

भारत सरकार GOVERNMENT OF INDIA
रेल मंत्रालय MINISTRY OF RAILWAYS
(रेलवे बोर्ड RAILWAY BOARD)

No. 2022/GS/Stn. Dev.-I/08/70

New Delhi, dated: 31.12.2022

**The General Managers,
All Zonal Railways.**

Sub: Amrit Bharat Station Scheme for Indian Railways- draft Terms of Reference for engaging Technical Consultants for Master Planning

Ref. : 1. Railway Board letter of even number dated 23.12.2022, 26.12.2022, 29.12.2022

Amrit Bharat Station Scheme has been circulated vide above ref. letter dated 23.12.2022. Zonal Railways have been asked to identify 15 stations per Division to be developed under this scheme. A draft for Terms of Reference(TOR) for engaging Technical consultants for Master Planning and preparation of tender schedules is attached herewith. This draft TOR is for guidance only, is not mandatory and does not cover all types of services under Amrit Bharat Station Scheme. Certain activities where the Divisions have sufficient expertise may be planned in-house also. Divisions may modify the draft TOR as per their local needs. However, care should be taken to meet the timelines given during the video conference with DRMs and CPM/GSUs on 26.12.2022.

R
31.12.22
(Rakesh Choudhary)
(Executive Director(SD & Trans.)
Railway Board

DA/- As above.

Copy to:-

1. PCEs, CCMs, CEEs & CSTEs, DRMs all zonal railways.

TERMS OF REFERENCE (TOR)

1. General

1.1. The Authority seeks the services of Technical Consultant for preparing Concept Plans, Master Plan, Technical Feasibility Report, Estimate and Tender Schedules for upgradation of [.....] Railway Station (the 'Railway Station') under '**Amrit Bharat Station Scheme**' as per detailed scope of services given herewith. The details of the plot for Master Planning are attached as [...Annexure-1].

2. Objective

2.1. The broad objective of this assignment (the "**Objective**") is to undertake Technical Feasibility Study and Prepare a Concept & Master Plan for upgradation of the Railway Station under '**Amrit Bharat Station Scheme**' (the '**Scheme**') for the purpose of firming up Authority's requirements in respect of upgradation of the Railway Station.

The following shall be the broad Objective:

- (a) To study the usage of the Railway Station by different stakeholders, the condition and survey of station assets, traffic at and around the station and submit proposals and reports as per the Detailed scope of services of this Terms of Reference.
- (b) Submit three options for cost efficient improvement of station façade and circulating area and develop the details for the option selected by the Authority.
- (c) Prepare the Master Plan for the station as per the selected option and carryout appropriate phasing plans for implementation of the Master Plan in consultation with the Authority.
- (d) Prepare a detailed report for enhancement/upgradation of amenities for station users, elements for enhancing user experience etc.
- (e) Prepare detailed drawings, specifications, estimates and tender schedules for the first phase of the Master Plan, assist the Authority with respect to queries by prospective bidders and technical support during the execution of works of first Phase by contractor/s.

3. Scope of Services:

The scope of services shall be as follows:

3.1. The Consultant shall undertake this consultancy in order to achieve the Objective specified in Clause 2 above. The detailed scope of services specified below is not exhaustive. The Consultant shall be required to carry out additional works, if any, to meet the objectives stated above without any extra cost. The Consultants are, therefore, advised to study the existing site conditions carefully and determine the activities required before quoting.

3.2. The basic objective underlying the Master Plan is to improve facilities for the station users. Any planning shall keep in view the subsequent development of station into a city center, including providing a roof plaza, and any future commercial development. As far as possible, the planning shall be such that there is as little overlap and wastage during subsequent development.

3.3. The Master Plan to be prepared shall aim at optimal planning for facilities such as parking, inter-modal transfer and in-coming/outgoing road traffic at the Station as well as real estate development.

3.4. The Technical Feasibility Report and Master Plan to be prepared by the Consultant shall be supplemented with complete structural/ architectural/ MEPF drawings for all the components and the detailed Bill of Quantities (BOQ) cost related to development planned in Phase-1.

3.5. The outline scope of services to be performed by the Consultant shall include but not limited to the following:

- i. Review of previous reports/ available plans / drawings /data and verify the available drawings details at the Site;
- ii. Traffic study and development of integrated traffic plans;

- iii. Studies, Surveys and Investigations;
 - a. Engineering Survey;
 - b. Ascertaining condition, ownership and usage of structures;
 - c. Existing utilities mapping, assess and plan permanent and temporary diversion of utilities;
 - d. Collection of Land maps/ records and details from Site to understand the extent of Railway land available for planning; and
 - e. Study of identification of sensitive structures;
- iv. Applicable Development Control Norms;
- v. Planning for augmentation of utility infrastructure such as water, power, sewage treatment etc;
- vi. Plan for enhancement and upgradation of amenities at the station
- vii. Relocation plan for buildings, structures and utilities;
- viii. Architectural Controls, special conditions for execution of work, Preparation of indicative BOQ and Cost Estimates of Phase-1 works;

4. Detailed Scope of Services

The above scope of services is further explained hereunder:

4.1. Review of previous reports/drawing/data and verify the available drawings of the Site

4.1.1. The consultant shall collect relevant details, information, data, reports, future plans from the Railways/Local Bodies/Departments and understand the proposed/planned development within the influence area of the Railway Station. These data should include:

- (a) Available details with railway including yard plans, station plans, utility plans, existing drone survey reports, railway's planning/ proposals for utilizing land, any land proposed for monetization by RLDA or to be handed over to local bodies/Metro etc;
- (b) Details of station structure, Foot Over Bridges, Cover on Platforms, signages, CCTV, announcements, utilities and all other details necessary for the preparation of technical feasibility report and master plan.
- (c) Details of passenger, traffic and engineering surveys, goods/ parcel/ post movement details, train movement details, circulation area details, types of existing passenger amenities, facilities at station and terms of their license/ lease etc.
- (d) Permissible height, ground coverage, setbacks etc applicable to the development of in Railway land as per building bye laws, City Master Plan proposals in station surrounding areas;

4.1.2. Master Plan shall be developed around the future yard plans/operational infrastructure frozen by the Railways for the Project Station. The same shall be reviewed by the Consultant and may recommend improvements / adjustments while developing the Master Plan. The plans, drawings, other data available for the area has to be verified by physical verification, topographical survey and available records/reports. The Consultant shall ascertain and study development plans of various departments/local bodies which have bearing on the Master Plan. An integrated Master Plan for the areas necessary to provide passenger amenities/ circulation areas to meet the Objective at Project Railway Station shall be in the scope of the consultant.

4.2. Railway Demand assessment: The Consultant shall collect the expected future passenger traffic projections for the next 20 (Twenty) years from the Authority.

4.3. Traffic study and development of integrated traffic plans

4.3.1. To ensure easy access to the passengers from surrounding city, the Consultant shall study all roads leading to station. The consultant shall also study the traffic survey reports/data provided by the Authority and local bodies and plan

widening of existing roads, junctions / corridor improvements (including grade separators where absolutely necessary over roads as well as the railway yard), improvement of existing geometry, augmentation of capacity on approach roads, segregation of through traffic, etc.

4.3.2. The Master Plan shall, inter-alia, include facilities required for vehicles carrying passengers, parcels, catering and linen materials, garbage disposal, vehicles for maintenance, VIP movements etc. and ensure smooth movements in the station premises. The design of circulating areas and inter-modal transfer facilities should provide an efficient, convenient and aesthetic solution to connectivity and integration between various modes of transport.

4.3.3. Consultant shall aim at seamless flow for pedestrians between public/private transport boarding/alighting points and station premises and minimizing the length of walking distances. The requirements of pedestrians and physically disabled persons are to be specially taken care of. Parking requirements of the station should be well provided in the Master Plan. Considerations for disaster management shall be an integral part of the planning.

4.4. Studies, Surveys and Investigations

4.4.1. Engineering Survey: The Consultant shall carry out a detailed survey of the site and the surrounding areas to prepare accurate site plans. The development should not be confined to the site but also include infrastructure facilities and adjoining railway land to present an integrated development around the site. A report shall be prepared on topographic survey indicating base line survey report which shall include GPS benchmark, GTS benchmark, triangulation network points (temporary benchmark), close traverse survey details along with the photographs of important locations.

4.4.2. Ascertaining condition, ownership and usage of structures: Survey the existing structures to the extent covered in the areas required for preparing the Master Plan and assess their condition/ownership/usage etc, including the need for their relocation or restoration, as the case may be. Study of as-built drawings and condition survey of structures likely to be affected during construction works shall be carried out and necessary plan shall be developed /suggested so that the adjacent structures are not affected during construction activities for the project. Report on building condition survey including inventory report shall be submitted.

4.4.3. Existing utilities mapping, assessment and planning of permanent and temporary diversion of utilities: The Consultant shall map the physical and ground details, such as alignment of roads, details of existing structures on the proposed development area, land use details, utilities (telephone lines, signal lines/ equipment, HT/LT lines, water supply, drainage/gas lines and OFC cables, etc), trees and other plantation and access to adjacent properties.

4.4.4. Geotechnical Investigation: The consultant shall carryout need based geotechnical investigation for the Technical Feasibility Report.

4.4.5. Study of Sensitive Structures: A survey of all the sensitive structures which are sensitive from the religious, archaeological, heritage and historical point of view and are located within 1km of the site shall be carried out along with all relevant details like approach, condition, patronage and impact of project on them and vice-versa.

4.5. Assessment of Additional Requirement of Utility Infrastructure

4.5.1. Consultant shall review the existing infrastructure in terms of drainage, water, sewerage, power and communications for the entire Railway Station and suggest any augmentations/ modifications/ replacement duly incorporating elements of sustainable development.

4.6.Relocation Plan for Structures

- 4.6.1.** Consultant shall assess the requirements of relocation of structures and their users/occupants, removal of encroachments, rehabilitation and resettlement, land acquisition, diversion of services/utilities and trees to be felled. Wherever technically possible, and subject to sufficient residual life/ satisfactory condition of buildings, the Consultant shall plan to retain some of the existing structures through the processes of restoration, adaptive reuse etc.
- 4.6.2.** Plans prepared by the Consultant shall incorporate drawings for structures required to be relocated and due space provisions for the relocation and permanent diversion of services/utilities. Cost estimates for all these requirements shall also be included.
- 4.6.3.** Any other study or survey which the Consultant considers necessary or which Authority may stipulate for successful completion of the Services under the Consultancy shall be carried out.
- 4.6.4.** The Consultant shall identify locations of plots suitable for commercial monetization including development of logistics parks etc at the Railway Station. The planning/ relocation shall be done such that such monetization can be done subsequently. Details and drawings of such locations shall be included in the Technical Feasibility Report.
- 4.6.5.** The Consultant shall suggest the relocation of operational and other structures that need to be dismantled on account of the Master Plan and shall suggest workable plans to first complete the construction of buildings to house facilities prior to their actual shifting/demolition. Only in exceptional and unavoidable cases, shifting of establishments to temporary accommodation should be resorted to.

4.7.Consultation with Local Bodies/other Authorities:

- 4.7.1.** The Consultant shall initiate consultations for improving circulation in the roads leading to the Railway Station and owners for other modes of transport including Metro, RRTS, BRTS, ropeways, waterways etc.
- 4.7.2.** The responsibility for defending the plans/proposals and designs including modifications thereto, if any, before the various authorities shall remain with the Consultant.
- 4.7.3.** The Consultant shall study the development control norms, building bylaws and Master Plan of the city and other requirements laid down by local authorities and shall advise Authority regarding the nature and extent of construction permitted. The Consultant shall actively assist Authority in preparation of documents, reports, drawings etc. to enable Authority to logically argue its case and get the issues satisfactorily resolved. The Consultant shall prepare plans conforming to the extant building bylaws or as instructed by the Authority.

4.8.Study of Amenities at the station:

- 4.8.1.** The consultant shall carefully study the amenities at the station for its various users and suggest for improvements of the same as per the extant policies of the Ministry of Railways.
- 4.8.2.** It is envisaged to provide cost efficient improvement to facades, provision of wide, well lit aesthetically pleasing entrance porches. The consultants shall study the same and suggest appropriate improvements.
- 4.8.3.** Existing building usage shall be reviewed and space may be required to be released in favour of passengers near the station entrances and the Railway offices should be suitably relocated.
- 4.8.4.** It is envisaged to relocate redundant/old buildings in a cost efficient manner so that space is released for higher priority passenger related activities and future development may be carried out smoothly. Creation of new buildings should

generally be avoided other than those required for relocation of old structures or relocation of structures to improve circulation or provision of structures to improve the size of waiting halls. Consultants should plan it in consultation with the Authority.

- 4.8.5.** Attempts shall be made to club different grades/types of waiting halls and provide good cafeteria/retail facilities as far as possible. Suitable low level partitions may be done in waiting halls if required.
- 4.8.6.** Provision for minimum two stalls for One Station One Product shall be made.
- 4.8.7.** Space shall also be created for Executive Lounges and places for small business meetings.
- 4.8.8.** At least one aesthetically designed hoarding(signage) on each side of the circulating area at a prominent location shall be erected for display of important information etc. The size of such hoarding shall not be less than 10mx20m.
- 4.8.9.** Station approaches should be improved to ensure smooth access by widening of roads, removal of unwanted structures, properly designed signages, dedicated pedestrian pathways, well planned parking areas, improved lighting etc. Necessary liaison should be established with local authorities for necessary improvements to be carried out by local authorities in their areas.
- 4.8.10.** Elements of landscaping, green patches and local art and culture should be used to create a pleasant experience for the station users.
- 4.8.11.** Second Entry Station Building and circulating area shall be improved as per the needs of the station. Wherever second entry building is not being provided presently, space for circulating area should be well planned.
- 4.8.12.** High level platforms(760-840 mm) shall be provided at the Railway Station. Length of the platforms shall generally be 600m, however, yard layout and other considerations of the Authority should be examined while planning.
- 4.8.13.** Length, location and phasing of Platform shelters shall be developed in consultation with the Authority based on usage of the station.
- 4.8.14.** Ballastless tracks (BLT) should be provided on platform lines and lines with train maintenance facilities. Proposals and execution of works should be planned in suitable phases in consultation with the Authority.
- 4.8.15.** Drainage of platforms and circulating areas shall be studied by the consultant. Special emphasis shall be given to achieve self cleansing of drains as far as possible. Suitable cross drains, sump and pump arrangement may be planned where natural slopes are not adequate. Drains may be planned to be covered with aesthetically designed theft resistant covers. Consultant shall also develop a drainage plan for the Master Plan area.
- 4.8.16.** Cables should be planned to be laid in aesthetically designed duct or cable trays and should have provision for future cables as well.
- 4.8.17.** Material finishes of elements, such as flooring, walls, structures, furniture, sanitary fittings, etc. within the public areas of the station where surfaces either come in direct physical contact of passengers or are visible to them should be highly durable (preferably washable), generally dustproof and need low maintenance.
- 4.8.18.** The furniture available on Waiting halls, Platforms, Retiring Rooms, Offices shall be reviewed and intervention planned for more comfortable and durable furniture suitable to the Railway Stations of that area. In a phased manner, it shall be planned to eliminate multi-design furniture. Suggestions shall also be made by the Consultant for usage of the released furniture.
- 4.8.19.** All signages/display boards including train indication boards and coach guidance systems/boards should be positioned for intuitive way finding,

should have good visibility and be aesthetically pleasing. Public announcement system should be planned to ensure pleasing quality.

- 4.8.20.** Escalators may be provided at NSG/1-4 and SG/1-2 category stations irrespective of footfall. Phasing may be required for provision of the lifts/escalators in consultation with Authority. However, the General Arrangement Drawings should be prepared in sufficient details to speed up the work of installation of escalators/lifts as per the phasing plan.
- 4.8.21.** Amenities for Divyangjan at stations shall be as per guidelines issued by Railway Board from time to time.
- 4.8.22.** Ceremonial flags may be provided at appropriate space in the station.
- 4.8.23.** At least two station name boards should be LED based with good visibility for the passengers of trains passing through the station.
- 4.8.24.** Circulating area boundary wall normally should not block the view of the station from outside. Access may be controlled by iron/steel grill fencing. However, the planning should be such that unnecessary dismantling of existing walls is avoided. The costs of providing fencing should not be very high.
- 4.8.25.** Sufficient number of toilets shall be provided at all categories of stations with separate provisions for women and Divyangjan. Location of toilets should be appropriate to station usage, easily visible and accessible.
- 4.8.26.** Consultant shall study the existing assets and submit plans for gradual shift to sustainable and environmental friendly solutions as per availability of funds and condition of existing assets.
- 4.8.27.** Lighting arrangements at the station shall be studied in detail by the Consultant. Illumination levels specified vide Railway Board's letter no. 2008/Elect(G)/172/1 dated 08.03.2019 for the then A1 and A category stations shall be applicable for Amrit Bharat Stations. Tentative guidelines are as given in Railway Board's letter no. 2022/GS/Stn. Dev.-I/08/70 dated 23.12.2022. The Consultants shall also submit proposals to further improve the overall look of a station through façade lighting based upon the layout of a particular station.
- 4.8.28.** CCTV surveillance system along with panic button at various location in the stations to be planned in consultation with Authority.
- 4.8.29.** The above list of amenities is not exhaustive. The Consultant shall examine and submit proposals for the amenities based on their existing condition requiring improvement, as per the guidelines issued by Ministry of Railways, best practices, global benchmarks and aspirations of the society. Based on the Authority's decisions for the type of amenities, further detailing for the Master Plan, Technical Feasibility Report, Estimates and Tender Schedules shall be carried out.

4.9.Development of Master Plan

- 4.9.1.** The consultant shall develop at least three conceptual alternatives for façade improvement for the station building including the concerned circulating areas. Wherever station has multiple entry buildings, the conceptual alternatives (at least three) shall be developed for each one of them separately. The Consultant shall provide elementary 3-D views and assess the approximate costs and benefits of different alternatives for the assessment of the Authority. The conceptual alternatives should be sufficiently detailed, equally complete, feasible and viable in all respects so that the Authority may be able to take an informed decision based on a range of options. These alternatives shall be presented at an intermediate stage before draft submission stage. The Authority might selectively choose some concepts from

each alternative and the Consultant may have to develop a new option based on these inputs. The alternatives which are rejected by Authority for non-compliance to the TOR shall have to be replaced by the Consultant. The Consultant will carry out detailing for the Concept Plan selected by the Authority and proceed further to develop the Master Plan.

- 4.9.2.** The Master Plan, read with supporting drawings and reports, shall meet the requirements of this TOR. The Master Plan should be sufficiently detailed to give a complete picture of the station.
- 4.9.3.** The Master Plan shall also clearly indicate the land pockets identified for subsequent commercial development and its approach roads and other utilities.
- 4.9.4.** The Master Plan shall show the location for Ceremonial flag, the tentative location for Roof Plaza, the places identified for 5G towers, the spaces marked for parcel sidings/spurs and goods/parcel handling areas, the pockets identified for development as green patches etc.
- 4.9.5.** The Master Plan shall clearly indicate the integration with the other existing / proposed public transport modes, like High-Speed Railway, Metro LRT, and Metro Rail System, BRTS, Bus Depot etc.
- 4.9.6.** Master plan shall be fit for modular / phased construction.
- 4.9.7.** The drainage of circulating area and yard shall be carefully studied and proposals shall be included for improving the same.
- 4.9.8.** The Master Plan shall clearly show the building needing relocations and any modifications changing the footprint of the existing buildings/structures.
- 4.9.9.** The Technical Feasibility Report to be prepared by the Consultant will contain various drawings, floor plans and sufficient other details to judge the feasibility and constructability of various layouts. After receiving the observations of Authority on the Master Plan and draft Feasibility Report, the Consultant shall further amplify the major elements of design of the Project, and prepare Design for the Project such that tenders/bids can be called for the same, in single or multiple phases planned by the Authority. The Master Plan and Technical Feasibility Report shall be compliant to the applicable laws/bye-laws/rules/regulations in force at the time of submission of the Master Plan and Technical Feasibility Report.

4.10. Designs

- 4.10.1.** The Consultant shall prepare design and drawings of the planned Works under Phase-1. The details of foundations, structural system supporting unique and uncommon architectural elements, typical parameters of unique and special architectural finishes, parameters of external architectural facades/canopies, operational and passenger areas including size, location and minimum facilities to be provided in each area, platform usage plan showing positioning of important operational and passenger facilities, etc. The architectural design should be advertisement friendly and earmark space for advertisements.
- 4.10.2.** These drawings shall be prepared in sets of A-3 or larger size drawing sheets containing drawings as well as design parameters. These design drawings together with specifications shall be adequately clear to explain the scope of work to the Bidders. For detailing and explaining the plans/structures/structural components, necessary three/two dimensional sketches shall also be provided.

4.11. Project cost and Preparation of BOQ and Cost Estimates

- 4.11.1.** The Consultant shall work out the BOQ of various components and prepare cost estimates of the Works with a break up of cost for each component separately for works planned in Phase-1.

4.12. Preparation of Technical Schedules

4.12.1. The Consultant shall prepare, revise and update all technical schedules for works planned in Phase-1 in consultation with the Authority. These schedules will define the Authority's architectural parameters and controls as well as the technical requirements, based on which tenders shall be called by the Authority in one of more phases.

4.12.2. These schedules shall consist of drawings and design, construction and functional criteria and will generally define the site of the project including the existing assets and facilities, scope of relocation and development, development control norms for the proposed development, scope of other civic infrastructure such as roads, parks, landscaping etc. Generally, the content of these schedules shall be derived from the approved Master Plan and draft Technical Feasibility Report and shall be submitted as part of the final Technical Feasibility Report.

4.12.3. The Schedule of Rate as well as non-schedule items shall be included in the planning. Necessary market rate analysis, quotations for the basis of rates and other supporting documents shall be furnished to enable the estimates to be sanctioned.

5. **Deliverables:** The Consultant shall deliver the following deliverables (the "Deliverables") during the course of this Consultancy. Each Deliverable shall include drawing, report, photographs and such other documents that generally comprise Deliverable for similar consultancy work internationally by way of best practices. The Deliverables shall be so drafted that they could be given to the prospective developers for guidance in preparation of their bids. [5(Five)] hard copies and [2 (two)] soft copies in pen-drives of all the Reports, Drawings, 3D/2D views etc. mentioned below shall be submitted to Authority. The size of drawings shall be A-3 (maximum) up-to Concept Plan stage. Subsequent stage drawings may be submitted on larger sheets, if required.

5.1. Survey Report (SR):

This report shall contain the details provided by the Authority about the land boundary plans, yard plans, projected traffic details, estimated passenger numbers for the design horizon period, any other inputs given by the Authority. The consultations carried out with local bodies and other statutory Authorities shall also be contained in this report. The topographical survey and any other surveys carried out by the Consultant shall also be part of this report. This report shall contain the condition of existing assets including trees etc on the project site. Station usage studies carried out by the Consultant shall be part of the Survey Report.

5.2. Concept Plan (CP)

As per details in clause 4.9.1 above.

5.3. Master Plan (MP)

5.3.1. As per clause 4.9 above

5.3.2. Format for stakeholder consultation as Railway Board letter no. 2022/GS/Stn. Dev.-I/08/70 dated 23.12.2022

5.4. Detailed Estimate (DE)

5.4.1. The Consultant shall prepare a detailed estimate for implementation of the works planned in Phase-1 duly marked in Master Plan in consultation with the Authority. Phasing plan should also cover how various utilities will be provided in each phase. The Consultant shall identify and prepare an exhaustive list of works to be included in the different phases in a manner that is feasible and which improves passenger services at the Station.

5.4.2. The schedule of finishes for various components of project shall also be proposed in this report. During the planning process, the components of different phases

may change and, in that case, the Detailed Estimate shall be modified accordingly.

5.5. Technical Feasibility Report (TFR): The technical feasibility report (the "Technical Feasibility Report" or "TFR") shall include the final Master Plan incorporating compliance of Authority observations, an executive summary of relevant survey/study reports, site plans, drawings of traffic integration, plans at each floor level, sections and elevations, perspective plans, landscape design, streetscape plan, structure relocation, costing, sensitive structure study, phasing and construction planning, appropriate maintenance practices for the solutions proposed by the Consultant etc. The FR shall consist of, but not be limited to, the following:

5.5.1 Drawings: The drawings shall be prepared for the work planned in Phase-1 of Master Plan under Amrit Bharat Station Scheme.

After receiving the approval of the Authority on the Master Plan, the Consultant shall prepare the drawings for foundations, superstructure, underground structure, roof structure, water supply mains, electrical power supply and distribution, communication systems, Passenger Information Systems, sewerage mains, storm water drainage, landscaping etc. in sufficient detail so as to demonstrate the constructability and feasibility of the Master Plan. This shall include but not be limited to Architectural Plan, site plan, ground plan, L-sections, cross sections, elevations, perspective views, street scape plan, traffic integration & Circulation Plan, Utility Plan and landscape plans including brief design commentary. The details of location and types of signages, elements of Local Art & Culture, Façade Lighting Plan lighting at different locations, furniture etc. shall also be included in the drawings.

5.5.2 Construction Methodology: In order to achieve the Objective the Consultant shall suggest a construction methodology that is reasonably elaborate and economical laying down construction sequences, temporary structures, diversion plans and construction phasing. The construction methodology should ensure modularity and amenability to retrofitment.

5.5.3 Construction Plan: The construction plan of Phase-1 works shall include the methodology for execution, equipment required, site planning with respect to locations for storage, flow of construction traffic, handling of materials, fabrication yards, movement of materials, road traffic diversions, rail traffic diversions/blocks, passenger management, temporary arrangements, temporary parking, utility diversions and project scheduling.

5.5.4 User Amenity Report: It shall include detailed report on status of amenities for the users and the proposals for development as detailed in clause 4.8 above.

5.5.6 Other reports as may be prepared by the Consultant in compliance of this TOR, but not forming part of the Reports specified in clauses above.

5.6. Technical Schedules (TS)

The Consultant shall prepare Technical Schedules for Tender documents for selection of contractor Phase I works.

5.6.1. The Consultant shall prepare, revise and update all Technical Schedules and Drawings as per the requirements of the tender document in order to convey the information required to the bidders for Phase I of the Works. These schedules shall consist of drawings and designs, construction and functional outline criteria and will generally define the site of project including the existing assets and facilities, scope of relocation etc.

5.6.2. Detailed Specifications and Schedule of Finishes

The consultant is required to review and update detailed schedules of finishes, specifications, colors, makes and models of all items required for constructing. The consultant shall also provide specifications, details, etc. for new / non-scheduled items. While the existing Authority specifications and schedule of finishes shall be

adopted to the extent possible, project-specific variations, especially in respect of finishes and exteriors would have to be specified.

5.7 Good for Construction Drawings: The Good for Construction(GFC) drawings which are not part of the Technical Feasibility Report, Tender schedules shall be provided by the Consultant during KD6 stage.

6. Time and Payment Schedule

6.1. The total duration of this consultancy assignment shall be one year, excluding any delay in granting approvals including by Authority to the draft reports. The Consultant is expected to provide support during construction by way of providing drawings required during construction and joining site visits as per need. For site visit, travel, boarding and lodging expenses shall be reimbursed as detailed below:

S.No.	Item	Unit	Rate
1			

6.2. Time schedule for submission of important deliverables, shall be determined by the maximum permissible number of days from the date of award of work (the "Key Days").

The Key Days and payment schedule linked to the specified deliverables are given below:

Key Deliverable No.	Description of deliverables	Days from Date of Commencement of work (In Days)	Payment (% of Awarded Cost of Work)
KD1	Survey Report	14	5%
KD2	Concept Plan (CP)	21	10%
KD3	Master Plan (MP)	30	15%
KD4	Technical Feasibility Report (TFR)	42	20%
KD5	Detailed Estimate (DE) along with BOQ Tender Schedules (TS) for work planned in phase-1	45	25%
KD6	Good for Construction Drawings	100	20%
KD7	Support During Construction	365	5
Total			100%

6.3. Weekly Meetings

Authority may review the progress of the Consultancy in every meeting(weekly or earlier) to be held at Authority's office/online as per Authority's requirements.

7.0 Completion of Services

All the study outputs including primary data shall be compiled, classified and submitted by the Consultant to Authority in soft form apart from the Deliverables indicated in above. The study outputs shall remain the property of Authority and shall not be used for any purpose other than that intended under these Terms of Reference without the permission of Authority. The Consultancy services shall stand completed on acceptance of all the required deliverables of the Consultant by Authority and execution of Phase-1 work by the construction Contractor after which Authority shall issue a completion certificate to that effect.