# REPUBLIC OF IRAQ

# MINISTRY OF PLANNING

Iraq Social Fund for Development SFD (P163108)

# ENVIRONMENTAL AND SOCIAL MANAGEMENT PLAN (ESMP)

## FOR THE

CONSTRUCTION OF
ROADS IN FIVE VILLAGES (JEDALAH, AL-HAYALI, AL-MAGNONIA, RUSKA, MOJAMAA AL-QAHTANIA)
IN
SINJAR COUNTY

WITHIN NINEVEH GOVERNORATE

**7<sup>TH</sup> NOVEMBER 2023** 

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# IRAQ: Social Fund for Development Project PART A: GENERAL PROJECT AND SITE INFORMATION

| INSTITUTIONAL & | ADMINISTRATIVE  |
|-----------------|---|
| Country         | IRAQ  |
| Project Title   | CONSTRUCTION OF ROADS IN FIVE VILLAGES (JEDALAH, AL-HAYALI, AL-MAGNONIA, RUSKA, mojamaa Al-Qahtania) IN SINJAR WITHIN NINEVEH GOVERNORATE   |
| Introduction    | Iraq faces a historic opportunity for national reconciliation through the effective delivery of critical social services, economic growth and recovery programs. The reinstatement of trust between the State and its citizens is highly dependent on the Government of Iraq (GOI) demonstrating its capacity to deliver security, jobs and economic growth to all Iraqis, with a focus on the poor, the vulnerable and the millions of Internally Displaced People (IDP).  The GOI, represented by the Ministry of Planning (MOP), requested the World Bank's support in the design and financing of a Social Fund for Development (SFD) project to support locally driven initiatives to improve the living conditions and opportunities of the poor and most vulnerable people in Iraq. The GOI has demonstrated its commitment and support to the design of this operation and established a high-level national team to guide and coordinate the development and institutionalization of the SFD, as well as five technical teams to work on the different aspects of the fund.  The Project Development Objectives (PDOs) are to: (1) Improve access to basic services and; (2) Increase short-term employment opportunities, in targeted communities. This environmental and social management checklist reflects the main issues (project description and activities, baseline conditions, impact analyses, mitigation measures and monitoring arrangements). The main objective of this document is to examine the environmental and socio-economic impacts of the project (both construction and operation phases), and to propose mitigation measures. The project is expected to result in significant socio-economic benefits for the local communities and surrounding areas in addition to develop social awareness, group responsibility. |

#### PROJECT LOCATION & SITE DESCRIPTION

According to the Environmental and Social Management Framework (ESMF) which was prepared for the Iraq Social Fund for Development Project disclosed locally in Iraq and on the World Bank's website<sup>1</sup>. Environmental and Social Management plan (ESMP)/ Environmental and Social Management Checklist should be prepared, cleared, publicly consulted and disclosed prior to the commencement of any rehabilitation activity. The World Bank Operational Policy 4.01 on Environmental Assessment was triggered as the proposed Subprojects has some potential negative environmental and social impacts. Accordingly, this Environmental and Social Management Checklist is required to implement the Sub-project in accordance with the requirements of the World Bank's Operational Procedures and applicable Iraqi national legislation.

## Project Location

The governorate of Ninewa (also sometimes referred to as "Nineveh") is located in northwestern Iraq. It shares borders with Syria and several Iraqi governorates. Ninewa is the third largest governorate in terms of size. The provincial capital is Mosul city, located in the northeast. Sinjar district borders and is a crossing point with Syria. The district is 136 km from Mosul city. The Tigris and Greater Zab rivers irrigate much of Mosul. The Tigris River extends from the governorate's northwest to the south. There are arid, semi-desert plains south of Mosul city (as shown in figure below). The proposed location of these rural roads will be in an open area. The upgrading of the projects will use the exact footprint of the existing roads and no widening of the roads will occur.

The area of each road, coordinates, and the population in each village are shown in the table below:

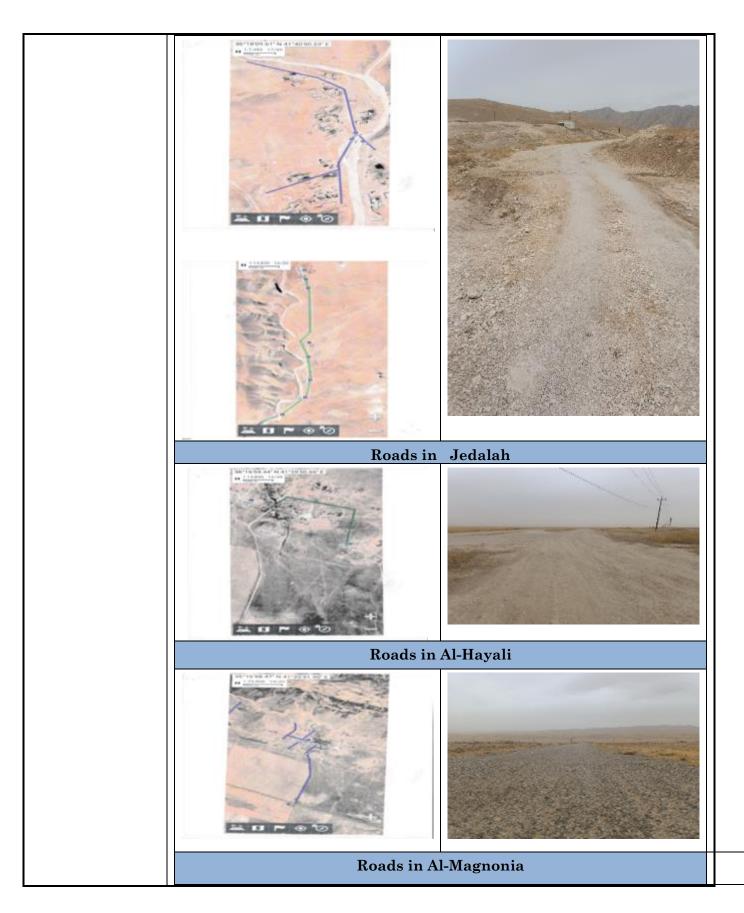
<sup>&</sup>lt;sup>1</sup>https://documents1.worldbank.org/curated/en/221731554372651925/pdf/Environmental-and-Social-Management-Framework.pdf

|     | Table 1: Information about the villages |             |             |              |  |
|-----|---|-------------|-------------|--------------|--|
| No. | Village                                 | Length (km) | Population  | Coordinates  |  |
|     |   | 4.5         |             | 36.3025697,  |  |
| 1   | Jedalah                                 | 4.0         | 1695        | 41.2821757   |  |
| _   | bedalali                                | 2.3         | 1699        | 36.3010135,  |  |
|     |   | 2.0         |             | 41.682245    |  |
| 2   | Al-Hayali                               | 1.33        | 852         | 36.285764,   |  |
|     | АІ-пауап                                | 1.00        | 094         | 41.591847    |  |
| 3   | Al-                                     | 3.45        | 455         | 36.285745,   |  |
| 0   | Magnonia                                | 0.40        | 400         | 41.591796    |  |
| 4   | Ruska                                   | 2.25        | 557         | 36.273134,   |  |
| 4   | nuska                                   | 2.20        | 99 <i>1</i> | 41.577204    |  |
|     | mojamaa                                 |             |             | 36.20680658, |  |
| 5   | Al-                                     | 2.44        | 26730       | ,            |  |
|     | Qahtania                                |             |             | 41.69066202  |  |
|     | Total                                   | 16 97       | 30289       |              |  |



Figure 1: Project Location

The area adjacent to these subprojects' sites are characterized as rural residential and semi desertic to agricultural in some area. There are no protected areas or endangered species (there is no critical or high biodiversity values that might be affected) in the vicinity of the sites. There are no close sensitive receptors located to the subprojects site. The subprojects will improve the transportation infrastructure in these villages by providing asphalt surface to facilitate transport for local communities and road users. Moreover, the road will help the students to go to their schools easily. It important to mention that these roads are within the villages as a network, therefore the other roads can be used as alternative roads.



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|                                   | 16-17-03-660 20-03-70-61  16-17-03-660 20-03-70-61   |
|-----------------------------------|--|
|                                   | Roads in Ruska   |
|                                   | المناس الذي الذي الذي المن المن المن المن المن المن المن المن  |
|                                   | Roads in mojamaa Al-Qahtania   |
| D                                 | Figure 2: Current situation of Roads in these villages   |
| Project<br>Duration               | The anticipated duration of all works is (180) days including mobilization and demobilization of contractors.  |
| Proposed<br>Project<br>Activities | <ol> <li>Construction of the road will include the following activities:         <ol> <li>The surface needs to be completely clean and clear after backfilling with clean soil. The average width of the existing roads is ranging from 5-8 m and one lane in each direction.</li> <li>Providing materials (gravel) to create double layer of subbase (each one is 15cm in thickness) and well compacted. The sub base provides a stable surface to support new pavement.</li> <li>Binder will be added after the sub base is laid and any soft areas are identified and repaired.</li> <li>Once the supportive structures of a new asphalt surface are installed, the top layer of fresh asphalt (10 cm in thickness) is added to provide a clean and smooth ride.</li> <li>The expected machineries and equipment are: Wheel Loader, Motor Grader, Asphalt Pavers, and roller machine.</li> <li>Its important to mention that all the raw materials that will be used in the construction of the roads are from an authorized quarry.</li> </ol> </li> </ol> |

## The area adjacent to the project site is characterized as rural residential and semi desertic to agricultural area. However, the Land Use construction activities will not cause an impact on agricultural area or and make any crop damage. Acquisition The road will be constructed on state land and hence there are no issues related to land acquisition. The implementation activities will not cause relocation of people, vendors, and any individuals. The construction of the road will need about 15-20 worker per day for each site per day per day, Workers are expected to be hired locally, however if a construction camp is deemed necessary, it will be installed on vacant state-owned land. Portable holding tanks will be installed in the subproject, wastes will be collected and disposed of in an authorized waste treatment plant/authorized disposing site to be determined later by the local municipality. Contactor's The contractor will establish his storage on vacant state-owned land for Camp equipment and materials within the area close to the construction area. The construction camp should have independent sources of water and electricity and an adequate septic tank for sanitary effluent disposal. Due to its geographical location, an influx of workers to the subproject area is not expected. Most of the workers will be locals from the surrounding area and will return to their homes. PROJECT BASELIN CONDITIONS Mosul stands 230 meters above sea level in the Upper Mesopotamia region of the Middle East. To the south west of Mosul is the Syrian Geographic Desert and to the East is the Zagros Mountains. Conditions Sinjar district borders and is a crossing point with Syria. The district is 136 km from Mosul city, the capital of the Nineveh Governorate. The Sinjar Mountains are located in the district The governorate of **Ninewa** is located in northwestern Iraq. Mosul is Climate, Air the capital or city center of Ninewa and it is about 400Km from Quality and Baghdad. It shares borders with Syria and several Iraqi governorates. noise In general, the climate is the most important factor affecting the quality of surface water, groundwater and the hydrological cycle in the study area.

|              | Mosul is situated 36.19 N, 43.09 E, at 230 m above sea level in a hilly  |
|--------------|--|
|              | area between the Mountains in the North and the Al-jazeera plane in  |
|              | the South and the West, Tigress River divides the city into two parts.   |
|              | The climate of Mosul is characterized by hot and dry summers and cold  |
|              | winters with rare snow. Annual mean temperature is 19.5° C and   |
|              | rainfall is 383 mm.  |
|              | The year is divided into two influential seasons. A long warn dry  |
|              | summer, a short cold rainy winter cold season and sunny weather often  |
|              | year-round. The summers are hot and dry, with average high   |
|              | temperatures reaching above 40°C while the winters are mild. Rainfall  |
|              | is between the months of November-April and averages 383 mm  |
|              |  |
|              | annually.  These subpresides sites are leasted in open areas, so the expected  |
|              | These subprojects sites are located in open areas, so the expected   |
|              | concentration of air pollutants is low. Air pollutants in the villages are   |
|              | caused mainly from movement of vehicles and trucks. Therefore, the   |
|              | ambient air quality is expected to be within the WHO ambient air   |
|              | quality standards (Annex3).  |
|              | Currently, there is no traffic congestion and consequently the existed   |
|              | noise level is within the normal levels.   |
| Hydrogeolog  | The depth of ground water in the area ranges of range from 5-44  |
| y Conditions | meters. Flooding of the area near the project has not been reported in   |
| <i>y</i>     | the past years.  |
| Ecology      | There are no Nature Reserves or other legally protected areas in the vicinity of the project or in a close proximity. The project areas do not |
| Conditions   | contain any globally important habitats or ecosystems.   |
|              | There are no sites of historical or cultural importance in the area.   |
| Heritage     | There are no cemeteries, historical-cultural monuments, churches,  |
| Environment  | mosques near the project that need to be removed or will be impacted   |
|              | due to the rehabilitation activities.  |
|              | The population of these projects area is approximately 30289. The  |
|              | suggested areas of the roads will be on state land, where no land or   |
| Socia        | property expropriation will be necessary and is free from encroachers or   |
| Socio-       | squatters. All the areas around the sites remain clear of any settlement   |
| economic     | or economic use and are ready for construction works, no interference is   |
| Aspects      | registered from the local community which is eager for the works to be   |
|              | completed. It is important to mention that during the construction of  |
|              | the road, it is not expected to cause restriction of access or livelihood  |
|              | impacts. Some of the population have a degree or equivalent to   |
|              | Bachelor level, and some have equivalent to middle school., some of  |
|              |  |

them operating small businesses and they have only a few years of basic education.

#### **LEGISLATION & POLICIES**

- ➤ The applicable national legislation is as following:
- ➤ The Law for the Protection and Improvement of Environment No. 27, 2009;
- ➤ Ministry of Water Resources Law No. 50 of 2008;
- ➤ Public Health Law No. 89 of 1981, amended by Resolution No.54 of 2001:
- Law no. 37 of 2008 regarding to Ministry of Environments (MoE) roles and responsibilities.
- ➤ Law No.3,1997 regarding to Environment protection
- Regulation for the Provision of Water Resources, No. 2, 2001;
- Regulation for the Protection of Rivers No. 25, 1967;
- ➤ Instructions No. 2 of 2014 on Environmental Protection from Municipal Waste;
- ➤ Instructions no. 3 of 2015 on Hazardous Waste Management:
- ➤ Law No. 6 of 1988 concerning the National Commission for Occupational Hygiene and Safety;
- ➤ Instructions No. 12 of the year 2016: Occupational Health and Safety;
- ➤ Labor Law No. 37 of 2015;
- ➤ Law no. 89 of the year 1981, amended by Decree No.54 of 2001: Public Health:
- ➤ Law No. 41 for the year of 2015: Noise Protection and Control;
- ➤ Public Roads Law No. 35 of 2002;
- ➤ Instructions No.3 of 2012: National Emissions' Determinants for Activities and Businesses by the Ministry of Health and Environment;
- Regulation No. 4 for the year of 2012: Ambient Air Quality;
- ➤ The main WB safeguard policies applicable for SFD are:
- ➤ OP 4.01 Environmental Assessment
- ➤ OP 4.12 Involuntary Resettlement (There might be a probability of storage of construction materials in main rural roads. Until the date of report development, no land acquisition is anticipated.).
- ➤ OP 4.11 Physical and Cultural Resources (The proposed construction activities are not expected to pose risks of damaging cultural property).

National & Local
Legislation and World
Bank
Policies that
Apply to the
Project

- labor influx guidance note (2016).
- ➤ WB General Environmental, Health, and Safety guideline<sup>2</sup> The EHS guidelines entails the effective methods for managing environmental, health and safety issues in accordance with WBG requirements. This includes understanding the likelihood, magnitude and priority of the EHS risks. The EHS guidelines includes 4 primary sections and respective sub sections (applicable segments from the EHS guidelines for the sub-project are highlighted in **Red**):

#### 1. Environmental Guidelines

- a. Ambient Air Quality Limits and Guidelines
- **b.** Energy Conservation Energy Conservation and Efficiency Methods
- c. Wastewater and Ambient Water Quality Effluent water quality and indicators for water discharge and treatment
- **d.** Water Conservation Methods for ensuring reduction in water consumption
- **e. Hazardous Material Management** The appropriate Methods for managing hazardous waste and instructions on community and worker protection
- **f. Waste Management** Instructions on waste management and planning, waste prevention and safe waste disposal
- g. Noise Methods for prevention and control of Noise, and the applicable noise limits for different activities and exposure period
- h. Contaminated Land Management approaches for contaminated land due to different hazardous substances or waste or oil. Includes Risk Reduction measures
- 2. Occupational Health and Safety Guidelines<sup>3</sup>
  - **a.** General Facility Design and Operation ensuring appropriate facility integration of H&S, that integrates safety measures in design for different physical hazards
  - b. Communication and Training Ensuring there is an

<sup>&</sup>lt;sup>2</sup> https://www.ifc.org/wps/wcm/connect/29f5137d-6e17-4660-b1f9-02bf561935e5/Final%2B-%2BGeneral%2BEHS%2BGuidelines.pdf?MOD=AJPERES&CVID=nPtguVM

https://www.ifc.org/wps/wcm/connect/1d19c1ab-3ef8-42d4-bd6b-cb79648af3fe/2%2BOccupational%2BHealth%2Band%2BSafety.pdf?MOD=AJPERES&CVID=nPtgxyx

- appropriate level of communication between workers and management, and that there is sufficient training for all workers prior to operations
- **c. Physical Hazards** Methods for prevention of accidents or injuries that can occur due to exposure to mechanical or other physical works, including Noise and Vibrations
- d. Chemical Hazards Injuries and accidents that could occur due to usage of chemicals and methods of protection and prevention. Includes management of fires and explosions
- e. Biological Hazards Protection and Management of different biological agents
- f. Radiological Hazards Management and Limits for Radiation Exposure
- **g. PPE** Guidance on usage of PPE and clearly highlighting that it should be considered the last resort
- h. Special Hazards Environments Guidance on Managing different environments that can present a risk to workers such as confined spaces.
- Monitoring Efficient monitoring of occupational health and safety programs and mitigation measures. This includes the Occupational Accident Reporting frequency
- 3. Community Health and Safety Guidelines<sup>4</sup>
  - **a.** Water Quality and Availability Ensuring the protection of nearby water resources such as groundwater and surface water sources.
  - **b.** Structural Safety of the Project Potential Hazards that could occur due to poor design and methodology for dealing with those hazards. Includes the general approach that architects/structural engineers must follow to ensure community safety is considered during design
  - **c.** Life and Fire Safety (L&FS) Ensuring that project design is in accordance with local regulations and requirements, and that it integrates Fire safety standards.
  - **d.** Traffic Safety Includes the potential risks and impacts on traffic and from traffic that occurs due to the project.

https://www.ifc.org/wps/wcm/connect/eeb82b4a-e9a8-4ad1-9472f1c766eb67c8/3%2BCommunity%2BHealth%2Band%2BSafety.pdf?MOD=AJPERES&CVID=nPtgxTd

Includes recommend measures to deal with traffic risk

- **e.** Transport of Hazardous Material Approach and Guidelines for transporting hazardous material, including a hazard assessment and emergency response plan.
- **f. Disease Prevention** Includes the recommended interventions and methods to protect the community from communicable diseases and vector borne diseases
- **g.** Emergency Response and Preparedness This sub section requires a plan and response system in place to respond to any potential emergency that could occur due to the works or operation
- 4. Construction and Decommissioning Guidelines<sup>5</sup>
  - **a. Environment** covers the different environmental factors that could be affected by the construction activities including soil erosion, disturbance to water bodies, disturbance to air quality, wastewater discharges etc.
  - **b.** Occupational Health and Safety Different OHS risks due to construction or decommissioning works
  - **c.** Community Health and Safety Different Hazards that can occur due to the project and affect the surrounding community.
  - ➢ Grievance Redress Service

#### PUBLIC CONSULTATION & GRIEVANCE REDRESS MECHANISMS

The consultations were carried out in the village for the construction of Roads on the Sep. 2023, One on one interviews were conducted. Accordingly, a questionnaire was formatted to cover the key environmental and social aspects related to the subproject.

The purpose of conducting the consultation activities is to achieve the below:

## Public Consultation Process

- 1. Introduce the construction subproject of the road.
- 2. Disclose information regarding the Grievance Mechanism resources in place.
- 3. Discuss anticipated environmental and social impacts associated with the project.
- 4. Propose extensive mitigation measures to address potential

https://www.ifc.org/wps/wcm/connect/7d708218-2a9e-4fcc-879d-9d5051746e7d/4%2BConstruction%2Band%2BDecommissioning.pdf?MOD=AJPERES&CVID=nPtgy6x

environmental and social risks associated with the project activities.

The formatted questionnaire was then addressed to 12 women and 30 men in five villages the surrounding community randomly to have their opinions and thoughts regarding the construction activities.

#### **Consultation Results:**

All those interviewed expressed their support to the project. All interviewees expressed their hope that the completion of the project will lead to more goods moving through their areas. Therefore, they link the project with improving their living conditions and the development of the area economically. They also stressed the importance of providing a timetable for the completion of the project because they heard of many planned projects in their district but have not seen them being completed. The participants emphasized that they know that the project's benefits are far greater than its negative impacts and confirmed their willingness to cooperate with the project. All participants in the village expressed that the construction of the Road will have a positive impact on their social daily life. Please refer to Annex 1 and Annex 2 for sample of the consultations for both men and women in these villages. The full list of participants for public consultations and individual interviews are attached in standalone document to reduce the size of the instrument. As per the questionnaire prepared for individual interview, the below are the main findings:

- 1) No infrastructure will be affected negatively due the construction activities and there is no need for alternative roads.
- 2) All interviewed locals agreed that the construction activities of road will serve all the people in the village and have a strong positive impact from the social perspectives on the locals via improve their achievements and performance via simplifying the ways of communications.
- 3) No vegetation covers, crops, plants, trees...etc. will be removed in order to execute the construction activities of the road.
- 4) No claims from any locals were recorded or alleged regarding the ownership of the land where the road will be constructed.
- 5) No deportation, dislocation of any of the local community will be needed due to these activities.
- 6) The construction of the project will enhance the economic situation of the people via saving transportation fares to achieve their daily

|                | <del>- 1 </del>   |
|----------------|---|
|                | requirements.   |
|                | The Grievance Redress Mechanism is a procedure that aims to facilitate the most satisfactory solution and/or guidance to stakeholders seeking to submit their comments or complaints.  Before the start of the project, local community members will be informed about the GRM via communication channels. For example, they will be informed verbally by their community leader or through social media online. Visible sign boards, hard copies of the GRM brochures, and online platforms will also be made available posting GRM-relevant contact information and an explanation of the grievance process.  |
| GRM<br>Process | The SFD established a central free hotline, and it is functioning properly in addition to the email and WhatsApp application. The digital system with multi-channels for receiving complaints, inquiries, feedback or comments like WhatsApp, Facebook, email and complain boxes for each subproject. Additionally, GRM focal points will be assigned at local level and central level to be in charge of handling complaints. The focal point will maintain a log and report on grievance management, which includes minutes of meetings, resolutions and recommendations as part of an annual project progress report. The information for the central office is: |
|                | # Name Job Title Phone E-mail Number  |
|                | 1         Husam A. Shaael         GRM Team leader         07833344263 07733344263         Sfd.grm.iraq@gmail.com  |
|                | Meanwhile, in order to comply with the WB requirements, SFD has assigned staffs as focal points with their cell phone numbers to be disseminated at each subproject level for receiving calls and handling complaints. The contact details will be posted on subproject signboard and the complaint boxes will be installed in each location as shown in the below table.  Contact Information for GRM  |
|                | # Name Job Title Phone E-mail   |

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SFD Team

leader

 $\operatorname{GRM} \operatorname{Officer}$ 

1

2

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|---|-----------------------|--------------------------|-------------|--------------------------|
|---|-----------------------|--------------------------|-------------|--------------------------|

The process of managing complaints will be as follows:

The grievance note should be signed and dated by the aggrieved person. Where the affected person is unable to write, s/he should obtain assistance from the community to write the note and mark the letter with his/her thumbprint. Individuals who submit their comments or grievances have the right to request that their name be kept confidential, though this may mean that the social officer in charge of the GRM is unable to provide feedback on how the grievance is to be addressed. However, an anonymous complaint can receive a code and should be investigated appropriately and treated courteously.

After receiving the comments and complaints, they will be summarized and listed in a Complaints/Comments LogBook, containing the name/group of commenter/complainant, date the comment was received, brief description of issue, information on proposed corrective actions to be implemented (if appropriate), and the date of response sent to the commenter/complainant. Complaints should be sorted out according to complexity; Significantly, the GRM classifies feedback in two categories, high-level and standard, each has its own procedure as explained further below.

#### **High-Level Feedback**

Feedback received to be categorized as 'high' level instances will include issues that meet the following criteria:

- Incidents that caused or may potentially cause significant or great harm to the environment, workers, communities, or natural resources;
- Incidents which entail failure to implement environmental and social measures with significant impacts or repeated non-compliance with E&S policies;
- Incidents for which failure to address may potentially cause significant impacts that are complex and/or costly to reverse; and
- Incidents that may result in a fatality or some level of lasting damage or injury.

This type of feedback will be acknowledged, and an investigation will be launched by the PCU/PMO and any other relevant stakeholders with 24 hours during work days and within 48 hours if the feedback was received over the weekend. It should be noted that some types of incidents, including accidents and fatalities need to be reported to the World Bank. This guidance is provided in the Environment & Social Incident Response Procedures.

#### **Standard-Level Feedback**

If the identity of the aggrieved person is known and the grievance is classified as 'standard', the acknowledgement of grievance will be within 3 working-days and the response will be within 20 working-days (depending on the type of grievance i.e. high or standard). The GRM Social Officer will keep a grievance log and report on grievance management (i.e. minutes of meeting, recommendations, and resolutions made) as part of annual project progress reports. At the 20 business-day mark, if a complaint/question is still pending, the GRM focal point will provide an update to the aggrieved person and inform them of the reason of delay in resolving their case, and provide the date for which a response will be provided.

Aggrieved people who are dissatisfied with the outcome of their complaint can appeal the decision by resubmitting their complaint to the GRM Social Officer within 30 working days of receiving a response to the original submitted grievance. Subsequently, the GRM Social Officer and other relevant personnel have 30 working days to investigate and address the issue. Additionally, the GRM Social Officer has 10 working days to prepare a comprehensive response, including the findings of the investigation and the rationale of the determination. Accordingly, within a maximum of 40 working days, the appeal case should be closed.

Lastly, if the aggrieved person is still not satisfied with the solution provided, s/he has the option to go to court.

Individuals who submit their comments or grievances have the right to request that their name be kept confidential. An anonymous complaint will receive a code and should be investigated appropriately and treated courteously. Ensuring confidentiality when dealing with cases of sexual harassment, sexual exploitation and sexual abuse. In order to mitigate those issues/ complaints, assigning female GRM officer in case of facing any SEA/SH incidents, in addition, all GRM officers/ focal points must be trained on how to handle SEA/SH related grievances.

In addition to PMO, the MOP, project offices in governorates, and Community Development Groups (CDGs), the World Bank's Grievance Redress System (GRS) can also be approached for reporting and resolving issues.

#### **Disclosure activities**

As soon as the site-specific ESMP gets clearance from the World Bank and approval from the Ministry of planning, the following disclosure procedures will be adapted. A final report, in English and in local language, will be published on the WB, SFD and Ministry of Planning

|                                      | websites and also will be available locally (such as at local SFD office.   |
|--------------------------------------|---|
| INSTITUTIONAL C.                     | APACITY BUILDING  |
| Will there be any capacity building? | [] N or [x]Y It is recommended to provide safety trainings and induction sessions to the workers and engineers who will be employed throughout the construction phase. Moreover, there needs to be more training on GRM implementation in order to ensure its proper functioning in the future. |

## PART B: SAFEGUARDS SCREENING AND TRIGGERS

| ENVIRONMENTAL /SOCIAL SCREENING FOR SAFEGUARDS TRIGGERS |   |                    |  |  |
|---|---|--------------------|--|--|
|   | Activity / Typology   | Status             | Triggered Actions  |  |
|   | 1. Re/construction of urban, inter-urban or rural roads                         | [X] Yes<br>[ ] No  | This subproject is mainly construction of roads.   |  |
|   | 2. Reconstruction of / impacts on surface drainage system                       | [ ] Yes<br>[X] No  | The subproject doesn't entail any major reconstruction or impact on Surface drainage system  |  |
| Will the site activity include/in volve any of the      | 3. Activities in Historic building(s) and districts                             | [ ] Yes<br>[X] No  | The construction activities do not take place anywhere near historic buildings or districts and  |  |
|   | 4. Required acquisition of land or temporary / permanent impacts on livelihoods | [ ] Yes<br>[X] No  | No land acquisition is required for this subproject as the activities will be taking the road will be constructed on state owned land. |  |
| following?  | 5. Handling or presence of hazardous or toxic materials                         | [ ] Yes<br>[ X] No | There are no toxic or hazardous materials generated by the project.  |  |
|   | 6. Impacts on forests and/or protected areas                                    | [ ] Yes<br>[X] No  | There are no forests or protected areas surrounding the subproject area.   |  |
|   | 7. Risk of unexploded ordinance (UXO)   | [ ] Yes<br>[X] No  | An official clearance letter has been provided by authorities (Annex 4).   |  |
|   | 8. Traffic and Pedestrian Safety  | [X] Yes<br>[ ] No  | If "Yes", see Part C   |  |

# PART C: MITIGATION MEASURES/ CONSTRUCTION PHASE

| No. | Potential<br>Impacts  | Mitigation Measures   |
|-----|-----------------------|---|
| 1   | General<br>Conditions | <ol> <li>The local construction and environment inspectorates and communities have been notified of upcoming activities.</li> <li>The public has been notified of the works through appropriate notification in the media and/or at publicly accessible sites (including the site of the works).</li> <li>All legally required permits have been acquired for construction and/or rehabilitation.</li> <li>The Contractor formally agrees that all work will be carried out in a safe and disciplined manner designed to minimize impacts on neighbouring residents and environment.</li> <li>Workers' PPE will comply with international good practice (always hardhats, as needed masks and safety glasses, harnesses and safety boots)</li> <li>There is posted material indicating the nearest police station and hospital (with</li> </ol> |

|     | Potential      |  |
|-----|----------------|--|
| No. | Impacts        | Mitigation Measures  |
|     |                | accident and emergency facilities).  |
|     |                | 7) The contractor must take reasonable steps to prevent unauthorized people  |
|     |                | accessing the site.  |
|     |                | 8) Prohibit the burning of waste on site.  |
|     |                | 9) Provide a first aid kits in different places of the work site with the appropriate  |
|     |                | number of materials given the number of workers on site. The workers will be noted about the locations of the first aid kits.  |
|     |                | 10) Providing extinguishers which distributed within the working area.   |
|     |                | 11) If work involving the use of flammable materials is being carried out or any   |
|     |                | other material that might make any danger, stop people smoking and do not allow other work activities involving potential ignition sources to take place   |
|     |                | nearby.  |
|     |                | 12) Providing site boundaries (if any) by installing suitable physical boundaries (barriers, tape or fence).   |
|     |                | 13) Marking excavation holes (if any) with physical boundaries (barriers, tape or fence).  |
|     |                | 14) The contractor should put up barriers or covers in the area of openings and excavations if any.  |
|     |                | <ul><li>15) Site areas should be clear from explosive remnants of War (ERW) Unexploded Ordnance (UXO) before commencing the work in the site.</li></ul>  |
|     |                | 16) Everyone who works on any site must have access to adequate toilet and   |
|     |                | washing facilities, a place for preparing and consuming refreshments, and an   |
|     |                | area for storing and drying clothing and personal protective equipment (PPE).  |
|     |                | 17) Contractor to ensure PPE (personal protective equipment) is used by all workers on site.   |
|     |                | 18) Materials and equipment are tidily stacked, protected and covered where necessary. Additionally, there is adequate space for new materials to be stored in secured covered areas to avoid damage, theft, and to protect these items from weather conditions. |
|     |                | 19) Appropriate signposting of the sites will inform workers of key rules and regulations to follow.   |
|     |                | 20) The contractor should provide full insurance coverage schema of all type of workers. The insurance should cover work related accidents (Injuries and fatalities) as well as insurance for third party.   |
|     |                | 21) Rigid obligations and penalties will be added to the contractor/subcontractors'  |
|     |                | contractual agreements in order to guarantee child labor is prohibited in the  |
|     |                | project. Penalties to be applied in cases where workers under the age of 18 are  |
|     |                | hired.   |
|     |                | 22) "Ensure appropriate drainage channels and gutters to avoid water-logging and   |
|     |                | address any access issues across such drainage channels.   |
|     |                | 23) Site rehabilitation after completion of works,   |
|     |                | 24) Chance find procedures are included in Annex 6 in order to provide guidance in case of finding any cultural heritage objects   |
|     | ~              | 1) Waste collection and disposal pathways and sites will be identified for all major   |
|     | Generation,    | waste types expected from construction activities.   |
|     | storage,       | 2) Construction and demolition waste, if any, will be separated from general   |
|     | disposal<br>of | refuse, organic, liquid and chemical wastes by on-site sorting and stored in   |
| 2   | constructio    | appropriate containers.  |
|     | n, hazard,     | 3) Construction waste will be collected and disposed properly by licensed collectors   |
|     | and            | to authorized area.  |
|     | domestic       | 4) The records of waste disposal will be maintained as proof for proper  |
|     | $ m waste^6$   | management as designed.  5) Whenever feesible Contractor will reuse and recycle appropriate and visible.   |
|     |                | 5) Whenever feasible Contractor will reuse and recycle appropriate and viable  |

 $<sup>\</sup>frac{^6}{\text{https://www.ifc.org/wps/wcm/connect/456bbb17-b961-45b3-b0a7-c1bd1c7163e0/1-6%2BWaste%2BManagement.pdf?MOD=AJPERES&CVID=nPtgwEW}$ 

| No. | Potential<br>Impacts                              | Mitigation Measures   |
|-----|---|---|
|     |   | materials 6) Simple waste management plan for specific waste streams must be developed. 7) General waste must be collected and transported to the approved disposal sites. 8) Food wastes must be collected, where practicable, considering health and hygiene issues, for disposal off-site through licensed contractors. 9) Waste containers must be located at each worksite with sufficient numbers.  |
| 3   | Hazardous<br>wastes and<br>materials <sup>7</sup> | <ol> <li>Hydrocarbons, including lubricants, which will be very limited and resulted just from machines/truck shall be collected for safe transport outside the site for recycling, transport or disposal at approved sites to be nominated by the Municipality and the Ministry of Health and Environment</li> <li>The site will be cleaned from all wastes frequently and wastes will be stored in safe containers until transported</li> <li>The waste shall be transported by specially licensed Transporters and disposed of in the special areas to be determined by the authority.</li> <li>Paints containing solvents, solvents or lead-based paints might use for road furniture shall not be used as per requirements, instructions and coordination with the Ministry of Science and Technology</li> <li>Empty containers of treatment chemicals shall be returned to suppliers.</li> </ol>  |
| 4   | Air quality <sup>8</sup>                          | <ol> <li>Demolition debris, excavated soil and aggregates shall be kept in controlled area and sprayed with water mist to reduce debris dust when necessary</li> <li>There will be no open burning of construction / waste material at the site.</li> <li>All machinery will comply with Iraqi emission regulations, shall well maintained and serviced and there will be no excessive idling of construction vehicles at sites</li> </ol>  |
| 5   | Noise <sup>9</sup>                                | <ol> <li>Construction noise will be limited to restricted times agreed to in the permit</li> <li>All the workers will be supplied with fully safety measures including earmuffs.</li> </ol>   |
| 6   | Runoff<br>water and<br>drainage<br>systems        | <ol> <li>Procedures will be put in place for rapid response to accidental spills of fuels, lubricants and other toxic or noxious substances, and for their recovery and appropriate disposal</li> <li>Construction vehicles and machinery will be washed only in designated areas where runoff will not pollute natural surface water bodies.</li> <li>There will be no unregulated extraction of groundwater, nor uncontrolled discharge of process waters, cement slurries, or any other contaminated waters into the ground or the water resource.</li> <li>Drainage system: A well-designed drainage system is crucial in preventing flooding on roads. This can involve constructing gutters and culverts to divert water away from the road surface and into nearby waterways or drainage systems.</li> <li>Elevation: Raising the height of the road can also be an effective measure in preventing flooding. This can be achieved by adding layers of asphalt or concrete to the existing road surface, or by building up the road bed.</li> <li>Slope stabilization: Slope stabilization measures such as the use of retaining walls or vegetative cover can prevent soil erosion and landslides, which can contribute to flooding.</li> <li>Floodplain management: In some cases, the road may be located in a floodplain. In these situations, it is important to implement floodplain management measures such as land use restrictions, flood warning systems, and evacuation plans to mitigate the impact of flooding.</li> </ol> |

<sup>&</sup>lt;sup>7</sup> https://www.ifc.org/wps/wcm/connect/90231ba8-5bb3-40f4-9255-eaf723d89c32/1-

<sup>5%2</sup>BHazardous%2BMaterials%2BManagement.pdf?MOD=AJPERES&CVID=nPtgwml https://www.ifc.org/wps/wcm/connect/4e01e089-ad1a-4986-b955-e19e1f305ff0/1-

<sup>1%2</sup>BAir%2BEmissions%2Band%2BAmbient%2BAir%2BQuality.pdf?MOD=AJPERES&CVID=nPtgvbS

<sup>9</sup> https://www.ifc.org/wps/wcm/connect/4a4db1c5-ee97-43ba-99dd-8b120b22ea32/1-7%2BNoise.pdf?MOD=AJPERES&CVID=nPtgwZY

| No. | Potential<br>Impacts  | Mitigation Measures  |
|-----|---|--|
| 7   | Groundwat<br>er<br>quality  | Sewage from construction offices and rest areas will be collected in septic tanks and transferred by trucks to the nearest sewage treatment plant by authorized contractors.   |
| 8   | Traffic   | <ol> <li>In compliance with national regulations, the Contractor will ensure that the construction site is properly secured and construction related traffic regulated.</li> <li>The site will be clearly visible and the public warned of all potential hazards by signposting and barriers / fencing</li> <li>Adjustment of working hours to local traffic patterns, e.g. avoiding major transport activities during rush hours or times of livestock movement</li> <li>If required, active traffic management by trained and visible staff at the site for safe passage for the public</li> <li>Ensuring safe and continuous access to all adjacent office facilities, shops and residences during construction</li> </ol>  |
| 9   | Occupation<br>al and<br>community<br>health &<br>safety<br>conditions | <ol> <li>Provide adequate signage to prevent accidental falling into open areas</li> <li>Include Construction OHS Plan (submitted and approved by the Resident Engineer) prior to the start of construction. It will address all the risks anticipated including, but not limited to: Working in confined space (inside sheet piles), Risk of sinking, Electrocution, and Safety of equipment.</li> <li>Deployment of HSE procedures for the construction personnel.</li> <li>During the loading and unloading of debris specific measures should be applied:         <ol> <li>Covering the trucks using polyethylene sheets to avoid the falling of debris</li> <li>Trucks should use unpopulated routes as much as possible</li> </ol> </li> <li>For proper implementation of Community Health and Safety mitigation measures during construction, it is essential to establish and sustain an open and transparent dialogue between MoP/contractor and the affected communities in full compliance with the WB standards related to stakeholder engagement activities.</li> <li>It is necessary to put signs telling the citizen that the road is undergoing paving and that the alternative route should be identified.</li> <li>Apply the concept of universal access to the design and construction of buildings or any structures where technically and financially feasible (i.e. access to all users, including persons with disabilities such as wheelchair users)</li> <li>A grievance mechanism should be made available to community people12) Rigid obligations and penalties will be added to the contractor/subcontractors' contractual agreements in order to have the contractors adhere to all World Bank policies and regulation and is in compliance with measures listed in the ESMP.</li> </ol> |
| 10  | Social<br>Impacts   | Reducing impacts on the community through community and neighbour engagement.     Provide the proper GRM for handling complaints   |
| 11  | Child labor   | <ol> <li>Rigid obligations and penalties will be added to the contractor contracts in order to warrantee no child labor exist in the subproject</li> <li>The PMO will oblige the contractor to keep a copy of IDs of laborers in order to monitor the hired staff (Chapter 11 of the 2015 Labor Law of Iraq sets the age for hazardous works 18 years old).</li> <li>The contractor also will be obliged to maintain daily attendance sheets in order to verify the attendance of workers in case of accidents and provide the injured persons with proper health insurance</li> <li>The code of conduct for workers/contractors should be introduced to prevent misconducts, including prevention of sexual harassment and also training and awareness rising for workers should be continued, through daily toolbox talks and other training opportunities.</li> <li>Implement all facets of the established grievance mechanism, ensuring anonymous channels are available.</li> </ol>  |

## MITIGATION MEASURES/ OPERATION PHASE

| In | npact                             | Mitigation Measures   | Responsi<br>bility        | Supervisi<br>on                          | Total<br>estimated<br>Cost in        |
|----|-----------------------------------|---|---------------------------|--|--------------------------------------|
| 1  | • Air quality                     | • During the license issuance or renewal process of vehicles, traffic authorities to ensure that all vehicle engines are in good conditions.  | Traffic<br>Departme<br>nt | Traffic<br>Departme<br>nt                | No direct cost                       |
| 2  | • Noise                           | <ul> <li>During the license issuance or renewal process of vehicles, traffic authorities should ensure that all vehicle engines are in good conditions.</li> <li>Speed limits should be reduced especially near residential buildings.</li> <li>Limit trucks movement especially at night in coordination with the local traffic authorities.</li> </ul>                            | Traffic<br>Departme       | Traffic<br>Departme<br>nt                | No direct cost                       |
| 3  | Solid and<br>hazardous<br>wastes  | During the operational period, some littering and waste generation resulting from the repair activities will occur. Littering may occur due to wind action.  All waste should be deposed through licensed haulers/transporters to licensed and regulated landfill sites appropriate to the type of waste generated  |                           | Local<br>Authority<br>(Municipal<br>ity) | Within<br>municipal<br>budget        |
| 4  | Flora &<br>Fauna                  | Not applicable  | Not<br>Applicable         | Not<br>Applicable                        | Not<br>Applicable                    |
| 5  | Runoff and<br>drainage<br>systems | • Regular maintenance of drainage systems, culverts, and other infrastructure is essential in preventing flooding. This can involve clearing debris from culverts, repairing damaged infrastructure, and maintaining vegetation cover.  |                           | Local<br>Authority                       | Within<br>municipal<br>budget        |
| 6  | Topography<br>and<br>landforms    | Not Applicable  | Not<br>Applicable         | Not<br>Applicable                        | Not<br>Applicable                    |
| 7  | Handling<br>Complains             | The continued operation of a GRM for one year following operating of the Road for use will ensure that local community members have an accessible, fair and transparent means of reporting any emerging adverse impacts, and a means of obtaining mitigation.   | Local                     | Local<br>authorities                     | No cost                              |
| 8  | Health and<br>Safety              | <ul> <li>Provision signage to improve visibility and overall safety of roads, particularly along stretches located near Roads or other locations where children may be present.</li> <li>Having a clear set of emergency Plan and Procedures.</li> <li>provision of health and safety information;</li> <li>regular inspection, review and recording of EHS performance;</li> </ul> |                           | Resident<br>engineer                     | Included<br>in<br>contractor<br>cost |

| Impact | Mitigation Measures               | Responsi<br>bility | Supervisi<br>on | Total<br>estimated<br>Cost in |
|--------|-----------------------------------|--------------------|-----------------|-------------------------------|
|        | Total cost US\$ (Operation phase) |                    |                 | No Cost                       |

## PART D: MONITORING PLAN/ CONSTRUCTION PHASE

|     | Potential             |   |   | Respor          | nsibility            | Additional               | Cost in USD              |
|-----|-----------------------|---|---|-----------------|----------------------|--------------------------|--------------------------|
| No. | Impacts               | Mitigation Measures   | Monitoring  | Implement ation | Monitoring           | Mitigation<br>measures   | Monitoring               |
| 1   | General<br>Conditions | <ol> <li>The local construction and environment inspectorates and communities have been notified of upcoming activities</li> <li>The public has been notified of the works through appropriate notification in the media and/or at publicly accessible sites (including the site of the works)</li> <li>All legally required permits have been acquired for construction and/or rehabilitation</li> <li>The Contractor formally agrees that all work will be carried out in a safe and disciplined manner designed to minimize impacts on neighbouring residents and environment.</li> <li>Workers' PPE will comply with international good practice (always hardhats, as needed masks and safety glasses, harnesses and safety boots)</li> <li>There is posted material indicating the nearest police station and hospital (with accident and emergency facilities).</li> <li>The contractor must take reasonable steps to prevent unauthorized people accessing the site.</li> <li>Prohibit the burning of materials on site.</li> <li>Provide a first aid kits in different places of the work site with the appropriate number of materials given the number of workers on site. The workers will be noted about the locations of the first aid kits.</li> <li>Providing extinguishers which distributed within the working area.</li> <li>If work involving the use of flammable materials is being carried out or any other material that might make any danger, stop people smoking and do not allow other work activities involving potential ignition sources to take place nearby.</li> </ol> | Bi-monthly: record of<br>all the licenses and<br>permits obtained;<br>Compliance with the<br>HSE requirements | Contractor      | Resident<br>Engineer | No<br>additional<br>cost | No<br>additional<br>cost |

|     | Potential           |   |   | Respon          | sibility             | Additional             | Cost in USD      |
|-----|---------------------|---|---|-----------------|----------------------|------------------------|------------------|
| No. | Impacts             | Mitigation Measures   | Monitoring                                | Implement ation | Monitoring           | Mitigation<br>measures | Monitoring       |
|     |                     | <ol> <li>Providing site boundaries (if any) by installing suitable physical boundaries (barriers, tape or fence).</li> <li>Marking excavation holes with physical boundaries (barriers, tape or fence)</li> <li>The contractor should put up barriers or covers in the area of openings and excavations.</li> <li>Store building materials (such as pipes, manhole rings, and cement bags) so that they cannot topple or roll over.</li> <li>Everyone who works on any site must have access to adequate toilet and washing facilities, a place for preparing and consuming refreshments, and an area for storing and drying clothing and personal protective equipment (PPE).</li> <li>Contractor to ensure PPE (personal protective equipment) is used by all workers on site.</li> <li>Materials and equipment are tidily stacked, protected and covered where necessary. Additionally, there is adequate space for new materials to be stored in secured covered areas to avoid damage, theft, and to protect these items from weather conditions.</li> <li>Appropriate signposting of the sites will inform workers of key rules and regulations to follow.</li> <li>The contractor should provide full insurance coverage schema of all type of workers. The insurance should cover work related accidents (Injuries and fatalities) as well as insurance for third party.</li> <li>Rigid obligations and penalties will be added to the contractor/subcontractors' contractual agreements in order to guarantee child labor is prohibited in the project. Penalties to be applied in cases where workers under the age of 18 are hire.</li> <li>Contractor clauses in case of any non-compliances including (initial warning, penalties, contract termination etc) will be followed and reviewed as in annex 5.</li> <li>Chance find procedures are included in Annex 6 in order to provide guidance in case of finding any cultural heritage objects</li> </ol> |   |                 |                      |                        |                  |
| 2   | Generatio, storage, | Waste collection and disposal pathways and sites will be identified for all major waste types expected from   | Weekly site inspections and verifying the | Contractor      | Resident<br>Engineer | No<br>additional       | No<br>additional |

|     | Potential  |  |  | Respon          | sibility             | Additional               | Cost in USD              |
|-----|--|--|--|-----------------|----------------------|--------------------------|--------------------------|
| No. | Impacts  | Mitigation Measures  | Monitoring   | Implement ation | Monitoring           | Mitigation<br>measures   | Monitoring               |
|     | disposal of<br>constructio<br>n, hazard,<br>and<br>domestic<br>waste | <ul> <li>construction activities.</li> <li>2) Construction and demolition waste, if any, will be separated from general refuse, organic, liquid and chemical wastes by on-site sorting and stored in appropriate containers.</li> <li>3) Construction waste will be collected and disposed properly by licensed collectors to authorized area.</li> <li>4) The records of waste disposal will be maintained as proof for proper management as designed.</li> <li>5) Whenever feasible Contractor will reuse and recycle appropriate and viable materials</li> <li>6) Simple waste management plan for specific waste streams must be developed.</li> <li>7) General waste must be collected and transported to local council approved disposal sites.</li> <li>8) Food wastes must be collected, where practicable, considering health and hygiene issues, for disposal off-site through licensed contractors.</li> <li>9) Waste containers must be located at each worksite with sufficient numbers.</li> <li>10) Storage, transport and handling of all chemicals must be conducted in accordance with all legislative requirements, through licensed contractors and in coordination with the local authority.</li> </ul> | records on waste<br>disposal   |                 |                      | cost                     | cost                     |
| 3   | Handling<br>of<br>hazardous<br>wastes and<br>materials               | <ol> <li>Hydrocarbons, including lubricants, which will be very limited and resulted just from machines/truck shall be collected for safe transport outside the site for recycling, transport or disposal at approved sites to be nominated by the Municipality and the Ministry of Health and Environment</li> <li>The site will be cleaned from all wastes frequently and wastes will be stored in safe containers until transported</li> <li>The waste shall be transported by specially licensed tankers and disposed of in the special areas away from the city to be determined by the paddies.</li> <li>Paints containing solvents, solvents or lead-based paints shall not be used as per requirements, instructions and coordination with the Ministry of Science and Technology.</li> </ol>  | Weekly site inspections<br>and verifying the<br>records on waste<br>disposal | Contractor      | Resident<br>Engineer | No<br>additional<br>cost | No<br>additional<br>cost |

|     | Potential  |   |   | Respon          | sibility             | Additional  | Cost in USD  |
|-----|--|---|---|-----------------|----------------------|---|--|
| No. | Impacts  | Mitigation Measures   | Monitoring  | Implement ation | Monitoring           | Mitigation<br>measures  | Monitoring   |
| 4   | Deteriorati<br>on of<br>air<br>quality <sup>10</sup>               | <ol> <li>Demolition debris, excavated soil and aggregates shall be kept in controlled area and sprayed with water mist to reduce debris dust</li> <li>During pneumatic drilling or breaking of pavement and foundations dust shall be suppressed by ongoing water spraying and/or installing dust screen enclosures at site</li> <li>The surrounding environment (sidewalks, roads) shall be kept free of soil and debris to minimize dust</li> <li>There will be no open burning of construction / waste material at the site.</li> <li>All machinery will comply with Iraqi emission regulations, shall well maintained and serviced and there will be no excessive idling of construction vehicles at sites</li> </ol> | Ambient air quality test, 1 time prior to construction to obtain the baseline Air quality parameters: PM10, PM2.5, SO2, NOx, CO, Ozone and HC Compliance with dust abatement measures (Annex 3) | Contractor      | Resident<br>Engineer | Additional cost of water 500  | Testing done by accredited Laboratorie s. Additional cost 750 US |
| 5   | Increased<br>level of<br>noise <sup>11</sup>                       | <ol> <li>Construction noise will be limited to restricted times agreed to in the permit</li> <li>All the workers will be supplied with fully safety measures including earmuffs.</li> <li>Compliance with the time limitations;</li> <li>Switching off the equipment not in use;</li> <li>Use of protective gear</li> </ol>   | Weekly site inspection<br>(Annex 3)   | Contractor      | Resident<br>Engineer | No<br>additional<br>cost  | No<br>additional<br>cost   |
| 6   | Disruption<br>of the<br>runoff<br>water and<br>drainage<br>systems | <ol> <li>Procedures will be put in place for rapid response to accidental spills of fuels, lubricants and other toxic or noxious substances, and for their recovery and appropriate disposal</li> <li>Construction vehicles and machinery will be washed only in designated areas where runoff will not pollute natural surface water bodies</li> <li>There will be no unregulated extraction of groundwater, nor uncontrolled discharge of process waters, cement slurries, or any other contaminated waters into the ground or adjacent streams or rivers;</li> </ol>   | Weekly site inspection during rainy season; Bi-weekly site inspection during dry seasons:  Signs of spillage of hazardous materials Testing in case of accidental spills of hazardous materials | Contractor      | Resident<br>Engineer | additional<br>cost:<br>contingenc<br>y for<br>removal of<br>accidental<br>hazardous<br>spills<br>1000 US \$ | No<br>additional<br>cost   |
| 7   | Deteriorati  | 1) Sewage from construction offices and rest areas will be  | Weekly site inspection  | Contractor      | Resident             | No  | Testing  |

<sup>&</sup>lt;sup>10</sup> https://www.ifc.org/wps/wcm/connect/4e01e089-ad1a-4986-b955-e19e1f305ff0/1-

<sup>1%2</sup>BAir%2BEmissions%2Band%2BAmbient%2BAir%2BQuality.pdf?MOD=AJPERES&CVID=nPtgvbS

1 https://www.ifc.org/wps/wcm/connect/4e01e089-ad1a-4986-b955-e19e1f305ff0/11%2BAir%2BEmissions%2Band%2BAmbient%2BAir%2BQuality.pdf?MOD=AJPERES&CVID=nPtgvbS

|     | Potential  |  |  | Respon          | sibility                    | Additional               | Cost in USD   |
|-----|--|--|--|-----------------|-----------------------------|--------------------------|---|
| No. | Impacts  | Mitigation Measures  | Monitoring   | Implement ation | Monitoring                  | Mitigation<br>measures   | Monitoring  |
|     | on of<br>groundwat<br>er<br>quality                      | collected in septic tanks and transferred by trucks to the nearest sewage treatment plant (Annex 3)  | during rainy season; Bi-weekly site inspection during dry seasons Water testing: in case of accidental spills of hazardous materials: pH, Turbidity, (EC), Color, Total Suspended Solids (TSS), (TDS), (COD), (BOD), |                 | Engineer                    | additional<br>cost       | done by<br>Accredited<br>Laboratorie<br>s.<br>Additional<br>cost<br>500 US \$ |
| 8   | Disruption<br>of<br>traffic                              | <ol> <li>1)In compliance with national regulations the Contractor will ensure that the construction site is properly secured and construction related traffic regulated.</li> <li>2)The site will be clearly visible and the public warned of all potential hazards by signposting and barriers / fencing</li> <li>3)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.</li> <li>4)Adjustment of working hours to local traffic patterns, e.g. avoiding major transport activities during rush hours or times of livestock movement</li> <li>5)Ensuring safe and continuous access to all adjacent office facilities, shops and residences during construction</li> </ol> | Monthly site<br>surveillance for the<br>presence of<br>fencing/barriers and<br>warning signs, and<br>traffic speed<br>limitations  | Contractor      | Resident<br>engineer<br>PMO | No<br>additional<br>cost | No<br>additional<br>cost  |
| 9   | Deteriorati<br>on of<br>health &<br>safety<br>conditions | <ol> <li>Provide adequate signage to prevent accidental falling into open areas</li> <li>Fencing of the work areas.</li> <li>The contractor should develop and implement "EHS Procedures".</li> <li>Include Construction OHS Plan (submitted and approved by the Resident Engineer) prior to the start of construction. It will address all the risks anticipated including, but not limited to: Working in confined space (inside sheet piles), Risk of sinking, Electrocution, and Safety of equipment.</li> </ol>   | Inspection and photo<br>evidence<br>Maintaining records of<br>injuries and accidents<br>with cause and location  | Contractor      | Resident<br>engineer        | No<br>additional<br>cost | No<br>additional<br>cost  |

<sup>.</sup> 

https://www.ifc.org/wps/wcm/connect/1d19c1ab-3ef8-42d4-bd6b-cb79648af3fe/2%2BOccupational%2BHealth%2Band%2BSafety.pdf?MOD=AJPERES&CVID=nPtgxyx

|     | Potential   |   | Monitoring   | Respor          | sibility             | Additional               | Cost in USD   |
|-----|---|---|--|-----------------|----------------------|--------------------------|---|
| No. | Impacts   | Mitigation Measures   |  | Implement ation | Monitoring           | Mitigation<br>measures   | Monitoring  |
|     |   | <ul> <li>5) To ensure worker safety, health insurance must be provided to all type of workers</li> <li>6) Deployment of HSE procedures for the construction personnel</li> <li>1) Reducing impacts on the community through community and</li> </ul>  |  |                 |                      |                          |   |
| 10  | Social<br>Impacts   | neighbour engagement.  2) Provide the proper GRM for handling complaints. This GRM should assure confidentiality. Specific engagement with women and girls that includes awareness on SEA/SH and access to anonymous channels to report cases. Training GRM focal point on how to handle SEA/SH related grievances.  3) Ensure that the Worker's Code of Conduct and corresponding training concerning commitment of labor towards the community and the different behavior that should be avoided. | Weekly monitoring<br>of response to<br>complaints<br>Training on GRM +<br>attendance sheet                               | Contractor      | Resident<br>Engineer | No<br>additional<br>cost | Purchasing<br>of the<br>required<br>equipment<br>\$750 UD |
| 11  | 4) Rigid obligations and penalties will be added to the contractor contracts in order to warrantee no child labor exist in the subproject  5) The PMO will oblige the contractor to keep a copy of IDs of laborers in order to monitor the hired staff (Chapter 11 of the 2015 Labor Law of Iraq sets the age for hazardous works 18 years old).  6) The contractor also will be obliged to maintain daily attendance sheets in order to verify the attendance of workers in case of accidents and provide the injured persons with proper health insurance  7) The code of conduct for workers/contractors should be introduced to prevent misconducts, including prevention of sexual harassment and also training and awareness rising for |   | Inspection and Bi- weekly monitoring Signed Worker's Code of Conduct Trainings on Code of Conduct + attendance sheet GRM | Contractor      | Resident<br>Engineer | No<br>additional<br>cost | No<br>additional<br>cost                                  |
|     |   | Expected additional mitigation cos  | ts:  |                 |                      | USD 1500                 |   |
|     |   | Expected monitoring co  | sts:   |                 |                      |                          | USD 2250  |

## **ANNEXES**

# **Annex 1: Consultations Photos**



Public consultations at Jedalah village



Public consultations at Al-Hayali village



Public Consultations at Al-Magnonia Village



Public Consultations at Ruska Village



Public consultations at mojamaa Al-Qahtania village

# Annex (2): Sample individual interviews for both men and women

| استييان الصندوق الاجتماعي للتنمية لمحافظة المراح من المستويان الصندوق الاجتماعي للتنمية لمحافظة المراح من المراح | الإجرافات البينية والاجتماعية التي سوتم الخلاها بخصوص تتغيذ المتساريع في القريبة ومدى الترها على المجتمع المحلى والبينية  |
|--|---|
| اسم العشروع: الشَّمَا و طرَّت تم الِحَرْيَةِ   | استا و طِين الرّب   |
| فقداء المحاج فنعة المطاش فقية عداد<br>لونس حائد<br>فعدر: ٢٩٧ سنة   | قبشن هذکر ولائن<br>قصرت را باد  |
| المهتة وموظف ومقاعد كوكشب ومذاهب وريةييت   | فمهلة وموظف ومقامد وكاسب وطفيه أورية يبت  |
| <ul> <li>ا. على هشك ادعاوات او مطافيات من قبل السكان المعلمين بعادية الإرض المقام عليها المشروع؟.</li> <li>ين تعم عكل ي ملاحظات.</li> </ul>  | <ol> <li>على هنتك ادعادات أو مطالبات من قبل السكان المحليين بعادية الارض العلم طبها السشروع؟.</li> <li>ن مم ك كلا ن ملاحظات.</li> </ol>   |
| <ol> <li>قل ميكون هذك شرر على التشاطات و المصالح اليومية للأهالي يسبب الاحدال الاتشائية للمشروع؟.</li> </ol>   | <ol> <li>قل سيادن فذا ضرر على التشاطات و المصالح اليومية للأهالي بسبب الاصال الاشائية للمشروع؟.</li> </ol>  |
| ن نم کلا ن ملاحظات   | ن نم سن کلا ن ملاحظات   |
| <ol> <li>هل هناك أي يشي تعنية مشتقار يسبب الاعمال الانشائية للمشروع ٢.</li> </ol>  | <ol> <li>فل هذاك أي يني تحلية ستتاثر بسبب الاصال الاشائية للمشروع ؟.</li> </ol>   |
| ن نم 🔪 کلا 🔾 ملاحظات   | ی تمم در کلا ی مانمطانت   |
| <ul> <li>قل هذاك اعادة توطين الشفص او تحدة الشفاص يسبب الخاصة المشروع في القرية؟.</li> </ul>   | <ul> <li>قل هذك اعادة توطين تشخص او تحة الشفاص بسبب الله المشروع في القرية؟.</li> </ul>   |
| 2) لهم   | D نم  |
| <ul> <li>هل صوف يثاثر الموتمع المحلي بصورة مثبية تنبجة المشاريع المقامة?.</li> </ul>   | <ul> <li>هل سوف بتأثر المجتمع المعلى يصورة سلبية للنهجة المشاريع المقتمة.</li> </ul>  |
| n نعم من کلا و ملاحظات   | () Lind (2) 26 () all and 10  |
| <ol> <li>الله اعسال الشاء أو اعادة تاهيل المشروع ستوثر بشائل سلبي على المجاميع الإكثر ضعفا والإكثر هشائشة (النساء والمعطون) ٢.</li> </ol>  | <ol> <li>قل اعسال الشاء أو اعادة تاهل المشروع ستؤثر بشكل سئين على الموسوع الإكثر ضعا والإكثر عشاشة (النساء والمعانن) 7.</li> </ol>  |
| ورنمم المكالف والملاحظات   | ر نعم   |
| ٧. هل تتوقع ازالة معاصيل زراعية او السجار او اية غطاء نباتني تعود علديله لمواطنين او ستان محليين يسهب الاعمال الانششانية   | ٧. هل تتوقع ازالة محاصيل زراعية او اشجار او اية غطاء تبائي تعود عاميته لدواطلين او سان محليين يسبب الاحسال الانشامية  |
| ششروع؟.  | المشروع!.   |
| ونم كالأ والملاملات  | ر تمم م كلا را ملامظات<br>المام المنافقة المامظات   |
| ٨. هل سيوش المشروع في الثلثقة السكانية (امكانية قاوم مواطنين من مناطق الحرى الى الغرية بسبب المشاريع التي سنلط)؟   | <ul> <li>٨. على سنوش المشروع في التشقة السفانية أراسكتية أواسكتية قدوم مواطنين من متطق نفري التي القرية يسبب المشاريع التي سنتفائها</li> <li>١٠٠ ما ١٠٠ ملاحظات المحاطنات المحاطن</li></ul> |
| والمم واكلا والمطلت  |   |
| <ul> <li>٩. هل تحقد أن عملية الشاء أو اعادة تأهيل المشروع لها الله إيجابية من الناهية الاجتماعية باللمية للسكان القاملتين في المشاطق</li> </ul>  | <ul> <li>٩. هل تعظم أن عصلية أنشاء أو اعتدة تأهيل المشروع لها التر ليجابية من النامية الاجتماعية يالنسية النستان القاطنين في المناطق</li> </ul>   |
| القريبة من المشروع".   | القريبة من المشروع .  |
| آرونمم ن کلا ن ملامظات   | الم و کلا و ملاحظات   |
| شكراً على والتكم   | شكراً على والتكم  |
|  |   |

| the second |        |         |        |           |        |        |
|------------|--------|---------|--------|-----------|--------|--------|
| - went     | ا نوسو | اممافقة | تتتمية | الاجتماعي | المشوق | ستبيان |

طريزش المواطئة... طريز ي المواطن...

تُجريه ( وزارة التفظيط / المنتدق الاجتماعي للثمية ) مسح ميداني تغرض التشاور المجتمعي مع أيناه الغرية هول الإهرافات الينية والجثناعية التي سيثم انفذها يخصوص تتقيذ المشاريع في القريبة ومدير الرها على الموضع المعلي واليبنة المعيطة، راجين الإدبية بصدق وحيدية عن الاستبيان الثاني دون العاجة للكر الاسم أو وسيلة الاتصال .

|  | مري من المريد                           | انتار               | شروع:        | اسم الما |
|--|---|---------------------|--------------|----------|
| سه جمال  | فللمية المتحاس                          | 20                  | الم          | القنباء  |
|  | و قتي                                   |                     | Sist         | الجس     |
|  |   | ibe                 | 7.           | العسر    |
| 0 رياجت  | ار کاسب از خالب                         | age D o             | ورموطة       | شهنة     |
| *  | , قبل السكان المطبين بعادية الإرض الد   | na cialiba el cielo | a da a       | ,        |
| -22-00   | و علامقات                               | 26.6                | pai ()       |          |
| لاعمل الاشتية للمشروع:                             | طات و المصالح الومية للأهالي يسبب ا     |                     |              |          |
| 100  | Gladle ()                               | 34.0                |              |          |
|  | بيب الاصال الاشائية المشروع ال          |                     |              |          |
|  | ن ملاحظات                               | Mg                  | 200          |          |
| , mi, pir,   | لحة الشاص يسبب فاضة المشروع في          | بة توطئ تشخص او     | 4 40 14      | .1       |
|  | و مالحقات                               | 3615                | pal ()       |          |
|  | مورة عليية تتيجة المشتريع المقادة إ     | ثر تسيئع البحيء     | هل سوف پا    |          |
|  | رر ملاحقات                              | 24 1                | pai ()       |          |
| يع الانثر ضحًا والانثر هششة والساء والمعافئ) ٢.    | تعشروع ستؤثر يشتل سليي على المجام       | شاء او اعادة ناهل ا | هل اعمال ال  | 2.       |
|  | () ماأحظات                              | 34 (1               | pa) (I       |          |
| ته لمواطنين او سكان مطيين يسيب الاعمال الالشاعية   | او السجار او ايـة غطاه ليكني تعود علديا | لة معاصيل زراعية    | <b>我说话</b>   | Ψ.       |
|  |   |                     | ششروع".      |          |
|  | called to p                             | 34:5                | pai ()       |          |
| ل نفرى الى القرية يسبب المشاريع التي سللقاً}"      | سكتية زامكانية فدوم مواطئين من مناط     | مشروع في اللفاة ا   | هل سيوثر ۵   | A        |
|  | ي ملاحقات                               | 36 n                | نونعم        | -        |
| تغية الاوتمامية بالتمية البنتان القاطنين في المنطق | ة تأهل المشروع لها التر ايجابية من الا  | عشية لشاء او اعد    | هل تعتقد ان  | .4       |
|  |   | للشروع".            | القريبة من ا |          |
|  | ن ملاحظات                               | 36.0                | pai ()       |          |

شكراً على وفتكم ....

استبيان الصندوق الاجتماعي للتنمية لمعافظة الحرار السعار

عزيزتي الدواطئة... عزيزي الدواطن... تُجريرا وزارة التخليف / المستوق الارتماض للتلمية } مسح ميداني لفرض التشاور المهتمين مع ليناه تقرية مول الإجراءات البينية والإيضاعية التي سيئم الفاذها بقصوص تقلية المشاريع في القرية ومدن الثرها على المجتمع المعلي والبينة المعيطة، راجين الإجابة بصدق وحيادية عن الاستبيان التشي دون المادية الكر الاسم أو وسيئة الاتصال.

|                                       |                    | المتري             | ر عارمت مت         | انشا                   | _ ; 533           | نم ھٹ          |
|---------------------------------------|--------------------|--------------------|--------------------|------------------------|-------------------|----------------|
| فية صالي                              |                    | المتطائم           | الثمية             | .2.                    | المعا             | للضاء          |
|                                       |                    |                    | 10                 |                        | , jii (1          | لولس           |
|                                       | Carlos             | وطائب              | 11 كاسب            | artife ()              | () <b>n</b> ether | نصر:<br>نمهنة: |
|                                       |                    |                    |                    |                        |                   |                |
| شروع.                                 | ن المكام طبيها الم | ين يعلنية الارش    | أقيل السكان المعلم | ان او مطالبات من       | ل هلك ادعاءا      | V, 3           |
|                                       |                    |                    | ن مالعظائر         | 35,00                  | pai ;             | in .           |
| غية المشروعة.                         | بب الاعمل الانك    | ومية للاعلى بمع    | فان ر المسالح ال   | د شور علی الشا         | ل سيلون هنڌ       | P. 4           |
|                                       |                    |                    | CONTROL (S         | 35 p                   | 120               |                |
|                                       |                    | ية المشروع از      | بب الاصل الإثلبة   | رتحتية ستناثر يس       | ل هنگ ای باتر     | A .5           |
|                                       |                    |                    | CONTRACT:          | 36 9                   | pal ;             | a              |
|                                       | و في گلوية؟.       | ب قامة المشروع     | لحة اللقاص يسي     | تُوطِينَ لِشَخْصَ أَوْ | ل هنك اعدًا       | I, 4           |
|                                       |                    |                    | Gillen Ne (2)      | 26 1                   | paid              | i              |
|                                       | .5%                | اعشاريع الملام     | سورة سلبية نتيجا   | الموتمع المحلي يد      | ل سوف پئائر       | * .*           |
|                                       |                    |                    | GlinNe))           | 75 0                   | pai               | t)t            |
| طا والاكثر هشتشة والنساء والمعقون) 7. | جامرج الاكثر شم    | كل سلين على الد    | مشروع ستؤثر بث     | او اعتدائمل ا          | ل اعمال الشاء     | 1. 4           |
|                                       |                    |                    | ومالطات            | 36 p                   | pai               | п              |
| أو سكان معليين بسبب الاعدق الاشتهة    | بلتيته لدواطئين ا  | فاء لبائي تجود ع   | و اشجار او نية غ   | معاصيل زراعية          | ر عوقع تردة       | A .Y           |
|                                       |                    |                    |                    |                        | شروع".            | ar .           |
|                                       |                    |                    | ن ملاحظات          | 365                    | pai               |                |
| الغرية بسبب المشاريع التي ستلفأ)؟     | شاطق اغزق الى ا    | م مواطنين من م     | خلية ومكلية فر     | روع في الانتفاقات      | ن ميوثر المثر     | A. 4           |
|                                       |                    |                    | ن ملاحقات          | 56.0                   | pal               | 0              |
| فية بالنسبة السكان القطلين في المشطق  | ن النامية الاوتساء | ها اثار ایجابیة مر | التأهيل المشروع ا  | ئية الشاء او اعدا      | ر تحاد ان صا      | 2. 4           |
|                                       |                    |                    |                    | .12.37.                | زيية من است       | ab .           |
|                                       |                    |                    | ن ملاحظات          | 36.0                   | pai               | 0              |
|                                       |                    | رأ على وقتكم       | ш                  |                        |                   |                |

#### المرار المناوق الاجتماعي للتعية لمحافظة المرار مرا

عزيزتي المواطئة\_ عزيزي المواطن\_

لُعِرِيوً وزارةَ النَّطَيْطُ } المندوق الاعتماعي للنبية } سبح ميداني تعرض الشاور المجتمعي مع لبناء القرية مون الاجراءات الهيئية والاجتماعية التي سيتر الغلاما بقصوص تلقيدً المشاريع في القرية ومدو الثرها على المجتمع المحتي والبيشة المحيفة، واجن الإجابة يصدق وحبائية عن الاستييان الثاني مون العابية تلكر الاسم أو وسيلة الالصال.

| المحل و التمية التراكيسي الفرية المرتب و التي التي التي التي التي التي التي التي  |        |                      | لقريه              | طرب مت            | انتار           | . : 5,1     | م المث |
|---|--------|----------------------|--------------------|-------------------|-----------------|-------------|--------|
| موزنگر الله الله الله الله الله الله الله الل   | المزند | طرية                 | الترايات           | £,ni20            | 9               | المدا       | يناو   |
| ن موطقت ن مثقامت کی کشب ن خلف ن ریة بیت<br>فی هفته ادعادات او مطلبات من قبل السکان المحلبین یعادیة الارض المقام طبها المشروع".<br>راهم کرد کان ن ملاحظات.<br>فی میکون هذات شور طی اللشاطات و المصطلح الومیة الاعلی بسیب الاصال الالشاعیة کمشروع". |        |                      | أنثي               | 0                 |                 | Sign        | (mi)   |
| في هذك ادعادات او مطالبات من قبل السكان المحلمين يعاندية الارض المثلم طليها المشروع".<br>با نعم روكا ن ملامطات.<br>فل معينون هذك شور على اللشاطات و المصداع اليومية للأهالي بسبب الانصال الانششابة للمشروع".                                      |        | 10                   | 23                 | -                 |                 |             | 1344   |
| ر نام ﴿ ﴿ وَ كَانَ ﴿ فَا مَالْمُطَلَّتُمْ ﴿<br>فَاسْتِكُونَ مِنْكُ شِرَرَ عَلَى النَّشَاطِيةِ وَ الْمُعَلِّقِ بِمِينِهِ الأعمالُ الانششيةُ تَسْشَرُوعٍ *.   |        | C# 410               | 1) <del>طالب</del> | ال السب           | 36 May ()       | رر موظف     | 1      |
| ، نعم ﴿ ﴿ وَ كُلَّ ﴿ ۞ مَالْمُطْلَتُ،<br>لَ سَيَاوَنَ هَلَكُ شَوْرَ عَلَى النَّسُطُكُ وَ الْمُصَالِّةِ الْوَجِيِّةِ لِلْأَعْلَى بِسِيبِ الاَصَالُ الاَشْشَابِةِ كَسَشْرُوعٍ؟.   |        |                      |                    |                   |                 |             |        |
| ل سيكون هنك شرر على التشاطات و المصالح اليومية للأهالي يسبب الاصال الانشائية للمشروع".  | .5     | العقام عليها المشروع | شين يعلنية الارض   | ن قبل السكان المد | ات او مطالبات م | ن های دعاء  | 4.1    |
|   |        |                      |                    | وملاطات           | 35,50           | pair        | 0.     |
|   | شروع?. | بالاصل الانشانية للم | الومية للأهلى يسيم | نظات و المصالح    | ك شرر على الله  | ق سیکون هشا | 1, 1   |
|   |        |                      |                    | dilahen           | 36 (            | 0.00        |        |

- ٢. هل هذك أي بلي تعلية ستثاثر بسبب الإعمال الإنشائية الششروع ٦.
- ن مر سو کا و مادهات
- ا. فل هناك اعدة توطين تشخص او لحدة تشخاص يسبب الأنبة المشروع في القرية ال
  - هل سوف يتثار المجتمع المحلي يصورة سلبية للبجة المشاريع الطامة الـ
- פיאן על פילאלוט
- ب. هل تتوقع ازقة محاصيل زراعية أو الشجار أو أية غطاه نياتي تعود عائنية أمواطنين أو سكان محليين يسبب الإعمال الإنشائية المشروع!.
  - ging gill under
- هل سوائر المشروع في الثقافة المستقية إصفائية الموم مواطنين من منطق نفري الى القرية بسبب المشاريع التي سنتقاع:
   ب نح
   ب نح
   ب كال حال المحلقات
- و. حل تحك أن صابة تشاء أو احدة تلفيل فنشروع لها اثار أيجلية من النامية الإبتداعية بالنسبة تشكل القطئين في المشطئ الطريقة من النشروع؟.
  - ونم وكلا وملاحظات

#### شكراً على وقتكم ....

#### استبيان الصندوق الاجتماعي للتمية لمحافظة المعار ارسان

عزيزتي المواطئة\_ عزيزي المواطن\_

أجويو( وزارة النظوط / الصندوق الايمناعي للتمية } سبح مباشي لغرض النشور المهنمي مع ابناء القرية حول الإمرادات البينية والاجتماعية التي سيتم الفلاها بقصوص تقية المشاروع في القرية ومدور الذها على المهنميع المحلي والبيشة المعيظة، راجن الإجابة بعدق ومهامية عن الاستبيان الثاني دون المابعة فلكر الاسم أو وسيلة الاصلال.

|                              |                          | بالقرري            | عرب مت              | انسار              | . : 533       | اسم المشر |
|------------------------------|--------------------------|--------------------|---------------------|--------------------|---------------|-----------|
| المزت                        | 4,80                     | الفطان             | التعية              | 2                  | الما          | القضاء    |
|                              |                          | · di               | A per               |                    | 200           | البشن:    |
|                              |                          |                    |                     | lin                | 127           | : , , , , |
|                              | الا وية بيت              | 0.484              | ن کلمیه             | an War ()          | ن بوظف        | فيهنة     |
|                              |                          |                    |                     |                    |               |           |
|                              | المائم عليها المشروح!!   | نين يعادية الإرش   | ر قبل السكان السما  | ات او مطالبات من   | er dia j      | 1. 4      |
|                              |                          |                    | رو مالحقائد         | 24,00              | إنمير         | tit .     |
| 1820                         | بالاصل الاشتية للث       | يومية للأهلى يسيم  | طات و المصالح ا     | ك شرر على اللك     | ل ميكون هذا   | 1. 1      |
|                              |                          |                    | ومالطات             | 36,0               | paic          | à.        |
|                              |                          | نية للمشروع ال     | ب الاعمال الالما    | ر تحلية ستثار يد   | ل هلك اي يتر  | 4.5       |
|                              |                          |                    | المالطان            | 35.47              | pal           | 0         |
|                              | في القرية ال             | ب اللهة المشروع    | لحة النقاص يم       | توطئ للبلص او      | ل هلك اعدة    | 2. 4      |
|                              |                          |                    | ومالطات             | 36-0               | paig          | į.        |
|                              |                          | ة المشاريع المقامة | هورة مثية تيو       | الموتمع المطيء     | ل موف يتكر    |           |
|                              |                          |                    | ومالطات             | 34.0               | -             | 63        |
| ر عششة والساء والمعالين) ٢.  | بشيع الإعكر طبطا والإعكا | عل ساين على المج   | بعقروع ستؤثر يث     | ه او اعادة داهيل ا | ل اعمل خشیا   | 1. 4      |
|                              |                          |                    | ومالعات             | 346                | ing           |           |
| مطيئ يسبب الاعدال الاشانية   | دینه امواطلین او سکان    | طاه ثبائي تعود عد  | او المجار او اينا ا | معاصيل زراعية      | ر تترقع برها  | N. N.     |
|                              |                          |                    |                     |                    | شروع".        | a         |
|                              |                          |                    | (Saladia)           | 76 17              | jac           | D         |
| جب المشتريع التي منتفازا     | علق نفری الی اللویة ید   | وم دواطنين من منا  | ساتية وسائية ف      | روع في تفتفة ا     | رُ سيوٽر اشڪ  | 1. 4      |
|                              |                          |                    | ciliana ()          | 36 0               | pai           | 1         |
| لية السكان القطلين في المشطق | التعية الابتماعية بالس   | لها تار ايجابية من | ة تأهل الطروع       | شية لشاء او اعد    | ر نظار ان عم  | 4.4       |
|                              |                          |                    |                     | 18.87.             | ئريية من النط | Alta .    |
|                              |                          |                    | وعلامقات            | 34 D               | pai           | 13        |
|                              |                          | ع اعلى وقت         | 4                   |                    |               |           |

|               | القرية حول                | ر المهتمي مع آيتاه<br>دد            | باني تغريض الشنور<br>دما جاء ماء ماء | ائي لللعبة ) مسح مع<br>ثم القلاها يقصوهن. | ستييان الصندو<br>زي المواطن<br>الصندوق الاجتما<br>تدام ة ال | مواطئة_ على<br>ارة التفطيط إ | is he m |
|---------------|---------------------------|-------------------------------------|--------------------------------------|---|---|------------------------------|---------|
| لمطلي والهيشة | ، عني المجمع ا            | عربه ومدن سره<br>م أو وسيئة الإنصال | ن المنهة الكر الاس                   | م الاستيبان التالي دو                     | يصدق وهيانية ا  | راهن الاهابة                 | سيطة    |
|               |                           |                                     | 9                                    | لامت مير لغة                              | انساء   | 1840                         | سم العث |
|               | -                         |                                     |                                      |   |   |                              |         |
|               | 821                       | 1,30                                | حالهم                                | النية إ                                   | 9   | 1.60                         | لمتاو   |
|               |                           |                                     |                                      | all to                                    |   | fü ti                        | بشرر    |
|               |                           |                                     | /                                    |   | il.,  | 62                           | :,      |
|               |                           | الاربة جث                           | رر خالب                              | ر کلب                                     | Jellia ()   | وبرش                         | 140     |
|               |                           |                                     |                                      |   |   |                              |         |
|               |                           |                                     |                                      |   |   |                              |         |
|               |                           | نام عليها المشروع?                  | يعلنية الارض الط                     | رقيل السلان المعليين                      |   |                              |         |
|               |                           |                                     |                                      | ن ملاحظات                                 | 34.0  |                              |         |
|               | . TEA                     | حال الاشتية للمثر                   | ية للاهالي يسيب الا                  | طلك و المصالح اليوم                       |   |                              |         |
|               |                           |                                     |                                      | CARAGO D                                  | 38 0  |                              |         |
|               |                           |                                     | لمشروع ٢.                            | ب العل الشابة                             |   |                              |         |
|               |                           |                                     |                                      | () alfailte                               | 38.0  |                              |         |
|               |                           | تقرية؟.                             | فتمة المشروع في ا                    | لحة الشاص يسيب                            |   |                              |         |
|               |                           |                                     | 0.410.211100                         | (jaKaši)                                  | 34.0  |                              |         |
|               |                           |                                     | شاريع الطامة:                        | مورة بثية تليبة ث                         |   |                              |         |
|               |                           |                                     |                                      | (Indian)                                  | Mg  |                              |         |
| والمعالين) ٢. | عششة والساء               | والانتر ضطا والانتر                 | داين خي المهاموا                     | لمشروع سنؤثر يشتال                        |   |                              |         |
|               |                           |                                     |                                      | وملاحقات                                  | 35,0  |                              |         |
| سل الاشتية    | N. who citizen            | المواطلون او سكان                   | نبائي نعود عاديتا                    | او النجار او اينة غاناه                   | elect the second  |                              |         |
|               |                           |                                     |                                      | ر مالحقات                                 | 34.6  | شروخ?.<br>نم                 |         |
| and an        |                           |                                     | det vivae                            |   |   |                              |         |
| day           | يب المشاريع التي          | لفزی هی تکاریه پس                   | و اطنین من منطق                      | سكانية واسكنية فدوم .<br>ان ماتحظات       | 7.5 ch mms 2.5  |                              | -       |
|               |                           | a factor                            | market w                             | ر مجمود<br>ا تامل المشروع لها ا           |   |                              |         |
|               | water and the same of the | married flat courts at 1 flats      | out (or nation) jui                  | do Cilbert Man a                          | m. k som d  | 0                            | 100     |
| ر في المنطق   |                           |                                     | 200                                  |   |   | زيبة من المشر                |         |

شكراً على وقتكم ....

عزيزتي المواطئة... عزيزي المواطئ... تُعِرِي( وزارة التَفَقِط / المندوق الاجتماعي للتمية ) ممح ميداني تغرض التشاور المجتمعي مع ايناه القرية هول الإجراءات الينية والجشاعية التي سبتم الفائعا يقصوص تنفيذ المشاريع في نقرية ومدى الارها على المجتمع المعلى والبينة المعيطة، راجين الإجابة بصدق وهيائية عن الاستييان التقي بون المذية لأكر الاسم أو وسيلة الانسال. المسوهدوع: المشارطون ت الغرب الجلس: ﴿ يَا لَكُ هل هذك ادعاوات او مطالبات من قبل السكان المعليين بعلدية الارض المقام عليها المشروع!!. ٢. هل سباون هناك شور على التشاطات و المصالح اليوسية اللاهالي يسبب الاصال الاشتانية المشروح!. هل هذاك أن بني تعلية سنتائر بسبب الاصال الاشائية للمشروع 7. ورملاحظات على هذاك احادة توطين للسفس او تحدة السفاس يسبب ظامة المشروع في القرية ا. قل سوف يثائر المجتمع المحلي بصورة سليبة تتيجة المشاريع المقتمة إ. My NO ٢. هل اعمال الشاه أو اهامًا تاهيل المشروع ستوثر يشكل سلين على المجاميع الانكر ضعفا والانكر عششة والنساء والمعظين) ٢. ٧. هل نتوقع ازناة معاصيل زراعية او النجار او اية غطاه نيائي تعود عاديته نمواطنين او ستان معايين بسبيب الاعدل الاشدادية في سيؤثر المشروع في الثقافة السكتية (اعكثية قوم موتطنين من منطق نفرى الى تقرية بسبب المشاريع التي ستلفاع؟ إ. فإن تعلق إن صلية الشاء أو اعدة تأجل المشروع لها التر ليجلية من التنجية الاجتماعية بالنسبة النسكان اللهظين في المشاطق القريبة من المشروع". ن مائمقات 36 () شكراً على وقتكم ....

استبيان الصندوق الاجتماعي لتنمية لمحافظة المرصل برسما

#### استبيان الصندوق الاجتماعي للنتمية لمحافظة المرس س

عزيز تن المواطئة ... عزيز ي المواطن ... أحد ما مادة كالقطعة السندي الاحداد

أوريواً وزارة النطبة ( المستوى الاجتماعي التنبية ) مسح ميدتي لفرض التشاور المجتمعي مع لهناه القرية مول الإجراءات الهيئية والاجتماعية التي سيتر الفلاها بخصوص تقية المشارع في القربة ومدن الربعا على المجتمع المحلي والهيئة المحيطة، راجن الإجابة بصدق وجهامية عن الاستيان التلي دون الحاجة لكار الإسراق وسيئة الإنصار

| Hed & | ظية     | القطائ  | Estilli |           | العاج  | plui |
|-------|---------|---------|---------|-----------|--------|------|
| 1     |         | il.     | TI TI   |           | Sup    | 100  |
|       |         |         |         | ilia.     | 0      | Lju  |
|       | واريةيت | ال طالب | made gr | aritis () | ن برقد | -44  |
|       |         |         |         |           |        |      |

- فل سياون طاله ضرر على التشطات و المصالح اليوسية الأعلى يسبب الانصال الانشائية المشروع ال
  - Alba Da Cl. Alba El
  - فأر هذك أن بنى تعلية ستثاثر يسبب الاصل الاشائية المشروع ?.
     نام حرب كلا إن ماتحظات
  - هل هناك اعادة توطين تشخص او تحة الشخاص بسبب الأمة المشروع في القرية إ.
    - ﴿ ﴿ ﴿ مُوفَ يَتَأَرُ الْمُوسَعِ الْمُعْلَى بِصُورِ السِّيةَ تَتِيْهِ أَ الشَّارِيعِ النقضارُ إِلَيْنَا اللَّهِ اللَّهُ اللَّهِ الللَّهِ اللَّهِ اللَّلَّمِي اللّ
      - ونم والا والأطال
- قد اعمل انشاء او اعتدا تاهيل المشروع متوثر بشكل سلبي على السياسيع ١٥٥٠ طبطة و١٥٥٠ هشتشة والنساء والمعطون) ٦.
   را نحم حمر كلا را ماهمانات
- ب. عل تتوقع ازالة معاصيل زراعية او الشهار او اينة غطاه نباتي تعود علديته تمواطئين او سكان مجليين بسبب الاحدال الاشادائية المشروع!.
  - Died 1975 (Laterillia
- قل تعقد أن عملية أنشاء أو اعادة تأهيل المشروع لها التر ليجليية من الناعية الاجتماعية بالسبة السندن الفاطنين في المناعلق
  - القريبية من المشروع?. إن نعم ن كلا ن ملاحظات

شاراً على وأنكم ....

#### استبيان الصندوق الاجتماعي للتلمية لمحافظة المرسل مسار

عزيز في المواطئة ... هزيز ي المواطئ .. أما ويا والدة التفضيط لا المشرود الايشام الكليمة لا يستح سوال الله

أور يواً وزارة التخطّ العشاوق الاجتماعي للنمية ) سنح مبالي لغرض للشاور المجتمع مع أيناه القرية حول الإجراحات البينية والاجتماعية التي سيتر الغلاما بقصوص القياة المشارع في القرية ومدى الترما على المجتمع المعلى والبينة المحيلة، راجين الإجابة بصدق وجيانية عن الاستيان الثلي بون الحاجة القار كاسم أو وسيلة الإنسال.



# ANNEX (3): IRAQI STANDARDS FOR AIR, NOISE, and Water

### **Ambient Air Quality Guidelines**

| Dallatant               | Iraqi Standards                      |              | WHO Standards        |  |  |
|-------------------------|--------------------------------------|--------------|----------------------|--|--|
| Pollutant               | Concentration                        | Average Time | Concentration        |  |  |
| СО                      | 10 ppm                               | 8 hours      | N/A                  |  |  |
|                         | 35 ppm                               | 1 hour       | N/A                  |  |  |
|                         | 0.1 ppm                              | 1 hour       | 500 μg/m³            |  |  |
| SO <sub>2</sub>         | 0.04 ppm                             | 24 hours     | 20 μg/m³             |  |  |
|                         | 0.018 ppm                            | 1 year       | N/A                  |  |  |
| NO <sub>2</sub>         | 0.05 ppm                             | 24 hours     | 200 μg/m³            |  |  |
| NO <sub>2</sub>         | 0.04 ppm                             | 1 year       | 40 μg/m <sup>3</sup> |  |  |
| Ozone (O <sub>3</sub> ) | 0.06 ppm                             | 1 hour       | 100 μg/m³            |  |  |
| PM <sub>10</sub>        | 150 μg/m³                            | 24 hours     | 50 μg/m <sup>3</sup> |  |  |
| PM <sub>2.5</sub>       | 65 μg/m <sup>3</sup>                 | 24 hours     | 50 μg/m <sup>3</sup> |  |  |
| FIVI <sub>2.5</sub>     | 15 μg/m <sup>3</sup>                 | 1 year       | 15 μg/m <sup>3</sup> |  |  |
| Total Suspended         | 350 μg/m³                            | 24 hours     | N/A                  |  |  |
| Particles               | 150 μg/m³                            | 1 year       | N/A                  |  |  |
| Falling Dust            | 10 t/Km²/month<br>(Residential Zone) | 30 days      | N/A                  |  |  |
| Falling Dust            | 20 t/Km²/month                       | 30 days      | N/A                  |  |  |
|                         | (Industrial Zone)                    |              |                      |  |  |
| Hydrocarbons            | 0.24 ppm                             | 3 hours      | N/A                  |  |  |
|                         | 2 μg/m <sup>3</sup>                  | 24 hours     | N/A                  |  |  |
| Pb                      | 1.5 μg/m <sup>3</sup>                | 3 months     | N/A                  |  |  |
|                         | 1 μg/m <sup>3</sup>                  | 1 year       | N/A                  |  |  |
| Benzene                 | 0.003 μg/m <sup>3</sup>              | 1 year       | N/A                  |  |  |
| Dioxin                  | 0.6 pico g/m <sup>3</sup>            | 1 year       | N/A                  |  |  |

## Noise:

Law no. 41 of the year 2015: Noise Protection and Control / Noise Limits for Different Working Zones

| Туре        | Allowable (dB) |
|-------------|----------------|
| Industrial  | 70             |
| Commercial  | 70             |
| Residential | 55             |

### Water:

The table below shows the limits defined for discharges to both natural waters (water resources) and sewers (which generally have higher permissible discharge limits).

| Pollutant                        | Limits for discharge to water resources  | Limits for discharge to public sewers |
|----------------------------------|--|---------------------------------------|
| Color                            | -  | -                                     |
| Temperature                      | Less than 35°C   | 45°C                                  |
| Suspended solids                 | 60   | 750                                   |
| pH                               | 6 – 9.5  | 6 – 9.5                               |
| Dissolved Oxygen (DO)            | -  | -                                     |
| Biochemical Oxygen Demand (BOD)  | Less than 40   | 1,000                                 |
| Chemical Oxygen Demand (COD)     | Less than 100  | -                                     |
| Cyanide (CN <sup>-</sup> )       | 0.05   | 0.5                                   |
| Fluoride (F <sup>-</sup> )       | 5.0  | 10                                    |
| Free Chlorine (Cl <sub>2</sub> ) | Traces   | 100                                   |
| Chloride (Cl <sup>-</sup> )      | <ul> <li>A. If the ratio of the amount of water discharged to the amount of source water is 1000:1 or less, the chloride concentration of the discharge is permitted at 1% of the concentration of the natural source before discharge.</li> <li>B. If the ratio of the amount of water discharged to the amount of source water is more than</li> </ul> | 600                                   |

| Pollutant                                  | Limits for discharge to water resources  | Limits for discharge to public sewers |
|--|--|---------------------------------------|
|  | <ul> <li>1000:1 the wastewater discharge must not exceed a chloride concentration of greater than 600 mg/L.</li> <li>C. If the concentration of chloride in the source water is less than 200 mg/L then the permitted discharge limit must be established on a case by case basis</li> </ul>   |                                       |
| Phenol                                     | 0.01 – 0.05  | 5 – 10                                |
| Sulfate (SO <sub>4</sub> <sup>2-</sup> )   | <ul> <li>A. If the ratio of the amount of water discharged to the amount of source water is 1000:1 or less, the sulfate concentration of the discharge is permitted at 1% of the concentration of the natural source before discharge.</li> <li>B. If the ratio of the amount of water discharged to the amount of source water is more than 1000:1 the wastewater discharge must not exceed a sulfate concentration of greater than 400 mg/L.</li> <li>C. If the concentration of sulfate in the source water is less than 200 mg/L then the permitted discharge limit must be established on a case by case basis</li> </ul> | 300                                   |
| Nitrate (NO <sub>3</sub> )                 | 50   | -                                     |
| Phosphate (PO <sub>4</sub> <sup>3-</sup> ) | 3  | -                                     |
| Ammonium (NH <sub>4</sub> <sup>+</sup> )   | -  | -                                     |
| DDT  | Nil  | -                                     |
| Lead (Pb)                                  | 0.1  | 0.1                                   |
| Arsenic (As)                               | 0.05   | 0.05                                  |
| Cupper (Cu)                                | 0.2  | -                                     |
| Nickel (Ni)                                | 0.2  | 0.1                                   |
| Selenium (Se)                              | 0.05   | -                                     |
| Mercury (Hg)                               | 0.005  | 0.001                                 |
| Cadmium                                    | 0.01   | 0.1                                   |
| Zinc (Zn)                                  | 2.0  | 0.1                                   |

| Pollutant                           | Limits for discharge to water resources  | Limits for discharge to public sewers |
|-------------------------------------|--|---------------------------------------|
| Chromium (Cr)                       | 0.1  | 0.1                                   |
| Aluminum (Al)                       | 5.0  | 20                                    |
| Barium (Ba)                         | 4.0  | 0.1                                   |
| Boron (B)                           | 1.0  | 1.0                                   |
| Cobalt (Co)                         | 0.5  | 0.5                                   |
| Iron (Fe)                           | 2.0  | 15                                    |
| Manganese (Mn)                      | 0.5  | -                                     |
| Silver (Ag)                         | 0.05   | 0.1                                   |
| Total Hydrocarbons & Derivatives    | Allows discharge of total hydrocarbons to water sources and A1 and A2 according to the concentrations and limitations set forth in the tables below; the concentration of hydrocarbons must be measured discharging to the water source. Hydrocarbons shall not be discharged to water sources A3 and A4. For rivers in continuous flow 10 mg/l according to the ratio of the amount of wastewater discharged to the amount of the water source should not be less than 1000:1. For a river in a continuous flow 3 mg/L and in accordance with the ratio of the amount of the wastewater discharged to the amount of water source should not be 300:1 or less. | -                                     |
| Sulfide (S <sup>2-</sup> )          | Nil  | 3.0                                   |
| Ammonia (NH <sub>3</sub> )          | Nil  | 10                                    |
| Ammonia gas (free NH <sub>3</sub> ) | Nil  | 6.0                                   |
| Sulfur dioxide SO <sub>2</sub>      | Nil  | 7.0                                   |
| Calcium Carbide CaC                 | Nil  | Not allowed                           |
| Organic solvents                    | Nil  | Not allowed                           |
| Benzene                             | Nil  | 0.5                                   |
| Chlorobenzene                       | Nil  | 0.1                                   |
| TNT                                 | Nil  | 0.5                                   |
| Bromine (Br <sub>2</sub> )          | Nil  | 1-3                                   |



يجب على مقاول الإنشاء الالتزام بالإجراءات التالية:

#### جودة الهواء

- الترطيب المنتظم للطرق بالماء لمنع الغبار
- التحكم في نواتج الحفر والتسوية للحد من إنتشار الغبار.
- أي مواد بناء قابلة للتطاير (أسمنت جاف وخلافه) يتم تخزينها في أكياس محكمة الغلق وتغطيتها لمنع تولد الغبار.
- الاحتفاظ بالمازوت والزيوت والطلاء والمواد الكيميائية الأخرى المستخدمة في الموقع بأقل كميات ممكنة وتخزينها في حاويات محكمة الغلق للحد من الأبخرة ؟
  - لا يتم تشغيل محركات المركبات والآلات الأخرى إلا عند الضرورة لتجنب الانبعاثات غير الضرورية ؛
- يتم الحفاظ على جميع المعدات والآلات والمركبات المستخدمة في الموقع في حالة عمل جيدة في جميع الأوقات لضمان الحد الأدنى من استهلاك الوقود وعوادم الدخان. ينطبق هذا على الحافلات المستخدمة لنقل العمال من وإلى الموقع.
  - منع الحرق المكششوف للمخلفات.
- يتم تغطية الشاحنة الناقلة لمواد/مخلفات البناء أو المواد المتربة الأخرى وذلك بعد التأكد من الاحتفاظ بمسافة ٢.٠ متر تحت الحافة العلوية لجدران الشاحنة ، بالقماش المشمع للتحكم في الغبار ؛
  - تغطية درم الحفر المخزن بصفة مؤقتة في الموقع بالمواد المناسبة ، مثل البولي إيثيلين أو ألواح النسيج لتجنب تشتت التربة.
  - تحديد سرعة قصوى للمركبات والمعدات التابعة للمشروع بحيث ألا تتجاوز السرعة القصوى داخل حدود الموقع عن ١٠−٥٠ كم/ساعة.
    - توفير خط ساخن لتلقى الشكاوي ٧/٢٤

#### الضوضاء

- تطبيق جدول زمني مناسب لتجنب أي أعمال قد تسبب ضوضاء واهتزازات خلال الفترة من ١٠ مساءا إلى ٦ صباحا.
- إقتصار تشغيل المعدات المستخدمة في أعمال البناء على أوقات محدودة خلال النهار حيث أنها ليست آمنة للعمل أثناء الليل. سيؤدي ذلك إلى تقليل اضطراب الضوضاء إلى حد كبير للمجتمعات القربية من مواقع العمل ؟

- تقييد استخدام الآلات التي تصدر ضوضاء بالقرب من المستقبلات الحساسة ، واستخدام وسائل الحد من الضوضاء لآلات البناء ، إذا لزم الأمر ؟
  - استخدام المركبات والمعدات المطابقة للمعايير الوطنية للضوضاء والاهتزاز ؟
- أثناء العمل ، يجب إغلاق أغطية المحرك للمولدات وضواغط الهواء وغيرها من المعدات الميكانيكية التي تعمل بالطاقة ، ووضع المعدات بعيدًا عن المناطق السكنية قدر الإمكان ؛
  - يجب توفير أغطية للأذنين / معدات حماية السمع لجميع العمال
  - لا يتم تشغيل محركات المركبات والآلات الأخرى إلا عند الضرورة للتحكم في الضوضاء الناتجة ؟
    - · تطبيق نظام الشكاوى لتلقى الشكاوى المتعلقة بالضوضاء.

### إدارة المخلفات الصلبة والخطرة

### التقليل من المخلفات:

- شراء المواد بالكمية الدقيقة المطلوبة ، لتقليل الاستخدامات المتبقية غير المستخدمة.
  - تقليل تولد النفايات في الموقع.
  - وضع خطة إدارة بسيطة للنفايات.
  - يجب جمع النفايات العامة ونقلها إلى المكان المخصص لذلك من قبل البلدية.
- يجب جمع نفايات الطعام ، حيثما أمكن ، مع مراعاة النظافة الشخصية ، للتخلص منها خارج الموقع من خلال مقاولين مرخصين.
  - يجب وضع حاويات لتجميع النفايات في كل موقع عمل.
- يجب جمع النفايات الكيميائية في براميل (أو حاويات محكومة مماثلة) ، معنونة بشكل مناسب ، وم ثم يتم إرجاعها إلى المورد أو نقلها بأمان إلى المكان المخصص من قبل البلدية. يحتوي مكب النفايات هذا على مكان مخصص لاستقبال النفايات الخطرة والطبية على حد سواء ، ويجب إجراء عمليات التخزين والنقل والتعامل مع جميع المواد الكيميائية وفقًا لجميع المتطلبات التشريعية ، من خلال المقاولين المرخصين وبالتسيق مع البلدية.
  - يجب تخزين جميع النفايات الخطرة بشكل ملائم في مناطق محدودة ويجب تحديدها بوضوح على أنها "خطرة".
  - يجب أن يتم نقل النفايات الخطرة والتخلص منها من خلال مقاولين مرخصين وبالتنسيق الوثيق مع البلدية ذات الصلة ووفقًا للمتطلبات والتعليمات القانونية.
    - يجب إدارة السوائل الخطرة ، مثل المذيبات وعوامل مقاومة الصدأ طبقاً لمتطلبات التشريعات ذات الصلة.

- ب يجب إعداد جرد للمواد الخطرة لفترة البناء.
- يجب توفير أصحيفة بيانات سلامة المواد (MSDS) للمواد الخطرة في الموقع أثناء البناء وإتاحتها وشرحها للعمال.
- يجب جمع نفايات المواد الهيدروكربونية ، بما في ذلك زيوت التشحيم ، للنقل الآمن خارج الموقع لإعادة استخدامها أو إعادة تدويرها أو نقلها أو التخلص منها في مكب معين من قبل البلدية.

#### إعادة استخدام النفايات وإعادة التدوير

- كلما أمكن ، سيعيد المقاول استخدام المواد القابلة للتدوير وإعادة تدويرها.
- يتم إعادة تدوير المخلفات التالية: الورق المقوى ، والمعادن ، وخردة المعادن مثل علب المشروبات الغازية ، وزيت مستهلك ، والورق ، والبلاستيك ، والخرسانة النظيفة ، وكذلك الغطاء النباتي المنزوع .

#### حفظ السجلات

- سيتم الاحتفاظ بكافة سجلات إزالة النفايات والإبلاغ عنها كما هو مطلوب في تقرير الأداء البيئي الشهري ؟
- السجلات التي سيتم الاحتفاظ بها تشمل: إيصالات وفواتير من مقاول نقل النفايات ومنشأة استلام النفايات
- يتم الاحتفاظ بالسجلات السالفة الذكر في سجل النفايات ، الذي يسجل تواريخ الجمع ونوع النفايات والكميات وشركة نقل النفايات والوجهة وتوقيع الشخص المفوض تخزين النفايات ومعالجتها
  - سيتم تخزين النفايات في حاويات أو صناديق. لن يتم تخزينها مباشرة على أرض غير مبطنة ؛
  - · سيتم تخزبن نفايات إعادة التدوير في مناطق أو حاوبات منفصلة ، ولن يتم خلطها مع أنواع النفايات الأخرى ؛
    - عجب تخزين جميع النفايات الخطرة بشكل ملائم في المناطق المحصورة وتحديدها بوضوح على أنها "خطرة"
  - معالجة النفايات وإدارتها بشكل صحيح من خلال فصل النفايات الصلبة عن النفايات الخطرة وعدم مزجها في مكب النفايات ؟
  - سيتم جدولة إزالة النفايات من الموقع ، بحيث يكون لديك دائمًا سلة للنفايات متاحة للإستخدام في الموقع ، وللتأكد من عدم الملئ الكامل للنفايات/الحاويات ؟
  - أي مناطق تخزين نفايات مؤقتة (غير متضمنة في صناديق أو حاويات) سيتم تغطيتها و / أو إحاطتها بسياج شبكي لمنع هبوب الرياح منها إلي الموقع ؛ و
    - يتم تخزين النفايات السائلة ، بما في ذلك نفايات الزيوت والمواد الكيميائية السائلة ، في براميل / حاويات محكمة الإغلاق على سطح خرساني.

### التخلص من النفايات

- يجب أن يتم نقل النفايات الخطرة والتخلص منها من خلال المقاولين المرخص لهم وبالتنسيق الوثيق مع البلدية المختصة بذلك.
  - يجب جمع النفايات العامة ونقلها إلى المكب المعين من قبل البلدية.

### <u>جودة التربة</u>

- وضع علامات لتحديد مكان الحفر عن طريق سور ولاصقات وعلامات ارشادية.
  - إتباع الأساليب السليمة للحد من الانسكابات/التسريات؛
  - التداول والإدارة السليمة للمخلفات ومواد البناء والمواد الخطرة.
  - يتم تخزين النفايات داخل صناديق أو حاويات، وليس على الأرض مباشرة؛
    - عدم دفن و / أو حرق النفايات المنزلية في موقع المشروع.
- التخزين المؤقت للنفايات الصلبة عن طريق الاحتواء المناسب لتجنب انتشار النفايات والرائحة وتجنب الغبار؛ احتواء ثانوي لمنع التسرب.
- ضمان أن تكون حاويات المواد السائلة الخطرة / حاويات النفايات محكمة الإغلاق بشكل صحيح دائمًا ومؤمنة من الانقلاب / السقوط / التلف / أشعة الشمس المباشرة أثناء النقل والتخزين؛
  - تخزين المواد الكيميائية، مثل الزبوت ومضادات التآكل بكميات قليلة بالموقع.
  - تحفظ جميع أنواع الوقود والمواد الكيميائية السائلة في أوعية أو براميل أو خزانات محكمة الإغلاق وفوق سطح الارض.
    - يجب إجراء الصيانة والإصلاح الروتيني للمعدات / المركبات المتنقلة في ورشة عمل.
- يتم الاحتفاظ بمجموعات التنظيف الخاصة بالانسكابات بالقرب من المناطق المستخدمة لتخزين الوقود أو المواد الكيميائية السائلة وسيتلقى الموظفون تدريباً على استخدام أدوات تنظيف الانسكابات؛
  - تخزين الزيت ومواد الطلاء في مكان مناسب له قاعدة واقية، مثل بلاطة خرسانية، لمنع أي تغلغل في الأرض؛
- التأكد من وجود البراميل والحاويات المستخدمة في تخزين الوقود أو المواد الكيميائية السائلة (بما في ذلك الزيوت المستعملة والدهانات) في حالة جيدة وخالية من الصدأ أو التلف؛
  - تنظيف موقع البناء من المخلفات الصلبة قبل إغلاقه.
  - تخصيص مناطق معينة لتخزين مخلفات التربة ومخلفات البناء.

- يجب أن يتم ترميم التربة السطحية والمناطق المتضررة بعد انتهاء مرحلة البناء.

#### جودة المياه

- يجب تنفيذ أعمال الأرض (إزالة الغطاء النباتي، والحفر، والتسوية) خلال فترات الطقس الجاف.
  - يجب أن يتم تخزين التربة على مسافة آمنة بعيداً عن المجاري المائية.
- يتم تخزين النفايات داخل صناديق أو حاويات ، وليس على الأرض مباشرة لمنع التسرب ؛
- · عدم إلقاء / التخلص من النفايات الصلبة (غير الخطرة أو الخطرة) ومياه الصرف في المسطحات المائية أو بالقرب منها.
  - التنظيف الجيد لتقليل الانسكابات / التسريبات.
- الاستجابة السريعة للانسكابات العرضية للوقود ومواد التشحيم والمواد السامة أو الضارة الأخرى ، واستعادتها والتخلص منها بشكل مناسب (يجب على المقاول إعداد خطة استجابة للطوارئ).
  - عدم غسل أو صيانة المركبات والآلات بالقرب من المسطحات المائية.

#### المياه الجوفية:

- سيتم تخزين النفايات داخل حاويات أو حاويات نفايات ، وليس مباشرة على الأرض لمنع التسرب ؛
  - يجب إجراء الصيانة والإصلاح الروتينية للمعدات / المركبات المتنقلة في ورشة ؟
- إجراء الصيانة والتفتيش الدوربين على خزانات الصرف الصحي والسباكة ومرافق الصرف الصحي المرتبطة بها لضمان ظروف صحية جيدة

#### السلامة والصحة المهنية

يجب على المقاول إعداد خطة الصحة والسلامة المهنية وتحليل مخاطر العمل خلال مرحلة البناء. سيقوم المقاول أيضًا بتعيين شخص متخصص للإشراف على الخطة. فيما يلي بعض تدابير التخفيف الرئيسية التي يجب تضمينها في الخطة:

- يجب تدريب العمال على تحديد وتقييم مخاطر السقوط وأن يكونوا على دراية كاملة بكيفية التحكم في التعرض لمثل هذه المخاطر.
  - يجب على العمال وموظفي الموقع دائمًا استخدام معدات الحماية الشخصية خاصة عند التعامل مع المواد السامة.
    - يجب على العمال الامتثال لقاعدة إدارة الصحة والسلامة المهنية التي تخص الاستخدام الأمن للسلالم.
- لمنع مخاطر معدات البناء الثقيلة ، يجب على العمال اتباع إرشادات سلامة البناء المصممة للقضاء على التعرض لمثل هذه الإصابات والحوادث
  - يجب أن تكون معدات الطوارئ (مواد تنظيف الانسكاب ، طفايات الحريق ، إلخ ..) متوفرة دائمًا في الموقع.

- يجب توفير الفحوصات الصحية الأولية والدورية للعمال.
- يجب أن تتضمن الخطة تدابير الاستجابة لفيروس كورونا المستجد كما هو موضح في الملحق ٤.
- يجب تزويد العمال بتأمين صحى (يغطى تقديم الدعم الطبي في حالة الإصابة بالأمراض) وتأمين السلامة (الذي يغطى العمال في حالة الحوادث

#### السلامة المجتمعية

- يجب وضع خطط أمن وأمان كافية لمنع وصول الجمهور إلى مواقع العمل والمواد الخطرة والمخلفات
  - يجب على المقاول الالتزام بخطة إدارة المخلفات لتجنب أي عوائق أو مخاطر على السلامة.
    - يجب توفير آلية للتظلمات لضمان التواصل الفعال فيما يتعلق بمخاوف المجتمع.

### السلامة المرورية

- يجب تثبيت لافتات أمان لإخطار المجتمع بأن مركبات البناء ستستخدم الطرق المؤدية إلى محطة المياه
  - يجب على المقاول التأكد من أن النقل المرتبط بالبناء يتو افق مع حدود السرعة

#### عمالة الأطفال

- يجب كتابة شروط صارمة في عقد المقاول لحظر تعبين الأطفال دون سن ١٨ عامًا
  - يجب أن يحتفظ المقاول بنسخة من هويات جميع العاملين

### التراث الثقافي

- اتباع إجراء العثور على الآثار (مرفق رقم (٣))

### تدفق العمالة و العنف القائم على النوع الإجتماعي

- إعداد مدونة سلوك مناسبة تنص على التزام العمال تجاه فئات المجتمع والسلوكيات التي يجب تجنبها
  - يجب تدريب جميع العاملين على قواعد السلوك.
  - يجب توقيع قواعد السلوك من قبل المقاول من الباطن
- تعريف بمدونة قواعد السلوك يتم إجراؤه كل أسبو عين للعاملين الدائمين والوافدين الجدد قبل بدء العمل.
  - تطبيق المتطلبات الكاملة المتعلقة بتشغيل آلية التظلم بما في ذلك القنوات المجهولة
- زيادة وعي السكان المحليين حول التزام المشروع تجاه المجتمعات والتدابير المتخذة لذلك من خلال المشاورات العامة ومناقشات على شكل مجاميع.
  - تطبيق العقوبات على العاملين المخالفين لقواعد السلوك

#### البنية التحتية والمرافق

- في حالة تلف أحد المرافق الموجودة تحت الأرض وأنابيب البنية التحتية ، يجب اتباع الإجراءات القياسية ، بالإضافة إلى إعداد تقرير توثيقي للحادث.
  - في حالة قطع المياه، يجب إعلام المجتمع المحلى قبل القطع
    - تنفیذ آلیة للشکاوی

#### إدارة الخدمات الموقعية

- إقامة المخيم داخل أراضي محطة المياه
- ضمان إقامة كرفانات البناء الملائمة ومرافق الصرف الصحى للبناء، أي إنشاء خزان لتخزين المياه العادمة المنزلية الناتجة عن المخيم.
  - اتباع أفضل ممار سات إدارة المخلفات وتدابير التخفيف الواردة في خطة الإدارة البيئية والاجتماعية.
    - مراقبة ظروف العمل عن كثب ، وفرض تدابير للتحكم في انتقال الأمراض المعدية.
- الحفاظ على آلية فعالة للتظلم (تمت مناقشتها في فصل مشاركة أصحاب المصلحة). يجب أن تكون آلية معالجة المظالم هذه حساسة للنوع الاجتماعي وتضمن السرية
  - انخراط محدد مع النساء والفتيات يتضمن التوعية بالعنف القائم على النوع الاجتماعي والوصول إلى قنوات مجهولة للإبلاغ عن الحالات.

# العقوبات والغاء التعاقد

إذا فشل المقاول في الوفاء بأي من الالتزامات المذكورة أعلاه بموجب العقد ، فسيتم تطبيق العقوبات التالية:

| التفاصيل   | الإجراء         | المراحل         |
|--|-----------------|-----------------|
| يجب أن يتلقى المقاول بيان تحذير يتضمن الإجراء التصحيحي المقترح.  | التحذير         | المرحلة الأولي  |
| يجب أن تبدأ جميع الإجراءات التصحيحية في مدة لا تزيد عن أسبوعين.  |                 |                 |
| يجب على المقاول اتخاذ الإجراء التصحيحي بشكل سريع.  |                 |                 |
| في حالة عدم التزام المقاول بخطة الإدارة البيئية والاجتماعية ، لا يحق للمقاول الحصول على الدفعات النقدية بموجب شروط هذا العقد.  | الدفعات النقدية | المرحلة الثانية |
| لن يتم صرف المدفوعات حتى يتم وضع خطة عمل واضحة ويبدأ المقاول في تنفيذ الإجراءات المتفق عليها.  |                 |                 |
| لن يتم إنهاء العقد بسبب عدم الوفاء بالتزامات خطة الإدارة البيئية والاجتماعية. ومع ذلك ، سيخصم مالك المشروع تكلفة تنفيذ خطة الإدارة البيئية والاجتماعية من العقد. وفي هذه الحالة يجب إرفاق دليل واضح على فشل المقاول في تنفيذ خطة الإدارة البيئية والاجتماعية | إلغاء التعاقد   | المرحلة الثالثة |

# Annex (6): Cultural Heritage Chance Find Procedure

Cultural property includes monuments, structures, works of art, or sites of significance points of view, and are defined as sites and structures having archaeological, historical, architectural, or religious significance, and natural sites with cultural values. During the project induction meeting, all contractors will be made aware of the presence of an on-site archaeologist who will monitor earthmoving and excavation activities.

The initial phase of the proposed emergency rehabilitation operations pose limited risks in damaging cultural property since subprojects will largely consist of small investments in community infrastructure and income generating activities, rehabilitation of existing structures, and minor public works. Further, it is understood by the Consultant that any activity that would adversely impact cultural property would make a subproject ineligible. Nevertheless, the Consultant will check that the following procedures for identification, protection from theft, and treatment of discovered artifacts should be followed in the event that archaeological material is discovered:

- Stop all construction activities in the area of the chance find.
- Delineate the discovered site or area.
- Record the find location, and all remains are to be left in place.
- Secure the site to prevent any damage or loss of removable objects. In cases of removable antiquities or sensitive remains, a night guard shall be present until the responsible local authorities and the Ministry of Culture immediately (within 24 hours or less);
- Notify the supervisory Engineer who in turn will notify the responsible local authorities and the Ministry of Culture (within 72 hours). The significance
  and importance of the findings should be assessed according to the various criteria relevant to cultural heritage; those include the aesthetic, historic,
  scientific or research, social and economic values.
- Decisions on how to handle the findings shall be taken by the responsible authorities and the Ministry of Culture. This could include changes in the layout (such as when finding an irremovable remain of cultural or archaeological importance) conservation, preservation, restoration and salvage.
- Implementation for the authority decision concerning the management of the finding shall be communicated in writing by the Ministry of Culture; and
- Construction work could resume only after permission is given from the responsible local authorities and the Ministry of Culture concerning safeguard of the heritage.
- The Consultant will ensure that during project supervision, the Site engineer will monitor the above regulations relating to the treatment of any
  chance find encountered and observed. Relevant findings will be recorded in World Bank Project Supervision Reports (PSRs), and Implementation
  Completion Reports (ICRs) will assess the overall effectiveness of the project's cultural property mitigation, management, and activities, as
  appropriate.