

# **PUNJAB LAND DEVELOPMENT COMPANY**

**ASHIANA HOUSING SCHEMES, SAHIWAL AND FAISALABAD**

## **SEALED QUOTATIONS FOR ENVIRONMENTAL CONSULTANCY SERVICES FOR INITIAL ENVIRONMENT EXAMINATION (IEE)**

PLDC intends to invite quotations for the Environmental Consultancy Services for IEE of Ashiana housing projects situated at sahiwal and faisalabad as per scope of the work identified in the attached TOR. Companies / Firms meeting criteria as mentioned in TOR's may submit sealed quotations in the office of the Punjab Land Development Company, 1-A, off club road, GOR 1, Lahore latest by 01-11-2012 upto 11:30 hrs positively.

# **TERMS OF REFERENCE**

For hiring Services of

**Environmental Consultancy Firm**

Regarding

**IEE of Ashiana Housing Scheme at  
Sahiwal and Faisalabad**

**Punjab Land Development Company (PLDC)  
1-A, Off Club Road, GOR-1, Lahore**

**Tel: 042 9920 5551~4**

(October 2012)

# 1. Project Information

## (1) Background

This document containing brief description of the project and the Terms of Reference (ToR) has been developed specifically for hiring services of an independent and professionally competent environmental consultancy firm for carrying out Initial Environmental Examination (IEE) of the development and construction of the projects named “Ashiana Housing Schemes” at Sahiwal and Faisalabad.

Housing is an important and productive sector of the economy and a fundamental human need. Tens of millions in the country are struggling to have a roof over their heads. There is a shortage of housing units in the country, which according to an estimate, goes beyond 7.0 million.

Besides the public sector, role of the private sector has also remained unsatisfactory in catering to the growing housing needs in the province of Punjab. As a result of interest of the private sector, the majority of housing developments (more than 90%) have been by the private sector. Whereas, role of the Government has been to act as a facilitator and promoter of housing with major focus on providing housing for the low-income groups, needy and the poor.

According to the statistics published by the Ministry of Housing & Works, Government of Pakistan, annual requirement of housing in the country is around 800,000 units, whereas annual production is around 400,000 units leaving a recurring backlog of about 400,000 units annually. If the average household size is taken as 6.6 persons and the occupancy as 3.0 persons per room, then about 800,000 new units are required annually to makeup the backlog and to cater for shortfall in the coming years. Of the current housing stock of 22.25 million units, about 68% pertain to rural areas and 32% to urban areas. Another dimension of housing is that as a sector of economy, housing can provide an opportunity for local as well as foreign investment of around Rs 2.5 trillion thereby generating tremendous economic activities in the country besides reducing current pressure of financial crises. It is for these reasons that Government of the Punjab under the able leadership of Muhammad Shahbaz Sharif, Chief Minister Punjab, intends to invest in this important sector of the economy and to provide shelter to the poor, needy, destitute, widows and other deprived sections of the society.

Sahiwal and Faisalabad cities are facing acute shortage of housing due to large-scale influx of population from all over towns and villages of the country. Despite development of large sized housing projects (both in the public and the private sector), the void between demand and availability of housing, particularly for the poor and the low paid, has increased manifold during the recent decades. In order to provide housing to the poor and marginalized sections of the society, Government of the Punjab, under the directions of the Chief Minister, has constituted the Punjab Land Development Company (PLDC) for providing housing to the poor on long-term sustainable basis.

Due to rapid increase in the population of the provincial metropolis and other cities and towns, particularly during the recent years, void between availability of housing units and their actual demand has widened to an alarming extent. Consequently, large sections of population, particularly those belonging to the non-affording strata, are deprived even of the basic facilities of shelter, privacy and respectable living. Another dimension has been sharp rise in the price of land. Due to soaring land prices, there has been unplanned growth of slums in the city, particularly on the vacant state land, with its attending social consequences. The situation has been helped, to a marginal extent, by the private sector, which has developed some housing schemes in the district to cater for growing need of housing. However, there is still great shortage of housing units, which needs to be addressed through establishment of new housing schemes.

In order to provide housing for the non-affording sections of the society (low paid employees, widows, destitute and the marginalized persons), GoPb, in furtherance to Vision of the Chief Minister, Government of the Punjab has launched the mega project for providing shelter to the poor under the name “Ashiana Housing Schemes”. Under these schemes, thousands of low-cost houses will be constructed all over the province and will be provided to the eligible persons on tailored and easy to pay mode.

## **(2) Project Description and Information on the Project Area**

The scope of the Ashiana Housing Scheme, inter alia, covers but not limited to the following:

- Identification of suitable land developing and establishing “Ashiana Housing Schemes”
- Acquisition of privately owned land for the scheme (if and where necessary)
- Planning and designing the scheme in accordance with the applicable rules, regulations and bylaws
- Obtaining NOCs/approvals from the concerned regulatory agencies for constructing the scheme
- Provision and construction of all necessary infrastructure and support facilities
- Provision of amenities and facilities complimentary to needs and requirement of the scheme
- Construction of low cost houses and handing them over to successful applicants through balloting on easy to pay instalment plan and other approved modes
- Provision of any other services commensurate to the projects

## **(3) Organizations to Implement the Project**

The Executing Agency of the scheme is the “Punjab Land Development Company”, an un-listed public limited company of the GoPb, established under the Companies Ordinance, 1984.

## **2. Related Information**

### **(1) Related Laws and Regulations**

Construction of housing schemes/projects being a sizeable developmental activity requires prior assessment of the environmental impacts as envisaged under Section 12 of the Pakistan Environmental Protection Act. According to the provisions of the said Act, the proponent is duty bound and under legal obligation to construct the project in an environmental friendly and socially, and economically sustainable manner to avoid environmental and social impacts of the project.

The project proponent, Punjab Land Development Company (hereinafter referred as “proponent”), in compliance with the mandatory provisions of the Pakistan Environmental Protection Act (PEPA), 1997 and the IEE/EIA Regulations, 2000 therefore intends to carry out IEE/EIA of the project before taking up its construction and hence these ToRs for hiring an independent environmental consultant firm. The applicant must be a professionally competent and financially sound environmental consulting firm capable of conducting IEE of the project in accordance with the governing provisions of the laws and regulations on the subject. The underlying objective of hiring the consultant is to ensure environment friendly construction of the project in compliance to the PEPA.

### **(2) Government’s Guidelines for Environmental and Social Considerations**

As per law, IEE should be conducted in accordance with the Guidelines for Environmental and Social Considerations as are notified from time to time by both the federal as well as the provincial government.

## **3. Terms of Reference (ToRs)**

### **(1) General Information**

<b>Project:</b>	Ashiana Housing Schemes, Sahiwal and Faisalabad
<b>Scope of Work</b>	
<b>Sahiwal</b>	Infrastructure Development of Area of approximately 105 Kanals Construction of (100 Nos), 03 Marla Housing Units Development of (90 Nos.), 05 Marla Residential Plots Community Centre, Mosque, Commercial Area and allied facilities
<b>Faisalabad</b>	Infrastructure Development of Area of approximately 82 Kanals Construction of (100 Nos), 03 Marla Housing Units Development of (115 Nos.), 05 Marla Residential Plots Community Centre, Mosque, Commercial Area and allied facilities

**Job:** Conducting Initial Environmental Examination (IEE) of the project schemes  
**Location:** Chak 83/84/6 for Sahiwal and Chak No 229/RB Mauza Makuana for Faisalabad  
**City/District:** Sahiwal and Faisalabad  
**Province:** Punjab  
**Sponsor:** Government of the Punjab  
**Proponent:** Punjab Land Development Company, 1-A Off Club Road, GOR-1, Lahore  
**Consultant:** Environmental Management Firm  
**Study duration:** 28 Calendar Days from the Date of Award  
**Monitoring duration:** 12 months (will be awarded separately, if required).

## **(2) Consultancy's Objectives**

The main objectives of the present consultancy are:

- To conduct prior IEE studies of the scheme to assess and evaluate environmental and social impacts and to identify the beneficial and the adverse environmental and social impacts of the scheme
- To outline the suitable mitigation measures for addressing the adverse environmental and social impacts (including land acquisition and resettlement issues, if applicable)
- To identify and describe the residual adverse impacts which cannot be mitigated and to find the best available options for dealing with them
- To identify appropriate monitoring strategies to track the identified impacts and provide an early warning system through the Environmental Management Plan (EMP)
- To prepare a comprehensive Environmental Management and Monitoring Plan for ensuring lifelong environmental and social sustainability of the project
- To monitor and report environmental impacts throughout the construction period, if required through award of separate contract
- To assess the needs for training and capacity building of the relevant functionaries of the proponent for implementing the EMP
- To incorporate environmental information into the decision-making process relating to various aspects of the scheme, and
- To suggest occupational health and safety measures both for construction and usage stages of the scheme

## **(3) General Description of Work**

Preparation of the Initial Environmental Examination (IEE) Report of the scheme and to meet all other requirements of the Environmental Protection Agency, Punjab (EPA-Pb), excepting payment of applicable fees, for obtaining Environmental Approval from EPA-Punjab and subsequent monitoring with respect to environmental management and monitoring plan (EMMP), if so required by the EPA-Pb and awarded by the proponent as a separate job.

## **(4) Scope of Work**

Consultancy's work scope will include but will not be limited to the following:

- To prepare IEE reports as per requirements of PEPA, 1997, IEE/EIA Regulations, 2000 and allied requirements of the EPA-Pb, and in accordance with GoPk/GoPb Guidelines
- To prepare the report in requisite number of hard and soft copies (10+1) for submission to the EPA-Pb and the proponent
- To assist the Proponent in preparing the submittal documents for presenting IEE Report to the EPA-Pb
- To assist the Proponent in drafting any affidavits or undertakings that may have to be submitted to the EPA-Pb in connection with the assignment
- To assist the Proponent in responding to questions, observations, comments, remarks, and queries of the EPA-Pb during the course of review of the environmental report of the scheme and grant of environmental approval
- To conduct environmental monitoring of the scheme and to report on monthly-basis to the proponent and the EPA-Pb throughout the construction period

- To provide advice, free of cost, on any environmental issue that may arise during implementation stage of the scheme
- To meet any other requirements of the EPA-Pb commensurate to scope of the job, if, as and when required

## **(5) Consultant's Attributes & Qualifications**

The consulting firm:

- Should be a professionally qualified Environmental Management Firm, having professionals of all the relevant fields for carrying out the assignment
- Should have demonstrable experience (five years or more) of conducting IEEs/EIAs of developmental projects including construction of housing projects
- Should have conducted at least ten (10) IEE/EIA studies of housing project at least five (05) of which must be in the province of Punjab
- Must have obtained at least ten (10) Environmental Approvals for the clients/proponents from the Environmental Protection Agency, Punjab
- Should have backup laboratory support or arrangements in this behalf with a Government lab or an accredited private environmental laboratory
- Must have the desired professionals at its strength
- Preference will be given to environmental consultancy firms having registration with the Pakistan Engineering Council or an international environmental impact assessment body like IAIA in the relevant discipline

## **(6) Duties & Responsibilities of the Consultancy Firm**

The duties and responsibilities of the consultancy will include but not necessarily limited to the following:

- Carrying out comprehensive Initial Environmental Examination (IEE) of the project and preparing the Initial Environmental Examination Report (IEER) for and on behalf of the proponent
- Formal presentation of the report to the Proponent for onward submission to the EPA-Pb for its review in compliance with the mandatory provisions of the law on the subject
- Reviewing the project activities in context to all pertinent environmental perspectives and suggesting appropriate measures wherever required for making the scheme as environment friendly as possible
- Suggesting mitigation measures in case an activity or part of an activity of the scheme or its components is apprehended to have any negative impacts at any time before the project implementation, during its implementation, and even thereafter
- Preparing the IEE Report in the light of the Guiding Principles, International Practices, and the Rules set forth in the Pakistan Environmental Protection Agency's Regulations on the subject of IEE/EIA, and the GoPk/GoPb Guidelines on Environmental Assessment
- Preparing the balance sheet of the sum total of all the possible or the likely environmental impacts of the scheme
- Using the best-suited environmental examination and impact assessment methodologies, i.e., the ones that are the most appropriate for identification and assessment of the possible negative or positive environmental impacts in line with special nature of the scheme
- Identifying, investigating, examining, and preparing a comprehensive profile of the likely impacts of the project activities on the physical, biological, hydrological, economical, and socio-cultural environments
- Suggesting and preparing the Environmental Management and Monitoring Plan (EMMP), if so warranted from outcome of the environmental assessment examination and investigations
- Conducting environmental monitoring of the scheme and reporting on a monthly basis to the proponent and the EPA-Pb throughout the construction period, if so desired by the proponent through award of a separate and independent job
- Preparation of environmental budgeting and auditing of the scheme and its ancillary/allied activities for a better management of the environmental issues
- Provision of any other advice and or technical expertise before, during, or after completion of the study and even thereafter, if so required by the Proponent and covered by the scope of contract

- To assist the proponent during 'Public Hearing', if it becomes applicable at any stage during the IEE review process

### **(7) Changes to Work**

- The consultant shall make such changes and revisions in the completed work as necessary to correct errors appearing therein, when required to do so by the proponent, without additional compensation thereof. Should the proponent find it desirable for its own purposes to have previously satisfactorily completed work or parts thereof changed or revised, the consultant shall make such revisions as directed by the proponent. This work shall be considered as extra work and consultant shall be entitled for an equitable adjustment in the (1) maximum amount payable; (2) delivery or completion schedule, or both; and (3) or any other, if required.
- The proponent shall have the sole power to decide the case of equitable adjustment and the determination of proponent in respect of equitable adjustment shall be binding on the consultant and shall not be challenged by the latter.

### **(8) Consultant's Core Team of Professionals**

The core team of the consultant to comprise the following professionals, officers and staff:

Sr.	Description	Qualification/Experience
1.	Team Leader	M.Sc. Environmental Science with 6-8years of conducting IEE/EIA; Environmental Audit & Compliance Monitoring; preparation of EMMP; and environmental risk & hazard management planning
2.	Ecologist	M.Sc Environmental Science with Bachelor Degree in Forestry or Ecology
3.	Analytical Chemist	M.Sc. Chemistry. Preference for environmental science degree as additional qualification
4.	Resettlement Expert/Junior Environmentalist	Bachelor Degree with 4-6 years' experience of revenue administration Preference for environmental science degree as additional qualification
5.	Senior Engineer	B.Sc. Civil Engineering with 6-8 years' experience in road construction engineering. Preference for environmental science degree as additional qualification
6.	Junior Engineers	B.Sc. Civil Engineering with 3-5 years' experience in road construction engineering
7.	Electrical/Mechanical Engineer	B.Sc. Electrical/Mechanical Engineering with 5-7 years' experience
8.	Supervisors/Inspector	Diploma in Environmental Science/Civil/Electrical/Mechanical engineering with 3-5 years' experience in the field
9.	Support staff	Computer Operators, Field Assistants, Drivers, Helpers

### **(9) Qualification & Experience of the Core Team of the Consultant**

#### **i) Team Leader**

He will be responsible for coordination and supervision of the work of the other team members. He will also coordinate with the Proponent and will seek guidance and advice from the proponent as and when required. He will be responsible for timely completion of the assignment.

#### **ii) Deputy Team Leader**

He will be the focal person for the assignment. He will assume the role of the Team Leader during absence of the former and will be responsible for all the duties of the former then. He will also coordinate and supervise various assignment activities. He will be responsible to devise appropriate questionnaires, checklists, and proformas for ensuring smooth progress of the assignment and for submitting periodic reports to the proponent.

#### **iii) Ecologist**

The responsibility of the Ecologist will be to assess and evaluate interactions of the project activities with the local fauna and flora and to suggest mitigation measure for its protection where the project activities are likely to impinge upon the flora or fauna in any way. He will be responsible for identifying sensitive species of the plants and animals and measures for their protection during both

construction and operation of the project roads. He will also advise on the species of the plants to be planted as a part of greening of the roads.

**iv) Analytical Chemist**

He will be responsible for collection of samples of air, water, soil, solid waste, wastewater, and other environmental parameters and arranging for their laboratory analysis.

**v) Resettlement Expert/Junior Environmentalist**

He will be responsible to look after the resettlement issues and displacement of persons and properties in the wake of implementation of the project roads. He will also suggest the principal and the alternate resettlement plans for the displace persons as well as likely compensations.

**vi) Senior Engineer**

He will be responsible to identify, report, and suggest appropriate mitigation measures of the environmental impacts arising from civil works (design aspects, construction aspects, structure aspects, etc.) of the project roads. He will also report progress of the study on regular basis to the Deputy Team Leader.

**vii) Junior Engineer**

He will be responsible to assist the senior engineer in the identification of environmental impacts relating to design, structure, construction and operation of the project roads. He will submit requisite reports to the senior engineer.

**viii) Electrical / Mechanical Engineer**

He will be responsible to comment upon environmental and social impacts of the project roads relating to implementation of any electrical or mechanical works under the project.

**ix) Inspector**

He will be responsible to carryout inspections of the project roads all during construction phase to assess their environmental impacts in accordance with the guidelines and parameters given by the Deputy Team Leader. He will fill up the prescribed proformas etc.

**x) Support Staff**

The support staff will assist the Consultant's team in accomplishing the assignment in the best professional manner and in accordance with the ToRs.

## **(10) Completion Time for the Assignment**

- The prescribed time for completion of IEE of the scheme shall be 28 calendar days from the date of award of job. The prescribed time for the project's environmental performance and monitoring during construction, if so awarded through a separate contract, will be twelve (12) months
- The IEE Report, complete in all respects, shall have to be submitted to the proponent within one week following the study period. A grace period, not exceeding 10 days, would be admissible on request of the consultant, if the circumstances so warrant.
- No extension in the time of completion or submission of the report shall be given on account of any delays occasioned by an act of the consultant. However, the proponent may extend the time, at its discretion, to compensate for any delays occasioned by any of its actions. The Force Majeure clause shall be applicable.
- The consultant shall begin the work immediately upon issuance of work order or signing of the contract agreement.

## **(11) Nature and Extent of the Consultant's Responsibilities**

- The work output from the Consultant shall be of the highest professional standard and to the satisfaction of the Proponent and the EPA-Pb. Consultant shall exercise all reasonable skill, care and diligence in the discharge of his duties and obligation at all times. Consultant will be responsible for the accuracy and completeness of his work.



- Consultant shall report to the Proponent promptly of the occurrence of any event or condition, which might delay or prevent completion of any significant part of the assignment in accordance with the agreed schedules. He shall also report any happening that might cause serious deviation from relevant laws and regulations of the country and the environmental guidelines and indicate the steps to be taken to meet the situation. Consultant shall, however, not be responsible for any such event or condition beyond its due control and authority including Force Majeure or an Act of Nature, and shall be held harmless against any claim, damage, loss, liability or expense arising out of, relating to or in connection with such event or condition.

## **(12) Deliverables / Reports from the Consultancy Firm**

The consultant shall prepare and submit:

- An inception report within 07 days of issuance of the work order/signing the agreement which shall include the methodology of the consultant, work plan, and time schedule
- First Draft of the IEE Report within 05 days of completion of the study period
- Final IEE Report within 02 days of return approval of the 1<sup>st</sup> draft report by the proponent
- Monthly Environmental Monitoring Report within 07 days of the end of each month from the commencement of civil work to the completion of construction, if awarded, and

## **(13) Schedule of Submission of Reports by the Consultancy Firm**

The following schedule of submission of the reports is expected from the consultant:

Sr	Report	No. of Copies	Time of Submission
1.	Inception Report	02	Within 07 days of work order
2.	Fortnightly IEE/EIA Progress Report, if applicable	02	On 16 <sup>th</sup> of relevant month and final report
3.	First Draft of the IEE Report	02	Within 05 days of cessation of study period
4.	Final IEE Report	05	Within 01 week of cessation of study period
5.	Monthly Environmental Monitoring Report during Construction Span (if the job is awarded)	02	Within 07 days of the end of each month

## **(14) Miscellaneous Requirements**

- The Consultant may be required to make Power-Point presentations to the proponent, as and when required, during the whole period of the assignment at his own cost and arrangement.

## **(15) Documents required from the Consultant**

The Consultant firm should submit the following documents at the time of participation

- Proof of the Firm's registration with the Registrar of Companies
- Proof of registration with the Pakistan Engineering Council in the relevant discipline
- Proof of registration with the FBR (NTN Registration Certificate)
- Proof of successful completion of at least 05 similar assignments (IEE/EIA of Housing Schemes) during the last five years
- Proof of having obtained Environmental Approvals from EPD for 10 different clients/proponents
- Undertaking that the consulting firm is not blacklisted by any public authority and is not in litigation with any public authority
- Registration with the international environmental impact assessment body like IAIA (preferred)
- Undertaking that the Firm shall not apply for engineering consultancy for the project

### **(16) Professional Liability of the Consultancy Firm**

Professional liability as stated in the prevalent code of conduct and practice ethics of the consulting engineers as prescribed by the Pakistan Engineering Council (PEC) shall be applicable to the consultant.

### **(17) Payment**

Following shall govern the payment for the assignment.

- Mobilization advance of 25% of the contract award shall be admissible free of interest upon award of work to the consulting firm
- 25% will be paid on submission of draft IEE report
- 30% will be paid on submission of the final IEE Report
- 20% will be paid on issuance of Environmental Approval/NOC from the EPA-Pb, and
- All payments shall be subject to deduction of applicable taxes, fees, and other Government dues
- Running expenses on (i) scheduled departmental review fee of the EPA-Pb, (ii) newspaper advertisements of public hearing, and (iii) arrangements for public hearing at the project site or any other suitable site as identified by the EPA-Pb, if applicable (iv) and the expenses incidental to the study shall be all borne by the Proponent

### **(18) Services and Facilities to be Provided by the Proponent**

The proponent will be responsible for providing the following services, information and facilitation for accomplishing the assignment in a befitting manner in accordance with the ToRs:

- Timely provision of all essential data and other relevant information necessary for accomplishing the assignment and for preparing the draft and the final IEE document
- Submission of the Final IEE document in requisite number of copies alongwith the prescribed review fee to the Environment Protection Agency Punjab with a covering letter on the company's letterhead
- Nomination of a liaison/focal person for providing the requisite information/documents in time and for assisting in conducting the job
- Arrangements and expenses on public notices, advertisements, refreshments, holding of public hearings/gatherings (if become applicable at any stage), and other incidental expenses not relating to scope of assignment
- Onsite office support facilities on request of the consultant if these are available onsite

### **(19) Resolution of Disputes & Consultant's Performance**

- Any disputes concerning questions of facts in connection with the work not covered by the agreement between the proponent and consultant shall be referred for determination to arbitration. Both the proponent and the consultant shall be entitled to nominate one arbiter each. The decision made by the arbiters in the matter under dispute shall be final and binding on both the proponent and the consultant