622+397) Freshwater Critical Habitats (FCH25)							breeding season) by electroshock in shallow regions and by fyke net in deeper regions in order to determine the fish species' population densities in construction region before activities have started, after the relevant data has been obtained captured species will be released again. Achievement Criteria: There is no significant change in population densities of determined aquatic species and their diversity after construction	punctulata; May-July Frequency Once per year	Monthly Report & Annual Biorestation Monitoring Report		Monitoring Plan	for Reinstatement	
669	1-2	Gönen Stream (1661+511 - 1661+561) Freshwater Critical Habitats (FCH26)	Fauna <i>Anguilla anguilla</i>		*No activities should be carried out in the spawning periods (April-June). *Control sediment release into the river bed. *Minimize construction activities to avoid or minimize soil erosion, sedimentation and impacts to riparian vegetation at the crossing. *Avoid impacts and removal to gravel areas at the crossing. *Install silt screens and sediment traps prior to initiating construction crossing activities and maintain the screens and traps during the crossing			CC	Methodology: 1. Habitat Control (Comparison of situations before and after construction period) 2. The presence of bentic and fish species of aquatic species (Comparison of situations before and after construction period)	Period In breeding period for <i>A. anguilla</i> ; May-July Frequency Once per year	Interim First-Findings in Monthly Report & Annual Biorestation Monitoring Report	TANAP	Biorestation Monitoring Plan	BAP; Specification for Reinstatement	

RefNo	Ph.	Specific Location (and KP)	Environmental Component ²	Project Commitment					Monitoring				Mang. Plan	Addition. Docum.	ESIA Chapter
				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
					to prevent or minimize downstream sedimentation.				Achievement Criteria: 1. Situation of the habitat is similar to previous situation 2. Situation of coastal region which contain riparian vegetation is similar and/or close to previous conditions after construction 3. There is no significant change in population densities of <i>A. anguilla</i> and their diversity after construction 4. Situation of the bottom structure is similar and/or close to previous situation 5. Using this area during the breeding season especially by <i>A. anguilla</i>						
670	1-2	Gönen Stream (1661+511 - 1661+561) Freshwater Critical Habitats (FCH26)	Distribution of Individuals of Freshwater Fauna	-	-	-	-	CC	Methodology: Fish species will be captured once a year (in breeding season) by electroshock in shallow regions and by fyke net in deeper regions in order to determine the fish species' population densities in construction region before	Period In breeding period; May-July Frequency Once per year	Interim First-Findings in Monthly Report & Annual Biorestation Monitoring Report	TANAP	Biorestation Monitoring Plan	BAP; Specification for Reinstatement	-

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RefNo .	Ph.	Specific Location (and KP)	Environmental Component ²	Project Commitment					Monitoring				Mang. Plan	Addition. Docum.	ESIA Chapter
				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
									activities have started, after the relevant data has been obtained captured species will be released again. Achievement Criteria: There is no significant change in population densities of determined aquatic species and their diversity after construction						
671	1-2	Biga Stream (1699+822 - 1699+876) Freshwater Critical Habitats (FCH27)	Fauna <i>Cobitis fahirae</i>		*No activities should be carried out in the spawning periods (April-June). *Control sediment release into the river bed. *Minimize construction activities to avoid or minimize soil erosion, sedimentation and impacts to riparian vegetation at the crossing. *Avoid impacts and removal to gravel areas at the crossing. *Install silt screens and sediment traps prior to initiating construction crossing activities and maintain the screens and traps during the crossing to prevent or minimize downstream sedimentation.	-	-	CC	Methodology: 1. Habitat Control (Comparison of situations before and after construction period) 2. The presence of bentic and fish species of aquatic species (Comparison of situations before and after construction period) Achievement Criteria: 1. Situation of the habitat is similar to previous situation 2. Situation of coastal region which contain riparian vegetation is similar and/or	Period In breeding period for A. anguilla; May-July Frequency Once per year	Interim First-Findings in Monthly Report & Annual Biorestoration Monitoring Report	TANAP	Biorestorati on Monitoring Plan	BAP; Specification for Reinstatement	-

RefNo .	Ph.	Specific Location (and KP)	Environmental Component ²	Project Commitment					Monitoring				Mang. Plan	Addition. Docum.	ESIA Chapter
				General Commitment	Mitigation Action	Relevant Authority	Authority Requirement	Resp.	Action	Freq.	Report.	Report. to			
									close to previous conditions after construction 3. There is no significant change in population densities of <i>C. fahirae</i> and their diversity after construction 4. Situation of the bottom structure is similar and/or close to previous situation 5. Using this area during the breeding season especially by <i>C. fahirae</i>						
672	1-2	Biga Stream (1699+822 - 1699+876) Freshwater Critical Habitats (FCH27)	Distribution of Individuals of Freshwater Fauna	-	-	-	-	CC	Methodology: Fish species will be captured once a year (in breeding season) by electroshock in shallow regions and by fyke net in deeper regions in order to determine the fish species' population densities in construction region before activities have started, after the relevant data has been obtained captured species will be released again. Achievement Criteria: There is no significant	Period In breeding period; May-July Frequency Once per year	Interim First-Findings in Monthly Report & Annual Biorestoration Monitoring Report	TANAP	Biorestorati on Monitoring Plan	BAP; Specification for Reinstatement	-

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RefNo .	Ph.	Specific Location (and KP)	Environmental Component ²	Project Commitment					Monitoring				Mang. Plan	Addition. Docum.	ESIA Chapter
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									change in population densities of determined aquatic species and their diversity after construction						

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Major cost items for the above given commitment register of Project, which contains mitigation measures and the monitoring requirements, are presented in Table 1 below. The mitigation and monitoring requirements of the Project are both a part from the ESIA Report and Environmental Monitoring Plan of TANAP. ESIA Report, BAP and ESMS documentation of TANAP were a part of Bid Documentation submitted to each Contractor during Bid phase.

Item	Project Activities	Cost (till Contract completion date)						
1	Clearing and grading	84,0 mUSD						
2	Clean-up and reinstatement	103,8 mUSD						
3	HSE Requirements (Induction, training, supervision, equipment, medical resources, medivac, contractors incentive scheme etc.)	45,6 mUSD						
4	Cultural Heritage Management Activities including the chance find procedure implementation, salvage excavation and test pit excavation etc.)		Salvage Excavation (USD/m³)			Test Pit Excavation (USD/m³)		
		Excavation amount (m³)	0-500	500-2000	2000 and above	0-200	201-500	500 and above
		Unit Cost (USD/m³)	200-400	150-350	100-325	80-165	75-140	65-135
5	Biorestitution Monitoring (On-site monitoring by experts on SCC species and critical habitats together with species diversity and vegetation cover in critical habitats, slopes and other areas such as temporarily used areas, including experts’ site visit in proper seasons covering both ROW and nearby areas.)	300,000-340,000 USD/annum						
6	Overall E&S Management and Monitoring Studies	35,9 mUSD						

Table 1 Approximate Costs for the above mitigation measures and monitoring requirements³

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- 2. Costs for the item 4 (Cultural Heritage Management) are presented as a valid interval based on the existing prices including all the construction activities.
 - 3. Cost for the item 5 is presented as an estimation regarding the previous similar studies. Other tasks stated in Biorestitution Monitoring Plan (acquisition of satellite imagery, site selection of monitoring locations and monitoring resofrestation areas) are not included in the estimated budget.