

**FEASIBILITY STUDY FOR “PROVIDING IRRIGATION FACILITIES IN THE PROPOSED
COMMAND AREAS UNDER THE BAITARANI LEFT CANAL SYSTEM (1200HA),
BAITARANI RIGHT BANK CANAL SYSTEM(5000HA) AND SALANDI LEFT MAIN
CANAL SYSTEM FROM RD.16.08KM TO 45.273KM (19339HA) OF ANANDAPUR
BARRAGE PROJECT BY LAYING UNDERGROUND PIPE CONDUITS INSTEAD OF
FLOW IRRIGATION THROUGH OPEN CANALS”**

TERMS & CONDITIONS

1. The agency shall be supplied with all the available data such as Project Report, Index Map, and Layout Map showing the Dam, Head Regulator & other appurtenant works, proposed command area maps with contours on village maps. The bench marks (Location & Level) as available at dam site shall be supplied. Any other data relevant to the works if available with the Department shall be supplied.
2. L.S. & D.S. of Main Canal and general Layout plan of Distribuitaries, Minors and Sub-Minors under Flow Irrigation through open channels shall be supplied to the Agency to facilitate him to take up the Feasibility study for piped irrigation by laying underground pipe conduits.
3. Surveys as may be required for preparation of the Feasibility report shall be done by the Agency by making field visits to check the level at important nodes with reference to the Bench mark data and cross check the surveyed levels already available with the department.
4. The Agency shall ensure that all the villages which have been proposed to be provided with irrigation facilities through flow irrigation in open channels under the canal systems of Anandapur Barrage Project should also get water through piped irrigation. No villages should be left out.
5. As pipe irrigation is being proposed, possibility of covering the possible uncovered areas in the upland & other areas may be explored in addition to the existing command area.
6. The general layout of pipe line network on village maps and preferably on 1:25000 / 1:50000 scale toposheets indicating the alignment of pipes to cover the entire command area should be shown.
7. The nodes along the pipe line alignment should be numbered; length of pipe or distance between nodes, diameter of pipes, head loss computation between different nodes, residual head available at each node, etc should be computed and shown in a separate sheet.
8. The location of outlets on the alignments of pipe line should be indicated along with the discharges of each out lets with area to be irrigated in the command area of the entire system.
9. The alignment of pipeline and diameter of pipes may be so fixed that that the residual head available at each node is sufficient to generate required velocity at each outlet to ensure smooth flow of water to the fields.
10. Care may be taken to avoid involvement of forest land, building or any permanent establishments to the extent possible while identifying the general layout alignment of pipe line network.
11. River crossing, Railway crossing should also be avoided to the extent possible. Wherever it is not possible to avoid such crossing, suitable methods may be suggested to take the pipe line over such crossing.

12. The position of various kinds of valves such as air relief valves, scour valves, check of non-return valves etc. to be provided along the alignment of pipe network may be suggested.
13. In case, pipes are to be laid in more than one row to carry the required discharge of main Canal, the number of rows of pipes to be laid and distance between the different rows may be specified. In such a case, the location of direct outlets from each pipe and the location of direct sub-minors from each pipe and their off taking levels may be indicated.
14. If pumping is required to provide smooth irrigation in the proposed command area, the location of pump house along with details of pumping arrangement like the capacity of pump, number of pumps to be installed, extent of lift involved, etc. may be suggested to obtain sufficient pressure at various nodes for providing smooth irrigation.
15. The approximate cost of the project along with CCA to be covered and the cost per Hectare of irrigation without pumping arrangement and with pumping arrangement may be indicated in the feasibility report.
16. If underground piped irrigation is found feasible, then bid document for execution of the project through EPC contract is to be prepared and submitted.
17. The cost effectiveness of the project with its advantages and disadvantages over gravity flow irrigation on long term perspectives during the life period of the projects and the concluding remarks may be indicated in the feasibility report. Current schedule of rates and prevailing market rates of materials & machinery to be used in arriving at the estimated cost.
18. The bidder should contact the EE, A.B.Division, Salapada / Bidyadharpur Canal Division, Bidyadharpur/ Markona Canal Division, Markona for any information or clarifications on the Baitarani Left Bank Canal/Rt Bank Canal/Salandi Left Main Canal respectively.

DOCUMENTS TO BE SUBMITTED

The General values layout of pipe line network on village maps and preferably on 1:25000 / 1:50000 scale topographic sheets.

1. Concept note on piped irrigation along with soft copies.
2. Draft Feasibility report (5 Copies) along with soft copies.
3. Comments & Compliances on concept Note & Draft feasibility Report along with soft copies.
4. Final Feasibility Report (8Copies) along with soft copies.
5. The detail estimate along with rate analysis in CSR/ Market Rate(5 Copies) along with soft copies .

MODE OF PAYMENT

The conditions for making payment are as follows.

1. 30% of contract amount shall be paid to the Agency on submission of the Draft Feasibility report(5 Copies) in full shape with all features mentioned under scope of the study for examination, review and offering views or comments.
2. 30% of the contract amount shall be paid after submission of compliance to the views / comments offered by the Department.
3. 30% of the contract amount shall be paid after submission of the final feasibility report (8 copies) in full shape with all documents along with the compliance report.

4. 10% of the contract amount shall be paid after the final feasibility report is approved by the competent authority.
5. Standard deductions like Security Deposits @5%, IT 2%, VAT 5%, Cess 1% & Service Tax @15% shall be deducted from each bill.
6. Amount due to deviation in quantity, if any because of variation in proposed CCA shall be paid after approval of such deviation by the Chief Construction Engineer, Anandapur Barrage Project, Salapada, Keonjhar

OTHER CONDITIONS

1. The successful bidder shall be required to furnish initial SD before execution of agreement in shape of Post office TD/NSC/STDR of any Nationalised Bank duly pledged in favour of the concerned EEs. The EMD and ISD amount shall be the total of 2% of the accepted value.
2. The bidders should furnish all the relevant documents related to the Feasibility study to the concerned Executive Engineers under intimation to the Chief Construction Engineer, Anandapur Barrage Project, Salapada, Keonjhar.
3. The Bidder should complete the work within 3 (Three) calendar months from the date of issue of work order adhering to the completion milestones.
4. If the work is not completed within the stipulated period of 3(Three) months for reasons beyond the control of the Agency, extension of the time shall be granted to complete the Project work without financial liabilities to either party.
5. The EMD, ISD & SD deducted from the bills shall be liable to be forfeited to Government in case the work is left incomplete by the agency.
6. In case of any dispute, the decision of the Chief Construction Engineer, Anandapur Barrage Project, Salapada Keonjhar shall be final & binding on all concerned.

STATUTORY AND INSURANCE

1. The authority / Department undertakes no responsibility in respect of life, accidents, Travel or other insurance coverage for Travel or elsewhere for the purpose of the services.
2. The agency shall take out and maintain adequate professional indemnity, insurance and insurance against claims by third party consulting from acts performed in carrying out the service / survey.
3. The Agency shall comply with all statutory requirements of labour laws at their own cost.

**Chief Construction Engineer
Anandapur Barrage Project
Salapada, Keonjhar, Odisha**