Republic of Türkiye Ministry of
Environment, Urbanization and Climate Change
General Directorate of Construction Affairs

TÜRKİYE EARTHQUAKE RECOVERY AND RECONSTRUCTION PROJECT

(TERRP)

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This Environmental and Social Management Plan is developed by the EMAY within the scope of "Consultancy Services for Design Review and Reconstruction Supervision of Rural Housing (Ref: TERRP/CS-DESSUP-03)" under Türkiye Earthquake Recovery and Reconstruction Project.

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AFAD	:	Disaster and Emergency Management Presidency
AoI	:	Area of Influence
C-ESMP	:	Contractor Environmental and Social Management Plan
CFP	:	Chance Find Procedure
CHS	:	Community Health and Safety
DSI	:	State Hydraulic Works
E&S	:	Environmental and Social
EBRD	:	European Bank for Reconstruction and Development
EMAY	:	EMAY International Engineering and Consultancy Inc.
EP	:	Electric Poles
ESHS	:	Environmental, Social, Health and Safety
ESMF	:	Environmental and Social Management Framework
ESMP	:	Environmental and Social Management Plan
ESS	:	Environmental and Social Standard
GDCA	:	General Directorate of Construction Affairs
GRM	:	Grievance Redress Mechanism
HEP	:	Hydroelectrical Plant
IFC	:	International Finance Corporation
KGM	:	General Directorate of Highways
LMP	:	Labor Management Procedure
MASKİ	:	Malatya Water and Sewerage Administration
MoEUCC	:	Ministry of Environment, Urbanization and Climate Change
OGM	:	General Directorate of Forestry
OHS	:	Occupational Health and Safety
PCA	:	Preventive/Corrective Action
PDoEUCC	:	Provincial Directorate of Environment, Urbanization and Climate Change
PIU	:	Project Implementation Unit
PPE	:	Personal Protective Equipment
PPP	:	Pollution Prevention Plan
PWWTP	:	Package Wastewater Treatment Plant
RCA	:	Root Cause Analysis
RP	:	Resettlement Plan
SEA	:	Sexual Exploitation and Abuse
SEP	:	Stakeholder Engagement Plan
SH	:	Sexual Harassment
TEDAŞ	:	Türkiye Electricity Distribution Inc.
TERRP	:	Türkiye Earthquake Recovery and Reconstruction Project
TMP	:	Traffic Management Plan
TurkStat	:	Turkish Statistics Institution
WB	:	World Bank
WBG	:	World Bank Group
WMP	:	Waste Management Plan
WSWW	:	Water Supply and Wastewater
WWTP	:	Wastewater Treatment Plant

1 Introduction

The World Bank (WB) is supporting the Ministry of Environment, Urbanization and Climate Change (MoEUCC) in implementing the Türkiye Earthquake Recovery and Reconstruction Project (TERRP). WB finances TERRP activities under Component 3, Rural Housing Reconstruction and Recovery, and Component 4.3, Project Management, Monitoring and Evaluation.

TERRP will overall support restoring access to essential municipal and health services and earthquake-resilient rural housing in selected provinces affected by the February 2023 earthquakes in Türkiye. The MoEUCC is implementing the Project activities for Components 3 and 4.3, in close collaboration with the Disaster and Emergency Management Presidency (AFAD). AFAD will carry out tasks as part of its ongoing organizational and legal mandates in collaboration with the MoEUCC.

Under the scope of this Environmental and Social Management Plan (ESMP), it is aimed to assess the possible negative environmental-social risks and impacts that may arise from the construction of a total of 224 houses in Gündüzbey Neighborhood, Yeşilyurt district of Malatya province, and to minimize or completely eliminate these impacts. The destroyed or severely damaged houses and basic infrastructures in the selected neighborhood will be reconstructed in new settlement location. The details regarding the neighborhood, new settlement, number of houses to be reconstructed, etc. will be given in the following chapters of the plan. This Environmental and Social Management Plan (ESMP) also includes health and safety measures, stakeholder engagement activities to be carried out, and the establishment of a Grievance Redress Mechanism (GRM). Finally, the ESMP outlines the responsibilities of relevant parties within the sub-project scope.

2 The Rationale of the Environmental and Social Management Plan

In accordance with the Environmental and Social Framework (ESMF) of the TERRP, the Project Implementation Unit (PIU) operating within the General Directorate of Construction Affairs (GDCA) of MoEUCC has completed the Environmental and Social (E&S) Screening, and the Screening Study is given in Appendix 2. The project's E&S Risk Rating was assessed as **"moderate"**, based on anticipated environmental and social risks and impacts. Following the guidelines outlined in the ESMF, and based on the findings of the E&S screening and subsequent assessment, the project-level ESMP needed to be customized for the subproject namely "Construction of 224 Houses in Gündüzbey Neighborhood Project in Yeşilyurt district of Malatya province" (hereinafter "the Project").

EMAY International Engineering and Consultancy Inc. (EMAY) under its assignment "Consultancy Services for Design Review and Reconstruction Supervision of Rural Housing" with the name of the 'supervision consultant' took the responsibility to prepare the ESMP in Annex-4 of the Environmental and Social Management Framework for the subproject. In the course of these studies, EMAY visited the subproject site in Gündüzbey Neighborhood in Yeşilyurt District on 28/02/2024 having phone interview with the Gündüzbey Mukhtar and examine the new location where the houses to be constructed.

It is the responsibility of the Contractor to regularly review, revise, and update the ESMP according to its planning and decisions. The ESMP contains site-specific measures developed based on the available information. During the planning and construction phases, adjustments to construction methods will be able to be made based on feasibility and technical considerations. In the event of such changes in the Contractor's construction approach, the ESMP will be reviewed and revised by the Contractor and then submitted to EMAY for review. The Contractor will ensure that the ESMP accurately reflects site conditions and will proactively incorporate any revisions into the plan. The Waste Management Plan, Pollution Prevention Plan, Labor Management Plan, OHS Plan, Community Health, Safety and Traffic Management Plan, etc., will be prepared by the Contractor, reviewed by EMAY and submitted to the PIU for approval, including the company's opinions.

3 Legal and Institutional Framework

The TERRP's ESMF provides a comprehensive overview of the legal and institutional framework in Section 3. This section outlines Türkiye's legal framework, followed by a brief explanation of the national environmental and social assessment regulatory process, including permitting, and identifies any disparities between the WB Environmental and Social Standards (ESSs) and legislative requirements.

During the development of the ESMP, both the WB ESSs and the national legislation applied for Project-related activities are taken into account. Feasible and effective mitigation measures are then documented based on these considerations.

The ESMF for the Project (both English and Turkish) could be found at the following website:

https://kadiyap.csb.gov.tr/cevresel-ve-sosyal-proje-dokumanlari-i-110820

4 Project Description

Within the scope of the Project, a total of 224 houses will be constructed in new location in Gündüzbey Neighborhood, Yeşilyurt district of Malatya province. The details regarding the neighborhood, number of houses and new location are summarized in Table 1, and in this section.

Table 1. Project Description

District / Province	Settlement	Number of Houses	New Location (lot/parcel)	Registry Status of the New Location
Yeşilyurt / Malatya	Gündüzbey neighborhood	224 houses in 14 buildings	0/4228	Raw soil

The parcel and the construction site as well as the close dwellings and facilities are shown in Figure 1 and Figure 2, and the distances to the close dwellings and other facilities and features are given in Table 2.

Table 2. Close Settlements and Other Movable/Immovable Assets to the Selected Parcel in Gündüzbey Neighborhood

Dwelling / Facilities / Features	Air Distance (m)
DW1	95
DW2	50
DW3	200
DW4	135
HEP Pond	348
DSI Channel*	14
HEP Channel	268
Neighborhood Center	830

* Trapezoidal rainwater drainage channel

The sub-project does not involve any risks of forced labor, child labor and other harmful forms of labor. Direct, contracted, local, and primary supply workers will be used in the construction process. Occupational health and safety risks will be managed by the hierarchy of controls. All measures will be involved in OHS Plan. With the measures to be taken during both the construction and operation phases, there will be no moving out, and people's business/commercial/livelihood activities will not be disrupted. Nor are any foreseen adverse impacts on the vulnerable individuals or groups.

Currently, the wastewater of Gündüzbey neighborhood is collected in the sewerage system belonging to the General Directorate of Water and Sewerage Administration of Malatya Metropolitan Municipality (MASKİ). Wastewater is treated in the Malatya Advanced Biological Wastewater Treatment Plant (WWTP) operated by MASKİ and discharged to the receiving environment. According to the information obtained from the MASKİ Sewerage Department, the current capacity of the WWTP is 135,000 m^3/day and there are additional treatment measures and applications such as package treatment on the sewer line in various settlements.

According to brief discussion made with the personnel of MASKİ Water and Sewerage Administration Directorate, there are wastewater collector (West Collector) and rainwater collector in Gündüzbey neighborhood, and the wastewater and rainwater collected from the buildings to be constructed within the scope of the Project can be connected to those collectors with approximately 1.5-km-long lines. It is also learnt that this line includes a road passage for which a permission/official letter from General Directorate of Highways (KGM) should be obtained.

The average daily wastewater amount to be generated by the of the right holders to be accommodated in the 14 buildings (224 houses) within the scope of the Project has been calculated. In the calculations, the average household size has been assumed to be 4 people/house[1] and the average daily wastewater production per

[1] According to Turkish Statistical Institution (TurkStat) data for 2023, the average household size in Malatya/Yeşilyurt district is 3.13, and for calculations this value is rounded up to 4 people/household. Retrieved from: https://biruni.tuik.gov.tr/ilgosterge/?locale=tr

person has been accepted as 197 liters/person-day[2]. Accordingly, wastewater amount is calculated as:

$$Wastewater\ amount\ = 224\ (house)\ x\ 4\left(\frac{person}{house}\right) x\ 197\left(\frac{liter}{person * day}\right) x\left(\frac{1\ m^3}{1000\ liter}\right) = 176.5\ \ m^3/day$$

Since the amount to be generated is approximately 0.13% of the Malatya WWTP current capacity, no extra load is expected on the existing wastewater infrastructure.

When it comes to the drinking and utility water, drinking water is supplied from natural sources and groundwater in Malatya without any treatment and is only chlorinated before being supplied to the network. The only water source that meets the drinking water needs of Yeşilyurt and Battalgazi districts, which make up the total population of 565,000 in the city center, is the Pınarbaşı spring that emerges within the boundaries of Gündüzbey Neighborhood.

Since the right holders within the scope of the Project have already resided in the Gündüzbey Neighborhood and have being used the existing water supplied, there will not be any extra load on the water supply system due to the Project.

[2] According to the TurkStat 2022 Water and Wastewater Statistics Bulletin (December 13, 2023), the average daily wastewater discharge per capita in municipalities is 197 liters/person-day, and this value has been used for calculations. Retrieved from: https://data.tuik.gov.tr/Bulten/Index?p=Su-ve-Atiksu-Istatistikleri-2022-49607

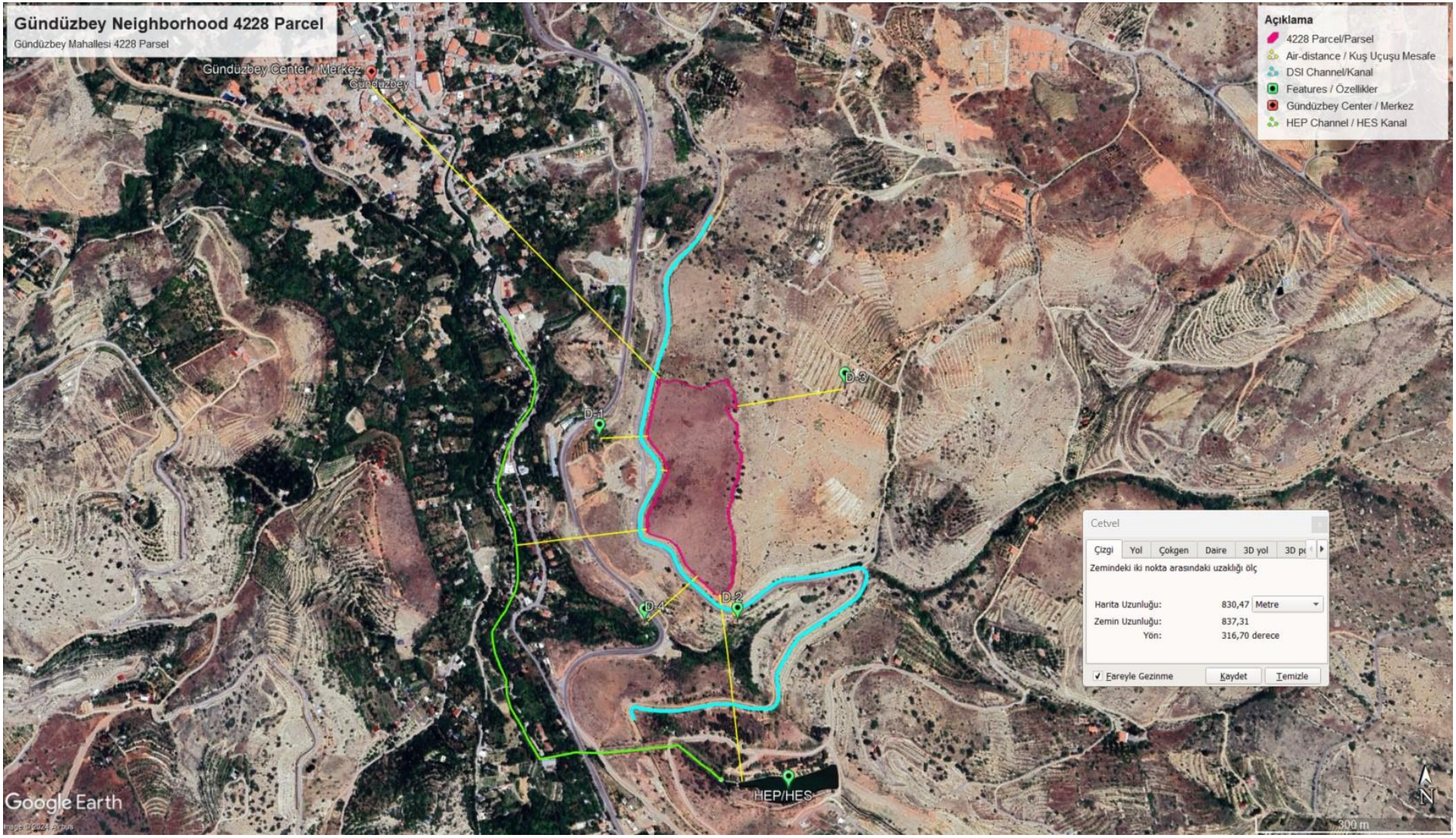


Figure 1. Satellite Image of 4228 Parcel

Figure 2. Area of Influence of Gündüzbey Project Area

5 Project Characteristics

Information regarding the houses to be built and some other matters is listed below:

- A total of 14 buildings will be built, with a total of 5 floors, including the basement (B), the ground floor (G), and 3 floors (B+G+3) and 4 flats on each floor. The number of the total number of houses/flats will be 224.
- The buildings to be constructed will be reinforced concrete structures and each flat will have 3 rooms and 1 living room.
- Each flat will have a gross area of 105.42 m^2 and a net area of 84.43 m^2.
- The closed construction area will be 35,000 m^2.
- The green area within the parcel will be 10,415 m^2.
- The number of workers of the Contractor are estimated to be maximum 400.
- The estimated duration for the completion of the construction is 12 months.
- Settlement Plan has been approved by MoEUCC.
- There will not be any construction of concrete plant within the scope of the Project. The concrete need for the construction of the buildings will be procured from the nearest licensed facility, which is located approximately 2 km from the construction area.
- Wastewater generated by the workers will be collected in the impermeable septic tank. Whereas, the wastewater collection system of the new buildings will be connected to the municipal sewage system ending with a wastewater treatment plant (WWTP). The more detailed information related to the subproject is given in Screening Form in Appendix 2.

6 Information Activities and Stakeholder Engagement for ESMP

The ESMP prepared for the Project was displayed at the entrance of construction site at least ten days before the meeting (See Appendix 4. The Photo of Public Disclosure of the ESMP dated 25.08.2024).

Table-3: The Place of the Photos of Public Disclosure of ESMP

Dessup	Province/District/Village	Place of the Photos Displayed
Group-4	Gündüzbey	Construction Site

Following the disclosure of the ESMP, the Mukhtar of Gündüzbey Neighborhood was contacted to organize an Information Meeting at the Şehit Levent Coşkun İlk-Ortaokulu on the 14th of September, 2024. An announcement was made by the Mukhtar from an online group that included all villagers. With this announcement, rights holders and everyone (especially women) who might be affected by the project activities were invited to the meeting.

On 14 September 2024, a meeting was conducted at the Şehit Levent Coşkun İlk-Ortaokulu within the Gündüzbey Neighborhood. A total of 142 individuals participated, consisting of 81 women and 61 men.

Table-4: Stakeholder engagement meetings in the villages listed under DESSUP-03

Dessup	Province/District/Village	Number of Rural Houses to be Constructed	Date of the Meeting	Number of Participants	
				Male	Female
Group-1	Gürçubuk	14	16.07.2024	17	13
	Halkalı	10	16.07.2024	7	13
	Çevrecik	17	17.07.2024	8	20
	Saman	36	17.07.2024	15	14
	Haberci	2	17.07.2024	13	6
Group-2	Bakladamlar	10	16.07.2024	18	6
	Çakmakkaya	38	04.04.2024	26	15
	Erimli	38	03.04.2024 16.07.2024	24	10
	Kambertepe	56	03.04.2024	19	9
	Ormanpınar	29	03.04.2024	27	5
Group-3	Poyraz	1	18.07.2024	17	9
	Üçağaç	5			
	Alpavut	3			
	Yukarıçakmak	2			
	Cip	19			
	Alaca	9	18.07.2024	21	6
	Altınkuşak	3			
	Alatarla	1			
	Çamyatağı	13	19.07.2024	18	12
	Salkaya	2			
Group-4	Gündüzbey	224	14.09.2024	61	81

Among the attendees of the information meeting were Malatya Provincial Director of Environment, Urbanization and Climate Change from the MoEUCC; Social Experts, Civil Engineers, Environmental Engineer and technical team member from the Audit Consultant (EMAY); a representative from the Contractor (MFK Engineering Const. Inc. & Abdulvahap Yılmaz Joint Venture); and the Mukhtar (See Appendix 5. ESMP Information Meeting Participant List).

The meeting commenced with the opening speech of Malatya Provincial Director and followed by the Project presentation by EMAY's Social Expert, Environmental Expert and Civil Engineers (See Appendix 6. Stakeholder Engagement Meeting Presentation). During the face-to-face

meeting, speakers provided information about the Project and its environmental, social requirements and the grievance redress mechanism (See Appendix 7. Stakeholder Engagement Meeting Photos). The project brochures were distributed to all attendees (See Appendix 8. Project Brochure), including the Mukhtar. The project poster was hung at the entrance of the Şehit Levent Coşkun İlk-Ortaokulu and Mukhtar's office. (See

Appendix 9. Project Poster).

Following the presentation, questions were raised by the participants and answered by the field experts. Information regarding the Q-A session can be found in the following table:

Table 5. Public Participation Meeting-Questions and Answers

Querist	Respondent	Question Raised	Answer Given
Neighborhood Resident	Administration (Malatya Provincial Director of Environment, Urbanization and Climate Change)	Rights holders asked what the cost of the houses to be delivered would be.	It was stated that there is no clear figure yet, but cost calculations will be made by the Administration. A discount may be applied (if deemed appropriate) by the Presidency. It was also stated that the loan conditions will be structured as a 20-year loan with no repayment for the first two years and interest-free for the following 18 years. Finally, it was emphasized that items such as basement and landscaping will not be included in the price.
Neighborhood	EMAY	It was asked whether the houses to be delivered could	It was reported that the newly built houses were 105 square

Resident	(Environmental Engineer)	be 120 square meters gross.	meters gross in order to place the largest possible number of families/rights holders in the construction area.
Neighborhood Resident	Administration (Malatya Provincial Director of Environment, Urbanization and Climate Change)	It was asked whether social facilities would be built.	It was stated that financial resources were primarily transferred to housing construction within the scope of "emergency" plan, but a preliminary study for social facilities such as bakeries, markets and masjids was carried out by the Directorate General of Construction Works.
Neighborhood Resident	Administration (Malatya Provincial Director of Environment, Urbanization and Climate Change)	It was asked to whom and how the houses would be given.	It was reported that the completed houses will be transferred to AFAD. The rightful owners will receive their houses through a draw, and only the rightful owners residing in Gündüzbey Neighborhood will participate in this lottery.
Neighborhood Resident	Administration (Malatya Provincial Director of Environment, Urbanization and Climate Change)	It was reminded that 224 houses will be built but there are 250 beneficiaries, and then asked whether those who were not awarded a house in the draw had to suffer from their bad luck.	It was stated that the administration is working on this inconvenience and a definitive program has not been formed yet; but if any program is finalized, it will be announced to the public immediately.
Neighborhood Residents	EMAY (Social Expert)	A group of women who are not rights holders but residing in the container city stated that they had to live as tenants before the earthquake and will be tenants after the construction completed. They added that they have been living in containers with the elderly and children and feeling uneasy and worried about the future because they are not rights holders. They asked whether the Project offers anything for them.	It was reported that those who do not own houses or have houses with moderate damages are not entitled within the scope of this Project. Only those who lost their houses or have severely damaged houses can benefit from the Project.
Neighborhood Residents	EMAY (Social Expert)	It was asked whether there was a priority or quota for the elderly or people with disabilities.	It was reported that the entitlement was determined by AFAD. It was added that elderly or people with disabilities had to become the rightful owners of the houses first. Only then, and if they apply, interior arrangements can be made in accordance with their needs or disabilities.

Neighborhood Resident	Administration (Malatya Provincial Director of Environment, Urbanization and Climate Change)	A resident, who complained about the uncertainties of life and the living conditions in the container city, asked when the houses would be delivered.	It was stated that the houses will be delivered within a year and, if any, construction-related problems will be resolved within the following year.

In the Q&A session held after the presentation, Malatya Provincial Director provided general information about the Project. It was reminded that housing construction was carried out in all provinces affected by the earthquake with a serious cost to the country's budget, and that the primary goal was to deliver the newly built houses to their rightful owners as soon as possible. It was emphasized that the Project had to ensure optimal use of time and cost in line with the determined target. For this reason, it's not possible to take all the demands into consideration, or revise designs based on individual requests.

7 Environmental and Social Management Plan

The Table below outlines the Environmental and Social Management Plan (ESMP), which delineates the requisite measures for the construction Contractor to adhere to during Project activities. This plan also encompasses foreseen environmental and social risks and impacts specific to the sub-project, along with recommended mitigation measures. It provides details on the stages where these risks and impacts are expected, indicators within the monitoring system, monitoring frequency, assigned responsibilities, and estimated costs. The ESMP thoroughly articulates the strategies to address these risks and impacts throughout the project timeline.

EMAY will oversee the implementation of specified measures, the Contractor's implementation system, organizational structure, site-specific Environmental and Social (E&S) Management Plans, their efficacy, and the monitoring plan to be enforced by the Contractor. The Contractor will be subject to supervision to establish an effective system for managing and monitoring E&S concerns related to sub-project activities. Besides, the Contractor will review the ESMP prepared by the Consultant and commit to implement it or prepare the C-ESMP, if needed. The Contractor shall also prepare sub-management plans, e.g. Waste Management Plan, Pollution Prevention Plan, Labor Management Plan, OHS Plan and Community Health, Safety and Traffic Management Plan, etc. and submit them to the consultant for review. The consultant in turn will send these documents with his/her comments to the PIU for approval.

Table 6. Environmental and Social Management Plan

Potential Risks and Impacts	Proposed Mitigation Measures	Phase			Indicators for monitoring	Frequency			Responsibility for Implementation and Monitoring	Estimated Cost
		Planning	Construction	Operation		Continuous	Monthly	Quarterly		
General for All Construction Works										
Environmental and Social Management: Inadequate management of environmental and social risks and impacts	The Contractor will prepare and submit for approval and subsequently implement its Contractor ESMP (C-ESMP). **The C-ESMP should be submitted prior to the commencement of construction works and no construction activities will be carried out under the Project until approval of the C-ESMP.** The C-ESMP will include at least the following site-specific management plans where the necessary outlines are given in the ESMF of TERRP: • Occupational Health and Safety (OHS) Plan including Risk Assessment Report and Emergency Response Plan (ERP) • Community Health, Safety (CHS) and Traffic Management Plan (can be prepared separately as CHS Management Plan and Traffic Management Plan (TMP)) • Waste Management Plan (WMP) • Pollution Prevention Plan (PPP) • Chance Find Procedure (CFP) • Water Supply and Wastewater (WSWW) Management Plan • Labor Management Plan to be prepared in accordance with project LMP • Grievance Redress Mechanism (GRM)	**X**	**X**		All sub-management plans are approved prior to construction and implemented throughout the construction period.		**X**		Contractor (*implementation*) Supervision Consultant (*supervision*)	Included in the cost of construction
	At least one full-time Class A/B OHS Specialist, one full-time Environmental Specialist and one full-time Social Specialist are employed before starting construction work. The Contractor will submit the	**X**	**X**		Relevant E&S staff is mobilized and maintained throughout the		**X**		Contractor (*implementation*)	Included in the cost of construction

	resumes of those specialists for approval. These specialists should be present at the site throughout the construction period.				construction period				Supervision Consultant (*supervision*)	
	The Contractor will prepare a Training Program and provide training to all its workers, before the start working on site, on basic environmental, social, health and safety (ESHS) risks associated with the proposed construction works and the workers' responsibility. The Training Program will be repeated on a monthly basis. The Contractor's monthly training program will also cover topics related to Code of Conduct such as sexual harassment particularly towards women and children, violence, including sexual and/or gender-based violence and respectful attitudes while interacting with the local community.	**X**	**X**		Training Program approved and all relevant staffed are trained. Training records		**X**		Contractor (*implementation*) Supervision Consultant (*supervision*)	Included in the cost of construction
	All necessary permits will be obtained and the installation of facilities is ensured before the construction. The permits which may be needed for the Project but not limited to the followings: • Official letters/permits from relevant governmental agencies (DSI 9th Regional Directorate for the trapezoidal rainwater drainage channel, HEP pond (if necessary), etc.) • Official letters/permits from Türkiye Electricity Distribution Inc. (TEDAŞ) for the electric poles and lines within the selected parcel if the relocation of the poles are essential • Official letters/permits to connect the water supply and sewage systems to the existing networks of MASKİ • Official letters/permits from KGM for the road passages of the new sewer and rainwater lines to be connected to existing networks • Land use permits (if necessary)	**X**			Permissions and relevant official letters	**Once before the start of construction**			Contractor (*implementation*) Supervision Consultant (*supervision*)	Included in the cost of construction

	• Waste disposal permits from the Yeşilyurt Municipality or Malatya Metropolitan Municipality • Environmental permits (if necessary) • Water usage permits from the DSI (if necessary) • Waste disposal protocols with licensed disposal facilities and/or Yeşilyurt Municipality or Malatya Metropolitan Municipality • Excavation waste disposal protocols with Yeşilyurt Municipality or Malatya Metropolitan Municipality • Electricity connection and usage permits								
Air Quality: Dust generation around the Project site due to construction activities, and emissions from construction equipment and vehicles	Dust from exposed work sites will be minimized by applying water on the ground regularly during the dry season. Construction debris will be kept in a controlled area and sprayed with water to reduce debris dust. Stockpile of aggregate materials will be kept covered to avoid suspension or dispersal of fine dust particles during windy days or disturbance from stray animals. In case of pneumatic drilling during excavation, dust will be suppressed by ongoing water spraying and/or construction dust screen enclosures at the site. The surrounding environment such as roads, etc. will be kept free of debris to minimize dust. The construction/waste materials at the site will not be burned. Construction vehicles will not be run idle on construction sites. The operation hours of generators/machines/ equipment/vehicles will be reduced as appropriate. Vehicle speed will be controlled when driving through community areas is unavoidable so that		**X**		Visual inspection of air quality control measures Records of maintenance Records of complaints	**X**			Contractor (*implementation*) Supervision Consultant (*supervision*)	Included in the cost of construction

	dust dispersion from vehicle transport is minimized. The trucks that transport materials will be covered to decrease dust emissions. Protective barriers will be installed to prevent the dwellings from dust if necessary. Dust measurements will be conducted by an authorized laboratory accordingly if any grievance regarding dust generation is received from the nearest receptors. If measured levels are above limit values, mitigation measures will be enhanced in this respect, i.e., increasing wet suppression / watering activities, applying non-toxic chemicals, further reducing speed/traffic.									
Noise: Noise generation due to construction vehicles and equipment	The construction activities will be limited to the restricted times defined in the national legislation and plan activities in consultation with nearby communities so that the noisiest activities are undertaken during periods that will result in the least disturbance. During operation, the engine covers of generators, air compressors, and other powered mechanical equipment will be closed, and equipment placed as far as away from residential/community areas as possible. All equipment will be maintained to keep it in good working order by manufacturing maintenance procedures and installing acoustic enclosures around generators to reduce noise levels. When needed and feasible, noise-control methods such as fences, barriers or deflectors (such as muffling devices for combustion engines or planting of fast-growing trees) will be used. Unnecessary use of alarms, horns and sirens will be avoided. Project transportation through community areas will be minimized. A buffer zone (such as open spaces, rows of trees or vegetated areas) between the project site and		**X**		Visual/audial inspection of noise control measures Records of complaints	**X**			Contractor (*implementation*) Supervision Consultant (*supervision*)	Included in the cost of construction

	residential areas will be created to lessen the impact of noise to the living quarters. Noise measurements will be conducted if any grievance regarding noise generation is received from the nearest receptors. If measured levels are above limit values, mitigation measures will be enhanced in this respect, i.e., installing acoustic barriers for mechanical equipment, limiting the hours of operation for specific pieces of equipment or operations, etc.									
Occupational Health and Safety: OHS-related risks due to unsafe practices and hazards at work sites such as work at height, rotating and moving equipment, electrical safety, working with hazardous materials, etc.	When planning activities, following steps should be considered with OHS specialist to avoid people getting injured: • Construction place: Are there any hazards that could be removed or should warn people about? • The people who will be taking part in construction: Do the participants have adequate skill and physical fitness to perform their work safely? • The equipment: Are there checks you could do to make sure that the equipment is in good working order? Do people need any particular skills or knowledge to enable them to use it safely? • Electricity safety: Do any electricity good practices such as the use of safe extension cords, voltage regulators and circuit breakers, labels on electrical wiring for safety measures, awareness on identifying burning smells from wires, etc. apply at the site? Is the worksite stocked with voltage detectors, clamp meters and receptacle testers?	**X**			Visual inspection Employee records Equipment records		**X**		Contractor (*implementation*) Supervision Consultant (*supervision*)	Included in the cost of construction
	Appropriate signposting will be provided in the construction sites and the workers will be informed about key rules and regulations to follow. The contractor's OHS specialist will provide a brief		**X**		Visual inspection of control measures OHS records	**X**			Contractor (*implementation*) Supervision	Included in the cost of construction

	daily toolbox talk to the construction workers on OHS risks associated with the construction activity that will be carried out on that particular day that particular day. The Contractor will ensure a safe working environment for the workers and before construction activities will supply appropriate Personal Protective Equipment (PPE) in line with international best practice and Turkish Legislation (hard hats, gloves, dust masks, goggles, harnesses and safety boots, etc.). All activities will be implemented in line with both the Law on Occupational Health and Safety (Official Gazette No:28339, dated June 30, 2012) and its relevant regulations and also with the WBG EHS Guidelines. The Contractor will immediately notify the MoEUCC PIU (through supervision consultants) about any serious incident which may have significant adverse effects on the environment, the affected communities, the public or workers. Then, MoEUCC will notify the WB about any serious incident in 48 hours and send an incident investigation report together with the root cause analysis and corrective action plan in 30 days to the WB.				Employee records Incident statistics and records Records of workers' complaints				Consultant (*supervision*)	
	The worksite will be kept clean and free of debris on a daily basis. First aid kit with bandages, antibiotic cream, etc. will be provided at the construction sites, and controlled regularly (monthly). Following safety guidelines will be ensured for the storage, transport, and distribution of hazardous materials aiming to minimize the potential for misuse, spills, and accidental human exposure. Corrosive fluids and other toxic materials will be kept in properly sealed containers for collection and disposal in properly secured areas. It will be ensured that structural openings are covered/protected adequately.		**X**		Visual inspection of control measures OHS records Employee records Incident statistics and records Records of workers' complaints	**X**			Contractor (*implementation*) Supervision Consultant (*supervision*)	Included in the cost of construction

	Loose or light material that is stored on roofs or open floors will be secured. It will be ensured keeping hoses, power cords, welding leads, etc. from laying in heavily travelled walkways or areas. During heavy rains or emergencies of any kind, all work will be suspended. The below measures will be followed for construction involving work at height: • Do as much work as possible from the ground. • Do not allow people with the following personal risks to perform work at height tasks: eyesight/balance problem; certain chronic diseases – such as osteoporosis, diabetes, arthritis or Parkinson's disease; certain medications – sleeping pills, tranquilizers, blood pressure medication or antidepressants; recent history of falls – having had a fall within the last 12 months, etc. • Only allow people with sufficient skills, knowledge and experience to perform the task. • Check that the place (e.g., a roof) where work at height is to be undertaken is safe. • Take precautions when working on or near fragile surfaces. • Clean up oil, grease, paint, and dirt immediately to prevent slipping; and • Provide fall protection measures e.g. safety hardness, and simple scaffolding/guard rail for working at height. The contractor will hire trained operators for the safe operation of specialized vehicles such as forklifts, including safe loading and unloading.				Training records of workers for specific tasks such as working at height, working with electric, etc.					

	Moving equipment with restricted rear visibility will be outfitted with audible backup alarms. A flagman will be provided to each moving equipment operator to guide the movement of equipment. The contractor will mark all energized electrical devices and lines with warning signs. The contractor will check all electrical cords, cables, and hand power tools for frayed or exposed cords and follow manufacturer recommendations for the maximum permitted operating voltage of the portable hand tools. There will be a leakage current relay in electrical panels. Both trainings and incidents (fatalities, lost time incidents, any significant events including spills, fire, etc.) including near-misses will be recorded.		**X**		Visual inspection of control measures OHS records Employee records Incident statistics and records Records of workers' complaints	**X**			Contractor (*implementation*) Supervision Consultant (*supervision*)	Included in the cost of construction
Community Health and Safety: Community health and safety risks associated with construction activities including traffic and road-related risks (such as risks to the population due to inadequate construction and traffic management) from increased traffic volume and movement of heavy-duty vehicles	The construction area will be surrounded by rope or a similar material and material stocks/storage areas will be kept away from the public. Warning signs will be posted, including in unsafe areas. Children will not be allowed to play in construction areas. All earth borrow-pits will be filled in once construction is completed to avoid standing water, water-borne diseases and possible drowning. The driving speed of vehicles will be controlled particularly when passing through a community or nearby school, children park, health center or other sensitive areas. If school children are in the vicinity, include traffic safety personnel to direct traffic during school hours. The project site will be illuminated during the night. The surrounding construction area will be kept clean, without waste disposed of there. The broken glass will be cleaned immediately to avoid any fires. Safety guidelines will be followed for transportation of hazardous materials to the site aiming to minimize the potential for spills and accidental		**X**		Visual inspection of control measures Traffic accident records Records of complaints	**X**			Contractor (*implementation*) Supervision Consultant (*supervision*)	Included in the cost of construction

	human exposure due to traffic accidents. Regular maintenance of vehicles will be carried out to minimize potentially serious accidents caused by equipment malfunction or premature failure. The local people will be informed about the work to be carried out, including the measures taken regarding communicable diseases relating to labor influx and post-disaster context (i.e., COVID-19 virus), using appropriate communication tools and methods (e.g., online/virtual and/or physically) in areas accessible to all stakeholders (including work sites). In case of any epidemic or pandemic / communicable disease, including COVID-19, the guidance, guidelines, and recommendations to be provided by the Ministry of Health, the Ministry of Family and Social Services, the Ministry of Labor and Social Security, and the World Health Organization will be followed, and all relevant measures will be taken for both employees and workplaces in terms of OHS and CHS. In addition, all construction works will follow the WB guidelines to minimize the risk of COVID-19 transmission during the execution of civil works. Any traffic diversions will take into account the needs of disabled persons. The Contractor will ensure that the construction site is properly secured and construction-related traffic regulated properly (including proper route planning). This will include but not be limited to the following: • Signposting, warnings, barriers, and traffic diversions: the site will be visible, and the public warned of all potential hazards. • Traffic management system and staff training, especially for site access and near-site heavy traffic. Provision of safe passages and crossings for pedestrians									

	where construction traffic interferes. • Adjustment of working hours to local traffic patterns, e.g. avoiding major transport activities during rush hours or times of livestock movement. • Active traffic management by trained and visible staff at the site, if required for a safe and convenient passage for the public. • The Consultant will train all Contractor staff on SEA/SH, Gender Equality and GBVH and explain the Code of Conduct in detail. All staff employed on the project will sign a written commitment to comply with the Code of Conduct. The sub-project will introduce a Code of Conduct for all staff working in the field and establish a Grievance Redress Mechanism for project staff.									
Land Acquisition and Resettlement: Involuntary land acquisition and relocation of community members to new resettlement plots (if needed), including livelihood impacts	Since there is no land acquisition or expropriation for the Project's land use, there is no need to prepare a Resettlement Plan (RP). However, the Contractor will conduct its activities in coordination with the supervision consultant. WB ESS5 will be followed in relevance with the Turkish legislation. There is no physical or economic displacement or resettlement envisaged within the scope of the Project. However, if any damage occurs to third-party assets, lands, crops, etc. during construction activities, the Contractor will compensate the damage according to WB ESS5 requirements, based on the "full replacement cost." In addition, if any damage is done by the project activities to private lands, crops, animals, etc. the near the construction site, it will be compensated by the Contractor. Categories of stakeholders, particularly the vulnerable groups, will be monitored closely, and Stakeholder Engagement Plan (SEP) and Grievance	**X**			Records of complaints Records of compansation payments (if any)		**X**		Contractor (*implementation*) Supervision Consultants (*supervision, support to Contractor, if required*)	Included in the cost of construction

	Redress Mechanism (GRM) will be implemented properly.									
Water Quality and Wastewater: Water pollution in nearby surface waters due to wastewater/waste generated at the construction area due to construction activities	The site will establish appropriate erosion and sediment control measures such as hay bales and/or silt fences to prevent sediment from moving off-site and causing excessive turbidity in nearby surface waters. Storage or disposal of generated wastewater on the site will be minimized. Temporary or final waste disposal and wastewater discharge without treatment near/in surface waters (such as trapezoidal rainwater drainage channel of the DSI, HEP Pond and HEP channel near the construction area) is strictly forbidden to prevent possible adverse impacts on surface waters. No soiled materials, solid wastes, toxic or hazardous materials will be stored in, poured into or thrown into water bodies/dry stream beds/channels for dilution or disposal. The training on the waste management/ environmental awareness will definitely include and emphasis those issues. The DSI rainwater channel adjacent to the selected parcel will be integrated into project design if feasible and appropriate. This integration includes the positioning of buildings and roads in the settlement plan. If deemed necessary and appropriate, various fences and similar barriers on the edges of the DSI channel will be placed, separating them from the project area. Construction vehicles and machinery will be washed only in areas where runoff will not pollute natural surface waters. The wastewater generated by the workers will be deposited in an impermeable septic tank in accordance with "Regulation on Pit Opening Where Sewer System Construction is not Applicable" published in Official Gazette No: 13783 dated 19.03.1971. Toilets with temporary septic tank might be used for this purpose as well. Septic tank		**X**		Visual inspection of control measures Septic tank effluent disposal records (if any) Effluent quality measurement records (if any) Records of complaints	**X**			Contractor (*implementation*) Supervision Consultant (*supervision*)	Included in the cost of construction

	effluent will be removed periodically by sewage trucks, and disposal will be provided within the scope of the protocol to be made with the Malatya Metropolitan Municipality that has a licensed wastewater treatment plant (WWTP). The Protocol will be submitted to the PIU. The wastewater collection system of the new buildings will be connected to the existing municipal sewage system in Gündüzbey neighborhood, which is connected to the MASKİ WWTP. It would be appropriate for the contractor to check this issue first and take the necessary actions. Activities will not affect the availability of water for drinking and hygienic purposes. The drinking water (tap water) system of the new houses will be connected to existing system near the construction site. It would be appropriate for the contractor to check this issue first and take the necessary actions. The flow of natural waters will not be obstructed or diverted in a manner that could lead to drying of river beds or inundation of residential areas. Concrete works will be separated from waterways, especially HEP and DSI channels, and mixing will be kept separate from drainage to waterways									
Soil and Groundwater Quality: Soil and groundwater pollution due to improper waste management and accidental spills, and soil erosion	The mitigation measures specified in the "Solid and Hazardous Waste" section will be applied for proper waste management. Residual (left out) concrete in concrete mixers will not be allowed to wash out into the construction site, its vicinity, or access roads of construction sites. Related trainings will be provided to concrete mixer drivers. Hazardous and dangerous chemicals and materials will be secured in a designated storage area to prevent spillage and tip-over. Semi-used chemical-containing containers will have lids and lids will be closed while they are not in use.		**X**		Visual inspection of control measures Incident records Training records Records of complaints	**X**			Contractor (*implementation*) Supervision Consultant (*supervision*)	Included in the cost of construction

	In case of a spill of any hazardous material or hazardous wastes, spill prevention methods will be put in place in order to limit the exposure area. Workers who might intervene in such incidents will have relevant trainings on emergency response to spills. Proper spill kits will be placed at appropriate locations in the construction area. Construction will be scheduled during the dry season if appropriate. The length and steepness of slopes will be contoured and minimized. Mulch, grasses or compacted soil will be used to stabilize exposed areas. Topsoil will be quickly laid on the construction areas once work is completed, and these areas will be revegetated (grass, fast-growing plants/bushes/trees will be planted). Channels and ditches will be designed for post-construction flows and line steep channels/slopes (e.g., with palm frowns, jute mats, etc.).									
Solid and Hazardous Waste: EHS risks due to inappropriate management of waste generated due to construction activities (such as construction demolition wastes, hazardous waste, biodegradable waste, recyclable waste, non-hazardous waste, etc.)	Wastes will be managed in accordance with the waste management hierarchy (prevent, reduce, reuse, recycle, recover, dispose) and personnel will be trained to raise awareness on waste management. Waste will be segregated as recyclable, hazardous and non-hazardous waste. Mineral construction wastes will be separated from general refuse, organic, liquid, and chemical wastes by on-site sorting and stored in appropriate containers. Non-hazardous wastes, inert and biodegradable wastes and also recyclables will be collected separately, and special attention will be paid to prevent hazardous wastes from mixing with other types of waste. Collection, storage and transportation of waste to appropriately designated /controlled licensed disposal areas/facilities (such as excavation waste		**X**		Visual inspection of control measures Waste generation and disposal records Training records Records of complaints	**X**			Contractor (*implementation*) Supervision Consultant (*supervision*)	Included in the cost of construction

	storage areas, sanitary landfills, recycling/recovery facilities, etc.) will be ensured. An official letter stating that these wastes will be accepted to licensed sites will be submitted to PIU. Temporary waste storage area (to be established at the construction area) should be on impermeable ground, covered with a roof, and equipped with a suitable drainage system, proper spill kits and appropriate firefighting equipment. Wastes will be temporarily stored in this area in separate compartments (labeled with waste codes) according to their types in order not to react with each other. Except for medical wastes, hazardous wastes will be stored in the temporary waste storage area for a maximum of six (6) months and non-hazardous wastes for a maximum of one year. If one thousand kilograms or more per month hazardous waste is produced, a temporary storage permit will be obtained from the PDoEUCC. Excavation waste will be re-used for backfilling purposes as much as possible and recovery and other re-use options will be considered as appropriate. The excess excavation waste will be transported and disposed of separately by licensed transport vehicles to existing licensed excavation waste storage area(s), identified by the relevant governmental authorities, in the district/region. Municipal solid waste will be collected by the Yeşilyurt Municipality or Malatya Metropolitan Municipality within the scope of the protocol to be made. Hazardous waste will be transferred to a licensed disposal facility via licensed waste transportation companies, and recyclable wastes to a relevant licensed recycling/recovery facility. All protocols will be submitted to the PIU. On-site storage of wastes prior to final disposal (including earth dug for foundations) should be at least 300 meters from rivers, streams, lakes and wetlands. A secured area will be used for refueling and									

	transfer of other toxic fluids distant from the settlement area (and at least 50 meters from drainage structures and 100 meters from important water bodies); ideally on a hard/non-porous surface. Workers will be trained on correct transfer and handling of fuels and other substances and require the use of gloves, boots, aprons, eyewear and other protective equipment for protection in handling highly hazardous materials. Small amounts of maintenance materials such as oily rags, oil filters, used oil, etc. will be collected and properly disposed of. Spent oils will never be disposed of on the ground and in water courses as they can contaminate soil and groundwater (including drinking water aquifers). After each construction site is decommissioned, all debris and waste will be cleared. All records of generated waste and disposal will be kept. Whenever feasible, the Contractor will reuse and recycle appropriate and viable materials. Temporarily storage on site of all hazardous or toxic substances will be in safe containers with labels detailing composition, properties, and usage information. The containers of hazardous substances will be placed in a leak-proof container to prevent spillage and leaching. It is forbidden to use unapproved toxic materials including lead-based paints, un-bonded asbestos, etc.									
Stakeholder Engagement and Grievance Mechanism: Construction-related complaints and temporary disruption to the local community including eligible property owners	The relevant measures suggested in the SEP will be taken and followed. Early liaison and effective communication will be carried out with local people (including those with special needs) who may be affected by the work of the contractor and supervision consultant. A liaison program will be implemented during the		**X**		Records of complaints Stakeholder engagement records		**X**		PIU (*implementation*) Supervision Consultant (*supervision*)	Included in the cost of construction

	construction process to make sure that the local environment is overseen and the well-being of residences is protected. The supervision consultant will appoint a certain person(s) accountable for community liaison. This person(s) will engage with the community to provide the appropriate information and to be the first line of response to resolve issues of concern. Grievance boxes will be located at the bus stop (İsmet Paşa Cad.), at the entrance of the government's health center in the village and at the construction site. The locations of the boxes should and will be accessible by all, especially by disadvantageous groups like women, children, and disabled people. Moreover, the needs, demands and complaints of local people and right holders will be collected both at the participation meetings and via a designated telephone number (i.e., via WhatsApp, direct massages and direct calls). Accordingly, the Project Grievance Redress Mechanism will be operated by the opening and closing of forms and complaints. The names and contact telephone numbers and e-mail addresses of all site personnel with responsibilities for both supervision and management of the works will be displayed on the site hoarding. The former mukhtar in Gündüzbey neighborhood was informed during the screening studies regarding the construction activities, and newly elected mukhtar after 31 March elections will be informed about the construction activities to avoid any social conflict/disturbance. Once planning consent is obtained, those who could potentially be affected by the construction of the houses will be informed via the mukhtar. The consultation will be proceeded with the relevant E&S risk management instruments. Outside normal working hours, security personnel will act as the main point of contact via a designated									

	phone number. Security will alert the person(s) accountable for liaison, if necessary (available 24 hours). All workers will sign/commit to and be trained on the Code of Conduct to manage the potential adverse impacts on social cohesion and Sexual Exploitation and Abuse/Sexual Harassment (SEA/SH) risks. Received complaints will be logged, fully investigated, and responded to quickly, with some suitable advice about the action to be taken. Complaints will be registered and reported to the Contractor, Supervision Consultant and also PIU. Public notice boards will be set at site entrances providing contact details of the person(s) accountable for liaison.									
Labor and Working Conditions: Risks associated with potential labor influx and presence of worker camps (such as accommodation conditions, child labor risks, gender-based violence and harassment, human rights risks, etc.) and other labor issues	The relevant measures in labor management plan to be prepared in accordance with project LMP will be followed. Workers will be provided with information and documentation that is clear and understandable regarding their terms and conditions of employment such as their rights under national labor and employment law (which will include any applicable collective agreements). Workers will be paid on a regular basis as required by national law and project LMP. Workers will be provided with adequate periods of rest per week, annual holiday and sick, maternity and family leave, as required by national law and project LMP. Workers will receive written notice of termination of employment and details of severance payments in a timely manner. Workers will be employed on the principle of equal opportunity and fair treatment, and there will be no discrimination with respect to any aspects of the employment relationship.		**X**		Visual inspection of control measures Health records Employee records Training records Records of workers' complaints	**X**			Contractor (*implementation*) Supervision Consultant (*supervision*)	Included in the cost of construction

	Project workers, including specific groups of workers, such as women, people with disabilities, migrant workers and children of working age, will be provided with appropriate measures of protection and assistance in line with ESS2 of WB ESF. This process will be executed in accordance with the project LMP. It is expected that some external labor will be hired for the sub-project site and these workers may come to the village center for supplies during the construction process. Everyone working for the project will be given training on gender equality and gender-based violence, as well as the rules of conduct determined by the World Bank. The same training for workers working on the construction site also includes grievance mechanisms for them. All staff employed on the project will sign a written commitment to comply with the Code of Conduct. Workers are allowed to participate, or seek to participate, in workers' organizations and collective bargaining or alternative mechanisms. Children under the minimum age of 18 will not be employed or engaged by the Contractor in connection with this sub-project. Forced labor, which consists of any work or service not voluntarily performed that is exacted from an individual under threat of force or penalty, will not be used in connection with this sub-project. A worker's GRM will be established by the Contractor at the construction site for all workers to raise workplace concerns. Contact details of the worker's GRM will be provided. All workers will receive training about their rights under national labor and employment law and regarding the GRM upon recruitment and before the implementation of the work. Code of Conduct will be shared with project workers during employment. All workers are obliged to comply with the Code of Conduct and sign									

	relevant documentation at the time of employment. Movement in and out of the construction site will be controlled, and unauthorized access to the site will be prevented. Contractor will confirm that workers are fit for work before they start work, paying special attention to workers with underlying health issues or who may be otherwise at risk. The Contractor will provide information and awareness of communicable diseases to workers. The Contractor will provide safe drinking water, adequate toilet facilities, accommodation, rest and dining areas for the workers. The Contractor will provide a first aid kit with bandages, antibiotic cream, etc. or health care facilities, and shall identify and train an adequate number of workers to provide first aid during medical emergencies. The Contractor will comply with the provisions of Workers' Accommodation: Processes and Standards – A Guidance Note by International Finance Corporation (IFC) and European Bank for Reconstruction and Development (EBRD) for the conditions of camp sites/worker accommodation areas.									
Cultural Heritage: Chance find	Cultural or historic protected sites within the Gündüzbey neighborhood center will not be disturbed. Tangible or intangible values and heritage important to the local people will not be damaged. If encountered with any cultural heritage/assets, chance find, during construction works (especially excavation and earthworks), the Chance Finds Procedure (CFP) (see Annex-9 of ESMF of the project) will be implemented.		**X**		Chance find records		**X**		Contractor (*implementation*) Supervision Consultant (*supervision*)	Included in the cost of construction
Biodiversity: Potential risks to flora and fauna due to construction activities	If trees need to be cut in new resettlement plot, at least two times more than the trees cut will be planted at the site (preferably a site in the nearby	**X**			Tree plantation records			**X**	PIU	Included in the cost of construction

and improper waste management	region) identified by the General Directorate of Forestry, as per the commitment of the MoEUCC within the scope of the Project.									
	There will be no cutting of trees or destruction of vegetation other than on construction site. No hunting, capture of wildlife or collection of plants are allowed.		**X**		Visual inspection of control measures	**X**			Contractor (*implementation*) Supervision Consultant (*supervision*)	Included in the cost of construction
Specific to Road Construction Works										
General Considerations	Road construction in unstable soils, steep slopes and nearby stream banks will be avoided. Additional measures (see the section below on slope protection) need to be applied where there is no alternatives for road alignments.	**X**			Design approval	**Once during design**			PIU	
	Placement of all construction waste (including earth cuts) to approved disposal sites (at >300 m from streams,) will be controlled. Erosion control measures should be implemented before the rainy season begins, preferably immediately following construction. The measures will be maintained and reapplied until vegetation is successfully established. Sediment control structures should be applied where needed to slow or redirect runoff and trap sediment until vegetation is established.		**X**		Visual inspection of control measures	**X**			Contractor (*implementation*) Supervision Consultant (*supervision*)	Included in the cost of construction
Slope protection	Protect slopes from erosion and landslides by the following measures: • Indigenous Species, fast-growing grass will be used on slopes prone to erosion. These grasses help stabilize the slope and protect soil from erosion by rain and runoff. Locally available species possessing the properties of good growth, dense ground cover and deep root shall be used for stabilization.		**X**		Visual inspection of control measures	**X**			Contractor (*implementation*) Supervision Consultant (*supervision*)	Included in the cost of construction

	• Preventive/stopping ditches, which are especially effective in areas of high-intensity rainfall and where slopes are exposed, will be constructed. This type of ditch intercepts and carries surface run-off away from erodible areas and slopes before reaching the steeper slopes, thus reducing the potential surface erosion. • For steep slopes, a stepped embankment (terracing) is needed for greater stability. • A retaining wall will be placed at the bottom of the unstable slope. There should be drainage holes for drainage of the road sub-base, thus reducing pressure on the wall. • Rocks (riprap) can be used in addition to protect the slope. • With sufficiently wide drainage ditches, uncontrolled discharge of water from the road surface will be removed from the slope.									
Specific to Wastewater Systems										
General Considerations for Septic Tanks[3] (If used by the Contractor during construction)	Septic tanks will have a vent pipe to prevent the build-up of gas inside the chamber and a 'manhole' that provides access inside the tank if needed will be used. It will be ensured that the septic tanks have two chambers: the first chamber is for settling sludge, and the second chamber is for aerobic treatment. These chambers will generally treat wastewater better. Partially treated septic tank effluent can pollute groundwater and surface water. If this is not possible, septic tanks will be impervious and designed in accordance with "Regulation on Pit Opening Where Sewer System Construction is not	**X**			Design approval	**Once during design**	PIU	Included in the cost of construction	

[3] Wastewater connection system of the buildings to be constructed will be connected to the municipal sewage system. Septic tank will only be used for the wastewater generated by the workers during construction phase.

	Applicable" published in Official Gazette No: 13783 dated 19.03.1971.								
	The effluent of septic tank will not be discharged to an open drain or other surface water. The effluents need to be treated before final disposal. This may be achieved through (i) an underground leach field, (ii) a vegetated leach field, or (iii) a pit for soaking away. If this is not possible, septic tank effluent will be removed periodically by sewage trucks, and disposal will be provided within the scope of the protocol to be made with the Malatya Metropolitan Municipality that has a licensed wastewater treatment plant. As discussed in Chapter 4 of this ESMP, no extra load on the existing sewage system and WWTP is expected due to the future residents of the houses to be constructed.			**X**	Effluent disposal records (if any) Records of complaints		**X**		Local Authority (Yeşilyurt Municipality or Malatya Metropolitan Municipality)	Included in the cost of construction
General Considerations for PWWTP (If used by the Contractor during construction for their workers)	If PWWTPs will be used to treat domestic wastewater generated by the workers, design approval of package facilities will be obtained before the construction. PWWTP and discharge permits (Environmental Permits) will be received from the relevant governmental authorities before its operation. It will be ensured that the PWWTP is operating in accordance with the requirements and that the wastewater quality complies with national discharge standards.	**X**		**X**	Design approval Environmental Permits Wastewater quality analysis	**Once during design and once before operation**			Contractor (*implementation*) Supervision Consultant (*supervision*)	Included in the cost of construction

Appendices

Appendix 1. Site Photographs

Photograph 1. General View of 4228 Parcel-1

Photograph 2. General View of 4228 Parcel-2

Photograph 3. General View of 4228 Parcel-3

Photograph 4. General View of 4228 Parcel-4 (EP lines)

Photograph 5. General View of 4228 Parcel-5

Photograph 6. General View of 4228 Parcel-6

Photograph 7. General View of 4228 Parcel-7

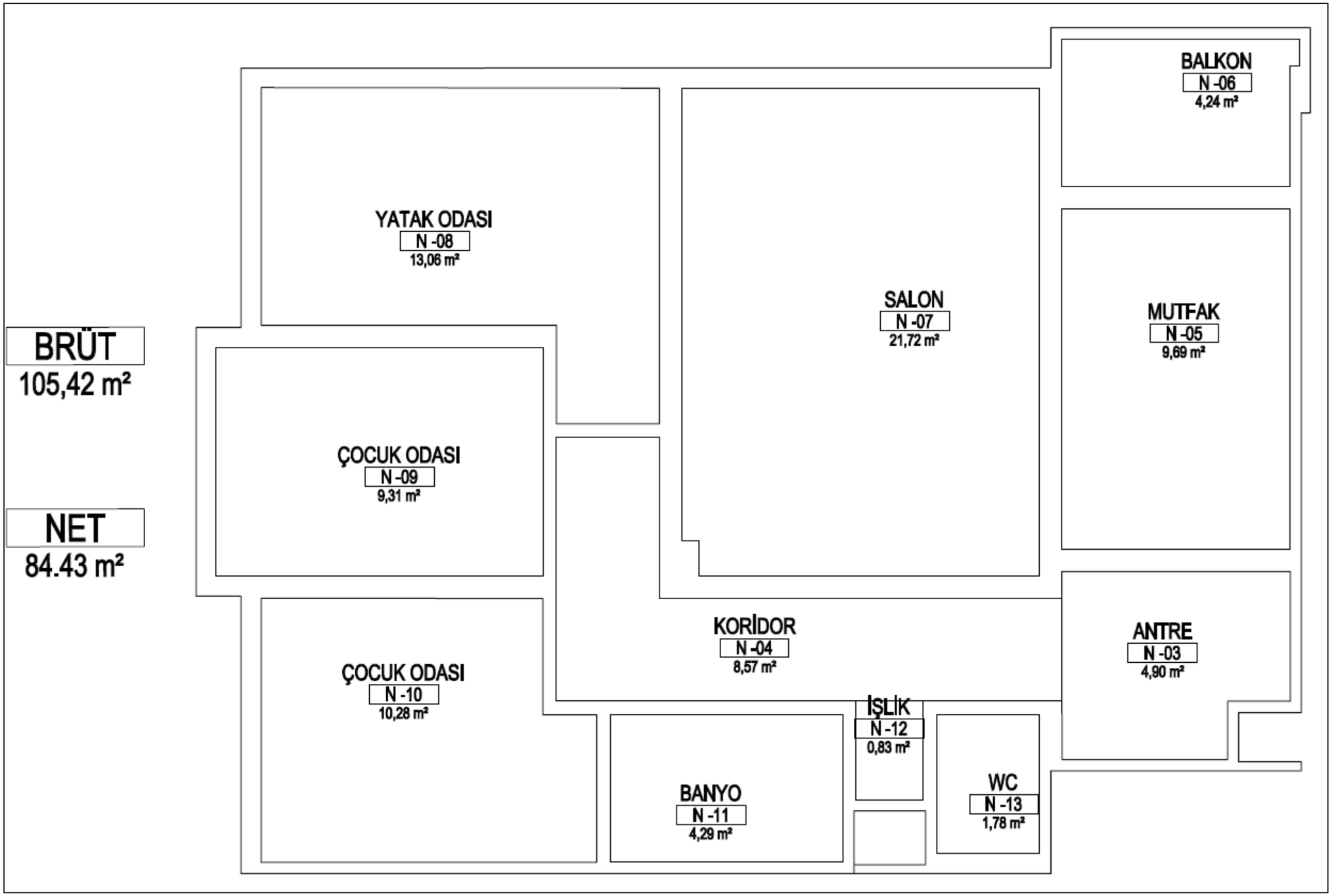
Photograph 8. DSI channel

Photograph 9. General View from the HEP Pond

Appendix 2. Screening Studies

(Given as a separate document)

Appendix 3. Settlement Plans


BRÜT
105,42 m²
NET
84.43 m²
YATAK ODASI
N -08
13,06 m²
ÇOCUK ODASI
N -09
9,31 m²
ÇOCUK ODASI
N -10
10,28 m²
SALON
N -07
21,72 m²
KORİDOR
N -04
8,57 m²
BANYO
N -11
4,29 m²
İŞLİK
N -12
0,83 m²
WC
N -13
1,78 m²
BALKON
N -06
4,24 m²
MUTFAK
N -05
9,69 m²
ANTRE
N -03
4,90 m²

Appendix 4. The Photo of Public Disclosure of the ESMP dated 25.08.2024

Appendix 5. ESMP Information Meeting Participant List

Within the scope of the Law on the Protection of Personal Data No. 6698, the clear identity information of the participants cannot be shared. However, the recordings of the meeting are kept by the PUB.

Appendix 6. Stakeholder Engagement Meeting Presentation

THE WORLD BANK

T.C. ÇEVRE, ŞEHİRCİLİK VE İKLİM DEĞİŞİKLİĞİ BAKANLIĞI

KIRSAL ALANLARDA DEPREM İYİLEŞTİRME VE YENİDEN YAPIM PROJESİ (KADİYAP)

Malatya Yeşilyurt İlçesi Kırsal Konut Projesi

Gündüzbey Mahallesi

PAYDAŞ KATILIM TOPLANTISI

14.09.2024

13:00

emay

PROJE HAKKINDA

- Proje'nin finansmanı Dünya Bankası tarafından sağlanmakta olup Hazine ve Maliye Bakanlığı garantörlüğünde Çevre, Şehircilik ve İklim Değişikliği Bakanlığı Yapı İşleri Genel Müdürlüğü tarafından yürütülmektedir.
- Proje'nin İnşaat Müşavirliği'ni EMAY Uluslararası Mühendislik ve Müşavirlik Anonim Şirketi (EMAY) üstlenmektedir.
- Proje kapsamında Elazığ ilinde Afet ve Acil Durum Yönetimi Başkanlığı tarafından tespit edilen hak sahipleri için belirlenen yeni alanlarda kırsal konutların inşa edilmesi amaçlanmaktadır.

PROJE YÖNETİMİ

Proje Yönetim Birimleri:

BANKA: Finansmanı Sağlayan Kuruluş, *Dünya Bankası*

İDARE: Proje Faaliyetlerin Genel Yönetimi ve İdaresi,
Çevre, Şehircilik ve İklim Değişikliği Bakanlığı,
Yapı İşleri Genel Müdürlüğü (YİGM)

MÜTEAHİT: İnşaat İşini Yapan Firma, MFK Mühendislik İnşaat A.Ş. Abdulvahap Yılmaz Adi Ortaklığı

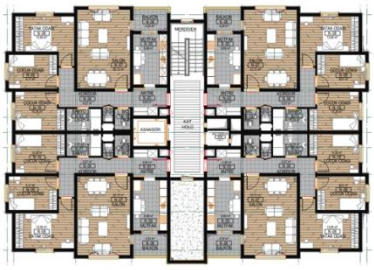
MÜŞAVİR: İnşaatı Denetleyen Firma,
EMAY Uluslararası Mühendislik ve Müşavirlik Anonim Şirketi

KADİYAP Bileşen 3:
Kırsal Konut
Yeniden İnşası ve
İyileştirmesi

Gündüzbey
Mahallesi
KIRSAL KONUTLARI

KADİYAP Bileşen 3:
Kırsal Konut
Yeniden İnşası ve
İyileştirmesi

GÜNDÜZBEY
MAHALLESİ
KIRSAL KONUTLARI



TİP-e EV
105 m^2 brüt
3 + 1
BETONARME

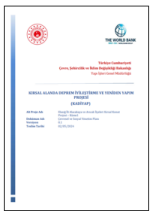
Çevresel Konuların Yönetimi

Atıklar	• Evsel Katı Atıklar, Tehlikeli ve Tehlikesiz Atıklar, Sıvı Atıklar,...
Hava Kalitesi	• Makinelerden ve inşaat işlerinden kaynaklanan toz oluşumu ve egzoz emisyonları
Gürültü	• Makinelerden ve inşaat işlerinden kaynaklanan gürültü seviyelerinde artış
Kaynak Kullanımı	• Su, yakıt, elektrik, vb. doğal kaynak kullanımı
Su Kaynakları	• Yeraltı ve yüzey sularına olası etkiler
Toprak	• Kimyasal sızıntılar veya dökülmelerden kaynaklanan olası toprak kirliliği etkileri

- Proje inşaat alanında meydana gelebilecek olası çevresel etki ve riskler arasında katı ve sıvı atıkların oluşumu, toz ve gürültü emisyonlarında artış, kaynak kullanımı, su ve toprak kaynaklarında oluşabilecek olası kirlilik riskleri yer almaktadır.

PROJENİN ÇEVRESEL VE SOSYAL DOKÜMANLARI

ÇEVRESEL VE SOSYAL YÖNETİM PLANI (ÇSYP)



- Çevresel ve Sosyal Yönetim Planı (kısaca ÇSYP) olası çevresel ve sosyal etkilerin azaltılabilmesi için ihtiyaç duyulan tedbirlerin yer aldığı, bu etki ve önlemlerin nasıl ve ne şekilde uygulanması ve yönetilmesi gerektiğini ortaya koyan bir plandır.
- Müşavir Firma ile çevresel ve sosyal uzmanlar ÇSYP'nin etkin bir şekilde oluşturulması için 12-13-14 Ocak 2024 tarihlerinde alt proje sahalarına ziyarette bulunmuştur.
- Bu saha ziyaretleri kapsamında hem muhtar ile görüşme yapılmış hem de seçilen parselin çevresel ve sosyal değerlendirmesi yerinde gerçekleştirilmiştir.
- Bu gözlem ve görüşmeler neticesinde Çevrecik Köyü Kırsal Konut İnşa Alt Projesinin de dahil olduğu bir Çevresel ve Sosyal Yönetim Planı hazırlanmıştır.
- Bu kapsamda öngörülen riskler ve etkilerine göre Çevresel ve Sosyal risk seviyesi **«Orta»** olarak değerlendirilmiştir.
- Belirlenen çevresel ve sosyal etki ve riskler ÇSYP'de belirtilen önlemlerin uygulanması, tedbirlerin alınması ile çözülebilecektir.

Çevresel Konuların Yönetimi

- Söz konusu olası çevresel etki ve risklerin yönetilmesi için;
  - Gerekli izinler alınacak,
  - Sorumlular belirlenecek,
  - Tüm çalışanlara ilgili çevresel yönetim ve farkındalık eğitimleri verilecek,
  - Meydana gelen çevresel kazalar, sızıntılar, vb. durumlar raporlanacaktır.

İş Sağlığı ve Güvenliği Yönetimi

- Sorumlular belirlenecektir.
- Tehlikeler tespit edilecek ve risk analizleri gerçekleştirilecektir.
- Tespit edilen risk ve tehlikeler için uygun önlem ve tedbirler değerlendirilecek ve uygulanacaktır.
- Tüm çalışanlara yaptıkları işle ilgili temel düzey ve teknik İş Sağlığı ve Güvenliği (İSG) eğitimleri verilecektir.
- Tüm çalışanların işe giriş muayeneleri işyeri hekimi tarafından yapılacak ve uygunluk raporu düzenlenecektir.
- İnşaat sahası ilgili sorumlular tarafından düzenli olarak denetlenecektir.
- Denetleme sırasında tespit edilen uygunsuzluklar rapor edilerek en kısa sürede gerekli aksiyonlar alınacaktır.

İş Sağlığı ve Güvenliği Yönetimi

- İnşaat sahasında meydana gelebilecek tehlike ve risklere bazı örnekler şu şekildedir:

Yüksekte Çalışma | Yüksekten düşme sonucu yaralanma | Makinaların uygunsuz kullanımı | Düzensiz iş yeri | Kişisel Koruyucu Donanımların kullanılmaması

İş Sağlığı ve Güvenliği Yönetimi

- Tehlike, risk, önlem, raporlama gibi İSG yönetimine ilişkin adımlara yönelik aşağıdaki örnekler verilebilir.

Tehlike	Risk	Tedbir/Önlem	Eğitim	Teftiş ve İç Kontrol	Raporlama
• Yüksekte Çalışma	• Yüksekten düşme sonucu yaralanma	• Yüksekte çalışmaktan kaçınmak, • İlgili Kişisel Koruyucu Donanımları kullanmak.	• Aylık, haftalık, günlük İSG eğitimlere katılım sağlamak ve uygulamak	• İlgili sorumlular tarafından düzenli saha turları yapılması, ve kontrol kayıtlarının tutulması	• Günlük, haftalık, aylık raporların düzenlenmesi.

PROJENİN ÇEVRESEL VE SOSYAL DOKÜMANLARI

İŞGÜCÜ YÖNETİM PLANI (İYP)

- İYP, projenin inşaat öncesi, inşaat ve işletme aşamalarında geçerli olan, işgücü ve çalışma koşullarına ilişkin gerekliliklerı açıklayan bir dokümandır.
- Tüm çalışanlara adil muamele yapılarak eşit fırsatların tanınması ve ayrımcılık yapılmaması için gereken uygulamaları teşvik eder ve uygulamaya koyulmasını sağlar.
- Proje çalışanlarının kendilerinin ve haklarının korunması ve işgücü ile ilgili risklerin yönetilmesi için gerekli altyapının sağlanmasını hedefler.
- İYP, işgücü ve çalışma koşullarına uygunluk, raporlama, roller ve sorumluluklar, izleme ve eğitim açısından gereksinimleri ve beklentileri açıklar.

Acil Durum Hazırlık ve Müdahale

- Acil Durum Planının hazırlanması
- Acil Durum Ekiplerinin belirlenmesi ve görevleri ile ilgili eğitimlerin verilmesi
- Acil Toplanma Alanının belirlenmesi ve işaretlenmesi
- Acil Durum müdahale ekipmanlarının tamamlanması ve eksiksiz olması
- Tatbikatlar yapılması
- Tüm çalışanlara acil durumlar hakkında bilgilendirme yapılması

Acil Durum Hazırlık ve Müdahale

- Düzenleyici faaliyetlerin belirlenmesi ve uygulamaya koyulması

Acil Durum Ekipleri

- Kurtarma
- Koruma
- Söndürme
- İlk Yardım

Toplum Sağlığı ve Güvenliği Yönetimi

Alınacak Önlemler

- İnşaat alanına erişim bariyerlerle ve güvenlik personeli ile kısıtlanacaktır.
- Saha içerisinde ve yakınlarında ilgili trafik güvenliği önlemleri alınacak ve uygulanacaktır. Proje sürücülerinin hız limitleri kontrol altında tutulacaktır.
- Makine ve araçların bakımları düzenli olarak yapılacaktır.
- İnşaat ile ilgili bilgilendirmeler yapılacak ve Şikayet Mekanizması etkin bir şekilde uygulanacaktır.

Paydaş kimdir?

Proje faaliyetlerinden etkilenen ya da etkilenme ihtimali olan gerçek ya da tüzel kişiler..

- ✓ Kredi veren kuruluşlar
- ✓ Proje sahibi, proje yürütücüsü..
- ✓ Ulusal ve yerel devlet kurum ve kuruluşları
- ✓ Proje alanına yakın yerleşimler
- ✓ Proje kapsamında arazisi edinilen PEK'ler.. (Projeden Etkilenen Kişiler)
- ✓ Dezavantajlı ya da hassas olabilecek PEK'ler (Örneğin; yaşlılar, engelliler, kadınlar, vb.)
- ✓ Sivil Toplum Kuruluşları
- ✓ Üniversiteler, vakıflar, kooperatifler, yerel iş kuruluşları, iş dernekleri, ticaret odaları vs..
- ✓ Yüklenici ve ona bağlı çalışanlar..

Neden Paydaş Katılım Toplantıları Düzenlenir?

- Paydaş katılımı, ilgili proje boyunca gerçekleştirilen kapsayıcı ve süreklilik arz eden bir süreçtir. Doğru şekilde tasarlanıp uygulandığında, projenin çevresel ve sosyal etki ve risklerinin başarılı bir şekilde yönetilmesini ve paydaşlarla sağlam iletişim ve ilişkilerin kurulmasına olanak sağlar.
- Proje sürecinde paydaşlar arasında kurulan erken, sık ve açık iletişim ile olası çatışmalar ve proje gecikmelerinin önüne geçilecektir.

PROJENİN ÇEVRESEL VE SOSYAL DOKÜMANLARI

Şikayet Çözüm Mekanizması (ŞÇM)

Şikâyet Çözüm Mekanizması (ŞÇM), herhangi bir paydaşın proje hakkındaki varsa bir şikâyetini iletmesine veya projenin nasıl planlanacağına, inşa edileceğine ve uygulanacağına dair çözüm yolları sağlayan bir süreçtir.

4982 sayılı Bilgi Edinme Hakkı Kanunu: Herkes kamu kurum ve kuruluşlarının faaliyetleri hakkında bilgi edinme hakkına sahiptir. Bilgi edinme hakkının şeffaflık, eşitlik ve tarafsızlık esaslarına göre uygulanması gerekir.

Şikâyet Çözüm Mekanizmasındaki Temel Değerler:

- **Şeffaflık:** Tüm şikâyetler, açık ve anlaşılır bir şekilde şikâyet prosedürü kapsamında değerlendirilir.
- **Tarafsızlık:** Birey veya halk tarafından sunulan her şikâyet veya endişe için adil ve eşit bir şikâyet giderme prosedürü uygulanır.
- **Gizlilik:** Anonim şikâyetler sunulabilir ve çözülebilir. Şikâyet bildirmek kişisel bilgi veya fiziksel varlık gerektirmez.
- **Erişilebilirlik:** Tüm çalışanlar ve paydaşlar kolaylıkla yorum yapabilir veya şikâyette bulunabilir.
- **Kültürel Uygunluk:** Yerel halk tarafından dile getirilen bir şikâyet veya sorun, bölgesel kaygılar çerçevesinde değerlendirilir ve oradaki kültürel forma uygun bir çözüm süreci başlatılır.

Şikâyet/Öneri/Talep İletim Kanalları

- **Öneri ve şikâyetlerinizin**; içeriği ne olursa olsun, nasıl kaleme alınırsa alınsın bizim için değerli olduğunu bilmenizi isteriz. Genel etik ilkelere uygun olarak yazdığınız öneri ve şikâyetlerinizden dolayı olumsuz herhangi bir durumla karşılaşmayacak ve eleştirilmeyeceksiniz. Öneri ve şikâyetlerinizi farklı yöntemle iletebilirsiniz. *Şikâyet kutuları, e-mail , internet formları, yüz yüze ya da telefon* ile ileteceğiniz öneri ve şikâyetlerinizin hepsi aynı şekilde değerlendirilir, tarafsız bir kurul tarafından incelenir ve tamamı gizli bilgi statüsündedir.
- Tüm şikayet iletim kanallarından anonim şekilde (kimlik bilgisi paylaşmadan) öneri/talep ve görüşlerinizi Proje Uygulama Birimine iletebilirsiniz
- Bu proje hakkında genel bilgi almak, çevresel ve sosyal proje dokümanlarına erişmek ya da öneri ve şikayetlerinizi bildirmek için; https://kadiyap.csb.gov.tr/ web sayfasını ziyaret edebilirsiniz.

Şikâyet İletim Kanalları

- Çevre, Şehircilik ve İklim Değişikliği Bakanlığı'nın (ÇŞİDB) hem telefon hem de web sitesi aracılığıyla erişilebilen bir 'Alo181' yardım hattı vardır. Bu yardım hattı aynı zamanda çalışanları, çözüm ortakları ve daha geniş zümreler için bakanlık düzeyinde bir şikâyet mekanizması işlevi görür. ÇŞİDB tarafından sağlanan tüm çevre ve şehir hizmetleri ile ilgili soru, talep ve şikâyetler profesyonel olarak yönetilen ALO 181 çağrı merkezi tarafından yanıtlanmaktadır ya da Proje Uygulama Birimine iletilmektedir. 0312 586 48 27 nolu telefondan doğrudan Proje Uygulama Birimine ulaşabilirsiniz.

Çağrı Merkezi	: Alo 181
Telefon	: 0312 586 48 27
Whatsapp Şikayet Hattı	: 0530 747 24 81
E-Mail	: yigmkadev@csb.gov.tr
Şikayet Formu	: https://kadiyaponeri.csb.gov.tr/

Şikayet Kutularının Yeri

Çalışan Personeller İçin;
- Şantiye Alanlarında

Köy Halkı İçin;
- Camilerin Kadın ve Erkek Girişlerinde

Şikâyet İletim Kanalları

İnternet üzerinden şikâyet formuna hemen erişim için lütfen yandaki kodu telefonunuza okutun.

(Bu eylem için akıllı telefonunuzda QR kod uygulaması olmalıdır. Söz konusu uygulama yoksa, herhangi bir internet tarayıcı adres çubuğuna şikâyet formu erişim adresini yazabilirsiniz.)

SON OLARAK…

Projeye ilişkin çevresel ve sosyal tüm dokümanlara nereden ulaşılabilir?

- Köy muhtarlığı,
- Proje alanı,
- KADİYAP resmi web sitesi (https://kadiyap.csb.gov.tr/)

Appendix 7. Stakeholder Engagement Meeting Photos

Appendix 8. Project Brochure

Yerleşim Planı

ŞİKAYET İLETİM KANALLARI

Bize Ulaşın... Bize Ulaşın... Bize Ulaşın...

1 Müteahit: MFK Mühendislik İnşaat A.Ş. Abdulvahap Yılmaz Adi Ortaklığı
Sorumlu Kişi: Ömer Faruk Yılmaz (Teknik Sorumlu)
Telefon: +90 532 798 47 96
E-Posta: ofaruk79@hotmail.com

2 Müşavir: EMAY Ulus. Müh. ve Müş. A.Ş.
Sorumlu Kişi: : Ömer AKDENİZ
Telefon: +90 507 118 28 33
E-Posta: ustyapiankara@emay.com

3 İdare: Çevre, Şehircilik ve İklim Değişikliği Bakanlığı Yapı İşleri Genel Müdürlüğü
Telefon: ALO 181, 0312 586 48 27
E-Posta: yigmkadev@csb.gov.tr
Web: kadiyaponeri.csb.gov.tr

Karekodu telefon/tablet vb okutarak Şikâyet Formuna anında ulaşabilirsiniz!

THE WORLD BANK

KIRSAL ALANLARDA DEPREM İYİLEŞTİRME VEYENİDEN YAPIM PROJESİ (KADİYAP)

Malatya İli Yeşilyurt İlçesi Gündüzbey Mahallesi 224 Adet Kırsal Konut Yapımı

KADİYAP HAKKINDA

KADİYAP Projesi; Türkiye'de 6 Şubat depreminden etkilenen seçilmiş illerde halkın depreme dayanıklı konutlara yeniden erişimini amaçlamaktadır.

Elazığ, Kahramanmaraş, Malatya, ve Adıyaman illerinde yıkılan kırsal konutlar altyapıları ile birlikte yeniden inşa edilecektir. Malatya ili, Yeşilyurt ilçesi, Gündüzbey Mahallesi KADİYAP kapsmanında alt proje olarak seçilmiştir

emay

ŞİKÂYET ÇÖZÜM MEKANİZMASI

- Şikayetin **ALINMASI**
- Şikayetin **KAYDEDİLMESİ** → 1-2 Gün içinde
- Şikayetin **ONAYLANMASI**
- Şikayetle ilgili gerekli aksiyonların **TANIMLANMASI** → 7-10 Gün içinde
- Şikayet sahibinin **BİLGİLENDİRİLMESİ**
- Şikayetle ilgili gerekli aksiyonların **ALINMASI** → 15-30 Gün içinde
- Şikayetin **KAPATILMASI** → 15-30 Gün içinde

İletişimde şeffaflığı ve sürekliliği sağlamak amacıyla **Şikayet Çözüm Mekanizması** oluşturulmuştur. Şikâyet, görüş ve önerilerinizi aşağıdaki iletişim kanallarını kullanarak veya şikâyet kutularına yazarak bizlere ulaştırabilirsiniz. Şikâyet kutuları; paydaşlardan gelen görüş ve öneriler doğrultusunda konteyner kent, şantiye sahası, mahalle camisinin kadın ve erkek girişleri gibi paydaşların kolaylıkla erişim sağlayabileceği lokasyonlara yerleştirilecektir.

Toplam planlanan konut sayısı 224 olarak belirlenmiştir. AFAD tarafından seçilen yerleşim yeri; Çevre, Şehircilik ve İklim Değişikliği Bakanlığı tarafından onaylanmıştır. Yerleşim Planı EMAY Müşavirlik tarafından hazırlanmıştır.

ALT PROJE YERLEŞKESİNDE DEPREME DAYANIKLI 224 KONUT YAPILMASI PLANLANMAKTADIR .

İnşaat süresinin planlama/hazırlı aşamasından sonra 10 ay olması beklenmektedir. İhaleyi kazanan Yüklenici firma arazi hazırlama ve inşaat faaliyetlerini gerçekleştirecektir.

Appendix 9. Project Poster