

**“GÖKIRMAK COPPER MINE PROJECT” ARCHAEOLOGICAL AND IMMOVABLE
CULTURAL HERITAGE CURRENT STATE IMPACT ASSESSMENT REPORT**



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GLOSSARY

The Early Bronze Age	The Early Bronze Age covers a period between 3000 and 2000 BCE when organized, fortified and independent city states, which included temples and administrative buildings, became widespread. The Early Bronze Age witnessed certain social, religious and technological changes. Inventions of earlier ages in agriculture, animal husbandry, weaving and pottery were added with the discovery of bronze, an alloy of copper with tin which enabled production of powerful weapons and fineware jewellery. Production of bronze by mixing copper with tin is an important development for the metallurgy of the period.
Phrygians	Phrygians is a people which migrated from Thrace passing the Straits to Anatolia in 1200s BCE. They became prominent in 750s BCE and dominated the region called Phrygia in Anatolia.
Hellens	The culture and the people which constituted to this culture that first appeared in Crete island and spread to closer islands and then to Greece Peninsula. Although lived in forms of city states for a long time, they were brought together by Alexander the Great, who established the Hellen union and paved the way for the Hellenic culture to spread. The "Hellenistic Period" started in Anatolia after Alexander the Great arrived at Anatolia and ended the Perisan rule.
Mound	Mounds are artificial pile of earth, where consecutive settlements overlapped onto each other. Their forms may change due to natural and unnatural reasons. Their elevations and area they occupy may vary with respect to their geography and settlement dynamics.
Hittite	The state which ruled in Anatolia between 1700 and 1200 BCE.
Chalcolithic Period	The period when copper was started to be used in addition to stone tools (5500-3000 BCE)
Luwians	The native inhabitants of Anatolia who lived before Hittite Period and long before the Greek migrations

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	to Anatolia. This people are named Luvili (Luvian/ Luwili) in Hittite cuneiform documents.
Lydia	Lydia is the region which constitutes the cradle and centre of the Lydian civilization that started in the end of the Bronze Age and continued until the 6 th century BCE in Anatolia.
Neolithic Period	Neolithic Period (New Stone Age) is one of the prehistoric ages (8000-5500 BCE).
Paphlagonia	Paphlagonia is an ancient region in Anatolia located in the Black Sea coast between Pontus and Bythinia.
Palaeolithic Period	Palaeolithic Period is the period which started 2 millions years and ended 10.000 years before the present day.
Persian Period	The period between 533 BCE and 334 BCE when Iran and Anatolia was under the Persian control.
Pontus	Pontus means “sea” in Greek and is the name of the son of Gaia. After Strabon of Amasya, the word was used by ancient geographers to denote the northern Anatolian coast with its hinterland located in the east of Halys River (Kızılırmak) in the southern coast of the Black Sea. After the same period, the term Pontikos, meaning “from Pontus”, was used in reference to those who lived in these territories and those who were born in Pontus[1]. Pontus corresponds to present Central and Eastern Black Sea region. Therefore it is a geographical and cultural term rather than a political one.

ABBREVIATIONS

EIA	<i>Environmental Impact Assessment</i>
GPS	<i>GPS (Global Positioning System)</i>
BCE	<i>Before Common Era</i>
CE	<i>Common Era</i>
T.R.	<i>Republic of Turkey</i>
C	<i>Century</i>

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1. INTRODUCTION

This document covers the studies conducted for evaluating the current state of archaeological and immovable cultural assets which may be located within the boundaries of the construction site (Map 1) of “Gökırmak Copper Mine Project” run by Acacia Mining Co. and assessing the impact of project on these assets and the results of these studies.

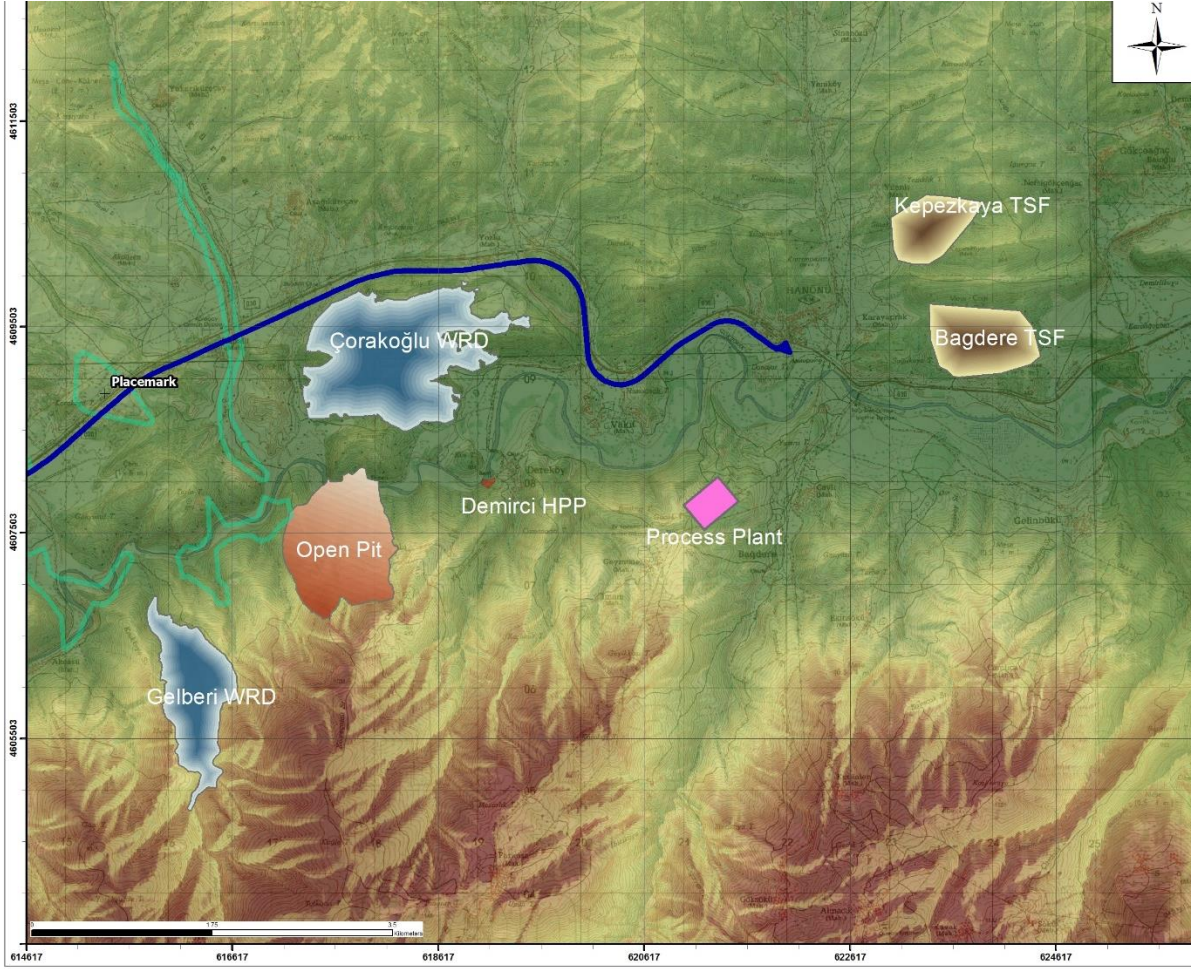
1.1. Scope and Aims

This report includes the results of the desk research and the field survey conducted for identifying archaeological and immovable heritage located in the construction site (Map 1) that is to be occupied by underground and surface installations, some of which have already been established, which is proposed within the scope of the Gökırmak Copper Mine Project. The surface installations are planned to be situated in different locations at Hanönü district. Within the scope of the researches, the course of power transmission line stretching between Hanönü and Taşköprü was also investigated.

The main aims of this report are as following:

- Identifying the current situation and geographical distribution of possible archaeological or immovable cultural properties located in the impact area of the copper mine project.
- Assessing possible negative impacts of the project over the archaeological or immovable cultural properties.
- Developing necessary methods and suggestions in order to minimize the possible negative impacts over the archaeological or immovable cultural properties.

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Map 1: Gökırmak Copper Mine Project Area

2. LEGAL FRAMEWORK AND RELEVANT STANDARDS

In Turkey, the movable and immovable cultural and natural assets are put under protection in compliance with the “Law on Preservation of Cultural and Natural Assets”, 2863, which was published in the Official Gazette numbered 18113 and dated 23 July 1983. The cultural and natural heritages, which are protected by aforementioned Law, are identified as following:

- Natural properties which require protection and immovable assets which were built before the end of the 19th century;
- Any immovable cultural asset constructed after the end of the 19th century but categorized as “a significant asset which requires preservation” by the Ministry of Culture and Tourism;
- Immovable cultural assets located within the boundaries of Protection Sites; Structures, buildings or places that have witnessed significant historical events during the Turkish

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Independence War or the foundation of the Turkish Republic, regardless of their period and registration status; and all dwellings and buildings that have been used by Mustafa Kemal ATATURK without considering their period of construction or registration status.

In addition to the Law no: 2863 on Preservation of Cultural and Natural Assets, there are some regulations and principle decisions governing the management of cultural and natural assets. According to the Principle Decision no: 658, taken on November 5th 1999, "Archaeological Sites, Conditions of Protection and Usage", the archaeological sites are classified into three main categories:

- **1st Degree Archaeological Sites:** Areas requiring highest level of protection, with the exception of scientific excavations aiming protection. Neither construction nor development are allowed in these sites. All kinds of construction, excavation, and modification activities are prohibited within the boundaries of these sites. However, for exceptional cases such as the necessity for infrastructure construction, Regional Preservation Boards may permit such activities based on the approval of the relevant museum directorate and the head of the scientific excavation team
- **2nd Degree Archaeological Sites:** Sites which require medium level of protection. They should be preserved based on the conditions of protection and utilisation set by the Regional Preservation Boards. Additional construction is prohibited. Similar to the 1st Degree Sites, for exceptional cases such as necessity for infrastructure construction among others, Regional Preservation Boards may permit such activities based on the approval of the relevant museum directorate and the head of the scientific excavation team.
- **3rd Degree Archaeological Sites:** Lowest level of protection area. Construction is permitted based on the decisions of Regional Preservation Boards. Before applying for a construction permit, test pit excavations should be conducted and the outcomes of these excavations should be reviewed by the relevant museum and, if present, the head of the scientific excavation team. Reviews should be submitted to Regional Preservation Boards. The Boards may ask for extension of the scope of test pits before taking any decision.

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In addition to the regulations mentioned above, the following guidelines and guiding principles of the international institutions were taken into consideration during the preparation of current status report:

International Finance Corporation-IFC, Performance Standard 8

- European Bank for Reconstruction and Development- EBRD, Environmental and Social Policy, PR08, Cultural Heritage
- Guidance on Heritage Impact Assessments for Cultural World Heritage Properties, International Council on Monuments and Sites, ICOMOS 2011

3. MISSIONS AND RESPONSIBILITIES

According to the Law on the Conservation of Cultural and Natural Assets no: 2863, all cultural and natural properties requiring protection are considered as state property. As stated in the same law, the Ministry of Culture and Tourism and its local branches (Boards for Conservation of Cultural Assets, Museums) are the main national government institutions who have the authority of conducting the works of identification and registration of cultural assets and defining the conditions of conservation and use of these sites as defined in the Section 2. In this respect Ankara Regional Board no: 1 for Conservation of Cultural Assets is the sole competent authority within the scope of the Gökirmak Copper Mine Project. The project is bound legally to follow the decision taken and shall be taken by the conservation board.

Gökirmak Copper Mine Project Management is, on the other hand, responsible from conservation of immovable cultural assets, in case any discovered, as well as preparation and implementation of plans minimizing the negative impacts of the construction activities over these assets and establishing communication with the government institutions. In this respect, the project management ought to prepare a plan, which comprises of the construction activities and their impacts on the archaeological and immovable cultural assets located within the boundaries of project construction and impact area and submit the methods for eliminating or minimizing the negative impacts of construction activities over concerning sites to the opinion of the directorate of Conservation Board.

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4. METHOD

Three different methods were followed in the archaeological and immovable cultural heritages current status impact assessment studied conducted for Gökırmak Copper Mine Project. These were:

- Desktop Studies
- Field Survey
- Reporting

4.1. Desktop Studies

The archaeological publications were reviewed to assess the archaeological potential of the region. In addition, by contacting Ankara Regional Board No:1 for Conservation of Cultural Assets, information on previously registered archaeological or cultural assets in the Project Area and its vicinity was collected. The information resources used during literature review are as following:

- Academic publications
- Historic maps
- Reports on the previous Cultural Heritage Studies and Results of Field Surveys
- Inventory records of Museum and Conservation Board

4.2. Field Survey

In order to locate the archaeological and immovable cultural heritage, the field survey was conducted at the facilities of the copper mine project except for places covered with forest.

The field survey was conducted between January 5th and 7th 2017. In case any archaeological finding was encountered during the field survey, the method of “Intensive Field Survey” was followed. In addition to this method, rest of the construction site and impact area were searched by following the “Extensive Field Survey” methodology. The results of the works conducted were summarized in the “Field Survey Findings Status Table” (Annex 1) and recorded comprehensively in the “Archaeological Field Survey Form” (Annex 2). These forms were the main reference documents used in preparation of the final report. It should be emphasized that the field survey was limited to the experienced archaeologists’ observation of archaeological surface trails.

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Field and assessment works were conducted by REGIO Archaeology Team¹ which comprises of the experts having different specialities.

4.2.1. Intensive Field Survey

This method was followed when an archaeological site was encountered within the boundaries of project construction site and impact area. The aim of this method is determining the expansion of the archaeological site, identifying its association with the location of the project on map, revealing the area of distribution of archaeological surface findings and completing entire documentation which would aid in interpreting the history of the site on the basis of archaeological artefacts on the surface. During this activity, by taking sufficient number of GPS coordinates (from at least four different points) from each site, its surface area in current geography and its location were determined. In addition, detailed photographs of each site were taken from different angles and stored to be used in the reports. During all these works, an “Archaeological Field Survey Form” (Annex 2), which was created by the research team, was filled separately for each site and all information related to the observations made in every site were conveyed to these forms. *Küpeli Houses (no: 1,5 and 9), Aşağı Küreçay Cemetery*, which were identified to be located within or nearby the project impact area, were investigated by following this method (Annex 1, Annex 2).

4.2.2. Extensive Field Survey

Greater part of the works related to identification of archaeological and immovable cultural assets within the project construction site and impact area were conducted by following this method. In order to determine the existence of archaeological or immovable cultural assets at the places where were covered with forests or thick flora, the location of mining facilities, the construction of which were almost complete, and the places of steep slope, where a field survey was not viable, possible archaeological traces such as ceramic sherds, stone or bone objects, ancient coins, architectural remains etc. (including unexpected changes in the geological topography) were observed from the most accessible parts of these places. The archaeological data retrieved from the desk research were taken into consideration in estimating the observed areas.

4.3. Reporting

In the course of all studies, the data gathered about the archaeological or immovable cultural assets located within the project construction site and impact area were conveyed to GIS medium and

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current geographical positions of these sites, their site classifications, impact of the construction sites and possible mitigation methods to be followed in the construction phase were determined and reporting is finalized.

5. ARCHAEOLOGICAL AND HISTORIC BACKGROUND

Kastamonu region is covered with two steep mountain chains which lie parallel to the Black Sea in the south and north and connect Black Sea Region with the Central Anatolia through few passages and wide plateaus at the average altitude of 900-1000 m above sea level between these mountains. These plateaus are divided by Gökırmak, the longest western tributary of Kızılırmak River in the east-west axis and numerous streams, which join to Gökırmak, in the north-south axis. The riverbed of Gökırmak Valley, which becomes wider at the city centre of Kastamonu and between Taşköprü and Hanönü Districts, is covered with a thick layer of alluvial fill carried by the streams. The mountainous regions are covered with thick forests which allow lumber production, while plateaus are covered with shrubs and rich variety of herbaceous plants. The region also has rich mineral deposits (Özdoğan, 1996: 304).

The mountains which run parallel to the Black Sea constituted a barrier between the sea and the central Anatolia in the prehistoric ages. On the other hand, the natural roads formed by long rivers flowing in the east-west axis enabled the cultural relationship between the Marmara Region and Inner Black Sea Region.

Agriculture is done in the narrow fertile alluvial plains in the region where vast plains are rare. As a precaution against floods, the villages are often located in plateaus and in some regions on the rocky ground. Although timber is predominantly used in the vernacular architecture of the region, it is known that mudbrick and stone are also important building materials in some places (Özdoğan, 1996: 305).

In the period following the Early Bronze Age, in the 2nd Millenium of the historic geography of Anatolia, Kastamonu was inhabited by tribes named Pala and Tummana. The language of these tribes is called Pala and their cuneiform writing was encountered in very few clay tablets in the Hittite archives. These tribes, which were most possibly of Transcaucasian origin, were migrated to Anatolia together with their close relatives Hittites and Luwians and settled in the region (Kıymet, 2004: 58)

Following the collapse of the Hittite state, the region was captured by Phrygians for a short period and then occupied by Lydians, Persians, Hellenistic and then Pontic states respectively. In the region, which was annexed to the Roman Republic by Gnaeus Pompeus Magnus in 73-72 BCE, the most

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important settlement is “Pompeiopolis” located in modern Taşkopru province. The city, which was founded by Roman commander “Pompey”, who was assigned to the region, in 64 BCE and was named after this commander (Çakır, 1994: 41).

Pompeipolis was captured by Seljuk ruler Alaaddin Keykubat in 1213 CE. The city was completely abandoned after the Citadel of Kastamonu was conquered by Turks. After this, Taşkopru, which was founded by Turks was started to be inhabited.

Taşköprü and Hanönü were located in the region which was named Paphlagonia in the ancient period. The borders of this region covered modern Sinop, Zonguldak, Bolu, Samsun (Alaçam and Bafra districts) Çorum (Kargı and Osmancık districts), Çankırı and Kastamonu (Yaman, 1990: 64).

Archaeological field surveys and excavations conducted in Taşköprü and Hanönü districts and their vicinities revealed that the traces of human kind went back to the Palaeolithic Period in the region (Çakır, 1994:41). In the researches, in addition to the Palaeolithic Period, archaeological materials belonging to the Neolithic, Chalcolithic and Early Bronze Ages were also encountered (Özdoğan, 1996: 305-313, 1998: 63-104, 1998:219-244).

Majority of the settlements, which were identified in the field surveys, are located in the south and north of Taşkopru and Hanonü districts, on top of hills at the altitude of 950-1800 m above sea level, in mountainous areas (Özdoğan, 1996: 305-313, 1998: 63-104).

As a result of the researches, it was identified that the first examples of mining in the region took place in the Chalcolithic period. Slags and galleries belonging to prehistoric mines were identified in Koçaç Tepe near Garipşah Village and Bakırboku locality near Bozarmut Village (Özdoğan, 1998:66-70).

The locations of the sites mentioned in the literature are given in the Table 1 and Map 2. As can be noted on the table, no archaeological sites were indicated in Hanönü district. All sites listed are located in Taşköprü district and the closest one to the project area is at a distance of 11 km. Consequently, the mining activities are not likely to have any adverse affect on these sites.

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An important site, Pompeipolis is 1.1 km away from the planned Electrical Transmission Line which is far enough for keeping the area safe from the operational activities.



Figure 1: General View of Project Transmission Line and Pompeipolis

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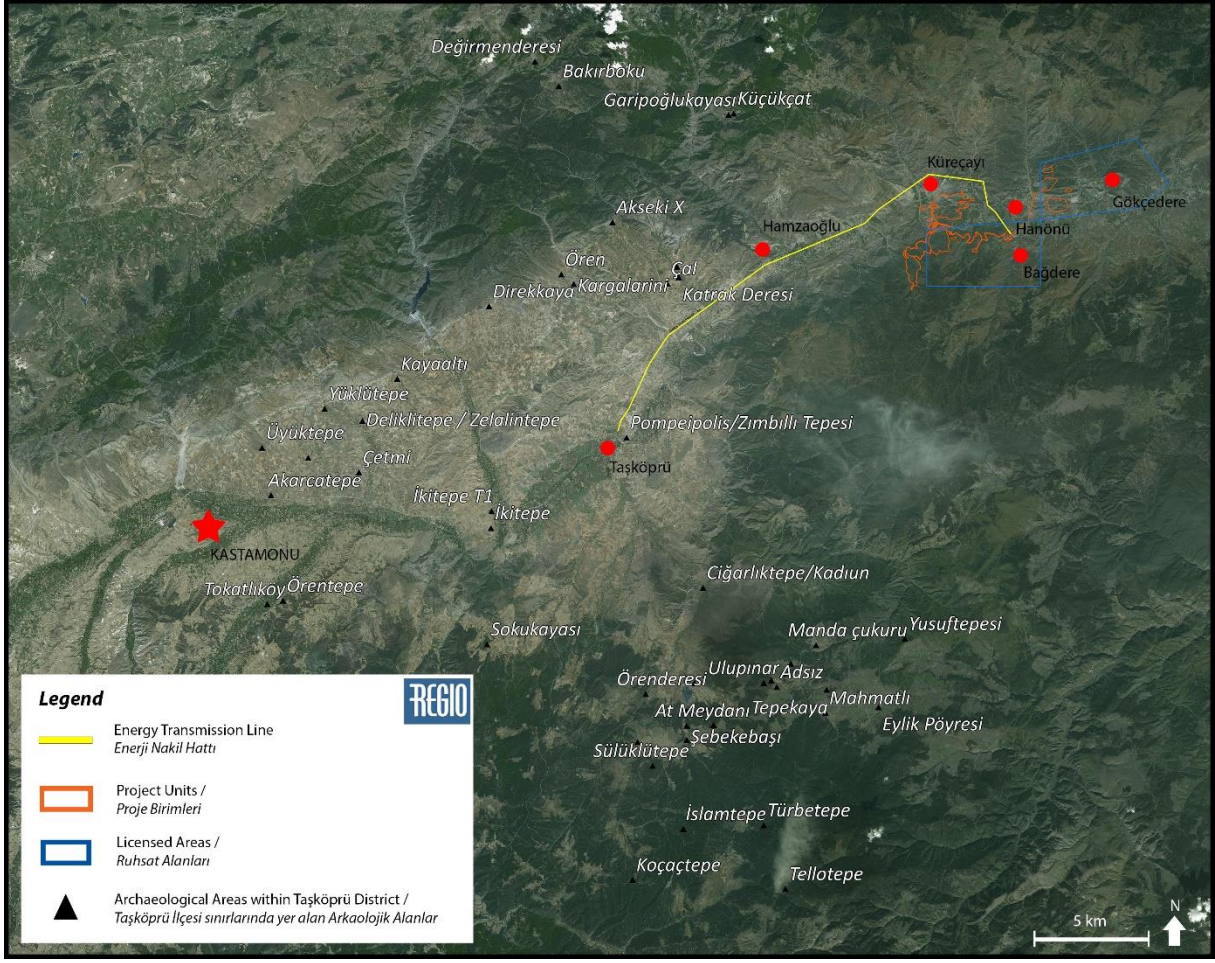
Table 1: Archaeological Sites Near the Project Area

No	Name of the Site	City	District	Village	Closest Distance to Project License Area (km)	Reference
1	Pompeiopolis/Zimbılı Hill Mound	Kastamonu	Taşköprü	Zimbılı	19	Çakır, N.(1995).
2	Sokukayası	Kastamonu	Taşköprü	Kızılcaören	28	Özdoğan,A.,Marro,C.,Tibet,A.,(1997).
3	Çetmi	Kastamonu	Taşköprü	Çetmi	30	Özdoğan,A.,Marro,C.,Tibet,A.,(1997).
4	Deliklitepe/Zelatintepe	Kastamonu	Taşköprü	Aşağıurgancı	30	Özdoğan,A.,Marro,C.,Tibet,A.,(1997).
5	Yüklütepe	Kastamonu	Taşköprü	Samanlıören	31	Özdoğan,A.,Marro,C.,Tibet,A.,(1997).
6	Kayaaltı	Kastamonu	Taşköprü	Bademci	27	Özdoğan,A.,Marro,C.,Tibet,A.,(1997).
7	Direkkaya	Kastamonu	Taşköprü	Afşar	21	Özdoğan,A.,Marro,C.,Tibet,A.,(1997).
8	Ören	Kastamonu	Taşköprü	Bey	18	Özdoğan,A.,Marro,C.,Tibet,A.,(1997).
9	Kargalarini	Kastamonu	Taşköprü	Bey	18	Özdoğan,A.,Marro,C.,Tibet,A.,(1997).
10	Akseki X	Kastamonu	Taşköprü	Akseki	15	Özdoğan,A.,Marro,C.,Tibet,A.,(1997).
11	Türbe	Kastamonu	Taşköprü	İncesu	12	Özdoğan,A.,Marro,C.,Tibet,A.,(1997).
12	Katrak Creek	Kastamonu	Taşköprü	İncesu	12	Özdoğan,A.,Marro,C.,Tibet,A.,(1997).
13	Örentepe	Kastamonu	Taşköprü	Abay	37	Özdoğan,A.,Marro,C.,Tibet,A.,(1997).
14	Tokatlıköy	Kastamonu	Taşköprü	Abay	37	Özdoğan,A.,Marro,C.,Tibet,A.,(1997).
15	İkitepe T1	Kastamonu	Taşköprü	Alamaşışli	25	Özdoğan,A.,Marro,C.,Tibet,A.,(1997).
16	İkitepe	Kastamonu	Taşköprü	Alamaşışli	25	Özdoğan,A.,Marro,C.,Tibet,A.,(1997).
17	Çal	Kastamonu	Taşköprü	İncesu	12	Özdoğan,A.,Marro,C.,Tibet,A.,Kuzucuoğlu,C.(1998).
18	Küçükçat	Kastamonu	Taşköprü	Akçakese	11	Özdoğan,A.,Marro,C.,Tibet,A.,Kuzucuoğlu,C.(1998).
19	Bakırboku	Kastamonu	Taşköprü	Bozarmut	21	Özdoğan,A.,Marro,C.,Tibet,A.,Kuzucuoğlu,C.(1998).
20	Kabakçısırtı	Kastamonu	Taşköprü	Bozarmut	21	Özdoğan,A.,Marro,C.,Tibet,A.,Kuzucuoğlu,C.(1998).
21	Değirmenderesi	Kastamonu	Taşköprü	Bulak	21	Özdoğan,A.,Marro,C.,Tibet,A.,Kuzucuoğlu,C.(1998).
22	Garipoğlukayası	Kastamonu	Taşköprü	Akçakese	11	Özdoğan,A.,Marro,C.,Tibet,A.,Kuzucuoğlu,C.(1998).
23	Mercimekısırtı	Kastamonu	Taşköprü	Ömerli (Eğlecek)	27	Özdoğan,A.,Marro,C.,Tibet,A.,Kuzucuoğlu,C.(1998).
24	Örenderesi	Kastamonu	Taşköprü	Hasanlı	25	Özdoğan,A.,Marro,C.,Tibet,A.,Kuzucuoğlu,C.(1998).
25	Isırganlık Ridge	Kastamonu	Taşköprü	Çiftlik	38	Özdoğan,A.,Marro,C.,Tibet,A.,Kuzucuoğlu,C.(1998).
26	Atmeydanı	Kastamonu	Taşköprü	Armutlu(Cevizli)	26	Özdoğan,A.,Marro,C.,Tibet,A.,Kuzucuoğlu,C.(1998).
27	Şebekebaşı	Kastamonu	Taşköprü	Armutlu(Cevizli)	26	Özdoğan,A.,Marro,C.,Tibet,A.,Kuzucuoğlu,C.(1998).
28	Hızarderesi	Kastamonu	Taşköprü	Armutlu(Cevizli)	26	Özdoğan,A.,Marro,C.,Tibet,A.,Kuzucuoğlu,C.(1998).

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29	Sülüklütepe	Kastamonu	Taşköprü	Ömerli (Eğlecek)	28	Özdoğan,A.,Marro,C., Tibet,A.,Kuzucuoğlu,C.(1998).
30	Namaztepe T1-T2	Kastamonu	Taşköprü	Armutlu(Cevizli)	26	Özdoğan,A.,Marro,C., Tibet,A.,Kuzucuoğlu,C.(1998).
31	Koçaçtepe	Kastamonu	Taşköprü	Garipşah	32	Özdoğan,A.,Marro,C., Tibet,A.,Kuzucuoğlu,C.(1998).
32	Tellotepe	Kastamonu	Taşköprü	Dağbelören	34	Özdoğan,A.,Marro,C., Tibet,A.,Kuzucuoğlu,C.(1998).
33	İslamtepe	Kastamonu	Taşköprü	Dağbelören	34	Özdoğan,A.,Marro,C., Tibet,A.,Kuzucuoğlu,C.(1998).
34	Kirenklitepe T	Kastamonu	Taşköprü	Uzunkavak	33	Özdoğan,A.,Marro,C., Tibet,A.,Kuzucuoğlu,C.(1998).
35	Üyüktepe T	Kastamonu	Taşköprü	Uzunkavak	33	Özdoğan,A.,Marro,C., Tibet,A.,Kuzucuoğlu,C.(1998).
36	Akarcatepe T	Kastamonu	Taşköprü	Uzunkavak	33	Özdoğan,A.,Marro,C., Tibet,A.,Kuzucuoğlu,C.(1998).
37	Emennitepesi	Kastamonu	Taşköprü	Çiftlik	38	Özdoğan,A.,Marro,C., Tibet,A.,Kuzucuoğlu,C.(1998).
38	Türbetepe	Kastamonu	Taşköprü	Bekirli	33	Özdoğan,A.,Marro,C., Tibet,A.,Kuzucuoğlu,C.(1998).
39	Patdağısırtı	Kastamonu	Taşköprü	Kapaklı (Avdullar)	22	Özdoğan,A.,Marro,C., Tibet,A.,Kuzucuoğlu,C.(1998).
40	Mandaçukuru	Kastamonu	Taşköprü	Kapaklı (Avdullar)	22	Özdoğan,A.,Marro,C., Tibet,A.,Kuzucuoğlu,C.(1998).
41	Patdağ nekro	Kastamonu	Taşköprü	Kapaklı (Avdullar)	22	Özdoğan,A.,Marro,C., Tibet,A.,Kuzucuoğlu,C.(1998).
42	Ulupınar	Kastamonu	Taşköprü	Kapaklı (Avdullar)	22	Özdoğan,A.,Marro,C., Tibet,A.,Kuzucuoğlu,C.(1998).
43	Cıgarlıktepe/Kadıun	Kastamonu	Taşköprü	Alisaray	19	Özdoğan,A.,Marro,C., Tibet,A.,Kuzucuoğlu,C.(1998).
44	Tepekaya	Kastamonu	Taşköprü	Köçekli	22	Özdoğan,A.,Marro,C., Tibet,A.,Kuzucuoğlu,C.(1998).
45	Büyükçayır	Kastamonu	Taşköprü	Kapaklı	22	Özdoğan,A.,Marro,C., Tibet,A.,Kuzucuoğlu,C.(1998).
46	Nameless	Kastamonu	Taşköprü	Kapaklı	22	Özdoğan,A.,Marro,C., Tibet,A.,Kuzucuoğlu,C.(1998).
47	Mahmatlı	Kastamonu	Taşköprü	Yoğunluk	23	Özdoğan,A.,Marro,C., Tibet,A.,Kuzucuoğlu,C.(1998).
48	Eylik Pöyesi	Kastamonu	Taşköprü	Köçekli	22	Özdoğan,A.,Marro,C., Tibet,A.,Kuzucuoğlu,C.(1998).
49	Yusuftepsi	Kastamonu	Taşköprü	Kılıçlı	20	Özdoğan,A.,Marro,C., Tibet,A.,Kuzucuoğlu,C.(1998).
50	Öşektürbe Tepe	Kastamonu	Taşköprü	Abdalhasan	24,5	Özdoğan,A.,Marro,C., Tibet,A.,Kuzucuoğlu,C.(2000).

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Map 2: Archaeological and Immovable Cultural Heritage Sites Located in Gokirmak Copper Mine Project Area and its Vicinity

6. GENERAL EVALUATION

The field survey for identifying the archaeological and immovable cultural assets located in the area of Gokirmak Copper Mine Project and assessing the impact of the project was held between January 5th and 7th 2017.

Within the scope of the preparation works of EIA report in line with the local regulations in 2012, it was reported that no cultural assets were discovered as a result of the field visits conducted by Ankara Regional Board no: 1 for Conservation of Cultural Assets and inventory review (Annex 3).

However, some examples of civil architecture which reflect the cultural identity of the region were encountered in the project area. These examples of civic architecture exhibit a wide variety in terms of building technique and design in compliance with the geography of the region they are located.

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Three civil architecture examples of these buildings are located in Kupeli Neighbourhood on the left side of the road between Hanönü and Taşköprü (for details please see Field Works Results Status Table given in Annex 1). None of these structures are registered by the Regional Conservation Board. Küpeli Neighbourhood is located 100 m northwest of “Kupeli Stock Area” (Figure 1).

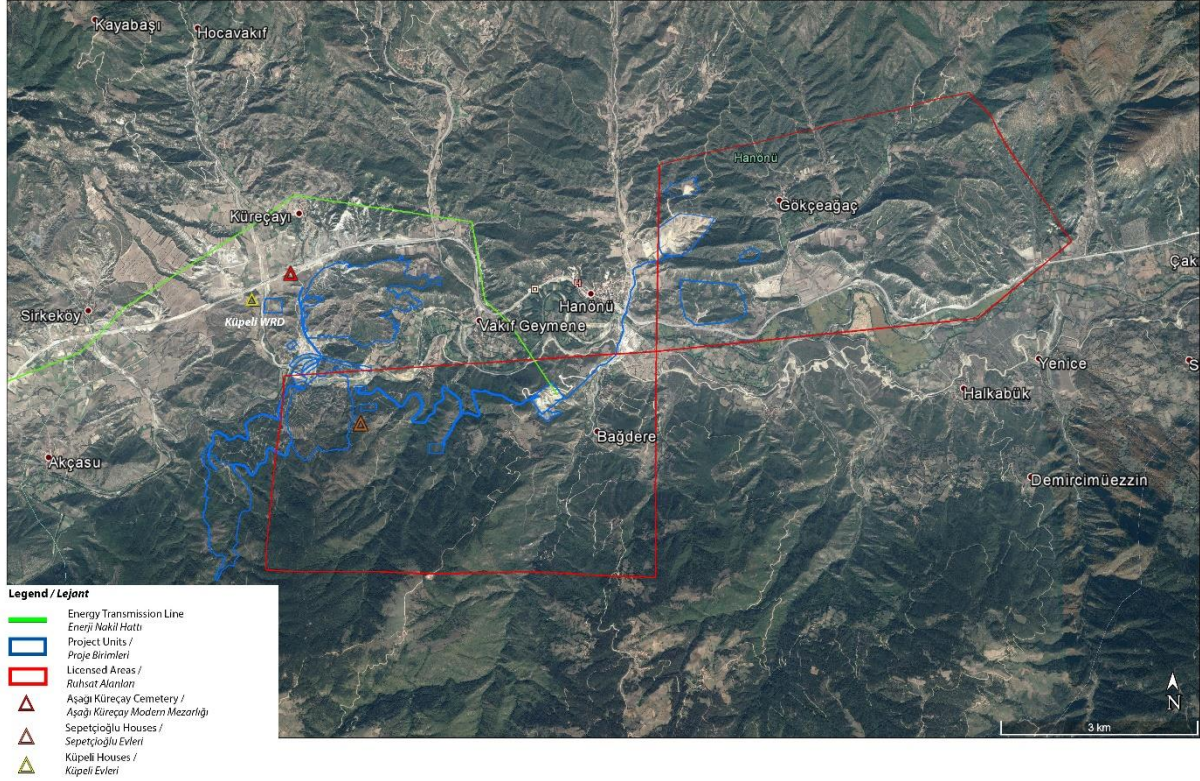


Figure 2: Project Areas and Cultural Heritage Areas

There are many abandoned houses in the region representing traditional architecture. Three of those are located in Küpeli Neighbourhood. Every house has a door number (Door No: 1, Door No: 5 and Door No: 9).

Kupeli House No: 1 is built entirely with timber with interlocking technique (Figure 2). The house is elevated on eight timber piers which are approximately 1,5 m high and supported by surrounding stones. The building which is elevated above the ground is accessed through a timber stairway.

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Figure 3: Kupeli House No: 1

Different from House No: 1, Kupeli House No: 5 is a two-floored structure in which timber, stone and brick were used together. The entrance of the building is on the eastern facade and the timber annex located right side of the entrance was entirely demolished. The first floor was built above a basement, which was constructed with stone, via bricks laid in form of fishbone between timber beams. Above this, the second floor is located where timber and mudbrick were used together (Figure 3).



Figure 4: K peli House No: 5

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Kupeli House No: 9 is the most intact and best maintained example. The entrance of the building is on the eastern facade. In the backyard, there is an annex made of timber for hay storage . The door, roof, timber structure and intact plaster of the house point to the fact that the building has been in use until very recently. On the upper floor, the gaps between timber piers were filled with brick (Figure 4).



Figure 5: K peli House No:9

There are similar houses in Sepet io lu Neighbourhood, which is located between the Open Pit and Surface Soil Storage Area. None of these houses are classified as cultural heritage by Ankara Regional Board No:1 for Conservation of Cultural Assets (Figure 1).

The structures in Sepet io lu Neighbourhood, which are called as Timber Cluster Houses are one or two floored buildings (Figure 5). Among these buildings there are those built entirely with timber and those built in combination of materials (stone, brick and timber together). Among the timber cluster houses, which are considered one of the examples of civic architecture, especially those in the western edge of the Sepet io lu Neighbourhood, are located within the impact area of the “Open Pit” belonging to the project .

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Figure 6: Küme Houses in Sepetçioğlu Quarter

Another immovable cultural heritage site that remains within the vicinity of project area is “Aşağı Küreçay Cemetery”, which is located at the leftside of the entrance of the road that reaches to “Çorakoğlu WRD” Area on the left side of the highway between Hanonu and Taşkopru before Kupeli Neighbourhood (Figure 1, Annex 1). The cemetery is located at a distance of 1.7 km from open pit area where blasting activities will take place and thus it is not likely to be affected by the project during the construction and operational phases.

The Cemetery was most probably used until the 19th century although it is not registered by the Regional Conservation Board. It was observed that the stilized patterns of the “tree of life” were carved on the grave stones which possibly belong to the 19th century. As a living cultural tradition, these trees of life have been carved on various stone artefacts since the prehistoric periods. On some of the gravestones, Ottoman inscriptions were noticed (Figure 6).



Figure 7: Graves and Gravestones dated to the 19th Century

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7. MITIGATION MEASURES

Gökırmak Copper Mine Project area is located in a territory covered with oak and pine forests stretching in two sides of the valley of Gökırmak, a tributary of Kızılırmak River. Besides, it was observed that the project activities have already begun in certain sites, where the installations will be built, and physical intervention was made on the ground. At the time of the field survey conducted January 5-7, 2017, there were no construction activities on the locations of Bağdere TSF, Bağdere Surface Soil Storage, Pipeline and Process Plant-Closed Ore Stock Area. These areas could not be surveyed since they were covered with forests. Construction activities were under progress in other project areas. The updated images of construction sites mentioned can be seen in the Annex 4 Photograph Album.

There are some examples of civil architecture both in these areas and the vicinities of other areas where construction activities shall be realized. However, these buildings neither registered by the Regional Conservation Board nor could be considered under the scope of Law 2863.

For the future construction works in areas which are currently not being used, it is recommended to carry out an archaeological field survey prior to any intervention.

8. CONCLUSION

It was identified in the previous scientific researches made in the region that mound formation is rare because the vernacular architecture is dominated by timber. Because of the land structure, identification of small mounds and flat settlements is very difficult (Özdoğan, 1996: 305). Most of the archaeological settlements were established on rocky hills or steep slopes. On alluvial plains, small number of late period settlements was identified. This situation indicates that the settlement pattern has continued in the same manner from the prehistoric ages until present day (Özdoğan, 1996:305). Some examples of civil architecture were observed in the Project Area and in close vicinity (none are classified as cultural heritage by Ankara Regional Board No:1 for Conservation of Cultural Assets); however, no archaeological remains were encountered within the Project Area.

This finding is in alignment with the settlement pattern mentioned before. For this reason, for the management of potential archaeological and immovable cultural heritage, "Chance Find Procedure" will be implemented by the E&S teams of the Project owner throughout the construction phase of the Project. As part of Project ESMS, capacity building of construction workers on the

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implementation of “Chance Finds Procedure” for the conservation of potential cultural heritage will be conducted by the E&S teams of the Project owner.

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