

# TERMS OF REFERENCE FOR PROJECT MANAGEMENT CONSULTANT FOR SUPERVISION OF DESIGN AND CONSTRUCTION OF FACULTY OF TECHNOLOGY – RAJARATA UNIVERSITY OF SRI LANKA

## I. BACKGROUND

1. **Introduction.** Sri Lanka is a fast-growing economy and has a population of over 20 million. Its long history of state sponsored welfare policies and programs has led to an impressive performance in social development, particularly in comparison to other countries in South Asia. Sri Lanka attained middle-income country status in 2010 and many strategies were developed to move towards upper middle-income category. One of the key factors that contributed to its high literacy rate (92.6%) and good performance in human development index is free education provided by state from primary education up to graduate level. Sri Lanka's university system is state-owned and state-funded. The higher education system has three types of institutes: (i) universities and higher education institutions under the Ministry of Education; (ii) universities and higher education institutes under other Ministries, and (iii) universities run by private sector.

2. One of the biggest challenges faced by the higher education system in Sri Lanka is its capacity to cater to the increasing demand for higher education from the increasing ranks of those successfully completing secondary level education. The Government of Sri Lanka has introduced a new bachelor's degree stream (i.e., technology) in several state universities as one of its strategies to meet increasing demands of higher education.

3. **Brief description of the project.** The Asian Development Bank (ADB) as requested by the Government of Sri Lanka has recently approved the Science and Technology Human Resource Development Project (STHRDP) to support the government's efforts in increasing human resource capacity for its transformation to a knowledge-based and innovation-based economy. Considering Sri Lanka's economic structure, such transformation would require more proportion of workforce that are trained in science and technology disciplines, who can add higher value to Sri Lanka's resource base in the manufacturing and service sectors.

4. Considering the above, ADB agreed to support establishment of three technology faculties at University of Kelaniya, Rajarata University of Sri Lanka, Sabaragamuwa University of Sri Lanka and one engineering faculty at University of Sri Jayewardenepura in line with following five outputs: (i) innovative technology learning and research environment established, (ii) quality and industry-relevant higher technology education programs implemented, (iii) industry linkages

and international collaborations strengthened, (iv) faculty management capacity strengthened, and (v) new higher education project preparation supported.

5. The executing agency of the STHRDP is the Ministry of Education (MOE). The STHRDP is expected to construct three technology faculty buildings in University of Kelaniya (UOK), Rajarata University of Sri Lanka (RUSL) and Sabaragamuwa University of Sri Lanka (SUSL) and engineering faculty building in University of Sri Jayewardenepura (USJP). All these civil works will be implemented based on design-and-build contract. The STHRDP requires the services of a Project Management Consultants (PMC) whose on-site presence will ensure the effective and efficient day-to-day implementation of the STHRDP under the guidance and direct supervision of the executing agency (EA) and the Rajarata University of Sri Lanka. It ensures that all project constraints, including scope, quality, schedule, cash flow, budget, resources, and risks, are properly managed and balanced from the pre-design stages to the project completion. Under the EA, there is a Project Management Unit (PMU) for implementation of overall project, and each university has Project Implementation Unit (PIU) for implementation of the project at university level. The brief description of Rajarata University of Sri Lanka site is as follows.

6. **Construction of Technology Faculty Building Complex at Rajarata University of Sri Lanka (RUSL).** There are two land lots for the civil works. The construction of buildings is for 5 departments including lecture theatres and lab complex, library, administrative block and collaborative cell, and cafeteria complex etc. The site development around the building includes the driveway, covered entrance drop off area, pedestrian walkways, water supply system including elevated water tank(s), service/delivery areas, generators and air conditioning/heating equipment area, waste disposal, landscaped green and open spaces, permanent perimeter fence, and parking area. Total floor area is approximately 23,000 square meters including circulation area, and end-user is Faculty of Technology, RUSL. The design-and-build contract duration is expected to be 913 calendar days. Proposed Project Management Consultancy duration will be 1,095 calendar days (2 years and 6 months for construction supervision and three months for finalizing the contract). The expected commencement date of PMC consultancy is 1 March 2021-

## II. OBJECTIVES

7. The PMC should proactively ensure that all activities are aligned with the university's overall goals and objectives for the project by planning, managing, and fine-tuning all of the details during, and after the execution of the design-and-build contract.

8. Specific objectives of this PMC package under the project are the following:

- (i) Review and assess the existing information available with PMU and PIU at RUSL.

- (ii) Prepare project (contract) management plan which includes master project time schedule and work breakdown structure to support PMU and PIU.
- (iii) Assist the PMU and PIU on design-and-build contract management.
- (iv) Monitor the civil works based on environmental management plan for RUSL and ADB's safeguards policy requirements.
- (v) Ensure the project complies with green building requirements and promote to develop innovative learning environments.
- (vi) Assess and enforce, on behalf of the Client, the adequacy of the Contractor's inputs in terms of material, equipment, construction machinery, workers, and construction approach and methodologies as per the best accepted construction management practices.
- (vii) Supervise all construction works to ensure quality of works as per technical specification, drawings, and condition of contract using modern and computerized systems of project monitoring
- (viii) Ensure the constructions are in accordance with the required standards, on time, compliance all structural requirements, Environmental Compliances, Green Building requirements and Gender requirements through full time close supervision, inspection and monitoring.

9. The PMC will work as the architectural and engineering representatives of PMU and PIU, and perform the responsibilities to facilitate the design-and-build contract for the civil works at RUSL under the project.

### **III. SCOPE OF WORK AND EXPECTED DELIVERABLES**

10. In general, the scope of consultancy services will include, but not limited to the following:
- (i) Facilitate the design-and-build civil work contracts by coordinating with multiple stakeholders (PMU, PIU of RUSL, design-and-build contractor), reviewing designs and bill of quantities (BOQs), monitoring time schedule and compliance with the safeguard and safety requirements;
  - (ii) Monitor the compliance with the green and intelligent building requirements and promote innovative learning environments; and
  - (iii) Supervise and manage the construction with frequent site visits, carry out quality control, testing and reporting, monitor construction activities and certify contractor's progress claims.
  - (iv) Ensure the compliance with environmental safeguard requirements and safety requirements as mentioned in Environmental and social management plan (ESMP).
  - (v) Review the contractor's proposed work program to ensure timely delivery of the project as per expected outcome outlined elsewhere in this document

- (vi) Conduct close full time supervision by employing capable dedicated fully qualified experts.0

**11. Estimated total person-months.** The consultants will be comprised of a team of 60.5 person-months of national consultants. The estimated cost of this service contract is LKR 52.0 Mn. (Without VAT). The Consultant will be paid according to the time spent and other out-of-pocket expenditures with evidence throughout the duration of the consulting assignment. The team will be headed by the team leader. The detailed breakdown of the person-months for each required expert is given in Section V (Team Composition and Qualification Requirements for Key Experts).

#### **IV. TASKS**

**12. Major tasks.** The PMC shall proactively ensure that all activities are aligned with the University's overall goals and objectives for the construction by planning, managing, overseeing, and fine-tuning all of the details before, during, and after the execution of the Design-and –build construction. The PMC shall act as advocate and representatives of the PMU and PIU throughout the construction, so that all of the goals from beginning to end are satisfactorily met and accomplished. Taking any action under a civil works contract designated the Consultant as “Engineer”, for which action, PMC is expected to deliver following major tasks but not limited to:

- (i) **Review and assess detailed engineering design.** The design-and-build contractor will prepare the detailed engineering design, specification, bill of quantity, and cost estimation of the civil works under the project. The PMC is required to carry out the gap analysis and prepare the gap analysis report with recommendations for improvements if any from the viewpoint of PMU and PIU of RUSL. In addition, the buildings need to be designed in such a way that green and intelligent system is incorporated and design is aligned with the university and faculty vision. The PMC will also make sure that design reflects international and / or local best practices to promote innovative learning, and energy efficient green architecture, aesthetic aspects to harmonize with the natural features and resources surrounding the site.

If PMU and PIU of RUSL approve the improvements identified and recommended by PMC, required actions should be taken to implement with help of design-and-build contractor.

- (ii) **Design of Construction as green building.** The PMC is expected to ensure the adoption of new technologies that are constantly being developed to complement current practices in creating greener structures and the application of processes that are environmentally responsible and resource-efficient throughout a building's life-

cycle: from planning to design, construction, operation, maintenance, renovation, and demolition. This requires close cooperation of the contractor, the architects, the engineers, and the client at all project stages. The Green Building practices expands and complements the classical building design concerns of economy, utility, durability, and comfort. The Constructions are expected to meet energy efficiency requirements as mentioned in the Bid Documents.

- (iii) **Manage cost, scope and schedule.** The PMC will periodically verify cost estimates prepared by design-and-build contractor by analyzing detailed unit rate and cost items, and make sure construction cost is within the budget. If changes are required, evaluate the design revisions and justifications of the cost estimates as well as implications of the time schedule. The PMC will also assist PMU and PIU in managing time by developing project management plan, master project time schedule and work breakdown structure. For quality control, PMC will also conduct testing and acceptance of all materials and inspect them before utilization. PMC will also review, evaluate and process all applications for progress billing or payments of the design-and-build contractors.
- (iv) **Document project activities.** The PMC will submit weekly, monthly and quarterly progress reports as well as project completion report. The electronic construction management information system and electronic document control and project records system will also be developed and maintained. PMC is also requested to review and record all approved deviations of the as-built plans prepared by the design-and-build contractor prior to the finalization.
- (v) **Implementation based on the environmental management plan of RUSL.** These include update of the initial environmental examination, environmental management plan and environmental monitoring plan as per ADB environmental safeguard guidelines. The consultants also assist contractors, PMU and PIU of RUSL in obtaining necessary site clearances if required. The consultants will also make sure the safety of the people involved in the construction activities

Further, the consultant is required to:

- a. Monitor, manage review and evaluate all construction activities, issues that may arise during construction to ensure that the final output requirements are met according to quality, budget, and schedule.
- b. Monitor safety programs adoption by design-and-build contractors, especially those safety provisions for the overall works as provided by the general conditions of the design and build constructions

- (vi) **Supervision, Monitoring and Managing the Design and Build Contractors.** PMC is the controller of design and build contractors on behalf of PMU. Under this PMC is expected to:
- a. Supervise manage and monitor all design activities and outputs to ensure that the project requirements are met and are according to budget, schedule, function, aesthetics, and low maintenance and running costs
  - b. Evaluate and ensure that all plans, specifications, bill of quantities, design reports, construction schedule, time schedules and other documents submitted by the contractor: (i) are clear, coordinated and complete; (ii) can be executed within quality, cost and time parameters; and (iii) can be successfully constructed, operated and maintained.
  - c. Supervise manage and monitor all construction activities to ensure that the project requirements are met according to quality, budget, and schedule; participate in the progress review meetings at PMU and PIU.
- (vii) **Dispute resolution.** The Consultant shall: (i) take necessary action to minimise disputes during contract implementation; (ii) Assist the adjudicator/DAB for disputes referred for adjudication in order to resolve the dispute in a timely manner; and (iii) Assist the arbitration proceedings for disputes referred for arbitration in order to resolve the dispute in a timely manner.
- (viii) **Post Construction Activities.** PMC is expected to organize and conduct smooth handing over of the constructions at the end of the construction period. PMC is also expected to assist and monitor the processing of application for certificate of occupancy and other government/regulatory agency approvals from their respective authorities, issue of construction completion report, monitor and review the as build drawings to ensure the faculty building and laboratory facilities requirements and the University Master Development Plans and Development Principles are being met.

The PMC shall:

- i. Verify and approve the physical construction and installation of the various facilities and systems;

- ii. Identify defects prior to taking over the site;
- iii. Ensure remedy of such defects at the contractor's cost prior to issue of completion certificate;
- iv. Recommend and draft the certificate to the Employer of the contracts to issue completion certificates in accordance with the signed contract;
- v. Obtain supply trade files, documents, test certificates, performance warranties/guarantees, spare parts list, maintenance procedures/ manuals, no claim certificate and other relevant documents/information from the contractors and transmit the same to the Client in both hard copy and electronic formats;
- vi. Obtain the AS BUILT drawings immediately on completion of each area after reviewing, verifying and approving the "as-built" corrections to all plans, drawings and other documents;
- vii. Maintain 2 sets of hard copy and 2 soft copies and specifications marked with "as-built" conditions and transmit the same to the Client;
- viii. Ensure that the constructed works and sites are cleaned and prepared for occupancy and use;
- ix. Ensure the smooth handing over the constructed works; and
- x. Verify and approve final payment to the Contractor after adjusting any liquidated damages and security deposits if any, under the terms of contracts.

## **V. TEAM COMPOSITION AND QUALIFICATION REQUIREMENTS FOR KEY EXPERTS**

13. Proposed buildings, especially the specified labs and lecture rooms, are expected to be learning spaces that support innovative pedagogies which will promote active and collaborative learning. Key considerations in the 21st century learning space design include, among other things, flexibility of the facilities to promote accommodation of emerging pedagogies, creativity to inspire learners and enterprising nature to make each space capable of supporting different purposes. The latter will lead to better utilization of buildings. Considering the above facts as well as the complex nature of these innovative learning spaces, relevant experience (local and / or international) will be necessary to make the best out of this large investment, and experience with the similar ADB-funded projects will be an advantage. The consultants should propose a comprehensive team of local consultants with task assignments for each key staff along with sufficient support staff to meet the objectives and scope of the services.

14. Indicative list of the positions of key staff for PMC who will be evaluated during the technical evaluation process is given below (note that the list does not include support staffs for field work and other activities such as field survey, data collection, documentation, etc.). The

consultant may enhance the utility of expertise by proposing their own estimate of the required number of positions/person-months to carry out the assignment.

| <b>Sl No.</b> | <b>Position / Area of Expertise</b>         | <b>No. of Expertise/ Staffs</b> | <b>Total Person-Month</b> |
|---------------|---|---------------------------------|---------------------------|
| 1             | Team Leader: Site Engineer                  | 1                               | 33                        |
| 2             | Senior Architect                            | 1                               | 5.5                       |
| 3             | Energy efficient and Green Building Expert  | 1                               | 5.5                       |
| 4             | Senior Structural Engineer (civil)          | 1                               | 5.5                       |
| 5             | Laboratory Design Expert                    | 1                               | 5.5                       |
| 6             | Electrical Mechanical and Plumbing Engineer | 1                               | 5.5                       |
| <b>Total</b>  |   | <b>6</b>                        | <b>60.5</b>               |

In addition to the above listed positions of professionals, the consultant should make arrangements and submit CVs at proposed stage for other experts and support professionals with adequate experience in relevant fields approximately for 132 person-months. During the technical evaluation process, non-key staff will not be evaluated individually. However, they will be considered collectively along with other support staff, if any, under “Work Schedule and Staffing” criteria of evaluation.

## **VI. TERMS OF REFERENCE OF CONSULTANTS**

15. Generally, each consultant will work under the direct guidance/supervision of the designated team leader of the PMC team in close consultation with the project director of PMU. The outline terms of reference of the PMC are described below.

### **A. Consultants**

#### **a. Team Leader / Site Engineer**

16. The Team Leader / Site engineer is preferred to have a Bachelor’s degree in civil engineering and be a senior civil engineer with the Corporate membership of the Institution of Engineers of Sri Lanka having at least 15 years of professional engineering experience with at



least 10 years' of experience as a site engineer, of professional engineering experience with at least 5 years' experience as a site engineer, assistant site engineer or equivalent on similar and comparable construction works, including assignments in different locations. Knowledge and experience with design and construction, modern design and construction technology and contractual arrangements used for the project is important.

The Team leader/ site engineer is expected to supervise, manage and advice the design and build contractor, maintaining of required records relevant to the construction, coordination with PIU, University and design and build contractor, participate in progress review meeting in respective university, review design documents and change orders, check and certify the invoices of constructions and facilitate the university to partially or completely take over the building. Experience in designing green/energy efficient infrastructure and working in educational infrastructure development project, particularly higher education, will be an advantage.

The team leader will coordinate the efforts of the project management team, to ensure that management and technical policies are correctly and consistently implemented in all aspects of the project. The team leader will be a point of contact, and lead a series of meetings to monitor the cost, scope and schedule of the design-and-build contract. The team leader will also oversee agenda of the project team meetings and folder and back-up all pertaining documents for proper documentation. Monitoring team performance and intervening when necessary to ensure successful delivery of projects are also important. The team leader will also review and endorse contractor's personnel to be deployed at the project sites, and submit and endorse to PMU and PIU of RUSL for approval. He is required to advice and guide Design and build contractor.

It is a compulsory requirement to deploy the team leader on fulltime basis for 33-months' period throughout the consultancy service or any other time agreed by both parties.

#### **b. Senior Architect**

17. The Senior Architect is preferred to be chartered architect having a Master's degree in architecture and having at least 15 years of professional architectural experience with at least 3 years' experience as a senior architect of designing of modern and scientific building or equivalent on similar and comparable construction works, including assignments in different locations. A thorough knowledge and experience with national design-and-build contract "best practices", modern design and construction technology and contractual arrangements used for the project are important.

He/she will work with other experts and review the architectural design of the facilities. Major tasks include revision of the layout plan of the facilities, architectural plans, and design of all

building works and structures to be constructed. He is required to advise and guide Design and build contractors and also expected to guide Site engineer in construction issues. The Senior Architect will be responsible for reporting to the project director of PMU or designated representative for managing the following individual consultants and tasks.

The Senior Architect is expected to serve for 5.5 person-months period continually/intermittently or as required. The total duration is sub divided in to 2 person-months during design stage for design review and 3.5 person-months during the construction stage intermittently.

**c. Energy Efficiency and Green Building Expert**

18. The Energy Efficiency and Green Building expert is preferred to have a Master's degree in energy efficiency, green building and other related fields having at least five years of experience in relevant field.

The Energy Efficiency and Green Building expert will assist the team in incorporating climate resilient and green infrastructure/technology development in engineering design. The expert also ensures that the green features are properly addressed in the design. He/she will assist the team leader to incorporate provision of green infrastructure/technology/development in engineering designs. He/she will also ensure that the green features are properly addressed during the construction stage. He/she will arrange to have a relevant ISO energy management certification or any other certification required in favor of climate resilient and green infrastructure, such as green building rating system certification by Urban Development Authority in Sri Lanka. He/she will also perform any other task as assigned by the project authority related to climate and environment.

The Energy Efficiency and Green Building Expert is expected to serve for 5.5 person-months period continually/intermittently. The total duration is sub divided in to 2 person-months during design stage for design review and 3.5 person-months during the construction stage intermittently.

**d. Senior Structural Engineer (civil)**

19. The Senior Structural Engineer (civil) is preferred to be a chartered civil engineer with the specialization in the field of structural engineering and have a Master's degree in structural engineering or other relevant field, with at least 15 years of professional structural engineering experience of a similar and comparable nature with previous experience as a team leader.

Experience in designing green/energy efficient infrastructure and working in educational infrastructure development project, particularly higher education, will be an advantage.

The Senior Structural Engineer is responsible to (i) review the structural design of buildings and infrastructure, etc; (ii) review the detailed climate-resilient, green and intelligent building and engineering designs, bill of quantities; (iii) coordinate and guide all activities in connection with the structural design aspect of the project; (iv) maintain liaison with the architects for coordinated effort in arriving at energy efficient, low carbon emission, and economical design solution; (v) coordinate all super structure component design with the architects; and (vi) do any other works necessary for proper consultancy. He/she also required to confirm the as build structural design at the end of the construction.

The Senior Structural Engineer is expected to serve for 5.5 person-months period continually/intermittently or as required. The total duration is sub divided in to 2 person-months during design stage for design review and 3.5 person-months during the construction stage intermittently.

#### **e. Laboratory Design Expert**

20. The Laboratory Design Expert – is preferred to have a Bachelor’s degree in Mechanical Engineering or Electrical/Electronic Engineering or Biology with at least 5 years’ experience in design and supervision of laboratories in similar nature.

The Laboratory Design Expert is expected to review the Design of Laboratories related to Mechanical Engineering, Electrical Engineering, Electronic Engineering and Bio systems subject areas from the point of view, adequacy of space, internal arrangements, supply of electricity, water, safety, storage, disposal of laboratory, waste and other special requirements. The Expert needs to supervise construction of laboratories with other consultants.

The Laboratory Design Expert is expected to serve for 5.5 person-months period continually/intermittently or as required. The total duration is sub divided in to 2 person-months during design stage for design review and 3.5 person-months during the construction stage intermittently.

**f. Mechanical, Electrical and Plumbing Engineer (MEP)**

21. The Mechanical, Electrical and Plumbing Engineer shall be a chartered engineer with the specialization in the field of Mechanical, Electrical and Plumbing, and have 10 years of experience in MEP designs with 5 years of experience in review and design of Electro-mechanical engineering elements related to Education building. Experience in construction supervision and designing in foreign funded projects is an added advantage.

The MEP Engineer shall be responsible for (i) the reviewing and approving MEP related designs/drawings/details submitted by contractor; (ii) ensure quality assurance and quality control; and (iii) provide assistance in resolving technical and contractual issues.

The MEP Engineer is expected to serve for 5.5 person-months period continually/intermittently or as required. The total duration is sub divided in to 2 person-months during design stage for design review and 4 person-months during the construction stage intermittently.

**Non key Experts**

**a. Quantity Surveyor**

22. The site quantity surveyor is preferred to have a Bachelor's degree and be a licensed professional with at least 5 years' post qualifying experience in cost estimating and quantity surveying on major construction projects of a comparable nature. The quantity surveyor is expected to estimate materials, time and labour costs.

The Quantity Surveyor shall prepare, negotiate and analyze cost estimates and check, review and make recommendations on contractor's invoices. Further the Quantity Surveyor is expected to review change order invoices of contracts, review the estimating of additional works, maintain relevant documents and advice and guild the project staff.

It is a compulsory requirement to deploy the Quantity Surveyor on full time basis continually for 33 months' period throughout the construction period in relevant construction site or any other time period agreed by both parties during the contract period which is essential for completing the consultancy service.

**a. Technical Officer**

The Technical officer is preferred to have engineering field or having obtained a certificate of proficiency not below than the National Vocational qualification (NVQ) 6, issued by a Technical Vocational Training Institute accepted by Tertiary and Vocational Education Commission for a

post related with 5 years' experience. The technical officer should be deployed on full time basis for the period of 33 months to support activities of the project monitoring activities.

b. Other non-key staff

In addition to the above non-key experts, a Management Assistant and an Office Assistant should be deployed on full time basis for the period of 33 months to support the activities of PMC.

In addition to the key staff, a Technical Officer, Management Assistant and an Office Assistant should be deployed on full time basis for the period of 33 months to support activities of the project monitoring activities.

## **VII. REPORTING REQUIREMENTS AND TIME SCHEDULE FOR DELIVERABLES**

23. The total duration of the assignment is expected to be 33 months for PMC, and the consultant team will focus its efforts to facilitate the design-and-build contract for the civil work components under the proposed project. The selection of the consultancy firm will be based on Quality and Cost based Selection (QCBS) method with a quality-cost ratio of 80:20. All consultants, including the firm and individuals, will be recruited in accordance with ADB Procurement Policy (2017, as amended from time to time) and Procurement Regulations for ADB Borrowers: Goods, Works, Non-consulting and Consulting Services (2017, as amended from time to time). **A Biodata technical proposal will be used for the selection of a firm.**

24. The PMC will assist the PMU in preparing and submitting quarterly progress reports (every 3 months) to ADB through the Project Director. The quarterly progress report format will be developed by the consultant in consultation with the PMU and will meet the requirements of ADB and the government. An inception report and interim reports will be prepared. A draft final report will be submitted to ADB, 3 months before the completion of the construction. ADB comments, and the comments of the government will be provided before the commencement of the final month of the project and a final report will be presented. In addition, PMC will prepare any reports required in relation to the project as requested by the Project Director. The following table summarizes the deliverables expected in this consulting service.

| <b>Report No</b> | <b>Title</b>                 | <b>Main contents</b>   | <b>Time</b>   |
|------------------|------------------------------|--|---|
| 1                | Inception report             | Submission of the inception report outlining the understanding of the work to be conducted, detailed description of each step to be taken, activity to be executed, resources needed and the subsequent timelines for completion of this consultancy engagement. The inception report should include a Gantt chart prepared using MS Project or similar software, for review by the relevant stakeholders. | Within two weeks of the award of the contract.              |
| 2                | Scope of Works Document      | Scope of works document.   | Within two weeks of the submission of the inception report. |
| 3                | Review report                | Review of design-and-build Contractor's and Expert Panel documents, designs, bills of quantity and other documentation.  | Within four weeks of the award of the contract.             |
| 4                | Technical report             | 'For Construction' drawing and specifications. (approval for drawings and specifications to commence the construction by design-and-build contractors)   | Within two months of commencing of designs.                 |
| 5                | Monthly report               | Monthly progress and cost reports (on a monthly basis within the first week of the subsequent month)   | Within one week of the completion of the meeting            |
| 6                | Monthly cash forecast report | Monthly cash forecast report – describes next month cash requirement for make payments to the contractors including advances part payments bill settlements and payments to the consultant etc.  | Before one week of end of the month.                        |
| 7                | Quarterly progress report    | Summarize the progress using agreed templates.   | Quarterly.  |
| 8                | Special meeting minutes      | As required.   | Within one week of the completion of the Meeting.           |

| <b>Report No</b> | <b>Title</b>                 | <b>Main contents</b>  | <b>Time</b>  |
|------------------|------------------------------|---|--|
| 9                | Interim payment certificates | Interim payment certificates, monthly interim payment request received from contractors or as stipulated under the terms and conditions of the contract.                  | Within two weeks of receiving of interim payment request from contractors. |
| 10               | Project completion report    | Practical completion report, final account, certificate of final completion and other close out documents - As stipulated under the terms and conditions of the contract. | As per the conditions of the contract.                                     |
| 11               | Other report                 | Any other reports have to be present according to the TOR and the contract agreement.   | As stipulated in the TOR and/or the contract agreement.                    |

(Note) one week is defined as 5 working days.

## **VIII. CLIENT'S INPUT AND COUNTERPART PERSONNEL**

### **20. Services, facilities, and property to be made available to the consultant by the client.**

The PMU and PIU of RUSL will provide available reports, data and information relevant to PMC assignments. Design and build contractor will provide sufficient office space for consultant's office. The provisional sum has been allocated for office furniture for team leader, managerial officers and other office staff. The equipment and furniture purchased under this item is considered as property of the Project.

However, the consultants have to make the arrangements for obtaining required utilities such as stationary, telephone and internet facility, etc.

**21. Professional and support counterpart personnel to be assigned by the client to the consultant's team.** The PMU and PIU will provide adequate counterpart support to the consultant's team for this assignment. The counterpart of PMU and PIU is (i) Project Director, (ii) Deputy Project Director of PIU and Senior Procurement Officer of PIU, (iii) Procurement

Specialist (iv) Project Engineers of PMU and PIU, (v) university engineer of RUSL under the supervision of the MOE management. The focal point and other faculties of end-user at universities will also support the consultant's team, as necessary. There would be no support counterpart staff assigned to the Consultant by the client.

## **IX. INFORMATION TO FACILITATE PROPOSAL**

22. Upon written request from the consultants, the client will provide the consultants with all available data, environmental and social safeguard documents, site plans and bid proposal, designs and BOQs prepared by the contractor, and Contract Agreement. ADB procurement guidelines will also be available.