SCOPE OF WORK

INTRODUCTION (BACKGROUND)

The General requirement is as follows:

The applicant needs to interact with user and contact Executive Engineer, Chhattisgarh Housing and Infrastructure Development Board Division-Raigarh (C.G.)

"Architectural Consultancy work & Preparation of DPR for Proposed Construction Work of Commercial Complex, Oxyzone and Development Work at Jail Parisar Raigarh (C.G.)".

1. Purpose/Objectives of the Assignment

The objectives of this consultancy services would be to carry out economical & sustainable planning for modern development of the District Jail Parisar Raigarh, including Construction Work of Commercial Complex and Other amenities, is a significant urban beautification project and providing recreational spaces, aligning with efforts to Systematic Plan And Better Environment for public and detailed engineering planning, structural design, design for electrical works, plumbing works, preparation of structural and detailed working drawings for construction work, Preparation of Specifications & detailed estimate for construction work as per prevalent CGPWD SOR and Market rate analysis with supporting documents for Non Sor Items.

Accordingly, the activities under this consultancy packages hold include:

Detailed architectural and structural design and preparation of DPR:

The consultant shall present the preliminary Project Report to the employer for review by the Review Team and after discussion shall firm up the same. Then, the consultant shall carry out detailed Engineering studies and prepare the final planning & design. The detail project report shall also include preparation of all drawings, detail cost estimate, BOQ, Specifications etc.

2. Detailed Scope of the Work

The Architect must Submit One Model Architectural Plan, Design, 3D Elevation and will do all detailed engineering planning, structural design, design for electrical works, plumbing works, Design of Box Culvert, Road planning, geometric layout with Survey and Countering by Total Station and Demarcation of various Element involving horizontal/vertical alignment, pavement structure, drainage, and safety features, balancing traffic needs with environmental and economic factors. Key elements include alignment (curves, grades), cross-section (lanes, shoulders, drainage), pavement type (flexible asphalt, rigid concrete), and safety features (signage, guardrails) to manage water, traffic flow, and environmental impact, preparation of structural and detailed working drawings for construction work and, Preparation of Specifications & detailed estimate for construction work and as per prevalent CGPWD SOR,CGBRIDGE SOR, CGWRD SOR and Market rate analysis with supporting documents for Non Sor Items in buildings wherever required or as per demand of employer which shall be used by the Employer at any places and any number of times as and when required, and **no separate payment shall be made for such type of repetition of work.**

It is necessary to carry out Planning, Drawing, Designing of Below components.

1. Commercial Complex (G+1)
2. RCC Drain
3. Stamped Concrete Pathway
4. Pond Development with Pachri Ghat
5. Pachri Ghat Side Pathway
6. Pond Retaining Wall, Floor, Steps & Ramps
7. Construction of Oxyzon
8. CC Road
9. Food Court Design
10. Boundary Wall, Main Gate and Other gate with Guard Room
11. Gazebo Steel Structure Design
12. Toilet (Male & Female Block)
13. Septic Tank Drawing & Designing

14. Sumpwell Drawing & Designing
15. External Water Supply for Irrigation Line Plan
16. Rainwater Harwesting
17. External Electrification Work
18. Box Culvert Drawing & Designing
19. Gentry Sign Board

These details are furnished to acquaint the prospective DPR cum Architectural Consultants to understand the quantum of planning & design work involved. The consultants are expected to reflect the above requirement in their technical and financial proposal adequately in their proposed methodology.

The DPR consultant will be required to operate from office and have senior experts performing advisory, supervision and regulatory functions over the field offices and their experts.

The Consultant shall be required to execute the following tasks:

(a) The Consultant shall take detailed brief of the project from the employer including the control layouts of the structure and other details regarding the important features to be provided in the various facilities to facilitate his work.

(b) The consultant shall submit elevations, perspective views and internal layouts of the proposed room for consideration of the employer. The consultant shall incorporate suggestions, modifications or alterations as desired by the employer in order to facilitate final selection of the layout and other details by the employer.

(c) The Consultant shall submit plans, elevations, sectional & perspective views of the selected alternative in all details showing interior layout of each facility on a scale of 1:100.

(d) The scope also includes making alternate presentations to Executive Engineer Chhattisgarh Housing and Infrastructure Development Board Division-Raigarh (C.G.) any other Authority directed for vetting. The modifications / suggestions made during such presentations shall be incorporated in the final drawings.

(e) The Consultant shall be required to make comprehensive presentations before officials of Works Dept., Govt. of Chhattisgarh / any other authority as directed at various stages to explain the concepts and detailing in order to facilitate approvals of the schemes.

(f) The Consultant shall incorporate any suggestions, modifications or alterations in the details after deliberations with the authority & submit revised drawings/schemes to office of the Executive Engineer Chhattisgarh Housing and Infrastructure Development Board Division Raigarh for final approval.

(g) The consultant shall prepare statutory drawings and assist the user to get It approved from approving authority.

(h) The consultant shall prepare a master plan for approach road, Cafeteria, Parking Space, Compound Wall, Street light facilities & Effluent Treatment plant.

(i) The consultant shall furnish the detailed estimate for construction of Each type of Building with facilities of approach road, cafeteria Building, Parking space, compound wall, street Light facilities, Effluent treatment Plant, sewerage system, Drainage System etc.

PREPARATION OF BOQ, SPECIFICATIONS, DRAWINGS AND TENDER SPECIFICATIONS

(a) The scope of work shall include detailed structural design of the building and Other Structure, issue of detailed working construction drawings for the same. **Structural Design will be got vetted by NIT/Govt. Engineering College by the consultant.**

(b) The consultant shall prepare detailed bill of quantities covering all items of work to be carried out under various packages, detailed technical specifications and detailed cost estimates for all the tender packages including rate analysis of individual items of work and submit for the approval of the competent authority. The rate analysis shall be carried out based on Analysis of Rate and Schedule of Rate CGPWD SOR 2026, Govt. of Chhattisgarh and supporting documents of rate analysis shall also be submitted to authority for vetting. NSR items shall be dealt as per CGPWD code. The bill of quantities for various items shall be supported by quantity take-off sheets etc. The estimate may vary from the cost of the project as mentioned in this document from actual cost after execution.

(c) The consultant shall prepare drawings for all items of work in all details and calculate the bill of quantities accurately and show all construction details & elements necessary for executing the individual items of work.

(d) Execution and Good for working drawings shall be prepared on the scale of 1:50 or as per requirement.

(e) The consultant shall also prepare the preamble to schedule of rates detailing all works deemed to be included in the rate analysis of each item.

(f) The Consultant shall prepare good for construction drawings for all items of works in all details in accordance with relevant standard codes of practice and sound engineering to enable individual contractors to complete construction without the need of any further detailing by the contractors. In other words, individual contractors will not be required to make any drawings or supply any details and all details are to be supplied by the Consultant. It is also brought to the attention of consultant that all construction drawings are required to be released along with the package wise tender documents and hence should be prepared in advance. However, some construction drawings may also require to be prepared by the Consultant on continuous basis during execution of interior work.

(g) The consultant shall plan, design and provide full details of all utility services like **water supply, electricity, Road Section, Box Culvert, Construction of Oxyzon** required as per the regulations in force. The consultant shall give complete details along with drawings for execution of work.

(h) The consultant shall design and provide electrical drawings covering all internal wiring and power plugs, sockets, switch board, distribution boards, panel, fans, tube lights /LED etc fittings L.T. electrical works, sub-station, power connection, Switch rooms, site illumination, all requirements related to interior and Exterior Work etc. The scheme should take in to account energy conservation as per the CG Energy Conservation Building Code (CGECBC) guidelines.

(i) Water supply scheme shall cover water connections, underground / semi underground storage tank, pumping arrangement and pipeline connections..

(j) All design shall be carried out as per latest relevant IS/BIS standards.

A. PREPARATION OF LAYOUT PLAN FOR EXTERNAL SERVICES

Layout plan should be in 1:500 scale (or as directed). Layout plan shall include position of Buildings, Roads, Sewerage System, Water Supply System, External Electricity/power backup System, Open Spaces, Garden development, Play Grounds etc.

SUBMISSION

Detail Architectural and working drawing with detail, drawing for each allied services must be submitted in separate with required indexing and symbols in minimum 4 set in A-1 or A-0 size, necessary changes shall be made by the consultant and submitted as per the instruction of competent authority.

On approval of the concept plan, detail layout plan as per below, shall be submitted in 8 signed hard copies and one soft copy.

B. DESIGNING OF EXTERNAL SERVICES

1. Designing of external Water Supply System shall include:-

(a) Capacity of Septic Tank and sumpwell shall be designed for the population of entire Scheme/Project.

(b) Design of external water supply line for Irrigation System clearly showing diameter of pipe and type of pipe (GI, CI, CPVC/PVCetc.) and position of values and operating systems.

(c) Design of pump houses for sumpwell and Tubewells including capacity of pumps/motors.

SUBMISSION

1. All Working drawing in 5 signed hard copies size**(A2=4,A1=4)**and one soft copy.
2. Detail estimate including specification of different items of work, in 3 hard copies and one soft copy.

2 Designing of external sewerage system.

(a) Detail working drawings of external sewerage system including details of Eco-friendly final disposal of the waste.

SUBMISSION

1. All Working drawing in10 hard copies size **(A2=4,A1=4)** and one soft copy.
2. Detail estimate and brief specification of works, in 3 hard copies and one softcopy.

3 Designing of Cement Concrete/Bitumen Roads including Culverts and Drainage system. It shall include: -

(a) Levels of Roads, Culverts & Storm water Drains.

(b) Sections of Roads/Culverts Drains.

(c) Design of Bitumen/CC Roads/RCC Box culverts/drains.

SUBMISSION

1 All Detail Working Drawings in 10 hard copies size**(A2 = 5, A1 = 5)** and one soft copy.

2 Detail estimate and brief specification of works in 3 hard copies and one soft copy

4 Design of external electrification.

(a) Design of external electrification system as per the CSPDCL Norms.

SUBMISSION

1 All Detail Working drawings in 10 signed hard copies size**(A2=5, A1=5)** and one soft copy.

2 Detail estimate and brief specification of works in 3hard copies and one soft copy

5 Landscaping, Trees plan shall include:

(a) Detail landscape plan, including choice of species etc.

SUBMISSION

1 All Detail Working drawings in 10 signed hard copies size**(A2=5, A1=5)** and one soft copy.

2 Detail estimate and brief specification of works in 3hard copies and one soft copy.

C: PLANING AND DESIGN OF COMMERCIAL COMPLEX (G+1) AND DEVELOPMENT WORK OF JAIL PARISAR AND OTHER AMENITIES:-

i Preparation of plans, elevation, 3D views, and sections and detail working drawing with all detail specification for opening, fittings, fixture, internal electrification work with detail specification as per the latest BIS code for **Construction Work of Commercial Complex and Development Work at Jail Parisar Raigarh (C.G.)**

ii Detailed structural designs of foundation, superstructure, beams, columns, lintels, chhajjas, slab, and all members of building and Other Structure.

iii Designs of Food Court Structure.

iv Design of Box Culvert.

v Preparation of Drawing showing:-

a. Layout/site plan and Amenities.

b. Working drawing with details of footing, (as per the type of soil and height of the structure) Plinth level details, super structure details, beams, columns, lintels, chhajjas, slab etc., Commercial Complex & Jail Parisar Layout Plan in scale 1:1000. Elevation in scale 1:1000 RCC Design of Building, Box Culvert, Retainning Wall including reinforcement details, Design of internal and External Water Supply, Design of internal Electrification, Design of Sanitary and plumbing system, Design of Doors and windows, Design of Gate, Grills and Railings Design of internal external color schemes, Color scheme on Grills and Railings, water harvesting.

c. External Electrical layout plan,

d. Water supply for Irrigation System layout plan.

e. Various elevation of all sides with perspective views, models etc.,

f. Oxyzon Internal and peripheral Plantation plan.

g. External Lightening for Road, Ghat and Oxyzon.

SUBMISSION

1. All Detail Working Drawing in 10 signed hard copies size**(A1=5,A0=5)**and one soft copy.
2. Details estimate and brief specification of work sin 3 hard copies and one soft copy.

Note-

1. The consultant shall submit model/ 3 D views/ Walk through presentation on a convenient scale of all the plans and designs, as per the requirement.
2. The consultant shall show and in corporate appropriate street furniture in all plans and designs.
3. Consultant shall design as per existing relevant codes. Consultant should follow existing norms, rules and regulations of CGPWD, PHE, WRD, Nagar Nigam, Town and Country Planning Department, Electricity board, MCI and other departments. Consultant shall visit the site for at -least two days in a month as per the date fixed by the Engineer in charge as and when required at his own cost. Consultant shall prepare Detailed structural design, plans, estimate, and bill of quantities based on schedule of rates of CGPWD, in consultation with engineer in charge, within the rules and regulation of CGHIDB.

Executive Engineer
Chhattisgarh Housing and
Infrastructure Development Board
Division-Raigarh