Background

With an estimated population of around 25 million, Afghanistan is among the poorest countries in the world. The urban infrastructure of Afghanistan was severely damaged in the past two decades of conflict. Neglect and even deliberate targeting of vital facilities that keep modern cities healthy and prosperous have resulted in a variety of public health problems in a number of urban centers in the country. These problems are further compounded by the increasing numbers of people who are moving into urban areas to escape rural hardships insecurity arising from degraded environments and loss of livelihood as well as return of refugees in substantial numbers (nearly 3.5 million Afghans are estimated to be returning by the end of 2003). There is a tremendous shortage of housing. The proposed Afghanistan Emergency Urban Reconstruction Project with funding assistance from the World Bank seeks to provide much-needed support in rehabilitating and improving services in Kabul and provincial towns of Afghanistan.

Project Objective

The main objective of the Emergency Urban Reconstruction Project is to improve urban management and the delivery of urban services and shelter in Kabul Municipality. This will be achieved by supporting the integration of selected neighborhoods into the urban fabric of the capital city by carrying out reconstruction and rehabilitation of urban services and enhancing the managerial capacity of the Ministry of Urban Development and Housing and the Kabul Municipality. The project would also lay the groundwork for a follow-up project aimed at city-wide infrastructure reconstruction and service delivery. The project will also support improvements in water supply and primary road networks in selected secondary towns.

Project Description

In pursuit of the above objective, the proposed Credit will finance a series of investments in critical infrastructure and housing and a set of institutional development activities designed to improve the management capacity of the Ministry of Urban Development and Housing and the Kabul Municipality.

The project includes two components, each with its five sub-components; (i) urban service and shelter improvements; and (ii) policy advice, training and engineering and management support:

- Urban Services Improvement
  - Area Upgrading in Kabul and secondary towns
- Housing reconstruction
- Repairs and reconstruction of major road and drains (KfW to oversee implementation)
- Repair and extension of Water supply and Sanitation systems (KfW to oversee implementation for works in Kabul)
- Engineering and Management Support
- Policy Advice and other support
  - Urban Institutional Development
  - Structural Planning for Kabul
  - Land tenure regularization in Kabul upgrading areas
  - Future project preparation and other studies
  - Management support

**Potential impacts of various components**

Activities envisaged under the project should not entail significant and negative environmental and social impacts, provided they are designed and implemented with due consideration of environmental and social issues. Construction activities may cause limited, temporary, and localized negative impacts that can be mitigated through the implementation of an appropriate social and environmental management plan. Most sub-projects envisaged under EURP should contribute to improving environmental and social conditions in Kabul and other provincial cities. Capacity building of municipalities, which would also include environmental and social management, are likely to have a positive impact on the environment. The proposed preparation of a revised structure plan for Kabul and feasibility studies will include detailed environmental and social assessments so that environmental and social concerns can be addressed in both the design and implementation of future large scale projects.

Adverse impacts may arise due to depletion or degradation of natural resources such as stone, earth, water etc. used for housing and urban infrastructure construction and if proper environmental management is not carried out at design, construction and operation stages. To limit the extent of these risks, the Framework provides guidelines and codes of practice for and environmental mitigation measures to be incorporated in the design, contracting and monitoring of sub-projects, along with an implementation structure assigning responsibilities to implementing agencies and their consultants, and a capacity building program for social and environmental management.

**Purpose of the Environmental and Social Management Framework**

It is acknowledged that currently social and environmental management in Afghanistan is suffering from critical capacity constraints. Since there is potential for adverse impacts, albeit limited, on the environment due to the proposed activities under the Urban Reconstruction Project, their mitigation and management is key to wholesome rehabilitation and development of neighborhoods. Hence, keeping in view the existing
social and environmental management capacity, as well as the flexibility required with investments still to be finalized, a framework approach is adopted for EURP. It allows the early identification of potential adverse impacts, without the requirement of rigorous analysis through quantification, and also provides broad guidance for their effective mitigation. Consistent with existing national legislation, the objective of the Framework is to help ensure that activities under the project will:

- Protect human health;
- Prevent or compensate any loss of livelihood;
- Prevent environmental degradation as a result of either individual subprojects or their cumulative effects;
- Enhance positive environmental and social outcomes; and,
- Ensure compliance with World Bank safeguard policies.

General Principles

Recognizing the emergency nature of proposed reconstruction operations, and the related need for providing assistance, while at the same time ensuring due diligence in managing potential environmental and social risks, this Framework is based on the following principles:

1. The proposed operations will support multiple subprojects, the detailed designs of which may not be known at appraisal. To ensure the effective application of the World Bank’s safeguard policies, the Framework provides guidance on the approach to be taken during implementation for the selection and design of subprojects, and the planning of mitigation measures;

2. All proposed subprojects will be screened (using Matrix 1) to ensure that the environmental and social risks can be adequately addressed through the application of standardized guidelines (using Matrix 2);

3. Project design and subproject selection will aim to maintain regional balance, and equity between genders, and ethnic and religious groups, considering variations in population density. Employment opportunities within the projects will be available on an equal basis to all, on the basis of professional competence, irrespective of gender, or ethnic or religious group. In all projects which require consultations with local communities or beneficiaries, gender-separated consultations will be conducted to elicit the views of the female population, along with that of the male population; and,

4. Consultation and disclosure requirements will be simplified to meet the special needs of these operations. Prior to approval by the World Bank Board, this Environmental and Social Safeguards Framework will be disclosed in Afghanistan in Dari and Pashto, and in the World Bank Infoshop.
Safeguard Screening

Although no significant environmental impacts are expected, some proposed activities will need to be carefully screened for potential impacts, including: (i) solid waste management, particularly if it involves disposal; (ii) domestic liquid waste disposal, and septic tank cleaning; (iii) reconstruction of sewers and drains; (iv) low cost water treatment facilities and water distribution network repairs and extensions in Kabul and in provincial cities; and (v) construction impacts for access roads.

Additionally, the selection, design, contracting, monitoring and evaluation of subprojects will be consistent with the following guidelines:

- A negative list of characteristics that would make a proposed subproject ineligible for support, as indicated in Attachment 1;
- Guidelines for land and asset acquisition, entitlements and compensation, presented in Attachment 2;
- Procedures for the protection of cultural property, including the chance discovery of archaeological artifacts, and unrecorded graveyards and burial sites, provided in Attachment 3.
- Generic codes of practices for environmental management at design, construction and operation stages, provided in Attachment 4.
- Formats for limited environmental assessment (LEA) and generic Terms of Reference for a full Environmental Impact Assessment (EIA), available in Attachments 5 and 6, respectively.
- Generic Terms of Reference for a full Social Assessment in Attachment 7
- The requirement that confirmation is received through the Regional Mine Action Center that areas to be accessed during reconstruction and rehabilitation activities have been demined (see guidelines in Attachment 8)

Mitigation measures – Design

Sound design will, if not eliminate, at least diminish to the extent possible, most of the potential adverse impacts of project activities. Good Engineering design will, in most cases, have a positive impact on the environmental conditions in the project area. Environmental criteria for the design of particular types of sub-projects are provided in Attachment 4.

As a matter of principle, no new borewells should be drilled in urban areas as it would further deteriorate the quantity and quality of groundwater. It is however recognized that piped water will not be made available to all urban residents for many more years, and there is an urgent need to ensure access to safe water for drinking purposes at least. Where water cannot be supplied through the network, the project will assess feasible alternative/temporary options on a case-to-case basis. If it is determined that a new
borewell is the only possible alternative, a through environmental assessment will be carried out, including water quality tests and analysis of impact on aquifers and on other users of the resource. In all cases, adequate water quality monitoring arrangements will be put in place.

Adverse impacts on local ecology will be considered on a case-by-case basis. A pre-design walk-through of the design team, with specialist environmental input, through the project area will be a highly desirable exercise. Otherwise, local knowledge from other stakeholders such as NGOs’ and local residents may be tapped to ascertain that the project does not cause significant damage to any important environmental resources.

Co-ordination with the line departments, other stakeholders such as NGOs must begin in the design phase itself. This will ensure that the project is ready for mitigating impacts such as those related to Resettlement and Health service support, if required. One aspect which deserves attention is the drafting of the Contract documents where social and environmental mitigation should be built into the project agreements (candidate clauses are provided in the next section and formats/guidelines are provided in the Annex).

Mitigation measures – Construction

The emphasis of the Environmental Management Plan (EMP) is on construction stage impacts since the operation stage impacts, as has already been stated before, can be minimized, mitigated or compensated by managing the rehabilitated infrastructure in line with project design parameters. In order to minimize the potential adverse impacts of construction, standard bidding documents would have the following environmental precautionary clauses:

- The natural landscape should be preserved to the extent possible by conducting operations in a manner that will prevent unnecessary destruction or scarring of natural surroundings. Except where required for permanent works, quarries, borrow pits, staging and processing areas, dumps, and camps, all trees, saplings, and shrubbery should be protected from unnecessary damage by project related activities. After unavoidable damage and to restore quasi-original conditions were appropriate;
- Contractor's operations should be so performed as to prevent accidental spillage of contaminants, debris, or other pollutants, especially into streams or underground water resources. Such pollutants include untreated sewage and sanitary waste, tailings, petroleum products, chemical, biocides, mineral salts, and thermal pollution.
- Wastewater, including those from aggregate processing and concrete batching, must not enter streams without settling ponds, grade I filters, or other process, so as not to impair water quality or harm aquatic life;
- The contractor should ensure proper disposal of waste materials and rubbish. If disposal by burial or fire, it should not cause negative impact to either the air, soil nor ground water supplies;
- The contractor should minimize air and water pollution emissions. Dust from the handling or transporting of aggregates, cement, etc., should be minimized by sprinkling or other methods. Materials, brush or trees should only be burned when the owners permits, under favorable weather conditions;

- The contractor's facilities, such as warehouse, labor camps, and storage areas, should be planned in advance to decide what the area will look like upon completion of construction. These facilities should be located so as to preserve the natural environment (such as trees and other vegetation) to the maximum extent possible.

- After project construction, camps and building should either serve as permanent residences and form future communities, if such use can be foreseen and approved, or be torn down and the area restored to its quasi-original condition in order to avoid deterioration into shanty towns.

- Borrow pits should be landscaped and planted accordingly to an ecological design to provide some substitute area for lost natural landscapes and habitats.

Social Safeguards

The components of the project will benefit households in general by providing increased level of services including water, sanitation and transport. While women and children are not specifically targeted, they will be the primary beneficiaries of the interventions in water and sanitation in terms of health gains (the under-5 mortality rate is currently 25%) and reduced workload in water collection. The realization of these benefits will be ensured through the provision of health education as part of the water and sanitation interventions.

No land acquisition is anticipated since the project mostly involves rehabilitation of existing urban structures and construction in existing municipal right-of-ways (for roads and water supply). However there are three proposed investment components where there could be some potential for land acquisition: urban upgrading, water supply, and roads. In the event that any minor areas of land would be needed for a project (e.g. realignment of a road), such land could only be obtained through either private voluntary donations, compensation payments for assets acquired by the local community, or available government land. Private voluntary donations would be documented as required by the Framework (Attachment 2(ii)), as would compensation payments made by the community (Attachment 2(i)). A one page Land Acquisition Assessment Data sheet includes basic land acquisition screening information including, quality of land required, location, use of land and number of people potentially affected by involuntary resettlement. For government land, documentation would be needed that the land is free of encroachments, squatters or other encumbrances, and has been transferred for the project by the authorities.

No activities will be supported that require involuntary land acquisition or the acquisition of land requiring the resettlement or compensation of more than 200 people. Consequently, no Resettlement Action Plan will be required for the proposed project.
Participation Framework

Participation is a process through which stakeholders influence and share control over development initiatives and the decisions and resources which affect them. This process will be carried out through the different stages of proposed project i.e. selection of sub-projects, planning, implementation and monitoring for which a strategy will be prepared (by the consultants implementing the project components, notably urban upgrading, as part of inception reports), with the following objectives:

- Understand existing modes of participation to improve the effectiveness of stakeholder participation. Collaborate with government to identify appropriate stakeholders. Recognize customs, beliefs, attitudes and constraints related to participation are gender-specific and stem from the fact that men and women play different roles, have different needs, and face different constraints on a number of different levels.

- Develop a strategy for involving stakeholders as participants and monitoring and evaluating participation and outcomes that involves both quantitative and qualitative tracking of indicators over the life of the project which is done with the direct involvement of the communities whose participation is being monitored.

During the process of consultations with local communities, separate arrangements shall be made to ensure participation by and consultation with women, as they can not be expected to be covered through the general community consultations.

Responsibilities for Safeguard Screening and Mitigation

The overall responsibility of project oversight rests with the Ministry of Urban Development and Housing (MUDH). A designated Safeguards Nodal Officer will be identified with responsibility for overseeing the implementation of the Environmental and Social Safeguards Framework and Management Plan within the Project Management Team (PMT) at the MUDH. The Kabul Municipality will provide an officer drawn from its own staff to act as the nodal point for safeguards for sub-project implemented by the Municipality. International Consultant firms will be contracted for the implementation of the project investment components (urban upgrading, water supply, and roads), and will have primary responsibility as per the terms of their Contract to ensure adequate social and environmental mitigation and management during design, construction and operation, as shown below:
Sub-project | Responsibilities for implementation of the safeguards framework | Responsibilities for oversight/monitoring
--- | --- | ---
Area Upgrading in Kabul and secondary towns; Housing reconstruction | Design/implementation Consultant #1 (UN-Habitat), as per the terms of their contract/ToR | MUDH and Kabul Municipality (KM), with assistance from Project Management Consultant
Repairs and reconstruction of major road and drains | Design/implementation Consultant #2 (KfW-funded), as per the terms of their contract/ToR | KM, with assistance from Project Management Consultant
Repair and extension of Water supply and Sanitation systems | Design/implementation Consultant #3 (KfW and IDA-funded), as per the terms of their contract/ToR | KM, with assistance from Project Management Consultant
Urban Institutional Development | Urban component of Technical Assistance for Social and Environmental Assessment (separate IDA-funded component) | 
Structural Planning for Kabul | Design Consultant #4, as per the terms of their contract/ToR | MUDH and KM, with assistance from Project Management Consultant
Future project preparation and feasibility studies | Design Consultant #5, as per the terms of their contract/ToR, using generic ToR (Attachments 6 and 7) | MUDH and KM, with assistance from Project Management Consultant

**Capacity Building**

As part of the social and environmental capacity building that will be provided for implementation of IDA-financed operations in Afghanistan, the Safeguards Focal Officer and relevant staff of MUDH, Kabul Municipality and implementing agencies/Consultants will receive training in the application of the Safeguard Framework. It is proposed to prepare specific materials, hold a workshop, and arrange site visits to other countries in the region on similar projects in progress to provide hands-on training to the Ministry and implementing agency staff. Specialist training modules may be considered after an acceptable level of base knowledge has been established. The capacity building activity will be implemented under a separate Technical Assistance program for Social and Environmental management. During supervision of the project, the World Bank will assess the implementation of the Framework, and if required, will recommend additional strengthening.

**Consultation and Disclosure**

This Environmental and Social Safeguards Framework was developed on the basis of an overall Framework for World Bank-funded reconstruction operations which was prepared in consultation with the principal NGOs and development partners participating in reconstruction activities in Afghanistan. Prior to approval of the project by the World Bank Board, it will be disclosed by ITSA in both Dari and Pashto, as well as English, and it will also be made available at the World Bank’s Infoshop. It is worth noting that ITSA intends to make all project documentation publicly available through the Afghan Information Management System (AIMS).
The proposed project will support feasibility studies for future large urban infrastructure schemes, for which World Bank safeguard policies relating to consultation and disclosure will apply, if they are financed by IDA. In particular, for environmental Category A and B investments (as defined in World Bank Operational Policy 4.01, Environmental Assessment) proposed for future operations, the implementing agency will consult project-affected groups and local non-governmental organizations about the project's environmental and social aspects, and will take their views into account. The executing agency will initiate such consultations as early as possible, and for meaningful consultations, will provide relevant material in a timely manner prior to consultation, in a form and language that are understandable and accessible to the groups being consulted.

No activities classified under Category A will be financed in this project.
Attachment 1

Negative List of Subproject Attributes

Subprojects with any of the attributes listed below will be ineligible for support under the proposed emergency reconstruction operations.

<table>
<thead>
<tr>
<th>Attributes of Ineligible Subprojects</th>
</tr>
</thead>
<tbody>
<tr>
<td>Involves the significant conversion or degradation of critical natural habitats. Including, but not limited to, any activity within:</td>
</tr>
<tr>
<td>• Ab-i-Estada Waterfowl Sanctuary;</td>
</tr>
<tr>
<td>• Ajar Valley (Proposed) Wildlife Reserve;</td>
</tr>
<tr>
<td>• Dashte-Nawar Waterfowl Sanctuary;</td>
</tr>
<tr>
<td>• Pamir-Buzurg (Proposed) Wildlife Sanctuary;</td>
</tr>
<tr>
<td>• Bande Amir National Park;</td>
</tr>
<tr>
<td>• Kole Hashmat Khan (Proposed) Waterfowl Sanctuary.</td>
</tr>
<tr>
<td>Will significantly damage non-replicable cultural property, including but not limited to any activities that affect the following sites:</td>
</tr>
<tr>
<td>• monuments of Herat (including the Friday Mosque, ceramic tile workshop, Musallah complex, Fifth Minaret, Gawhar Shah mausoleum, mausoleum of Ali Sher Navai, and the Shah Zadehah mausoleum complex);</td>
</tr>
<tr>
<td>• monuments of Bamyan Valley (including Fuladi, Kakrak, Shar-I Ghulghular and Shahr-i Zuhak);</td>
</tr>
<tr>
<td>• archaeological site of Ai Khanum;</td>
</tr>
<tr>
<td>• site and monuments of Ghazni;</td>
</tr>
<tr>
<td>• minaret of Jam;</td>
</tr>
<tr>
<td>• mosque of Haji Piyada/Nu Gunbad, Balkh province;</td>
</tr>
<tr>
<td>• stupa and monastery of Guldarra;</td>
</tr>
<tr>
<td>• site and monuments of Lashkar-i Bazar, Bost;</td>
</tr>
<tr>
<td>• archaeological site of Surkh Kotal.</td>
</tr>
<tr>
<td>Requires pesticides that fall in WHO classes IA, IB, or II.</td>
</tr>
<tr>
<td>Requires involuntary acquisition of land, or the resettlement or compensation of more than 200 people.</td>
</tr>
</tbody>
</table>
I. Objectives

Land acquisition and involuntary resettlement is not anticipated under this proposed emergency project since it mainly involves rehabilitation of existing urban infrastructure. Proposals that require more than minor expansion, along rights of way, demolishing houses or acquiring productive land should be carefully reviewed to minimize or avoid their impacts through alternative alignments. No land or asset acquisition may take place outside of these guidelines. A format for Land Acquisition Assessment is attached as Attachment 2(i).

These guidelines provide principles and instructions to compensate affected persons to ensure that all such persons negatively affected, regardless of their land tenure/tenancy status, will be assisted to improve, or at least to restore, their living standards, income earning or production capacity to pre-project levels.

Categorization

Based on the number of persons that may be affected by the project (Project Affected People, PAPs) and the magnitude of impacts, projects may be categorized as S-1, S-2, or S-3 projects:

a. S-1 projects are those that will involve the resettlement of more than 200 PAPs and where a full Resettlement Action Plan (RAP) must be produced. Such interventions will be ineligible for support under the proposed emergency reconstruction operations.

b. S-2 projects are those which will involve the resettlement of less than 200 persons. In such cases, the following documentation is required: (1) a land acquisition assessment, (2) the Minutes or record of consultations which assess the compensation claimed and agreement reached, and (3) a record of the receipt of the compensation, or voluntary donation, by those affected (see below).

c. S-3 projects are not expected to have any land acquisition or any other significant adverse social impacts; on the contrary, significant positive social impact and improved livelihoods are expected from such interventions.

II. Eligibility

PAPs are identified as persons whose livelihood is directly or indirectly affected by the project. PAPs deemed eligible for compensation are:
those who have formal legal rights to land, water resources or structures/buildings, including recognized customary and traditional rights;

(2) those who do not have such formal legal rights but have a claim to usufruct right rooted in customary law;

(3) those whose claim to land and water resources or building/structures do not fall within (1) and (2) above, are eligible to assistance to restore their livelihood.

Acquisition of Productive Assets and Compensation

PAPs are eligible for replacement costs for lost assets as described below:

a. Voluntary contributions. In accordance with traditional practices, individuals may elect to voluntarily contribute land or assets and/or relocate temporarily or permanently from their land without compensation.

b. Contributions against compensation. A contributor/asset loser considered "affected" will be eligible for compensation from the local community or alternatively from the Government. A PAP shall lodge his/her claim for compensation to the local community representatives/shura head and it shall be verified by the implementing agency. The claim shall be lodged within 2 weeks of completion of the consultations with the concerned community, and before project implementation begins.

Voluntary contribution, or contribution against compensation, should be documented. The documentation should specify that the land is free of any squatters, encroachers or other claims. A format is attached in Attachment 2(i), which includes a Schedule to be followed to assess any compensation claimed and the agreement reached.

III. Compensation Principles

The project implementing agencies shall ensure that any of the following means of compensation are provided in a timely manner to affected persons:

(1) Project affected persons losing access to a portion of their land or other productive assets with the remaining assets being economically viable are entitled to compensation at replacement cost for that portion of land or assets lost to them. Compensation for the lost assets will be according to following principles:

a. replacement land with an equally productive plot, cash or other equivalent productive assets;

b. materials and assistance to fully replace solid structures that will be demolished;

c. replacement of damaged or lost crops and trees, at market value;

d. other acceptable in-kind compensation;
e. in case of cash compensation, the delivery of compensation should be made in public, i.e. at the Community Meeting.

(2) Project affected persons losing access to a portion of their land or other economic assets rendering the remainder economically non-viable, will have the options of compensation for the entire asset by provision of alternative land, cash or equivalent productive asset, according to the principles in (1) a-d above.

**Consultation Process**

The implementing agencies will ensure that all occupants of land and owners of assets located in a proposed subproject area are consulted. There will be gender-separate community meetings for each affected *mantaqa/gozar* (urban infrastructure) or village (other projects) to inform the local population about their rights to compensation and options available in accordance with these Guidelines. The Minutes of the community meetings shall reflect the discussions held, agreements reached, and include details of the agreement, based on the format provided in Attachment 2(ii).

The implementing agency shall provide a copy of the Minutes to affected persons and confirm in discussions with each of them their requests and preferences for compensation, agreements reached, and any eventual complaint. Copies will be recorded in the posted project documentation and be available for inspection during supervision.

**Subproject Approval**

In the event that a subproject involves acquisition against compensation, the implementing agency shall:

a. not approve the subproject unless a satisfactory compensation has been agreed between the affected person and the local community;

b. not allow works to start until the compensation has been delivered in a satisfactory manner to the affected persons;

c. if more than 200 persons are affected and require compensation, the subproject shall be deemed ineligible for support under the emergency reconstruction operations.

**Complaints and Grievances**

All complaints should first be negotiated to reach an agreement at the local community/village level. If this fails, complaints and grievances about these Guidelines, implementation of the agreements recorded in the Community Meeting Minutes or any alleged irregularity in carrying out the project can also be addressed by the affected persons or their representative at the municipal or district level. If this also fails, the complaint may be submitted to the relevant implementing agency for a decision.
Verification

The Community Meeting Minutes, including agreements of compensation and evidence of compensation having been made shall be provided to the Municipality/district, to the supervising engineers, who will maintain a record hereof, and to auditors and socio-economic monitors when they undertake reviews and post-project assessment. This process shall be specified in all relevant project documents, including details of the relevant authority for complaints at municipal/district or implementing agency level.
Attachment 2(i)

Land Acquisition Assessment Data Sheet

(To be used to record information on all land to be acquired)

1. Quantities of land/structures/other assets required:

2. Date to be acquired:

3. Locations:

4. Owners:

5. Current uses:

6. Users:
   - Number of Customary claimants:
   - Number of Squatters:
   - Number of Encroacher:
   - Number of Owners:
   - Number of Tenants:
   - Others (specify): Number:

7. How land/structures/other assets will be acquired (identify one):
   - Donation
   - Purchase

8. Transfer of title:
   - Ensure these lands/structures/other assets free of claims or encumbrances.
   - Written proof must be obtained (notarized or witnessed statements) of the voluntary donation, or acceptance of the prices paid, from those affected, together with proof of title being vested in the community, or guarantee of public access, by the title-holder.

9. Describe grievance mechanisms available:
Attachment 2(ii)

Format to Document Contribution of Assets

The following agreement has been made on.......................... day of........................... between..............................resident of ...........................................(the Owner) and ...........................................(the Recipient).

1. That the Owner holds the transferable right of ...........................................jerib of land/structure/asset in..............................................................

2. That the Owner testifies that the land/structure is free of squatters or encroachers and not subject to other claims.

3. That the Owner hereby grants to the Recipient this asset for the construction and development of ...........................................for the benefit of the villagers and the public at large.

(Either, in case of donation:)

4. That the Owner will not claim any compensation against the grant of this asset.

(Or, in case of compensation:)

4. That the Owner will receive compensation against the grant of this asset as per the attached Schedule.

5. That the Recipient agrees to accept this grant of asset for the purposes mentioned.

6. That the Recipient shall construct and develop the...............................and take all possible precautions to avoid damage to adjacent land/structure/other assets.

7. That both the parties agree that the...............................so constructed/developed shall be public premises.

8. That the provisions of this agreement will come into force from the date of signing of this deed.

_____________________________________________   ________________________________________________
Signature of the Owner:                                          Signature of the Recipient:

Witnesses:
1. ________________________________

2. ________________________________
   (Signature, name and address)
## Schedule of Compensation of Asset Requisition

### Summary of Compensation affected unit/item

<table>
<thead>
<tr>
<th>Units to be Compensated</th>
<th>Agreed</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>a. Urban/agricultural land (m²):</strong></td>
<td></td>
</tr>
<tr>
<td><strong>b. Houses/structures to be demolished (units/m²):</strong></td>
<td></td>
</tr>
<tr>
<td><strong>c. Type of structure to be demolished (e.g. mud, brick, etc.):</strong></td>
<td>Not Applicable.</td>
</tr>
<tr>
<td><strong>d. Trees or crops affected:</strong></td>
<td></td>
</tr>
<tr>
<td><strong>e. Water sources affected:</strong></td>
<td></td>
</tr>
</tbody>
</table>

Signatures of local community representatives, shura head:

Include record of any complaints raised by affected persons:

Map attached (showing affected areas and replacement areas):
Attachment 3

Protection of Cultural Property

Physical culture includes monuments, structures, works of art, or sites of "outstanding universal value" from the historical, aesthetic, scientific, ethnological, or anthropological point of view, including unrecorded graveyards and burial sites. Within this broader definition, cultural property is defined as sites and structures having archaeological, paleontological, historical, architectural, or religious significance, and natural sites with cultural values.

The proposed emergency reconstruction operations are unlikely to pose a risk of damaging cultural property, as the sub-projects will largely consist of small investments in community infrastructure and income generating activities, reconstruction of existing structures, and minor urban public works. Further, the negative list of attributes, which would make a subproject ineligible for support (Attachment 1), includes any activity that would significantly damage non-replicable cultural property. Nevertheless, the following procedures for identification, protection from theft, and treatment of chance finds should be followed and included in standard bid documents.

Chance Find Procedures

Chance find procedures are defined in the law on Maintenance of Historical and Cultural Monuments (Official Gazette, December 21, 1980), specifying the authorities and responsibilities of cultural heritage agencies if sites or materials are discovered in the course of project implementation. This law establishes that all moveable and immovable historical and cultural artifacts are state property, and further:

1. The responsibility for preservation, maintenance and assessment of historical and cultural monuments rests with the Archaeological Committee under the Ministry of Information and Culture, which has representation at provincial level.

2. Whenever chance finds of cultural or historical artifacts (moveable and immovable) are made the Archaeological Committee should be informed. Should the continuation of work endanger the historical and cultural artifacts, the project work should be suspended until a solution is found for the preservation of these artifacts.

3. If a moveable or immovable historical or cultural artifact is found in the countryside of a province, the provincial governor (wali) or district-in-charge (woluswal) should be informed within two weeks, and they should inform the Archaeological Committee. In case the immovable historical or cultural artifact is found in a city, the provincial branch of the Department of Maintenance of Historical Values of the Ministry of Information and Culture should be informed within two weeks (art. 18). If the find is made within the center, the Archaeological Committee must be informed directly within one week (art. 25).
4. Failure to report a chance find within the stipulated time limit will be punished with a fine or imprisonment for a period of one week or up to one month (art. 72).

5. If someone intentionally damages a historical or cultural artifact, the culprit shall pay compensation in accordance with the value of the artifact plus be imprisoned for a period of one month to ten years depending on the gravity of the crime (art. 71).

In case of a chance find of moveable or immovable historical or cultural artifact, the implementing agency is responsible for securing the artifact from theft, pilferage and damage until the responsibility has been taken over by the relevant authorities as specified above.

These procedures must be referred to as standard provisions in construction contracts, when applicable. During project supervision, the Site Engineer shall monitor that the above regulations relating to the treatment of any chance find encountered are 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 resources mitigation, management, and capacity building activities, as appropriate.
## Codes of Practice for Prevention and Mitigation of Environmental Impacts

<table>
<thead>
<tr>
<th>Potential Impacts</th>
<th>Prevention and Mitigation Measures</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Water Supply</strong></td>
<td></td>
</tr>
<tr>
<td>Disease caused by poor water quality:</td>
<td></td>
</tr>
<tr>
<td>• contamination by seepage from latrines, municipal waste or agricultural areas.</td>
<td>• Prioritize leak detection and repair of pipe networks.</td>
</tr>
<tr>
<td>• high mineral concentrations.</td>
<td>• Chemical and bacteriological testing of water quality from adjacent comparable sources prior to installation of new sources.</td>
</tr>
<tr>
<td>• creation of stagnant pools of water.</td>
<td>• Redesign to prevent contamination if adjacent comparable sources are found to be contaminated.</td>
</tr>
<tr>
<td></td>
<td>• Subsequent monitoring of installed or rehabilitated sources.</td>
</tr>
<tr>
<td></td>
<td>• Appropriate location, apron and drainage around tubewells and dug wells to prevent formation of stagnant pools.</td>
</tr>
<tr>
<td></td>
<td>• Provision of cover and hand-pump to prevent contamination of dug wells.</td>
</tr>
<tr>
<td></td>
<td>• Where pit latrines are used they should be located more than 10m from any water source. The base should be sealed and separated by at least 2m of sand or loamy soil from the groundwater table.</td>
</tr>
<tr>
<td></td>
<td>• Where nightsoil latrines or septic tanks are built they should be sealed. Outflows should drain either to a soakaway located at least 10m from any water source or be connected to a working drain.</td>
</tr>
<tr>
<td>Depletion of water source:</td>
<td>• Urban interventions and abstraction limits to be planned in the context of groundwater investigations.</td>
</tr>
<tr>
<td>• over-exploitation of aquifers.</td>
<td>• Local water use planning (community and technical consultation).</td>
</tr>
<tr>
<td>• hazard of land subsidence.</td>
<td></td>
</tr>
<tr>
<td><strong>Sanitation (on-site systems)</strong></td>
<td></td>
</tr>
<tr>
<td>Contamination of water supplies:</td>
<td></td>
</tr>
<tr>
<td>• contamination of groundwater because of seepage.</td>
<td>• Where pit latrines are used they should be located more than 10m from any water source. The base should be sealed and separated vertically by not less than 2m of sand or loamy soil from the ground water table.</td>
</tr>
<tr>
<td>• contamination of surface waters due to flooding or over-flowing.</td>
<td>• Where nightsoil latrines or septic tanks are built they should be sealed. Outflows should drain either to a soakaway located at least 10m from any water source or be connected to a working drain.</td>
</tr>
<tr>
<td></td>
<td>• Maintenance training to be delivered along with new latrines.</td>
</tr>
<tr>
<td>Disease caused by poor handling practices of nightsoil.</td>
<td>• Training and health education to be provided to nightsoil handlers where affected by interventions.</td>
</tr>
<tr>
<td></td>
<td>• Protective clothing and appropriate containers for nightsoil transportation to be provided.</td>
</tr>
</tbody>
</table>
### Potential Impacts

<table>
<thead>
<tr>
<th>Disease caused by inadequate excreta disposal or inappropriate use of latrines.</th>
</tr>
</thead>
</table>

### Prevention and Mitigation Measures

- Nightsoil should be handled using protective clothing to prevent any contamination of workers skin or clothes.
- Where night-soil is collected for agricultural use it should be stored for a sufficient period to destroy pathogens through composting. At the minimum it should be stored in direct sunlight and turned regularly for a period of at least 6 weeks.
- Septic tanks should not be constructed nor septic waste collected unless primary and secondary treatment and safe disposal is available.
- Health and hygiene education to be provided for all users of latrines.
- Awareness campaign to maintain sanitary conditions.

### Solid Waste

<table>
<thead>
<tr>
<th>Disease caused by inadequate collection and disposal, including health risks from:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• insects, rats.</td>
</tr>
<tr>
<td>• burning of waste.</td>
</tr>
<tr>
<td>• industrial/medical waste.</td>
</tr>
</tbody>
</table>

| Sufficient frequency of collection from transfer stations. |
| Containment of waste during collection and transfer. |
| Promote separation at source to reduce spreading by rag-pickers during recycling. |
| Minimize burning. |
| Separate collection and disposal system for medical or hazardous wastes. |
| Assess requirement for additional investment in final disposal site. |

### Contamination of water supplies:

| lateral seepage into surface waters. |
| seepage of contaminants into aquifers. |
| contamination from clandestine dumping. |

| Site transfer stations should have sealed base and be located at least 15m away from water sources with the base separated vertically by not less than 2m of sand or loamy soil from the ground water table. |
| Assess requirement for additional investment in final disposal site to protect water sources. |
| Monitoring of site to prevent illegal dumping |

### Roads

| Disruption of drainage: |
| hampers free drainage, causes stagnant pools of water. |
| increased sediments into ponds, streams and rivers due to erosion from road tops and sides. |
| increased run-off and flooding. |

<p>| Design to provide adequate drainage and to minimize changes in flows, not limited to the road reserve. |
| Provision of energy dissipaters, cascades, steps, and check dams. |
| Provision of sufficient number of cross drains. |
| Balancing of cut and fill. |
| Revegetation to protect susceptible soil surfaces. |
| Rehabilitation of borrow areas. |</p>
<table>
<thead>
<tr>
<th>Potential Impacts</th>
<th>Prevention and Mitigation Measures</th>
</tr>
</thead>
<tbody>
<tr>
<td>Erosion:</td>
<td>• Design to prevent soil erosion and maintain slope stability.</td>
</tr>
<tr>
<td>• erosion of land downhill from the road bed, or in borrow areas.</td>
<td></td>
</tr>
<tr>
<td>• landslides, slips or slumps.</td>
<td></td>
</tr>
<tr>
<td>• Bank failure of the borrow pit.</td>
<td>• Construction in the dry season.</td>
</tr>
<tr>
<td>• Protection of soil surfaces during construction.</td>
<td></td>
</tr>
<tr>
<td>• Physical stabilization of erodible surfaces through turving, planting a wide range of vegetation, and creating slope breaks.</td>
<td></td>
</tr>
<tr>
<td>• Rehabilitation and re-grading of borrow pits and material collection sites.</td>
<td></td>
</tr>
<tr>
<td>Loss of vegetation:</td>
<td>• Balancing of cut and fill.</td>
</tr>
<tr>
<td>• Revegetation to protect susceptible soil surfaces.</td>
<td></td>
</tr>
<tr>
<td>• Minimize loss of natural vegetation during construction.</td>
<td></td>
</tr>
<tr>
<td>• Revegetation and replanting to compensate any loss of plant cover or tree felling.</td>
<td></td>
</tr>
<tr>
<td>Loss of access:</td>
<td>• Design to include accessibility to road sides in case roadbed is raised.</td>
</tr>
<tr>
<td>• Alternative alignments to avoid bisecting villages by road widening.</td>
<td></td>
</tr>
<tr>
<td>Impacts during construction:</td>
<td>• Provision of fuel at work camps to prevent cutting of firewood.</td>
</tr>
<tr>
<td>• fuelwood collection.</td>
<td>• Provision of sanitation at work camps.</td>
</tr>
<tr>
<td>• disease due to lack of sanitation.</td>
<td>• Removal of work camp waste, proper disposal of oil, bitumen and other hazardous wastes.</td>
</tr>
<tr>
<td>• introduction of hazardous wastes.</td>
<td>• Management of construction period worker health and safety.</td>
</tr>
<tr>
<td>• ground/water contamination (oil, grease).</td>
<td>• accidents during construction.</td>
</tr>
</tbody>
</table>

### Housing and Public Buildings

| Deforestation caused by: | • Replace timber beams with concrete where structurally possible. |
| • unsustainable use of timber. | • Ensure fired bricks are not wood-fired. |
| • wood-firing of bricks. | • Where technically and economically feasible, substitute fired bricks with alternatives, such as sun-dried mud bricks, compressed earth bricks, or rammed earth construction. |
| Injury and death from earthquake: | • Apply low-cost aseismic structural designs. |
| Disease caused by inadequate provision of water and sanitation: | • Ensure designs include adequate sanitary latrines and access to safe water. |
Environmental criteria for Design of sub-projects

Housing Reconstruction
- Avoid sensitive areas as housing sites (see Attachment 1)
- Adequate sizing of dwelling units and toilets
- Layout of infrastructure – proper grades to prevent water logging; avoid contamination of water supply by wastewater
- Use environmentally benign techniques such as vegetative protection, rather than ‘hard’ engineering solutions as far as possible for stabilizing of slopes for housing in hilly areas
- Use rational, rather than highest, building code standards - setbacks, Floor-space, etc. to maximize utility of existing resources

Water and wastewater conveyance
- See layout of infrastructure above
- Use locally available material in drain construction wherever possible
- Provide manholes at more frequent intervals to ensure that any material clogging the drains can be accessed more easily
- Provide adequate space for siting treatment and disposal facilities

Solid waste collection and disposal
- Ensure that collection trips are routed and timed to avoid sensitive locations and periods.
- Provide the locations of kerbside collection bins as far away from drains as practical to avoid clogging of the drains due to spilled, neglected, blown over garbage
- Site the storage and disposal locations with due consideration of access by animals, especially rodents, migration of leachate to ground and at times surface waters, etc.
- Avoid disposal by open burning of waste
- Include in the layout of the disposal facility, a screen, preferably using trees (green belt) to shield visual blight as well as act as wind barrier to the site.

Road and street construction and repairs
- Avoid environmentally sensitive locations
- Use locally available material as far as possible
- Be prepared to use slightly lower standards than the highest in order to accommodate local concerns – social, cultural and environmental
- Provide adequate street crossings for people and animals and non-motorized transport wherever these are identified as a characteristic of the neighborhood
Attachment 5

Format for
Limited Environmental Assessment (LEA)

Context of LEAs

The LEAs to be carried out for individual schemes to be rehabilitated as part of the EURP will draw upon Attachment 4 of the Environmental and Social Safeguards Management Framework. They will guide the process of assessing the potential impacts and examining candidate mitigation measures for each environmental concern. This format is a guide to the reporting of the assessment carried out as per those matrices. It will provide documentary evidence of environmental considerations in decision-making at the sub-project level and streamline the processing of the schemes during implementation. It will also act as a reference for executing mitigation and management measures selected during the assessment.

Outline of an LEA

Description of the project area

This section will include concise description of the project area, its inhabitants, their current condition, existing urban infrastructure, etc. Describe current practices with respect to water supply, sanitation, solid waste, drainage etc.

Project Interventions

This will include various improvements considered under the project. It will include a rationale for selection of a particular treatment over others (if alternatives were considered). A concise overview of the benefits will also be provided.

Existing Environmental Scenario (draw on site visits and secondary sources)

Biophysical Environment
- Topography – slope
- Soil – Structure, Salinity
- Water – quality and quantity
- Flora and Fauna within the study area (include terrestrial and aquatic)

Socio-Economic Environment
- Income levels
- Amenities available – water supply, etc.
- Health and Hygiene
- Role of Women

Impacts Anticipated (draw on site visits, secondary sources and Attachment 4)

Biophysical Environment
- Topography changes – landform, erosion
- Soil structure – moisture retention capacity, stability, increased salinity
- Water – qualitative changes due to increased salinity, use of chemicals
Flora and fauna – loss of habitat, impeding migration

Socio-economic Impacts
- Changes in income – distribution and timing
- Changes in amenities – impact of construction period increased population, long-term Demographic changes due to improved urban services
- Health and Hygiene – risk of increased spread of disease, etc.

Mitigation Measures and Implementation Responsibilities (Use Attachment 4)

<table>
<thead>
<tr>
<th>Stage of the project</th>
<th>Anticipated Impact Environmental attribute</th>
<th>Selected Mitigation Measure</th>
<th>Implementation Responsibility</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Budgetary Estimates

<table>
<thead>
<tr>
<th>Stage of the project</th>
<th>Mitigation measure</th>
<th>Quantity / Time input</th>
<th>Amount</th>
</tr>
</thead>
</table>
Generic Terms of Reference for a full Environmental Assessment

Introduction

Since the Loya Jirga in 2002, a new Afghanistan is being built by the concerted efforts of the Afghan people. The Government of Afghanistan (GoA) intends to upgrade and expand its urban infrastructure to enhance the quality of life and promote the economic development potential of its urban centers. For achieving this objective, it has decided to take up several large urban infrastructure projects. GoA wants that the proposed development occurs with due regard for the environmental and social concerns associated with such development. The Ministry of Urban Development and Housing (MUDH) wishes to engage the services of a consultant to carry out the Environmental Impact Assessment of large / new schemes during the project preparation stage to ensure that these key concerns are addressed early in project development. While the MUDH is the nodal ministry for the project, inputs are also expected from the Municipalities of ___ and urban sector institutions such as___.

Project Background

The Government of Afghanistan is to avail IDA credit for the rehabilitation and expansion of its urban infrastructure. The proposed multi-component Emergency Urban Reconstruction Project (EURP) aims to improve urban infrastructure, including water supply, sanitation, solid waste, drainage, urban roads, housing etc.. One component of this project is also financing preparation of feasibility studies for large urban infrastructure schemes which may be taken up in the future. As part of the EURP, detailed Environmental Impact Assessments are to be carried out for candidate large/new projects identified, to feed into the overall project preparation. The XYZ project is being prepared as part of this component. {Provide a plan of the area that will be affected either indirectly or directly. Basic data should be given on existing and proposed urban infrastructure in the area and the area characteristics, if available.}

Objectives

This study is being carried out to ensure that environmental implications of the proposed XYZ project have been identified, analyzed and clearly communicated to the decision makers. In order to achieve this target, the following objectives have been set:

a. To prepare inventory of the biophysical and socio-economic environmental attributes in the study area;

b. To involve the local population in project preparation through active consultations which could also assist in identifying the attributes important to them;

c. To identify and assess the magnitude and significance of impacts due to the proposed activities on the attributes identified;

d. To consider a range of proposals should be considered and if so whether they would be less environmentally damaging;

e. To propose avoidance, mitigation and enhancement measures for adverse and positive impacts;

f. To assess the current capacity for environmental management to develop institutional arrangements for this and subsequent (like) projects; and
g. To prepare an environmental management plan to ensure implementation of the management measures selected from the ones proposed, along with budgetary allocation (to feed into the overall project cost estimates) and institutional responsibility.

**Environmental Assessment Requirements**

The Environmental Assessment shall be guided by the requirements of OP4.01 and other relevant safeguard policies of the World Bank such as OP4.04, etc.

**Scope of Work**

The current information has led to the development of the following tasks, which may be modified with consent of the MUDH if new information comes to light during the course of the study (e.g. the presence of sensitive receptors not known when the ToR is finalized).

**Task 1.** Description of the Proposed Project. General design and extent of urban infrastructure works, size and specifics of project area; operation and maintenance of urban infrastructure works.

**Task 2.** Description of the Environment. Assemble, evaluate and present baseline data on the relevant environmental characteristics of the study area. Include information on any changes anticipated before the project commences.

(a) Physical environment: geology; topography; soils; climate and meteorology; ambient air quality; surface and ground-water hydrology; existing sources of air emissions; existing water pollution discharges; and receiving water quality.

(b) Biological environment: flora; fauna; rare or endangered species; sensitive habitats, including parks or preserves, significant natural sites, etc.; species of commercial importance; and species with potential to become nuisances, vectors or dangerous.

(c) Socio-cultural environment: land use (including current crops and cropping patterns); land tenure and land titling; present water supply and water uses, control over allocation of resource use rights.

**Task 3.** Legislative and Regulatory Considerations. Describe the pertinent regulations and standards governing environmental quality, health and safety, protection of sensitive areas, protection of endangered species, siting, land use control, etc., at international, national, if any.

**Task 4.** Determination of the Potential Impacts of the Proposed Project. Potential impacts to be assessed include:

(a) Project location: resettlement of people; loss of forest land; loss of agricultural land (cropping and grazing); impact on flora and fauna; impact on historic and cultural sites; effects on water resources outside and inside command area.

(b) Project Design: disruption of hydrology; drainage problems; design of urban structures; crossings for people and animals.

(c) Construction Works: soil erosion; construction spoils (disposal of); sanitary conditions and health risks associated with construction camp and workers coming into area; social and cultural conflicts between imported workers and local people.
(d) Project Operation: water and air pollution; impacts on soils; changes in ground water levels inside and outside command area; changes in surface water quality and risks of eutrophication; incidence of water-borne and water-related diseases, water quality testing and monitoring.

(e) Cumulative and long-term effects

Task 5. Analysis of Alternatives to the Proposed Project. Describe alternatives that were examined in the course of developing the proposed project and identify other alternatives which would achieve the same objectives. The concept of alternatives extends to siting, design, technology selection, construction techniques and phasing, and operating and maintenance procedures. Compare alternatives in terms of potential environmental impacts; capital and operating costs; suitability under local conditions; and institutional, training, and monitoring requirements. When describing the impacts, indicate which are irreversible or unavoidable and which can be mitigated. To the extent possible, quantify the costs and benefits of each alternative, incorporating the estimated costs of any associated mitigating measures. Include the alternative of not constructing the project, in order to demonstrate environmental conditions without it.

Task 6. Development of Environmental Management Plan, with focus on three generic areas: Mitigation measures, institutional strengthening and training, and monitoring. The emphasis on each of these areas depends on the needs in the specific project context, as identified by the EA itself.

- Mitigation of environmental impact: Recommend feasible and cost-effective measures to prevent or reduce significant negative impacts to acceptable levels. Estimate the impacts and costs of those measures. Consider compensation to affected parties for impacts which cannot be mitigated. The plan should include proposed work programs, budget estimates, schedules, staffing and training requirements, and other necessary support services to implement the mitigating measures.

- Institutional strengthening and training: Identification of institutional needs to implement environmental assessment recommendations. Review the authority and capability of institutions at local, provincial/regional, and national levels and recommend steps to strengthen or expand them so that the management and monitoring plans in the environmental assessment can be implemented. The recommendations may extend to new laws and regulations, new agencies or agency functions, intersectoral arrangements, management procedures and training, staffing, operation and maintenance training, budgeting, and financial support.

- Monitoring: Prepare detailed arrangements for monitoring implementation of mitigating measures and the impacts of the project during construction and operation. Include in the plan an estimate of capital and operating costs and a description of other inputs (such as training and institutional strengthening) needed to carry it out.

Task 7. Assist in Inter-Agency Coordination and Public/NGO Participation. Assist in coordinating the environmental assessment with other government agencies, in obtaining the views of local NGO's and affected groups, and in keeping records of meetings and other activities, communications, and comments and their disposition.

**Reporting Requirements**
(I) **Inception Report:** The Consultant will submit an Inception report confirming the methodology to be adopted for the study, the deployment schedule of personnel, a schedule of site visits to be carried out and a reporting schedule, within a fixed time from the date of beginning of the assignment. The consultant may want to carry out a reconnaissance survey before submitting the inception report.

(II) **Environmental Impact Assessment:** The EA report should include the following items (not necessarily in the order shown):

(a) *Executive summary.* Concisely discusses significant findings and recommended actions.

(b) *Policy, legal, and administrative framework.* Discusses the policy, legal, and administrative framework within which the EA is carried out. Explains the environmental requirements of any co-financiers. Identifies relevant international environmental agreements to which the country is a party.

(c) *Project description.* Concisely describes the proposed project and its geographic, ecological, social, and temporal context, including any offsite investments that may be required (e.g., dedicated pipelines, access roads, power plants, water supply, housing, and raw material and product storage facilities). Indicates the need for any resettlement plan or indigenous peoples development plan (see also subpara. (h)(v) below). Normally includes a map showing the project site and the project's area of influence.

(d) *Baseline data.* Assesses the dimensions of the study area and describes relevant physical, biological, and socioeconomic conditions, including any changes anticipated before the project commences. Also takes into account current and proposed development activities within the project area but not directly connected to the project. Data should be relevant to decisions about project location, design, operation, or mitigatory measures. The section indicates the accuracy, reliability, and sources of the data.

(e) *Environmental impacts.* Predicts and assesses the project's likely positive and negative impacts, in quantitative terms to the extent possible. Identifies mitigation measures and any residual negative impacts that cannot be mitigated. Explores opportunities for environmental enhancement. Identifies and estimates the extent and quality of available data, key data gaps, and uncertainties associated with predictions, and specifies topics that do not require further attention.

(f) *Analysis of alternatives.* Systematically compares feasible alternatives to the proposed project site, technology, design, and operation—including the "without project" situation—in terms of their potential environmental impacts; the feasibility of mitigating these impacts; their capital and recurrent costs; their suitability under local conditions; and their institutional, training, and monitoring requirements. For each of the alternatives, quantifies the environmental impacts to the extent possible, and attaches economic values where feasible. States the basis for selecting the particular project design proposed and justifies recommended emission levels and approaches to pollution prevention and abatement.

(g) *Environmental management plan (EMP).* Covers mitigation measures, monitoring, and institutional strengthening; see outline (in III) below.
(h) **Appendices**

(i) List of EA report preparers—individuals and organizations.

(ii) References—written materials both published and unpublished, used in study preparation.

(iii) Record of interagency and consultation meetings, including consultations for obtaining the informed views of the affected people and local nongovernmental organizations (NGOs). The record specifies any means other than consultations (e.g., surveys) that were used to obtain the views of affected groups and local NGOs.

(iv) Tables presenting the relevant data referred to or summarized in the main text.

(v) List of associated reports (e.g., resettlement plan or indigenous peoples development plan).

(III) **Environmental Management Plan:** The consultant will submit an environmental management plan (in line with Annex C of OP4.01) which will include the following components.

(a) **Mitigation** The EMP identifies feasible and cost-effective measures that may reduce potentially significant adverse environmental impacts to acceptable levels. The plan includes compensatory measures if mitigation measures are not feasible, cost-effective, or sufficient.

(b) **Monitoring** Environmental monitoring during project implementation provides information about key environmental aspects of the project, particularly the environmental impacts of the project and the effectiveness of mitigation measures. Such information enables the borrower and the Bank to evaluate the success of mitigation as part of project supervision, and allows corrective action to be taken when needed. Therefore, the EMP identifies monitoring objectives and specifies the type of monitoring, with linkages to the impacts assessed in the EA report and the mitigation measures described in the EMP.

(c) **Capacity Development and Training** To support timely and effective implementation of environmental project components and mitigation measures, the EMP draws on the EA's assessment of the existence, role, and capability of environmental units on site or at the agency and ministry level. If necessary, the EMP recommends the establishment or expansion of such units, and the training of staff, to allow implementation of EA recommendations. Specifically, the EMP provides a specific description of institutional arrangements—who is responsible for carrying out the mitigatory and monitoring measures (e.g., for operation, supervision, enforcement, monitoring of implementation, remedial action, financing, reporting, and staff training). To strengthen environmental management capability in the agencies responsible for implementation, most EMPs cover one or more of the following additional topics: (a) technical assistance programs, (b) procurement of equipment and supplies, and (c) organizational changes.
(d) **Implementation Schedule and Cost Estimates** For all three aspects (mitigation, monitoring, and capacity development), the EMP provides (a) an implementation schedule for measures that must be carried out as part of the project, showing phasing and coordination with overall project implementation plans; and (b) the capital and recurrent cost estimates and sources of funds for implementing the EMP. These figures are also integrated into the total project cost tables.

(e) **Integration of EMP with Project** The borrower's decision to proceed with a project, and the Bank's decision to support it, are predicated in part on the expectation that the EMP will be executed effectively. Consequently, the Bank expects the plan to be specific in its description of the individual mitigation and monitoring measures and its assignment of institutional responsibilities, and it must be integrated into the project's overall planning, design, budget, and implementation. Such integration is achieved by establishing the EMP within the project/contract documents so that the plan will receive funding and supervision along with the other components.
Attachment 7

Generic Terms of Reference for a full Social Assessment

1. Introduction

Since the Loya Jirga in 2002, a new Afghanistan is being built by the concerted efforts of the Afghan people. The Government of Afghanistan (GoA) intends to upgrade and expand its urban infrastructure to enhance the quality of life and promote the economic development potential of its urban centers. For achieving this objective, it has decided to take up several large urban infrastructure projects. GoA wants that the proposed development occurs with due regard for the environmental and social concerns associated with such development. The Ministry of Urban Development and Housing (MUDH) wishes to engage the services of a consultant to carry out the Environmental Impact Assessment of large / new schemes during the project preparation stage to ensure that these key concerns are addressed early in project development. While the MUDH is the nodal ministry for the project, inputs are also expected from the Municipalities of ___ and urban sector institutions such as ___.

2. Project Background

The Government of Afghanistan is to avail IDA credit for the rehabilitation and expansion of its urban infrastructure. The proposed multi-component Emergency Urban Reconstruction Project (EURP) aims to improve urban infrastructure, including water supply, sanitation, solid waste, drainage, urban roads, housing etc.. One component of this project is also financing preparation of feasibility studies for large urban infrastructure schemes which may be taken up in the future. As part of the EURP, detailed Environmental Impact Assessments are to be carried out for candidate large/new projects identified, to feed into the overall project preparation. The XYZ project is being prepared as part of this component. {Provide a plan of the area that will be affected either indirectly or directly. Basic data should be given on existing and proposed urban infrastructure in the area and the area characteristics, if available.}

3. Objectives

Social Assessment (SA) through participatory planning has specific functions to assess the social issues and impacts on affected populations which helps to design mitigation plans in order to improve their quality of life and a strategy for participatory implementation. This study is being carried out to ensure that social implications of the proposed XYZ project have been identified, analyzed and clearly communicated to the decision makers. In order to achieve this target, the broad objective is to identify, develop and incorporate social measures into project planning, preparation, implementation and monitoring as a means of identifying and addressing direct and indirect social outcomes through all aspects of project execution. This process needs to be carried out at each stage of project preparation namely feasibility and detailed project report (DPR) stage. To carry out the detailed assessments at various stages a detailed work-plan needs to be provided as part of the inception report. The following provides specifies objectives, activities and outputs to complete the SA process:
4. Specific Objectives

SA is an approach for incorporating social analyses and participatory processes into project design and implementation. The specific objectives of the SA are:

(a) To carry out a socio-economic, cultural and political/institutional analysis to identify potential social impacts of the proposed projects;

(b) To identify principal stakeholders and develop consultation framework for participatory implementation;

(c) To screen social development issues and scope SA activities for feasibility and design stage;

(d) To ensure that results of the SA provide inputs to the monitoring of project impacts during implementation and to the evaluation of project outcomes at completion;

(e) To provide inputs to the project design at the feasibility and detailed design stage including specific recommendations in selection of design alternatives (identification of areas that may require adjustments in project designs) and preparing social policy framework;

(f) Develop a Resettlement Action Plan (RAP) that includes comprehensive mitigation measures to ensure that the affected and displaced persons are appropriately resettled and rehabilitated i.e. to assist them to improve their livelihoods and standards of living or at least to restore them, in real terms.

(g) Assess the current capacity for management of social impacts, develop institutional arrangements for this and subsequent (like) projects and formulate a training and capacity building plan.

Scope of Work

(i) Stage I - Feasibility Stage:
To determine the magnitude of potential impacts and ensure mainstreaming of social considerations in selection and design of proposed projects.

(a) Social screening and preliminary assessment will be carried out to determine nature, magnitude of adverse social impacts and specific of social issues to scope out social issues for detailed assessment.

(b) To inform, consult and carry out dialogues with stakeholders on matters regarding project design alternatives, implementation of social mitigation measures and provide specific recommendations with high social risks, including, presence of significant common property that may require adjustments in project design.

(c) Assess the capacity of institutions and mechanism for implementing social risk management instruments and recommend capacity building.

(d) Develop monitoring and evaluation mechanism to assess social development outcomes.

(e) Develop broad mitigative measures and prepare preliminary budget estimates.
SA Methods and Tools:

(a) For socio-economic, cultural and political/institutional analysis combine multiple tools and employ a variety of methods for collecting and analyzing data, including both quantitative and qualitative methods (expert and key informant interviews, focus group discussions, beneficiary assessments, rapid and participatory rural appraisal, gender analysis).

(b) Develop scoping techniques, interview schedules, field survey instruments and checklist for data collection and discussions.

(c) Screen and scope to prioritize social issues through different techniques such as ranking and composite index.

(d) The selection of SA methodology should emphasize consultation and participation of project affected persons (PAPs), project implementing and executing agencies and other stakeholders. The discussions with the relevant government officials, other institutions and organizations in the civil society, should be participatory and broad-based, leading to the identification, selection and agreement on project options.

Outputs:

The expected output will be a Social Screening report and findings integrated in the feasibility report, including

(a) Findings of analysis and consultation framework for project.

(b) Outline of social risk management instruments as required.

(c) Recommendation for adjustments in designs during feasibility and detailed design stage.

(d) Scope of social impact assessment to define the universe of social issues for detailed analysis for DPR.

(e) Guidelines for resettlement and rehabilitation measures.

(ii) Stage II – Detailed Project Report:
The social impact assessment will cover the directly affected populations to formulate development strategies in order to assist in determining project impacts on the social, economic, cultural, and livelihood activities of affected communities. This will establish a social baseline against which changes resulting from the intervention can be measured in the future. The social surveys will be carried out after demarcation of zone of impact.

(a) A census and socio-economic survey, including a detailed inventory of affected assets would however, need to be carried out for all PAPs to establish a cut-off date, loss of fixed assets such as structures and trees, livelihood or access to community resources and categorise each type of losses as a result of project implementation.

(b) Assess local tenure and property rights arrangements which may include usufruct or customary rights to the land or other resources taken for the project including common property resources.

(c) Analysis of baseline information and its processing will include adequate measures to compensate and assist the people to restore and improve their livelihood.

(d) Carry out market survey and focus group consultation with different social groups
including women to prepare socially, technically and economically feasible income
generations schemes including skill upgradation plans.

(e) Identify the land and prepare a plan for relocation in consultation with the project
displaced people with different social groups including women and local administration.

(f) Finalize estimate of land required that will be affected by zone of impact, resettlement
and economic rehabilitation and review land transfer procedure adopted in project area
for all types of activities related to project such as back water effect, distributary network,
approach roads and other civil works.

(g) Carry out meaningful public consultation with project affected people and other
stakeholders on the types of social risk management measures to ensure 1) that the
proposed mitigation measures are feasible to assist people to improve their livelihoods
and 2) provide opportunities and a plan to participate in planning and implementing
resettlement. Setting out mechanisms for community participation to set out priorities to
ensure consultation with project affected people and dialogues with government officials
from various departments, to make recommendations on measures necessary to mitigate
adverse impacts and enhance social outcomes.

(h) Determine, in consultation with government officials, the current replacement cost rates
for all types of affected assets and prepare detailed cost estimates for all types of affected
assets and for other assistance and allowances.

(i) For all those who are affected including ethnic minorities, the social and economic
benefits they receive should be consistent with their cultural preferences and decided in
consultation with affected communities.

(j) The assessment will incorporate all measures necessary to ensure compensation for assets
acquired at replacement cost, assistance to facilitate shifting of structures out of the
impact zone, and mitigation measures for loss of livelihood, or reduction in incomes for
PAPs. RAP is intended to be action-oriented and time-bound document. As such it should
be as precise and affirmative as possible, to facilitate approval by project authorities and
the WB. Clarifying the parameters of the RAPs during the early stages will ensure that
the RAP is a document focused on practical steps for implementation of R&R measures.

(k) Prepare the draft R & R framework in close coordination with the borrower and the
project affected people, based on type of losses expected, which describes entitlements
and mitigation measures needed to assist affected people, specially for the vulnerable in
accordance with World Bank guidelines.

(l) Assess institutional capacity and propose the institutional arrangement for
implementation of RAP, addressing grievances, and ensuring gender equity, and identify
the roles and responsibilities of each agency and develop a training program on R & R,
based on the assessment of the capacity of the implementing agency.

(m) To develop a time schedule to implement the action plan that synchronizes with civil
works.

(n) Conduct risk assessment for proposed mitigation measures and develop a risk assessment
framework.

(o) Develop user friendly software package for database on Project Affected Households and
families to enable monitoring.
Methods & Tools:

(a) Conduct census and baseline survey with the help of interview schedules and prepare linear maps at appropriate scales showing each affected property to identify all project affected households and assets.

(b) Conduct land surveys in project area with the assistance of government officials for preparing land plan schedules.

(c) Conduct focus group discussions to discuss adjustment in designs.

(d) Conduct consultations with affected people, and district level workshops with communities and executing organizations to finalize the implementation mechanism and for informed decision making.

Output:

The following shall be the outputs:

(a) Final R&R policy.

(b) Final Resettlement Action Plan (RAP) including a capacity building & training plan for project partners.

(c) Final data base of the socio-economic surveys.

5. Reporting Requirements

(a) Inception Report: The Consultant will submit an Inception report confirming the methodology to be adopted for the study, the deployment schedule of personnel, a schedule of site visits to be carried out and a reporting schedule, within a fixed time from the date of beginning of the assignment. The consultant may need to carry out a reconnaissance survey before submitting the inception report.

(b) Social Screening report: The expected output will be a Social Screening report and findings integrated in the feasibility report, including findings of analysis and consultation framework for project; outline of safeguard instruments as required; recommendation for adjustments in designs during feasibility and detailed design stage; scope of social impact assessment to define the universe of social issues for detailed analysis for DPR; and guidelines for resettlement and rehabilitation measures.

(c) Resettlement Action Plan: Project description; method of study; analysis of alternatives; minimization of adverse impacts; analyses of land tenure systems, land acquisition or transfer mechanism and R&R polices; project area profile and Impact analyses of the project on affected and displaced people with disaggregated data analyses of men and women; impact on land and other assets vis-à-vis the total asset including impact on occupation (formal and informal) and income (formal and informal sources) with disaggregated data analyses of both men and women; relocation plan with alternate sites, selection of preferred sites in consultation with the affected people, and planning for development of alternative sites; livelihood restoration plan with training plan for skill upgradation, employment and credit; community participation and integration with host population; restoration and relocation plan for cultural/common properties; institutional arrangement specified with roles and responsibilities, and training plan for capacity building; implementation schedule; monitoring, and evaluation plan, including indicators and reporting
formats; risk assessment; cost estimates including rate analysis, quantities for civil work items and detailed budget.

**Other Information**

The consultant are advised to refer to the following World Bank policies in addition to any other resources that they may deem fit:

1. OP 4.12 Involuntary Resettlement
2. OPN 11.03 Cultural property
3. Involuntary Resettlement Sourcebook

In addition, the consultant may refer to [www.worldbank.org/socialanalysissourcebook](http://www.worldbank.org/socialanalysissourcebook).
Attachment 8

Procedures for Mine Risk Management in World Bank-Funded Projects in Afghanistan

Background:

The following procedures are designed to respond to the risks caused by the presence of mines in Afghanistan, in the context of:

- **Community rehabilitation / construction works** to be identified and implemented by the communities themselves (for small projects of up to $100,000 each);
- **Small and medium-size works** to be identified by local authorities and implemented by local contractors (for projects up to $5m each);
- **Works to be implemented directly by Government departments/agencies**, without use of contractors;
- **Large works** to be implemented by contractors (for projects above $5m);

General comment applying to all following procedures: All risk assessment and clearance tasks shall be implemented in coordination with the Mine Action Center for Afghanistan (MACA). These procedures may need to be amended in the future depending on evolving circumstances.

Procedure for Community-Managed Works

**Applicability:** This procedure applies to community rehabilitation / construction works to be identified and implemented by the communities themselves (for small projects of up to $100,000 each).

**Overall approach:** The communities should be responsible for making sure that the projects they propose are not in mine-contaminated areas, or have been cleared by MACA (or a mine action organization accredited by MACA).

**Rationale:** Communities are best placed to know about mined areas in their vicinity, and have a strong incentive to report them accurately as they will carry out the works themselves.

**Procedure:**

1. Communities are required to submit a reply to a questionnaire regarding the suspected presence of mines in the area where Bank-funded community-managed projects will be implemented. This questionnaire should be formally endorsed by the Mine Action Program for Afghanistan (MAPA). It will be a mandatory attachment to the project submission by the communities and should be signed by community representatives and the external project facilitator. External project facilitators will receive training from
MAPA. Financing agreements with the communities should make clear that communities are solely liable in case of a mine-related accident.

2. If the community certifies that there is no known mine contamination in the area, the ministry responsible for the selection of projects should check with MACA whether any different observation is reported on MACA’s data base.

   o If MACA’s information is the same, the project can go ahead for selection. The community takes the full responsibility for the assessment, and external organizations cannot be made liable in case of an accident.

   o If MACA’s information is different, the project should not go ahead for selection as long as MACA’s and community’s statements have not been reconciled.

3. If the community suspects mine contamination in the area,

   o If the community has included an assessment / clearance task in the project agreed to be implemented by MACA (or by a mine action organization accredited by MACA), the project can go ahead for selection.

   o If the community has not included an assessment / clearance task in the project, the project should not go ahead for selection as long as this has not been corrected.

   o Mine clearance tasks must be implemented by MACA or by a mine action organization accredited by MACA. Communities will be penalized (subsequent funding by World-Bank funded projects shall be reduced or cancelled) if they elect to clear mines on their own.

Procedure for Small and Medium-size Works Contracted Out

Applicability: This procedure applies to small- and medium-size works to be identified by local authorities and implemented by local contractors (for projects up to $5m each).

Overall approach: MACA (or a mine action organization accredited by MACA) should provide detailed information on the mine-related risks (either based on previously done and updated general survey or on a new general survey) before projects are considered for selection. Only project sites assessed to have a nil-to-low risk would be eligible for selection, unless they have been demined by MACA or by a mine action organization accredited by MACA.

Rationale: Neither local authorities nor local contractors have the capacity to assess the mine-related risks in a systematic way, while they may have incentives to underestimate them.

Procedure:
1. Prior to putting up a project for selection, a general survey should be carried out by MACA (or a mine action organization accredited by MACA) to assess mine-related risks in the area of the project (this should include checking information available in the MACA data base).

2. If MACA provides information suggesting a nil-to-low risk in the proposed project area, the project can go ahead for selection.

3. The contract between the responsible ministry and the contractor will include a clause stating that in case of an accident, legal liability would be fully and solely borne by the contractor.

4. If MACA assesses a potentially high risk in the area (whether due to the presence of mines or uncertainty),
   - If the project includes an assessment / clearance task agreed to be implemented by MACA (or by a mine action organization accredited by MACA), it can go ahead for selection based on agreed funding modalities (clearance may be funded either under a contract with a Bank-funded project or under existing donor agreements with the mine action organization);
   - If the project does not included an assessment / clearance task, it should not go ahead for selection as long as this has not been corrected.

**Procedure for Works to be implemented directly by Government Departments/Agencies, without use of contractors**

**Applicability:** This procedure applies to works to be implemented directly by Government departments/agencies, without use of contractors.

**Overall approach:** MACA (or a mine action organization accredited by MACA) should provide detailed information on the mine-related risks (either based on previously done and updated general survey or on a new general survey) before works or installation of goods/materials are carried out in any given area. Work would only be allowed to proceed in areas assessed to have a nil-to-low risk, unless they have been demined by a mine action organization accredited by MACA.

**Rationale:** Government departments and agencies responsible for providing services currently do not have the capacity to assess the mine-related risks in a systematic way, and currently follow a process of consulting with MACA prior to carrying out activities.

**Procedure:**

1. Prior to carrying out work, the Government department/agency will consult with MACA to assess mine-related risks in the area (this should include checking information...
available in the MACA database). If not already done, a general survey should be carried out by MACA (or by a mine action organization accredited by MACA) to assess mine-related risks in the area.

2. If MACA provides detailed information on mine-related risks which suggest a nil-to-low risk in the proposed area, the work can proceed. The Government would be solely liable in case of a mine-related accident.

3. If information provided by MACA cannot support the assessment of a nil-to-low risk in the proposed area (whether due to the presence of mines or uncertainty), works should not go ahead before MACA (or a mine action organization accredited by MACA) carries out the necessary further assessment and/or clearance for risks to be downgraded to nil-to-low, based on agreed funding modalities (clearance may be funded either under a contract with a Bank-funded project or under existing donor agreements with the mine action organization).

**Procedure for Large Works Using Contractors**

*Applicability:* This procedure applies to large works to be implemented by large contractors (projects above $5m).

*Overall approach:* The main contractor should be responsible for dealing with mine-related risks, in coordination with the UN Mine Action Center.

*Procedure:*

1. As part of the preparation of the bidding documents, a general survey should be carried out by MACA (or a mine action organization accredited by MACA) on all the areas where contractors may have to work (broadly defined). This survey should provide detailed information on mine-related risks in the various areas allowing for an unambiguous identification of areas that have a nil-to-low risk of mine/UXO contamination and areas where the risk is either higher or unknown. The survey should be financed out of the preparation costs of the bidding documents.

2. All survey information should be communicated to the bidders (with sufficient legal caveats so that it does not entail any liability), as information for the planning of their activities (e.g., location of campsites, access roads to quarries).

3. Depending on the nature and location of the project and on the available risk assessment, two different options can be used.

   **Option 1 – Mine-clearance activities are part of the general contract**

   a. Based on the general survey results, a specific budget provision for mine action during construction is set aside as a separate provisional sum in the tender documents for the general contract.
b. As a separately identified item in their bid, the bidders include a provision for a further detailed mine assessment and clearance during construction.

c. On the instruction of the Supervision Engineer and drawing on the specific provisional sum for mine action in the contract, the contractor uses one of several nominated sub-contractors (or a mine action organization accredited by MACA) to be rapidly available on call, to carry out assessment prior to initiation of physical works in potentially contaminated areas, and to conduct clearance tasks as he finds may be needed. The Contractor may also hire an international specialist to assist him in preparing and supervising these tasks. The Contractor is free to chose which of the accredited sub-contractors to use, and he is fully responsible for the quality of the works and is solely liable in case of accident after an area has been demined.

d. To avoid an “over-use” of the budget provision, the Contractor is required to inform the Supervision Engineer in writing (with a clear justification of the works to be carried out) well in advance of mobilizing the mine-clearing team. The Supervision Engineer has the capacity to object to such works.

Option 2 – Mine-clearance activities are carried out under a separate contract

a. Specific, separately-awarded contracts are issued for further surveying and/or clearing of areas with a not-nil-to-low risk (under the supervision of the Engineer) by specialized contractors (or a mine action organization accredited by MACA). The definition of the areas to be further surveyed / cleared should be limited to those areas where any contractor would have to work, and should not include areas such as camp sites and quarries/material sites which are to be identified by the Contractor during and after bidding of the works. As a result of these further surveys and possibly clearance works, mine-related risk in the entire contract area is downgraded to nil-to-low.

b. The contract with the general Contractor specifies the extent of the portion of the construction site of which the Contractor is to be given possession from time to time, clearly indicating restrictions of access to areas where the mine risk is not nil-to-low. It also indicates the target dates at which these areas will be accessible. Following receipt of the notice to commence works from the Engineer, the Contractor can start work in all other areas.

c. The general Contractor is invited to include in its bid an amount for mine-security, to cover any additional survey / clearance he may feel necessary to undertake the works.

4. In case of an accident, a Board of Inquiry is assembled by MACA to investigate on the causes of the accident and determine liabilities. Large penalties should be applied on the Contractor if the Board determines that the accident resulted from a breach of safety rules.
5. All parties involved in this process are required to closely coordinate with MACA and to provide the Government, local communities, MACA, as well as any interested party the full available information on mine-related risks that may reasonably be required (e.g., maps of identified minefields, assessments for specific areas).
Matrix 1

Environmental Screening for sub-projects under the AEURP

Name of the sub-project: ________________________________
City: __________________________

<table>
<thead>
<tr>
<th>Activity</th>
<th>Potential Impacts</th>
<th>Assessment {Put only one tick (✓) in each row}</th>
<th>Scheme specific observations, if any</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Impact NOT significant</td>
<td>Significant Impact requires mitigation measures</td>
</tr>
<tr>
<td>Construction of houses, drains, roads, street repairs</td>
<td>Land take</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Removal of vegetation</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Pollution from ancillary activities like hot-mix plants, crushers, concrete batching plants, etc.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Dust generation during construction activities</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Increased Noise due to construction activities</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Risks of accidents and spills</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Potential for spread of water-borne diseases</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Increased traffic and congestion due to development of housing colony</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cleaning up of existing networks of water supply and wastewater conveyance to improve service delivery</td>
<td>Potential risk of accidents due to widened excavation for manhole or trenches</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Health hazard caused due to indiscriminate disposal of sludge removed from the pipes, drains and other appurtenances</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Providing kerb-side collection of solid waste in previously lacking such a service</td>
<td>Clogging of open drains conveying storm water and / or wastewater</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Indiscriminate disposal of collected waste causing a health hazard</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Provision of street lighting</td>
<td>Accidents during construction stage</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Hindrance to movement of traffic in operation stage</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Stamp & Signature of Authorized Official of the City Authority:__________________________
Date:__________________________

KEY IMPACTS IDENTIFIED
1.
2.
3.
4.

MITIGATION MEASURES TO BE IMPLEMENTED (REFER TO MATRIX 2 & ATTACHMENTS 1 & 3)
1.
2.
3.
4.

AGENCY RESPONSIBLE FOR IMPLEMENTATION / SUPERVISION (REFER TO MATRIX 2)
1.
2.
3.
4.

TIMING OF IMPLEMENTATION WITH REFERENCE TO STAGE OF CIVIL WORKS CYCLE (DESIGN, CONSTRUCTION OR OPERATION)
1.
2.
3.
4.

Stamp and Signature of the Authorized Official of the City Administration:
__________________________
Date:
Place:

Stamp and Signature of Nodal Officer, M&E Cell, MHUD:
__________________________
Date:
Place:
## Matrix 2

**Compendium of Environmental Mitigation measures for Projects under AEURP**

### Part A: Construction stage Impacts

<table>
<thead>
<tr>
<th>Activity</th>
<th>Potential Impacts</th>
<th>Mitigation Measures</th>
<th>Responsibility of Execution</th>
<th>Monitoring measure &amp; method</th>
<th>Responsibility of Monitoring</th>
</tr>
</thead>
<tbody>
<tr>
<td>Construction of houses</td>
<td>Land take</td>
<td>Compensation to be paid to affected persons as per Attachment 2 to the SEMF</td>
<td>Consultant firm/ Municipality</td>
<td>Record of transfer of payment to affected persons</td>
<td>MUDH/ Municipality</td>
</tr>
<tr>
<td>Removal of vegetation</td>
<td></td>
<td>☐ Planting saplings as compensation @ 2 saplings for each tree felled. This must be done after the construction activities have been completed on site. Alternatively, planting must be done well in advance of beginning of construction so that the trees have grown strong enough to resist accidental hits during movement of construction equipment</td>
<td>Consultant firm/ Municipality</td>
<td>Provide cleared land to the Contractor after recording the number of trees cut, or after the planting is complete and trees have reached a specified height</td>
<td>MUDH/ Municipality</td>
</tr>
<tr>
<td>Dust generation during activities</td>
<td></td>
<td>☐ Provide temporary enclosures to the site using GI sheets and poles</td>
<td>Contractor</td>
<td>Visual Inspection, Check log books</td>
<td>Project Management Consultant (PMC)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>☐ Provide cover on trucks carrying construction material.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>☐ Provide protective masks for workers</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>☐ Sprinkle water within site, especially on windy days</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Noise due to construction activities</td>
<td></td>
<td>☐ Avoid noise generating activities during particular periods – times of prayers, school hours, etc.</td>
<td>Contractor</td>
<td>Visual inspection of works, checking log books</td>
<td>PMC</td>
</tr>
<tr>
<td></td>
<td></td>
<td>☐ Discontinue all operations during night except if concreting requires work to continue during the night.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>☐ Provide ear plugs to construction workers manning noisy equipment.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Activity</td>
<td>Potential Impacts</td>
<td>Mitigation Measures</td>
<td>Responsibility of Execution</td>
<td>Monitoring measure &amp; method</td>
<td>Responsibility of Monitoring</td>
</tr>
<tr>
<td>----------</td>
<td>------------------</td>
<td>---------------------</td>
<td>----------------------------</td>
<td>-----------------------------</td>
<td>-----------------------------</td>
</tr>
<tr>
<td></td>
<td></td>
<td>□ Consider provision of noise barriers by landscaping, tree plantation or even double-glazing.</td>
<td>PMC</td>
<td>Municipality</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>□ Provide adequate signages and fencing around the site.</td>
<td>Contractor</td>
<td>Visual inspections, checking logbooks</td>
<td>PMC</td>
</tr>
<tr>
<td></td>
<td></td>
<td>□ Train workers to follow safety instructions.</td>
<td>Contractor</td>
<td>Visual inspections, checking logbooks</td>
<td>PMC</td>
</tr>
<tr>
<td></td>
<td></td>
<td>□ Prepare contingency plans for spillages, and carry out mock drills.</td>
<td>Contractor</td>
<td>Visual inspections, checking logbooks</td>
<td>PMC</td>
</tr>
<tr>
<td></td>
<td></td>
<td>□ Provide adequate notice of site/road closures to locals.</td>
<td>Contractor</td>
<td>Visual inspections, checking logbooks</td>
<td>PMC</td>
</tr>
<tr>
<td></td>
<td></td>
<td>□ Provide adequate detours around construction areas.</td>
<td>Contractor</td>
<td>Visual inspections, checking logbooks</td>
<td>PMC</td>
</tr>
<tr>
<td></td>
<td></td>
<td>□ The site should be graded after construction is finished to ensure proper drainage of runoff from the site.</td>
<td>Contractor</td>
<td>Measurements at the end of construction</td>
<td>PMC</td>
</tr>
<tr>
<td></td>
<td></td>
<td>□ Prepare and execute debris disposal plans.</td>
<td>Contractor</td>
<td>Visual inspections, checking logbooks</td>
<td>PMC</td>
</tr>
<tr>
<td>Improving service delivery through cleaning up of existing networks of water supply and wastewater conveyance</td>
<td>Potential risk of accidents due to widened excavation for manhole or trenches</td>
<td>□ Meticulously follow drawings prepared for the project.</td>
<td>Contractor</td>
<td>Visual inspections, checking logbooks</td>
<td>PMC</td>
</tr>
<tr>
<td></td>
<td></td>
<td>□ Install fencing for the period of construction in case of deep trenches.</td>
<td>Contractor</td>
<td>Visual inspections, checking logbooks</td>
<td>PMC</td>
</tr>
<tr>
<td></td>
<td></td>
<td>□ Provide training to workers on action to be taken in case they encounter methane in sewers.</td>
<td>Contractor</td>
<td>Visual inspections, checking logbooks</td>
<td>PMC</td>
</tr>
<tr>
<td></td>
<td></td>
<td>□ Provide adequately sized sanitary landfill site where such waste can be disposed of.</td>
<td>Contractor</td>
<td>Visual inspection, surveys of citizens, etc.</td>
<td>PMC</td>
</tr>
<tr>
<td>Health hazard caused due to indiscriminate disposal of sludge removed from the pipes, drains and other appurtenances</td>
<td></td>
<td>□ Train the workforce and raise public awareness regarding the potential hazard of indiscriminate disposal of such sludge.</td>
<td>Contractor</td>
<td>Visual inspection, surveys of citizens, etc.</td>
<td>PMC</td>
</tr>
<tr>
<td></td>
<td></td>
<td>□ Consider flushing the system one-time to dispose of the solids rather than removing sludge outside the</td>
<td>Contractor</td>
<td>Visual inspection, surveys of citizens, etc.</td>
<td>PMC</td>
</tr>
<tr>
<td>Activity</td>
<td>Potential Impacts</td>
<td>Mitigation Measures</td>
<td>Responsibility of Execution</td>
<td>Monitoring measure &amp; method</td>
<td>Responsibility of Monitoring</td>
</tr>
<tr>
<td>------------------------------</td>
<td>----------------------------------------------------------------------------------</td>
<td>--------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>-----------------------------</td>
<td>-----------------------------------------------</td>
<td>-------------------------------</td>
</tr>
<tr>
<td>Street lighting</td>
<td>Risk of accidents during installation – falling objects, electric shocks, etc.</td>
<td>❑ Follow safety guidelines. ❑ Provide for personal protective equipment – gloves, hard hats, etc. ❑ Provision of first-aid kit on-site. ❑ Carry out construction during off-peak hours.</td>
<td>Contractor</td>
<td>Visual inspections</td>
<td>PMC</td>
</tr>
<tr>
<td>Provision of access roads or street repairs</td>
<td>Land take</td>
<td>Compensation to be paid to affected persons for new access roads as per Attachment 2 to the SEMF.</td>
<td>Municipality</td>
<td>Record of transfer of payment to affected persons</td>
<td>MUDH</td>
</tr>
<tr>
<td>Removal of vegetation</td>
<td>❑ Planting saplings as compensation @ 2 saplings for each tree felled. This must be done after the construction activities have been completed on site. Alternatively, planting must be done well in advance of beginning of construction so that the trees have grown strong enough to resist accidental hits during movement of construction equipment</td>
<td>Municipality / PMC</td>
<td>Provide cleared land to the Contractor after recording the number of trees cut, or after the planting is complete and trees have reached a specified height</td>
<td>Municipality / MUDH</td>
<td></td>
</tr>
<tr>
<td>Pollution from ancillary activities like hotmix plant, concrete batching plants, crusher operations, etc.</td>
<td>❑ Locate the hotmix plant at least 500m away from habitation ❑ Locate crushers and concrete batching plants at least 100m from habitation ❑ Provide and operate emission control devices like ESP or wet venturi scrubber ❑ Provide dust control devices on crushers and concrete batching plants</td>
<td>Contractor</td>
<td>Visual inspection, Check operation logs</td>
<td>PMC</td>
<td></td>
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<tr>
<td>Dust generation during construction activities</td>
<td>❑ Provide temporary enclosures to the site using GI sheets and poles ❑ Provide cover on trucks carrying construction material. ❑ Provide protective masks for workers</td>
<td>Contractor</td>
<td>Visual Inspection, Check log books</td>
<td>PMC</td>
<td></td>
</tr>
<tr>
<td>Activity</td>
<td>Potential Impacts</td>
<td>Mitigation Measures</td>
<td>Responsibility of Execution</td>
<td>Monitoring measure &amp; method</td>
<td>Responsibility of Monitoring</td>
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<td>Sprinkle water within site, especially on windy days</td>
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</tbody>
</table>
| Noise due to construction activities | ❑ Avoid noise generating activities during particular periods – times of prayers, school hours, etc.  
❑ Discontinue all operations during night except if concreting requires work to continue during the night.  
❑ Provide ear plugs to construction workers manning noisy equipment.  
❑ Consider provision of noise barriers by landscaping, tree plantation or even double-glazing. | Contractor  
Municipality | Visual inspection of works, checking log books  
MUDH | PMC                              |
| Risks of accidents and spills    | ❑ Provide adequate signages and fencing around the site.  
❑ Train workers to follow safety instructions.  
❑ Prepare contingency plans for spillages, and carry out mock drills.  
❑ Provide adequate notice of site/road closures to locals.  
❑ Provide adequate detours around construction areas. | Contractor | Visual inspections, checking logbooks | PMC |


## Part B: Operation Stage Impacts

<table>
<thead>
<tr>
<th>Activity</th>
<th>Potential Impacts</th>
<th>Mitigation Measures</th>
<th>Responsibility of Execution</th>
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<th>Responsibility of Monitoring</th>
</tr>
</thead>
</table>
| Construction of housing          | Increased traffic and congestion due to development of housing colony               | ☐ Provide adequate RoW from planning stage itself.  
☐ Protect this RoW using appropriate devices – notification, planting in area currently not used for the road, fencing, etc.  
☐ Educate the locals not to bring out household waste on days other than those on which collection has been fixed.  
☐ Consider provision of fixed metallic bins which may be emptied during collection.                                                                 | City Authority              | Copies of notifications to be filed Visual inspection              | MUDH                        |
| Providing kerbside collection of solid waste in areas previously lacking such a service | Clogging of open drains conveying storm water and / or wastewater | ☐ Fix up days on which the waste would be collected from the kerbside in the locality.  
☐ Educate the locals not to bring out household waste on days other than those on which collection has been fixed.  
☐ Consider provision of fixed metallic bins which may be emptied during collection.                                                                 | City Authority              | Check for copies of advertisements on file, Visual monitoring     | MUDH                        |
| Indiscriminate disposal of collected waste causing a health hazard | Indiscriminate disposal of collected waste causing a health hazard | ☐ Provide adequately sized sanitary landfill site where such waste can be disposed of.  
☐ Train the workforce and raise public awareness regarding the potential hazard of indiscriminate disposal of such sludge.                                                                 | City Authority              | Visual inspection, surveys of citizens, etc.                     | MUDH                        |
| Water supply improvement         | Increased sewage and sullage to be treated                                        | ☐ Provide simultaneous development of water as well as wastewater conveyance, treatment and disposal.                                                                                                                  | City Authority              | Inspection of plans and schemes                                  | MUDH                        |
| Access roads and streets         | Increased traffic                                                                | ☐ Provide adequate RoW from planning stage itself.  
☐ Protect this RoW using appropriate devices – notification, planting in area currently not used for the road, fencing, etc.                                                                                             | City Authority              | Copies of notifications to be filed Visual inspection              | MUDH                        |
| Street lighting                  | Hindrance to traffic                                                             | ☐ Locate street lights appropriately                                                                                                                  | City Authority              | Plans to be verified before execution                           | MUDH                        |