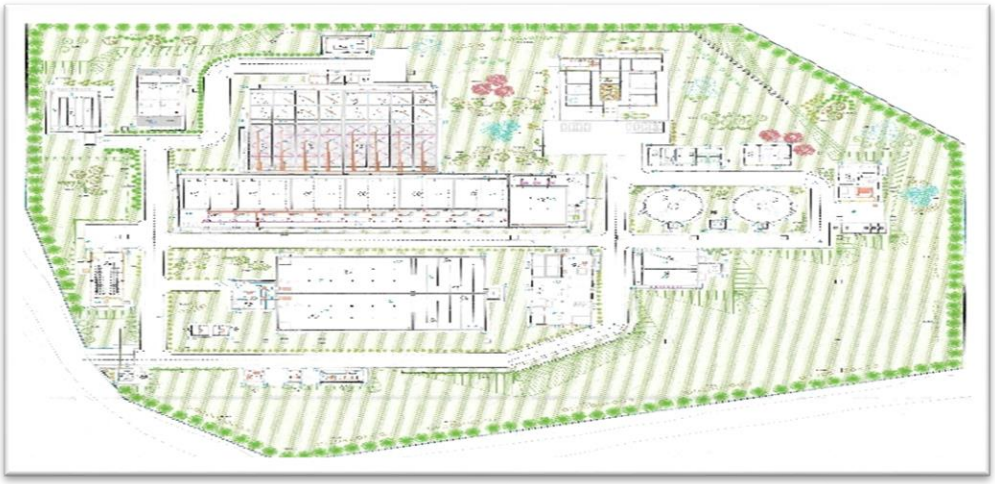
ENVIRONMENTAL TECHNOLOGIES



ART ENVIRONMENTAL TECHNOLOGIES

ART is a leading independent international consulting firm based in Türkiye since 1992, providing a wide range of lined services to public and private clients, major financial institutions.

We have an extensive and well-established capability in the planning, design and supervision of major development projects in Türkiye and abroad, particularly in Azerbaijan, Uzbekistan and Pakistan.

We have been serving for more than 30 years with our experienced engineers focused on offering different perspectives to solution partners beyond engineering services.

We provide our customers with integrated design and management solutions to meet the requirements of each individual task, regardless of size, complexity and location.

We put sustainability and quality at the centre of everything, together with our work team that prepares, develops and manages our new projects, our commercial activities and our work.

We will continue to realize successful projects with our offices and partners in Türkiye and abroad, and in the coming period we will ensure our enthusiasm for creating liveable urban spaces with a holistic approach that considers nature and people together.

We are a member of ATCEA (Association of Turkish Consulting Engineers and Architects), FIDIC (International Federation of Consulting Engineers) and EFCA (European Federation of Engineering Consultancy Associations) and holding ISO 9001-2015 and ISO 14001-2015 quality management systems.

We are implementing our planning, detailed design and project management activities by strictly adhering the principles of sustainability in order to prevent water scarcity caused by global problems along with climate change.

We are proud to have over 30 years of service as a brand for design and implementation of complex projects.

CERTIFICATES

Türk Müşavir Mühendisler ve Mimarlar Birliği
Association of Turkish Consulting Engineers and Architects

İLGİLİ MAKAMA

Üyemiz

ART Çevre Teknolojileri Ltd. Şti.

bağımsız teknik müşavir olarak, Türk Müşavir Mühendisler ve Mimarlar Birliği TürkMMMB üyeliği kanalıyla **Müşavir Mühendisler Uluslararası Federasyonu - FIDIC**'in de üyesidir.

Saygılarımızla,

Halil AGAH
Genel Sekreter
Secretary of General

Nisan 2024

TO WHOM IT MAY CONCERN

Our member

ART Environmental Technologies Ltd.

being an independent technical consultant, is member of ***FIDIC - International Federation of Consulting Engineers*** through the membership in ATCEA - Association of Turkish Consulting Engineers and Architects.

Sincerely,

Halil AGAH
Genel Sekreter
Secretary of General

Nisan 2024

FIDIC - MÜŞAVİR MÜHENDİSLER ULUSLARARASI FEDERASYONU

FIDIC, 1913 yılında kurulmuş olup bugün, 97 ülkeyi temsil eden ulusal birlikler kanalıyla bağımsız mühendislik müşavir, mühendisleri temsil etmektedir. Her ulusal birliğin üye firmaları, FIDIC Ahlak Kuralları'na, Politikalarına ve Tüzüğü'ne uygun hareket ederler.

FIDIC, yüksek düzeydeki ahlaki ve mesleki standartları sürdürmeki üyeleri arasında bilgi ve görüş alış verişini sağlamak, üye birlikler ve uluslararası finans kuruluşları temsilcileri arasında ortak sorunları tartışmaya açmak ve mühendislik mesleğinin ilerlemesine yardımcı olmak amacıyla seminerler, konferanslar ve benzeri etkinlikler düzenlemekte, yayınlar hazırlamaktadır.

Bu belge 01/05/2024 tarihine kadar geçerlidir.

FIDIC - INTERNATIONAL FEDERATION OF CONSULTING ENGINEERS

FIDIC was founded in 1913. Today FIDIC membership numbers 97 countries and the federation represents most of the private practice consulting engineers in the world. The member firms of each national association comply with FIDIC's Code of Ethics, Policy Statements and Statutes.

FIDIC arranges seminars, conferences and other events and prepares publications in the furtherance of its goals that are maintenance of high ethical and professional standards; exchange of views and information between members; discussion of problems of mutual concern among member associations and representatives of the international financial institutions.

This certificate is valid until 01/05/2024

Ahmet Rasim Sok. No: 35 / 2 Çankaya - 06550 Ankara TURKEY T: +90 (312) 440 69 70 F: +90 (312) 440 69 72
e-mail: tmmmb@tmmmb.org.tr (Türkçe için) / atcea@atcea.org.tr (for English)
url: www.tmmmb.org.tr (Türkçe için) / www.atcea.org.tr (for English)

Türk Müşavir Mühendisler ve Mimarlar Birliği
Association of Turkish Consulting Engineers and Architects

İLGİLİ MAKAMA

Üyemiz

ART Çevre Teknolojileri Ltd. Şti.

bağımsız teknik müşavir olarak, Türk Müşavir Mühendisler ve Mimarlar Birliği TürkMMMB üyeliği kanalıyla **Müşavir Mühendisler Uluslararası Federasyonu - FIDIC**'in de üyesidir.

Saygılarımızla,

Halil AGAH
Genel Sekreter
Secretary of General

Nisan 2024

TO WHOM IT MAY CONCERN

Our member

ART Environmental Technologies Ltd.

being an independent technical consultant, is member of ***FIDIC - International Federation of Consulting Engineers*** through the membership in ATCEA - Association of Turkish Consulting Engineers and Architects.

Sincerely,

Halil AGAH
Genel Sekreter
Secretary of General

Nisan 2024

FIDIC - MÜŞAVİR MÜHENDİSLER ULUSLARARASI FEDERASYONU

FIDIC, 1913 yılında kurulmuş olup bugün, 97 ülkeyi temsil eden ulusal birlikler kanalıyla bağımsız mühendislik müşavir, mühendisleri temsil etmektedir. Her ulusal birliğin üye firmaları, FIDIC Ahlak Kuralları'na, Politikalarına ve Tüzüğü'ne uygun hareket ederler.

FIDIC, yüksek düzeydeki ahlaki ve mesleki standartları sürdürmeki üyeleri arasında bilgi ve görüş alış verişini sağlamak, üye birlikler ve uluslararası finans kuruluşları temsilcileri arasında ortak sorunları tartışmaya açmak ve mühendislik mesleğinin ilerlemesine yardımcı olmak amacıyla seminerler, konferanslar ve benzeri etkinlikler düzenlemekte, yayınlar hazırlamaktadır.

Bu belge 01/05/2024 tarihine kadar geçerlidir.

FIDIC - INTERNATIONAL FEDERATION OF CONSULTING ENGINEERS

FIDIC was founded in 1913. Today FIDIC membership numbers 97 countries and the federation represents most of the private practice consulting engineers in the world. The member firms of each national association comply with FIDIC's Code of Ethics, Policy Statements and Statutes.

FIDIC arranges seminars, conferences and other events and prepares publications in the furtherance of its goals that are maintenance of high ethical and professional standards; exchange of views and information between members; discussion of problems of mutual concern among member associations and representatives of the international financial institutions.

This certificate is valid until 01/05/2024

Ahmet Rasim Sok. No: 35 / 2 Çankaya - 06550 Ankara TURKEY T: +90 (312) 440 69 70 F: +90 (312) 440 69 72
e-mail: tmmmb@tmmmb.org.tr (Türkçe için) / atcea@atcea.org.tr (for English)
url: www.tmmmb.org.tr (Türkçe için) / www.atcea.org.tr (for English)

Kalitest

SERTİFİKA–CERTIFICATE OF REGISTRATION

Bu sertifika aşağıdaki kuruluşa
This certificate has been awarded to the company

ART ÇEVRE TEKNOLOJİLERİ İNŞAAT MÜHENDİSLİK TURİZM TİCARET LİMİTED ŞİRKETİ

Çukurambar Mahallesi 1480 Sokak No:2 A/33 Çankaya/ANKARA

Uygulanmakta olan çevre yönetim sisteminin
To certify that the implemented environmental management system complies with

ISO 14001:2015

Standardına uygunluğunu belgelendirmek amacı ile aşağıdaki kapsamda verilmiştir.

Su Temini, Dağıtımı ve Arıtılması, Kanalizasyon Şebeke ve Arıtma Tesisleri, Yağmursuyu ve Katı Atık Tesislerine Ait Uygulama Projeleri, Fizibilite ve Planlama Çalışmaları, Mühendislik ve Müşavirlik Hizmetleri

Water Supply and Sanitation System Detailed Design Projects, Storm Water & Solid Waste Project Detailed Design, Feasibilty and Planning Studies, Engineering & Consultancy

EAC 34

Kalitest Belgelendirme ve Eğitim Hizmetleri Ltd. Şti. :

Sertifika No Certificate No	K-EM-1914
İlk Belge Tarihi Date of Registration	09.12.2019
Belge Periyodu Period of Registration	3 yıl / years
Sertifika Tarihi Certificate Date	25.11.2022
Bitiş Tarihi Expiry Date	09.12.2025

Figen BİGÜN
Genel Müdür Yardımcısı/Vice General Manager

Bu sertifikanın geçerliliğini 6845137 seri numarasıyla www.kaltest.com.tr adresinden veya TÜRKAK BDS NO ile tbds.turkak.org.tr adresinden doğrulayabilirsiniz.
Please verify the validity of this certificate with the serial number of 6845137 from the web site of www.kaltest.com.tr or with TURKAK BDS NO from the web site of tbds.turkak.org.tr

Bu sertifikanın geçerliliği firmanın KALİTEST Sertifika Yönetmeliğine uyumuna ve yılda en az bir kez yapılacak gözetim denetimlerinin başarılı geçmesine bağlıdır.
The validity of this certificate depends on the company's conformity with KALITEST Certificate Regulations and the result of the surveillance audits which will be carried out at least once in a year.

KALİTEST BELGELENDİRME VE EĞİTİM HİZMETLERİ LİMİTED ŞİRKETİ
Yazgülü Sokak, Aydın Sitesi 1.Kısım, C-4 1/D Blok, D:33, Levazım-Beşiktaş/İSTANBUL
www.kaltest.com.tr info@kaltest.com.tr

Kalitest

SERTİFİKA–CERTIFICATE OF REGISTRATION

Bu sertifika aşağıdaki kuruluşa
This certificate has been awarded to the company

ART ÇEVRE TEKNOLOJİLERİ İNŞAAT MÜHENDİSLİK TURİZM TİCARET LİMİTED ŞİRKETİ

Çukurambar Mahallesi 1480 Sokak No:2 A/33 Çankaya/ANKARA

Uygulanmakta olan kalite yönetim sisteminin
To certify that the implemented quality management system complies with

ISO 9001:2015

Standardına uygunluğunu belgelendirmek amacı ile aşağıdaki kapsamda verilmiştir.
For the activities described below

Su Temini, Dağıtımı ve Arıtılması, Kanalizasyon Şebeke ve Arıtma Tesisleri, Yağmursuyu ve Katı Atık Tesislerine Ait Uygulama Projeleri, Fizibilite ve Planlama Çalışmaları, Mühendislik ve Müşavirlik Hizmetleri

Water Supply and Sanitation System Detailed Design Projects, Storm Water & Solid Waste Project Detailed Design, Feasibilty and Planning Studies, Engineering & Consultancy

EA 34

Kalitest Belgelendirme ve Eğitim Hizmetleri Ltd. Şti.

Sertifika No Certificate No	K-QM-3567
İlk Belge Tarihi Date of Registration	10.09.2015
Belge Periyodu Period of Registration	3 yıl / years
Sertifika Tarihi Certificate Date	16.10.2024
Bitiş Tarihi Expiry Date	10.09.2027

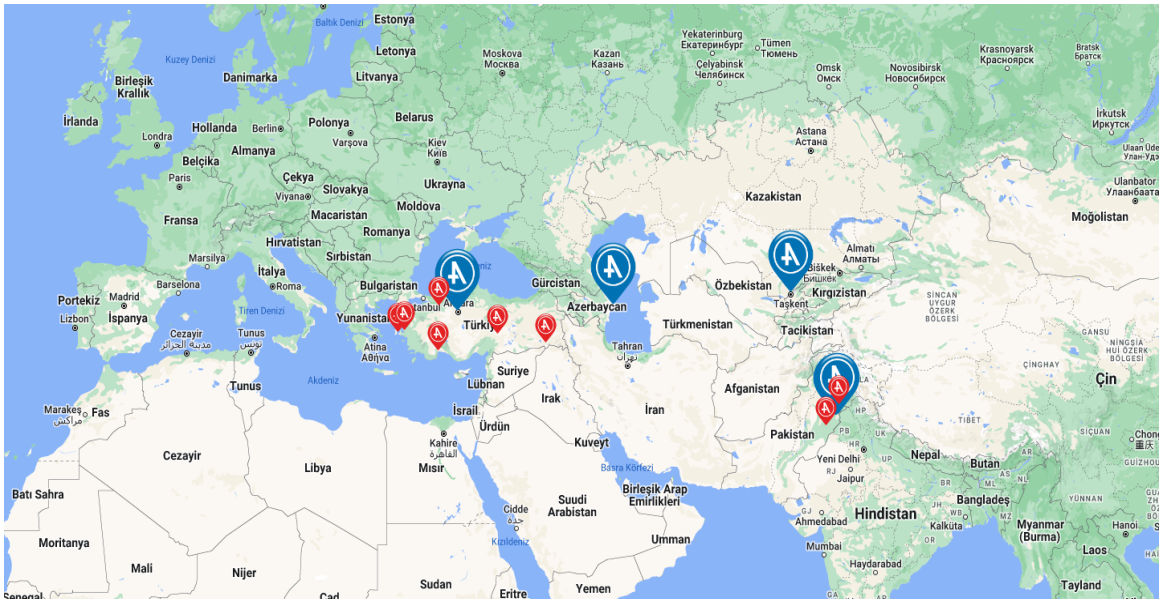
Özgür KÖSE
Genel Müdür / Managing Director

Bu sertifikanın geçerliliğini 2575668 seri numarasıyla www.kaltest.com.tr adresinden veya TÜRKAK BDS NO ile tbds.turkak.org.tr adresinden doğrulayabilirsiniz.
Please verify the validity of this certificate with the serial number of 2575668 from the web site of www.kaltest.com.tr or with TURKAK BDS NO from the web site of tbds.turkak.org.tr

Bu sertifikanın geçerliliği firmanın KALİTEST Sertifika Yönetmeliğine uyumuna ve yılda en az bir kez yapılacak gözetim denetimlerinin başarılı geçmesine bağlıdır.
The validity of this certificate depends on the company's conformity with KALITEST Certificate Regulations and the result of the surveillance audits which will be carried out at least once in a year.

KALİTEST BELGELENDİRME VE EĞİTİM HİZMETLERİ LİMİTED ŞİRKETİ
Yazgülü Sokak, Aydın Sitesi 1.Kısım, C-4 1/D Blok, D:33, Levazım-Beşiktaş/İSTANBUL
www.kaltest.com.tr info@kaltest.com.tr

OFFICES



Main Office

Address
Çukurambar Mah. Muhsin Yazıcıoğlu Cad.
1480. Sok. 2A Blok Kat.9 No.33
06510 Çankaya, Ankara

Phone
+90 (312) 229 78 54

Fax
+90 (312) 229 96 78

Email
infoart@artltd.com.tr

Uzbekistan Branch

Address
Abdulla Qahhor 4,1
Taşkent, ÖZBEKİSTAN

Pakistan Branch

Address
C-3, Jhelum Block, Green Forts-II
Lahore, PAKISTAN

Phone
+ 92 (42) 371 92 547

Azerbaijan Branch

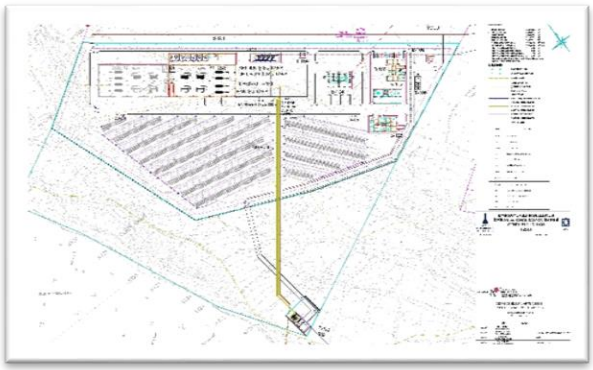
Address
Azadliq Street No.192
Baku, AZERBAIJAN

Phone
+99 (450) 776 56 42

Consultancy Offices

Suluova Consultancy Office/ AMASYA
Konya Consultancy Office/ KONYA
Muş Consultancy Office/ MUŞ

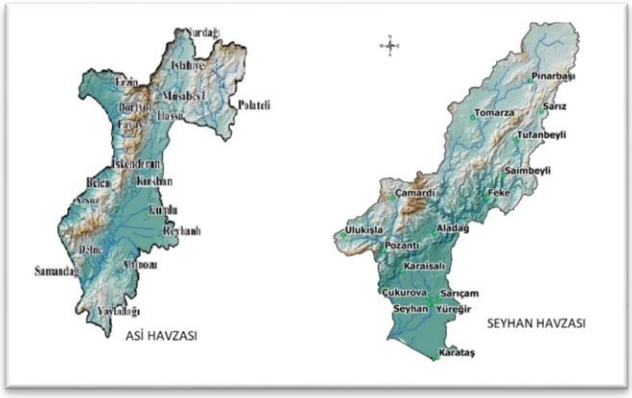
FIELDS OF EXPERTISE



PLANNING

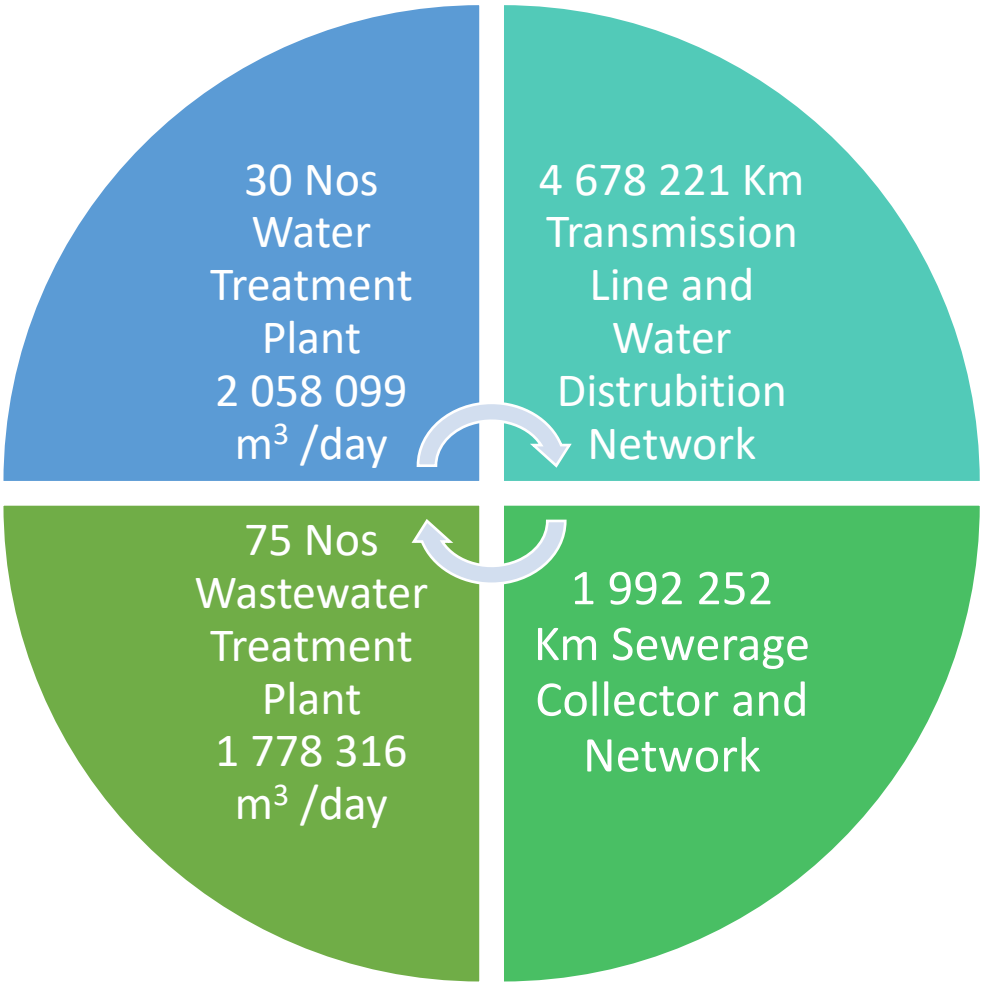
INFRASTRUCTURE DESIGN

CONTRACT MANAGEMENT



FLOOD PROTECTION

TOTAL CAPACITY REALISED IN LAST 15 YEARS



	ART ENVIROMENTAL TECHNOLOGIES						
	LIST OF WATER TREATMENT PLANT PROJECTS						
	Location	Start Date	Completion Date	Water Amount (m3/day)	Treatment Type	Detailed Design	Consultancy
1	ARTVİN (CENTRAL) DSİ GENERAL DIRECTORATE	March 14	March 18	Eki.54	CONVENTIONA (Pre-Ozonated)	✓	
2	KUŞADASI - SÖKE (AYDIN) DSİ GENERAL DIRECTORATE	March 14	May.21	Eki.73	CONVENTIONA (Pre-Ozonated)	✓	
3	GEMLİK (BURSA) DSİ GENERAL DIRECTORATE	May.12	Oct. 14	Ağu.91	CONVENTIONA (Pre-Ozonated)	✓	
4	ÇANAKKALE STAGE 2 (CENTRAL) DSİ GENERAL DIRECTORATE	June 13	May.16	Eki.73	CONVENTIONA (Pre-Ozonated)	✓	
5	ERGANİ (DİYARBAKIR) DSİ GENERAL DIRECTORATE	July 12	July 13	May.16	CONVENTIONA (Pre-Ozonated)	✓	
6	HİLVAN (DİYARBAKIR) DSİ GENERAL DIRECTORATE	May.12	Eyl.13	Oca.41	CONVENTIONA (Pre-Ozonated)	✓	
7	DİVRİĞİ (SİVAS) DSİ GENERAL DIRECTORATE	May.12	Haz.13	Kas.21	CONVENTIONA (Pre-Ozonated)	✓	
8	CİZRE (ŞIRNAK) DSİ GENERAL DIRECTORATE	Mar.13	Sept.14	Eki.73	CONVENTIONA (Pre-Ozonated)	✓	
9	ERCİŞ (VAN) DSİ GENERAL DIRECTORATE	Nov.12	May.15	Oca.08	CONVENTIONA (Pre-Ozonated)	✓	
10	AKÇAKOCA (DÜZCE) DSİ GENERAL DIRECTORATE	Jan.15	Aug.16	Mar.71	CONVENTIONA (Pre-Ozonated)	✓	
11	DENİZLİ (MERKEZ) DSİ GENERAL DIRECTORATE	March 14	March 18	Eki.73	CONVENTIONA (Pre-Ozonated)	✓	
12	BAFRA (SAMSUN) DSİ GENERAL DIRECTORATE	Dec.14	Oct.17	Eki.73	CONVENTIONA (Pre-Ozonated)	✓	
13	BOYABAT (SİNOP) DSİ GENERAL DIRECTORATE	Jan.15	Feb.18	Şub.82	CONVENTIONA (Pre-Ozonated)	✓	
14	ŞARKIŞLA (SİVAS) DSİ GENERAL DIRECTORATE	March 16	June 17	Nis.39	CONVENTIONA (Pre-Ozonated)	✓	
15	İNEGÖL (BURSA) DSİ GENERAL DIRECTORATE	Feb.17	June 23	Tem.28	CONVENTIONA (Pre-Ozonated)	✓	
16	KARABURUN (İZMİR) DSİ GENERAL DIRECTORATE	March 17	May.19	Oca.65	CONVENTIONA (Pre-Ozonated)	✓	
17	YEDİGÖZE (ADANA) ASKİ	Feb.16	Oct.16	Ara.16	POTASSIUM PERMANGANATE (Pre-Chlorination)	✓	
18	GENCE (AZERBAYCAN)	Dec.10	Oct.12	Kas.14	CONVENTIONAL	✓	
19	KARABÜK (CENTRAL) DSİ GENERAL DIRECTORATE	Nov.16	Dec.17	Mar.71	REVERSE OZMOS	✓	
20	ÇINARCIK (BURSA) DSİ GENERAL DIRECTORATE	May.20	April 24	May.21	CHLORINE FROM CONVENTIONAL SALT (PRE-OZONE)	✓	
21	ÇEŞME (İZMİR) İZSU	Oct.21	Nov.22	May.81	SEA WATER TREATMENT	FEASIBILITY	
22	DEVREKHANİ (KASTAMONU) İLBANK	Jan.22	April 22	Eyl.13	PACKAGE CONVENTIONAL	✓	
23	ÇANAKCI (GİRESUN) İLBANK	June 22	Oct.22	Eyl.13	PACKAGE CONVENTIONAL	✓	
24	ALAPLI (ZONGULDAK) DSİ GENERAL DIRECTORATE	July 21	On-going	Eki.95	CHLORINE FROM CONVENTIONAL SALT (PRE-OZONE)	✓	
25	MİLAS (AYDIN) DSİ GENERAL DIRECTORATE	Nov.17	Oct.22	Haz.57	CONVENTIONAL (Pre-Ozonated)		✓
26	FAISALABAD(PAKİSTAN)	Feb.22	On-going	Mar.42	CONVENTIONAL	PRE-PROJECT	✓
27	SURKHANDARYA (ÖZBEKİSTAN)	Eyl.21	On-going	Tem.47	CHLORINE FROM CONVENTIONAL SALT (PRE-OZONE)	✓	✓
28	MANAVGAT (ANTALYA) ASAT	June 17	Oct.17	2*450.000	CHLORINE FROM CONVENTIONAL SALT (PRE-OZONE)	IBILITY+ PRE-PROJECT	
29	SALIPAZARI (SAMSUN) SASKİ	Dec.24	On-going	Eki.73	CONVENTIONAL (Pre-Ozonated)	✓	
30	YALOVA (BURSA) DSİ	Jan.25	On-going	Eki.95	CONVENTIONAL (Pre-Ozonated)	✓	
	TOPLAM			2.058.099,00			

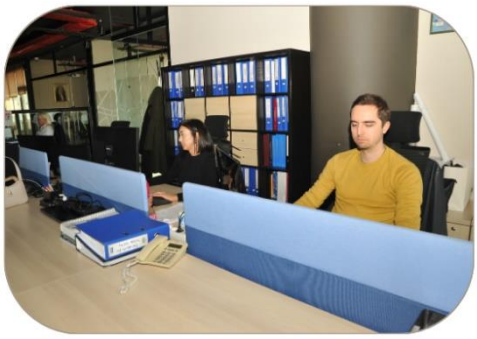
	ART ENVIROMENTAL TECHNOLOGIES								
	LIST OF WASTEWATER TREATMENT PLANT PROJECTS								
	Location	Start Date	Completion Date	Wastewater Quantity avg.(m^3/day)	Wastewater Quantity max.(m^3/day)	Treatment Type	Detailed Design	Consultancy	Irrigation Area (m^2)
1	BELDİBİ GÖYNÜK (ANTALYA) ASAT	Jan. 2018	April 18	53.151	90.310	ADVANCED BIOLOGICAL WWTP	✓		12.963.659
2	İMAMOĞLU (ADANA) ASKİ	Sept.17	Sept.19	4.884	8.105	ADVANCED BIOLOGICAL WWTP	✓		1.191.220
3	YUNUSOĞLU (ADANA) ASKİ	Sept.17	Sept.19	10.358	2.247	ADVANCED BIOLOGICAL WWTP	✓		2.526.341
4	KÜRKÇÜLER (ADANA) ASKİ	Sept.17	Sept.19	22.032	23.301	ADVANCED BIOLOGICAL WWTP	✓		5.373.659
5	KARS (CENTER) DSI GENERAL DIRECTORATE	Jan.19	May.21	25.000	50.000	ADVANCED BIOLOGICAL WWTP	✓		6.097.561
6	KOZAN (ADANA) ASKİ	March 19	On-going	20.017	56.928	ADVANCED BIOLOGICAL WWTP	✓		4.882.195
7	ŞARKÖY (TEKİRDAĞ) TESKİ	Jan.21	On-going	56.000	110.000	ADVANCED BIOLOGICAL WWTP	✓		13.658.537
8	GÜDÜL (ANKARA) ASKİ	Oct.22	Aug.24	1.200	2.400	ADVANCED BIOLOGICAL WWTP	✓		292.683
9	PİRSAHİ (AZERBAYCAN)	July 16	May.19	60.000	160.000	ADVANCED BIOLOGICAL WWTP	✓		14.634.146
10	OGUZ (AZERBAYCAN)	Aug.10	Sept.12	2.276	3.603	ADVANCED BIOLOGICAL WWTP	✓		555.122
11	TOVUZ (AZERBAYCAN)	Aug.10	Sept.12	6.380	8.932	ADVANCED BIOLOGICAL WWTP	✓		1.556.098
12	ZAGATALA (AZERBAYCAN)	Aug.10	Sept.12	9.327	12.591	ADVANCED BIOLOGICAL WWTP	✓		2.274.878
13	AGSTAFA (AZERBAYCAN)	Aug.10	Sept.12	4.394	6.408	ADVANCED BIOLOGICAL WWTP	✓		1.071.707
14	AGDASH (AZERBAYCAN)	Feb.08	June 10	25.000	28.000	ADVANCED BIOLOGICAL WWTP	✓		6.097.561
15	GÖYÇAY (AZERBAYCAN)	Feb.08	June 10	25.000	35.000	ADVANCED BIOLOGICAL WWTP	✓		6.097.561
16	BEYLEGAN (AZERBAYCAN)	March 11	May.18	20.000	30.000	ADVANCED BIOLOGICAL WWTP	✓		4.878.049
17	EDİRNE (MERKEZ) İLBANK	Nov.13	Oct.15	22.041	67.279	ADVANCED BIOLOGICAL WWTP	✓		5.375.854
18	KİLİS (GAZİANTEP) DSİ GENERAL DIRECTORATE	Dec.18	April 19	23.535	50.442	ADVANCED BIOLOGICAL WWTP	✓		5.740.244
19	ÇİĞLİ (İZMİR) İZSU	Oct. 21	On-going	200.000	200.000	RECOVERY PLANT	✓		48.780.488
20	GÜNEYBATI (İZMİR) İZSU	Dec.22	On-going	50.000	72.000	CAPACITY INCREASE	✓		12.195.122
21	DOĞU ARITMA (BURSA) BUSKİ	Jan. 21	On-going	325.000	800.000	PRE-TREATMENT	✓		79.268.293
22	İZNİK (BURSA) BUSKİ	Jan. 21	On-going	24.030	53.561	STAGE 2 MBR	✓		5.860.976
23	ORHANGAZİ (BURSA) BUSKİ	Jan. 16	Nov. 18	4.352	8.203	STAGE 2	✓		1.061.463
24	ŞIRNAK (ŞIRNAK MÜŞAVİRLİK)	Nov. 19	July 23	12.000	15.000	ADVANCED BIOLOGICAL WWTP		✓	
25	ELBİSTAN(KAHRAMANMARAŞ MÜŞAVİRLİK)	Nov. 19	October 2022- DNP Continues	22.567	30.000	ADVANCED BIOLOGICAL WWTP		✓	
26	ISPARTA CENTER (DSİ GENERAL DIRECTORATE)	Dec. 16	Oct. 19	120.000	220.000	ADVANCED BIOLOGICAL WWTP	✓		29.268.293
27	AĞLASUN (DSİ GENERAL DIRECTORATE)	Jan.17	May.19	2.150	4.560	ADVANCED BIOLOGICAL WWTP	✓		524.390
28	AKÇAY-ZÜMRÜTKÖY (KKTC-1) (DSİ GENERAL DIRECTORATE)	July 18	On-going	500	1.000	ADVANCED BIOLOGICAL WWTP	✓		121.951
29	GAYRETKÖY (KKTC-1) (DSİ GENERAL DIRECTORATE)	July 18	On-going	150	300	ADVANCED BIOLOGICAL WWTP	✓		36.585
30	LEFKE(KKTC-1) (DSİ GENEL MÜDÜRLÜĞÜ)	July 18	June 24	8.100	16.100	ADVANCED BIOLOGICAL WWTP	✓		1.975.610

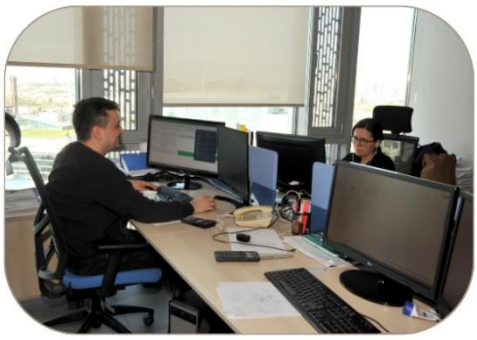
	LIST OF WASTEWATER TREATMENT PLANT PROJECTS								
	Location	Start Date	Completion Date	Wastewater Quantity avg.(m^3/day)	Wastewater Quantity max.(m^3/day)	Treatment Type	Detailed Design	Consultancy	Irrigation Area (m^2)
31	SERHATKÖT-ŞAHİNLER- MEVLEVİ (KKTC-1) (DSİ GENERAL DIRECTORATE)	July 18	June 24	500	1.000	ADVANCED BIOLOGICAL WWTP	✓		121.951
32	YEŞİLIRMAK (KKTC-1) (DSİ GENERAL DIRECTORATE)	July 18	June 24	300	500	ADVANCED BIOLOGICAL WWTP	✓		73.171
33	GELENDOST (DSİ GENERAL DIRECTORATE)	Dec.16	Oct. 19	3.500	8.000	ADVANCED BIOLOGICAL WWTP	✓		853.659
34	BÜYÜKKABACA (DSİ GENERAL DIRECTORATE)	Dec.16	Oct. 19	700	1.500	ADVANCED BIOLOGICAL WWTP	✓		170.732
35	BARLA (DSİ GENERAL DIRECTORATE)	Dec.16	Oct. 19	400	820	ADVANCED BIOLOGICAL WWTP	✓		97.561
36	YALVAÇ (DSİ GENERAL DIRECTORATE)	Dec.16	Oct. 19	5.100	10.700	ADVANCED BIOLOGICAL WWTP	✓		1.243.902
37	KARACABEY (BUSKİ)	Jan.16	Nov.18	50.403	111.411	ADVANCED BIOLOGICAL WWTP	✓		12.293.415
38	ESENCE (BUSKİ)	Jan.16	Nov.18	2.184	3.636	ADVANCED BIOLOGICAL WWTP	✓		532.683
39	MESUDİYE (BUSKİ)	Jan.16	Nov.18	1.904	3.048	ADVANCED BIOLOGICAL WWTP	✓		464.390
40	YENİKÖY(BUSKİ)	Jan.16	Nov.18	4.358	7.108	ADVANCED BIOLOGICAL WWTP	✓		1.062.927
41	KELEŞ (BUSKİ)	Jan.16	Nov.18	1.843	3.233	ADVANCED BIOLOGICAL WWTP	✓		449.512
42	BÜYÜKORHAN (BUSKİ	Jan.16	Nov.18	2.074	3.596	ADVANCED BIOLOGICAL WWTP	✓		505.854
43	HARMANCIK (BUSKİ)	Jan.16	Nov.18	1.723	3.122	ADVANCED BIOLOGICAL WWTP	✓		420.244
44	İNEGÖL (BUSKİ)	Jan.16	Nov.18	149.557	279.752	ADVANCED BIOLOGICAL WWTP	✓		36.477.317
45	KESTEL-GÜRSU (BUSKİ)	Jan.16	Nov.18	194.096	388.192	ADVANCED BIOLOGICAL WWTP	✓		47.340.488
46	ULUDAĞ (BUSKİ) (MBR)	Jan.16	Nov.18	2.240	4.489	ADVANCED BIOLOGICAL WWTP	✓		247.561
47	TİRİLYE(BUSKİ)	Jan.16	Nov.18	806	1.588	ADVANCED BIOLOGICAL WWTP	✓		196.585
48	ORHANGAZİ(BUSKİ)	Jan.16	Nov.18	34.272	68.544	ADVANCED BIOLOGICAL WWTP	✓		4.179.512
49	500-PERSON TYPE PROJECT (BUSKİ)	Jan.16	Nov.18	156	300	ADVANCED BIOLOGICAL WWTP	✓		38.049
50	700-PERSON TYPE PROJECT (BUSKİ)	Jan.16	Nov.18	188	398	ADVANCED BIOLOGICAL WWTP	✓		45.854
51	ARTIFICIAL WETLAND FOR 500 PEOPLE	Jan.16	Nov.18	156	300	ADVANCED BIOLOGICAL WWTP	✓		38.049
52	ŞİRİNEVLER (KKTC-2) (DSİ GENERAL DIRECTORATE)	July 20	On-going	Package	150	ADVANCED BIOLOGICAL WWTP	✓		
53	TAŞKENT (KKTC-2) (DSİ GENERAL DIRECTORATE)	July 20	On-going	Package	300	ADVANCED BIOLOGICAL WWTP	✓		
54	DAĞYOLU (KKTC-2) (DSİ GENERAL DIRECTORATE)	July 20	On-going	Package	420	ADVANCED BIOLOGICAL WWTP	✓		
55	YILMAZKÖY (KKTC-2) (DSİ GENERAL DIRECTORATE)	July 20	On-going	1.050	2.100	ADVANCED BIOLOGICAL WWTP	✓		
56	İNÖNÜ (KKTC-2) (DSİ GENERAL DIRECTORATE)	July 20	On-going	9.700	19.100	ADVANCED BIOLOGICAL WWTP	✓		
57	ALAYKÖY (KKTC-2) (DSİ GENERAL DIRECTORATE)	July 20	On-going	3.400	6.800	ADVANCED BIOLOGICAL WWTP	✓		
58	DEĞİRMENLİK (KKTC-2) (DSİ GENERAL DIRECTORATE)	July 20	On-going	2.900	11.700	ADVANCED BIOLOGICAL WWTP	✓		
59	DİKMEN (KKTC-2) (DSİ GENERAL DIRECTORATE)	July 20	On-going	7.200	14.860	ADVANCED BIOLOGICAL WWTP	✓		
60	ARDAHAN (KKTC-3) (DSİ GENERAL DIRECTORATE)	July 20	On-going	Package	120	ADVANCED BIOLOGICAL WWTP	✓		

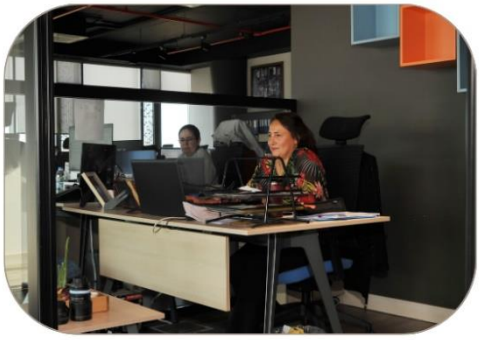
	LIST OF WASTEWATER TREATMENT PLANT PROJECTS								
	Location	Start Date	Completion Date	Wastewater Quantity avg.(m^3/day)	Wastewater Quantity max.(m^3/day)	Treatment Type	Detailed Design	Consultancy	Irrigation Area (m^2)
61	KUMYALI (KKTC-3) (DSİ GENERAL DIRECTORATE)	July 20	On-going	Package	200	ADVANCED BIOLOGICAL WWTP	✓		
62	BOĞAZİÇİ (KKTC-3) (DSİ GENERAL DIRECTORATE)	July 20	On-going	Package	386	ADVANCED BIOLOGICAL WWTP	✓		
63	KURTULUŞ (KKTC-3) (DSİ GENERAL DIRECTORATE)	July 20	On-going	Package	150	ADVANCED BIOLOGICAL WWTP	✓		
64	ZİYAMET (KKTC-3) (DSİ GENERAL DIRECTORATE)	July 20	On-going	690	1.400	ADVANCED BIOLOGICAL WWTP	✓		
65	DİPKARPAZ (KKTC-3) (DSİ GENERAL DIRECTORATE)	July 20	On-going	770	1.600	ADVANCED BIOLOGICAL WWTP	✓		
66	TATLISU (KKTC-3) (DSİ GENERAL DIRECTORATE)	July 20	On-going	1.250	2.500	ADVANCED BIOLOGICAL WWTP	✓		
67	KAPLICA (KKTC-3) (DSİ GENERAL DIRECTORATE)	July 20	On-going	930	1.900	ADVANCED BIOLOGICAL WWTP	✓		
68	BAFRA (KKTC-3) (DSİ GENERAL DIRECTORATE)	July 20	On-going	2.170	4.400	ADVANCED BIOLOGICAL WWTP	✓		
69	YENİ ERENKÖY (KKTC-3) (DSİ GENERAL DIRECTORATE)	July 20	On-going	1.500	3.000	ADVANCED BIOLOGICAL WWTP	✓		
70	BÜYÜKKONUK (KKTC-3) (DSİ GENERAL DIRECTORATE)	July 20	On-going	580	1.160	ADVANCED BIOLOGICAL WWTP	✓		
71	İSKELE (KKTC-3) (DSİ GENERAL DIRECTORATE)	July 20	On-going	9.900	19.700	ADVANCED BIOLOGICAL WWTP	✓		
72	SULUOVA	Nov.23	On-going	10.098		ADVANCED BIOLOGICAL WWTP		ü	
73	MUŞ	March 23	On-going	35.274		ADVANCED BIOLOGICAL WWTP		✓	
74	KARABAĞLAR (İZMİR) İZSU	Sept.23	On-going	67.000	96.000	ADVANCED BIOLOGICAL WWTP	✓		
75	NEFTÇALA (AZERBAYCAN)	Sept.23	Feb.23	8.000	24.000	ADVANCED BIOLOGICAL WWTP	✓		
TOTAL				**2.700.817,00**	**4.595.992,00**		**0,00**	**0,00**	**138.780.245**

ART ENVIRONMENTAL TECHNOLOGIES

MAIN OFFICE TEAM







OUR MANAGEMENT TEAM

Tamer Tuncer founded ART Environmental Technologies in 1992. He is the General Manager of our company and completed his bachelor's and master's degree at M.E.T.U Environmental Engineering Department.

With 37 years of experience, he has been involved in the supervision, master plan studies, feasibility studies, detailed design and design review of numerous water supply, wastewater collection and treatment projects. He has a good knowledge of the environmental and legal aspects as well as technical aspects of project management and organizational structure. His assignments have included consultancy services for international projects funded by IFIs. He has extensive experience in managing teams on infrastructure projects, with a

particular focus on design review, detailed design and construction supervision.

Ahmet Uyanık is an Environmental Engineer and graduated from M.E.T.U Environmental Engineering Department in 1987. He has been working as Senior Design Engineer at ART since 2011. He has 37 years of professional experience as a senior design engineer and project manager in infrastructure projects in the water/wastewater sector.

B. Alev Dumlupınar graduated from M.E.T.U, Department of Environmental Engineering in 1991. She has 32 years of experience in the management of internationally and locally funded projects.

She is experienced in coordination of various disciplines in control, procurement, design and construction of wastewater treatment plant, sewerage project components, related infrastructures, along with extensive management experience in Master Plan, Feasibility, Tender Document preparation, integrated urban water management projects and integrated solid waste management projects. She has also experience in tender evaluation of international and local funded projects (EU, WB, AIIB, IBRD, AfD, etc.). She has worked in Turkey, Pakistan and Uzbekistan.

Senem Işık is the Business Development Manager of our company and holds bachelor's degree in Civil Engineering. She graduated from M.E.T.U in 2003 and till that time she has been exploring different sectors in the field of project management. She has been involved in many national and international multi-scale construction projects from tender to taking over. She is also involved in the coordination of IFI funded consultancy assignments.

Burak Tuncer received his B.S. in Mechanical Engineering from the University of Rochester in 2017 and M.S. in Earth and Environmental Engineering from Columbia University in 2018. For 5 years, he has been working on internationally and locally financed water supply and wastewater treatment plant projects.

Rukiye Büyükdemirci graduated from Kırıkkale University, Department of Civil Engineering in June 2006. She has 17 years of Civil Engineering experience and specializes in Hydraulic Structures, Transportation Design, Design of Hydraulic Structures for Flood and Flood Damage Prevention, Water Resources Management Planning and Design. He has been working as a Project Manager in domestic and international internationally and locally funded Water Resources Management, Planning and Design projects.

Enis Tokat, has a PhD degree in Environmental Engineering and has 25 years of experience in construction supervision, preparation of feasibility studies, cost estimates and tender documents, and design review. He has extensive experience in evaluating technical capabilities and recommending technical solutions, water supply and distribution, supervising the construction of wastewater collection and treatment works, preparation of technical specifications of equipment, review and finalization of RFB / Tender Documents, construction and materials for tenders. Electromechanical and construction rehabilitation works, detailed design of Wastewater Treatment Facilities, analysis of deep-sea discharge alternatives, electrical and mechanical installation design, structural design works and calculations, preparation of the final design of water supply and sewage systems, infrastructure projects, preparation of monthly and quarterly progress reports, He supervised pre-commissioning and commissioning reports, and stormwater network construction. He has work experience in Türkiye, Pakistan and Azerbaijan.

Sümer Okan

In 2011, he graduated from Anadolu University, Department of Environmental Engineering. He has 12 years of experience in internationally and locally funded projects such as sewerage and drinking water networks, transmission and pumping lines, wastewater and drinking water treatment plants, pumping stations, clean water tanks, deep sea discharges, feasibility reports.

OUR PROJECT MANAGERS

Arda Varış completed his bachelor's and master's degrees at M.E.T.U Civil Engineering Department and worked as an Assistant Engineer in 1976-77 and completed his master's degree in 1981. Simultaneously, he completed his master's degree in Business Administration at Ankara Engineering and Architecture High School in 1977. He has been working as Project Manager at ART since 2011.

With more than 47 years of experience, he has extensive experience in all phases of construction projects, especially construction of water supply networks, sewage and storm water collectors, and water and wastewater treatment plants as consultant. He has managed many work contracts ruled under FIDIC and/or PRAG for the projects, which were financed by IFI's including EU, ADB and KfW.

Hakan Yılmaz holds Bsc and Msc from Civil Engineering and has 33 years of Professional experience mainly in Turkey, as project coordinator, project manager/team leader, deputy PM/TL, designer, procurement and contracting expert as well as construction supervisor. He has Extensive experience with technical assistance projects for the provision of engineering services (preparation of master plans and feasibility studies, conceptual and detailed designs, tender preparations and evaluations as well as supervision of construction works and system operations) as well as capacity building services. He

has been involved in several water/wastewater infrastructure projects governed by FIDIC Conditions of Contract (Red and Yellow Book) as project Manager. He is experienced in the field of contract and claim management for different types of contract conditions. He is also skilled in project management and coordination, leading of project teams and personnel responsibility. He completed many projects and worked with different international financing institutions (WB, KfW, EIB, UNDP, EU), both at home and abroad.

Özgür Pınarbaşı holds bachelor's degree in Civil Engineering and graduated from Middle East Technical University(METU)in 2002. He has 16 years of experience in construction sector acting at different positions such as planning and cost engineer, quality control chief, construction chief and resident engineer. He has strong professional working experience in infrastructure sector. He is responsible for managing and supervising the contracts according to service contract and its Terms of Reference and the Employer's requirements by supervising a team, managing the project in accordance with the budget and schedule, claim management, reviewing, commenting and approving designs, technical specifications, interim and final payments working as Project Manager.

Bülent Metin graduated from Çukurova University, Department of Civil Engineering in 1998. He has 37 years of work experience as an engineer in potable water and wastewater treatment plants, water transmission lines and water network, sewage collector and network lines, including water tunnel projects. He has vast experienced in ensuring the compliance of the work with the budget and work program, follow-up of the bills of quantities, supervision of the compliance of the materials to be used with the specifications and design review. He is also experience in setting the standards and procedures for QA/QC to be adopted in the performance of the works, setting the project management plan and monitoring the overall progress, attending the WWTP operation training and monitoring the operation of WWTP as well as preparing variation orders and estimating and monitoring project and construction costs.

ORGANIZATIONS WE WORK WITH

DSİ

REPUBLIC OF TÜRKİYE
MINISTRY OF ENVIRONMENT,
URBANIZATION AND CLIMATE CHANGE

İSTANBUL
SU VE KANALİZASYON
İDARESİ
İSKİ

İZSU

ADANA
ASKİ

asat
GENEL MÜDÜRLÜĞÜ

azaransu

WATER AND SANITATION AGENCY
WASA
FAISALABAD

AFD
AGENCE FRANÇAISE
DE DÉVELOPPEMENT

KFW
Bank aus Verantwortung

European Bank
for Reconstruction and Development

THE WORLD BANK

İLBANK

O'ZSUVTA'MINOT
AKSIYADORLIK JAMIYATI

ASKİ
ANKARA SU ve KANALİZASYON
İDARESİ GENEL MÜDÜRLÜĞÜ

BUSKİ

ADB
ASIAN DEVELOPMENT BANK

KKTC
TARIM VE DOĞAL KAYNAKLAR
BAKANLIĞI

AIIB

KOSKİ

CORPORATE TRAINING PROGRAMS

Within the scope of project and consultancy works, our company implements programs targeting development in various fields such as water and wastewater resource management, flood control, infrastructure operations, resource recovery, capacity building in Turkey and abroad with expert engineers. Interactive visits to the administrations and facilities implementing the most innovative technologies from Turkey and Europe create an environment where participants can submit their questions one-to-one and expand their professional networks.

ANTALYA TECHNICAL TRIP 1

This technical trip was organized within the scope of the Elbistan Wastewater Project Technical Assistance and Supervision Work, by ART Environmental Technologies, between June 28 2021, and July 2 2021, to ensure the effective and efficient implementation of the project. The participants consist of a 7-member team designated by the Kahramanmaraş Municipality. This team traveled to Antalya for a domestic technical study trip. The participants were guided by engineers from ART Environmental Technologies, who are involved in the Elbistan Wastewater Project. The participants gained valuable insights into topics such as water and wastewater facility management, water and sewer infrastructure operation, SCADA systems, and GIS system installations.

ANTALYA TECHNICAL TRIP 2

Between April 4 and April 10, 2021, a study tour was organized for the personnel of the Şırnak Water and Sewerage Directorate within the scope of the Şırnak Wastewater Project. ASAT (Antalya Water and Sewerage Administration) was chosen as an ideal destination due to its comprehensive model for water and wastewater management. During the visit, participants gained valuable insights into the management and operation of water and sewer infrastructure and had the opportunity to observe the practical applications of these systems in Antalya.

ITALY TECHNICAL TRIP

The international study tour organized under the Elbistan Wastewater Project Technical Assistance and Supervision was conducted by ART Environmental Technologies. This educational trip took place from October 17 to 23 in Rome and Naples, Italy, and included nine participants from the Kahramanmaraş Municipality. The participants were accompanied by Burak Tuncer, a Mechanical Engineer from ART Environmental Technologies. In addition, employees from ACEA, AKERUS, and GORI companies also served as guides during the trip. The purpose of the trip was to teach participants about the operation and maintenance processes of wastewater treatment plants in Europe. Participants visited large wastewater treatment facilities in the Rome and Naples regions, where they learned about wastewater treatment and infrastructure management. The training covered topics such as

the operation and maintenance of wastewater treatment plants, wastewater network and pumping stations, wastewater transmission infrastructure, and the use of SCADA systems. During this trip, participants had the opportunity to observe wastewater treatment processes on-site and learn best practices from Europe.

BUDAPEST TECHNICAL TRIP

Within the scope of the Şırnak Wastewater Treatment Plant Project, a study tour was organized by ART Environmental Technologies in Budapest from April 4 to 10, 2021. This five-day study tour included a comprehensive training program covering topics such as wastewater treatment plant operation, sewer network maintenance, and SCADA systems. At the end of the trip, an evaluation report was prepared, summarizing the visited sites and gained experiences, and a best practice guide was created for those who could not attend. During the tour, participants visited facilities such as the Budapest Waterworks Wastewater Treatment Plant, the SCADA center, and the Hungarian Water Aid Unit.

FRANCE STUDY TOUR

On March 11, 2024, Burak Tuncer, an engineer from the Izmir Water and Sewerage Administration (İZSU) Project Department, participated in a technical study trip to Marseille and Nice, France, within the scope of the İzmir Karabağlar Wastewater Treatment Plant Project. The focus of the trip was on urban applications of the visited

facilities, and discussions took place regarding the challenges encountered in operational processes and potential solutions. The aim of this trip was to ensure that the Karabağlar Wastewater Treatment Plant is designed and implemented in a way that can provide uninterrupted service to İzmir for many years to come.

AMSTERDAM TECHNICAL TRIP

Between December 2-6, 2024, meetings were held with Royal HaskoningDHV (RHDV), a Netherlands-based project management and multi-disciplinary consultancy company. Tamer Tuncer and Burak Tuncer represented ART Environment during the visit. ART Çevre discussed developments in Turkey and neighboring countries, business opportunities and possible partnerships at the RHDHV Netherlands head office. RHDHV made presentations on the treatment technologies it has developed and shared its experiences. The applicability and potential usage areas of these technologies in Turkey were discussed. In the following days, technical examinations were carried out in the facilities where these new technologies are applied. As a result of mutual discussions, it is planned to continue working in the fields of sustainability and treatment.

REREFERENCES

PROJECT AND CONTRACT MANAGEMENT

Technical Assistance and Construction Supervision for Suluova Wastewater and Stormwater Project

Employer: Ministry of Environment, Urbanization and Climate Change (EU Funded)

Date: November 2023 - Ongoing

Location: Turkey, Amasya, Suluova

Details: Consultancy services and technical assistance in administrative, financial and technical fields for Suluova wastewater treatment plant with capacity Q=10,098 m^3 /day, construction supervision of stormwater collectors (L=26 km), implementation of loss and leakage program, under the management of European Union - Ministry of Environment, Urbanization and Climate Change

Consultancy Services for Design Review, Preparation of Tender Documents, Support to Tender Process and Supervision of Construction Works for Muş Wastewater Treatment Plant Construction Works

Employer: Muş Municipality (JICA ODA Loan)

Date: March 2023 – Ongoing

Location: Turkey, Muş

Details: 24.000 m^3 /day capacity wastewater treatment plant design review, preparation of tender documents, providing technical support to the contracting authority during the tender phase, construction supervision

Consultancy Service Procurement for KOSKI Construction Works and Assembled Goods Procurement Works

Employer: KOSKI General Directorate (JICA ODA Loan)

Date: October 2023 – Ongoing

Location: Turkey, Konya

Details: Project consists of below components covering design review, preparation of tender documents, providing technical support to the contracting authority during the tender phase, construction supervision:

- Sancak Neighbourhood-Büsan Industry Main Collector Line Sewerage Construction Work
- Water Loss and Leakage Investigation Emergency Action Plan Project
  - Central City Water Network Improvement (Drinking Water Network Improvement and Well Collection Line) Construction Work
  - DMA/DMZ Studies for Water Loss Detection
  - Meter Replacement
  - SCADA
- Water Safety Management System

Technical Assistance and Supervision for Şırnak Wastewater Treatment Plant Project

Employer: Ministry of Environment, Urbanization and Climate Change (EU Funded)

Date November 2019 - July 2023

Location: Turkey, Şırnak

Details: Consultancy services and technical assistance, implementation of the loss and leakage program and construction supervision of the collector line (L = 1.6 km) for the Şırnak wastewater treatment plant with a capacity of Q=12,000 m^3/day under the management of the European Union - Ministry of Environment, Urbanization and Climate Change.

Water Supply and Sanitation Investment Program (WSSIP) – Project 1
Consultancy for Construction Supervision, Tendering and Institutional Capacity Building, Loan No 2571-AZE, Loan No 3079-AZE

Employer: Azersu (ADB Funded)

Date: March 2011 – May 2018

Location: Azerbaijan, 5 cities

Details: Project consists of three components:

Component A: Water Supply and Sanitation Infrastructure Development in 5 cities,
Component B: Institutional Effectiveness (Management Improvement and Capacity Building)
Component C: Program Management Facility (PMF)

The works include: water intake structures, water transmission lines with inspection chambers, water reservoirs, pumping stations, water distribution and sewerage networks, house connections, sewerage collector, creek and culvert crossings, administration buildings, workshops, reinstatement of roads and wastewater treatment plants including sludge treatment processes. Total construction cost of the works is 435,300,000. - USD.

	Aghdas	Goycay	Beylegan	Agcabedi	Balakan
Population (2035)	46 733	49 013	24 036	45 300 .	50 482
Area	1564 ha	1138 ha	942 ha	2168 ha	6384 ha
Water intake facilities	Infiltration gallery	4 artesian wells	5 artesian wells	7 artesian wells	Infiltration gallery
Transmission mains	L=20 km	L= 4.6 km	L= 13.6 km	L= 9.8 km	L=15 km
Water reservoirs	2x10 000 m^3	2x2 000 m^3	2x4 000 m^3	2x5 000 m^3	2x5 000 m^3
Water network	L=187 km	L=123 km	L=95 km	L=194 km	L=210 km
Sewerage network	L=168 km	L=115 km	L=89 km	L=206 km	L=205 km
Wastewater Treatment Plants	25.000 m^3/day	25.000 m^3/day	20.000 m^3/day	20.000 m^3/day	30.000 m^3/day

Technical Assistance and Supervision for Elbistan Wastewater Project

Employer: Ministry of Environment, Urbanization and Climate Change (EU Funded)
Date: November 2019 – October 2022
Location: Turkey, Kahramanmaraş, Elbistan
Details: Consultancy services and technical assistance for Elbistan wastewater treatment plant with a capacity of Q=22,500 m^3 /day, implementation of loss and leakage program, construction supervision of wastewater collectors (L=33 km) under the management of European Union - Ministry of Environment, Urbanization and Climate Change.

Faisalabad City Water Supply Expansion Phase 2 - Consultancy Services for Preparation of Preliminary Designs, Tender Documents, Safeguards (ESIA and RAP) Reports and Construction Supervision

Employer: WASA Faisalabad (AFD Funded)

Date: February 2022 - Ongoing

Location: Pakistan, Faisalabad

Details: The overall objective of the Project is to improve the living conditions of the inhabitants of Faisalabad by developing the public drinking water service. The Project aims to extend the services and improve the quality (continuity and pressure) of the water service, to preserve the water resource, and to reinforce the viability of financial position of WASA-F. Drinking water production capacity shall be increased by 135 000 m3/d through:

- The extension of the existing surface Jhal WTP capacity by 15 MGD by addition of 5 MGD;
- The construction of a new 25 MGD WTP near Jaranwala Road at lower Gogera Canal Branch and the arterial water main to the existing network.
- Establishment of zones (Regional Metering Zones and District Metering Areas) through the preparation of the Non-Revenue Water reduction program, piloting of the SCADA system, leak detection and 24/7 service concept.

Phase 1 of the assignment covers, reviewing existing studies, preliminary design and documentation for DBO work tender, preparation of tender documents, preparation of the ESIA, RAP and other associated reports (e.g. ESMP), assistance in the tendering process and

model & design specifications for hydraulic modelling in pilot DMZ, DMA creation, hydraulic analysis and work specifications for network upgrading in the NRW pilot project, to be incorporated in the DBO bidding documents.

Phase 2 covers construction supervision including coordination of works, monitoring of progress, quality control, and supporting PIU/F-WASA in contract management and reporting. The consultant shall act as the Engineer (in accordance with FIDIC Gold Book) on behalf of the Client in routine dealings with the DBO contractor.

Detailed Design for the Rehabilitation of Water Supply and Sewerage Systems in Oguz, Tovuz, Zagatala and Agstafa Rayons - Water and Sewerage Project - II

Employer: Azerbaijan Reconstruction Agency Rehabilitation of Areas - ARRA

Date: August 2010 - September 2012

Location Azerbaijan, 4 cities

Details: The project includes detailed design of the infrastructure system and all related details for four rayons, including water intake structures, water transmission lines, water reservoirs, water distribution networks, sewerage systems and collectors; hydraulic modelling, profiles, flushing and air release valves, house connections, on-site surveying, topographic and geological survey works, quantity surveying, manholes, culvert crossing, assistance for tender documents.

Construction Supervision for Milas Water Supply Project

Employer: State Hydraulic Works (DSİ)

Date: November 2017 – Taking over completed on 30 May 2022 for main transmission line and 8 October 2022 for WTP

Location: Turkey, Muğla, Milas

Details: Construction supervision of the infrastructure system of Milas province, including water intake structures, water transmission lines, water reservoirs and water treatment plant. The target year is 2045 with a total population of 100,000 people.

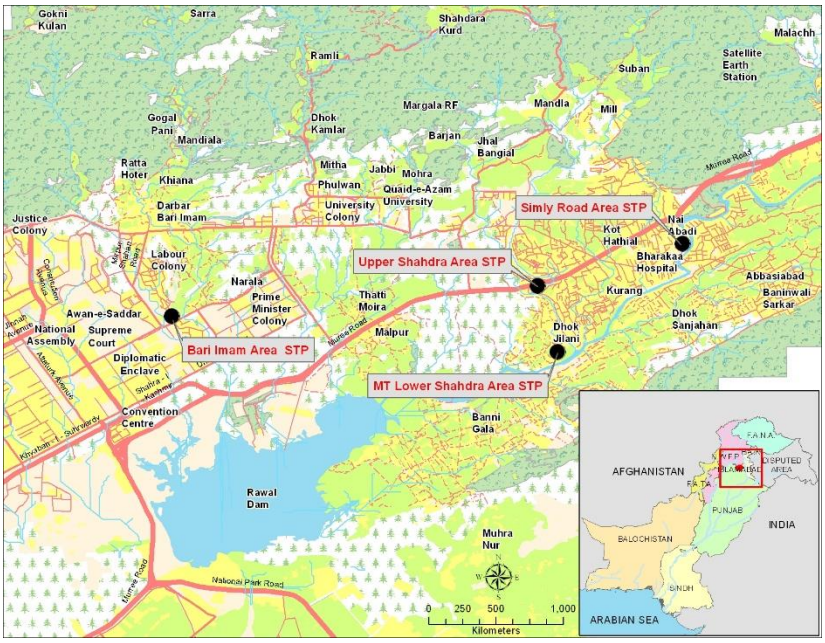
- 19,600 m water transmission main line Ø550 - Ø200
- N.2 water tanks, 2,000 m³ and 1,000 m³ capacity
- N.1 pump station, 81 lt/sec capacity
- Mechanical and electrical installation works with SCADA systems
- Water treatment plant with a capacity of 21,000 m³/day
- All related construction works

Preparation/Finalization of RFP Document including Bid Evaluation in EPC Mode and to Oversee the Supervision of Construction of Three Sewerage Treatment Plants Falling Into Korang River (Rawal Lake)

Employer: Capital Development Authority (CDA)

Date: October 2022 - Ongoing

Location: Pakistan, Islamabad



Details: Preparation of Request for Proposal Documents, Tender evaluation services and Construction supervision for EPC construction of 3 WWTPs (Bari Imam STP 3.65 MGD, Simly Road STP 1.97 MGD & Madina Town Dhok Jillani STP 4.00 MGD i/c Trunk Sewers) with a total treatment capacity of 9.62 MGD in order to p revent the flow of polluted and contaminated water into Rawal Lake

and to address the problem of water pollution through the construction of Sewage Treatment Plants.

The scope covers to oversee, assist and facilitate in the implementation of the Sewerage Treatment Plants along the Korang River, Rawal Lake. Works of EPC-Contractor shall be overseen and necessary administrative support for efficient and professional management of the bidding process shall be provided during the implementation of project.

(Credit No: 2119 AZE) Design, Construction Supervision and Administrative Support for WSS Systems in Agdash, Goychay and Nakchivan - Urban Water Supply and Sanitation Project

Employer: AZERSU

Date: February 2008 - June 2010

Location Azerbaijan, 3 cities

Details: Project consists of 3 compounds which are:
Component A: Water Supply and Sanitation Infrastructure Development
Component B: Institutional Effectiveness (Management Improvement and Capacity Building)
Component C: Program Management Facility (PMF)
Design Population For Year 2034 : 87 743 cap.
Water Intake Facility : Infiltration system facilities
Water Transmission Main : L = 15 100 m
Water Reservoirs, Chlorinator and Laboratory Buildings : V=3x2000, 2x2000, 2x10000, 1x5000 m3
Water Network System : 110 mm – 710 mm HDPE pipe L = 462 470 m
Sewerage System : L = 403 952 m
Main Collector : L = 3 451 m HDPE Pipe

Detailed Design of Salıpazarı Dam (Samsun) Water Treatment Plant Project

Employer: Samsun Metropolitan Municipality Water and Sewerage Administration (SASKİ)

Date: November 2024- Ongoing

Location: Türkiye,Samsun,Salıpazarı

Details: The project covers detailed design of 100.000 m3/day capacity water treatment plant. Water supply resource is Salıpazarı Dam. N.2 pumping stations will also be designed within the scope of the assignment.

Water Treatment Plant Capacity: 100,000 m3/day

Design Horizon:2060

Description of actual services provided in the assignment:

- Collection and revision of all available data concerning existing water supply systems,
- Evaluation of technical, financial and economical capabilities,
- Topographical and geotechnical studies,
- Suggestion of technical solutions,
- Preparation of BOQ's, cost estimates and tender documents,

Detailed design of below structures:

- Inlet Aeration
- Rapid Mixer Tank
- Slow Mixer Tank
- Coagulation and Flocculation
- Chlorination System
- SCADA System
- Chemical Building
- Return and Excess Sludge Pumping Station
- Blower Building
- Sludge Thickening Building
- Filter washing and recycle system
- Administration Building
- Transformer and Generator Building
- Heat Center

Detailed Design of Water Supply Facilities from Yalova Armutlu and Kaledere Dams

Employer: State Hydraulic Works (DSİ)

Date: January 2025 - Ongoing

Location: Türkiye,Yalova

Details: The project aims to supply long term water need of Armutlu district of Yalova province from Armutlu and Kaledere Dams. Scope includes detailed design of below water structures:

- Main transmission line with a leght of approximately 11 km,

- 35 000 m³/day capacity water treatment plant

- Water tanks, pumping station and auxiliary structures,

Description of actual services provided in the assignment:

- Collection and revision of all available data concerning existing water supply systems,
- Water analysis of Armutlu and Kaleders water sources
- Evaluation of technical, financial and economical capabilities,
- Suggestion of technical solutions,
- Preparation of feasibility report,
- Topographical and geotechnical studies,
- Detailed design of water treatment plant, main transmission line,water tanks, pumping station and auxiliary structures,
- Preparation of BOQ's, cost estimates and tender documents,
- GIS studies,

Detailed Design of Tekirdağ 2nd Stage Water Treatment Plant

Employer: State Hydraulic Works (DSİ)

Date: October 2024- Ongoing

Location: Türkiye,Tekirdağ

Details: The project covers design of 60,000 m3/day capacity 2nd stage water treatment plant. Water supply resource is Dedecik, Otmanlı and İnecik Dams. Rehabilitation of 1st stage Tekirdağ Water Treatment Plant having 90,000 m3/day capacity is also included within the scope; the existing plant shall be reviewed and a rehabilitation report shall be prepared.

2nd Stage Water Treatment Plant Capacity: 60,000 m3/day

Design Horizon:2055

Description of actual services provided in the assignment:

- Collection and revision of all available data concerning existing water treatment plant,
- Water analysis of Dedecik, Otmanlı and İnecik water source,
- Topographical and geotechnical studies,
- Evaluation of technical, financial and economical capabilities,
- Suggestion of technical solutions,
- Preparation of BOQ's, cost estimates and tender documents,
- GIS studies,

Detailed design of below structures:

  - Inlet Aeration
  - Rapid Mixer Tank
  - Slow Mixer Tank
  - Coagulation and Flocculation
  - Chlorination System
  - SCADA System
  - Chemical Building
  - Return and Excess Sludge Pumping Station
  - Blower Building
  - Sludge Thickening Building
  - Filter washing and recycle system
  - Administration Building
- Transformer and Generator Building
- Heat Center

PLANNING

Feasibility Study of Reuse of Çiğli Wastewater Treatment Plant Discharge Water and Detailed Design of Reuse Irrigation System

Employer: İzmir Water and Sewerage Administration (IZSU)
Date: October 2022 - Ongoing

Location Turkey, İzmir

Details: The project scope includes feasibility study and evaluation of alternatives for the reuse of Cigli Wastwater Treatment Plant (200,000 m^3 /day) discharge water re-use unit, with a capacity of 220 hm^3/year. Reuse alternatives such as urban irrigation, agricultural irrigation, environmental reuse for feeding Gediz river delta and groundwater discharge are evaluated considering the environmental and financial criteria.

Feasibility Study, Detailed Design and EIA Report of Izmir Province Karabağlar Wastewater Treatment Plant Feasibility Report, Detailed Design

Employer: İzmir Water and Sewerage Administration (IZSU)

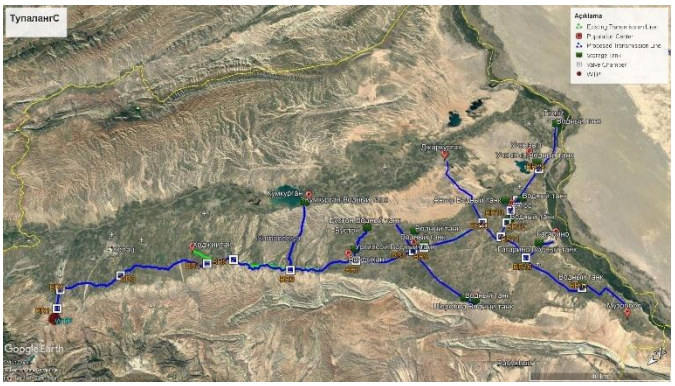
Date: September 2023 - Ongoing

Location Turkey, İzmir

Details

1st Stage: 24.000 m^3 /day MBR + 24.000 m^3 /day Long Aeration Activated Sludge Hybrid System

2nd Stage: 96.000 m/day MBR systema capacity waste water treatment plant Feasibility study, detailed design according to the result of feasibility study and preparation of EIA report.



Technical support and design for the development of the Feasibility Study (FS) of the project "Improvement of the drinking water supply system of Surkhandarya region using Tupolang reservoir waters"

Employer: JSC "Hydroproject"

Date: September 2021 - December 2022

Location Uzbekistan, Surkhandarya

Details: The assignment focused on the need to provide water consumers with high-quality drinking water, improve social living conditions and improve the health of the population in regional centers and rural settlements in Sariasi, Denau, Shurchinsky, Bandykhansky, Kiziriksky, Kumkurgan, Sherabad, Jarkurgan, Angora, Muzrabad, Tezmez districts and the city of Termez, as well as supplying water to settlements located along the existing Tupolangi-Termez water pipeline. Scope covers review, finalisation and approval of feasibility study of 200,000 m3/day WTP and 400 km of main transmission line.

Feasibility Study of Çeşme Desalination Plant

Employer: İzmir Water and Sewerage Administration (IZSU)

Date: October 2021 - November 2022

Location Turkey, İzmir

Details: The project scope is the feasibility study of Çeşme desalination plant in order to use sea water as water supply source. Project location which is Çeşme, a district of İzmr,, is a touristic place at Aegean region and summer population is considerably high as well as residential population.

Cesme Desalination Plant, Reverse Osmosis Sea water Desalination

1. phase, 2025 target year Q_{design} = 15 000 m^3/day,
2. phase, target year 2055 Q_{design} = 35 000 m^3 /day.

Feasibility Study and Detailed Design Work of Konya Province Karapınar and Suğla Locations Water Supply

Employer: Konya Water and Sewerage Administration KOSKI)

Date: September 2019 - December 2020

Location: Turkey, Konya

Details: The project aims to design the water supply need of Karapınar and Suğla Locations of Konya province. Design of infrastructure system

includes water transmission lines, water reservoirs and related all details; hydraulic modelling, profiles, washout and air release valve.

Design Flow Rate: 261 lt/s,
Design Population: 355,043 people. 2055 target year
Total Length of Water Transmission Line: 159,890 m (Ø600 - Ø90),
Water Storage: 2 x 100 m³, 1 x 200 m³.

Feasibility Study of Eskişehir (Centrum) Wastewater Treatment Plant

Employer: İLBANK (EIB Financed)

Date November 2015 - April 2016

Location Turkey, Eskişehir

Details: Eskisehir is one of the developed cities of Turkey. ESKI (Eskişehir Water and Sewage Administration) has two Wastewater Treatment Plants prior to discharge to receiving body. However, city population is increasing and requirements shall be met according to Urban Wastewater Treatment Regulations in future. Eskisehir WWTP capacity needs to be increased and 3rd stage of urban wastewater treatment plant need to be constructed to meet the legislative discharge criteria. Feasibility Study prepared for the City of Eskisehir to identify and define its priority legislative compliance and investment needs for the provision of public wastewater services by using EIB loans administrated by İller Bank, as per Turkish Urban Wastewater Treatment Regulation No. 26047 harmonized with the EC Directive 91/271/CEE . Eskişehir WWTP has a design capacity of 146,138 m³/day for a population equivalent of 1,344,012.

Burdur (Center) Wastewater Treatment Plant Feasibility Study (İlbank)

Employer: İLBANK (EIB Financed)

Date: August 2015 - April 2017

Location: Turkey, Burdur

Details: Burdur has a Wastewater Treatment Plant prior to discharge into the receiving body (Burdur Lake); however, treatment process has been outdated. Burdur Lake is sensitive area according to Urban Wastewater Treatment Regulations and required discharge parameters cannot be achieved with existing operation. Therefore a new WWTP is required. Feasibility Study prepared for the Burdur to identify and define its priority legislative compliance and investment needs for the provision of public wastewater services by using EIB loans administrated by İller Bank, as per Turkish Urban Wastewater Treatment Regulation No. 26047 harmonized with the EC Directive 91/271/CEE. Burdur WWTP has:

1st stage capacity 32 820 m³/day, 105 935 EN

2nd stage capacity 41 448 m³/day, 134 980 EN

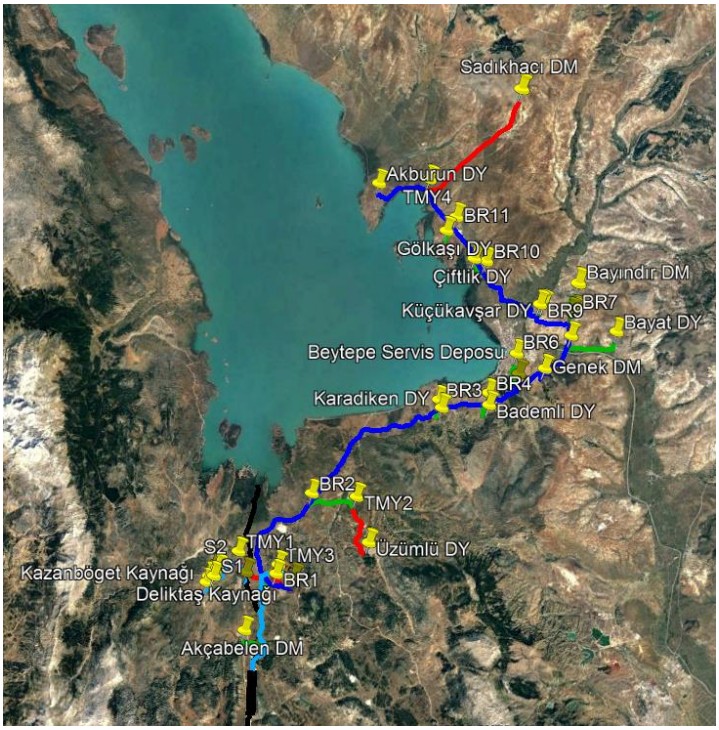
Feasibility Study, Water Supply and Sewage Network Design Work of Gaziantep Town Various Accommodation Areas

Employer: Gaziantep Water and Sewerage Administration (GASKI)

Date: May 2014 - May 2016

Location Turkey, Gaziantep

Details: The project includes survey works, preparation of feasibility studies of water and sewerage systems and detailed design of infrastructure system for various accommodation areas with population 0 – 40 000 cap. Within the scope of the study, water and sewerage facilities of 139 settlements with 0-200 inhabitants, 95 settlements with 201-500 inhabitants, 36 settlements with 501-1000 inhabitants, 9 settlements with 1001-2000 inhabitants, 6 settlements with 2001-5000 inhabitants, and 1 settlement with 5001-10000 inhabitants were surveyed and feasibility reports were prepared. Afterwards, detailed design of 467.87 km of water network (pumping, transmission, network, etc.) and 285.73 km of sewer network has been completed.



Beyşehir Group Drinking Water Supply Planning Report and Project Construction Work (DSİ)

Employer: State Hydraulic Works (DSİ)

Date: June 2018-Ongoing

Location Turkey, Konya

Details:

The project aims to planning of solutions to utilize alternative water resources for Beyşehir and Derebucak provinces. The purpose of the assignment is to plan the water supply system of Konya Beyşehir and Derebucak provinces. Technical feasibility studies of alternative water resources and optional water storage areas shall be carried out. Research of alternative water resources, hydrology studies, analysis of water quality and flow rate with research and planning of alternative water storage areas are some sections of the assignment. Technical and financial capability of these alternatives shall be evaluated. After the planning phase, main transmission water supply line and water treatment plant design shall be done.

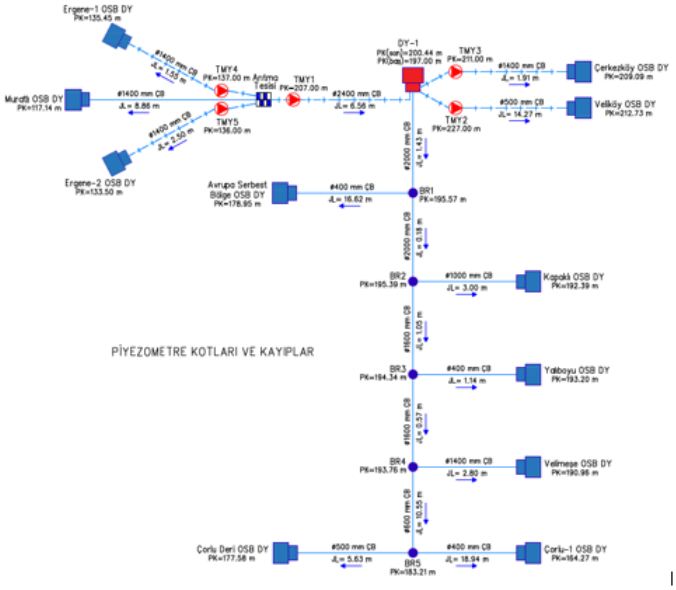
Planning of Meric River Industrial, Commercial and Residential Water Supply Project

Employer: State Hydraulic Works (DSİ)

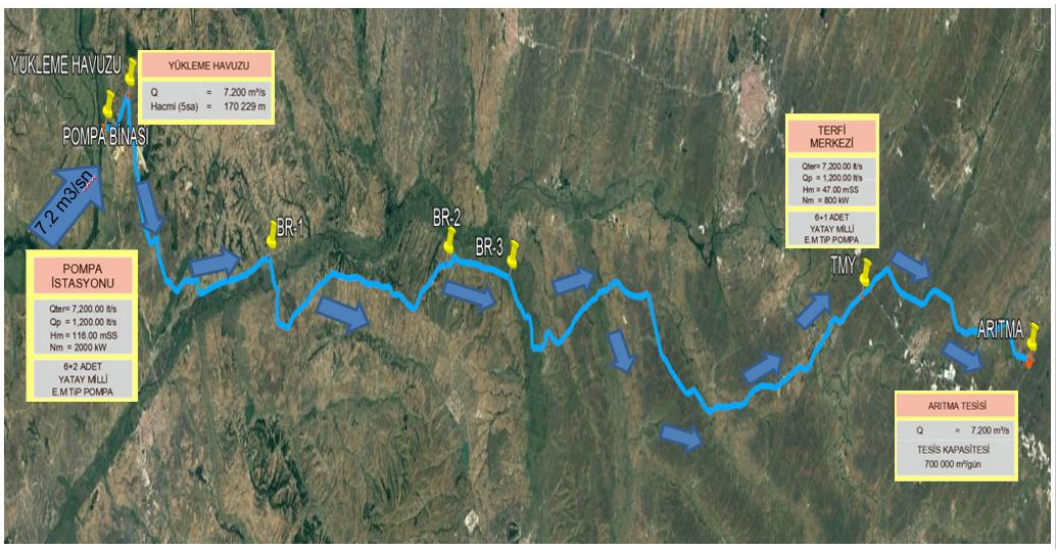
Date: April 2018-Ongoing

Location Turkey, Edirne -Tekirdağ – Kırklareli

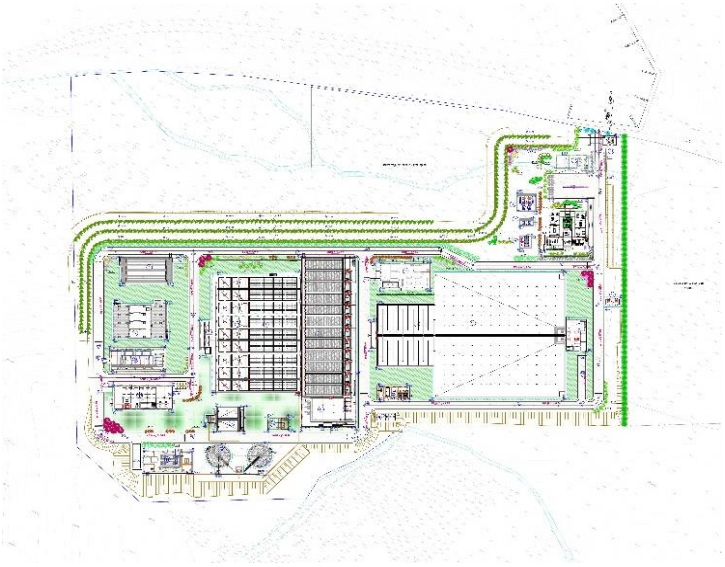
Details:



Industry in the Corlu-Cerkezkoy region, which consists of a significant portion of overall manufacturing industry in Turkey, also requires plenty of water to operate. In order to provide enough water to cover industry demands, flowrates in excess of 7.2 m3/s are proposed to be stored in intermediate storage tanks. As part of the Meric River Industrial, Commercial and Residential Water Supply Project Plan, appropriate studies will be completed and assessment reports will be completed that investigate industry supply to be directed to a nearby proposed water treatment plant. As part of the project, water supply potential of all sources will be evaluated and hydrology, expropriation, flood protection, and water rights studies wil be completed. Preliminary design of water retaining and water intake structures with main transmission line shall be completed. Main transmission line diameters are Ø 3000 - Ø 2000 with water treatment plant capacity 700 000 m³/day.



INFRASTRUCTURE DESIGN



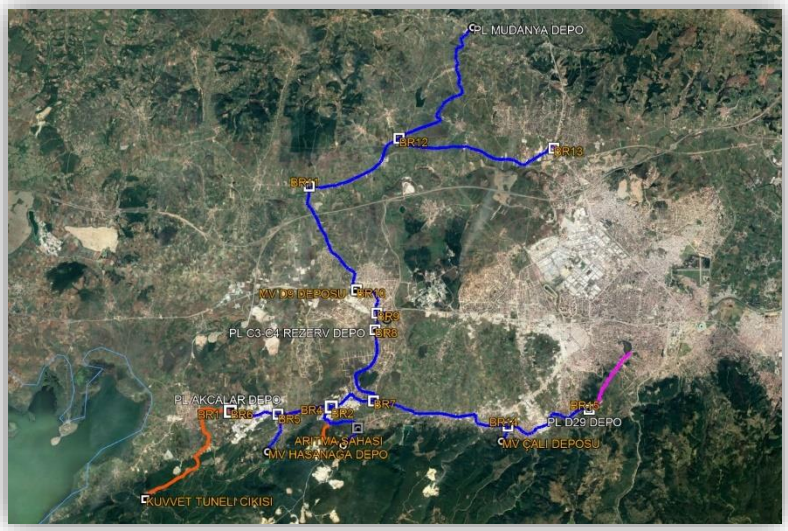
Detailed Design of Water Supply Facilities from Bursa Çınarcık Dam

Employer State Hydraulic Works (DSI)

Start Date: May 2020 – April 2024

Location Turkey, Bursa

The project aims to design the water supply need of Bursa, Mudanya, Görükle, Çalı,Hasanağa, Akçalar, Başköy, Fadıllı, Gölyazı, Kayapa, Tahtalı, Yaylacık residential areas and industrial organized zones. Design of infrastructure system includes water transmission lines, water reservoirs and related all details; hydraulic modelling, profiles, washout and air release valve. 2 alternatives of main transmission line route will be analysed Conventional type water treatment plant will also be designed within the scope of project. Project characteristics are;



Allocated Water Amount: 145 hm3/year (75 hm3/year for residential and 70 hm3/year for industrial usage)
Design Flow Rate : 2 378,23 lt/sn
Design Population: 3 888 986 cap. with horizon of 2050
Total Length of Water Transmission Line: 72 215 m (Ø 2370 – Ø 398)
Water Treatment Plant: 300 000 m³/day
Water Storage: 1 x 300 m³, 2 x 10 000 m³

Zonguldak Alaplı Water Supply Design

Employer: State Hydraulic Works (DSI)

Start Date: July 2021 - Ongoing

Location: Turkey, Zonguldak, Alaplı

Details : The aim of the project is to design water supply facilities for Alaplı and Eregli district's n.66 residential areas. 6,86 hm3 year form Gümeli Dam is allocated for the water supply need. Project target

year is 2055. Main objectives of the project is to ensure water supply sustainability, utilization of dam as water supply source instead of wells, lowering the cost of pump stations and existing system and Increase in the water quality which are polluted by the sewerage and rainwater leakage. Project characteristics are;

Design Flow Rate: 217,52 lt/sn
Design Population: 74 856 cap for year 2055.
Total Length of Water Transmission Line : 46 808 m
Water Treatment Plant : 35 000 m3/day

Detailed Design of Çanakçı (Giresun) Conventional Package Water Treatment Plant

Employer: Ilbank

Date: June 2022 - October 2022

Location: Turkey, Giresun

Details: Detailed design of package water treatment plant consisting of aeration, rapid and slow mixer, clarifier, filter and chlorine contact tank units carried out in order to supply drinking water needs of Çanakçı District.

Detailed Design of Devrekani (Kastamonu) Conventional Package Water Treatment Plant

Employer: Ilbank

Date: January 2022 - April 2022

Location: Turkey

Details: Detailed design of package water treatment plant consisting of aeration, rapid and slow mixer, clarifier, filter and chlorine contact tank units carried out in order to supply drinking water needs of Devrekani District.

İzmir Province Selçuk District Selçuk Wastewater Treatment Plant Detailed Design

Employer: IZSU

Date: July 2021- September 2022

Location: Turkey, İzmir, Selçuk

Details: The project covers detailed design of the waste water treatment plant of Selçuk district of İzmir. Plants treatment process is extended aeration type advance biological treatment. Project identification dossier shall also be prepared according to Environmental Impact Assessment legislation. WWTP characteristics are;

1st stage, with horizon 2045 Q_{design} = 25 921 m3/day, Q_{max} = 35 521 m3/day, PE 100 000

2nd stage, with horizon 2060 Q_{design} = 32 423 m3/day, Q_{max} = 44 423 m3/day, PE 125 000

Şarköy Advanced Biological Wastewater Treatment Plant Implementation Project

Employer: Tekirdağ Water and Sewerage Administration (TESKİ)

Start Date: January 2021- Ongoing

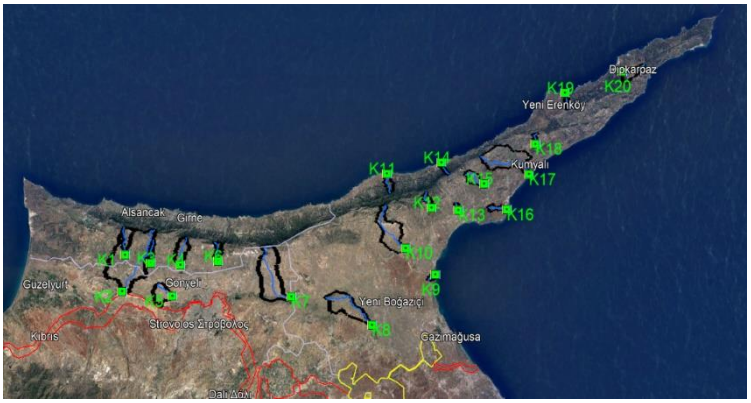
Location: Turkey, Tekirdağ, Şarköy

Details: The poject scope is the design of the treatment of waste water of Şarköy district and Gaziköy, Güzelköy, Çınarlıdere, Hoşköy, Mürefte, Aşağı ve Yukarı Kalamış, Eriklice, Şenköy, Kirazlı, İğde Bağları neighborhoods of Tekirdağ according to discharge criteria's. Project location is a touristic place at Marmara region and summer population is considerably high.

The main objective of the project is to prevent pollution of Marmara Sea due to sewage discharge. WWTP characteristics are;

Equivalent Population 331 368 cap, with horizon 2056
1st stage, with horizon 2041 Qdesign = 61 009 m3/day, Qmax = 81 623 m3/day,
2nd stage, with horizon 2056 Qdesign = 82 155 m3/day, Qmax = 109 807 m3/day,

Detailed Design of Cyprus Water Supply and Sewerage Systems (Zone 3)



Employer State Hydraulic Works (DSI)

Start Date: July 2020 - Ongoing

Location: Cyprus, Multiple Municipalities

Details: The purpose of the assignment is to design sewerage network, rainwater collectors and wastewater treatment plants of Gazimağusa, İskele, Paşaköy, Tatlısu, Serdarlı, Vadili, Geçitkale, Akdoğan, Beyarmudu, Yeniboğaziçi, İnönü, Mehmetçik, Büyükkonuk, Yenierenköy, Dipkarpaz accommodation areas. Design horizon is 2055. Zone 3 covers the following structures:

Sewerage collector L = 63 377 m
Sewerage network L= 851 837 m
İnönü WWTP, Equivalent Population 9 024 cap,
Qavg = 2 563 m3/day, Qmax =5 126 m3/day,

Yeni Boğaziçi WWTP, Equivalent Population 14 016 cap,
Qavg = 3 304 m3/day, Qmax = 6 606 m3/day,

İskele WWTP, Equivalent Population 12 845 cap,
Qavg = 4 661 m3/day, Qmax = 9 323 m3/day

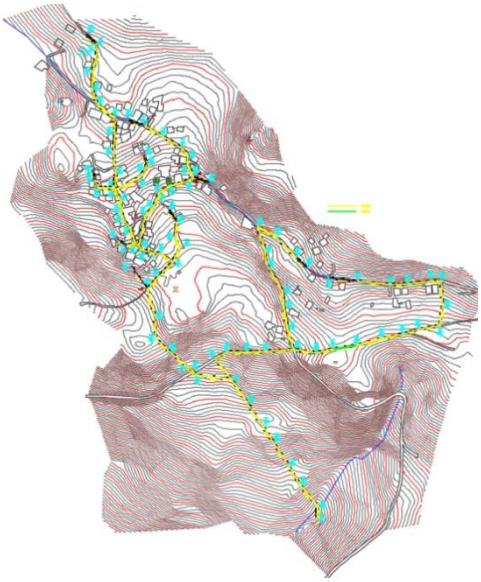
N.22 typical waste water treatment plants

Detailed Design of Sewerage and Rainwater Collection System Kızılcahamam and Çamlıdere Districts, Ankara

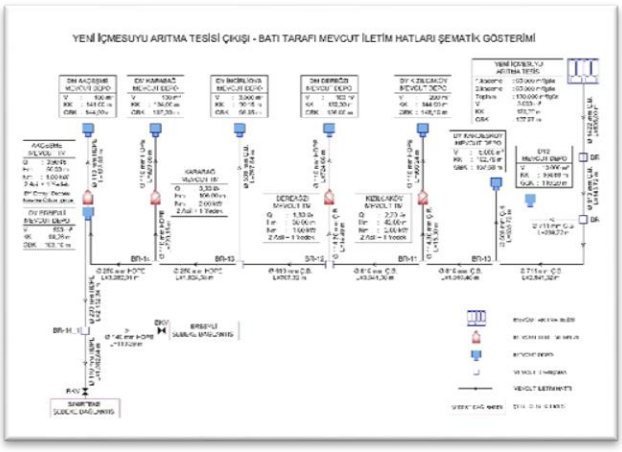
Employer: Ankara Water and Sewerage Administration (ASKI)

Start Date: July 2020 – March 2022

Location: Turkey, Ankara, Kızılcahamam, Çamlıdere



Details: The purpose of the assignment is to design sewerage network and rainwater collectors of Kızılcahamam and Çamlıdere district of Ankara. Design horizon is 2055. 413 300 m length of sewerage network is designed including geological and topographical survey works and preparation of bills of quantities.



Detailed Design of Main Transmission Line of Germencik and Köşk Districts, Aydın

Employer State Hydraulic Works (DSI)

Date: September 2019 - Ongoing

Location Turkey, Aydın, Germencik – Köşk

Details: The project aims to design the water supply need of Germencik and Köşk distritcts of Aydın province. Current situation, 2055 needs and existing network design works are reviewed and integrated within the project.Design of infrastructure system includes water transmission lines, water reservoirs and related all details; hydraulic modelling, profiles, washout and air release valve. Project chracteristics are:

Design Flow Rate : 85 lt/sn
Design Population: 111 392 cap. With horizon of 2055
Total Length of Water Transmission Line: 37 000 m (Ø711 – Ø90)

Beldibi-Göynük Region Capacity Increase and Rehabilitation Implementation Project

Employer: Antalya Water and Sewerage Administration (ASAT)

Date: December 2017 - April 2018

Location: Turkey, Antalya

Details: Project location is Beldibi and Göynük towns located in the Antalya province, where highly intense tourism population is observed. A combined waste water treatment plant w

as designed for the replacement of n.2 existing treatment plants which are situated in the middle of touristic areas. Main objective of the project is to establish a single water treatment plant which shall serve the basin where various touristic facilities located; with Increased capacity in sewerage treatment and renewed infrastructure and the discharge water quality to Mediterranean Sea. WWTP characteristics;

Equivalent Population 70 190 cap, with horizon 2025 and 86 088 with horizon 2050
1st stage, Qdesign = 71 524 m3/day, Qmax = 76 500 m3/day,
2nd stage, Qdesign = 85 747 m3/day, Qmax = 93 500 m3/day

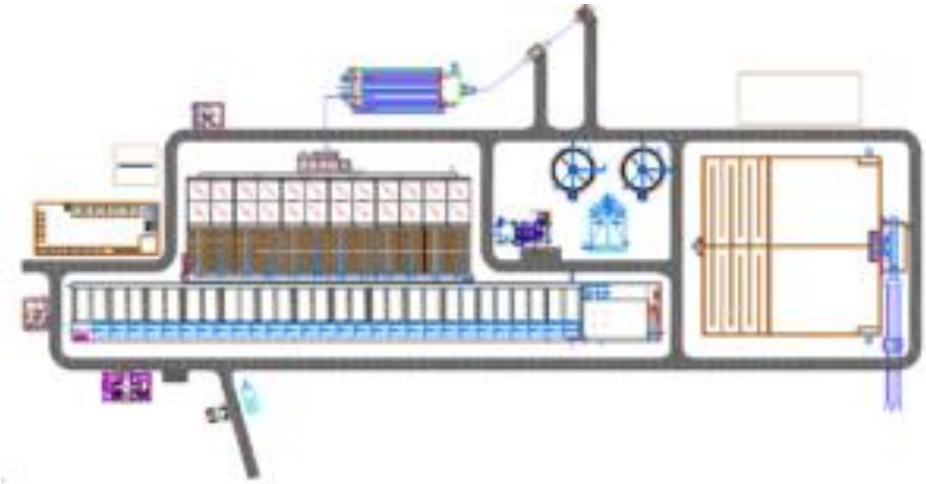
Antalya Manavgat Oymapınar Main Transmission Line & Water Treatment Plant Design

Employer Antalya Water and Sewerage Administration (ASAT)

Start Date: June 2017 – October 2017

Location: Turkey, Manavgat

Details: The project aims to modify the water supply of Antalya Municipality as Oymapınar Dam instead of groundwater sources mainly utilized at city geography. Project scope covers distribution of 900 000 m3/day water from new treatment plant to 552 960 m3/day capacity to Antalya city province and districts, 187 040 m3/day capacity to Manavgat and Alanya distrits and remaining 160 000 m3/day capacity to the other distribution points and existing water treatment plant storage.



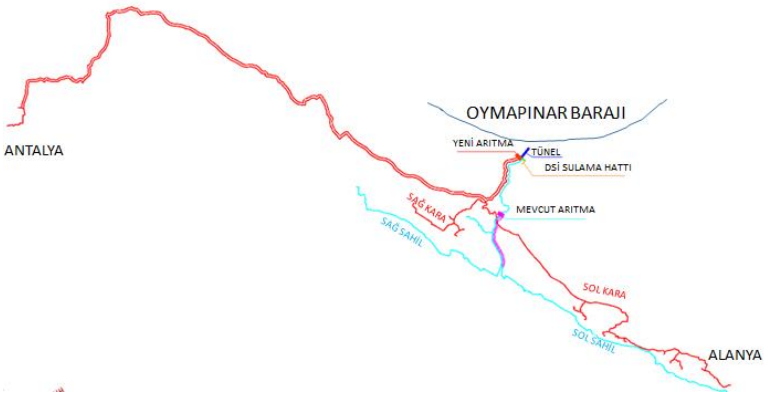
Main objectives of the Project are Increase in the water quality and Lowering the cost of pumping stations by rehabilitation of the existing treatment plant and new reatment plant design with updated and modern solutions. Project Characteristics are:

Design Flow Rate : Variable (From 2 000 lt/sn to 41 lt/sn)

Design Population: 3 939 871 cap.
Total Length of Water Transmission Line : 420 318 m, Qtotal : 1 236 400 m3/day
Existing water treatment plant capacity: 250 000 m3/day
New water treatment plant capacity :900,000 m3/day

Tunnel DN 3500 mm, L = 1940 m
Gundoğu Pumping station: 73 lt/sec capacity
Konaklı Pumping station: 1297 lt/sec capacity
Main Transmission Line Characteristics:

DN3200 mm, L = 9.911 m
DN3000 mm, L = 149.815 m
DN2000 mm, L= 82.577 m
DN1600 mm, L = 15.979 m
DN1400 mm, L = 50.920 m
DN1200 mm, L = 54.562 m
DNlO00 mm, L = 9.819 m
DN800 mm, L = 13.737 m
DN600 mm, L = 14.577 mm
DN400 mm, L = 7.457 m
DN300 mm, L = 6.096 m
DN150 mm, L = 4.868 m



Preparation of Detailed Design of Pirsagi Rayon Sewage Treatment Plant

Employer Hansol Eme Co. Ltd

Start Date: July 2016 – February 2019

Location Azerbaijan, Pirsahi

Details: The services include detailed design of waste water treatment plant which shall serve in Pirsahi region. The assignment includes preparation of Environmental and Social Impact Assessment Report. WWTP Characteristics:

Design Population For Year 2035- 325 000 persons
$Q_{design+rainfall}$= 260 000 m3/day,
$Q_{biological}$ = 60 000 m3/day (2nd stage),
$Q_{biological}$ = 40 000 m3/day (1st stage)
Deep Sea Discharge (Caspian Sea) L=1.7 km, ø 1600 mm

Bursa Districts n.14 Waste Water Treatment Plant Application Projects

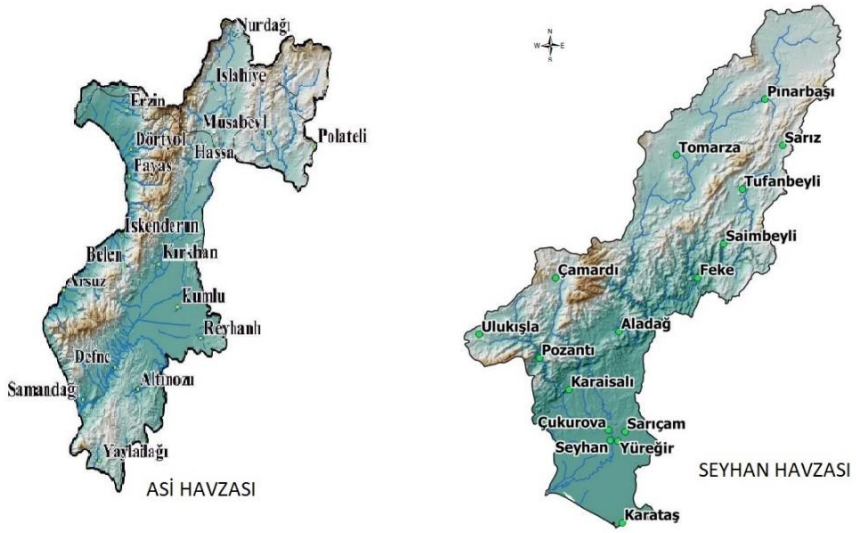
Employer: Bursa General Directorate of Water and Sewerage Administration (BUSKİ)
Date: January 2016- November 2018
Location: Turkey, Bursa
Details: The consultancy work includes the detailed design of 15 wastewater treatment plants and 2 pumping stations belonging to various districts within the borders of Bursa Metropolitan.

1.İnegöl (City Center) WWTP,
Equivalent population 934 825 people,
Qort = 149 557 m3/day, Qmax = 279 752 m3/day,
2.Kestel-Gürsu Common WWTP,
Equivalent population 1 078 800 people,
Qort = 194 096 m3/day, Qmax = 388 192 m3/day,
3.Karacabey (City Center) WWTP,
Equivalent population 239 300 people,
Qort = 50 403 m3/day, Qmax = 111 411 m3/day,
4.Harmancık (City Center) WWTP,
Equivalent population 8 825 people
Qort = 1 723 m3/day, Qmax = 3 122 m3/day,
5.Büyükorhan (City Center) WWTP,
Equivalent population 6 925 people,
Qort = 2 074 m3/day, Qmax = 3 596 m3/day,
6.Yeniköy (Karacabey) WWTP, 4 358 m³/day
Equivalent population 22 500 people,
Qort = 4 358 m3/day, Qmax = 7 108 m3/day,
7.Uludağ WWTP,
Equivalent population 14 650 people,
Qort = 2 240 m3/day, Qmax = 4 489 m3/day,
8.Keles (City Center) WWTP,
Equivalent population 12 600 people,
Qort = 1 843 m3/day, Qmax = 3 233 m3/day,

9.Esence (Mudanya) WWTP,
Equivalent population 13 000 people,
Qort = 2 184 m3/day, Qmax = 3 122 m3/day,
10.Mesudiye (Mudanya) WWTP,
Equivalent population 10 000 people,
Qort = 1 904 m3/day, Qmax = 3 048 m3/day,
11.Tirilye (Mudanya) WWTP,
Equivalent population 6 025 people,
Qort = 806 m3/day, Qmax = 1 588 m3/day,
12.Orhangazi WWTP,
Equivalent population 241 036 people,
Qort = 34 272 m3/day, Qmax = 68 544 m3/day,
13.Görükle pump station, Qp=710 lt/sec, DN=800 mm, L=260 m
14.Alanyurt pump station, Qp=515 lt/sec, DN=710 mm, L=570 m
15,500-person package WWTP,
Qort = 156 m3/day, Qmax = 300 m3/day,
16,700-person package WWTP,
Qort = 188 m3/day, Qmax = 398 m3/day,
17,500 pax constructed wetland,
Qort = 156 m3/day, Qmax = 300 m3/day,

FLOOD MANAGEMENT

Preparation of Asi and Seyhan Basins Flood Management Plans



Employer: Ministry of Agriculture and Forestry, al Directorate of Water Management

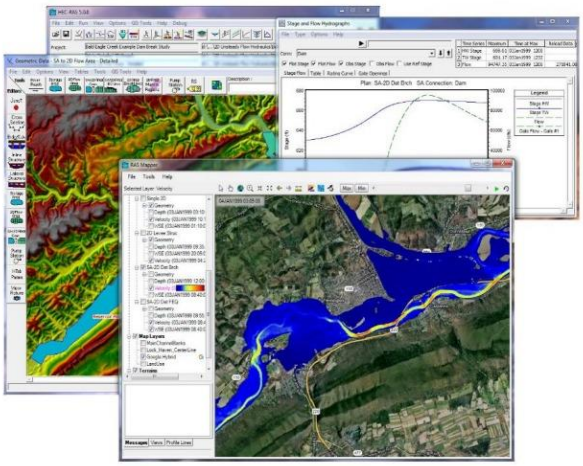
Date: June 2018- December 2020

Location: Turkey, Asi-Seyhan Basins

Details:

Project aims to preparation of flood risk management plans of Asi and Seyhan basins, which are two of 25 basins of Turkey. Flood risk shall be evaluated within the borders of basins as a whole and mapping works shall be carried out in order to form flood hazard and risk maps. Mitigation plans shall be prepared for prior, during and afterward flood stages

- Preparation of the Flood Risk Preliminary Assessment Report taking into account the potential negative impacts of past and future floods on human health, environment, cultural heritage and economic activities, topography, routes of streams and rivers and natural water retention areas, floodplains, general hydrological and geological characteristics, efficiency level of existing infrastructures, location of settlement areas, economic activity areas, strategic structures and possible impacts of climate change, separately in Asi and Seyhan Basins. Conducting flood hydrology studies by using hydrological model and classical methods for the areas found to be risky in the preliminary flood risk assessment report, separately in Asi and Seyhan Basins, and preparing the Hydrology Report
- Creation of 1-dimensional and 2-dimensional Hydrodynamic model using the numerical data in the project, processing all existing structures on the river beds on the model, determining the change of water on the cross-sections.



- Creation of Flood Hazard Maps by using flood peak flows in settlements and economic activity areas.
- Creation of Flood Risk Maps with GIS database by revealing the risks in each area shown in Flood Hazard Maps
- Preparation of Flood Management Plans for Asi and Seyhan Basins separately
- Updating or improving the Database by using the data previously created and created within the scope of the work.

Main Office

Address
Çukurambar Mah. Muhsin Yazıcıoğlu Cad.
1480. Sok. 2A Blok Kat.9 No.33
06510 Çankaya, Ankara

Phone
+90 (312) 229 78 54

Fax
+90 (312) 229 96 78

Email
infoart@artltd.com.tr

Uzbekistan Branch

Address
Abdulla Qahhor 4,1
Taşkent, ÖZBEKİSTAN

Pakistan Branch

Address
C-3, Jhelum Block, Green Forts-II
Lahore, PAKISTAN

Phone
+ 92 (42) 371 92 547

Azerbaijan Branch

Address
Azadliq Street No.192
Baku, AZERBAIJAN

Phone
+99 (450) 776 56 42

Consultancy Offices

Suluova Consultancy Office/ AMASYA
Konya Consultancy Office/ KONYA
Muş Consultancy Office/ MUŞ

ENVIRONMENTAL TECHNOLOGIES

Çukurambar Mahallesi Muhsin Yazıcıoğlu Caddesi
1480. Sokak No:2 A Blok No:33 Besa Kule
ÇANKAYA /ANKARA/TÜRKİYE
+90 312 229 78 54