TERMS OF REFERENCE

TRANSACTION ADVISORY SERVICES FOR FEASIBILITY STUDIES FOR PUBLIC PRIVATE PARTNERSHIP PROJECT

1. INTRODUCTION

THIS SECTION SHOULD CAPTURE THE BACKGROUND OF THE PROJECT.

Provide a background to the project idea:

- a) Briefly describe the current situation that rationalizes the project;
- b) Briefly describe past and on-going interventions to address the situation. (quote official statistics including past trends to support your narrative, where applicable)

2. OBJECTIVE OF THE ASSIGNMENT

The primary objective of the Transaction Advisory services is to comprehensively assess the feasibility of the proposed project in terms of financial, economic, technical, legal and environmental perspectives and on the basis of the findings recommend the most technically and commercially viable transaction structure for the Project. The Project Feasibility Studies should provide a sound basis for the procurement of a private partner to deliver the project.

3. SCOPE OF THE ASSIGNMENT

In general, the scope of the assignment will include the following steps: (i) Inception Meeting (ii) Pre-feasibility and Detailed Full Feasibility Studies (iii) Market Testing (iv) Development of Project Management and Procurement Plan and (v) Submission of Pre-Feasibility and Full Feasibility Reports, and a Financial Model, reflecting among others, the most technically and commercially viable PPP transaction structure. In addition, the assignment is expected to lead to the development of Public Investment Program for Affordable Housing delivery in Ghana.

The specific activities to be undertaken by the Transaction Advisor's team of specialized technical, financial, legal and environmental/ safeguards experts in respect of the above-mentioned steps include the following:

3.1. STEP ONE: INCEPTION MEETING

Within two weeks of the award of this assignment, the Transaction Advisor will conduct an inception meeting with Ministry of Works and Housing (MWH). The objective of this meeting will be to apprise MWH of the complete and updated plan of activities proposed by the Transaction Advisor. Specifically, this meeting will cover the following:

- a) Review of the concept and requirements for the Project
- b) Overview of key issues

- c) Review of the timetable of activities / milestones / team organization going forward
- d) Development of a communication and coordination protocol with the MWH and the Public Investment and Assets Division of the Ministry of Finance (MoF-PIAD)
- e) Discussion of any specific issues requiring immediate attention of the MWH.

Under no circumstances should the Inception Meeting objective be to re-define the Scope of assignment committed in the Transaction Advisory Services Agreement (ASA).

3.2. STEP TWO: PRE-FEASIBILITY AND DETAILED FULL FEASIBILITY STUDIES

The Transaction Advisor will undertake a Pre-feasibility¹ and detailed Full Feasibility Study that would, at a minimum, cover the following areas: (A) Needs and Options Analysis (B) Project Due Diligence – Technical, Legal and Environmental & Social Safeguards (C) Financial Viability Assessment (D) Economic Assessment (E) Distributional Analysis and (F) Value for Money Assessment, among others. The specific issues to be considered by the Transaction Advisor under each of the aforementioned areas are described as follows:

3.2.1. NEEDS AND OPTIONS ANALYSIS

The Needs and Options analysis will (i) entail an in-depth analysis of a range of technical, financial and legal options available for delivering the Project outputs and outcomes and (ii) explore options for commercialization of opportunities of the facility. The analysis should culminate in the selection of a preferred option from the available options based on possible activities, services, businesses and/or assets. A model outline of the Needs and Options Analysis is provided below:

- 1. Needs Analysis
- a) Clearly identify and prioritise project needs in terms of filling service/quality gaps, time reduction, cost reduction, enhanced efficiency, enhanced effectiveness, safety improvements, health improvements, environmental benefits, etc.
- b) Define the project needs in terms of project outputs, that is, what needs to be achieved, as opposed to how it will be achieved. These outputs, in turn, need to be expressed in terms of minimum standards, services levels and key performance indicators for service volume, availability, timing, quality, safety, security and environmental compliance.
- c) Define the scope of the project taking into account the needs and strategic objectives of the MWH, and the desired project service delivery outputs. Develop a clear and precise definition of the project and its refined scope. The project scope should briefly state the following:
 - Project outputs that address the strategic objectives of the MWH;

¹ Pre-feasibility should make use of secondary data for the analysis. Full-feasibility should be based on primary data.

- Tasks, functions and responsibilities (design, finance, build, operate, maintain, etc.) that should be delegated to the private partners for them to effectively deliver the required project outputs;
- Key project risks (such as demand for accommodation space/revenue /commercial, development, operational, etc.) and their allocation;
- Potential need for Fiscal Commitment and Contingency Liability support by the Government; and
- Type of costs (capital, operational and maintenance) and revenues (userfee and/or service payments) envisaged for the project.

2. Options Analysis

- a) Based on the project scope and definition, explore the full range of all possible technical, financial and legal options for structuring the project in the light of the information obtained from addressing the following:
 - Is the proposed option possible under the current legal and regulatory framework of Ghana?
 - Can the MWH delegate (legally, politically and socially) the envisaged tasks, functions and responsibilities for the proposed option to the private sector?
 - What will be the broad benchmarked estimated costs of the proposed option?
 - What are potential benefits and revenues of the proposed option based on the expected level of demand?
 - What are the socio-economic features of the proposed option and how these could be used to ascertain and justify the level of Government support (fiscal and/ or subsidies), if any?
- b) Each proposed option should be further evaluated on the basis of:
 - Strength and capacity of the market (developers/ investors/ sponsors/ financiers, etc.)
 - Efficiency in operation
 - Possible risk profile of each option
 - Potential viability and bankability of each option (based on high level benchmarked cost and revenue estimates)
 - Potential scale of Fiscal Commitment (annuity payments and/ or subsidies) and Contingent Liability (guarantees) implications of each option on the Government
 - Possible environmental impacts
 - Possible contractual arrangements (such as a Concession under a Build Operate Transfer (BOT) contract and its variants or a Lease contract, etc.)
 - Possible pros/ advantages
 - Possible cons/ disadvantages
 - Pre-requisites

3. Selection of the Preferred Option

The Transaction Advisor is required to:

- Rank all options best to worst, based on Technical, Financial/Commercial, Legal, Environmental, Administrative and Economic/social analysis
- Select the best option per your analysis as the Preferred Option

4. Market Assessment

The Transaction Advisor will undertake a desktop based 'reality check' of the Preferred Option through a 'market test' by calling up/e-mailing key market players (sponsors, investors, financiers, operators, builders, etc.) and obtaining their views.

3.2.2. PROJECT DUE DILIGENCE

The Transaction Advisor will undertake a detailed due diligence in terms of the preferred Project option, in the following areas:

1. Technical Due Diligence and Cost Estimates

Extensive and in-depth technical due diligence in connection with the possible options for design and engineering aspects of the Project. This will inform the preliminary design, including technical specifications, layout plans/alignment, etc. and set out the capacity and performance standards as well as the minimum technical requirements for the Project. The Technical or Engineering Analysis is expected to cover, among others:

- a) Location: provide the geographical coordinates of the location of the project including a graphical illustration (map). Availability of land is a key aspect: evidence should be provided that the land is owned (or can be accessed) by the beneficiary, who has the full title to use it, or has to be purchased (or rented) through an acquisition process. In the latter case, the conditions of acquisition should be described. The administrative process and the availability of the relevant permits to carry out the works should also be explained.
- b) **Technical design:** description of the main works components, technology to be adopted, design standards and specifications. Key output indicators, defined as the main physical quantities produced (example No. of Housing Units with associated infrastructure, number of trees planted, etc.), should be provided.
- c) **Production plan:** description of the infrastructure capacity and the expected utilization rate. These elements describe the service provision from the supply side. Project scope and size should be justified in the context of the forecasted demand.
- d) **Costs estimates:** estimation of the financial needs for project realization and operations. Provide the basis for cost estimates.
- e) **Implementation timing:** a realistic project timetable together with the implementation schedule should be provided including, for example, a Gantt

chart (or equivalent) with the works planned. A reasonable degree of detail is needed in order to enable an assessment of the proposed schedule.

2. Legal Due Diligence

Review issues in the existing legal framework in Ghana, which may have an impact on the development of the Project (preferred option) going forward. The review is expected to address specific issues including:

- Any Constitutional impediments to the Project;
- Any constraints arising under applicable sector law, foreign investment law, land law, environmental law, planning and construction law, etc;
- Any constraints arising under the Public Private Partnership Law, 2020 (Act 1039);
- Requirements for licenses, permits, approvals, consents and other forms of authorizations required to be obtained for the Project;
- The fiscal regime relevant to the project, in particular, taxation, import duties, and exchange control issues;
- Site and related infrastructure enablement, suitability, ownership and availability issues land claims, servitudes, long leases, etc; and
- Key challenges to risk allocation.

Questions to be addressed in the Institutional and Legal Analysis include:

- a) What are the legal or regulatory issues that could be detrimental or assist the project?
- b) Is the entity that is supposed to manage the project properly organized and its management adequately equipped to handle the Project?
- c) Are the capabilities and facilities being properly utilized?
- d) Is there a need for changes in policy and institutional set up?
- e) Outside this entity, what changes may be needed in policies at the National and/or the local Governments?
- f) What are the legal and regulatory requirements expected before the project is implemented?
- g) What are the risks, legal and regulatory obligations that could increase costs or decrease the benefits?
- h) Does the institution have requisite skills and capacity in line with the project requirements?
- i) Are there suitable incentives or penalties in place to ensure project delivery is on time and within the budget?
- j) Are there critical governance issues that may affect implementation?

3. Environmental and Social Due Diligence

Undertake an exhaustive investigation into environmental, climate, social, and heritage issues and develop a strategic Environmental and Social Impact Assessment (as per the Environmental Protection Agency Act 1994, Act 490 and Ghana Environmental Assessment Regulations 1999, LI 1652, etc.) for integrating environmental issues into the formulation of plans to undertake the Project in

compliance with the Regulation enforced by Ghana Environmental Protection Agency (EPA) and in compliance with the requirements of the IFC Performance Standards and the World Bank Group EHS Guidelines (both General and Industry Sector guidelines) as well as the Equator Principles. Initial authorization of Project must be obtained from the environmental authorities. The final approval of the Environmental Management Plan from EPA will be obtained by the private party for the Project based on a comprehensive environmental study of their final design.

Questions and issues to be addressed in the Environmental and Social Analysis include:

- a) What are the likely environmental impacts from undertaking project?
- b) What is the cost of reducing or mitigating the negative impacts?
- c) Evaluation of the environmental impacts and risks with and without the project.
- d) What Technical measures are taken to reduce these impacts?
- e) Are there alternative ways of delivering the required service or the good without incurring these environmental costs?
- f) What are the costs of these alternatives?
- g) What is the cost of an environmental impact assessment?
- h) What are the costs of permits and approvals required from environmental protection agencies?
- i) What contractual provisions are needed to reset the project in cases of environmental effects escalating beyond control?
- j) What financial contingencies are expected?
- k) What is the cost of resettlement?
- I) What are the non-market costs and benefits that need to be taken into account in the viability analysis?
- m) How will the project impact Small and Micro Enterprises, local community income, health, land value and social welfare including job creation prospects?

4. Human Resources and Administrative Support Analysis

Point out the human resource requirements for implementation and operation, in terms of quantities and specialties; identify the sources of the work force. Determine the management capacity and the functional structure of the operating entity. Key issues to be addressed:

- a) What are the managerial and labour needs of the project?
- b) Does organization have the ability to get the managerial skills needed?
- c) What are wage rates for labour skills required?
- d) Are manpower requirements by category reconciled with availabilities and project timing?

3.2.3. FINANCIAL VIABILITY ASSESSMENT

The Transaction Advisor will develop a risk adjusted financial model of the Project. This model will provide analysis of the financial soundness (viability, affordability and bankability) of the proposed Project, including fiscal sustainability of the Project

based on the costs projected for adequate maintenance and operation of the Project. This will also indicate an appropriate length of term for the Project. In developing the financial model, at least the following steps would be required:

1. Identifying costs

The Transaction Advisor will determine the Project's capital, maintenance and operational costs as inputs to the financial model as provided below:

- All Capital costs associated with the development of the Project must be reflected in the year in which they occur, including, but not limited to, the design, land and development costs, construction, and equipment (all preliminary cost of civil works). Capital costs should also account for labor and management related costs of development of the Project, including technical, financial, legal, procurement, and project management services. If needed, costs pertaining to asset replacement as they occur during the Project's life should also be included.
- All Maintenance costs included in the full life-cycle costs of maintaining the assets in terms of the standard specifications of the Project. It may include elements such as materials, tools/equipment costs, and labor costs associated with maintenance. Any costs related to risk mitigation related to Project maintenance need to be accounted for.
- All Operating costs associated with the regular operation of Project must be reflected each year, including, but not limited to, direct management costs, labor costs, insurance, etc. Any costs related to risk mitigation and compliance with environment regulations need to be considered.

2. Identifying Project revenue

In order for the Project to be viable, the total cost of the Project should be offset by the anticipated Project revenues based on user charges. The Transaction Advisor would propose a user fee schedule (including adjustments, indexing, and review) that allows cost recovery, as well as, ensures that the facility remains affordable and competitive.

The Transaction Advisor will also identify and explore additional commercial opportunities for the facility to cross-subsidize project affordability to the MWH and Government, in case viability gap issues exist. In forecasting demand, scenarios should be developed to provide: (i) low; (ii) high; and (iii) most likely/best guess levels of demand.

Demand analysis: Identify the need for the investment project by assessing:

- a) Current demand (based on statistics provided by service suppliers/ regulators/ ministries / national and district statistical offices for the various types of users);
- b) **Future demand** (based on reliable demand forecasting models) in both the scenarios with and without the project; and
- c) The factors that constrain demand including government regulations, technological developments, income levels etc.

3. Model assumptions

The Transaction Advisor will develop Financial Model assumptions regarding inflation rate, discount rate, depreciation, etc.

4. The Base Case model

The Transaction Advisor will develop a discounted Cash Flow Model that takes into account maintenance costs, operating costs, capital costs and revenues anticipated for this Project.

5. The Risk Matrix

The Transaction Advisor will:

- Identify risks associated with the Project
- Assess the impact of these risks
- Assess the likelihood of these risks arising
- Calculate the value of risk (and ranges of possible outcomes)
- Allocate risks to party best able to manage risk
- Identify strategies for mitigating risks

The Transaction Advisor will undertake the calculation of risk as a separate Cash Flow item, and not by adjusting the discount rate as an indication of the level of risk for the Project. An indicative list of risks is given below (by no means an exhaustive list – it will be the responsibility of the Transaction Advisor to develop a complete list of risks):

- i. Planning Consent timely and effective grant of all the necessary consents (including legal, regulatory, land-use, environmental, etc.) necessary to commence the Project
- ii. Sites Risk risks related to the condition and title, preparation of sites for construction, land use, e.g., restrictions on the use of land for environmental or heritage reasons
 - iii. Technical risk e.g., faults in developer's design of the Project that does not meet the requirements of MWH, etc.
- iv. Construction Risk risk of cost overruns on the construction of the Project infrastructure, delay in completion, or failure to meet performance criteria
- v. Operating Risk risk of change in cost for implementing environmental standards, delays or interruption in service, shortfall in service quality, etc.
- vi. Financial Risk fluctuations in interest rates (based on the possible origin of financing) that affect payments to lenders, fluctuations in inflation rates (based on the possible origin of sponsors, etc.) that leads to the value of payments being eroded, and fluctuations in exchange rates, if any; transferability and convertibility of currencies
- vii. Force Majeure Risk e.g., risk of earthquakes, riots, strikes, etc.
- viii. Regulatory/Political Risk changes in the law, changes in the regulatory regime, political interference such as breach of contractual provisions, import restrictions, discriminatory taxes, civil war/social disturbances, acts of terrorism, etc.

6. The Risk Adjusted Financial Model

The Transaction Advisor will be required to revise the base case Financial Model by including Project risks to provide a <u>'true' picture of the Project in terms of cost, viability, bankability and sustainability</u>. The basic idea is that the financial analysis should be able to show:

- If the project is financially viable;
- What would be needed to make the project viable (bankable or acceptable to the private sector) if it turns out to be only marginally viable; and
- The clear identification, approximate costing and timing of any proposed project support measures, and through which financial instruments this support may be provided, minimized, and scheduled.

7. The Need for Viability Gap Funding

Based on the 'Affordability' constraints of MWH, in terms of its budget availability, determine the gap between cost recovery and affordability for the use of the facility. In case a gap exists, suggest the nature and timing (capital subsidy vs. operational subsidy) of Viability Gap Funding and/or any revenue support guarantees to make the project viable and bankable.

8. Creating the model to reflect project finance structure.

The Transaction Advisor will devise a structure of the Project demonstrating the relationship between the Government of Ghana and the Private Party set up specifically for the purpose of undertaking the Project – including its relationship with lenders, shareholders, suppliers, subcontractors, and other stakeholders. This planned project structure must incorporate the funding structure, appropriate equity returns, and the costs and key terms of debt funding. In particular, the following must be developed:

- Ratios, such as Annual Debt Service Cover Ratio and Loan Life Cover Ratio
- Financial Internal Rate of Return, Net Present Value, Discounted Payback period etc.
- Legal / financial structures and identification of various participants

9. Sensitivity Analysis

The Transaction Advisor's Financial Model must be capable of Sensitivity Analysis necessary to determine the resilience of the model to changes in assumptions and risk components over the Project term. Some key variables that the Transaction Advisor may want to apply in sensitivity analysis include, but not limited to:

- Demand
- Length of Project term
- Inflation rate
- Construction Cost
- Operating Cost
- Financing Terms
- Magnitude of fiscal commitments and contingent liabilities (subsidies, grants, guarantees etc.), if any.

10. Full Assessment of Fiscal Commitments from the Project

The Transaction Advisor will undertake a full assessment of the likely fiscal commitments from the proposed project including direct fiscal support, payment guarantees, and cost of related investments and associated works, etc.

3.2.4. ECONOMIC ASSESSMENT

The Transaction Advisor will calculate the incremental benefits and costs of the Project to the whole economy based on "with" and "without" Project scenarios. This will be done by estimating the expected economic benefits to be generated from the Project expressed in terms of the Economic Internal Rate of Return, Benefit Cost ratio etc.

Economic values should be generated from financial data using conversion factors. Costs and benefits are appraised from the point of view of the entire economy. Examine the project using the whole country as the accounting entity. Issues / questions to be addressed include:

- a) What is the expected value of economic net benefits?
- b) What are the primary economic costs and benefits of the project?
- c) Describe the sources of costs and benefits?
- d) What are the macro-economic growth effects, spills-over effects, or distributional impacts of the project?
- e) What is the net present value of economic benefits? (GHS.)
- f) What is the Economic Rate of return?
- g) What is the Economic Internal Rate of return?

3.2.5. DISTRIBUTIONAL ANALYSIS

The project is appraised from the point of view of stakeholders receiving economic benefits or costs. Economic externalities have to be calculated and distributed among different actors (stakeholders)

What is done:

- a) Identification and quantification of extra-economic impacts of project
- b) Distributive Appraisal
- c) Income, Cost, and Fiscal Impacts on various stakeholders
- d) Poverty Alleviation and Political Necessities
- e) Basic Needs: Evaluate the impact of project on achieving basic needs objectives.

Key Questions

- a) In what ways does project generate beneficial and cost impacts on stakeholders?
- b) What stakeholders could the project impact?
- c) Who benefits and who pays the costs?
- d) What are the basic needs of the society that are relevant in the country?
- e) What impact will the project have on basic needs?

- f) What alternative ways are there to generate desirable social impacts?
- g) Is project relatively cost effective in generation of desirable social impacts?

3.2.6. VALUE FOR MONEY ASSESSMENT

The Transaction Advisor will demonstrate if the Project has the ability to provide Value for Money if it is procured and implemented under the PPP methodology relative to traditional public procurement, in the following two manners:

- Quantitative assessment: Net Present Value of the risk that is transferable to the private sector which otherwise would have been kept in the public sector;
- Qualitative assessment: In terms of efficiencies that the private sector can provide; and possibility of risk transfer to the private sector (and that such risk transfer will be achieved within the costs of the Project)

3.2.7. VERIFY INFORMATION AND SIGN-OFF

The Transaction Advisor will provide a statement on the reasonableness of the information collected and the process by which the information was collected; a description of how the assumptions used in constructing the Financial Model are realistic and appropriate; a record of the methodologies used for valuing various costs, including the costs of key risks, and ensuring that all the inputs into the feasibility study are signed off as accurate and verified by each of the Transaction Advisor's consortium member.

3.3. STEP THREE: MARKET TESTING

The Transaction Advisor will undertake a 'reality check' of the Project structure and financing requirements by undertaking a 'market test' (sharing the key features of the Project with potential operators and obtaining their feedback and comments). Prospective Transaction Advisors should, as part of their proposals, show how they would gauge the appetite of the market for private sector participation in the Project.

3.4. STEP FOUR: DEVELOPING A PROJECT MANAGEMENT AND PROCUREMENT PLAN

The Transaction Advisor will prepare a Project Management Plan based on the packaging of the various Project components that needs to be agreed to by all concerned parties. The plan must include at least the following:

- An updated Project timetable highlighting the key milestones and all approvals which will be required to take the Project to implementation
- Mechanisms to maximize competition while avoiding unrealistic bids and project vulnerability from overly aggressive bidding
- List of any potential challenges to the Project and a discussion on how these can be addressed

- Identification of all the stakeholders and the extent of their involvement in the Project
- List of required approvals from all Ministries, Departments and Agencies and a list of action items necessary for obtaining these approvals (for example, environmental studies, permits, etc.)
- Categories of information to be made available to bidders and how such information will be developed
- Contingency plans for dealing with deviations from the timetable and budgets
- Proposed pre-qualification, bid evaluation parameters and the process
- Appropriate quality assurance process for bid documentation
- Means of establishing and maintaining an appropriate audit trail for the bid process

3.5. STEP FIVE: SUBMISSION OF THE FEASIBILITY STUDY REPORT, ECONOMIC & FINANCIAL MODEL

The Transaction Advisor is required to produce, in close liaison with the INSTITUTION (also referred to as the 'Public Authority'), a comprehensive Feasibility Study Report for the Project that must include, at a minimum, the following:

Executive Summary

A.1 Background

A.1.1 Sector overview

• Provide an overview of the sector to which the project relates, the services the sector provides and whether current service levels are adequate.

A.1.2 Problem being addressed

State the problem the project seeks to address

A.1.3 Alignment with strategic plans and priorities

 Explain how the project aligns with the national and sectoral plans and priorities

A.1.4 Objectives of the project

 State the objectives of the project. Phrased as solutions to the problem being addressed

A.1.5 What has been done so far

- Describe the history and origin of the project, noting whether the project follows up on an existing, or past project.
- If the Public Authority has experience with PPPs, please describe what the Public Authority has done before.
- Indicate whether the Public Authority, or others, have conducted any studies of the project.

A.2 Technical Specifications

A.2.1 Location of the project

- Specify the location of the project
- Provide maps and pictures clearly showing the project site, connecting roads and other infrastructure, and surrounding areas

- Note whether the Public Authority owns the land necessary for the project or if the Public Authority will need to acquire additional land
- If the Public Authority needs to acquire land, the maps and pictures of the project should clearly indicate the land the Public Authority proposes to acquire, and identify who owns that land

A.2.2 Scope of services

- Describe precisely the service(s) the project will provide
- Include the estimated costs of the project showing:
 - Capital costs distributed annually over the life of the project
 - Operations and maintenance costs annually in real terms
 - Costs of land acquisition, resettlement and regulatory compliance should also be included.
- State the expected duration of the contract

A.2.3 Roles and responsibilities

- Specify the roles and responsibilities of the private partner
- Specify the roles and responsibilities of the Public Authority

A.2.4 Output specifications

- Define the outputs that the private partner will assume responsibility for providing
- Specify performance indicators against which the Public Authority will measure the private partner's performance
- Describe the performance evaluation system that the Public Authority will use to measure the private partner's performance

A.2.5 Payment mechanism

- Specify how the private partner will be remunerated for the service it provides—that is, through user charges, availability payments, both, or through other means.
- Specify who will pay the private partner for the service it provides—the government, or users or both.
- If user charges apply, specify who will collect the charges from users.

A.3 Options Analysis

- Describe the technical project delivery and PPP structuring options considered.
- Describe the criteria and approach to assessing the project options
- Summary of evaluation and assessment of all Options considered
- Recommendation of the Preferred technical and PPP Options

A.4 Legal and Regulatory Due Diligence

- Analysis of the applicable legal framework to identify legal requirements and impediments. The frameworks to be analyzed include:
 - Constitution
 - PPP Policy and legislation (if passed)
 - Public procurement law
 - Law referring to foreign investment, property, and labor
 - Legislation relating to land use planning and environmental law
 - Sector specific legislation

- Legal analysis of project specific issues, for instance:
 - Financial aspects of the project, including the ability/right to charge users
 - Use of existing land and assets
 - Commercial viability
 - Tax and accounting issues considered in the financial model.
- The legal due diligence should note whether the Public Authority needs to take any actions to make the project legally feasible before the project can proceed further such as getting regulatory approvals.

A.5 Demand Analysis

 Demonstrate through detailed analysis that there is demand for the service the project will provide. This may include a detailed willingness to pay or ability to pay study using a carefully designed methodology.

A.6 Financial Analysis

Present a financial model with the following inputs:

- Estimates of the capital costs yearly, over the life of the project
- Estimates of the operations and maintenance costs yearly in real terms, over the life of the project
- Expected sources of financing. If the project includes debt, provide the terms of the loan such as the interest rate, and repayment terms.
- Expected cost overruns
- Expected level of user charges
- Revenue projections over the life of the project.

The model should calculate the:

- The private partner's break-even revenue requirements
- Returns to the shareholders as well as returns to the project
- Basic financial ratios
- Debt service coverage ratios, if project finance is envisaged
- Level of viability gap funding or other support envisaged from Government.

The model should demonstrate financial viability (expressed in terms of NPV and IRR) and affordability. Further, the model should include:

- Scenario analysis
- Sensitivity tests
- Risk simulation methods

This section should also clearly specify the assumptions made to arrive at the model outputs.

A.7 Fiscal Impact Analysis

- Precisely state the direct and contingent liability the government will assume should the project be implemented
- Estimate the fiscal impact of the project in terms of the direct and contingent liabilities on the government budget
- Demonstrate compliance with applicable laws and regulations governing accounting standards for direct and contingent liabilities

A.8 Economic Analysis

Perform an economic cost-benefit analysis using economic costs and benefits, and an appropriate discount rate. The economic cost-benefit analysis model should show:

- Economic Net Present Value of incremental benefits
- Economic internal rate of return
- Economic cost to benefit ratio

The mode should also include:

- Scenario analysis
- Risk and sensitivity analysis

A.9 Value for Money Analysis

Examine whether the project will deliver more value when delivered as a PPP than it would as a publicly-financed project procured under the Public Procurement Act (PPA), using qualitative and quantitative methods.

A.10 Risk Allocation

Prepare a comprehensive risk matrix including the probability of occurrence and financial impact on the project, specifically:

- Identify risks
- Assess them
- Allocate them between the private partner and the CE
- Specify measures to mitigate risks
- Suggest measures to monitor these risks

A.11 Market Interest Assessment

- Note whether any market sounding exercise has been conducted. If yes, describe the results stating:
 - Number of firms surveyed
 - Number of firms responded
 - Summary conclusions
- Also state if any unsolicited proposals have been received for the project

A.12 Environmental and Social Impact Assessment

Provide information on any environmental and social impacts the project will have and how the Public Authority and the private partners will ensure proper accounting of these impacts and will mitigate these impacts say through mechanisms within the PPP contract. This assessment should conclude with a sound recommendation about the environmental viability of the project.

A.13 Stakeholder Analysis

This section should include a list of the meetings held with stakeholders and should demonstrate what has been done to address stakeholder concerns.

A.14 Project Implementation Plan

A.14.1 Institutional Considerations

• Indicate whether the Public Authority will establish dedicated units to implement the project. If yes, also specify how it will fund these units

 Indicate whether the Public Authority will hire external consultants to perform some functions

A.14.2 Procurement Plan

Describe:

- Bid process and evaluation criteria
- Plan for managing the bid process and evaluating bids
- Indicative procurement timeline

Also include a high-level outline of the bid documents and the PPP contract.

A.14.3 Implementation Plan

Provide a detailed timeline for implementing the project broken down by stages, activities within stages, and milestones.

Annexes

Annex 1: Statements of information verification and sign-off from advisors (each consortium member)

Annex 2: Complete Financial Model and Assumptions

Annex 3: Risk Assessment and Comprehensive Risk Matrix

Annex 4: Document list (list of all documents related to the project)

Annex 5: Market Testing Feedback and Comments

Annex 6: Attach as an annex all other documents that have informed the Feasibility Study and that are of decision-making relevance to the project.

Additional Requirements:

- The Feasibility Study and above deliverables must be compiled in a single report in Microsoft Word format (with relevant annexes) in both electronic and hard copy formats;
- All Financial Models must be in Microsoft Excel format, clearly setting out all assumptions made, sensitivity analyses carried out, and model outputs. The Financial Models must be sufficiently adaptable for use by others at later stages;
- The Feasibility Study must be presented with a thorough Executive Summary and must encapsulate all the key features of the study. The Executive Summary must be compiled in such a manner that can be used by the relevant Approving Authorities for decision-making purposes.

3.6. STEP SIX: SUBMISSION OF THE PUBLIC INVESTMENT PROGRAM FOR AFFORDABLE HOUSING

4. TEAM COMPOSITION AND QUALIFICATION REQUIREMENT FOR KEY EXPERTS

The Transaction Advisor needs to be a single legal entity with all other necessary expertise secured via subcontract, or joint venture arrangement with other consulting firms to enhance their capabilities, strengthen the technical responsiveness of their proposals, make available bigger pools of experts, and enhance the value and quality of their services. The MWH will enter into a single

contract for the delivery of the work set out in these Terms of reference. Foreign Firms must familiarize themselves with local conditions and laws and take them into account in preparing their proposals.

The Transaction Advisor will include qualified personnel from different fields such as, architectural and engineering design, construction, rehabilitation, upgrading, expansion, operations, management and maintenance of buildings, building design, engineering and planning; project preparation and appraisal; project management; project finance; financial modeling/structuring; investment promotion; economic and financial analysis; risk analysis; procurement; policy and legal issues; and drafting and negotiating PPP agreements.

The team shall have extensive demonstrated international and country-specific experience/expertise that would include knowledge of affordable housing projects; regulatory issues involved and the initiatives taken by the Government for the successful implementation of projects; the project's taxation framework, including exemptions and tax exemption regime (if any); domestic and global insurance and guarantee sector and their products; and other country-specific knowledge. There should be indication of awareness and understanding of the eco-friendly building concept, climate agenda within Ghana and at the international level with a working knowledge of the Kyoto Protocol and the global agenda on sustainable development and climate change.

Each individual on the team must be personally available to do the work as and when required. The lead advisor will be held accountable, in terms of the Transaction Advisor contract, for ensuring project deliverables and for the professional conduct and integrity of the team.

All members of the Transaction Advisory team must be in good standing in all respects including ethically and professionally and should provide proof of registration where required in respect of professional registration as well as proof of good standing with such professional bodies.

It should be noted that all these positions are suggestive and that the Transaction Advisor will decide on the most appropriate team that ensures that all functions and expertise areas are included. <u>Participation by nationals among proposed key experts will be an advantage</u>.

PPP Specialist/ Team Leader

The Team Leader is expected to have minimum of a Master's Degree in economics, law, finance, engineering, development, business administration, management or a relevant discipline. An interdisciplinary background is desirable and be fully conversant with all aspects of project finance, including PPPs. She/he will be the Team Leader with the overall responsibility of directing and coordinating the inputs of the other specialists, overall quality control and performance of the team, ensuring outputs expected, professional integrity and conduct of the team. The Team Leader will spend at least 60% of his/her time in Accra, the capital city of Ghana. It is anticipated that the skills and expertise required for this assignment will include

the following:

- At least 15 years' relevant experience in terms of successfully leading and coordinating team of professionals in similar assignments within a complex multi-cultural and cross-sectoral environment;
- Minimum of 10 years of demonstrated experience in preparation of PPP projects, providing Transaction Advisory services/development of large infrastructure projects in housing, office accommodation, facilities management including extensive experience in project preparation and project structuring; risk analysis, allocation and management; project agreements; negotiations; and bid process management. Preferably have prepared and brought to financial close two PPP projects including one multifloor accommodation type within the last 10 years.
- Demonstrated ability to work with government/public sector decision-makers and organizations alike;
- Knowledge of relevant national policies, legislation, institutional, & regulatory frameworks for PPPs;
- Strong oral and written communication skills in English language with a capacity to communicate effectively to a wide variety of audiences, including conducting periodic presentations;
- Ability to manage multiple tasks effectively & a strong team player with excellent leadership and interpersonal skills and the ability to work in a highprofile environment; and
- Experience with working in developing countries.

Project Finance Specialist

The Project Finance Specialist is expected to have a background in economics, finance, business administration or a relevant discipline. A Master's degree in any of these fields and an interdisciplinary background, with relevant professional qualification, such as ACCA, ICA, CIMA, CFA, etc. will be an advantage and be fully conversant with all aspects of infrastructure financing and investment, PPPs, and Project Finance. It is anticipated that the skills and expertise required for this assignment will include the following:

- A minimum of 8 years of demonstrated experience in preparing PPP projects including financial modeling/structuring of large infrastructure projects including, Value for Money analysis, project costing and revenue forecast, development of financing plans, tendering arrangements, global insurance and guarantee products. Preferably have prepared and brought to financial close two PPP projects including one multi-floor accommodation type within the last 8 years;
- Financial analysis, with relevant PPP and project finance experience including development, evaluation and audit of complex financial models in any sector that assesses the impact on PPPs both on the public sector side or private sector side;
- Project structuring and preparation (experience in PPPs is an advantage), financing options, taxation, identification of types and amount of governmental financial support, bidder qualification & evaluation criteria in similar projects internationally;

- Experience in providing market intelligence gathering from lenders relating to financing terms, and incorporating final debt pricing into financial model, ascertaining the potential acceptability of recommended financing structure to private investors and potential lenders, determining the suitable bankable financing plan for recommended structure, including appropriate debt equity ratios, loan tenures and rates for project viability, and identifying appropriate sources of funding;
- Demonstrated ability to work with government/public sector decision-makers and donor organizations alike;
- Strong oral and written communication skills in English language with a capacity to communicate effectively to a wide variety of audiences, including conducting periodic presentations; and
- Experience with working in developing countries.

Engineer (Civil/Structural)

The Engineer is expected to have a Master's degree in Civil/Structural Engineering with membership of a relevant professional institution. She/he is expected to provide guidance on the major technical issues for the project arrangement. It is anticipated that the skills and expertise required for this assignment will include the following:

- At least fifteen (15) years of demonstrated experience in design, layout and construction and operations of multi-floor buildings, cost recovery mechanisms and identification of issues to be addressed in the housing projects. Must have assisted in the preparation of two (2) multi-floor accommodation type PPP projects and facilities management in a similar environment within the last 6 years;
- Experience in design of eco-friendly building concept;
- Preparation of lay out (conceptual) plan and other related activities relating to the establishment of multi-floor buildings;
- Development of CAPEX, and operation and maintenance cost projections according to the underlying operations in the project on a project whole-life basis:
- Experience in developing project financial and economic analyses with inputs on project costs (capital expenditures, operations and maintenance), required contingency levels;
- Should have demonstrated ability to work with government/public sector decision-makers and organizations alike;
- Strong oral and written communication skills in English language with a capacity to communicate effectively to a wide variety of audiences, including conducting periodic presentations; and
- Experience with working in developing countries.

Architect

The Architect is expected to have a Post Graduate degree in Architecture with membership of a relevant professional institution. She/he is expected to provide guidance on the major technical issues for the project arrangement. It is anticipated that the skills and expertise required for this assignment will include the following:

• At least fifteen (15) years of demonstrated experience in design, layout and

construction and operations of green multi-floor housing, and identification of issues to be addressed. Must have assisted in the preparation of two (2) multi-floor accommodation type PPP projects and facilities management in a similar environment within the last 6 years;

- Experience in design of eco-friendly building concept;
- Hold LEED Agent Credentials/Certificate or similar Diploma;
- Preparation of lay out (conceptual) plan and other related activities relating to the establishment of multi-floor buildings;
- Should have demonstrated ability to work with government/public sector decision-makers and organizations alike;
- Strong oral and written communication skills in English language with a capacity to communicate effectively to a wide variety of audiences, including conducting periodic presentations; and
- Experience with working in developing countries.

Legal Specialist

The Legal Specialist must be a lawyer qualified to practice in at least one jurisdiction and belong to a legal professional body. The Legal Specialist must have a minimum qualification of Bachelor of Law (LLB) with demonstrated familiarity with the legal issues surrounding project finance, advising on contractual arrangements for project finance transactions and risk allocation. She/he must also have experience in drafting contractual agreements, negotiating and closing projects. It is anticipated that the skills and expertise required for this assignment will include the following:

- At least 8 years demonstrated experience in preparing projects, drafting & other negotiating contractual agreements and related procurement, documents/agreements, policy PPP and institutional assessment, and resolving all legal issues until contract award. Preferably have prepared and brought to financial close two (2) PPP projects including one multifloor accommodation type within the last 8 years;
- Familiarity with relevant Ghanaian national and sectoral legislation relating to building industry standards, codes and guidelines;
- Demonstrated ability to work with government/public sector decision-makers and donor organizations alike;
- Knowledge and familiarity with the PPP Act, (Act 1039) of Ghana;
- Strong oral and written communication skills in English language with a capacity to communicate effectively to a wide variety of audiences, including conducting periodic presentations; and
- Experience with working in developing countries.

Environmental & Safeguards Specialist

The Environmental & Safeguards Specialist is expected to have a minimum of a Master's Degree in Environmental Assessment/Management, Environmental/Civil Engineering, Economics, Social Sciences or other relevant field. She/he will ensure that the project is properly prepared and implemented in compliance with national and international environmental and social safeguards instrument, policies,

regulations and procedures. It is anticipated that the skills and expertise required for this assignment will include the following:

- At least eight (8) years of demonstrated experience in environmental impact assessment, social impacts and mitigation measures; preparation of land acquisition and resettlement action plan on development projects. Must have experience in at least two (2) multi-floor accommodation projects and facilities management in a similar environment within the last 6 years;
- Knowledge of Ghanaian national and regional legislations related to environment, and social issues in the building industry, with Ghana EPA's regulations and procedures and World Bank Safeguards Policies;
- Experience in conducting gender assessment and analysis of needs of clients as well as gender differential impact of the project; gender risks and develop mitigation measures.
- Experience in identifying key 'at risk' areas and threats to the facilities; identifying technical, administrative, institutional, infrastructure, and environmental mitigating measures and recommendations for integration into over-all project design, financial and implementation proposal.
- Demonstrated ability to work with government/public sector decision-makers and donor organizations alike; working relationship with the Ghana EPA will be an advantage;
- Strong oral and written communication skills in English language with a capacity to communicate effectively to a wide variety of audiences, including conducting periodic presentations; and
- Experience with working in developing countries.

5. DURATION OF CONTRACT

It is expected that the assignment (completion of all tasks) will be concluded over a maximum period of **Six (6)** months. The Transaction Advisor may propose for consideration alternative, but reasonable, durations for this consultancy.

6. REPORTING SCHEDULE

The Deliverable and Reporting Schedule is proposed as follows:

Indicative Milestones	Expected Timeframe
(timeframes include client approval times/ most	
activities can be undertaken in parallel)	
Inception meeting/Inception Report giving a detailed	There will be an inception
work plan and assignments for each individual in the	meeting two (2) weeks after
Transaction Advisors team. In addition, the Inception	the award of the contract and
Report at a minimum will include:	after an additional two (2)
• review of the concept and requirements for the	weeks the inception report
Project;	should be submitted.
 overview of the key issues; 	
• timetable of activities / milestones / team	
organization going forward;	
• development of a communication and	

coordination protocol with the MWH and MoF-PIAD,	
• discussion of any specific issue requiring	
immediate attention of the MWH and MoF-PIAD	
Progress Reports	On monthly basis
Submission of Pre-Feasibility Study	2-3 months from signing of
	agreement
(i) Submission and acceptance of the Full Feasibility	6 months from signing of
Study and the Project Management and Procurement	agreement
Plan	
(ii) Submission of Public Investment Program for	
Affordable Housing in Ghana.	

In the process of carrying out the assignment, the Transaction Advisor will appoint a Team Leader (from the lead firm of the Transaction Advisor consortium) to assume overall responsibility of the Project and to interface with the MWH's Project Development Team and MoF-PIAD, as well as other entities required for carrying out the work. It is anticipated that the team-leader and co-team leader of the Transaction Advisor's team will be located in Ghana for the vast majority of the duration of the contract.

The Transaction Advisor will be expected to attend meetings and briefing sessions at the request of the MWH for the duration of the Assignment.

The Transaction Advisor will maintain all records of the Project for a period of 6 months from the end of this assignment and during this period assist the MWH and the MoF-PIAD in dealing with queries related to the Project as and when required.

7. ACTIVITY SUPERVISION

In executing this assignment, the Transaction Advisor will work closely with the MWH Project Development team, MoF-PIAD, as well as other entities required for carrying out the work. A team-leader and co-team leader will be appointed from the MWH team to take full responsibility for managing the Transaction Advisor's work and for ensuring delivery on the project. The team-leader and co-team leader will assist in securing appointments with any Government Ministries, Departments and Agencies, as may be required, and will grant the transaction advisor full access to all information required for the completion of the assignment. The MWH Project Development Team will engage regularly with the Transaction Advisor to facilitate efficient completion of the various delivery items. The MWH Project Development Team will meet at least monthly and the Transaction Advisor will report progress at these meetings.

8. PAYMENT

The total payment will be computed as Retainer Fee. The Payment Schedule is provided below.

Indicative Payment Schedule

A) The Transaction Advisory Service Fee Payment Schedule is as follows:

Indicative Milestones	Percentage of Retainer Fee
 Mobilization and Inception Report giving a detailed work plan and assignments for each individual in the Transaction Advisors team. In addition, the Inception Report will include: review of the concept and requirements for the Project; overview of the key issues; timetable of activities / milestones / team organization going forward; development of a communication and coordination protocol with the MWH and MoF-PIAD, discussion of any specific issue requiring immediate attention of the MWH, MoF-PIAD, 	10%
Submission Pre-feasibility study report	20%
Submission of (i) draft Full Feasibility Study Report and (ii) draft Public Investment Program for Affordable Housing in Ghana	30%
Submission of (i) Final Full Feasibility Study Report and (ii) Public Investment Program for Affordable Housing in Ghana	40%
Total	100%