

| <b>BOQ FOR SEWERAGE NETWORK PACKAGE-2</b> |  |             |                   |            |                     |
|---|--|-------------|-------------------|------------|---------------------|
| <b>Sr. No.</b>                            | <b>Description</b>   | <b>Unit</b> | <b>Rate in Rs</b> | <b>Qty</b> | <b>Amount in Rs</b> |
|   | <b>PART- A</b>   |             |                   |            |                     |
| <b>I</b>                                  | <b>CIVIL ITEMS</b>   |             |                   |            |                     |
| 1   | <b>Earth Work Excavation</b>   |             |                   |            |                     |
|   | Earth work Excavation and Depositing on bank with an Initial lead of 10.00m and initial lift of 2.00m in case of Head Lead only.Excluding of cost of seinorage charges on all materials  |             |                   |            |                     |
| 1.1                                       | For 0 to 2.0 m depth   | Cum         |                   | 53273      |                     |
|   | Earthwork excavation for the following depth with all lead & lifti in Soft Disintegrated Rock for laying of varying sizes of sewers, including bailing out of water, barricading with safety lamps etc all complete as per standard specification as directed .Excluding of cost of seinorage charges on all materials |             |                   |            |                     |
| 1.2                                       | For 2.0 to 5.0 m depth   | Cum         |                   | 263729     |                     |
| 1.3                                       | For 5 to 6 m depth   | Cum         |                   | 522        |                     |
| 1.4                                       | For depth grater than 6.0 m  | Cum         |                   | 283        |                     |
| 2   | <b>Sand Bedding</b> : Sand for filling and blindage,Excluding of cost of seinorage charges on all materials  | Cum         |                   | 41977      |                     |
| 3   | <b>Refilling</b> with the excavated soils ( other than sand) complying with the standard specifications for filling foundations.Excluding of cost of seinorage charges on all materials  | Cum         |                   | 232632     |                     |
| 3a  | Bailing out water from the pipe line trenches with oil engine driven pumpsets, including drilling of sufficient number of Filter points with necessary piping arrangements, hire charges, fuel charges and wages for Driver and Helper, DG set backup, complete  | Cum         |                   | 100000     |                     |
| 4   | <b>Carting:</b> Conveyance of Earth Sand and Gravel, including loading, Unloading and Stacking for the initial lead of 0.50 km,Excluding of cost of seinorage charges on all materials   | Cum         |                   | 41315      |                     |
| 5   | Cutting road surface for pipeline trenches and disposing off the excavated Stuff as directed including barricadding, danger lighting etc.,Excluding of cost of seinorage charges on all materials  | Cum         |                   | 46641      |                     |
| 6   | Pipe Encasement/Supports at locations wherever necessary like locations of Culverts/Bridges/Places at minimum cover criteria is not achieved....etc.   | LS          |                   |            |                     |
|   | <b>Sub Total For Civil Works (I)</b>   |             |                   |            |                     |
| <b>II</b>                                 | <b>MATERIALS</b>   |             |                   |            |                     |

| Sr. No. | Description   | Unit | Rate in Rs | Qty  | Amount in Rs |
|---------|---|------|------------|------|--------------|
| 7       | Supply of Glazed Stoneware pipes with necessary socket and spigot joints as per standards and lowering into trenches, laying to proper grade and alignment, cutting the pipes true to axis & jointing the pipes & specials including cost of jointing materials |      |            |      |              |
|         | <b>150 mm dia pipes</b>   |      |            |      |              |
| 7.1     | For 0 to 2 m depth  | Rm   |            | 5553 |              |
| 7.2     | For 2 to 3 m depth  | Rm   |            | 3557 |              |
| 7.3     | For 3 to 3.5 m depth  | Rm   |            | 0    |              |
| 7.4     | For 3.5 to 4 m depth  | Rm   |            | 0    |              |
| 7.5     | For 4 to 5 m depth  | Rm   |            | 0    |              |
| 7.6     | For depths above 6 m  | Rm   |            | 0    |              |
|         | <b>200 mm dia pipes</b>   |      |            |      |              |
| 7.7     | For 0 to 2 m depth  | Rm   |            | 1416 |              |
| 7.8     | For 2 to 3 m depth  | Rm   |            | 1467 |              |
| 7.9     | For 3 to 3.5 m depth  | Rm   |            | 0    |              |
| 7.10    | For 3.5 to 4 m depth  | Rm   |            | 0    |              |
| 7.11    | For 4 to 5 m depth  | Rm   |            | 0    |              |
| 7.12    | For depths above 6 m  | Rm   |            | 0    |              |
|         | <b>250 mm dia pipes</b>   |      |            |      |              |
| 7.13    | For 0 to 2 m depth  | Rm   |            | 708  |              |
| 7.14    | For 2 to 3 m depth  | Rm   |            | 512  |              |
| 7.15    | For 3 to 3.5 m depth  | Rm   |            | 0    |              |
| 7.16    | For 3.5 to 4 m depth  | Rm   |            | 0    |              |
| 7.17    | For 4 to 5 m depth  | Rm   |            | 0    |              |
| 7.18    | For depths above 6 m  | Rm   |            | 0    |              |
|         |   |      |            |      |              |
| 8       | Manufacture, Supply and Delivery of <b>RCC</b> Socket and Spigot Pipes Conforming to BIS 458/1988 at Ex-Factory (Rate per meter Effective Length) Excluding Transportation, Taxes & Duties.   |      |            |      |              |
|         | <b>150 mm dia pipes</b>   |      |            | 0    |              |
| 8.1     | For 0 to 2 m depth  | Rm   |            | 1847 |              |
| 8.2     | For 2 to 3 m depth  | Rm   |            | 3182 |              |
| 8.3     | For 3 to 3.5 m depth  | Rm   |            | 369  |              |
| 8.4     | For 3.5 to 4 m depth  | Rm   |            | 115  |              |
| 8.5     | For 4 to 5 m depth  | Rm   |            | 24   |              |
| 8.6     | For depths above 6 m  | Rm   |            | 11   |              |
|         | <b>200 mm dia pipes</b>   |      |            |      |              |
| 8.7     | For 0 to 2 m depth  | Rm   |            | 2730 |              |
| 8.8     | For 2 to 3 m depth  | Rm   |            | 4249 |              |
| 8.9     | For 3 to 3.5 m depth  | Rm   |            | 1170 |              |
| 8.10    | For 3.5 to 4 m depth  | Rm   |            | 279  |              |
| 8.11    | For 4 to 5 m depth  | Rm   |            | 119  |              |
| 8.12    | For depths above 6 m  | Rm   |            | 11   |              |
|         | <b>250 mm dia pipes</b>   |      |            |      |              |
| 8.13    | For 0 to 2 m depth  | Rm   |            | 1809 |              |
| 8.14    | For 2 to 3 m depth  | Rm   |            | 1382 |              |
| 8.15    | For 3 to 3.5 m depth  | Rm   |            | 684  |              |

| Sr. No. | Description             | Unit | Rate in Rs | Qty  | Amount in Rs |
|---------|-------------------------|------|------------|------|--------------|
| 8.16    | For 3.5 to 4 m depth    | Rm   |            | 346  |              |
| 8.17    | For 4 to 5 m depth      | Rm   |            | 514  |              |
| 8.18    | For depths above 6 m    | Rm   |            | 11   |              |
|         | <b>300 mm dia pipes</b> |      |            |      |              |
| 8.19    | For 0 to 2 m depth      | Rm   |            | 1821 |              |
| 8.20    | For 2 to 3 m depth      | Rm   |            | 1651 |              |
| 8.21    | For 3 to 3.5 m depth    | Rm   |            | 638  |              |
| 8.22    | For 3.5 to 4 m depth    | Rm   |            | 96   |              |
| 8.23    | For 4 to 5 m depth      | Rm   |            | 346  |              |
| 8.24    | For depths above 6 m    | Rm   |            | 11   |              |
|         | <b>350 mm dia pipes</b> |      |            |      |              |
| 8.25    | For 0 to 2 m depth      | Rm   |            | 1557 |              |
| 8.26    | For 2 to 3 m depth      | Rm   |            | 1801 |              |
| 8.27    | For 3 to 3.5 m depth    | Rm   |            | 155  |              |
| 8.28    | For 3.5 to 4 m depth    | Rm   |            | 6    |              |
| 8.29    | For 4 to 5 m depth      | Rm   |            | 78   |              |
| 8.30    | For depths above 6 m    | Rm   |            | 11   |              |
|         | <b>400 mm dia pipes</b> |      |            |      |              |
| 8.31    | For 0 to 2 m depth      | Rm   |            | 940  |              |
| 8.32    | For 2 to 3 m depth      | Rm   |            | 863  |              |
| 8.33    | For 3 to 3.5 m depth    | Rm   |            | 504  |              |
| 8.34    | For 3.5 to 4 m depth    | Rm   |            | 157  |              |
| 8.35    | For 4 to 5 m depth      | Rm   |            | 235  |              |
| 8.36    | For depths above 6 m    | Rm   |            | 11   |              |
|         | <b>450 mm dia pipes</b> |      |            |      |              |
| 8.37    | For 0 to 2 m depth      | Rm   |            | 11   |              |
| 8.38    | For 2 to 3 m depth      | Rm   |            | 11   |              |
| 8.39    | For 3 to 3.5 m depth    | Rm   |            | 11   |              |
| 8.40    | For 3.5 to 4 m depth    | Rm   |            | 11   |              |
| 8.41    | For 4 to 5 m depth      | Rm   |            | 11   |              |
| 8.42    | For depths above 6 m    | Rm   |            | 11   |              |
|         | <b>500 mm dia pipes</b> |      |            |      |              |
| 8.43    | For 0 to 2 m depth      | Rm   |            | 179  |              |
| 8.44    | For 2 to 3 m depth      | Rm   |            | 859  |              |
| 8.45    | For 3 to 3.5 m depth    | Rm   |            | 138  |              |
| 8.46    | For 3.5 to 4 m depth    | Rm   |            | 11   |              |
| 8.47    | For 4 to 5 m depth      | Rm   |            | 11   |              |
| 8.48    | For depths above 6 m    | Rm   |            | 11   |              |
|         | <b>600 mm dia pipes</b> |      |            |      |              |
| 8.49    | For 0 to 2 m depth      | Rm   |            | 298  |              |
| 8.50    | For 2 to 3 m depth      | Rm   |            | 586  |              |
| 8.51    | For 3 to 3.5 m depth    | Rm   |            | 56   |              |
| 8.52    | For 3.5 to 4 m depth    | Rm   |            | 11   |              |
| 8.53    | For 4 to 5 m depth      | Rm   |            | 11   |              |
| 8.54    | For depths above 6 m    | Rm   |            | 11   |              |
|         | <b>700 mm dia pipes</b> |      |            |      |              |
| 8.55    | For 0 to 2 m depth      | Rm   |            | 11   |              |
| 8.56    | For 2 to 3 m depth      | Rm   |            | 11   |              |
| 8.57    | For 3 to 3.5 m depth    | Rm   |            | 11   |              |
| 8.58    | For 3.5 to 4 m depth    | Rm   |            | 11   |              |

| Sr. No.    | Description  | Unit | Rate in Rs | Qty  | Amount in Rs |
|------------|--|------|------------|------|--------------|
| 8.59       | For 4 to 5 m depth   | Rm   |            | 11   |              |
| 8.60       | For depths above 6 m   | Rm   |            | 11   |              |
|            | <b>800 mm dia pipes</b>  |      |            |      |              |
| 8.61       | For 0 to 2 m depth   | Rm   |            | 11   |              |
| 8.62       | For 2 to 3 m depth   | Rm   |            | 11   |              |
| 8.63       | For 3 to 3.5 m depth   | Rm   |            | 11   |              |
| 8.64       | For 3.5 to 4 m depth   | Rm   |            | 11   |              |
| 8.65       | For 4 to 5 m depth   | Rm   |            | 11   |              |
| 8.66       | For depths above 6 m   | Rm   |            | 11   |              |
|            | <b>900 mm dia pipes</b>  |      |            |      |              |
| 8.67       | For 0 to 2 m depth   | Rm   |            | 11   |              |
| 8.68       | For 2 to 3 m depth   | Rm   |            | 11   |              |
| 8.69       | For 3 to 3.5 m depth   | Rm   |            | 11   |              |
| 8.70       | For 3.5 to 4 m depth   | Rm   |            | 11   |              |
| 8.71       | For 4 to 5 m depth   | Rm   |            | 11   |              |
| 8.72       | For depths above 6 m   | Rm   |            | 11   |              |
|            |  |      |            |      |              |
| 9          | <b>Ventilating shafts:</b> Providing and fixing CI Soil pipe for ventilating shaft 5 m high with specials and cowl and suitable grips in CC 1:2:4 pillar using 10 mm to 20 mm graded hard granite/trap/basalt or any approved metal with 15 cm thick CC around upto 1.   | Nos  |            | 7    |              |
| 10         | House service connections with 110mm UPVC  | No.s |            | 6528 |              |
|            | <b>Sub Total For Materials (II)</b>  |      |            |      |              |
| <b>III</b> | <b>DETAILED ESTIMATE FOR SEWER APPURTENANCES</b>   |      |            |      |              |
| 11         | Construction of manholes of following sizes on sewer lines as per detailed drawing including supplying & fixing 600 mm dia FRC Manholes frame & cover & encapsulated plastic steps complete as per the specifications, including earthwork excavation on all so  |      |            |      |              |
|            | <b>Type I - 750 x 1200 mm</b>  |      |            |      |              |
| 11.1       | Less than 0.9 m  | No   |            | 569  |              |
|            | <b>Type II - 900 x 1200 mm</b>   |      |            |      |              |
| 11.2       | 0.90 to 1.24   | No   |            | 133  |              |
| 11.3       | 1.25 to 1.74   | No   |            | 148  |              |
| 11.4       | 1.75 - 2.24m   | No   |            | 318  |              |
| 11.5       | 2.25-2.74m   | No   |            | 542  |              |
| 12         | Construction of circular manhole clear internal 1,500 mm dia., including earthwork excavation in all type of soils, rock, bailing of water, brick work in CM 1:3, 230mm and above thick, upto 2.5m depth and above over a bed of cement concrete in 1:3:6, Excluding of cost of seinorage charges on all materials |      |            |      |              |
|            | <b>Type III - 1500 mm diameter</b>   |      |            |      |              |
| 12.1       | 2.75 to 4.0 m depth  | No   |            | 29   |              |
| 12.2       | 4.0 to 6.0 m depth   | No   |            | 19   |              |
|            |  |      |            |      |              |

| Sr. No.       | Description   | Unit  | Rate in Rs | Qty   | Amount in Rs |
|---------------|---|-------|------------|-------|--------------|
| 13            | <b>Drops to the Manholes:</b> Providing and constructing vertical drop arrangement of 0.6 m and more height as required including providing and joining special such as double T bend, required pipe fixed in CC M100 at required level as type design cutting jointing |       |            |       |              |
| 13.1          | Verical drops upto 0.6 m height   | No.   |            | 0     |              |
| 13.2          | Verical drops upto 1.0 m  | No    |            | 4     |              |
| 13.3          | Verical drops upto 2.0 m  | No    |            | 6     |              |
| 13.4          | Verical drops upto 3.0 m  | No    |            | 3     |              |
| 13.5          | Verical drops upto 4.0 m  | No    |            | 4     |              |
| 13.6          | Verical drops upto 5.0 m  | No    |            | 2     |              |
|               | <b>Sub Total For Maintenance equipment (III)</b>  |       |            |       |              |
| 14            | Maintanence equipment   | 1 Job |            |       |              |
| 15            | Road Relaying   | Rmt   |            | 47000 |              |
|               | <b>Sub Total For Appurtenances (IV)</b>   |       |            |       |              |
| 16            | Operation and maintance of the collection network   |       |            |       |              |
|               | 1st year  |       |            |       |              |
|               | 2nd year  |       |            |       |              |
|               | 3rd year  |       |            |       |              |
|               | 4th year  |       |            |       |              |
|               | 5th year  |       |            |       |              |
|               | <b>Sub Total For O&amp;M of Collection network (V)</b>  |       |            |       |              |
| 17            | Capex cost of STPs  |       |            |       |              |
|               | Plant 1   | MLD   |            | 4     |              |
|               | Plant 2   | MLD   |            | 5     |              |
| 18            | Operation and Maintance of STPs   |       |            |       |              |
|               | 1st year  |       |            |       |              |
|               | 2nd year  |       |            |       |              |
|               | 3rd year  |       |            |       |              |
|               | 4th year  |       |            |       |              |
|               | 5th year  |       |            |       |              |
|               | <b>Sub Total For sewerage treatment plants (VI)</b>   |       |            |       |              |
| 19            | Lift stations including all related works   |       |            |       |              |
|               | 25 HP   | No    |            | 1     |              |
|               | 20 HP   | No    |            | 1     |              |
|               | <b>Sub Total For Lift stations (VII)</b>  |       |            |       |              |
|               |   |       |            |       |              |
| <b>PART A</b> | <b>Total Amount (I+II+III+IV+V+VI+VII)</b>  |       |            |       |              |
| <b>PART B</b> | <b>Add 18 % towards GST</b>   |       |            |       |              |
|               | <b>Grand Total</b>  |       |            |       |              |
|               | <b>Amount in words</b>  |       |            |       |              |
|               |   |       |            |       |              |