

# **Environmental and Social Screening Report**

## **Rehabilitation of existing lights into LED lights along Mai Kolachi Road**

May 2, 2021

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### **List of Acronyms**

<b>AED</b>	:	Anti-encroachment Drive
<b>BP</b>	:	Bank Procedure
<b>GDP</b>	:	Gross Domestic Product
<b>GoS</b>	:	Government of Sindh
<b>DMCs</b>	:	District Municipal Corporations
<b>KMC</b>	:	Karachi Metropolitan Corporation
<b>CLICK</b>	:	Competitive and Livable City of Karachi
<b>PDOs</b>	:	Project's Development Objectives
<b>LCs</b>	:	Local Councils
<b>UIPT</b>	:	Urban Immovable Property Tax
<b>SSWMB</b>	:	Sindh Solid Waste Management Board
<b>ESR</b>	:	Environmental and Social Screening Report
<b>EA</b>	:	Environmental Assessment
<b>ESC</b>	:	Environmental and Social Cell
<b>EIA</b>	:	Environmental Impact Assessment
<b>ESMP</b>	:	Environmental and Social Management Plan
<b>SEPA</b>	:	Sindh Environmental Protection Agency
<b>OP</b>	:	Operational Policy
<b>ESMF</b>	:	Environmental and Social Management Framework
<b>RoW</b>	:	Right of Way
<b>IEE</b>	:	Initial Environmental Examination
<b>PPEs</b>	:	Personal Protective Equipment's
<b>PAPs</b>	:	Project Affected People

## Chapter 1: INTRODUCTION

### 1.1. Project Background

Karachi is Pakistan's largest city, its economic and financial hub and main seaport. However despite its higher contribution to the national and regional economy, due to the heavy influx of population and a continued neglect in the development and upkeep of the urban infrastructure and related services over the last few decades, it is now considered among the world's least livable cities. The city ranks in the bottom five cities (out of 140), performing poorly in the dimensions of livability, health, environment, safety and education.

The Karachi City Diagnostic Study estimates an investment requirement of at least US\$9-10 billion over the next 10 years to close the infrastructure and services gaps.

During the last few decades, Karachi has suffered infrastructure neglect and declining access and quality of urban services. The city's urban planning; management and service delivery has been unable to keep pace with the needs of the growing population. Karachi's infrastructure challenges are compounded by the city's high risk and vulnerability to climate-related disasters. Despite being a relatively dry city, Karachi faces heavy rainfall during the monsoon season and is highly vulnerable to recurrent and massive flooding. Increasing flooding events are mainly a result of the poor performance of the city's drainage system, which is largely blocked by uncollected solid waste and unplanned informal settlements along the drainage channels. The World Bank is assisting the Government of Sindh (GoS) for strengthening the institutional and financial capacity of the Karachi local councils (Karachi Metropolitan Corporation (KMC), six District Municipal Corporations (DMCs) and District Council Karachi) to deliver and maintain critical urban infrastructure and services through the project 'Competitive and Livable City of Karachi (CLICK)'.

### 1.2. Project Components

There are following four components of the project:

#### **Component 1** – Performance-Based Grants to Local Governments and Capacity Building

This component will finance the provision of performance-based grants (PBGs) to Karachi local councils (LCs) upon achievement of specified institutional strengthening measures, to incentivize LCs to improve management capacity and enhance city competitiveness. LCs will use these grant funds to implement subprojects for infrastructure and services under their mandate, in line with the needs of citizens and businesses. To assist LCs in achieving the institutional strengthening measures, and to manage and implement the performance grants system, this component will also finance the provision of technical assistance (TA), and project implementation and management, by the Local Government Department (LGD) of GoS. Subprojects to be implemented by LCs will be selected based on a comprehensive screening and risk reduction procedure.

- **Sub-component 1.1:** *Performance-based Grants to Local Councils; and*
- **Sub-component 1.2:** *Technical Assistance and performance grants implementation and management.*

#### **Component 2** – Technical Assistance for reforming urban Property Tax administration and system indicative financing

#### **Component 3** – Improving City's Competitiveness and Business Environment

#### **Component 4** – Technical Assistance for Solid Waste Management

## **Chapter 2: LEGISLATIVE REQUIREMENTS**

### **2.1. Legislative Requirements**

This section of the screening report document gives an overview of the legislative requirements that applies to the proposed sub-project. The activity is expected to comply with all the national, provincial and World Bank safeguard requirements including World Bank Operational Policies and Sindh Environmental Protection Agency (SEPA) laws and all the required regulatory clearances will be obtained. Legal provisions relevant to environmental protection applicable to the design, construction and operation were identified under the scope of the ESR. The Local Council (LC) and Construction Contractor will be informed of these requirements and are legally bound to comply with the provisions as applicable.

Relevant National and Provincial laws, policies and strategies for the proposed projects are mentioned below.

#### **2.1.1 National and Provincial Requirements**

##### **2.1.1.1 National Policies and Laws**

- Pakistan Penal Code
- The Antiquities Act, 1975

##### **2.1.1.2 Provincial Policies and Laws**

- Sindh Environmental Protection Act 2014 (SEPA 2014)
- Sindh Environmental Protection Agency (Review of IEE and EIA Assessment) Regulations, 2014
- The Sindh Local Government Act 2013
- The Karachi Water and Sewerage Board Act, 1996 (KWSB Act)
- The Sindh Differently Able Persons (Employment, Rehabilitation and Welfare (Amendment) Act, 2017
- The Sindh Commission on the Status of Women Act, 2015
- Sindh Bonded Labor (Abolition) Act 2015
- Sindh Factories Act, 2015
- Sindh Minimum Wages Act, 2015
- Sindh Payment of Wages Act, 2015
- The Sindh Occupational Safety and Health Act (2017)
- The Sindh Transparency and Right to Information, 2016
- Sindh Cultural Heritage (Preservation) Act, 1994

##### **2.2.2 World Bank Safeguard Policies**

Relevant World Bank safeguards policies triggered are as given in Table 2.1 below:

**Table 2.1: Safeguard Policies Triggered and Compliance Status**

#	Environmental Assessment	Policy Reference	Triggered	Remarks
1.	Environmental Assessment	OP/BP 4.01	✓	CLICK is categorized as category B with partial assessment. The sub-project has been screened as per OP 4.01 and is envisaged to have low to minor environmental and social impacts. The sub-project involves only rehabilitation of the streetlight system by replacing the damaged electric poles and existing lights with LED lights along the existing road. Therefore, no new construction is required.
2.	Physical Cultural Resources	OP/BP 4.11	✓	Even though this OP has been triggered for this project, the requirements are not envisaged to be applicable for this activity. The sub-project activities will be carried out along the existing Mai Kolachi road with no adverse impact on any cultural, archeological, historical, heritage, or religious significant site being observed.
3.	Involuntary Resettlement	OP/BP 4.12	✓	This OP is triggered for the overall project of CLICK. For the subproject activity, screening has been carried out to ensure that there is no dispute and tenants over the land used for the proposed sub-project, as well as not any Anti Encroachment Drive (AED) being carried out.
4.	Access to information	BP 17.50	✓	This OP has been triggered for the overall project. It has been ensured that sub-project related information is put on the websites of KMC and CLICK and has been disseminated with the stakeholders to improve the design and implementation of the project.

## Chapter 3: SUB-PROJECT DESCRIPTION

### 3.1 Details of the Sub-Project

The Mai Kolachi Road is a main arterial road of Karachi and was illuminated with street lights. However, due to lack of maintenance, stealing of cables and accessories and some road accidents this main arterial road is present without proper street illumination. The lights, which were previously installed (having high watts power from 1000 watts to 4000 watts), consume very high power. Being located near the sea-side, the electric poles and their arms also get rusted if not repainted frequently.

Considering the law-and-order situation and to provide illumination to the daily road commuter, the KMC is planning to rehabilitate the streetlights by providing LED lights, overhead cables, painting of poles and other accessories.

### 3.2 Sub-Project Features

The Mai Kolachi Road section stretches over 12,500 Rft in length, which is required for the rehabilitation of streetlights. The proposed sub-project includes the installation of LED lights works. The sub-project salient features can be seen in Table 3.2 below:

**Table 3.2: Sub-project salient features**

Sub-Project salient Features	Details
Rehabilitation of existing lights into LED lights	<ul style="list-style-type: none"><li>• Replacement of missing and damaged electric poles (25 in numbers);</li><li>• Replacements of conventional lights with LED lights;</li></ul> <p>LED light have been considered because:</p> <ul style="list-style-type: none"><li>◦ The overall system does not support solar lights</li><li>◦ Solar panels require more maintenance and frequent cleaning of the panels</li><li>◦ In Karachi there is humidity and dust problem due to which the efficiency of solar power lights is found to be very low.</li><li>◦ Previous experiences of installing solar lights in a few areas of the city were not good as they were either stolen or were not maintained and found in damaged condition.</li></ul> <ul style="list-style-type: none"><li>• Installation of ABC wire overhead completely, and</li><li>• Installation of pole-mounted transformers 100kVa including repairing of damaged foundations of all poles.</li></ul>

### 3.3. Analysis of Alternatives

The section of the ESR presents an outline for sub-project alternatives as it is an integral part of



the E&S assessment process to select the best option among all the possible sub-project options by keeping environmental and social considerations. The analysis of alternatives assessment and justifications for best and possible options are made presented below:

#### **Option-I: Analysis of Sub-project proceeding**

The proposed subproject's most street lights are out of order and damaged for a long time now. Movement on the road during the night has become risky, as a large number of streetlights lie inoperative. Therefore, project proceeding will pose positive socio-economic impacts, however desistence to the proposed project will cause worsen the existing situation.

#### **Option-II: Analysis of Sub-project proceeding**

The overall existing system of Mai Kolachi Street lights does not support the Solar power, as it requires more maintenance including frequent cleaning of the panels. In Karachi there is humidity and dust are prevailing issues due to which the efficiency of solar power lights found to be very low, previous experiences of installing solar lights in a few areas of the city were either stolen or were not maintained and found in damaged condition. Therefore conventional (LED) light has been considered instead of Solar Powered Lights.

### **3.4 Sub-Project Location**

The proposed sub-project starts near Mai Kolachi Road / M.T.Khan Road Intersection and ends near the Underpass across Chaudhry Khalique Uz Zaman Road, Karachi—It connects downtown areas of Karachi to Clifton and spread over a length of about 12,500 RFT.

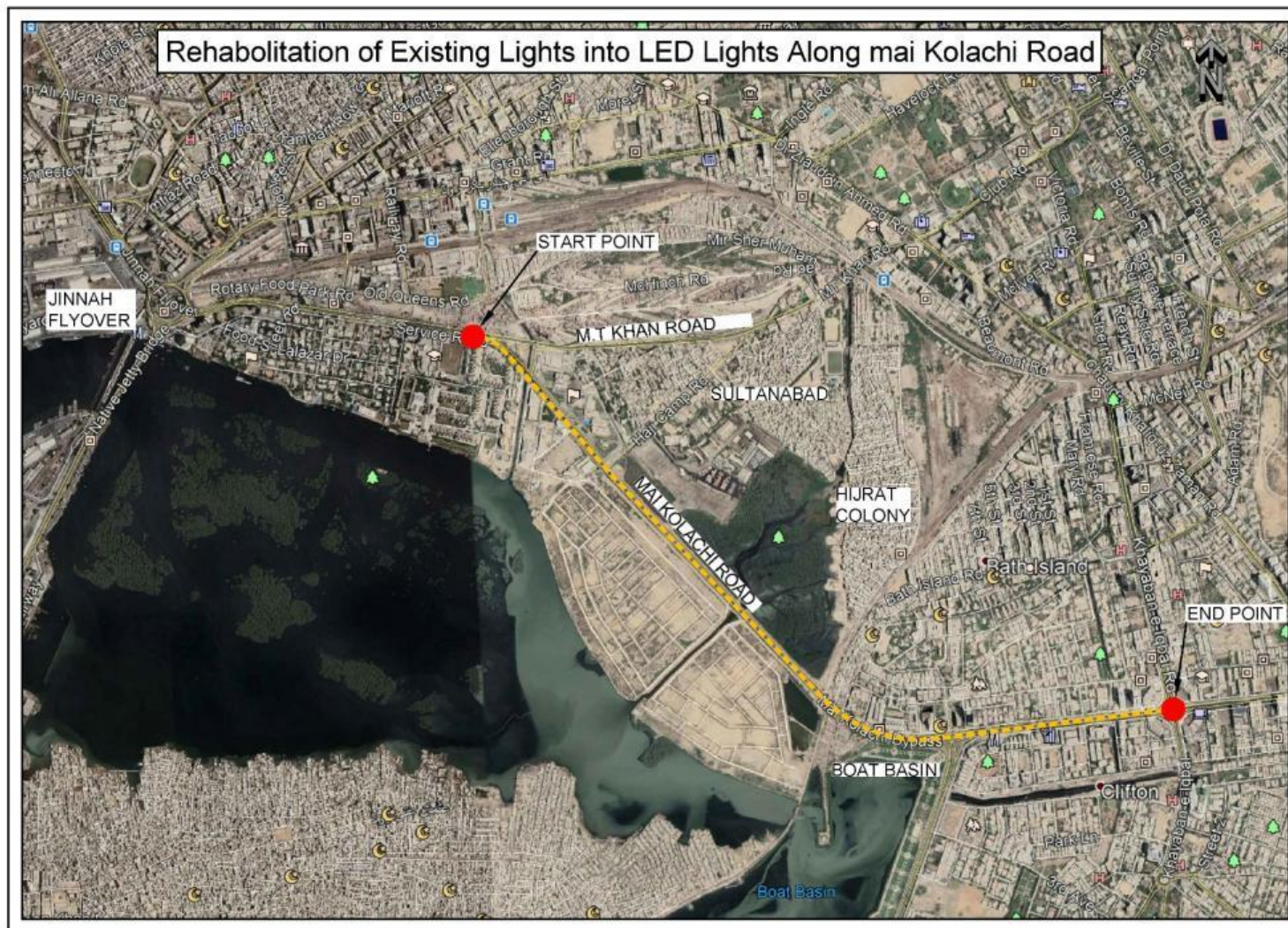


Figure 3.1: Location Map of the proposed Sub-Project

### 3.5 Sub-Project Significance

Karachi has seen dramatic growth over the last few decades, with a population increasing by over a million people to 16 million today. By 2050, this number is expected to reach almost double.<sup>1</sup> Population growth and expanding urban development have necessitated the provision of better road network including lighting arrangements at the major roads like the project road to provide the best-traveling facilities to the motorists as well as heavy traffic. As the population increases and associated urban growth continues, it will become increasingly important to undertake more such activities on other major roads in order to maintain the region's unique character, safer law and order conditions, high quality of life, and environmental quality. Rehabilitation and provision of such projects improve road safety and traffic flow strengthens our communities and make our cities and neighborhoods more attractive and competitive places to live and work.

In general, to ease the flow of traffic inside the city and to provide the best traveling facilities to the pedestrians, motorists as well as other heavy traffic, the KMC is committed to making a positive impact on the movement of traffic in the city by providing well-planned and illuminated roads like Mai Kolachi Road with necessary and advanced illumination facilities to serve the residents of the vicinity as well as the daily traffic.

In brief, the proposed sub-project will help curtail the traffic issues in the city and will help achieve the following objectives:

- To provide best-traveling facilities to the residents traveling from old city to Clifton;
- To provide safer travel conditions along the road section;
- To enhance road safety and avoid accidents; and
- To improve the law and order situation en-route.

### 3.6. Environmental Setting

The proposed sub-project site is located in the urban setting of District South, Clifton, Karachi. For a better understanding of the adjoining environment, important landmarks are identified with respect to accessibility to the project area. The proposed sub-project area lies in the heart of the city and densely populated urban area. The area starts from a low-income residential locality and ends at a posh locality of the district. Photographs of the surrounding of the proposed project can be seen as **Annex-A**.

### 3.7. Sub-Project Commencement Details

The sub-project construction activities are expected to be initiated before July-2021 and will be continued till December 2021. The expected timeframe for the proposed sub-project can be seen in Table 3.2 below.

**Table 3.1 : The Tentative Schedule for the proposed sub-project**

Details	Duration
Expected date for the start of Construction/Rehabilitation Activities	After receiving necessary approvals in FY 2020-21 and included in bidding document
Expected year for completion	Dec-2021

### 3.8. Sub-Project Activities

#### 3.8.1. Design Phase

This phase provides the basis for construction activities, adopted methodology and technologies that will be involved. To design the sub-project consultancy services have been

<sup>1</sup><https://sites.utoronto.ca/sustainabilitytoday/urban-and-energy-systems/Worlds-largest-cities/population-projections/city-population-2050.php>

taken on-board for providing assistance in planning construction activities, engineering design, cost estimation, preparation of bidding documents, contracts procurement, bid evaluation, construction supervision, quality assurance, and monitoring and evaluation of civil works (sub-projects) and contract management under CLICK. After the World Bank approval, the consultant will assist in detailed architectural/engineering design and provision of construction drawings for the sub-project.

### **3.8.2. Construction Phase**

The construction activity of the proposed Sub-Project will commence after getting approval from the World Bank. This phase will involve the civil works as following:

- excavation,
- reinforcement,
- concreting,
- necessary masonry,
- plastering at the site where the pole installed,
- painting on poles,
- Installation of light,

Standard and environmentally friendly construction materials and practices will be employed. The types of environmentally friendly construction materials used will be:

- Cement,
- Precast concrete,
- Wood,
- Steel,

Materials generate less emissions and energy in their manufacturing and production, with a direct reduction in carbon emissions. Using these materials in the civil works will be more beneficial due to their environmentally friendly nature with respect to the locally use material.

### **3.8.3. Operation and Maintenance Phase**

The overall responsibility of compliance of the operational phase will lie with the KMC. The operation and maintenance phase of this subproject activity will be financed by KMC and carried out in line with the existing practices and EMF and SMF of CLICK as well as the relevant measures proposed in this ESR.

In the organizational hierarchy of KMC, Director General (Technical Services) and Senior Director (Municipal Services) under Municipal Commissioner, will be overall responsible for the operation and maintenance of KMC projects.

## Chapter 4: STAKEHOLDERS ENGAGEMENT

### 4.1. Stakeholders Consultation

The stakeholders engagement and consultations has been carried out with the people of the proposed sub-project area at the pre-qualification phase, by following the methodological steps, guidelines and procedures for social screening defined in Social Management Framework (SMF) of CLICK. The purpose and methodology for the social screening process is aimed to determine the which activities of the proposed sub-project are likely to result in significant positive or negative social effects, with a view to determine appropriate impact mitigation measures for those activities to ensure sustainability of the subproject. Due to COVID-19 situation public meetings were restricted by provincial government therefore, one to one meeting/discussions were conducted adopting the COVID-19 Standard Operating Procedures at the sub-project location from 19th to 22nd April 2021 with people of the area as part of the environment and social screening study. The outcome of the consultations and determined social considerations are adhered in decision making and to carrying out the sub-project activities.

Information dissemination was ensured for the proposed project and complaint registration number has also been provided on website, social media and on banners at the project site. To address the grievances the consultation meeting progressed in the following manner:

- An overview of the Project, Sub-project and screening process was provided to the community representatives in the local language.
- Participants were given the opportunity to raise queries or concerns regarding the Sub-project. Queries were responded to and concerns were documented.

The list of consultation participants is attached as **Annex B** and pictorial presentation of the activity as **Annex C** respectively.

### 4.2. Issues / information

The following information was shared with the people/Community:

- Sub-project selection methodology and its sources of assistance, implementation/execution methodology,
- Information on perceived benefits from the proposed sub-project.
- Construction activity whether causing any type of health hazard or not? And mitigation measures.
- Discussion among the public for sharing of information related to project, environment and social policy of World Bank, direct and indirect impacts of improvement/ construction work on the environment.
- Any loss of land/structure/ business or other community property due to construction activity?
- Any risk to historic or cultural monuments due to the project.
- Possible types of problems faced by the locals in their daily activities due to construction work.
- The influx of labor during the construction stage of the project.

### 4.3. Feedback received

The main issues and concerns raised or feedback received from the community representatives of the area are and PIU Response is summarized in Table below:

**Table 4.3: Key Community Stakeholder Concerns and PIU Response**

<b>S. No.</b>	<b>Stakeholder Feedback</b>	<b>PIU/KMC Response</b>
1	It was suggested that street lightening should be completed in time without any delay.	After obtaining necessary approvals the sub-project will be completed in expeditious manner.
2	The installation of lights may cause difficulties for the local residents, road users and pedestrians.	It involves minor activities, and most of the task will be performed in off-peak times to avoid such hindrances or difficulties for the locals and commuters.
3	Local residents and sub-contractors should be given priority for jobs during the construction phase.	The sub-project is not a labor intensive project, However, priority will be given while hiring.
4	Public utilities and overhead wires may be disturbed. Arrangements should be made to minimize the disruption of public utilities.	No such utility lines are present.
5	Solid waste produced during street lights installation activities should be disposed off timely.	The contractor will be bound to dispose of all solid waste generated during street lights installation activities in an environment friendly manner following the EMP.
6	The stakeholders show their concerns regarding Health and Safety of the commuters.	KMC assured that the requisite environmental management and EHS measures shall be incorporated in the contractors' document, and it will be implemented strictly. Moreover, The installation of lights will be carried out at nighttime to avoid any disturbance to commuters ensuring all Health and Safety Protocols.
7	Several respondents appreciated the proposed sub-project and KMC's initiative for improvement of street lights along the Mai Kolachi Road. The proposed project will reduce accidents risk as a number of accidents happens due to the unavailability of Lights and darkness along the road.	<b>The KMC / PIU officials acknowledged the participation and appreciation of the people</b>

During the consultation process about the proposed sub-project, people expressed keen interest in the proposed sub-project. People, in general, were very enthusiastic about the benefits of the sub-project for the residents and daily commuters in specific. People are ready to extend all types of support during the execution of the sub-project as their major difficulties will be addressed after completion of the sub-project.



## **Chapter 5: ENVIRONMENTAL MANAGEMENT PLAN**

### **5.1 Methodology of Environmental and Social Screening**

The environmental and social screening for the sub-project has been carried out by making use of the methodology provided in the approved Environmental Management Framework (EMF), Social Management Framework (SMF), Environmental and Social Screening Checklist and the Screening Questions for Involuntary Resettlement (**Annex D, E & F**). The environmental impacts are localized, low intensity, and temporary in nature which could be avoided or mitigated. There will be no involuntary land acquisition, and therefore there will be no physical displacement or impacts on livelihoods nor restrictions on access to the local community. Team composition details for the study are attached as **Annex G**.

### **5.2. Overall Screening Outcome**

The proposed sub-project will not have any significant environmental & social impact because the project will not involve diversion of forest land, destruction of ecological resources, displacement of people, acquisition of private land, demolition/removal of existing structures or any other major environmental threats/risks. The land as per the RoW belongs to the KMC/Government of Sindh. Hence there are no significant social impacts; therefore, no further special study or detailed/social impact assessment needs to be undertaken.

There may be some short-term inconvenience to the local—road users due to construction/Rehabilitation of the streetlights but it will be for a very short period if compared with its long-term benefits to the local citizens. Additional issues identified include as related Occupational, Health and Safety (OH&S) issues, generation of solid and liquid waste and air emissions which are expected to be short-term, localized and reversible in nature. The activity is expected to have long-term benefits for the local citizens. Therefore, no IEE, EIA, or ESMP is required for the subproject site. However, the mitigation measures proposed in this EMP report should be implemented for the proposed sub-project.

### **5.3. Statutory Clearances/ No Objection Certificate**

The Sub-Project is only the Rehabilitation of existing Street Lights, which will be under use of the local commuter for a long time and the site has already been under the possession of the KMC for a long time. Only Statutory clearance from the Karachi Commissioner's Office is therefore obtained by the KMC, which is attached as **Annex J**.

### **5.4. Implementation of ESR**

This ESR will be an integral part of contractor's bidding documents. Contractor for the sub-project will be provided with a copy of environmental screening & monitoring checklists to make arrangements for necessary compliance with the proposed mitigation measures. Regular site visits will also be arranged to monitor the compliance of the mitigation measures and their proper implementation during construction phase.

- i. This environmental and social monitoring will be carried out with the help of the Environmental and Social Monitoring Checklist by the Focal Person of LC, ESC of PIU and Supervision Consultant.
- ii. Safeguards Team-PIU will also arrange regular visits at sites and meetings with concerned officials to check the compliance as prescribed in Environmental and Social Screening checklist.
- iii. Based on the prevailing scenario as mentioned in Environmental and Social screening checklist, Environmental and Social monitoring checklist will be filled out accordingly.
- iv. Summary of the findings of the monitoring for the compliance of environment and social aspects will be submitted to World Bank.

### **5.5. Environmental and Social Mitigation and Monitoring**

Environmental and Social Management and Monitoring Plan is developed to address the environment and social issues that may arise during construction activities:

**Table 5.1: Environmental and Social Management and Monitoring Plan**

Proposed Mitigation Measures	Implementation Responsibility	Monitoring Parameter(s)	Frequency	Monitoring Responsibility
<b>Pre-Construction Phase</b>				
<b>Site Selection</b>				
<ul style="list-style-type: none"> <li>Selection of site will not result in a loss of trees and soil erosion since the activity involves rehabilitation of existing light poles and structures.</li> </ul>	E&S Team of Contractor / Sub-contractor	Visual inspection	Before initiation, During Construction	Focal Person of LC, ESS and Supervision Consultant
<b>Selection of construction material</b>				
<ul style="list-style-type: none"> <li>Environment friendly construction material will be used during construction phase like; <ul style="list-style-type: none"> <li>- Cement</li> <li>- Precast Concrete slabs</li> <li>- Reclaimed or recycled wood and metal</li> </ul> </li> </ul>	E&S Team, Site Engineer of Contractor / Sub-contractor	Visual inspection  Purchase orders	Before initiation, During Construction	Focal Person of LC, ESS and Supervision Consultant
<b>Construction Phase</b>				
<b>Noise</b>				
<ul style="list-style-type: none"> <li>The contractors would ensure keeping noise levels from construction vehicles and machinery is within safe limits.</li> <li>Vehicular and machinery will not be allowed to operate at night time.</li> <li>Noisy machines and vehicles will not be allowed to be used at the sub-project site (noise level will not be more than 85 dBA at 7.5 m distance), properly tuned machines and vehicles will be allowed only.</li> <li>Pressure horns will not be allowed to be used for the construction vehicles.</li> <li>The contractor will adhere to the requirements of the mitigation plan contained in the contract documents with</li> </ul>	E&S Team of Contractor / Sub-contractor	Up-to-date maintenance documents of vehicles and related machinery  Use of machinery and equipment having less noise.  Provision for personal protective equipment (PPE's),	Pre and During Construction of the sub-project	Focal Person of LC, ESS and Supervision Consultant



<p>true spirit.</p> <ul style="list-style-type: none"> <li>• Confining excessively noisy work to normal working hours (8am-5pm) in the day. Maintain all vehicles in order to keep them in good working order in accordance with manufactures maintenance procedures - Make sure all drivers will comply with the traffic codes concerning maximum speed limit and driving hours;</li> <li>• Providing construction workers with suitable hearing protection such as earmuffs and training them in their use. Heavy machinery like percussion hammers and pneumatic drills should be used at a minimum level and should not be used at all during the night.</li> </ul>		earmuffs/ear plugs to workers.		
<b>Air Emissions</b>				
<ul style="list-style-type: none"> <li>• Regular water sprinkling will be the responsibility of the contractor at the dust generation points, during rehabilitation activities. Water will be also sprinkled at vehicular and machinery movement routes to avoid dust spreading to the nearby community as required. In addition, the provision of dust masks and ensuring their use by the workers will also be the responsibility of the contractor.</li> <li>• All vehicles, machinery, equipment and generators used during construction activities should be kept in good working condition and be properly tuned and maintained to minimize exhaust emissions. Stockpiled materials will be covered to avoid dust/particulate emission. The stack emissions from generators, (if used), minor excavations and vehicular/machinery</li> </ul>	E&S Team of Contractor / Sub-contractor /	<p>Visual inspection</p> <p>Provision of PPEs to the workers</p> <p>Maintenance records of equipment and machinery</p>	Pre and During Construction of the sub-project	Focal Person of LC, ESS and Supervision Consultant

<p>movement at the site can affect the ambient air quality at sub-project site. It will be the responsibility of the contractor to use well-maintained generators and vehicles/machines to keep ambient air quality within the desired level. The contractor will be obliged to provide fitness certificate/maintenance records of the generators, vehicles and machines before deploying them at the construction sites.</p>				
<b>Solid Waste</b>				
<ul style="list-style-type: none"> <li>The debris (rejected material) produced during minor civil works would be disposed-off in government approved/allocated disposal sites. Leftover material would not be dumped into storm water drains or watercourses, because such practices can clog these man-made and natural drainage systems and cause many other problems for the residents/Local Commuters.</li> <li>While it is confirmed by the PIU that mercury containing light bulbs are not currently used in the existing street lights under the proposed sub-project, in case such light bulbs are identified during rehabilitation works, KMC will ensure that the contractor will hire Sindh Environmental Protection Agency (SEPA) approved hazardous waste contractor, who will be responsible to properly handle, segregate, treat and dispose-off the old lights according to the Sindh hazardous waste management rules, 2014. This should be bound through contract agreement with the contractor.</li> </ul>	E&S Team of Contractor / Sub-contractor /	Visual inspection	During and Post execution of sub-project	Focal Person of LC, ESS and Supervision Consultant

<ul style="list-style-type: none"> <li>• Non-toxic and biodegradable products will be used whenever possible.</li> <li>• Hazardous materials such as chemicals, oils, heavy metals, and harmful solvents, will be properly collected and stored in appropriate containers with clearly visible labels. Hazardous materials will be stored at least 100 feet from any down gradient drainage or within secondary containment capable of containing its entire volume (if generate any such as electric batteries).</li> <li>• Equipment and work areas will be regularly inspected for signs of leaks and spills. Spill containment and cleanup kits will be available wherever hazardous materials are being used or stored. Any incidental spills or leaks will be contained and cleaned up as soon as it is safe to do so. Any contaminated soil will be collected and disposed of in an appropriate landfill.</li> <li>• Equipment refueling and maintenance will be limited to designated areas at least 30 meters (100 feet) from any down gradient drainage.</li> <li>• Solid Waste will be safely disposed of in demarcated waste disposal sites or dedicated garbage transfer stations (GTS;</li> <li>• A contract with SEPA Approved waste contractors should be made in case hazardous waste generates from the site, defining the schedule for hazardous waste management and its disposal.</li> <li>• Burning of waste oil should be strictly prohibited.</li> </ul>				
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**Water Pollution**

<ul style="list-style-type: none"> <li>Proper disposal of solid waste in designated site to sustain the water and land quality for domestic requirements. Solid waste will not be thrown in Nullah or any water body present in the area.</li> </ul>	E&S Team of Contractor / Sub-contractor /	Visual inspection	During and Post execution of sub-project	Focal Person of LC, ESS and Supervision Consultant
<b>Vehicular Traffic</b>				
<ul style="list-style-type: none"> <li>Only drivers with a valid license and car registration documents will be allowed to drive the vehicles.</li> <li>The drivers will be trained to strictly adhere to local traffic laws.</li> <li>At all times, the contractor will provide safe and convenient passage for vehicles, pedestrians and livestock, and will not cause any hurdle on the road for commuters.</li> <li>Appropriate safety precautions will be taken when transporting large equipment on public roadways.</li> <li>proper road signage during construction period, followed by provision of adequate and safe pedestrian crossings and walkways</li> </ul>	E&S Team of Contractor / Sub-contractor /	Visual inspection	During and Post execution of sub-project	Focal Person of LC, ESS and Supervision Consultant
<b>Flora and fauna</b>				
<ul style="list-style-type: none"> <li>Avoid unnecessary cutting of plant species during site clearance if needed;</li> <li>Limiting vehicular transport to defined roads as to prevent unnecessary injury and habitat destruction;</li> <li></li> </ul>	E&S Team of Contractor / Sub-contractor /	Visual inspection	During and Post execution of sub-project	Focal Person of LC, ESS and Supervision Consultant
<b>Occupational Health and Safety</b>				
<ul style="list-style-type: none"> <li>The labor with any transmittable disease will not be allowed on the Construction site Ensure and strictly implement the SOPs regarding COVID- 19 (refer to <b>Annex H</b>), including daily body temperature check,</li> </ul>	E&S Team of Contractor / Sub-contractor /	Visual inspection	During and Post execution of sub-project	Focal Person of LC, ESS and Supervision Consultant

<p>daily disinfection, quarantine management, area access management, PPEs, emergency response, and drills;</p> <ul style="list-style-type: none"> <li>Workers should be provided with good hygienic food for free;</li> <li>Only skilled workers will be allowed to work at the construction site;</li> <li>Provision of first aid facilities for workers at site for meeting the emergency needs of workers, and providing basic medical training to specified work staff and basic medical service and supplies to workers;</li> <li>Observe and maintain standards of Health and Safety towards all employees in line with WB EHS Guidelines along with Sindh Occupational Health and Safety Law</li> <li>Ensure that hazards associated with manual lifting are controlled by proper lifting techniques, work rotation system will reduce the chances of being exposed to work- related stress associated with construction activities.</li> <li>Unauthorized personnel will not be allowed to access the proposed project site without permission.</li> <li>Workers should be facilitated by providing appropriate work specific PPE's;</li> <li>Training and use of personal fall arrest systems, such as full-body harnesses and energy-absorbing lanyards as well as fall rescue procedures to deal with workers whose fall has been successfully arrested;</li> </ul>				
<b>Labor Living and Working Conditions</b>				
<ul style="list-style-type: none"> <li>The worker's Grievance redressal mechanism must be developed and communicated among workers to lodge</li> </ul>	E&S Team of Contractor / Sub-contractor /	Visual inspection	During and Post execution of sub-project	Focal Person of LC, SSS and Supervision Consultant

complains; <ul style="list-style-type: none"> <li>Workers should be provided with clean bottled drinking water for free;</li> <li>Workers should be provided with suitable toilets.</li> <li>Avoiding Gender Based Violence. Contractor will prepare and implement robust measures to address the risk of gender-based violence that include (i) mandatory and repeated training and awareness raising for the workforce about refraining from unacceptable conduct toward local community members, specifically women; (ii) informing workers about national laws that make sexual harassment and gender-based violence a punishable offence which is prosecuted; (iii) Introducing a Worker Code of Conduct as part of the employment contract, and including sanctions for noncompliance (e.g., termination), and (iv) contractors adopting a policy to cooperate with law enforcement agencies in investigating complaints about gender based violence.</li> <li>Use of child and forced labour will be strictly prohibited.</li> </ul>				
<b>Community Health and Safety</b>				
<ul style="list-style-type: none"> <li>Maintain a complaint register on site and it must be communicated to the internal staff and the public</li> <li>Close consultation with local communities to identify optimal solutions where needed</li> <li>Contractor shall give preference to local community members in the Project Area of Influence, to the extent feasible, with respect to the employment of unskilled</li> </ul>	E&S Team of Contractor / Sub-contractor /	Visual inspection	During and Post execution of sub-project	Focal Person of LC, SSS and Supervision Consultant

<ul style="list-style-type: none"> <li>labor</li> <li>Community grievances will be recorded and responded to on an urgent;</li> <li>No Hazardous and non-hazardous waste will be dumped outside any community.</li> </ul>				
<b>Socio-Culture and Cultural Heritage</b>				
<ul style="list-style-type: none"> <li>Contractor will not cause any damage or harm to cultural heritage around the project area. In case of any finding Chance find Procedure will be followed (refer to <b>Annex I</b>)</li> <li>Pollution such as noise and dust generation will be avoided while working in close to religious and ancient site. Contractors would be trained to address privacy issues behave ethically. The contractors staff must be trained enough to respect local norms.</li> </ul>	E&S Team of Contractor / Sub-contractor /	Site Visit Public Consultation	During execution of sub-project	Focal Person of LC, SSS and Supervision Consultant
<b>Site Restoration</b>				
<ul style="list-style-type: none"> <li>Contractor should obtain approval for excavation and submit the plan of rehabilitating the site after excavation.</li> <li>Site restoration must be completed immediately after completion of the sub-project.</li> </ul>	E&S Team of Contractor / Sub-contractor /	Visual inspection  Contractor's Site Restoration Plan	During and Post execution of sub-project	Focal Person of LC, ESS, SSS and Supervision Consultant

**Recommendation for operation/maintenance:** CLICK does not support operation/maintenance of street lights. However, the following measures are requested to be flowwed to mitigate the impacts during operational phase.

<ul style="list-style-type: none"> <li><b>Maintenance Illumination of Street Lights</b> The staff will ensure daily on the lights at 07:00 p.m. and off the lights at 07:00 a.m. It could be varying as per the weather condition.</li> </ul>	Dedicated staff member of KMC Engineering Department	Visual inspection	Daily	Focal Person of LC and Mechanical Engineering Department (M&E Department)
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<ul style="list-style-type: none"> <li>This will be ensured that Lights will not be lit in the day time.</li> </ul>				
<b>Maintenance</b>				
<ul style="list-style-type: none"> <li>Check the condition of Lights, wires and poles regularly</li> <li>Repairing of the damaged street lights, wires and poles will be done immediately.</li> </ul>	KMC Engineering Department	Visual inspection  Maintenance Record	Weekly	Focal Person of LC and Mechanical Engineering Department (M&E Department)



### 5.6. ESMP/ESR Budget

- The cost for the implementation of construction stage activities given in this EMP will be included within the civil works contract for this sub-project with total cost of **Rs. 225,905 PKR.**

**Table 5.2: ESMP/ESR Implementation Cost**

Name of item	Quantity	Unit Rate	Total Amount (PKR)
Masks Box	5	375	1,875
Safety Shoes	20	1875	37,500
Safety Gloves	10	125	1,250
First Aid Box	5	750	3,750
Ear Plugs	20	88	1,760
Safety Helmets	20	563	11,260
Safety Jackets with reflectors	20	375	7,500
Sanitizer	10	313	3,125
Thermo-gun	2	3750	7,500
Provision of Dust Bins	5	1250	6,250
Reflective Tape	10	250	2,500
Safety cones	10	938	9,385
Safety boards	5	1250	6,250
<b>SUB TOTAL (1)</b>			<b>99,905</b>
<b>OTHERS</b>			
Water sprinkling	02	7000	14000
Internal Training for sub-project construction staff comprises: <ul style="list-style-type: none"> <li>- Project overview</li> <li>- ESMP/ESR implementation, communication, documentation and monitoring, and reporting requirement</li> <li>- GBV/SH</li> <li>- Code of Conduct</li> <li>- Grievances Redress Mechanism</li> </ul>	1	100,000	100,000
Project dissemination materials such as banners, flayers,	-	12,000	12,000
<b>SUB TOTAL (2)</b>			<b>126,000</b>
<b>GRAND TOTAL (1+2)</b>			<b>225,905</b>

Note:

Supervision of the implementation of ESMP is included in the Consultant's scope of work.

## Chapter 6: Recommendations

Overall, the sub-project will have positive impacts. The proposed sub-project will achieve its objective of providing a healthier and livable, secure and safe residential environment to the local residents in an urban settlement. The proposed sub-project will also enhance the safe lifestyle of the area and it will also comply with all legislative requirements and standards listed under the ESMF, Contractual Documents and in this ESR report.

Recommendations made for the sub-project development on the basis of ESR are given below:

- The selected Contractor must implement the proposed mitigation measures mentioned in this ESR and Environmental and Social Management Framework (ESMF) and Social Management Framework (SMF) of CLICK.
- The selected Contractor must also ensure that all the safety and security (HSE) procedures are in place and implemented in true spirit which includes but is not limited to the use of safety nets/sheets, erection of safety warning signs, provision of the necessary PPE's for the workers and warning signs for the road users and passersby.
- The selected Contractor must ensure that the building materials are sourced from genuine and certified suppliers.
- Ensure that codes of conduct are understood by employees and signed. It should be posted on sites visible to employees.
- The selected Contractor should also take due care of the local community, construction activity related issues regarding women, (e.g., sexual harassment, gender based-violence), and its sensitivity towards local customs and traditions of local culture.
- While it is confirmed by the PIU that mercury containing light bulbs are not currently used in the existing street lights under the proposed sub-project, in case such light bulbs are identified during rehabilitation works, KMC will ensure that the contractor will hire will hire Sindh Environmental Protection Agency (SEPA) approved hazardous waste contractor, who will be responsible to properly handle, segregate, treat and dispose-off the old lights according to the Sindh hazardous waste management rules, 2014. This should be bound through contract agreement with the contractor.

## Annex A: Photographs of the Surrounding of Proposed Sub-Project



**Missing Pole of Existing street Light**



**Rusted pole of existing Street Lights**



**Missing lights from pole and also little tilted**



**Damaged foundation of pole**

## Annex B: List of Participants



### Consultation Workshop Meeting at Boat Basin Karachi Metropolitan Corporation, K.M.C

S#	Name	Designation	Department	Contact No.	Email	Signature
1.	Anshad Hussain	Driver	Private Job	0301240960		الشرحیت
2.	Rais Mukhtar	Store Incharge	Bank Sindh	03009200364		میر
3.	Bahadur Ali	Driver	Private Job	0313-6620709		Bahadur
4.	Naeem Khanja	Key Punch	Any Card	0331244022		Naeem
5.	Zagham Hussain	Cashier	HBL	03129252044		Zagham
6.	Mohd Ashraf	Machine Man	Hina Bank	03143027555		اشرف
7.	Agha Hussain	Key Punch	Hina Bank	03302199777		Agha
8.	Moshin Sarwar	Cashier HBL	HBL	03002148118		Moshin
9.	Ibrahim	KPO	KPT	03120299290		Ibrahim
10.	Hanief	Driver	Any Card	03002252042		Hanief
11.	Shahid Hassan	Machine Man	KPT under	0333-5006485		Shahid

## Annex C: Stakeholders' Consultation

	
<p>Public consultation</p>	<p>Information banner with mobile number was displayed in local language</p>

#### Annex D: Environmental and Social Screening Checklist

- <b>Country</b>	PAKISTAN
- <b>Project Title</b>	Competitive and Livable City of Karachi (CLICK), LGD, Sindh
- <b>Sub-project Title</b>	<b>Rehabilitation of Street Lights at Mai Kolachi Road</b>

SCREENING QUESTIONS	Yes	No	Impact Severity Ranking				Remarks/Mitigation Measures
			NR	1	2	3	
<b>Project Siting</b>							
Is the project area							
<b>1.</b> Densely populated?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	The Project lies in an area where many important offices including warehouses are located and the route is also in the use of heavy traffic coming from Kemari to National Highway via Boat Basin, therefore, the impact of this project will be of a high-value event though the area is not densely populated.
<b>2</b> Heavy with development activities?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No development activity is going on in the surrounding area.
<b>3</b> Adjacent to or within any environmentally sensitive areas?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No sensitive area is around
<b>4</b> Cultural heritage site	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No cultural or heritage site is in the vicinity of this project
<b>5</b> Protected area	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	The area is well in the use of the residents as well as motorists and heavy traffic and is not protected.
<b>6</b> Wetlands	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No wetland or damage to flora and fauna
<b>7</b> Mangrove	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Mangroves are present in the vicinity of the proposed sub-project area ~ 500-1000 m distance. The mangroves cluster is



SCREENING QUESTIONS	Yes	No	Impact Severity Ranking				Remarks/Mitigation Measures
			NR	1	2	3	
							present at the safe distance. Moreover, the proposed small scale localized activities on the road are not likely to cause any disruption to the mangroves or ecosystem of the project area.
<b>8</b> Estuarine	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No estuarine area is present around the project area.
<b>9</b> Buffer zone of protected area	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No buffer zone viz. a river lake, open space, trees, shrubs in its immediate surroundings. However, mangroves are present at safe distance.
<b>10</b> Special area for protecting biodiversity	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	The area is in use of regular inhabitants and no special area for the protection of biodiversity exists.
<b>11</b> Forest	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No forested area or a forestation is around
<b>12</b> Bay	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No bay is around this project
<b>Potential Environmental Impacts Construction Phase)</b>							
<b>1</b> Will construction camp site cause land clearing and tree cutting?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	The project is designed for the rehabilitation of street lights into LED lights, therefore no tree cutting is involved.
<b>2</b> Will construction camp site interfere with the community?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No interference to the community as for the given activity no establishment of construction camp is required.
<b>3</b> Will construction camp site cause soil pollution?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	There will be no construction camp, therefore, no soil pollution will be created.
<b>4</b> Will construction camp generate domestic solid waste?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	There will be no construction camp, therefore, no domestic waste will be created.
<b>5</b> Will construction camp generate hazardous solid waste?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	There will be no construction camp, therefore, no hazardous will be created.

SCREENING QUESTIONS	Yes	No	Impact Severity Ranking				Remarks/Mitigation Measures
			NR	1	2	3	
<b>6</b> Will construction camp generate sanitary wastewater?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	There will be no construction camp, therefore, no sanitary wastewater will be generated.
<b>7</b> Will fire be a potential safety hazard at construction camp?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No construction camp will be established, therefore, no fire risk is anticipated.
<b>8</b> Will construction camp activities cause air pollution?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No air pollution will be created during construction all means of action will be taken for this protection.
<b>9</b> Will construction camp activities cause noise?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No construction camp will be established; therefore, no noise pollution will be caused.
<b>10</b> Will construction activities require tree cutting?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	This is only rehabilitation of the street lights project, so there will be no requirement for tree cutting.
<b>11</b> Will construction activities resulting damaging existing local roads, bridges or other infrastructure?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No construction activities except minor repairs to the existing pole foundations are required; therefore no damage will be done to the existing local roads, bridges or other infrastructure.
<b>12</b> Will construction activities involve use of explosives and chemicals?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No explosives will be used during the rehabilitation activities.
<b>13</b> Will construction activities disturb natural habitats?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No natural habitats will be disturbed as the project is for the rehabilitation of street lights only.
<b>14</b> Will construction activities resulting impairment of historical/cultural monuments/areas and loss/damage to these sites?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	The project is only for the rehabilitation of street lights, wherein, historical or cultural monument is not present in the immediate vicinity. Therefore, no historical/cultural monuments/areas will be lost or damaged.
<b>15</b> Will construction activities generate noise?	Yes	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<p>The project is for the rehabilitation of streetlights therefore, little noise will be generated.</p> <p><b>Mitigations</b> The contractors would ensure keeping noise levels from</p>



SCREENING QUESTIONS	Yes	No	Impact Severity Ranking				Remarks/Mitigation Measures
			NR	1	2	3	
							<p>construction vehicles and machinery to be within safe limits. Vehicular and machinery will not be allowed to operate at night time.</p> <p>Noisy machines and vehicles will not be allowed to be used at the sub-project site (noise level will not be more than 85 dBA at 7.5 m distance), properly tuned machines and vehicles will be allowed only.</p> <p>Workers will use noise protection equipment including ear plugs and/or ear muffs</p> <p>Pressure horns will not be allowed to be used by the for the construction vehicles.</p> <p>The contractor will adhere to the requirements of the EMP mitigation plan contained in the contract documents with true spirit.</p>
16 Will construction activities generate dust?	✓	□	□	□	□	✓	<p>The project is for the rehabilitation of street lights therefore little dust will be generated.</p> <p><b>Mitigations</b></p> <p>Regular water sprinkling will be the responsibility of the contractor at the dust generation points, during construction activities. Water will be also sprinkled at vehicular and machinery movement routes to avoid dust spreading to the nearby community as required. In addition, the provision of dust masks and ensuring their use by the workers will also be the responsibility of the contractor.</p> <p>All vehicles, machinery, equipment and generators used during construction activities should be kept in good working condition and be properly tuned and maintained to minimize exhaust emissions.</p> <p>Stockpiled materials will be covered to avoid dust/particulate emission. Air quality analysis will be carried out before and during construction through engaging SEPA, that will be shared</p>

SCREENING QUESTIONS	Yes	No	Impact Severity Ranking				Remarks/Mitigation Measures
			NR	1	2	3	
							with PIU Team.
<b>17</b> Will construction activities cause air pollution due to stack emissions from generators, construction machines and vehicles?	Yes	<input type="checkbox"/>	<input type="checkbox"/>	✓	<input type="checkbox"/>	<input type="checkbox"/>	<p>The project may cause a little air pollution due to some vehicular/ machinery movement during installation of street lights.</p> <p><b>Mitigations</b></p> <p>The stack emissions from generators, (if used), minor excavations and vehicular/machinery movement at the site can affect the ambient air quality at sub-project site. It will be the responsibility of the contractor to use well-maintained generators and vehicles/machines to keep ambient air quality within the desired level. The contractor will be obliged to provide fitness certificate/maintenance records of the generators, vehicles and machines before deploying them at the construction sites.</p>
<b>18</b> Will construction activities generate asphalt emissions?	<input type="checkbox"/>	✓	✓	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No asphalt activity is involved in this project, therefore, no asphalt emission will be generated.
<b>19</b> Will construction activities cause soil pollution?	<input type="checkbox"/>	No	NR	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No, the project construction/rehabilitation will not cause any soil pollution.
<b>20</b> Will construction activities generate construction debris?	Yes	<input type="checkbox"/>		✓	<input type="checkbox"/>	<input type="checkbox"/>	<p>Yes, as the sub-project will involve very little civil works for repair of damaged pole foundation, which may generate a very small quantity of construction debris.</p> <p><b>Mitigation</b></p> <p>The debris (rejected material) produced during construction would be disposed-off in government approved/allocated disposal sites. Leftover material would not be dumped into storm water drains or watercourses, because such practices can clog these man-made and natural drainage systems and cause many other problems for the residents/Local Commuters.</p>

SCREENING QUESTIONS	Yes	No	Impact Severity Ranking				Remarks/Mitigation Measures
			NR	1	2	3	
<b>21</b> Will construction activities generate hazardous solid waste?	Yes	<input type="checkbox"/>	<input type="checkbox"/>	✓	<input type="checkbox"/>	<input type="checkbox"/>	<p>Yes, during the construction activities different types of hazardous solid waste including empty containers of paint, lubricants, grease, fuel, etc. oil filters, and construction waste will be generated, though in very small quantity. Currently, 25 existing street lights to be replaced are sodium lights and mercury containing light bulbs are not used in the existing street lights.</p> <p><b>Mitigation</b></p> <p>The hazardous waste will be properly collected and temporarily stored at the impervious surface under shade. This waste will be handed over to the authorized waste collectors (SEPA Approved) so that it could be disposed of properly. The construction contractor will implement the mitigation measures provided in this screening report and elucidated in Table 5-1 above. In addition, following mitigations will be implemented in true spirit:</p> <p>Non-toxic and biodegradable products will be used whenever possible.</p> <p>Hazardous materials will be transported and stored in appropriate containers with clearly visible labels. Hazardous materials will be stored at least 100 feet from any down gradient drainage or within secondary containment capable of containing its entire volume.</p> <p>Equipment and work areas will be regularly inspected for signs of leaks and spills. Spill containment and cleanup kits will be available wherever hazardous materials are being used or stored. Any incidental spills or leaks will be contained and cleaned up as soon as it is safe to do so. Any contaminated soil will be collected and disposed of in an appropriate landfill.</p> <p>Equipment refueling and maintenance will be limited to designated areas at least 30 meters (100 feet) from any down</p>

SCREENING QUESTIONS	Yes	No	Impact Severity Ranking				Remarks/Mitigation Measures
			NR	1	2	3	
							<p>gradient drainage.</p> <p>While it is confirmed by the PIU that mercury containing light bulbs are not currently installed in the existing street lights, in case such light bulbs are identified during rehabilitation works, the contractor ensures that those will be segregated, properly handled and stored and treated by the special vendor that can treat and dispose safely.</p>
<b>22</b> Will construction take place near to water bodies?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No, as the project is only rehabilitation of street lights so installation activities will be carried out on the mid of the road surface.
<b>23</b> Will construction activities cause contamination of the surface water resources?	<input type="checkbox"/>	No	NR	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	It will not cause contamination of the surface water resources as it is the rehabilitation of street lights.
<b>24</b> Will construction activities take place near wastewater/storm water drains?	Yes	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<p>Yes, wastewater/drain is present in the surroundings of the site.</p> <p>Mitigations Avoid siting of facilities near rivers, streams and nullahs (if exists) Proper disposal of solid waste in designated site to sustain the water and land quality for domestic requirements. Solid waste will not be thrown in Nullah or any water body present in the area.</p>
<b>25</b> Will construction activities result in damaging the utilities at site?	<input type="checkbox"/>	No	NR	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	The sub-project development will not cause any damage to the utilities of the site or utilities of the area.
<b>26</b> Will construction activities require utilities relocation?	<input type="checkbox"/>	No	NR	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No utilities relocation is required.
<b>27</b> Will construction activities involve excavation?	Yes	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<p>Very minimal about 0.5 m of manual excavation will be carried out for the foundation works for the Street light pole wherever it is required. The excavation will be done carefully to avoid damages.</p> <p>Appropriate availability and use of Personal Protective</p>

SCREENING QUESTIONS	Yes	No	Impact Severity Ranking				Remarks/Mitigation Measures
			NR	1	2	3	
							equipment (PPEs) by the workers will be ensured
<b>28</b> Will construction involve heavy machinery?	<input type="checkbox"/>	No	NR	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	The construction doesn't involve heavy machinery.
<b>29</b> Will construction activities increase road traffic at site?	<input type="checkbox"/>	No	NR	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	A small number of vehicles ~3-4 are required for construction activities which includes a truck for material supply, a bucket truck and a wagon for labor are anticipated, which may cause minimal traffic congestion. Mitigation measures to avoid any traffic disruption are as follows: 1. Only drivers with a valid license and car registration documents will be allowed to drive the vehicles. 2. The drivers will be trained to strictly adhere to local traffic laws.
<b>30</b> Will construction activities cause traffic congestion/diversion?	Yes	<input type="checkbox"/>	<input type="checkbox"/>	✓	<input type="checkbox"/>	<input type="checkbox"/>	<p>The work will be carried out during low pressure of traffic / off-peak hours, therefore negligible traffic congestion/jam will occur along at the Mai Kolachi Road. Moreover, the road is enough widen, and the rehabilitation activities will be carried out in the day time while and heavy traffic is not allowed on the road in day time. Therefore, it will not cause any traffic congestion.</p> <p><b>Mitigations</b></p> <ul style="list-style-type: none"> <li>At all times, the contractor will provide safe and convenient passage for vehicles, pedestrians and livestock, and will not cause any hurdle on the road for commuters</li> <li>. Appropriate safety precautions will be taken when transporting large equipment on public roadways.</li> <li>- Signs/visual warning devices should be used to alert workers and pedestrians to potential hazards.</li> <li>- create a buffer area to separate workers and equipment from oncoming traffic</li> <li>- clearly mark the work zone so that drivers can know where they need to pay an extra attention</li> </ul>

SCREENING QUESTIONS	Yes	No	Impact Severity Ranking				Remarks/Mitigation Measures
			NR	1	2	3	
							- prepare traffic control plan to define all the mitigation measures for traffic safety to be implemented.
<b>31</b> Will construction activities cause mobility and accessibility issue for the residents?	<input type="checkbox"/>	No	NR	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No such issue of mobility/accessibility for the residents will be caused during the sub-project execution as it will be carried out during off peak hours. The residents will be informed about the work time.
<b>32</b> Will construction activities/machines be the safety hazards for the workers?	<input type="checkbox"/>	No	NR	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	The development of the proposed subproject doesn't involve any heavy machine and activities which can pose safety risks for workers. However, required safety gears will be used during the project activity and safety standards will be followed.
<b>33</b> Will construction activities be the safety hazards for the occupational?	Yes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<p>Yes, occupational health and safety issues are anticipated from the proposed activities. Mitigations</p> <p><b>The labor with any transmittable disease will not be allowed on the Construction site;</b> Ensure and strictly implement the SOPs regarding COVID- 19, including daily body temperature check, daily disinfection, quarantine management, area access management, PPEs, emergency response, and drills; Workers should be provided with good hygienic food for free; Only skilled workers will be allowed to work at the construction site; Assess the hazards associated with the required works and prepare and follow the safety procedures required for the specific works such as electrical works and works at height.</p> <p>Provision of first aid facilities for workers at site for meeting the emergency needs of workers, and providing basic medical training to specified work staff and basic medical service and supplies to workers;</p>

SCREENING QUESTIONS	Yes	No	Impact Severity Ranking				Remarks/Mitigation Measures
			NR	1	2	3	
							<p>Observe and maintain standards of Health and Safety towards all employees in line with WB EHS Guidelines along with Sindh Occupational Health and Safety Law</p> <p>Ensure that hazards associated with manual lifting are controlled by proper lifting techniques, work rotation system will reduce the chances of being exposed to work- related stress associated with construction activities.</p> <p>Unauthorized personnel will not be allowed to access the proposed project site without permission and safety permits.</p> <p>Workers should be facilitated by providing appropriate work specific PPE's;</p> <p>Training and use of personal fall arrest systems, such as full-body harnesses and energy-absorbing lanyards as well as fall rescue procedures to deal with workers whose fall has been successfully arrested;</p>
<b>34</b> Will construction activities will cause any damage to flora and Fauna of the area?	<input type="checkbox"/>	No	NR	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<p>No, the proposed activities will not cause any harm to biodiversity of the area, but still strict mitigation measures are proposed to follow:</p> <p>Avoid unnecessary cutting of plant species during site clearance if needed;</p> <p>Limiting vehicular transport to defined roads as to prevent unnecessary injury and habitat destruction;</p> <p>Hunting and trading of any wildlife species will be strictly prohibited;</p>
<b>C. Potential Social Impacts</b>							
<b>1</b> will the construction cause any labor issues such as labor living and working conditions?	Yes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	✓	<input type="checkbox"/>	<p>Labor condition or rights related issues are anticipated at minor scale such as working hours, leaves, benefits, wages, and other related facilities like provision of foods, clean water, transportation etc. However, No labor living conditions issues are anticipated as it involves small scale activities which doesn't involve any living condition.</p> <p>Mitigations</p>

SCREENING QUESTIONS	Yes	No	Impact Severity Ranking				Remarks/Mitigation Measures
			NR	1	2	3	
							The worker's Grievance redresal mechanism must be developed communicated among workers to lodge complains; Workers should be provided with clean drinking water for free;
<b>2</b> Will construction activities will cause community Health and Safety issues? Or any other	<input type="checkbox"/>	No	NR	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No such impacts are anticipated, though following will be applicable to the project activities.  Mitigations GRM Mechanism must be communicated to the internal staff and the public Close consultation with local communities to identify optimal solutions where needed Contractor shall give preference to local community members in the Project Area of Influence, to the extent feasible, with respect to the employment of unskilled labor Community grievances will be recorded and responded to on an urgent basis No Hazardous and non-hazardous waste will be dumped outside any community
<b>3</b> Will the construction activities cause the socio-cultural issues and damage to any cultural heritage?	<input type="checkbox"/>	No	NR	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No, the construction activities will not cause such impacts.  Mitigations:  Contractor will not cause any damage or harm to cultural heritage around the project area. Pollution such as noise and dust generation will be avoided while working in close to religious and ancient site. Contractors would be trained to address privacy issues behave ethically. The contractors staff must be trained enough to respect local norms.
<b>C. Potential Environmental Impacts (Operational Phase)</b>							



SCREENING QUESTIONS	Yes	No	Impact Severity Ranking				Remarks/Mitigation Measures
			NR	1	2	3	
<b>1</b> Leakages in the drains	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	The project is for the rehabilitation of street lights therefore no leakage of the drain (s) will be there.
<b>2</b> Damaging of drains	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	The project is for the rehabilitation of street lights therefore, no damage to the drains is involved in the project.
<b>3</b> Clogging and overflowing of wastewater from the drains	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	The project is for the rehabilitation of street lights therefore, no overflowing of any gutter will be involved.
<b>4</b> Chances of contamination water supply	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	The project is for the rehabilitation of street lights therefore, no contamination of water supply coming in the area of project.
<b>5</b> Flooding at roads	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	The project is for the rehabilitation of street lights therefore, no flooding will be caused on the roads
<b>6</b> Type of lightings in the infrastructure	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	During the project, existing street lights will be replaced with advanced LED lights for proper illumination.
<b>7</b> Inadequate protection of intake works or wells, leading to pollution of water supply?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Not applicable as the project is for the rehabilitation of street lights only.
NR Not Relevant No or Minor Impact Moderate, Short Term, Reversible Impact Severe, Long Term, Irreversible Impact							
<b>Category</b>				A	B	C	
<b>Environmental Management Required</b>				NO	N/A	✓	
<b>Type of Environmental Management Tool to be Used</b>				Social + Environmental Monitoring checklist			

SCREENING QUESTIONS	Yes	No	Impact Severity Ranking				Remarks/Mitigation Measures
			NR	1	2	3	
Prior review and “no-objection” of World Bank required.							YES

### Annex E: Screening Questions for Involuntary Resettlement/Indigenous People

#### Involuntary Resettlement Impact screening questionnaire.

Probable IR Impacts	Yes	No	Not Known	Remarks
<b>Involuntary Acquisition of Land and Resettlement Impacts</b>				
1. Will there be land acquisition?		✓		No. The land is owned by the municipality.
2. Is the site for land acquisition and ownership status and current usage of land to be acquired known?	✓			The KMC is the sole owner of the land.
3. Will easement be utilized within an existing Right of Way (ROW)?		✓		There is no right of way of any agency surrounding the project site.
4. Will there be loss of shelter and residential land due to land acquisition or due to clearance of existing right of way?		✓		Since there is no land acquisition therefore no shelter or residential land is lost.
5. Will there be loss of agricultural and other productive assets due to land acquisition or due to clearance of existing right of way?		✓		No agriculture or other productive assets exist there as the road is owned by the KMC.
6. Will there be losses of crops, trees, and fixed assets due to land acquisition or due to clearance of existing right of way?		✓		No loss of trees, crops and fixed assets on site as no land acquisition is involved.
7. Will there be loss of businesses or enterprises due to land acquisition or due to clearance of existing right of way?		✓		No land acquisition is involved; therefore, question of loss of business or enterprise does not arise.
8. Will there be loss of income sources and means of livelihoods due to land acquisition or due to clearance of existing right of way?		✓		No land acquisition or clearance of the existing ROW will be required
9. Will people lose access to natural resources, communal facilities and services due to involuntary restriction of land use or on access to legally designate parks/protected areas?		✓		The rehabilitation or replacement of exiting street lights will be undertaken along the road median. Therefore, no access to any land resources own by the community or by the Govt will be restricted during the work

Probable IR Impacts	Yes	No	Not Known	Remarks
Will access to land and resources owned by the communally or by the state be restricted?		✓		This road is owned by the KMC and the access will not be restricted.
<b>Information on PAPs:</b>				
Any estimate of the likely number of persons that will be affected by the Project? [ NO ] If yes, approximately how many? <u>Not applicable</u>				
Are any of them poor, female-heads of households, or vulnerable to poverty risks? [ NO ]				

**Note:** The project team may attach additional information on the project, as necessary.

### Annex F: Environmental and Social Monitoring Checklist

Sr.#	Environmental Aspect	Mitigation Measures Implemented			Reason for non-compliance (If status is “ No” )	Corrective Measures
		Details	Status (Yes/No)	Means of Monitoring (Documents/Pictorial Proof)		
1.	Site Selection	- Selection of site that will not result in loss of trees and soil erosion will be considered for siting and construction activities.				
2.	<u>Noise</u>	<ul style="list-style-type: none"> <li>- The contractors would ensure keeping noise levels from construction vehicles and machinery is within safe limits.</li> <li>- Vehicular and machinery will not be allowed to operate at night time.</li> <li>- Noisy machines and vehicles will not be allowed to be used at the sub-project site (noise level will not be more than 85 dB(A) at 7.5 m distance), properly tuned machines and vehicles will be allowed only.</li> <li>- Workers will use noise protection equipment including ear plugs and/or ear muffs</li> <li>- Pressure horns will not be allowed to be used by the for the construction vehicles.</li> <li>- The contractor will adhere to the requirements of the EMF, SMF, and mitigation plan contained in the</li> </ul>				

		<p>contract documents with true spirit.</p> <ul style="list-style-type: none"> <li>- Confining excessively noisy work to normal working hours (8am-5pm) in the day. Maintain all vehicles in order to keep it in good working order in accordance with manufactures maintenance procedures - Make sure all drivers will comply with the traffic codes concerning maximum speed limit and driving hours. Providing construction workers with suitable hearing protection such as earmuffs and training them in their use. Heavy machinery like percussion hammers and pneumatic drills should be used at a minimum level and should not be used at all during the night.</li> </ul>				
3.	Air Emissions	<ul style="list-style-type: none"> <li>- Regular water sprinkling will be the responsibility of the contractor at the dust generation points, during construction activities. The water will be also sprinkled at vehicular and machinery movement routes to avoid dust spreading to the nearby community as required. In addition, the provision of dust masks and ensuring their use by the workers will also be the responsibility of the contractor.</li> <li>- All vehicles, machinery, equipment and generators used during construction activities should be kept in good working condition and be properly tuned and maintained to minimize exhaust emissions.</li> </ul>	-	-	-	-

		<p>Stockpiled materials will be covered to avoid dust/particulate emission. Air quality analysis will be carried out before and during construction by the contractor through engaging SEPA certified contractor, that will be shared with PIU Team. The stack emissions from generators, (if used), minor excavations and vehicular/machinery movement at the site can affect the ambient air quality at sub-project site. It will be the responsibility of the contractor to use well-maintained generators and vehicles/machines to keep ambient air quality within the desired level. The contractor will be obliged to provide fitness certificate/maintenance records of the generators, vehicles and machines before deploying them at the construction sites.</p>				
4.	Solid Waste	<p>- The debris (rejected material) produced during construction would be disposed-off in government approved/allocated disposal sites. Leftover material would not be dumped into stormwater drains or watercourses, because such practices can clog these man-made and natural drainage systems and cause many other problems for the residents/Local Commuters.</p> <p>While it is confirmed by the PIU that mercury containing light bulbs are not currently installed in the existing street lights, in case such light bulbs are</p>	-	-	-	-

		<p>identified during rehabilitation works, the contractor ensures that those will be segregated, properly handled and stored and treated by the special vendor that can treat and dispose safely.</p> <ul style="list-style-type: none"> <li>- Non-toxic and biodegradable produced will be used whenever possible.</li> <li>- Hazardous materials will be transported and stored in appropriate containers with clearly visible labels. Hazardous materials will be stored at least 100 feet from any down gradient drainage or within secondary containment capable of containing its entire volume (if generate any such as electric batteries).</li> <li>- Equipment and work areas will be regularly inspected for signs of leaks and spills. Spill containment and cleanup kits will be available wherever hazardous materials are being used or stored. Any incidental spills or leaks will be contained and cleaned up as soon as it is safe to do so. Any contaminated soil will be collected and disposed of in an appropriate landfill.</li> <li>- Equipment refueling and maintenance will be limited to designated areas at least 30 meters (100 feet) from any down gradient drainage.</li> <li>- Solid Waste will be safely disposed in</li> </ul>				
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		<p>demarcated waste disposal sites or dedicated garbage transfer stations (GTS); A contract with SEPA Approved waste contractor should be made in case hazardous waste generates from the site, defining the schedule for hazardous waste management and its disposal.</p> <ul style="list-style-type: none"> <li>- Burning of waste oil should be strictly prohibited.</li> </ul>				
5.	Water Pollution	<ul style="list-style-type: none"> <li>- Avoid siting of facilities near rivers, streams and <i>nullahs</i> (if exists)</li> <li>- Proper disposal of solid waste in designated site to sustain the water and land quality for domestic requirements. Solid waste will not be thrown in <i>Nullah</i> or any water body present in the area.</li> </ul>	-	-	-	-
6.	Vehicular Traffic	<ul style="list-style-type: none"> <li>- Only drivers with a valid license and car registration documents will be allowed to drive the vehicles.</li> <li>- The drivers will be trained to strictly adhere to local traffic laws.</li> <li>- At all times, the contractor will provide safe and convenient passage for vehicles, pedestrians and livestock, and will not cause any hurdle on the road for commuters.</li> <li>- Appropriate safety precautions will be taken when transporting large equipment on public roadways.</li> <li>- proper road signage during construction period, followed by provision of adequate and safe pedestrian crossings and walkways</li> <li>- create a buffer area to separate</li> </ul>	-	-	-	-

		<p>workers and equipment from oncoming traffic</p> <ul style="list-style-type: none"> <li>- clearly mark the work zone so that drivers can know where they need to pay an extra attention</li> <li>- prepare traffic control plan to define all the mitigation measures for traffic safety to be implemented.</li> <li>-</li> </ul>				
7.	Flora and Fauna	<ul style="list-style-type: none"> <li>- Avoid unnecessary cutting of plant species during site clearance if needed;</li> <li>- Limiting vehicular transport to defined roads as to prevent unnecessary injury and habitat destruction;</li> <li>- Hunting and trading of any wildlife species will be strictly prohibited;</li> </ul>	-	-	-	-
8.	Occupational Health and Safety	<ul style="list-style-type: none"> <li>- <b>The labor with any transmittable disease will not be allowed on the Construction site;</b></li> <li>- Ensure and strictly implement the SOPs regarding COVID- 19, including daily body temperature check, daily disinfection, quarantine management, area access management, PPEs, emergency response, and drills;</li> <li>- Work related hazards should be assessed.</li> <li>- the safety procedures to address the identified hazards associated with the specific works such as electrical works and works at height should be prepared and followed.</li> <li>-</li> </ul>	-	-	-	-

		<ul style="list-style-type: none"> <li>- Workers should be provided with good hygienic food for free;</li> <li>- Workers should be provided with good toilets</li> <li>- Only skilled workers will be allowed to work at the construction site;</li> <li>- Provision of first aid facilities for workers at site for meeting the emergency needs of workers, and providing basic medical training to specified work staff and basic medical service and supplies to workers;</li> <li>- Observe and maintain standards of Health and Safety towards all employees in line with WB EHS Guidelines along with Sindh Occupational Health and Safety Law</li> <li>- Ensure that hazards associated with manual lifting are controlled by proper lifting techniques, work rotation system will reduce the chances of being exposed to work-related stress associated with construction activities.</li> <li>- Unauthorized personnel will not be allowed to access the proposed project site without permission and safety permits.</li> <li>- Workers should be facilitated by providing appropriate work specific PPE's;</li> <li>- Training and use of personal fall arrest systems, such as full-body harnesses and energy-absorbing lanyards as well as fall rescue procedures to deal</li> </ul>				
--	--	---	--	--	--	--

		with workers whose fall has been successfully arrested;				
<b>9.</b>	Labor Living and Working Conditions	<ul style="list-style-type: none"> <li>- The worker's Grievance redressal mechanism must be developed and communicated among workers to lodge complains;</li> <li>- Workers should be provided with clean drinking water for free;</li> <li>- Avoiding Gender Based Violence. Contractor will prepare and implement robust measures to address the risk of gender-based violence that include (i) mandatory and repeated training and awareness raising for the workforce about refraining from unacceptable conduct toward local community members, specifically women; (ii) informing workers about national laws that make sexual harassment and gender-based violence a punishable offence which is prosecuted; (iii) Introducing a Worker Code of Conduct as part of the employment contract, and including sanctions for noncompliance (e.g., termination), and (iv) contractors adopting a policy to cooperate with law enforcement agencies in investigating complaints about gender based violence.</li> <li>- Use of child and forced labor will be strictly prohibited.</li> </ul>	-	-	-	-
<b>10.</b>	Community Health and Safety	<ul style="list-style-type: none"> <li>- Maintain a complaint register on site and it must be communicated to the internal staff and the public</li> </ul>	-	-	-	-

		<ul style="list-style-type: none"> <li>- Close consultation with local communities to identify optimal solutions where needed</li> <li>- Contractor shall give preference to local community members in the Project Area of Influence, to the extent feasible, with respect to the employment of unskilled labor</li> <li>- Community grievances will be recorded and responded to on an urgent</li> <li>- No Hazardous and non-hazardous waste will be dumped outside any community.</li> </ul>				
11.	Socio-Culture and Cultural Heritage	<ul style="list-style-type: none"> <li>- Contractor will not cause any damage or harm to cultural heritage around the project area.</li> <li>- Pollution such as noise and dust generation will be avoided while working in close to religious and ancient site. Contractors would be trained to address privacy issues behave ethically. The contractors staff must be trained enough to – respect local norms.</li> </ul>	-	-	-	-
12.	Site Restoration	<ul style="list-style-type: none"> <li>- Contractor should obtain approval for excavation and submit the plan of rehabilitating the site after excavation.</li> <li>- Site restoration must be completed immediately after completion the sub-project.</li> </ul>	-	-	-	-
<b>Operational and Maintenance Phase</b>						
13.	Illumination of Street Lights	<ul style="list-style-type: none"> <li>- The staff will ensure daily on the lights at 07:00 p.m. and off the lights at 07:00 a.m. It could be varying as per</li> </ul>	-	-	-	-

		<p>the weather condition.</p> <ul style="list-style-type: none"> <li>- This will be ensured that Lights will not be lit in the day time.</li> </ul>				
<b>14.</b>	Maintenance	<ul style="list-style-type: none"> <li>- Check the condition of Lights, wires and poles regularly</li> <li>- Repairing of the damaged street lights, wires and poles will be done immediately.</li> </ul>	-	-	-	-

<b>Contractor Details</b>	<b>LC Focal Person Details</b>
Name: -----	Name: -----
Designation: -----	Designation: -----
Signature:	Signature:
Date:	Date:
<b>Checklist filled by:</b>	<b>Checklist reviewed by:</b>
Name: -----	Name: -----
Designation: -----	Designation: -----
Signature:	Signature:
Date:	Date:

#### **Annex G: Screening Team Details**

<b>Focal Person of LC</b>	<b>Mr. Masood Alam</b> 0333-3421371
<b>Environmental Focal Person</b>	<b>Mr. Mohammad Tariq</b> 0322-2349036
<b>Social Focal Person of LC</b>	<b>Mr. Syed Kazim</b> 0333-3123078



## Annex H: COVID-19 SOPs for Construction

### COVID-19 STANDARDS OPERATING PROCEDURES (SOPs) FOR CONSTRUCTION

Given the unprecedented nature of the COVID-19 pandemic, contractors are bound to take all necessary precautions to maintain the health and safety related measures at site and to ensure suitable arrangements regarding hygiene requirements for the prevention of COVID-19 pandemic.

#### Scope:

These SOPs are intended to provide consistent measures on construction activities of all types and sizes in line with the ESMP/ESR recommendations on social distancing and to ensure contractors, sub-contractors, and other individuals associated with the CLICK Project make every effort to comply.

#### Objectives:

Prioritize the health and safety of workers and of their surrounding individuals and communities;

- Apply recommendations and best practices from health authorities to construction site procedures;
- Implement COVID-19 Standard operating procedures in in true spirit across the construction activities or sites; and
- Foster open communication amongst stakeholders and ensure a respectful work environment.

Following are the measures that should be implemented at the construction site to avoid the spread of Covid-19:

Activities	Adaptive Measures
<b>Pre- Execution Phase</b>	
<b>A. Profile preparation</b>	<ul style="list-style-type: none"><li>• Detail profile of the workforce will be developed</li><li>• Enlist the names, addresses and contact number</li><li>• Breakdown of the workforce (workers from local community and those who will do house renting).</li><li>• Workers will be instructed to minimize contact with people near the site, and in certain cases be prohibited from leaving the site for the duration of their contract.</li></ul>
<b>B. Initial Screening</b>	<ul style="list-style-type: none"><li>• All enlisted workforce should go through initial screening (checking temperature using thermo gun) to confirm their fitness.</li><li>• Ensuring the availability of Thermogun/s at site.</li><li>• Checking temperature of all workers and maintaining record.</li><li>• If a worker shows symptoms of COVID-19 (e.g. fever, dry cough, fatigue), it is Site Supervisor's responsibility to immediately remove worker from the site and refer him to the nearest health facility. It's also his responsibility to prevent a worker who has been in contact with infected coworker from returning to the site for 14 days.</li></ul>

During Execution Phase	
<b>A. Restricted Movement/ Demobilization of staff</b>	<ul style="list-style-type: none"> <li>• Entry/exit to the work site should be controlled and documented for workers and other people. Possible measures should include:</li> <li>• Ensure that the social distancing is observed on site</li> <li>• All workers who reside in site labor camps (if any) should be provided separate accommodation keeping in view social distancing protocol.</li> <li>• Implementation of emergency preparedness and response plan covering the detail of a treatment facilities, procedure to inform health authorities, how to sanitize site, how to screen remaining workers, etc.</li> </ul>
<b>B. Special Arrangements regarding PPEs</b>	<ul style="list-style-type: none"> <li>• Ensure availability of PPEs at site including disposable masks, gloves etc.</li> <li>• Record keeping of PPE stock availability. If PPE items are unavailable due to world-wide shortages, alternatives such as dust masks, construction gloves and eye goggles should be arranged. While these items are not recommended, they should be used as a last resort if no medical PPE is available.</li> </ul>
<b>C. General Hygiene</b>	<ul style="list-style-type: none"> <li>• Encourage employees to wash their hands at least for 20 seconds with soap provided at key places throughout site. Where hand washing facilities do not exist or are not adequate, hand sanitizers should be placed.</li> <li>• Maintain a distance of at least one meter.</li> </ul>
<b>D. Training sessions</b>	<ul style="list-style-type: none"> <li>• Contractors E&amp;S Team will arrange awareness sessions for Contractors and their labor force.</li> <li>• Sessions related to safety procedures, use of construction PPEs, occupational health and safety issues, and code of conduct specially privacy issues including social distancing</li> <li>• Post appropriate signage and pictorial displays at site about COVID-19 Health &amp; Safety measures.</li> <li>• Site supervisor will arrange briefings from time to time with workforce, and encourage them to report to their supervisor or the COVID-19 focal person if they have symptoms. (TORs are given at the end).</li> <li>• Training staff who will be monitoring entry to the site, providing them with the resources they need to document entry of workers, conducting temperature checks and recording details of any worker that is denied entry.</li> </ul>
<b>E. Operationalization of Grievance Redress Mechanism</b>	<ul style="list-style-type: none"> <li>• Contractor should ensure implementation of GRM developed by PIU for addressing specific COVID related grievances, which would allow community &amp; workers to quickly report issues, such as a lack of PPE, lack of proper procedures, and allow the project to respond and take necessary action.</li> </ul>
<b>F. Role of PIU</b>	<ul style="list-style-type: none"> <li>• PIU is responsible for sharing the COVID-19 checklist with the contractors in the subproject procurement documents.</li> <li>• Arrange meetings with contractors for support and guidance where needed.</li> </ul>

<b>G. Role of supervision consultant</b>	<p>The consultant must ensure the implementation of Environmental and Social Management Plans as per the ESRs and ESMPs along with afore mentioned COVID related activities / protocols.</p> <ul style="list-style-type: none"> <li>• Ensure that the necessary PPEs (as per contract) have been issued to the staff by the respective contractor.</li> </ul>
<b>Post Execution Phase</b>	
<b>A. Post Screening</b>	<p>If a worker shows any symptoms of COVID-19, he should be immediately reported to the concerned health department.</p>
<b>B. Cleaning and waste disposal</b>	<ul style="list-style-type: none"> <li>• All waste (PPEs and sanitation related) shall be disposed off properly following Sindh Hospital Waste Management Rules, 2014.</li> <li>• Providing cleaning staff with adequate protective gear, cleaning equipment, and disinfectants.</li> <li>• Where it is anticipated that cleaners will be required to clean areas that have been or are suspected to have been contaminated with COVID-19, providing them with appropriate PPEs. If appropriate PPE is not available, cleaners should be provided with best available alternatives.</li> </ul>

#### **TORS for COVID-19 Focal Person from LCs**

Responsibilities to include:

- Monitoring, supervising, and reporting on COVID-19 related issues
- Coordination and reporting arrangements with the contractors
- Raising awareness and training of workers in mitigating the spread of COVID-19
- Prepare a plan to handle COVID-19 cases in the light of WHO guidelines
- Implementing a communication strategy with the community, community leaders and local government.

## **Annex I: Chance Find Procedure**

### **Purpose of the chance finds procedure**

The chance find procedure is a project-specific procedure that outlines actions required if previously unknown heritage resources, particularly archaeological resources, are encountered during project construction or operation. A Chance Find Procedure, as described in Guidance Note of World Bank and law on Cultural Antiquities of Sindh, is a process that prevents chance finds from being disturbed until an assessment by a competent specialist is made and actions consistent with the requirements are implemented.

### **Scope of the chance find procedure**

This procedure is applicable to all activities conducted by the personnel, including contractors that have the potential to uncover a heritage item/site. The procedure details the actions to be taken when a previously unidentified and potential heritage item/site is found during construction activities. Procedure outlines the roles and responsibilities and the response times required from both project staff, and any relevant heritage authority.

### **Induction/Training**

All personnel, especially those working on earth movements and excavations, are to be inducted on the identification of potential heritage items/sites and the relevant actions for them with regards to this procedure during the Project induction and regular toolbox talks.

### **Chance find procedure**

If any person discovers a physical cultural resource, such as (but not limited to) archaeological sites, historical sites, remains and objects, or a cemetery and/or individual graves during excavation or construction, the following steps shall be taken:

1. Stop all works in the vicinity of the find, until a solution is found for the preservation of these artefacts, or advice from the relevant authorities is obtained;
2. Immediately notify a construction site in-charge. The in-charge will then notify the PIU-CLICK and the Supervision Consultant;
3. Record details in Incident Report and take photos of the find;
4. Delineate the discovered site or area; secure the site to prevent any damage or loss of removable objects. In cases of removable antiquities or sensitive remains, a night guard shall be arranged until the responsible local authorities take over;
5. Preliminary evaluation of the findings by archaeologists. The archaeologist must make a rapid assessment of the site or find to determine its importance. Based on this assessment the appropriate strategy can be implemented. The significance and importance of the findings should be assessed according to the various criteria relevant to cultural heritage such as aesthetic, historic, scientific or research, social and economic values of the find;
6. Sites of minor significance (such as isolated or unclear features, and isolated finds) should be recorded immediately by the archaeologist, thus causing a minimum disruption to the work schedule of the Contractor. The results of all archaeological work must be reported to the Ministry/Agency, once completed.
7. In case of significant find the Agency/Ministry (Sindh Archaeology Department, hereinafter referred to as Heritage team) should be informed immediately and in writing within 7 days from the find).
8. The onsite archaeologist provides the Heritage team with photos, other information as relevant for identification and assessment of the significance of heritage items.
9. The Ministry must investigate the fact within 2 weeks from the date of notification and provide response in writing.
10. Decisions on how to handle the finding shall be taken by the responsible authorities. This could include changes in the layout (such as when finding an irremovable remain of cultural or archaeological importance) conservation, preservation, restoration and salvage;
11. Construction works could resume only after permission is granted from the responsible authorities.
12. In case no response received within the 2 weeks period mentioned above, this is considered as authorization to proceed with suspended construction works.

One of the main requirements of the procedure is record keeping. All finds must be registered. Photolog, copies of communication with decision making authorities, conclusions and recommendations/guidance, implementation reports kept.

#### **Additional information**

##### **Management options for archaeological site**

- **Site avoidance.** If the boundaries of the site have been delineated attempt must be made to redesign the proposed development to avoid the site. (The fastest and most cost-effective management option)
- **Mitigation.** If it is not feasible to avoid the site through redesign, it will be necessary to sample it using data collection program prior to its loss. This could include surface collection and/or excavation. (The most expensive and time-consuming management option.)
- **Site Protection.** It may be possible to protect the site through the installation of barriers during the time of the development and/or possibly for a longer term. This could include the erection of high visibility fencing around the site or covering the site area with a geotextile and then capping it with fill. The exact prescription would be site-specific.

##### **Management of replicable and non-replicable heritage**

Different approaches for the finds apply to replicable and non-replicable heritage.

##### **Replicable heritage**

Where tangible cultural heritage that is replicable and not critical is encountered, mitigation measures will be applied. The mitigation hierarchy is as follows:

- Avoidance;
- Minimization of adverse impacts and implementation of restoration measures, in situ;
- Restoration of the functionality of the cultural heritage, in a different location;
- Permanent removal of historical and archaeological artefacts and structures ;
- Compensation of loss - where minimization of adverse impacts and restoration not feasible.

##### **Non-replicable heritage**

Most cultural heritage is best protected by in situ preservation, since removal is likely to result in irreparable damage or even destruction of the cultural heritage.

Nonreplicable cultural heritage must not be removed unless all of the following conditions are met:

- There are no technically or financially feasible alternatives to removal;
- The overall benefits of the project conclusively outweigh the anticipated cultural heritage loss from removal; and
- Any removal of cultural heritage must be conducted using the best available technique advised by relevant authority and supervised by archaeologist.

##### **Human Remains Management Options**

The handling of human remains believed to be archaeological in nature requires communication according to the same procedure described above. There are two possible courses of action:

- **Avoid.** The development project is redesigned to completely avoid the found remains. An assessment should be made as to whether the remains may be affected by residual or accumulative impacts associated with the development, and properly addressed by a comprehensive management plan.
- **Exhume.** Exhumation of the remains in a manner considered appropriate by decision makers. This will involve the predetermination of a site suitable for the reburial of the remains. Certain ceremonies or procedures may need to be followed before development activities can recommence in the area of the discovery.

**EMERGENCY CONTACTS****CLICK, Local Government Department, GoS**

Address: 1st Floor, DMC South Office,  
KRC Captain Road, Haqqani Chowk, Aaram Bagh  
Karachi,  
Landline : +92- 21- 99218874

**Sindh Environmental Protection Agency**

Address: Head Office, Plot No. ST-2/1, Sector-23,  
Korangi Industrial Area, Karachi  
Tel : 021-35065950 Fax : 021-35065940

**Directorate General Antiquities & Archaeology**

Address: C-82, Block 2 Clifton, Karachi  
Tel: Phone: [021-99212126](tel:021-99212126)

**Annex J: Anti-Encroachment Drive (AEC) Certificate**



Ph. #00202822  
Email: ade1.south@gmail.com

**OFFICE OF THE  
DEPUTY COMMISSIONER  
(SOUTH) KARACHI**

No.South/PA.Br/28/2021  
Dated: 21<sup>st</sup> April, 2021

To,

The Assistant Commissioner (General),  
For Commissioner Karachi Division.

**SUBJECT: ANTI-ENCROACHMENT VERIFICATION CERTIFICATE OF  
IDENTIFIED SCHEMES OF KARACHI METROPOLITAN  
CORPORATION.**

**Reference:** Your office Letter No.CK/PIU/2021-21, dated: 12-04-2021

With reference to subject, it is submitted that reports regarding the subject matter were called from all Assistant Commissioners of District South Karachi and they submitted NIL reports. The details of Anti-Encroachment operations carried out after 27<sup>th</sup> October-2018 are as under:

S.N	DESCRIPTION	ANTI-ENCROACHMENT OPERATION
1	Development of Badminton Court at Agha Khan Park	NIL
2	Rehabilitation of street lighting at Mai kolachi Road	NIL
3	Rehabilitation of Fish Aquarium at Clifton	NIL
4	Replacement of Expansion joints at various flyover/ bridges / under passes and gratings at drains	NIL

The same is sent herewith for further necessary action as desired.

**DEPUTY COMMISSIONER  
SOUTH KARACHI**

**Copy to:**

PS to Deputy Commissioner, District South Karachi.

**ADDITIONAL DEPUTY COMMISSIONER-I  
SOUTH KARACHI**



Tel: 99204734  
4th Club Road,  
Opposite Karachi  
Gymkhana, Karachi-75530.

No. CK/PIU/2021-21  
**OFFICE OF THE  
COMMISSIONER KARACHI  
DIVISION, KARACHI**

Dated: 12 - 04 -2021.

To,

The Deputy Commissioner,  
District South, East, West, Central,  
Malir, Korangi & Keamari, Karachi.

**Subject: Anti-Encroachment Verification Certificate of Identified Schemes of Karachi Metropolitan Corporation.**

I am directed to enclose herewith a copy of letter No. PS/MC/KMC/2021/73, dated 19-03-2021, alongwith its enclosure, received from Metropolitan Commissioner, Karachi Metropolitan Corporation (KMC), on the subject noted above for furnishing a comprehensive report and a verification certificate to this office after thoroughly verifying the record.

  
**Assistant Commissioner (General)**  
for Commissioner Karachi Division

Copy to:-

1. The Metropolitan Commissioner, KMC, Karachi.
2. PS to Commissioner Karachi Division.
3. Incharge R&I branch of this office for delivery.





**KARACHI METROPOLITAN CORPORATION**  
**METROPOLITAN COMMISSIONER SECRETARIAT**  
1<sup>st</sup> Floor K.M.C. Building M.A Jinnah Road Karachi,  
Telephone No 021-99216095, 99216038 Fax No: 021-99216011

No. PS/MC/KMC/2021/ 73

Dated: 17/03/2021

To,  
The Commissioner Karachi,  
Karachi Division.

**Subject:- Anti Encroachment Verification Certificate of Identified Schemes of Karachi Metropolitan Corporation**

Reference subject cited above:

- 2) As per the requirement of the world Bank that each shortlisted scheme under the project COMPETITIVE & LIVABLE CITY OF KARACHI (CLICK) LOCAL GOVERNMENT DEPARTMENT, GOVERNMENT OF SINDH are required to be verified by Commissioner office Karachi through verification certificate that there had been no encroachment drive on the proposed sites after 27<sup>th</sup> October 2018.
- 3) Therefore, a Certificate is requested for each attached scheme of KMC for CLICK Project

(S. M. AFZAL ZAIDI, PAS)  
Metropolitan Commissioner,  
K.M.C.

Copy for information to the:-

1. P.S to Secretary Local Government, GoS, Karachi.
2. P.S to Administrator KMC.
3. P.S to Metropolitan Commissioner K.M.C.
4. Focal Person KMC, CLICK.
5. Office Copy