TERMS-OF-REFERENCE (TOR)

DESIGN AND BUILD FOR THE JOHN HAY MANAGEMENT CORPORATION (JHMC) OFFICE BUILDING AT CAMP JOHN HAY, BAGUIO CITY

I. BACKGROUND

The JHMC through the approved allocation for capital outlays under CY 2019 Corporate Budget intends to apply the sum of Thirty-Eight Million Pesos (PhP38,000,000.00) being the approved budget for the construction of JHMC Office Building through a design and build scheme.

II. OBJECTIVE

Since Camp John Hay has a unique character in terms of its prominent natural and cultural resources, remarkable landscapes and exceptional biodiversity, all the works, which will be carried out for the design and construction of the office building will be executed through eco-architecture and environmentally sensitive designs, with very low impact on the environment.

III. CONCEPTUAL DESIGN AND PLAN

A conceptual design and plan was prepared by JHMC, however, this design shall serve as reference only. JHMC does not guarantee that the data is fully correct, updated, and applicable to the project at hand. The winning bidder is responsible for the accuracy and applicability of all data. The conceptual design and plans are hereto attached as Annexes "A" and "B" respectively.

Prospective bidders may introduce an entirely new concept subject to the design parameters, performance standards and space requirements set by this TOR.

IV. ORGANIZATIONAL STRUCTURE

JHMC is governed by its Board of Directors and has a total of fifty (57) plantilla positions in the organization. An innovative approach to the design must be incorporated to accommodate future increase in personnel of |JHMC.

V. PROJECT DESCRIPTION AND LOCATION

The project is to be implemented in two (2) stages namely the design stage and construction stage. In the design stage, the contractor shall be required to prepare and submit design plans that is compliant with the design parameters and performance specifications set by this TOR. The construction stage shall commence after all clearances and/or permits from JHMC is issued to the contractor.

The office building shall be designed for at most three (3) storeys with basement and will be constructed on a one thousand (1,000) square meter parcel within portion of Lot 6 (Ccs-131102-000030). Situated on this parcel is Cottage 624 which will be demolished after portion of the new office building is ready for occupancy. Prospective bidders shall be

required to submit a construction schedule incorporating the above-mentioned arrangement.

The design shall be prepared to meet applicable requirements of the following Laws, Codes and Standards:

a) National Building Code of the Philippines and its referral Codes including the Green Building Code;
b) Comprehensive Fire Code of the Philippines;
c) Occupational Safety and Health Standards;
d) Accessibility Law (BP 344); and
e) Other laws and regulations covering environmental concerns and regulations.

In cases where there are conflicts in the provisions of the above stated Laws, Codes and Standards, the most stringent provision shall apply.

VI. DESIGN PARAMETERS AND PERFORMANCE STANDARDS

The design parameters and performance standards are required to ensure that all aspects in the design and construction stages attain minimal impact to the environment while providing JHMC an office that is resilient, of high standards and in harmony with its surroundings.

a) Design Parameters:
   i. Site Analysis.

      A detailed site analysis shall be conducted for the purpose of analysis, recording and evaluating information on the site and its surroundings. The result of the analysis shall be used in the design process.

      The analysis shall include:

      - Building Orientation;
      - Wind Direction;
      - Soil Type and Condition;
      - Topography;
      - Vegetation and Natural Features;
      - Precipitation & Hydrology;
      - Surrounding land uses & buildings;
      - Prominent Vision lines / Visual linkages; and
      - Locally available resources

   ii. Site Planning

      This parameter shall be incorporated during the design of the building and shall include:

      - Shape, size and orientation of the area where the building will be built;
      - Levels and contours of the area and its surroundings;
      - Height of existing buildings and its surroundings;
      - Open spaces surrounding the property
      - Natural or man-made structures
      - Pine trees within and surrounding the area
      - Street including drainages and utility poles
      - Movement system through and around the site

iii. Building Envelope. This involves using exterior wall materials and designs that are climate-appropriate, structurally sound and aesthetically pleasing.
   - Support (Resistance to and transfer of structural and dynamic loads)
   - Control (Control of air, water and heat flow)
   - Finish (Desired aesthetics on the inside and outside of the building)

iv. Engineering and Architectural Parameters.
Design of the building shall be responsive to economic, environmental, and cultural conditions through the following:

- *Building Height and Massing*. Height of the building in relation to its overall configuration.
- *Space Planning*. Office and equipment space needs of JHMC shall be addressed. Special attention should be made to the selection of interior finishes and art installations, particularly in entry spaces, conference rooms and other areas with public access.
- *Functional/Operational Planning*. The building design must consider the integrated requirements of the different offices, departments and units of JHMC. This includes the desired image, degree of public access, operating hours, growth demands, security issues and vulnerability assessment results, organization size and group assembly requirements, electronic equipment and technology requirements, acoustical requirements, special floor loading and filing/storage requirements, special utility services, any material handling or operational process flows, special health hazards, use of vehicles and economic objectives.
- *Flexibility*. The office must easily and economically accommodate frequent renovation and alteration. These modifications may be due to management reorganization, personnel shifts, changes in business models, or the advent of technological innovation, but the office infrastructure, interior systems, and furnishings must be up to the challenge.
- *Employee Productivity*. Employee satisfaction, health, and comfort are of primary concern. Strategies such as excellent indoor air quality, access to windows and views, opportunities for interaction, and natural light are some of the factors that contribute to improved workplace that are important to the health and psychological well-being of the occupants. Special consideration must be given to noise control in open office settings, with absorptive finish materials, masking white noise.
- *Technical Connectivity.* Technology is an an indispensable tool for JHMC. The office building shall be planned to have a well distributed, robust, and flexible IT infrastructure. All technological systems such as audio/visual systems, speaker systems, internet access, Local Area Networks (LAN) / Wide-Area Networks (WAN) / Wireless Fidelity (WI-FI) and Voice-over Internet Protocol (VoIP) shall be a major component of the design. Ser

b) Performance Standards.
The design and construction of the building shall conform to the following standards:

- Energy Efficiency. Requires the adoption of efficient practices, designs, methods and technologies that reduce energy consumption resulting in cost savings.
- Water Efficiency. Requires the adoption of efficient practices, plan, design, materials, fixtures, equipment and methods that reduce water consumption resulting in cost savings.
- Material Sustainability. Material Sustainability governs all matters related to resource efficiency and material selection and use with the least impact on the environment.
- Solid Waste Management. Efficient waste management requires the adoption of efficient waste management practices and use of eco-friendly materials.
- Site Sustainability. Requires the adoption of planning, design, construction and operation practices that minimize the adverse impact of buildings on ecosystems and water resources.
- Indoor Environmental Quality. Requires the adoption of efficient design and operation practices that take into consideration the building environment to improve occupant health, productivity and safety.

VII. SCOPE OF WORKS

The scope of works for the project shall involve the following activities:

a) Preliminary Investigations. These shall include, among others, information on soil, geotechnical, hydrologic, hydraulic, seismic, traffic, and environmental conditions that shall be used to define project design of the building and to set the basis for the financial proposal of the prospective bidders.

b) Preliminary Survey and Mapping. These shall determine boundaries and provide stationing along control lines to establish feature and design criteria location and identify existing and future right-of-way limits and construction easements associated with the project.

c) Preparation of Detailed Engineering and Design. Upon award of the design and build contract, the winning bidder shall be responsible for the preparation and submission of all necessary detailed engineering investigations, surveys and designs as stated hereunder. JHMC has the right to require other documents as it may deemed necessary.

1) Survey Plan and Returns
2) Site Investigation Report
3) Soils and Foundation Investigation Report
4) Construction Materials Investigation Report
5) Design Plans

   Aside from the Architectural and Engineering plans required by the NBC, the following shall be required:

   a. Demolition Plan and inventory of recovered materials of Cottage 624; and
   b. Furniture Lay-out Plan, List of furniture and Specifications.

6) Technical Specifications

7) Bill of Quantities and Cost Estimates
8) Program of Work
9) Proposed Construction Schedule (and estimated Cash Flow
10) Site or Right-of-Way Plans including Schedule of Acquisition (if applicable)
11) Utilities Relocation Plan
12) Design Report
13) Environmental Impact Statement for critical project as defined by the Department of Environment and Natural Resources (DENR)
14) Construction Safety and Health Program
15) Value Engineering Studies

d) Construction and Completion Stage.
Implementation of the project shall be governed by applicable provisions of R.A 9184 and its revised IRR.

The Contractor shall be responsible for obtaining all necessary information as risks, contingencies and other circumstances which may affect the works and shall prepare and submit all necessary documents specified by JHMC to meet all regulatory approvals as specified in the contract documents.

The Contractor shall submit a detailed program of work within fourteen (14) calendar days after the issuance of the Notice to Proceed for approval by JHMC that shall include, among others:

a) The order in which it intends to carry out the work including anticipated timing for each stage of design/detailed engineering and construction;
b) Periods for review of specific outputs and any other submissions and approvals;
c) Sequence of timing for inspections and tests as specified in the contract documents;
d) General description of the design and construction methods to be adopted; Number and names of personnel to be assigned for each stage of the work; List of equipment required on site for each major stage of the work; and Description of the quality control system to be utilized for the project.

Any errors, omissions, inconsistencies, inadequacies or failure submitted by the contractor that do not comply with the requirements shall be rectified, resubmitted and reviewed at the contractor's cost. If the Contractor wishes to modify any design or document which has been previously submitted, reviewed and approved, the contractor shall notify JHMC within a reasonable period of time and shall shoulder the cost of such changes.

VIII. PROCUREMENT PROCESS

Following the procedures and requirements for a design and build scheme, the following additional requirements shall be included in the Technical Proposal:

a) Preliminary Conceptual Design Plans.
   i. At least four (4) perspective views of the building;
   ii. Floor plans;

iii. Four (4) elevations;
iv. Two (2) sections
v. A 3D visual presentation of the building including a walk-through animation of the interior and exterior views.

b) Value engineering analysis of design and construction method.

IX. SPACE REQUIREMENTS

Aside from the space requirements shown in Annex "B", the following shall be incorporated in the space planning:

a) Lactation Station
b) Pantry in the ground and second floor
c) Mini-conference room in the second floor
d) Rain water collector
e) Off-street parking
f) Sewer Treatment Plant
g) Server Room
h) CCTV Control Room
i) Records Storage Room
j) Vault
k) Health and wellness Room
l) Mini-Library
m) Cafeteria/Canteen

X. GENERAL CONDITIONS

a) There shall be no cutting of Benguet Pine Trees. However, Benguet Pine Trees having a diameter at breast height of 15 centimeters and smaller may be earth-balled subject to existing laws or regulations of the Department of Environment and Natural Resources (DENR).
b) The demolition or clearing of the existing cottages/structures within the Property shall only be conducted after securing the necessary permits or clearances from JHMC. In cases where developmental permits from other National Government Agencies need to be secured, JHMC will endorse such applications to the concerned Agencies.