GENERAL DIRECTORATE OF ANTALYA WATER AND WASTEWATER ADMINISTRATION

(ASAT)

ANTALYA SUSTAINABLE WATER AND WASTEWATER MANAGEMENT PROJECT

ENVIRONMENTAL AND SOCIAL MANAGEMENT PLAN FOR CONSTRUCTION OF SEWERAGE NETWORK LINE IN FİNİKE REGION

PREPARED BY

INFRASTRUCTURE MANAGEMENT AND CONSULTANCY SERVICES INDUSTRY AND TRADE INC.

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Contents

1. INTRODUCTION 1
2. PURPOSE OF ENVIRONMENTAL AND SOCIAL MANAGEMENT PLAN 3
3. ENVIRONMENT POLICIES AND LEGISLATION 4
3.1 National 4
3.1.1 Regulation of Environmental Impact Assessment 4
3.1.2 Other National Environmental Legislations 5
3.2 International 6
3.2.1 World Bank Environmental and Social Policies 6
3.2.2 EU Environmental Legislation 11
4. PROJECT DESCRIPTION 15
5. ENVIRONMENTAL AND SOCIAL BACKGROUND OF PROJECT SITE 16
5.1 Geographical Position 16
5.2 Population 18
5.3 Socio-Economic Situation 22
5.4 Project Area 23
5.5 Technical Specification of Project 27
5.5.1 Wastewater Works 27
6. ENVIRONMENTAL AND SOCIAL MANAGEMENT STRUCTURE AND RESPONSIBLITIES 32
6.1 Environmental and Social Management Structure 32
6.2 Training 34
6.3 Instutional Arrangements 35
6.4 Necessary Approvals and Permissions 37
7. ENVIRONMENTAL AND SOCIAL MANAGEMENT PLAN 38
7.1 Environmental and Social Impacts and Measures 38
7.1.1 Construction Phase 40
7.1.2 Operating Phase 50
7.2 Environmental and Social Impact Monitoring Plan 53
7.2.1 Construction Phase 53
7.2.2 Operating Phase 60
8. GRIEVANCE MECHANISM 61
9. PUBLIC PARTICIPATION MEETING 62

9.1 Information of Meeting 62
9.2 Questions and Answers 63
9.3 Advertising Notice 66
9.4 Images Related To Public Participation Meeting 71
9.6 List of Participants 74
9.7 Information Activities Planned to be Made Within the Scope of the Project 75
10. RESULT OF ENVIRONMENTAL AND SOCIAL MANAGEMENT PLAN 76
11. REFERENCES 79

Figures

Figure 1. Manhole Type Ready Wastewater Pumping Station Type Sectional View 15
Figure 2. General View of Project Area in Scope of ESMP 16
Figure 3. Finike District Geographical Position 17
Figure 4. Finike Project Site Line Routes (Sahilkent District and Yeni District) 24
Figure 5. Finike Project Site Line Routes (Kale District, Eski District, Kızılca District, Karşıyaka District and İskele District) 25
Figure 6. Finike Project Site Line Routes 26
Figure 7. Environmental and Social Management System to be Implemented 33
Figure 8. 'Antalya A' Newspaper Puclic Participation Meeting Announcement 66
Figure 9. 'Finike Akdeniz' Newspaper Public Participation Meeting Announcement 67
Figure 10. ASAT General Directorate Website Public Participation Meeting Announcement 68
Figure 11. ALDAŞ Inc. Website Public Participation Meeting Announcement 69
Figure 12. Finike Municipality Website Public Participation Meeting Announcement 70
Figure 13. Images Related to the Public Participation Meeting 72

Tables

Table 1. Comparison Between Word Bank Environmental Policy and National Legislation 8
Table 2. Antalya Population by Districts 18
Table 3. Population Density and Population Increase by Years in Antalya 19
Table 4. Population Calculations by Geometric Method 20
Table 5. Population Calculations by Iller Bank Method 21
Table 6. Population Calculations by Projection/Arithmetic Method 21
Table 7. Materials to be used for the Particle Size for HDPE Corrugated/Concrete Pipes 30
Table 8. Relevant Institution - Duties and Authorities 35
Table 9. Potential Environmental and Social Impacts and Mitigation Measures During the Construction Phase 40
Table 10. Posibble Environmental and Social Impacts and Preventation during the Construction Phase 50
Table 11. Potential Environmental and Social Impacts Monitoring Plan during the Construction Phase 53
Table 12. Monitoring Plan for Possible Environmental and Social Impacts During Operation 60
Table 13. Public Participation Meeting Participant List 74

1. INTRODUCTION

Antalya Water and Wastewater Administration (ASAT) General Directorate has been established as a separate institutional structure of Antalya Metropolitan Municipality, for the execution of water and wastewater services, with the decision of Council of Ministers No. 94/6516 in the framework of the law numbered 2560.The related decision has been published in the Official Gazette numbered 22206 in 18/02/1995. General Directorate of ASAT, established in accordance with the Law No. 2560, is an independent institution with independent budget and public legal entity of the Antalya Metropolitan Municipality.

Duties and Responsibilities within the framework of Law No. 2560 and Law of Metropolitan Municipality, No. 5216;

- In order to provide potable and industrial water from all kinds of underground and surface resources and to distribute them, carrying out all necessary survey and design studies of the facilities for supplying water to the subscribers, establishing facilities regarding to the projects, taking over and operating of the established facilities, carrying out necessary maintenance, repair works and renewals,
- For the collection of wastewater and storm water, removal from the settlement areas and safely transferring to discharge place or reuse of water, commissioning the survey and design studies of all facilities stating from the subscribers to discharge point; establishing the facilities according to these projects when necessary; taking over and operating of the established facilities, making maintenance-repair works and renewals,
- To prevent the pollution of water resources in the region; such as lake, river shores and underground waters with waste waters and industrial wastes, to prevent the establishment of facilities and activities which may cause loss of water from these sources and to take all kind of technical, administrative and legal precautions on these issues,
- To carry out the duties assigned to the municipalities for water and sewage services and to use the authorities in these circumstances,
- To purchase and rent all kinds of movable and immovable properties, to sell vehicles and equipments that are not economically worthy, to establish and operate facilities related to ASAT services directly or indirectly with other public or private establishments, to participate the facilities which have been established for this purpose,
- According to Article 7 / r of the Law No. 5216 of the Metropolitan Municipality, it can be summarized as, “to carry out water and sewerage services, to establish and operate the necessary dams and other facilities for this purpose; rehabilitate the

streams; to market waters from water resources or produced water at the end of the treatment ".

Within the scope of the duties and responsibilities mentioned above; ASAT realize the infrastructure investments with both own resources and foreign finance resources.

Till this time, under "Antalya Water and Wastewater Project", 163 million USD project financed by the World Bank and the European Investment Bank and under "Municipality Services Project", 148 million Euros project financed by the World Bank - International Bank for Reconstruction and Development.

ASAT intends to continue its investments with the World Bank financed Sustainable Cities Project. The investments which will be realized under the project, will be in accordance with the Republic of Turkey Environmental Legislation and World Bank Environmental Protection Policy.

Within this scope, "Environmental and Social Management Report (ESMP)" of wastewater network constructions for Finike region under ASAT3/W9 "**Construction of Wastewater Network in Finike District**" regarding to "Antalya Sustainable Water and Wastewater Management Project" has been prepared and the necessary measures for the environmental and social impacts mentioned in this report will be taken into account during the execution of the projects.

2. PURPOSE OF ENVIRONMENTAL AND SOCIAL MANAGEMENT PLAN

The main objective of the Sustainable Cities Project (SCP) is to enhance more the environmental, financial / economic and social sustainability of the contract packages that the General Directorate of ASAT will implement under the project. According to the elimination criteria stated in the document of the Environmental and Social Management Framework prepared for SCP, it is necessary to prepare the Environmental and Social Management Plan (ESMP) considering the World Bank's Environmental and Social Protection Prevention Policies.

The aim of this ESMP document is to determine and to take precautions regarding to the social and environmental impacts that may occur during the construction of the contracts for sewerage and parcel connection ASAT3/W9 (Construction of Wastewater Network in Finike District) and during the operating period following the completion of these construction works.

Within the scope of the report, information about the construction works planning to be done within the the contract, the methodologies to be applied and the data regarding to the work sites are given and the social and environmental impacts that can occur during construction and operation have been determined. The impacts that could occur during all phases of the execution of the contract have been defined, and measures have been set up to prevent and / or minimize the harmful impacts. Responsible project stakeholders have been identified for the prevention and minimization of the impacts described in this report and it has been aimed to monitor and control the impacts identified in the ESMP during the implementation of the Project.

Considering the monitoring parameters determined within the scope of the ESMP document, it is aimed that the supervision organization will control the quality of construction during the construction period and monitor the work and measures carried out in the field related to these parameters. The Contractor will submit the quarterly report included in arrangements on the site, measures and situations encounteredto the supervision team. These monthly monitoring reports will be reviewed by the supervision team by taking into account the work done on the field and monitoring reports will be submitted quarterly periods to the Ilbank. Ilbank will evaluate these environmental and social monitoring reports and submit them to the World Bank as semi-anual environmental and social monitoring reports. In operation phase, the social and environmental impacts will be evaluated and submitted to the World Bank and Ilbank in semi-annual period.

3. ENVIRONMENT POLICIES AND LEGISLATION

3.1 National

3.1.1 Regulation of Environmental Impact Assessment

The purpose of this regulation is to arrange the administrative and technical procedures and principles to be complied with the environmental impact assessment process.

Environmental Impact Assessment (EIA) covers; identification of the positive and negative impacts that the projects planned to be realized may have on the environment, preventing the negative impacts or measures to be taken for reducing the minimum amount that will not harm the environment, evaluation of the selected location and technology alternatives, and monitoring and control of the implementation of the projects.

The authority to give decisions on "EIA positive", "EIA negative," EIA required " or “EIA is not required” for the projects related to this directive are under the Ministriy of Environment and Urbanisation ’sresponsibility. However, when the Ministry deems it is neccesary, it may transfer its authority to the governorships on the basis of authority limits, determining the "EIA is required" or "EIA is not required" decision.

According to the Regulation EIA report is compulsory: for the projects listed in Annex 1; for the projects that the “EIA is required” decision is given; in case the capacity increase and / or expansion is planned for the projects which are listed in Annex 2 but end up with a total capacity exceeding the thresholds provided in Annex 1; in case the capacity increase and / or expansion is planned for the projects having ‘EIA positive’ decision but exceeding the threshold values in Annex 1; in case the capacity increase and / or expansion is planned for the projects that are within the scope of this Regulation but remain below the threshold value, the new capacity of the project is at or above the threshold value specified in Annex 1.

Within the scope of EIA, the public participation meetings are held by authorized ministries and organizations with the participation of the project owner on the date determined by the Ministry and at the place and time determined by the governorship for informing the citiziens

Activities of ASAT3/W9 contract within the scope of Antalya Sustainable Cities Project are not included in Annex-1 and Annex-2 according to Turkish EIA legislation, it is considered out of scope.

3.1.2 Other National Environmental Legislations

Regulations and related standards, within the framework of Turkey's EU integration is mostly harmonized with EU legislation, and assessments on this subject are given in Section 3.2.1.

The Regulations for National Environmental Legislation are listed below:

- Regulation on Control of Packaging Waste
- Regulation on Control of Waste Electrical and Electronic Items
- Regulation on Control of Waste Batteries and Accumulators
- Regulation on Control of Waste Oil
- Regulation on Landfill of Wastes
- Regulation on Waste Management
- Regulation on Control of Medical Wastes
- Regulation on Zero Waste
- Regulation of Exhaust Gas Emission Control
- Regulation on Control of Excavation, Construction, Demolition Wastes
- Regulation on Environmental Auditing
- Regulation on Environmental Permit and License
- Regulation on Strategic Environmental Assessment
- Regulation on Evaluation and Management of Environmental Noise
- Regulation on Control of Soil Pollution and Point Source Contaminated Lands
- Regulation on the Inventory and Control of Chemicals
- Regulation on Control of Odor-forming Emissions
- Regulation on Urban Wastewater Treatment
- Regulation on Water Pollution Control
- Regulation on Inspection Services of Water Structures
- Regulation on the Protection of Groundwater Against Pollution and Deterioration
- Regulation on Surface Water Qualitiy
- Regulation on Wastewater Collection and Disposal Systems
- Regulation on Assessment and Management of Air Quality

- Regulation on Control of Air Pollution Caused by Heating
- Regulation on Reduction of Ozone Depleting Substances
- Regulation on Control of Industrial Air Pollution
- Regulation on Tracking of Greenhouse Gas Emissions
- Regulation on the Establishment and Management of the National Geographic Information System
- Regulation on Occupational Health and Safety

3.2 International

3.2.1 World Bank Environmental and Social Policies

It is necessary for the ASAT General Directorate to prepare the Environmental and Social Management Report for the investments defined in the Antalya Sustainable Water and Wastewater Management Project and for the World Bank's Environmental Assessment Operational Policy (OP 4.01).

The operational policies listed below are within the framework of the ESMP;

- Natural Habitats (OP 4.04);
- Physical Cultural Resources (OP 4.11);
- International Waterways (OP 7.50);
- Involuntary Resettlement (OP 4.12)
- Physical Cultural and other World Bank Safeguards.

In the course of preparation of the Environmental and Social Management Plan, the operating policies listed above were determined taking into consideration for the nature of the sewerage network and collector lines construction project and the geographical, natural and demographic structure of the region. It was seen that there was no trigger to cause the project category to rise.

Within the scope of the Involuntary Resettlement Policy (OP 4.12), the Land Acquisition and Resettlement Policy Framework (LARPF) document which will be implemented in the second series of the Sustainable Cities Project, has been prepared by Ilbank and approved by the World Bank. This document is published on IlBank's web page. During the implementation of the Antalya Sustainable Water and Wastewater Management Project, the Administration shall consider the matters specified in this document.

Environmental and Social Monitoring System will include following items;

- General Enviroment

- Air Emmissions
- Soil
- Above ground and underground water
- Biological Diversity
- Noice and dust emmisions
- Social Monitoring
  - Community Health and Safety
  - Employment
  - Labor Influx (not all subjects may have labor influx issues. Labor influx pertains to social risks that might be encountered from long term accommodation of wokers on camp sites established on site for the contrsuction of investments.)
  - Local Procurement
  - Land Acquisition
  - Affected Vulnerable Groups (such as waste pickers, people with disabilities, elderly etc.)

It is anticipated that the projects under the scope of Antalya Sustainable Water and Wastewater Management Project will have investments related to "Wastewater" and "Water".

Within the Sustainable Cities Project-II, Environmental and Social Management Framework dated March 2018, the mentioned investments are defined as follows;

Investment related to water supply: Development, rehabilitation and expansion of water supply systems together with urban growth and reconstruction.

Investment related to wastewater: Expansion and rehabilitation of collection networks to provide wastewater services to developing urban areas; separation of wastewater and rainwater drainage networks when appropriate; investment in new wastewater treatment capacity, including sludge removal management in line with environmental policy objectives.

In consultation with the World Bank, Ilbank will classify the projects as Category A, Category B or Category C by conducting a screening of the sub projects. Ilbank if one of the evaluated criteria is found to be at high risk, it shall classify that sub project as Category A. If none of the criteria are high risk, but at least one is found to carry a "moderate" risk, that sub-project will be classified as Category B. If all criteria of the sub project are found to be "too small or zero risk", that sub project shall be classified as Category C.

Differences between World Bank Environmental Policy and National Legislation has ben described in Table 1.

Table 1. Comparison Between Word Bank Environmental Policy and National Legislation

Steps	Turkish Regulation on EIA	World Bank O.P 4.01
Screening	The EIA Regulation classifies the proposed projects into two categories as; 1. Annex I Projects: The projects that have significant potential impacts. 2. Annex II Projects: The projects that may or may not have significant impacts on the environment.	Under the O.P. 4.0.1, the proposed projects are classified under three categories as; 1. Category A: These types of projects would have significant adverse environmental impacts that are sensitive, diverse or unprecedented. 2. Category B: These types of projects might have some adverse environmental impacts, but less adverse than those of Category A projects. i. Category B projects divides in two within its structure as B and B+ projects. Category B+ projects have relatively more impacts and mitigation measures comparing to Category B projects, yet the impacts and mitigation measures are not significant enough to be recognized as Category A projects. 3. Category C: These types of projects are likely to have minimal or no adverse environmental impacts. When a WB-funded project involves a series of sub projects which are selected and funded by a Financial Intermediary (FI)

		using WB loan proceeds, the project is classified as Category FI.
Public Participation Meeting	For projects that require the preparation of an EIA, the Governorate is required to inform the public that a project application has been submitted in a specified locality, that the EIA process has begun and that the public may submit its comments and suggestions to the Governorate or MoEU.	For all Category A and B sub projects proposed for WB financing, during the EA process, the borrower consults sub project affected groups and NGOs about the sub project's environmental impacts and takes their opinions into account.
Scope of Environmental Assessment	The project proponent presents a Project Introduction File (PIF) for Annex II projects and the PIF outline for Annex I projects to a commission which comprises representatives of MoEU and relevant organizations as identified by MoEU. Based on the information submitted, the commission determines the scope of the EIA of the proposed project.	For Category A sub projects the borrower is required to prepare an EIA which examines the sub project's potential negative and positive environmental impacts, compares them with those of feasible alternatives, and recommends any measures needed to prevent, minimize, mitigate, or compensate for adverse impacts and improve environmental performance. For Category B projects, this information may be contained in an Environmental and Social Management Plan (ESMP) only unless there are site-specific issues which necessitating a site-specific assessment in addition to the ESMP. If the project is recognized as B+, then partial EA document or partial Environmental and Social Impact Assessment (ESIA) is required to satisfy the expected requirements.

Review and Approval of the EA	The commission reviews the draft version of the EIA report. The final EIA report which incorporates the commission's assessments is then submitted to the MoEU for final review. MoEU determines whether the "EIA is positive" in which case the project proponent may implement the project or "EIA is negative" in which case the project may not go any forward.	In FI projects, the responsibility to ensure that OP 4.01 requirements are met rests with the FI. The EA process should normally be completed prior to the FI's approval of a sub project for financing with a WB loan.
Disclosure	The draft EIA report is made available to the public for comments at Central MoEU or provincial directorate. After MoEU's final evaluation of the EIA report, the Governorate announces to the public MoEU's decision together with its justifications. Disclosure of the final EIA document is not foreseen in the EIA Regulation.	For Category A sub projects the FI must make the draft EIA report available at a public place accessible to sub project affected groups and local NGOs. After the EIA of a Category A sub project is finalized, the FI transmits to WB an English language copy of the final report including an English language executive summary. The WB distributes the executive summary to its executive directors and makes the report available through its InfoShop. In case of Category B sub projects, the FI transmits to WB the final English language Category B EA report and WB makes it available through its InfoShop.
Implementation, Monitoring and Inspection	According to the EIA Regulation, MoEU monitors and inspects projects that were assessed either "not to need an EIA" or "to have a positive EIA" based on provisions specified in the PIF or the EIA, respectively. Furthermore, the project	During sub project implementation, the FI reports to WB on (a) compliance with measures agreed with the Bank on the basis of the findings and results of the EA, including implementation of the ESMP; and (b) the findings of monitoring

	proponent is obliged to submit monitoring reports to MoEU which transmits them to the Governorate for disclosure to the public.	programs. The Bank bases supervision of the project's environmental aspects on the findings and recommendations of the EA, including measures set out in the legal agreements, any ESMP, and other project documents.

The risk assessment related to the ASAT3/W9 Contract within the scope of Antalya Sustainable Water and Wastewater Management Project 2 was classified as Category B. For all Category A and B Subprojects proposed for WB financing, during the E&S Assesment Process, the borrower consults the Project affected groups on the environmental and social impacts of the subproject and takes into account their opinions. Within this framework, it has been concluded that it would be appropriate to prepare an Environmental and Social Management Plan and to hold a Public Participation Meeting for E&S Assesment regarding to the subject contract packages.

3.2.2 EU Environmental Legislation

The EU Environmental Policy is a dynamic policy area that provides an integrated management understanding with the objectives of many policy areas, primarily in the protection of the environment, prevention of the problem at the source, efficient and sustainable use of natural resources, guarantee of human health and the highest standard of living. The EU encourages the implementation of this policy not only within the EU but also through collaborations with other countries.

The development of this policy area has been accelerated by the Environmental Action Programs (EAP), which best offers the EU's integrated environmental management approach and has been prepared since 1973. The last phase of the EAP, which allows more effective solutions to solve global problems, covers the 2014-2020 years with the Seventh Program.The Environmental Action Programs, which have been prepared in 1973, have been quite effective in the development of the European Union's environmental policy:

In 1973 first Environmental Action Program

In 1977, 2nd Environmental Action Program

3th Environmental Action Program

4th Environmental Action Program

5th Environmental Action Program

The 6th Environmental Action Program period has been completed in 2012

7th Environmental Action Plan Based On: EU's environmental target within 10 years has been put forth. The main targets of the "Environment 2020: Our Future, Our Choice" programme are;

- Climate Change
- Nature and Biodiversity
- Environment and Health
- Natural Resources and Wastes

We can explain these four titles as follows;

Climate Change: EU member states have undergone a program to reduce greenhouse gas emissions by 8% between 2013-2020.

Nature and Biodiversity: Protection of different living species and prevention of industrial accidents.

Environment and Health: To prevent the adverse impacts of air, water, noise pollution on human health.

Natural Resources and Wastes: Solving the waste problem by ensuring that resources are used correctly and wastes are properly separated and recycled.

Basic Application Areas in EU Environmental Policy

Horizontal Legislation

- Environmental Impact Assessment (EIA) (EIA Directive 2011/92 / EC)
- Strategic Environmental Assessment (SEA) (Strategic Environmental Assessment Directive 2001/42 / EC)
- Environmental Information Access (Directive 2003/4/EC on Environmental Information Access)

Air Quality

The Air Quality Framework Directive 2008/50 / EC includes regulations for emission reduction of ozone depleting substances, emissions related with volatile organic compounds (VOC) and fuel quality.

Waste Management

Basic regulation is the Waste Framework Directive 2008/98 / EC. According to the waste management hierarchy set out in the Framework Directive, waste management strategies should focus primarily on preventing the formation of wastes.

Water Quality

Directives are formed related to the Water Framework Directive 2000/60 / EC, which is the priority for harmonization for this sector. The Water Framework Directive is the basic legal framework that envisages the protection and improvement of all water bodies in the European Union in terms of quality and quantity, based on the principle of integrated watershed management and participation of people in decision-making processes.

Nature Protection

In the EU acquis, Bird 2009/147 / EC and Habitat Directives 92/43 / EEC are important and have priority. These directives include the provisions for the identification of protected areas - in particular Natura 2000 areas - and the priority safeguard measures to be considered in all sectors.

Industrial Pollution Control and Risk Management

- Integrated Pollution Prevention and Control (IPPC) Directive 2008/1/EC
- Large Incineration Facilities Directive 2001/80 / EC
- Industrial Emissions Directive 2010/075 / EC

Chemicals

Regulation 1272/2008 / EC contains arrangements for the classification, packaging and labeling of substances and mixtures.

Another important regulation in the chemicals is REACH (Registration, Evaluation, Authorisation and Restriction of Chemicals) Regulation 1907/2006 / EC.

Climate Change

There are EU Regulations related to greenhouse gas emission monitoring, emission trading system, reduction of greenhouse gas emissions from sectors other than the emission trading system (Effort Sharing Decision 406/2009 / EC), carbon trapping and storage, control of F-gases and protection of the ozone layer.

Noise

There is Environmental Noise Directive 2002/49 / EC on the assessment and management of environmental noise. In accordance with the Directive, preparation of the strategic noise maps and the creation of noise action plans are required for the residential areas with a population of more than 250,000 inhabitants, main roads with more than 6 million vehicles per year, main railways with more than 60.000 km of trains per year, and airports with movement more than 50,000 per year.

Compliance with the EU Environmental Acquis

EU Integrated Environmental Strategy (2007-2023) in Turkey, which is a prerequisite for accession to the EU, includes detailed information on required technical and institutional

infrastructure, obligatory environmental improvements and regulations to ensure compliance with the EU environmental legislation and implementation of the regulations in an effective way.

In the scope of EU Integrated Environmental Strategy, particularly in Turkey, aim, target, strategy and planning activities have been introduced for the environmental priorities as of water, waste, air, industrial pollution control, conservation of nature and horizontal sector.

4. PROJECT DESCRIPTION

In this section, the scope and manufacturing of ASAT3/W9 "Construction of Wastewater Network in Finike District" contract within the scope of ESMP has been defined.

Within the scope of **ASAT3/W9 "Construction of Wastewater Network in Finike District**" it is being planned to establish network and parcel connections and 10 Manhole Type Ready Wastewater Pumping Stations within the boundaries of Sahilkent, Kale, İskele, Yeni, Karşıyaka, Kızılca and Eski Neighborhoods.

10 Manhole Type Ready Wastewater Pumping Stations to be built will be in the form of a tank that will be vertically positioned under the ground in a single piece manufacturing in the body to be made of GRP (glass-fiber reinforced polyester) or high density polyethylene (HDPE-PE100) material. Pumps will be located in these tanks and pump selections, mechanical equipment and pressure lines will be manufactured regarding to the Technical Specification prepared in accordance with the relevant standards.

The mentioned pumping stations will be used such as sewer menhole, where needed along the line route without any aboveground construction structure. Type section of Manhole Type Ready Wastewater Pumping Station is presented in Figure 1.

The respective investment is expected to provide watewater service to approximately 3.600 people through 900 subscriber connections in region.

Within the scope of the contract package, there are Ø160-Ø560 mm diameter, 25,7 km long sewerage network and parcel connection manufacturing in Finike district of Antalya.

The subject of the project, definition of investment, features, life, service purposes, importance and necessity are explained below.

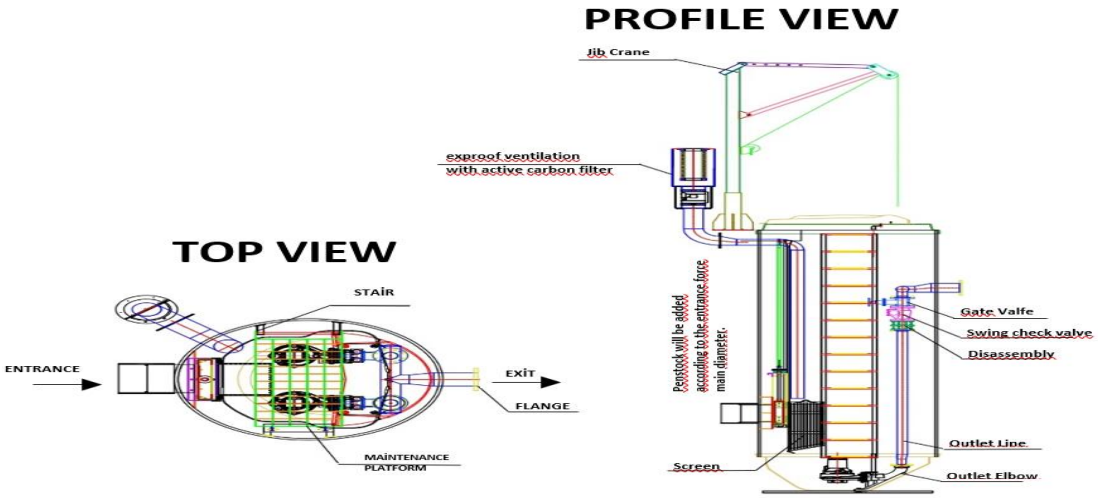


Figure 1. Manhole Type Ready Wastewater Pumping Station Type Sectional View

5. ENVIRONMENTAL AND SOCIAL BACKGROUND OF PROJECT SITE

5.1 Geographical Position

ASAT3/W9 Contract within the scope of ESMP is planned to be realized in the Antalya City Finike Region.

Figure 2. General View of Project Area in Scope of ESMP

Finike Region

Finike is in the southwest of Mediterranean region in Turkey, in the region of Teke Peninsula located in South West Anatolia. District boundaries are between 30-31 degress ongitudes and 36 - 37 degrees latitudes. Finike District; surrounded by Alakır stream and Kumluca district in the east, Elmalı district with Avlan elevation in the north, Alacadağ and Gülmez mountains in the west, Kale district in the northwest, Kaş district in the northwest and the Mediterranean in the south. The central altitude of the region is around 7 meters.

Finike district center is located in a fertile plain on the Mediterranean coast on an area of 2458 decares. District property area is 699 km^2. The district has a total of 28 km of coastline. Its mountainous geographical structure has created a natural barrier between the interior and the coast. Because of this barrier, the mild impactof the Mediterranean could not pass to the inner parts.

Summers are hot and dry, winters are warm and rainy, a typical Mediterranean climate prevails. The prevailing wind direction in the district is the north-northwest direction. The average wind speed is about 7 km.

The main economic livelihood of the district is domestic tourism and agriculture. Orange and Mandarin are prominent among the agricultural products grown in the district. The prevailing economic structure in and around Finike is of agricultural character, and the existing trade and industry arealso based on agricultural structure. The biggest source of livelihood in the region is early grown vegetable and citrus.

Figure 3. Finike District Geographical Position

Besides this, there is a little fishery in the area. The seasonality of agriculture and tourism in the region and their intensity in different time periods show that the tourism that has just started to develop in the region can be an additional source of income rather than an alternative source of income. This means that the regional agriculture and tourism balance each other with seasonal characteristics, partially solving the seasonal unemployment problem of the region.

The gulf of Ba with its rocky and sandy bottom structure, is home to many Mediterranean fish, marine mammals and sea turtles.

Coral and white Lahos are the most demanded fish species of local people and fishermen. Many fishes of high economic value are caught in the beach areas, tricklet top and harbours on the coast of Finike. In the rocky areas of the Bay, there are fishes such as Orfoz, Lahos, Fangri, Sinarite, Sarıkuyruk, Sargos, Sokar, Iskaroz, Karagöz.

Except the fishes, the long coastline, which is sandy, is defined as the first degree Caretta Caretta breeding areaThe endangered Mediterranean Monk Seal is trying to survive with about 2 individuals in the gulf.

5.2 Population

Antalya has a population of 2.511.700 according to 2019 Address Based Population Registration System results. This number has reached 2.548.308 people in 2020. An average of 6.2% annual increase rate in the city population between 1985-2000 has been experienced in Antalya, and this increase rate has slowed down since 2000 and decreased to 3,52% for 2018-2019. Still, Antalya Province population growth rate in 2020 (1,46%) is above than Turkey average (0,55%). In addition, it receives more than 1% net migration every year, and it is one of the most migrated cities in our country. Manufacturer regions are the central regions of Finike, and migration situations are taking place for the segment that will benefit mainly from summer tourizm and summer residents.

Table 2. Antalya Population by Districts

Year	District	District Population	Male Population	Female Population	Population Percentage
2020	Kepez	574.183	291.888	282.295	%22,53
2020	Muratpaşa	513.035	250.984	262.051	%20,13
2020	Alanya	333.104	169.227	163.877	%13,07
2020	Manavgat	242.490	124.182	118.308	%9,52
2020	Konyaaltı	189.078	91.205	97.873	%7,42
2020	Serik	130.589	66.689	63.900	%5,12
2020	Aksu	74.570	38.173	36.397	%2,93
2020	Kumluca	71.931	36.309	35.622	%2,82
2020	Kaş	60.839	31.306	29.533	%2,39
2020	Döşemealtı	69.300	35.372	33.928	%2,72
2020	Korkuteli	55.588	27.876	27.712	%2,18
2020	Gazipaşa	51.555	26.102	25.453	%2,02
2020	Finike	49.307	24.708	24.599	%1,93
2020	Kemer	45.082	23.511	21.571	%1,77

2020	Elmalı	39.365	19.812	19.553	%1,54
2020	Demre	26.896	13.780	13.116	%1,06
2020	Akseki	10.957	5.608	5.349	%0,43
2020	Gündoğmuş	7.492	3.710	3.782	%0,29
2020	İbradı	2.947	1.501	1.446	%0,12

The weight of the young population in Antalya is remarkable. 35,43% of the province's population is under 25 years old. 47,26% of the total population is between the ages of 25-65 and 12,83% is over the age of 65 years. The average number of households is 3,10. Population density by the year 2015 is 109 people / km^2 that has exceeded the Turkey average. The surface area of Antalya is 20,909 km^2.

Table 3. Population Density and Population Increase by Years in Antalya

Year	Antalya General Population	Population Density	ANNUAL POPULATION GROWTH %
2020	2.548.308	122 /km2	1,46
2019	2.511.700	120 /km^2	3,52
2018	2.426.356	116 /km^2	2,62
2017	2.364.396	113 /km^2	1,54
2016	2.328.555	111 /km2	1,75
2015	2.288.456	109 /km^2	2,96
2014	2.222.562	106 /km^2	2,98
2013	2.158.265	103 /km^2	3,14
2012	2.092.537	100 /km^2	2,40
2011	2.043.482	98 /km^2	3,29
2010	1.978.333	95 /km^2	3,05
2009	1.919.729	92 /km^2	3,25
2008	1.859.275	89 /km^2	3,91
2007	1.789.295	86 /km^2	4,04

Population Projection (between 2020-2050)

The 2008-2018 results of ADNKS (Address Based Population Registration System) established in accordance with the Population Services Law No. 5490 were used in the Population Projections. Projection Methods which are frequently used in population estimations such as Arithmetic Method, Geometric Method, Iller Bank Method are used.

Data Scope

The scope of this study is the same as the Population included in the Adress based Population Registration System. In ABPRS, resident in the territory of the country Turkey citizens and all foreign nationals are covered.

Province of previous years, District Population and other data required Turkey Statistical Institute (TSI) was obtained from the web page.

Table 4. Population Calculations by Geometric Method

FİNİKE DISTRICT 2020-2050 Population Projection				
YEAR	**POPULATION**		**YEAR**	**POPULATION**
2020	48.785		**2036**	52.980
2021	49.037		**2037**	53.254
2022	49.291		**2038**	53.529
2023	49.545		**2039**	53.806
2024	49.801		**2040**	54.084
2025	50.059		**2041**	54.364
2026	50.318		**2042**	54.645
2027	50.578		**2043**	54.927
2028	50.839		**2044**	55.211
2029	51.102		**2045**	55.497
2030	51.366		**2046**	55.783
2031	51.632		**2047**	56.072
2032	51.899		**2048**	56.362
2033	52.167		**2049**	56.653
2034	52.437		**2050**	56.946
2035	52.708			

Table 5. Population Calculations by Iller Bank Method

FİNİKE DISTRICT 2020-2050 Population Projection				
YEAR	POPULATION		YEAR	POPULATION
2020	49.019		2036	57.479
2021	49.510		2037	58.054
2022	50.005		2038	58.634
2023	50.505		2039	59.221
2024	51.010		2040	59.813
2025	51.520		2041	60.411
2026	52.035		2042	61.015
2027	52.555		2043	61.625
2028	53.081		2044	62.242
2029	53.612		2045	62.864
2030	54.148		2046	63.493
2031	54.689		2047	64.128
2032	55.236		2048	64.769
2033	55.789		2049	65.416
2034	56.346		2050	66.071
2035	56.910			

Table 6. Population Calculations by Projection/Arithmetic Method

FİNİKE DISTRICT 2020-2050 Population Projection				
YEAR	POPULATION		YEAR	POPULATION
2020	48.902		2036	55.230
2021	49.273		2037	55.654
2022	49.648		2038	56.082
2023	50.025		2039	56.513
2024	50.406		2040	56.949
2025	50.789		2041	57.387
2026	51.176		2042	57.830
2027	51.567		2043	58.276
2028	51.960		2044	58.726
2029	52.357		2045	59.180
2030	52.757		2046	59.638
2031	53.161		2047	60.100
2032	53.567		2048	60.565
2033	53.978		2049	61.035
2034	54.392		2050	61.508
2035	54.809			

5.3 Socio-Economic Situation

Finike Region

Finike plain, which is covered with alluvium, has fertile soil where all kinds of agricultural plants can easily grow due to this feature. Finike's opening to the outside and the development of its economy started from 1965. Greenhouse cultivation and citrus production are very important in the district economy. During the Republican era, the swamp in the plain was dried and rice, peanut, and cotton were planted. When citrus and greenhouse cultivation started in the 1070s, these plantings were abandoned. The first orange sapling was brought to Finike from Rhodes by İdris Ağa from Finike.

Livestock farming in the region could not develop due to the intensity of greenhouse cultivation and fruit growing. Livestock farming is carried out to meet domestic needs rather than being an economic value. The existence of the marina in Finike district is serving to Finike and its surroundings. It allows the people of Finike to socialize and to rest recreationally. Thus, it continues to operate in a way that is intertwined with the city and provides integrity. Finike marina provides employment opportunities to its surroundings and has become a focal point for both domestic and foreign tourists. For this reason, it adds economic value to both Finike district and surrounding districts.

General Evaluation

It is planned that the manufacturing activities of the region where the socio-economic status have been mentioned in the ESMP, will be carried to in the district centers. In areas where construction activities are to be carried out;

- Within the scope of the projects, no land acqusition and easement subject has been occurred. In the lands no users have been encountered for agricultural, commercial, etc. purposes.
- Since agricultural activities are not carried out in the project area and its immediate surroundings, there is no temporary/permanent damage to any agricultural product.
- The protected areas such as National Park, Natural and Archaeological Sites are not included in the regions where the project will be implemented.
- In the light of the studies, it is anticipated that there will be no need for the provision of temporary new roads during the execution of the construction activities. During the construction phase, it is envisaged to use different street alternatives by short distance traffic routing.
- The materials to be used within the scope of Construction Contracts are provided by the Contractors and will be stored in the places which will be rented by the Contractor. The excess materials from the excavations will be transferred to the

areas which has been determined by the decision of relevant Municipality. This has been described in detail in the Technical Specifications for the Contract.

Together with these;

During construction in the work areas, it is considered that short-term employment will be available for unskilled workers during the construction period, while medium/long-term employment for skilled workers can be achieved.

Along with the wastewater lines to be constructed, natural groundwater sources and/or marine and/or natural environment will be prevented from being contaminated in case of the possibility of existing phospoletic leakage and the residents problems related to the sewerage infrastructure will be solved. Besides, possible threats against tourism activities will be removed.

5.4 Project Area

The sewer network lines are indicated on aerial photographs.

The ASAT3/W9 Contract will be realized in the Sahilkent District, Kale District, İskele District, Yeni District, Karşıyaka District, Kızılca District and Eski District regions.

During the project phase, negotiations are made with the relevant Municipality in the selection of the Pumping Stations locations, suitable parcels and the parks etcs have been selected. For this reason, there is no zoning change. Pumping Stations, parking etc. will be established in appropriate public parcels. Since all of the sewerage lines will be built on the zoning roads and the Manhole Type Wastewater Pumping Stations will be built on the zoning roads, pedestrian pavements and public parcels (parks, etc.), no expropriation requirement is expected.

TF-9 is located in an area where the settlement rate is low due to its location, and it is planned to be built as a 2nd stage. For this reason, a total of 10 Pumping Stations will be built within the scope of the current contract, and the construction of TF-9 determined as the 2nd stage is not within the scope of the project. For general information purposes, the location of TF-9 is illustrated in the relevant figures.

Within the scope of the project, it is envisaged that the construction site to be established by the Contractor for the stocking of its own materials, accommodation of its personnel and the work of the Supervision personnel will be established in an area that will not affect the social life of the citizens as much as possible. According to clause 1.3 of the Technical Specification of the related Project, the below phrase is included: “Finding the site facility is under the responsibility of the Contractor. The Contractor will make the necessary arrangements for the installation of construction site facilities and will set up the facilities in the places determined by greement with the Project Manager."

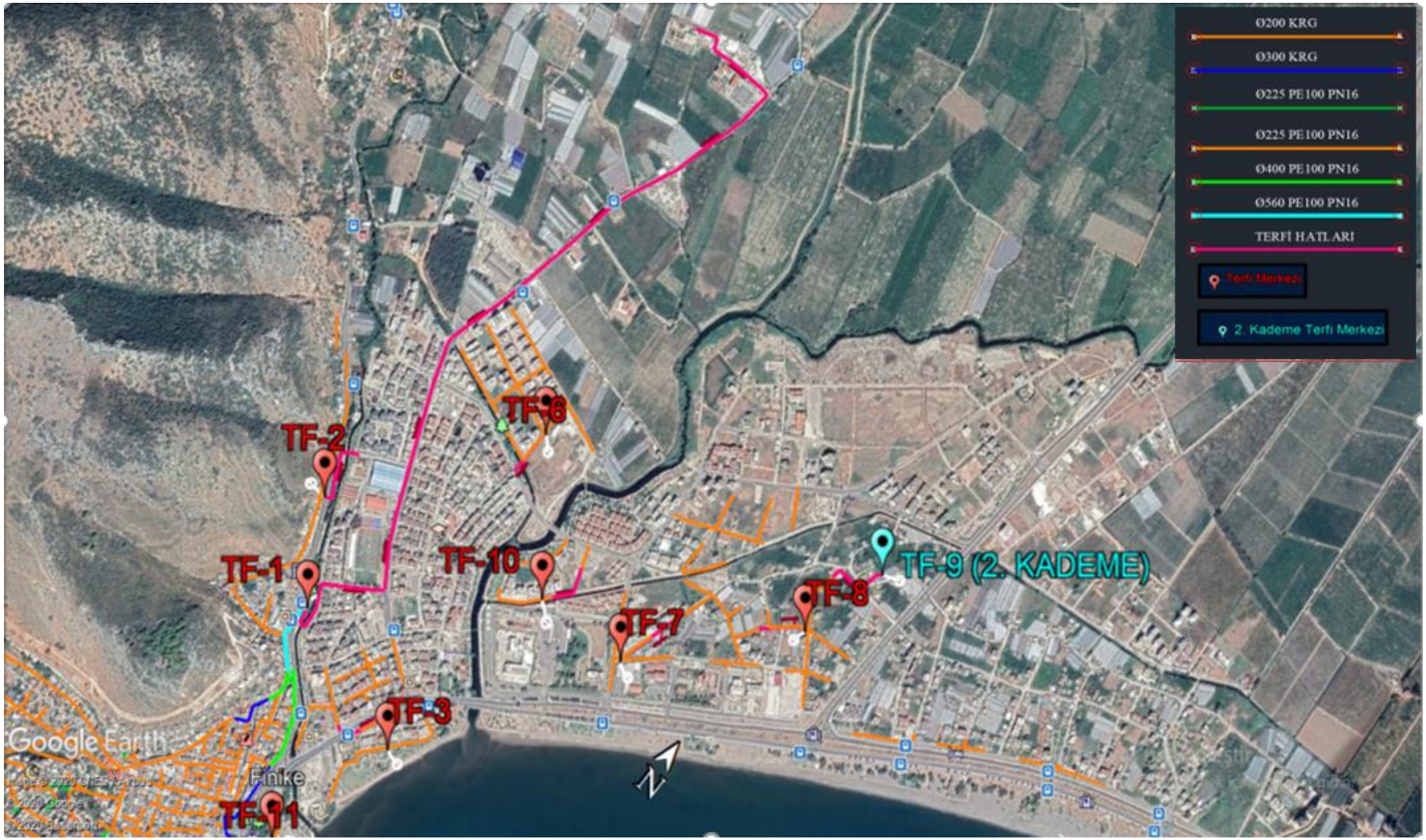


Figure 4. Finike Project Site Line Routes (Sahilkent District and Yeni District)

Figure 5. Finike Project Site Line Routes (Kale District, Eski District, Kızılca District, Karşıyaka District and İskele District)

Figure 6. Finike Project Site Line Routes

5.5 Technical Specification of Project

ASAT3/W9 (Finike Region), contract collectively include wastewater collectors, networks and house connections. Within this scope, as a common methodology in the contract, providing of material, excavation, sheet pile, ground improvement, line manufacturing, filling, compacting, coating works will be carried out and the technical definitions related to these manufacturing are described in this section.

5.5.1 Wastewater Works

Material Certification and Documentation

The Contractor shall provide the necessary documents related to quality, manufacturing and tests of the equipment and materials to be used within the scope of the project from the manufacturer and submit the copies to the Project Manager of the Supervision Organization.

Material Testing

Records of the relevant standards and test results of the manufacturers of the equipment and materials procured under the project should be kept.

It should perform all the tests necessary to verify the qualities and specifications of the material, its dimensional tolerances.

Documents containing test results should be prepared at the intervals specified in the standards.

If there is a conflict in the test results, the test can be repeated again by a different testing organization deemed appropriate by the Employer and the Project Manager.

It is anticipated that the materials to be used in construction will be procured from local suppliers. It is thought that this will contribute to the local economy.

Excavation Works

The definition of ditch excavation within the scope of the Project, is all kind of excavations made with hand, machine, crusher, compressor etc.

Before the pipe-laying work, more ditches than necessary will not be excavated and the maximum open ditch length in any application line in construction will be 200 m. The excavations will be carried out by taking precautions so as not to disrupt the daily life, the local governments and the public will be informed about the time planning of the excavations. The excavated material will be removed immediately from the site and will never be used as backfill.

Excavation wastes must be transported to the dump site which is determined in line with the decision taken by the relevant Municipality with excavation trucks that have a "Waste Transportation Permit" which is approved by the Project Manager.

Ditch excavations will be carried out with width that will leave enough working margin to allow for pipe placement, bedding and covering.

The route of each ditch or channel and grade elevation and similar measures shall be determined by the benchmark points. The horizontal and vertical route and the maximum pipe decking and deflection used in conjunction with it shall comply with the requirements in the specification coveringpipe installation.

Depth and width of the ditch will be opened in accordance with the application projects.

Ditch widths will not be reduced or increased unless sheet pile is required due to deep excavation or ground improvement or other infrastructure on the excavated route or for any other reason without permission from the Project Manager. The excavation widths and diameters given are arranged taking such situations into account and in the actual case the Contractor is expected to work within the given values. If the Contractor damages the roadways outside the specified widths, it will be obliged to restore the damage given.

The excavation will be arranged on the ditch so that the distance between the right and left sides of the pipe to be laid will be equal and in each case the measurements given in the project drawings will be provided.

During the ditch excavation, the Contractor shall take the necessary safety precautions; in areas where ground improvement is required sheet pile, etc. Work and Employee Safety will be ensured by taking precautions.

In the excavations of the chambers and chimneys to be made on the pipeline routes, maximum 50 cm working margin will be left from the outer surface of the structure. However, the Contractor shall provide work and worker safety by establishing revetment if it is necessary.

In the light of the Project studies, it is anticipated that there will be no need for provisional new access roads during the execution of the construction activities. During the construction, it is envisaged to form short distance traffic routing with different street alternatives.

The Contractor shall comply with all the requirements and recommendations of the Municipality, the Traffic Supervision Branch Directorate and the Highways Administration on road traffic regulations and road safety precautions. The contractor will submit traffic recommendations (if necessary) and permissions from the Traffic Supervision Branch Directorate and the Highways Administration to the approval of the Project Manager before starting the activity on the site.

Sheet Pile Manufacturing

Work will be carried out by driving the steel sheet pile shoring profile to uncohesive loose / medium tight, cohesive soft / plastic floors, with the approval of the Project Manager, in

areas deemed appropriate by the Project Manager and / or where the groundwater level is high and / or where ground improvement will be made.

During the work; Steel sheet pile profiles will be procured and taken from the edge of the field where they will be driven with a crane or excavator, fixed vertically to the place where it will be hammered, and driven by vibrating vibro drivers as shown in the project by interlocking from the ground level.

Ground Improvement Manufacturing

Where the Project Manager deems appropriate, in accordance with the type sections, the bottom of the ditch will be dug deeper than normal, a geotextile filter cover will be laid to cover the excavation bottom and slopes, then quarry stone material will be laid in layers of 20 cm (70-150 mm) and compacted. The geotextile filter cover around the compacted filling material will be wrapped, bundled and sewn over the overlaps. On top of the filling material bundled with geotextile material, a prefabricated reinforced concrete bedding concrete element of 200 cm length and width of the ditch, manufactured using a single row of wire mesh steel (Q188 / 188), will be placed as shown in the type sections. Later, on this ground improvement detail, bedding, pipe laying, covering and backfilling manufacturing will be made respectively

Compaction of Fills and Backfills

After the cleaning and scratch process is completed, on all surfaces with a compacted filler on it, at least 15 cm of scratch shall be done and the fill shall be laid and compressed. Before compression, as required by the Project Manager, if the surface moisture content is too dry, wetting or if it'is too wet drying process will be conducted.

Compaction works will be controlled by ground compaction tests in accordance with Turkish Standarts Institute.

Pipe Bedding-Covering and Backfill

If not shown otherwise in the drawings, digging a minimum of 20 cm depth from the bottom of the pipe will be made, ground will be leveled and prepared for bedding and covering with the material given in the following table. The lower bedding material will be laiddown accross the width of the ditch. When the tests on pipes laid on the bedding material give positive results and after the Project Manager's approval is obtained the bedding and covering material shall be placed around the pipe to the design height and compacted. Upon completion of the pipe covering process the backfill materials shall be placed, compacted and tested.

Properties of Materials for Bedding, Covering and Backfilling

In sewerage works, pipe bedding and covering and backfilling materials with the specification given below and supplied from the approved quarries by the Project Manager shall be used. 0-4,76 mm material (crushed aggregate, gravel will be used for

bedding and covering materials which are desired distribution and well graded and 0-38,1 mm materaial will be used for backfiiling.

Table 7. Materials to be used for the Particle Size for HDPE Corrugated/Concrete Pipes

<table>
<tr><th></th><th colspan="2">HDPE CORRUGATED PIPES</th><th colspan="2">CONCRETE/REINFORCED CONCRETE PIPES</th></tr>
<tr><td>Bedding and Covering</td><td colspan="2">0-4,76 mm material (crushed aggregate or gravel in the desired distribution – well-graded)</td><td colspan="2">8-22,4 mm material (crushed aggregate or gravel in the desired distribution – well-graded)</td></tr>
<tr><td rowspan="8">Back Filling</td><td colspan="2">8-22,4 mm material (crushed aggregate or gravel in the desired distribution – well-graded)</td><td colspan="2"></td></tr>
<tr><td>Sieve Diameter</td><td>Sieve Passed (%)</td><td>Sieve Diameter</td><td>Sieve Passed (%)</td></tr>
<tr><td>22,4 mm</td><td>100</td><td>22,4 mm</td><td>100</td></tr>
<tr><td>19 mm</td><td>70-80</td><td>19 mm</td><td>70-80</td></tr>
<tr><td>16 mm</td><td>55-65</td><td>16 mm</td><td>55-65</td></tr>
<tr><td>11,2 mm</td><td>15-25</td><td>11,2 mm</td><td>15-25</td></tr>
<tr><td>8 mm</td><td>0-3</td><td>8 mm</td><td>0-3</td></tr>
<tr><td colspan="4">Note: In the sections to be repaired on the canal asphalt pavement, the filler material of the last 20 cm of the backfill shall be laid and compacted and prepared for asphalting. (asphalt pavement thick as available asphalt pavement)</td></tr>
</table>

Distiribution of the bedding and covering material for HDPE Pipes shall be approximately same with the below table 7.

Due care and attention shall be paid to backfilling. None of the pipes shall be bedding and covering without the Project Manager's permission. Materials of specified quality shall be used by taking all related permissions.

The ditch backfill material shall be placed in max. 30 cm-thick layers and each layer shall be levelled and compacted using tamping rods or any other equipment suitable to the purpose and after watering using water in appropriate amount. A second layer of material shall not be placed unless each layer is properly compacted.

In any case, bedding and covering material will be submitted to the approval of the Project Manager before they are used materials which are not approved by the Project Manager shall not be used.

Also, bedding and covering material shall not contain any such material as ash and slag which may cause corrosion of the pipe.

Bedding and covering materials both below and above the bottom of the pipe, and placement and compaction of bedding materials shall conform to the requirements shown on the contractual requirements.

Tests

All tests to ensure that bedding, covering and backfill materials and their placement comply with specified requirements and all additional tests required by the Project Manager shall be made by the Contractor and at the expense of the Contractor.

In the pipeline two moisture-density (Proctor) tests or two relative density tests for each type of embedment fill, or backfill material proposed, except for granular embedment material. Required Tests will be done for every 300 m. length of the pipelines and/or requested locations by the Project Manager.

Pavements

It consists of the following main items shown in the project drawings and defined in the specifications.

- Repair of roads that have been damaged before,
- Repairs of roads damaged due to infrastructure activities,
- Repair of previously damaged pedestrian pavements,
- Asphalt pavements work,

The above shall be started without delay after completion of network and parcel related manufacturing.

6. ENVIRONMENTAL AND SOCIAL MANAGEMENT STRUCTURE AND RESPONSIBLITIES

6.1 Environmental and Social Management Structure

Within the scope of the Antalya Sustainable Water and Wastewater Management Project, the realization of the possible impacts on the region where the construction activities take place and the nearby settlements will be supervised by the Inspection Organization. During the activities, the Contractor should comply with the existing environmental laws and regulations and other legislation in this respect.

The Contractor shall undertake all relevant planning, including risk analysis linked to the construction works and areas related to construction work and specific environmental management reports special to construction site, (according to the Occupational Health and Safety Regulation).

Pre-construction inspection results of the works area will be controlled by the Supervision Team and before the Construction activities, the Contractor is obliged to make preparations and to take precautions regarding to the monitoring parameters specified in the ESMP whis was prepared by the Client. During the construction activities, the Contractor shall execute the construction activities in accordance with this situation. If the environmental and social risks change due to the changes that may occur during the execution of the contract, the Contractor is obliged to change the monitoring plans according to these changes and to continue to fulfill the obligations by reducing and / or eliminating the risks to a minimum.

The ESMP will also include environmental and social impact mitigation methods and safe working applications that must be implemented, during the main construction activities and especiallyrealization of risky activities. Taking of all necessary permission and licenses for the Contractor’s construction works; safety of construction area, workers and citizen; transportation of excavation waste; transportation and removal of other wastes etc…will be controlled.

The Contractor's Quality Control or Environmental Health and Safety (EHS) Expert will be responsible for the health, safety and environmental management at construction area and will continue their activities taking into consideration environmetal protection, the socio-economic characteristics of of settlements located near the construction area and the socio-economic value of public asset and daily routines of citizens. The Quality Control or EHS Specialist will be responsible for the monitoring, supervision and planning of the construction activities in terms of environment and health and safety and will report the EHS practices on the site quarterly. The Contractor's Quality Control or EHS Specialist will also monitor and coordinate the application and process of obtaining licenses and permits related to the local environment, health and safety laws and regulations. These

applications and processes carried out by the Contractor shall be controlled by the Supervision Organization.

The flow chart related to environemtal and social managment system which shows authorities and reponsibilites of Supervision Organization, Contractor and ASAT is presented in Figure 7.

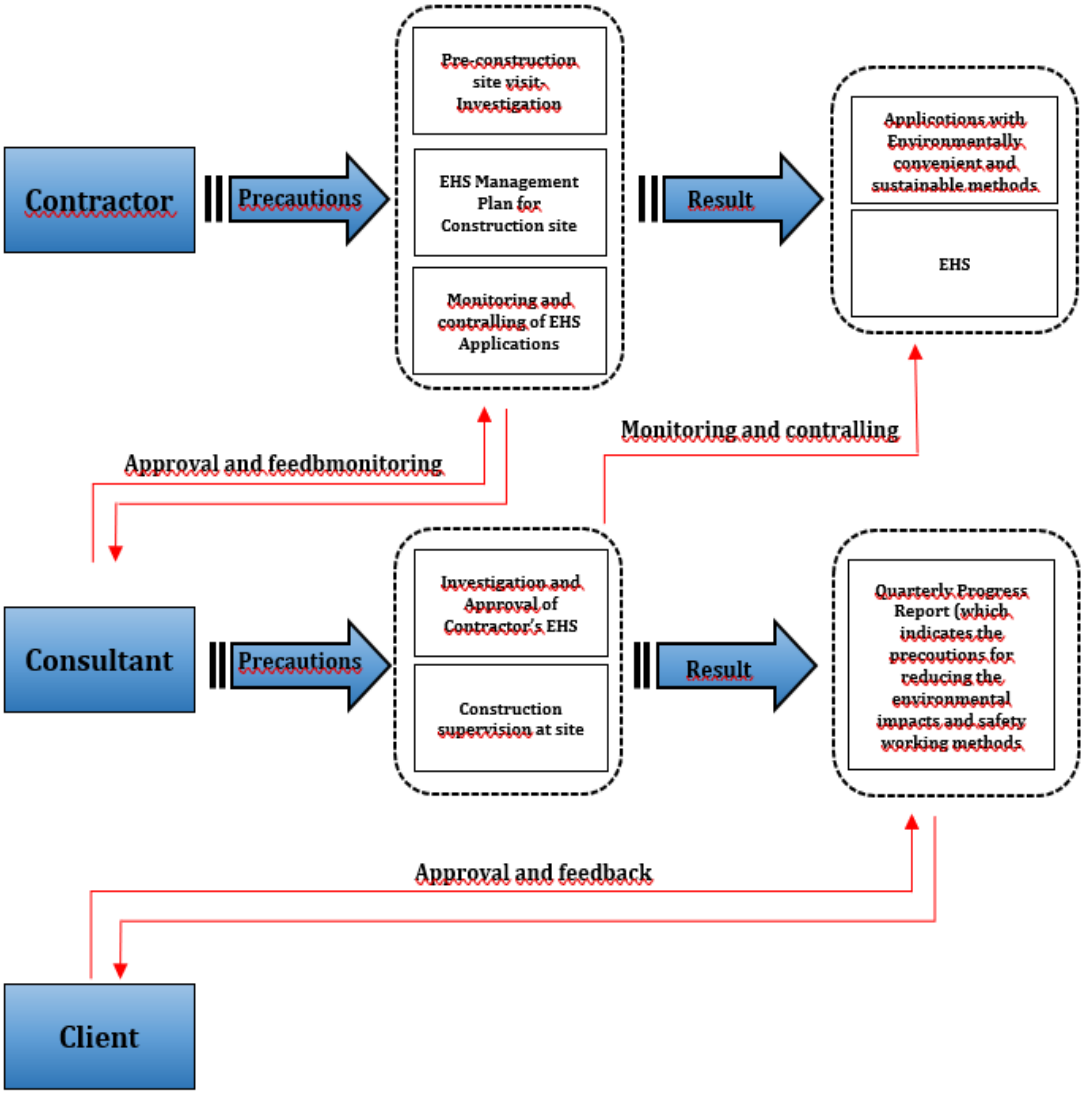


Figure 7. Environmental and Social Management System to be Implemented

The construction site will be regularly inspected by the Supervision Organization to ensure maintaining of cleanliness, order and convenience of environmental regulations and not to be adversely affected by negative environmental impacts of nearby settlemtents and habitats.

Providing of environmental health and safety training by the Contractor in accordance with the relevant occupational health and safety regulations will also be monitored by the Supervision Organization.

6.2 Training

Within the scope of Antalya Sustainable Water and Wastewater Management Project, Occupational Health and Safety Training should be provided to all contractor's staff to include the subjects specified in the "Regulation on the Procedures and Principles of Occupational Health and Safety Training of Employees" plans related to staff training will be included in the quarterly ESMP.

In addition, the Contractor will provide training on the environmental and social impacts of the ESMP document. It is the responsibility of the contractor to inform the contractor that the contractor has taken all necessary measures to minimize the environmental and social impacts during field manufacturing.

The contractor will ensure that employees are trained primarily in matters involving risks associated with work and workplace risks and safeguards before the employee actually starts to work.

Training will also be given on the risks that will arise due to changes in the workplace or job, the change of work equipment, or the implementation of a new technology.

The trainings will be repeated at regular intervals, taking into account the changing and emerging risks identified in the Regulation on the Procedures and Principles of the Occupational Health and Safety Training of Employees. Informing and training will be done not only for employees but also for measures to be taken for community health and safety. Persons who have been away from work for six months or more for any reason should be given training in information renewal before starting work again. Careful attention should be given to the selection of the topics that the trainers need to be effective in order to be effective. Training should be organized theoretically and practically so that employees can easily understand.

In addition to trainings, citizens will be informed about the bloking and disconnection of roads. This will include the followings:

- A brochure will be prepared by the Contractor and it will contain the sketch of the site, authorized person information to communicate in case of emergency, start date and targeted end date. The brochure will be distributed to all related buildings in the region
- 10 days before starting work, print out flyers containing the sketch of the site, authorized person information to communicate in case of emergency, start date and targeted end date will be distributed to all related vehicles in that area

- Before the construction works, the traffic direction plans and the necessary sign tables will be settled to the related areas.

It is necessary that the knowledge, skills, attitudes and attitudes of the contractor personnel should be presented separately and in a measurable manner in occupational health and safety, environment and social issues.

Measurement and evaluation should be done at the end of the training. According to the evaluation results which shows the training is affective or not, the education program or the trainers should be changed or the training should be repeated if it is necccesary.

6.3 Instutional Arrangements

Table 8. Relevant Institution - Duties and Authorities

Related Institution	Duties and Authorities
ASAT General Directorate	General Directorate of ASAT has 19 seperate departments. One of these departments is "Head of Sewerage Department" ASAT3 / W9 “Construction Wastewater Network in Finike Region” Contract package within the scope of the ESMP report will be executed under job description and responsibility of the Sewerage Department. The task of the Sewerage Department is; Regarding the operation of sewage system; maintenance and control of the deep sea discharge line, opening of the drilling wells for the provision of rainwater drainage, final connection, domestic connection, maintenance and preliminary maintenance, solving the problem of parcel blockage problems, control of system whole, contract and correspondence, purification plant, pumping stations, and to resolve any complaints that may arise in this matter.
ALDAŞ Infrastructure Management and Consultancy Inc.	ALDAS Infrastructure Management Consultancy Industry and Trade Inc. that will serve as the supervisionorganization during the implementation of the Antalya Sustainable Water and Wastewater Project was established on 13 December 1995 in order to serve as responsible for the administrative and financial management of the water supply and sewage services on behalf of the General Directorate of ASAT. ALDAS manages investments, supervises the private operator and provides consultancy services for corporate restructuring, new investments and new policies as a ASAT’s sole and authorized representative.

	ALDAŞ Inc. will serve as project management unit within the scope of the project and will control both the technical and administrative progress of the contract packages and the applications of the issues stated in the ESMP. In addition, ALDAS will examine the quarterly environment and social monitoring reports of the contractors as well as the field inspections and will submit these reports to Ilbank regularly.
Contractor Companies	The construction contracts and the operation of the contract packages within the scope of the Environmental and Social Management Plan will be carried out by the contracting firms. Contractor Firms are obliged to comply with the responsibilities specified in the Environmental Management Plan. The issues related to the implementation of the ESMP will be examined by the contractor during the preparation of the tender offer and will be given taking into consideration the Environmental and Social Management Plan. Measures to be taken within the Environmental and Social Management plan to reduce the most possible adverse impacts of the project on the construction and operation phase and monitoring plans designed to control the implementation conditions of the measures. These plans also include the institutions and organizations (project stakeholders) responsible for the afformentioned items. During the construction phase, the contractor firm will provide training to the personnel who will take part in the project, including environmental, occupational, health and safety, citizen safety, measures within the scope of ESMP, in order to create social awareness. The implementation of the measures for the construction phase of the ESMP will be coordinated by experts in environmental, social and occupational health and safety. The subject experts are responsible for taking necessary measures and implementing monitoring plans to eliminate/minimize environmental and social impacts in the direction of the ESMP.
Ilbank and World Bank	During the construction and operation stages, the Bank Authorities and General Directorate of ASAT will supervise the performance of the contractors in compliance with the ESMP. Regarding these issues, contractors will be required to quartely

	reports periodically and if necessary, on-site inspections will be done. Regarding the quarterly studies and reports, Ilbank., The General Directorate of International Relations Department will be informed by ALDAŞ with prepared monitoring reports. and the field supervision that the Bank has carried out with certain periods and the activities and progress of the quarterly reports will be carried out. Ilbank will inform the World Bank with its environmental and social monitoring reports biannually. In addition to this information, the World Bank will also check its activities periodically.

6.4 Necessary Approvals and Permissions

Within the context of the Antalya Sustainable Water and Wastewater Management Project, the processes related to the permits to be taken prior to the start of work, from the Employer, the Employer Representative, the Project Manager and other infrastructure and superstructure institutions and organizations, (DSİ, Museum Directorates, TEDAS, TEAŞ, TCK, Traffic Branch Directorate, AYKOME, UKOME, municipalities and so on.) should be shown in the Work Programwhich the Contractors are obliged to submit.

The Application projects should be reviewed in site by the Contractor and in case of necessity the required permissionsfrom natural gas distribution company, Museum Directorate and Protection Board, TEDAS, Telekom, Highways, Traffic Branch Directorate, AYKOME, UKOME and related municipalities etc. should be taken by the Contractor on behalf of the Client before starting to excavation.

In accordance with the provisions specified in the Technical Specifications, the Contractor shall comply with all requirements and recommendations of the Municipality, the Traffic Supervision Branch Directorate and the Highways Administration on traffic regulations and road safety precautions. The contractor will submit the traffic recommendations (if necessary) and the permits received from the Traffic Supervision Branch Directorate and the Highways Administration to the approval of Project Manager of the Supervision Organization before starting the activity on the site.

Compliance with the specifications specified in the technical specifications of the work done and compliance with the particulars specified in the ESMP plan will be audited by the supervision organization. The Contractor shall fulfill its obligations in line with the approval and approval of the supervision Organization.

Technical, environmental and social responsibilities and / or risks will be monitored by exchanging information on the work during the weekly and monthly meetings with the Administration, supervision Organization and the Contractor.

7. ENVIRONMENTAL AND SOCIAL MANAGEMENT PLAN

7.1 Environmental and Social Impacts and Measures

Within the scope of the Sustainable Cities Project, it is envisaged that the potable water and wastewater projects planned for the future will occur the environmental and social impacts in the construction and operation stages. The measures to be applied for the elimination of these impacts and / or the reduction of the impacts at the maximum level are given in this section.

Potential social and environmental impacts during the construction phase are divided into groups as follows.

(I) Environmental Impacts

a) Soil Pollution

- Excavation Waste
- Solid Waste
- Packing wastes (paper, plastic, glass, metal)
- Hazardous wastes (waste oil, oakum, contaminated package etc…)
- Protection of existing infrastructure,
- Impact formation outside the construction site.

b) Water Pollution

- Influence of surface waters such as ponds, streams etc. and underground waters.

c) Air Pollution

- Dust formation during the excavation works,
- Exhaust from work machines

d) Noise Pollution

(II) Social Impacts

- Informing the local people about investments and construction works regularly.
- Evaluating the impacts of transportation, noise, dust, visuality, etc. that may occur during Construction of Wastewater Network and Manhole Type Wastewater Pumping Stations within the scope of Worker and Citizen Health and Safety,
- Meet the wastewater infrastructural requirements of the citizens,

- Recruitment.
- Taking security measures during construction activities, taking into account the presence of vulnerable groups (disabled citizens) affected by the project. Creating temporary roads and bridges in a way that does not disturb their daily lives, taking into account the vulnerable groups such as ramps for the disabled.

  Regarding the construction site, the creation of the construction site campus in accordance with the Article 1.3 of the Technical Specification, depending on the number of site teams to be formed after the contract signature, Providing trainings and information by the site chief and the contractor project manager in order to ensure that the workers staying at the construction site do not have a negative impact on the daily life of the people living in the region

7.1.1 Construction Phase

Table 9. Potential Environmental and Social Impacts and Mitigation Measures During the Construction Phase

Phase	Potential Impact Component	Mitigation Measures	Cost	Instutional Responsibility
Construction	Excavation Waste	• Taking security precautions in the site to be excavated to prevent visual disturbances and accidents, closing of the excavation area, placement of safety signs, routing of road, • Materials excavated during construction; Classifying separately as asphalt, border, parquet, concrete, soil and recycling, evaluating the re-use possibilities in the construction area • Removal of the excavated material from the site at regular intervals without waiting, • Covering the excavation soil to be stored temporarily in construction sites with tarpaulin or plastic material in order to protect against erosion • In the construction of Manhole Type Wastewater Pumping Stations to be built in the raw soil and landscape areas, the existing plants are removed and the vegetable soil stripped, the stripped vegetable soil is protected, after the construction process is completed, vegetable soil is laid according to the current situation and replanting and landscaping operations are carried out. • Elimination of land subsidence that may occur due to access to the worksite or work, • Mounting of sensors registered to relevant Municipality system for earth-moving trucks and disposal of excavation wastes without accumulation and / or temporary storage by taking them with transportation vehicles to the area authorized by the municipality	Within the contract price.	Contractor, Supervision Team, ASAT, Provincial Directorate of Environment and Urbanization

Phase	Potential Impact Component	Mitigation Measures	Cost	Instutional Responsibility
Construction	Air quality	• Regular irrigation of the study area, particularly in spring and summer, to reduce the impacts of dust-causing activities such as excavation and backfilling, • Storage of daily backfilling, bedding and covering materilas from quarry at temporary storage areas, moistening and compacting the materials to prevent the materials moving with the help of wind, covering if necessary • Supplying backfilling material from licensed, Environmental İmpact Assessment (EIA) Certificate holder quarries • Loading and unloading trucks carefully and preventing the material from being thrown out, • Covering of the transport trucks with canvas during their arrival and departure to the contruction site and on the public highway, • Application of speed limit for trucks, • Cleaning truck tires to prevent mud transport on roads, • Covering the construction site by encircling it, • Selection of modern equipment and tools that can provide relevant emission standards during the construction activities, making urgent cleaning in case of spillage of material on the roads. • Checking the exhaust systems and emission levels of the machines and vehicles, performing periodic control and maintenance and ensuring the use of fuel in accordance with the standards.	Within the contract price	Contractor, Supervision Team, ASAT, Provincial Directorate of Environment and Urbanization

Phase	Potential Impact Component	Mitigation Measures	Cost	Instutional Responsibility
Construction	Domestic Solid Waste	• Providing containers for different types of solid wastes at site office and construction site for collecting wastes in these containers,	Within the contract price	Contractor, Supervision Team, ASAT, Provincial Directorate of Environment

		• Transfer of wastes collected in closed containers at the project site to waste disposal sites by the Municipality. • Collection of recyclable wastes in different waste containers by separating them at the source. • Keeping records of waste generation, temporary storage, if any, and final disposal. • In case of cooking at the construction site, vegetable oil will be accumulated regularly and given to the enterprises licensed within the framework of the Regulation on Control of Waste Vegetable Oils and will be documented. Waste vegetable oils will be collected in sealed, corrosion-resistant drums with internal and external surfaces, and will be recycled by being given to environmental permit and licensed waste vegetable oil recovery facilities.		and Urbanization

Phase	Potential Impact Component	Mitigation Measures	Cost	Instutional Responsibility
Construction	Package Waste	• Not delivering the packaging wastes directly or indirectly to the receiving environment that will harm the environment, and storing them separately from domestic wastes and delivering them to licensed collection and sorting companies for disposal. • Keeping records of waste generation, temporary storage and final disposal	Within the contract price	Contractor, Supervision Team, ASAT, Provincial Directorate of Environment and Urbanization

Phase	Potential Impact Component	Mitigation Measures	Cost	Instutional Responsibility
Construction	Hazardous Waste (Oakum, contaminated package, end-of-life-tire etc...)	• Hazardous wastes that may occur in the construction site and the work site should be stored in solid, impermeable, safe and temporary hazardous waste areas placed on the concrete site in accordance with the provisions of the Regulation on Waste Management and forwarded to the licensed company for disposal. • Keeping records of waste generation, temporary storage and final disposal	Within the contract price	Contractor, Supervision Team, ASAT, Provincial Directorate of Environment and Urbanization

		• Disposal of accumulators from vehicles and batteries from the construction site in accordance with legal requirements,		

Phase	Potential Impact Component	Mitigation Measures	Cost	Instutional Responsibility
Construction	Waste Oil (In the event that the maintenance of the machines and the oil changes are carried out in the vehicle service, the Contractor will be provided with promotional documents)	• A complete list of the vehicles, construction machinery and equipment to be used under the contract and their maintenance and repair status shall be informed quarterly by the Contractors to the supervision team under the ESMP, • Starting maintenance and repair work for vehicles after taking all precautions against leakage and spillage, • Keeping a sufficient amount of absorbent materials in order to prevent spillages and leaks that may occur in the facility and storing these absorbent materials in the leak area in a way that they can be used easily at appropriate points in the field, then disposal of used absorbent materials according to the Regulation on control of Hazardous Waste • Oil filters taken out from vehicles should be accumulated in a seperate covered containers and never be thrown in the domestic waste containers or sent to the landfill area, • Disposal / recycling of the accumulated waste oils by sending them to the licensed facilities via licensed carriers, • Placing the containers in which waste is collected on impermeable ground, protected from rain water.	Within the contract price	Contractor, Supervision Team, ASAT, Provincial Directorate of Environment and Urbanization

Phase	Potential Impact Component	Mitigation Measures	Cost	Instutional Responsibility
Construction	Wastewater	• Wastewater to be generated in the site office should be connected to the existing network (or if there is not an existing network, the formation of temporary isolated septic tank pits and the transfer of the wastewater to the nearest wastewater	Within the Contract Price	Contractor, Supervision Team, ASAT, Provincial Directorate of Environment

		treatment plant by licensed wastewater vacuum tankers,) • Using portable toilets for the needs of workers in flume excavations in densely settled areas in the city • During the connection of newly built sewer lines to existing sewer lines, the contractor must have all precautions to prevent the wastewater from spreading to the work area. (Team and equipment such as plug, blocking pad, pump and wastewater vacuum tankers etc.),		and Urbanization.

Phase	Potential Impact Component	Mitigation Measures	Cost	Instutional Res ponsibility
Construction	Noise and Vibration	• Closing sewerage excavation areas with security barriers, • Planning working hours in accordance with the Regulation on Evaluation and Management of Environmental Noise (ÇGDYY), • Informing citizens one week before starting of noisy activities that could cause a temporary discomfort, • Construction work to be done on the allowed days and hours, • Within the scope of the project, paying attention to the selection of equipment with low noise level in the construction machinery. • Regular maintenance of the construction machinery to be used during the construction phase, • Applying of speed limit for work construction machinery. • As stated in Article 25 of the ÇGDYY, attention will be paid to the selection of equipment and parts in accordance with the ground vibration velocity values given in Annex-VII, Table-7. In case of observations and complaints that the selected vehicles and equipment cause vibration above the expected level during the construction phase, making necessary arrangements by conducting measurement studies	Within the Contract Price	Contractor, Supervision Team, ASAT, Provincial Directorate of Environment and Urbanization.

Phase	Potential Impact Component	Mitigation Measures	Cost	Instutional Responsibility
Construction	Health and Safety	• Surrounding the construction area and surrounding the working area in a way that can be easily noticed and placing signs • A brochure will be prepared by the Contractor containing the sketch of the site, authorized person information to communicate in case of emergency, starting date and targeted end date. The brochure will be distributed to all related buildings in the region • 10 days before starting work, print out flyers containing the sketch of the site, authorized person information to communicate in case of emergency, starting date and targeted end date will be distributed to all related vehicle users in that area • Preparation of the traffic directions plans and the necessary signboard, placing them in the places prescribed before the start of the work. • The pedestrian areas and bus stops should be provided safely and adequately if required, along with pedestrian crossings with intervals not exceeding 50 m on the construction site, • Providing protective equipment (headphones, helmets, vests, etc.) to the Employers to minimize occupational health and safety risks, • Providing personal protective equipment suitable for the disinfection material to be used for the disinfection processes to be carried out at the end of the construction and providing necessary trainings in this regard, • Providing suitable training related to health and safety to employers and informing them, • Placing of signboards such as “Danger”, “Entrance Forbidden” along the construction site in accordance with the Occupational Health and Safety Regulation • Keeping adequate amount of fire fighting equipment in construction site,	Within the Contract Price	Contractor, Supervision Team, ASAT, Provincial Directorate of Environment and Urbanization.

		• Keeping all equipment used in the construction phase in good working condition, • In case of any injured accident during the construction phase, availability of first aid materials in construction site for the first aid intervention before the transfer to the nearest health facility. • Especially in important environmental and social situations (eg fatal accidents, lost time problems, environmental spills, etc.), contractors should inform ASAT about the issue within 3 working days at the latest and notify the World Bank when ASAT is informed. Root cause analysis of the incident and the status report containing the measures taken and compensatory measures should be submitted to ASAT within 30 working days and ASAT should forward this report to the World Bank. • Within Covid-19 Epidemic Measures, which is declared as a pandemic by the World Health Organization; ○ Having a maximum of 3 people including the driver in passenger vehicles, and necessity to wear a mask in vehicles with more than one person, ○ Entering and exiting the construction site with the individual HES codes obtained through the "Hayat Eve Sığar (HES) application implemented by the Ministry of Health, ○ Measuring fever with thermometer at entrances to the construction site ○ It is mandatory to wear a personal protective mask in the construction site, ○ Taking all relevant measures for the measures announced by the Ministry of Health regarding the Covid-19 Epidemic, ○ Informing all personnel and ensuring compliance with the measures by authorized persons, ○ Regular follow-up of these measures, ○ Creating relevant documents and documentation to convey information related to follow-up,		

		○ Regular and frequent ventilation of public areas such as dormitories, dining halls and social facilities, ○ Paying attention to the protection of social distance in public areas such as dormitories, dining halls, social facilities, shuttle transportation and transportation, if the volumes are insufficient, switch to shift meals without interrupting the business plan in order to maintain social distance in dining halls ○ The prohibition of entrances to the back of the kitchen (cooking) and food distribution stand, except for the personnel who take necessary hygiene measures, ○ Tables, chairs, etc. in the dining hall Moving to the next shift after cleaning all places with human contact, ○ Prohibiting the use of common materials in dormitories, dining halls, social facilities, and ensuring the use of personal materials (paper towels, disposable cups, liquid soap dispensers, packaged salt / sugar / spices, packaged bread, etc.) ○ Providing daily disinfection of public areas,		

Phase	Potential Impact Component	Mitigation Measures	Cost	Instutional Res ponsibility
Construction	Cultural Heritage	• In the event of encountering a property or area with cultural prescription during construction activities, stopping the work immediatelty, informing the competent authorities of the situation, no to restart work until the written approval from the competent authorities, not to remove any artifact.	Within the Contract Price	Contractor, Contractor, Supervision Team, ASAT, Directorate of Regional Board for the Protection of Cultural Assets.

Phase	Potential Impact Component	Mitigation Measures	Cost	Instutional Res ponsibility
Construction	Land use	• The protection of the vegetation cover in the working area, if necessary; removal of the trees, transport to another place and sewing again at the end of the work, • Keeping materials and equipments in closed and protected areas, if it is needed to provide additional space for closed and protected areas, temporary rental procedures or permits must be obtained by the Contractor, • Making improvements in the areas such as road, pavement, garden etc. damaged during the work, • No more than 200 m of open ditch during operation. • In order to prevent citizens being affected, until the finalisation of the excavation works in front of the shops, houses and common areas, temporary safety bridges with ramps should be built by considering the disabled people and children.	Within the Contract price	Contractor, Supervision Team, ASAT, Provinci al Directorate of Environment and Urbanization.

Phase	Potential Impact Component	Mitigation Measures	Cost	Instutional Res ponsibility
Construction	Traffic	• Informing the public about the works and the construction schedule before the work starts, via notice boards, telecommunication tools and the website • Preparing the traffic direction plans and the necessary sign tables, placing them in the places foreseen before the start of the work • The pedestrian areas and bus stops should be provided safely and adequately if required, along with pedestrian crossings with intervals not exceeding 50 m on the construction site • Identification and announcement of alternative routes for transportation of work machines and trucks,	Within the contract price	Contractor, Supervision Team, ASAT, Antalya Metropolitan Municiple Dire ctorate of transportation services

		• Placing the warning signs at least 500 m before the field works, • Transportation works in areas with heavy traffic are carried out at times when traffic is off-peak time, • Warning signs are visible at night and in bad weather conditions.		

Phase	Potential Impact Component	Mitigation Measures	Cost	Instutional Res ponsibility
Construction	Employment	• In case of required, constitution of accommodation area for employees who will come from outside the city. • Taking necessary precautions to ensure that workers from outside the city are trained in dialogue and communication with local communities and that social and cultural problems do not arise between host communities and outside workers. • Providing training and information if deemed necessary by the contractor project manager and site chief.	Within the contract price	Contractor, Supervision Team, ASAT, Provincial Directorate of Environment and Urbanization
Construction	Procurement	• Contribution to the local economy with the use of local materials, to pay attention to supply various goods and services locally	Within the contract price	Contractor, Supervision Team, ASAT, Provincial Directorate of Environment and Urbanization

Phase	Potential Impact Component	Mitigation Measures	Cost	Instutional Res ponsibility
Construction	Negative Impact on Social Lifes	• Training of the contractor's field personnel on environmental and social issues, • Execution and controlling the activities carried out during the construction works in such a way as not to restrict / prevent the social and economic life of the people of the region.	Within the contract price	Contractor, Sup ervision Team, ASAT,

		• Placement of security and information signs on the site before starting to work, in order to provide the security and prevent the daily life of the citizens from being affected. • Providing the notification of complaints of citizens and professional groups to the project management in a short time through the contact information of the Supervisory Organization, which is left to local governments such as the headman. • Informing the people of the region, including the traffic regulations, if any, with handoutflyers before manufacturing, giving the contact information of the supervision organization and the Contractor site chief in the handoutflyers. • During the excavation, filling works etc, temporary bridges should be provided if they effect the access to the living areas of the citizens and excavation wastes should not be kept in front of the houses and workplaces, necessary precautions should be carried out.		

7.1.2 Operating Phase

Table 10. Posibble Environmental and Social Impacts and Preventation during the Construction Phase

Phase	Potential Impact Component	Mitigation Measures	Cost	Instutional Responsibility
Operation	Continous Controlling of Society, work and Employee Safety	• Periodic monitoring of the operation of the whole sewerage network, • Maintaining the pumps and equipment in manhole type pumping stations at the periods specified in the manufacturer's manuals, • To prevent odor problem by placing 6-cycle active carbon odor removal systems to be used to prevent odor formation in manhole type pumping stations and to replace the active carbons of these odor removal systems in specified periods,	ASAT own resources (The damages generating from the construction contractor's deficients and defects will be	ASAT, The firm responsible with operator.

		• In case of clogging, immediate removal of the causing the clogging, cleaning of the pipeline and cleaning of the area where the wastewater is poured not to affect the environment and human health, • Imposing sanctions on persons responsible for damage, • Taking precautions for methan (CH_4) and Hydrogen Sulphure (H_2S) during the cleaning of menholes and and pipe line. In this response, supply of methane (CH_4) and H_2S measurement devices and measuring the level of gases. • Supply of safety equipments for site works. • Periodic monitoring of menholes cover along the network to prevent the unforeseen accidents and /or to protect the citiziens from the negative impacts of unstanding and onlocked menhole cover. • In case of any significant accident (environmental spills, day loss and accidents involving death etc.) on the construction area, firstly ASAT and Iller Bank will be informed about accident within 3 days and submission of accident root-cause analysis and accident report included in the measures taken and the possible payments for damages within 30 days. • Within Covid-19 Epidemic Measures, which is declared as a pandemic by the World Health Organization; o Taking all relevant measures and measures announced by the Ministry of Health regarding the Covid-19 Epidemic, o Informing all personnel and ensuring compliance with the measures by authorized persons, o Regular follow-up of these measures, o Creating relevant documentation to convey information related to follow-up,	conpansed by the contractor during the defect and liability period)	

		○ Checking employees with non-contact thermometers before starting work and directing those with fever to the workplace doctor, ○ Developing an appropriate working model to ensure the social distance of employees throughout the workplace, ○ A maximum of 3 people including the driver in passenger vehicles, and a mask must be worn in vehicles with more than one person ○ Ensuring that employees wear masks and gloves in working environments, ○ To remove work clothes and protective equipment before leaving the work area and to keep them separate from other clothes, to ensure that these contaminated clothing and protective equipment are cleaned from viruses,		

7.2 Environmental and Social Impact Monitoring Plan

7.2.1 Construction Phase

Table 11. Potential Environmental and Social Impacts Monitoring Plan during the Construction Phase

Parameter	Phase	Where the parameters shall be monitored?	How shall the parameters be monitored?	When shall the parameters be monitored?	Why shall the parameters be monitored?	Cost	Instutional Responsibility
Excavation Waste	Construction	At the excavation area and by following truck which are used for materials transportation.	• By supervision team's monitoring of excavation works at site, • Checking whether the ditch openings in the excavated areas affect the access of citizens to places such as residences, workplaces, hospitals, shopping malls, etc., and to take possible measures by locating alternative roads considering the routes used by the citizens, considering the disabled people, children and people with special needs. • Informing the people of the region, including the traffic regulations, if any, with handout flyers before manufacturing, giving the contact information of the supervision organization and the Contractor site chief in the handouts	By daily records during the construction period.	• In order to prevent unsuitable storage, transportation and removal, • In order to prevent open ditch excavation which is too long than determination, • In order to eliminate the subjects which impact the social life/trasportation.	Within the contract price.	Contractor, Site Supervision Team, ASAT

			• Monitoring trucks and construction equipment by supervisions during transportation of excavation waste. • Recording the application documents for excavation permits				
Solid Waste	Construction	Throughout the contruction site and site office area where the waste containers are located.	• Checking the occupancy rates of the containers and making observations to prevent random waste in the site • Creating separate containers for recyclable wastes and ensuring monitoring and control of these recyclable wastes in Quarterly Environmental Monitoring Reports	By daily records during the contruction period.	In order to prevent unsuitable solid waste storage, transportation and removal.	Within the contract price.	Contractor, Site Supervision Team, ASAT
Packing waste	Construction	Throughout the contruction site and site office area where the waste containers are located.	• For collecting of packing waste in separate waste containers, • By recording of packing waste which are transported to the licenced collecting and sortation facilities.	By daily records during the contruction period.	In order to prevent unsuitable packing waste storage, transportation and removal.	Within the contract price.	Contractor, Site Supervision Team, ASAT
Hazardous Waste	Construction	Throughout the construction site and site office area.	• By monitoring of temporary storage field in case of hazardous waste generation.	By daily records during the contruction period.	In order to prevent unsuitable hazardous waste storage, transportation and removal.	Within the contract price.	Contractor, Site Supervision Team, ASAT
Waste Oil	Construction	In the construction site where the work machineries work.	• By monitoring of oil leakage and oil change of work equipments and machineries in construction site,	During the construction period, maintenance and	In order to prevent unsuitable waste oil storage,	Within the contract price.	Contractor, Site Supervision Team,

			• By following the maintenance and repair information of work machineries.	repair times o f work machineries.	transportation and removal.		ASAT
Wastewater	Construc tion	In the construction site and site office in general	• By recording of wastewater receipts if the site office is connected to the existing wastewater network (or recording of wastewater vacuum truck transportation receipt)	On the daily basis records during the contructi on period.	In order to prevent unsuitable wastewater storage, transportation and removal.	Within the contract price.	Contractor, Site Supervision Team, ASAT
Air Quality	Construc tion	During the excavation works, in material s storage fields, emissions from work machines.	• By watering in areas where dust formation is observed during the excavation works, controlling of emission limits from work machines and storage fields of backfill materials.	During the construction phase.	In order to protect the health of workers and citizens and to protect air quality.	Within the contract price.	Contractor, Site Supervision Team, ASAT
Noise	Construc tion	In construction site where work machines work extensively	• By measuring the noise levels with portable devices, especially in areas where machines work extensively.	It will be monitoring continuously during the construction phase.	In order to protection of employer and citizens heath and control the noise pollution.	Within the contract price.	Contractor, Site Supervision Team, ASAT

Healty and Security	Construction	Construction site and office. Within the project boundaries	• By the controlling of security sign boards and safety barriers during the site works. • By checking whether the speed limits of work machines and trucks are complied with, • By checking whether workers health and safety equipment (earplugs, eyeglasses, safety boots, etc.) are used, • By checking work conditions in the construction site, • By following the trainings given to the personnel by the of contractor, • It will be checked wheter or not the contractor inform the residents about the work site, targeted start and end date, contact person in case of emergency • Within Covid-19 Epidemic Measures, which is declared as a pandemic by the World Health Organization; o Having a maximum of 3 people including the driver in passenger vehicles, and necessity to wear a mask in vehicles with more than one person o Entering and exiting the construction site with the individual HES codes obtained through the "Hayat Eve Sığar (HES) application	It will be monitoring continuously during the constructi onphase.	In order to protect work, employeer an d citizens safety.	Within the contract price.	Contractor, Site Supervision Team, ASAT

			implemented by the Ministry of Health, o Measuring fever with a thermometer at entrances to the construction site, o It is mandatory to wear a personal protective mask in the construction site, o Taking all relevant measures and measures announced by the Ministry of Health regarding the Covid-19 Epidemic, o Informing all personnel and ensuring compliance with the measures by authorized persons, o Regular follow-up of these measures, o Creating the relevant documentation to convey information related to the follow-up o Adequate ventilation in public areas such as dormitories, dining halls and social facilities, o Paying attention to the protection of social distance in public areas such as dormitories, dining halls, social facilities, shuttle transportation and transportation, if the volumes are insufficient, switch to shift meals without interrupting the business plan in order to maintain social distance in dining halls				

			○ The prohibition of entrances to the back of the kitchen (cooking) and food distribution stand, except for the personnel who take necessary hygiene measures, ○ To move on to the next shift after cleaning all places where there is human contact, such as tables, chairs, etc. ○ Prohibiting the use of common materials in dormitories, dining halls, social facilities and ensuring the use of personal materials (paper towels, disposable cups, liquid soap dispensers, packaged salt / sugar / spices, packaged bread, etc.), ○ Providing daily disinfection of public areas,				
Traffic	Construction	On streets and roads where the construction works are going on and connected roads.	• With the monitoring of the road closing and route permission and route chart drawing, • Safety precautions for road closure and routing, with the relevance of traffic signs and signs. • The operations, which will be carried out for the purpose of traffic routing, will be controlled on site, • In the construction site, pedestrian crossings along with pedestrian areas	It will be monitoring continuously during the construction stage	Not to blok the existing traffic flow and to prevent from the unforeseen traffic accidents.	Within the contract price.	Contractor, Site Supervision Team, ASAT

			will be checked to ensure that they are safe and adequate.				
Usage of land	Construction	Construction site	• Controlling the vegetation and trees in the study area and controlling the excavation widths and material storage areas in the study area • Making rental agreement for additional land required in the work area or obtaining permission from related institutions.	It will be monitoring continuously during the construction phase	To avoid from probable disputes.	Within the contract price.	Contractor, Site Supervision Team, ASAT
Artifacts / Areas with a Historical or Cultural Value	Construction	Excavation site	• In case of encountering an unforeseen historical, cultural structure or region during field work, informing the project manager and providing necessary trainings about the subject.	It will be monitoring continuously during the construction phase	Protection of cultural heritage.	Within the contract price.	Contractor, Site Supervision Team, ASAT
Restriction of Social Life	Construction	Monitoring will be done in areas affected by Construction Site.	• Training of personnel on the environment and social issues to express the points to consider during the construction works and to keep under control of workers' relationship with citizens. • Checking the security and information signs in order to ensure citizens safety and daily lives are not affected • During the excavation, filling works etc. monitoring of transportation to places where citizens use collectively or individually, such as residence, workplaces, hospital, shopping mall, etc.	It will be monitoring continuously during the construction phase	For prevention of probable complaints and ensuring the citizens' health and safety.	Within the contract price.	Contractor, Site Supervision Team, ASAT

7.2.2 Operating Phase

Table 12. Monitoring Plan for Possible Environmental and Social Impacts During Operation

Parameter	Where will it be monitoring?	How will it be monitoring?	When will it be monitoring?	Why will it be monitoring?	Responsibilities
Society, Work and Worker Security	Monitoring along the network line.	Periodic Controls	It will be monitoring continuously. In case of a complaint, follow-up studies will also be carried out.	In order not to have a negativeimpacton environment, the citizens and the employees during the operation of the manufacturing done within the project.	The Contractor who is the responsible for operation, ASAT.

8. GRIEVANCE MECHANISM

Potential citizen complaints to be received during the execution of the project will be informed to the supervisory organization. Grievance such as research on complaints, arrangements, if any, and remediation of the complaint will be carried out with the joint work of ASAT / Supervisory Organization.

In order to inform the public about the establishment of the grievance mechanism, relevant brochures will be prepared and distributed in public places, notice boards and construction signs will be posted in and around the construction site regarding the grievance mechanism, information on the subject via telecommunication tools and the website will be published both during consultation of this plan and the project implementation period.

Records of the complaints received by the Supervisory Organization and ASAT General Directorate through the following communication ways will be kept, and information will be given and recorded in quarterly reports.

- Complaint petitions to be left to ASAT General Directorate, Construction Site Offices and Headmans
- CİMER (Presidency Communications Center)
- Alo 185 Complaint Line
- Whatsapp Complaint Line (It will be established by the ASAT General Directorate for the projects within the scope of the SCP. The GSM number to be used as the complaint line will be indicated in the information notes to be left to the neighborhood Headmans residence entrances and workplaces when the contracts begin.)

9. PUBLIC PARTICIPATION MEETING

9.1 Information of Meeting

Meeting Notice Method	:	Newspaper Advertisements / ASAT General Directorate, ALDAŞ Inc., Finike Municipality Web Sites
Meeting Date	:	January 21, 2021 - Hour:14:00
Online Meeting Link	:	https://zoom.us/j/98165939361?pwd=SHJHYXluNlh4V0ZJbVQwZys5N1VzQT09
Meeting Participants	:	Information about the participants is available in the attached list.
Meeting Agenda	:	Opening Speech Project Description Questions - Answers Closing - Pleasure

According to the project, the Public Participation Meeting was held by the project owner in order to inform the public about the investments and to obtain opinions and suggestions about the project.

The Public Participation Meeting was held on January 21, 2021 at 14:00 as a video conference via the link https://zoom.us/j/98165939361?Pwd=SHJHYXluNlh4V0ZJbVQwZys5N1Vz QT09.

The Public Participation Meeting was published on the 6th page of the Antalya A Newspaper dated January 14, 2021 and on the 6th page of the Finike Akdeniz Newspaper dated 14 January 2021. In addition, the Public Participation Meeting was published and announced on www.asat.gov.tr, www.aldas.com.tr and www.finike.bel.tr. 21 people attended the Public Participation Meeting related to the project and the names of the participants were recorded.

A presentation related to environmental and social impacts that could occur during the implementation of the project was prepared for public participation meeting. In the presentation, the definition and impacts of the project were supported with figures and photographs. The impacts of the construction and operating periods of the project were evaluated and presented as two separate stages.

The presentation of the project at the Public Participation Meeting was made by ALDAŞ Inc.

In the presentation made at the Public Participation Meeting, the definition of the project and the environmental and social impacts were discussed. After the presentation, participants had a chance to declare their opinions, suggestions and questions. Regarding the project, no negative opinion was given by the participants. At the public participation meeting, the questions asked by the participants and the answers given to the questions were recorded.

9.2 Questions and Answers

At the public information meeting held on January 21, 2021 at 14:00 as a video conference, the questions asked by the participants and their answer are given below at the end of the information given to the participants about the project.

Question 1 : How long will the project be completed? Could our infrastructure problems be solved until the summer?

Answer : **Hakan KAPLAN – ALDAŞ INC. TECHNICAL MANAGER**

Regarding the project, the tender preparation phase continues. Within the scope of the project, approximately 30 km of sewerage network will be constructed in seven (7) neighborhoods. It may take a certain period of time to commission the whole system. In our project, priority will be achieved by determining the regions in urgent need. The commissioning of the entire project will take approximately 1.5 - 2 years.

Question 2 : Kale, Iskele, Karşıyaka and Eski District are located in places with rocky and height levels. For this reason, overflows occur in the existing septic tanks in these areas and an intense odor problem occurs. Will the sewerage line laying be applied to the region I have mentioned with this project?

Answer : **Hakan KAPLAN – ALDAŞ INC. TECHNICAL MANAGER**

The regions you specified are included in the project. The existing soil structure studies of these regions and the necessary projects have been made according to the situations you mentioned. In these regions, it is aimed to solve the wastewater with the new system sewage infrastructure project. In case of additional needs that meet the zoning plan and project design criteria in these regions, the Contract can be evaluated within the estimation increase limits.

Question 3 : I work as a shopkeeper in the Finike Marina Region. There are the Military, Fishing Shelter and fifteen (15) shops of in our region. The line routes of the project to be built pass very close to the region we are in, but do not cover this region. Since this region is a touristic area, could it be included in the scope of the project to prevent odor and wastewater overflow problems that may arise from the existing septic tanks today and in the future? If this region is not included in the scope of the project, wouldn't it be difficult to develop any infrastructure projects in the future?

Answer : **Mehmet BÜYÜKOKAN - CIVIL ENGINEER, ASAT GENERAL DIRECTORATE**

A recreation activity is planned by the Municipality of Finike in the region you mentioned. For this reason, the mentioned region is not included in the scope of the project. However, by adhering to the recreation works to be developed by the Municipality of Finike, the necessary regulations and the manufacturing of the sewer line will be carried out at the required stages. An end flow has been left for this area and therefore it will not cause any problems for the future infrastructure work.

Question 4 : There are sewerage pipes previously laid in Eski District and Kale District. Will these existing pipes be used within the scope of the project or will the infrastructure system be made by laying new pipes completely?

Answer : **Hakan KAPLAN – ALDAŞ INC. TECHNICAL MANAGER**

Since the condition of the old pipes is not healthy, these pipes cause the current infrastructure problems. For this reason, a modern infrastructure system with completely new pipes will be established and put into operation within the scope of the project, without considering the old pipes.

Question 5 : You mentioned the construction of the Pumping Stations. Are these Pumping Stations built as reinforced concrete structures? Are the Pumping Stations large structures and will they cause a visual disturbance to the environment?

Answer : **Hakan KAPLAN – ALDAŞ INC. TECHNICAL MANAGER**

Pumping Stations are underground manholes made of GRP or HDPE material, produced as a single piece in which pumps, valves, check valves are located, and located under the ground. They are simple structures that will occupy a small area on the ground and have

an electrical panel surrounded by wire mesh, a jib crane and an odor removal system. For this reason, the Pumping Stations do not create any visual pollution.

Question 6 : There is also a shortage of drinking water in some districs. Existing water tanks are not sufficient. Could our drinking water problems be solved by purchasing larger water tanks within the scope of this Project?

Answer : **Fevzi ÇİFTÇİ - ASAT GENERAL DIRECTORATE FINIKE REGIONAL MANAGER**

Within the scope of the introduced ASAT3 / W9 Finike Project, sewerage network line manufacturing will be made only in the specified regions. We have received the requests of the problems you have regarding drinking water and as ASAT General Directorate, we will solve these problems as soon as possible.

9.3 Advertising Notice

The Public Participation Meeting was published in two (2) Local Newspapers: Antalya A Newspaper dated January 14, 2021 and Finike Akdeniz Newspaper dated January 14, 2021.

GÜNLÜK YEREL GAZETE

ANTALYA A GAZETESİ

15. Yıl

14 OCAK 2021 PERŞEMBE

1.TL

DUYURU

Antalya Su ve Atıksu İdaresi (ASAT) Genel Müdürlüğü tarafından Antalya Sürdürülebilir Su ve Atıksu Yönetimi Projesi için Dünya Bankasından finansman temin edilmiş olup, bu kapsamdaFinike Bölgesi'nde yeni kanalizasyon altyapı yatırımlarınınhayata geçirilmesi planlanmaktadır.

Planlanan Finike Bölgesinde Kanalizasyon Şebeke Hattı Yapım İşi için Türk Çevre Mevzuatı ve Dünya Bankası Usul ve Yönetmeliklerine (OP 4.01) uygun olarak çevre ve sosyal etkilerinin değerlendirilmesi ve yapım sürecinde olumsuz çevresel ve sosyal etkileri asgariye indirilmesi ile ilgili olarak çalışmalar yapılmakta ve "Çevre ve Sosyal Yönetim Planı" hazırlanmaktadır.

Planlanan yatırım hakkında halkın bilgilendirilmesi, projeye ilişkin kamuoyunun görüş ve önerilerinin alınması için ASAT Genel Müdürlüğü tarafından aşağıda belirtilentarih ve saatte "Halkın Katılım Toplantısı" düzenlenecektir.

Dünya Sağlık Örgütü tarafından Pandemi olarak ilan edilen COVID-19 Salgınınedeniyle alınan tedbirler çerçevesinde "Halkın Katılımı Toplantısı" video konferans olarak gerçekleştirilecektir.

Halkımıza saygı ile duyurulur.

ANTALYA SU VE ATIKSU İDARESİ (ASAT) GENEL MÜDÜRLÜĞÜ

Tel : (0 242) 310 12 00
Faks : (0 242) 310 13 17

Antalya Sürdürülebilir Su ve Atıksu Yönetimi Projesi- Finike Bölgesinde Kanalizasyon Şebeke Hattı Yapım İşi Sözleşmesine ait Çevre ve Sosyal Yönetim Planı Halkın Katılımı Toplantısı

Online Halkın Katılımı Toplantı Linki:https://zoom.us/j/98165939361?pwd=SHJHYXluNlh4V0ZJbVQwZys5N1VzQT09

Toplantı Tarihi :21.01.2021Perşembe
Toplantı Saati : 14:00
Tel : 0 242 259 32 16
Faks : 0242 259 32 20

Resmi İlanlar www.ilan.gov.tr'de BASIN (ANT) 1293784

Figure 8. 'Antalya A' Newspaper Puclic Participation Meeting Announcement

FİNİKE 49.yıl **AKDENİZ**

GÜNLÜK BAĞIMSIZ SİYASİ GAZETE

Yıl: 50 | Sayı: 4845 | 14 Ocak 2021 Perşembe | Fiyatı: 1 TL. (KDV Dahil)

DUYURU

Antalya Su ve Atıksu İdaresi (ASAT) Genel Müdürlüğü tarafından Antalya Sürdürülebilir Su ve Atıksu Yönetimi Projesi için Dünya Bankasından finansman temin edilmiş olup, bu kapsamda Finike Bölgesi'nde yeni kanalizasyon altyapı yatırımlarının hayata geçirilmesi planlanmaktadır.

Planlanan Finike Bölgesinde Kanalizasyon Şebeke Hattı Yapım İşi için Türk Çevre Mevzuatı ve Dünya Bankası Usul ve Yönetmeliklerine (OP 4.01) uygun olarak çevre ve sosyal etkilerinin değerlendirilmesi ve yapım sürecinde olumsuz çevresel ve sosyal etkileri asgariye indirilmesi ile ilgili olarak çalışmalar yapılmakta ve "Çevre ve Sosyal Yönetim Planı" hazırlanmaktadır.

Planlanan yatırım hakkında halkın bilgilendirilmesi, projeye ilişkin kamuoyunun görüş ve önerilerinin alınması için ASAT Genel Müdürlüğü tarafından aşağıda belirtilentarih ve saatte "Halkın Katılım Toplantısı" düzenlenecektir.

Dünya Sağlık Örgütü tarafından Pandemi olarak ilan edilen COVID-19 Salgınınedeniyle alınan tedbirler çerçevesinde "Halkın Katılımı Toplantısı" video konferans olarak gerçekleştirilecektir.

Halkımıza saygı ile duyurulur.

ANTALYA SU VE ATIKSU İDARESİ (ASAT) GENEL MÜDÜRLÜĞÜ
Tel : (0 242) 310 12 00
Faks : (0 242) 310 13 17

Antalya Sürdürülebilir Su ve Atıksu Yönetimi Projesi- Finike Bölgesinde Kanalizasyon Şebeke Hattı Yapım İşi Sözleşmesine ait Çevre ve Sosyal Yönetim Planı-Halkın Katılımı Toplantısı

Online Halkın Katılımı Toplantı
Linki:https://zoom.us/j/98165939361?pwd=SHJHYXIuNIh4V0ZJbVQwZys5N1VzQT09
Toplantı Tarihi : 21.01.2021 Perşembe
Toplantı Saati : 14:00
Tel : 0 242 259 32 16
Faks : 0 242 259 32 20

Resmi İlanlar www.ilan.gov.tr'de BASIN (ANT) 1293784

Figure 9. 'Finike Akdeniz' Newspaper Public Participation Meeting Announcement

In addition, it has been published on www.asat.gov.tr, www.aldas.com.tr and www.finike.bel.tr websites in order to announced better the Public Participation Meeting to the citizens.

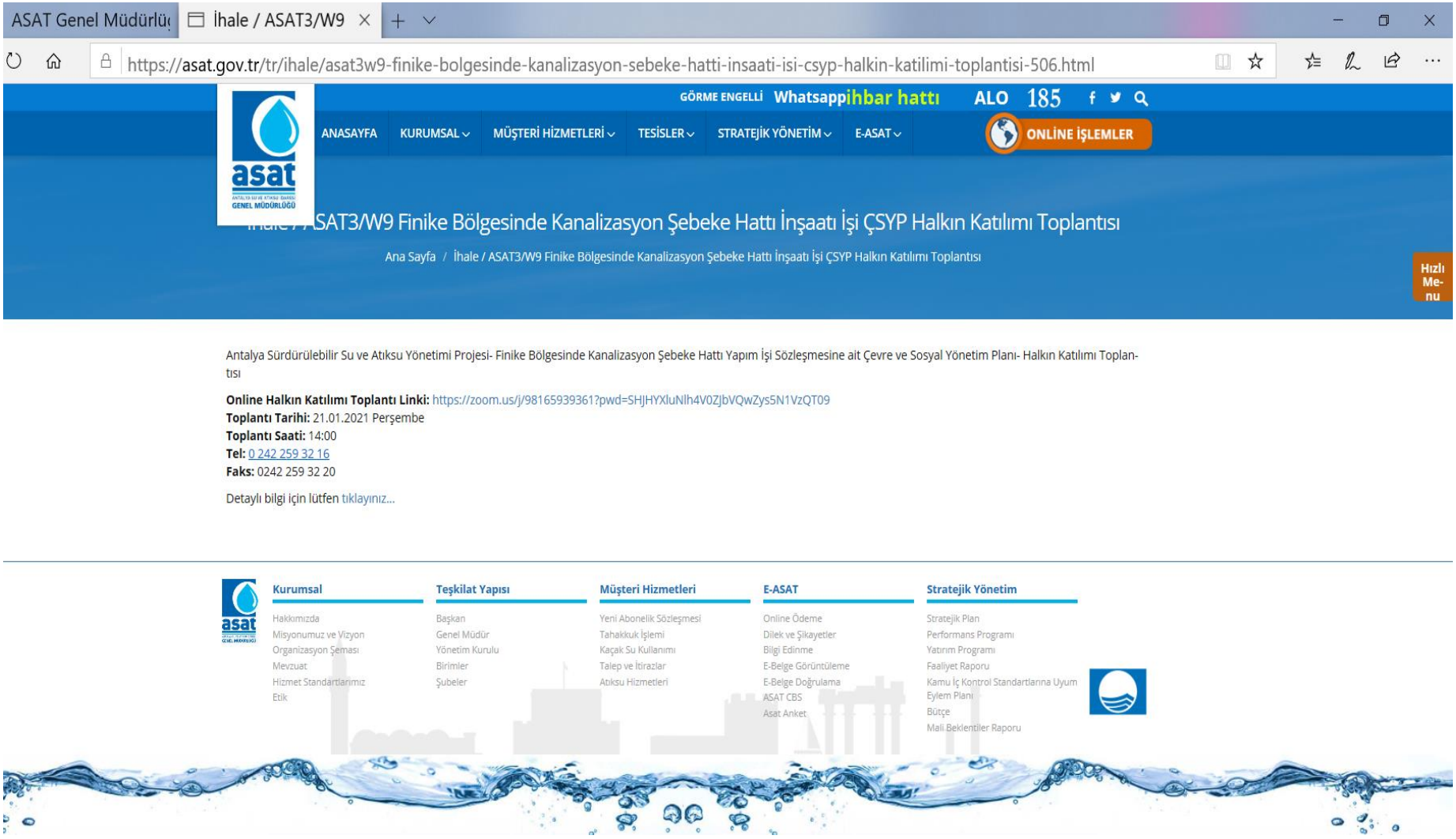


Figure 10. ASAT General Directorate Website Public Participation Meeting Announcement

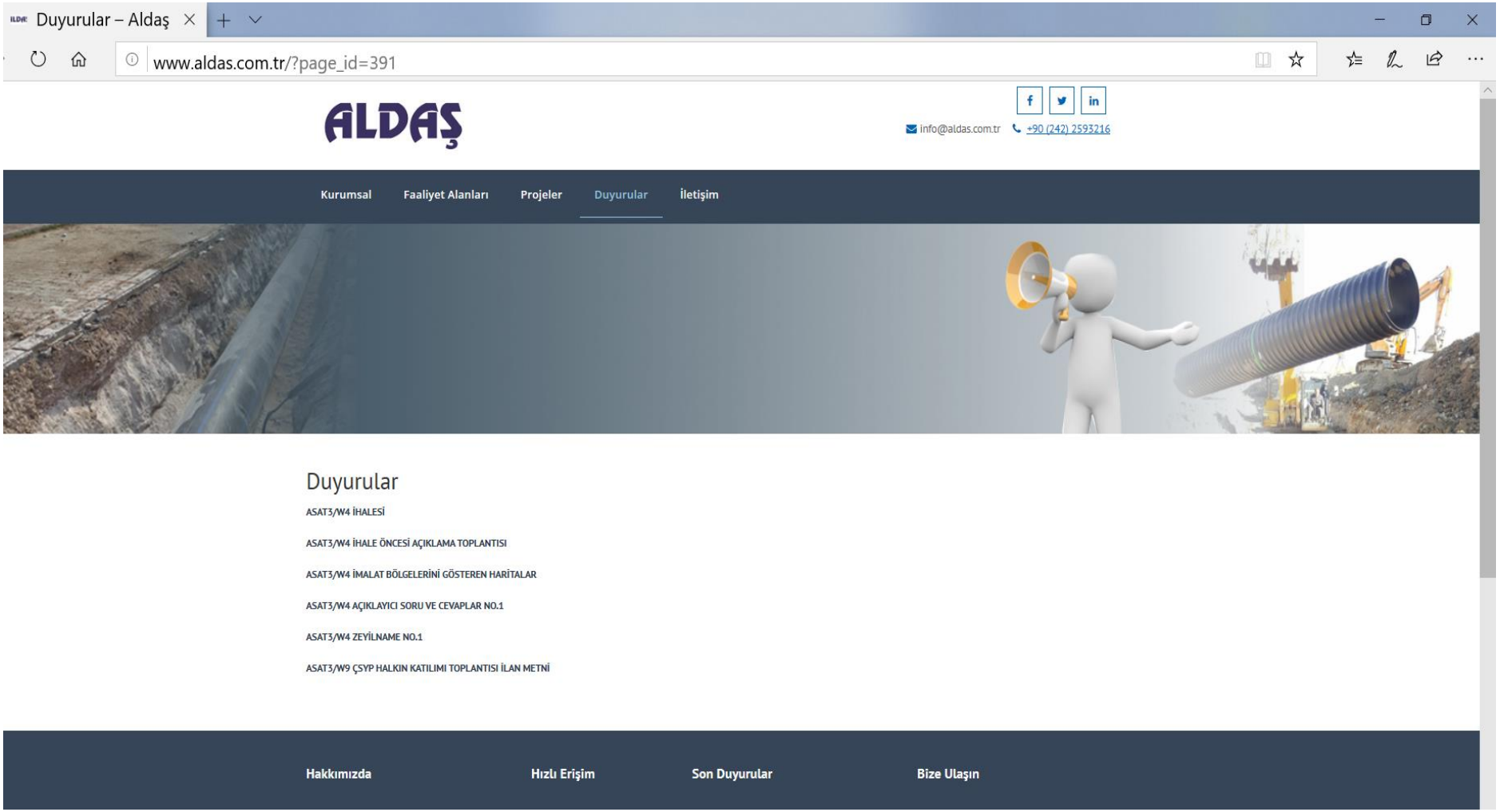


Figure 11. ALDAŞ Inc. Website Public Participation Meeting Announcement

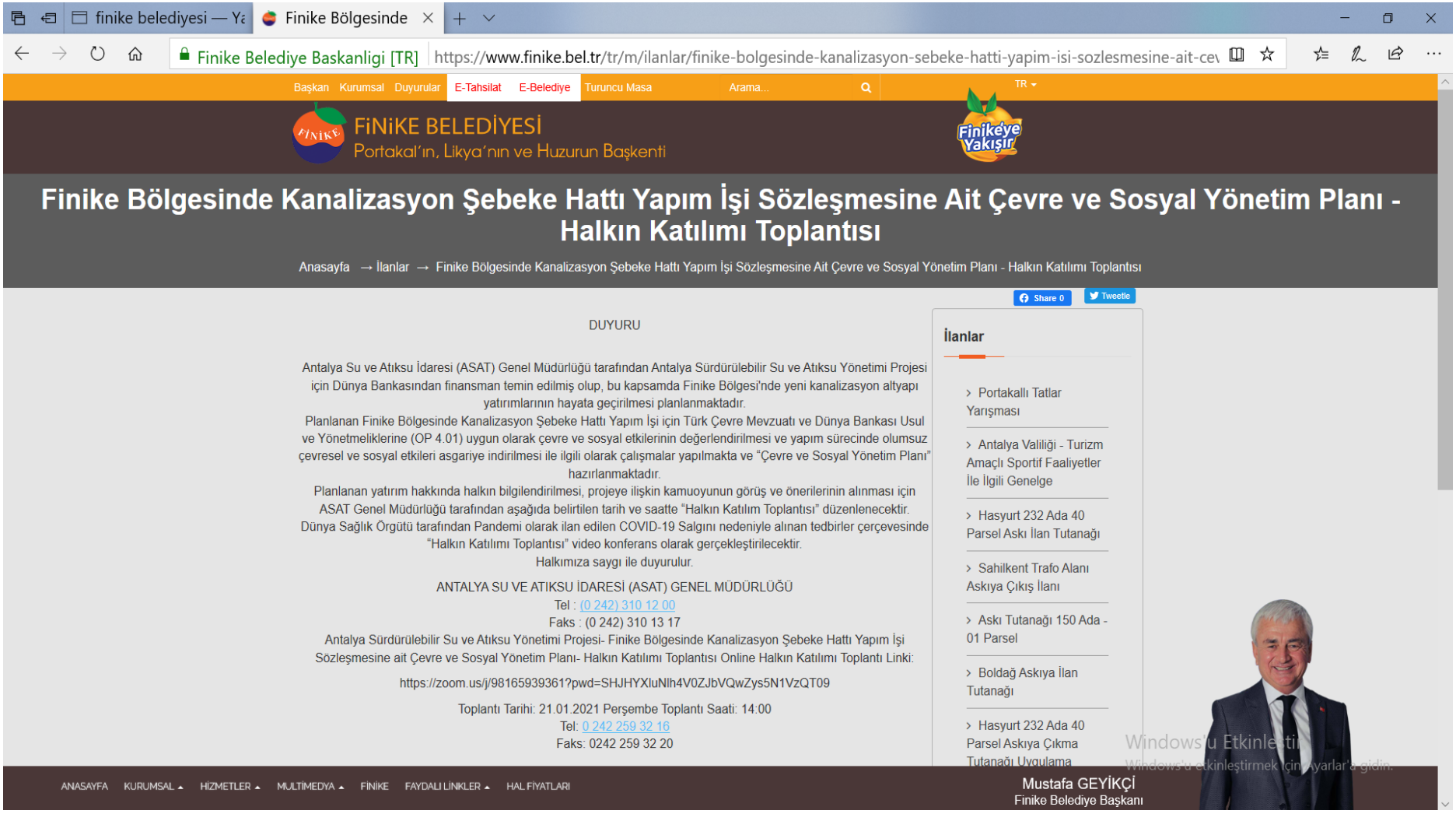
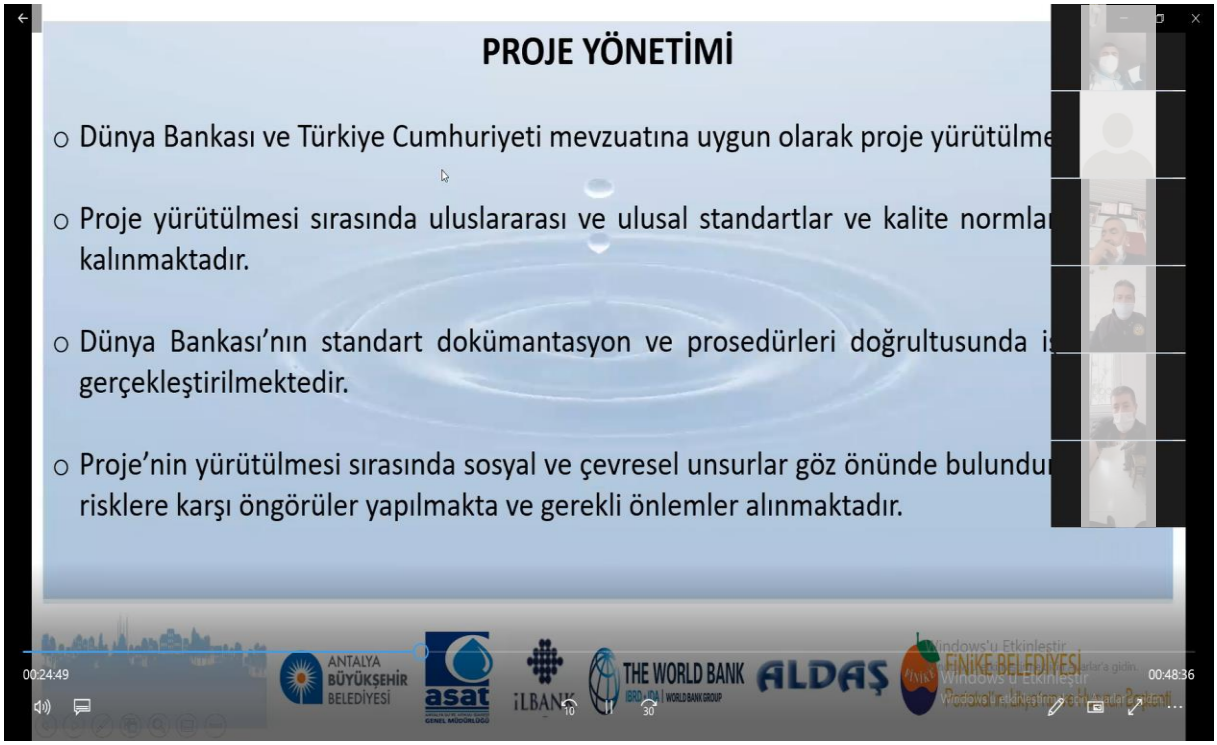
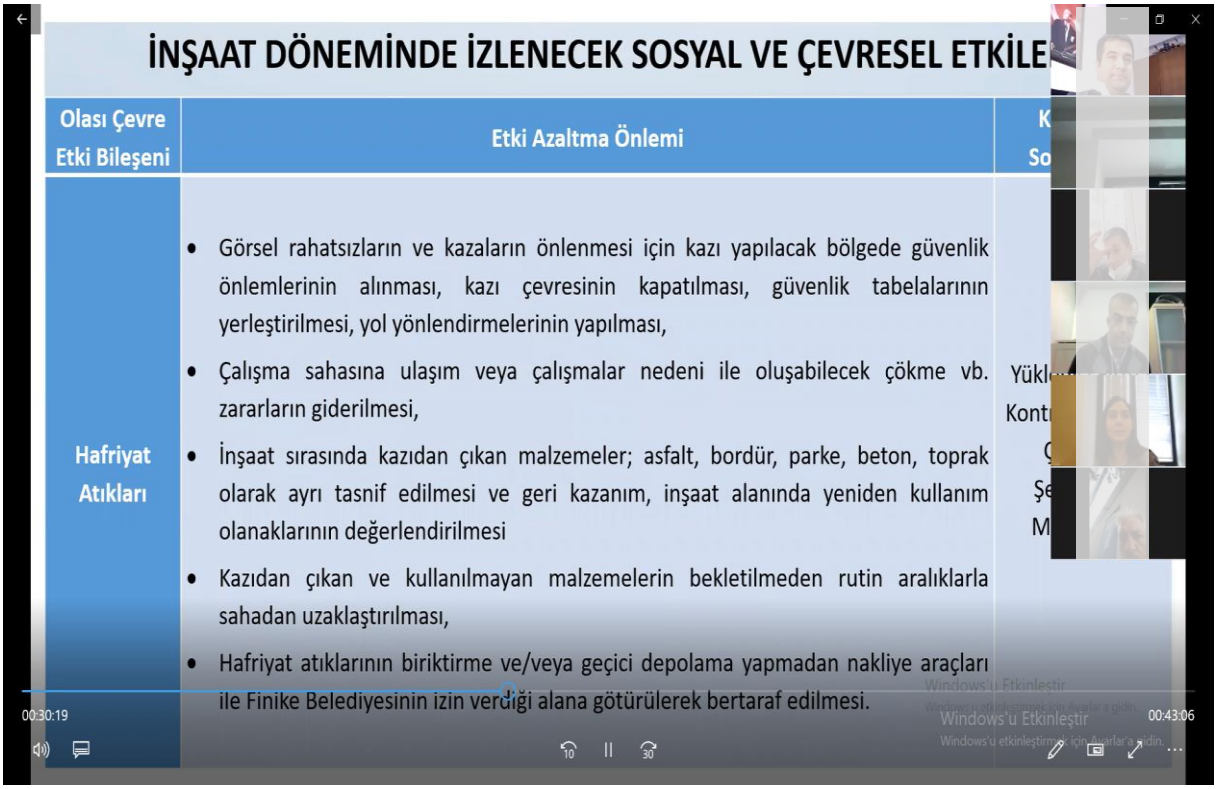


Figure 12. Finike Municipality Website Public Participation Meeting Announcement

9.4 Images Related To Public Participation Meeting





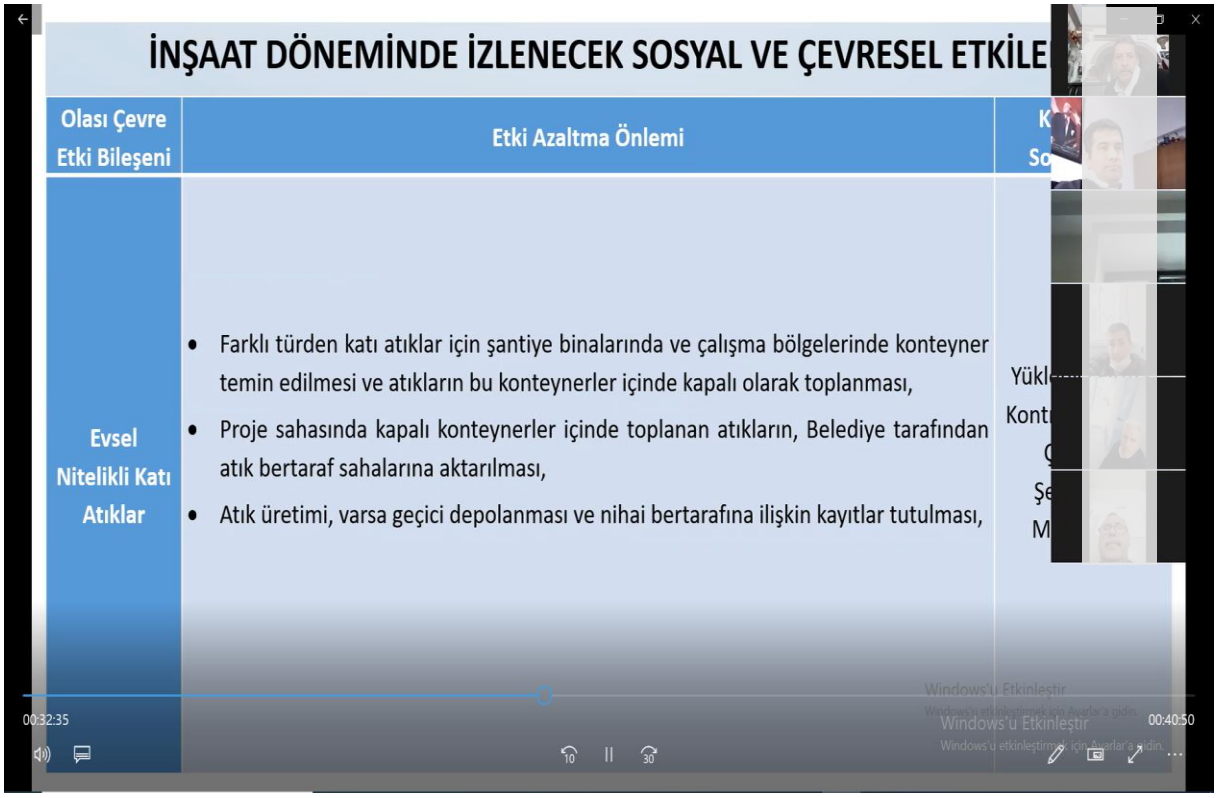


Figure 13. Images Related to the Public Participation Meeting

9.5 Comments

Regarding to the comments stated in the participation meeting, it was observed that in general, the participants supported the ınfrastructure investments and they found the project favourable.

As a result of the meeting held with the public on January 21, 2021, it was determined that, it has been recognized that the construction of the sewerage network line in the Finike Region Project will be useful for theprotection and improvement of the environment.

With the scope of the project, it is planning to take measures against environmental impacts that may arise in terms of environment and human health. Mentioned measures defined in meeting have been found satisfactory by the participants. For this reason, it has been concluded that the implementation of the Environmental and Social Management Plan (ESMP) prepared for each stage of the project will have an important place in terms of protecting and improving the environment and human health.

9.6 List of Participants

Table 13. Public Participation Meeting Participant List

ASAT3/W9 CONSTRUCTION OF SEWERAGE NETWORK LINE IN FİNİKE REGION ENVIRONMENTAL AND SOCIAL MANAGEMENT PLAN PUBLIC PARTICIPITAON MEETING LIST OF PARTICIPANTS
Date: January 21, 2021
Hour: 14:00

No:	Name / Surname
1	Engin YENİACUN
2	Ahmet ÇOBANOĞLU
3	Mustafa KELEŞOĞLU
4	Erdal TAŞGIN
5	Erkan ÇARKÇI
6	Vedat ÖNER
7	Hasan KARAYEL
8	Şerafettin SÖNMEZ
9	Hatice EVMEZ
10	Tahsin ULUTAŞ
11	Erdoğan ULUTAŞ
12	Ercem SUBAŞI
13	Veli ÖZLÜ
14	Fevzi ÇİFTÇİ
15	Mehmet BÜYÜKOKAN
16	Murat ZEYDANLI
17	Aras GEZER GÖRGEÇ
18	Hakan KAPLAN
19	Melda ÇAKIR YILDIZ
20	Hayriye Hazal HAŞAR
21	Sevda KORKUT

9.7 Information Activities Planned to be Made Within the Scope of the Project

The construction contractor will, on behalf of ASAT, obtain relevant permits and licenses from the following institutions; Natural Gas Distribution Company, Museum Directorate and Protection Board, TEİAŞ, Local Electricity Distribution Company, Local Natural Gas Distribution Company, Telecom and other private communication infrastructure companies, Highways, Traffic Branch Directorate, AYKOME, UKOME, relevant municipalities etc. for excavation.

Prior to construction, handoutflyers containing the scope of the work, the sketch of the work site, the starting and targeted deadlines and contact information of the authorised person will be prepared and distributed to the regional management units, regional tradesmen and residents mail boxes in order to inform the residents and stake holders.

During construction of the work, no damage will be given to any underground and above ground facilities public and private entities. In order to ensure this, prior to excavation, the contractor will engage with relevant authorities for the suspension of underground services such as natural gas, telephone, electricity, sewerage and water and take precautionary measures. Despite the measures taken, in cases where there is damage to municipal infrastructure or to facilities of private entities, the contractor will be responsible for covering the damages. In cases where the Contractor does not undertake necessary repairments, all costs for the compensation of the damages occurred will be borne by the Contractor.

10. RESULT OF ENVIRONMENTAL AND SOCIAL MANAGEMENT PLAN

The province of Antalya is the number one province in the country where the tourism sector and the sub-sectors related to the tourism develop. The touristic facilities requirement of the tourism sector, employment requirement of tourism facilities, staff requirement of the supporting sectors of the tourism, andthe natural beauties of the city have made Antalya Province a center of attraction causing increasing population and immigration.

The completion of environmental infrastructure investments in the region, such as potable water, sewage, domestic wastewater treatment plants, and starting operations in a short time has been extremely successful in solving environmental problems caused by wastewater in the region.

Furthermore, in accordance with the Law No. 6360 , as of 01.04.2016; the service limits of General Directorate of ASAT have been reached to as geographically 2,000 km^2 to 20,909 km^2, from 5 districts with 1,200,000 population to 19 districts with 2,328,555 population, from 40 km long shoreline to 640 km long shoreline, from 512,935 water subscribers to 1,169,304 water subscribers, from 2 wastewater treatment plants to 32 wastewater treatment plants In this respect, it was necessary to carry out sewerage infrastructure works in Finike region.

The Environmental and Social Management Plan, which covers the construction and operation phases of the project, describes the impacts of the project, precautions to be taken and who will be responsible. The purpose of the Environmental and Social Management Plan is to specify the provisions on Environmental, Social, Occupational Health and Safety and Citizen Security to be monitored within the construction and operation phases of the ASAT3/W9 contract.

The operator during the operation phase and the Contractor during the construction phase will be the critical organizations during the implementation of the ESMP. Antalya Water and Wastewater Administration (ASAT) General Directorate and ALDAŞ Infrastructure Management and Consultancy Services Industry and Trade Inc. will be the supervisor part in the ESMP during implementation of construction and operation phases.

Construction works of ASAT3/W9 (Finike Region) contract are planned to be carried out by Contractors who are successful within the scope of Sustainable Cities Project.

As a general principle, the Contractor is obliged to follow the application of the environmental and social management plan during all construction activities under the contract and to minimize the inconveniences that may occur in the existing road networks, along with damages that may occur in vegetation, soil, groundwater, surface waters and landscapes.

During the operation phase, the contractor responsible for the operation will be responsible for the implementation of the Environmental and Social Management Plan under the supervision of ASAT and ALDAŞ. The management, supervision and coordination of environmental and social issues related to the project will be carried out under ASAT responsibility. These institutions will communicate with other relevant institutions through their assigned coordinators and will follow environmental and social issues. Compliance with the national laws and regulations on the environment will be kept on the frontline at all phases of the project, and the necessary expert assistance will be available for this purpose.

During the preparation of the Environmental and Social Management Plan for the project; it has been found out that there is no significant environmental impact in the activities of carrying out the project environmentally due to the physical and biological, meteorological, geological, hydrogeological, geomorphological, agricultural areas, forestry, historical and touristic features of the project area.

As a result; it is estimated that the environmental impacts of the activities to be carried out within the scope of the project will not reach to significant extent if the measures to be taken in order to reduce the environmental impacts arising from the mentioned project are minimized and or eliminated.

The sub-projects will be regularly audited during construction and operation phases to ensure that the ESMP is properly applied in a proper manner. If the Bank finds any problems regarding ESMP implementation, rproject stakeholders will be informed about this issue and they will decide on the steps to be taken to solve the problems. lbank findings will be sent to the World Bank in six-month project reports and, if necessary, more frequently. The WB project team will visit the project sites from time to time and when necessary, within the scope of the project audit.

It is planned to prevent or reduce potential adverse environmental impacts in the construction and operation phases, while the environmental and social impacts are expected to be minimal during the construction and operation phases of the ASAT3/W9 contract.

In the construction and operation stages, the works carried out by contractors in the scope of environmental and social management plan (ESMP) will be audited and monitoring of the (ESMP) will be ensured. Quarterly monitoring reports prepared by the Supervision Team and Environmental and Social Monitoring Reports prepared by the Contractor will be sent to Ilbank as information. Ilbank will compile the monitoring reports submitted by the contractor and submit them to the World Bank as an Environmental and Social Monitoring Report in every six months as updated information about the Project. Contractor Firms shall carry out site works by taking into account the monitoring parameters included in Section 7 of the ESMP document during the execution

of contract packages. In the field, the works for each parameter, measures and complaints, if any, will be prepared as quartely monitoring reports and submitted to the Supervision Organization for approval. During the execution of the Contract, in the case of environmental and social monitoring parameters change due to the job changes, ESMP document will be revised and and the Contractor will be responsible for the risks of the revised parameters. Supervision team will be informed about possible citizen complaints to be received during the execution of the project. The issues such as research on complaints, if necessary arrangements and remedy of the complaint will be carried out jointly by ASAT / Supervision Team.

By means of the following communication channels, the records of the complaints received by the Supervision Team and the General Directorate of ASAT will be kept and recorded in the quarterly reports.

- Complaint petitions which will be submitted to ASAT General Directorate, Construction Site Offices and Headmans
- CIMER (Presidency Communications Center)
- Alo 185 Complaint Line
- Whatsapp Complaint Line (It will be established by the ASAT General Directorate for the projects within the scope of the SCP. The GSM number to be used as the complaint line will be written in the information notes which will be distributed to the Headmans and households and workplaces.)

Citizen complaints made via the e-mail address info@asat.gov.tr on the official website of www.asat.gov.tr or made by phone via the Alo 185 complaint line will be forwarded to the relevant Departments according to the working area and project. Relevant Department of ASAT General Directorate will inform the Project Manager of the Supervision Organization and request the necessary measures to be taken in the field and provide feedback. After the improvements in the field are completed, the Project Manager will again inform the relevant Department of ASAT and return to their e-mail, written petition, phone message or interviewsHowever, in the case of a main street and a zone that is heavily used by citizens (tourism, shopping area, etc.), firstly hand information handoutflyers will be distributed to indicate the streets to which traffic is directed, and citizens will be informed about the duration of the manufacturing in this area. Telephone numbers of both the Contractor and the Field Engineers of the Supervision Organization will be given in the handoutflyers. In case of any complaint, the teams will be informed about the issue via these phone numbers and they will be intervened immediately. After the regulation and / or complaint remediation, feedback will be given to the citizens on the issue.

11. REFERENCES

- Sustainable Cities Project (P128605) Environmental and Social Management Framework, Draft Executive Summary, 25 August 2014.
- Antalya Water and Wastewater Management Project, Feasibility Report
- Antalya Culture and Tourism Directorate, General City Evaluation Work, Part 2.
- Address Based Registration Information System.
- Republic of Turkey Environmental Impact and Evaluation Regulation and Ministry's EIA Legislation