Section-I

NOTICE INVITING e-Tender

NIT No: BARC(V)/CES/Consultant/175, dated 09.04.2025

1.0 Salient details of the work for which bids are invited are as under:

Work Location (s) & Pin Code (s) : Atchutapuram, Visakhapatnam-531011 iii) Work/Product Category : Architecture iv) Tender inviting Authority : Chief Engineer, BARC, Visakhapatnam v) Inviting Officer Address : General Services Building, BARC(V) main campus, Gajuwa		Name of Work	:	"Development of Master Plan and Design of Architectural,	
ii) Work Location (s) & Pin Code (s) : Atchutapuram, Visakhapatnam-531011 iii) Work/Product Category : Architecture iv) Tender inviting Authority : Chief Engineer, BARC, Visakhapatnam v) Inviting Officer Address : General Services Building, BARC(V) main campus, Gajuwa Yellamanchili Road, Maduturu Sub Post Officer Visakhapatnam-531 011 vi) Preliminary Estimated cost of the buildings, services and infrastructure, etc on which consultancy services are required				Structural and allied services for Phase-1 of BARC-	
iii) Work/Product Category : Architecture iv) Tender inviting Authority : Chief Engineer, BARC, Visakhapatnam v) Inviting Officer Address : General Services Building, BARC(V) main campus, Gajuwa Yellamanchili Road, Maduturu Sub Post Officer Visakhapatnam-531 011 vi) Preliminary Estimated cost of the buildings, services and infrastructure, etc on which consultancy services are required		1,			
iv) Tender inviting Authority : Chief Engineer, BARC, Visakhapatnam v) Inviting Officer Address : General Services Building, BARC(V) main campus, Gajuwa Yellamanchili Road, Maduturu Sub Post Of Visakhapatnam-531 011 vi) Preliminary Estimated cost of the buildings, services and infrastructure, etc on which consultancy services are required			:		
v) Inviting Officer Address : General Services Building, BARC(V) main campus, Gajuwa Yellamanchili Road, Maduturu Sub Post Officer Visakhapatnam-531 011 vi) Preliminary Estimated cost of the buildings, services and infrastructure, etc on which consultancy services are required : General Services Building, BARC(V) main campus, Gajuwa Yellamanchili Road, Maduturu Sub Post Officer Address Subject Services Building, BARC(V) main campus, Gajuwa Yellamanchili Road, Maduturu Sub Post Officer Address Subject Services Building, BARC(V) main campus, Gajuwa Yellamanchili Road, Maduturu Sub Post Officer Address Subject Services Building, BARC(V) main campus, Gajuwa Yellamanchili Road, Maduturu Sub Post Officer Address Subject Services Subject Services Building, BARC(V) main campus, Gajuwa Yellamanchili Road, Maduturu Sub Post Officer Address Subject Services Subject Servi		<u> </u>	:		
Yellamanchili Road, Maduturu Sub Post Of Visakhapatnam-531 011 vi) Preliminary Estimated cost of the buildings, services and infrastructure, etc on which consultancy services are required		· · · · · · · · · · · · · · · · · · ·	:		
vi) Preliminary Estimated cost of the buildings, services and infrastructure, etc on which consultancy services are required Visakhapatnam-531 011 Rs 459 Cr + Applicable GST	v)	Inviting Officer Address	:		
vi) Preliminary Estimated cost of the buildings, services and infrastructure, etc on which consultancy services are required Rs 459 Cr + Applicable GST				,	
buildings, services and infrastructure, etc on which consultancy services are required	• • • • • • • • • • • • • • • • • • • •				
infrastructure, etc on which consultancy services are required	VI)	1	:	Rs 459 Cr + Applicable GST	
consultancy services are required		1			
		•			
VII) Estimated value of the consultancy :	::\				
	VII)	•	•	5 4 5 0 0 A U LL 00T	
services in Rupees Rs 4.59 Crores + Applicable GST		services in Rupees			
viii) Tendering Mode E- Procurement : Two Part (03 cover) Public tender	viii)	Tendering Mode F- Procurement	:	Two Part (03 cover) Public tender	
				https://oprocure.gov.in/oprocure/opp	
https://eprocure.gov.in/eprocure/app.		System		nttps://eprocure.gov.in/eprocure/app.	
Pre-Qualification Bid (Cover 1)				Pro Qualification Pid (Cover 1)	
Techno-Commercial Bid (Cover 2)					
Financial Bid (Cover 3)				, ,	
	ix)	Farnest Money		INR 10,83,240/- (Rupees Ten Lakhs Eighty Three	
				Thousand Two Hundred and Forty only). Bidders are	
not required to submit EMD at Pre- Qualificati				not required to submit EMD at Pre- Qualification	
				stage. However, the original EMD is required to be	
submitted in person or through registered post by					
				pre-qualified bidders within 10 working days from	
date of intimation through e-mail by BARC (V).				date of intimation through e-mail by BARC (V).	
Examplian from payment of EMD/Rid Security, or o				Examplian from normant of EMD/Bid Socurity, or any	
				Exemption from payment of EMD/Bid Security, or any	
				other benefits for MSE's / Startups is applicable under	
the relevant Act.					
				Please refer Para 5.6 C of Section-V of this tender	
document.	<u> </u>				
x) Cost of tender Document NIL					
xi) Tender Processing Fee : NIL	xi)	Tender Processing Fee	:	NIL	
xii) Period of work : 730 calendar days .	xii)	Period of work	:	730 calendar days.	
xiii) 'Start/End Date of Download of Bid : From 11.04.2025 (17:00 Hrs.) to 06.05.2025 (15:00 Hrs.)	xiii)	'Start/End Date of Download of Bid	:	From 11.04.2025 (17:00 Hrs.) to 06.05.2025 (15:00 Hrs.)	
Documents' To Download – please visit CPPP website	-	Documents'			
				https://eprocure.gov.in/eprocure/app_Detailed NIT is also	
available on website <u>www.barc.gov.in</u> for view only				La attable de la batta de la batta de la contra della contra de la contra de la contra de la contra de la contra della contra de la contra de la contra de la contra della con	
xiv) Seek clarification Start Date : 11.04.2025 (17:05 Hrs.)				available on website <u>www.barc.gov.in</u> for view only	

vv)	Seek clarification End Date		02.05.2025 (10:00 Hrs.)
xv)	Site Visit Date & Time	•	
xvi)	*****	-	02.05.2025 at 11:00 Hrs
xvii)	Pre-Bid meeting Date & Time	:	02.05.2025 at 11:00 Hrs
xviii)	Pre-Bid meeting Address	:	UC-1 Meeting Room, UC-1 building, BARC(V) main campus,
			Gajuwaka -Yellamanchili Road, Maduturu Sub Post Office,
			Visakhapatnam-531 011
xix)	Bid Submission start Date for	:	13.05.2025 (15:00 Hrs.)
	submission of all Pre-		
	qualification documents(Cover		
	1), Techno-Commercial		
	documents (Cover 2) and		
	Financial Bid(Cover 3)		
xx)	Bid Submission End Date for		19.05.2025 (15:00 Hrs.)
7.0.4	submission of all Pre-		
	qualification documents(Cover		
	1), Techno-Commercial		
	documents (Cover 2) and		
	Financial Bid(Cover 3)		
xxi)	Bid opening Date /Date and time of	:	21.05.2025 (15:00 Hrs.)
	online opening of Pre-		
	Qualification Bid (Cover-1)		
xxii)	Date & time of opening of	:	Shall be intimated separately to the Pre-qualified bidders
	Techno-Commercial Bid (Cover		
	2) & Financial Bid (Cover 3)		
xxiii)	Validity of Tender (in days)	:	270 days
xxiv)	Security Deposit	:	10% of the contract value including prevailing GST
xxv)	Contact Details	:	kvbabu@barc.gov.in, mkjha@barc.gov.in
			CC: tsrihari@barc.gov.in, jagadeeshb@barc.gov.in
			Contact von (0004) 20244 AC (4450 (44 A0 (44 A7
			Contact no: (0891) 2831146/1150/1149/1147

1.1 Introduction:

Bhabha Atomic Research Centre is a premier multi-disciplinary Nuclear Research and Development Centre under the administrative control of the Department of Atomic Energy, Government of India and having its facilities Near Visakhapatnam, Andhra Pradesh

BARC (V) has land admeasuring 600 acres at Ravipalem, Atchuthapuram, Near Visakhapatnam. It is contemplated to construct a residential colony with amenities as given in scope of the work. All the designs are to be carried out as per extant guidelines in force.

Now, for facilitating civil construction works, BARC (V) intends to select an Architect-Consultant for Development of Master Plan for the entire colony admeasuring 600 Acres including area drainage studies, Obtaining Approvals from the local Bodies & Preparation of Architectural, Structural, Electrical, Mechanical, Communications, Plumbing, Area Development Designs, etc. for all phase-1 township buildings, service and infrastructure at BARC Residential Colony, Ravipalem, Achuthapuram, Near Visakhapatnam

1.2 Brief description of Bidding Process:

BARC(V) has adopted a 2 Part (3 cover) bidding process with tendering Mode being E-Procurement using e-procurement portal of CPPP for selection of the Bidder for award of the Project.

BARC(V) shall receive the Bids pursuant to this tender document in accordance with the terms set forth herein as modified, altered, amended and clarified from time to time by BARC(V).

All Pre-Qualification Documents (Cover 1), Techno-commercial documents (Cover 2) and Financial Bid (Cover 3) shall be prepared and submitted by all the bidders at a time on or before the bid submission last date as specified in the tender document.

- **1.21 Pre-Qualification Bid Part-I**: The first part of the Bidding Process will involve prequalification of Bidders in accordance with this tender document. At the end of this part, Pre-qualified bidders only shall submit the original EMD on or before the date and time which will be intimated separately by BARC (V). Subsequently, bidders whose EMDs are in order will only enter in to Techno-Commercial Bidding Process.
- **1.22 Techno-Commercial Bid-Part II (a):** The evaluation of the techno commercial bids will be undertaken in accordance to the qualification scoring parameters as mentioned in this tender document to have the list of technically qualified bidders.
- **1.23** Financial Bid-Part II (b): Financial Bids will be opened under this stage.

The bids will be ranked according to their combined techno commercial and financial scores as specified in this tender document. The bidder achieving the highest combined technical and financial score will be considered to be the successful bidder.

1.3 Scope of Work of Comprehensive Consultancy Services

BARC (V) would furnish the Topographical Survey data to all the Pre-qualified bidders. The Geotechnical Investigation data will be given to the Architect-Consultant after placement of work order, there upon the Architect-Consultant shall render the following services but not limited to and deemed to be included in their quoted price:

ROLE OF THE SELECTED ARCHITECTURAL AND ENGINEERING DESIGN CONSULTANCY FIRM:

The role of the selected Architect / Consultant is to provide a complete and comprehensive architectural concept, design, detailing and Engineering Design Consultancy for all requirements for construction of the proposed campus, but not limited to the following:

- i. Master plan indicating the campus zoning and building locations
- ii. Conceptual Building plans (Floor plans)/ Elevations/ Sections/ 3D view etc.
- iii. Detail Planning/ Design of buildings and site development;

- iv. Green Building Concepts
- v. Interiors and furniture layouts
- vi. Structural design and detailing
- vii. Infrastructure Design like roads, culverts, under passes etc.
- viii. Area Drainage Study
- ix. Sanitary, Plumbing, Storm water drainage, water supply and sewerage design;
- x. Electrical and Network & communication design;
- xi. Audio-visual systems and Acoustics design (wherever required)
- xii. Heating, Ventilation and air-conditioning (HAVC) & other mechanical systems(wherever required);
- xiii. Elevators. Escalators etc (wherever required).
- xiv. Fire detection, fire protection etc.
- xv. Landscape & Irrigation
- xvi. Getting approvals from statutory authorities and any other concerned authorities that are necessary for construction.
- xvii. Preparation of cost estimates, Bill of Quantities along with detail measurements as per CPWD practice.

Scope of Work of Comprehensive Consultancy Services:

DETAILED SCOPE OF WORK

The detailed scope of works for Architect/ Consultant shall comprise of preparation of Master Plan and the following for all the Buildings/ Structures/ External & Internal Services/ Systems for the complete project:

1.31 ARCHITECTURAL, CIVIL AND STRUCTURAL WORK.

- a) Ascertain requirements and examine site constraints & potential for individual buildings, external and internal systems/ services and prepare brief including conceptual/ control designs/ drawings/ documents and incorporate required changes suggested by BARC.
- b) Study and interpretation of soil investigation report and finalize input data for structural and foundation design for individual buildings/ structures/ equipment etc.
- c) Design and Preparation of architectural drawings at various stages (conceptual/preliminary(GA)/working(GFC)) including but not limited to, dimensioned plans, elevations, interior layouts and schemes, sections, details etc. for individual buildings/ structures.
- d) Spatial planning for MEPF related services, OHT, UGT, STP etc. and Co-ordination of the architectural drawings with all structural and MEPF requirements/drawings.

- e) Preparation of door/ window schedules, fitting schedules, finishing schedules, colour schemes, flooring patterns, reflected ceiling plans, ironmongery, joinery, installation details etc. for individual buildings/ structures.
- f) Furnish necessary architectural norms, calculations etc.
- g) Study of input data and preparation of DBR, design calculations, schematic drawings and construction drawings (GFC) for all individual buildings pertaining to internal services such as:
 - (i) Plumbing System.
 - (ii) Sewerage Piping System.
 - (iii) Waste Water Piping system.
 - (iv) Rain Water System.
 - (v) Connection of Internal Services Systems with external services network.

The detailed working drawings of the above systems shall include flow/schematic diagrams, plans, elevations, sections; blow-ups etc. for individual services complete with material take off.

- h) Preparation of DBR, detailed structural analysis & structural design calculations (including seismic design and wind load design as applicable), preparation of structural drawings(General Arrangement and GFC) and Design reports.
- i) Preparations of fabrication/ construction/ shop drawings including material take off etc. complete.
- j) Detailed design, drawings and specifications to cover all civil works associated with installation of all mechanical/electrical equipment, services and systems.
- k) Preparation of detailed quantity estimates supported by detailed measurement sheets/ material take off sheets based on detailed drawings.
- Preparation and submission of detailed cost estimates for buildings, structures, services & systems based on latest CPWD Schedule of Rates with necessary indices and correction slips, if any, applied thereupon. Preparation of rate analysis for the items, which are not available in CPWD-SOR, based on market rate quotations. Also preparation of abstract of quantities building wise or package wise, as required.
- m) Preparation of detailed "Bill of Quantities" for Tender purposes for individual buildings/structures and a consolidated statement thereof.
- n) Preparation of list of recommended makes/ manufacturers
- Obtaining approval from all relevant statutory body/local Govt. Body like VMRDA/VUDA, Pollution Control Board, Environmental clearance etc. as applicable to this project which are all required for execution of work and preparation of required drawings & documents for the same.

1.32 ELECTRICAL WORKS

Load estimation and optimization, design of system/ equipment, substation layout, HT & LT single line diagram, HT/LT panel room layout, sizing of transformers, DG sets, Earthing layout, electrical distribution system comprising of panels, distribution boards, bus ducts,

cables & cable trays layout, lighting with circuiting, convenience power, Preparation of technical specifications, calculations, BOQ, drawings, SLD, schematics, blank data sheets recommended vendors list, rate analysis (with back up offers), cost estimates, obtaining clearances and certificates from statutory authorities wherever required

a) Internal electrification works

The major items shall include: Lighting and power calculations for different buildings, Lighting & telephone layout drawings, conduit layout drawings, mounting details of lighting fixtures and other fittings, Load calculations for internal electrification, DB/SDB details of different circuits for lighting fixtures, fans, exhaust fans, sockets etc., earthing and Lightning protection system calculations & drawings, cable sizing details, cable schedule. Details of protection switch gear, calculation of breaking capacity of upstream tripping, assessment of requirement of residual current circuit breaker and other special requirement of switch gear specific buildings

b) Centralized UPS System (as per requirement)

The major items shall include: Sizing calculations of UPS, Floor wise UPS power distribution drawing, cables, conduits and cable tray. Layout drawing for cables, conduit and cable trays.

Audio-Visual System and Acoustic design (for Auditorium/Seminar Halls and other spaces as per requirement)

The major items shall include: Conference room projection system, microphone, amplifier, speakers, DVD Player, acoustics, cables, conduits, cable trays and floorwise layout drawings and system layout drawings.

d) Internal Communication System (for Guest House/Hostel etc. as per requirement) Detailing of internal communication system. Design and distribution drawing of PABX Line.

e) Local Area Networking (for specific buildings as per requirement)

The major items shall include: Topology of networking, local area networking (Structured cabling), cables, conduits, raceways, sockets and layout drawings floor wise.

1.33 MECHANICAL WORKS

Design and preparation of system/equipment description, Technical specifications, BOQ, GA & layout drawings, data sheets and calculations ensuring compliance with the latest codes/ standards as applicable, detailed cost estimates, rate analysis with back-up quotations, obtaining clearances from statutory authorities, wherever applicable, any other information required to be included to complete the specification for the following works.

a) Lifts:

- (i) Preparation of Technical specification considering the relevant code / Standard with capacity calculations, technical particulars with material of construction of various items.
- (ii) Preparation of layout drawings indicating the location of lifts, shaft, pit, machine room & floor levels.
- (iii) Preparation of bill of quantities.
- (iv) Preparation of blank data sheet to be filed by vendors.
- (v) Traffic Analysis.
- (vi) Preparation of specification of panels & other electrical equipment.

b) HVAC:

- (i) HVAC Systems (for auditorium, Guest House and other areas per requirement)
- (ii) Preparation of technical specifications of the system with capacity calculation along with basis for calculations.
- (iii) Preparation of technical particulars of each component of the system indicating their material of construction.
- (iv) Heat load calculation for summer and winter.
- (v) Layout of each building showing the location of each components of the system.
- (vi) Ducting layout and plant room layout, AHU & ducting size calculations.
- (vii) Preparation of SLD, scheme GA drawing for the electrical panel, control desk and specification of electrical equipment.

c) LPG Systems:

- (i) Preparation of Technical specifications, Technical particulars indicating the material of construction of various components with back-up capacity calculations of the systems.
- (ii) Preparation of P&I diagram.
- (iii) Preparation of bill of quantities.
- (iv) Preparation of general layout drawings indicating the gas system and piping layout drawings with gas cylinders' station room layout.

1.34 MASTER PLAN & EXTERNAL SERVICES

The overall scope of work covers the following:

- a) The Architect-Consultant shall furnish a site evaluation and analysis report with basic approach to Circulation, activity, distribution, interaction and external linkage.
- b) The Architect-Consultant is also responsible for collection of any data/information over and above the data provided by BARC(V) which may be required for the design from any relevant sources including (but not limited to) statutory bodies, Power Distribution companies etc.

- c) Volumetric study and urban form recommendations including pedestrian/ vehicular movement and parking.
- d) Area drainage studies including the following:
 - i) Identification of existing natural stream and lakes carrying storm water within/through the site.
 - ii) Collection of rainfall data from IMD/state dept
 - iii) Carrying out extreme analysis for arriving at peak rainfall for applicable return periods.
 - iv) Estimating the peak flood levels in the natural stream and lakes for applicable return periods.
 - v) Design of main storm water drainage system and their drawings for the total colony area and fixing the disposal points with boundary conditions.
 - vi) Carryout routing of estimated peak floods by adopting hydraulic model through the existing stream network and proposed drain networks
 - vii) Estimation of the Safe Grade Elevation (SGE) at master plan level for applicable return periods based on the type of facility.
- e) Concept design of the following services and their inner connectivity at master plan level and detailed design, detailed drawings and specifications for Phase-1 development.
 - i) Water supply system: water demand , storage, treatment & supply distribution
 - ii) Sewerage system: collection, treatment and disposal including soil & waste water
 - iii) Storm water drainage: storm water drainage around buildings, facilities, parks, playgrounds and roads from collection to disposal in to the main drains.
 - iv) Electrical & IT systems: Substation, Power receiving and distribution, area lighting, Network & communication etc.
 - v) Fire fighting system: storage, pumping and distribution of fire water
 - vi) General Infrastructure: Roads, pathways, parks and playgrounds.
- f) Landscape architecture including site planning, suitability & appraisal, landform, planting pattern at master plan level and preparation of detailed design & drawings of landscaping elements, open space/community space including water bodies/water fronts, planting schemes and other horticulture details, irrigation, illumination design, street furniture graphic design and signage's for Phase-1 development. Scope includes drawings and details for the development of a Nursery in Phase-1.
- g) Design and details for development of existing lakes
- h) Conceptual & detailed design, specifications and estimations for non-conventional use of energy, if required.
- i) Conceptual & detailed design, specifications, estimates of rain water harvesting of the entire site.
- Recycling of waste water, its appraisal, suitability study & preparation of detailed design/ schemes along with specifications.

- k) Preparation of detailed design schemes along with specifications, implementation methodology for garbage disposal.
- Prepare schematic network of all services and its interconnectivity including water supply, drainage, sewerage, electrical, communication, fire detection and fire fighting, garbage disposal, rain water harvesting, recycling of waste water, irrigation system, use of renewable energy and other services.
- m) Prepare an integrated layout plan of the campus showing all the services.
- n) Obtain approval of schemes of all services from the concerned local statutory authorities if required.

Note: All designs and detailing shall be as per latest revisions of applicable standards and codes.

DELIVERABLES:

Stage-1:

Submission of the following drawings / documents for the perusal of BARC.

- Conceptual master plan indicating zoning, buildings, utility centres (substation, WTP, STP etc.), existing features like natural streams, lakes, HT and LT lines, monuments, trees, temples, etc.
- Conceptual drawings of individual buildings (schematic floor plans, elevations, sections, area calculations etc.)
- Perspectives/visualizations to establish the form and architectural character of campus and individual buildings.
- Design Basis Reports for structural, mechanical, electrical, plumbing and Firefighting systems of buildings
- Design Basis Reports for external infrastructure and utilities(roads, water supply, storm water, sewerage, electrical& firefighting)
- Design Basis Report for Landscape

Stage-2:

 Incorporating the comments of BARC in all the drawings/documents at Stage-1 above and submission of the revised drawings/documents for the approval of BARC

Stage-3:

- Preliminary architectural drawings (dimensioned plans, elevations, sections, furniture layouts, area calculations but not limited to) of all residential buildings(housing only) duly co-ordinated for the Spatial planning for structural systems and MEPF related services OHT, UGT, STP etc.
- Structural design models and calculations for the above buildings

Stage-4:

• Same as mentioned at Stage-3 above but for all other buildings which are not covered at stage 3.

Stage-5:

- Master plan/Site plan and building drawings necessary for submission to statutory authority for approval.
- Document of approval from statutory authority including Fire NOC/clearance required to take up construction.

Note:

- i. Environmental clearance has already been obtained by BARC in the year 2012 for construction of 500 quarters. Obtaining fresh clearance (or) modifications in the already obtained clearance if required to be taken from MOEFCC, the same shall be in the scope of the Architect-Consultant including the necessary studies/documentation to be carried out in the process at no extra cost to BARC.
- ii. Fee paid directly to statutory bodies for getting statuary approvals will be reimbursed by BARC at actuals on submission of relevant documents. However, Architect Consultant shall take prior approval from BARC before making such payments.

Stage-6:

- Architectural working (GFC) drawings (marking plan, dimensioned plans, elevations, cross sections, skin sections, details of facade, joinery, toilets, kitchens, staircases, balconies & railings, flooring patterns, external development works around buildings, area calculations but not limited to) of all residential buildings duly co-ordinated with structural and MEPF related services requirements.
- Schedule of finishes for the above buildings
- Structural GFC drawings and design report for the above buildings
- GFC drawings of internal civil works (water supply, sewage, waste water & rain water) for the above buildings
- GFC drawings of Mechanical(Lifts), Electrical, Network & communications services for the above buildings

Stage-7:

- Same as mentioned at Stage-6 above but for all other buildings which are not covered at stage 6.
- GFC drawings of HVAC, Acoustics, AV and any other systems required for specific buildings

Stage-8:

- Co-ordinated master plan with utility centres, major drains and utility routings/corridors, Finished Road Levels (FRL)s, Finished Ground Levels for total site area.
- Report on storm water drainage system at master plan level and GFC drawings for major drains, strengthening of existing drains and lakes in total colony area
- GFC drawings and documents of the following external infrastructure for Phase-1 area:
 - a) Roads, pathways and culverts
 - b) Storm water drains (other than major drains)
 - c) Water storage, treatment, pumping and supply system
 - d) Sewage & waste water collection, treatment and disposal

- e) Parks and playgrounds
- f) Lakes and water fronts
- g) Power distribution network, Area lighting and networking & Communication
- h) Fire water storage, pumping, distribution and hydrant network if proposed
- i) Landscape and irrigation
- j) Non-conventional use of energy and water recycling systems proposed if any.
- Architectural, Structural and MEPF services GFC drawings for substations, water treatment plant, Sewage treatment plant and Nursery etc.

Stage-9:

- Detailed measurements, abstract of quantities, Technical specifications, proposed makes for all materials, Quality Assurance Plan (QAP)
- Rate analysis and cost estimates for all the items.
- Cost estimate for individual buildings and infrastructure along with BOQ
- Report on master plan control and guidelines for future development in terms of buildings and utility extensions.

Table 1: Requirements of the Main Residential Colony of BARC(V)

S. No	Name of building/facility	Present requirement (Phase-1 Colony)	Master plan requirements (for a final colony strength of 4500 quarters minimum)	Remarks
I	TYPE HOUSING (QUAR	TERS)		
а	Type 'II' quarters (unit area : 63 m2)	60 nos	900	
b	Type 'III' quarters (unit area:73 m2)	60 nos	900	
С	Type 'IV' quarters (unit area:98 m2) (servant : 19.5 m2)	102 nos	1500	The present requirement of quarters shall be accommodated in a cluster in such a manner that the number can be modularly enhanced in future. Note:
d	Type 'V' quarters (unit area:161.5m2) (servant : 25 m2)	80 nos	1200	
е	Type 'VI' quarters (unit area:229.5m2) (servant : 25 m2)	6 nos	90	
f	Type 'VII' quarters (unit area:331m2) (servant : 25.5 m2)	1 nos	4	
g	Efficiency apartments (unit area:73 m2)	Nil	Space for 84 nos	
II	COMMON AMENITIES	<u>'</u>	1	1
а	Nursery School 1		One for every cluster	

b	Senior secondary school (class 1 to 12)	1	One for every cluster			
С	Medical Centre	1 (4 consulting rooms, Causality, X-ray Lab, Pathology Lab, Dental (2chair), Eye & REMC)	One 75 bed hospital for the total colony and One dispensary (400sqm plinth area) in each cluster	Hospital shall be abutting the Northern approach road		
d	Club house	One club house with plinth area of 750sqm.	One for every cluster			
е	Welfare Centre	One welfare centre with 750sqm plinth area	One for every cluster			
f	Sports Complex and playground	400m running track with 1000cap spectators gallery, Gym, NCC, etc.	Similar space should be provided in each cluster for alternative games	Shall be centrally		
g	Swimming Pool	50 x 18 x 3 m pool(covered), toddler pool, change rooms	Space to be identified in every cluster	locateu		
h	Parks & open spaces	As per NBC/local authority requirements				
i	Shopping centre	1 main shop (140sqm), 8 small shops(24sqm each), small Restaurant, ATM & Post office	One for every cluster except for Post office			
j	Township Office	250sqm plinth area	Space for future expansion	Shall be centrally located		
k	LPG Godown & Filling station	As per NBC at one location for the total township				
I	Guest House	32 guest rooms and 4 guest suites, Director's visiting office & ICCM	Space for 2 guest houses			
m	Religious	As per NBC or 400sqm plot	One for every cluster			
n	Police Outpost	As per NBC/local norms at		-		
0	Burial Ground	Existing village burial groun	nd shall be planned for ut	ilisation		
III	GUEST HOUSE & F					
а	Training School Hostel cum Guest House	Single rooms:300nos Double rooms:50nos Guest rooms:150nos Guest suites:4nos VIP suites :2nos Dining Hall:250 cap VIP Dining:50cap Lecture Hall:2x100cap	Space for future expansion	Can be planned as high rise.		
b	Guest House	Nil	200 rooms			

С	Hostel	Nil	200 rooms			
IV	OTHER FACILITIES					
а	ESL	Space for a building with plinth area of 800sqm	Equal area may be provided for future expansion			
b	Public information & off-site emergency control centre	A building with plinth area of 600 sqm	Equal area may be provided for future expansion			
С	Convention Centre		1000 cap Auditorium & 2 nos of 200 cap lecture halls	abutting the Northern approach road		
d	Nursery	As deemed fit for present and future requirements				
V	Infrastructure	Sub-station and electrical distribution, area lighting, WTP, water supply system, sewage network, STP including solid waste management, Fire Hydrant system, Roads, Storm water drains, IT, networking telephone, Landscaping etc.	Storm water drainage system and Utility Services.			

Note:

- i) The unit areas mentioned in the type quarters is plinth areas inclusive of balcony and utility area. Extra for Circulation/staircase areas and parking areas shall be considered as per applicable norms. BARC(V) shall provide the detailed plinth area norms for the quarters to the pre-qualified bidders.
- ii) Cluster refers to a minimum 1500 Dwelling units or as decided by the Architect-Consultant during the preparation of the Master Plan.
- iii) The number of quarters can vary slightly depending on the type design/block planning.
- iv) BARC (V) reserves the right to modify/add/ delete buildings/facilities/infra from the above scope.

1.4 Deliverables to be achieved by the Architect-Consultant

The activity deliverables by the Architect-Consultant shall be as under:

 T_0 being the date of commencement of the services of the Architect-Consultant. The Services shall commence within 15 days from issue of the work order.

S.No	Activity to be achieved	Time Line in Months
1	Submission of concept Master Plan for the total colony and unit plans for all buildings of Phase-1.	T ₀ + 1
2	On revising and finalizing of unit plans and Master plan and approval of BARC(v)	T ₀ + 2
3	Preparation and Submission of Preliminary (General Arrangement) drawings of architectural and structural disciplines including Design Basis Reports of all services & infrastructure and approval of BARC (V).	T ₀ + 4
4	Preparation of required drawings and obtaining approvals from concerned local/Statutory authorities.	T ₀ + 8
5	Preparation and submission of GFC drawings of all disciplines for all Quarters of Phase-1 Colony and approval of BARC(V).	T ₀ + 12
6	Preparation and submission of GFC drawings of all disciplines for all other buildings of Phase-1 Colony & infrastructure as per the scope and approval of BARC(V).	T ₀ + 16
7	Preparation and submission of master services layout, substation & electrical distribution system, water treatment plant and distribution system, fire fighting system along with the GFC drawings of all disciplines for services buildings(like substation, WTP, STP etc) and approval of BARC(V).	T ₀ + 20
8	Complete BoQ, Technical Specifications, List of recommended makes, Analysis of rates, and Detailed Estimate for Phase-1 Colony and Infrastructure and approval of BARC (V).	T ₀ + 22

1.5 Reports , Documents and Drawings:

The Architect-Consultant shall submit the following, but not limited to, sets of various documents/ drawings for each revision.

Conceptual Drawings including Master Plan – 2 sets each

Preliminary DBRs – 2 sets each

Preliminary (GA) Drawings – 2 sets each

Final DBRs, Design calculations, etc. – 6 sets each

Site use Good for Construction (GFC) drawings- 10 sets each

Coordinated Master Plan: 6 sets each

Note:

- i) Soft copy of all above drawings in both PDF and editable drawing (Auto CAD or similar) format shall be submitted
- ii) All Design models in respective software in editable format shall be submitted

1.6 Payment of Remuneration:

1.61 Remuneration

(a) The Consultancy Fee:

BARC (V) agrees to pay the Architect-Consultant fees for the professional services to be rendered by them as per scope of work.

The final approved estimated cost on which the consultancy fee to be calculated shall not include the following:

- Cost of land.
- Payments made to statutory bodies/local authorities/ State/Central Government, etc.
- GST, Taxes, Cess and other levies
- (b) The above fee at 1.61 (a) is inclusive of fee payable by the Architect-consultant to any other consultant/ Associate(s) and nothing extra shall be payable by BARC (V) for this purpose.
- (c) Any fee required to be paid by the Architect-Consultant to State/Central government departments (Example municipal /local/statutory bodies, MoEF etc) will be reimbursed by BARC(V) upon submission of documentary proof.

1.62 Milestones for payment schedule for various activities are as under:

Stage No	Milestone to be achieved by Architect-Consultant to release the stage payment	Extent of Payment/ Percentage of Payable Fee
1	Submission of concept Master Plan of the total colony area, Preliminary Project report including DBRs, conceptual design & drawings of individual buildings and internal/External services for Phase-1 colony.	10%
2	Submission of the revised Master Plan, conceptual drawings of individual buildings and DBRs of structural and internal & external services based on the comments of BARC(V) and approval of BARC(V)	15%
3	Preparation and Submission of General Arrangement (GA) drawings of architectural and structural disciplines duly incorporating the services requirement for all residential buildings including hostels & guest houses and approval of BARC (V).	10%
4	Preparation and Submission of General Arrangement (GA) drawings of architectural and structural disciplines duly	10%

	incorporating the services requirement for all buildings as per scope other than buildings covered at stage 3 above and approval of BARC(V).	
	Preparation of block estimates based on CPWD PAR for all buildings, services and infrastructure for phase-I colony.	
5	Preparation of necessary drawings and obtaining all approvals from local/Statutory authorities required to start construction activity.	10%
6	Preparation and submission of GFC drawings of architectural, structural, Mechanical, Electrical, Plumbing and Fire Fighting (MEPF), networking & communication for all residential buildings including hostels & guest houses of Phase-1 Colony and approval of BARC(V).	15%
7	Preparation and submission of GFC drawings of architectural, structural, Mechanical, Electrical, Plumbing and Fire Fighting (MEPF), networking & communication for all buildings as per scope other than buildings covered at stage 6 above and approval of BARC (V).	10%
8	Preparation and submission of master services layout, and drawings pertaining to electrical power distribution system, area lighting, water supply system, sewerage system, fire fighting system, storm water drainage system, roads and pathways, landscape and irrigation along with the GFC drawings of service buildings (like substation, WTP, STP etc) and approval of BARC(V).	10%
9	Prepare and submit complete BoQ, Technical Specifications, List of recommended makes, Analysis of rates, and Detailed Estimate of building, services and Infrastructure of the Phase-1 colony based on CPWD Visakhapatnam rates and approval of BARC (V).	10%

Note: The part payment against above stages on part completion of required scope of work under a particular stage can be released on pro rata basis at the discretion of BARC (V) by mentioning the reasons for the same.

The payment of fee to the Architect-Consultant shall be calculated initially based on the departmental preliminary estimated cost of Rs. 459 Cr for the scope mentioned above at Table-1 for stages 1 to 8.

Further, Vide Milestone No. 9, Architect-Consultant shall prepare and submit the final estimated cost (based on prevailing CPWD Visakhapatnam rates) of buildings, services and Infrastructure of the Phase-1 colony to BARC (V) for their scrutiny and approval. The Fee paid to the Architect-Consultant for milestone stages 1 to 8 shall be adjusted upward/downward based on the final BARC (V) approved cost.

1.7 Additions, Alterations and Variation:

- a) BARC (V) shall have the right to request in writing for additions, alterations, modifications or deletions in the design and drawing of any part of the work and to request in writing for additional work in connection therewith and the Architect-consultants shall comply with such requests without any extra cost. No extra payment shall be made to Architect-Consultant by BARC (V) on account of such Additions & Alterations as enumerated above.
- b) If the work in full or part is withdrawn by the Client, the same shall be withdrawn from the scope of Architect-consultant and proportionate consultancy fee shall be paid only up to the stage for which the consultancy work has been completed.

1.8 General:

- a) The scrutiny of the drawing, and designs by BARC(V) does not absolve the Architect-Consultant of their responsibility under the agreement. The Architect-Consultant shall remain solely responsible for structural soundness of the design and other services for all provisions of the contract so as to satisfy the particular requirement of the Architectural specifications.
- b) The Architect-Consultant shall supply to BARC(V) copies of all documents, instructions issued to Architect-Consultant, if any, relating to the work, drawings, specifications, bill of quantities and also other documents as may be required.
- c) The Architect-Consultant hereby agree that the fees to be paid as provided will be in full discharge of function to be performed by him and no claim whatsoever shall be against BARC(V) in respect of any proprietary rights or copy rights on the part of any party relating to the plans, models and drawings.
- d) While providing consultancy services, the Architect-consultant shall ensure that there is no infringement of any patent or design rights and he shall be fully responsible for consequences/any actions due to any such infringement. Architect-Consultant shall keep BARC (V) indemnified all the times and shall bear the losses suffered by BARC (V) in this regard.
- e) Architect-Consultant shall appoint and notify a team of two senior officials of his organization as nodal officers to represent the Architect-consultant in all the meetings/presentations with Local Municipal Corporation Authorities/State/ Client / BARC (V)/Central Govt. or any other agency.
- f) All designs and drawings shall be the property of BARC (V). The name and logo of BARC (V) shall be predominantly displayed on all the drawings and documents.
- g) Soft copy of all the drawings (in AutoCAD format) & designs shall have to be given on compact disc (CD)/Pen drive. The proprietary rights of all the design shall remain with BARC (V).
- h) The Architect-Consultant shall be required to sign an Agreement with BARC (V) within 30-days of the receipt of work order based on these terms & conditions.
- Recovery/Penalties can be recovered from the consultancy fee/EMD/BG of the other works that the Architect-consultant is doing or would be doing for BARC (V) at that time.

j) Currency of payment - All payments shall be made in Indian Rupees.

1.9 DISCLAIMER:

The information contained in this Tender Document or subsequently provided to Bidder(s), whether verbally or in documentary or any other form, by or on behalf of BARC (V) or any of its employees or advisors, is provided to Bidder(s) on the terms and conditions set out in this tender document and such other terms and conditions subject to which such information is provided. The information provided is only for the information and reference of the Bidders.

This tender document is not an agreement and is neither an offer by BARC (V) to the prospective Bidder(s) or any other person. The purpose of this tender document is to provide interested parties with information that may be useful tothem in the formulation of their bid for participation in this tender document (the "Bid"). This tender document includes statements, which reflect various assumptions and assessments arrived at by BARC (V) in relation to the Project. Such assumptions, assessments and statements do not purport to contain all the information that each Bidder may require. This tender document may not be appropriate for all persons, and it is not possible for BARC (V), its employees or advisors to consider the investment objectives, financial situation and particular needs of each party who reads or uses this tender document. The assumptions, assessments, statements and information contained in this tender document may not be complete, accurate, adequate or correct. Each Bidder should therefore, conduct its own investigations and analysis and should check the accuracy, adequacy, correctness, reliability and completeness of the assumptions, assessments, statements and information contained in this tender document and obtain independent advice from appropriate sources.

Information provided in this tender document to the Bidder(s) is on a wide range of matters, some of which may depend upon interpretation of law. The information given is not intended to be an exhaustive account of statutory requirements and should not be regarded as a complete or authoritative statement of law. BARC (V) accepts no responsibility for the accuracy or otherwise for any interpretation or opinion on law expressed herein.

BARC(V), its employees and advisors make no representation or warranty and shall have no liability to any person, including any Bidder, under any law, statute, rules or regulations or tort, principles of restitution or unjust enrichment or otherwise for any loss, damages, cost or expense which may arise from or be incurred or suffered on account of anything contained in this tender document or otherwise, including the accuracy, adequacy, correctness, completeness or reliability of the tender document and any assessment, assumption, statement or information contained therein or deemed to form part of this tender document or arising in any way with qualification of Bidders for participation in the Bidding Process. BARC (V) also accepts no liability of any nature whether resulting from negligence or otherwise howsoever caused arising from reliance of any Bidder upon the statements contained in this tender document. BARC (V) may, in its absolute discretion but without being under any obligation to do so, update, amend or supplement the information, assessment or assumptions contained in this tender document.

The issue of this tender document does not imply that BARC (V) is bound to select and short-

list qualified Bids for Price Bid stage or to appoint the Selected Bidder for the Project, and BARC (V) reserves the right to reject all or any of the Bids without assigning any reasons whatsoever.

The Bidder shall bear all its costs associated with or relating to the preparation and submission of its Bid including but not limited to preparation, copying, postage, delivery fees, expenses associated with any demonstrations or presentations which may be required by BARC (V) or any other costs incurred in connection with or relating to its Bid. All such costs and expenses will remain with the Bidder and BARC(V) shall not be liable in any manner whatsoever for the same or for any other costs or other expenses incurred by a Bidder in preparation or submission of the Bid, regardless of the conduct or outcome of the Bidding Process.

Project Director& Chief Engineer BARC, Visakhapatnam