

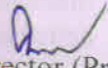
**GOVERNMENT OF HIMACHAL PRADESH**  
**HIMACHAL PRADESH STATE ROADS TRANSFORMATION PROJECT (HPSRTP)**

**CORRIGENDUM-IV**

**Procurement Title:** Consultancy services for preparation of DPR and preconstruction activities of Tunnel from IGMC Junction to old Shimla area (Chota Shimla, secretariat, Lift to mall road etc..) for Traffic decongestion.

Sr. No.	As per RFP dated 31.08.2024	Modified As
1.	Refer Section 1 – Request for Proposal Letter (Page No. 6-7)	Please refer Annexure-A
2.	Refer ITC 2.2 of section-2 Instructions to Consultants (Page No.29)  The name of the assignment is:  Project Management and Construction Supervision Consultancy services (PMC) for review of detailed feasibility studies of Tunnel from IGMC Junction to IPH pump house near St. Bede’s college, and feasibility studies of two other suitable alternatives, finalization of most advantageous alignment of the Tunnel, and its detailed feasibility studies, preparation of bid documents, and technical schedules, supervision of the civil works i/c contract management through the client during the construction and Defect Liability Period etc	The name of the assignment is:  Project Management services (PMC) for preparation of DPR and preconstruction activities of Tunnel from IGMC Junction to old Shimla area (Chota Shimla, secretariat, Lift to mall road etc..) for Traffic decongestion
3.	Refer ITC 2.4 of Section 2 - Instructions to Consultants - Data Sheet (Page No.30)  The Client will provide the following inputs, project data, reports, etc. to facilitate the preparation of the Proposals:  • The feasibility and detailed design of the tunnel in Shimla prepared in 2008by M/s GC- RITES-SECON JV comprising of GEOCONSULT ZT GmbH (Lead Firm), Hoelzlstrasse, Austria and RITES Ltd. India, and SECON Pvt. Ltd. India.	The client will provide the following project data, reports etc. to the successful bidder, on consultant’s request, only after award of work.  • The feasibility and detailed design of the tunnel in Shimla prepared in 2008by M/s GC-RITES-SECON JV comprising of GEOCONSULT ZT GmbH (Lead Firm), Hoelzlstrasse, Austria and RITES Ltd. India, and SECON Pvt. Ltd. India.  • Revised DPR prepared by Assystem India Limited (Formerly Known as L&T Infrastructure

	<ul style="list-style-type: none"> <li>Revised DPR prepared by Assystem India Limited (Formerly Known as L&amp;T Infrastructure Engineering Ltd.) as part of the URIP-Shimla.</li> </ul>	Engineering Ltd.) as part of the URIP-Shimla.
4.	Refer Section 6. Terms of Reference (Page no.69-110)	<p>Please refer annexure-B</p> <p>Further required qualifications &amp; experience of key personnel (Page 84-100), reporting requirements (Page No. 106-110 is to be remain as it was in original RFP dated 31.08.2023</p>
5.	<p>Refer Section 7 - Conditions of Contract and Contract Forms (Page no.115)</p> <p>Assignment Title: Project Management and Construction Supervision Consultancy services (PMC) for review of detailed feasibility studies of Tunnel from IGMC Junction to IPH pump house near St. Bede's college, and feasibility studies of two other suitable alternatives, finalization of most advantageous alignment of the Tunnel, and its detailed feasibility studies, preparation of bid documents, and technical schedules, supervision of the civil works i/c contract management through the client during the construction and Defect Liability Period etc</p>	Assignment Title: Project Management services (PMC) for preparation of DPR and preconstruction activities of Tunnel from IGMC Junction to old Shimla area (Chota Shimla, secretariat, Lift to mall road etc..) for Traffic decongestion
6.	<p>Refer Section 7 - Conditions of Contract and Contract</p> <p>I. Forms (Time Based) ( Page no. 116-118)</p>	Please refer Annexure -C

  
 Director (Projects)  
 HPRIDCL, Nirman Bhawan,  
 Nigam Vihar, Shimla -171002,

# ANNEXURE –A

# Request for Proposal Letter

## Consulting Services

**Name of Assignment: Consultancy services for preparation of DPR and preconstruction activities of Tunnel from IGMC Junction to old Shimla area (Chota Shimla, secretariat, Lift to mall road etc..) for Traffic decongestion.**

**Country: India**

**Date: June 18th, 2024**

### BACKGROUND

The Government of Himachal Pradesh through HPRIDCL (client) and M/s GC- RITES-SECON JV comprising of GEOCONSULT ZT GmbH (Lead Firm), Hoelzlstrasse and RITES Ltd. (consultant) in the year 2008 has checked the feasibility and detailed design of the tunnels in Shimla. The design of these tunnels was subsequently checked and updated by Assystem India Limited (Formerly Known as L&T Infrastructure Engineering Ltd.) Chennai during their preparation of the Urban Road Improvement Project for Shimla district. Among these proposed tunnels, some of the tunnels have already been constructed by GoHP.

**Description of Tunnel:** Circular Road in Shimla could be considered as one of the major urban arterial roads of the city. Traffic Bottlenecks have become a common feature along the road in recent times because of capacity stagnation due to the restrictive terrain condition and with no widening possibility. Construction of tunnels has been proposed as a solution which will enable the thorough traffic to bypass congested road sections and junctions where most of the bottlenecks are experienced. In this regard, Government of Himachal Pradesh has desired to eliminate the **congestions around HP Secretariat** which usually occurs due to traffic flow **from Talland area to IGMC** through, Chotta Shimla ,HP secretariat and Sanjauli chowk . Hence three alternates are to be found out by the consultant. Government will select one of the best alternative among these alternatives and detailed project report of this one alternative is to be prepared including detailed engineering design, preparation of safeguards documents, BoQ, cost estimates and bidding documents etc.

The Client now invites proposals to provide the following consulting services (hereinafter called “Services”): **Consultancy services for preparation of DPR and preconstruction activities of Tunnel from IGMC Junction to old Shimla area (Chota Shimla, secretariat, Lift to mall road etc..) for Traffic decongestion.**

1. More details on the Services are provided in the Terms of Reference (Section 7).
2. A firm will be selected under **Quality and Cost Based Selection (QCBS)** procedures and in a Full Technical Proposal (FTP) format as described in this RFP. The RFP includes the following documents:

Section 1 – Request for Proposals Letter

Section 2 - Instructions to Consultants and Data Sheet

Section 3 - Technical Proposal (FTP) - Standard Forms

Section 4 - Financial Proposal - Standard Forms

Section 5 – Eligible Countries

Section 6 – Fraud and Corruption

Section 7 - Terms of Reference

Section 8 - Standard Forms of Contract (Time-Based)

Section 9- Notification of Intention to Award and Beneficial Ownership Forms.

3. Interested consultants who are having technical competency to perform this assignment can obtain the details and the Request For Proposal (RFP) documents from “the office of the State Roads Project, HPRIDCL, Nirman Bhawan, Nigam Vihar, Shimla-171002 (H.P), by paying Rs.11, 800/- (Including 18% GST) (Rupees Eleven Thousand Eight Hundred Only) Non-refundable in the form of D.Ds drawn in favor of the Director (Projects), HPSRTP, HPRIDCL respectively payable at any nationalized/scheduled bank in Shimla” OR “The RFP can also be downloaded from the website i.e., <https://himachalservices.nic.in/hpridc/HPSRTP.html>”) in such a case; the DDs shall be enclosed along with the RFP.
4. Details on the proposal’s submission date, time and address are provided in ITC 17.7 and ITC 17.9.

Yours sincerely,

[\_\_\_\_\_]

Director (Projects), HPSRTP,HPRIDCL,

NirmanBhawan,Nigam Vihar,

Shimla-171002 (H.P),

Fax: +91-177-2620663,

E-mail [pdsrp-hp@nic.in](mailto:pdsrp-hp@nic.in)

# ANNEXURE –B

## Section 6. Terms of Reference

### **Consultancy services for preparation of DPR and preconstruction activities of Tunnel from IGMC Junction to old Shimla area (Chota Shimla, secretariat, Lift to mall road etc..) for Traffic decongestion.**

#### **A) BACKGROUND**

The Government of Himachal Pradesh through HPRIDCL (client) and M/s GC- RITES-SECON JV comprising of GEOCONSULT ZT GmbH (Lead Firm), Hoelzlstrasse and RITES Ltd. (consultant) in the year 2008 has checked the feasibility and detailed design of the tunnels in Shimla. The design of these tunnels was subsequently checked and updated by Assystem India Limited (Formerly Known as L&T Infrastructure Engineering Ltd.) Chennai during their preparation of the Urban Road Improvement Project for Shimla district. Among these proposed tunnels, some of the tunnels have already been constructed by GoHP.

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For the successful implementation of this project, the Lead implementing agency Himachal Pradesh Road and Infrastructure Development Corporation (HPRIDCL), represented by the Director (Projects) intends to have a **Project Management DPR Consultant**.

#### **1. Objective & Scope of Consultancy**

The objective of this consultancy is to provide high quality professional advice and management and implementation support to the project (all components & activities) through assistance to HPRIDCL - the Employer, HPPWD for project implementation part pertaining to this authority like removal of all encumbrances, along the proposed approved roads to both the portal, Police and Transport Departments for program implementation part pertaining to these two departments. The consultant will ensure that each and every activity of the project is completed as per agreed timelines, within the budgeted cost frame and in full compliance with the applicable National and State legal, Environmental and Social Framework.

In order to achieve these objectives, the consultant would carry out the following broad scope:

- (i) Ensure compliance with the Guidelines of GoI/GoHP with a view to achieve agreed-upon project monitoring indicators in stipulated time frame. The consultant will be required to work in close co-ordination with the PIU.
- (ii) The main objective of the consultancy service is to establish the technical, economical, and financial viability of the project and prepare detailed project reports for construction of 2 lane Tunnel and connecting road.
- (iii) The Detailed Project Report would inter-alia include detailed Tunnel alignment design, Geotechnical studies and design report, Bore log report, Geophysical investigation report Topographic Survey report, Study of Seismicity, Study of Water samples, Chemical analysis of water samples, Detailed Tunnel design report, design of approach roads, Design of Structures, Technical specification for road tunnels, E & M lighting and other fixed operating equipments, Snow & Avalanche protection measures if any, quantities of various items, detailed working drawings, detailed cost estimates, economic and financial viability analyses, environmental and social feasibility, social and environmental action plans as appropriate and documents required for tendering the project on commercial basis for international / local competitive bidding.
- (iv) The consultant should, along with Feasibility Report, clearly bring out through financial . analysis the preferred mode of implementation on which the Civil Works for the stretches are to be taken up. The consultant should also give cost estimates along with feasibility report/ detailed Project Report.
- (v) If at inception stage or feasibility stage, employer desires to terminate the contract, the contract will be terminated after payment up to that stage.

## **2. Implementation Mechanism**

The Employer has established the Project Implementation Unit (PIU) in Shimla, head Quarter PIU is headed by a Director (Projects). He is assisted full time by one Superintending Engineer and Executive Engineer (EE)/GM, Joint Controller (Finance)/GM, Assistant Engineers (AEs), and Junior Engineers to look after planning/overall coordination, procurement, technical/designs, contract management/structures/utilities/environmental and social policy and standards.

It has to be recognized that the Consultant will generally not have a direct role in implementing the project, except that is required in delivering the TOR. The PIU will be the main interface between the Employer and consultant/concessionaire/contractor. The PIU will conduct its business as per authorization under various agreements with contractor/consultant/concessionaire and under rules and regulations of the Employer.



## **Section-II**

### **Detailed Scope of Consultancy**

The overall scope of the PMC services shall be as indicated herein but not limited thereto.

#### **Preparation stage of Project**

- i. Assist PIU in ensuring site readiness of the project, including follow-up and coordinating with authorities or department for timely obtaining of clearances such as Forest and all other relevant clearances.
- ii. Acquaint with base line surveys and reports in respect of the project.
- iii. Assist HPRIDCL to complete Land Acquisition, Rehabilitation and Resettlement process and ensure getting encumbrance free land for the project.

#### **Designs / DPR review**

- i. The alignment options report shall contain the reviews of the existing road, local traffic patterns, initial reconnaissance surveys, drone survey, dgps survey of portals etc. Analysis of alignment alternatives bringing out the pros and cons of each alternative including, but not limited to: new construction required, land acquisition requirements, environmental impact, utilities and structures affected, cost of construction, road geometry and road safety aspect, decongestion of traffic and getting rid of the traffic bottleneck junctions. Recommendations from among the alignment options presented for the HPRIDCL to consider that the PMC will enable HPRIDCL to visualize and compare alignment options by providing alignment options in a GIS environment that should include, but not be limited to :
  - Road alignment alternative centerlines
  - Digital elevations model of the region
  - Land use / land cover information
  - Hydrology information
  - High resolution satellite/ airborne imagery of the region
  - Geological maps showing the rock strata of the alignments and out crop details at the proposed portals.
    - Preliminary cost comparison for three options
- ii. HPRIDCL will approve one alignment for which the PMC will conduct the feasibility study. The feasibility report shall contain (not limited to) following:
  - Topographical survey maps

- Project description including possible alternate alignments / bypasses.
- Indicative design standards, methodologies and specifications
- Traffic survey analysis
- Tunnel and approach design
- Geological and geotechnical investigations. PMC shall carry out the bore hole investigation and geophysical investigation. The data collected from investigations shall be used in the tunnel and approach road design.
- Cost estimate based on preliminary rate analysis and bill of quantities.
- Economic and financial analysis
- Tunnel and road drawings
- LA and FC clearances. Strip plan. Upload on parivesh and Bhoomi portal if applicable.
- Utilities / incumbencies relocation plan with cost estimates.
- Drainage design report.

### iii. Bid document and technical Schedules

PMC is required to prepare the bid document for EPC modes of contracting. The PMC shall assemble and provide all supporting documents from the alignment and feasibility report that will be required for the bid, in the format required by the contracting company at the time of bidding or as maybe required by the authority.

- iv. The PMC shall submit a draft contract agreement. The agreement submitted shall contain all required technical schedules updated with the pertinent project details and data required.
- v. Facilitate HPRIDCL in finalizing a Stakeholder Engagement Plan (SEP) and ‘Environment and Social Commitment Plan’ (ESCP) for as envisaged in the DPRs of the Project.
- vi. Help HPRIDCL for detailing out cost for the implementation of safeguard compliance.
- vii. Ensure integration of ESIA/ESMP findings in investment plans, engineering designs and bidding documents.
- viii. Coordinate with State Revenue Departments for land acquisition. Facilitate preparation of computerized data base related to the Land acquisition and resettlement impacts.
- ix. Facilitate PIU to get all the environmental, HP-SPCB, and forest related regulatory clearances and royalties as required.
- x. PMC to Carry out site survey and prepare a survey report.
- xi. The PMC shall appoint a **Proof Check Consultant** who shall proof check the detailed calculations, drawings, design of the Alignment report, Feasibility report and DPR. All the submissions from PMC shall be checked and approved by the Proof check consultant and thereafter submitted to HPRIDCL. The PMC shall appoint a proof check consultant (the “Proof Consultant”) after proposing

to HPRIDCL a Panel of three (3) names of qualified and experienced firms from whom the HPRIDCL may choose (1) to be proof consultant. The PMC shall also obtain the consent of the HPRIDCL for two (2) key persons of the proof consultant who shall have adequate experience and qualifications in Tunnels, Highways and bridges respectively.

The Proof consultant shall:

- Evolve a systems approach with the PMC design engineer so as to minimise the time for alignment and feasibility report including design and drawings.
- Proof check the detailed calculations, drawings and designs of alignment report and feasibility report developed by PMC.

### **Procurement & Contract management:**

i. Deleted

#### **(1) Other activities related to the Project.**

- i. Efficient Documentation both on paper media and softmedia
- ii. Assist PIU in handling RTI applications and assessment of RTI compliance.
- iii. Assist PIU in handling audit observations including preparation of detailed replies on Audit Para, factual note.
- iv. Assist PIU in handling complaints/representations.

### **Training and Capacity building**

-Deleted-

#### **Assist the PIU in preparation of Supporting Documentation for the Project.**

deleted

### **Location & Duration of the Services and Deliverables**

The PMC will have to establish its main office in Shimla during the entire duration of the project and will be reimbursed for the same on monthly basis. The selected Consultant will be responsible for making their own arrangements for accommodation for the office of the Team Leader and all associated staff stationed in Shimla as well as for at-site staff. The Consultant should also make his own arrangements for office furniture, equipment, stationeries, photocopiers, communication facilities like telephones, web connections, facsimiles, etc. including maintenance thereof and vehicles for transportation of office staff, etc. (including operation, maintenance, insurances and repairs thereof) and will be reimbursed on monthly basis for the same.

The following are the key deliverables to be submitted by the consultant.

- 1) Inception report/s
- 2) Reports of comments for finalizing ESIA, ESMP & ARAP, and any other safeguard documents.
- 3) Full RFP document/Schedules for the project for approved mode of Bidding / EPC
- 4) Notice inviting Tender (NIT).
- 5) REOI, EOI, TOR, RFP addenda for various consultancy services

- 6) Contract agreement, LOA for works.
- 7) Bid Evaluation report, negotiation, contract agreement, LOA.
- 8) Report of completed works of up-gradation and rehabilitation.
- 9) Notes/reportsrequiredforanyapprovalfromGoHP/GOI
- 10) Sixmonthlyreportsrevisingprojectdevelopmentgoalsagainststipulatedgoals.
- 11) Mid-term review report
- 12) Complete documentation till the project completion or completion of the PMC assignment, whichever isearlier.
- 13) Final report of project completion containing details of each work and consultancyserviceandgoods/equipmentpurchasedundertheproject.
- 14) Final report on QATA of works.

### **Data, services, and facilities to be provided by the employer**

Following documents/reports may be provided to successful bidder after approval of competent authority:

- DPR & Feasibility Report of 2008 prepared by GEOCONSULT-RITES-SECON (JV).
- Revised DPR (of 2008) prepared by Assystem India Limited (Formerly Known as L&T Infrastructure Engineering Ltd.)In 2024.

### **Staffing**

1. ThePMCmusthaverelevantinternational-standardexperienceandexpertise andbe familiar with local conditions and laws.
2. Staff nominated by the selected PMC must be confirmed as available to do the scheduledwork.
3. The indicative Man months of key professionals are as per **Annexure-1**.
4. In addition, the consultant needs to deploy the following **support staff** also during the course of the project:
  1. Office Manager – One (1) no.
  2. Computer Operators – Two (2) nos.
  3. Office boys - Two (2) nos.
5. The PMC is required to deliver the services from a location in Shimla, in close interaction with the Director (Projects)and other Project concernedofficers.
6. The key personnel shall be supported by adequate support staff; for example, there maybeaneedformorethanonehighwayengineer.
7. ThemobilizationanddemobilizationofkeyPMCprofessionalswhoserequirementis intermittent will be resolved in consultation with PIU. All endeavors shall be made bytheConsultanttoaccountforreasonablyacceptedvariationinprojectactivityand to complete the assignment in the quoted man months. The Consultant shall accordinglydecidethequalificationsanddeploymentofthesupportstaff.
8. **The selected Consultant shall also provide One(1) Computer data operators and One(1) office boy for deployment in the PIU/HPRIDCL office to support operations and needs there.**
9. The proposed key and other personnel need to be available during the project

implementation period according to the manning schedule agreed in the negotiations with the employer. The PIU / Employer must approve beforehand any replacements in the PMC team of key professional staff.

## **DPR Deliverables shall be as per following guidelines (not limited to)**

### **1. Quality Assurance Plan (QAP) Document**

Immediately upon the award, the Consultants shall submit four copies of the QAP document covering all aspects of field studies, investigations design and economic financial analysis. The quality assurance plans/procedures for different field studies, engineering surveys and investigation, design and documentation activities should be presented as separate sections like engineering surveys and investigations, traffic surveys, material geo-technical and sub-soil investigations, road and pavement investigations, investigation and design of bridges & structures, environment and R&R assessment, economic & financial analysis, drawings and documentation; preparation, checking, approval and filing of calculations, identification and traceability of project documents etc. Further, additional information as per format shall be furnished regarding the details of personnel who shall be responsible for carrying out/preparing and checking/verifying various activities forming part of feasibility study and project preparation, since inception to the completion of work. The field and design activities shall start after the QAP is approved by Public Works Department, Himachal Pradesh.

Data formats for report and investigation result submission

- a. Required data formats for some reports, investigations and documents are discussed in ENCLOSURE-II
- b. Formats for submission of Reports and Documents.
- c. The consultants will need to propose data formats for use in all other field studies and investigations not covered in enclosure II.
- d. The proposed data forms will need to be submitted for the approval of Public Works Department, Himachal Pradesh after the commencement of services.

### **2. Inception Report (IR)**

The report shall cover the following major aspects:

- i. Project appreciation;
- ii. Detailed methodology to meet the requirements of the TOR finalized in consultation with the Public Works Department, Himachal Pradesh officers; including scheduling of various sub activities to be carried out for completion of various stages of the work; stating out clearly their approach & methodology for project preparation after due inspection of the entire project stretch and collection/collation of necessary information;
- iii. Task Assignment and Manning Schedule;
- iv. Work programme;
- v. Proforma for data collection;
- vi. Design standards and proposed cross-sections;
- vii. Key plan and Linear Plan;
- viii. Development plans being implemented and/or proposed for implementation in the near future by the local bodies and the possible impact of such development plans on the overall scheme for field work and design for the study;
- ix. Quality Assurance Plan (QAP) finalized in consultation with MoRTH/Public Works Department,
- x. Draft design standards; and

The requirements, if any, for the construction of bypasses should be identified on the basis of data derived from reconnaissance and traffic studies. The available alignment options should be worked out on the basis of available maps. The most appropriate alignment option for bypasses should be identified on the basis of site conditions and techno-economic considerations. Inception Report should include the details regarding these aspects concerning the construction of bypasses for approval by Ministry of Road Transport & Highways /Public Works Department,

- i) Bypasses should be identified on the basis of data derived from reconnaissance and initial traffic information/traffic studies
- ii) The available alignment options should be worked out on the basis of available topographic maps, publicly available mapping services or remote sensing based topography and land use maps
- iii) The most appropriate alignment option for bypasses should be identified on the basis of site conditions and techno-economic considerations

### **3. Alignment Options report**

Basis review of the existing project road, local traffic patterns and initial reconnaissance surveys, the consultant shall present possible alignment alternatives for the project road

Alignment options should include but not be limited to:

- (i) Greenfield sections of the road
- (ii) New alignments due to lack of RoW, opportunity to shorten road etc.
- iii) Bypasses as suggested and approved in alignment report
- iv) Provision of ROBs, flyovers and other structures

The alignment report shall contain:

- i. Analysis of alignment alternatives bringing out the pros and cons of each alternative including, but not limited to: new construction required, land acquisition requirements, environmental impact, utilities and structures affected, cost of construction, road geometry and road safety aspects, input from local consultation, Ministry of Road Transport & Highways /Public Works Department, views
- ii. Recommendations from among the alignment options presented for the authority to consider
  - a. Land use / land cover information
  - b. Hydrology information
  - c. Surrounding road network including key NH, SH, MDR and ODRs
  - d. Key O/D points and urban settlements
  - e. High resolution satellite/airborne imagery of the region

### **4. Feasibility Report**

The consultant shall commence the Feasibility Study of the project in accordance with the accepted IR and the report shall contain the following:

- i. Executive summary
- ii. Overview of <MoRTH>organization and activities, and project financing and cost recovery mechanisms
- iii. Project description including possible alternative alignments/bypasses and technical/engineering alternatives
- iv. Methodology adopted for the feasibility study
- v. Socioeconomic profile of the project areas
- vi. Indicative design standards, methodologies and specifications
- vii. Traffic surveys and analysis
- viii. Environmental screening and preliminary environmental assessment
- ix. Initial social assessment and preliminary land acquisition/resettlement plan
- x. Cost estimates based on preliminary rate analysis and bill of quantities,
- xi. Cost analysis of all alternate identified alignments

- xii. Economic and financial analysis
- xiii. Conclusions and recommendations

In view of para 1 above the consultant has to submit the following documents in six sets:

- i. Technical Specifications:
- ii. Rate Analysis: This volume will present the analysis of rates for all items of works. The details of unit rate of materials at source, carriage charges, any other applicable charges, labour rates, and machine charges as considered in arriving at unit rates will be included in this volume.
- iii. Cost Estimates: This volume will present the each item of work as well as a summary of total cost.
- iv. Bill of Quantities: This volume shall contain the detailed Bill of Quantities for all items of works

The basic data obtained from the field studies and investigations shall be submitted in a separate volume as an Appendix to Feasibility Report.

The Final Feasibility Study Report incorporating comments, revisions and modifications suggested by Ministry of Road Transport & Highways /Public Works Department, Himachal Pradesh shall be submitted within 15 days of receipt of comments from Ministry of Road Transport & Highways /Public Works Department, Himachal Pradesh on draft feasibility study report.

## **5. Strip Plan and clearances along with Land acquisition report**

## **6. Draft Detailed Project Report (DPR)**

The draft DPR Submission shall consist of construction package-wise Main Report, Design Report, Materials Report, Engineering Report, Drainage Design Report, Economic and Financial Analysis Report, Environmental Assessment Report including Resettlement Action Plan (RAP), Package-wise bid Documents and Drawings.

The Documents and Drawings shall be submitted for the proposed tunnel alternative and shall be in the following format:

### Reports

- i. Volume-I, Main Report :This report will present the project background, social analysis of the project, details of surveys and investigations carried out, analysis and interpretation of survey and investigation data, traffic studies and demand forecasts designs, cost estimation, environmental aspects, economic and commercial analyses and conclusions. The report shall include Executive Summary giving brief accounts of the findings of the study and recommendations including what not limited to the reports such as General Project Description, Horizontal and Vertical Tunnel Alignment, Typical cross section, Pavement, Tunnel Safety concept, Ventilation Concept and design , Ventilation shafts etc., Hydraulic Design , Construction Method, Geotechnical/Geological evaluation and Rock Mass classification , Tunnel Support System, Portal Design and Construction Time, Construction Cost etc. The Report shall also include maps, charts and diagrams showing locations and details of 80 existing features and the essential features of improvement and upgrading. The Environmental Impact Assessment (EIA) Report for contract package shall be submitted as a part of the main report. The basic data obtained from the field studies and investigations and input data used for the preliminary design shall be submitted in a separate volume as an Appendix to Main Report.
- ii. Volume - II, Design Report: This volume shall contain design calculations, supported by computer printout of calculations wherever applicable. The Report shall clearly bring out the various features of design standards adopted for the study. The design report will be in two parts. Part-I shall primarily deal with the design of bridges, tunnels and cross-drainage structures while Part-II shall deal with the design of road features and pavement composition. The sub-soil exploration report including the complete details of boring done, bore log report, geotechnical base line report, comparison between conventional and TBM construction, analyses and interpretation of data and the selection of design

parameters shall be included as an Appendix to the Design Report. The detailed design for all features should be carried out as per the requirements of the Design Standards for the project. However, there may be situations wherein it has not been possible to strictly adhere to the design standards due to the existing site conditions, restrictions and other considerations. The report should clearly bring out the details of these aspect and the standards adopted.

- iii. Volume - III, Materials Report: The Materials Report shall contain details concerning the proposed borrow areas and quarries for construction materials and possible sources of water for construction purposes. The report shall include details on locations of borrow areas and quarries shown on maps and charts and also the estimated quantities with mass haul diagram including possible end use with leads involved, the details of sampling and testing carried out and results in the form of important index values with possible end use thereof.  
The materials Report shall also include details of sampling, testing and test results obtained in respect physical properties of subgrade soils. The information shall be presented in tabular as well as in graphical representations and schematic diagrams. The Report shall present soil profiles along the alignment.  
The material Report should also clearly indicate the locations of areas with problematic soils. Recommendations concerning the improvement of such soils for use in the proposed construction works, such as stabilization (cement, lime, mechanical) should be included in the Report.
- iv. Volume - IV, Environmental Assessment Report including Environmental Management Plan (EMP) & Resettlement Action Plan (RAP): The Report shall be prepared conforming to the Guidelines of the Government of India, State Government and World Bank / ADB as appropriate for construction package.
- v. Volume-V, Technical Specifications: The MORT&H's Technical Specifications for Road and Bridge works shall be followed for this study. However, Volume IV: Technical Specifications shall contain the special technical specifications which are not covered by MOST Specifications for Roads and Bridges (latest edition / revision) and also specific quality control norms for the construction of works.
- vi. Volume - VI, Rate Analysis: This volume will present the analysis of rates for all items of works. The details of unit rate of materials at source, carriage charges, any other applicable charges, labour rates, machine charges as considered in arriving at unit rates will be included in this volume.
- vii. Volume - VII, Cost Estimates: This volume will present the contract package wise cost of each item of work as well as a summary of total cost.
- viii. Volume - VIII, Bill of Quantities: This volume shall contain the package-wise detailed Bill of Quantities for all items of works.
- ix. Volume - IX, Drawing Volume: All drawings forming part of this volume shall be 'good for construction' drawings. All plan and profile drawings will be prepared inscale 1:250V and 1:2500H scale to cover one km in one sheet

## **7. Final Detailed Project Report, Documents and Drawings (6 Sets)**

The Final DPR of proposed tunnel alternative consisting of Main Report, Design Report, Drainage Design Report and Materials Report, incorporating all revisions deemed relevant following receipt of the comments from MoRTH/Public Works Department, Himachal Pradesh on the draft DPR shall be submitted

## **8. Bid documents and Technical Schedules**

### **Bid documents**

- a) The consultant shall prepare bid documents for EPC, PPP or other modes of contracting as suggested by MoRTH/Public Works Department, Himachal Pradesh.
- b) Individual bid documents will be submitted for each mode suggested and for each individual package or section identified for execution
- c) Consultant shall assemble and provide all supporting documents from the DPR assignment that will be required for the bid, in the format required by the contracting SOP in force at the time of bidding or as maybe required by the authority



#### Technical Schedules

- a. The consultant shall submit a Draft Contract/Concession Agreement derived from the Master Contract/Concession Agreement maintained by the authority with all required modifications and inclusions made with reference to the .
- b. The agreement submitted shall contain all required technical schedules updated with the pertinent project details and data required
- c. Draft agreement and schedules shall be finalised in consultation with the authority and submitted for further processing and use with the contractor/concessionaire awarded the bid packages

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### 3. TOR of QATA

**QATA will be the part of scope of PMC**

#### A) BACKGROUND

The Government of Himachal Pradesh through HPRIDCL (client) and M/s GC- RITES-SECON JV comprising of GEOCONSULT ZT GmbH (Lead Firm), Hoelzlstrasse and RITES Ltd. (consultant) in the year 2008 has checked the feasibility and detailed design of the tunnels in Shimla. The design of these tunnels was subsequently checked and updated by Assystem India Limited (Formerly Known as L&T Infrastructure Engineering Ltd.) Chennai during their preparation of the Urban Road Improvement Project for Shimla district. Among these proposed tunnels, some of the tunnels have already been constructed by GoHP.

**Description of Tunnel:** Circular Road in Shimla could be considered as one of the major urban arterial roads of the city. Traffic Bottlenecks have become a common feature along the road in recent times because of capacity stagnation due to the restrictive terrain condition and with no widening possibility. Construction of tunnels has been proposed as a solution which will enable the thorough traffic to bypass congested road sections and junctions where most of the bottlenecks are experienced. In this regard, Government of Himachal Pradesh has desired to eliminate the sectereit congestion which usually occurs due to traffic flow from Tauland area to IGMC through Sanjauli chowk, Chotta shimla and HP sectereit. Hence three alternates are to be found out by the consultant. Government will select one of the best alternative among these alternatives and detailed project report of this one alternative is to be prepared including detailed engineering design, preparation of safeguards documents, BoQ, cost estimates and bidding documents etc. For successful implementation of this project, the Lead implementing agency.

HP Road and Infrastructure Development Corporation (HPRIDCL), represented by the Director (Projects) intends to have a Project Management and Construction supervision Consultant.

#### 4. Objectives: -

To ensure achieving high quality in construction work to be executed under road rehabilitation program.

- To ensure that all the work carried out under this program fully comply with engineering designs, technical specifications, drawings, established codes & sound engineering practices and contract documents.
- To provide technical audit and advisory services for the works executed under the road rehabilitation program.
- To strengthen the technical capabilities & promote technology transfer to the engineers of HPRIDCL through on job training and technical audit/ advisory services.
- To strengthen the capabilities of the local contracting industry by encouraging expansion, acquisition of modern equipment and introduction of new technologies, processes and procedures.
- To ensure that IRC mandated Environmental Mitigation measures are adhered to during construction.

## **5. Scope of Consultant's Services**

The scope of consulting Services will include the following:

1. Assist in interpretation of the drawings and Technical Specifications etc. as and when required by the HPRIDCL.

## **6. Task to be carried out under the Consultancy Services**

### **6.1 Task 1: Team Mobilization and Project Start-up**

Team Leader will introduce team members with the concerned officials of HPRIDCL and will hold meetings to discuss the following:

- Rules and responsibilities of all parties in the project setup and layout the rules and guidelines for implementation of the project.
- Status on award of contract for various sections
- Reporting system and contact for various sections
- Setting up of consultant's project office
- Issuing of Project Reports, Contract Documents and other background information related to the project

### **6.2 Task 2: Review of Available Documents**

Following documents/reports may be provided to successful bidder after approval of competent authority:

- DPR & Feasibility Report of 2008 prepared by GEOCONSULT-RITES-SECON (JV).
- Revised DPR (of 2008) prepared by Assystem India Limited (Formerly Known as L&T Infrastructure Engineering Ltd.) In 2024.

### **6.3 Task 3: Preparation of Quality Assurance Plan**

The Consultant, in discussion with the HPRIDCL, shall prepare a Quality Assurance Plan (QAP), which will detail Consultant's Plan to conduct the various activities and measures/procedures to keep a check on the quality of the products. The Quality Assurance Plan and Quality Control procedures will be continually checked by the Consultant's supervisory staff to oversee work completed according to specifications or accepted international practices.

The main considerations that should weigh with preparation of an overall Quality Assurance Plan are: -

Clearly defining the objectives, numerating the activities involved

- Incorporating the requirements of quality in each activity and providing for a fail proof safeguard, if any,
- Laying down the surveillance plan, checks for each apprehended lapse and omission

- Establishment of corrective action and continuous improvement process.

The Consultants shall also develop forms and procedures for proper implementation of the Quality Assurance Plan. They shall, inter alia, include the following: -

Procedure for storing of materials to be used in permanent works.

- Type, frequency and procedure of tests for different kinds of materials and related pavement works-Inspection and test plans including requirement for witnessing tests,
- Requirements for recordkeeping.
- Norms and procedures for control of process related to laying of bituminous concrete, surface regularity for pavement and concrete structures.
- Acceptability criteria for work and workmanship.
- Organization of materials from stockyards during laying and finished works - Procedures for monitoring of compaction equipment and field compaction.
- Procedures for monitoring/inspection of bitumen plants during production, laying and compaction.
- Procedures for monitoring bituminous concrete production, laying and compacting.
- Formats for recording and compilation of test data
- Reporting system for test results and for actions to be taken in respect of quality
- Other aspects as specifically required/modified to suit to prevailing site conditions and other agencies.
- Safety of the public and the workforces

#### **6.4 Task 4: Environmental Impacts of Works**

The Consultant will be constantly alert to environmental concerns and recommendations in the Environmental Assessment plans prepared as part of the Project. Apart from the measures built in to the project, the Consultant will pay particular attention to environmental management system of project; assess E&S risk and conduct due diligence during construction not limited to compliance to conditions in clearances/approvals, implementation of mitigation measures, community health and safety, handling of rain runoff, waste earth and dumpsites, slope stability and protection, erosion and sedimentation, air and noise pollution; management of municipal solid and hazardous wastes, enhancement measures, impacts on biodiversity and habitat. The Consultant will ensure that mitigation measures for safeguarding the environment are implemented by the Contractor as per ESMP/EMP, IRC Specifications for Road and Bridge Works and Hill road manual. In case of observed or potential environment degradation and non-compliance, advise and prepare recommendations to the HPRIDCL for mitigation measures.

#### **6.5 Task 5: Training and Technology transfer**

Deleted

### **6.11 Task 11: Reporting Requirements**

Reports required to be submitted in three copies each of, hard & soft copy include the following:

- Monthly reports on the activities progress and major issues and the observations by the P  
MC's Engineer.
- The final audit report contains detailed report of quality and other relevant  
information.
- Final quality Report–certificate covering overall view of quality and all items.

# ANNEXURE –C

# I. Form of Contract

## TIME-BASED

(Text in brackets [ ] is optional; all notes should be deleted in the final text)

This CONTRACT (hereinafter called the “Contract”) is made the [number] day of the month of [month], [year], between, on the one hand, [name of Client or Recipient] (hereinafter called the “Employer”) and, on the other hand, [name of Consultant] (hereinafter called the “Consultant”).

*[If the Consultant consist of more than one entity, the above should be partially amended to read as follows: “...(hereinafter called the “consortium/Associates” as applicable) and, on the other hand, a Joint Venture (name of the JV) consisting of the following entities, each member of which will be jointly and severally liable to the Client for all the Consultant’s obligations under this Contract, namely, [name of member] and [name of member] (hereinafter called the “Consultant”).]*

### WHEREAS

- (a) The Client/Employer has requested the Consultant to provide certain consulting services as defined in this Contract (hereinafter called the “Services”);
  - (b) the Consultant, having represented to the Client/Employer that it has the required professional skills, expertise and technical resources, has agreed to provide the Services on the terms and conditions set forth in this Contract;
  - (c) Circular Road in Shimla could be considered as one of the major urban arterial roads of the city. Traffic Bottlenecks have become a common feature along the road in recent times because of capacity stagnation due to the restrictive terrain condition and with no widening possibility. Construction of tunnels has been proposed as a solution which will enable the thorough traffic to bypass congested road sections and junctions where most of the bottlenecks are experienced. In this regard, Government of Himachal Pradesh has desired to eliminate the sectereit congestion which usually occurs due to traffic flow from Tauland area to IGMC through Chotta Shimla, HP sectereit and Sanjauli chowk. Hence three alternates are to be found out by the consultant. Government will select one of the best alternative among these alternatives and detailed project report of this one alternative is to be prepared including detailed engineering design, preparation of safeguards documents, BoQ, cost estimates and bidding documents etc. The Lead implementing agency Himachal Pradesh Road and Infrastructure Development Corporation Ltd. (HPRIDCL), represented by the Director (Projects) intends to have a Consultancy services for preparation of DPR and preconstruction activities of Tunnel from IGMC Junction to old Shimla area (Chota Shimla, secretariat, Lift to mall road etc..) for Traffic decongestion.
- The detailed design of the tunnel prepared by M/s GC- RITES-SECON JV comprising of GEOCONSULT ZT GmbH (Lead Firm), Hoelzlstrasse, Austria and RITES Ltd. India, and SECON Pvt. Ltd. India. And subsequently updated by Assystem India Limited (Formerly Known as L&T Infrastructure Engineering Ltd.) has to be reviewed and updated as per the best global practices by the consultant. Moreover, the Consultant will ensure to achieve high quality in construction works so that all works fully comply with the engineering designs, technical specifications, drawing, established codes and sound engineering practices and contract

documents. He will ensure that the EnvironmentMitigation Measure are adhered to during construction and provide his services as per the Terms of Reference of Contract Agreement.

NOW THEREFORE the parties hereto hereby agree as follows:

1. The following documents attached hereto shall be deemed to form an integral part of this Contract:
  - (a) The General Conditions of Contract (including Attachment 1 “Fraud and Corruption”;
  - (b) The Special Conditions of Contract;
  - (c) Appendices:
    - Appendix A: Terms of Reference
    - Appendix B: Key Experts
    - Appendix C: Deleted
    - Appendix D: Deleted
    - Appendix E: Form of Advance Payments Guarantee
    - Appendix F Code of Conduct (ESHS) [*Note to Client: to be included for supervision of civil works contracts*]

In the event of any inconsistency between the documents, the following order of precedence shall prevail: the Special Conditions of Contract; the General Conditions of Contract, including Attachment 1; Appendix A; Appendix B; Appendix C and Appendix D; Appendix E; and Appendix F [*Note to Client: to be included for supervision of civil works contracts*]. Any reference to this Contract shall include, where the context permits, a reference to its Appendices.

2. The mutual rights and obligations of the Client and the Consultant shall be as set forth in the Contract, in particular:
  - (a) The Consultant shall carry out the Services in accordance with the provisions of the Contract; and
  - (b) The Client shall make payments to the Consultant in accordance with the provisions of the Contract.

IN WITNESS WHEREOF, the Parties hereto have caused this Contract to be signed in their respective names as of the day and year first above written.

For and on behalf of [*Name of Client*]

\_\_\_\_\_

[*Authorized Representative of the Client – name, title and signature*]



For and on behalf of *[Name of Consultant or Name of a Joint Venture]*

\_\_\_\_\_

*[Authorized Representative of the Consultant – name and signature]*

*[For a joint venture, either all members shall sign or only the lead member, in which case the power of attorney to sign on behalf of all members shall be attached.]*

For and on behalf of each of the members of the Consultant [insert the name of the Joint Venture]

*[Name of the lead member]*

\_\_\_\_\_

*[Authorized Representative on behalf of a Joint Venture]*

*[Add signature blocks for each member if all are signing]*