Request for Proposals





The Government of Sri Lanka (GOSL) has identified the need of an expressway towards Sabaragamuwa province which will function as a fast road link between Sabaragamuwa and Uva provinces from Colombo the economic capital of the country. With the above perspective, the RDA has almost finalized a suitable road corridor to construct this Expressway considering present and future development scenarios of the country. This expressway project is officially called as "Ruwanpura Expressway Project" or REP.

As per the final trace, the proposed expressway is to start from Kahathuduwa Interchange of the Southern Expressway and to end at Pelmadulla connecting to Pelmadulla – Nonagama (A018) road. The length of the Expressway is about 76+450 km and phases for the REP are established as follows.

- Phase I Southern Expressway (Kahathuduwa) to Ingiriya, (Ch. 0+000 km Ch. 25+000 km)
- Phase II Ingiriya to Kiriella (Ch. 25+000 km Ch. 44+000 km)
- Phase III Kiriella to Pelmadulla (Ch. 44+000 km Ch. 76+450 km)

In order to assess the environmental and social feasibility of the final trace and also to obtain the environmental approval from the Central Environmental Authority (CEA), the RDA is planning to conduct an EIA, ES, SIA and RAP for the Phase II and III in accordance with the CEA - Terms of Reference (TOR) given for the EIA (Refer Annexure 1).

The Terms of Reference (TOR) prepared separately for EIA, ES, SIA and RAP are also attached hereto for your reference (Refer Annexure 2, 3 and 4).

The technical and financial proposals are called from the eligible individual Consultants to carry out the following studies and submit the reports as per the TOR's annexed hereto.

- 1. Environmental Impact Assessment (EIA)
- 2. Ecological Study (ES)
- 3. Social Impact Assessment (SIA) and Resettlement Action Plan (RAP)

The financial proposal should include remuneration of the Consultants and his team members, cost of the office, office furniture and equipment, stationary, photo copy, fax, email, and all the other maintenance cost of the office including transport.

You are kindly invited to forward your Technical and Financial proposals in sealed envelopes to reach the under mentioned address on or before 14.00 pm on 17th November 2021. The name of the proposal should be stated on the top left hand corner of the envelop. An individual Consultant can submit a Technical and Financial proposal for one of the above study based on his expertise. The

individual Consultant who will select for the EIA study should act as the Team Leader and compile all the required details of the other studies to the EIA report.

Address of the proposals to be submitted,

Director, Environmental and Social Development, Road Development Authority, 5th Floor, Maga Neguma Maha Medura, No.216, Denzil Kobbekaduwa Mawatha, Koswatta, Battaramulla.

Eng. L.V.S. Weerakoon Director General, Road Development Authority

TERMS OF REFERENCE

(This ToR is valid only for one and half years from the date of issue)

This ToR has been issued by the Central Environmental Authority (CEA) only as a means of providing guidance for preparation of the Environmental Impact Assessment (EIA) report for the proposed project. Required information on impacts mitigation measures etc. which will be useful in decision making should be incorporated in the EIA report based on the findings of the EIA study.

Issuance of the ToR does not in any way reflect an agreement on the part of the CEA regarding the granting of approval for the project. It is the responsibility of the project proponent to clear any issues regarding land ownership and to obtain approvals required from agencies other than the CEA. In the case where the project is to be sited on state land we recommend obtaining "in principle" approval of the land owner, prior to embarking on the EIA report preparation. The CEA will not be responsible for any costs incurred by the project proponent in EIA report preparation in case the project is rejected.

Project Name	:	Ruwanpura Expressway Project Phase 2 from Ingiriya (26+300 Km) to Ratnapura (52+500 Km) and Phase 3 from Ratnapura (52+500 Km) to Palmadulla (76+450 Km)
Project Proponent	:	Road Development Authority
Project Approving Agency	:	Central Environmental Authority
Report requirement	:	Environmental Impact Assessment (EIA) report
Date of issue of the ToR	:	04.10.2021

Report format

Executive Summary

- 1. Introduction
- 2. Reasonable alternatives and description of the proposed project
- 3. Description of the existing environment

:

- 4. Anticipated environmental impacts of proposed project
- 5. Proposed mitigation measures
- 6. Cost Benefit Analysis
- 7. Environmental Management Plan
- 8. Conclusion and Recommendation

Annexure

- I Terms of Reference
- II References
- III Sources of data & information
- IV List of preparers including their work allocation (Report should be authenticated by the preparers)
- V Comments made by the public, NGOs and other agencies during formal and informal scoping meetings held by the EIA study Team
- VI Relevant approvals and consent letters obtained
- VII Complete set of relevant maps, tables, charts, layout plans and other details

Executive Summary

The summary should be a brief, non-technical summary of the justification of the proposed project, description of the salient features of the project, the existing environment of the project sites and its environs, key environmental impacts, the measures proposed to mitigate the environmental impacts, extended cost benefit analysis, monitoring programme and conclusions.

A one page summary table indicating the significant impacts and proposed mitigation measures should be presented.

1. INTRODUCTION

- 1.1 Background of the project (Brief history of the project, its current status etc.)
- 1.2 Objective of the proposed project and justification of the project (Summarize the need of the project. Please note that concerns of the planning agencies such as National Physical Planning Department need to be considered).
- 1.3 Objective of the EIA report (Specify the objectives of the assessment and the relationship of the results to project design and implementation).
- 1.4 Methodologies and technologies adopted in EIA report preparation
- 1.5 Conformity with existing or proposed developments and/ or conservation plans in the area/ relevant government policies.
- Preliminary approvals needed for the project and any conditions laid down by state agencies in granting preliminary clearance for the project
 Ex: National Physical Planning Department, National Planning Department, Urban Development Authority, Irrigation Department, Archeological Department

2. REASONABLE ALTERNATIVES AND DESCRIPTION OF THE PROPOSED PROJECT

2.1 Evaluation of Alternatives

- Describe reasonable alternatives considered in the course of developing the project and the basic environmental engineering and economic parameters used in their investigation and evaluation. The following alternatives shall be described;
 - No action alternative
 - Alternative routes
 - Siting
 - Design
 - Technology selection
 - Construction methods
- Compare alternatives considered both during pre-feasibility and feasibility stages of the project in terms of potential environmental impacts, mitigation of environmental impacts, capital and operating costs, reliability etc.
- Comparison of the alternatives considered and recommendations should be given with respect to selected option (Give clear reasons for why such alternatives were rejected in preference to the one recommended).

2.2 Description of the proposed project

2.2.1. Project Location land ownership of the proposed project

Following details should be given in order to get a clear picture of the project

- Location, indicating the Divisional Secretariat Division/s and the Local Authority area/s within which the project site falls. GPS coordinates of the Centerline of the final trace.
- Location map(s) of appropriate scale indicating the project site (road trace and surrounding land use). Clear coloured and readable maps together with diagrams and photographs to be provided for reviewer to get a clear understanding of the project area.
- Ownership of the project site (public / private / other- specify) (If state owned especially either by the Forest Department or Department of Wildlife Conservation, in principle approval/ consent of the state agencies are required for release of the land for the project).

2.2.2. Project Details

- Design details of all project components including the following
 - Length of the trace, width of the Right of Way (RoW), length, width and height of the cut /fill (embankment) sections, length, width, height and vertical clearances of the elevated structures, number of lanes, interchanges, ramps, toll plazas, dimensions and number of grade separated crossings (overpasses, underpasses etc) and tunnels (if any), drainage provisions, service areas to be kept etc
- Methodology of construction
 - Steps in construction process such as methodologies applied for preliminary works, earth works, construction of structures (including installation of foundations, piles, piers, decks within the marshes and water bodies), ground development and removal of unwanted materials, temporary facilities, Greenery works and temporary activities should be described. Construction technology to be applied for plain terrain/hilly area/water bodies should also be described.
 - All relevant details including methodology of construction of any actions/additional structures both permanent and temporary (such as pilot/service roads) to be installed to support the project activities, area earmarked and the removal procedure of such works also need to be described. Any engineering or technical adaptation to be followed to avoid ground subsidence/ any collapses. Management procedures/ technologies to be adopted to be indicated when road traverses through already established public utility services.
 - Construction materials
 - Quantities of raw material required and sources (all sources for material extraction should be proposed upon identification of the availability of such sources with the relevant agencies such as GSMB. Approvals/consent obtained from such agencies needs to be annexed)
 - Locations of material storage, temporary facilities to be established
 - Details of supportive plants such as operation of asphalt batching, metal crushing along with location
 - Temporary stockpiling & disposal of earth/soil/debris with locations, anticipated quantities and suitability of selected sites for such work and any

improvements/developments required at such sites (Attach recommendations received from such relevant agencies).

- Solid waste & wastewater management
 - Anticipated quantity of solid waste such as plastics, cement debris, construction debris etc. / scheduled waste/ with quantities / materials use se for piling/ and its management and final disposal
 - Wastewater generated due to project activities (including labour camps, dewatering process of which water accumulated during the construction/ piling) and its management.
- Project Layout plan
 - The layout plan(s) of the project at appropriate scale. This should indicate all the project components mentioned above and reservations to be maintained. The layout plan should also indicate the project area depicting RoW of the road trace and foot print of elevated structures, embankment/cut sections of the road trace and interchanges.

2.2.3 Implementation plan

- Construction programme (timing and duration of all project activities from preconstruction to full operation)
- Requirement and availability of workforce
- Phased development activities If such activities are envisaged
- Methodology of operation of the project components, any maintenance requirements during operational phase and methodologies to be used
- Environmental monitoring works along with locations for all environmental aspects especially noise, air quality and ground vibration, low lying area filling both construction and operation stages
- Ownership of the project after completion of the project

2.2.4 **Project cost, investment and funding sources.**

-Project cost including construction, operation, maintenance cost along with break downs -Investment and funding sources.

3. DESCRIPTION OF THE EXISTING ENVIRONMENT

3.1 Study Area

The study area for the assessment shall include but not be limited to, the following;

- i) Project site (area within proposed Right of Way (RoW) and areas where project related constructions such as drainage structures, interchanges etc. are planned)
- ii) The area beyond the Right of Way (Row) and 100 m buffer that has a likelihood of being significantly impacted ("influenced area"), which must also include areas in the vicinity of the ancillary constructions. (The limits of "influenced area" should be identified by the study team with clear justification.
- iii) Offsite locations which will be affected due to activities of the project.

Assemble, evaluate and present baseline data on the relevant environmental characteristics of the areas identified under (i), (ii) and (iii) above.

This chapter should provide representative information on physical, biological socio-economic, archaeological and cultural aspects of the environment likely to be affected by any activity of the project during and after the project construction period. Information should be presented in a comprehensive format using photographs, tables, maps and diagrams where appropriate. The maps provided must be clear, readable and in coloured form and appropriate scale. An updated satellite images may also be used. The methods used to collect data should be clearly stated under each category.

The existing environment should be described under following;

3.2 Physical aspects

- Description of the existing land use (directly and indirectly affected land use categories/ areas to be indicated)
- Geology and soil types
 - Identify of terrain conditions with the aid of existing contour maps, slope maps, geological and landslide hazard zonation maps. Drone survey/photo geological survey could be provided as required.
 - Describe general geology of the area and detailed description of geology along the road trace of the project. Provide a regional geology map (1:100,000) to describe geology of the region and site specific geology map to describe the detailed geology of the impact area at suitable scale (preferably at 1:10,000 scale on 500m distance either side of the center line, without enlarging existing 1:100,000 regional geology maps)
 - Bore-hole data or augur-hole data to determine the soil type and the thickness of the soil layer and depth to hard bedrock at every major structure locations along the road trace.
 Provide few geological sections along the road and across the road (Few bore-holes or auger-holes should be drilled at suitable locations up to the bed rock)
 - Include a detailed landslide study report along the road trace to identify landslide risk of the proposed road and to identify previous landslide locations which may affect the road trace (Records of landslide occurrence to be provided).
 - Geophysical survey to identify abandoned gem mining pits and other cavities of voids especially along the river trace.
 - Include detailed groundwater study report of the entire project area.
 - Existing ground levels with respect to MSL along the trace (LS) and the immediate vicinity
- Rainfall data both historic and projected for climate change scenarios (monthly rainfall data for the last 10 years for the rainfall stations in the vicinity of the proposed expressway trace, critical rain fall events induced flooding, updated IDF curves)
- Hydrology and drainage
 - List and maps showing rivers, streams, drainage pathways, flood plains etc. encountered (with basic information such as width, peak flows etc.)
 - Flood retention/ detention areas, marshy lands or any other wetland encountered (with basic information such as extents etc.). Relevant maps in this regard needs to be provided additionally.
 - o Present flood detention capacity of the lowlands on either sides of the trace
 - List and layout of existing flood protection schemes or irrigation schemes (irrigation structures/ anicuts/ maintenance roads etc.) encountered
 - Drainage pattern in and around the proposed trace including drainage capacity of existing waterways and flood ways to which collected water from the road trace is to be discharged (This should be supported by a map of the stream network of the area, clearly labeled with the names of all the significant streams in the network. The map shall extend up to the catchment boundaries).
- Surface water quality along the affected areas (*including BOD₅*, *COD*, *Total Suspended Solids*, *Oil and grease, e-coli and electrical conductivity*) and water uses including water supply intakes and existing sources of water pollution if any etc

- Ground water quality (*Water Level, pH, Turbidity, BOD*₅, COD, Temperature, Electrical conductivity, Total Dissolved Solid, and Total coli form and e-coli) and present uses of ground water.
- Air quality, ground vibration & noise
 - (Baseline information on air quality, ground vibration levels, noise levels, noise & ground vibration sensitive receptors etc. and locations identified for baseline establishement related to identification of ground water quality, Surface water quality, noise and vibration to be provided including all relevent details together with the maps)
- Information regarding natural disaster (occurrence, frequency and duration of incident prevailed to be indicated)
 - Floods- including flood peak value, inundation levels in the last 50/100 years, inundation periods and inundation areas)
- 3.2 Ecological aspects (both terrestrial and aquatic)
 - A description of protected areas (extent, category etc., ecological services and importance) and other sensitive/reservation habitats (rock outcrops, wetlands, rivers/riverine vegetation, streams etc.) lying within the project area (described under (i, ii, iii above). A map should be provided with the demarcation of the PAs together with the project entities (ROW, other constructions and a 1 km buffer from either side from the centerline).
 - A description of the different natural, semi-natural and anthropogenic habitat types (species composition, distribution) in the study area. Ecological significance of the natural/semi-natural habitats should be described.
 - Description of fauna and flora including their distribution status (native, endemic, exotic, migrant) and conservation status (threatened status Critically Endangered, Endangered, Vulnerable, Near Threatened or Least Concern) (if any) within these habitats as divulged through a field survey conducted as part of the EIA and those that have been recorded previously (as evident from published and unpublished documents, informal interviews). Baseline studies and data collection may need to consider seasonal factors.
 - Animal movement pathways (including nocturnal spices, avifauna, primates (monkeys etc.) aquatic species etc.)
 - Nesting and roosting sites (the latter would also include those of bats) within the study area
 - Presence of any commercially important species

3.3 Socio-economic and cultural aspects

- Settlements (number of houses, government institutes, commercial buildings/ workplaces, religious places etc.) within the area directly affected by project and within the influenced area separately
- Existing sensitive receptors on either side of the RoW (such as schools, religious places, court houses, archeological monuments/ heritage sites/ locations envisaged with cultural activities)
- Socio economic status of the affected population
- Principal economic activities carried out within the directly affected area
- Agricultural areas (types of crops, extent, number of farmers affected directly and indirectly)
- Planned development activities
- Presence of infrastructure, public/ common utilities/ facilities within directly affected area (roads, railways, water supply lines, sewerage lines, power transmission lines, telecommunication network etc.)
- Service area covered by existing water supply/irrigation/ flood control structures
- Any land mark or evidence of historic, religious, archeological or cultural/ heritage importance known to be in the study area
- Existing environmental considerations, problems or issues prevailing in the area.

4. ANTICIPATED ENVIRONMENTAL IMPACTS OF THE PROPOSED PROJECT

This chapter should show the overall impacts of the project on the individual environmental components. Impacts should include the direct and indirect, long and short-term, positive and negative effects. When describing the impacts indicate which are irreversible or unavoidable and which can be mitigated to the extent possible. Wherever possible describe impacts quantitatively.

Significance of impacts should be assessed using appropriate techniques. Impacts should be discussed in the order of significance.

Impacts caused by the project activities during the construction phase may differ from the longterm impacts during the operational phase. Significant short-term impacts have to be considered whenever necessary. Following impacts, among others, have to be analyzed and evaluated.

Special attention should be paid but not limited to;

• Hydrological and drainage impacts

- Impacts on the natural drainage system to be studied using a mathematical model and the model need to calibrated and verified for selected past flood events with observed data. Impacts in both Construction (including temporary filling for pilot road , yards, working platforms etc) and operational phases of the proposed project on the hydrology should be analyzed. Climate change impacts (increase in rainfall frequency/intensity) should be incorporated as appropriate in the design. Future developments in land use should also be incorporated. A suitable critical Design rainfall event should be adopted depending on the catchment characteristics.
- Evaluation of impacts from floods (10 year, 25 year, 50 year, 100 year etc.) including impacts on flood detention/retention capacity, discharge levels, storage capacity of affected water bodies , for both construction and operational phases . Worst case scenario, which is likely to be the construction stage should be analyzed in depth.
 - Pilot road drainage openings shall be provided for 5 year return period floods.
 - Subsequently, the main trace shall be designed for 100 year return period floods. 10, 25, 50 year return period flood impacts should also be checked in terms of inundation extent, flood depths, period of inundation etc against the baseline conditions (without the expressway).
- Impacts on river/stream flows (including water levels/flows in the downstream part of the catchment), blockage of drainage pathways, inundation areas and inundation time periods including permanent or temporary stream/channel diversions (if any) should also be discussed using proper hydrological studies. Inundation maps, hydrographs, etc shall be presented in the discussion.
- Any anticipated impacts on flood protection schemes (flood bunds/ gates etc.) and/or other irrigation schemes.
- All the long-term hydrological impacts must allow for predicted climate change.

• Impacts on surface water quality and ground water quality due to;

- Spillage, leakages and accidental discharge of fossil oil, waste oil generated from maintenance, washing, serving etc.
- Disposal of liquid (wastewater)/solid wastes (including hazardous) from workers camps, offices, toll plaza buildings, serving at motor pools (if any) etc.

• Impacts on land stability and soil erosion

- Erosion of excavated materials, construction materials etc. and spoil and other waste generated from construction activities and resultant siltation
- Impacts on the stability of the area due to the project activities and possibility of slope failures (Landslide risk assessment using evaluation criterion to be indicated).
- Stability assessment of gentle- steep slopes which identified as critical for future failures.
- Possible impacts due to subsidence/collapsing due to adits (ongoing/abandoned) especially for gem mining
- Impacts due to natural disaster such as earthquake, landslides

Biological /ecological impacts

Ecological impacts of the project should be assessed and presented clearly and must include the following.

- A description of the impacts on natural habitats and ecosystems. A map should be provided indicating the extents of the impacted areas.
- Habitat fragmentation and loss of connectivity associated with Protected Areas (PA) and Environment Protection Areas (EPA), reservations or other natural habitats should be specifically addressed. Wetlands, forests and the Kaluganga riverine forests should be given specific emphasis.
- A description of the impacts on species i.e. flora and fauna, particularly on endemic and threatened species, and impacts on migratory or movement paths, foraging, nesting and roosting sites, within PAs and other sensitive habitats. The PAs and EPAs and reservations should be addressed separately.
- Description of impacts on species/habitats outside the PA, EPA and reservations e.g. tributaries that might be impacted.
- Impacts must include the loss of habitats and the death, displacement and disturbance of fauna.
- A count (species & distribution and conservation status) of trees that would have to be removed due to project activities
- Loss and alteration of natural functions/balance of habitats / ecosystems
- Impacts on aquatic habitats and on paddy/coconut/tea/rubber cultivations due to sedimentation, increased turbidity and contamination due to run off containing increased particulate matter, oil, fuel and other hazardous material or due to other pollutants
- Impacts on ecosystem due to leakages, improper handling of construction materials (Note: Impacts in each case must be categorized as impacts during site preparation/ construction/ operation phases; low/ moderate/ high; temporary/ permanent)

• Socio economic impacts

- Impacts due to loses of properties, agricultural lands, public amenities and significance of such impacts
- Destruction of existing/ongoing economic and livelihood related activities due to construction activities

Any negative impact on social wellbeing (risk on lives, livelihoods such as gem mining, agriculture based on paddy lands, livestock etc of the people in the vicinity (especially due to flooding, in the vicinity as well as downstream part of catchment as a result of the project. Consultation of farmer organizations/public in the vicinity of highway with respect to flood aspects should be done at a satisfactory level in order to avoid public conflicts during construction stage which may lead to delays and increase of project costs and it should be documented and presented).

- Loss of social cohesions and impacts of relocation
- Impacts due to disruption of existing infrastructure facilities

- Impacts due to disruption/ damages to the public/common utilities
- Impacts on public safety including impacts on people and their properties due to sudden collapses and possible failures caused by project activities.
- Social unrest due to accidents and heavy vehicle movements due to project activities
- Possible impacts due to groundwater depletion due to deep cuts /steep slopes
- Impacts due to migration and settlement of workers (social issues, solid waste disposal, waste water disposal etc.)
- Impacts on culturally, historically and archaeologically important objects/places

• Impacts on land stability and soil erosion

- Erosion of excavated materials, construction materials etc. and spoil and other waste generated from construction activities and resultant siltation
- Impacts on the stability of the area due to the project activities and possibility of slope failures (Landslide risk assessment using evaluation criterion to be indicated).
- Stability assessment of gentle- steep slopes which identified as critical for future failures.
- Possible impacts due to subsidence/collapsing due to adits (ongoing/abandoned) especially for gem mining
- Impacts due to natural disaster such as earthquake, landslides

• Noise and vibration impacts during construction and operation.

- Noise / vibration impacts during construction (predicted cumulative impacts during pilling, compaction etc. need to be considered)
- Distribution of noise levels at expected different fleet compositions should be predicted using a validated mathematical model and results should be presented to identify the impact area and affected population etc,

• Extraction, process and transportation of construction materials (sand, soil and metal etc.)

- Impacts due to extraction of borrow material at such locations
- Impacts caused by metal crusing plants, asphalt plants, concrete batching plants, precast yards etc.
- Damages to roads due to movement of heavy vehicles

• Waste Disposal (Solid & Liquid)

- Disposal of dredged material and other solid waste and its impacts on surface/ground water and/or air
- Waste types (hazardous, domestic, recyclable waste etc.), quantities of and possible impacts (e.g. accumulation & wash off etc)
- Types and quantities of wastewater generated due to project activities. (including dewatering process of water accumulated during the construction/piling)
- Wastewater disposal method (type of wastewater with quantities / treatment process (if any) and final discharge) and its impacts on surface /ground water

5. **PROPOSED MITIGATION MEASURES**

This chapter should set out the proposed measures to minimize the impacts identified in Chapter 4 to maximum possible level including conformity to regulations and national standards. Alternative methods of mitigation should be discussed and effectiveness of the proposed measures that are to be provided should be stated. Mitigation methods should be defined in specific practical terms. A rationale should also be presented for selection of chosen mitigation measures.

A contingency plan for unexpected events for constructional and operational stage should be provided. This plan should indicate anticipated occurrences of accidents such as fire, pollution, natural hazards etc.

Special emphasis should be paid on the following

- Mitigation plan for drainage impacts
 - The drainage management plan should be prepared in order to minimize the flood impacts to the maximum possible level. Drainage management plan for 100 year return period should considered as the worst case scenario which shall be the construction stage with temporary filling (pilot road, yards, working platforms etc). The drainage management plan should comprise of layout plan of drainage structures such as viaducts/ bridges/culverts/toe drains/cut off drains etc with dimensions for main trace and drainage structures for pilot road. Mitigation measures (such as retention ponds in the upstream, resettlement of people during construction stage etc) for the people affected due to flood impacts due to temporary filling (based on 10, 25, 50, 100 return period flood analysis) should be provided.
 - Emergency management plan (with breaching sections, criteria for breaching etc) addressing impact due to temporary fillings such as pilot road, working platforms, yards, etc. should also be provided
- Mitigation plan for any ecological and/or biological impacts especially susceptible fauna and flora (reptiles, amphibians and birds etc.)
- Mitigation plan for the affected agricultural lands and wetland functions during operational and construction periods
- Resettlement plans along with schedules, compensation packages
- Measures to salvage/ relocate archeological/ cultural monuments
- Restoration of lands, water bodies, disturbed areas and infrastructure
- Landslide and slope failure mitigation strategies/ plan covering possible geotechnical hazards due to implementation of the project
- Soil conservation plan with siltation and erosion control measures
- Noise & Vibration control measures
- Pollution control measures air quality and water quality aspects
- Emergency preparedness plan in consultation with relevant agencies including identification of breaching sections in pilot/access roads for discharging floods during construction phase, landslides

6. EXTENDED COST BENEFIT ANALYSIS

Extended cost benefit analysis for the project. (The cost of the proposed remedial/ mitigation measures including the cost incurred by the loss of ecosystem services due to the proposed land use changes should be considered additionally).

7. ENVIRONMENTAL MANAGEMENT PLAN

A suitable Environmental Management Plan (EMP) should be submitted to mitigate potential adverse impacts and monitor the changes of environment and implementation of mitigation measures. This plan should include the following;

(i) Mitigation

- Identifies and summarizes anticipated significant adverse environmental impacts and risks
- Describes each mitigation measure with technical details, including the type of impact to which it relates and conditions under which it is required, together with designs, equipment descriptions, and operating procedures as appropriate
- Contingency plans for maintain services in the event of accident/floods that disrupt project operation.

(ii) Monitoring

A suitable monitoring programme should be submitted to monitor the changes of environment and implementation of mitigation measures. This plan should include the following;

- Parameters to be monitored
- Frequency of monitoring, detection limits and definition of thresholds that will signal the need for corrective action
- Location / timing of sampling
- Institutional framework for mitigation of impacts
- Responsible agency / agencies of monitoring
- (iii) Implementation arrangements
 - Specifies the implementation schedule showing phasing and coordination with overall project implementation
 - Describes the institutional framework, namely who is responsible for carrying out the mitigation and monitoring, which may include, additional topics to strengthen environmental management capability, technical assistance programs, training programs, organizational changes etc,
 - Identify the capital and recurrent costs to implement mitigation and monitoring measures described above. Identify the availability and source of funds to implement the measures.

8. CONCLUSION AND RECOMMENDATION

The environmental acceptability of the proposed project and key findings and recommendations of the assessment should be clearly stated.

Any programme to improve general environmental conditions can also be stated here.

Annexure 2

MINISTRY OF HIGHWAYS ROAD DEVELOPMENT AUTHORITY ENVIRONMENT AND SOCIAL DEVELOPMENT DIVISION

TERMS OF REFERENCE FOR ENGAGEMENT OF AN ENVIRONMENTAL SPECIALIST FOR CARRYING OUT THE ENVIRONMENTAL IMPACT ASSESSMENT (EIA) FOR RUWANPURA EXPRESSWAY – PHASE II and III

1. Background

Government of Sri Lanka (GOSL) has identified the need of an expressway towards Sabaragamuwa province, which will act as a fast road link between Sabaragamuwa and Uva provinces with Colombo the economic capital of the country. This project is considered as one of the key infrastructure development projects in the country that needs to be implemented in the near future. With the above directive, RDA initiated a Feasibility Study (FS) in year 2016 to find out a suitable road corridor to construct the Ruwanpura Expressway considering present and future development scenarios of the country. The study also considered having minimum possible impacts on the environment including the social environment (i.e. minimum resettlement impacts to general public and land acquisition cost). This expressway project was officially called as "Ruwanpura Expressway Project" or REP.

Different route alternatives were studied during the FS conducted in 2016 and a final trace was selected to conduct detailed investigations. As per the final trace of the FS, the proposed expressway is to start from Kahathuduwa Interchange of Southern Expressway and end at Pelmadulla connecting with Pelmadulla – Nonagama (A018) road.

The expressway had a length of about 74 kilometers (km) and consisted of three (3) stages as;

- Phase I Southern Expressway (Kahathuduwa) to Ingiriya, (Ch. 0+000 km Ch. 26+300 km)
- Phase II Ingiriya to Ratnapura (Ch. 26+300 km Ch. 52+500 km)
- Phase III Ratnapura to Pelmadulla(Ch. 52+500 km Ch. 73+900 km)

As per the National Environmental Act (NEA) regulations, REP was categorized as a Prescribed Project so that RDA conducted and Environmental Impact Assessment (EIA) for the trace selected under the FS of 2016 seeking the environmental approval from Central Environmental Authority (CEA) who is the Project Approving Agency (PAA). However, due to location of the major parts of the Phase II and III of the expressway within the Central Fragile Area (CFA) of the country and considering the adverse impacts to the land use changes, possible urbanization around the interchanges in the CFA and impacts due to construction of tunnels, National Physical Planning Department (NPPD) being a key stakeholder of the project was not in a position to grant their consent for the EIA for Phase II and III of REP. As a result, the environmental approval was granted only for the Phase I of the REP in 2021.

In 2020, RDA under the guidance of Ministry of Highways took actions to revisit the FS in order to explore alternative routes for the Phase II and III of the REP having the least impacts to the CFA and avoiding tunnels, and accordingly University of Moratuwa (UOM) was entrusted the work. As a result, UOM conducted a new FS and proposed a new trace having comparatively less impacts to the CFA and also avoiding tunnels. The new trace proposed by the UOM for the Phase II is deviating about 19km from the trace selected under the FS of 2016 and no change in Phase III.

The location map of the new trace is presented in figure 1.1 below.

As per the new trace, length of the Expressway is 76+225 km and phases for the REP were revised as follows.

- Phase I Southern Expressway (Kahathuduwa) to Ingiriya, (Ch. 0+000 km Ch. 25+000 km)-Work already started.
- Phase II– Ingiriya to Kiriella (Ch. 25+000 km Ch. 44+000 km)(diverted section- End Ch. 44+000 km can be changed)
- Phase III– Kiriella to Pelmadulla (Ch. 44+000 km Ch. 76+450 km) (Ch. 44+000 km and end Ch. 76+450 km can be slightly changed)

Therefore, in order to assess the environmental and social feasibility of the new trace and also to obtain the environmental approval from the CEA, RDA is planning to conduct a new EIA for the Phase II. Subsequently, the Basic Information Questionnaire (BIQ) was submitted to the CEA and the Terms of Reference (TOR) for the EIA was received from CEA on 04th October 2021 through the letter 08/EIA/Trans/07/2014 Vol. V (TOR is attached in Appendix 1.1).

Figure: Location map of the selected trace for Phase II of REP

Environmental and Social Development Division (ESDD) of RDA was assigned to conduct the EIA for Phase II and III on behalf of the Project Management Unit (PMU) of RDA in compliance with the TOR issued by the CEA, and to obtain the environmental approval from the CEA.

ESDD has planned to complete the EIA in combining with the specialists hired for the specialized areas required for the EIA. Accordingly ESDD shall obtain the expert inputs of an Environmental Specialist (ES) who will act as the Team Leader (TL) of the EIA in order to complete the EIA and to obtain the environmental approval.

This document presents the TOR for the services and inputs required from the Environmental Specialist in carrying out the EIA study, preparation of EIA Report (EIAR) and obtaining the environmental approval from CEA.

2. Objectives of the TOR

- To specify the qualifications and experience required by the ES (TL of the EIA) in order to qualify for the said assignment,
- To specify the scope of work of the ES with relation to conducting the EIA study, preparation of EIAR and obtaining the environmental approval from CEA
- To describe the requirements stipulated in the EIA TOR forwarded by CEA (Annexure 1) and requirements of other stakeholder agencies
- To indicate the assistance provided by the RDA (ESDD and PMU) for the ES during the assignment,
- To indicate the time allocation for the assignment and the financial disbursement related to the assignment of Environmental Specialist.

3. Required Qualifications of the Environmental Specialist

- M.Sc. in Environmental Sciences, Environment Management, Environmental Engineering or related field
- Minimum of 8 years proven experience in carrying out Environmental Impact Assessments (EIA) for road development projects which were approved by CEA.
- Experience in acting as the Team Leader of EIA's which were approved by CEA

4. Scope of the Service

In general the Environmental Specialist shall perform the following activities.

- Shall act as the Team Leader of the EIA
- Taking overall responsibility of completing the Environment Impact Assessment Report (EIAR) collating all required inputs,
- Providing logistics which are necessary for field visits and preparation of reports,
- Carrying out field reconnaissance to the project area with other team members of the EIA team and staff of ESDD and PMU or on individual basis as required to collect field data and guide other EIA team members in collecting relevant data,
- Carrying out literature survey on available reports and documents in order to obtain relevant information to be included in to the EIAR,
- Studying other relevant assessments such as hydrological study report, reports on water quality, air quality and noise assessments, landslide study report and noise modelling study to assess the traffic noise impact etc... to obtain required information for the EIAR,
- Compiling the sections/chapters prepared by other team members of the study in the EIAR in order to complete the reports required in this assignment,
- Preparation of the draft final EIA report incorporating the requirements as stipulated in the TOR issued by CEA,
- Presenting and defending the EIA with the help of other team members at the Technical Evaluation Committees (TEC) of the CEA
- Incorporating any feasible comment, suggestion or request made by the TEC reviewing the draft final EIAR and preparation of the Final EIAR,
- Addressing any feasible comments made during the public disclosure of the EIAR and preparation of any additional reports such as addendums to the EIAR,
- Attending any public or stakeholder meeting with ESDD or PMU staff and assisting RDA in defending the EIAR,
- Within this scope assist RDA to resolve any other issue related to the obtaining the EIA approval for the project

To facilitate the above scope of work the ES will be provided with following facilities by ESDD and PMU;

- The final trace of the Phase II and III of REP in KML formats and hard formats (with adequate resolution) with defined start and end points; locations of links, entry and exit ramps, tall gates etc.
- Feasibility report or any other relevant report which includes following information;
 - 1. Design and construction related information including different options considered for construction of the highway (alternative route, design, technology and construction techniques),
 - 2. Description of the project including objective of the project, funding source, financial and economic analysis (where the economic analysis should include the environment cost), timing and possible phasing of the project,
 - 3. Quantities of material (including cement, sand, soil and aggregate) and possible sites of extraction with proximity to the project site,
 - 4. Quantity of construction waste that would be generated and potential location/s of disposal (with the concurrence from land owners),
- All relevant maps or row data to prepare maps as indicated and required to fulfill the information requirement of the EIAR.
- Relevant chapters/sections on Social Impact Assessment as required in the CEA TOR for the EIA

- A complete report on public and stakeholder consultation and awareness programs conducted by ESDD and PMU,
- Information on baseline condition of air, water and noise parameters with respect to national standards,
- Reports on hydrological impact assessment, studies on landslide impacts, noise model report etc.,
- Relevant chapters/sections of the EIAR on ecological assessment as required in the CEA TOR for the EIA including baseline condition, impacts to the ecological environment and feasible mitigation measures to avoid/reduce or mitigate the impacts
- Consents from key stakeholder agencies as required in the CEA TOR for the EIA
- And any other information related to preparation of EIAR as requested by ES.

5. Time Schedule

Time duration for the said assignment is 4 (four) calendar months from the date on which the contractual agreement is signed between both parties (RDA and ES), unless otherwise extended due to unavoidable externalities as mutually agreed by both parties.

6. Expected deliverables

Following deliverables are expected from the Environmental Specialist during the specified time period.

- Draft final EIA
- Final EIA after incorporating CEA and public, stakeholder comments
- A summary report of activities completed when submitting a claim for payment. This summary report shall include key activities carried in completion of the task for which the claim is made.

The Consultant is expected to exercise with utmost care during the process to avoid any accidents at site and any unfair situation and will be responsible for any faults/conflicts. Accordingly, no claims will be accepted by RDA on this regard.

7. Payments

Payments shall be made to the Environmental Specialist as detailed in the table below.

Task	Outputs/Reports	Tentative duration to complete the task	Percentage of payment eligible	Cumulative Payment Ceiling (% of Total cost of the Assignment)
Task 1	Advance payment	After the contractual agreement	5%	
Task 2	Completion of field reconnaissance	3 weeks	15%	20%
Task 3	Collection of relevant secondary data and compilation	2 weeks	30%	50%
Task 4	Completion of Draft Final EIAR and submission to ESDD/RDA	7 weeks	20%	70%
Task 5	Presenting the EIAR to TEC	1 day	5%	75%
Task 6	Attending to comments, requests made by TEC and submission of Final EIAR to ESDD/RDA	3 weeks	10%	85%
Task 7	Attending any public hearing and attending to quarries made by public during public disclosure of EIAR	1.5 months	5%	90%
Task 8	Addressing public and stakeholder comments made during public disclosure and technical evaluation and preparation of the addendums to the EIAR	3 weeks	10%	100%

MINISTRY OF ROADS AND HIGHWAYS ROAD DEVELOPMENT AUTHORITY ENVIRONMENTAL AND SOCIAL DEVELOPMENT DIVISION

ENVIRONMENTAL IMPACT ASSESSMENT (EIA) FOR RUWANPURA EXPRESSWAY PROJECT -PHASE 2 (INGIRIYA-25.00KM TO KIRIELLA 44+000KM) AND PHASE 3 (KIRIELLA 44+000KM TO PALMADULLA 76+450KM)

TERMS OF REFERENCE (TOR) FOR ECOLOGICAL ASPECTS

1.0 Background

Ruwanpura Expressway is one of the expressways identified in the National Road Master Plan of Sri Lanka. The Government of Sri Lanka (GoSL) had decided to construct the Ruwanpura Expressway from Kahatuduwa (link to the Southern Expressway) to Palmadulla via Rathnapura which is connecting Western Province with Sabaragmauwa Province.

Phase 2 of the Ruwanpura Expressway commences from the 25+000km Ingiriya and proceeds up to Kiriella (44+000km). Phase 3 of the Ruwanpura Expressway commences from the 44+000km Kiriella and proceeds up to Palmadulla (76+450km) via Ratnapura.

In order to ensure compliance with the relevant provisions under the National Environmental Act (NEA) and associated regulations, as well as other relevant legislation and policies linked to road works, an Environmental Impact Assessment Report with the Environmental Management and Monitoring Plan (EMMP) need to be prepared.

Road Development Authority (RDA) had obtained the Terms of Reference (TOR) for Environmental Impact Assessment (EIA) from the Central Environmental Authority through the letter no.08/EIA/Trans/07/2014 Vol. IV dated 04/10/2021. Since the Biological and Ecological environment is susceptible to be disturbed with onset of the construction activities, the Ecological aspects of the TOR should be covered from Ingiriya (25+000km) to Kiriella (44+000km) of the Phase 2 and Kiriella (44+000km) to Palmadulla (76+450km) of the phase 3 along the proposed trace of the Ruwanpura Expressway. Please note that these chainages shall be slightly changed.

2.0 Objective of the Study

- Carrying out the study of Biological and Ecological aspects pertaining to the project influence area (100m either side of the ROW) and prepare the study report in order to fulfil the requirements of the TOR issued by the Central Environmental Authority.
- The study should be carried out generally accepted professional practices and employ appropriate technology and effective tools and equipment to identify impact in the vicinity of the project.

3.0 Scope of the Consultancy Service

In general the Consultant shall perform the following activities;

• Taking overall responsibility of completing the Biological and Ecological study.

- Carrying out literature survey on available reports and documents in order to obtain relevant data, information and findings to be included in to the Biological and Ecological study report.
- Investigate and propose mitigation measures for both the terrestrial and aquatic habitats for the items from 3.2 under the section 3.0 (Biological and Ecological aspect) of the TOR issued from Central Environmental Authority through the letter no.08/EIA/Trans/07/2014 Vol. IV dated 04/10/2021.
- Identification of most desirable locations to be established for Animal Crossing Structures, Overpasses/Underpasses, Wire Ropes, fence avoid collision of birds, species rescue and translocation drive, Green belting, Habitat Enrichment Program etc.
- And any other studies to fulfill the above objectives.
- Carrying out field reconnaissance to the project influence area with the staff of RDA or individual basis as required for collecting field data.
- Attending any public or stakeholder meeting with RDA staff and assisting RDA in defending the Biological and Ecological study report.
- Attending to the meetings to be held in CEA or any other stakeholder agency as instructed by RDA to defend the Biological and Ecological study report.
- Preparation of the draft final Biological and Ecological study report incorporating the requirements as stipulated in the TOR issued by RDA.
- Addressing comments of public and stakeholders over the final EIA report.

4.0 Required Qualifications of Key staff of Consultancy Service for the study

Environmental and Social Development Division (ESDD) of RDA was assigned to conduct the EIA for Phase II and III on behalf of the Project Management Unit (PMU) intends to select a local individual/firms Consultant to conduct and prepare reports as per the directives specified in the TOR issued by the CEA. Required qualifications and experiences of the consultant team related to similar work shall consist of the followings.

Team Leader -

- M.Sc. in Environmental Sciences, Environment Management, Environmental Engineering or related field
- Minimum of 8 years proven experience in carrying out Environmental Impact Assessments (EIA) for road development projects which were approved by CEA.
- Experience in acting as the Team Leader of EIA's which were approved by CEA
- **Ecologist** -Minimum 02 nos. graduates in science or agriculture or any other relevant degree with minimum 05 years' proven experience in carrying out the Biological and Ecological studies in the field.

Note: The Consultant shall propose any additional experts and an optimum team structure to complete all tasks within the prescribed study period.

6.0 Facilities and Information Provide from the RDA

To facilitate the delivery of the scope of the Consultant, following information and facilities will be provided by the RDA;

- Drawing of the proposed acquisition corridor of the entire trace including interchanges, entry/exit ramps and tall gates sections etc. with GPS coordinate and KML files.
- Preliminary design details of the trace.
- Final report of the feasibility study of the Ruwanpura Expressway Project (2016) with additional reports/information.
- Terms of References issued from the CEA (letter no.08/EIA/Trans/07/2014 Vol. IV dated 04/10/2021).
- And any information related to the preparation of Biological and Ecologicalstudy report as requested by Consultant.

7.0 Time Schedule

The consultant is expected to submit the report within 14 weeks from the commencement date and perform the assignment until granting approval for the Biological and Ecological study report by the CEA. The commencement date will be the date of the agreement signed by the both parties.

8.0 Expected Deliverables

Following deliverables are expected from the Consultant during the specified time period.

- Reports including collected data
- Draft final Biological and Ecological study report.
- A power point presentation based on the findings of the study for CEA Technical Evolution Committees (TEC).
- Attending to the public/stake holder comments and updating the Biological and Ecological study report.
- Final Biological and Ecological study report after incorporating comments made by RDA and CEA.
- Final report in PDF, word format and hard copies

The Consultant is expected to exercise with utmost care during the process to avoid any accidents at site and any unfair situation and will be responsible for any faults/conflicts. Accordingly, no claims will be accepted by RDA.

9.0 Financial Proposal and Payments

Payments shall be done to the Consultant as stated in the table below.

Task	Outputs/Reports	Tentative duration to complete the task	Cumulative Payment Ceiling(% of Total cost of the assignment)	Submission document/s for the payment component
Task 1	Collection of necessary field data and secondary data	04 weeks From the date of commencement	30%	Report including collected data
Task 2	Upon the Client receipt of the Draft Final Report and acceptable to the RDA	10 weeks From the date of commencement	70%	Draft Final Report after incorporating the RDA comments

Task 3	Upon the RDA receipt of the final	Within 02 weeks		After
	report,	after issuing the		incorporating
		comments from CEA,	100%	the
				comments of
				the CEA and
				Stake holders

Annexure 4

MINISTRY OF HIGHWAYS ROAD DEVELOPMENT AUTHORITY

ENVIRONMENT AND SOCIAL DEVELOPMENT DIVISION

TERMS OF REFERENCE (TOR) FOR ENGAGEMENT OF A SOCIAL SPECIALIST FOR CARRYING OUT THE SOCIAL IMPACT ASSESSMENT (SIA) AND RESETTLEMENT PLAN (RP) FOR RUWANPURA EXPRESSWAY – PHASE II & III

1. Background

Government of Sri Lanka (GOSL) has identified the need of an expressway towards Sabaragamuwa province, which will act as a fast road link between Sabaragamuwa and Uva provinces with Colombo the economic capital of the country. This project is considered as one of the key infrastructure development projects in the country that needs to be implemented in the near future. With the above directive, RDA initiated a Feasibility Study (FS) in year 2016 to find out a suitable road corridor to construct the Ruwanpura Expressway considering present and future development scenarios of the country. The study also considered having minimum possible impacts on the environment including the social environment (i.e. minimum resettlement impacts to general public and land acquisition cost). This expressway project was officially called as "Ruwanpura Expressway Project" or REP.

Different route alternatives were studied during the FS conducted in 2016 and a final trace was selected to conduct detailed investigations. As per the final trace of FS, the proposed expressway is to start from Kahathuduwa Interchange of Southern Expressway and end at Pelmadulla connecting with Pelmadulla – Nonagama (A018) road.

The expressway had a length of about 74 kilometers (km) and consisted of three (3) stages as;

- Phase I Southern Expressway (Kahathuduwa) to Ingiriya, (Ch. 0+000 km Ch. 26+300 km)
- Phase II Ingiriya to Ratnapura (Ch. 26+300 km Ch. 52+500 km)
- Phase III Ratnapura to Pelmadulla(Ch. 52+500 km Ch. 73+900 km)

As per the National Environmental Act (NEA) regulations, REP was categorized as a Prescribed Project so that RDA conducted an Environmental Impact Assessment (EIA) for the full trace selected under the FS of 2016, seeking the environmental approval from Central Environmental Authority (CEA) who is the Project Approving Agency (PAA). However, due to the location of the major parts of the Phase II and III of the expressway within the Central Fragile Area (CFA) of the country, and considering the adverse impacts to the land use changes, possible urbanization around the interchanges in the CFA and impacts due to construction of tunnels, National Physical Planning Department (NPPD) being a key stakeholder of the project was not in a position to grant their consent for the EIA for Phase II and III of the REP. As a result, the environmental approval was granted only for the Phase I of the REP in 2021.

In 2020, RDA under the guidance of Ministry of Highways took actions to revisit the FS in order to explore alternative routes for the Phase II and III of the REP having the least impacts to the CFA and avoiding tunnels, the particular assignment was entrusted to the University of Moratuwa (UOM). As a result, UOM conducted a new FS and proposed a new trace having comparatively less impacts to the CFA and also avoiding tunnels. The new trace proposed by the UOM for the Phase II is deviating about 19km from the trace selected under the FS of 2016, whereas no change in the Phase III. The location map of the new trace is presented in **Figure 1.1** below.

As per the new trace, length of the Expressway is 76+450 km and phases for the REP were changed as follows.

- Phase I Southern Expressway (Kahathuduwa) to Ingiriya, (Ch. 0+000 km Ch. 25+000 km)
- Phase II Ingiriya to Kiriella (Ch. 25+000 km Ch. 44+000 km) in diverted section-This Ch. 44+000 km shall be slightly changed.
- Phase III Kiriella to Pelmadulla (Ch. 44+000 km Ch. 76+450 km)- These Ch. 44+000 km and 76+450 km shall be slightly changed.

Therefore, in order to assess the environmental and social feasibility of the new trace and also to obtain the environmental approval from the CEA, RDA is planning to conduct a new EIA for the Phase II and III. Subsequently, the Basic Information Questionnaire (BIQ) was submitted to the CEA and the Terms of Reference (TOR) for the EIA was received from CEA on 04th October 2021 through the letter 08/EIA/Trans/07/2014 Vol. V (TOR is attached in **Appendix 1**).

Location map of the selected trace for Phase II and III of REP

The National Involuntary Resettlement Policy, 2001 states that, a Resettlement Plan need to be prepared for any project if 20 families or more are affected by the project. And according to NEA, a project becomes prescribed if 100 families are affected. Thus, this project required a Resettlement Plan to be prepared. Accordingly, in 2016, parallel to EIA study, Resettlement Plan was also prepared for the entire 73.900km trace. In year 2021, Environmental and Social Development Division (ESDD) of RDA updated the Resettlement Plan for Phase I of the project with land acquisition data of the Project Management Unit (PMU) of RDA. However, as the trace has been changed in Phase II, a new Resettlement Plan need requires to be prepared for Phase II and III of the REP.

2. Purpose of the Consultancy

Environmental and Social Development Division (ESDD) of RDA was assigned to conduct the EIA and Resettlement Plan (RP) for Phase II and III on behalf of the Project Management Unit (PMU) of the RDA. 1. The EIA needs to be prepared in compliance with the TOR issued by CEA and to obtain the environmental approval from the CEA. ESDD has planned to complete the EIA and RP in combining with the specialists hired for the specialized areas required for the EIA. Accordingly, ESDD shall obtain the expert inputs of a Social Specialist who will act as the Sociologist for the EIA in order to identify social impacts and mitigation measures of the proposed REP. He/ She needs to assist the Team Leader of the EIA study to compile social section of the EIA and to obtain the environmental approval. The Assignment 1 of this document presents the TOR for the services and inputs required from the Social Specialist for the EIA study.

2. In parallel to the EIA study, the Social Specialist needs to act as the team leader and employ a team to prepare Resettlement Plan for Phase II and III of REP in compliance with the social safeguard policies and principles of the Government of Sri Lanka. The Assignment 2 of this document presents the TOR for the services and inputs required from the Social Specialist in preparation of the Resettlement Plan. In Assignment 2, the Social Specialist needs to work closely with ESDD and PMU and need to follow procedures of RDA in preparation of a Resettlement Plan.

3. Objectives of the TOR

- To specify the qualifications and experience required by the Social Specialist in order to qualify for the said assignment,
- To specify the scope of work of the Social Specialist in the EIA study as the requirements stipulated in the EIA TOR forwarded by CEA (Appendix 1.1) and preparation of the Resettlement Plan
- To indicate the time allocation for the assignment and the financial disbursement related to the assignment of Social Specialist.

4. Required Qualifications of the Social Specialist

- Masters or higher qualification in the field of Social Sciences.
- At least 8 years proven experience in preparing Resettlement plans. He/she should be a Team leader for at least three Resettlement Plans of transport related projects.
- At least 8 years proven experience in working in EIA studies as a Sociologist.

5. Assignment 1

5.1 Scope of the Service

- 1. Shall act as the Social Specialist for the EIA study.
- 2. Carry out field work to REP Phase II and III to identify impacts and mitigation measures for the Social environment following necessary health guidelines against the COVID 19.
- 3. Carry out socio economic survey for a sample population (affected people and people living close to the proposed road trace) to assess the existing socio economic conditions of people in the project area following necessary health guidelines against the COVID 19.

- 4. Carry out Key Informant Interviews and consultations/Focus Group Discussions with all stakeholders including affected people following necessary health guidelines against the COVID 19.
- 5. Draft sections pertaining to Social environment in EIA and the TOR issued by CEA (Appendix 1.1) and support team leader of EIA team to compile the EIA report.
- 6. Assist Team Leader of EIA study to present and defend the EIA at the Technical Evaluation Committee/s (TEC) of the CEA
- 7. Assist the Team Leader of EIA study to incorporate any feasible comments, suggestion or requests made by the TEC reviewing the draft final EIA and preparation of the Final EIA
- 8. Assist Team Leader of EIA study addressing any feasible comments made during the public disclosure of the EIAR and preparation of any additional reports such as addendums to the EIA.
- 9. Attending any public or stakeholder meeting with ESDD or PMU staff and assisting RDA in defending the EIA study,

5.2 Time Schedule

The Social Specialist shall complete the assignment 1 and Assignment 2, giving priority to the assignment 1. Total time duration for these 2 assignments is 4 (four) calendar months from the date on which the contractual agreement is signed between both parties, unless otherwise extended due to unavoidable externalities as mutually agreed by both parties.

5.3 Expected Deliverables

Following deliverables are expected from the Social Specialist during the specified time period.

- Draft sections pertaining to Social environment in EIA TOR forwarded by CEA (Appendix 1.1)
- Socio economic survey questionnaires hard copies
- Database of socio economic survey
- Final sections pertaining to Social environment in EIA TOR after incorporating CEA and public, stakeholder comments
- A summary report of activities completed when submitting a claim for payment. This summary report shall include key activities carried in completion of the task for which the claim is made.
- The Consultant is expected to make his practice with utmost care during the process to avoid any accidents at site and any unfair situation, and will be responsible for any faults/conflicts. Accordingly, no claims will be accepted by RDA on this regard.

5.4 Payments

Payments shall be made to the Social Specialist as detailed in the table below.

Task	Outputs/Reports	Tentative duration to complete the task	Percentage of payment eligible	Cumulative Payment Ceiling (% of Total cost of the Assignment)
Task 1	Advance payment	After the contractual agreement	5%	

Task 2	Completion of field reconnaissance	3 weeks	15%	20%
Task 3	Collection of relevant secondary data and compilation	2 weeks	30%	50%
Task 4	Completion of sample socio economic survey, consultation and focus group discussions	6 weeks	20%	70%
Task 4	Completion of Draft Final EIAR and submission to ESDD/RDA	2 weeks	10%	80%
Task 5	Assisting Tem leader to present the EIAR to TEC	1 day	5%	85%
Task 6	Attending to comments, requests made by TEC and submission of Final EIAR to ESDD/RDA if required	1 week	5%	90%
Task 7	Attending any public hearing and attending to quarries made by public during public disclosure of EIAR	1 week	5%	95%
Task 8	Addressing public and stakeholder comments made during the public disclosure and technical evaluation and preparation of the addendums to the EIAR	1 week	5%	100%

6. Assignment 2

. 6.1 Scope of the Service

The Consultant is required to,

- 1. Familiarize the existing guidelines and tools that are adopted by RDA in the preparation of RPs.
- 2. Recruit enumerators, train under the supervision of ESDD/RDA on data collection tools and guide them to conduct census and socio-economic surveys. The Consultant shall be responsible to disseminate correct information about the project to the affected people through enumerators.
- 3. Consult the concerned Divisional Secretaries, Grama Nilandaris and other relevant stakeholders. The PMU has to facilitate all consultation sessions, meetings and discussions which are requested by the Consultant concerning this assignment.
- 4. Carry out awareness meetings in the project area for government officials prior to the actual consultation and census and socioeconomic surveys. The Land Division of RDA, Valuation Department, and Survey Department also need to be involved in the awareness meetings. This can be arranged through relevant Divisional Secretariat offices.
- 5. <u>Design/disseminate information flyers</u> on the project for the affected people. The onepage double-sided flyer (written in Sinhala, Tamil and English) shall contain the

following basic information:

- Brief description of the project.
- Types of impacts expected;
- Basic compensation policy and rights of APs
- Outline of livelihood restoration measures
- Implementation schedule; and
- Who to contact for additional information.
- 6. Conduct a census¹ of affected persons including tenants of affected land, workers of affected business establishments and farm laborers, non-titled claimants, encroachers of private and state-owned lands, vulnerable groups based on the available design information, as well as the census survey, which will generate the following data:
 - Total and affected areas of structures, by type of structure (main or secondary)
 - Legal status of affected land and structure assets, and duration of tenure and ownership
 - Quantity of other losses, e.g., business or other income, jobs or other productive assets;
 - Quantity and types of affected crops and trees;
 - Quantity/area of affected cooperate owned properties.
 - Quantity/area of affected common property, community or public assets, by type;
 - APs preferences for compensation and, as required, relocation.
- 7. Carry out concurrently the census <u>a socio-economic survey to collect socio economic information of APs</u>.

The scope of data to be collected in the survey includes:

- Household head: name, sex, age, livelihood or occupation, income, education and ethnicity;
- Household members: number, employment status, school age children and school attendance, and literacy, disaggregated by gender; Vulnerability
- Living conditions: access to water, sanitation and energy for cooking and lighting; ownership of durable goods;
- Tenure, ownership and use of land and other assets; and
- Sources of household income: primary and secondary sources of household income (waged and non-waged); household member(s) responsible for primary source of income; total household income (viz-a-viz poverty line); and, whether affected land is primary source of income.
- 8. Need to identify the affected government properties and common properties in the project area and need to carry out consultations to relocate such properties.
- 9. Need to collect land values in the project area through Valuation Department/Real estate agents to prepare the budget of the RP.
- 10. Record GPS location and photographs of all affected structures (including both main structures and secondary structures) and prepare a database of the affected properties.
- 11. The Consultant is required to draft the Resettlement Plan (RP) for the project which should include the following chapters.

¹ Use the RDA-ESDD standard census questionnaire.

- 1. Project Description
- 2. Legislative and Policy Framework
- 3. Scope of Land Acquisition and Resettlement
- 4. Socioeconomic Profile
- 5. Public Consultation
- 6. Grievance Redress Mechanism
- 7. Project Entitlement Matrix
- 8. Relocation of housing and Settlements
- 9. Income Restoration Program
- 10. Resettlement Budget
- 11. Implementation Schedule
- 12. Institutional Framework
- 13. Monitoring and Evaluation

Annexure - A comprehensive report describing the processes and outcomes of consultations together with supporting documents such as lists of participants (with their signatures) and photographs should be submitted.

6.2 Time Schedule

Total time duration for the said assignment is 4 (four) calendar months from the date on which the contractual agreement is signed between both parties, unless otherwise extended due to unavoidable externalities as mutually agreed by both parties.

6.3 Expected deliverables

Following deliverables are expected from the Social Specialist during the specified time period.

- Final Resettlement Plan (After addressing ESDD comments if any) Four hard copies
- Filled Questionnaires hard copies
- Database of Census and Socio economic survey
- Minutes of Stakeholder consultations, Awareness meetings and focus group discussions with photographs.
- A summary report of activities completed when submitting a claim for payment. This summary report shall include key activities carried in completion of the task for which the claim is made.
- The Consultant is expected to make his practice with utmost care during the process to avoid any accidents at site and any unfair situation and will be responsible for any faults/conflicts. Accordingly, no claims will be accepted by RDA on this regard.

6.4 Payments

Payments shall be made to the Social Specialist as given in the table below.

Task	Outputs/Reports	Tentative duration to complete the task	Percentag e of payment eligible	Cumulative Payment Ceiling (% of Total cost of the Assignment)
Task 1	Advance payment	After the contractual agreement	5%	

Task 2	Completion of leaflet preparation, stakeholder consultation and awareness meetings	2 weeks	10%	15%
Task 3	Completion of census and socio economic Survey	5 Weeks	30%	45%
Task 4	Completion of data entry and data analysis	2 Weeks	10%	55%
Task 5	Submission of Draft Resettlement Plan to ESDD,RDA AND PMU for comments and approval	3 Weeks	25%	80%
Task 6	Incorporating ESDD/PMU comments and submission of final report	3 Weeks	10%	90%
Task 7	Submission of final copies of the Resettlement Plan along with other deliverables	1 Week	10%	100%

Proposed Ruwanpura Expressway Location Map



