SOLAPUR MUNICIPAL CORPORATION MAHARASHTRA JEEVAN PRADHIKARAN DIVISION SOLAPUR SOLAPUR CITY UNDERGROUND SEWERAGE SCHEME (AMRUT) RECAPUTALATION SHEET

| | | Estimated |
|-------|--|-----------|
| S No. | SUBWORK | Cost |
| | | (Crore) |
| 1 | Sewerage Zone IX | |
| | Collection System (Dia 150 to 800 mm, L = 146.29 Km) DWC/RCC | 39.34 |
| | Sewage Pumping Station @ Desai Nagar (Dia 10.5 m) | 1.58 |
| | Pumping Machinery (40 BHP -2, 70 BHP-2, 150 BHP-1) | 1.85 |
| | Pumping Main (Dia - 600 mm, DI K9, L= 150 m) | 0.25 |
| | Sewage Treatment Plants - 20 MLD MMBR Technology | 10.43 |
| | Sump for Tanker Feed treated effluent | 0.82 |
| | Property Connection (29155 Nos.) | 21.99 |
| | Total | 76.26 |
| 2 | Sewerage Zone X | |
| | Collection System (Dia 150 to 700 mm, L = 119.75 Km) DWC/RCC | 33.35 |
| | Sewage Pumping Station @ Hyd. Road (Dia 10.5 m) | 1.53 |
| | Pumping Machinery (30 BHP -2, 55 BHP-2, 120 BHP-1) | 1.69 |
| | Pumping Main (Dia - 500 mm, DI K9, L= 150 m) | 0.19 |
| | Sewage Treatment Plants - 15.5 MLD MMBR Technology | 8.67 |
| | Property Connection (23167 Nos.) | 17.48 |
| | Total | 62.91 |
| 3 | Trunk Sewer for Sewerage Zone XI,XII,XIII | 40.07 |
| 3 | (Dia 300 - 1500 mm, L = 15.5 Km) RCC | 19.27 |
| | Trunk Sewer for Sewerage Zone I to IV & VI | 45.05 |
| 4 | (Dia 250 - 900 mm, L =16.19 Km) DWC/RCC | 15.65 |
| 5 | Property Connection (5738 Nos.) | 4.33 |
| 6 | Nalla Interception | 1.42 |
| 7 | Miscellaneous | 0.40 |
| | TOTAL - | 180.24 |
| | Add 3% PMC charges - | 5.41 |
| | Gross Total - | 185.65 |

(Underground Sewerage Network -150 to 900 mm dia RCC Pipes, HDPE DWC SN 8 Pipes , L=146.26

ABSTRACT

| MATERIAL : 1 Providing ISI Standard RCC pipes in standard length of following class and diameter, suitable for either collor joints or rubber ring joints, including all taxes (central and local) inspection charges, transport to departmental store / site unloading and stacking | | |
|---|-----|------------|
| 1 Providing ISI Standard RCC pipes in standard length of following class and diameter, suitable for either collor joints or rubber ring joints, including all taxes (central and local) inspection charges, transport to departmental store / site unloading and stacking | | |
| length of following class and diameter, suitable for either collor joints or rubber ring joints, including all taxes (central and local) inspection charges, transport to departmental store / site unloading and stacking | | |
| suitable for either collor joints or rubber ring joints, including all taxes (central and local) inspection charges, transport to departmental store / site unloading and stacking | | |
| joints, including all taxes (central and local) inspection charges, transport to departmental store / site unloading and stacking | | |
| inspection charges, transport to departmental store / site unloading and stacking | | |
| store / site unloading and stacking | | |
| | | |
| etc.complete. | | |
| Notes :- One rubber ring should be supplied | | |
| with each full length of socketed pipe, cost | | |
| included in the rates below. | | |
| RCC NP 3 Class | | |
| 1961.00 150 mm dia. 357.00 | Rmt | 700077.00 |
| 1710.00 200 mm dia. 394.00 | Rmt | 673740.00 |
| 2009.00 250 mm dia. 541.00 | Rmt | 1086869.00 |
| 3529.00 300 mm dia. 757.00 | Rmt | 2671453.00 |
| 1162.00 350 mm dia. 1260.00 | Rmt | 1464120.00 |
| 1241.00 400 mm dia. 1344.00 | Rmt | 1667904.00 |
| 1087.00 450 mm dia. 1449.00 | Rmt | 1575063.00 |
| 1098.00 500 mm dia. 1785.00 | Rmt | 1959930.00 |
| 29.00 700 mm dia. 2940.00 | Rmt | 85260.00 |
| 540.00 800 mm dia. 3150.00 | Rmt | 1701000.00 |
| RCC NP 4 Class | | |
| 165.00 250 mm dia. 617.00 | Rmt | 101805.00 |
| 238.00 300 mm dia. 945.00 | Rmt | 224910.00 |
| 91.00 350 mm dia. 1344.00 | Rmt | 122304.00 |
| 140.00 400 mm dia. 1470.00 | Rmt | 205800.00 |
| 567.00 600 mm dia. 2520.00 | Rmt | 1428840.00 |
| 60.00 800 mm dia. 3413.00 | Rmt | 204780.00 |
| (CSR 2016-17, P. 103,104, I. E, F) | | |
| 2 Providing and supplying in standard lengths | | |
| Polyethelene (PE) Pipes for non pressure | | |
| underground drainage and sewerage with | | |
| smooth internal and corrugated (profiled) | | |
| external surface with anti rodent property | | |
| conforming to ISO-21138-3:2007 with | | |
| necessary jointing material like mechanical | | |
| connectors, i.e. thread/ insert joint/quick | | |
| release coupler joint/ compression fitting joint | | |
| or flanged joint, including all taxes (Central | | |
| and local), transportation and freight charges, | 1 | |
| inspection charges, loading/ unloading | | |
| charges, conveyance to the departmental | | |
| stores/site and stacking the same in closed | | |
| shade duly protecting from sunrays and rains, | | |
| etc. complete. | 1 | |

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| I. N. | Quantity | ITEM DESCRIPTION | Rate | Unit | Amount Rs. |
|-------|-----------|--|--------------|------|-------------|
| | | H.D.P.E. DWC pipes for Drainage Class SN | | | |
| | 124424.00 | 150 mm dia.(ID) | 378.00 | Rmt | 47032272.00 |
| | 3543.00 | 170 mm dia.(ID) | 437.00 | Rmt | 1548291.00 |
| | 1261.00 | 200 mm dia.(ID) | 594.00 | Rmt | 749034.00 |
| | 1434.00 | 250 mm dia.(ID) | 1007.00 | Rmt | 1444038.00 |
| | | (CSR 2016-17, P. 132,133 I. 2) | | | |
| | | | | | |
| | | | Material Cos | t | 66647490.00 |
| | | LABOUR : | | | |
| 1 | | Excavation for foundation / pipe trenches in | | | |
| | | earth, soils of all types , sand, gravel, and soft | | | |
| | | murum includng removing the excavated | | | |
| | | material up to a distance of 50 m. and lift as | | | |
| | | below, stacking and spreading as directed by | | | |
| | | the Engineer-in- charge, normal dewatering, | | | |
| | | preparing the bed for foundation and | | | |
| | | excluding back filling. etc.complete. | | | |
| | | | | | |
| | | Lift 0.0 -1.5 M. | | | |
| | | Basic Rate | 141.00 | | |
| | | Add 10 % for M.C | 14.10 | | |
| | 38996.09 | Total | 155.10 | Cum | 6048293.56 |
| | 30330.03 | (CSR 2016-17, P. 35 I. 1) | 100.10 | Cum | 0040233.00 |
| | | | | | |
| 2 | | Excavation for foundation / pipe trenches in | | | |
| ~ | | hard murum & boulders, WBM road including | | | |
| | | removing the excavated material up to a | | | |
| | | distance of 50 m. and lift as below, stacking | | | |
| | | and spreading as directed by the Engineer-in- | | | |
| | | | | | |
| | | charge, normal dewatering, preparing the bed | | | |
| | | for foundation and excluding back filling. | | | |
| | | etc.complete. Lift 0 -1.5 M. | | | |
| | | Basic Rate | 180.00 | | |
| | | Add 10 % for M.C | 18.00 | | |
| | 53963.68 | Total | 198.00 | Cum | 10684808.64 |
| | 00900.00 | | 190.00 | Cum | 10004000.04 |
| | | (CSR 2016-17, P. 35 I. 3) | | | |
| • | | Everyotion for ping transhap in act and | | | |
| 3 | | Excavation for pipe trenches in soft rock and | | | |
| | | old cement and lime masonary foundation, | | | |
| | | ashphalt road includng removing the | | | |
| | | excavated material up to a distance of 50 m. | | | |
| | | and lift as below, stacking and spreading as | | | |
| | | directed by the Engineer-in- charge, normal | | | |
| | | dewatering, preparing the bed for foundation | | | |
| | | and excluding back filling. etc.complete. | | | |
| | | | | | |
| | | Lift 0 -1.5 M. | | | |
| | | Basic Rate | 443.00 | | |
| | | Add 10 % for M.C | 44.30 | | |
| | 99670.06 | Total | 487.30 | Cum | 48569220.24 |

| I. N. | Quantity | ITEM DESCRIPTION | Rate | Unit | Amount Rs. |
|-------|----------|--|--------|-------|-------------|
| | | Lift 1.5 -3.0 M. | | | |
| | | Basic Rate | 463.00 | | |
| | | Add 10 % for M.C | 46.30 | | |
| | 18670.38 | Total | 509.30 | Cum | 9508824.53 |
| | | (CSR 2016-17, P. 35 I. 5) | | | |
| | | | | | |
| 4 | | Excavation for pipe trenches in hard rock and concrete road, by chiselling, wedging, lime drilling by mechanical means or by all means other than blasting, including trimming and levelling the bed, removing the excavated material up to a distance of 50 m. and lift as below, stacking and spreading as directed by the Engineer-in- charge, normal dewatering, preparing the bed for foundation and excluding back filling. etc.complete. | | | |
| | | Lift 0-1.50 M. | | | |
| | | Basic Rate | 751.00 | | |
| | | Add 10 % for M.C | 75.10 | | |
| | 8277.38 | Total | 826.10 | Cum | 6837943.62 |
| | 0211.00 | Lift 1.5 -3.0 M. | 020.10 | Uuiii | 0007 040.02 |
| | | Basic Rate | 771.00 | | |
| | | Add 10 % for M.C | 77.10 | | |
| | 31451.45 | Total | 848.10 | Cum | 26673974.75 |
| | | Lift 3.0 -4.5 M. | 010.10 | Cum | 20010011.10 |
| | | Basic Rate | 791.00 | | |
| | | Add 10 % for M.C | 79.10 | | |
| | 7593.83 | Total | 870.10 | Cum | 6607389.99 |
| | 1000.00 | Lift 4.5-6.0 M. | 0/0.10 | Cum | 0001000.00 |
| | | Basic Rate | 811.00 | | |
| | | Add 10 % for M.C | 81.10 | | |
| | 971.81 | Total | 892.10 | Cum | 866951.52 |
| | | Lift 6.0-7.5 M. | 002110 | | |
| | | Basic Rate | 831.00 | | |
| | | Add 10 % for M.C | 83.10 | 1 | |
| | 1.49 | Total | 914.10 | Cum | 1361.34 |
| | | (CSR 2016-17, P. 36 I. 7) | | | |
| | | | | | |
| 5 | | Providing dry trap/ granite/quartzite/ gneiss, rubble stone soling in 15 cm to 20 cm thick layers including hand packing and compacting etc.complete. | | | |
| | | Basic Rate | 912.00 | | |
| | | Add 5 % for M.C | 45.60 | | |
| | 288.00 | Total | 957.60 | Cum | 275788.80 |
| | | (CSR 2016-17, P. 39 I.18) | | | |
| | | | | | |

| U | I | E | V | V |
|---|---|---|---|---|
| | | | | |

| I. N. | Quantity | ITEM DESCRIPTION | Rate | Unit | Amount Rs. |
|-------|----------|---|--------|-------|------------|
| 6 | | Providing & filling in sand boxing in pipeline or for foundation with sand of approved quality including watering and compaction,etc.complete. | | | |
| | | Basic Rate | 931.00 | | |
| | | Add 5 % for M.C | 46.55 | | |
| | 1829.98 | Total | 977.55 | Cum | 1788896.95 |
| | | (CSR 2016-17, P. 39 I. 19) | | | |
| 7 | | Providing murum bedding in trenches with approved murum from excavated materials from foundation in 15 cm. to 20 cm. layers including watering & compaction complete. | | | |
| | | Basic Rate | 64.00 | | |
| | | Add 5 % for M.C | 3.20 | | |
| | 16469.84 | Total | 67.20 | Cum | 1106773.25 |
| | | (CSR 2016-17, P. 39, I. 16) | 01.20 | | 1100110.20 |
| 8 | | Lowering laying and jointing in proper grade and alignment R.C.C. pipes with collar joints in CM 1:1 proportion or socketed R.C.C. pipes with rubbar joints (excluding cost of rubber ring or R.C.C. collor), including cost of conveyance from stores to site of works, cost of jointing material, labour, giving hydraulic testing, etc.complete as directed by Engineer- in-charge | | | |
| | | 150 mm dia. | | | |
| | | Basic Rate | 55.00 | | |
| | | Add 5 % for M.C | 2.75 | | |
| | 1961.00 | Total | 57.75 | Rmt | 113247.75 |
| | | 200 mm dia. | | | |
| | | Basic Rate | 73.00 | | |
| | | Add 5 % for M.C | 3.65 | | |
| | 1710.00 | Total | 76.65 | Rmt | 131071.50 |
| | | 250 mm dia. | | | |
| | | Basic Rate | 95.00 | | |
| | | Add 5 % for M.C | 4.75 | | |
| | 2174.00 | Total | 99.75 | Rmt | 216856.50 |
| | | 300 mm dia. | | | |
| | | Basic Rate | 115.00 | | |
| | | Add 5 % for M.C | 5.75 | | |
| | 3767.00 | Total | 120.75 | Rmt | 454865.25 |
| | | 350 mm dia. | 440.00 | | |
| | | Basic Rate | 118.00 | | |
| | 4070.55 | Add 5 % for M.C | 5.90 | | |
| | 1253.00 | Total | 123.90 | Rmt | 155246.70 |
| | | 400 mm dia. | 4 - 4 | | |
| | | Ikoojo Koto | 151.00 | 1 | |
| | | Basic Rate Add 5 % for M.C | 7.55 | ┨───┤ | |

| I. N. | Quantity | ITEM DESCRIPTION | Rate | Unit | Amount Rs. |
|-------|----------|---|----------|--------|------------|
| | | 450 mm dia. | | | |
| | | Basic Rate | 180.00 | | |
| | | Add 5 % for M.C | 9.00 | | |
| | 1087.00 | Total | 189.00 | Rmt | 205443.00 |
| | | 500 mm dia. | | | |
| | | Basic Rate | 197.00 | | |
| | | Add 5 % for M.C | 9.85 | | |
| | 1098.00 | Total | 206.85 | Rmt | 227121.30 |
| | 1000100 | 600 mm dia. | 200.00 | | |
| | | Basic Rate | 248.00 | | |
| | | Add 5 % for M.C | 12.40 | | |
| | 567.00 | Total | 260.40 | Rmt | 147646.80 |
| | 307.00 | 700 mm dia. | 200.40 | 1XIIII | 147040.00 |
| | | Basic Rate | 281.00 | | |
| | | Add 5 % for M.C | | | |
| | 20.00 | | 14.05 | Drest | |
| | 29.00 | Total | 295.05 | Rmt | 8556.45 |
| | | 800 mm dia. | 005.05 | | |
| | | Basic Rate | 325.00 | | |
| | | Add 5 % for M.C | 16.25 | | |
| | 600.00 | Total | 341.25 | Rmt | 204750.00 |
| | | (CSR 2016-17, P. 105, I. 2) | | | |
| | | Hydraulic testing of RCC pipe line to specified | | | |
| | | pressure including cost of all materials and labour and water for testing for specified length including cutting, placing end cap making arrangement for filling safe water using reciprocating type pumps which should be able to provide specified test pressure gauges and other necessary equipments, labour, operation charges, etc. required for testing. The rate under this item shall also include cost of retesting, if necessary and reinstating to original position. | | | |
| | | 150 mm dia. | | | |
| | | Basic Rate | 6000.00 | | |
| | | Add 5 % for M.C | 300.00 | | |
| | 1.96 | Total | 6300.00 | Km | 12354.30 |
| | | 200 mm dia. | | | |
| | | Basic Rate | 8000.00 | | |
| | | Add 5 % for M.C | 400.00 | | |
| | 1.71 | Total | 8400.00 | Km | 14364.00 |
| | | 250 mm dia. | | | |
| | | Basic Rate | 11000.00 | | |
| | | Add 5 % for M.C. | 550.00 | | |
| | 2.17 | Total | 11550.00 | Km | 25109.70 |
| | 2.17 | 300 mm dia. | 11550.00 | | 20109.10 |
| | | | 12000.00 | | |
| | | Basic Rate | 13000.00 | | |
| | | Add 5 % for M.C | 650.00 | | 51419.55 |
| | 3.77 | Total | 13650.00 | Km | 51 |

| I. N. | Quantity | ITEM DESCRIPTION | Rate | Unit | Amount Rs. |
|-------|-----------|--|----------|--------|------------|
| | | 350 mm dia. | | | |
| | | Basic Rate | 13000.00 | | |
| | | Add 5 % for M.C | 650.00 | | |
| | 1.25 | Total | 13650.00 | Km | 17103.45 |
| | | 400 mm dia. | | | |
| | | Basic Rate | 17000.00 | | |
| | | Add 5 % for M.C | 850.00 | | |
| | 1.38 | Total | 17850.00 | Km | 24650.85 |
| | | 450 mm dia. | | | |
| | | Basic Rate | 20000.00 | | |
| | | Add 5 % for M.C | 1000.00 | | |
| | 1.09 | Total | 21000.00 | Km | 22827.00 |
| | 1.03 | 500 mm dia. | 21000.00 | | 22021.00 |
| | | Basic Rate | 22000.00 | | |
| | | Add 5 % for M.C | 1100.00 | | |
| | 1.10 | | | I/ inc | 05000.00 |
| | 1.10 | Total | 23100.00 | Km | 25363.80 |
| | | 600 mm dia. | | | |
| | | Basic Rate | 28000.00 | | |
| | | Add 5 % for M.C | 1400.00 | | |
| | 0.57 | Total | 29400.00 | Km | 16669.80 |
| | | 700 mm dia. | | | |
| | | Basic Rate | 31000.00 | | |
| | | Add 5 % for M.C | 1550.00 | | |
| | 0.03 | Total | 32550.00 | Km | 943.95 |
| | | 800 mm dia. | | | |
| | | Basic Rate | 36000.00 | | |
| | | Add 5 % for M.C. | 1800.00 | | |
| | 0.60 | Total | 37800.00 | Km | 22680.00 |
| | 0.00 | (CSR 2016-17, P. 105, I. 2) | 57000.00 | | 22000.00 |
| | | | | | |
| 10 | | Lowering, laying and jointing H.D.P.E. Double Wall Corrugated Pipes for nonpressure Underground drainage and Sewerage applications and specials offollowing class and diameter includingcost of conveyance from stores to site of works including cost of all labour,material except O ring coupler giving satisfactory hydraulic testing as per relevent ISO, etc. complete | | | |
| | | H.D.P.E. DWC pipes for Drainage CLASS SN | | | |
| | | 150 mm dia.(ID) | | | |
| | | Basic Rate | 32.00 | | |
| | | Add 5 % for M.C | 1.60 | | |
| | 124424.00 | Total | 33.60 | Rmt | 4180646.40 |
| | | 170 mm dia.(ID) | | | |
| | | Basic Rate | 35.00 | | |
| | | Add 5 % for M.C | 1.75 | | |
| | 3543.00 | Total | 36.75 | Rmt | 130205.25 |
| | 5545.00 | | 30.73 | ixint | 130203.23 |
| | | 200 mm dia.(ID) | 00.00 | | |
| | | Basic Rate | 38.00 | | |
| | | Add 5 % for M.C | 1.90 | | _ |
| | 1261.00 | Total | 39.90 | Rmt | 50313.90 |

| I. N. | Quantity | ITEM DESCRIPTION | Rate | Unit | Amount Rs. |
|-------|----------|--|---------|------|------------|
| | | 250 mm dia.(ID) | | | |
| | | Basic Rate | 47.00 | | |
| | | Add 5 % for M.C | 2.35 | | |
| | 1434.00 | Total | 49.35 | Rmt | 70767.90 |
| | 1404.00 | (CSR 2016-17, P. 134, I. 4) | 40.00 | | 10101.00 |
| | | | | | |
| 11 | | Hydraulic testing of HDPE double wall | | | |
| | | corrugated pipe for non pressure underground | | | |
| | | line to specified pressure including cost of all | | | |
| | | materials and labour and water for testing for | | | |
| | | specified length including cutting, placing end | | | |
| | | cap making arrangement for filling safe water | | | |
| | | using reciprocating type pumps which should | | | |
| | | be able to provide specified test pressure | | | |
| | | gauges and other necessary equipments, | | | |
| | | labour, operation charges, etc. required for | | | |
| | | testing. The rate under this item shall also | | | |
| | | include cost of retesting, if necessary and | | | |
| | | reinstating to original position., etc. complete | | | |
| | | | | | |
| | | | | | |
| | | H.D.P.E. DWC pipes for Drainage CLASS SN | | | |
| | | 150 mm dia.(ID) | | | |
| | | Basic Rate | 3000.00 | | |
| | | Add 5 % for M.C | 150.00 | | |
| | 124.42 | Total | 3150.00 | Km | 391935.60 |
| | | 170 mm dia.(ID) | | | |
| | | Basic Rate | 7000.00 | | |
| | | Add 5 % for M.C | 350.00 | | |
| | 3.54 | Total | 7350.00 | Km | 26041.05 |
| | | 200 mm dia.(ID) | | | |
| | | Basic Rate | 4000.00 | | |
| | | Add 5 % for M.C | 200.00 | | |
| | 1.26 | Total | 4200.00 | Km | 5296.20 |
| | | 250 mm dia.(ID) | | | |
| | | Basic Rate | 5000.00 | | |
| | | Add 5 % for M.C | 250.00 | | |
| | 1.43 | Total | 5250.00 | Km | 7528.50 |
| | | (CSR 2016-17, P. , I. 6) | | | |
| | | | | | |
| 12 | | Open timbering in trenches of depth more | | | |
| | | than 1.5 m for shoring and strutting including | | | |
| | | use of and waste of all necessary timber | | | |
| | | works including walling, strutts, open polling | | | |
| | | boards/ horizontal sheeting, runners, etc. as | | | |
| | | may be necessary and fixing and removal | | | |
| | | complete. (Measurements to be taken of the | | | |
| | | face/area timbered) | | | |
| | | Non Water Logged Area | | | |
| | | Lift 1.50 to 3.00 m. | | | |
| | | Basic Rate | 240.00 | | |
| | | Add 5 % for M.C | 12.00 | | |
| | 1021.50 | Total | 252.00 | Sqm | 257418.00 |
| L | 1021.00 | 10101 | 202.00 | | 201710.00 |

| I. N. | Quantity | ITEM DESCRIPTION | Rate | Unit | Amount Rs. |
|-------|----------|--|----------|----------|--------------|
| | Quantity | | Nato | | Anount No. |
| | | Water Logged Area | | | |
| | | Lift 1.50 to 3.00 m. | | | |
| | | Basic Rate | 239.00 | | |
| | | Add 5 % for M.C | 11.95 | | |
| | 1021.50 | Total | 250.95 | Sqm | 256345.43 |
| | | (CSR 2016-17, P. 39, I. 20a / b) | | | |
| | | | | | |
| 13 | | Providing and laying in situ cement concrete | | | |
| | | 1:2:4 of trap/ granite / quartzite/ gneiss metal | | | |
| | | for foundation and bedding including bailing | | | |
| | | out water manually, formwork, compacting | | | |
| | | and curring etc. complete. | | | |
| | | Basic Rate | 4233.00 | | |
| | | Add 5 % for M.C | 211.65 | | |
| | 415.57 | Total | 4444.65 | Cum | 1847046.01 |
| | | (CSR 2016-17, P. 43, I. 1b) | | | 101101010101 |
| | | | | | |
| 14 | | Dewatering the excavated trenches and pools | | | |
| | | of water in the pipeline trenches, well works by | | | |
| | | using pumps and other divices including | | | |
| | | disposing off water to safe distance as | | | |
| | | directed by Engineer-in- charge (including cost | | | |
| | | of machionary, labour,fuel) etc.complete. | | | |
| | | | | | |
| | | Basic Rate | 62.00 | | |
| | | Add 5 % for M.C | 3.10 | | |
| | 07000.00 | Total | | | 0.400700.00 |
| | 37800.00 | | 65.10 | HP/Hr | 2460780.00 |
| | | (CSR 2016-17, P. 38, I. 14) | | | |
| | | | | | |
| 15 | | Providing and constructing on sewer, B.B. | | | |
| | | masonary circular manhole with concentric | | | |
| | | cone 1.2 M. dia. at bottom and 0.5 M. from | | | |
| | | top and up to depth of 2 m. with 23 cm thick | | | |
| | | brick work up to depth of 2 M in CM 1:4 | | | |
| | | proportion with 20 mm thick smooth plaster on | | | |
| | | both sides in CM 1:2 proportion excluding | | | |
| | | excavation including foundation concrete 250 | | | |
| | | mm thick and haunches and channels in C.C. | | | |
| | | 1:2:4 proportion, finishing channels in smooth | | | |
| | | rendering, providing C.I. dapuri type steps | | | |
| | | each weighing 5.5 Kg., 1:2:4 coping and | | | |
| | | providing and fixing approved make and | | | |
| | | quality S.F.R.C. frame and cover of 56 cm | | | |
| | | dia. etc.complete as directed by Engineer-in- | | | |
| | | charge. | | ↓ ↓ | |
| | | Upto 1.50 m depth. | | | |
| | | Basic Rate | 17299.00 | | |
| | | Add 5 % for M.C | 864.95 | | |
| | 3108.00 | Total | 18163.95 | No. | 56453556.60 |

| I. N. | Quantity | ITEM DESCRIPTION | Rate | Unit | Amount Rs. |
|-------|----------|---|----------|------|-------------|
| | | Upto 2 m depth. | | | |
| | | Basic Rate | 20148.00 | | |
| | | Add 5 % for M.C | 1007.40 | | |
| | 1461.00 | Total | 21155.40 | No. | 30908039.40 |
| | | (CSR 2016-17, P. 272, I. 6) | | | |
| | | a) Rebate for every decrease in depth of 50 cm or part there of Rs.2849/-Add 5% for M.C=Rs.2991.45 | | | |
| 16 | | Providing and constructing on sewer, B.B. masonary circular manhole with concentric cone 1.5 M. dia. at bottom and 0.5 M. from top and up to depth of 5 m. with 23 cm thick brick work up to depth of 2 M from top and 35 cm thick brick work for remaining depth up to 5 M in CM 1:4 proportion with 20 mm thick smooth plaster on both sides in CM 1:2 proportion excluding excavation including foundation concrete 250 mm thick and haunches and channels in C.C. 1:2:4 proportion, finishing channels in smooth rendering, providing C.I. dapuri type steps each weighing 5.5 Kg., 1:2:4 coping and providing and fixing approved make and quality S.F.R.C. frame and cover of 56 cm dia. etc.complete as directed by Engineer-incharge. | | | |
| | | Upto 2.5 m depth. | | | |
| | | Basic Rate | 28011.00 | | |
| | | Add 5 % for M.C | 1400.55 | | |
| | 500.00 | Total | 29411.55 | No. | 14705775.00 |
| | 000.00 | Upto 3.0 m depth. | 20111.00 | 110. | 11100110.00 |
| | | Basic Rate | 33901.00 | | |
| | | Add 5 % for M.C | 1695.05 | | |
| | 210.00 | Total | 35596.05 | No. | 7475170.50 |
| | 210.00 | Upto 3.50 m depth. | 00000.00 | 110. | 1410110.00 |
| | | Basic Rate | 39791.00 | | |
| | | Add 5 % for M.C | 1989.55 | | |
| | 134.00 | Total | 41780.55 | No. | 5598593.70 |
| | 104.00 | Upto 4.0 m depth. | 41700.00 | 110. | 0000000.10 |
| | | Basic Rate | 45681.00 | | |
| | | Add 5 % for M.C | 2284.05 | | |
| | 92.00 | Total | 47965.05 | No. | 4412784.60 |
| | 92.00 | Upto 4.5 m depth. | 47903.03 | INO. | 4412704.00 |
| | | Basic Rate | 51571.00 | | |
| | | Add 5 % for M.C | 2578.55 | | |
| | 40.00 | Total | 54149.55 | No. | 2165982.00 |
| | +0.00 | Upto 5.0 m depth. | 54143.00 | INU. | 2103302.00 |
| | | Basic Rate | 57461.00 | | |
| | | Add 5 % for M.C | | ļ | |
| | 20.00 | Total | 2873.05 | Na | 1206694 00 |
| | 20.00 | | 60334.05 | No. | 1206681.00 |
| | | (CSR 2016-17, P. 273, I. 7) a) Rebate for every decrease in depth of 50 cm or part there of Rs.5890/-Add 5% for M.C=Rs.6184.50 | | | |

| I. N. | Quantity | ITEM DESCRIPTION | Rate | Unit | Amount Rs. |
|-------|----------|---|----------|------|------------|
| | | | | | |
| 17 | | Providing and constructing on sewer, B.B. | | | |
| | | masonary circular manhole with concentric | | | |
| | | cone 1.5 M. dia. at bottom and 0.5 M. from | | | |
| | | top and 35 cm thick brick work for depth of 2 | | | |
| | | M and 45 cm thick brick work for remaining | | | |
| | | depth up to 9 M in CM 1:4 proportion with 20 | | | |
| | | mm thick smooth plaster on both sides in CM | | | |
| | | 1:2 proportion excluding excavation including | | | |
| | | foundation concrete 250 mm thick and haunches and channels in C.C. 1:2:4 | | | |
| | | | | | |
| | | proportion, finishing channels in smooth | | | |
| | | rendering, providing C.I. dapuri type steps each weighing 5.5 Kg., 1:2:4 coping and | | | |
| | | providing and fixing approved make and | | | |
| | | quality S.F.R.C. frame and cover of 56 cm | | | |
| | | dia. etc.complete as directed by Engineer-in- | | | |
| | | charge. | | | |
| | | 5.50 m depth. | | | |
| | | Basic Rate | 71823.00 | | |
| | | Add 5 % for M.C | 3591.15 | | |
| | 14.00 | Total | 75414.15 | No. | 1055798.10 |
| | | 6.0 m depth. | | | |
| | | Basic Rate | 79233.00 | | |
| | | Add 5 % for M.C | 3961.65 | | |
| | 7.00 | Total | 83194.65 | No. | 582362.55 |
| | | 6.5 m depth. | | | |
| | | Basic Rate | 86643.00 | | |
| | | Add 5 % for M.C | 4332.15 | | 101050.00 |
| | 2.00 | | 90975.15 | No. | 181950.30 |
| | | (CSR 2016-17, P. 273, I. 8) | | | |
| | | a) Rebate for every decrease in depth of 50 | | | |
| | | cm or part there of Rs7410/-Add 5% for M.C .=Rs.7780.50 | | | |
| | | .=1(3.7760.50 | | | |
| 18 | | Providing and fixing in position steel bar | | | |
| | | reinforcement of various diameters for RCC | | | |
| | | piles, caps, footings, foundations, lintels, | | | |
| | | parodies, copings, fins, arches, etc. as per | | | |
| | | detailed designs, drawings and schedules; | | | |
| | | including cutting, bending, hooking the bars, | | | |
| | | binding with wires or tack welding and | | | |
| | | supporting as required, etc. complete. | | | |
| | | (including cost of binding wire). | | | |
| | | Tor Steel | | | |
| | | Basic Rate | 52194.00 | | |
| | | Add 5 % for M.C | 2609.70 | | |
| | 3.30 | Total | 54803.70 | MT | 180687.80 |
| | | (CSR 2016-17, P. 46, I. 8b) | | | |
| | | | | | |

| I. N. | Quantity | ITEM DESCRIPTION | Rate | Unit | Amount Rs. |
|-------|----------|--|---------|------|------------|
| 10 | | Providing as per required dia S.W. or R.C.C. | | | |
| 13 | | pipes in vertical drop arrangement including | | | |
| | | providing 150 mm dia S.W. and R.C.C. Pipe | | | |
| | | fixed in B.B. masonry of manhole at the | | | |
| | | required level including providing 150 mm dia. | | | |
| | | double tee, 150 mm dia right angled bend | | | |
| | | encasing in B.B. masonry 1:4 proportion all | | | |
| | | around the pipe, double tee, bend up to the | | | |
| | | foundation of manhole, jointing, cutting, | | | |
| | | filleting including neat cement rendering, | | | |
| | | plugging the opening with jungle wood knob | | | |
| | | complete as directed by Engineer-in- charge (| | | |
| | | 0.60 M. depth) excluding cost of chamber. | | | |
| | | For 200 mm dia Pipes | | | |
| | | a) For depth up to 1.10 M | | | |
| | | Basic Rate | 3269.00 | | |
| | | Add 5 % for M.C. | 163.45 | | |
| | 5.00 | Total | 3432.45 | No. | 17162.25 |
| | | a) Rebate for every decrease in depth of 50 | | | |
| | | cm or part there of Rs. 791/-Add 5% for M.C | | | |
| | | .=Rs.830.55 | | | |
| | | For 250 mm dia Pipes | | | |
| | | a) For depth up to 1.10 M | | | |
| | | Basic Rate | 3772.00 | | |
| | | Add 5 % for M.C. | 188.60 | | |
| | 5.00 | Total | 3960.60 | No. | 19803.00 |
| | | b) For depth up to 1.10 M to 1.60 M | 4575.00 | | |
| | | Basic Rate | 4575.00 | | |
| | 2.00 | Add 5 % for M.C | 228.75 | Na | 0007 50 |
| | 2.00 | Total a) Rebate for every decrease in depth of 50 | 4803.75 | No. | 9607.50 |
| | | cm or part there of Rs. 803/-Add 5% for M.C | | | |
| | | .=Rs.843.15 | | | |
| | | For 300 mm dia Pipes | | | |
| | | a) For depth up to 1.10 M | | | |
| | | Basic Rate | 4529.00 | | |
| | | Add 5 % for M.C | 226.45 | | |
| | 5.00 | Total | 4755.45 | No. | 23777.25 |
| | | b) For depth up to 1.10 M to 1.60 M | | | |
| | | Basic Rate | 5452.00 | | |
| | | Add 5 % for M.C | 272.60 | | |
| | 1.00 | Total | 5724.60 | No. | 5724.60 |
| | | c) For depth up to 2.10 M to 2.60 M | | | |
| | | Basic Rate | 7298.00 | | |
| | | Add 5 % for M.C | 364.90 | | |
| | 1.00 | Total | 7662.90 | No. | 7662.90 |
| | | a) Rebate for every decrease in depth of 50 | | | |
| | | cm or part there of Rs. 923/-Add 5% for M.C | | | |
| | | .=Rs.969.15 | | | |
| | | (CSR 2015-16, P. 275, I. 11) | | | |
| | | For 350 mm dia Pipes | | | |
| | | a) For depth up to 1.10 M to 1.60 M | | | |

| I. N. | Quantity | ITEM DESCRIPTION | Rate | Unit | Amount Rs. |
|-------|-----------|---|---------|------|-------------|
| | | Basic Rate | 6415.00 | | |
| | | Add 5 % for M.C | 320.75 | | |
| | 1.00 | Total | 6735.75 | No. | 6735.75 |
| | | b) For depth up to 1.60 M to 2.10 M | | | |
| | | Basic Rate | 7453.00 | | |
| | | Add 5 % for M.C | 372.65 | | |
| | 1.00 | Total | 7825.65 | No. | 7825.65 |
| | | a) Rebate for every decrease in depth of 50 cm or part there of Rs. 1029/-Add 5% for M.C .=Rs.1080.45 For 400 mm dia Pipes | | | |
| | | a) For depth up to 1.10 M | | | |
| | | Basic Rate | 6225.00 | | |
| | | Add 5 % for M.C | 311.25 | | |
| | 1.00 | Total | 6536.25 | No. | 6536.25 |
| | | b) For depth up to 1.10 M to 1.60 M | | | |
| | | Basic Rate | 7378.00 | | |
| | | Add 5 % for M.C | 368.90 | | |
| | 1.00 | Total | 7746.90 | No. | 7746.90 |
| | | a) Rebate for every decrease in depth of 50 cm or part there of Rs. 1135/-Add 5% for M.C .=Rs.1191.75 | | | |
| | | For 450 mm dia Pipes | | | |
| | | a) For depth up to 1.10 M | | | |
| | | Basic Rate | 6565.00 | | |
| | | Add 5 % for M.C | 328.25 | | |
| | 2.00 | Total | 6893.25 | No. | 13786.50 |
| | | a) Rebate for every decrease in depth of 50 cm or part there of Rs. 1194.5/-Add 5% for M.C .=Rs.1254.22 | | | |
| | | For 500 mm dia Pipes | | | |
| | | a) For depth up to 1.10 M | | | |
| | | Basic Rate | 6905.00 | | |
| | | Add 5 % for M.C | 345.25 | | |
| | 1.00 | Total | 7250.25 | No. | 7250.25 |
| | | a) Rebate for every decrease in depth of 50 cm or part there of Rs. 1254/-Add 5% for M.C .=Rs.1316.7 | | | |
| | | (CSR 2016-17, P. 275 I. 12) | | | |
| | | | | | |
| 20 | | Refilling the trenches with available excavated stuff with soft material first over pipe line and then hard material in 15 cm layers with all leads and lifts including consolidation, surcharging, etc.complete. | | | |
| | | Basic Rate | 64.00 | | |
| | | Add 5 % for M.C | 3.20 | | |
| | 209329.69 | Total | 67.20 | Cum | 14066955.39 |
| | | (CSR 2016-17, P. 38, I.15) | | | |
| | | | | | |

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| I. N. | Quantity | ITEM DESCRIPTION | Rate | Unit | Amount Rs. |
|-------|----------|---|----------|------|-------------|
| 21 | | Dispossing of surplus excavated stuff from site of work up to a distance of 2 Km.including, loading, unloading, transportation etc.complete or as directed by the Engineering- in- charge. | | | |
| | | (CSR 2015-16, P. 22, Statement VI) | | | |
| | 31966.65 | Basic Rate | 195.62 | Cum | 6253315.62 |
| 22 | | Providing, fixing and erecting RCC (M20) Vent shaft with cowl, 125mm x 225mm internal and external dia respectively at top, 300mm and 450mm internal and external dia at bottom and 9.10m over all length, bottom 1.25m below ground level fixed in the pit 900mmx900mmx1500mm with PCC M15, 250mm in bed and 200mm around with top 150mm in cement concrete 1:2:4 (1 cement 2 coarse sand and 4 graded stone aggregate of 20mm nominal size) junction of vent shaft and concrete grouted with cement mortar 1:2 (1 cement and 2 fine sand) including making connection with sewer manhole with 150 mm dia NP4 RCC pipe (IS 458- ammended upto date) for 5.0 m length including Murum bedding complete and as per standard design and finished with water proofing cement of approved brand of required shade as per drawings and/or as directed by Engineer.Providing and fixing RCC ventilation shaft, making connection to manhole etc. complete as directed by EIC. | | | |
| | 10.00 | (As per Rate Analysis) | 18516.00 | No. | 185160.00 |
| | | ערש אבו זענב הוומונטוט | | | |
| 23 | | WBM Road restoration: Reinstating the road surface with supplying & spreading 60mm metal of 20 cm thick with Hard murum & 40mm metal of 15 cm thick with Soft murum as a blindage, above WBM surfaceFor all the above layers watering & compacting with Power roller, including Excavation of required depth for road reinstating or as directed by Engineer-in-charge etc. complete. | | | |
| | 92727.75 | (As per Rate Analysis) | 208.74 | Sqm | 19355990.54 |

| I. N. | Quantity | ITEM DESCRIPTION | Rate | Unit | Amount Rs. |
|-------|----------|--|---------------------------|------|-------------|
| 24 | | Asphalt Road restoration: Reinstatement of road by excavating the potholes in rectangular shape and filling of potholes by one layers of one layer of 80 mm trap metal of 200 mm thick, one layer of 40 mm trap metal of 100 mm thick including supplying and spreading of stone dust/murrum of 100 mm thick, watering compaction and 75 mm thick bituminous bound macadam with cold emulsion 60/70 grade and bituminous macadam of 50 mm thick with bitumen of S-65 grade and 20 mm thick asphalt concrete with S-35 grade of bitumen including compaction by vibratory roller of all layers and providing and applying tack coat of 50 Kg / 100 m2 on black top surface and seal coat of 1kg/sqm. B.B.M. surface and disposal of surplus soil etc., complete. for pipeline trenches of various diameter etc., complete as per specifications and or as directed by engineer- in-charge. | | | |
| | 24727.00 | (As per Rate Analysis) | 873.47 | Sqm | 21598292.69 |
| 25 | | Concrete Road restoration : Reinstatement of Concrete road by excavating the concrete panels in rectangular shape and filling the trench with one layer of natural sand of 300 mm thick , one layer of M20 grade PCC of 150 mm thick and one layer of PCC M30 grade of 300 mm thick including dewatering etc., complete. for pipeline trenches of various diameter etc., complete as per specifications and or as directed by engineer- in-charge. | | | |
| | | Item No. 25a Providing and filling in the foundation with sand of ap-proved quality including watering, compaction complete. Spec. No.: Bd.A.13 Page No. 264 PWD DSR 17-18, Item No. 12 / 1 BDA 13, Pg-17 | | | |
| | 618.20 | Basic Rate Add 5% for M.C. + 5% Sugarcane Area Total | 451.00 45.10 496.10 | Cum | 306689.02 |

| I. N. | Quantity | ITEM DESCRIPTION | Rate | Unit | Amount Rs. |
|-------|----------|---|---------|------|------------|
| | | Item No. 25b Providing and casting in situ cement concrete M- 15 of trap / granite / quartzite / gneiss metal for steps including centering, formwork, compacting, roughening them if special finish is to be provided and curing and finishing if required complete,with fully automatic micro processor based PLC with SCADA enabled reversible Drum Type mixer With natural sand. Spec. No.: Bd.E.2 Page No. 288 and B.7 Page No 38 | | | |
| | | PWD DSR 2017-18, I. No. 2 i a 4, Pg. No. 25 | | | |
| | | Basic Rate | 5380.00 | | |
| | | Add 5% for M.C. + 5% Sugarcane Area | 538.00 | | |
| | 618.20 | Total | 5918.00 | Cum | 3658507.60 |
| | | Item No. 25c: Providing and laying in situ cement concrete M -30 with tremix treatment for 200 mm thickness for Concrete Road is including laying plastic sheet for 125 micron thickness with groove cutting of 4 mm wide and 20 mm deep with necessary refilling with bitumen (excluding reinforcement) with Natural sand etc. complete Spec : As directed by Engineer incharge | | | |
| | | PWD DSR 2017-18, I. No. 93 / 23 MORTH, Pg. No. 228 | | | |
| | | Basic Rate | 6362.00 | | |
| | | Add 5% for M.C. + 5% Sugarcane Area | 636.20 | | |
| | 309.10 | Total | 6998.20 | Cum | 2163143.62 |
| 26 | | Shifting of Utilities: All utilities like Electric Poles, waterline & Communication line Shifting while Manhole and Line Laying work etc., complete as per specifications and or as directed by engineer- in-charge. | | | |
| A | | Reconnection of existing damaged connection including 15 mm dia. CPVC pipe with necessary fittings, remaking good the demolished portion etc. complete including all labour, etc. complete. as directed by Engineer in charge. | | | |
| | | Water Supply Connections - 15 mm dia | | | |
| | | Basic Rate | 167 | | |
| | | Add 5% for M.C. | 8.35 | | |
| | 30 | Total | 175.35 | Rmt | 5260.5 |
| | | (Similar Item PWD CSR 2016-17, P. 166, I No 42.62) | | | |

| I. N. | Quantity | ITEM DESCRIPTION | Rate | Unit | Amount Rs. |
|-------|----------|--|----------|------|------------|
| | | Water Supply Connections - 20 mm dia | | Rmt | |
| | | Basic Rate | 196 | | |
| | | Add 5% for M.C. | 9.8 | | |
| | 4 | Total | 205.8 | Rmt | 823.2 |
| В | | Electrical Lines & Poles | | | |
| | | Electrical Poles - RA for 10 km | | | |
| i) | | Pole Foundation : Providing cement concrete foundation including excavation for the pole 60 cms x 60 cms x 1.5 mtr deep in1:3:6 cement concrete (20x 25 mm stone metal) and 45 cm x 45cm x45 cm / 45 cm x 45 cm height plinth duly plaster and with necessary curing & finishing in above manner (for 9 mtr pole) | | | |
| | 1 | | 2771.00 | Nos | 2771 |
| | | PWD DSR 15-16, E & M, Item No. 16.3.2, P.No. 161 | | | |
| ii) | | Dismantling of existing poles above 6 mtr height with brackets. Clamps, insulators stay from the cement concrete foundation and making the site clear by refilling the pits with excavated materials and bringing it to ground level | 704.00 | | |
| | 1 | | 701.00 | Nos | 701 |
| iii) | | PWD DSR 15-16, E & M, Item No. 8.8.2, P.No. 110 Re-Erecting: Supplying and erecting steel | | | |
| | 1 | tubular swaged pole 165.1 X 139.7 X 114.3 mm dia with 4.5 X 4.5 X3.65 mm thick (5+2+2m) length respectively and total 9 m long with pole cap, base plate in provided foundation (weight 147 kg) as per specifications. | 12722.00 | Nos | 12722 |
| | | PWD DSR 15-16, E&M, Item No. 8.1.3, Page No.98 | 12122.00 | 1103 | |
| iv) | 1 | Earthling : Providing erecting pipe type earthling of 40 mm GI pipe dia with double earthling to the all equipments as per Detailed specifications. | 1585.00 | Nos | 1585 |
| | | PWD DSR 14-15 E&M, Item No. 9.1.4, Page No.111 | | | |
| С | | Electrical Cable - Providing and Jointing | | | |
| | | Communication Cable - Jelly Filled | | | |
| | | telephone lines and optical Fibre Cable | | | |
| i) | - | Supply & Erecting of Jelly filled armoured telephone cable 10 pair with 0.5 mm dia laid in provided trench as per specification no. WG-TW | | | |
| | 3 | PWD DSR 15-16 Item 1-10-10, P No 17 | 83.00 | Rmt | 249 |
| ii) | | Supply & erecting of FR grade PVC armourd multi mode Optical Fibre Cable with 6 fibres with core dia 50 μM , suitable for 1 GBps Ethernet distance at 850 nm of wavelength on wall/ ceiling or laid in provided pipe / trench as per specification no. WG- COC/ OFC | | | |
| | 3 | | 247.00 | Rmt | 741 |
| | | PWD DSR 15-16 Item 1-12-8, P No 20 | | | |

| I. N. | Quantity | ITEM DESCRIPTION | Rate | Unit | Amount Rs. |
|-------|----------|--|----------|------|------------|
| iii) | | Supply & fixing of wall /rack type 12 port light guide interconnection unit for termination of optical fibre cable on wall /provided U rack | | | |
| | | complete as per specification no. EG- NAS / | | | |
| | 1 | LIU | 4366.00 | Nos | 4366 |
| | <u> </u> | PWD DSR 15-16 Item 1-14-5 P No 21 | 4300.00 | 1103 | 4300 |
| | | | | | |
| 27 | | Highway Crossing | | | |
| | | Pushing of M.S. pipe of following dia. For road crossing and railway crossing by push through metod in all types of strata by using hydraulic jack and drilling machine of required diameter of below MS casing pipes, loweing, laying & | | | |
| | | jointing of material , requred welding machinery , tripod, chain pully block , crain , blower, compressor, loading & unloading of machinery into the trench , etc. transportation and dewatering , etc. complete as directed by | | | |
| | | Engineer-in-charge but excluding the cost of MS pipes500 to 1000 mm dia. MS Pipe | | | |
| | | Basic Rate | 22781.00 | | |
| | | Add 5 % for M.C | 1139.05 | | |
| | 100.00 | Total | 23920.05 | Rmt | 2392005.00 |
| | | (CSR 2016-17, P. 58, I. 14a) | | | |
| | | MS Pipe 500 mm (ID) 10 mm thick | | | |
| | 100.00 | Basic Rate | 6620.00 | Rmt | 662000.00 |
| | | (CSR 2016-17, P.193, I.2I) | | | |

SMC

Labour Cost

Say Rs. Lakhs

Say in Crore

Say Rs.

Total Material + Labour Cost Rs.

326704079.14

393351569.14 393351570.00

3933.52 39.34

SOLAPUR MUNICIPAL CORPORATION MAHARASHTRA JEEVAN PRADHIKARAN DIVISION SOLAPUR SOLAPUR CITY UNDERGROUND SEWERAGE SCHEME (AMRUT) SUB ESTIMATE NO. :- SEWERAGE SYSTEM FOR ZONE IX

(Underground Sewerage Network -150 to 800 mm dia RCC Pipes, HDPE DWC SN 8 Pipes , L=146.29 Km) **MEASUREMENT**

| M DESCRIPTION TERIAL : viding ISI Standard RCC pipes in standard gth of following class and diameter, complete. C NP 3 Class mm dia. C NP 4 Class mm dia. | 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 | L 1961.00 1710.00 2009.00 3529.00 1162.00 1241.00 1098.00 29.00 540.00 165.00 238.00 91.00 140.00 567.00 60.00 | B | D/H | Quantity Qua | Unit Rmt Rmt Rmt Rmt Rmt Rmt Rmt Rmt Rmt Rm |
|--|---|--|---|---|--|--|
| viding ISI Standard RCC pipes in standard pth of following class and diameter, complete. C NP 3 Class mm dia. mm dia. mm dia. mm dia. mm dia. mm dia. mm dia. mm dia. mm dia. C NP 4 Class mm dia. mm di | 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 | 1710.00 2009.00 3529.00 1162.00 1241.00 1087.00 1098.00 29.00 540.00 540.00 238.00 91.00 140.00 567.00 | | | 1710.00 2009.00 3529.00 1162.00 1241.00 1087.00 1098.00 29.00 540.00 540.00 165.00 238.00 91.00 140.00 567.00 | Rmt Rmt Rmt Rmt Rmt Rmt Rmt Rmt Rmt Rmt |
| gth of following class and diameter, complete. C NP 3 Class mm dia. mm dia. mm dia. mm dia. <td< td=""><td>1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00</td><td>1710.00 2009.00 3529.00 1162.00 1241.00 1087.00 1098.00 29.00 540.00 540.00 238.00 91.00 140.00 567.00</td><td></td><td></td><td>1710.00 2009.00 3529.00 1162.00 1241.00 1087.00 1098.00 29.00 540.00 540.00 165.00 238.00 91.00 140.00 567.00</td><td>Rmt Rmt Rmt Rmt Rmt Rmt Rmt Rmt Rmt Rmt</td></td<> | 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 | 1710.00 2009.00 3529.00 1162.00 1241.00 1087.00 1098.00 29.00 540.00 540.00 238.00 91.00 140.00 567.00 | | | 1710.00 2009.00 3529.00 1162.00 1241.00 1087.00 1098.00 29.00 540.00 540.00 165.00 238.00 91.00 140.00 567.00 | Rmt Rmt Rmt Rmt Rmt Rmt Rmt Rmt Rmt Rmt |
| complete. C NP 3 Class mm dia. | 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 | 1710.00 2009.00 3529.00 1162.00 1241.00 1087.00 1098.00 29.00 540.00 540.00 238.00 91.00 140.00 567.00 | | | 1710.00 2009.00 3529.00 1162.00 1241.00 1087.00 1098.00 29.00 540.00 540.00 165.00 238.00 91.00 140.00 567.00 | Rmt Rmt Rmt Rmt Rmt Rmt Rmt Rmt Rmt Rmt |
| C NP 3 Class mm dia. mm dia. mm dia. mm dia. mm dia. mm dia. mm dia. mm dia. mm dia. mm dia. C NP 4 Class mm dia. mm dia. plete. P.E. pipes for Drainage CLASS SN 8 | 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 | 1710.00 2009.00 3529.00 1162.00 1241.00 1087.00 1098.00 29.00 540.00 540.00 238.00 91.00 140.00 567.00 | | | 1710.00 2009.00 3529.00 1162.00 1241.00 1087.00 1098.00 29.00 540.00 540.00 165.00 238.00 91.00 140.00 567.00 | Rmt Rmt Rmt Rmt Rmt Rmt Rmt Rmt Rmt Rmt |
| mm dia. mm dia. mm dia. mm dia. mm dia. mm dia. mm dia. mm dia. mm dia. mm dia. C NP 4 Class mm dia. C NP 4 Class mm dia. mm dia. pipes for non pressure erground drainage and sewerage , etc. plete. P.E. pipes for Drainage CLASS SN 8 | 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 | 1710.00 2009.00 3529.00 1162.00 1241.00 1087.00 1098.00 29.00 540.00 540.00 238.00 91.00 140.00 567.00 | | | 1710.00 2009.00 3529.00 1162.00 1241.00 1087.00 1098.00 29.00 540.00 540.00 165.00 238.00 91.00 140.00 567.00 | Rmt Rmt Rmt Rmt Rmt Rmt Rmt Rmt Rmt Rmt |
| mm dia. mm dia. plete. P.E. pipes for Drainage CLASS SN 8 | 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 | 1710.00 2009.00 3529.00 1162.00 1241.00 1087.00 1098.00 29.00 540.00 540.00 238.00 91.00 140.00 567.00 | | | 1710.00 2009.00 3529.00 1162.00 1241.00 1087.00 1098.00 29.00 540.00 540.00 165.00 238.00 91.00 140.00 567.00 | Rmt Rmt Rmt Rmt Rmt Rmt Rmt Rmt Rmt Rmt |
| mm dia. mm dia. mm dia. mm dia. mm dia. mm dia. mm dia. mm dia. C NP 4 Class mm dia. C NP 4 Class mm dia. mm dia. plete. P.E. pipes for Drainage CLASS SN 8 | 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 | 2009.00 3529.00 1162.00 1241.00 1087.00 29.00 540.00 540.00 238.00 91.00 140.00 567.00 | | | 2009.00 3529.00 1162.00 1241.00 1087.00 29.00 540.00 540.00 238.00 91.00 140.00 567.00 | Rmt Rmt Rmt Rmt Rmt Rmt Rmt Rmt Rmt Rmt |
| mm dia. viding and supplying in standard lengths yethelene (PE) Pipes for non pressure erground drainage and sewerage , etc. nplete. .P.E. pipes for Drainage CLASS SN 8 <td>1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00</td> <td>3529.00 1162.00 1241.00 1087.00 1098.00 29.00 540.00 540.00 165.00 238.00 91.00 140.00 567.00</td> <td></td> <td></td> <td>3529.00 1162.00 1241.00 1087.00 29.00 540.00 540.00 165.00 238.00 91.00 140.00 567.00</td> <td>Rmt Rmt Rmt Rmt Rmt Rmt Rmt Rmt Rmt Rmt</td> | 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 | 3529.00 1162.00 1241.00 1087.00 1098.00 29.00 540.00 540.00 165.00 238.00 91.00 140.00 567.00 | | | 3529.00 1162.00 1241.00 1087.00 29.00 540.00 540.00 165.00 238.00 91.00 140.00 567.00 | Rmt Rmt Rmt Rmt Rmt Rmt Rmt Rmt Rmt Rmt |
| mm dia. pethelene (PE) Pipes for non pressure erground drainage and sewerage , etc. nplete. .P.E. pipes for Drainage CLASS SN 8 | 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 | 1162.00 1241.00 1087.00 29.00 540.00 165.00 238.00 91.00 140.00 567.00 | | | 1162.00 1241.00 1087.00 29.00 540.00 165.00 238.00 91.00 140.00 567.00 | Rmt Rmt Rmt Rmt Rmt Rmt Rmt Rmt Rmt Rmt |
| mm dia. pethelene (PE) Pipes for non pressure erground drainage and sewerage , etc. nplete. .P.E. pipes for Drainage CLASS SN 8 | 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 | 1241.00 1087.00 1098.00 29.00 540.00 165.00 238.00 91.00 140.00 567.00 | | | 1241.00 1087.00 1098.00 29.00 540.00 165.00 238.00 91.00 140.00 567.00 | Rmt Rmt Rmt Rmt Rmt Rmt Rmt Rmt Rmt |
| mm dia. performant of the supplying in standard lengths (PE) Pipes for non pressure erground drainage and sewerage , etc. nplete. .P.E. pipes for Drainage CLASS SN 8 | 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 | 1087.00 1098.00 29.00 540.00 165.00 238.00 91.00 140.00 567.00 | | | 1087.00 1098.00 29.00 540.00 165.00 238.00 91.00 140.00 567.00 | Rmt Rmt Rmt Rmt Rmt Rmt Rmt Rmt |
| mm dia. mm dia. mm dia. C NP 4 Class mm dia. mm dia. mm dia. mm dia. mm dia. mm dia. mm dia. mm dia. mm dia. pressure erground drainage and sewerage , etc. nplete. .P.E. pipes for Drainage CLASS SN 8 | 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 | 1098.00 29.00 540.00 165.00 238.00 91.00 140.00 567.00 | | | 1098.00 29.00 540.00 165.00 238.00 91.00 140.00 567.00 | Rmt Rmt Rmt Rmt Rmt Rmt Rmt Rmt |
| mm dia. mm dia. C NP 4 Class mm dia. mm dia. mm dia. mm dia. mm dia. mm dia. mm dia. viding and supplying in standard lengths /ethelene (PE) Pipes for non pressure erground drainage and sewerage , etc. nplete. .P.E. pipes for Drainage CLASS SN 8 | 1.00 1.00 1.00 1.00 1.00 1.00 1.00 | 29.00 540.00 165.00 238.00 91.00 140.00 567.00 | | | 29.00 540.00 165.00 238.00 91.00 140.00 567.00 | Rmt Rmt Rmt Rmt Rmt Rmt Rmt |
| mm dia. yiding and supplying in standard lengths yethelene (PE) Pipes for non pressure erground drainage and sewerage , etc. nplete. .P.E. pipes for Drainage CLASS SN 8 | 1.00 1.00 1.00 1.00 1.00 1.00 1.00 | 540.00 165.00 238.00 91.00 140.00 567.00 | | | 540.00 165.00 238.00 91.00 140.00 567.00 | Rmt Rmt Rmt Rmt Rmt Rmt |
| C NP 4 Class mm dia. mm dia. mm dia. mm dia. mm dia. mm dia. viding and supplying in standard lengths vethelene (PE) Pipes for non pressure erground drainage and sewerage , etc. nplete. .P.E. pipes for Drainage CLASS SN 8 | 1.00 1.00 1.00 1.00 1.00 1.00 | 165.00 238.00 91.00 140.00 567.00 | | | 165.00 238.00 91.00 140.00 567.00 | Rmt Rmt Rmt Rmt Rmt |
| mm dia. mm dia. mm dia. mm dia. mm dia. mm dia. viding and supplying in standard lengths vethelene (PE) Pipes for non pressure erground drainage and sewerage , etc. nplete. .P.E. pipes for Drainage CLASS SN 8 | 1.00 1.00 1.00 1.00 1.00 | 238.00 91.00 140.00 567.00 | | | 238.00 91.00 140.00 567.00 | Rmt Rmt Rmt Rmt |
| mm dia. mm dia. mm dia. mm dia. mm dia. mm dia. viding and supplying in standard lengths vethelene (PE) Pipes for non pressure erground drainage and sewerage , etc. nplete. .P.E. pipes for Drainage CLASS SN 8 | 1.00 1.00 1.00 1.00 1.00 | 238.00 91.00 140.00 567.00 | | | 238.00 91.00 140.00 567.00 | Rmt Rmt Rmt Rmt |
| mm dia. mm dia. mm dia. mm dia. mm dia. viding and supplying in standard lengths vethelene (PE) Pipes for non pressure erground drainage and sewerage , etc. nplete. .P.E. pipes for Drainage CLASS SN 8 | 1.00 1.00 1.00 1.00 1.00 | 238.00 91.00 140.00 567.00 | | | 238.00 91.00 140.00 567.00 | Rmt Rmt Rmt Rmt |
| mm dia. mm dia. mm dia. mm dia. viding and supplying in standard lengths vethelene (PE) Pipes for non pressure erground drainage and sewerage , etc. nplete. .P.E. pipes for Drainage CLASS SN 8 | 1.00 1.00 1.00 1.00 | 91.00 140.00 567.00 | | | 91.00 140.00 567.00 | Rmt Rmt Rmt |
| mm dia. mm dia. mm dia. viding and supplying in standard lengths /ethelene (PE) Pipes for non pressure erground drainage and sewerage , etc. nplete. .P.E. pipes for Drainage CLASS SN 8 | 1.00 1.00 1.00 | 140.00 567.00 | | | 140.00 567.00 | Rmt Rmt |
| mm dia. mm dia. viding and supplying in standard lengths vethelene (PE) Pipes for non pressure erground drainage and sewerage , etc. nplete. .P.E. pipes for Drainage CLASS SN 8 | 1.00 1.00 | 567.00 | | | 567.00 | Rmt |
| mm dia. viding and supplying in standard lengths /ethelene (PE) Pipes for non pressure erground drainage and sewerage , etc. nplete. .P.E. pipes for Drainage CLASS SN 8 | 1.00 | | | | | |
| viding and supplying in standard lengths /ethelene (PE) Pipes for non pressure erground drainage and sewerage , etc. nplete. .P.E. pipes for Drainage CLASS SN 8 | | 00.00 | | | 00.00 | |
| vethelene (PE) Pipes for non pressure erground drainage and sewerage , etc. aplete. .P.E. pipes for Drainage CLASS SN 8 | | | | | | |
| | | | | | | |
| mm dia.(ID) | | | | | | |
| | 1.00 | 124424.00 | | | 124424.00 | Rmt |
| mm dia.(ID) | 1.00 | 3543.00 | | | 3543.00 | Rmt |
| mm dia.(ID) | 1.00 | 1261.00 | | | 1261.00 | Rmt |
| mm dia.(ID) | 1.00 | 1434.00 | | | 1434.00 | Rmt |
| BOUR : | | | | | | |
| CAVATION DETAILS -From computer | | | | | | |
| | 4 5 2 0 | 2.0.4.5 | 4500 | C O 7 E | TOTAL | |
| | | | | | | Cum |
| | | | | | | Cum |
| | | | | | | Cum |
| 907.21 | 50121.05 | 7595.65 | 9/1.01 | 1.49 | 259590.10 | Cum |
| avation for foundation / pipe trenches in earth, s of all types, sand, gravel, and soft murum complete. | | | | | | |
| 0.0 -1.5 M. | | | | | 38996.09 | Cum |
| avation for foundation / pipe trenches in hard | | | | | | |
| um & boulders, WBM road etc.complete. | | | | | | |
| 0.0 -1.5 M. | | | | | 53963.68 | Cum |
| | | | | | | |
| avation for pipe trenches in soft rock and old nent and lime masonary foundation, ashphalt d etc.complete. | | | | | | |
| nent and lime masonary foundation, ashphalt | | | | | 99670.06 18670.38 | Cum |
| av s (<u>co</u> av <u>co</u> av | rated design sheet 7.17 0.04 7.21 ration for foundation / pipe trenches in earth, of all types , sand, gravel, and soft murum mplete. 0 -1.5 M. ration for foundation / pipe trenches in hard n & boulders , WBM road etc.complete. | rated design sheet1.5-3.057.1732413.080.0417708.757.2150121.83vation for foundation / pipe trenches in earth, of all types , sand, gravel, and soft murum mplete.0 -1.5 M.vation for foundation / pipe trenches in hard m & boulders , WBM road etc.complete. | rated design sheet 1.5-3.0 3.0 - 4.5 57.17 32413.08 5210.23 50.04 17708.75 2383.60 57.21 50121.83 7593.83 ration for foundation / pipe trenches in earth, of all types , sand, gravel, and soft murum mplete. | rated design sheet 1.5-3.0 3.0 - 4.5 4.5-6.0 57.17 32413.08 5210.23 677.62 0.04 17708.75 2383.60 294.18 07.21 50121.83 7593.83 971.81 ration for foundation / pipe trenches in earth, of all types , sand, gravel, and soft murum mplete. | rated design sheet 1.5-3.0 3.0 - 4.5 4.5-6.0 6.0-7.5 57.17 32413.08 5210.23 677.62 1.49 0.04 17708.75 2383.60 294.18 0.00 07.21 50121.83 7593.83 971.81 1.49 ration for foundation / pipe trenches in earth, of all types , sand, gravel, and soft murum mplete. | rated design sheet 1.5-3.0 3.0 - 4.5 4.5-6.0 6.0-7.5 TOTAL i7.17 32413.08 5210.23 677.62 1.49 194959.59 i0.04 17708.75 2383.60 294.18 0.00 64636.57 i7.21 50121.83 7593.83 971.81 1.49 259596.16 ration for foundation / pipe trenches in earth, of all types , sand, gravel, and soft murum mplete. |

| ltem No | ITEM DESCRIPTION | No | L | В | D/H | Quantity | Unit |
|------------|---|------|-----------|------|------|-----------|------|
| 4 | Excavation for pipe trenches in hard rock and | | | | | | |
| | concrete road, by chiselling, wedging, lime drilling | | | | | | |
| | by mechanical means or by all means other than | | | | | | |
| | blasting, etc.complete. | | | | | | |
| | Lift 0.0-1.50 M. | | | | | 8277.38 | Cum |
| | Lift 1.5-3.0 M. | | | | | 31451.45 | Cum |
| | Lift 3.0-4.5 M. | | | | | 7593.83 | Cum |
| | Lift 4.5-6.0 M. | | | | | 971.81 | Cum |
| | Lift 6.0-7.5 M. | | | | | 1.49 | Cum |
| 5 | Droviding dry trop/ gropito/guartzita/ gnaica, rubbla | | | | | | |
| Э | Providing dry trap/ granite/quartzite/ gneiss, rubble | | | | | | |
| | stone soling etc.complete. Provision Made for trunk sewer along nallah | 1.00 | 600.00 | 1.60 | 0.30 | 288.00 | Cum |
| | | 1.00 | 000.00 | 1.00 | 0.00 | 200.00 | Cam |
| 6 | Providing & filling in sand boxing in pipeline or for | | | | | | |
| | foundation etc.complete. | | | | | | |
| | (As per Computer generated sheet) | | | | | 1829.98 | Cum |
| | | | | | | | |
| 7 | Providing murum bedding in trenches with approved | | | | | | |
| | murum from excavated materials etc.n complete. | | | | | | |
| | | | | | | 10100.01 | |
| | (As per Computer generated sheet) | | | | | 16469.84 | Cum |
| 8 | Lowering laying and jointing in proper grade and | | | | | | |
| 0 | alignment R.C.C. pipes etc.complete | | | | | | |
| | 150 mm dia. | 1.00 | 1961.00 | | | 1961.00 | Rmt |
| | 200 mm dia. | 1.00 | 1710.00 | | | 1710.00 | Rmt |
| | 250 mm dia. | 1.00 | 2174.00 | | | 2174.00 | Rmt |
| | 300 mm dia. | 1.00 | 3767.00 | | | 3767.00 | Rmt |
| | 350 mm dia. | 1.00 | 1253.00 | | | 1253.00 | Rmt |
| | 400 mm dia. | 1.00 | 1381.00 | | | 1381.00 | Rmt |
| | 450 mm dia. | 1.00 | 1087.00 | | | 1087.00 | Rmt |
| | 500 mm dia. | 1.00 | 1098.00 | | | 1098.00 | Rmt |
| | 600 mm dia. | 1.00 | 567.00 | | | 567.00 | Rmt |
| | 700 mm dia. | 1.00 | 29.00 | | | 29.00 | Rmt |
| | 800 mm dia. | 1.00 | 600.00 | | | 600.00 | Rmt |
| | | | | | | | |
| 9 | Hydraulic testing of RCC pipe line to specified | | | | | | |
| | pressure etc.complete | | | | | | |
| | 150 mm dia. | 1.00 | 1.96 | | | 1.96 | Rmt |
| | 200 mm dia. | 1.00 | 1.71 | | | 1.71 | Rmt |
| | 250 mm dia. | 1.00 | 2.17 | | | 2.17 | Rmt |
| | 300 mm dia. | 1.00 | 3.77 | | | 3.77 | Rmt |
| | 350 mm dia. | 1.00 | 1.25 | | | 1.25 | Rmt |
| | 400 mm dia. | 1.00 | 1.38 | | | 1.38 | Rmt |
| | 450 mm dia. | 1.00 | 1.09 | | | 1.09 | Rmt |
| | 500 mm dia. | 1.00 | 1.10 | | | 1.10 | Rmt |
| | 600 mm dia. | 1.00 | 0.57 | | | 0.57 | Rmt |
| | 700 mm dia. | 1.00 | 0.03 | | | 0.03 | Rmt |
| | 800 mm dia. | 1.00 | 0.60 | | | 0.60 | Rmt |
| | | | <u> </u> | | | | ļ |
| 10 | Lowering, laying and jointing H.D.P.E.Double Wall | | | | | | |
| | Corrugated Pipes for nonpressure Underground | | | | | | |
| | drainage and Sewerage applications etc. complete | | | | | | |
| | H.D.P.E. pipes for Drainage CLASS SN 8 | | | | | | |
| | 150 mm dia.(ID) | 1.00 | 124424.00 | | | 124424.00 | Rmt |
| | 170 mm dia.(ID) | 1.00 | 3543.00 | | | 3543.00 | Rmt |
| | 200 mm dia.(ID) | 1.00 | 1261.00 | | | 1261.00 | Rmt |
| | 250 mm dia.(ID) | 1.00 | 1434.00 | | | 1434.00 | Rmt |
| | | | | | | | |
| 11 | Hydraulic testing of HDPE double wall corrugated | | | | | | |
| | pipe for non pressure underground line to specified | | | | | | |
| | pressure etc.complete | | | | | | |
| | 150 mm dia.(ID) | 1.00 | 124.42 | | | 124.42 | Km |
| | 170 mm dia.(ID) | 1.00 | 3.54 | | | 3.54 | Km |

Collection Conveyance Measurement

| 250 mm dia.(D) 1.00 1.43 1 12 Open timbering in trenches of depth more than 1.5 m for shoring and structing etc. complete. 1 1 Now Water Logged Area 2.00 340.50 1.50 10 Water Logged Area 2.00 340.50 1.50 10 Water Logged Area 2.00 340.50 1.50 10 13 Providing and laying in situ cement concrete 1:2.4 of trap granite / quartita/ gneiss metal for foundation and beding etc. complete. 100.00 1.50 1.50 0.60 4 Provision of anchor block Made for trunk sewer along nallah 100.00 1.50 1.60 4 14 Devatering the excavated trenches and pools of water in the pipeline trenches, etc.complete. 2.00 180.00 5.00 6.00 37 15 Providing and constructing on sewer, B.8. masonary circular manhole with concentric cone 1.2 4 4 10pt 0.50 m depth. 10pt 0.50 m depth. 14 (As per Computer generated sheet) 14 (As per Computer generated sheet) 31 14 Dewatering the excavated trenches etc.complete 14 (As per | ltem No | ITEM DESCRIPTION | No | L | В | D/H | Quantity | Unit |
|--|------------|--|--------|---------|----------|------|----------------|--------|
| Image: statuting etc. complete. Image: statuting etc. complete. Image: statuting etc. complete. Now Water Logged Area 2.00 340.50 1.50 10 If if .50 to 3.00 m. 2.00 340.50 1.50 10 If if .50 to 3.00 m. 2.00 340.50 1.50 10 If if .50 to 3.00 m. 2.00 340.50 1.50 0.60 11 If if .50 to 3.00 m. 0.00 1.50 1.50 0.60 11 Deduct 100.00 0.79 1.00 0.60 11 Deduct 100.00 0.79 1.00 0.60 11 If bewatering the excavated trenches and pools of water in the pipeline trenches. etc.complete. 10 0.00 5.00 6.00 37 If Providing and constructing on sewer, B.B. masonary cincular manhole with concentric core 1.5 1.40 </td <td></td> <td>200 mm dia.(ID)</td> <td>1.00</td> <td>1.26</td> <td></td> <td></td> <td>1.26</td> <td>Km</td> | | 200 mm dia.(ID) | 1.00 | 1.26 | | | 1.26 | Km |
| 2 Open timbering in trenches of depth more than 1.5 more shoring and strutting etc. complete. | | | | | | | 1.43 | Km |
| m for shoring and strutting etc. complete. Non Water Logged Area 2.00 340.50 1.50 10 Water Logged Area 2.00 340.50 1.50 10 Uift 1.50 to 3.00 m. 2.00 340.50 1.50 10 1 Providing and laying in situ cement concrete 1:2:4 of trac/ granite / quartizite/ gneiss metal for foundation and bedding etc. complete. 100.00 1.50 1.50 0.60 11 Provision of anchor block Made for trunk sewer along nallah 100.00 0.79 1.00 0.60 12 Deduct 100.00 0.79 1.00 0.60 12 12 Total City 100 0.79 1.00 0.60 32 32 Total City 100 0.79 1.00 5.00 6.00 37 Total City 118 Providing and constructing on sewer. B.B. 18 18 18 19 10 14 (As per Computer generated sheet) 10 14 14 14 14 14 | | | | | | | | |
| Non Water Logged Area | 12 | | | | | | | |
| Lift 1.50 to 3.00 m. 2.00 340.50 1.50 10 Water Logged Area 2.00 340.50 1.50 10 Lift 1.50 to 3.00 m. 2.00 340.50 1.50 10 13 Providing and laying in situ cement concrete 1:2:4 of trap/ granite / quartzlef units sewer foundation and bedding etc. complete. 100.00 1.50 1.60 0.60 1:50 Provision of anchor block Made for trunk sewer along nallah 100.00 0.79 1.00 0.60 4 Deduct 100.00 0.79 1.00 0.60 4 Net Qy 0 0 7 0 68 (As per Computer generated sheet) 0 0 7 160.00 5.00 6.00 37 Total Chy 0 180.00 5.00 6.00 37 7 7 7 160.00 5.00 6.00 37 T Fornals. 5 BHP Pump-GHrs. 180 Days 1 160.00 5.00 6.00 37 T Fornals. 2 buttor and 0.5 M. from top and up to depth of 2 m. with 23 cm thick bick work up to depth o | | | | | | | | |
| Water Logged Area 2.00 340.50 1.50 10 13 Providing and laying in situ cement concrete 1:2:4 of trap/granite / quartile/ gneiss metal for foundation and bedding etc. complete. 100.00 1.50 1.50 1.60 13 Provision of anchor block Made for trunk sewer along nallah 100.00 1.50 1.50 0.60 13 Deduct 100.00 0.79 1.00 0.60 4 Net Gty 100.00 0.79 1.00 0.60 4 14 Dewatering the excavated trenches and pools of water in the pipeline trenches, etc.complete. 7.00 180.00 5.00 6.00 37 15 Providing and constructing on sewer, B.B. masonary circular manhole with concentric cone 1.2 M. dia, at bottom and 0.5 M. from top and up to depth of 2 m. with 23 cm thick brick work up to depth of 2 m. with 23 cm thick brick work up to depth of 2 m. with 23 cm thick brick work up to depth of 5.0 m depth. 41 10 Providing and constructing on sewer, B.B. masonary circular manhole with concentric cone 1.5 M. dia, at bottom and 0.5 M. from top and up to depth of 2 M mot top and 35 cm thick brick work up to depth of 2 M mot top and 35 cm thick brick work tor remaining depth. 52 10 Providing and constructing on sewer, B.B. masonary circular manhole | | | | | | | | |
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| 17 Providing and constructing on sewer, B.B. masonary circular manhole with concentric cone 1.5 M. dia. at bottom and 0.5 M. from top and 35 cm thick brick work for depth of 2 M and 45 cm thick brick work for remaining depth up to 9 M in etc.complete 1 Upto 5.5 m depth. 1 Upto 6.0 m depth. 1 Upto 6.5 m depth. 2 (As per Computer generated sheet) 2 Wt of Steel = 0.1% of Concrete Qty = 0.42 3297 | | | | | | | 20.00 | No. |
| masonary circular manhole with concentric cone 1.5 M. dia. at bottom and 0.5 M. from top and 35 cm thick brick work for depth of 2 M and 45 cm thick brick work for remaining depth up to 9 M in etc.complete Upto 5.5 m depth. Upto 6.0 m depth. Upto 6.5 m depth. (As per Computer generated sheet) Image: the strength of 2 M and 45 cm thick Wt of Steel = 0.1% of Concrete Qty = 0.42 3297 | | (no per computer generated sheet) | | | | | | |
| masonary circular manhole with concentric cone 1.5 M. dia. at bottom and 0.5 M. from top and 35 cm thick brick work for depth of 2 M and 45 cm thick brick work for remaining depth up to 9 M in etc.complete Upto 5.5 m depth. Upto 6.0 m depth. Upto 6.5 m depth. (As per Computer generated sheet) Image: the strength of 2 M and 45 cm thick Wt of Steel = 0.1% of Concrete Qty = 0.42 3297 | 17 | Providing and constructing on sewer R.R. | | | | | | |
| M. dia. at bottom and 0.5 M. from top and 35 cm thick brick work for depth of 2 M and 45 cm thick brick work for remaining depth up to 9 M in etc.complete 1 Upto 5.5 m depth. 1 Upto 6.0 m depth. 1 Upto 6.5 m depth. 2 (As per Computer generated sheet) 2 Providing and fixing in position steel bar reinforcement etc. complete 0.42 Wt of Steel = 0.1% of Concrete Qty = 0.42 3297 | | u | | | | | | |
| thick brick work for depth of 2 M and 45 cm thick brick work for remaining depth up to 9 M in etc.complete Image: Complete depth of 2 M and 45 cm thick brick work for remaining depth up to 9 M in etc.complete Upto 5.5 m depth. Image: Complete depth of 2 M and 45 cm thick brick work for remaining depth up to 9 M in etc.complete Image: Complete depth of 2 M and 45 cm thick brick work for remaining depth up to 9 M in etc.complete Upto 5.5 m depth. Image: Complete depth of 2 M and 45 cm thick brick work for remaining depth up to 9 M in etc.com depth. Image: Complete depth of 2 M and 1 m and the depth of 2 M and 1 m and the depth of 2 M and 1 m and the depth of 2 M and 1 m and the depth of 2 M and 1 m and the depth of 2 M and 1 m and the depth of 2 M and 1 m and | | | | | | | | |
| brick work for remaining depth up to 9 M in etc.complete Image: Complete depth dep | | | | | | | | |
| etc.completeImage: completeImage: completeUpto 5.5 m depth.Image: completeImage: completeImage: completeUpto 6.0 m depth.Image: completeImage: completeImage: completeUpto 6.5 m depth.Image: completeImage: completeImage: complete(As per Computer generated sheet)Image: completeImage: completeImage: complete18Providing and fixing in position steel bar reinforcement etc. completeImage: completeImage: completeImage: completeWt of Steel = 0.1% of Concrete Qty =Image: completeImage: complete | | | | | | | | |
| Upto 6.0 m depth. Image: Computer generated sheet Image: Computer generated sheet (As per Computer generated sheet) Image: Computer generated sheet Image: Computer generated sheet 18 Providing and fixing in position steel bar reinforcement etc. complete Image: Computer generated sheet Image: Computer generated sheet Wt of Steel = 0.1% of Concrete Qty = 0.42 3297 Image: Computer generated sheet | | | | | | | | |
| Upto 6.5 m depth. 2 (As per Computer generated sheet) 2 18 Providing and fixing in position steel bar reinforcement etc. complete 2 Wt of Steel = 0.1% of Concrete Qty = 0.42 3297 3297 | | | | | | | 14.00 | No. |
| (As per Computer generated sheet) Image: Computer generated sheet 18 Providing and fixing in position steel bar reinforcement etc. complete Wt of Steel = 0.1% of Concrete Qty = 0.42 3297 3297 | | | | | | | 7.00 | No. |
| 18 Providing and fixing in position steel bar reinforcement etc. complete 0.42 3297 3297 Wt of Steel = 0.1% of Concrete Qty = 0.42 3297 3297 3297 | | • • | | | | | 2.00 | No. |
| reinforcement etc. complete 0.42 3297 3297 Wt of Steel = 0.1% of Concrete Qty = 0.42 3297 3297 3297 | | (As per Computer generated sheet) | | | | | | |
| reinforcement etc. complete 0.42 3297 3297 Wt of Steel = 0.1% of Concrete Qty = 0.42 3297 3297 3297 | | | | | | | | |
| Wt of Steel = 0.1% of Concrete Qty = 0.42 3297 | 18 | 5 7 | | | | | | |
| | | | | | | | | |
| 19 Providing as per required dia S.W. or R.C.C. pipes | | vvt of Steel = 0.1% of Concrete Qty = | 0.42 | 3297 | | | 3.30 | MT |
| | | | | | | | | |
| | 19 | Providing as per required dia S.W. or R.C.C. pipes | | | | | | |
| in vertical drop arrangementetc. Complete | | | | | | | | |
| a) For depth up to 1.10 M 5 | | | F | | <u> </u> | | 5 | No. |

Collection Conveyance Measurement

| ltem No | ITEM DESCRIPTION | No | L | В | D/H | Quantity | Uni |
|------------|---|---------|---|---|------|-----------|-----|
| | For 250 mm dia Pipes | | | | | | |
| | a) For depth up to 1.10 M | 5 | | | | 5 | No |
| | b) For depth up to 1.10 M to 1.60 M | 2 | | | | 2 | No |
| | For 300 mm dia Pipes | | | | | | |
| | a) For depth up to 1.10 M | 5 | | | | 5 | No |
| | b) For depth up to 1.10 M to 1.60 M | 1 | | | | 1 | No |
| | c) For depth up to 2.10 M to 2.60 M | 1 | | | | 1 | No |
| | For 350 mm dia Pipes | | | | | | |
| | a) For depth up to 1.10 M to 1.60 M | 1 | | | | 1 | No |
| | b) For depth up to 1.60 M to 2.10 M | 1 | | | | 1 | No |
| | For 400 mm dia Pipes | | | | | | |
| | a) For depth up to 1.10 M | 1 | | | | 1 | No |
| | b) For depth up to 1.10 M to 1.60 M | 1 | | | | 1 | No |
| | For 450 mm dia Pipes | | | | | | |
| | a) For depth up to 1.10 M | 2 | | | | 2 | No |
| | For 500 mm dia Pipes | | | | | | |
| | a) For depth up to 1.10 M | 1 | | | | 1 | No |
| | | | | | | | |
| 20 | Refilling the trenches with available excavated stuff | | | | | | |
| - | etc.complete. | | | | | | |
| | (As per Computer generated sheet) | | | | | 209329.69 | Cu |
| | | | | | | | |
| 21 | Dispossing of surplus excavated stuff from site of | | | 1 | 1 | | |
| - • | work up to a distance of 2Km etc.complete | | | | | | |
| | (As per Computer generated sheet) | | | | | 31966.65 | Cu |
| | | | | | | | |
| 22 | Providing, fixing and erecting RCC (M20) Vent shaft | | | | | | |
| | etc. complete | | | | | | |
| | | 10 | | | | 10 | No |
| | | | | | | | |
| 23 | WBM Road Restoration : Reinstating the road | | | | | | |
| | surface with supplying & spreading 60mm metal of | | | | | | |
| | 20 cm thick with Hard murum & 40mm metal of 15 | | | | | | |
| | cm thick with Soft murum etc. complete. | | | | | | |
| | (As per Computer generated sheet) | | | | | 92727.75 | Sq |
| | | | | | | | |
| 24 | Asphalt Road restoration: Reinstatement of road | | | | | | |
| | by excavating the potholes in rectangular shape and | | | | | | |
| | filling of potholes by one layers of one layer of 80 | | | | | | |
| | mm trap metal of 200 mm thick, one layer of 40 mm | | | | | | |
| | trap metal of 100 mm thick etc., complete. | | | | | | |
| | | | | | | | |
| | (As per Computer generated sheet) | | | | | 24727.00 | Sc |
| | | | | | | | |
| 25 | Concrete Road restoration : Reinstatement of | | | | | | |
| | Concrete road by excavating the concrete panels in | | | | | | |
| | rectangular shape and filling the trench with one | | | | | | |
| | layer of natural sand of 300 mm thick, one layer of | | | | | | |
| | M20 grade PCC of 150 mm thick and one layer of | | | | | | |
| | PQC M30 grade of 300 mm thicketc., complete | | | | | | |
| | | | | | | ļ | |
| | (As per Computer generated sheet) | | | | | 6182.00 | Sc |
| | Item No. 25a Providing and filling in the foundation | | | | | | |
| | with sand of ap-proved quality including watering, | | | | | | |
| | compaction complete. Spec. No.: Bd.A.13 Page No. | | | | | | |
| | 264 | | | | | | |
| | | 6182.00 | | | 0.10 | 618.20 | Cu |
| | Item No. 25b Providing and casting in situ cement | | | | | | |
| | concrete M- 15 of trap / granite / quartzite / gneiss | | | | | | |
| | metal for etc complete | | | | | | |
| | | 6182.00 | | | 0.10 | 618.20 | Cu |
| | Item No. 25c Providing and laying in situ cement | | | Τ | | | |
| | concrete M -30 with tremix treatment for 300 mm | | | | | | |
| | thickness for Concrete Road etc. complete Spec : | | | | | | |
| | | | | | | | |
| | | 6182.00 | | | 0.05 | 309.10 | Сι |

| ltem No | ITEM DESCRIPTION | Νο | L | В | D/H | Quantity | Uni |
|------------|---|----|----|---|-----|----------|-----|
| 26 | Shifting of Utilities: All utilities like Electric Poles, | | | | | | |
| 20 | waterline & Communication line Shifting while | | | | | | |
| | Manhole and Line Laying etc., complete as per | | | | | | |
| | specifications and or as directed by engineer- in- | | | | | | |
| | charge. | | | | | | |
| Α | Reconnection of existing damaged connection | | | | | | |
| ~ | including 15 mm dia. CPVC pipe with necessary | | | | | | |
| | fittings, remaking good the demolished portion etc. | | | | | | |
| | complete including all labour, etc. complete. as | | | | | | |
| | directed by Engineer in charge. | | | | | | |
| | (Similar Item PWD CSR 2016-17, P. 165, I No | | | | | | |
| | 42.61) | | | | | | |
| | Water Supply Connections - 15 mm dia | 30 | 1 | | | 30 | Rr |
| | (Similar Item PWD CSR 2016-17, P. 166, I No | | | | | | |
| | 42.62) | | | | | | |
| _ | Water Supply Connections - 20 mm dia | 4 | 1 | | | 4 | Rr |
| В | Electrical Lines & Poles Electrical Poles - RA for 10 km | | | | | | |
| i) | Pole Foundation : Providing cement concrete | | | | | | |
| •, | foundation including excavation for the pole 60 cms | | | | | | |
| | x 60 cms x 1.5 mtr deep in1:3:6 cement concrete | | | | | | |
| | (20x 25 mm stone metal) and 45 cm x 45cm x45 cm | | | | | | |
| | / 45 cm x 45 cm height plinth duly plaster and with | | | | | | |
| | necessary curing & finishing in above manner (for 9 | | | | | | |
| | mtr pole) | 1 | | | | 1 | No |
| ii) | Dismantling of existing poles above 6 mtr height | | | | | | |
| | with brackets. Clamps, insulators stay from the | | | | | | |
| | cement concrete foundation and making the site | | | | | | |
| | clear by refilling the pits with excavated materials | | | | | | |
| | and bringing it to ground level | 1 | | | | 1 | No |
| III) | Re-Erecting: Supplying and erecting steel tubular swaged pole 165.1 X 139.7 X 114.3 mm dia with 4.5 | | | | | | |
| | X 4.5 X3.65 mm thick (5+2+2m) length respectively | | | | | | |
| | and total 9 m long with pole cap, base plate in | | | | | | |
| | provided foundation (weight 147 kg) as per | | | | | | |
| | specifications. | 1 | | | | 1 | No |
| iv) | Earthling : Providing erecting pipe type earthling of | | | | | | |
| | 40 mm GI pipe dia with double earthling to the all | | | | | | |
| | equipments as per Detailed specifications. | 1 | | | | 1 | No |
| С | Electrical Cable - Providing and Jointing | | | | | | |
| | Communication Cable - Jelly Filled telephone | | | | | | |
| i) | lines and optical Fibre Cable Supply & Erecting of Jelly filled armoured telephone | | | | | | |
| " | cable 10 pair with 0.5 mm dia laid in provided trench | | | | | | |
| | as per specification no. WG-TW | 1 | 3 | | | 3 | Rr |
| ii) | Supply & erecting of FR grade PVC armourd multi | | | | | | |
| - | mode Optical Fibre Cable with 6 fibres with core dia | | | | | | |
| | 50 μM , suitable for 1 GBps Ethernet distance at 850 | | | | | | |
| | nm of wavelength on wall/ ceiling or laid in provided | | | | | | |
| | pipe / trench as per specification no. WG- COC/ | 1 | 2 | | | 2 | |
| iii) | OFC Supply & fixing of wall /rack type 12 port light guide | Í | 3 | | | 3 | Rr |
| , | interconnection unit for termination of optical fibre | | | | | | |
| | cable on wall /provided U rack complete as per | | | | | | |
| | specification no. EG- NAS / LIU | 1 | | | | 1 | No |
| 27 | Highway Crossing | | | | | | |
| <u> </u> | Pushing of M.S. pipe of following dia. For road | | | | | | |
| | crossing and railway crossing by push through | | | | | | |
| | metod in all types of strata by using hydraulic jack | | | | | | |
| | and drilling machine etc. complete | | | | | | |
| | MS Pipe 500 mm (ID) 10 mm thick | 5 | 20 | | | 100 | Rr |

SOLAPUR MUNICIPAL CORPORATION MAHARASHTRA JEEVAN PRADHIKARAN DIVISION SOLAPUR SOLAPUR CITY UNDERGROUND SEWERAGE SCHEME (AMRUT) NAME OF SUBWORK: PUMING STATION FOR ZONE IX @ DESAI NAGAR ABSTRACT

| · | - | | ABSTRACT | | | | |
|---------|--------|------|--|-------------------|--------|------|------------|
| Item No | Quant | tity | ITEM DESCRIPTION | | Rate | Unit | Amount Rs. |
| 1 | | | Excavation for foundation / pipe trenches in | n earth, soils | | | |
| | | | of all types, sand, gravel, and soft mur | um includng | | | |
| | | | removing the excavated material up to a di | stance of 50 | | | |
| | | | m. and lift as below, stacking and spreading | g as directed | | | |
| | | | by the Engineer-in- charge, normal | dewatering, | | | |
| | | | preparing the bed for foundation and exc | | | | |
| | | | filling. etc.complete. | U | | | |
| | | | MJP 16-17, Section E, Item No 1, Pg-35 | | | | |
| | 686.29 | Cum | | | 148.05 | Cum | 101605.72 |
| | 000.29 | Cum | | 1 1 1 00 | 146.05 | Cum | 101005.72 |
| | | | Basic Rate | 141.00 | | | |
| | | | Add 5 % for M.C. | 7.05 | | | |
| | 444.07 | 0 | Total | 148.05 | 400.05 | | 00470.04 |
| | 144.27 | Cum | 1.5 to 3 m | | 160.65 | Cum | 23176.31 |
| | | | Basic Rate | | | | |
| | | | Add 5 % for M.C. | 7.65 | | | |
| | | | Total | 160.65 | | | |
| 2 | | | Excavation for foundation / pipe trench | | | | |
| | | | murum & boulders, WBM road includng r | emoving the | | | |
| | | | excavated material up to a distance of 50 r | n. and lift as | | | |
| | | | below, stacking and spreading as dired | cted by the | | | |
| | | | Engineer-in- charge, normal dewatering, p | reparing the | | | |
| | | | | back filling. | | | |
| | | | etc.complete. | 5 | | | |
| | | | MJP 16-17, Section E, Item No 3, Pg-35 | | | | |
| | 76.25 | Cum | upto 1.5m | | 189.00 | Cum | 14412.16 |
| | 10.20 | Oum | Basic Rate | 180.00 | 105.00 | Oum | 14412.10 |
| | | | | | | | |
| | | | Add 5 % for M.C. | 9.00 | | | |
| | 444.07 | Cum | Total | 189.00 | 201.00 | Cum | 20094.00 |
| | 144.27 | Cum | 1.5 to 3 m | 100.00 | 201.60 | Cum | 29084.00 |
| | | | Basic Rate | 192.00 | | | |
| | | | Add 5 % for M.C. | 9.60 | | | |
| | | | Total | 201.60 | | | |
| | 61.83 | Cum | 3m to 4.5m | | 214.20 | Cum | 13243.61 |
| | | | Basic Rate | 204.00 | | | |
| | | | Add 5 % for M.C. | 10.20 | | | |
| | | | Total | 214.20 | | | |
| 3 | | | Excavation for pipe trenches in soft ro | | | | |
| | | | cement and lime masonary foundation, as | shphalt road | | | |
| | | | includng removing the excavated mater | ial up to a | | | |
| | | | distance of 50 m. and lift as below, s | tacking and | | | |
| | | | spreading as directed by the Engineer | -in- charge, | | | |
| | | | normal dewatering, preparing the bed for for | , , , | | | |
| | | | excluding back filling, etc.complete. | | | | |
| | | | MJP 16-17, Section E, Item No 5, Pg-35 | | | | |
| | 432.80 | Cum | 1.5 to 3 m | | | Cum | 210404.54 |
| | | | Basic Rate | Basic Rate 463.00 | | | |
| | | | Add 5 % for M.C. | | | | |
| | | | Total | Total 486.15 | | | |
| | 309.14 | Cum | 3m to 4.5m | | | Cum | 156780.92 |
| | | | Basic Rate | | | | |
| | | | Add 5 % for M.C. | 24.15 | | | |
| | | | Total | 507.15 | | | |
| | 346.24 | Cum | 4.5m to 6m | | 528.15 | Cum | 182865.63 |
| | | | Basic Rate | 503.00 | | | |
| | | 1 | Add 5 % for M.C. | 25.15 | | | |
| | | | Total | 528.15 | | | |
| | | ļ | l Total | 520.13 | | | |

| Item No | Quant | tity | ITEM DESCRIPTION | | Rate | Unit | Amount Rs. | | |
|---------|---|----------|---|-------------------------------|---------|------------------|------------|--|--|
| 4 | | | Excavation for pipe trenches in hard rock a | and concrete | | | | | |
| | | | road, by chiselling, wedging, lime drilling by | mechanical | | | | | |
| | | | means or by all means other than blastir | ng, including | | | | | |
| | | | trimming and levelling the bed, removing th | e excavated | | | | | |
| | | | material up to a distance of 50 m. and li | ft as below, | | | | | |
| | | | stacking and spreading as directed by the | Engineer-in- | | | | | |
| | | | charge, normal dewatering, preparing the | he bed for | | | | | |
| | | | foundation and excluding back filling. etc.cor | nplete. | | | | | |
| | | | | Castion F. Itom No. 7. Dr. 20 | | | | | |
| | 0.17.0.1 | | MJP 16-17, Section E, Item No 7, Pg-36 | 830.55 | | | | | |
| | 247.31 Cum 3m to 4.5m Basic Rate 791.00 | | | | | Cum | 205405.73 | | |
| | | | | 791.00 | | | | | |
| | | | Add 5 % for M.C. | 39.55 | | | | | |
| | | | Total | 830.55 | | | 100550.05 | | |
| | 230.83 | Cum | 4.5m to 6m | | 851.55 | Cum | 196559.35 | | |
| | | | Basic Rate | 811.00 | | | | | |
| | | | Add 5 % for M.C. | 40.55 | | | | | |
| | | | Total | 851.55 | | | | | |
| | 535.84 | Cum | 6m to 7.5m | | 872.55 | Cum | 467551.23 | | |
| | | ļ | Basic Rate | 831.00 | | <u> </u> | | | |
| | | | Add 5 % for M.C. | 41.55 | | | | | |
| | | | Total | 872.55 | | | | | |
| | 494.63 | Cum | More than 7.5 m depth | | 892.50 | Cum | 441453.53 | | |
| | | | Basic Rate | 850.00 | | | | | |
| | | | Add 5 % for M.C. | 42.50 | | | | | |
| | | | Total | 892.50 | | | | | |
| | 61.83 | Cum | More than 7.5 m depth | | 913.50 | Cum | 56480.08 | | |
| | | | Basic Rate | 870.00 | | | | | |
| | | | Add 5 % for M.C. | 43.50 | | | | | |
| | | | Total | 913.50 | | | | | |
| 5 | | | Providing dry trap granite quartizite qneiss, | | | | | | |
| • | | | soling in 15 cm to 20 cm thick layer inc | | 957.60 | | | | |
| | 35.63 Cum packing and compacting royelty charges etc.complete | | | | | Cum | 34118.13 | | |
| | packing and compacting royerty charges etc.complete | | | | | | | | |
| | | | | 010.00 | | | | | |
| | | | Basic Rate | 912.00 | | | | | |
| | | | Add 5 % for M.C. | 45.60 | | | | | |
| | | | Total | 957.60 | | | | | |
| 6 | | | MJP 16-17, Section E, Item No 18, Pg-39 Filling in murum bedding in trenches wit | h approved | | | | | |
| 0 | | | murum from excavated materials from for | | | | | | |
| | 18.00 | Cum | | | 67.20 | Cum | 1209.60 | | |
| | | | 15cm to 20 cm layers including wa | atering and | | | | | |
| | | | compaction, etc. complete. | | | | | | |
| | | | Basic Rate | 64.00 | | | | | |
| | | | Add 5 % for M.C. | 3.20 | | + | | | |
| ŀ | | | Total | 67.20 | | $\left \right $ | | | |
| 7 | | | MJP 16-17, Section E, Item No 16, Pg-39 | | | | | | |
| 7 | | | Providing and laying in situ, M-15 grade of | | | | | | |
| | 111.88 | Cum | granite/ quartzite/ gneiss/ metal for four | | 4444.65 | Cum | 497250.84 | | |
| | 111.00 | Cum | bedding including dewatering, formwork, | compacting | 4444.00 | Cum | 497230.04 | | |
| | | | and curing, finishing, etc.complete | | | | | | |
| - | | | Basic Rate | 4233.00 | | | | | |
| | | <u> </u> | Add 5 % for M.C. | 4233.00 | | + | | | |
| - | Add 5 % for M.C. 211.65 Total 4444.65 | | | | | | | | |
| - | | | MJP 16-17, Section G, Item No 1 b, Pg-43 | 4444.00 | | + | | | |
| 0 | | | | site of work | | + | | | |
| 8 | | | Dispossing of surplus excavated stuff from | | | | | | |
| | 1885.76 | Cum | up to a distance of 2 Km.including, loading | 195.62 | Cum | 368892.55 | | | |
| | | | transportation etc.complete or as direc | ied by the | | | | | |
| | | | Engineering- in- charge. | | | | | | |
| | | | Basic Rate | <u>195.62</u> | | | | | |
| | | | (CSR 2015-16, P. 22, Statement VI) | | | 1 | | | |

| | | | ITEM DESCRIPTION | | Rate | Unit | Amount Rs. |
|----|--------|-------------|--|---|--------|--------|------------|
| 9 | 942.88 | Cum | Refilling the trenches with available approve stuff with soft materials first over pipeline ar material in 15cm layers with all lead and li consolidation, surcharging etc. complete. | nd then hard | | Cum | 63361.57 |
| | | | Basic Rate | 64.00 | | | |
| | | | Add 5 % for M.C. | 3.20 | | | |
| | | | Total | 67.20 | | | |
| 10 | 500.00 | BHP/ Hr. | in the building trenches / pipeline trenches by using pumps and other devices includir off water to safe distance as directed by E charge (including cost of machinery, labou complete | the excavated trenches and pools of water og trenches / pipeline trenches, well works mps and other devices including disposing safe distance as directed by Engineer-in - uding cost of machinery, labour, fuel), stc | | BHP/Hr | 32550.00 |
| | | | Basic Rate | 62.00 | | | |
| | | | Add 5 % for M.C. Total | 3.10 65.10 | | | |
| | | | MJP 16-17, Section E, Item No. 14, Pg-38 | 00.10 | | + + | |
| 11 | 100.00 | RMT | Bypass & Overflow Providing ISI Standard RCC NP3 900 mm overflow pipe for sump suitable for rubl including all taxes, duties inspectio transportation to site, unloading stacking etc | berring joint n charges | | RMT | 479100.00 |
| | | | 900 mm NP3 | | | | |
| | | | Basic Rate | 4791.00 | | | |
| 12 | 100.00 | RMT | MJP 16-17, Section I, Item No. 1E, Pg-104 Lowering, laying and jointing in prope alignment R.C.C.pipes with jointsinCM1:1proportion or socketed R.C.C rubber joints(excluding cost of rubbe R.C.C.collar), including cost of conveyance to site of works, cost of jointing material, la hydraulic testing, etc.complete as directed b in-charge. (IS-783/1985) | collar C.pipes with er ring or from stores abour, giving | 541.80 | RMT | 54180.00 |
| | | | 900 mm NP3 | | | | |
| | | | Basic Rate | 516.00 | | | |
| | | | Add 5 % for M.C. Total | 25.80 541.80 | | + | |
| | | | MJP 16-17, Section I, Item No. 2, Pg-105 | JH 1.00 | | + + | |
| 13 | | | Providing and Constructing of manaholes on and bypass line | overflow | | | |
| | 3.00 | No | 0.5 mm dia at top and upto a depth of 2n brick work, upto depth of 2 m from top an brick work for balance depth in CM 1:4 pro 20 mm smooth plaster on both side in CM 1: excluding excavation, including foundation 250mm thick and haunches and channels proportion, finishing chanel in smooth providing CI dapuri type steps each weigh 1:2:4 coping and providing and fixing app and quality SFRC frame and cover of 56 | an hole with concentric cone 1.5 mm dia and ia at top and upto a depth of 2m with 23cm a, upto depth of 2 m from top and 35mm thk a for balance depth in CM 1:4 proportion with nooth plaster on both side in CM 1:2 proportion excavation, including foundation concrete ick and haunches and channels in CC 1:2:4 , finishing chanel in smooth rendering CI dapuri type steps each weighing 5.5 kg, ing and providing and fixing approved make by SFRC frame and cover of 56 cm dia etc | | No | 63466.20 |
| | | | Basic Rate Add 5 % for M.C. | 20148.00 1007.40 | | | |
| | | | Total | 21155.40 | | | |
| | | | MJP 16-17, Section L, Item No. 7, Pg-272 | | | | |

| Item No | Quan | ity | ITEM DESCRIPTION | | Rate | Unit | Amount Rs. |
|---------|--------|------|---|--|----------|------|------------|
| 14 | | | RCC | | | | |
| | | | Providing and casting in situ cement Conc | | | | |
| | | | granite / quartzite / gneiss metal for RC.C v | | | | |
| | | | detailed drawings and design as directed by | - | | | |
| | | | Charge including normal dewatering, cer work, compaction, finishing the formed su | - | | | |
| | | | C.M. 1:3 of sufficient minimum thickness | | | | |
| | | | smooth and even surface wherever ne | - | | | |
| | | | roughening if special finish is to be provided | , | | | |
| | | | etc.complete.(By weigh batching and mix d | - | | | |
| | | | 250 and M-300 only. Use of L & T, A.C.C | - | | | |
| | | | Birla Gold, Manikgad, Rajashree, etc | .cement is | | | |
| | | | permitted.) (Excluding M.S. or Tor reinforce | ement) | | | |
| | | | Crode M 20 | | | | |
| | | | Grade M 30 | | | | |
| | 55.28 | Cum | Raft | | 6325.20 | Cum | 349668.65 |
| | 00.20 | Cum | Basic Rate | 6024.00 | 0020.20 | Oum | 0-10000.00 |
| | | | Add 5 % for M.C. | 301.20 | | | |
| | | | Total | 6325.20 | | | |
| | | | MJP 16-17, , Item No. 2, Pg-43,44 | | | | |
| | 15.44 | Cum | Column | | 8086.05 | Cum | 124808.18 |
| | | | Basic Rate | 7701.00 | | | |
| | | | Add 5 % for M.C. | 385.05 | | | |
| | | | Total | 8086.05 | | | |
| | 10.10 | 0 | MJP 15-16, , Item No. ,3,, Pg-43,44 | | 7000.05 | 0 | 00000 50 |
| | 12.42 | Cum | | 7507.00 | 7966.35 | Cum | 98920.56 |
| | | | Basic Rate Add 5 % for M.C. | 7587.00 379.35 | | | |
| | | | Total | 7966.35 | | | |
| | | | MJP 15-16, , Item No. ,4,, Pg-43,44 | 1900.00 | | | |
| | 254.33 | Cum | Vertical Wall/Slabs/Staircase | | 8620.50 | Cum | 2192468.98 |
| | | | Basic Rate | 8210.00 | | | |
| | | | Add 5 % for M.C. | 410.50 | | | |
| | | | Total | 8620.50 | | | |
| . – | | | MJP 16-17, , Item No.,5, Pg-43,44 | | | | |
| 15 | | | Providing and fixing in position steel bar re | | | | |
| | | | of various diameters for RCC piles, cap | - | | | |
| | | | foundations, lintels, parodies, copings, fins, as per detailed designs, drawings and | | | | |
| | | | including cutting, bending, hooking the b | | | | |
| | | | with wires or tack welding and supporting | - | | | |
| | | | etc. complete. | • • | | | |
| | | | (including cost of binding wire). | | | | |
| | 33.75 | M.T. | Tor Steel | | 54803.70 | M.T. | 1849439.25 |
| | | | Basic Rate | 52194.00 | | | |
| | | | Add 5 % for M.C. | 2609.70 | | | |
| | | | Total MJP 16-17, Section G, Item No. 8 b, Pg-46 | 54803.70 | | | |
| 16 | | | Providing and fixing 900mm high S.S | 304 Grade | | | |
| | | | Stainless steel railing with 40mm diameter | | | | |
| | | | - | ck at top,40mm diameter and 1.5mm thick vertical | | | |
| | | | upports spaced at 1.5m center to center and 8mm thick | | | | |
| | | RM | bughened glass including fabricating ,fixtures, errecting, | | 4411.00 | RM | 132330.00 |
| | 30.00 | | ecessary welding, grinding, finishing, buffing to | | | | |
| | 30.00 | | | buining to | | | |
| | 30.00 | | stainless steel pipe | bunning to | | | |
| | 30.00 | | stainless steel pipe etc. complete.** | | | | |
| | 30.00 | | stainless steel pipe | | | | |
| | 30.00 | | stainless steel pipe etc. complete.** | | | | |
| | 30.00 | | stainless steel pipe etc. complete.** Spec. No.: As directed by Engineer Incharge | 9 | | | |
| | 30.00 | | stainless steel pipe etc. complete.** Spec. No.: As directed by Engineer Incharge Basic Rate | e <u>4010.00</u> 401.00 4411.00 | | | |

| Item No | Quant | ity | ITEM DESCRIPTION | | Rate | Unit | Amount Rs. |
|---------|--|------|---|---|---------|------|------------|
| 17 | | | Brick Masonry | | | | |
| | 37.24 | Cum | Providing II nd class B.B. masonry with objects in C.M. 1:6 of following prosuperstructure including striking out and joints, watering and scaffolding, etc.complete | oportion in raking out | 5940.00 | Cum | 221201.44 |
| | | | Basic Rate | 5400.00 | | | |
| | | | Add 5 % for M.C.+ 5% Sugarcane Area | 540.00 | | | |
| | | | Total | 5940.00 | | | |
| 40 | | | (PWD CSR 17-18 P.No. 71 I.No.4) | | | | |
| 18 | Internal Plastering Providing cement plaster for following thickness in two coats in cement mortar in following proportions without neeru finish to concrete, brick or stone surfaces in all positions including scaffolding and curing, etc.complete. | | | | | | |
| | 161.91 | Sq.m | 20 mm thick cement plaster in C.M.1:5 | | 269.50 | Sq.m | 43634.75 |
| | | | Basic Rate | 245.00 | | | |
| | | | Add 5 % for M.C.+ 5% Sugarcane Area | 24.50 | | | |
| | | | Total | 269.50 | | | |
| 40 | | | (PWD CSR 17-18 P.No. 86 I.No. 3) | | | | |
| 19 | 161.91 | Sq.m | Providing sand faced plaster externally in ce using approved screened sand in all position base coat of 15 mm th in cement morter 1:4 proofing compound @ 1 Kg per cement ba same for not less than 2 days & keeping th base coat rough to recieve the sand faced 6 to 8 mm th in cement morter 1:4 finishing | viding sand faced plaster externally in cement morter ng approved screened sand in all positions including se coat of 15 mm th in cement morter 1:4 using water ofing compound @ 1 Kg per cement bag curing the ne for not less than 2 days & keeping the surface of se coat rough to recieve the sand faced treatment of 0.8 mm th in cement morter 1:4 finishing the surface taking out grains & curing for 14 days, scaffolding etc | | Sq.m | 71240.40 |
| | | | Basic Rate | 400.00 | | | |
| | | | Add 5 % for M.C.+ 5% Sugarcane Area | 40.00 | | | |
| | | | Total (PWD CSR 17-18 P.No. 87 I.No. 5) | 440.00 | | | |
| 20 | 43.27 | Sqm | Providing cement based water proofing to terraces (Indian water proofing or alike) with laid in required slope to drain the water for an cleaning the base surface. Applying a coal slurry admixed with approved water proofing and laying the brick bats on bottom layer admixed with approved water proofing com- up to half depth of brick bats, curing this layer for 3 days, applying cement slur layer joints of brick bats with C.M.1:3 and approved water proofing compound and finishing with average 20 mm. thick layer mortar added with jute fiber at 1 Kg per b finishing the surface smooth with cement slur with approved water proofing compound. Marking finished surface with false squares 300 mm. making the junctions at the para and tapered top for required height, with d the junction of plaster and parapet and covering 10 years Guarantee against leakp Court fee stamp paper of Rs. 500/including | rement based water proofing treatment to lian water proofing or alike) with brick bats redslope to drain the water for any span after the base surface. Applying a coat of cement we with approved water proofing compound the brick bats on bottom layer in C.M.1:5 th approved water proofing compound filling epth of brick bats, curing or 3 days, applying cement slurry over this of brick bats with C.M.1:3 admixed with water proofing compound and finally top th average 20 mm. thick layers of same ed with jute fiber at 1 Kg per bag including e surface smooth with cement slurry admixed ed water proofing compound. shed surface with false squares of 300mm x taking the junctions at the parapet rounded d top for required height, with drip mould at n of plaster and parapet and curing and years Guarantee against leakproofness on amp paper of Rs. 500/including ponding test | | Sqm | 27370.25 |
| | | | Basic Rate Add 5 % for M.C.+ 5% Sugarcane Area | 575.00 57.50 | | | |
| | | | Total PWD DSR 2017-18, BD -J, Item No. 4 / BD P.No80- | 632.50 | | | |

| Item No | Quantity ITEM DESCRIPTION | | | | Rate | Unit | Amount Rs. | |
|---------|--|--------|---|--|--------|----------|------------|--|
| 21 | | | Paving,Flooring and Dado | | | | | |
| | | | Providing and laying machine cut machi | ne Polished | | | | |
| | | | Kota stone flooring 25mm to 30mm thick a | | | | | |
| | | | width in plain/ diamond pattern on bed of | | | | | |
| | | | mortar including cement float, filling joint | | | | | |
| | | | cement slurry, curing, polishing and cleaning | | | | | |
| | | | Spec. No.: Bd.M.3 Page No. 380 | | | | | |
| | | | | | | | | |
| · | 28.36 | Sam | a) 30 cm. X 30 cm | 979.00 | Sq.m | 27762.60 | | |
| | 20.00 | l oq.m | Basic Rate | 373.00 | 0q.m | 21102.00 | | |
| | | | Add 5 % for M.C.+ 5% Sugarcane Area | | | | | |
| | | | Total | 979.00 | | | | |
| | PWD DSR, 2017-18, BD -M, Item No 4/12BDM 3B/ | | | | | | | |
| 22 | | | | | | | | |
| | Providing & applying washable oil-bound distemper of | | | | | | | |
| | approved colour and shade to old & new surfaces in two | | | | | | | |
| | coats including scaffolding, preparing the surfaces. | | | | | | | |
| | (excluding the primer coat.) complete. Spec. No.: Bd.P.5 | | | | | | | |
| | | | Page No. 413 | | | | | |
| | 107.94 | Sa m | | | 38.50 | Sam | 1155 60 | |
| | 107.94 | Sq.m | a) Two coat Basic Rate | 25.00 | 36.30 | Sq.m | 4155.69 | |
| | | | | 35.00 3.50 | | | | |
| | | | Add 5 % for M.C.+ 5% Sugarcane Area | Add 5 % for M.C.+ 5% Sugarcane Area 5.50 Total 38.50 | | | | |
| | | | | CSR 2017-18 P.No.111 I.No.5b/Bdp -5 A) | | | | |
| 23 | | | External Paintings | | | | | |
| 20 | | | Providing and applying two coats of appex / | Ace exterior | | | | |
| | | | paint of approved manufacture and of approved | | | | | |
| | | | the plastered surfaces including cleaning, p | | | | | |
| | | | | | | | | |
| | | | plaster surface applying primer coat, s necessary and watering the surface fo | | | | | |
| | | | , , | two days | | | | |
| | 407.04 | | complete. | | 470.00 | | 40007.44 | |
| | 107.94 | Sq.m | a) Two coat | | 176.00 | Sq.m | 18997.44 | |
| | | ┨──── | Basic Rate | 160.00 | | | | |
| | | | Add 5 % for M.C.+ 5% Sugarcane Area | 16.00 | | | | |
| | | | Total | 176.00 | | | | |
| | | | (PWD CSR 2017-18 P.No.108 I.No.17/35.25) | | | | | |
| 24 | | | Furniture in pumping house | | | | | |
| - | Providing installing erecting furthiture and necessary | | necessary | | | | | |
| | 1.00 | LS | accessories in pump house | | | LS | 100000.00 | |
| 25 | | | Drilling of 3 Nos. 100mm dia Vertical Pa | assive Rock | | | | |
| - | | | Anchor with rebar of 25mm. Of 3m deep wit | | | | | |
| | 1.00 | Ls | of steel reinforcement with L-bent at top, (| | | Ls | 200000.00 | |
| | | | Anchor with Non shrink Grout & Pull Out Te | - | | | | |
| | | | | | | | | |

| Item No | Quant | ity | ITEM DESCRIPTION | | Rate | Unit | Amount Rs. |
|---------|--------|------|---|--|--------|----------|------------|
| 26 | | | Door- Rolling shutter | | | | |
| | 19.80 | Sqm. | Providing and fixing rolling shutter fabricated laths of minimum thickness 0.9 mm with 1 3.15 mm thickness reinforced with 35 x 35 x section fitted with sliding bolts and hand sides, deep M.S. channel section of depth a not less than 65 mm and 3.15 mm respective fast arrangements, M.S. Bracket plate 300 mm minimum size and shape with a suspension shaft of minimum 32 mm dia cover of M.S. sheet not less than 0.9 mm the of any size at top and safety deviced mechanical gear operation arrangement of worm gear wheels and worms of high graded mild steel and one coat of red lead primer et (I.S. 6248-1979) (With mechanical gear) Bd.T. P. No. 510 | 2860.00 | Sqm. | 56628.00 | |
| | | | Basic Rate | 2600.00 | | | |
| | | | Add 5 % for M.C.+ 5% Sugarcane Area | 260.00 | | | |
| | | | Total (PWD CSR 2017-18 P.No.133/134, I.No BDT-55) | 2860.00 | | | |
| 27 | | | Windows | | | | |
| | 18.00 | Sqm. | Aluminium sliding window of two tracks with pipe having overall dimension 63.50 x 38.10 at weight 0.547 kg/Rmt. and window frame section 61.85 x 31.75 x 1.20 mm at w kg/Rmt. Top and side track section 61.85 x mm at weight 0.659 kg/Rmt. The shutter s bearing bottom 40 x 18 x 1.25 mm at w kg/Rmt. Inter locking section 40 x 18 x weight 0.469 kg/Rmt. And handle section 40 mm at weight 0.417 kg/Rmt. and top section 1.25 mm at weight 0.417 kg/Rmt. As drawings and as directed by Engineer in ch necessary Aluminium sections fixtures an such as roller bearing in nylon casting and catch fitted in vertical section of shutter inc thick plain glass with all required screws a complete. with colour Anodising with box S directed by Engineer-in-charge. | Vindows roviding and fixing in position. (as per I.S.1868 / 1982) luminium sliding window of two tracks with rectangular pe having overall dimension 63.50 x 38.10 x 1.02 mm t weight 0.547 kg/Rmt. and window frame bottom track ection 61.85 x 31.75 x 1.20 mm at weight 0.695 g/Rmt. Top and side track section 61.85 x 31.75 x 1.30 im at weight 0.659 kg/Rmt. The shutter should be of earing bottom 40 x 18 x 1.25 mm at weight 0.417 g/Rmt. Inter locking section 40 x 18 x 1.10 mm at eight 0.469 kg/Rmt. And handle section 40 x 18 x 1.25 im at weight 0.417 kg/Rmt. and top section 40 x 18 x .25 mm at weight 0.417 kg/Rmt. As per detailed rawings and as directed by Engineer in charge with all ecessary Aluminium sections fixtures and fastenings uch as roller bearing in nylon casting and self locking atch fitted in vertical section of shutter including 5 mm ick plain glass with all required screws and nuts etc, pmplete. with colour Anodising with box Spec. No.: As | | Sqm. | 77517.00 |
| | | | Basic Rate | 3915.00 | | | |
| | | | Add 5 % for M.C.+ 5% Sugarcane Area | 391.50 | | | |
| | | | Total PWD 17-18/ Item No. 31i / 18 BDT 39.40 / F | | | | |
| 28 | | | Approach Road in Paver Block | | | | |
| | 120.00 | Sqm. | roviding and fixing heavy duty inter locking concrete ray paving blocks of 80 mm thickness of having a grength of 300 kg/Sq.cm. of approved quality and hape on a bed of crushed and of 25 to 30 mm thick including skirting joints and eaning etc. complete.** pec. No.: A directed by Engineer in charge Basic Rate 678.00 | | 745.80 | Sqm. | 89496.00 |
| | | | Add 5 % for M.C.+ 5% Sugarcane Area | 678.00 | | | |
| | | | Total | 745.80 | | | |
| | | | PWD DSR 2017-18/Sec-BDM 33.52 //Item | No 21A ii / | | | |

| 111 | F | ۱۸/ |
|-----|---|-----|
| | | |

| | - | - | | | | | |
|----------|--|---|---|--------------|------------|-----------------|----------------------------|
| Item No | Quant | ity | ITEM DESCRIPTION Providing and Applying of Elastome | eric (450% | Rate | Unit | Amount Rs. |
| 29 | 791.28 | bonding with plasterd surface and 100 micron of top coat for puming station as directed by Engineer-in- charge. | | 1143.45 | Sqm. | 904789.12 | |
| | | | Basic Rate | | | | |
| | | | Add 5 % for M.C. | 54.45 | | | |
| | | | Total | 1143.45 | | | |
| | | | MJP 16-17/Sec-I(XVII) / Pg 216/Item No 23 | | | | |
| 30 | 1.00 | No | Manual Coarse Screen Providing, errecting, Manual Coarse Scree by Engineer-in-charge | n as dircted | 119600.00 | No | 119600.00 |
| | | | Market Rate | 119600.00 | | | |
| | | | | | | | |
| | | | Total | 119600.00 | | | |
| 24 | | | As Per Rate Analysis | | | | |
| 31 | 1.00 | No | Mechanical Screen Providing, errecting, Mechanical Coarse dircted by Engineer-in-charge | Screen as | 1486000.00 | No | 1486000.00 |
| | | | Market Rate | 1486000.00 | | | |
| | | | Total | 1486000.00 | | | |
| | | | As Per Rate Analysis | | | | |
| 32 | 1.00 | No | Conveyor Belt Providing, errecting, Conveyor Belt as Engineer-in-charge | directed by | 698390.00 | No | 698390.00 |
| | | | Market Rate | 698390.00 | | | |
| | | | Total | 698390.00 | | | |
| 33 | | | As Per Rate Analysis Penstock Gate | | | | |
| | 1.00 | No | Providing, errecting, Penstock Gate as Engineer-in-charge | - | 419035.00 | No | 419035.00 |
| | | | Market Rate | 419035.00 | | | |
| | | | Total | 419035.00 | | | |
| | | | As Per Rate Analysis | | | | |
| 34 | | For Automation of SPS Job | | 2500000.00 | | | |
| | | | | Total | | | 15506605.03 |
| | Add RCC Design Charges @ 2 % Total Cost Rs. | | | | 310132.10 | | |
| | | | | | | | 15816737.13 15816738.00 |
| <u> </u> | | | | | | ay Rs. Lakhs | 158.17 |
| | | | | | | Crore | 1.58 |

SOLAPUR MUNICIPAL CORPORATION MAHARASHTRA JEEVAN PRADHIKARAN DIVISION SOLAPUR SOLAPUR CITY UNDERGROUND SEWERAGE SCHEME (AMRUT) NAME OF SUBWORK: PUMING STATION FOR ZONE IX @ DESAI NAGAR MEASUREMENT SHEET

| | IVIEAJ | | | 1 | | | | |
|-------------|---|-------------|-------------|------------------|--------------------------|--------|------------|-------------------|
| ltem No. | Description of Item | Ν | los | Length or Dia | Breadth | Depth | Unit | Qty |
| | | | | | | | | |
| | Sump Size (Inside Diametrer and Inside | | | | | | | |
| | depth) | | 1.00 | 10.50 | | 8.00 | | |
| | Inner Sizes of Receiving chamber | | 1.00 | 4.00 | 3.60 | 5.20 | | |
| | Inner Sizes of Screen chamber | | 2.00 | 5.50 | 1.10 | 5.50 | | |
| | Receiving/Screen Chamber - Middle Wall Thickness | | | | 0.20 | | | |
| | Wet Well - Outer Wall Thickness | | | | 0.55 | | | |
| | Raft of wetwell thickness | | | | | 0.45 | | |
| | Raft outside vertical wall | | | | | 0.15 | | |
| | PCC thickness for Raft | | | | | 0.10 | | |
| | PCC outside Vertical Wall | | | | | 0.10 | | |
| | Soiling for Raft | | | | | 0.30 | | |
| | Side margin for excavation of wet well outside wall | | | 4.00 | | | | |
| | Pump Pit Size at Bottom for submergence | | | 0.50 | 2.50 | 1 50 | | |
| | of Pump | | | 9.50 | 2.50 | 1.50 | | |
| | Valve chamber Vertical wall thickness | | | | | 0.15 | | |
| | Outer Sizes of receiving Chamber | | | 4.20 | 3.80 | 5.20 | | |
| | Outer Sizes of Screeen Chamber | | | 5.70 | 1.70 | 5.50 | | |
| | Valve chamber outside Wet well | | | 9.50 | 2.50 | 2.00 | | |
| | Byepass Pipe Length in | | | 100.00 | | | | 900.00 |
| | Excavation | | | | | | | |
| | Wet Well | 1.00 | | 0.79 | 20.60 | 9.15 | | 3048.07 |
| | Pump Pit | 1.00 | | 9.50 9.50 | 3.00 3.50 | 2.20 | | 62.70 99.75 |
| | Valve chamber outside Wet well | 1.00 | | 9.50 | 3.50 | 3.00 | | 99.75 |
| | Bypass arrangement | 1.00 | | 100.00 | 1.65 | 3.40 | | 561.00 |
| | | | | | | | | |
| | 0 to 1.5 m depth | | | | | | | 3771.52 762.55 |
| | 1.5 m to 3.0 m depth | | | | | | | 721.33 |
| | 3 m to 4.5 m depth | | | | | | | 618.28 |
| | 4.5 m to 6.0 m depth | | | | | | | 577.06 |
| | 6.0 m to 7.5 m depth | | | | | | | 535.84 |
| | 7.5 m to 9 m depth | | | | | | | 494.63 |
| | More than 9 m depth | | | | | | | 61.83 |
| 1 | Excavation for foundation/ pipes trenches in | | | | | | | |
| | earth, soil of all types ,sand ,gravel and soft | | | | | | | |
| | murum including removing the excavated | | | | | | | |
| | material upto a distance of 50M beyond | | | | | | | |
| | area & lift as below, stacking and spreading | | | | | | | |
| | as directed, normal dewatering, preparing of | | | | | | | |
| | bed for foundation & excluding | | | | | | | |
| | backfilling,etc. complete | | | | | | | |
| | | | | | | | | |
| | 0 to 1.5 m depth | 0.90 | | qty of 1.5 | - | 762.55 | Cum | 686.29 |
| | 1.5 m to 3.0 m depth | 0.20 | Of total of | qty of 1.5 -: | 3.0 m depth | 721.33 | Cum | 144.27 |
| 2 | Excavation for foundation/ pipe trenches in | | | | | | | |
| | hard murum and boulders,W.B.M.road | | | | | | | |
| | including removing the excation material up | | | | | | | |
| | to a distance of 50 meter and lift as below, | A 16 | 0(1) | | | 700 | 6 | |
| | 0 to 1.5 m depth 1.5 m to 3.0 m depth | 0.10 | | qty of 1.5 n | n depth = 3.0 m depth | 762.55 | Cum Cum | 76.25 |

| Item No. | Description of Item | Ν | los | Length or Dia | Breadth | Depth | Unit | Qty |
|-------------|--|------|-------------|------------------|-------------|--------|-------------|---------|
| | 3.0 m to 4.5 m depth | 0.10 | Of total of | qty of 3.0 - | 4.5 m dept | 618.28 | Cum | 61.83 |
| 3 | Excavation for foundation/ pipe trenches by all means in soft rock and old cement and lime masonry foundation asphalt road including removing the excavated material | | | | | | | |
| | 0 to 1.5 m depth | 0.00 | Of total of | ty of 1.5 m | n depth = | 762.55 | Cum | 0.00 |
| | 1.5 m to 3.0 m depth | 0.60 | | | 3.0 m depth | | Cum | 432.80 |
| | 3.0 m to 4.5 m depth | 0.50 | | | 4.5 m dept | | Cum | 309.14 |
| | 4.5 m to 6.0 m depth | 0.60 | | | 5.0 m depth | | Cum | 346.24 |
| 4 | Excavation for foundation/ pipe trenches in hard rock and concrete road by chiseling wedging line drill by mechanical means or | | | | | | | |
| | 3.0 m to 4.5 m depth | 0.40 | Of total of | qty of 3.0 - | 4.5 m dept | 618.28 | Cum | 247.31 |
| | 4.5 m to 6.0 m depth | 0.40 | Of total of | qty of 4.5 -6 | 6.0 m depth | 577.06 | Cum | 230.83 |
| | 6.0 m to 7.5 m depth | 1.00 | Of total of | qty of 4.5 -6 | 6.0 m depth | 535.84 | Cum | 535.84 |
| | 7.5 m to 9 m depth | 1.00 | Of total of | qty of 3.0 - | 4.5 m dept | 494.63 | Cum | 494.63 |
| | More than 9 m depth | 1.00 | | | 4.5 m dept | | Cum | 61.83 |
| 5 | providing dry trap granite quartizite qneiss, rubble stone soling in 15 cm to 20 cm thick | 4.00 | 0.70 | 40.00 | | 0.00 | 0 | 25.00 |
| | Wet Well | 1.00 | 0.79 | 12.30 | | 0.30 | Cum | 35.63 |
| 6 | Filling in murum bedding in trenches with approved murum from excavated materials Bypass arrangement | 1.00 | | 100.00 | 0.90 | 0.20 | Cum | 18.00 |
| 7 | Providing and laying in situ, M-15 grade of | 1.00 | | 100.00 | 0.90 | 0.20 | Cum | 10.00 |
| | C.C. of trap/ granite/ quartzite/ gneiss/ Wet Well | 1.00 | | 12.30 | 0.00 | 0.10 | Cum | 11.88 |
| | Qty for uplift | 1.00 | | 12.00 | 0.00 | 0.10 | Cum | 100.00 |
| | | | | | | Total | Cum | 111.88 |
| 8 | Transportation Disposal of excavated material including loading and unloading, lead up to 7.5 km etc. Complete | 0.50 | Of Exca | vated Qty | | | Cum | 1885.76 |
| 9 | Refilling the trenches with available approved excavated stuff with soft | 0.25 | of Excav | ated Qty | | | Cum | 942.88 |
| 10 | Dewatering the excavated trenches and pools of water in the building trenches / pipeline trenches, well works by using | | | | | | BHP/H r. | 500.00 |
| 11 | Bypass / Overflow channel Providing ISI Standard RCC NP3 900 mm dia pipe as overflow pipe for sump suitable for rubberring joint including all taxes, duties 600 mm NP3 | 1.00 | | 100.00 | | | RMT | 100.00 |
| 12 | Lowering, laying and jointing in proper grade and alignment R.C.C. pipes with collar joints in CM1:1 proportion or socketed R.C.C.pipes with rubber joints (excluding 900 mm NP3 | | | 100.00 | | | RMT | 100.00 |
| 13 | Providing and Constructing of manaholes on overflow and bypass line | | | | | | | |
| | Providing and constructing on sewer BB Masonary circular man hole with concentric cone 1.5 mm dia and 0.5 mm dia at top and upto a depth of 5m with 23cm brick work, upto depth of 2 m from top and 35mm thk Upto 2.5 M | | | | | | No | 3.00 |

| ltem No. | Description of Item | Nos | | Length or Dia | Breadth | Depth | Unit | Qty |
|-------------|--|-------|---------|------------------|---------|-------|-------|---------|
| | RCC | | | | | | | |
| | Providing and casting in situ ready mix | | | | | | | |
| | cement concrete grade of | | | | | | | |
| | trap/granite/gneiss metal of approved | | | | | | | |
| | quality for RCC work as per detailed | | | | | | | |
| | drawings and design for as directed by | | | | | | | |
| | Engineer In charge including normal | | | | | | | |
| I | Wet well - Raft | 1.00 | 0.79 | 12.10 | | 0.45 | | 51.72 |
| Ш | Vale Chamber Raft | 1.00 | | 9.50 | 2.50 | 0.15 | | 3.56 |
| | Columns for pumping ststaion | 10.00 | | 0.30 | 0.35 | 13.50 | | 14.18 |
| IV | Columns to support receiving chamber and | | | 0.30 | 0.35 | 3.00 | | |
| 1 4 | screen chamber | 4.00 | | 0.00 | 0.00 | 0.00 | | 1.26 |
| V | Cross beam Qty in sump (Wet well dia + | 1.00 | | 21.00 | 0.45 | 0.30 | | 2.84 |
| - | Pump House beam Qty at floor slab (Wet | | | 21.00 | 0.45 | 0.30 | | 2.84 |
| VI | | | | 21.00 | 0.45 | 0.30 | | 2.04 |
| | well dia + cross beam over col) =(wet well | | | | | | | |
| \/11 | $\frac{dia = 8.5 + 4.5^{*}2}{Dump Llawal (Wet)}$ | 1 00 | | 07.40 | 0.20 | 0.20 | | 2.07 |
| VII | Pump House beam Qty at lintel level (Wet | | | 37.49 | 0.30 | 0.30 | | 3.37 |
| | well dia + cross beam over col) =(wet well | | | | | | | |
| \ //··· | dia = 8.5 + 4.5*2 | 4.00 | | 07.40 | 0.00 | 0.00 | | 0.07 |
| | Pump House beam Qty at roof Level | 1.00 | | 37.49 | 0.30 | 0.30 | | 3.37 |
| | Wetwell Vertical walls | 1.00 | 3.14 | 11.60 | 0.55 | 8.30 | | 166.28 |
| | Receiving chamber slab | 1.00 | | 4.20 | 3.80 | 0.20 | | 3.19 |
| XI | Screening chamber slab | 0.00 | | 5.70 | 1.70 | 0.25 | | 2.42 |
| XII | Receiving chamber Vertical wall | 1.00 | | 8.00 | 0.20 | 5.20 | | 0 00 |
| | (Length+Width) =4.55+1.55=6.1 | | | | | | | 8.32 |
| XIII | Screening chamber Vertical wall length (3 | 1.00 | | 18.80 | 0.20 | 5.50 | | |
| | | | | | | | | 20.68 |
| | Lengthwise+1Width side) =(5.25*3+2.05*1) | | | | | | | |
| XIV | Pumping station floor slab (half portion of | 1.00 | 3.14/8 | 10.50 | | 0.15 | | 0.40 |
| | wet well) | | | | | | | 6.49 |
| XV | Pumping station roof slab (half portion of | 1.00 | 3.14/8 | 10.50 | | 0.15 | | 0.40 |
| ~~ | wet well) | | 011 1/0 | | | 0110 | | 6.49 |
| XVI | Stair case up to bottom | 5.00 | | 5.00 | 1.20 | 0.20 | | 6.00 |
| | Valve Chamber Walls | 1.00 | | 24.00 | 0.15 | 2.00 | | 7.20 |
| | Wet Well - Pump Pit | 1.00 | | 22.00 | 2.20 | 0.15 | | 7.26 |
| | Qty for slabs for maintenace and screen | | | 22.00 | 2.20 | 0.10 | | 1.20 |
| | disposal, Stairs Valve chamber slab and | | | | | | | |
| | | | | | | | | 20.00 |
| | support slab for pump pipes, beams in wet | | | | | | | |
| vv | well Total Concrete Qty of Grade M 30 | | | | | | Cum | 337.47 |
| XX | * | | | | | | | |
| | RCC qty of Raft, footing (sub item I +II) | | | | | | Cum | 55.28 |
| | RCC Qty of Colums (sub item III + IV) | | | | | | Cum | 15.44 |
| | RCC Qty of Beams (Sub item V to VIII) | | | | | | Cum | 12.42 |
| | RCC Qty of Vertical walls, slabs, staircase | | | | | | Cum | 254.33 |
| | (IX to XIX) | | | | | | Juin | _0 1.00 |
| 15 | Providing and fixing in position steel bar | | | | | | | |
| | reinforcement of various diameters for RCC | | | | | | | |
| | piles, caps, footings, foundations, lintels, | | | | | | | |
| | parodies, copings, fins, arches, etc. as per | | | | | | | |
| | a) Tor Steel= Steel consumtion of 10% of | | | | | | N 4 T | 00 75 |
| | RCC Qty | | | | | | М.Т. | 33.75 |
| 16 | Providing & Fixing stainless steel railing | | | | | | | |
| | with top and vertical pipe of 50 mm dia at | | | | | | | |
| | 0.90m c/c or as required and horizontal | | | 30.00 | | | RM | 30.00 |
| | • | | | | | | | |
| 47 | pipes of 25 mm dia in two rows, all pipes of | | | | | | | |
| 17 | Brick Masonry | | | | | | | |
| | Providing second class Burnt Brick masonry | | | | | | | |
| | with conventional/ I.S. type bricks in cement | | | | | | | |
| | a) Pumping station | 1.00 | | 26.99 | 0.23 | 6.00 | | 37.24 |
| | | | | | | | | |
| | | | | | | | | 37.24 |

| Item No. | Description of Item | ٦ | los | Length or Dia | Breadth | Depth | Unit | Qty |
|-------------|---|------|-----|------------------|---------|-------|------|--------|
| 18 | Internal Plastering | | | | | | | |
| | Providing cement plaster for following thickness in two coats in cement mortar in | | | | | | Sq.m | |
| | following proportions without neeru finish to | | | | | | | |
| | 20 mm thick cement plaster in C.M.1:5 | 1.00 | | 26.99 | | 6.00 | | 161.91 |
| | | | | | | | | 161.91 |
| 19 | External Plastering | | | | | | | 101.91 |
| | Providing sand faced plaster externally in cement morter using approved screened sand in all positions including base coat of 15 mm th in cement morter 1:4 using water proofing compound @ 1 Kg per cement bag curing the same for not less than 2 days & a) Pumping station | | | 26.99 | | 6.00 | | 161.91 |
| | | | | | | | | |
| 20 | Providing and laying water proofing to Terrace | | | | | | | 161.91 |
| | a) Pumping station | 1.00 | | 10.50 | | 0.15 | | 43.27 |
| | | | | | | | | |
| 21 | Paving,Flooring and Dado | | | | | | | 43.27 |
| | Providing and laying in position polished Kota stone flooring of approved quality 25mm to 30mm thick in plain/diamond pattern on a bed of cement mortar 1:6 | | | 0.50 | | 4.00 | | 00.00 |
| | a) Pumping station | 1.00 | | 8.50 | | 1.00 | | 28.36 |
| | | | | | | | | 28.36 |
| 22 | Internal Painting | | | | | | | |
| | Providing & applying washable oil-bound distemper of approved colour and shade to old & new surfaces in two coats including scaffolding, preparing the surfaces. | | | | | | | |
| | a) Pumping station | 1.00 | | 26.99 | | 4.00 | | 107.94 |
| | | | | | | | | 107.04 |
| 23 | External Paintings | | | | | | | 107.94 |
| | Providing and applying two coats of appex /Ace exterior paint of approved manufacture and of approved color to the plastered surfaces including cleaning, prepairing the plaster surface applying primer coat, scaffolding if necessary and watering the surface for two days complete. | | | | | | | |
| | a) Pumping station | 1.00 | | 26.99 | | 4.00 | | 107.94 |
| | | | | | | | | 107.94 |
| | | | | | | | | 107.94 |
| 24 | Furniture in pumping house | | | | | | | |
| | Providing installing erecting furtniture and necessary accessories in pump house | | | | | | LS | 1.00 |
| 25 | Drilling of 3 Nos. 100mm dia Vertical Passive Rock Anchor with rebar of 25mm. Of 3m deep with fabrication of steel | | | 1.00 | | | Ls | 1.00 |

| Item No. | Description of Item | | Nos | | Breadth | Depth | Unit | Qty |
|-------------|--|------|-----|-------|---------|-------|------|--------|
| 26 | Door- Rolling shutter | | | | | | | |
| | Providing and fixing rolling shutter fabricated from steel laths of minimum thickness 0.9 mm with lock plate of 3.15 | 2.00 | | 2.20 | | 4.50 | Sqm | 19.80 |
| 27 | Windows | | | | | | | |
| | Supplying and fixing in position anodized extruded modular aluminum section Two Track sliding window mounted on rectangular frame of size 100 x 50x 2.80 mm thick (2.183 kg/Rmt.) made up of three | | | | | | | |
| | Providing and fixing aluminum lowered window | 3.00 | | 2.00 | 3.00 | | Sqm | 18.00 |
| 28 | Approach Road in Paver Block | | | | | | | |
| | Providing and fixing m 25 grade precast factory made Interlocking paver blocs with 3.0m wide approach width and 25 m length with complete etc | 1.00 | | 40.00 | 3.00 | | Sqm | 120.00 |
| 29 | Providing and Applying of Elastomeric (450% Elongation) thermoplastic, fire retardant, Coatingskin tensile strength 18 to | 3.00 | | 32.97 | | 8.00 | Sqm | 791.28 |
| | Manual Coarse Screen | 1.00 | | | | | No | 1.00 |
| 31 | Mechanical Coarse Screen | 1.00 | | | | | No | 1.00 |
| 32 | Conveyor Belt | 1.00 | | | | | No | 1.00 |
| 33 | Penstock Gate | 1.00 | | | | | No | 1.00 |

SOLAPUR MUNCIPAL CORPORATION NAME OF SCHEME - UNDERGROUND SEWERAGE PROJECT OF SOLAPUR CITY NAME OF SUB WORKS - PUMPING MACHINERY AT DESAI NAGER PUMPING STATION

| Sr. No. | Description | Amount |
|------------|--------------------------|-------------|
| | | |
| 1 | Part A- Electrical Works | 7479080.00 |
| 2 | Part B- Mechanical Works | 11065173.00 |
| | | |
| | Total cost in Rs | 18544253.00 |
| | Total cost in Lakhs | 185.44253 |
| | Total cost in Crore | 1.85 |

SOLAPUR MUNCIPAL CORPORATION NAME OF SCHEME - UNDERGROUND SEWERAGE PROJECT OF SOLAPUR CITY NAME OF SUB WORKS - MECHANICAL WORK COST ESTIMATES AT DESAI NAGER PUMPING STATION ABSTRACT

| Sr. No. | Description | Qty | Unit | Rates | Amount |
|------------|--|-----|------|--------------|------------|
| 1 | Submarsible Non Clog Sewage Pump- 1 DWF flow Designing, Providing, installing, Commissioning & testing with satisfactory test & trail of Submersible Non Clog sewage pumps having Casing – CI IS 210 Gr. FG 220, Impeller – SS 304, Shaft and Sleeve – SS 316, Motor Parts – CI IS 210 Gr. FG 220, Fastners – BHT Steel, Guide Pipe – SS 304, Lifting Chain – SS 304with three phase squirrel cage motor 730/1000/1460 rpm, suitable for continuous duty with F class Insulation, suitable to operate required duty conditions & specified requirement having minimum efficiency 70% suitable for solid handling capcity of 100 mm as below including cable set (30 mtr.), auto rail coupling, integral bend, duck foot bend, lifting chain, control panel with PMU having all protections, bottom stand, clamps etc. with TPI & Inspection | | | | |
| | Pump- 1/2 DWF | | | | |
| 1.A | Pump discharge = 122 LPS | 2 | No | 2,92,791.00 | 585582.00 |
| 1.7 | Duty Head = 15 m | | | | |
| | B.H.P = 40 | | | | |
| | Pump- 1 DWF | | | | |
| 1.B | Pump discharge =244 LPS | 2 | No | 4,70,753.00 | 941506.00 |
| 1.0 | Duty Head =15 mtr | | | | |
| | B.H.P = 70 | | | | |
| | Pump- Peak flow | | | | |
| 10 | Pump discharge =522 LPS | 1 | No | 13,09,457.00 | 1309457.00 |
| 1.C | Duty Head = 15 mtr | | | | |
| | B.H.P = 150 | | | | |
| | As per Rate Analysis | | | | |
| 2 | Glandless CIDF Sluice Valve - PN 1.0 Providing, erecting, testing and commissioning CI Glandless Sluice valve suitable for working pressure of 10 kg/cm2 with standard non rising spindle, handwheel, cap etc and manufactured as per IS 2906 / 14846 and as per detailed specification | | | | |
| 2.A | 300 mm (for 1/2 X DWF) | 2 | No | 70255.00 | 140510.00 |
| 2.B | 400 mm (for 1 X DWF) | 2 | No | 92481.00 | 184962.00 |
| 2.C | 500 mm (for Peak flow) | 1 | No | 111979.00 | 111979.00 |
| 2.D | 600 mm (for common header) | 1 | No | 140787.00 | 140787.00 |
| | , I no- VL 1-10,13 Pg. No- 13+ (RS.4000.0 TPI) | | | | |

| Sr. No. | Description | Qty | Unit | Rates | Amount |
|------------|--|-----|------|-----------|-----------------|
| 3 | Valve Actuator :- Providing erecting electric valve actuators totally enclosed weather proof and dust prooft construction with IP 67 protection class suitable for installation in any position without lubrication leakages or other operatrional difficulty with special grease filled gear box and hand wheel for emerency manula opeartion which will beautomatically disengaged on restoration of power to motor and with 10 watt single phase space heater with TEFC squiral cage including motor working on 440 V + /- 10% 3 phase 50 Hz AC of intermittent duty rating S-2 insulation class FG and temp rise resticted to class B with IP 67 protection class suitable for DOL starting and with three thermostat and 30% over loading margin | | | | |
| 3.A | 300 mm (for 1/2 X DWF) | 2 | No | 102381.00 | 204762.00 |
| 3.B | 400 mm (for 1 X DWF) | 2 | No | 109750.00 | 219500.00 |
| 3.C | 500 mm (for Peak flow) | 1 | No | 109750.00 | 109750.00 |
| 3.D | 600 mm (for common header) | 1 | No | 119106.00 | 119106.00 |
| | , I no- VL 1-10,13 Pg. No- 13+ (RS.4000.0 TPI) | | | | |
| 4 | Reflux Valve :- Providing & supplying ISI mark CI D/F Reflux valve(non return valve) PN 1 rating with bypass arrangement, as per IS 5312 Part I (1984), including all taxes, inspection charges, transportation etc. | | | | |
| 4A | 300 mm (for 1/2 X DWF) | 2 | No | 41933.00 | 83866.00 |
| 4B | 400 mm (for 1 X DWF) | 2 | No | 93880.00 | 187760.00 |
| 4C | 500 mm (for Peak flow) | 1 | No | 187416.00 | 187416.00 |
| 4D | 600 mm (for common header) | 1 | No | 201485.00 | 201485.00 |
| | l no-1.B viii, x, , Pg. No- 153 & 4.vii, x, P. No. 159 | | | | |
| 5 | Kinetic Air Valve 200mm ida- Providing & supplying Kinetic Air Valves PN 1 as per IS 14845-2000 and MJP's standard specifications double orifice type combined with isolating sluice valve, mounted in horizontal position and operated by wheel gearing, small orifice elastic ball resting on gun metal orifice nipple, large orifice valcanite ball seating on moulded seat ring, inlet face and drilled, including all taxes (central and local), insurance third party inspection charges, loading, unloading, transportation up to departmental stores / site etc | | No. | 31679.00 | 31679.00 |
| | As per Rate Analysis | | | | |
| 6 | Pressure Gauge-150mm dia. Providing, installing, testing & commissioning of 150 mm dia Glyscerine filled Pressure Gauges Bourdon type as IS 3624:1987 Mounting - direct bottom, stainless steel body, toughened glass window Range 0 to 15 kg/Cm ² .as per detailed specifications & as directed by Engineer. | 6 | No. | 1796.00 | 10776.00 |
| | Item No-PM 11-4, Pg No-9 | | | | |
| 7 | CIDF Pipes & Specials for Pump Delivery :- Providing and supplying ISI standard CIDF Pipes & specials for pump delivery including all taxes (central & local) etc. complete as directed by Engineer | | | ň | echanical Works |

| Sr. No. | Description | Qty | Unit | Rates | Amount |
|------------|--|-------|------|-----------|-------------|
| | up to 500 mm dia | 15000 | kgs | 67.41 | 1011150.00 |
| | l no- 6.A.i, Pg. No- 67 | | | | |
| 8 | Flanged Joints :- Providig & making flanged joints to the CIDF pipes & specials for pump delivery including all jointing material such as rubber packing, nut bolts & testing | | | | |
| 8A | 300 mm (for 1/2 X DWF) | 45 | No | 1071.00 | 48195.00 |
| 8B | 400 mm (for 1 X DWF) | 45 | No | 1806.00 | 81270.00 |
| 8C | 500 mm (for Peak flow) | 25 | No | 1806.00 | 45150.00 |
| 8D | 600 mm (for common header) | 10 | No | 2220.00 | 22200.00 |
| | l no-4 xi, viii Pg. No-66 | | | | |
| 9A | EOT Crane :- Providing, erecting and commissioning single girder Electrically Operated Rectangular Over head Travelling Crane with 6 m lift complete with wire rope hoist, class II duty, all three motions electrically operated by suitable rating motor IP 54, control panel and down pendant control block. | | No | 812450.00 | 8,12,450.00 |
| | 5 Tonne Capacity.Above 8m Upto 10m Span | | | | |
| | As per Rate Analysis | | | | |
| 9B | DSL System - For D.S.L. (Down Shop Lead) system for above crane | 36 | М | 2500.00 | 90000.00 |
| | MJP E/M DSR 15-16, Note 5, Pg No-20 | | | | |
| 10 | Full bore electromagnetic flowmeter 500 mm dia :- Manufacture, supply and commission Electromagnetic Flow Meter (EMF), for Raw/Pure water with accuracy +/-0.5% of measured value & protection as per given specifications for size 500 mm Including sensor, transmitter surge arrestor, cable GI duct if suitable size for 25 mtrs. sensor, transmitter surge arrestor,built in GSM (without simcard) 25 Mtrs per flow meter, including the pipe cutting, leveling and installation of flow meter in the pipelines with necessary tool tackles, cranes including 36 months guarantee etc complete, as may be required at site & based on technical specifications (Annexure-A) attached | | No | 355035.75 | 314349.00 |
| | As per Rate Analysis | | | | |
| 11 | Structural Steel- Providing Structural steel work in rolled sections like joints, channels, angles, tees ect. As per detailed design and drawing including fix in position without connecting plates, braces ect. And one coat of anticarrossive paint and over it two coats of oil painting, of approved quality and shade, complete. | | MT | 58798.00 | 176394.00 |
| | Section. F, Item no-5, Pg. No-42 + Add 5% Sugarcane Area+ 1% L. W+ 1% L. A | | | | |

| Sr. No. | Description | Qty | Unit | Rates | Amount |
|------------|--|-----|------|------------|------------|
| 12 | RCC M 250- Providing and laying in situ ready mix cement concrete grade of trap/ granite/ quartzite/gneiss metals for RCC work in foundation like raft, grillage, strip foundation and footing for RCC column and steel stanchions including normal dewatering, form work, compaction finshing and curing including tranporting from mixing plant up to distance of 25 Km, pouring the concrte at work site for 1.5 mtrs lift above GL and 5 lift bellow GL etc comlete. (excluding Reinfprcement and Structural steel) | 7 | CUM | 7835.00 | 54845.00 |
| | Sect-G, Item No-10C Pg NO-48 + Add 5% Sugarcane Are+ 1% L. W | | | | |
| 13 | Tor Steel- Providing and fixing in position steel bar reinforcement of varoius diameters for RCC piles, caps ,footings, foundations, slabs, beams, columns, canopies, staircases, newels, chajjas, lintels, pardies, copings, fins, arches, etc as per detailed design, drawing and schedules including cutting, bending , hooking, the bars , binding with wires or tack welding and supporting as requires etc complete (including cost of binding wires) | 1 | MT | 52194.00 | 52194.00 |
| | Sect-G, Item No-8b Pg No-46 + Add 5% Sugarcane Are+ 1% L. W+ 1% L. A | | | | |
| | | | | Total (Rs) | 7479080.00 |

SOLAPUR MUNCIPAL CORPORATION NAME OF SCHEME - UNDERGROUND SEWERAGE PROJECT OF SOLAPUR CITY NAME OF SUB WORKS - ELECTRICAL WORK COST ESTIMATES AT DESAI NAGER ABSTRACT

| SR | Description | Qty | Unit | Rates | Amount |
|----|--|-----|------|-----------|-----------|
| 1 | L.T.Main Control Panel Board :- Designing, Providing , Errecting Main L. T. Cantrol Panel Board comprises of 300 Amp. MCCB for Incoming & other required switchgears as per attached rate analysis. | 1 | No | 296020.06 | 296020.06 |
| 2 | AT Starter :- Providing, Errecting A T Starters for following HP PumpsProviding erecting and giving test and trial of Fully Automatic, Auto Transformer Starter with Air Break Contactor, assembled locally with contactors of approved make in 14 SWG sheet steel fabricated, floor mounted type cubical panel, suitable for operation on 380 - 440 Volts, 3 Phase, 50 Hz, fitted with accessories as below. The incoming and outgoing cable end boxes shall be on either sides of main panel. The cable entries from auto transformer shall be totally enclosed in sheet metal. The starter shall have screened louvers on both sides etc complete. | | | | |
| 2A | AT Starter -For 1DWF-40HP | 2 | No | 89258.00 | 178516.00 |
| 2B | FCMA Strater for 2 DWF-80 HP | 2 | No | 122366.00 | 244732.00 |
| 2C | FCMA Strater-For Peak Flow -150HP | 1 | No | 248139.00 | 248139.00 |
| | As per Rate analysis | | | | |
| 3 | Alluminium Armoured cable :- Providing, erecting Allum. Armoured cable of following sizes 1.1 kV grade etc complete. | | | | |
| ЗA | 3.5 Core 300Sq. MM Aluminium Armoured Cable for Transformer to LT Panel | 50 | М | 1590.00 | 79500.00 |
| 3B | 3.5 core x 95 sqmm 40 HP pumpset from Panel to starter | 50 | М | 578.00 | 28900.00 |
| 3C | 3.5 core x 120 sqmm 80 HP pumpset from Panel to starter | 75 | М | 716.00 | 53700.00 |
| 3D | 3.5 core x 150 sqmm 150 HP pumpset from Panel to starter | 75 | М | 862.00 | 64650.00 |
| 3E | 3.0 core x 95 sqmm for capacitor | 100 | М | 575.00 | 57500.00 |
| 3F | 3 Core 2.5 Sq.mm copper armoured cable for valve actuators | 200 | М | 166.00 | 33200.00 |
| | No.CB5.5 5. 5.6 5.7 4.10 & CB 2-3 P. No.69 Ino CB 4-15 Pno 68 | | | | |
| 4 | Submarsible Copper Cable :- Providing, erecting 1.1 kV grade submersible copper cable for following sizes | | | | |
| 4A | 40 HP pumpset from Starter to Motor | 20 | М | 886.00 | 17720.00 |
| 4B | 80 HP pumpset from Starter to Motor | 20 | М | 2542.00 | 50840.00 |
| 4C | 150 HP pumpset from Starter to Motor | 10 | М | 5307.00 | 53070.00 |
| | As per offer of M/s. Aqua & Kishor Pumps | | - | | |
| 5 | HT CABLE | | | | |
| 5A | 11 kv XLPE cabe 3 core x 120 sqmm | 100 | М | 1133.00 | 113300.00 |
| 5B | Indoor termination kit 11 kv (70-120 sq.mm) | 4 | М | 8223.00 | 32892.00 |
| 5C | Out door termination kit 11 kv (70-120 sq.mm) | 4 | М | 11865.00 | 47460.00 |
| 6 | Pno 74 Ino CB 11-5 Pno 78 Ino CB 25-2 ,3 Item No. 6 :- Cable Trench - Making the trench in hard murum/ tar road of suitable width and depth for laying provided L.T. Cable of 10 sq mm complete as per detailed specifications. | | М | 204.00 | 20400.00 |
| | PWD Ele CSR I.No. 16-1-2 P. No. 160 | | | | |
| 7 | Making Trench- Making the trench in hard murum/ tar road of suitable width and depth for laying provided L.T. Cable of 25 sq mm & above covered with half round hume pipe complete | | М | 328.00 | 32800.00 |
| | PWD Ele CSR I.No. 16-1-4 P. No. 160 | | | | |

| SR | Description | Qty | Unit | Rates | Amount |
|----|--|-----|------|-----------|-----------|
| 8 | Cable Tray - Providing, fabricating and fixing G.I. perforated cable tray for cables as per requirement and specifications - 200 x 20 mm | 100 | М | 170.00 | 17000.00 |
| | MCSR 15-16 I. No. CB 34-2 P. No. 80 | | | | |
| 9 | Capacitor :- Providing, erecting bank of condenser for power factor correction | 130 | kVAR | 349.00 | 45370.00 |
| | MCSR I. No. CP 1 P. No. 57 | | | | |
| 10 | APFC Panel :- Supply & erecting 50 kVAR 440 V three phase 50 cycles thyrester switched Micro APFC passive filter panel consisting of steps of APP type capacitor units confirming to IS: 13585 (part -1) with harmonic filter reactors suitable for 150 KW load as per specifications. | 1 | No | 197185.80 | 197185.80 |
| | PWD Ele CSR 2015-16 I. No.6-7-8 P. No. 105 | | | | |
| 11 | Transformer 200kVA- 11/0.433kV- Suppling & erecting approved make of 200kVA 50 c/s oil immersed and naturally cooled indoor /outdoor type, copper wound transfoemer with delta conn. on HV side & star conn. on LV side with additional neutral brought out in load side, voltage rating 11/0.433 V with tapping of +/- 2.5 % -5 %, continuosly rated for full load with standered accessories complete with test certificate with losses below 580 watts at no load, 4200 watts at full load asp er IS 2026. and approved by engineering incharge. | 1 | No | 336614.00 | 336614.00 |
| | Pno 36 Ino TR 1.4 | | | | |
| 12 | H.T. sub station- Providing, supplying and erecting 11 Kv/ 0.433 Kv H T Substation as per Detailed specification. 6 x 4 sq mtr | 1 | Job | 556322.00 | 556322.00 |
| | As per Rate analysis | | | | |
| 13 | GI Earthing - Supplying & erecting GI earth plate size 60x 60x6 cms complete with all materials, testing & recording results as per specifications . As per IS 3043-1987 & as directed by engineering incharge. | 6 | No | 4323.00 | 25938.00 |
| 14 | PWD DSR 15-16, Page No.106, Item No.9-1-1 Copper Earthing - Supplying & erecting copper earth plate size 30 x 30 x 0.6 cms complete with all materials, testing & recording results as per specifications . As per IS 3043-1987 & as directed by engineering incharge. PWD DSR 15-16, Page No 106 Item No.9-1-2 | 11 | No | 7732.00 | 85052.00 |
| 15 | Earthing Strip :- Supplying and erecting G.I.Strip of required size used for earthing on wall and/or any other purpose with necessary GI clamps fixed on wall painted with bituminous paint in an approved manner with joint required as per specification | 200 | kgs | 199.50 | 39900.00 |
| | PWD DSR 15-16, Page No 85 Item No.9-2-3 | | | | |
| 16 | Tools :- Providing Tools as per Detailed specification enclosed. | 1 | Lot | 66825.00 | 66825.00 |
| | As per RA enclosed | | | | |
| 17 | Indoor Lighting :- The lighting shall comprise fleuorescent - 4 nos Bulkhead fitting - 3 nos D.B 2 nos. Suitable size conductors with fuses, switches including H.G.conduit etc. | | Job | 15048.40 | 15048.40 |
| | As per RA enclosed | | | | |
| 18 | Area Lighting :- The area lighting shall comprise 2 250 w mercury vapour lamps with and mounted on tubular swivelled pole 7 m high including ballast, condensor,fuse reflector,cable and control switch etc out of the two lams.one shall be in the substation yard and the second lamp shall be erected for area lighting. | 1 | Job | 107895.60 | 107895.60 |
| | | | | | |

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| SR | Description | Qty | Unit | Rates | Amount |
|----|---|-----|------|------------|-------------|
| 19 | Diesel Generating Set :- Supplying Errecting diesel generating set 250 KVA capacity with AMF Panel as per Detailed specification with water cooled engine set incluiding inspection charges | | Set | 2005607.10 | 2005607.10 |
| | PWD DSR Pg- 129 Item No. 11-1-19 | | | | |
| 20 | PLC Automation System :- Providing, erecting PLC Automation | 1 | Job | 913076.00 | 913076.00 |
| | As per RA | | | | |
| 21 | MSEDCL Charges | 1 | Job | 5000000.00 | 500000.00 |
| | | | | Total Rs | 11065172.96 |
| | | | | Say Rs. | 11065173.00 |

UIEW

SOLAPUR MUNICIPAL CORPORATION MAHARASHTRA JEEVAN PRADHIKARAN DIVISION SOLAPUR SOLAPUR CITY UNDERGROUND SEWERAGE SCHEME (AMRUT) ABSTRACT

SUB ESTIMATE NO. :- PUMPING MAIN MAIN FROM PUMING STATION TO STP @ DESAI NAGAR

(600 mm Dia. D.I. K-9 Pipe, Length = 150 m)

| lte m | Quar | ntity | ITEM DESCRIPTION | Rate | Unit | Amount Rs. |
|----------|--------|-------|---|----------|------|------------|
| | | | Material : | | | |
| 1 | | | Providing& supplying ISI marked D.I. S&S pipes (push on jointspressure pipes of D. I. of following class & dia. confirming to IS specifications iclusive of the cost of jointing materials (rubber gasket of EPDM quality)including all staturoty duties & taxes levied by Govt. of Maharashtra in all respect, education cess, VAT. third party inspection charges of TPI agecy approved by MJP, including transit, insurance, railway freight, unloading from railway wagon, loading into truck, transport to departmental store / site, unloading, stacking etc. complete as directed by Engineer-in-charge. (IS-IS:1536/2001 for pipes and IS 158/1969 and IS 12820/1989 or latest edition / revision with ammendments for rubber gaskets). | | | |
| | 150.00 | Rmt | 600 mm dia.D.I. K-9 Pipe | 7900.00 | Rmt | 1185000.00 |
| 2 | | | (CSR 2016-17 P.No.63 I.No.3) Providing and supplying ISI standard DI specials & | | | |
| | | | fittings with sealing rubber gasket of SBR complete with cast iron follwer gland & MS nutbolts coated or otherwise protected from rusting and suitable for DI pipes cost of labour , material, and transportation to stores/site loading unloading including all taxes, etc. complete as per IS -9523 For all types of specials, bends, TEEs, etc | | | |
| | 500.00 | Kg | 350 mm Dia.& above | 129.68 | Kg | 64840.00 |
| | | | (CSR 2016-17 P.No.69/70 I.No.10a) | | | |
| 3 | | | Providing & supplying DI fittings with ISI mark mechanical joints confirming to table 12 to 31 of IS Supply of CI mechanical jont double socket with flanged TEEs as dimensionally described in Table 19 of IS 9523/2000 upto latest ammendments including cost of SBR/EPDM gaskets, nut bolts, washers, & ductile iron folloer glands . Fittings should be internally OPC lined & externally metallic zinc coating / zinc rich paint with finishing layer of black bitumen coating including transportation and all taxes etc. complete | | | |
| | 1.00 | No | 600 x600 x 150 mm dia. TEE | 23682.00 | No | 23682.00 |
| | 2.00 | No | (CSR 2015-16. P.No.85 I.No. 13 VIII) 600 mm dia. Tail Piece | 21994.00 | No | 43988.00 |
| | 1.00 | No | 150 mm dia. Tail Piece flanged socket PN 10 (CSR 2016-17 P.No.86 I.No.13 IX) | 2599.00 | No | 2599.00 |
| | 1.00 | No | 600 mm dia. Collars (CSR 2016-17 P.No. 81 I.No.13 I) | 27836.00 | No | 27836.00 |

| lte | Quan | tity | ITEM DESCRIPTION | Rate | Unit | Amount Rs. |
|-----|--------|------|--|-----------|------|------------|
| m | 3.00 | No | 600 mm dia.90 Bend | 46557.00 | No | 139671.00 |
| | 0.00 | | (CSR 2016-17 P.No.82 I.No.13II) | 10001100 | | |
| 4 | | | Providing and supplying at site of ductile iron / spheroidial graphite (S.G.) iron D/F non rising spindle resilient seated glandless sluice valves with handwheel & without bypass arrangement. Valves in accordance with BS 5163 of PN-10/16 rated, with body and bonnet of ductile iron confirming to IS 1865 Gr. 500/7 or Gr. 400/15. Wedge fully encapsulated WRAS approved EPDM rubber (approved for drinking water), Wedge nut of brass, shaft of stainless steel 1.4021/ 1.4104, stem seals min 3 nos. of NBR, internal fasteners of stainless steel A2. Body & Bonnet coated inside & outside with electrostaically applied epoxy powder coated bule colour (suitable for drinking water) as per DIN 30677-2 & GSK guideliness with a coating thickness of min.600 microns. Valves should be full bore & tight shut-off. Flange drilling as per IS 1538 raised face & pressure testing at manufactures works shall be done as per IS 14846. Including all taxes and transportation charges etc. complete. | | | |
| | | | | | | |
| | 1.00 | No | 600 mm dia Sluice Valve PN - 1.0 | 589191.00 | No | 589191.00 |
| | 1.00 | No | 150 mm dia Sluice Valve PN - 1.0 (CSR 2016-17 P.No. 160 I.No. 24) | 22672.00 | No | 22672.00 |
| 5 | | | Providing and supplying at site ductile iron / Spheroidal Graphite (S.G.) iron single / Double chamber tamper proof air valve without isolating sluice valve. Valves in accordance with BSEN 1074-4 of PN 10/16 rated, with body and bonnet of ductile iron confirming to EN 1563/IS 1865 GR. 500/7 or Gr. 400/15 floats, float guide, seat ring of stainless steel 1.4436/1.4306, seat ring gasket of WRAS approved EPDM rubber (suitable for drinking water), internal fasteners of stainless steel A2. Body & Bonnet coated inside & outside with electrostatically applied epoxy powder coated blue colour (suitable for drinking water) as per DIN 30677-2 & GSK guideliness with a coating thickness of min. 600 microns. Flange connections as per IS 1538 raised face & pressure testing at manufactures works shall be done as per IS 14845, Including all taxes and transportation charges etc. complete. | | | |
| | 1.00 | No | Air valve 150 mm dia PN 1.0 | 40993.00 | No | 40993.00 |
| 6 | | | (CSR 2016-17 P.No.161 I.No.25) Providing and supplying ISI standard MS specials of required thickness with 3 coats of approved make epoxy paint (Shalimar,Ciba or Mahindra & Mahindra make) from inside & outside including all taxes (Central & Local), octroi, inspection charges, transportation to stores/site and stacking etc. complete. | | | |
| | 500.00 | Kg | Doble flanged specials of all Diameters | 67.41 | Kg | 33705.00 |
| | | | (CSR 2016-17 P.No.68 I.No.7c) | | | |
| | | | Total Cost Of Material | | | 2174177.00 |

| lte | Quantity | | ITEM DESCRIPTION | | Rate | Unit | Amount Rs. |
|-----|----------|-----|---|---|--------|------|------------|
| m | | , | Labour : | | | | |
| 1 | | | | | | | |
| | | | etc.complete. | | | | |
| | 90.00 | Cum | Lift 0-1.50 m | | 155.10 | Cum | 13959.00 |
| | | | Basic Rate Add 10 %for M.C. | 141.00 14.10 | | | |
| | | | Total | 155.10 | | | |
| | | | (CSR 2016-17,P.35, I.No.1) | | | | |
| 2 | | | Excavation for foundation / pipe trenches murum & boulders, WBM road including the excavated material up to distance of 50 l as below,. stacking and spreading as normal dewatering, preparing, the bed for for and excluding backfilling etc.complete. | removing M. and lift directed, | | | |
| | 90.00 | Cum | Lift 0-1.50 m | | 198.00 | Cum | 17820.00 |
| | | | Basic Rate | 180.00 | | | |
| | | | Add 10 %for M.C. | 18.00 | | | |
| | | | Total [] | 198.00 | | | |
| | | | and old cement & lime masonry foundation road including removing the excavated mate distance of 50 M. and lift as below, stac spreading as directed, normal dewatering, p the bed for foundation and excluding b etc.complete. | erial up to king and preparing, | | | |
| | | | | | | | |
| | 90.00 | Cum | Lift 0-1.50 m | 442.00 | 487.30 | Cum | 43857.00 |
| | | | Basic Rate Add 10 %for M.C. | 443.00 44.30 | | | |
| | | | Total | 487.30 | | | |
| 4 | | | (CSR 2016-17 P.No. 35, I No.5) Filling in plinth and floors murum bedding in with approved murum from excavated mate | rials from | | | |
| | | | foundation 15 cm to 20 cm layers including and compaction complete. | watening | | | |
| | 27.00 | Cum | Murrum available @ site | | 67.20 | Cum | 1814.40 |
| | | | Basic Rate | 64.00 | | | |
| | | | Add 5 %for M.C. | 3.20 | | | |
| | | | Total (CSR 2016-17 P.No.39 I.No.16) | 67.20 | | | |
| 5 | | | Lowering, laying and jointing with SBF gaskets C.I. S/S pipes of various classes MS specials of following diameters in position, grade and allignment as dire Engineer-in-charge including conveyance of from stores to site of work, including cost of materials and rubber rings, labour giving testing, etc.complete. | with CI / n proper ected by materials of jointing | | | |

| lte m | Quan | tity | ITEM DESCRIPTION | | Rate | Unit | Amount Rs |
|----------|--------|---|--|-------------|----------|------|-----------|
| | | | Note :- Only SBR , rubber gaskets to be use | ed. | | | |
| | 150.00 | Rmt | 600 mm dia DI K-9 | | 381.15 | Rmt | 57172.50 |
| | | | Basic Rate | 363.00 | | | |
| | | | Add 5 %for M.C. | 18.15 | | | |
| | | | Total | 381.15 | | | |
| | | | (CSR 2016-17, P. 63, I. 2) | | | | |
| 6 | | | Lowering, laying and jointing in position foll D/F Reflux valves, Butterfly valves and Slu including cost of all labour jointing | | | | |
| | | | cincluding nut bolts and giving satisfactory testing, etc.complete. | / hydraulic | | | |
| | 1.00 | No | 600 mm dia Sluice Valve PN - 1.0 | | 9179.10 | No | 9179.10 |
| | | | Basic Rate | 8742.00 | | | |
| | | | Add 5 %for M.C. | 437.10 | | | |
| | | | Total | 9179.10 | | | |
| | 1.00 | No | 150 mm dia Sluice Valve PN - 1.0 | | 3357.90 | No | 3357.90 |
| | | | Basic Rate | 3198.00 | | | |
| | | | Add 5 %for M.C. | 159.90 | | | |
| | | | Total | 3357.90 | | | |
| | | | (CSR 2016-17 P.No.159 I.No.4) | | | | |
| 7 | | | Lowering and fixing kinetic air valve of follow | wing dia in | | | |
| | | | proper position and alignment as directed | d including | | | |
| | | | cost of conveyance from store to site of | f work, all | | | |
| | | | jointing material, labour and hydraulic te complete. | esting etc. | | | |
| | 1.00 | No | Air valve 150 mm dia PN 1.0 | | 741.30 | No | 741.30 |
| | | | Basic Rate | 706.00 | | | |
| | | | Add 5 %for M.C. | 35.30 | | | |
| | | | Total | 741.30 | | | |
| | | | (CSR 2016-17, P. 164, I. 13c) | | | | |
| 8 | | | Providing and contstructing B.B. maso chamber with 15 cm thick 1:3:6 propor | rtion PCC | | | |
| | | bedding , excluding excavation B.B. masonary C.M. 1:5 proportion with precast steel fibre reinforce concrete frame and covers (S.F.R.C. frame ar | | reinforced | | | |
| | | | covers) etc | | | | |
| | 2.00 | No | Clear Size 1.20 x1.20 x1.50 M. | | 18420.15 | No | 36840.30 |
| | | | Basic Rate | 17543.00 | | | |
| | | | Add 5 %for M.C. | 877.15 | | | |
| | | | Total | 18420.15 | | | |
| | | | (CSR 2016-17 P.No. 271 I.No.3E) | | | | |
| | | | | | | | |

| lte m | Quar | Quantity ITEM DESCRIPTION | | | Rate | Unit | Amount Rs. |
|----------|--------|---------------------------|---|--|----------|------|------------|
| 9 | | | Providing and laying in situ following grad of trap/ granite / quartzite / gneiss foundation and bedding including dewat work, compacting and curing, finishing etc.o | metal for ering form | | | |
| | 5.40 | Cum | PCC M150 | | 4444.65 | Cum | 24001.11 |
| | | | Basic Rate | 4233.00 | | | |
| | | | Add 5 %for M.C. | 211.65 | | | |
| | | | Total (CSR 2016-17 P.No. 43 I.No.1) | 4444.65 | | | |
| 10 | | | Providing and laying in situ cement Concr | ote of tran/ | | | |
| | | | granite / quartzite / gneiss metal for RC foundation like raft, grillage, strip found footing of RCC columns and steel s including normal dewatering, form work, co finishing and curing , etc.complete (batching and mix design for M-600 and M Use of L & T, A.C.C. , Ambuja, Birla Gold, Rajashree, etc.cement is permitted.) (M.S. or Tor reinforcement) M-150 Grade | C work in dation and stancthions ompaction, By weigh I-300 only. Manikgad, | | | |
| | 9.72 | Cum | RCC M150 Grade | | 5373.90 | Cum | 52234.31 |
| | | | Basic Rate | 5118.00 | | | |
| | | | Add 5 %for M.C. | 255.90 | | | |
| | | | Total (CSR 2016-17 P.No. 43 I.No.2) | 5373.90 | | | |
| 11 | | | reinforcemement of various diameters piles, caps, footings, foundations, slab columns, canopies, staircases, newels lintels, pardies, copings, fins, arches, e detailed designs, drawings,and schedules cutting ,bending, hooking the bars, binding or tack welding and supporting as etc.complete. (including cost of binding wir | s, beams, s, chajjas, tc. as per s, including with wires required, | | | |
| | 0.34 | MT | Tor Steel | | 54803.70 | MT | 18633.26 |
| | | | Basic Rate | 52194.00 | | | |
| | | | Add 5 %for M.C. | 2609.70 54803.70 | | | |
| | | | Total (CSR 2016-17 P.No. 46 I.No.8) | 54603.70 | | | |
| 12 | | | Refilling the trenches with available exca with soft material first over pipeline and material in 15 cm layers with all leads including consolidation, surcharging, etc. c | then hard and lifts | | | |
| | 186.00 | Cum | | | 67.20 | Cum | 12499.20 |
| | | | Basic Rate | 64.00 | | | |
| | | | Add 5 %for M.C. | 3.20 | | | |
| | | | Total (CSR 2016-17 P.No. 38 I.No.15) | 67.20 | | | |
| | | | (USIX 2010-17 F.INU. 30 I.INU. 13) | | | | |

| lte | - | | | | | | |
|-----|------|-------|--|---|--------------|--------|------------|
| m | Quar | ntity | ITEM DESCRIPTION | | Rate Unit | | Amount Rs. |
| 13 | 13 | | Hydraulic testing of C.I./D.I. pipe line to pressure including cost of all materials a and water for testing for specified length cutting, placing end cap making arrang filling safe water using reciprocating ty which should be able to provide spe pressure gauges and other necessary e labour, operation charges, etc. required The rate under this item shall also inclu- retesting, if necessary and reinstating position using water supplied by the conrra | and labour h including gement for pe pumps ecified test quipments, for testing. Ide cost of to original | | | |
| | 0.15 | Km | 600 mm dia DI K-9 | | 42394.80 | Km | 6359.22 |
| | | | Basic Rate | 40376.00 | | | |
| | | | Add 5 %for M.C. | 2018.80 | | | |
| | | | Total | 42394.80 | | | |
| | | | (CSR 2016-17 P.No. I.No. 12) | | | | |
| | | | Total Cost | Of Labour | | | 298468.60 |
| | | | Tota | al Cost Of | Material + L | abour | 2472645.60 |
| | | | | | Total Co | st Rs. | 2472645.60 |
| | | | | | Say Rs.in | Lakhs | 24.73 |
| | | | | | Say in C | Crores | 0.25 |

SOLAPUR MUNICIPAL CORPORATION MAHARASHTRA JEEVAN PRADHIKARAN DIVISION SOLAPUR SOLAPUR CITY UNDERGROUND SEWERAGE SCHEME (AMRUT) MEASUREMENT

SUB ESTIMATE NO. 5 :- PUMPING MAIN MAIN FROM PUMING STATION TO STP @ DESAI NAGAR

| Item | ITEM DESCRIPTION | No | L | в | D/H | Quantity | Total Qty. | Unit |
|----------|---|------|--------|---|-----|----------|---------------------------------------|------|
| No | Material : | | | | | , | · · · · · · · · · · · · · · · · · · · | |
| 1 | Providing& supplying ISI marked D.I. S&S pipes (push on jointspressure pipes of D. I. of following class & dia. confirming to IS specifications iclusive of the cost of jointing materials (rubber gasket of EPDM quality)including all staturoty duties & taxes levied by Govt. of Maharashtra in all respect , education cess, VAT. third party inspection charges of TPI agecy approved by MJP , including transit, insurance, railway freight, unloading from railway wagon, loading into truck, transport to departmental store / site, unloading, stacking etc. complete as directed by Engineer-in-charge. (IS-IS:1536/2001 for pipes and IS 158/1969 and IS 12820/1989 or latest edition / revision with ammendments for rubber gaskets). | | | | | | | |
| <u> </u> | | | | | | | | |
| | 600 mm dia.D.I. K-9 Pipe | 1.00 | 150.00 | | | | 150.00 | Rmt |
| 2 | Providing and supplying ISI standard DI specials & fittings with sealing rubber gasket of SBR complete with cast iron follwer gland & MS nutbolts coated or otherwise protected from rusting and suitable for DI pipes cost of labour , material, and transportation to stores/site loading unloading including all taxes, etc. complete as per IS -9523 For all types of specials, bends, TEEs, etc | | | | | | | |
| | 80 -300 mm Dia. | | | | | | 500.00 | Kg |
| 3 | Providing & supplying DI fittings with ISI mark mechanical joints confirming to table 12 to 31 of IS Supply of CI mechanical jont double socket with flanged TEEs as dimensionally described in Table 19 of IS 9523/2000 upto latest ammendments including cost of SBR/EPDM gaskets, nut bolts, washers, & ductile iron folloer glands . Fittings should be internally OPC lined & externally metallic zinc coating / zinc rich paint with finishing layer of black bitumen coating including transportation and all taxes etc. complete | | | | | | | |
| | 600 x 600 x 150 mm dia. TEE | 1.00 | | | | | 1.00 | No |
| | 600 mm dia. Tail Piece | 2.00 | | | | | 2.00 | No |
| | 150 mm dia. Tail Piece | 1.00 | | | | | 1.00 | No |
| | 600 mm dia. Collars | 1.00 | | | | | 1.00 | No |

| ltem No | ITEM DESCRIPTION | No | L | В | D/H | Quantity | Total Qty. | Unit |
|------------|--|------|--------|------|------|----------|------------|------|
| 6 | Providing and supplying ISI standard MS specials of required thickness with 3 coats of approved make epoxy paint (Shalimar,Ciba or Mahindra & Mahindra make) from inside & | | | | | | | |
| | outside including all taxes (Central & Local), octroi, inspection charges, transportation to stores/site and stacking etc. complete. | | | | | | | |
| | Doble flanged specials of all Diameters | | | | | | 500.00 | Kg |
| | Labour : | | | | | | | |
| 1 | Excavation for foundation / pipe trenches in earth, soils of all types, sand, gravel and soft murum including removing the excavated material up to distance of 50 M. and lift as below,. stacking and spreading as directed, normal dewatering, preparing, the bed for foundation and excluding backfilling etc.complete. | | | | | | | |
| | Lift 0-1.50 m | 1.00 | 150.00 | 1.20 | 0.50 | 90.00 | 90.00 | Cur |
| 2 | Excavation for foundation / pipe trenches in | | | | | Say | 90.00 | Cun |
| | hard murum & boulders , WBM road including removing the excavated material up to distance of 50 M. and lift as below,. stacking and spreading as directed, normal dewatering, preparing, the bed for foundation and excluding backfilling etc.complete. | | | | | | | |
| | Lift 0-1.50 m | 1.00 | 150.00 | 1.20 | 0.50 | 90.00 | 90.00 | Cur |
| | | | | | | Say | 90.00 | Cur |
| 3 | Excavation for foundation / pipe trenches in soft rock and old cement & lime masonry foundation, asphalt road including removing the excavated material up to distance of 50 M. and lift as below, stacking and spreading as directed, normal dewatering, preparing, the bed for foundation and excluding backfilling etc.complete. | | | | | | | |
| | Lift 0-1.50 m | 1.00 | 150.00 | 1.20 | 0.50 | 90.00 | | Cur |
| 4 | Filling in plinth and floors murum bedding in trenches with approved murum from excavated materials from foundation 15 cm to 20 cm layers including watering and compaction complete. | | | | | Say | 90.00 | Cur |
| | Murrum available @ site | 1.00 | 150.00 | 1.20 | 0.15 | 27.00 | 27.00 | Cur |
| | | | 100.00 | | 0.10 | Say | | Cur |

| Item No | ITEM DESCRIPTION | No | L | в | D/H | Quantity | Total Qty. | Uni |
|------------|--|------|--------|------|------|----------|------------|-----|
| 5 | Lowering, laying and jointing with SBR rubber gaskets C.I. S/S pipes of various classes with CI / MS specials of following diameters in proper position, grade and allignment as directed by Engineer-in-charge including conveyance of materials from stores to site of work, including cost of jointing materials and rubber rings, labour giving hydraulic testing, etc.complete. | | | | | | | |
| | Note :- Only SBR , rubber gaskets to be used. | | | | | | | |
| | 600 mm dia DI K-9 | 1.00 | 150.00 | | | | 150.00 | Rn |
| 6 | Lowering, laying and jointing in position following C.I. D/F Reflux valves, Butterfly valves and Sluice valves including cost of all labour jointing material, cincluding nut bolts and giving satisfactory hydraulic testing, etc.complete. | | | | | | | |
| | 600 mm dia; Sluice Valve PN - 1.0 | 1.00 | | | | | 1.00 | N |
| | 150 mm dia Sluice Valve PN - 1.0 | 1.00 | | | | | 1.00 | N |
| / | Lowering and fixing kinetic air valve of following dia in proper position and alignment as directed including cost of conveyance from store to site of work, all jointing material, labour and hydraulic testing etc. complete. | | | | | | | |
| | Kinetic Air valve 150 mm dia PN 1.0 | 1.00 | | | | | 1.00 | N |
| 8 | Providing and contstructing B.B. masonry valve chamber with 15 cm thick 1:3:6 proportion PCC bedding , excluding excavation B.B. masonary in C.M. 1:5 proportion with precast steel fibre reinforced concrete frame and covers (S.F.R.C. frame and covers) etc | | | | | | | |
| | Clear Size 1.20 x1.20 x1.50 M. | 2.00 | | | | | 2.00 | No |
| 9 | Providing and laying in situ following grades of C.C. of trap/ granite / quartzite / gneiss metal for foundation and bedding including dewatering form work, compacting and curing, finishing etc.complete. | | | | | | | |
| | PCC M150 | 3.00 | 5.00 | 1.20 | 0.30 | 5.40 | 5.40 | Cu |
| | | 5.00 | 5.00 | 1.20 | 0.30 | Total | | Cu |

| Item No | ITEM DESCRIPTION | No | L | В | D/H | Quantity | Total Qty. | Uni |
|------------|---|-------|------|------|-------|----------|------------------|------------|
| 10 | Providing and laying in situ cement Concrete | | | | | | | |
| | of trap/ granite / quartzite / gneiss metal for | | | | | | | |
| | RCC work in foundation like raft, grillage, | | | | | | | |
| | strip foundation and footing of RCC columns | | | | | | | |
| | and steel stancthions including normal | | | | | | | |
| | dewatering, form work, compaction, finishing | | | | | | | |
| | and curing , etc.complete (By weigh batching | | | | | | | |
| | and mix design for M-600 and M-300 only. | | | | | | | |
| | Use of L & T, A.C.C. , Ambuja, Birla Gold, | | | | | | | |
| | Manikgad, Rajashree, etc.cement is | | | | | | | |
| | permitted.) (Excluding M.S. or Tor | | | | | | | |
| | reinforcement) M-150 Grade | | | | | | | |
| | remotement) M=150 Grade | | | | | | | |
| | RCC M150 Grade For Thrust Block | 3.00 | 3.00 | 1.20 | 1.20 | 12.96 | | Cur |
| | | -3.00 | 3.00 | 0.60 | 0.60 | -3.24 | | Cur |
| | | | | | | Total | 9.72 | Cur |
| 11 | Providing and fixing in position steel bar | | | | | | | |
| | reinforcemement of various diameters for | | | | | | | |
| | RCC piles, caps, footings, foundations, slabs, | | | | | | | |
| | beams, columns, canopies, staircases, | | | | | | | |
| | newels, chajjas, lintels, pardies, copings, fins, | | | | | | | |
| | arches, etc. as per detailed designs, | | | | | | | |
| | drawings, and schedules, including cutting | | | | | | | |
| | ,bending, hooking the bars, binding with wires | | | | | | | |
| | or tack welding and supporting as required, | | | | | | | |
| | etc.complete. (including cost of binding wire.) | | | | | | | |
| | Tor Steel 5kg/sqm surface Area | 3.00 | 3.00 | 1.50 | 25.00 | 337.50 | 0.34 | MT |
| | | | | | | Say | 0.34 | MT |
| 12 | Refilling the trenches with available | | | | | | | |
| | excavated stuff with soft material first over | | | | | | | |
| | pipeline and then hard material in 15 cm | | | | | | | |
| | layers with all leads and lifts including | | | | | | | |
| | consolidation, surcharging, etc. complete. | | | | | | | |
| | Qty Of Excavation | | | | | | 270.00 | Cun |
| | Deduction | | | | | | | Cun |
| | Murrum Bedding | | | | | | 27.00 | Cun |
| | Concrete | | | | | | 15.12 | Cun |
| | Pipe Volume | | | | | | 42.39 | Cun |
| | Net Quantity | | | | | Say | 185.49 186.00 | Cur Cur |
| 13 | Hydraulic testing of C.I./D.I. pipe line to | | | | | Jay | 100.00 | Cur |
| 10 | specified pressure etc complete | | | | | | | 1 |
| | 600 mm dia DI K-9 | | 0.15 | + | | | 0.15 | Km |

SOLAPUR MUNICIPAL CORPORATION MAHARASHTRA JEEVAN PRADHIKARAN DIVISION SOLAPUR SOLAPUR CITY UNDERGROUND SEWERAGE SCHEME (AMRUT) NAME OF SUBWORK: STP Cap. 20 MLD FOR ZONE IX @ DESAI NAGAR

ABSTRACT

| Item No | Quant | ity | ITEM DESCRIPTION | Rate | Unit | Amount Rs. |
|------------|-------|-----|---|-------------|------|-------------|
| 1 | | | STP Cap. 20 MLD @ Desai Nagar | | | |
| 1 | | | STP Cap. 20 MLD @ Desai Nagar Designing, providing, constructing, hydraulic testing, commissioning and giving satisfactory trials of STP based on MMBR/FAB (based on technologies providing attached growth on plastic meddi kept suspended in the waste water due to low density of plastic and provided with compressed air for aeration with very hight MLSS of greater than 15000 mg/lit) technology consisting of Inlet Chamber, Screen Chamber, Detritus Tanks, Distribution Chamber and Biological CASP Basins, Sludge Sump, Chlorine Contact Tank, Chlorinator Room/Shed, Sludge Centrifuge necessary piping work with required valves, gates, drains, pathways Administration Block cum Laboratory, Laboratory | | | |
| | | | Equipments, Tools and Plants, Spare Parts, etc. complete as turnkey job with all involved civil, electrical and mechanical works inclusive of following items, units as per detailed specification for civil, electrical and mechanical components with all duties and taxes, etc. complete to achieve BOD < 5 ppm, COD < 100 ppm, TSS < 10 ppm, to get recyclable quality of water for industrial / agricultural purposes. (In Case Cyclic activated sludge plant is designed for N, P outlet parameters shall also include TN < 10 ppm, Nh3N < 2 ppm and TP < 1 ppm) | | | |
| | | | UNITS INCLUDED | | | |
| | | | 1. Inlet Chamber | | | |
| | | | 2. Screen Chamber | | | |
| | | | 3. Detritus Tank 4. CASP Basins | | | |
| | | | | | | |
| | | | Chlorine Contact Tank Chlorinator and Chlorinator Room / Tonner Room | | | |
| | | | | | | |
| | | | 7. Sludge Sump | | | |
| | | | 8. Sludge Centrifuge Platform with Centrifuges 9. Outfall Sewer | | | |
| | | | | | | |
| | | | 10. Piping Work in CI-LA class including Sluice Valves, | | | |
| | | | 11. Administrative Building cum Laboratory (G+1) | | | |
| | | | NOTES | | | |
| | | | These Rates are for Civil Works, in M- 30 grade RCC. | | | |
| | | | Water Table is considered at 5 m below ground level. | | | |
| | | | Soil bearing capacity considered as 20 T/m ² at 1.5 m below ground level. | | | |
| | | | All civil items, electrical, piping, valves, pumps, motors, blowers, etc. Are considered as per MJP Schedule of Rates. | | | |
| | | | These crates includes - Providing and Applying of Elastomeric (450% Elongation) thermoplastic, fire retardant, Coatingskin tensile strength 18 to 21 kg/cm2, antifungalantibacterial, anticorrosive,graft, co polymer coating on smooth plastered surface 100 micron dyu film thiclness of self bonding with plasterd surface and 100 micron of top coat for STP as directed by Engineer-in-charge. | | | |
| | 1.00 | No | STP Cap. 20 MLD - MMBR | 99036000.00 | No | 99036000.00 |
| | | | | | | |
| | | | MMBR 943.20 | | | |
| | | | MJP DSR 2016-17, P. No.247-253, I. No. 4D | | | |
| | | | Add 5 % for Municipal Corporation Area 47.16 | | | |
| | | | Net Cost 990.36 | | | |

| 2 | | | | | | | UIEV |
|------------|--------|------|--|--------------|----------|----------|--------------|
| ltem No | Quan | tity | ITEM DESCRIPTION | | Rate | Unit | Amount Rs. |
| | | | NOTE :- The Agency to give performance guarant | tee for the | | | |
| | | | efflunt quality as per pollution control board no | | | | |
| | | | directed by Engineer-in-charge at all the tim | • | | | |
| | | | designs shall be submitted to the competant au | ithority for | | | |
| | | | the approval prior to commencement of work.) | | | | |
| 2 | | | Providing and erecting chain link fencing 1.6 M. h G.I. chain link of size 50 x 50 mm 8 guage thick | - | | | |
| | | | wall Compund wall all around the STP as di | | | | |
| | | | Engineer-in-charge | | | | |
| | | | Plot Area = 100 M X 200 M = 20000 sqm, Total | Length = | | | |
| | | | 100 * 2+ 200*2 =600 Rmt - Gate Length of 5 | - | | | |
| | 590.00 | Rmt | =590 M Compund wall | _ | 4938.15 | Rmt | 2913508.50 |
| | | | As Per Rate Analysis | | - | | |
| 3 | | | Providing and fixing mild steel grill gate with a | angle iron | | | |
| | | | frame 65 mm x 65 mm x 10 mm with iror | n bars at | | | |
| | | | 150mm.C/C and diagonal flats as per the detaile | Ŭ, | | | |
| | | | including hinges, pivot blocks locking arrangemer | | | | |
| | | | riveting and oil painting of three coats of approv | | | | |
| | | | Weight of gate 35 Kg/smt. Spec. No.: Bd.W.6 | Page No. | | | |
| | 24.00 | Sqm | | | 1878.45 | Sqm | 45082.80 |
| | | | Gate Size 4.0 m X 3.0 M | | | | |
| | | | Basic Rate | 1789.00 | | | |
| | | | Add 5 % for M.C. | 89.45 | | | |
| | | | Total PWD DSR 17-18, I. No. 5 / 21 BDW 6, Pg. No. 179 | 1878.45 | | | |
| 4 | | | Providing and fixing 50 mm. dia. medium clas | s G L nine | | | |
| 4 | | | gate with wicket gate of approved drawing with all | | | | |
| | | | fittings in two leaves with strong hold fast embedd | | | | |
| | | | block at top & bottom with locking arrangement | | | | |
| | | | cutting, bending, making holes and with one coat | of primer | | | |
| | | | complete. Spec. No.: As directed by Engineer in c | harge. | | | |
| | 2.00 | Sqm | | | 4042.50 | Sqm | 8085.00 |
| | | | Gate Size 1.0 m X 2.0 M | | | | |
| | | | Basic Rate | 3850.00 | | | |
| | | | Add 5 % for M.C. | 192.50 | | | |
| | | | Total | 4042.50 | | | |
| | | | PWD DSR 17-18, I. No. 5 / 3 BDC, Pg. No. 24 | | | | |
| 5 | | | For Automation of STP | | | Job | 2300000.00 |
| | | | | | Total Re | 5. | 104302676.30 |
| | | | | • | | Say Rs. | 104302677.00 |
| | | | | | | . Lakhs | 104302677.00 |
| | | | | | | s. Crore | 10.43 |
| | | | | | | | |

| Cyclic Activated Sludge Proces | s SBR | Modernised Sewage Treatmen | t Plant | Moving Media Bio Reactor Technolog (MMBR) | y |
|--------------------------------|-------|-------------------------------|---------|--|--------|
| Basic Rate for 20 MLD in Lakhs | | Cost of 20 MLD Plant in Lakhs | | Basic Rate for 20 MLD in Lakhs | 47.16 |
| Total Cost for 20.0 MLD STP | 0.00 | Total Cost for 20.0 MLD STP | 0.00 | Total Cost for 20.0 MLD STP | 943.20 |
| *All rates in Lakhs | | | | | |
| | | | | | |

SOLAPUR MUNICIPAL CORPORATION MAHARASHTRA JEEVAN PRADHIKARAN DIVISION SOLAPUR SOLAPUR CITY UNDERGROUND SEWERAGE SCHEME (AMRUT) ABSTRACT

SUB ESTIMATE NO. 14 A :- SUMP CAP. 20 LAKH LIT. & PUMP HPUSE @ DESAI NAGAR STP CAMPUS

| Qty | Unit | ITEM DESCRIPTION | Rate | Per | |
|---------|------|--|------------|-----|------------|
| | | | | | (Rs. Ps.) |
| (A) SI | | Designing (seathetically) and constructing DCC | | | |
| | | Designing (aesthetically), and constructing RCC | | | |
| | | ground service reservoirs/RCC sumps in M-300 mix of required capacity including excavation in all types | | | |
| | | of strata, foundation concrete, container walls, bottom | | | |
| | | slab tob RCC roof slab/ or dome, 20 mm thick cement | | | |
| | | plaster with water proffing compound in CM 1:3 | | | |
| | | proportin to inside face of the container, including | | | |
| | | epoxy paint from inside including refilling and | | | |
| | | disposing of surplus stuff within lead of 50 M, all | | | |
| | | labour and material charges, for laying and jointing of | | | |
| | | pipe assembly for inlet, outlet washout, over flow and | | | |
| | | bye-pass arrangement consisting of C.I. M.S. D/F. | | | |
| | | pipes, specials and valves of given diameters, | | | |
| | | providing and fixing accessories such as S.S.ladder | | | |
| | | inside and outside, C.I. Manhole frame and cover, | | | |
| | | water top slab, B.B. masonry chamber for all valves, | | | |
| | | ventilating shafts, including giving satisfactory | | | |
| | | hydraulic test and water tightness test as per IS code | | | |
| | | and providing three coats of acrylic emulsion with | | | |
| | | silicon additives paint to all expose surface of | | | |
| | | structure including roof surface etc. complete as per | | | |
| | | design data, Anti-termite treatment shall be given for | | | |
| | | underground portion of the structure.criteria, | | | |
| | | obligatory requirements and detailed specifications. | | | |
| | | (CSR 15-16 P.No.255, 256, 257, I.No.1) | | | |
| | | Sump capacity - 20 Lakh Lit | | | |
| | | Basic Rate for 15 Lakh Lit | 5005671.00 | | |
| | | Add Rs. 1.77/Lit | 885000.00 | | |
| | | Total | 5890671.00 | | |
| | | Add 10 % for Overhead Pumphouse | 589067.10 | | |
| | | Total | 6479738.10 | | |
| | | Add 5% For MC Area , | 323986.91 | | |
| | | dd 1% Labour Welfare cess on (40% of 4847388.70) | 25918.95 | L | |
| 1.00 | No | Total | 6829643.96 | No | 6829643.96 |

| Qty | Unit | ITEM DESCRIPTION | Rate | Per | AMOUNT (Rs. Ps.) |
|----------------|-------|---|---------|-----|---------------------|
| (B) PU | MPHO | USE | | | |
| <u>(B) PO</u> | | Designing, Providing and constructing pump house of required size and shape over sump well with RCC framed structure of M-200, colums, beams. Corbles for gantry griders, lintels with band, chajjas, roof slab as per requirement and design. The height of pump house shall vary depending upon HP of pump motors (mininum 5.5 m) . Providing and constructing brick masonry walls of 23 cm in CM 1:6 proportion with 1:3 cement plaster 20 mm thick from inside and outside, rolling shutter (65 qm size) out of 16 gauge M.S.flat fully glazed steel windows minimum 20% of floor area, RCC, M-150 gallery Im wide around pump house with GI railing in 3 rows including 3 coats of oil paint to windows and rolling shutter, two coats of snowcem paint from outside, 2 coats of washable oil bound distemper from inside and white wash to | | | |
| | | ceilling, etc. complete as directed. | | | |
| | | Item No. 1 | | | |
| | | Providing II nd class B.B. masonry with conventional bricks in C.M. 1:6 of following proportion in superstructure including striking out and raking out joints, watering and scaffolding, etc.complete | | | |
| | - | Basic Rate | 4950.00 | | |
| | | Add 5 % For M.C. | 247.50 | | |
| 17.50 |) Cum | | 5197.50 | Cum | 90971.84 |
| | | (PWD CSR 16-17 P.No. 71 I.No.4) Item No. 2 | | | |
| | | Providing and casting in situ cement Concrete of trap/ granite / quartzite / gneiss metal for RC.C works as per detailed drawings and design as directed by Engineer-in-Charge including normal dewatering, centering form work, compaction, finishing the formed surfaces with C.M. 1:3 of sufficient minimum thickness to give a smooth and even surface wherever necessary or roughening if special finish is to be provided and curing, etc.complete.(By weigh batching and mix design for M-250 and M-300 only. Use of L & T, A.C.C. , Ambuja, Birla Gold, Manikgad, Rajashree, etc.cement is permitted.) (Excluding M.S. or Tor reinforcement) | | | |
| | | A) RCC Footing | | | |
| | | MJP 15-16, , Item No. 2, Pg-43,44 | | | |
| | | Basic Rate | 5906.00 | | |
| | | Add 5 %+1% for M.C.&L.W. | 354.36 | | |
| |) Cum | | 6260.36 | Cum | 50708.92 |
| 8.10 | | ID) DCC Columno | | | |
| 8.10 | | B) RCC Columns | | ++ | |
| 8.10 | | MJP 15-16, , Item No. 3, Pg-43,44 | 7550.00 | | |
| 8.10 | | MJP 15-16, , Item No. 3, Pg-43,44 Basic Rate | | | |
| | | MJP 15-16, , Item No. 3, Pg-43,44 Basic Rate Add 5 %+1% for M.C.&L.W. | 453.00 | | 102710 00 |
| | S Cum | MJP 15-16, , Item No. 3, Pg-43,44 Basic Rate Add 5 %+1% for M.C.&L.W. Total | | Cum | 103718.88 |
| | Cum | MJP 15-16, , Item No. 3, Pg-43,44 Basic Rate Add 5 %+1% for M.C.&L.W. | 453.00 | Cum | 103718.88 |

| Qty | Unit | ITEM DESCRIPTION | Rate | Per | AMOUNT (Rs. Ps.) | | |
|-------|----------|--|----------|-----|---|--|--|
| | | Add 5 %+1% for M.C.&L.W. | 446.28 | | | | |
| 17.28 | 3 Cum | Total | 7884.28 | Cum | 136240.36 | | |
| | | D) RCC Landing/Steps | | | (Rs. Ps.) Cum 136240.36 Cum 3685.80 Cum 18766.60 Cum 10037.27 | | |
| | | MJP 15-16, , Item No. 5, Pg-43,44 | | | | | |
| | | Basic Rate | 8049.00 | | | | |
| | | Add 5 %+1% for M.C.&L.W. | 482.94 | | | | |
| 0.43 | 3 Cum | Total | 8531.94 | Cum | 3685.80 | | |
| | | E) RCC Lintels | | | | | |
| | | MJP 15-16, , Item No. 4, Pg-43,44 | | | | | |
| | | Basic Rate | 7438.00 | | | | |
| | | Add 5 %+1% for M.C.&L.W. | 446.28 | | | | |
| | | Total | 7884.28 | | | | |
| 2.48 | 3 Cum | | 7554.99 | Cum | 18766.60 | | |
| | | F) RCC Chajjas | | | | | |
| | | MJP 15-16, , Item No. 6, Pg-45 | | | | | |
| | | Basic Rate | 8161.00 | | | | |
| | | Add 5 %+1% for M.C.&L.W. | 489.66 | | | | |
| | | Total | 8650.66 | | | | |
| 1.20 |) Cum | | 8364.39 | Cum | 10037.27 | | |
| | | G) RCC Slab | | | | | |
| | | MJP 15-16, , Item No. 5, Pg-43,44 | | | | | |
| | | Basic Rate | 8049.00 | | | | |
| | | Add 5 %+1% for M.C.&L.W. | 482.94 | | | | |
| 13.55 | 5 Cum | Total | 8531.94 | Cum | 115582.53 | | |
| | | Item No. 3 | | | | | |
| | | Providing and fixing in position steel bar | | | | | |
| | | reinforcement of various diameters for RCC piles, | | | | | |
| | | caps, footings, foundations, lintels, parodies, copings, | | | | | |
| | | fins, arches, etc. as per detailed designs, drawings | | | | | |
| | | and schedules; including cutting, bending, hooking | | | | | |
| | | the bars, binding with wires or tack welding and | | | | | |
| | | supporting as required, etc. complete. | | | | | |
| | | (including cost of binding wire). | | | | | |
| | | (including cost of binding wire). | | | | | |
| | | MJP 15-16, Section G, Item No. 8 b, Pg-46 | | | | | |
| | | Basic Rate | 50187.00 | | | | |
| | <u> </u> | Add 5 %+1% for M.C.&L.W. | 3011.22 | + | | | |
| 4.4(| D MT | Total | 53198.22 | MT | 233872.07 | | |

| Qty | Unit | ITEM DESCRIPTION | Rate | Per | AMOUNT (Rs. Ps.) |
|-----|--------|---|---|-----|---------------------|
| | | Item No.4 (A) | | | (|
| | | Providing and fixing rolling shutter fabricated from | | | |
| | | steel laths of minimum thickness 0.9 mm with lock | | | |
| | | | | | |
| | | • | | | |
| | | mm angle section fitted with sliding bolts and handles | | | |
| | | for both sides, deep M.S. channel section of depth | | | |
| | | and thickness not less than 65 mm and 3.15 mm | | | |
| | | respectively with hold fast arrangements, M.S. | | | |
| | | Bracket plate 300 x 300 x 3.15 mm minimum size and | | | |
| | | shape with square bar, suspension shaft of minimum | | | |
| | | 32 mm diameter, hood cover of M.S. sheet not less | | | |
| | | than 0.9 mm thickness and of any size at top and | | | |
| | | safety devices including mechanical gear operation | | | |
| | | arrangement consisting of worm gear wheels and | | | |
| | | worms of high grade cast iron or mild steel and one | | | |
| | | coat of red lead primer etc. complete. (I.S. 6248- | | | |
| | | 1979) (With mechanical gear) Spec. No. Bd.T. P. No. | | | |
| | | 510 | | | |
| | | | | | |
| | | Basic Rate | 5245.00 | | |
| 6.2 | 25 Sqm | | | | 0.4.400.04 |
| | | | Image: Constraint of the set of the | | 34420.31 |
| | | (PWD CSR 2016-17 P.No.133/134, I.No 21b/18) Item No.4 (B) | | | |
| | | | | | |
| | | | | | |
| | | 1982) Aluminium sliding window of two tracks with | | | |
| | | rectangular pipe having overall dimension 63.50 x | | | |
| | | 38.10 x 1.02 mm at weight 0.547 kg/Rmt. and window | | | |
| | | frame bottom track section 61.85 x 31.75 x 1.20 mm | | | |
| | | at weight 0.695 kg/Rmt. Top and side track section | | | |
| | | 61.85 x 31.75 x 1.30 mm at weight 0.659 kg/Rmt. The | | | |
| | | shutter should be of bearing bottom 40 x 18 x 1.25 | | | |
| | | mm at weight 0.417 kg/Rmt. Inter locking section 40 x | | | |
| | | 18 x 1.10 mm at weight 0.469 kg/Rmt. And handle | | | |
| | | section 40 x 18 x 1.25 mm at weight 0.417 kg/Rmt. | | | |
| | | and top section 40 x 18 x 1.25 mm at weight 0.417 kg/km. | | | |
| | | | | | |
| | | | | | |
| | | Engineer in charge with all necessary Aluminium | | | |
| | | sections fixtures and fastenings such as roller bearing | | | |
| | | in nylon casting and self locking catch fitted in vertical | | | |
| | | section of shutter including 5 mm thick plain glass | | | |
| | | with all required screws and nuts etc, complete. with | | | |
| | | colour Anodising with box Spec. No.: As directed by | | | |
| | | Engineer-in-charge. | | | |
| | | PWD 16-17/ Item No. 31i / 18 BDT / P.No-136 | | | |
| | | | | 1 | |
| | | | 1180 00 | | |
| | | Basic Rate | | | |

| Qty | Unit | ITEM DESCRIPTION | Rate | Per | | | |
|-------|-------|---|--------|--|---|--|--|
| | | Item No. 5 (A) | | | (| | |
| | | Providing cement plaster for following thickness in two | | | | | |
| | | coats in cement mortar in following proportions | | | | | |
| | | without neeru finish to concrete, brick or stone | | | | | |
| | | surfaces in all positions including scaffolding and | | | | | |
| | | curing, etc.complete. | | | | | |
| | | (PWD CSR 16-17 P.No. 86 I.No. 3) | | | | | |
| | | Basic Rate | 272.00 | | | | |
| | | Add 5 % for M.C. | 13.60 | | | | |
| 270.0 | 0 Sqm | Total | 285.60 | Sqm | 77112.00 | | |
| | | Item No. 5 (B) | | | | | |
| | | Providing sand faced plaster externally in cement | | | | | |
| | | morter using approved screened sand in all positions | | | | | |
| | | including base coat of 15 mm th in cement morter 1:4 | | | | | |
| | | using water proofing compound @ 1 Kg per cement | | | | | |
| | | bag curing the same for not less than 2 days & | | | | | |
| | | keeping the surface of base coat rough to recieve the | | | | | |
| | | sand faced treatment of 6 to 8 mm th in cement | | | | | |
| | | morter 1:4 finishing the surface by taking out grains & | | | | | |
| | | curing for 14 days, scaffolding etc comp.as directed. | | | | | |
| | | curing for 14 days, scarolding etc comp.as directed. | | | | | |
| | | (PWD CSR 16-17 P.No. 87 I.No. 5) | | | | | |
| | | Basic Rate | 398.00 | | | | |
| | | Add 5 % for M.C. | 19.90 | | | | |
| 228.0 | 0 Sqm | Total | 417.90 | Sqm | AMOUNT (Rs. Ps.) 77112.00 95281.20 95281.20 | | |
| | | Item No. 6 | | | | | |
| | | Providing and laying machine cut machine Polished | | | | | |
| | | Kota stone flooring 25mm to 30mm thick and required | | | | | |
| | | width in plain/ diamond pattern on bed of 1:6 Cement | | | | | |
| | | mortar including cement float, filling joints with neat | | | | | |
| | | cement slurry, curing, polishing and cleaning | | | | | |
| | | complete. | | | | | |
| | | Spec. No.: Bd.M.3 Page No. 380 | | | | | |
| | _ | | | _ | | | |
| | | PWD DSR, 2016-17, BD -M, Item No 4/12BDM 3B/ | | | | | |
| | | Basic Rate | 888.00 | | | | |
| | | Add 5 % for M.C. | 44.40 | 30 Sqm 77112.00 60 Sqm 77112.00 70 The second | | | |
| 80.1 | 0 Sqm | Total | 932.40 | Sqm | 74685.24 | | |
| | | Item No. 7 | | | | | |
| | | Providing & applying washable oil-bound distemper of | | | | | |
| | | approved colour and shade to old & new surfaces in | | | | | |
| | | two coats including scaffolding, preparing the | | | | | |
| | | surfaces. (excluding the primer coat.) complete. Spec. | | | | | |
| | | No.: Bd.P.5 Page No. 413 | | | | | |
| | | (PWD CSR 2016-17 P.No.111 I.No.5b/15) | | | | | |
| | | Basic Rate | 36.00 | | | | |
| | | Add 5 % for M.C. | 1.80 | | | | |
| 070.0 | 0 Sqm | Total | 37.80 | Sqm | 10206.00 | | |

| Qty | Unit | ITEM DESCRIPTION | Rate | Per | | | |
|--------|-------|--|---------------|------|---|--|--|
| | | Item No. 8 | | | | | |
| | | Providing and applying two coats of appex /Ace | | | | | |
| | | exterior paint of approved manufacture and of | | | | | |
| | | approved color to the plastered surfaces including | | | | | |
| | | cleaning, prepairing the plaster surface applying | | | | | |
| | | primer coat, scaffolding if necessary and watering the | | | | | |
| | | surface for two days complete. | | | | | |
| | | (PWD CSR 2016-17 P.No.108 I.No.17/14) | | | | | |
| | | Basic Rate | 160.00 | | | | |
| | | Add 5 % for M.C. | 8.00 | | (Rs. Ps.) | | |
| 228.00 |) Sqm | Total | 168.00 | Sqm | 38304.00 | | |
| | | Item No. 9 :- | | | | | |
| | | Providing and fixing 900mm high S.S.304 Grade | | | | | |
| | | Stainless steel railing with 40mm diameter and 1.5mm | | | | | |
| | | thick at top,40mm diameter and 1.5mm thick vertical | | | | | |
| | | supports spaced at 1.5m center to center and 8mm | | | | | |
| | | thick toughened glass including fabricating ,fixtures, | | | | | |
| | | errecting, necessary welding, grinding, finishing, | | | | | |
| | | buffing to stainless steel pipe | | | | | |
| | | etc. complete.** | | | | | |
| | | Spec. No.: As directed by Engineer Incharge | | | | | |
| | | PWD 16-17, BDV, Item No.59/21, Pg. No. 188 | | | 210525.00 1378206.0 [°] 8207849.9 | | |
| | | Basic Rate | | | (Rs. Ps.) (Rs. Ps.) 38304.00 38304.00 38304.00 1378206.0 8207849.9 82.08 | | |
| | | Add 5 % for M.C. | 200.50 | | | | |
| 50.00 | RM | Total | 4210.50 | RM | 210525.00 | | |
| | | Total | Cost of Pumph | ouse | 1378206.0 ⁻ | | |
| | | Total Cost of Sump + Pumphouse (A+B) | | | | | |
| | 1 | | Say Rs. | | 82.08 | | |
| | 1 | | Say in Croe | es. | 0.82 | | |

SOLAPUR MUNICIPAL CORPORATION MAHARASHTRA JEEVAN PRADHIKARAN DIVISION SOLAPUR SOLAPUR CITY UNDERGROUND SEWERAGE SCHEME (AMRUT) SUB ESTIMATE NO. 14 A :- SUMP CAP. 20 LAKH LIT. & PUMP HPUSE @ DESAI NAGAR STP CAMPUS

MEASUREMENTS

| MEASUREMENT | No. | I | В | D/H | Qty | Unit |
|--|------|----------|------|-------|---------|------|
| (A) SUMP | 110. | L | U | | પ્લાપ્ર | |
| Designing (aesthetically), and constructing RCC ground | | | | | | |
| service reservoirs/RCC sumps in M-300 mix of required | | | | | | |
| capacity including excavation in all types of strata, | | | | | | |
| foundation concrete, container walls, bottom slab tob | | | | | | |
| RCC roof slab/ or dome, 20 mm thick cement plaster with | | | | | | |
| water proffing compound in CM 1:3 proportin to inside | | | | | | |
| face of the container, including epoxy paint from inside | | | | | | |
| including refilling and disposing of surplus stuff within | | | | | | |
| lead of 50 M, all labour and material charges, for laying | | | | | | |
| and jointing of pipe assembly for inlet, outlet washout, | | | | | | |
| over flow and bye-pass arrangement consisting of C.I. | | | | | | |
| M.S. D/F. pipes, specials and valves of given diameters, | | | | | | |
| providing and fixing accessories such as M.S. ladder | | | | | | |
| inside and outside, C.I. Manhole frame and cover, water | | | | | | |
| top slab, B.B. masonry chamber for all valves, ventilating | | | | | | |
| shafts, including giving satisfactory hydraulic test and | | | | | | |
| water tightness test as per IS code and providing three | | | | | | |
| coats of cement paints to all expose surface of structure | | | | | | |
| including roof surface etc. complete as per design data, | | | | | | |
| Anti-termite treatment shall be given for underground | | | | | | |
| portion of the structure.criteria, obligatory requirements | | | | | | |
| and detailed specifications. | | | | | | |
| | | | | | | |
| Cap 20 Lakh Lit | 1 | | | | 1 | No |
| (B) PUMPHOUSE | - 1 | | | | • | 110 |
| Designing, Providing and constructing pump house of | | | | | | |
| required size and shape over sump well with RCC | | | | | | |
| framed structure of M-200, colums, beams. Corbles for | | | | | | |
| gantry griders, lintels with band, chajjas, roof slab as per | | | | | | |
| requirement and design. The height of pump house shall | | | | | | |
| vary depending upon HP of pump motors (mininum 5.5 | | | | | | |
| m). Providing and constructing brick masonry walls of 23 | | | | | | |
| cm in CM 1:6 proportion with 1:3 cement plaster 20 mm | | | | | | |
| thick from inside and outside, rolling shutter (65 qm size) | | | | | | |
| out of 16 gauge M.S.flat fully glazed steel windows | | | | | | |
| minimum 20% of floor area, RCC, M-150 gallery Im wide | | | | | | |
| around pump house with GI railing in 3 rows including 3 | | | | | | |
| coats of oil paint to windows and rolling shutter, two | | | | | | |
| coats of snowcem paint from outside, 2 coats of | | | | | | |
| washable oil bound distemper from inside and white | | | | | | |
| wash to ceilling, etc. complete as directed. | | | | | | |
| | | | | | | |
| Size of Pumphouse 12.60m x 6.0 m | | | | | | |
| | | | | | | |
| Item No. 1 | | | | | | |
| Providing 2 nd class Burnt Brick masonary with | | | | | | |
| conventional type bricks in CM 1:6 in Superstructure | | | | | | |
| including striking joints, racking out joints, watering and | | | | | | |
| scaffolding complete. | | | | | | |
| | 2 | 12 | 0.23 | 4.70 | 12.97 | Cum |
| | 2 | 6 | 0.23 | 4.70 | 6.49 | Cum |
| | ۷ | 0 | 0.20 | Total | 19.46 | Cum |
| | | | | TUIAI | 19.40 | Cull |

| ITEM DESCRIPTION | No. | L | В | D/H | Qty | Unit |
|--|--------|-------|---------|-------|----------|------|
| Deduction for Doors & windows | 1.00 | 2.50 | 0.23 | 2.50 | 1.44 | Cum |
| | 7.00 | 1.50 | 0.23 | 1.50 | 0.52 | Cum |
| | | | | Total | 1.96 | Cum |
| Net Quantity | | | | | 17.50 | Cum |
| Item No. 2 | | | | | | |
| Providing and laying in situ cement concrete 1:1 ¹ /2:3 of trap/granite/quartzite/gneiss metal for RCC structures as per detailed designs and drawings or as directed including centering, form work, compaction and roughening the surface if special finish is to be provided (Excluding reinforcement & structural steel) complete. | | | | | | |
| A) RCC Footing | 8 | 1.5 | 1.5 | 0.45 | 8.10 | Cum |
| B) RCC Columns | 8 | 0.3 | 0.6 | 9.00 | 12.96 | Cum |
| () DCC Dlinth Booms/ Boot Booms | 4 | 12 | 0.3 | 0.60 | 8.64 | Cum |
| C) RCC Plinth Beams/ Roof Beams | 4 8 | 6 | 0.3 | 0.60 | <u> </u> | Cum |
| | 0 | 0 | 0.3 | Total | 17.28 | Cum |
| D) RCC Landing/Steps | 2 | 1.2 | 1.2 | 0.15 | 0.43 | Cum |
| D) RCC Landing/Steps | 2 | 1.2 | 1.2 | 0.15 | 0.43 | Cum |
| E) RCC Lintels | 2 | 12 | 0.23 | 0.30 | 1.66 | Cum |
| | 2 | 6 | 0.23 | 0.30 | 0.83 | Cum |
| | | 0 | 0.20 | Total | 2.48 | Cum |
| F) RCC Chajjas | 8 | 2 | 0.75 | 0.10 | 1.20 | Cum |
| | | | | | | |
| G) RCC Slab | 1 | 13.36 | 6.76 | 0.15 | 13.55 | Cum |
| | | | | | | |
| Total Concrete Qty. Item No. 3 | | | | | 56.00 | Cum |
| Providing and fixing in position HYSD bar reinforcement of various diameters for R.C.C. pils caps, footings, foundations, slabs, beams, columns, canopies, staircase, newels, chajjas, lintels, pardis, copings, fins, arches etc. as per detailed designs, drawings and schedules including cutting, bending, hooking the bars, binding with wires or tack welding and supporting as required complete. | | | | | | |
| 1% of Concrete Qty | 0.01 | 56.00 | 7850.00 | 1000 | 4.40 | MT |
| | | | | | | |
| Item No. 4A Providing and fixing rolling shutter fabricated from steel laths of minimum thickness 0.9 mm with lock plate of 3.15 mm thickness reinforced with 35 x 35 x 5 mm angle section fitted with sliding bolts and handles for both sides, deep M.S. channel section of depth and thickness not less than 65 mm and 3.15 mm respectively with hold fast arrangements, M.S. Bracket plate 300 x 300 x 3.15 mm minimum size and shape with square bar, suspension shaft of minimum 32 mm diameter, hood cover of M.S. sheet not less than 0.9 mm thickness and of any size at top and safety devices including mechanical gear operation arrangement consisting of worm gear wheels and worms of high grade cast iron or mild steel and one coat of red lead primer etc. complete. (I.S. 6248-1979) (With mechanical gear) Spec. No. Bd.T. P. No. 510 | | | | | | |
| Rolling Shutter | 1.00 | 2.50 | | 2.50 | 6.25 | Sqm |
| 1 | I | | | | | 1 |

| ITEM DESCRIPTION | No. | L | В | D/H | Qty | Unit |
|---|------|--------|------|----------------------|------------------|-------------------|
| Item No. 4 B | | | | | | |
| Providing and fixing in position. (as per I.S.1868 / 1982) | | | | | | |
| Aluminium sliding window of two tracks with rectangular | | | | | | |
| pipe having overall dimension 63.50 x 38.10 x 1.02 mm | | | | | | |
| at weight 0.547 kg/Rmt. and window frame bottom track section 61.85 x 31.75 x 1.20 mm at weight 0.695 kg/Rmt. | | | | | | |
| Top and side track section 61.85 x 31.75 x 1.20 mm at weight 0.695 kg/Rm. | | | | | | |
| weight 0.659 kg/Rmt. The shutter should be of bearing | | | | | | |
| bottom 40 x 18 x 1.25 mm at weight 0.417 kg/Rmt. Inter | | | | | | |
| locking section 40 x 18 x 1.10 mm at weight 0.469 | | | | | | |
| kg/Rmt. And handle section 40 x 18 x 1.25 mm at weight | | | | | | |
| 0.417 kg/Rmt. and top section 40 x 18 x 1.25 mm at | | | | | | |
| weight 0.417 kg/Rmt. As per detailed drawings and as | | | | | | |
| directed by Engineer in charge with all necessary | | | | | | |
| Aluminium sections fixtures and fastenings such as roller | | | | | | |
| bearing in nylon casting and self locking catch fitted in | | | | | | |
| vertical section of shutter including 5 mm thick plain | | | | | | |
| glass with all required screws and nuts etc, complete. | | | | | | |
| with colour Anodising with box Spec. No.: As directed by | | | | | | |
| Engineer-in-charge. | | | | | | |
| Window | 7.00 | 1.50 | | 1.50 | 15.75 | Sqm |
| | | | | Total | 15.75 | Sqm |
| | | | | | | |
| Item No. 5 (A) Providing cement plaster 20 mm thick in two coats in | | | | | | |
| CM 1:4 without neeru finish to concrete brick surface in | | | | | | |
| all positions including scaffolding and curing, | | | | | | |
| etc.complete. | | | | | | |
| | 2.0 | 12.60 | | 5 50 | 129.60 | Sam |
| Inside | 2.0 | 6.00 | | 5.50 5.50 | 138.60 66.00 | Sqm Sqm |
| Ceiling | | 6.00 | | 1.00 | 75.60 | Sqm |
| | | | | Total | 280.20 | Sqm |
| Deductions | | | | | | |
| Door | 1.00 | | 0.50 | 2.50 | 3.125 | Sqm |
| Window | 7.00 | 1.50 | 0.50 | 1.50 | 7.875 | Sqm |
| Not Quantitu | | 200.20 | | Total | 11.00 | Sqm |
| Net Quantity | | 280.20 | - | 11.00 Say | 269.20 270.00 | Sqm Sqm |
| Item No. 5 (B) | | | | Jay | 270.00 | Juli |
| Providing snd faced plaster externally in cement mortar | | | | | | |
| using approved screened sand in all positions including | | | | | | |
| base coat of 15mm thick in cement mortar 1:4 using | | | | | | |
| waterproofing compound at 1kg per cement bag curing | | | | | | |
| the same for not less than 2 days and keeping the | | | | | | |
| surface of base coat rough to receive the sand faced | | | | | | |
| treatment of 6 to 8 mm thick in cement mortar in CM 1:4 | | | | | | |
| finishing the surface by taking out grains and curing for | | | | | | |
| 14 days , scaffolding etc. comlete | | | | | | |
| Outside | | 13.06 | | 5.50 | 143.66 | Sqm |
| | 2.0 | 6.46 | 0.75 | 5.50 | 71.06 | Sqm |
| Chajjas | 8.0 | 2.00 | 0.75 | 2.00 Total | 24.00 238.72 | Sqm Sqm |
| Deductions | | | | rolai | 2JU.12 | |
| Door | 1.00 | 2.50 | 0.50 | 2.50 | 3.125 | Sqm |
| Window | | 1.50 | 0.50 | 1.50 | 7.875 | Sqm |
| | | | | Total | 11.00 | Sqm |
| Net Quantity | | 238.72 | - | 11.00 | 227.72 | Sqm |
| | | | | Say | 228.00 | Sqm |

| SMC | | | | | | | |
|-----|------------------|-----|---|---|-----|-----|------|
| | ITEM DESCRIPTION | No. | L | В | D/H | Qty | Unit |
| | | | | | | | |

| ITEM DESCRIPTION | No. | L | В | D/H | Qty | Unit |
|--|------|-------|---|-------|--------|------|
| Item No. 6 | | | | | | |
| Providing and laying Polished Tandur Stone Flooring 25 | | | | | | |
| mm. to 30 mm. thick and of required width in plain / | | | | | | |
| diamond pattern on a bed of CM 1:6 including cement | | | | | | |
| float, filling joints, with neat cement slurry, curing, | | | | | | |
| polishening and cleaning complete. | | | | | | |
| Inside Room | 1.00 | 12.60 | | 6.00 | 75.60 | Sqm |
| Gallery/Steps | | 3.00 | | 1.5 | 4.50 | Sqm |
| | | | | Total | 80.10 | Sqm |
| | | | | | | |
| Item No. 7 | | | | | | |
| Providing & applying washable oil-bound distemper of | | | | | | |
| approved colour and shade to old & new surfaces in two | | | | | | |
| coats including scaffolding, preparing the surfaces. | | | | | | |
| (excluding the primer coat.) complete. Spec. No.: Bd.P.5 | | | | | | |
| Page No. 413 | | | | | | |
| Quantity As Per Internal Plastering | | | | | 270.00 | Sqm |
| | | | | | | |
| Item No. 8 | | | | | | |
| Providing and applying two coats of appex /Ace exterior | | | | | | |
| paint of approved manufacture and of approved color to | | | | | | |
| the plastered surfaces including cleaning, prepairing the | | | | | | |
| plaster surface applying primer coat, scaffolding if | | | | | | |
| necessary and watering the surface for two days | | | | | | |
| complete. | | | | | | |
| Quantity As Per External Plastering | | | | | 228.00 | Sqm |
| · · · · | | | | | | |
| | | | | | | |
| Item No. 9 :- | | | | | | |
| Providing and fixing 900mm high S.S.304 Grade | | | | | | |
| Stainless steel railing with 40mm diameter and 1.5mm | | | | | | |
| thick at top,40mm diameter and 1.5mm thick vertical | | | | | | |
| supports spaced at 1.5m center to center and 8mm thick | | | | | | |
| toughened glass including fabricating ,fixtures, errecting, | | | | | | |
| necessary welding, grinding, finishing, buffing to stainless | | | | | | |
| steel pipe | | | | | | |
| etc. complete.** | | | | | | |
| Spec. No.: As directed by Engineer Incharge | | | | | | |
| | 3.14 | 15.9 | | 1 | 49.96 | Rmt |
| | | | | | 49.96 | Rmt |
| | | | | Say | 50.0 | Rmt |

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SOLAPUR MUNICIPAL CORPORATION MAHARASHTRA JEEVAN PRADHIKARAN DIVISION SOLAPUR SOLAPUR CITY UNDERGROUND SEWERAGE SCHEME (AMRUT) PROPERTY CONNECTION FOR ZONE IX

| | ABSTRACT | | | | | | |
|------------|--|-------------------------------|--|--|----------|-------------|---|
| ltem No | Quantit | у | ITEM DESCRIPTION | | Rate | Unit | Amount Rs. |
| 1 | | | Providing and supplying in standard lengths F (PE) Pipes for non pressure underground de sewerage with smooth internal and corrugate external surface with anti rodent property co ISO-21138-3:2007 with necessary jointing r mechanical connectors, i.e. thread/ insert release coupler joint/ compression fitting join joint, including all taxes (Central and local), tra and freight charges, inspection charge unloading charges, conveyance to the d stores/site and stacking the same in closed protecting from sunrays and rains, etc. complete | rainage and ed (profiled) onforming to material like t joint/quick at or flanged ansportation s, loading/ lepartmental shade duly | | | |
| | H.D.P.E. DWC pipes for Drainage Class SN 8 | | 3 | | | | |
| | 174930.00 | 174930.00 Rmt 150 mm dia.(ID) | | 378.00 | Rmt | 66123540.00 | |
| 2 | | | (CSR 2016-17, P. 132,133 I. 2) Providing, laying & fixing, jointing Supreme 110 mm SN 8 Nu- Drain Upvc pipes or or make, manufacture as per EN 13476 or equiv I.S.15328 with fittings such a bends, tees, or jointing with rubber lubricant including excavation, trench refilling with selective material etc. complete. Spec : As directed by Engineer In Charge | f equivalent valent as per coupler, etc, necessary | | | |
| | | HDPE Pipes - Class SN8 | | | | | |
| ┝──┥ | 699720.00 | Rmt | 110 mm dia.(OD) | | 318.00 | Rmt | 222510960.00 |
| 3 | | | (PWD CSR 2017-18, P. 176, I. 88/20) Providing and constructing B.B. masonry val with 15 cm thick 1:3:6 proportion PCC beddin excavation, B.B. masonry in CM 1:5 propor S.F.R.C.frame and cover, etc. complete as Engineer-in-charge. Inspection Chamber {900 x 600x 1200} | g, excluding tion precast | | | |
| | 29155.00 | No. | | | 11608.80 | No. | 338454564.00 |
| | | | Basic Rate Add 5% for M.C. Total (CSR 2016-17, P. 275 I. 13) | 11056.00 552.80 11608.80 | | | |
| 4 | | | Excavation for pipe trenches in soft rock and and lime masonary foundation, ashphalt ro removing the excavated material up to a dis m. and lift as below, stacking and spreading by the Engineer-in- charge, normal dewaterin the bed for foundation and excluding the etc.complete. | ad includng stance of 50 as directed g, preparing | | | |
| | 119535.50 | Cum | Lift 0 -1.5 M. | | 487.30 | Cum | 58249649.15 |
| | | | Basic Rate | 443.00 | | | |
| | | | | 44.00 | | 1 | () () () () () () () () () () |
| | | | Add 10% for M.C. Total | 44.30 487.30 | | | |

| ltem No | Quantity | | ITEM DESCRIPTION | | Rate | Unit | Amount Rs. |
|------------|-----------------------------|--|--|---------|---------|------|-------------|
| 5 | | | Excavation for foundation / pipe trenches in of all types , sand, gravel, and soft mure removing the excavated material up to a dis m. and lift as below, stacking and spreading by the Engineer-in- charge, normal dewaterin the bed for foundation and excluding etc.complete. | | | | |
| | 119535.50 | Cum | Lift 0.0 -1.5 M. | | 155.10 | Cum | 18539956.05 |
| | | | Basic Rate | | | | |
| | | | Add 10% for M.C. Total | | | | |
| 6 | | Excavation for foundation / pipe trenches in hard murum & boulders, WBM road includng removing the excavated material up to a distance of 50 m. and lift as below, stacking and spreading as directed by the Engineer-in- charge, normal dewatering, preparing the bed for foundation and excluding back filling etc.complete. | | | | | |
| | 119535.50 | Cum | Lift 0 -1.5 M. | | 198.00 | Cum | 23668029.00 |
| | | | Basic Rate | | | | |
| | | | Add 10% for M.C. | | | | |
| 7 | | Total 198.0 Providing murum bedding in trenches with approved murum from excavated materials from foundation in 19 cm. to 20 cm. layers including watering & compaction complete. | | | | | |
| | 20991.60 | Cum | | | 67.20 | Cum | 1410635.52 |
| | | | Basic Rate | | | | |
| | | | Add 5% for M.C. | | | | |
| | | | Total (CSR 2016-17, P. 39, I. 16) | 67.20 | | | |
| 8 | | | Lowering, laying and jointing H.D.P.E.D Corrugated Pipes for nonpressure U drainage and Sewerage applications ar offollowing class and diameter incluc conveyance from stores to site of works inclu all labour,material except O ring cou satisfactory hydraulic testing as per releve complete H.D.P.E. DWC pipes for Drainage CLASS SN | | | | |
| | 174930.00 | Rmt | 150 mm dia.(ID) | 00.00 | 33.60 | Rmt | 5877648.00 |
| | | | Basic Rate Add 5% for M.C. | | | | |
| | | L | Total | | | | |
| 9 | | | (CSR 2016-17, P. 134, I. 4) Hydraulic testing of HDPE double wall corrugated pipe for non pressure underground line to specified pressure including cost of all materials and labour and water for testing for specified length including cutting, placing end cap making arrangement for filling safe water using reciprocating type pumps which should be able to provide specified test pressure gauges and other necessary equipments, labour, operation charges, etc. required for testing. The rate under this item shall also include cost of retesting, if necessary and reinstating to original position. | | | | |
| | 174.930 | KM | H.D.P.E. DWC pipes for Drainage CLASS SN | 8 | 3150.00 | KM | 551029.50 |
| | | | Basic Rate | 3000.00 | | | |
| | | | Add 5% for M.C. | | | | |
| | | | Total | 3150.00 | | | |
| | (CSR 2016-17, P. 134, I. 4) | | | | | | |

| ltem No | Quantity | | ITEM DESCRIPTION | | Rate | Unit | Amount Rs. |
|------------|-----------|-----|---|----------------|----------|---------|--------------|
| 10 | | | Refilling the trenches with available excavate soft material first over pipe line and then hard 15 cm layers with all leads and lifts consolidation, surcharging, etc.complete. | d material in | | | |
| | 295733.84 | Cum | | | 67.20 | Cum | 19873314.05 |
| | | | Basic Rate | 64.00 | | | |
| | | | Add 5% for M.C. | 3.20 | | | |
| | | | Total (CSR 2016-17, P. 38, I.15) | 67.20 | | | |
| 11 | | | Dispossing of surplus excavated stuff from | site of work | | | |
| | 24082.88 | Cum | up to a distance of 2 Km.including, loading, unloading, transportation etc.complete or as directed by the | | 195.62 | Cum | 4711092.99 |
| | 24002.00 | Oum | (CSR 2016-17, P. 22, Statement VI) | | 100.02 | Oum | 4711002.00 |
| | | | Basic Rate | 195.62 | | | |
| 12 | | | Asphalt Road restoration: Reinstatement of road by excavating the potholes in rectangular shape and filling of potholes by one layers of one layer of 80 mm trap metal of 200 mm thick, one layer of 40 mm trap metal of 100 mm thick including supplying and spreading of stone dust/murrum of 100 mm thick, watering compaction and 75 mm thick bituminous bound macadam with cold emulsion 60/70 grade and bituminous macadam of 50 mm thick with bitumen of S-65 grade and 20 mm thick asphalt concrete with S-35 grade of bitumen including compaction by vibratory roller of all layers and providing and applying tack coat of 50 Kg / 100 m2 on black top surface and seal coat of 1kg/sqm. B.B.M. surface and disposal of surplus soil etc., complete. for pipeline trenches of various diameter etc., complete as per specifications and or as directed by engineer- in-charge. | | | | |
| | 131197.50 | Sqm | (As per Rate Analysis) | | 873.47 | Sqm | 114597080.33 |
| 13 | | | Reconnection of existing damaged connection including 15 mm dia. CPVC pipe with necessary fittings, remaking good the demolished portion etc. complete including all labour, etc. complete. as directed by Engineer in charge. | | | | |
| | 29155.00 | No. | (Similar Item PWD CSR 2017-18, P. 165, I No 442.61 BDV 5) | | 175.35 | No. | 5112329.25 |
| | | | Basic Rate | 167.00 | | | |
| | | | Add 5% for M.C. Total | 8.35 175.35 | | | |
| | | ļ | lotar | 170.00 | Total Co | st Rs | 879679827.83 |
| | | | | | Say Rs. | | |
| | | | | Total Cost Rs. | | | |
| | | | | Say in Lakhs. | | 2199.20 | |
| | | | | Say in Crore | | 21.99 | |

SOLAPUR MUNICIPAL CORPORATION MAHARASHTRA JEEVAN PRADHIKARAN DIVISION SOLAPUR SOLAPUR CITY UNDERGROUND SEWERAGE SCHEME (AMRUT) **PROPERTY CONNECTION FOR ZONE IX**

MEASUREMENT SHEET

| MEASUREMENT SHEET DESCRIPTION NO L/D B HT QUIT Total Ros. of Property area on EC chamber 29155.00 Set 55.00 Set 55.00 Set 55.00 Nos. Total IC chamber 29155.00 Nos. Item No. 1Providing and supplying in standard lengths. Polyethelene (PE). Pipes for non pressure underground drainage, and contextus, La. Total IC chamber 29155.00 Nos. Item Nos. Colspan="2">Colspan="2">Colspan="2">Colspan="2">Colspan="2" Colspan="2" Item Nos. Colspan="2" Item Nos. Item Nos. Colspan="2" Item Nos. Colspan="2" Nos. Colspan="2" <th< th=""><th></th><th colspan="9">PROPERTY CONNECTION FOR ZONE IX</th></th<> | | PROPERTY CONNECTION FOR ZONE IX | | | | | | | | |
|--|--|---------------------------------|-------|----------|---------|-----------|------------------|--|--|--|
| Total Nos. of Progenties in Zone - 116620 Nos. 28155.00 Size 90 x 60 x 120 cm , common for 4 property 29155.00 Z8155.00 Nos. Item No. 1*Providing and supplying in standard lengths Polyethelene (PE) Pipes for non pressure underground drainage and severage with smooth internal and corrugated (profiled) external surface with adi rodent property conforming to ISO.21138-32007 with necessary joining material like mechanical connectors, i.e. thread insert joint/guick release coupler joint/ compression inderges. Inspection charges, loading/ unloading charges, someyance to the departmental stores/site and stacking the same in closed shade duly protecting if m surfays and rains, etc. 29155.00 6.00 174930.00 Rmt Usy press for Drainage CLASS SN 8 toom yance to the departmental stores/site and stacking the same in closed shade duly protecting if nom surfays and rains, etc. 29155.00 6.00 174930.00 Rmt Usy press for Drainage CLASS SN 8 toom dia.10D 120 md al.10D 174930.00 Rmt Usy press for Drainage CLASS SN 8 29155.00 6.00 174930.00 Rmt Usy press for Drainage CLASS SN 8 116620.00 6.00 174930.00 Rmt High Pick Pick SN 80 116620.00 6.00 6.00 6.00 6.00 Item No. 3 : Providing and constructing 8.15.22 Item No. | | | | D | LI /D | ΟΤΥ | | | | |
| Considering four Property have one IC chamber 29155.00 29155.00 Nos. ize 90 x 60 x 120 cm .common for 4 property Total IC chamber 29155.00 Nos. Total IC chamber 29155.00 Nos. Total IC chamber 29155.00 Nos. Total IC chamber 29155.00 Nos. Item No. 1 Providing and supplying in standard lengths Polytehelene (PE) Pipes for non pressure underground drainage and severage with smooth internal and corrugated (profiled) external surface with anti rodent property conforming to ISO-21138-3:2007 with necessary jointing material like mechanical connectors, i.e. thread insert privit/cuic relates coupler joint/ compression fitting joint or flanged joint, including all taxes (Central and local), transportation and freight charges, conveyance to the departmental stores/site and stacking the same in closed shade duly protecting from surrays and rains, etc. complete. H.D.P.E. pipes for Drainage CLASS N8 8 150 mm dia.(ID) 29155.00 6.00 174930.00 Rmt Tesm Stacking the scale shade duly protecting from surrays and rains, etc. complete. Spece : As directed by Englineer in Charge From House Chamber to IC Chamber HDPE Pipes - Goals 110 mm Sk Nb. Drain Upvo pipes or of equivalent make, manufacture as per KN 13476 or equivalent as per LS 15328 with fittings such a bonds, tese, coupler, etc. Spec : As directed by Englineer In Charge From House Chamber to IC Chamber HDPE Pipes - Giass SN8 110 mm dia.(OD) 116620.00 6.00 6.09720.00 RMT masony valve chamber with 50 mt thk 13:6 b proprotion PCC bedding, excluding excavation, B.B. masony in CM 155 mproprion precest S.F.R.C.frame and cover, etc. complete as directed by Englineer-in-charge. Inspection Chamber (900 x 600 x 1200) 29155.00 0.050 69972.00 Cum B. Exervation for foundation' pipes tranches by all mean in soft rock & old cament and Ilm masony role scales aphelt rocal excluding backfilling, etc. complete B. Exervation for foundation' pipes tranches he anth, soil of all types, sand gravel an | | | | D | | QII | | | | |
| size 90 x 60 x 120 cm , common for 4 property Total IC chamber 29155.00 Nos. Term No. 1'Providing and supplying in standard tengths Polyathelene (PE) Pipes for non pressure underground drainage and saverage with smooth internal and corrugated (profiled) external suffice with anti- todent incloading property conforming to ISC-21138-3:2007 with necessary joining material like mechanical connectors, i.e. thread/ insert joint/guick release coupler joint/ compression influip joint or flanged joint, including all taxes (Central and local), transportation and freight charges, inspection charges, localing/ unloading charges, corrueptes in all foreign charges, insertion charges, localing/ unloading charges, corrueptes for Drainage CLASS SN 8 150 mn dia.(ID) Lip E, pipes for Drainage CLASS SN 8 150 mn dia.(ID) Lip E, pipes for Drainage CLASS SN 8 150 mn dia.(ID) Lip E, pipes for or equivalent make, manufacture gap re N13476 or equivalent make and the gam remain gam gam rem N247700 cm gam remain gam gam remain gam remain gam gam remain gam remain gam remain gam gam remain g | | | 1103. | | | 29155.00 | Nos. | | | |
| Item No. 1Providing and supplying in standard lengths. Polybelone (PE) Pipes for non pressure underground drainage and severage with smooth internal and corrugated (profiled) external surface with anti rodent property conforming to E0x21138-32.007 with necessary jointing material like mechanical connectors, i.e. thread insert point/quick release oupler joint compression fitting joint or flanged joint, including all taxes (Central and local), transportation and freight charges, inspection charges, loading/ unloading charges. correspects on a drains, etc. 29155.00 Nos. Poilectift from surrays and rains, etc. 29155.00 6.00 174930.00 Rmt release to the departmental stores/site and stacking the same in closed shade duly protecting from surrays and rains, etc. 29155.00 6.00 174930.00 Rmt release to the departmental stores/site and stacking the same in closed shade duly protecting from surrays and rains, etc. 29155.00 6.00 174930.00 Rmt release to the departmental stores/site and stacking the same in closed shade duly protecting from surrays and rains, etc. 174930.00 Rmt released to the departmental stores/site and stacking with fittings scatter and reliase, etc. 174930.00 Rmt released to the departmental stores/site and stacking with fittings scatter and reliase the scatter and stacking with fittings scatter and reliase the reliase to the reliase with selective excavation iternel reliable with selective excavated material etc. complete. Spec : As directed by Engineer in Charge 174930.00 Rmt releases with fittings the complete as directed by Engineer in-charge. 174930.00 Rmt released with fitt | | | | | | | | | | |
| Item No. 1 Providing and supplying in standard tengths Polyethelene (PE) Pipes for non pressure underground drainage and sewerage with smooth internal and corrugated (profiled) external surface with anti rodent property conforming to ISO-2113-8-2007 with necessary jointing material like mechanical connectors. I.e. thread insert joindquick release coupler joint/ compression fitting joint or flanged joint, including all taxes (Contral and local), transportation and freight charges, inspection charges, loading/ unloading charges, stacking the same in closed shade duly protecting from sunrays and rains, etc. 14990.00 Eronwearce to the department stores/site and stacking the same in closed shade duly protecting from sunrays and rains, etc. 174930.00 Rm Item No.2: Providing , laying & fixing jointing Supreme Eco- drain 110 mm SN 8 Nu- Drain Upvo pipes or dequivalent make, manufacture as per EN 13476 or equivalent as per I.S. 15328 with fittings such a bends, teles, coupler, etc, jointing with ruber lubricant including necessary excavation stored reling with selective excavated material etc. complete. Spec : As directed by Engineer In Charge 149 From House Chamber to IC Chamber HDPE Pipes - Class SN8 110 mm dia. (OD) 116620.00 6.00 699720.00 RMT Item No. 3: Providing and constructing B.B. masonry in CM 15 proportion preceast SF.R Cirame and cover, etc. complete as directed by Engineer-in-charge. 29155.00 29155.00 29155.00 29155.00 29155.00 100 14936.50 Cum Is Exervation for foundation/ pipes trenches by all mean in soft rock & did cemont and lime masonry foundation asp | | | | | | | | | | |
| lengths Polyetheline (PE) [*] Pipes for non pressure underground drainage and severage with smooth internal and corrugated (profiled) external surface with anti rodent property conforming to ISO-21138-3:2007 with necessary jointing material like mechanical connectors, i.e. thread: insert joint/quick release coupler joint/ compression fitting joint or flanged joint, including all taxes (Central and Local), transportation and freight charges, inspection charges, localing/ unloading charges, corveyance to the departmental stores/site and stacking the same in closed shade duly protecting from survays and rains, etc. complete, H.D.P.E, pipes for Drainage CLASS SN 8 150 mm dia(ID) 2155.00 6.00 174930.00 Rm tem No.2 : Providing , laying & fixing .jointing Supreme Eco- drain 110 mm SN 8 N-D brain Upvo pipes or of equivalent make, manufacture as per EN 13476 or equivalent as per LS.1528 with fittings such a bends, ites, coupler, etc. jointing with rubber lubricant including necessary excavation, trench refilling with selective excavated material etc. complete. Spec : As directed by Engineer in Charge From House Chamber to IC Chamber HDPE Pipas-Class SN8 110 mm dia. (OD) 116620.00 6.00 Total 699720.00 RMT item No. 3 : Providing and constructing B.B masonry in CM 1:5 proportion precast S.F.R.C.frame and cover, etc. complete as directed by Engineer-in-charge. Item No. 4 : Excavation for foundation/ pipes trenches by all mean in soft rock & 0:0 coment and line masonry foundation asphat toad excluding backstone for took & 0:0 6.00 0.00 0.50 69972.00 Cum i) 0 to 1 5 m 29155.00 0.00 0.50 69972.00 Cum i) 0 to 1 5 m 29155.00 0.00 0.50 69972.00 Cum i) 0 to 1 5 m 29155.00 0.00 0.50 69972.00 Cum i) 0 to 1 5 m 29155.00 0.00 0.50 69972.00 Cum i) 0 to 1 5 m 29155.00 0.00 0.50 69972.00 Cum i) 0 to 1 5 m 29155.00 0.00 0.00 0.50 69972.00 Cum i) 0 to 1 5 m 29155.00 0.00 0.00 0.50 69972.00 Cum i) 0 to 1 5 m 29155.00 0.00 0.00 0.50 69972.00 Cum i) 0 to 1 5 m 29155.00 0.00 0.00 0.50 69972.00 Cum i) 0 to 1 5 m 29155.00 0.00 0.00 0.50 699 | | | | Total IC | chamber | 29155.00 | Nos. | | | |
| pressure underground trainage and sewerage with smooth internal and corrugated (profiled) external surface with anti rodent property conforming to ISO-2113-8-2007 with necessary jointing material like mechanical connectors, i.e. thread, insert joint/quick rolease coupler joint/ compression fifting joint or flanged joint, including all taxes (Central and local), transportation and freight charges, inspection charges, loading/ unloading charges, conveyance to the departmental stores/site and stacking the same in closed shade duly protecting from sunrays and rains, etc. complete. H.D.P.E. pipes for Drainage 'CLASS SN 8 2150 cm dia.(ID) Supreme Eco- drain 110 mm SN 8 Nu- Drain Upvc pipes or dequivalent make, manufacture as por EN 13476 or equivalent as per I.S.15328 with fittings such a bends, tees, coupler, etc., jointing with rubber lubricant including necessary excavation, trench refilling with selective excavated material for constructing E.B. masony valve chamber vith 15 or thick 1.3.6 proportion PCC bedring, excluding excavation, B.B. masony in CM 1.5 proportion precast directed by Engineer in Charge Firm House Chamber (300 x 600 x 1200) 110 mm dia.(OD) 116 mN 0.4: Excavation for foundation/ pipes trenches by all mean in soit rock & 0.01 complete a) Excavation for foundation/ pipes trenches prove inter ock & 0.01 complete a) excavation for foundation/ pipes trenches by all mean in soit rock & 0.01 complete a) Excavation for foundation/ pipes trenches in earth, soil of all types, sand, gravet and soit murum | S 11 5 S | | | | | | | | | |
| with smooth internal and corrugated (profiled) external surface with anti rodent property conforming to ISO-21138-3:2007 with necessary jointing material like mechanical connectors, i.e. thread insert joint/quick release coupler joint/ compression fitting joint or flanged joint, including all taxes (Central and Iccal), transportation and freight charges, inspection charges, locading/ unloading charges, conveyance to the departmental stores/site and stacking the same in closed shade duly protecting from surrays and rains, etc. complete. HD.P.E pipes for Drainage 'CLASS SN 8 150 mm dia (ID) 29155.00 6.00 1774930.00 Rm Item No.2: Providing , laying & fixing jointing Supreme Eco- drian 110 mm SN 8 Nu- Drain Upvc pipes or de quivalent takes, manufacture as per EN 13476 or equivalent as per LS. 15328 with fittings excavation, thench refilling with selective excavated material etc. complete. Spec : As directed by Engineer In Charge From House Chamber to IC Chamber 110 mm dia. (OD) 116620.00 6.00 699720.00 RMT Item No. 3 : Providing and constructing B. B. masony valve chamber with 15 cm thick 1:36 proportion PCC bedding, excluding excavation, B.B. masony in CM 1:5 proportion preceast S.F.R.C.frame and cover, etc. complete as directed by Engineer-in-charge. Item No. 4: Excavation for foundation/ pipes trenches by all mean in soft rock & old cement and time masonin yalve galow x 600x 1200) 29155.00 0.00 0.00 0.50 69972.00 Cum i) 0 to 1.5 m 29155.00 0.00 0.00 0.50 69972.00 Cum i) 0 to 1.5 m 29155.00 0.00 0.00 0.50 69972.00 Cum i) 0 to 1.5 m 29155.00 0.00 0.00 0.50 69972.00 Cum i) 0 to 1.5 m 29155.00 0.00 0.00 0.50 69972.00 Cum i) 0 to 1.5 m 29155.00 0.00 0.00 0.50 69972.00 Cum i) 0 to 1.5 m 29155.00 0.00 0.00 0.50 69972.00 Cum | | | | | | | | | | |
| external surface with anti rodent property conforming to ISO-21138-32007 with necessary jointing material like mechanical connectors, i.e. thread linseri jointvacker release coupler joint/ compression fitting joint or flanged joint, including all taxes (Central and local), transportation and freight charges, inspection charges, loading/ unloading charges, conveyance to the departmental stores/site and stacking the same in closed shade duly protecting from surrays and rains, th.D.P.E. pipes for Drainage CLASS SN 8 190 mm dia.(ID) Supreme Eco- drain 110 mm SN 8 Nu- Drain Upvc pipes or dequivalent make, manufacture as per EN 13476 or equivalent as per 1.5.15328 with fittings such a bends, tees, coupler, etc. jointing with rubber lubricant including necessary excavation, trench refilling with selective excavated material etc. complete. Spec: As directed by Engineer in Charge From House Chamber to IC Chamber HDPE Pipes - Class SN8 110 mm dia.(OD) 11em No. 3 : Providing and constructing B.B. masony valve chamber with 5 cm thick 13:6 proportion PCC bedding, excluding excavation, B.B. masony in CM 15 proportion precast S.F.R.C.Irame and cover, etc. complete as directed by Engineer in Charge Imspection Chamber (900 x 600 x 1200) 29155.00 129155.00 129155.00 129155.00 129155.00 129155.00 129155.00 129155.00 129155.00 129155.00 1201 15 m 129155.00 1202 0 10 10 to 1.5 m 129155.00 10 0.50 10 to 1.5 m 10 to 1.5 m 10 to 1.5 m 110 to 1.5 m 129155.00 10 0.50 10 to 1.5 m 10 t | | | | | | | | | | |
| conforming to ISO-21138-3:2007 with necessary joining material like mechanical connectors, i.e. thread' insert joint/quick release coupler joint/ including all taxes (Central and local), transportation and freight charges, inspection charges, locating/ unloading charges, conveyance to the departmental stores/site and stacking the same in closed shade duly protecting from surrays and rains, etc. complete. HD.P.E. pipes for Drainage CLASS SN 8 150 mm dia.(ID) 29155.00 6.00 174930.00 Rmt HD.P.E. pipes for Drainage CLASS SN 8 Supreme Eco-drain 110 mm SN 8 Nu- Drain Upvc pipes or of equivalent make, manufacture as per EN 13476 or equivalent make, manufacture as per LN 13476 or equivalent make, manufacture as per LN 13476 or equivalent make, manufacture as per LN 13476 or equivalent as per LS.15328 with fittings exclusion throch refilling with selective excavated material etc. complete. Spec : As directed by Engineer In Charge From House Chamber to IC Chamber HDPE Pipes - Class SN8 110 mm dia.(OO) 111662.000 6.00 Total 69972.0.00 RMT item No. 3 : Providing and constructing B.B. B. masony value chamber with 15 cm thick 1:35 proportion PCC bedding, excluding excavation, B.B. masony in CM 1:5 proportion precast S.F.R.C.frame and cover, etc. complete as directed by Engineer-in-charge. I is to 15 m 29155.00 2.201 2.29155.00 Nes. Item No. 4: Excavation for foundation/ pipes trenches by all mean in soft rock & old cement and time masonry foundation asphall road i) to 1.5 m 29155.00 0.080 0.50 69972.00 Cum i) D to 1.5 m 29155.00 0.080 0.50 69972.00 Cum i) D to 1.5 m 29155.00 0.080 0.50 69972.00 Cum i) D to 1.5 m 29155.00 0.080 0.50 69972.00 Cum i) D to 1.5 m 29155.00 0.080 0.50 69972.00 Cum i) D to 1.5 m 29155.00 0.080 0.50 69972.00 Cum i) D to 1.5 m 29155.00 0.080 0.50 69972.00 Cum | • • • • | | | | | | | | | |
| jointing material like mechanical connectors, i.e. thread/ insert jointvquk: relase coupler joint/ compression fitting joint or flanged joint, including all taxes (Central and local), transportation and freight charges, inspection charges, loading/ unloading charges, conveyance to the departmental stores/site and stacking the same in closed shade duly protecting from sunrays and rains, etc. complete. HD-P.E. pipes for Drainage 'CLASS SN 8 150 mm dia.(ID) tem No.2 : Providing , laying & fixing , jointing Supreme Ecco drain 110 mm SN 8 Nu- Drain Upvc pipes or of equivalent make, manufacture as per EN 13476 or equivalent as per IS.15328 with fittings such a bends, tees, coupler, etc. jointing with rubber lubricant including necessary excavation, trench refilling with selective excavated material etc. complete. Spec : As directed by Engineer In Charge From House Chamber to IC Chamber HDPE Pipes - Class SN8 110 mm dia. (OD) 116620.00 6.00 Excavation for foundation/ pipes trenches by all mean in soft rock & old cement and line masonry foundation of post 1200 29155.00 Excavation for foundation/ pipes trenches by all mean in soft rock & old cement and line masonry foundation as phalt road excluding backtilling, etc. complete as directed by Engineer in Charge. Inspection Chamber (900 x 600x 1200) 29155.00 Excavation for foundation/ pipes trenches by all mean in soft rock & old cement and line masonry foundation asphalt road excluding backtilling, etc. complete as directed by Engineer-in-chamber (900 x 600x 1200) Di to 1.5 m 29155.00 6.00 10 to 1.5 m 29155.00 6.00 10 to 1.5 m 29155.00 10 to 1.5 m 10 to 1.5 m 29155.00 10 to 1.5 m 10 to 1.5 m 29155.00 10 to 1.5 m 10 to 1.5 m 10 to 1. | | | | | | | | | | |
| thread' insert join/quick release coupler joint/ including all taxes (Central and local), transportation and freight charges, inspection charges, locating/ unloading charges, conveyance to the departmental stores/site and stacking the same in closed shade duly protecting from survays and rains, etc. complete. H.D.P.E. pipes for Drainage 'CLASS SN 8 150 mm dia.(ID) Item No.2 : Providing, laying & fixing jointing Supreme Eco drain 110 mm SN 8 Nu- Drain Upvc pipes or of equivalent make, manufacture as per EN 13476 or equivalent as per 1.5.15328 with fitting such a bends, tess, coupler, etc. jointing with rubber lubricant including necessary excavation, trench relilling with selective excavated material etc. complete. Spec : As directed by Engineer in Charge From House Chamber to IC Chamber HDPE Pipes - Class SN8 110 mm dia. (OD) Item No. 3 : Providing and constructing B.B. masonry valve chamber with 15 cm thick 1:36 proportion PCC bedding, excluding excavation, B.B. masonry in CM 1:5 proportion precast S.F.R.C.frame and cover, etc. complete address and rush etc. Complete as directed by Engineer-in-charge. Inspection Chamber (900 x 600x 1200) 29155.00 Item No. 4: Excavation for foundation/ pipes trenches by all mean in soft rock & old cernent and line masonry foundation asphalt road excluding backfilling, etc. complete a) Excavation for foundation/ pipes trenches by all mean in soft rock & old cernent and line masonry foundation asphalt road excluding backfilling, etc. complete a) Excavation for property chamber of 900 x 600 x 1200 D) Excavation for property chamber of 900 x 600 x 1200 D) Excavation for property chamber of 900 x 600 x 1200 D) Excavation for property chamber of 900 x 600 x 1200 D) Excavation for property chamber of 900 x 600 x 1200 D) Excavation for property chamber of 900 x 600 x 1200 D) Excavation for property chamber of 900 x 600 x 1200 D) Excavation for property chamber of 900 x 600 x 1200 D) Excavation for property chamber of 900 x 600 x 1200 D) Excavation for property chamber of 900 | • | | | | | | | | | |
| compression fitting joint or flanged joint, including all taxes (Central and local), transportation and freight charges, inspection charges, loading/ unloading charges, conveyance to the departmental stores/site and stacking the same in closed shade duly protecting from sunrays and rains, etc. complete. H.D.P.E, pipes for Drainage 'CLASS SN 8 150 mm dia.(ID) Supreme Eco- drain 110 mm SN 8 Nu- Drain Upvc pipes or of equivalent make, manufacture as per EN 13476 or equivalent as per LS.13228 with fittings such a bends, tees, coupler, etc. jointing with rubber lubricant including necessary excavation, trench refilling with selective excavated material etc. complete. Spec : As directed by Engineer In Charge From House Chamber to IC Chamber HDPE Pipes - Class SN8 110 mm dia.(OD) 116620.00 6.00 6.00 6.00 6.00 6.00 6.00 6. | | | | | | | | | | |
| transportation and freight charges, inspection charges, loading/ unloading charges, conveyance to the departmental stores/site and stacking the same in closed shade duly protecting from surrays and rains, etc. complete. H.D.P.E. pipes for Drainage 'CLASS SN 8 150 mm dia.(ID) 29155.00 6.00 174930.00 Rmt Item No.2 : Providing , laying & fixing , jointing Supreme Ecc - drain 110 mm SN 8 Nu - Drain Upvc pipes or of equivalent make, manufacture as per EN 13476 or equivalent as per L.S.15328 with fittings such a bends, tees, coupler, etc, jointing with rubber lubricant including necessary excavation, trench refilling with selective accavated material etc. complete. Spec : As directed by Engineer In Charge From House Chamber to IC Chamber 110 mm dia. (OD) 116620.00 6.00 699720.00 RMT Item No. 3 : Providing and constructing B.B. masony valve chamber with 15 cm thick 1:3.6 proportion PCC bedding, excluding excavation, B.B. masony in CM 1:5 proportion precast S.F.R.C.frame and cover, etc. complete as directed by Engineer-in-charge. Inspection Chamber (900 x 600x 1200) 29155.00 29155.00 Nos. Item No. 4: Excavation for foundation/ pipes trenches by all mean in soft rock & old cement and line masony foundation asphalt road excluding backfilling, etc. complete a) Excavation for foundation with 29155.00 C.00 b) Excavation for foundation / pipes trenches by all mean in soft rock & old cement and line masony foundation asphalt road excluding backfilling, etc. complete a) 0 to 1:5 m 29155.00 C.00 b) Excavation for foundation / pipes trenches in earth, soil of all types, sand, gravel and soft murum & excluding backfilling, etc. complete a) Excavation for foundation / pipes trenches in earth, soil of all types, sand, gravel and soft murum & excluding backfilling, etc. complete a) Excavation for Property chamber 0900 x 600 x 1200 b) Excavation for property chamber 0900 x 600 x 1200 b) Excavation for property chamber 0900 x 600 x 1200 com b) Excavation for Property chamber 0900 x 600 x 1200 com b) Excavation | | | | | | | | | | |
| charges, loading/ unloading charges, conveyance to the departmental stores/site and stacking the same in closed shade duly protecting from survays and rains, etc. H.D.P.E. pipes for Drainage CLASS SN 8 H.D.P.E. pipes for Drainage CLASS SN 8 Supreme Eco- drain 110 mm SN 8 Nu- Drain Upvc pipes or of equivalent make, manufacture as per EN 13476 or equivalent make, manufacture as per EN 13476 or equivalent make, manufacture as per EN 13476 or equivalent aske, tess, coupler, etc, jointing with rubber lubricant including necessary excavation, trench refilling with selective excavated material etc. complete. Spec : As directed by Engineer in Charge From House Chamber to IC Chamber HDPE Pipes - Class SN8 110 mm dia. (OD) Erowiding and constructing B.B. masonry valve chamber with 15 cm thick 13:6 proportion PCC bedding, excluding excavation, B.B. masonry in CM 1:5 proportion precast directed by Engineer-in-charge. Inspection Chamber (900 x 600x 1200) 29155.00 201 201 29155.00 201 201 29155.00 201 29155.00 201 29155.00 201 29155.00 201 29155.00 201 201 201 201 201 201 201 2 | including all taxes (Central and local), | | | | | | | | | |
| conveyance to the departmental stores/site and stacking the same in closed shade duly protecting from sunrays and rains, etc. compilete. H.D.P.E. pipes for Drainage 'CLASS SN 8 150 mm dia.(ID) Term No.2: Providing , laying & fixing , jointing Supreme Eco- drain 110 mm SN 8 Nu- Drain Upvc pipes or of equivalent as per LS.15328 with fittings such a bends, tees, coupler, etc, jointing with rubber lubricant including necessary excavation, trench refilling with selective excavated material etc. complete. Spec : As directed by Engineer In Charge From House Chamber to IC Chamber HDPE Pipes - Class SN8 110 mm dia. (OD) 116620.00 6.00 6.00 699720.00 RMT Item No. 3 : Providing and constructing B.B. B.B. masonry valve chamber with 15 cm thick 13:6 proportion PCC bedding, excluding excavation, B.B. masonry in CM 1:5 proportion precast S.F.R.C frame and cover, etc. complete as directed by Engineer-in-charge. Inspection Chamber (900 x 600 x 1200) 29155.00 29155.00 29155.00 29155.00 Nos. Item No. 4: Excavation for foundation/ pipes renches by all mean in soft rock & did cement and lime masonry foundation asphalt road excluding backfilling, etc. complete as directed by Engineer. i) 0 to 1.5 m 29155.00 0.080 0.50 69972.00 Cum i) 0 to 1.5 m 29155.00 1.70 0.50 49563.50 Cum i) 0 to 1.5 m 29155.00 0.080 0.50 69972.00 Cum i) 0 to 1.5 m 29155.00 0.080 0.50 69972.00 Cum i) 0 to 1.5 m 29155.00 0.080 0.50 69972.00 Cum i) 0 to 1.5 m 29155.00 0.080 0.50 69972.00 Cum i) 0 to 1.5 m 29155.00 0.080 0.50 69972.00 Cum i) 0 to 1.5 m 29155.00 0.080 0.50 69972.00 Cum i) 0 to 1.5 m 29155.00 0.080 0.50 69972.00 Cum i) 0 to 1.5 m 29155.00 0.080 0.50 69972.00 Cum i) 0 to 1.5 m 29155.00 0.080 0.50 69972.00 Cum i) 0 to 1.5 m 29155.00 0.080 0.50 69972.00 Cum i) 0 to 1.5 m 29155.00 0.080 0.50 69972.00 Cum i) 0 to 1.5 m 29155.00 0.080 0.50 69972.00 Cum i) 0 to 1.5 m 29155.00 0.080 0.50 69972.00 Cum i) 0 to 1.5 m 29155.00 0.080 0.50 69972.00 Cum | | | | | | | | | | |
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| 110 mm dia. (OD) 116620.00 6.00 699720.00 RMT Item No. 3 : Providing and constructing B.B. masonry valve chamber with 15 cm thick 1:3:6 proportion PCC bedding, excluding excavation, B.B. masonry in CM 1:5 proportion precast S.F.R.C.frame and cover, etc. complete as directed by Engineer-in-charge. Image: Complete as directed by Engineer-in-charge. Image: Complete as direc | | | | | | | | | | |
| TotalTotal699720.00RMTItem No. 3 : Providing and constructing B.B. masonry valve chamber with 15 cm thick 1:3:6 proportion PCC bedding, excluding excavation, B.B. masonry in CM 1:5 proportion precast S.F.R.C.frame and cover, etc. complete as directed by Engineer-in-charge.Image: Complete as complete as directed by Engineer-in-charge.Image: Complete as complete as complete as complete as complete as directed by Engineer-in-charge.29155.0029155.0029155.00Inspection Chamber (900 x 600x 1200)29155.0029155.00Nos.1Item No. 4: Excavation for foundation/ pipes trenches by all mean in soft rock & old cement and lime masonry foundation asphalt road excluding backfilling, etc. complete i) 0 to 1.5 m29155.000.800.5069972.00 Cumb) Excavation for Property chamber of 900 x 600 x 1200Image: Complete i) 0 to 1.5 m29155.002.001.700.5049563.50 Cumitem No. 5: Excavation for foundation/ pipes trenches in earth, soil of all types, sand ,gravel and soft murum & excluding backfilling, etc. complete a) Excavation : for pipe line from IC to street Manhole i) to 1.5 m29155.006.000.800.5069972.00 Cumitem No. 5: Excavation for foundation/ pipes trenches in earth, soil of all types, sand ,gravel and soft murum & excluding backfilling, etc. complete i) to 1.5 m29155.006.000.800.5069972.00 Cumitem No. 5: Excavation for Property chamber of 900 x 600 x 1200item No. 5069972.00item No. 5069972.00item No. 50item No. 5: Excavation for foundatio | | 116620.00 | 6.00 | | | 600720.00 | | | | |
| Item No. 3 : Providing and constructing B.B. masonry valve chamber with 15 cm thick 1:3:6 proportion PCC bedding, excluding excavation, B.B. masonry in CM 1:5 proportion precast S.F.R.C.frame and cover, etc. complete as directed by Engineer-in-charge. Inspection Chamber {900 x 600x 1200} 29155.00 29155.00 Nos. Item No. 4: Excavation for foundation/ pipes trenches by all mean in soft rock & old cement and lime masonry foundation asphalt road excluding backfilling, etc. complete a) Excavation : for pipe line from IC to street Manhole i) 0 to 1.5 m 29155.00 6.00 0.80 0.50 69972.00 Cum b) Excavation for foundation/ pipes trenches in earth, soil of all types ,sand ,gravel and soft murum & excluding backfilling, etc. complete a) Excavation : for pipe line from IC to street Manhole i) 0 to 1.5 m 29155.00 2.00 1.70 0.50 49563.50 Cum i) 0 to 1.5 m 29155.00 2.00 1.70 0.50 49563.50 Cum i) 0 to 1.5 m 29155.00 2.00 1.70 0.50 49563.50 Cum i) 0 to 1.5 m 29155.00 2.00 1.70 0.50 49563.50 Cum i) 0 to 1.5 m 29155.00 2.00 1.70 0.50 49563.50 Cum i) 0 to 1.5 m 29155.00 2.00 1.70 0.50 49563.50 Cum i) 0 to 1.5 m 29155.00 2.00 1.70 0.50 49563.50 Cum i) 0 to 1.5 m 29155.00 0.80 0.50 69972.00 Cum j) 0 to 1.5 m 29155.00 0.80 0.50 69972.00 Cum i) 0 to 1.5 m 29155.00 0.80 0.50 69972.00 Cum j) 0 to 1.5 m 29155.00 0.80 0.50 69972.00 Cum | | 110020.00 | 0.00 | | Total | | | | | |
| masonry valve chamber with 15 cm thick 1:3:6 proportion PCC bedding, excluding excavation, B.B. masonry in CM 1:5 proportion precast S.F.R.C.frame and cover, etc. complete as directed by Engineer-in-charge. Inspection Chamber (900 x 600x 1200) 29155.00 29155.00 Nos. Item No. 4: Excavation for foundation/ pipes trenches by all mean in soft rock & old cement and lime masonry foundation asphalt road excluding backfilling, etc. complete a) Excavation i for pipe line from IC to street Manhole i) 0 to 1.5 m 29155.00 6.00 0.80 0.50 69972.00 Cum b) Excavation for foundation/ pipes trenches in earth, soil of all types, sand ,gravel and soft murum & excluding backfilling, etc. complete a) Excavation : for pipe line from IC to street Manhole i) 0 to 1.5 m 29155.00 2.00 1.70 0.50 49563.50 Cum i) 0 to 1.5 m 29155.00 2.00 1.70 0.50 49563.50 Cum i) 0 to 1.5 m 29155.00 2.00 1.70 0.50 49563.50 Cum i) 0 to 1.5 m 29155.00 2.00 1.70 0.50 49563.50 Cum i) 0 to 1.5 m 29155.00 2.00 1.70 0.50 49563.50 Cum i) 0 to 1.5 m 29155.00 2.00 1.70 0.50 49563.50 Cum i) 0 to 1.5 m 29155.00 2.00 1.70 0.50 49563.50 Cum i) 0 to 1.5 m 29155.00 2.00 1.70 0.50 49563.50 Cum i) 0 to 1.5 m 29155.00 2.00 1.70 0.50 49563.50 Cum i) 0 to 1.5 m 29155.00 2.00 1.70 0.50 49563.50 Cum i) 0 to 1.5 m 29155.00 2.00 1.70 0.50 49563.50 Cum i) 0 to 1.5 m 29155.00 2.00 1.70 0.50 49563.50 Cum i) 0 to 1.5 m 29155.00 2.00 1.70 0.50 49563.50 Cum i) 0 to 1.5 m 29155.00 0.00 0.80 0.50 69972.00 Cum i) 0 to 1.5 m 29155.00 0.00 0.80 0.50 69972.00 Cum i) 0 to 1.5 m 29155.00 0.00 0.80 0.50 69972.00 Cum | Item No. 3 : Providing and constructing B.B. | | | | Total | 000720.00 | | | | |
| proportion PCC bedding, excluding excavation, B.B. masonry in CM 1:5 proportion precast S.F.R.C.frame and cover, etc. complete as directed by Engineer-in-charge. Inspection Chamber {900 x 600x 1200} 29155.00 29155.00 Nos. Item No. 4: Excavation for foundation/ pipes trenches by all mean in soft rock & old cement and lime masonry foundation asphalt road excluding backfilling, etc. complete a) Excavation : for pipe line from IC to street Manhole i} 0 to 1.5 m 29155.00 6.00 0.80 0.50 69972.00 Cum b) Excavation for Froperty chamber of 900 x 600 x 1200 trenches in earth, soil of all types ,sand ,gravel and soft murum & excluding backfilling, etc. complete a) Excavation : for pipe line from IC to street Manhole i} 0 to 1.5 m 29155.00 2.00 1.70 0.50 49563.50 Cum i} 0 to 1.5 m 29155.00 2.00 1.70 0.50 49563.50 Cum i} 0 to 1.5 m 29155.00 2.00 1.70 0.50 49563.50 Cum i} 0 to 1.5 m 29155.00 2.00 1.70 0.50 49563.50 Cum i} 0 to 1.5 m 29155.00 2.00 1.70 0.50 49563.50 Cum i} 0 to 1.5 m 29155.00 2.00 1.70 0.50 49563.50 Cum i} 0 to 1.5 m 29155.00 2.00 1.70 0.50 49563.50 Cum i} 0 to 1.5 m 29155.00 2.00 1.70 0.50 49563.50 Cum i} 0 to 1.5 m 29155.00 2.00 1.70 0.50 49563.50 Cum i} 0 to 1.5 m 29155.00 2.00 1.70 0.50 49563.50 Cum i} 0 to 1.5 m 29155.00 2.00 1.70 0.50 49563.50 Cum i} 0 to 1.5 m 29155.00 2.00 1.70 0.50 49563.50 Cum i} 0 to 1.5 m 29155.00 2.00 1.70 0.50 49563.50 Cum i} 0 to 1.5 m 29155.00 0.80 0.50 69972.00 Cum | a a | | | | | | | | | |
| S.F.R.C.frame and cover, etc. complete as directed by Engineer-in-charge. Inspection Chamber {900 x 600x 1200} 29155.00 29155.00 Nos. Item No. 4: Excavation for foundation/ pipes trenches by all mean in soft rock & old cement and lime masonry foundation asphalt road excluding backfilling, etc. complete a) Excavation : for pipe line from IC to street Manhole b) Excavation for Property chamber of 900 x 600 x 1200 b) Excavation for foundation/ pipes trenches in earth, soil of all types ,sand ,gravel and soft murum & excluding backfilling, etc. complete a) Excavation : for pipe line from IC to street Manhole i) 0 to 1.5 m 29155.00 2.00 1.70 0.50 49563.50 Cum i) 0 to 1.5 m 29155.00 2.00 1.70 0.50 49563.50 Cum i) 0 to 1.5 m 29155.00 2.00 1.70 0.50 49563.50 Cum i) 0 to 1.5 m 29155.00 2.00 1.70 0.50 49563.50 Cum i) 0 to 1.5 m 29155.00 2.00 1.70 0.50 49563.50 Cum i) 0 to 1.5 m 29155.00 0.80 0.50 69972.00 Cum b) Excavation for Property chamber of 900 x 600 x 1200 i) 0 to 1.5 m 29155.00 6.00 0.80 0.50 69972.00 Cum b) Excavation for Property chamber of 900 x 600 x 1200 | | | | | | | | | | |
| directed by Engineer-in-charge. | | | | | | | | | | |
| Inspection Chamber {900 x 600x 1200} 29155.00 29155.00 Nos. Item No. 4: Excavation for foundation/ pipes trenches by all mean in soft rock & old cement and lime masonry foundation asphalt road excluding backfilling, etc. complete Image: Complete of the second se | | | | | | | | | | |
| Item No. 4: Excavation for foundation/ pipes trenches by all mean in soft rock & old cement and lime masonry foundation asphalt road excluding backfilling, etc. complete i) 0 to 1.5 m 29155.00 6.00 0.80 0.50 69972.00 Cum i) 0 to 1.5 m 29155.00 2.00 1.70 0.50 49563.50 Cum i) 0 to 1.5 m 29155.00 2.00 1.70 0.50 49563.50 Cum i) 0 to 1.5 m 29155.00 2.00 1.70 0.50 49563.50 Cum i) 0 to 1.5 m 29155.00 0.00 119535.50 Cum ii) 0 to 1.5 m 29155.00 0.00 0.50 49563.50 Cum ii) 0 to 1.5 m 29155.00 0.00 0.50 49563.50 Cum iiiiiiiiiiiiiiiiiiiiiiii | directed by Engineer-in-charge. | | | | | | | | | |
| Item No. 4: Excavation for foundation/ pipes trenches by all mean in soft rock & old cement and lime masonry foundation asphalt road excluding backfilling, etc. complete i) 0 to 1.5 m 29155.00 6.00 0.80 0.50 69972.00 Cum i) 0 to 1.5 m 29155.00 2.00 1.70 0.50 49563.50 Cum i) 0 to 1.5 m 29155.00 2.00 1.70 0.50 49563.50 Cum i) 0 to 1.5 m 29155.00 2.00 1.70 0.50 49563.50 Cum i) 0 to 1.5 m 29155.00 0.00 119535.50 Cum ii) 0 to 1.5 m 29155.00 0.00 0.50 49563.50 Cum ii) 0 to 1.5 m 29155.00 0.00 0.50 49563.50 Cum iiiiiiiiiiiiiiiiiiiiiiii | Inspection Chamber (900 x 600x 1200) | 29155.00 | | | | 29155.00 | Nos | | | |
| trenches by all mean in soft rock & old cement and lime masonry foundation asphalt road excluding backfilling, etc. complete a) Excavation : for pipe line from IC to street Manhole i) 0 to 1.5 m 29155.00 6.00 0.80 0.50 69972.00 Cum b) Excavation for Property chamber of 900 x 600 x 1200 i) 0 to 1.5 m 29155.00 2.00 1.70 0.50 49563.50 Cum i) 0 to 1.5 m 29155.00 2.00 1.70 0.50 49563.50 Cum Item No. 5: Excavation for foundation/ pipes trenches in earth, soil of all types ,sand ,gravel and soft murum & excluding backfilling, etc. complete a) Excavation : for pipe line from IC to street Manhole i) 0 to 1.5 m 29155.00 6.00 0.80 0.50 69972.00 Cum b) Excavation i for Property chamber of 900 x 600 x 1200 | | 20100.00 | | | | 20100.00 | 1400. | | | |
| and lime masonry foundation asphalt road excluding backfilling, etc. completea) Excavation : for pipe line from IC to street Manholei) 0 to 1.5 m29155.006.000.800.50b) Excavation for Property chamber of 900 x 600 x 1200i) 0 to 1.5 m29155.002.001.700.5049563.50Cumi) 0 to 1.5 m29155.002.001.700.5049563.50Cumii) 0 to 1.5 m29155.002.001.700.5049563.50Cumitem No. 5: Excavation for foundation/ pipes trenches in earth, soil of all types ,sand ,gravel and soft murum & excluding backfilling, etc. completeiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiii | Item No. 4: Excavation for foundation/ pipes | | | | | | | | | |
| excluding backfilling, etc. completeImage: completeImage: completea) Excavation : for pipe line from IC to street Manhole29155.006.000.800.5069972.00Cumb) Excavation for Property chamber of 900 x 600 x 12002.001.700.5049563.50Cumi) 0 to 1.5 m29155.002.001.700.5049563.50Cumii) 0 to 1.5 m29155.002.001.700.5049563.50Cumiii) 0 to 1.5 m29155.002.001.700.5049563.50Cumiii | trenches by all mean in soft rock & old cement | | | | | | | | | |
| a) Excavation : for pipe line from IC to street Manhole i) 0 to 1.5 m 29155.00 6.00 0.80 0.50 69972.00 Cum b) Excavation for Property chamber of 900 x 600 x 1200 i) 0 to 1.5 m 29155.00 2.00 1.70 0.50 49563.50 Cum i) 0 to 1.5 m 29155.00 2.00 1.70 0.50 49563.50 Cum i) 0 to 1.5 m 29155.00 2.00 1.70 0.50 49563.50 Cum ii) 0 to 1.5 m 29155.00 2.00 1.70 0.50 49563.50 Cum item No. 5: Excavation for foundation/ pipes trenches in earth, soil of all types ,sand ,gravel and soft murum & excluding backfilling, etc. complete item is 0 to 1.5 m 29155.00 6.00 0.80 0.50 69972.00 Cum i) 0 to 1.5 m 29155.00 6.00 0.80 0.50 69972.00 Cum b) Excavation for Property chamber of 900 x 600 x 1200 iiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiii | - | | | | | | | | | |
| i} 0 to 1.5 m 29155.00 6.00 0.80 0.50 69972.00 Cum b) Excavation for Property chamber of 900 x 600 x 1200 i} 0 to 1.5 m 29155.00 2.00 1.70 0.50 49563.50 Cum i} 0 to 1.5 m 29155.00 2.00 1.70 0.50 49563.50 Cum i} 0 to 1.5 m 29155.00 2.00 1.70 0.50 49563.50 Cum ii 0 to 1.5 m 29155.00 ii 0 0.50 69972.00 Cum b) Excavation for Property chamber of 900 x 600 x 1200 ii 0 0.50 69972.00 Cum ii 0 < | | | | | | | | | | |
| b) Excavation for Property chamber of 900 x 600 x 1200 i) 0 to 1.5 m 29155.00 2.00 1.70 0.50 49563.50 Cum i) 0 to 1.5 m 29155.00 2.00 1.70 0.50 49563.50 Cum Item No. 5: Excavation for foundation/ pipes trenches in earth, soil of all types ,sand ,gravel and soft murum & excluding backfilling, etc. complete iiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiii | | | 6.00 | 0.90 | 0.50 | 60072.00 | Cum | | | |
| i} 0 to 1.5 m 29155.00 2.00 1.70 0.50 49563.50 Cum Total 119535.50 Cum Item No. 5: Excavation for foundation/ pipes trenches in earth, soil of all types ,sand ,gravel and soft murum & excluding backfilling, etc. complete a) Excavation : for pipe line from IC to street Manhole i} 0 to 1.5 m 29155.00 6.00 0.80 0.50 69972.00 Cum b) Excavation for Property chamber of 900 x 600 x 1200 | · · · · · · · · · · · · · · · · · · · | | 0.00 | 0.00 | 0.50 | 09972.00 | Cum | | | |
| TotalTotal119535.50CumItem No. 5: Excavation for foundation/ pipes trenches in earth, soil of all types ,sand ,gravel and soft murum & excluding backfilling, etc. completea) Excavation : for pipe line from IC to street Manhole i} 0 to 1.5 m29155.006.000.800.5069972.00Cumb) Excavation for Property chamber of 900 x 600 x 1200 </td <td></td> <td></td> <td>2.00</td> <td>1.70</td> <td>0.50</td> <td>49563.50</td> <td>Cum</td> | | | 2.00 | 1.70 | 0.50 | 49563.50 | Cum | | | |
| trenches in earth, soil of all types ,sand ,gravel and soft murum & excluding backfilling, etc. complete a) Excavation : for pipe line from IC to street Manhole i} 0 to 1.5 m 29155.00 6.00 0.80 0.50 69972.00 Cum b) Excavation for Property chamber of 900 x 600 x 1200 | | | | | | | | | | |
| trenches in earth, soil of all types ,sand ,gravel and soft murum & excluding backfilling, etc. complete a) Excavation : for pipe line from IC to street Manhole i} 0 to 1.5 m 29155.00 6.00 0.80 0.50 69972.00 Cum b) Excavation for Property chamber of 900 x 600 x 1200 | | | | | | | | | | |
| and soft murum& excluding backfilling, etc. completeImage: Completea) Excavation : for pipe line from IC to street ManholeImage: Completei) 0 to 1.5 m29155.006.000.80b) Excavation for Property chamber of 900 x 600 x 1200Image: Complete | | | | | | | | | | |
| etc. complete Image: Complete in the image: Complet | | | | | | | | | | |
| a) Excavation : for pipe line from IC to street Manhole i} 0 to 1.5 m 29155.00 6.00 0.80 0.50 69972.00 Cum b) Excavation for Property chamber of 900 x 600 x 1200 | | | | | | | | | | |
| i} 0 to 1.5 m 29155.00 6.00 0.80 0.50 69972.00 Cum b) Excavation for Property chamber of 900 x 600 x 1200 Cum | | hole | | | | | $\left \right $ | | | |
| b) Excavation for Property chamber of 900 x 600 x 1200 | | | 6.00 | 0.80 | 0.50 | 69972.00 | Cum | | | |
| i} 0 to 1.5 m 29155.00 2.00 1.70 0.50 49563.50 Cum | | | | | | | | | | |
| | i} 0 to 1.5 m | 29155.00 | 2.00 | 1.70 | 0.50 | 49563.50 | Cum | | | |

UIEW

| MEA | SUREMEN | IT SHEET | | MEASUREMENT SHEET | | | | | | |
|---|------------------|-----------------|-------------|-------------------|-----------|------|--|--|--|--|
| DESCRIPTION | NO | L/D | В | H/D | QTY | UNIT | | | | |
| | | | | Total | 119535.50 | Cum | | | | |
| | | | | | | | | | | |
| Item no. 6 Excavation for foundation/pipe | | | | | | | | | | |
| trenches in Hard Murum & excluding the | | | | | | | | | | |
| back filling, etc complete | | | | | | | | | | |
| a) Excavation : for pipe line from IC to street Man | | | | | | | | | | |
| i} 0 to 1.5 m | | 6.00 | 0.80 | 0.50 | 69972.00 | Cum | | | | |
| b) Excavation for Property chamber of 900 x 600 | | | | | | | | | | |
| i} 0 to 1.5 m | 29155.00 | 2.00 | 1.70 | 0.50 | 49563.50 | | | | | |
| | | | | Total | 119535.50 | Cum | | | | |
| Item No : 7 : Providing murum bedding in | | | | | | | | | | |
| trenches with approved murum from excavated | | | | | | | | | | |
| materials from foundation in 15 cm. to 20 cm. | | | | | | | | | | |
| layers including watering & compaction | | | | | | | | | | |
| complete. | | | | | | | | | | |
| for pipe line from IC to street Manhole | 29155.00 | 6.00 | 0.80 | 0.15 | 20991.60 | | | | | |
| | | | | Total | 20991.60 | Cum | | | | |
| | | | | | | | | | | |
| Item No.8 Lowering ,Laying and jointing HDPE | | | | | | | | | | |
| Double Wall Corrugated Pipes for non pressure | | | | | | | | | | |
| Underground drainage and Sewerage | | | | | | | | | | |
| applications etc complete | 00455.00 | 0.00 | | | 474000.00 | | | | | |
| for pipe line from IC to street Manhole | 29155.00 | 6.00 | | | 174930.00 | RMI | | | | |
| Itom No.0, Hydroulia tasting of HDDE double | | | | | | | | | | |
| Item No.9 :Hydraulic testing of HDPE double wall corrugated pipe for non pressure | | | | | | | | | | |
| wall corrugated pipe for non pressure underground line to specified pressure including | | | | | | | | | | |
| cost of all materials and labour and water for | | | | | | | | | | |
| testing . | | | | | | | | | | |
| H.D.P.E. DWC pipes for Drainage CLASS SN 8 | 29155.00 | 6.00 | | | 0.006 | КM | | | | |
| | 20100.00 | 0.00 | | | 0.000 | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| Item No.10: Refilling the trenches with | T () (1) | | | | | | | | | |
| approved excavated stuff with soft materials | | ling Qty = Tota | • | • | | | | | | |
| etc. Complete. | Bec | dding Qty + Pi | be volume | e) | | | | | | |
| Pipe Volume: | | | | | | | | | | |
| for pipe line from IC to street Manhole | 29155.00 | 6.00 | 0.15 | 0.15 | 3091.28 | Cum | | | | |
| Chamber Vol. | 29155.00 | 1.40 | 1.10 | 1.50 | 38789.78 | | | | | |
| | | | | Total | 41881.06 | Cum | | | | |
| | | | Refilling C | Quantity : | 295733.84 | Cum | | | | |
| Item No. 11: 'Dispossing of surplus excavated | | | | | | | | | | |
| stuff from site of work up to a distance of | | | | | | | | | | |
| 2Km.including, loading, unloading, | | | | | | | | | | |
| transportation etc.complete or as directed by the | | | | | | | | | | |
| Engineering- in- charge. | Disposa | I = Bedding Qt | y + Pipe ∖ | /olume | | | | | | |
| | | 20991.60 | + | 3091.28 | 24082.88 | Cum | | | | |
| | | | | | | | | | | |

| MEA | SUREMEN | T SHEET | | | | |
|--|---------|-----------|------|-----|-----------|------|
| DESCRIPTION | NO | L/D | В | H/D | QTY | UNIT |
| Item No. 12 : Asphalt Road restoration: Reinstatement of road by excavating the potholes in rectangular shape and filling of potholes by one layers of one layer of 80 mm trap metal of 200 mm thick, one layer of 40 mm trap metal of 100 mm thick including supplying and spreading of stone dust/murrum of 100 mm thick, watering compaction and 75 mm thick bituminous bound macadam with cold emulsion 60/70 grade and bituminous macadam of 50 mm thick with bitumen of S-65 grade and 20 mm thick asphalt concrete with S-35 grade of bitumen including compaction by vibratory roller of all layers and providing and applying tack coat of 50 Kg / 100 m2 on black top surface and seal coat of 1kg/sqm. B.B.M. surface and disposal of surplus soil etc., complete. for pipeline trenches of various diameter etc., complete as per specifications and or as directed by engineer- in-charge. | | | | | | |
| Item No. 13 :Reconnection of existing damaged connection including 15 mm dia. CPVC pipe with necessary fittings, remaking good the demolished portion etc. complete including all labour, etc. complete. as directed by Engineer in charge. | 50% | 174930.00 | 1.50 | | 131197.50 | Sqm |
| 15 mm Dia. | 25% | 116620.00 | 0.00 | | 29155.00 | No |

| | | SOLAPUR MUNICIPAL CORP | | | | | |
|-------|---|---|--------------------|-------|------------------------|--|--|
| | | HARASHTRA JEEVAN PRADHIKARAN | | | | | |
| | SOLAPUR CITY UNDERGROUND SEWERAGE SCHEME (AMRUT) SUB ESTIMATE NO. :- SEWERAGE SYSTEM FOR ZONE IX | | | | | | |
| (Lln | | ewerage Network -150 to 900 mm dia RC | | | | | |
| (011 | | | C Fipes, HDI | | C SN O FIPES, | | |
| I. N. | Quantity | ITEM DESCRIPTION | Rate | Unit | Amount Rs. | | |
| | | MATERIAL : | | | | | |
| 1 | | Providing ISI Standard RCC pipes in standard length of following class and diameter, suitable for either collor joints or rubber ring joints, including all taxes (central and local) inspection charges, transport to departmental store / site unloading and stacking etc.complete. | | | | | |
| | | Notes :- One rubber ring should be supplied with each full length of socketed pipe, cost included in the rates below. | | | | | |
| | | RCC NP 3 Class | | | | | |
| | | 150 mm dia. | 357.00 | | 907494.00 | | |
| | | 200 mm dia. | 394.00 | | 131596.00 | | |
| | | 300 mm dia. | 757.00 | | 1054501.00 | | |
| | | 350 mm dia. | 1260.00 | | 1998360.00 | | |
| | | 400 mm dia. | 1344.00 | | 1116864.00 | | |
| | | 500 mm dia. | 1785.00 | | 978180.00 | | |
| | 500.00 | 700 mm dia. | 2940.00 | Rmt | 1470000.00 | | |
| | 726.00 | RCC NP 4 Class 300 mm dia. | 0.45.00 | Dent | 605520.00 | | |
| | | | 945.00 | | 695520.00 185472.00 | | |
| | | 350 mm dia. 400 mm dia. | 1344.00 1470.00 | | 461580.00 | | |
| | | 400 mm dia. 600 mm dia. | 2520.00 | | 1557360.00 | | |
| | | 700 mm dia. | 3150.00 | | 381150.00 | | |
| | 121.00 | (CSR 2016-17, P. 103,104, I. E, F) | 5150.00 | INIII | 301130.00 | | |
| | | | | | | | |

| I. N. | Quantity | ITEM DESCRIPTION | Rate | Unit | Amount Rs. |
|-------|----------|--|------------|--------|-------------|
| 2 | | Providing and supplying in standard lengths Polyethelene (PE) Pipes for non pressure underground drainage and sewerage with smooth internal and corrugated (profiled) external surface with anti rodent property conforming to ISO-21138-3:2007 with necessary jointing material like mechanical connectors, i.e. thread/ insert joint/quick release coupler joint/ compression fitting joint or flanged joint, including all taxes (Central and local), transportation and freight charges, inspection charges, loading/ unloading charges, conveyance to the departmental stores/site and stacking the same in closed shade duly protecting from sunrays and rains, etc. complete. | | | |
| | | H.D.P.E. DWC pipes for Drainage | | | |
| | 99858 00 | 150 mm dia.(ID) | 378.00 | Rmt | 37746324.00 |
| | | 170 mm dia.(ID) | 437.00 | | 1777279.00 |
| | | 200 mm dia.(ID) | 594.00 | | 1841400.00 |
| | | 250 mm dia.(ID) | 1007.00 | | 3087462.00 |
| | 3000.00 | (CSR 2016-17, P. 132,133 I. 2) | 1007.00 | IXIII | 3007402.00 |
| | | (051(2010-17,1.132,1351.2) | Material C | Cost | 55390542.00 |
| | | | material | | 00000012.00 |
| | | LABOUR : | | | |
| 1 | | Excavation for foundation / pipe trenches in earth, soils of all types , sand, gravel, and soft murum includng removing the excavated material up to a distance of 50 m. and lift as below, stacking and spreading as directed by the Engineer-in- charge, normal dewatering, preparing the bed for foundation and excluding back filling. etc.complete. | | | |
| | | Lift 0.0 -1.5 M. | | | |
| | | Basic Rate | 141.00 | | |
| | | Add 10 % for M.C | 14.10 | | |
| | 33347.90 | | 155.10 | Cum | 5172259.29 |
| | | Lift 1.5 -3.0 M. | - | | |
| | | Basic Rate | 153.00 | | |
| | | Add 10 % for M.C. | 15.30 | | |
| | 451.82 | | 168.30 | Cum | 76041.31 |
| | 101102 | (CSR 2016-17, P. 35 I. 1) | | U GIII | 10011101 |
| | | | | | |
| | | | | | |

| I. N. | Quantity | ITEM DESCRIPTION | Rate | Unit | Amount Rs. |
|-------|------------|--|--------|------|-------------|
| 2 | | Excavation for foundation / pipe trenches in hard murum & boulders , WBM road includng removing the excavated material up to a distance of 50 m. and lift as below, stacking and spreading as directed by the Engineer- in- charge, normal dewatering, preparing the bed for foundation and excluding back filling. etc.complete. | | | |
| | | Lift 0 -1.5 M. | | | |
| | | Basic Rate | 180.00 | | |
| | | Add 10 % for M.C | 18.00 | | |
| | 49088.75 | Total | 198.00 | Cum | 9719572.50 |
| | | Lift 0 -1.5 M. | | | |
| | | Basic Rate | 192.00 | | |
| | | Add 10 % for M.C | 19.20 | | |
| | 404.26 | Total | 211.20 | Cum | 85379.71 |
| | | (CSR 2016-17, P. 35 I. 3) | | | |
| 3 | | Excavation for pipe trenches in soft rock and old cement and lime masonary foundation, ashphalt road includng removing the excavated material up to a distance of 50 m. and lift as below, stacking and spreading as directed by the Engineer-in- charge, normal dewatering, preparing the bed for foundation and excluding back filling. etc.complete. | | | |
| | | Lift 0 -1.5 M. | | | |
| | | Basic Rate | 443.00 | | |
| | | Add 10 % for M.C | 44.30 | | |
| | 74971.91 | | 487.30 | Cum | 36533811.74 |
| | | Lift 1.5 -3.0 M. | 400.00 | | |
| | | Basic Rate | | | |
| | 04.400.0.4 | Add 10 % for M.C | 46.30 | 0 | 40000400.00 |
| | 21402.24 | | 509.30 | Cum | 10900160.83 |
| | | (CSR 2016-17, P. 35 I. 5) | | | |
| | | | | | |

| I. N. | Quantity | ITEM DESCRIPTION | Rate | Unit | Amount Rs. |
|-------|----------|---|--------|------|-------------|
| 4 | | Excavation for pipe trenches in hard rock and concrete road, by chiselling, wedging, lime drilling by mechanical means or by all means other than blasting, including trimming and levelling the bed, removing the excavated material up to a distance of 50 m. and lift as below, stacking and spreading as directed by the Engineer- in- charge, normal dewatering, preparing the bed for foundation and excluding back filling. etc.complete. | | | |
| | | Lift 0-1.50 M. | | | |
| | | Basic Rate | 751.00 | | |
| | | Add 10 % for M.C | 75.10 | | |
| | 4868.31 | Total | 826.10 | Cum | 4021710.89 |
| | | Lift 1.5 -3.0 M. | | | |
| | | Basic Rate | 771.00 | | |
| | | Add 10 % for M.C | 77.10 | | |
| | 25302.20 | Total | 848.10 | Cum | 21458795.82 |
| | | Lift 3.0 -4.5 M. | | | |
| | | Basic Rate | 791.00 | | |
| | | Add 10 % for M.C | 79.10 | | |
| | 10373.78 | | 870.10 | Cum | 9026223.61 |
| | | Lift 4.5-6.0 M. | 044.00 | | |
| | | Basic Rate | 811.00 | | |
| | 1407 70 | Add 10 % for M.C | 81.10 | Cum | 1207055.66 |
| | 1487.79 | Total (CSR 2016-17, P. 36 I. 7) | 892.10 | Cum | 1327255.66 |
| | | (CSIX 2010-17, F. 301, 7) | | | |
| 5 | | Providing dry trap/ granite/quartzite/ gneiss, rubble stone soling in 15 cm to 20 cm thick layers including hand packing and compacting etc.complete. | | | |
| | | Basic Rate | 912.00 | | |
| | | Add 5 % for M.C | 45.60 | | |
| | 418.86 | | 957.60 | Cum | 401100.34 |
| | | (CSR 2016-17, P. 39 I.18) | | | |
| 6 | | Providing & filling in sand boxing in pipeline or for foundation with sand of approved quality including watering and compaction, etc. complete. | | | |
| | | Basic Rate | 931.00 | | |
| | | Add 5 % for M.C. | 46.55 | | |
| | 1488.08 | | 977.55 | Cum | 1454672.60 |
| | | (CSR 2016-17, P. 39 I. 19) | | | |
| | | | | | |

| I. N. | Quantity | ITEM DESCRIPTION | Rate | Unit | Amount Rs. |
|-------|----------|---|-----------------------|-------|------------|
| 7 | | Providing murum bedding in trenches with approved murum from excavated materials from foundation in 15 cm. to 20 cm. layers including watering & compaction complete. | | | |
| | | | | | |
| | | Basic Rate | 64.00 | | |
| | | Add 5 % for M.C | 3.20 | | |
| | 13392.76 | Total | 67.20 | Cum | 899993.47 |
| | | (CSR 2016-17, P. 39, I. 16) | | | |
| | | | | | |
| 8 | | Lowering laying and jointing in proper grade and alignment R.C.C. pipes with collar joints in CM 1:1 proportion or socketed R.C.C. pipes with rubbar joints (excluding cost of rubber ring or R.C.C. collor), including cost of conveyance from stores to site of works, cost of jointing material, labour, giving hydraulic testing, etc.complete as directed by Engineer-in-charge | | | |
| | | 450 | | | |
| | | 150 mm dia. Basic Rate | 55.00 | | |
| | | Add 5 % for M.C | 2.75 | | |
| | 2542.00 | | 57.75 | Rmt | 146800.50 |
| | 2012:00 | 200 mm dia. | 01110 | | 110000.00 |
| | | Basic Rate | 73.00 | | |
| | | Add 5 % for M.C. | 3.65 | | |
| | 334.00 | Total | 76.65 | Rmt | 25601.10 |
| | | 300 mm dia. | | | |
| | | Basic Rate | 115.00 | | |
| | | Add 5 % for M.C. | 5.75 | _ | |
| | 2129.00 | Total | 120.75 | Rmt | 257076.75 |
| | | 350 mm dia. | 110.00 | | |
| | | Basic Rate Add 5 % for M.C | <u>118.00</u> 5.90 | | |
| | 1724.00 | Total | 123.90 | Rmt | 213603.60 |
| | 1124.00 | 400 mm dia. | 120.00 | | _10000.00 |
| | | Basic Rate | 151.00 | | |
| | | Add 5 % for M.C. | 7.55 | | |
| | 1145.00 | Total | 158.55 | Rmt | 181539.75 |
| | | 500 mm dia. | | | |
| | | Basic Rate | 197.00 | | |
| | | Add 5 % for M.C | 9.85 | | |
| | 548.00 | Total | 206.85 | Rmt | 113353.80 |
| | | 600 mm dia. | 0.40,000 | | |
| | | Basic Rate | 248.00 | | |
| | 618.00 | Add 5 % for M.C Total | 12.40 260.40 | Rmt | 160927.20 |
| | 010.00 | 700 mm dia. | 200.40 | INIII | 100921.20 |
| | | Basic Rate | 281.00 | | |

| I. N. | Quantity | ITEM DESCRIPTION | Rate | Unit | Amount Rs. |
|-------|----------|---|-------------------|-------|------------|
| | | Add 5 % for M.C | 14.05 | | |
| | 621.00 | Total | 295.05 | Rmt | 183226.05 |
| | | (CSR 2016-17, P. 105, I. 2) | | | |
| | | | | | |
| 9 | | Hydraulic testing of RCC pipe line to specified pressure including cost of all | | | |
| | | materials and labour and water for | | | |
| | | testing for specified length including | | | |
| | | cutting, placing end cap making | | | |
| | | arrangement for filling safe water using | | | |
| | | reciprocating type pumps which should | | | |
| | | be able to provide specified test | | | |
| | | pressure gauges and other necessary | | | |
| | | equipments, labour, operation charges, | | | |
| | | etc. required for testing. The rate under | | | |
| | | this item shall also include cost of retesting, if necessary and reinstating | | | |
| | | to original position. | | | |
| | | New item to be added | | | |
| | | | | | |
| | | 150 mm dia. | | | |
| | | Basic Rate | 6000.00 | | |
| | | Add 5 % for M.C | 300.00 | | |
| | 2.54 | Total | 6300.00 | Km | 16014.60 |
| | | 200 mm dia. | 0000.00 | | |
| | | Basic Rate | 8000.00 | | |
| | 0.33 | Add 5 % for M.C Total | 400.00 8400.00 | Km | 2805.60 |
| | 0.33 | 300 mm dia. | 6400.00 | NIII | 2003.00 |
| | | Basic Rate | 13000.00 | | |
| | | Add 5 % for M.C. | 650.00 | | |
| | 2.13 | Total | 13650.00 | Km | 29060.85 |
| | 2.10 | 350 mm dia. | 10000.00 | | 20000.00 |
| | | Basic Rate | 13000.00 | | |
| | | Add 5 % for M.C | 650.00 | | |
| | 1.72 | Total | 13650.00 | Km | 23532.60 |
| | | 400 mm dia. | | | |
| | | Basic Rate | 17000.00 | | |
| | | Add 5 % for M.C | 850.00 | | |
| | 1.15 | Total | 17850.00 | Km | 20438.25 |
| | | 500 mm dia. | | | |
| | | Basic Rate | 22000.00 | | |
| | 0.55 | Add 5 % for M.C | 1100.00 | 1/100 | 40050.00 |
| | 0.55 | Total | 23100.00 | Km | 12658.80 |
| | | 600 mm dia. Basic Rate | 28000.00 | | |
| + | | Add 5 % for M.C | 1400.00 | | |
| | 0.62 | Total | 29400.00 | Km | 18169.20 |

| I. N. | Quantity | ITEM DESCRIPTION | Rate | Unit | Amount Rs. |
|-------|----------|--|----------|------|------------|
| | | 700 mm dia. | | | |
| | | Basic Rate | 31000.00 | | |
| | | Add 5 % for M.C | 1550.00 | | |
| | 0.62 | Total | 32550.00 | Km | 20213.55 |
| | | (CSR 2016-17, P. 105, I. 2) | | | |
| 10 | | Lowering, laying and jointing H.D.P.E. Double Wall Corrugated Pipes for nonpressure Underground drainage and Sewerage applications and specials offollowing class and diameter includingcost of conveyance from stores to site of works including cost of all labour,material except O ring coupler giving satisfactory hydraulic testing as per relevent ISO, etc. complete | | | |
| | | CLASS SN 8 | | | |
| | | 150 mm dia.(ID) | | | |
| | | Basic Rate | 32.00 | | |
| | | Add 5 % for M.C | 1.60 | | |
| | 99858.00 | | 33.60 | Rmt | 3355228.80 |
| | | 170 mm dia.(ID) | | | |
| | | Basic Rate | | | |
| | | Add 5 % for M.C | 1.75 | | |
| | 4067.00 | | 36.75 | Rmt | 149462.25 |
| | | 200 mm dia.(ID) | | | |
| | | Basic Rate | 38.00 | | |
| | | Add 5 % for M.C | 1.90 | | |
| | 3100.00 | | 39.90 | Rmt | 123690.00 |
| | | 250 mm dia.(ID) | | | |
| | | Basic Rate | 47.00 | | |
| | | Add 5 % for M.C | 2.35 | | |
| | 3066.00 | Total | 49.35 | Rmt | 151307.10 |
| | | (CSR 2016-17, P. 134, I. 4) | | | |
| | | | | | |

| I. N. | Quantity | ITEM DESCRIPTION | Rate | Unit | Amount Rs. |
|-------|----------|--|-------------------|--------|------------|
| 11 | | Hydraulic testing of HDPE double wall corrugated pipe for non pressure underground line to specified pressure including cost of all materials and labour and water for testing for specified length including cutting, placing end cap making arrangement for filling safe water using reciprocating type pumps which should be able to provide specified test pressure gauges and other necessary equipments, labour, operation charges, etc. required for testing. The rate under this item shall also include cost of retesting, if necessary and reinstating to original position., etc. complete | | | |
| | | CLASS SN 8 | | | |
| | | 150 mm dia.(ID) | | | |
| | | Basic Rate | 3000.00 | | |
| | | Add 5 % for M.C | 150.00 | | |
| | 99.86 | | 3150.00 | Km | 314552.70 |
| | | 170 mm dia.(ID) | 7000.00 | | |
| | | Basic Rate Add 5 % for M.C. | 7000.00 350.00 | | |
| | 4.07 | Total | 7350.00 | Km | 29892.45 |
| | | 200 mm dia.(ID) | 1000.00 | T XIII | 20002.10 |
| | | Basic Rate | 4000.00 | | |
| | | Add 5 % for M.C | 200.00 | | |
| | 3.10 | Total | 4200.00 | Km | 13020.00 |
| | | 250 mm dia.(ID) | | | |
| | | Basic Rate | 5000.00 | | |
| | 0.07 | Add 5 % for M.C | 250.00 | 12 inc | 40000 50 |
| | 3.07 | Total (CSR 2016-17, P. , I. 6) | 5250.00 | Km | 16096.50 |
| | | | | | |
| 12 | | Open timbering in trenches of depth more than 1.5 m for shoring and strutting including use of and waste of all necessary timber works including walling, strutts, open polling boards/ horizontal sheeting, runners, etc. as may be necessary and fixing and removal complete. (Measurements to be taken of the face/area timbered) | | | |
| | | Non Water Logged Area | | | |
| | | Lift 1.50 to 3.00 m. | | | |
| | | Basic Rate | 240.00 | | |
| | | Add 5 % for M.C | 12.00 | | |
| | 2255.40 | | 252.00 | Sqm | 568360.80 |
| | | Water Logged Area | | | |

| I. N. | Quantity | ITEM DESCRIPTION | Rate | Unit | Amount Rs. |
|-------|----------|---|----------|-------|------------|
| | | Lift 1.50 to 3.00 m. | | | |
| | | Basic Rate | 239.00 | | |
| | | Add 5 % for M.C | 11.95 | | |
| | 966.60 | Total | 250.95 | Sqm | 242568.27 |
| | | (CSR 2016-17, P. 39, I. 20a / b) | | | |
| | | | | | |
| 13 | | Providing and laying in situ cement | | | |
| | | concrete 1:2:4 of trap/ granite / | | | |
| | | quartzite/ gneiss metal for foundation | | | |
| | | and bedding including bailing out water | | | |
| | | manually, formwork, compacting and | | | |
| | | curring etc. complete. | | | |
| | | Basic Rate | 4233.00 | | |
| | | Add 5 % for M.C. | 211.65 | | |
| | 772.31 | Total | 4444.65 | Cum | 3432664.83 |
| | 112.01 | (CSR 2016-17, P. 43, I. 1b) | | Oum | 0402004.00 |
| | | | | | |
| 14 | | Dewatering the excavated trenches | | | |
| | | and pools of water in the pipeline | | | |
| | | trenches, well works by using pumps | | | |
| | | and other divices including disposing | | | |
| | | off water to safe distance as directed | | | |
| | | by Engineer-in- charge (including cost | | | |
| | | of machionary, labour,fuel) | | | |
| | | etc.complete. | | | |
| | | Basic Rate | 62.00 | | |
| | | Add 5 % for M.C | 3.10 | | |
| | 84000.00 | Total | 65.10 | HP/Hr | 5468400.00 |
| | | (CSR 2016-17, P. 38, I. 14) | | | |
| 15 | | Providing and constructing on sewer, | | | |
| 15 | | B.B. masonary circular manhole with | | | |
| | | concentric cone 1.2 M. dia. at bottom | | | |
| | | and 0.5 M. from top and up to depth of | | | |
| | | 2 m. with 23 cm thick brick work up | | | |
| | | to depth of 2 M in CM 1:4 proportion | | | |
| | | with 20 mm thick smooth plaster on | | | |
| | | both sides in CM 1:2 proportion | | | |
| | | excluding excavation including | | | |
| | | foundation concrete 250 mm thick | | | |
| | | and haunches and channels in C.C. | | | |
| | | 1:2:4 proportion, finishing channels in | | | |
| | | smooth rendering, providing C.I. dapuri | | | |
| | | type steps each weighing 5.5 Kg., | | | |
| | | 1:2:4 coping and providing and fixing | | | |
| | | approved make and quality S.F.R.C. | | | |
| | | frame and cover of 56 cm dia. | | | |
| | | etc.complete as directed by Engineer- | | | |
| | | in- charge. | | | |
| | | Upto 1.50 m depth. | | | |
| | | Basic Rate | 17299.00 | | |
| | | | - | | |

| I. N. | Quantity | ITEM DESCRIPTION | Rate | Unit | Amount Rs. |
|-------|----------|---|---------------------|------|-------------|
| | 2410.00 | Total | 18163.95 | No. | 43775119.50 |
| | | Upto 2 m depth. | | | |
| | | Basic Rate | 20148.00 | | |
| | | Add 5 % for M.C | 1007.40 | | |
| | 794.00 | Total | 21155.40 | No. | 16797387.60 |
| | | (CSR 2016-17, P. 272, I. 6) a) Rebate for every decrease in depth | | | |
| | | of 50 cm or part there of Rs.2849/-Add 5% for M.C=Rs.2991.45 | | | |
| 16 | | Providing and constructing on sewer, B.B. masonary circular manhole with concentric cone 1.5 M. dia. at bottom and 0.5 M. from top and up to depth of 5 m. with 23 cm thick brick work up to depth of 2 M from top and 35 cm | | | |
| | | to depth of 2 M from top and 35 cm thick brick work for remaining depth up to 5 M in CM 1:4 proportion with 20 mm thick smooth plaster on both sides in CM 1:2 proportion excluding excavation including foundation concrete 250 mm thick and haunches and channels in C.C. 1:2:4 proportion, finishing channels in smooth rendering, providing C.I. dapuri type steps each weighing 5.5 Kg., 1:2:4 coping and providing and fixing approved make and quality S.F.R.C. frame and cover of 56 cm dia. etc.complete as directed by Engineer-in- charge. | | | |
| | | Upto 2.5 m depth. | | | |
| | | Basic Rate | 28011.00 | | |
| | | Add 5 % for M.C. | 1400.55 | | |
| | 351.00 | Total | 29411.55 | No. | 10323454.05 |
| | | Upto 3.0 m depth. | | _ | |
| | | Basic Rate | 33901.00 | | |
| | | Add 5 % for M.C | 1695.05 | | |
| | 209.00 | Total | 35596.05 | No. | 7439574.45 |
| | | Upto 3.50 m depth. | | | |
| | | Basic Rate | 39791.00 | | |
| | | Add 5 % for M.C | 1989.55 | | |
| | 162.00 | Total | 41780.55 | No. | 6768449.10 |
| | | Upto 4.0 m depth. | | | |
| | | Basic Rate | 45681.00 | | |
| | | Add 5 % for M.C | 2284.05 | | |
| | 96.00 | Total | 47965.05 | No. | 4604644.80 |
| | | Upto 4.5 m depth. | | | |
| | | Basic Rate | 51571.00 | | |
| | 74.00 | Add 5 % for M.C Total | 2578.55 54149.55 | No. | 4007066.70 |

| I. N. | Quantity | ITEM DESCRIPTION | Rate | Unit | Amount Rs. |
|-------|----------|---|----------|------|------------|
| | | Upto 5.0 m depth. | | | |
| | | Basic Rate | 57461.00 | | |
| | | Add 5 % for M.C | 2873.05 | | |
| | 40.00 | Total | 60334.05 | No. | 2413362.00 |
| | | (CSR 2016-17, P. 273, I. 7) | | | |
| | | a) Rebate for every decrease in depth | | | |
| | | of 50 cm or part there of Rs.5890/-Add | | | |
| | | 5% for M.C=Rs.6184.50 | | | |
| 47 | | Droviding and constructing on course | | | |
| 17 | | Providing and constructing on sewer, | | | |
| | | B.B. masonary circular manhole with concentric cone 1.5 M. dia. at bottom | | | |
| | | and 0.5 M. from top and 35 cm thick | | | |
| | | brick work for depth of 2 M and 45 cm | | | |
| | | thick brick work for remaining depth up | | | |
| | | to 9 M in CM 1:4 proportion with 20 | | | |
| | | mm thick smooth plaster on both sides | | | |
| | | in CM 1:2 proportion excluding | | | |
| | | excavation including foundation | | | |
| | | concrete 250 mm thick and haunches | | | |
| | | and channels in C.C. 1:2:4 proportion, | | | |
| | | finishing channels in smooth rendering, | | | |
| | | providing C.I. dapuri type steps each | | | |
| | | weighing 5.5 Kg., 1:2:4 coping and | | | |
| | | providing and fixing approved make | | | |
| | | and quality S.F.R.C. frame and cover | | | |
| | | of 56 cm dia. etc.complete as directed | | | |
| | | by Engineer-in- charge. | | | |
| | | | | | |
| | | 5.50 m depth. | | | |
| | | Basic Rate | 71823.00 | | |
| | | Add 5 % for M.C | 3591.15 | | |
| | 41.00 | | 75414.15 | No. | 3091980.15 |
| | | 6.0 m depth. | | | |
| | | Basic Rate | 79233.00 | | |
| | | Add 5 % for M.C | 3961.65 | | |
| | 26.00 | | 83194.65 | No. | 2163060.90 |
| | | 6.5 m depth. | | | |
| | | Basic Rate | 86643.00 | | |
| | | Add 5 % for M.C | 4332.15 | | |
| | 3.00 | | 90975.15 | No. | 272925.45 |
| | | (CSR 2016-17, P. 273, I. 8) | | | |
| | | a) Rebate for every decrease in depth | | | |
| | | of 50 cm or part there of Rs7410/-Add | | | |
| | | 5% for M.C .=Rs.7780.50 | | | |
| | | | | | |

| I. N. | Quantity | ITEM DESCRIPTION | Rate | Unit | Amount Rs. |
|-------|----------|---|--------------------------|------|------------|
| 18 | | Providing and fixing in position steel bar reinforcement of various diameters for RCC piles, caps, footings, foundations, lintels, parodies, copings, fins, arches, etc. as per detailed designs, drawings and schedules; including cutting, bending, hooking the bars, binding with wires or tack welding and supporting as required, etc. complete. (including cost of binding wire). | | | |
| | | Tor Steel Basic Rate | 52194.00 | | |
| | | Add 5 % for M.C. | 2609.70 | | |
| | 6.04 | Total | 54803.70 | MT | 331260.96 |
| | 0.04 | (CSR 2016-17, P. 46, I. 8b) | 01000110 | | 001200.00 |
| | | | | | |
| 19 | | Providing as per required dia S.W. or R.C.C. pipes in vertical drop arrangement including providing 150 mm dia S.W. and R.C.C. Pipe fixed in B.B. masonry of manhole at the required level including providing 150 mm dia. double tee, 150 mm dia right angled bend encasing in B.B. masonry 1:4 proportion all around the pipe, double tee, bend up to the foundation of manhole, jointing, cutting, filleting including neat cement rendering, plugging the opening with jungle wood knob complete as directed by Engineer- in- charge (0.60 M. depth) excluding cost of chamber. | | | |
| | | For 200 mm dia Pipes | | | |
| | | a) For depth up to 1.10 M | | | |
| | | Basic Rate | 3269.00 | | |
| | 3.00 | Add 5 % for M.C Total | <u>163.45</u> 3432.45 | No. | 10297.35 |
| | 3.00 | a) Rebate for every decrease in depth of 50 cm or part there of Rs. 791/-Add 5% for M.C .=Rs.830.55 For 250 mm dia Pipes a) For depth up to 1.10 M | 3432.43 | | 10237.33 |
| | | Basic Rate | 3772.00 | | |
| | | Add 5 % for M.C | 188.60 | | |
| | 2.00 | Total | 3960.60 | No. | 7921.20 |
| | | b) For depth up to 1.10 M to 1.60 M | | | |
| | | Basic Rate | 4575.00 | | |
| | 4.00 | Add 5 % for M.C | 228.75 | No | 1000 75 |
| | 1.00 | Total c) For depth up to 1.60 M to 2.10 M | 4803.75 | No. | 4803.75 |

| I. N. | Quantity | ITEM DESCRIPTION | Rate | Unit | Amount Rs. |
|-------|----------|--|----------|------|------------|
| | | Basic Rate | 5378.00 | | |
| | | Add 5 % for M.C | 268.90 | | |
| | 1.00 | Total | 5646.90 | No. | 5646.90 |
| | | d) For depth up to 3.10 M to 3.60 M | | | |
| | | Basic Rate | 7787.00 | | |
| | | Add 5 % for M.C | 389.35 | | |
| | 1.00 | Total | 8176.35 | No. | 8176.35 |
| | | a) Rebate for every decrease in depth | | | |
| | | of 50 cm or part there of Rs. 803/-Add | | | |
| | | 5% for M.C .=Rs.843.15 | | | |
| | | For 300 mm dia Pipes | | | |
| | | a) For depth up to 1.10 M to 1.60 M | | | |
| | | Basic Rate | 5452.00 | | |
| | | Add 5 % for M.C | 272.60 | | |
| | 4.00 | | 5724.60 | No. | 22898.40 |
| | | b) For depth up to 2.60 M to 3.10 M | | - | |
| | | Basic Rate | 8221.00 | | |
| | | Add 5 % for M.C | 411.05 | | |
| | 1.00 | | 8632.05 | No. | 8632.0 |
| | 1.00 | a) Rebate for every decrease in depth | 0002.00 | 110. | 0002.0 |
| | | of 50 cm or part there of Rs. 923/-Add | | | |
| | | 5% for M.C .=Rs.969.15 | | | |
| | | (CSR 2015-16, P. 275, I. 11) | | | |
| | | For 350 mm dia Pipes | | | |
| | | a) For depth up to 1.10 M to 1.60 M | | | |
| | | Basic Rate | 6415.00 | | |
| | | Add 5 % for M.C | 320.75 | | |
| | 2.00 | | | No | 20207.2 |
| | 3.00 | Total b) For depth up to 1.60 M to 2.10 M | 6735.75 | No. | 20207.2 |
| | | | 7452.00 | | |
| | | Basic Rate | 7453.00 | | |
| | 4.00 | Add 5 % for M.C | 372.65 | N.1 | 7005.0 |
| | 1.00 | Total | 7825.65 | No. | 7825.6 |
| | | c) For depth up to 2.10 M to 2.60 M | | | |
| | | Basic Rate | 8491.00 | | |
| | | Add 5 % for M.C | 424.55 | | |
| | 2.00 | Total | 8915.55 | No. | 17831.1 |
| | | a) Rebate for every decrease in depth | | | |
| | | of 50 cm or part there of Rs. 1029/-Add | | | |
| | | 5% for M.C .=Rs.1080.45 | | | |
| | | For 400 mm dia Pipes | | | |
| | | a) For depth up to 1.10 M | | | |
| | | Basic Rate | 6225.00 | | |
| | | Add 5 % for M.C | 311.25 | | |
| | 2.00 | Total | 6536.25 | No. | 13072.5 |
| | | b) For depth up to 2.10 M to 2.60 M | | | |
| | | Basic Rate | 9684.00 | | |
| | | Add 5 % for M.C | 484.20 | | |
| | 1.00 | Total | 10168.20 | No. | 10168.2 |
| | | a) Rebate for every decrease in depth | | | |
| | | of 50 cm or part there of Rs. 1135/-Add | | | |
| | | • | | | |

| I. N. | Quantity | ITEM DESCRIPTION | Rate | Unit | Amount Rs. |
|-------|-----------|--|----------|------|-------------|
| | | For 600 mm dia Pipes | | | |
| | | a) For depth up to 1.10 M | | | |
| | | Basic Rate | 7945.00 | | |
| | | Add 5 % for M.C | 397.25 | | |
| | 2.00 | Total | 8342.25 | No. | 16684.50 |
| | | b) For depth up to 1.60 M to 2.10 M | | | |
| | | Basic Rate | 10831.00 | | |
| | | Add 5 % for M.C | 541.55 | | |
| | 1.00 | Total | 11372.55 | No. | 11372.55 |
| | | a) Rebate for every decrease in depth of 50 cm or part there of Rs. 1254/-Add 5% for M.C .=Rs.1316.7 (CSR 2016-17, P. 275 I. 12) | | | |
| | | | | | |
| 20 | | Refilling the trenches with available excavated stuff with soft material first over pipe line and then hard material in 15 cm layers with all leads and lifts including consolidation, surcharging, etc.complete. | | | |
| | | Basic Rate | 64.00 | | |
| | | Add 5 % for M.C | 3.20 | | |
| | 179814.91 | Total | 67.20 | Cum | 12083562.01 |
| | | (CSR 2016-17, P. 38, I.15) | | | |
| | | | | | |
| 21 | | Dispossing of surplus excavated stuff from site of work up to a distance of 2 Km.including, loading, unloading, transportation etc.complete or as directed by the Engineering- in- charge. | | | |
| | | (CSR 2015-16, P. 22, Statement VI) | | | |
| | 27003.20 | Basic Rate | 195.62 | Cum | 5282365.35 |
| | | | | | |

| I. N. | Quantity | ITEM DESCRIPTION | Rate | Unit | Amount Rs. |
|-------|----------|---|----------|------|-------------|
| 22 | | Providing, fixing and erecting RCC (M20) Vent shaft with cowl, 125mm x 225mm internal and external dia respectively at top, 300mm and 450mm internal and external dia at bottom and 9.10m over all length, bottom 1.25m below ground level fixed in the pit 900mmx900mmx1500mm with PCC M15, 250mm in bed and 200mm around with top 150mm in cement concrete 1:2:4 (1 cement 2 coarse sand and 4 graded stone aggregate of 20mm nominal size) junction of vent shaft and concrete grouted with cement mortar 1:2 (1 cement and 2 fine sand) including making connection with sewer manhole with 150 mm dia NP4 RCC pipe (IS 458- ammended upto date) for 5.0 m length including Murum bedding complete and as per standard design and finished with water proofing cement of approved brand of required shade as per drawings and/or as directed by Engineer.Providing and fixing RCC ventilation shaft, making connection to manhole etc. complete | | | |
| | 10.00 | | 18516.00 | No. | 185160.00 |
| | | (As per Rate Analysis) | | | |
| 23 | | WBM Road restoration:Reinstating the road surface with supplying & spreading 60mm metal of 20 cm thick with Hard murum & 40mm metal of 15 cm thick with Soft murum as a blindage, above WBM surfaceFor all the above layers watering & compacting with Power roller, including Excavation of required depth for road reinstating or as directed by Engineer- in-charge etc. complete. | | | |
| | 76641.00 | (As per Rate Analysis) | 208.74 | Sqm | 15998042.34 |

| 24 Asphalt Road restora | Rate Unit Amount Rs. |
|---|--|
| Reinstatement of road by excav the potholes in rectangular shape filling of potholes by one layers of layer of 80 mm trap metal of 200 thick, one layer of 40 mm trap met 100 mm thick including supplying spreading of stone dust/murrum of mm thick, watering compaction an mm thick bituminous bound maca with cold emulsion 60/70 grade bituminous macadam of 50 mm with bitumen of S-65 grade and 20 thick asphalt concrete with S-35 g of bitumen including compaction vibratory roller of all layers providing and applying tack coat of Kg / 100 m2 on black top surface seal coat of 1kg/sqm. B.B.M. sur and disposal of surplus soil complete. for pipeline trenches various diameter etc., complete per specifications and or as directed | ating and one mm tal of and f 100 d 75 dam and thick 0 mm yrade n by and of 50 e and fface etc., s of e as |
| 20438.00 (As per Rate Analysis) | 873.47 Sqm 17851979.86 |
| | |
| 25ConcreteRoadrestorationReinstatement of Concrete road excavating the concrete panel rectangular shape and filling the tri- with one layer of natural sand of mm thick , one layer of M20 g PCC of 150 mm thick and one lay PCC M30 grade of 300 mm including dewatering etc., complete pipeline trenches of various diantic, complete as per specification and or as directed by engineer charge.Item No. 25a Providing and filling the foundation with sand of ap-pr quality including watering, comparison complete. Spec. No.: Bd.A.13 I | d by s in ench 300 yrade er of thick e. for neter tions - in- ng in oved ction |
| | |
| No. 264 PWD DSR 17-18, Item No. 12 / 1 13, Pg-17 | |
| PWD DSR 17-18, Item No. 12 / 1 13, Pg-17 Basic Add 5% for M.C. + 5% Sugar | Rate 451.00 |

| I. N. | Quantity | ITEM DESCRIPTION | Rate | Unit | Amount Rs. |
|-------|----------|---|---------|------|------------|
| | | Item No. 25b Providing and casting in | | | |
| | | situ cement concrete M- 15 of trap / | | | |
| | | granite / quartzite / gneiss metal for steps including centering, formwork, | | | |
| | | compacting, roughening them if special | | | |
| | | finish is to be provided and curing and | | | |
| | | finishing if required complete, with fully | | | |
| | | automatic micro processor based PLC | | | |
| | | with SCADA enabled reversible Drum | | | |
| | | Type mixer With natural sand. Spec. | | | |
| | | No.: Bd.E.2 Page No. 288 and B.7 | | | |
| | | Page No 38 | | | |
| | | PWD DSR 2017-18, I. No. 2 i a 4, Pg. | | | |
| | | No. 25 | | | |
| | | Basic Rate | | | |
| | | Add 5% for M.C. + 5% Sugarcane | | | |
| | 540.00 | Area | 538.00 | 0 | 0000500.00 |
| | 510.90 | Total | 5918.00 | Cum | 3023506.20 |
| | | Item No. 25c: Providing and laying in | | | |
| | | situ cement concrete M -30 with tremix | | | |
| | | treatment for 200 mm thickness for | | | |
| | | Concrete Road is including laying | | | |
| | | plastic sheet for 125 micron thickness | | | |
| | | with groove cutting of 4 mm wide and | | | |
| | | 20 mm deep with necessary refilling | | | |
| | | with bitumen (excluding | | | |
| | | reinforcement) with Natural sand etc. | | | |
| | | complete Spec : As directed by | | | |
| | | Engineer incharge PWD DSR 2017-18, I. No. 93 / 23 | | | |
| | | MORTH, Pg. No. 228 | | | |
| | | Basic Rate | 6362.00 | | |
| | | Add 5% for M.C. + 5% Sugarcane | | | |
| | | Area | | | 4707000.40 |
| | 255.45 | Total | 6998.20 | Cum | 1787690.19 |
| | | | | | |
| 26 | | Shifting of Utilities: All utilities like | | | |
| | | Electric Poles, waterline & | | | |
| | | Communication line Shifting while | | | |
| | | Manhole and Line Laying work etc., | | | |
| | | complete as per specifications and or | | | |
| | | as directed by engineer- in-charge. | | | |
| | | | | | |

| I. N. | Quantity | ITEM DESCRIPTION | Rate | Unit | Amount Rs. |
|-------|----------|--|----------|------|------------|
| | | Utility Shifting | | | |
| Α | | Reconnection of existing damaged | | | |
| | | connection including 15 mm dia. | | | |
| | | CPVC pipe with necessary fittings, | | | |
| | | remaking good the demolished portion | | | |
| | | etc. complete including all labour, etc. | | | |
| | | complete. as directed by Engineer in | | | |
| | | charge. | | | |
| | | Water Supply Connections - 15 mm dia | l | | |
| | | Basic Rate | 167 | | |
| | | Add 5% for M.C. | 8.35 | | |
| | 30 | Total | 175.35 | Rmt | 5260.5 |
| | | | | | |
| | | (Similar Item PWD CSR 2016-17, P. | | | |
| | | 166, I No 42.62) | | | |
| | | Water Supply Connections - 20 mm dia | l | Rmt | |
| | | Basic Rate | 196 | | |
| | | Add 5% for M.C. | 9.8 | | |
| | 4 | Total | 205.8 | Rmt | 823.2 |
| В | • | Electrical Lines & Poles | 20010 | | 02012 |
| | | Electrical Poles - RA for 10 km | | | |
| i) | | Pole Foundation : Providing cement | | | |
| " | | 5 | | | |
| | | 5 | | | |
| | | excavation for the pole 60 cms x 60 | | | |
| | | cms x 1.5 mtr deep in1:3:6 cement | | | |
| | | concrete (20x 25 mm stone metal) and 45 cm x 45cm x45 cm / 45 cm x 45 cm | | | |
| | | | | | |
| | | height plinth duly plaster and with | | | |
| | | necessary curing & finishing in above | | | |
| | 4 | manner (for 9 mtr pole) | 0774 00 | Nee | 0774 |
| | 1 | | 2771.00 | Nos | 2771 |
| | | PWD DSR 15-16, E & M, Item No. 16.3.2, P.No. 161 | | | |
| ii) | | Dismantling of existing poles above | | | |
| "" | | | | | |
| | | 6 mtr height with brackets. Clamps, | | | |
| | | insulators stay from the cement | | | |
| | | concrete foundation and making the | | | |
| | | site clear by refilling the pits with | | | |
| | | excavated materials and bringing it to | | | |
| | 4 | ground level | 701.00 | Nee | 704 |
| | 1 | DWD DSD 15 16 E 9 M Ham No | 701.00 | Nos | 701 |
| | | PWD DSR 15-16, E & M, Item No. | | | |
| :::) | | 8.8.2, P.No. 110 | | | |
| iii) | | Re-Erecting: Supplying and erecting | | | |
| | | steel tubular swaged pole 165.1 X | | | |
| | | 139.7 X 114.3 mm dia with 4.5 X 4.5 | | | |
| | | X3.65 mm thick (5+2+2m) length | | | |
| | | respectively and total 9 m long with | | | |
| | | pole cap, base plate in provided | | | |
| | | foundation (weight 147 kg) as per | | | |
| | 1 | specifications. | 12722.00 | Nos | 12722 |
| | | PWD DSR 15-16, E&M, Item No. | | | |
| | | 8.1.3, Page No.98 | | | |

| | | ГГ | | | |
|-------|----------|---|---------|------|------------|
| I. N. | Quantity | ITEM DESCRIPTION | Rate | Unit | Amount Rs. |
| iv) | | Earthling : Providing erecting pipe | | | |
| - | | type earthling of 40 mm GI pipe dia | | | |
| | | with double earthling to the all | | | |
| | | equipments as per Detailed | | | |
| | 1 | specifications. | 1585.00 | Nos | 1585 |
| | | PWD DSR 14-15 E&M, Item No. 9.1.4, | | | |
| | | Page No.111 | | | |
| С | | Electrical Cable - Providing and Jointing | 9 | | |
| | | Communication Cable - Jelly Filled | | | |
| | | telephone lines and optical Fibre | | | |
| | | Cable | | | |
| i) | | Supply & Erecting of Jelly filled | | | |
| | | armoured telephone cable 10 pair with | | | |
| | | 0.5 mm dia laid in provided trench as | | | |
| | | per specification no. WG-TW | | | |
| | 3 | | 83.00 | Rmt | 249 |
| | | PWD DSR 15-16 Item 1-10-10, P No | | | |
| | | 17 | | | |
| ii) | | Supply & erecting of FR grade PVC | | | |
| | | armourd multi mode Optical Fibre | | | |
| | | Cable with 6 fibres with core dia 50 | | | |
| | | µM , suitable for 1 GBps Ethernet | | | |
| | | distance at 850 nm of wavelength on | | | |
| | | wall/ ceiling or laid in provided pipe / | | | |
| | | trench as per specification no. WG- | | | |
| | 3 | COC/ OFC | 247.00 | Rmt | 741 |
| | | PWD DSR 15-16 Item 1-12-8, P No 20 | | | |
| | | | | | |
| iii) | | Supply & fixing of wall /rack type 12 | | | |
| | | port light guide interconnection unit for | | | |
| | | termination of optical fibre cable on | | | |
| | | wall /provided U rack complete as per | | | |
| | 1 | specification no. EG- NAS / LIU | 4366.00 | Nos | 4366 |

PWD DSR 15-16 Item 1-14-5 P No 21

| I. N. | Quantity | ITEM DESCRIPTION | Rate | Unit | Amount Rs. |
|-------|----------|--|----------|------------|--------------|
| 27 | | Highway Crossing | | | |
| | | Pushing of M.S. pipe of following dia. | | | |
| | | For road crossing and railway crossing | | | |
| | | by push through metod in all types of | | | |
| | | strata by using hydraulic jack and | | | |
| | | drilling machine of required diameter of | | | |
| | | below MS casing pipes, loweing, laying | | | |
| | | & jointing of material, requred welding | | | |
| | | machinery, tripod, chain pully block, | | | |
| | | crain, blower, compressor, loading & | | | |
| | | unloading of machinery into the trench | | | |
| | | , etc. transportation and dewatering , | | | |
| | | etc. complete as directed by Engineer- | | | |
| | | in-charge but excluding the cost of MS | | | |
| | | v v | | | |
| | | pipes500 to 1000 mm dia. MS Pipe | | | |
| | | Basic Rate | 22781.00 | | |
| | | Add 5 % for M.C | 1139.05 | | |
| | 100.00 | Total | 23920.05 | Rmt | 2392005.00 |
| | | (CSR 2016-17, P. 58, I. 14a) | | | |
| | | MS Pipe 500 mm (ID) 10 mm thick | | | |
| | 100.00 | Basic Rate | 6620.00 | Rmt | 662000.00 |
| | | (CSR 2016-17, P.193, I.2I) | l ahou | ır Cost | 278070054.23 |
| | | Total Materia | | | 333460596.23 |
| | | | | ay Rs. | 333460597.00 |
| | | | | , Lakhs | 3334.61 |
| | | | Say | Crore | 33.35 |

SOLAPUR MUNICIPAL CORPORATION MAHARASHTRA JEEVAN PRADHIKARAN DIVISION SOLAPUR SOLAPUR CITY UNDERGROUND SEWERAGE SCHEME (AMRUT) SUB ESTIMATE NO. :- SEWERAGE SYSTEM FOR ZONE IX

SMC

(Underground Sewerage Network -150 to 800 mm dia RCC Pipes, HDPE DWC SN 8 Pipes , L=146.29 Km)

| | MEASUREMENT | | | | | | | |
|------------|--|----------|-----------|---------|-----|-----------|------|--|
| ltem No | ITEM DESCRIPTION | No | L | В | D/H | Quantity | Unit | |
| | MATERIAL : | | | | | | | |
| 1 | Providing ISI Standard RCC pipes in standard length of following class and diameter, etc.complete. | | | | | | | |
| | | | | | | | | |
| | RCC NP 3 Class | | | | | | | |
| | 150 mm dia. | 1.00 | 2542.00 | | | 2542.00 | Rmt | |
| | 200 mm dia. | 1.00 | 334.00 | | | 334.00 | Rmt | |
| | 300 mm dia. | 1.00 | 1393.00 | | | 1393.00 | Rmt | |
| | 350 mm dia. | 1.00 | 1586.00 | | | 1586.00 | Rmt | |
| | 400 mm dia. | 1.00 | 831.00 | | | 831.00 | Rmt | |
| | 500 mm dia. | 1.00 | 548.00 | | | 548.00 | Rmt | |
| | 700 mm dia. | 1.00 | 500.00 | | | 500.00 | Rmt | |
| | RCC NP 4 Class | | | | | | | |
| | 300 mm dia. | 1.00 | 736.00 | | | 736.00 | Rmt | |
| | 350 mm dia. | 1.00 | 138.00 | | | 138.00 | Rmt | |
| | 400 mm dia. | 1.00 | 314.00 | | | 314.00 | Rmt | |
| | 600 mm dia. | 1.00 | 618.00 | | | 618.00 | | |
| | 700 mm dia. | 1.00 | 121.00 | | | 121.00 | Rmt | |
| 2 | Providing and supplying in standard lengths Polyethelene (PE) Pipes for non pressure underground drainage and sewerage, etc. complete. | | | | | | | |
| | H.D.P.E. pipes for Drainage CLASS SN 8 | | | | | | | |
| | 150 mm dia.(ID) | 1.00 | 99858.00 | | | 99858.00 | Rmt | |
| | 170 mm dia.(ID) | 1.00 | 4067.00 | | | 4067.00 | Rmt | |
| | 200 mm dia.(ID) | 1.00 | 3100.00 | | | 3100.00 | Rmt | |
| | 250 mm dia.(ID) | 1.00 | 3066.00 | | | 3066.00 | Rmt | |
| | LABOUR : | | | | | | | |
| | EXCAVATION DETAILS -From | | | | | | | |
| | computer generated design | | | | | | | |
| | sheet | | | | | | | |
| Dt | 0-1.5 | 1.5-3.0 | 3.0 - 4.5 | 4.5-6.0 | | TOTAL | | |
| Ex Line | 128116.48 | 30774.02 | 7278.28 | 1067.01 | | 167235.79 | Cum | |
| Ex MH | 34160.38 | 16786.51 | 3095.50 | 420.77 | | 54463.16 | Cum | |
| Say | 162276.86 | 47560.52 | 10373.78 | 1487.79 | | 221698.95 | Cum | |
| | | | | | | | | |

| ltem No | ITEM DESCRIPTION | No | L | В | D/H | Quantity | Unit |
|------------|--|------|---------|------|------|----------|------|
| 1 | Excavation for foundation / pipe trenches in earth, soils of all types , sand, gravel, and soft murum etc.complete. | | | | | | |
| | Lift 0.0 -1.5 M. | | | | | 33347.90 | Cum |
| | Lift 1.5 -3.0 M. | | | | | 451.82 | Cum |
| | Excavation for foundation / pipe trenches in hard murum & boulders , WBM road etc.complete. | | | | | | |
| | Lift 0.0 -1.5 M. | | | | | 49088.75 | Cum |
| | Lift 1.5 -3.0 M. | | | | | 404.26 | Cum |
| 3 | Excavation for pipe trenches in soft rock and old cement and lime masonary foundation, ashphalt road etc.complete. | | | | | | |
| | Lift 0.0-1.50 M. | | | | | 74971.91 | Cum |
| | Lift 1.5-3.0 M. | | | | | 21402.24 | Cum |
| 4 | Excavation for pipe trenches in hard rock and concrete road, by chiselling, wedging, lime drilling by mechanical means or by all means other than blasting, etc.complete. | | | | | | |
| | Lift 0.0-1.50 M. | | | | | 4868.31 | Cum |
| | Lift 1.5-3.0 M. | | | | | 25302.20 | Cum |
| | Lift 3.0-4.5 M. | | | | | 10373.78 | Cum |
| | Lift 4.5-6.0 M. | | | | | 1487.79 | Cum |
| | | | | | | | |
| 5 | Providing dry trap/ granite/quartzite/ gneiss, rubble stone soling etc.complete. | | | | | | |
| | Provision Made for trunk sewer along nallah | 1.00 | 1074.00 | 1.30 | 0.30 | 418.86 | Cum |
| | Providing & filling in sand boxing in pipeline or for foundation etc.complete. | | | | | | |
| | (As per Computer generated sheet) | | | | | 1488.08 | Cum |
| 7 | Providing murum bedding in trenches with approved murum from excavated materials etc.n complete. | | | | | | |
| | (As per Computer generated sheet) | | | | | 13392.76 | Cum |

| ltem No | ITEM DESCRIPTION | No | L | В | D/H | Quantity | Unit |
|------------|--|------|----------|---|-----|----------|------|
| 8 | Lowering laying and jointing in proper grade and alignment R.C.C. pipes etc.complete | | | | | | |
| | 150 mm dia. | 1.00 | 2542.00 | | | 2542.00 | Rmt |
| | 200 mm dia. | 1.00 | 334.00 | | | 334.00 | Rmt |
| | 300 mm dia. | 1.00 | 2129.00 | | | 2129.00 | |
| | 350 mm dia. | 1.00 | 1724.00 | | | 1724.00 | Rmt |
| | 400 mm dia. | 1.00 | 1145.00 | | | 1145.00 | |
| | 500 mm dia. | 1.00 | 548.00 | | | 548.00 | Rmt |
| | 600 mm dia. | 1.00 | 618.00 | | | 618.00 | Rmt |
| | 700 mm dia. | 1.00 | 621.00 | | | 621.00 | Rmt |
| 9 | Hydraulic testing of RCC pipe line to specified pressure etc.complete | | | | | | |
| | 150 mm dia. | 1.00 | 2.54 | | | 2.54 | Rmt |
| | 200 mm dia. | 1.00 | 0.33 | | | 0.33 | Rmt |
| | 300 mm dia. | 1.00 | 2.13 | | | 2.13 | Rmt |
| | 350 mm dia. | 1.00 | 1.72 | | | 1.72 | Rmt |
| | 400 mm dia. | 1.00 | 1.15 | | | 1.15 | Rmt |
| | 500 mm dia. | 1.00 | 0.55 | | | 0.55 | Rmt |
| | 600 mm dia. | 1.00 | 0.62 | | | 0.62 | Rmt |
| | 700 mm dia. | 1.00 | 0.62 | | | 0.62 | Rmt |
| 10 | Lowering, laying and jointing H.D.P.E.Double Wall Corrugated Pipes for nonpressure Underground drainage and Sewerage applications etc. complete | | | | | | |
| | H.D.P.E. pipes for Drainage | | | | | | |
| L | 150 mm dia.(ID) | 1.00 | 99858.00 | | | 99858.00 | Rmt |
| | 170 mm dia.(ID) | 1.00 | 4067.00 | | | 4067.00 | Rmt |
| | 200 mm dia.(ID) | 1.00 | 3100.00 | | | 3100.00 | Rmt |
| | 250 mm dia.(ID) | 1.00 | 3066.00 | | | 3066.00 | Rmt |
| 11 | Hydraulic testing of HDPE double wall corrugated pipe for non pressure underground line to specified pressure etc.complete | | | | | | |
| | 150 mm dia.(ID) | 1.00 | 99.86 | | | 99.86 | Km |
| | 170 mm dia.(ID) | 1.00 | 4.07 | | | 4.07 | Km |
| | 200 mm dia.(ID) | 1.00 | 3.10 | | | 3.10 | Km |
| | 250 mm dia.(ID) | 1.00 | 3.07 | | | 3.07 | Km |
| | | | + + | | | | |

SMC

| ltem No | ITEM DESCRIPTION | No | L | В | D/H | Quantity | Unit |
|------------|--|--------|--------|------|------|----------|--------|
| 12 | Open timbering in trenches of depth more than 1.5 m for shoring and strutting etc. complete. | | | | | | |
| | Non Water Logged Area | | | | | | |
| | Lift 1.50 to 3.00 m. | 2.00 | 751.80 | | 1.50 | 2255.40 | Sqm |
| | Water Logged Area | | | | | | |
| | Lift 1.50 to 3.00 m. | 2.00 | 322.20 | | 1.50 | 966.60 | Sqm |
| 13 | Providing and laying in situ cement concrete 1:2:4 of trap/ granite / quartzite/ gneiss metal for foundation and bedding etc. complete. | | | | | | |
| | Provision of anchor block Made for trunk sewer along nallah | 200.00 | 1.50 | 1.50 | 0.60 | 270.00 | |
| | Deduct | 200.00 | 0.79 | 1.00 | 0.60 | 94.20 | |
| | Net Qty | | | | | 175.80 | Cum |
| | (As per Computer generated sheet) | | | | | 596.51 | Cum |
| | Total Qty | | | | | 772.31 | Cum |
| 14 | Dewatering the excavated trenches and pools of water in the pipeline trenches, etc.complete. | | | | | | |
| | For nalla / where water table high | 7.00 | 400.00 | 5.00 | 6.00 | 84000.00 | Bhp/hr |
| | 7 Fronts, 5 BHP Pump- 6Hrs- 180 Days | | | | | | |
| 15 | Providing and constructing on sewer, B.B. masonary circular manhole with concentric cone 1.2 M. dia. at bottom and 0.5 M. from top and up to depth of 2 m. with 23 cm thick brick work up to depth of 2 Metc.complete Upto 1.50 m depth. | | | | | 2410.00 | No. |
| | Upto 2.0 m depth. | | | | | 794.00 | No. |
| | (As per Computer generated sheet) | | | | | | |
| 16 | Providing and constructing on sewer, B.B. masonary circular manhole with concentric cone 1.5 M. dia. at bottom and 0.5 M. from top and up to depth of 5 m. with 23 cm thick brick work up to depth of 2 M from top and 35 cm thick brick work for remaining depth up to 5 M etc.complete Upto 2.50 m depth. | | | | | 351.00 | No. |

| ltem No | ITEM DESCRIPTION | No | L | В | D/H | Quantity | Unit |
|------------|--|----------|--------|---|-----|----------|------|
| | Upto 3.0 m depth. | | | | | 209.00 | No. |
| | Upto 3.5 m depth. | | | | | 162.00 | No. |
| | Upto 4.0 m depth. | | | | | 96.00 | No. |
| | Upto 4.5 m depth. | | | | | 74.00 | No. |
| | Upto 5.0 m depth. | | | | | 40.00 | No. |
| | (As per Computer generated | | | | | | |
| | sheet) | | | | | | |
| | | | | | | | |
| 17 | Providing and constructing on | | | | | | |
| | sewer, B.B. masonary circular | | | | | | |
| | manhole with concentric cone 1.5 | | | | | | |
| | M. dia. at bottom and 0.5 M. from | | | | | | |
| | top and 35 cm thick brick work for | | | | | | |
| | depth of 2 M and 45 cm thick brick | | | | | | |
| | work for remaining depth up to 9 | | | | | | |
| | M in etc.complete | | | | | | |
| | Upto 5.5 m depth. | | | | _ | 41.00 | No. |
| | Upto 6.0 m depth. | | | | | 26.00 | No. |
| | Upto 6.5 m depth. | | | | | 3.00 | No. |
| | (As per Computer generated | | | | | 0.00 | |
| | sheet) | | | | | | |
| | | | | | | | |
| 18 | Providing and fixing in position | | | | | | |
| | steel bar reinforcement etc. | | | | | | |
| | complete | | | | | | |
| | Wt of Steel = 0.1% of Concrete | | | | | 6.04 | |
| | Qty = | 0.77 | 6044.5 | | | | MT |
| | | | | | | | |
| 19 | Providing as per required dia | | | | | | |
| | S.W. or R.C.C. pipes in vertical | | | | | | |
| | drop arrangementetc. Complete | | | | | | |
| | For 200 mm dia Pipes | | | | | | |
| | a) For depth up to 1.10 M | 3 | | | | 3 | No. |
| | For 250 mm dia Pipes | | | | | | |
| | a) For depth up to 1.10 M | 2 | | | | 2 | No. |
| | b) For depth up to 1.10 M to 1.60 | | | | | 1 | |
| | M | 1 | | | | | No. |
| | c) For depth up to 1.60 M to 2.10 | | | | | 1 | |
| | M | 1 | | | | | No. |
| | d) For depth up to 3.10 M to 3.60 | | | | | 1 | |
| | M For 200 mm dia Dinoa | 1 | | | | | No. |
| | For 300 mm dia Pipes | | | | | А | |
| | a) For depth up to 1.10 M to 1.60 | Л | | | | 4 | Nie |
| | M b) For depth up to 2.60 M to 3.10 | 4 | + | | | 1 | No. |
| | M | 1 | | | | I | No. |
| | For 350 mm dia Pipes | <u> </u> | | | | | INO. |
| | a) For depth up to 1.10 M to 1.60 | | | | | 3 | |
| | | 3 | | | | 5 | No. |
| | b) For depth up to 1.60 M to 2.10 | 5 | | ļ | | 1 | 110. |
| | | 1 | | | | • | No. |

| ltem No | ITEM DESCRIPTION | No | L | В | D/H | Quantity | Unit |
|------------|---|----|---|---|-----|-----------|------|
| | c) For depth up to 2.10 M to 2.60 M | 2 | | | | 2 | No. |
| | For 400 mm dia Pipes | | | | | | |
| | a) For depth up to 1.10 M | 2 | | | | 2 | No. |
| | b) For depth up to 2.10 M to 2.60 | | | | | 1 | |
| | M | 1 | | | _ | | No. |
| | For 600 mm dia Pipes | | | | | | |
| | a) For depth up to 1.10 M | 2 | | | | 2 | No. |
| | b) For depth up to 1.60 M to 2.10 M | 1 | | | | 1 | No. |
| 20 | Refilling the trenches with available excavated stuff etc.complete. (As per Computer generated | | | | | 179814.91 | |
| | sheet) | | | | | | Cum |
| 21 | Dispossing of surplus excavated stuff from site of work up to a distance of 2Km etc.complete | | | | | | |
| | (As per Computer generated sheet) | | | | | 27003.20 | Cum |
| 22 | Providing, fixing and erecting RCC (M20) Vent shaft etc. complete | | | | | | |
| | | 10 | | | | 10 | No. |
| 23 | WBM Road Restoration : Reinstating the road surface with supplying & spreading 60mm metal of 20 cm thick with Hard murum & 40mm metal of 15 cm thick with Soft murum etc. complete. | | | | | | |
| | (As per Computer generated sheet) | | | | | 76641.00 | Sqm |
| 24 | Asphalt Road restoration: Reinstatement of road by excavating the potholes in rectangular shape and filling of potholes by one layers of one layer of 80 mm trap metal of 200 mm thick, one layer of 40 mm trap metal of 100 mm thick etc., complete. | | | | | | |
| | (As per Computer generated sheet) | | | | | 20438.00 | Sqm |

| 5109.00 | Sqm |
|---------|--------|
| 0100.00 | - Oqui |
| 510.90 | Cum |
| | |
| 510.90 | Cum |
| | |
| 255.45 | Cum |
| | |
| | |
| | |
| | |
| | |
| 30 | Rmt |
| | 510.90 |

| ltem No | ITEM DESCRIPTION | No | L | В | D/H | Quantity | Unit |
|------------|---|---------|---|---|-----|----------|------|
| | (Similar Item PWD CSR 2016-17, P. 166, I No 42.62) | | | | | | |
| | Water Supply Connections - 20 | | | | | | |
| | mm dia | 4 | 1 | | | 4 | Rmt |
| В | Electrical Lines & Poles | | | | | | |
| | Electrical Poles - RA for 10 km | | | | | | |
| i) | Pole Foundation : Providing | | | | | | |
| | cement concrete foundation | | | | | | |
| | including excavation for the pole | | | | | | |
| | 60 cms x 60 cms x 1.5 mtr deep | | | | | | |
| | in1:3:6 cement concrete (20x 25 | | | | | | |
| | mm stone metal) and 45 cm x | | | | | | |
| | 45cm x45 cm / 45 cm x 45 cm | | | | | | |
| | height plinth duly plaster and with | | | | | | |
| | necessary curing & finishing in | | | | | | |
| | above manner (for 9 mtr pole) | 1 | | | | 1 | Nos |
| ii) | Dismantling of existing poles | | | | | | |
| | above 6 mtr height with brackets. | | | | | | |
| | Clamps, insulators stay from the | | | | | | |
| | cement concrete foundation and | | | | | | |
| | making the site clear by refilling | | | | | | |
| | the pits with excavated materials | | | | | | |
| | and bringing it to ground level | 1 | | | | 1 | Nos |
| iii) | Re-Erecting: Supplying and | | | | | | |
| , | erecting steel tubular swaged pole | | | | | | |
| | 165.1 X 139.7 X 114.3 mm dia | | | | | | |
| | with 4.5 X 4.5 X3.65 mm thick | | | | | | |
| | (5+2+2m) length respectively and | | | | | | |
| | total 9 m long with pole cap, base | | | | | | |
| | plate in provided foundation | | | | | | |
| | (weight 147 kg) as per specifications. | 1 | | | | 1 | Nos |
| iv) | Earthling : Providing erecting | I | | | | I | 1403 |
| , | pipe type earthling of 40 mm GI | | | | | | |
| | pipe dia with double earthling to | | | | | | |
| | the all equipments as per Detailed | | | | | | |
| | specifications. | 1 | | | | 1 | Nos |
| С | Electrical Cable - Providing and Jo | ointing | | | | | |

| ltem No | ITEM DESCRIPTION | No | L | В | D/H | Quantity | Unit |
|-------------|--|----|----|---|-----|----------|------|
| | Communication Cable - Jelly Filled telephone lines and optical Fibre Cable | | | | | | |
| i) | Supply & Erecting of Jelly filled armoured telephone cable 10 pair with 0.5 mm dia laid in provided trench as per specification no. WG- TW | 1 | 3 | | | 3 | Rmt |
| ii) iii) | Supply & erecting of FR grade PVC armourd multi mode Optical Fibre Cable with 6 fibres with core dia 50 µM , suitable for 1 GBps Ethernet distance at 850 nm of wavelength on wall/ ceiling or laid in provided pipe / trench as per specification no. WG- COC/ OFC Supply & fixing of wall /rack type 12 port light guide interconnection | 1 | 3 | | | 3 | Rmt |
| 27 | unit for termination of optical fibre cable on wall /provided U rack complete as per specification no. EG- NAS / LIU Highway Crossing Pushing of M.S. pipe of following | 1 | | | | 1 | Nos |
| | dia. For road crossing and railway crossing by push through metod in all types of strata by using hydraulic jack and drilling machine etc. complete MS Pipe 500 mm (ID) 10 mm thick | 5 | 20 | | | 100 | Rmt |

SOLAPUR MUNICIPAL CORPORATION MAHARASHTRA JEEVAN PRADHIKARAN DIVISION SOLAPUR SOLAPUR CITY UNDERGROUND SEWERAGE SCHEME (AMRUT) NAME OF SUBWORK: PUMING STATION FOR ZONE X @ HYDRABAD ROAD MHADA

| | | | ABSTRA | СТ | | | |
|------------|--------|-----|--|------------------------|--------|------|--------------|
| ltem No | Quant | ity | ITEM DESCRIPTION | | Rate | Unit | Amount Rs. |
| 1 | | | Excavation for foundation / pipe trenches in earth, soils of all types, sand, gravel, and soft murum includng removing the excavated material up to a distance of 50 m. and lift as below, stacking and spreading as directed by the Engineer-in- charge, normal dewatering, preparing the bed for foundation and excluding back filling. etc.complete. | | | | |
| | | | /JP 16-17, Section E, Item No 1, Pg-35 | | | | |
| | 658.08 | Cum | pto 1.5m | | 148.05 | Cum | 97428.27 |
| | | | Basic Rate | 141.00 | | | |
| | | | Add 5 % for M.C. | 7.05 | | | |
| | | | Total | 148.05 | | | |
| | 138.33 | Cum | 1.5 to 3 m | | 160.65 | Cum | 22223.43 |
| | | | Basic Rate | 153.00 | | | |
| | | | Add 5 % for M.C. | 7.65 | | | |
| | | | Total Excavation for foundation / pipe | 160.65 | | | |
| 2 | | | hard murum & boulders, WBM road includng removing the excavated material up to a distance of 50 m. and lift as below, stacking and spreading as directed by the Engineer-in- charge, normal dewatering, preparing the bed for foundation and excluding back filling. etc.complete. | | | | |
| | | | MJP 16-17, Section E, Item No 3, | Pg-35 | | | |
| | 73.12 | Cum | upto 1.5m | | 189.00 | Cum | 13819.61 |
| | | | Basic Rate | 180.00 | | | |
| | | | Add 5 % for M.C. | 9.00 | | | |
| | | | Total | 189.00 | | | |
| | 138.33 | Cum | 1.5 to 3 m | | 201.60 | Cum | 27888.23 |
| | | | Basic Rate | 192.00 | | | |
| | | | Add 5 % for M.C. | 9.60 | | | |
| | 50.00 | 0 | Total | 201.60 | 044.00 | 0 | 40000.40 |
| | 59.29 | Cum | Add 5 % for M.C. | 004.00 | 214.20 | Cum | 12699.10 |
| | | | Basic Rate Add 5 % for M.C. | 204.00 | | | |
| | | | | 10.20 | | | |
| | | | Total | 214.20 oft rock and | | | |
| 3 | | | Excavation for pipe trenches in soft rock and old cement and lime masonary foundation, ashphalt road includng removing the excavated material up to a distance of 50 m. and lift as below, stacking and spreading as directed by the Engineer-in- charge, normal dewatering, preparing the bed for foundation and excluding back filling. etc.complete. | | | | Pumping Stat |
| | | | | | | | Measurem |

on

| ltem No | Quantity | | ITEM DESCRIPTION | | Rate | Unit | Amount Rs. |
|------------|---|--|---|-----------------|--------------|--------|---------------|
| | | | MJP 16-17, Section E, Item No 5, | Pg-35 | | | |
| | 415.00 | Cum | 1.5 to 3 m | | 486.15 | Cum | 201753.89 |
| | | | Basic Rate | 463.00 | | | |
| | | | Add 5 % for M.C. | 23.15 | | | |
| | 206 42 | Cum | Total | 486.15 | 50745 | Cum | 450004.07 |
| | 296.43 | Cum | 3m to 4.5m | 400.00 | 507.15 | Cum | 150334.97 |
| | | | Basic Rate | 483.00 | | | |
| | | | Add 5 % for M.C. Total | 24.15 507.15 | | | |
| | 332.00 | Cum | 4.5m to 6m | 507.15 | 528.15 | Cum | 175347.23 |
| | 002.00 | Oum | Basic Rate | 503.00 | 020.10 | Oum | 110011.20 |
| | | | Add 5 % for M.C. | 25.15 | | | |
| | | | Total | 528.15 | | | |
| | | | Excavation for pipe trenches in h | | | | |
| | | | concrete road, by chiselling, we | | | | |
| | | | drilling by mechanical means or b | by all means | | | |
| | | | other than blasting, including tr | - | | | |
| | | | levelling the bed, removing the | | | | |
| 4 | | | material up to a distance of 50 n | | | | |
| 4 | | | below, stacking and spreading as | | | | |
| | | | the Engineer-in- charge, normal preparing the bed for foundation a | | | | |
| | | | back filling. etc.complete. | na excluding | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | - | MJP 16-17, Section E, Item No 7, | Pg-36 | | | |
| | 237.14 | Cum | 3m to 4.5m | | 830.55 | Cum | 196960.60 |
| | | | Basic Rate | 791.00 | | | |
| | | | Add 5 % for M.C. | 39.55 | | | |
| | 221.34 | Cum | 4.5m to 6m | 830.55 | 054 55 | Cum | 188477.94 |
| | 221.34 | Cum | Basic Rate | 811.00 | 851.55 | Cum | 100477.94 |
| | | | Add 5 % for M.C. | 40.55 | | | |
| | | | Add 5 % lot M.C. Total | 40.55 851.55 | | | |
| | 513.81 | Cum | | 001.00 | 872.55 | Cum | 448328.15 |
| | 010.01 | oan | Basic Rate | 831.00 | 072.00 | Ouiii | 110020.10 |
| | | | Add 5 % for M.C. | 41.55 | | | |
| | | | Total | 872.55 | | | |
| | 474.29 | Cum | More than 7.5 m depth | | 893.55 | Cum | 423801.45 |
| | | | Basic Rate | 851.00 | | | |
| | | | Add 5 % for M.C. | 42.55 | | | |
| | | | Total | 893.55 | | | |
| | 59.29 | Cum | More than 7.5 m depth | | 914.55 | Cum | 54220.19 |
| | | | Basic Rate | 871.00 | | | |
| | | | Add 5 % for M.C. | 43.55 | | | |
| | | | Total | 914.55 | | | |
| | | Providing dry trap granite quartizite qneiss, rubble stone soling in 15 cm to 20 cm thick | | | | | |
| | 30.07 Cum layer including hand packing and compacting | | | | 957.60 | Cum | 28795.98 |
| | 50.07 | royelty charges etc.complete | | | 001.00 | J 9111 | _3. 00.00 |
| 5 | | | | | | | |
| | | | Basic Rate | 912.00 | | | |
| ļ | | | Add 5 % for M.C. | 45.60 | | | |
| ļ | | | Total | 957.60 | | | |
| | | | MJP 16-17, Section E, Item No 19 | , Pg-39 | | | Pumping Stati |

| ltem No | Quant | ity | ITEM DESCRIPTION | | Rate | Unit | Amount Rs. |
|------------|---------|-------------|---|--|---------|--------|----------------|
| 6 | 18.00 | Cum | Filling in murum bedding in tra approved murum from excavate from foundation in 15cm to 20 including watering and comp complete. | ed materials cm layers action, etc. | 67.20 | Cum | 1209.60 |
| | | | Basic Rate | 64.00 | | | |
| | | | Add 5 % for M.C. | 3.20 | | | |
| | | | Total MJP 16-17, Section E, Item No 17 | 67.20 Pa-39 | | | |
| 7 | 110.02 | Cum | Providing and laying in situ, M- C.C. of trap/ granite/ quartzite/ g for foundation and bedding dewatering, formwork, compacting finishing, etc.complete | lewatering, formwork, compacting and curing, | | | 489016.68 |
| | | | Basic Rate | 4233.00 | | | |
| | | | Add 5 % for M.C. | | | | |
| | | | | | | | |
| 8 | 1808.23 | Cum | Dispossing of surplus excavated s of work up to a distance of 2 k loading, unloading, tr etc.complete or as directed by the in- charge. | tuff from site (m.including, ansportation Engineering | 195.62 | Cum | 353725.76 |
| | | | Basic Rate | 195.62 | | | |
| 9 | 904.11 | Cum | (CSR 2015-16, P. 22, Statement VI) Refilling the trenches with availab excavated stuff with soft materia pipeline and then hard materi layers with all lead and lift consolidation, surcharging etc. co | als first over al in 15cm s including | 67.20 | Cum | 60756.50 |
| | | | Basic Rate | 64.00 | | | |
| | | | Add 5 % for M.C. | 3.20 | | | |
| | | | Total | 67.20 | | | |
| | | | MJP 16-17, Section E, Item No. 15 | - | | | |
| 10 | 500.00 | BHP/ Hr. | Dewatering the excavated trenches and pools of water in the building trenches / pipeline trenches, well works by using pumps and other devices including disposing off water to safe distance as directed by Engineer-in - charge (including cost of machinery, labour, fuel), stc complete | | | 3HP/Hr | 32550.00 |
| | | | Basic Rate | 62.00 | | | |
| | | | Add 5 % for M.C. | 3.10 | | | |
| | | | Total | 65.10 | | | |
| | | | MJP 16-17, Section E, Item No. 14 | , Pg-38 | | | |
| 11 | 100.00 | вит | Bypass & Overflow Providing ISI Standard RCC NP3 9 | 200 mm dia | 4791.00 | RMT | 479100.00 |
| | 100.00 | | 900 mm NP3 | | 4791.00 | | 479100.00 |
| | | | Basic Rate | 4791.00 | | | |
| | | | MJP 16-17, Section I, Item No. 1E | | | | Pumning Statio |

| ltem No | Quant | ity | ITEM DESCRIPTION | | Rate | Unit | Amount Rs. |
|------------|--------|-----|--|--|----------|----------|------------|
| 12 | 100.00 | RMT | Lowering, laying and jointing in and alignmentR.C.C.pipes w jointsinCM1:1proportion or R.C.C.pipes with rubber joints(ex of rubber ring or R.C.C.collar), in of conveyance from stores to sit cost of jointing material, lab hydraulic testing, etc.complete as Engineer-in-charge. (IS-783/1985) | 541.80 | RMT | 54180.00 | |
| | | | 900 mm NP3 | | | | |
| | | | Basic Rate | 516.00 | | | |
| | | | Add 5 % for M.C. | 25.80 | | | |
| | | | Total | 541.80 | | | |
| | | | MJP 16-17, Section I, Item No. 2, F | | | | |
| | | | Providing and Constructing of m on overflow and bypass line | Providing and Constructing of manaholes on overflow and bypass line | | | |
| 13 | 3.00 | No | Providing and constructing on sewer BB Masonary circular man hole with concentric cone 1.5 mm dia and 0.5 mm dia at top and upto a depth of 2m with 23cm brick work, upto depth of 2 m from top and 35mm thk brick work for balance depth in CM 1:4 proportion with 20 mm smooth plaster on both side in CM 1:2 proportion excluding excavation, including foundation concrete 250mm thick and haunches and channels in CC 1:2:4 proportion, finishing chanel in smooth rendering providing CI dapuri type steps each weighing 5.5 kg, 1:2:4 coping and providing and fixing approved make and quality SFRC frame and cover of 56 cm dia etc complete as directed by EIC. | | 21155.40 | No | 63466.20 |
| | | | Basic Rate | 20148.00 | | | |
| | | | Add 5 % for M.C. | 1007.40 | | | |
| | | | Total | 21155.40 | | | |
| | | | MJP 16-17, Section L, Item No. 6, | Pg-2/2 | | | |

| ltem No | Quantity ITEM DESCRIPTION | | | Rate | Unit | Amount Rs. | |
|------------|---|--------|---|--|----------|------------|---------------|
| | | | RCC | | | | |
| 14 | Providing and casting in situ cement Concrete of trap/ granite / quartzite / gneiss metal for RC.C works as per detailed drawings and design as directed by Engineer-in-Charge including normal dewatering, centering form work, compaction, finishing the formed surfaces with C.M. 1:3 of sufficient minimum thickness to give a smooth and even surface wherever necessary or roughening if special finish is to be provided and curing, etc.complete.(By weigh batching and mix design for M-250 and M-300 only. Use of L & T, A.C.C. , Ambuja, Birla Gold, Manikgad, Rajashree, etc.cement is permitted.) (Excluding M.S. or Tor reinforcement) | | | | | | |
| | | | Grade M 30 | rada M 20 | | | |
| | | | | | | | |
| | 46.71 | Cum | Raft | | 6325.20 | Cum | 295459.15 |
| | | | Basic Rate | 6024.00 | | | |
| | | | Add 5 % for M.C. | 301.20 | | | |
| | | | Total | 6325.20 | | | |
| | | - | MJP 15-16, , Item No. 2, Pg-43,44 | | | | (22222) |
| | 15.96 | Cum | Column | | 8086.05 | Cum | 129053.36 |
| | | | Basic Rate | 7701.00 | | | |
| | | | Add 5 % for M.C. | 385.05 | | | |
| | | | Total MJP 15-16, , Item No. ,3,, Pg-43,44 | 8086.05 | | | |
| | 11 23 | Cum | | r | 7966.35 | Cum | 89499.55 |
| | 11.20 | Oum | Basic Rate | 7587.00 | 7900.55 | Oum | 00+00.00 |
| | | | Add 5 % for M.C. | 379.35 | | | |
| | | | Total | 7966.35 | | | |
| | | | MJP 15-16, , Item No. ,4,, Pg-43,44 | | | | |
| | 243.51 | Cum | Vertical Wall/Slabs/Staircase | | 8620.50 | Cum | 2099139.14 |
| | | | Basic Rate | 8210.00 | | | |
| | | | Add 5 % for M.C. | 410.50 | | | |
| | | | Total | 8620.50 | | | |
| 15 | | | MJP 16-17, , Item No.,5, Pg-43,44 Providing and fixing in position reinforcement of various diameter piles, caps, footings, foundatio parodies, copings, fins, arches, o detailed designs, drawings and including cutting, bending, hookin binding with wires or tack we supporting as required, etc. comple (including cost of binding wire). | rs for RCC ns, lintels, etc. as per schedules; g the bars, elding and | | | |
| | 31.74 | ΜТ | Tor Steel | | 54803.70 | M.T. | 1739533.17 |
| | 51.74 | 111.1. | | | 34003.70 | 111.1. | 1100000.17 |
| | | | Basic Rate 52194.00 Add 5 % for M.C. 2609.70 | | | | |
| | | | Total | 54803.70 | | | |
| | | | MJP 16-17, Section G, Item No. 8 k | | | | Pumping Stati |

| ltem No | Quant | ity | ITEM DESCRIPTION | Rate | Unit | Amount Rs. | |
|------------|--------|------|---|---------------------------------|------|----------------------------|--|
| 16 | 30.00 | RM | Providing and fixing 900mm high S.S.30 Grade Stainless steel railing with 40mr diameter and 1.5mm thick at top,40mr diameter and 1.5mm thick vertical support spaced at 1.5m center to center and 8mr thick toughened glass including fabricating ,fixtures, errecting , necessar welding , grinding , finishing, buffing to stainless steel pipe etc. complete. | n s n 4411.00 | RM | 132330.00 | |
| | | | Basic Rate 4010.0 | 0 | | | |
| | | | Add 5 % for M.C. & 5% for Sugarcane area 401.0 | | | | |
| | | | Total 4411.0 | | | | |
| | | | PWD 17-18, BDV, Item No.40.07, Pg. No. 244 Brick Masonry | | | | |
| 17 | 33.69 | Cum | Providing second class Burnt Brick masonr with conventional/ I.S. type bricks in cemer mortar 1:6 in superstructure including strikin joints, raking out joints, watering an scaffolding etc. Complete | t 9 5040.00 | Cum | 200134.64 | |
| | | | Basic Rate 5400.0 |) | | | |
| | | | Add 5 % for M.C. & 5% for Sugarcane | | | | |
| | | | area 540.0 | D | | | |
| | | | Total 5940.0 |) | | | |
| | | | (PWD CSR 17-18 P.No. 172 soft copy, | | | | |
| | | | Internal Plastering | | | | |
| 18 | | | Providing internal cement plaster 20mm thic in two coats in cement mortar 1:5 withou neeru finish, to concrete, brick surface, in a positions including scaffolding and curing etc complete | t | | | |
| | 1/6/10 | Sam | 20 mm thick cement plaster in C.M.1:5 | 269.50 | Sam | 39479.06 | |
| | 140.49 | Sq.m | Basic Rate 245.0 | | Sq.m | 39479.00 | |
| | | | Add 5 % for M.C. & 5% for Sugarcane | | | | |
| | | | area 24.5 | D | | | |
| | | | Total 269.5 |) | | | |
| | | | (PWD CSR 17-18 P.No. 186 soft copy, I.No. | | | | |
| | | | External Plastering | | | | |
| 19 | 146.49 | Sq.m | Providing sand faced plaster externally i cement mortar using approved screened sand in all positions including base coat of 15 mr thick in cement mortar 1:4 using waterproofin compound at 1 kg per cement bag curing th same for not less than 2 days and keeping th surface of the base coat rough to receive th sand faced treatment 6 to 8 mm thick i cement mortar 1:4 finishing the surface b taking out grains and curing for fourteen day scaffolding etc.complete. | , g e e e 440.00 | Sq.m | 64455.60 | |
| | | | Basic Rate 400.0 Add 5 % for M.C. and 5% for Sugarcane area 40.0 | | | | |
| | | | Total 440.0 | | | Dumping Stati | |
| | | | (PWD CSR 17-18 P.No. 187 soft copy,I.No. 32.11) | | | Pumping Stati Measureme | |

| ltem No | Quant | ity | ITEM DESCRIPTION | Rate | Unit | Amount Rs. |
|------------|-------|------|---|--------|------|---------------------------------------|
| 20 | 35.42 | Sqm | Providing cement based water proofing treatment to terraces (Indian water proofing or alike) with brick bats laid in required slope to drain the water for any span after cleaning the base surface. Applying a coat of cement slurry admixed with approved water proofing compound and laying the brick bats on bottom layer in C.M.1:5 admixed with approved water proofing compound filling up to half depth of brick bats, curing this layer for 3 days, applying cement slurry over this layer joints of brick bats with C.M.1:3 admixed with approved water proofing compound and finally top finishing with average 20 mm. thick layers of same mortar added with jute fiber at 1 Kg per bag including finishing the surface smooth with cement slurry admixed with approved water proofing compound. Marking finished surface with false squares of 300mm x 300 mm. making the junctions at the parapet rounded and tapered top for required height, with drip mould at the junction of plaster and parapet and curing and covering 10 years Guarantee against leakproofness on Court fee stamp paper of Rs. 500/including ponding test etc. complete. | 640.50 | Sqm | 22688.51 |
| | | | Basic Rate 610.00 | | | |
| | | | Add 5 % for M.C. 30.50 Total 640.50 | | | |
| | | | PWD DSR 2016-17, BD -J, Item No. 4 / 9 BDJ / P.No80- | | | |
| 21 | | | Paving,Flooring and Dado Providing and laying machine cut machine Polished Kota stone flooring 25mm to 30mm thick and required width in plain/ diamond pattern on bed of 1:6 C. M. including cement float, filling joints with neat cement slurry, curing, polishing and leaning etc. complete. | | | |
| - | 28.36 | Sq.m | a) Kotah stone flooring 30 cm. X 30 cm Basic Rate 890.00 Add 5 % for M.C. and 5% for Sugarcane area 89.00 Total 979.00 | 979.00 | Sq.m | 27762.60 |
| | | | PWD DSR, 2017-18, BD -M, Item No 33.06,Page No.191Internal PaintingProviding & applying washable oil-bounddistemper of approved colour and shade to old& new surfaces in two coats includingscaffolding, preparing the surfaces. (excluding | | | |
| 22 | 97.66 | Sq.m | the primer coat.) complete. Spec. No.: Bd.P.5 Page No. 413 a) Two coat Basic Rate for oil bound distemper 35.00 | 57.20 | Sq.m | <u>Pumᢓᢧᠺᢓᢗᢌᡶᠲ</u> ᡓior Measuremen |

| tem No | Quant | ity | ITEM DESCRIPTION | | Rate | Unit | Amount Rs. |
|-----------|-------|------|---|----------------|---------|-------|---------------|
| | | | Basic Rate for Primer coat | 17.00 | | | |
| | | | Add 5 % for M.C. and 5% for Sugarcane | 5.00 | | | |
| | | | area Total | 5.20 | | | |
| | | | (PWD CSR 2017-18 P.No.207 I.No.36.11 a | 57.20 and P | | | |
| | | | no.206, I.no. 36.02) | | | | |
| | | | External Paintings | | | | |
| | | | Providing and applying two coats | of appex | | | |
| | | | Appex Ace white exterior paint of | | | | |
| | | | manufacture and of approved colo | | | | |
| | | | plastered surfaces including | cleaning | | | |
| 23 | | | ,preparing the plaster surface ,apply | /ing primer | | | |
| | | | coat ,scaffolding if necessary , | | | | |
| | | | and watering the surface for two | days etc. | | | |
| | | | complete. | | | | |
| | | | | | | | |
| | 97.66 | Sq.m | a) Two coat | | 176.00 | Sq.m | 17188.16 |
| | | | Basic Rate | 160.00 | | | |
| | | | Add 5 % for M.C . & 5% for sugarcane | | | | |
| | | | area | 16.00 | | | |
| | | | Total | 176.00 | | | |
| | | | (PWD CSR 2017-18 P.No.206 I.No.35.25) | | | | |
| | | | | | | | |
| 24 | | | Furniture in pumping house | | | | |
| | 1.00 | LS | Providing installing erecting furtr necessary accessories in pump hous | | | LS | 100000.00 |
| | | | Drilling of 3 Nos. 100mm dia Vertic | al Passive | | | |
| | | | Rock Anchor with rebar of 25mm. C | | | | |
| | | | with fabrication of steel reinforceme | | | | |
| 25 | 1.00 | Ls | bent at top, Grouting the Anchor | | | Ls | 200000.00 |
| | | | shrink Grout & Pull Out Test | | | | |
| | | | | | | | |
| 26 | | | Door- Rolling shutter | | | | |
| _ | | | Providing and fixing rolling shutter | fabricated | | | |
| | | | from steel laths of minimum thickne | | | | |
| | | | with lock plate of 3.15 mm | thickness | | | |
| | | | reinforced with 35 x 35 x 5 mm and | gle section | | | |
| | | | fitted with sliding bolts and handle | s for both | | | |
| | | | sides, deep M.S. channel | | | | |
| | | | section of depth and thickness not | | | | |
| | | | 65 mm and 3.15 mm respectively | | | | |
| | 10.00 | 0 | fast arrangements, M.S. Bracket p | | 2000 00 | Carro | 50000.00 |
| | 19.80 | Sqm. | 300 x 3.15 mm minimum size and s | shape with | 2860.00 | Sqm. | 56628.00 |
| | | | square bar, | 00 | | | |
| | | | suspension shaft of minimum | | | | |
| | | | diameter, hood cover of M.S. shee | | | | |
| | | | than 0.9 mm thickness and of any | • | | | |
| | | | and safety devices including mecha operation arrangement consisting | • | | | |
| | | | gear wheels and worms of high | | | | |
| | | | grade cast iron or mild steel and o | ne cost of | | | |
| | | | red lead primer etc. complete. (I.S. 6 | | | | |
| | | | Basic Rate | 2600.00 | | | |
| | | | Add 5 % for M.C. | 260.00 | | | |
| | | | | | | | |
| | | | Total | 2860.00 | | | Pumping Stati |

| Item No | Quant | ity | ITEM DESCRIPTION | | Rate | Unit | Amount Rs. |
|--------------------|------------------------|--------------------|---|---|--------|------|------------|
| 27 | | | Windows | | | | |
| | 18.00 | Sqm. | two tracks with rectangular pipe had dimension $63.50 \times 38.10 \times 1.02$ mit 0.547 kg/Rmt. and window frame bit section $61.85 \times 31.75 \times 1.20$ mm 0.695 kg/Rmt. Top and side trace $61.85 \times 31.75 \times 1.30$ mm at weight kg/Rmt. The shutter should be bottom $40 \times 18 \times 1.25$ mm at weight kg/Rmt. Inter locking section 40×1000 kg/Rmt. A section $40 \times 18 \times 1.25$ mm at weight 0.469 kg/Rmt. A section $40 \times 18 \times 1.25$ mm at weight 0.417 kg/Rmt. and $40 \times 18 \times 1.25$ mm at weight 0.417 kg/Rmt. and $40 \times 18 \times 1.25$ mm at weight 0.417 per detailed drawings and as of Engineer in charge with all Aluminium sections fixtures and such as roller bearing in nylon cast | / 1982) Aluminium sliding window of ks with rectangular pipe having overall on 63.50 x 38.10 x 1.02 mm at weight p/Rmt. and window frame bottom track 61.85 x 31.75 x 1.20 mm at weight g/Rmt. Top and side track section 31.75 x 1.30 mm at weight 0.659 The shutter should be of bearing 40 x 18 x 1.25 mm at weight 0.417 Inter locking section 40 x 18 x 1.10 weight 0.469 kg/Rmt. And handle 40 x 18 x 1.25 weight 0.417 kg/Rmt. and top section x 1.25 mm at weight 0.417 kg/Rmt. As ailed drawings and as directed by r in charge with all necessary m sections fixtures and fastenings roller bearing in nylon casting and self eatch fitted in vertical section of shutter | | Sqm. | 77517.00 |
| | | | Basic Rate Add 5 % for M.C. and 5% for sugarcane | 3915.00 | | | |
| | | | area | 391.50 | | | |
| | | | Total | 4306.50 | | | |
| 28 | | | PWD 17-18/ Item No. 39.37, BDT / Approach Road in Paver Block | P.No-229 | | | |
| 20 | | | Providing and fixing heavy duty in | nter locking | | | |
| | 120.00 | Sqm. | concrete Gray paving blocks of thickness of having a strengt kg/Sq.cm. of approved quality and bed of crushed sand of 25 to 30 including skirting joints and cle complete. | of 80 mm h of 300 shape on a) mm thick | 721.60 | Sqm. | 86592.00 |
| | | | Basic Rate | 656.00 | | | |
| | | | Add 5 % for M.C. | 65.60 | | | |
| | | | Total PWD DSR 2017-18/Sec-BDM//Iten 33.95, P.No-197 | 721.60 n No. | | | |
| 29 | 760.67 | Sqm. | Elongation) thermoplastic, fire Coatingskin tensile strength 18 to antifungalantibacterial, anticorrosiv polymer coating on smooth plaste 100 micron dyu film thiclness of s with plasterd surface and 100 mi | in tensile strength 18 to 21 kg/cm2, antibacterial, anticorrosive,graft, co oating on smooth plastered surface in dyu film thiclness of self bonding erd surface and 100 micron of top puming station as directed by | | Sqm. | 869782.39 |
| | | Basic Rate 1089.00 | | | | | |
| | Add 5 % for M.C. 54.45 | | | | | | |
| $\left - \right $ | | | Total MJP 16-17/Sec-I(XVII) / Pg 216/Iter | 1143.45 m No 23 | | | |
| I I | I | | INJP 10-17/Sec-I(XVII) / Pg 216/Iter | II NO 23 | l | | |

| ltem No | Quant | ity | ITEM DESCRIPTION | | Rate | Unit | Amount Rs. |
|------------|-------|-----|--|-------------------|--------------|--------------|-------------|
| 30 | | | Manual Coarse Screen | | | | |
| | 1.00 | No | Providing, errecting, Manual Coa as dircted by Engineer-in-charge | arse Screen | 119600.00 | No | 119600.00 |
| | | | Market Rate | 118600.00 | | | |
| | | | | | | | |
| | | | Total | 118600.00 | | | |
| | | | As Per Rate Analysis | - | | | |
| 31 | | | Mechanical Screen | | | | |
| | | | Providing, errecting, Mechanic | | | | |
| | 1.00 | No | Screen as dircted by Engineer-in-c | harge | 1486000.00 | No | 1486000.00 |
| | | | Market Rate | 1366700.00 | | | |
| | | | | (000700.00 | | | |
| | | | Total | 1366700.00 | | | |
| 20 | | | · · · · · · · · · · · · · · · · · · · | Per Rate Analysis | | | |
| 32 | | | Conveyor Belt | lt an alimate al | | | |
| | 1.00 | No | Providing, errecting, Conveyor Be by Engineer-in-charge | it as dircted | 698390.00 | No | 698390.00 |
| | | | Market Rate | 698390.00 | | | |
| | | | | | | | |
| | | | Total | 698390.00 | | | |
| | | | As Per Rate Analysis | | | | |
| 33 | | | Penstock Gate | | | | |
| | 1.00 | No | Providing, errecting, Penstock Gat by Engineer-in-charge | te as dircted | 419035.00 | No | 419035.00 |
| | | | Market Rate | 419035.00 | | | |
| | | | | | | | |
| | | | Total | 419035.00 | | | |
| | | | As Per Rate Analysis | | | | |
| 34 | | | Automation for SPS | | | | 2500000.00 |
| | | | | | Total | | 15051937.30 |
| | | | | Add RCC De | sign Charges | | 301038.75 |
| | | | | | Total Co | | 15352976.04 |
| | | | | | | ay Rs. | 15352977.00 |
| | | | | | | Lakhs | 153.53 |
| | | | | | Say | Crore | 1.53 |

SOLAPUR MUNICIPAL CORPORATION MAHARASHTRA JEEVAN PRADHIKARAN DIVISION SOLAPUR SOLAPUR CITY UNDERGROUND SEWERAGE SCHEME (AMRUT) NAME OF SUBWORK: PUMING STATION FOR ZONE X @ HYDRABAD ROAD MHADA

| | MEA | SURE | MENT | SHEET | | | | |
|-------------|---|------|----------|------------------|-----------|--------|------|---------------|
| ltem No. | Description of Item | Ν | los | Length or Dia | Breadth | Depth | Unit | Qty |
| | | | | | | | | |
| | | | | | | | | |
| | Sump Size (Inside Diametrer and | | 1.00 | 9.50 | | 8.50 | | |
| | Inside depth) | | | | 0.00 | | | |
| | Inner Sizes of Receiving chamber | | 1.00 | 4.00 | 3.00 | 5.20 | | |
| | Inner Sizes of Screen chamber | | 2.00 | 5.00 | 1.00 | 5.50 | | |
| | Receiving/Screen Chamber - Middle Wall Thickness | | | | 0.20 | | | |
| | Wet Well - Outer Wall Thickness | | | | 0.55 | | | |
| | Raft of wetwell thickness | | | | 0.00 | 0.45 | | |
| | Raft outside vertical wall | | | | | 0.40 | | |
| | PCC thickness for Raft | | | | | 0.10 | | |
| | PCC outside Vertical Wall | | | | | 0.10 | | |
| | Soiling for Raft | | | | | 0.30 | | |
| | Side margin for excavation of wet well | | | 4.00 | | | | |
| | outside wall | | | 4.00 | | | | |
| | Pump Pit Size at Bottom for | | | 0 50 | 2.50 | 1 50 | | |
| | submergence of Pump | | | 8.50 | 2.50 | 1.50 | | |
| | Valve chamber Vertical wall thickness | | | | | 0.15 | | |
| | Outer Sizes of receiving Chamber | | | 4.20 | 3.20 | 5.20 | | |
| | Outer Sizes of Screeen Chamber | | | 5.20 | 1.60 | 5.50 | | |
| | Valve chamber outside Wet well | | | 8.50 | 2.50 | 2.00 | | |
| | Byepass Pipe Length in | | | 100.00 | | | | 900.0 |
| 1 | Excavation | | | | | | | |
| | Wet Well | 1.00 | | 0.79 | 19.60 | 9.65 | | 2910.1 |
| | Pump Pit | 1.00 | | 8.50 | 3.00 | 2.20 | | 56.1 |
| | Valve chamber outside Wet well | 1.00 | | 8.50 | 3.50 | 3.00 | | 89.2 |
| | | 1 00 | | 100.00 | 1.05 | 2.40 | | F61 0 |
| | Bypass arrangement | 1.00 | | 100.00 | 1.65 | 3.40 | | 561.0 |
| | | | | | | | | |
| | | | | | | | | 3616.4 |
| | 0 to 1.5 m depth | | | | | | | 731.2 |
| | 1.5 m to 3.0 m depth | | | | | | | 592.8 |
| | 3 m to 4.5 m depth 4.5 m to 6.0 m depth | | | | | | | 553.3 |
| | 6.0 m to 7.5 m depth | | | | | | | 513.8 |
| | 7.5 m to 9 m depth | | - | | | | | 474.2 |
| | More than 9 m depth | | | | | | | 59.2 |
| | Excavation for foundation/ pipes | | | | | | | 00.2 |
| | trenches in earth, soil of all types | | | | | | | |
| | ,sand ,gravel and soft murum | | | | | | | |
| | including removing the excavated | | | | | | | |
| | material upto a distance of 50M | | | | | | | |
| 1 | beyond area & lift as below, stacking | | | | | | | |
| | and spreading as directed, normal | | | | | | | |
| | dewatering, preparing of bed for | | | | | | | |
| | foundation & excluding backfilling,etc. | | | | | | | |
| | complete | | | | | | | |
| | 0 to 1.5 m depth | 0.90 | Of total | qty of 1.5 m | n depth = | 731.20 | Cum | 658.0 |
| | 1.5 m to 3.0 m depth | 0.20 | | qty of 1.5 -3 | | | | npin16388-88i |

| Item No. | Description of Item | ١ | Nos | Length or Dia | Breadth | Depth | Unit | Qty |
|-------------|--|------|-------------|------------------|-----------|--------|-------------|---------|
| 2 | Excavation for foundation/ pipe trenches in hard murum and boulders,W.B.M.road including removing the excation material up to | | | | | | | |
| | 0 to 1.5 m depth | 0.10 | Of total of | qty of 1.5 m | n depth = | 731.20 | Cum | 73.12 |
| | 1.5 m to 3.0 m depth | 0.20 | Of total of | qty of 1.5 -3 | 3.0 m dep | 691.67 | Cum | 138.33 |
| 3 | 3.0 m to 4.5 m depth Excavation for foundation/ pipe trenches by all means in soft rock and old cement and lime masonry foundation asphalt road including | 0.10 | Of total of | qty of 3.0 - | 4.5 m dep | 592.86 | Cum | 59.29 |
| | 1.5 m to 3.0 m depth | 0.60 | | qty of 1.5 -3 | | | Cum | 415.00 |
| | 3.0 m to 4.5 m depth | 0.50 | Of total of | qty of 3.0 - | 4.5 m dep | 592.86 | Cum | 296.43 |
| | 4.5 m to 6.0 m depth | 0.60 | Of total of | qty of 4.5 -6 | 6.0 m dep | 553.34 | Cum | 332.00 |
| | Excavation for foundation/ pipe trenches in hard rock and concrete road by chiseling wedging line drill by | | | | | | | |
| | 3.0 m to 4.5 m depth | 0.40 | Of total of | qty of 3.0 - | 4.5 m dep | 592.86 | Cum | 237.14 |
| | 4.5 m to 6.0 m depth | 0.40 | Of total of | qty of 4.5 -6 | 6.0 m dep | 553.34 | Cum | 221.34 |
| | 6 m to 7.50m depth | 1.00 | | | • | 513.81 | Cum | 513.81 |
| | 7.5 m to 9 m depth | 1.00 | Of total of | - of 3.0 | 4.5 m dep | 474.29 | Cum | 474.29 |
| | More than 9 m depth | 1.00 | | gty of 3.0 - | | | Cum | 59.29 |
| 5 | providing dry trap granite quartizite qneiss, rubble stone soling in 15 cm | | | | | | | |
| 6 | Wet Well Filling in murum bedding in trenches with approved murum from excavated | 1.00 | 0.79 | 11.30 | | 0.30 | Cum | 30.07 |
| | Bypass arrangement | 1.00 | | 100.00 | 0.90 | 0.20 | Cum | 18.00 |
| 7 | Providing and laying in situ, M-15 grade of C.C. of trap/ granite/ | 4.00 | | 44.00 | 0.00 | 0.40 | 0 | 40.00 |
| 7 | Wet Well | 1.00 | | 11.30 | 0.00 | 0.10 | Cum | 10.02 |
| | Qty for uplift | | | | | | Cum | 100.00 |
| | Transportation Disposal of | 0.50 | | | | Total | Cum | 110.02 |
| 8 | excavated material including loading and unloading, lead up to 7.5 km etc. Complete | | Of Excav | vated Qty | | | Cum | 1808.23 |
| u | Refilling the trenches with available approved excavated stuff with soft | 0.25 | of Excav | ated Qty | | | Cum | 904.11 |
| | Dewatering the excavated trenches and pools of water in the building trenches / pipeline trenches, well | | | | | | BHP/H r. | 500.00 |
| 11 | Bypass / Overflow channel Providing ISI Standard RCC NP3 900 mm dia pipe as overflow pipe for sump suitable for rubberring joint 600 mm NP3 | | | 100.00 | | | RMT | 100.00 |
| 12 | Lowering, laying and jointing in proper grade and alignment R.C.C. pipes with collar joints in CM1:1 proportion or socketed R.C.C.pipes with rubber 900 mm NP3 | 1.00 | | 100.00 | | | RMT | 100.00 |

| ltem No. | Description of Item | Ν | los | Length or Dia | Breadth | Depth | Unit | Qty |
|-------------|---|---------------|--------|------------------|--------------|---------------|------|---------------|
| | Providing and Constructing of manaholes on overflow and bypass line | | | | | | | |
| 13 | Providing and constructing on sewer BB Masonary circular man hole with concentric cone 1.5 mm dia and 0.5 mm dia at top and upto a depth of 5m with 23cm brick work, upto depth of 2 | | | | | | No | 3.00 |
| | Upto 2.5 M | | | | | | | |
| 14 | RCC Providing and casting in situ ready mix cement concrete grade of trap/granite/gneiss metal of approved quality for RCC work as per detailed drawings and design for as directed by Engineer In charge including | | | | | | | |
| I | Wet well - Raft | 1.00 | 0.79 | 11.10 | | 0.45 | | 43.52 |
| | Vale Chamber Raft | 1.00 | | 8.50 | 2.50 | 0.15 | | 3.19 |
| III IV | Columns for pumping ststaion Columns to support receiving chamber and screen chamber | 10.00 4.00 | | 0.30 0.30 | 0.35 0.35 | 14.00 3.00 | | 14.70 1.26 |
| V | Cross beam Qty in sump (Wet well | 1.00 | | 19.00 | 0.45 | 0.30 | | 2.57 |
| | Pump House beam Qty at floor slab | | | 19.00 | 0.45 | 0.30 | | 2.57 |
| VI | (Wet well dia + cross beam over col) =(wet well dia =8.5 + 4.5*2) | | | | | | | |
| VII | Pump House beam Qty at lintel level (Wet well dia + cross beam over col) =(wet well dia =8.5 + 4.5*2) | | | 33.92 | 0.30 | 0.30 | | 3.05 |
| VIII | Pump House beam Qty at roof Level | 1.00 | | 33.92 | 0.30 | 0.30 | | 3.05 |
| VIX | Wetwell Vertical walls | 1.00 | 3.14 | 10.60 | 0.55 | 8.80 | | 161.09 |
| | Receiving chamber slab | 1.00 | | 4.20 | 3.20 | 0.20 | | 2.69 |
| XI | Screening chamber slab | 0.00 | | 5.20 | 1.60 | 0.25 | | 2.08 |
| XII | Receiving chamber Vertical wall (Length+Width) =4.55+1.55=6.1 Screening chamber Vertical wall | | | 7.40 | 0.20 | 5.20 | | 7.70 |
| XIII | length (3 Lengthwise+1Width side) =(5.25*3+2.05*1) | 1.00 | | 17.20 | 0.20 | 5.50 | | 18.92 |
| VIV | portion of wet well) | 1.00 | 3.14/8 | 9.50 | | 0.15 | | 5.31 |
| ۸v | Pumping station roof slab (half portion of wet well) | | 3.14/8 | 9.50 | | 0.15 | | 5.31 |
| | Stair case up to bottom Valve Chamber Walls | 6.00 1.00 | | 5.00 22.00 | 1.20 0.15 | 0.20 | | 7.20 6.60 |
| | Wet Well - Pump Pit | 1.00 | | 22.00 | 2.20 | 0.15 | | 6.60 |
| | Qty for slabs for maintenace and screen disposal, Stairs Valve | | | | | | | 20.00 |
| YY | chamber slab and support slab for pump pipes, beams in wet well Total Concrete Qty of Grade M 30 | | | | | | Cum | 317.41 |
| ~~ | RCC qty of Raft, footing (sub item I +II) | | | | | | Cum | 46.7 |
| | RCC Qty of Colums (sub item III + IV) | | | | | | Cum | 15.96 |

| Item No. | Description of Item | Nos | Length or Dia | Breadth | Depth | Unit | Qty |
|-------------|---|-----|------------------|---------|-------|------|--------|
| | RCC Qty of Beams (Sub item V to VIII) | | | | | Cum | 11.23 |
| | RCC Qty of Vertical walls, slabs, staircase (IX to XIX) | | | | | Cum | 243.51 |

| Item No. | Description of Item | Ν | los | Length or Dia | Breadth | Depth | Unit | Qty |
|-------------|--|------|-----|------------------|---------|-------|------|-----------------|
| 15 | Providing and fixing in position steel bar reinforcement of various diameters for RCC piles, caps, footings, foundations, lintels, a) Tor Steel= Steel consumtion of | | | | | | | |
| | 10% of RCC Qty | | | | | | M.T. | 31.74 |
| 16 | Providing & Fixing stainless steel railing with top and vertical pipe of 50 mm dia at 0.90m c/c or as required and horizontal pipes of 25 mm dia in | | | 30.00 | | | RM | 30.00 |
| 17 | Brick Masonry Providing second class Burnt Brick masonry with conventional/ I.S. type | | | | | | | |
| | a) Pumping station | 1.00 | | 24.42 | 0.23 | 6.00 | | 33.69 |
| | Internal Plastering | | | | | | | 33.69 |
| 18 | Providing cement plaster for following thickness in two coats in cement mortar in following proportions | | | | | | Sq.m | |
| | 20 mm thick cement plaster in C.M.1:5 | 1.00 | | 24.42 | | 6.00 | | 146.49 |
| 19 | External Plastering Providing sand faced plaster externally in cement morter using approved screened sand in all positions including base coat of 15 mm th in cement morter 1:4 using water proofing compound @ 1 Kg per | | | | | | | 146.49 |
| | a) Pumping station | 1.00 | | 24.42 | | 6.00 | | 146.49 |
| 20 | Providing and laying water proofing to Terrace a) Pumping station | 1.00 | | 9.50 | | 0.15 | | 146.49 35.42 |
| | | | | | | | | 35.42 |
| 21 | Paving,Flooring and Dado Providing and laying in position polished Kota stone flooring of approved quality 25mm to 30mm thick in plain/diamond pattern on a | | | | | | | |
| | a) Pumping station | 1.00 | | 8.50 | | 1.00 | | 28.36 |
| 22 | Internal Painting Providing & applying washable oil- bound distemper of approved colour and shade to old & new surfaces in two coats including scaffolding, | | | | | | | 28.36 |
| | a) Pumping station | 1.00 | | 24.42 | | 4.00 | | 97.66 |
| | | | | | | | | 97.66 |

| Item No. | Description of Item | Ν | los | Length or Dia | Breadth | Depth | Unit | Qty |
|-------------|---|------|-----|------------------|---------|-------|-------|--------|
| | External Paintings | | | | | | | |
| | Providing and applying two coats of | | | | | | | |
| | appex /Ace exterior paint of approved manufacture and of approved color to | | | | | | | |
| | the plastered surfaces including | | | | | | | |
| | cleaning, prepairing the plaster | | | | | | | |
| 23 | surface applying primer coat, | | | | | | | |
| | scaffolding if necessary and watering | | | | | | | |
| | the surface for two days complete. | | | | | | | |
| | a) Pumping station | 1.00 | | 24.42 | | 4.00 | | 97.66 |
| | | | | | | | | 97.66 |
| | Furniture in pumping house | | | | | | | |
| 24 | Providing installing erecting furtniture | | | | | | | |
| 27 | and necessary accessories in pump | | | | | | LS | 1.00 |
| | house | | | | | | | |
| | Drilling of 3 Nos. 100mm dia Vertical | | | | | | | 4.00 |
| 25 | Passive Rock Anchor with rebar of | | | 1.00 | | | Ls | 1.00 |
| 26 | 25mm. Of 3m deep with fabrication of | | | | | | | |
| 26 | Door- Rolling shutter Providing and fixing rolling shutter | | | | | | | |
| | fabricated from steel laths of | | | 2.20 | | 4.50 | Sqm | 19.80 |
| | minimum thickness 0.9 mm with lock | 2.00 | | 2.20 | | 4.50 | Oqm | 13.00 |
| 27 | Windows | | | | | | | |
| | Supplying and fixing in position | | | | | | | |
| | anodized extruded modular aluminum | | | | | | | |
| | section Two Track sliding window | | | | | | | |
| | mounted on rectangular frame of size | | | | | | | |
| | 100 x 50x 2.80 mm thick (2.183 | | | | | | | |
| | Providing and fixing aluminum | 3.00 | | 2.00 | 3.00 | | Sqm | 18.00 |
| 28 | Approach Road in Paver Block | | | | | | | |
| | Providing and fixing m 25 grade | | | | | | | |
| | precast factory made Interlocking | | | | | | | |
| | paver blocs with 3.0m wide approach | | | 40.00 | 3.00 | | Sqm | 120.00 |
| | width and 25 m length with complete | | | | | | | |
| | etc | | | | | | | |
| 29 | Providing and Applying of Elastomeric (450% Elongation) | | | 29.83 | | 8.50 | Sqm | 760.67 |
| 23 | Elastomeric (450% Elongation) thermoplastic, fire retardant, | 5.00 | | 23.03 | | 0.00 | Sqiii | 100.01 |
| 30 | Manual Coarse Screen | 1.00 | | | | | No | 1.00 |
| 31 | Mechanical Coarse Screen | 1.00 | | | | | No | 1.00 |
| 32 | Conveyor Belt | 1.00 | | | | | No | 1.00 |
| 33 | Penstock Gate | 1.00 | | | | | No | 1.00 |

SOLAPUR MUNCIPAL CORPORATION NAME OF SCHEME - UNDERGROUND SEWERAGE PROJECT OF SOLAPUR CITY NAME OF SUB WORKS -PUMPING MACHINERY ESTIMATES AT HYDRABAD ROAD PUMPING STATION

| Sr. No. | Description | Amount | | | |
|------------|--------------------------|-------------|--|--|--|
| | | | | | |
| 1 | Part A- Mechanical Works | 5989057.00 | | | |
| 2 | Part B-Electriical Works | 10863468.00 | | | |
| | | | | | |
| | Total cost in Rs | 16852525.00 | | | |
| | Total cost in Lakhs | 168.53 | | | |
| | Total cost in Crore | 1.69 | | | |

SOLAPUR MUNCIPAL CORPORATION NAME OF SCHEME - UNDERGROUND SEWERAGE PROJECT OF SOLAPUR CITY NAME OF SUB WORKS - MECHANICAL WORK COST ESTIMATES AT HYDRABAD ROAD PUMPING STATION ABSTRACT

| SR | Description | Qty | Unit | Rates | Amount |
|-----|--|-----|------|-------------|-----------------|
| 1 | Submarsible Non Clog Sewage Pump- 1 DWF flow Designing, Providing, installing, Commissioning & testing with satisfactory test & trail of Submersible Non Clog sewage pumps having Casing – CI IS 210 Gr. FG 220, Impeller – SS 304, Shaft and Sleeve – SS 316, Motor Parts – CI IS 210 Gr. FG 220, Fastners – BHT Steel, Guide Pipe – SS 304, Lifting Chain – SS 304with three phase squirrel cage motor 730/1000/1460 rpm, suitable for continuous duty with F class Insulation, suitable to operate required duty conditions & specified requirement having minimum efficiency 70% suitable for solid handling capcity of 100 mm as below including cable set (30 mtr.), auto rail coupling, integral bend, duck foot bend, lifting chain, control panel with PMU having all protections, bottom stand, clamps etc. with TPI & Inspection | | | | |
| 1.A | Pump- 1/2 DWF | | | | |
| | Pump discharge = 95 LPS | 2 | No | 3,19,713.00 | 639426.00 |
| | Duty Head = 14mtr | | | | |
| | B.H.P = 30 | | | | |
| 1.B | Pump- 1 DWF | | | | |
| | Pump discharge =190 LPS | 2 | No | 4,25,662.00 | 851324.00 |
| | Duty Head =14 mtr | | | | |
| | B.H.P = 55 | | | | |
| 1.C | Pump- Peak flow | | | | |
| | Pump discharge =407 LPS | 1 | No | 8,80,479.00 | 880479.00 |
| | Duty Head = 14 mtr | | | | |
| | B.H.P = 120 | | | | |
| | As per Rate Analysis | | | | |
| 2 | Glandless CIDF Sluice Valve - PN 1.0 Providing, erecting, testing and commissioning CI Glandless Sluice valve suitable for working pressure of 10 kg/cm2 with standard non rising spindle, handwheel, cap etc and manufactured as per IS 2906 / 14846 and as per detailed specification | | | | |
| 2.A | 250 mm (for 1 X DWF) | 2 | No | 41326.00 | 82652.00 |
| 2.B | 350 mm (for 2 X DWF) | 2 | No | 70255.00 | 140510.00 |
| 2.C | 500 mm (for Peak flow) & Common header | 2 | No | 119106.00 | 238212.00 |
| | | | | | Mechanical Worl |

| C | | 01 | | Dutu | UIEV |
|---------|--|-----|------|-----------|-----------|
| G SR | Description , I no- VL 1-8, as per rate analysis | Qty | Unit | Rates | Amount |
| | | | | | |
| 3 | Valve Actuator :- Providing erecting electric valve actuators totally enclosed weather proof and dust prooft construction with IP 67 protection class suitable for installation in any position without lubrication leakages or other operatrional difficulty with special grease filled gear box and hand wheel for emerency manula opeartion which will beautomatically disengaged on restoration of power to motor and with 10 watt single phase space heater with TEFC squiral cage including motor working on 440 V + /- 10% 3 phase 50 Hz AC of intermittent duty rating S-2 insulation class FG and temp rise resticted to class B with IP 67 protection class suitable for DOL starting and with three thermostat and 30% over loading margin | | | | |
| 3.A | 300 mm (for 1/2 X DWF) | 2 | No | 102381.00 | 204762.00 |
| 3.B | 400 mm (for 1 X DWF) | 2 | No | 109750.00 | 219500.00 |
| 3.C | 500 mm (for Peak flow) & Common header | 2 | No | 109750.00 | 219500.00 |
| | , I no- VL 1-10,13 Pg. No- 13+ (RS.4000.0 TPI) | | | | |
| 4 | Reflux Valve :- Providing & supplying ISI mark CI D/F Reflux valve(non return valve) PN 1 rating with bypass arrangement, as per IS 5312 Part I (1984), including all taxes, inspection charges, transportation etc. | | | | |
| 4A | 300 mm (for 1/2 X DWF) | 2 | No | 41933.00 | 83866.00 |
| 4B | 400 mm (for 1 X DWF) | 2 | No | 93880.00 | 187760.00 |
| 4C | 500 mm (for Peak flow) & Common header | 2 | No | 187416.00 | 374832.00 |
| 5 | Kinetic Air Valve 200mm ida- Providing & supplying Kinetic Air Valves PN 1 as per IS 14845-2000 and MJP's standard specifications double orifice type combined with isolating sluice valve, mounted in horizontal position and operated by wheel gearing, small orifice elastic ball resting on gun metal orifice nipple, large orifice valcanite ball seating on moulded seat ring, inlet face and drilled, including all taxes (central and local), insurance third party inspection charges, loading, unloading, transportation up to departmental stores / site etc | 1 | No. | 31679.00 | 31679.00 |
| | As per Rate Analysis | | ļ | | |
| | | | | | |

|) SR | Description | Qty | Unit | Rates | Amount |
|---------|--|-------|------|-----------|-----------|
| 6 | Pressure Gauge-150mm dia. Providing, installing, testing & commissioning of 150 mm dia Glyscerine filled Pressure Gauges Bourdon type as IS 3624:1987 Mounting - direct bottom, stainless steel body, toughened glass window Range 0 to 15 kg/Cm ² .as per detailed specifications & as directed by Engineer. | 6 | No. | 1796.00 | 10776.00 |
| | Item No-PM 11-4, Pg No-9 | | | | |
| 7 | CIDF Pipes & Specials for Pump Delivery :- Providing and supplying ISI standard CIDF Pipes & specials for pump delivery including all taxes (central & local) railway freight, insurance, unloading from railway wagon, loading into truck transport to store / site, unloading, stacking etc. complete as directed by Engineer | | | | |
| | up to 500 mm dia | 15000 | kgs | 67.41 | 1011150.0 |
| | I no- 6.A.i, Pg. No- 67 | | | | |
| 8 | Flanged Joints :- Providig & making flanged joints to the CIDF pipes & specials for pump delivery including all jointing material such as rubber packing, nut bolts & testing | | | | |
| 8A | 300 mm (for 1/2 X DWF) | 45 | No | 1071.00 | 48195.00 |
| 8B | 400 mm (for 1 X DWF) | 45 | No | 1806.00 | 81270.00 |
| 8C | 500 mm (for Peak flow) | 30 | No | 1806.00 | 54180.00 |
| | I no-4 xi, viii Pg. No-66 | | | | |
| 9 | DSL System - For D.S.L. (Down Shop Lead) system for above crane | 36 | М | 2500.00 | 90000.00 |
| | MJP E/M DSR 15-16, Note 5, Pg No-20 | | | | |
| 10 | Full bore electromagnetic flowmeter 450mm dia : - Providing, Installing & giving satisfactory test and trial of ultrasonic Insertion fixed type flow meter working on conditions and specifications, calibration, inspection, testing, training, guarantees, and manufacturers test certificate along with mandatory accessories given bellow complete with detailed specifications and as directed by engineer in charge. | 1 | No | 328944.00 | 314349.0 |
| | MJP Electro-mech DSR 15-16, Section WM 3-11 P. No- 118 | | | | |
| 11 | Structural Steel- Providing Structural steel work in rolled sections like joints, channels, angles, tees ect. As per detailed design and drawing including fix in position without connecting plates, braces ect. And one coat of anticarrossive paint and over it two coats of oil painting, of approved quality and shade, complete. | | MT | 58798.00 | 117596.0 |
| | Section. F, Item no-5, Pg. No-42 + Add 5% Sugarcane Area+ 1% L. W+ 1% L. A | | | | |

| AC SR | Description | Qty | Unit | Rates | Amount |
|----------|---|-----|------|----------|----------|
| 12 | RCC M 250- Providing and laying in situ ready mix cement concrete grade of trap/ granite/ quartzite/gneiss metals for RCC work in founadation like raft, grillage, strip foundation and footing for RCC column and steel stanchions including normal dewatering, form work, compaction finshing and curing including tranporting from mixing plant up to distance of 25 Km, pouring the concrte at work site for 1.5 mtrs lift above GL and 5 lift bellow GL etc comlete. (excluding Reinfprcement and Structural steel) | 7 | CUM | 7835.00 | 54845.00 |
| | Sect-G, Item No-10C Pg NO-48 + Add 5% Sugarcane Are+ 1% L. W | | | | |
| 13 | Tor Steel- Providing and fixing in position steel bar reinforcement of varoius diameters for RCC piles, caps ,footings, foundations, slabs, beams, columns, canopies, staircases, newels, chajjas, lintels, pardies, copings, fins, arches, etc as per detailed design, drawing and schedules including cutting, bending , hooking, the bars , binding with wires or tack welding and supporting as requires etc complete (including cost of binding wires) | 1 | MT | 52194.00 | 52194.00 |
| | Sect-G, Item No-8b Pg No-46 + Add 5% Sugarcane Are+ 1% L. W+ 1% L. A | | | | |

| SR | Description | Qty | Unit | Rates | Amount |
|----------|--|----------|----------|-----------------------|-----------------------|
| 1 | L.T.Main Control Panel Board :- Designing, Providing , Errecting Main L. T. Cantrol Panel Board comprises of 300 Amp. MCCB for Incoming & other required switchgears as per attached rate analysis. | 1 | No | 296020.06 | 296020.06 |
| | AT Starter :- Providing, Errecting A T Starters for following HP PumpsProviding erecting and giving test and trial of Fully Automatic, Auto Transformer Starter with Air Break Contactor, assembled locally with contactors of approved make in 14 SWG sheet steel fabricated, floor mounted type cubical panel, suitable for operation on 380 - 440 Volts, 3 Phase, 50 Hz, fitted with accessories as below. The incoming and outgoing cable end boxes shall be on either sides of main panel. The cable entries from auto transformer shall be totally enclosed in sheet metal. The starter shall have screened louvers on both sides etc | | | | |
| | AT Starter -For 1DWF-30HP AT Strater for 2 DWF-55HP | 1 2 | No No | 89258.00 122366.00 | 89258.00 244732.00 |
| | AT Strater for 2 DWF-55HP AT Strater-For Peak Flow -120HP | 2 | No | 238244.00 | 476488.00 |
| 20 | As per Rate analysis | 2 | 110 | 200277.00 | |
| 3 | Alluminium Armoured cable :- Providing, erecting Allum. Armoured cable of following sizes 1.1 kV grade etc complete. | | | | |
| 3A | 3.5 Core 300Sq. MM Aluminium Armoured Cable for Transformer to LT Panel | 50 | М | 1590.00 | 79500.00 |
| 3B | 3.5 core x 95 sqmm 30 HP pumpset from Panel to starter | 50 | М | 578.00 | 28900.00 |
| 3C | 3.5 core x 120 sqmm 55 HP pumpset from Panel to starter | 75 | М | 716.00 | 53700.00 |
| | 3.5 core x 150 sqmm 120 HP pumpset from Panel to starter | 75 | М | 862.00 | 64650.00 |
| 3E | 3.0 core x 95 sqmm for capacitor | 100 | М | 575.00 | 57500.00 |
| 3F | 3 Core 2.5 Sq.mm copper armoured cable for valve actuators | 200 | М | 166.00 | 33200.00 |
| | I. No. CB5.5 5. 5.6 5.7 4.10 & CB 2-3 P. No.69 Ino CB 4-15 Pno 68 | | | | |
| 4 | Submarsible Copper Cable :- Providing, erecting 1.1 kV grade submersible copper cable for following sizes | | | | |
| | 30 HP pumpset from Starter to Motor | 20 | М | 886.00 | 17720.00 |
| | 55 HP pumpset from Starter to Motor | 20 | М | 2542.00 | 50840.00 |
| 4C | 120 HP pumpset from Starter to Motor | 10 | М | 5307.00 | 53070.00 |
| - | As per offer of M/s. Aqua & Kishor Pumps | | | | |
| | | 100 | Ν.4 | 4400.00 | 112200.00 |
| 5A | 11 kv XLPE cabe 3 core x 120 sqmm | 100 4 | M | 1133.00 | 113300.00 |
| 5B 5C | Indoor termination kit 11 kv (70-120 sq.mm) Out door termination kit 11 kv (70-120 sq.mm) | 4 | M M | 8223.00 11865.00 | 32892.00 47460.00 |
| 50 | Pno 74 Ino CB 11-5 Pno 78 Ino CB 25-2 ,3 | 4 | IVI | 00.00011 | 41400.00 |
| 6 | Item No. 6 :- Cable Trench - Making the trench in hard murum/ tar road of suitable width and depth for laying provided L.T. | 100 | М | 204.00 | 20400.00 |
| | Cable of 10 sq mm complete | | | | |

| SR | Description | Qty | Unit | Rates | Amount |
|----|--|---------------------|------|-----------|-----------|
| 7 | Making Trench- Making the trench in hard murum/ tar road of suitable width and depth for laying provided L.T. Cable of 25 sq mm & above covered with half round hume pipe complete as per detailed specifications. | 100 | М | 328.00 | 32800.00 |
| | PWD Ele CSR I.No. 16-1-2 P. No. 160 | | | | |
| 8 | Cable Tray - Providing, fabricating and fixing G.I. perforated cable tray for cables as per requirement and specifications - 200 x 20 mm | 100 | М | 170.00 | 17000.00 |
| | MJP CSR I. No. CB 34-2 P. No. 74 | | | | |
| 9 | Capacitor :- Providing, erecting bank of condenser for power factor correction | 110 | kVAR | 349.00 | 38390.00 |
| | MJP CSR I. No. CP 1 P. No. 57 | | | | |
| 10 | APFC Panel :- Supply & erecting 50 kVAR 440 V three phase 50 cycles thyrester switched Micro APFC passive filter panel consisting of (25 x 2)steps of APP type capacitor units confirming to IS: 13585 (part -1) with harmonic filter reactors suitable for 150 KW load as per specifications. | panel units 1 No | | 197185.80 | 197185.80 |
| | PWD Ele CSR 2016.17 I. No.6-7-9 P. No. 82 | | | | |
| 11 | Transformer 160kVA- 11/0.433kV- Suppling & erecting approved make of 160kVA 50 c/s oil immersed and naturally cooled indoor /outdoor type , copper wound transfoemer with delta conn. on HV side & star conn. on LV side with additional neutral brought out in load side , voltage rating 11/0.433 V with tapping of +/- 2.5 % -5 % ,continuosly rated for full load with standered accessories complete with test certificate with losses below 580 watts at no load , 4200 watts at full load asp er IS 2026. and approved by engineering incharge. | 1 | No | 278535.00 | 278535.00 |
| | Pno 31 Ino TR 1.3 | | | | |
| 12 | H.T. sub station-Providing, supplying and erecting 11 Kv/ 0.433 Kv H T Substation as per Detailed specification. 6 x 4 sq mtr | | Job | 556322.00 | 556322.00 |
| | As per Rate analysis | | | | |
| 13 | GI Earthing - Supplying & erecting GI earth plate size 60x 60x6 cms complete with all materials, testing & recording results as per specifications. As per IS 3043-1987 & as directed by engineering incharge. | 6 | No | 4323.00 | 25938.00 |
| | PWD DSR 16.17, Page No.106, Item No.9-1-1 | | | | |
| 14 | Copper Earthing - Supplying & erecting copper earth plate size 30 x 30 x 0.6 cms complete with all materials, testing & recording results as per specifications . As per IS 3043-1987 & as directed by engineering incharge. | | No | 7732.20 | 85054.20 |
| | PWD DSR 16.17, Page No 106 Item No.9-1-2 | | | | |
| 15 | Earthing Strip :- Supplying and erecting G.I.Strip of required size used for earthing on wall and/or any other purpose with necessary GI clamps fixed on wall painted with bituminous paint in an approved manner with joint required as per specification | 200 | kgs | 199.50 | 39900.00 |
| | PWD DSR 16.17, Page No 85 Item No.9-2-3 | | | | |
| 16 | Tools :- Providing Tools as per Detailed specification enclosed. | 1 | Lot | 66825.00 | 66825.00 |
| | As per RA enclosed | | | | |

| SR | Description | Qty | Unit | Rates | Amount |
|----|--|-----|------|------------|-------------|
| 17 | Indoor Lighting :- The lighting shall comprise fleuorescent - 4 nos Bulkhead fitting - 3 nos D.B 2 nos. Suitable size conductors with fuses, switches including H.G.conduit etc. | | Job | 15048.40 | 15048.40 |
| | As per RA enclosed | | | | |
| 18 | Area Lighting :- The area lighting shall comprise 2 250 w mercury vapour lamps with and mounted on tubular swivelled pole 7 m high including ballast, condensor,fuse reflector,cable and control switch etc out of the two lams.one shall be in the substation yard and the second lamp shall be erected for area lighting. | 1 | Job | 107895.60 | 107895.60 |
| | As per RA enclosed | | | | |
| 19 | Diesel Generating Set :- Supplying Errecting diesel generating set 200 KVA capacity with AMF Panel as per Detailed specification with water cooled engine set incluiding inspection charges | 1 | Set | 1608419.40 | 1608419.40 |
| | Ino . 11-1-18 | | | | |
| 20 | PLC Automation System :- Providing, erecting PLC Automation | 1 | Job | 1034525.00 | 1034525.00 |
| | As per RA | | | | |
| 21 | MSEDCL Charges | 1 | Job | 500000.00 | 500000.00 |
| | | | | Total Rs | 10863468.46 |
| | | | | Say Rs. | 10863468.00 |

SOLAPUR MUNICIPAL CORPORATION MAHARASHTRA JEEVAN PRADHIKARAN DIVISION SOLAPUR SOLAPUR CITY UNDERGROUND SEWERAGE SCHEME (AMRUT) ABSTRACT

SUB ESTIMATE NO. :- PUMPING MAIN MAIN FROM PUMING STATION TO STP @ HYDRABAD ROAD (MHADA)

| lte m | Quanti | ty | ITEM DESCRIPTION | Rate | Unit | Amount Rs. |
|----------|--------|-------|---|---------|--------|------------|
| | | | Material : | | | |
| 1 | | | Providing DI Pipes (push on joints pressure pipes of DI of following class & Dia meters confirming to the Indian Standard Specification inclusive cost of jointing materials (Rubber Gasket of EPDM Quality) including all statutory duties & taxes such as GST levied by GOI & GOM in all respect, Third Party Inspection charges of TPI agency approved by the MJP including transit insurance, Railway freight, unloading from railway wagon, loading in to the truck, transportation to departmental store / site of work, unloading, stacking etc. completed as directed by Engineer-in-Charge (IS:1536:2001 for pipes & IS:158:1969 & 15:12820:1989 or latest edition / revision with amendments for rubber gaskets). (IS:8329:2000 latest version) | | | |
| | 150.00 | Rmt | 500 mm dia.D.I. K-9 Pipe | 5968.00 | Rmt | 895200.00 |
| | 130.00 | TXIII | (CSR 2016-17 P.No.63 I.No.3) | 0300.00 | TXIII. | 033200.00 |
| | | | | | | |
| 2 | | | Providing and supplying ISI standard DI specials & fittings with sealing rubber gasket of SBR complete with cast iron follwer gland & MS nutbolts coated or otherwise protected from rusting and suitable for DI pipes cost of labour, material, and transportation to stores/site loading unloading including all taxes, etc. complete as per IS -9523 For all types of specials, bends, TEEs, etc | | | |
| | 500.00 | Kg | 350 mm Dia.& above (CSR 2016-17 P.No.69/70 I.No.10b) | 129.68 | Kg | 64840.00 |

(500 mm Dia. D.I. K-9 Pipe, Length = 150 m)

| lte m | Quanti | ty | ITEM DESCRIPTION | Rate | Unit | Amount Rs. |
|----------|--------------|----------|---|-----------------------|----------|-----------------------|
| 3 | | | Providing & supplying DI fittings with ISI mark mechanical joints confirming to table 12 to 31 of IS Supply of CI mechanical jont double socket with flanged TEEs as dimensionally described in Table 19 of IS 9523/2000 upto latest ammendments including cost of SBR/EPDM gaskets, nut bolts, washers, & ductile iron folloer glands . Fittings should be internally OPC lined & externally metallic zinc coating / zinc rich paint with finishing layer of black bitumen coating including transportation and all taxes etc. complete | | | |
| | 1.00 | No | 500 x500 x 150 mm dia. TEE (CSR 2016-17. P.No.85 I.No. 13 VIII) | 24866.00 | No | 24866.00 |
| | 2.00 | No | 500 mm dia. Tail Piece | 15800.00 | No | 31600.00 |
| | 1.00 | No | 150 mm dia. Tail Piece | 2599.00 | No | 2599.00 |
| | | | (CSR 2016-17 P.No.86 I.No.13 IX) | | | |
| | 1.00 | No | 500 mm dia. Collars (CSR 2016-17 P.No. 81 I.No.13 I) | 22040.00 | No | 22040.00 |
| | 3.00 | No | 500 mm dia.90 Bend (CSR 2016-17 P.No.82 I.No.13II) | 31875.00 | No | 95625.00 |
| 4 | | | Providing and supplying at site of ductile iron / spheroidial graphite (S.G.) iron D/F non rising spindle resilient seated glandless sluice valves with handwheel & without bypass arrangement. Valves in accordance with BS 5163 of PN-10/16 rated, with body and bonnet of ductile iron confirming to IS 1865 Gr. 500/7 or Gr. 400/15. Wedge fully encapsulated WRAS approved EPDM rubber (approved for drinking water), Wedge nut of brass, shaft of stainless steel 1.4021/ 1.4104, stem seals min 3 nos. of NBR, internal fasteners of stainless steel A2. Body & Bonnet coated inside & outside with electrostaically applied epoxy powder coated bule colour (suitable for drinking water) as per DIN 30677-2 & GSK guideliness with a coating thickness of min.600 microns. Valves should be full bore & tight shut-off. Flange drilling as per IS 1538 raised face & pressure testing at manufactures works shall be done as per IS 14846. Including all taxes and transportation charges etc. complete. | | | |
| | 1.00 1.00 | No No | 500 mm dia Sluice Valve PN - 1.0 150 mm dia Sluice Valve PN - 1.0 (CSR 2016-17 P.No. 160 I.No. 6) | 387849.00 21592.00 | No No | 387849.00 21592.00 |

| lte m | Quanti | ty | ITEM DESCRIPTION | Rate | Unit | Amount Rs. |
|----------|--------|-----|---|--|------|------------|
| 5 | | | Providing and supplying at site ductile iron Spheroidal Graphite (S.G.) iron single Double chamber tamper proof air valv without isolating sluice valve. Valves i accordance with BSEN 1074-4 of PN 10/1 rated, with body and bonnet of ductile iro confirming to EN 1563/IS 1865 GR. 500/7 of Gr. 400/15 floats, float guide, seat ring of stainless steel 1.4436/1.4306, seat ring gasks of WRAS approved EPDM rubber (suitable for drinking water), internal fasteners of stainless steel A2. Body & Bonnet coated inside outside with electrostatically applied epox powder coated blue colour (suitable for drinking water) as per DIN 30677-2 & GS guideliness with a coating thickness of min 600 microns. Flange connections as per I 1538 raised face & pressure testing a manufactures works shall be done as per I 14845, Including all taxes and transportatio charges etc. complete. | / e n 6 n or of et or s & y or K n. S at | | |
| | 1.00 | No | Air valve 150 mm dia PN 1.0 | 29041.00 | No | 29041.00 |
| | | | (CSR 2016-17 P.No.161 I.No.7) | | | |
| 6 | | | Providing and supplying ISI standard M specials of required thickness with 3 coats of approved make epoxy paint (Shalimar,Ciba of Mahindra & Mahindra make) from inside outside including all taxes (Central & Local) octroi, inspection charges, transportation to stores/site and stacking etc. complete. | of or & , | | |
| | 500.00 | Kg | Doble flanged specials of all Diameters (CSR 2016-17 P.No.68 I.No.7c) | 64.20 | Kg | 32100.00 |
| | | | Total Cost Of Materia | ul | | 1607352.00 |
| | | | Labour : | | | |
| 1 | | | Excavation for foundation / pipe trenches i earth, soils of all types, sand, gravel and so murum including removing the excavate material up to distance of 50 M. and lift a below,. stacking and spreading as directed normal dewatering, preparing, the bed for foundation and excluding backfillin etc.complete. | ft d s I, or | | |
| | 83.00 | Cum | Lift 0-1.50 m | 148.05 | Cum | 12288.15 |
| | | | Basic Rate 141.0 | | | |
| | | | Add 5 % for M.C 7.0 Total 148.0 | | | |
| | | | (CSR 2016-17,P.35, I.No.1) | | | |

| lte m | Quanti | ty | ITEM DESCRIPTION | | Rate | Unit | Amount Rs. |
|----------|--------|----------|--|--|--------|----------|------------|
| 2 | | | Excavation for foundation / pipe hard murum & boulders , WBM roa removing the excavated mater distance of 50 M. and lift as below and spreading as directed dewatering, preparing, the bed for and excluding backfilling etc.comple | | | | |
| | 83.00 | Cum | Lift 0-1.50 m | | 189.00 | Cum | 15687.00 |
| | | | Basic Rate | 180.00 | | | |
| | | | Add 5 % for M.C | 9.00 | | | |
| | | | Total (CSR 2016-17 P.No. 35, 1 No.3) | 189.00 | | | |
| 3 | | | Excavation for foundation / pipe soft rock and old cement & lim foundation , asphalt road including the excavated material up to distand and lift as below, stacking and sp directed, normal dewatering, pre bed for foundation and excluding etc.complete. | | | | |
| | 83.00 | Cum | Lift 0-1.50 m | | 465.15 | Cum | 38607.45 |
| | | 0 0111 | Basic Rate | 443.00 | 100110 | 0 0 1 1 | |
| | | | Add 5 % for M.C. | 22.15 | | | |
| | | | Total (CSR 2016-17 P.No. 35, I No.5) | 465.15 | | | |
| 4 | | | Filling in plinth and floors murum | rum from on 15 cm to | | | |
| | 25.00 | Cum | Murrum available @ site | | 68.48 | Cum | 1712.00 |
| | | | Basic Rate | 64.00 | | | |
| | | | Add 5 % for M.C. Total | 4.48 68.48 | | | |
| | | | (CSR 2016-17 P.No.39 I.No.16) | 00.40 | | | |
| 5 | | | Lowering, laying and jointing with S gaskets C.I. S/S pipes of various of CI / MS specials of following di proper position, grade and allind directed by Engineer-in-charge conveyance of materials from store work, including cost of jointing mark rubber rings, labour giving hydrate etc.complete. | classes with iameters in gnment as including es to site of aterials and | | | |
| | | F | Note :- Only SBR , rubber gaskets | to be used. | | _ | 10000 |
| | 150.00 | Rmt | 500 mm dia DI K-9 | 070.00 | 286.65 | Rmt | 42997.50 |
| | | | Basic Rate | 273.00 | | | ping Main |

| lte m | Quanti | ty | ITEM DESCRIPTION | | Rate | Unit | Amount Rs. |
|----------|--------|-----|---|--------------|----------|------|------------|
| | | | Add 5 % for M.C. | 13.65 | | | |
| | | | Total | 286.65 | | | |
| | | | (CSR 2016-17, P. 63, I. 2) | | | | |
| 6 | | | Lowering,laying and jointing i | | | | |
| | | | following C.I. D/F Reflux valves | | | | |
| | | | valves and Sluice valves including | | | | |
| | | | labour jointing material, cincluding | | | | |
| | | | and giving satisfactory hydraul etc.complete. | ic testing, | | | |
| | 1.00 | No | 500 mm dia Sluice Valve PN - 1.0 | | 8648.85 | No | 8648.85 |
| | | | Basic Rate | 8237.00 | | | |
| | | | Add 5% for M.C. area | 411.85 | | | |
| | | | Total | 8648.85 | | | |
| | 1.00 | No | 150 mm dia Sluice Valve PN - 1.0 | | 3357.90 | No | 3357.90 |
| | | | Basic Rate | 3198.00 | | | |
| | | | Add 5% for M.C. area | 159.90 | | | |
| | | | Total | 3357.90 | | | |
| | | | (CSR 2016-17 P.No.159 I.No.4) | | | | |
| 7 | | | Lowering and fixing kinetic air | valve of | | | |
| | | | following dia in proper position and | d alignment | | | |
| | | | as directed including cost of conve | yance from | | | |
| | | | store to site of work, all jointin | g material, | | | |
| | | | labour and hydraulic testing etc. co | mplete. | | | |
| | 1.00 | No | Air valve 150 mm dia PN 1.0 | | 741.30 | No | 741.30 |
| | | | Basic Rate | 706.00 | | | |
| | | | Add 5% for M.C. area | 35.30 | | | |
| | | | Total | 741.30 | | | |
| | | | (CSR 2016-17, P. 164, I. 13c) | | | | |
| 8 | | | Providing and contstructing B.B | | | | |
| | | | valve chamber with 15 cm t | | | | |
| | | | proportion PCC bedding , | • | | | |
| | | | excavation B.B. masonary in | | | | |
| | | | proportion with precast steel fibre | | | | |
| | | | concrete frame and covers (S.F. and covers) etc | R.C. Itallie | | | |
| | | | , | | | | |
| | 2.00 | No | Clear Size 1.20 x1.20 x1.50 M. | | 18420.15 | No | 36840.30 |
| | | | Basic Rate | 17543.00 | | | |
| | | | Add 5% for M.C. area | | | | |
| | | | Total (CSR 2016-17 P.No. 271 I.No.3E) | 18420.15 | | | |
| | | | | | | | |
| 9 | | l | Providing and laying in situ followin | g grades of | | | |
| | | | C.C. of trap/ granite / quartzite / gr | | | | |
| | | | for foundation and bedding | | | | |
| | | | dewatering form work, compacting | and curing, | | | |
| | | | finishing etc.complete. | | | | |
| | 5.40 | Cum | PCC M150 | | 4444.65 | Cum | 24001.11 |
| | 0.40 | | Basic Rate | 4233.00 | | Juin | _ 1001.11 |
| | | | Add 5% for M.C. area | 211.65 | | ļ | |
| | | l | Total | 4444.65 | | | |
| | | | (CSR 2016-17 P.No. 43 I.No.1) | | | | |
| I | | | і ́ | I | | Pum | ping Main |

Abstract

| lte m | Quanti | ty | ITEM DESCRIPTION | Rate | Unit | Amount Rs. |
|----------|--------|-----|--|----------|------|------------|
| 10 | | | Providing and laying in situ cement Concrete of trap/ granite / quartzite / gneiss metal for RCC work in foundation like raft, grillage, strip foundation and footing of RCC columns and steel stancthions including normal dewatering, form work, compaction, finishing and curing , etc.complete (By weigh batching and mix design for M-600 and M-300 only. Use of L & T, A.C.C. , Ambuja, Birla Gold, Manikgad, Rajashree, etc.cement is permitted.) (Excluding M.S. or Tor reinforcement) M-150 Grade | | | |
| | 9.72 | Cum | RCC M150 Grade Basic Rate 5118.00 Add 5% for M.C. area 255.90 | 5373.90 | Cum | 52234.31 |
| | | | Total 5373.90 | | | |
| | | | (CSR 2016-17 P.No. 43 I.No.2) | | | |
| 11 | | | Providing and fixing in position steel bar reinforcemement of various diameters for RCC piles, caps, footings, foundations, slabs, beams, columns, canopies, staircases, newels, chajjas, lintels, pardies, copings, fins, arches, etc. as per detailed designs, drawings,and schedules, including cutting ,bending, hooking the bars, binding with wires or tack welding and supporting as required, etc.complete. (including cost of binding wire.) | | | |
| | 0.34 | MT | Tor Steel | 54803.70 | MT | 18633.26 |
| | | | Basic Rate 52194.00 Add 5% for M.C. area 2609.70 Total 54803.70 (CSR 2016-17 P.No. 46 I.No.8) 54803.70 | | | |
| 12 | | | Refilling the trenches with available excavated stuff with soft material first over pipeline and then hard material in 15 cm layers with all leads and lifts including consolidation , surcharging, etc. complete. | | | |
| | 180.00 | Cum | Basic Rate 64.00 | 65.28 | Cum | 11750.40 |
| | | | Add 5% for M.C. area 1.28 Total 65.28 | | | |
| | | | (CSR 2016-17 P.No. 38 I.No.16) | | | |

| lte m | Quantit | ty | ITEM DESCRIPTION | | Rate | Unit | Amount Rs. |
|----------|---------|----|--|--|--------------|---------|------------|
| 13 | | | Hydraulic testing of C.I./D.I. pip specified pressure including com materials and labour and water for specified length including cutting, p cap making arrangement for filling using reciprocating type pumps wh be able to provide specified test gauges and other necessary et labour, operation charges, etc. re- testing. The rate under this item include cost of retesting, if nece- reinstating to original position u supplied by the conrractor. | ost of all testing for blacing end safe water hich should t pressure quipments, equired for shall also essary and | | | |
| | 0.15 | Km | 500 mm dia DI K-9 | | 31796.10 | Km | 4769.42 |
| | | | Basic Rate | 30282.00 | | | |
| | | | Add 5 %for M.C. | 1514.10 | | | |
| | | | Total (CSR 2016-17 P.No. I.No. 12) | 31796.10 | | | |
| | | | Total Cost O | f Labour | | | 272268.94 |
| | | | Tot | al Cost Of | Material + L | .abour | 1879620.94 |
| | | | | | Total Co | ost Rs. | 1879620.94 |
| | | | | | S | ay Rs. | 18.80 |
| | | | | | Say | Crore | 0.19 |

SUB ESTIMATE NO. :- PUMPING MAIN MAIN FROM PUMING STATION TO STP @ HYDRABAD ROAD (MHADA)

| ltem No | ITEM DESCRIPTION | Νο | L | В | D/H | Quantity | Total Qty. | Unit |
|------------|---|----|--------|---|-----|----------|------------|------|
| 1 | Material : Providing& supplying ISI marked D.I. S&S pipes (push on jointspressure pipes of D. I. of following class & dia. confirming to IS specifications iclusive of the cost of jointing materials (rubber gasket of EPDM quality)including all staturoty duties & taxes levied by Govt. of Maharashtra in all respect , education cess, VAT. third party inspection charges of TPI agecy approved by MJP , including transit, insurance, railway freight, unloading from railway wagon, loading into truck, transport to departmental store / site, unloading, stacking etc. complete as directed by Engineer-in-charge. (IS- IS:1536/2001 for pipes and IS 158/1969 and IS 12820/1989 or latest edition / revision with ammendments for rubber gaskets). | | | | | | | |
| 2 | 500 mm dia.D.I. K-9 Pipe Providing and supplying ISI standard DI specials & fittings with sealing rubber gasket of SBR complete with cast iron follwer gland & MS nutbolts coated or otherwise protected from rusting and suitable for DI pipes cost of labour , material, and transportation to stores/site loading unloading including all taxes, etc. complete as per IS -9523 For all types of specials, bends, TEEs, etc | | 150.00 | | | | 150.00 | |
| | 350 mm Dia.& above | | | | | | 500.00 | Kg |

| Item | ITEM DESCRIPTION | No | L | В | D/H | Quantity | Total Qty. | Unit |
|------|--|------|---|---|------|----------|------------|------|
| No | | _ | | | D/II | Quantity | Total Qty. | 0 |
| 3 | Providing & supplying DI fittings with ISI mark mechanical joints confirming to | | | | | | | |
| | table 12 to 31 of IS Supply of CI | | | | | | | |
| | mechanical jont double socket with | | | | | | | |
| | flanged TEEs as dimensionally described in Table 19 of IS 9523/2000 | | | | | | | |
| | upto latest ammendments including | | | | | | | |
| | cost of SBR/EPDM gaskets, nut bolts, | | | | | | | |
| | washers, & ductile iron folloer glands . | | | | | | | |
| | Fittings should be internally OPC lined | | | | | | | |
| | & externally metallic zinc coating / zinc | | | | | | | |
| | rich paint with finishing layer of black | | | | | | | |
| | bitumen coating including transportation and all taxes etc. | | | | | | | |
| | complete | | | | | | | |
| | | | | | | | | |
| | 500 x500 x 150 mm dia. TEE | 1.00 | | | | | 1.00 | |
| | 500 mm dia. Tail Piece | 2.00 | | | | | 2.00 | |
| | 150 mm dia. Tail Piece | 1.00 | | | | | 1.00 | |
| | 500 mm dia. Collars | 1.00 | | | | | 1.00 | |
| | 500 mm dia.90 Bend | 3.00 | | | | | 3.00 | No |
| 4 | Providing and supplying at site of ductile iron / spheroidial graphite (S.G.) | | | | | | | |
| | iron D/F non rising spindle resilient | | | | | | | |
| | seated glandless sluice valves with | | | | | | | |
| | handwheel & without bypass | | | | | | | |
| | arrangement. Valves in accordance | | | | | | | |
| | with BS 5163 of PN-10/16 rated, with | | | | | | | |
| | body and bonnet of ductile iron | | | | | | | |
| | confirming to IS 1865 Gr. 500/7 or Gr. | | | | | | | |
| | 400/15. Wedge fully encapsulated | | | | | | | |
| | WRAS approved EPDM rubber | | | | | | | |
| | (approved for drinking water), Wedge | | | | | | | |
| | nut of brass, shaft of stainless steel | | | | | | | |
| | 1.4021/ 1.4104, stem seals min 3 nos. of NBR, internal fasteners of stainless | | | | | | | |
| | steel A2. Body & Bonnet coated inside | | | | | | | |
| | & outside with electrostaically applied | | | | | | | |
| | epoxy powder coated bule colour | | | | | | | |
| | (suitable for drinking water) as per DIN | | | | | | | |
| | 30677-2 & GSK guideliness with a | | | | | | | |
| | coating thickness of min.600 microns. | | | | | | | |
| | Valves should be full bore & tight shut- | | | | | | | |
| | off. Flange drilling as per IS 1538 | | | | | | | |
| | raised face & pressure testing at | | | | | | | |
| | manufactures works shall be done as | | | | | | | |
| | per IS 14846. Including all taxes and transportation charges etc. complete | | | | | | | |
| | 500 mm dia Sluice Valve PN - 1.0 | 1.00 | | | | | 1.00 | No |
| | 150 mm dia Sluice Valve PN - 1.0 | 1.00 | | | | | 1.00 | No |

| ltem No | ITEM DESCRIPTION | No | L | В | D/H | Quantity | Total Qty. | Unit |
|------------|---|------|--------|------|------|----------|------------|------|
| 5 | Providing and supplying at site ductile iron / Spheroidal Graphite (S.G.) iron single / Double chamber tamper proof air valve without isolating sluice valve. Valves in accordance with BSEN 1074- 4 of PN 10/16 rated, with body and bonnet of ductile iron confirming to EN 1563/IS 1865 GR. 500/7 or Gr. 400/15 floats, float guide, seat ring of stainless steel 1.4436/1.4306, seat ring gasket of WRAS approved EPDM rubber (suitable for drinking water), internal fasteners of stainless steel A2. Body & Bonnet coated inside & outside with electrostatically applied epoxy powder coated blue colour (suitable for drinking water) as per DIN 30677-2 & GSK guideliness with a coating thickness of min. 600 microns. Flange connections as per IS 1538 raised face & pressure testing at manufactures works shall be done as per IS 14845, Including all taxes and transportation charges etc. complete. | | | | | | | |
| 6 | a) Kinetic Air valve 150 mm dia PN 1.0 Providing and supplying ISI standard MS specials of required thickness with 3 coats of approved make epoxy paint (Shalimar,Ciba or Mahindra & Mahindra make) from inside & outside including all taxes (Central & Local), octroi, inspection charges, transportation to stores/site and stacking etc. complete. | 1.00 | | | | | 1.00 | No |
| | Doble flanged specials of all Diameters | | | | | | 500.00 | Kg |
| 1 | Labour: Excavation for foundation / pipe trenches in earth, soils of all types, sand, gravel and soft murum including removing the excavated material up to distance of 50 M. and lift as below,. stacking and spreading as directed, normal dewatering, preparing, the bed for foundation and excluding backfilling etc.complete. | | | | | | | |
| | Lift 0-1.50 m | 1.00 | 150.00 | 1.10 | 0.50 | 82.50 | | |
| | | | | | | Say | 83.00 | Cum |

| ltem No | ITEM DESCRIPTION | No | L | В | D/H | Quantity | Total Qty. | Unit |
|------------|---|------|--------|------|------|--------------|------------|------|
| 2 | Excavation for foundation / pipe trenches in hard murum & boulders , WBM road including removing the excavated material up to distance of 50 M. and lift as below,. stacking and spreading as directed, normal dewatering, preparing, the bed for foundation and excluding backfilling etc.complete. | | | | | | | |
| | Lift 0-1.50 m | 1.00 | 150.00 | 1.10 | 0.50 | 82.50 | | |
| 3 | Excavation for foundation / pipe trenches in soft rock and old cement & lime masonry foundation, asphalt road including removing the excavated material up to distance of 50 M. and lift as below, stacking and spreading as directed, normal dewatering, preparing, the bed for foundation and excluding backfilling etc.complete. | | | | | Say | 83.00 | Cum |
| | Lift 0-1.50 m | 1.00 | 150.00 | 1.10 | 0.50 | 82.50 | | |
| 4 | Filling in plinth and floors murum bedding in trenches with approved murum from excavated materials from foundation 15 cm to 20 cm layers including watering and compaction complete. | | | | | Say | 83.00 | |
| 5 | Murrum available @ site Lowering, laying and jointing with SBR rubber gaskets C.I. S/S pipes of various classes with CI / MS specials of following diameters in proper position, grade and allignment as directed by Engineer-in-charge including conveyance of materials from stores to site of work, including cost of jointing materials and rubber rings, labour giving hydraulic testing, etc.complete. | 1.00 | 150.00 | 1.10 | 0.15 | 24.75 Say | | |
| 6 | Note :- Only SBR , rubber gaskets to be used. 500 mm dia DI K-9 Lowering,laying and jointing in position following C.I. D/F Reflux valves, Butterfly valves and Sluice valves including cost of all labour jointing material, cincluding nut bolts and giving satisfactory hydraulic testing, etc.complete. | 1.00 | 150.00 | | | | 150.00 | Rmt |

| ltem No | ITEM DESCRIPTION | No | L | В | D/H | Quantity | Total Qty. | Unit |
|------------|--|-------|------|------|------|----------|------------|------|
| | 500 mm dia; Sluice Valve PN - 1.0 | 1.00 | | | | | 1.00 | No |
| | 150 mm dia Sluice Valve PN - 1.0 | 1.00 | | | | | 1.00 | No |
| 7 | Lowering and fixing kinetic air valve of following dia in proper position and alignment as directed including cost of conveyance from store to site of work, all jointing material, labour and hydraulic testing etc. complete. | | | | | | | |
| | Kinetic Air valve 150 mm dia PN 1.0 | 1.00 | | | | | 1.00 | No |
| 8 | Providing and contstructing B.B. masonry valve chamber with 15 cm thick 1:3:6 proportion PCC bedding , excluding excavation B.B. masonary in C.M. 1:5 proportion with precast steel fibre reinforced concrete frame and covers (S.F.R.C. frame and covers) etc Clear Size 1.20 x1.20 x1.50 M. | | | | | | 2.00 | No |
| 9 | Providing and laying in situ following grades of C.C. of trap/ granite / quartzite / gneiss metal for foundation and bedding including dewatering form work, compacting and curing, finishing etc.complete. | | | | | | 2.00 | |
| | PCC M150 | 3.00 | 5.00 | 1.20 | 0.30 | 5.40 | 5.40 | Cum |
| | | | | | | Total | | |
| 10 | Providing and laying in situ cement Concrete of trap/ granite / quartzite / gneiss metal for RCC work in foundation like raft, grillage, strip foundation and footing of RCC columns and steel stancthions including normal dewatering, form work, compaction, finishing and curing , etc.complete (By weigh batching and mix design for M- 600 and M-300 only. Use of L & T, A.C.C. , Ambuja, Birla Gold, Manikgad, Rajashree, etc.cement is permitted.) (Excluding M.S. or Tor reinforcement) M- 150 Grade | | | | | | | |
| | RCC M150 Grade For Thrust Block | 3.00 | 3.00 | 1.20 | 1.20 | 12.96 | 12.96 | Cum |
| | | -3.00 | 3.00 | 0.60 | 0.60 | -3.24 | | |
| | | | | | | Total | 9.72 | Cum |

| ltem No | ITEM DESCRIPTION | No | L | В | D/H | Quantity | Total Qty. | Unit |
|------------|---|------|------|------|-------|----------|------------------|------|
| 11 | Providing and fixing in position steel bar reinforcemement of various diameters for RCC piles, caps, footings, foundations, slabs, beams, columns, canopies, staircases, newels, chajjas, lintels, pardies, copings, fins, arches, etc. as per detailed designs, drawings,and schedules, including cutting ,bending, hooking the bars, binding with wires or tack welding and supporting as required, etc.complete. (including cost of binding wire.) | | | | | | | |
| | Tor Steel 5kg/sqm surface Area | 3.00 | 3.00 | 1.50 | 25.00 | 337.50 | 0.34 | мт |
| | | | | | | Say | 0.34 | МТ |
| 12 | Refilling the trenches with available excavated stuff with soft material first over pipeline and then hard material in 15 cm layers with all leads and lifts including consolidation , surcharging, etc. complete. | | | | | | | |
| | Qty Of Excavation | | | | | | 249.00 | Cum |
| | Deduction | | | | | | | Cum |
| | Murrum Bedding | | | | | | 25.00 | |
| <u> </u> | Concrete | | | | | | 15.12 | |
| | Pipe Volume Net Quantity | | | | | | 29.44 | |
| | | | | | | Say | 179.44 180.00 | |
| 13 | Hydraulic testing of C.I./D.I. pipe line to specified pressure etc complete | | | | | Say | 180.00 | Cum |
| | 500 mm dia DI K-9 | 1.00 | 0.15 | | | | 0.15 | Km |

| | | ABSTRACT | | | | | | |
|------------------------------|----------|--|------|------|------------|--|--|--|
| Item No | Quantity | ITEM DESCRIPTION | Rate | Unit | Amount Rs. | | | |
| 1 | | STP Cap. 15.50 MLD @ Hydrabad Road (MHADA) | | | | | | |
| | | Designing, providing, constructing, hydraulic testing, commissioning and giving satisfactory trials of STP based on SBR/MMBR/Moderinsed technology consisting of Inlet Chamber, Screen Chamber, Detritus Tanks, Distribution Chamber and Biological CASP Basins, Sludge Sump, Chlorine Contact Tank, Chlorinator Room/Shed, Sludge Centrifuge necessary piping work with required valves, gates, drains, pathways Administration Block cum Laboratory, Laboratory Equipments, Tools and Plants, Spare Parts, etc. complete as turnkey job with all involved civil, electrical and mechanical works inclusive of following items, units as per detailed specification for civil, electrical and mechanical components with all duties and taxes, etc. complete to achieve | | | | | | |
| | | BOD < 5 ppm, COD < 100 ppm, TSS < 10 ppm, to get recyclable quality of water for industrial / agricultural purposes. (In Case Cyclic activated sludge plant is designed for N, P outlet parameters shall also include TN < 10 ppm, Nh3N < 2 ppm and TP < 1 ppm) | | | | | | |
| | | UNITS INCLUDED | | | | | | |
| $\left - \right $ | | 1. Inlet Chamber 2. Screen Chamber | | | | | | |
| | | Designing, providing, constructing, testing and commissioning of screen chamber, designed for average 1 DWF and maximum peak flow of 2 DWF in RCC (M-300), including inlet pipe / channel from inlet chamber, outlet pipe channel to detritus tank, free board of 0.5 m minimum, RCC walkway 1.2 m wide with SS Pipe railing, RCC staircase of 1.2 m width from GL to screen chamber. | | | | | | |
| | | 3. Detritus Tank | | | | | | |
| | | 4. CASP Basins | | | | | | |
| | | 5. Chlorine Contact Tank | | | | | | |
| | | 6. Chlorinator and Chlorinator Room / Tonner Room Designing, providing and constructing chlorinators vacuum type 2 Nos. with auto switchover facility and having capacity for dosage of adequate chlorine to ensure 99.99% coliform reduction as per obligatory provisions and detailed specifications with necessary provision of having chlorinator room of adequate size. The chlorinator equipment shall include cost of chlorine cylinders / tonner piping, valves, measuring and controlling equipments, safety devices, lifting equipments, etc. complete as per IS- 10553 (Part II) 1982. The tonner room should have minimum 3 MT capacity hoist for loading and unloading facility. Tonner storage should be distinctly isolated and should be for minimum storage space as directed in the design specification and as per Gas Laws 1981 and Factory Act shall be provided. All other matching amenities shall be provided. 5 MT gantry rail shall be provided for full length of tonner room at 6 m height from level of tonner room, with outlet chamber and treated effluent outlet channel, etc. complete as per detailed specification. | | | | | | |
| | | 7. Sludge Sump | | | | | | |
| $\mid \downarrow \downarrow$ | | 8. Sludge Centrifuge Platform with Centrifuges | | | | | | |
| | | 9. Outfall Sewer 10. Piping Work in CI-LA class including Sluice Valves, Reflux 11. Administrative Building cum Laboratory (G+1) | | | | | | |
| $\left \right $ | | NOTES These Rates are for Civil Works, in M- 30 grade RCC. | | | | | | |
| | | Water Table is considered at 5 m below ground level. | | | | | | |

| Amount Rs. | Unit | Rate | | ITEM DESCRIPTION | ity | Quant | Item No |
|-------------------------|--------|-------------|--|---|-----|--------|------------|
| | | | 5 m below | Soil bearing capacity considered as 20 T/m ² at 1. | | | |
| | | | | ground level. | | | |
| | | | | All civil items, electrical, piping, valves, pumps, motor etc. Are considered as per MJP Schedule of Rates. | | | |
| | | | Coatingskin htibacterial, plastered th plasterd | These crates includes - Providing and Applying of 1 (450% Elongation) thermoplastic, fire retardant, (tensile strength 18 to 21 kg/cm2, antifungala anticorrosive,graft, co polymer coating on smooth surface 100 micron dyu film thiclness of self bonding w surface and 100 micron of top coat for STP as of Engineer-in-charge. | | | |
| 80384937.5 | No | 80384937.50 | | STP Cap. 15.50 MLD MMBR | No | 1.00 | |
| | | | 765.57 | | | | |
| | | | 38.28 803.85 | MMBR MJP DSR 2015-16, P. No.247-253, I. No. 4D Add 5 % for Municipal Corporation Area Net Cost | | | |
| | | | | NOTE :- The Agency to give performance guarantee for | | | |
| | | | shall be | quality as per pollution control board norms & as Engineer-in-charge at all the times (EPC designs submitted to the competant authority for the approv commencement of work.) | | | |
| | | | nd wall all | Providing and Constructing Brick Masonary Compu around the STP as directed by Engineer-in-charge | | | 2 |
| 0550040.0 | Dut | 0004.40 | | Plot Area = 150 M X 150 M = 22500 sqm, Total Length 150*2 =600 Rmt - Gate Length of 5m x 2 No =590 M wall | | 500.00 | |
| 3558349.0 | Rmt | 6031.10 | | As Per Rate Analysis | | 590.00 | |
| 45082.8 | Sqm | 1878.45 | d diagonal ivot blocks g of three | Providing and fixing mild steel grill gate with angle iro mm x 65 mm x 10 mm with iron bars at 150mm.C/C at flats as per the detailed drawing including hinges, p locking arrangement, welding riveting and oil paintin coats of approved shade. Weight of gate 35 Kg/smt. Bd.W.6 Page No. 585 | | 24.00 | 3 |
| | | | | Gate Size 4.0 m X 3.0 M | | | |
| | | | 1789.00 | Basic Rate | | | -+ |
| | | | 89.45 1878.45 | Add 5 % for M.C. Total | | | -+ |
| | | | | PWD DSR 16-17, I. No. 5 / 21 BDW 6, Pg. No. 179 | | | |
| | | | ngs in two at top & bending, | Providing and fixing 50 mm. dia. medium class G.I.pip wicket gate of approved drawing with all fixtures & fitt leaves with strong hold fast embedded in c.c. bloc bottom with locking arrangement including cutting making holes and with one coat of primer complete. Sp | | | 4 |
| 8085.0 | Sqm | 4042.50 | | directed by Engineer in charge. | Sqm | 2.00 | |
| | | | 0070.55 | Gate Size 1.0 m X 2.0 M | | | -+ |
| | | | 3850.00 192.50 | Basic Rate Add 5 % for M.C. | | | -+ |
| | | | 4042.50 | Add 5 % for M.C. | | | |
| | | | | PWD DSR 16-17, I. No. 5 / 3 BDC, Pg. No. 24 | | | |
| 2700000.0 86696454.3 | | Total Rs. | | For Automation of STP | | | 5 |
| 86696455.0 | ay Rs. | | | | | | |
| 866.9 | Lakhs | Say Rs. | | | | | |
| 8.6 | Crore | | | | | | |

SOLAPUR MUNICIPAL CORPORATION MAHARASHTRA JEEVAN PRADHIKARAN DIVISION SOLAPUR SOLAPUR CITY UNDERGROUND SEWERAGE SCHEME (AMRUT) PROPERTY CONNECTION FOR ZONE

| | | | ABSTRACT | | | |
|--------------------|-----------|-----|---|----------|------|--------------|
| ltem No | Quantit | у | ITEM DESCRIPTION | Rate | Unit | Amount Rs. |
| 1 | | | Providing and supplying in standard lengths Polyethelene (PE) Pipes for non pressure underground drainage and sewerage with smooth internal and corrugated (profiled) external surface with anti rodent property conforming to ISO-21138-3:2007 with necessary jointing material like mechanical connectors, i.e. thread/ insert joint/quick release coupler joint/ compression fitting joint or flanged joint, including all taxes (Central and local), transportation and freight charges, inspection charges, loading/ unloading charges, conveyance to the departmental stores/site and stacking the same in closed shade duly protecting from sunrays and rains, etc. complete. | | | |
| | | | H.D.P.E. DWC pipes for Drainage Class SN | | | |
| | 139002.00 | Rmt | 150 mm dia.(ID) | 378.00 | Rmt | 52542756.00 |
| | | | (CSR 2016-17, P. 132,133 I. 2) | | | |
| 2 | | | Providing, laying & fixing, jointing Supreme Eco- drain 110 mm SN 8 Nu- Drain Upvc pipes or of equivalent make, manufacture as per EN 13476 or equivalent as per I.S.15328 with fittings such a bends, tees, coupler, etc, jointing with rubber lubricant including necessary excavation, trench refilling with selective excavated material etc. complete. Spec : As directed by Engineer In Charge | | | |
| | | | HDPE Pipes - Class SN8 | | | |
| $\left - \right $ | 556008.00 | | 110 mm dia.(OD) | 318.00 | Rmt | 176810544.00 |
| 3 | | | (PWD CSR 2017-18, P. 176, I. 88/20) Providing and constructing B.B. masonry valve chamber with 15 cm thick 1:3:6 proportion PCC bedding, excluding | | | |
| | | | excavation, B.B. masonry in CM 1:5 proportion precast S.F.R.C.frame and cover, etc. complete as directed by Engineer-in-charge. Inspection Chamber {900 x 600x 1200} | | | |
| | 23167.00 | No. | Basic Rate 11056.00 | 11608.80 | No. | 268941069.60 |
| | | | Add 5% for M.C. 552.80 Total 11608.80 (CSR 2016-17, P. 275 I. 13) 11608.80 | | | |
| | | | | | | |

| ltem No | Quantity | | ITEM DESCRIPTION | | Rate | Unit | Amount Rs. |
|------------|----------|-----|---|---|--------|------|-------------|
| 4 | | | | asonary ncludng up to a stacking ngineer- reparing | | | |
| | 94984.70 | Cum | Lift 0 -1.5 M. | | 487.30 | Cum | 46286044.31 |
| | | | Basic Rate | 443.00 | | | |
| | | | Add 10% for M.C. | 44.30 | | | |
| | | | Total | 487.30 | | | |
| 5 | | | (CSR 2016-17, P. 35 I. 5) Excavation for foundation / pipe tree | nchos in | | | |
| | | | earth, soils of all types, sand, gra soft murum includng removin excavated material up to a distance and lift as below, stacking and sprea directed by the Engineer-in- charge | vel, and ng the of 50 m. ading as , normal ed for | | | |
| | 94984.70 | Cum | Lift 0.0 -1.5 M. | | 155.10 | Cum | 14732126.97 |
| | | | Basic Rate | 141.00 | | | |
| | | | Add 10% for M.C. | 14.10 | | | |
| | | | Total | 155.10 | | | |
| 6 | | | Excavation for foundation / pipe tren hard murum & boulders , WB includng removing the excavated up to a distance of 50 m. and lift as stacking and spreading as directed Engineer-in- charge, normal dev preparing the bed for foundation excluding back filling. etc.complete. | M road material s below, I by the <i>v</i> atering, | | | |
| | 94984.70 | Cum | Lift 0 -1.5 M. | | 198.00 | Cum | 18806970.60 |
| | | | Basic Rate | 180.00 | | | |
| | | | Add 10% for M.C. | 18.00 | | | |
| | | | Total | 198.00 | | | |
| 7 | | | Providing murum bedding in trenches with approved murum from excavated materials from foundation in 15 cm. to 20 cm. layers including watering & compaction complete. | | | | |
| | 16680.24 | Cum | | | 67.20 | Cum | 1120912.13 |
| | | | Basic Rate | 64.00 | | | |
| | | | Add 5% for M.C. | 3.20 | | | |
| | | | Total | 67.20 | | | |
| | | | (CSR 2016-17, P. 39, I. 16) | | | | |

| ltem No | I CJUANTITV | | ITEM DESCRIPTION | Rate | Unit | Amount Rs. |
|------------|-------------|-----|--|---------|------|-------------|
| 8 | | | Lowering, laying and jointing H.D.P.E.Double Wall Corrugated Pipes for nonpressure Underground drainage and Sewerage applications and specials offollowing class and diameter includingcost of conveyance from stores to site of works including cost of all labour,material except O ring coupler giving satisfactory hydraulic testing as per relevent ISO, etc. complete | | | |
| | | | H.D.P.E. DWC pipes for Drainage CLASS | | | |
| | 139002.00 | Rmt | 150 mm dia.(ID) | 33.60 | Rmt | 4670467.20 |
| | | | Basic Rate 32.00 | | | |
| | | | Add 5% for M.C. 1.60 | | | |
| | | | Total 33.60 | | | |
| 9 | | | (CSR 2016-17, P. 134, I. 4) Hydraulic testing of HDPE double wall | | | |
| 10 | 139.002 | KM | corrugated pipe for non pressure underground line to specified pressure including cost of all materials and labour and water for testing for specified length including cutting, placing end cap making arrangement for filling safe water using reciprocating type pumps which should be able to provide specified test pressure gauges and other necessary equipments, labour, operation charges, etc. required for testing. The rate under this item shall also include cost of retesting, if necessary and reinstating to original position. H.D.P.E. DWC pipes for Drainage CLASS Basic Rate 3000.00 Add 5% for M.C. 150.00 Total 3150.00 (CSR 2016-17, P. 134, I. 4) Refilling the trenches with available excavated stuff with soft material first over pipe line and then hard material in 15 cm | 3150.00 | KM | 437856.30 |
| | | | layers with all leads and lifts including consolidation, surcharging, etc.complete. | | | |
| | 234994.55 | Cum | | 67.20 | Cum | 15791633.76 |
| | | | Basic Rate 64.00 | | | |
| | | | Add 5% for M.C. 3.20 | | | |
| | | | Total 67.20 (CSR 2016-17, P. 38, I.15) | | | |
| 11 | | | Dispossing of surplus excavated stuff from site of work up to a distance of 2 Km.including, loading, unloading, transportation etc.complete or as directed | | | |
| | 19136.61 | Cum | by the Engineering- in- charge. (CSR 2016-17, P. 22, Statement VI) | 195.62 | Cum | 3743503.65 |

| | Quantit | у | ITEM DESCRIPTION | 4 | Rate | Unit | Amount Rs. |
|-----------|-----------|-----|--|---|----------|----------------|------------------|
| 12 | | | Asphalt Road restoration: Reins road by excavating the p rectangular shape and filling of one layers of one layer of 80 mr of 200 mm thick, one layer of metal of 100 mm thick includin and spreading of stone dust/mu mm thick, watering compaction thick bituminous bound macada emulsion 60/70 grade and macadam of 50 mm thick with b 65 grade and 20 mm thick asph with S-35 grade of bitume compaction by vibratory roller and providing and applying tack Kg / 100 m2 on black top surfa coat of 1kg/sqm. B.B.M. s disposal of surplus soil etc., co pipeline trenches of various dia complete as per specifications directed by engineer- in-charge. | ootholes in potholes by n trap metal 40 mm trap og supplying rrum of 100 and 75 mm im with cold bituminous itumen of S- alt concrete n including of all layers c coat of 50 ce and seal urface and omplete. for ameter etc., | | | |
| | 104251.50 | Sqm | (As per Rate Analysis) | | 873.47 | Sqm | 91060557.71 |
| 13 | | | Reconnection of existing damaged connection including 15 mm dia. CPVC pipe with necessary fittings, remaking good the demolished portion etc. complete including all labour, etc. complete. as directed by Engineer in charge. | | | | |
| | 23167.00 | No. | (Similar Item PWD CSR 2017-18, P. 10 442.61 BDV 5) | 65, I No | 175.35 | No. | 4062333.45 |
| | | | Basic Rate | 167.00 | | | |
| | | | Add 5% for M.C. | 8.35 | | | |
| \square | | | Total | 175.35 | | | |
| \vdash | | | | | Total Co | | 699006775.67 |
| ┝──╁ | | | | | Sa | 2 | 699006776.00 |
| ┝──╂ | | | | | Total Co | | 174751694.00 |
| ┝──╂ | | | | | | y Rs. Crore | 1747.52 17.48 |

SOLAPUR MUNICIPAL CORPORATION MAHARASHTRA JEEVAN PRADHIKARAN DIVISION SOLAPUR SOLAPUR CITY UNDERGROUND SEWERAGE SCHEME (AMRUT) PROPERTY CONNECTION FOR ZONE

| MEASUREMENT SHEET | | | | | | | | | |
|---------------------------------------|-------------------|------|----------|---------|-------------|---------|--|--|--|
| DESCRIPTION | NO | L/D | <u></u> | H/D | QTY | UNIT | | | |
| Total Nos. of Properties in Zone - | 92668 | Nos. | | - | | _ | | | |
| Considering four Property have one | | | | | 23167.00 | Nos. | | | |
| IC chamber size 90 x 60 x 120 cm | | | | | | | | | |
| ,common for 4 property | | | | | | | | | |
| , | | | Total IC | chamber | 23167.00 | Nos. | | | |
| Item No. 1'Providing and supplying | | | | | | | | | |
| in standard lengths Polyethelene | | | | | | | | | |
| (PE) Pipes for non pressure | | | | | | | | | |
| underground drainage and | | | | | | | | | |
| sewerage with smooth internal and | | | | | | | | | |
| corrugated (profiled) external | | | | | | | | | |
| surface with anti rodent property | | | | | | | | | |
| conforming to ISO-21138-3:2007 | | | | | | | | | |
| with necessary jointing material like | | | | | | | | | |
| mechanical connectors, i.e. thread/ | | | | | | | | | |
| insert joint/quick release coupler | | | | | | | | | |
| joint/ compression fitting joint or | | | | | | | | | |
| flanged joint, including all taxes | | | | | | | | | |
| (Central and local), transportation | | | | | | | | | |
| and freight charges, inspection | | | | | | | | | |
| charges, loading/ unloading | | | | | | | | | |
| charges, conveyance to the | | | | | | | | | |
| departmental stores/site and | | | | | | | | | |
| stacking the same in closed shade | | | | | | | | | |
| duly protecting from sunrays and | | | | | | | | | |
| rains, etc. complete. | | | | | | | | | |
| | | | | | | | | | |
| H.D.P.E. pipes for Drainage 'CLASS | | | | | | | | | |
| SN 8 | | | | | | | | | |
| 150 mm dia.(ID) | 23167.00 | 6.00 | | | 139002.00 | Rmt | | | |
| Item No.2 : Providing , laying & | | | | | | | | | |
| fixing ,jointing Supreme Eco- drain | | | | | | | | | |
| 110 mm SN 8 Nu- Drain Upvc pipes | | | | | | | | | |
| or of equivalent make, manufacture | | | | | | | | | |
| as per EN 13476 or equivalent as | | | | | | | | | |
| per I.S.15328 with fittings such a | | | | | | | | | |
| bends, tees, coupler, etc, jointing | | | | | | | | | |
| with rubber lubricant including | | | | | | | | | |
| necessary excavation, trench | | | | | | | | | |
| refilling with selective excavated | | | | | | | | | |
| material etc. complete. | | | | | | | | | |
| Spec : As directed by Engineer In | | | | | | | | | |
| Charge | | | | | | | | | |
| From House Chamber to IC | | | | | | | | | |
| Chamber | | | | | Dranautic | | | | |
| HDPE Pipes - Class SN8 | 00660.00 | 0.00 | | | Property Co | | | | |
| 110 mm dia. (OD) | 92668 ₁ ႳϘ | 6.00 | | | 556008100 | HKEWNER | | | |

| MEASUREMENT SHEET | | | | | | | | | |
|--|--------------|----------------|-------|---------------|-----------------------------|----------|--|--|--|
| DESCRIPTION | NO | L/D | B | H/D | QTY | UNIT | | | |
| | | | | Total | 556008.00 | RMT | | | |
| Item No. 3 : Providing and | | | | | | | | | |
| constructing B.B. masonry valve | | | | | | | | | |
| chamber with 15 cm thick 1:3:6 | | | | | | | | | |
| proportion PCC bedding, excluding | | | | | | | | | |
| excavation, B.B. masonry in CM 1:5 | | | | | | | | | |
| proportion precast S.F.R.C.frame | | | | | | | | | |
| and cover, etc. complete as directed | | | | | | | | | |
| by Engineer-in-charge. | | | | | | | | | |
| | | | | | | | | | |
| Inspection Chamber {900 x 600x | | | | | | | | | |
| 1200} | 23167.00 | | | | 23167.00 | Nos. | | | |
| Item No. 4: Excavation for | | | | | | | | | |
| | | | | | | | | | |
| foundation/ pipes trenches by all mean in soft rock & old cement and | | | | | | | | | |
| | | | | | | | | | |
| lime masonry foundation asphalt | | | | | | | | | |
| road excluding backfilling, etc. | | | | | | | | | |
| complete | | | | | | | | | |
| a) Excavation : for pipe line from IC t | | | | | | | | | |
| i} 0 to 1.5 m | | 6.00 | 0.80 | 0.50 | 55600.80 | Cum | | | |
| b) Excavation for Property chamber of | | | 4 70 | 0.50 | 20202.00 | O | | | |
| i} 0 to 1.5 m | 23167.00 | 2.00 | 1.70 | 0.50 Total | <u>39383.90</u> 94984.70 | | | | |
| | | | | TULAI | 94904.70 | Cum | | | |
| Item No. 5: Excavation for | | | | | | | | | |
| foundation/ pipes trenches in earth, | | | | | | | | | |
| soil of all types ,sand ,gravel and | | | | | | | | | |
| soft murum & excluding | | | | | | | | | |
| backfilling, etc. complete | | | | | | | | | |
| a) Excavation : for pipe line from IC t | o street Mar | nhole | | | | | | | |
| i} 0 to 1.5 m | | 6.00 | 0.80 | 0.50 | 55600.80 | Cum | | | |
| b) Excavation for Property chamber of | | | 4.70 | 0.50 | | 0 | | | |
| i} 0 to 1.5 m | 23167.00 | 2.00 | 1.70 | 0.50 Total | <u>39383.90</u> 94984.70 | | | | |
| | | | | TUlai | 34304.70 | Cum | | | |
| Item no. 6 Excavation for | | | | | | | | | |
| foundation/pipe trenches in Hard | | | | | | | | | |
| Murum & excluding the back | | | | | | | | | |
| filling, etc complete | | | | | | | | | |
| a) Excavation : for pipe line from IC t i} 0 to 1.5 m | | | 0.00 | 0.50 | | Cum | | | |
| b) Excavation for Property chamber of | | 6.00 x 1200 | 0.80 | 0.50 | 55600.80 | Cull | | | |
| i} 0 to 1.5 m | | 2.00 | 1.70 | 0.50 | 39383.90 | Cum | | | |
| | | 2.00 | | Total | 94984.70 | | | | |
| Item No : 7 :Providing murum | | | | | | | | | |
| bedding in trenches with approved | | | | | | | | | |
| murum from excavated materials | | | | | | | | | |
| from foundation in 15 cm. to 20 cm. | | | | | | | | | |
| layers including watering & | | | | | | | | | |
| compaction complete. | | | | | | | | | |
| - | | | | | | nnectio | | | |
| for pipe line from IC to street Manhol | | 6.00 | 0.80 | 0.15 | 16680.24 | | | | |
| | 148 | | | Total | 16680.24 | Cum | | | |

| NO | L/D | В | H /D | QTY | UNIT |
|----------------------|--|---|---|---|--|
| | | | | | |
| 23167.00 | 6.00 | | | 139002.00 | RMT |
| | | | | | |
| 23167.00 | 6.00 | | | 0.006 | KM |
| | • • | • | • | | |
| | | | | | |
| 23167.00 23167.00 | 6.00 1.40 | 0.15 1.10 | 0.15 1.50 Total | 2456.37 30822.94 33279.31 | Cum |
| | | Refilling C | Quantity : | 234994.55 | Cum |
| | | | | | |
| Disposa | | | | 40405.5 | |
| | 16680.24 | + | 2456.37 | 19136.61 | Cum |
| | 23167.00 Total refi Be 23167.00 23167.00 | 23167.00 6.00 Total refilling Qty = Tot Bedding Qty + P 23167.00 6.00 23167.00 1.40 Disposal = Bedding Q | 23167.00 6.00 23167.00 6.00 Total refilling Qty = Total Ex. Qty Bedding Qty + Pipe Volume 23167.00 6.00 0.15 23167.00 1.40 1.10 Refilling Qty Refilling Qty | 23167.00 6.00 23167.00 6.00 Total refilling Qty = Total Ex. Qty - (Sand Bedding Qty + Pipe Volume) 23167.00 6.00 23167.00 6.00 23167.00 6.00 0 1.10 1.40 1.10 1.50 Total 1.40 1.10 1.40 1.10 1.40 1.10 1.40 1.10 1.40 1.10 1. | 23167.00 6.00 0.006 23167.00 6.00 0.006 Total refilling Qty = Total Ex. Qty - (Sand Bedding Qty + Pipe Volume) |

| UIEW |
|------|
| |

| | MEASURE | EMENT SHE | EET | | | |
|--|---------|-----------|------|-----|-----------|------|
| DESCRIPTION | NO | L/D | В | H/D | QTY | UNIT |
| Item No. 12 : Asphalt Road | | | | | | |
| restoration: Reinstatement of road | | | | | | |
| by excavating the potholes in | | | | | | |
| rectangular shape and filling of | | | | | | |
| potholes by one layers of one layer | | | | | | |
| of 80 mm trap metal of 200 mm | | | | | | |
| thick, one layer of 40 mm trap metal | | | | | | |
| of 100 mm thick including supplying | | | | | | |
| and spreading of stone dust/murrum | | | | | | |
| of 100 mm thick, watering | | | | | | |
| compaction and 75 mm thick | | | | | | |
| bituminous bound macadam with | | | | | | |
| cold emulsion 60/70 grade and | | | | | | |
| bituminous macadam of 50 mm | | | | | | |
| thick with bitumen of S-65 grade | | | | | | |
| and 20 mm thick asphalt concrete | | | | | | |
| with S-35 grade of bitumen | | | | | | |
| including compaction by vibratory | | | | | | |
| roller of all layers and providing and | | | | | | |
| applying tack coat of 50 Kg / 100 | | | | | | |
| m2 on black top surface and seal | | | | | | |
| coat of 1kg/sqm. B.B.M. surface | | | | | | |
| and disposal of surplus soil etc., | | | | | | |
| complete. for pipeline trenches of | | | | | | |
| various diameter etc., complete as | | | | | | |
| per specifications and or as directed | | | | | | |
| by engineer- in-charge. | 50% | 139002.00 | 1.50 | | 104251.50 | Sqm |
| Item No. 13 :Reconnection of | | | | | | |
| existing damaged connection | | | | | | |
| including 15 mm dia. CPVC pipe | | | | | | |
| with necessary fittings, remaking | | | | | | |
| good the demolished portion etc. | | | | | | |
| complete including all labour, etc. | | | | | | |
| complete. as directed by Engineer | | | | | | |
| in charge. | | | | | | |
| 15 mm Dia. | 25% | 92668.00 | 0.00 | | 23167.00 | No |

| | | SOLAPUR MUNICIPAL CORPORATION MAHARASHTRA JEEVAN PRADHIKARAN DIVISION SO | OLAPUR | | | | | | |
|----------------|----------|---|--|--------|--------------------|--|--|--|--|
| | | SOLAPUR CITY UNDERGROUND SEWERAGE SCHEME | (AMRUT) | | | | | | |
| | (U | SUB ESTIMATE NO. :- TRUNK MAIN FOR ZONE nderground Sewerage Network -300 to 1000 mm dia RCC Pi | | 04 Km) | 1 | | | | |
| ABSTRACT No.3A | | | | | | | | | |
| S. No. | Quantity | ITEM DESCRIPTION | Rate | Unit | Amount Rs | | | | |
| | | MATERIAL : | | | | | | | |
| | | Providing ISI Standard RCC pipes in standard length of | | | | | | | |
| | | following class and diameter, suitable for either collor joints or | | | | | | | |
| 1 | | rubber ring joints, including all taxes (central and local) inspection charges, transport to departmental store / site | | | | | | | |
| | | unloading and stacking etc.complete. | | | | | | | |
| | | Notes :- One rubber ring should be supplied with each full | | | | | | | |
| | | length of socketed pipe, cost included in the rates below. | | | | | | | |
| | | RCC NP 3 Class | | | | | | | |
| | 787.00 | 300 mm dia. | 757.00 | Rmt | 595759.0 | | | | |
| | | 350 mm dia. | 1260.00 | | 827820. | | | | |
| | | 450 mm dia. | 1449.00 | | 2405340. | | | | |
| | | 500 mm dia. | 1785.00 | | 1354815. | | | | |
| | | 700 mm dia. | 2940.00 | | 73500. | | | | |
| | 2535.00 | 1000 mm dia. | 4095.00 | Rmt | 10380825. | | | | |
| | | RCC NP 4 Class | | | | | | | |
| | 30.00 | 350 mm dia. | 1344.00 | Rmt | 40320. | | | | |
| | | 450 mm dia. | 1575.00 | | 146475. | | | | |
| | | 500 mm dia. | 1943.00 | | 116580. | | | | |
| | 1298.00 | 600 mm dia. | 2520.00 | Rmt | 3270960. | | | | |
| | | (CSR 2016-17, P. 103,104, I. E, F) | | | | | | | |
| | | | Material C | Cost | 19212394.0 | | | | |
| | | LABOUR : | | | | | | | |
| | | Excavation for foundation / pipe trenches in earth, soils of all | | | | | | | |
| | | types, sand, gravel, and soft murum includng removing the | | | | | | | |
| 1 | | excavated material up to a distance of 50 m. and lift as below, | | | | | | | |
| 1 | | stacking and spreading as directed by the Engineer-in- charge, | | | | | | | |
| | | | | | | | | | |
| | | normal dewatering, preparing the bed for foundation and | | | | | | | |
| | | normal dewatering, preparing the bed for foundation and excluding back filling. etc.complete. | | | | | | | |
| | | normal dewatering, preparing the bed for foundation and excluding back filling. etc.complete. Lift 0.0 -1.5 M. | | | | | | | |
| | | normal dewatering, preparing the bed for foundation and excluding back filling. etc.complete. Lift 0.0 -1.5 M. Basic Rate | 141.00 | | | | | | |
| | 5460.76 | normal dewatering, preparing the bed for foundation and excluding back filling. etc.complete. Lift 0.0 -1.5 M. Basic Rate Add 10 % for M.C | 141.00 14.10 | | 846062 | | | | |
| | 5460.76 | normal dewatering, preparing the bed for foundation and excluding back filling. etc.complete. Lift 0.0 -1.5 M. Basic Rate Add 10 % for M.C Total | 141.00 | | 846963. | | | | |
| | 5460.76 | normal dewatering, preparing the bed for foundation and excluding back filling. etc.complete. Lift 0.0 -1.5 M. Basic Rate Add 10 % for M.C Total Lift 1.50 -3.0 M. | 141.00 14.10 155.10 | Cum | 846963. | | | | |
| | 5460.76 | normal dewatering, preparing the bed for foundation and excluding back filling. etc.complete. Lift 0.0 -1.5 M. Basic Rate Add 10 % for M.C Total Lift 1.50 -3.0 M. Basic Rate | 141.00 14.10 155.10 153.00 | Cum | 846963. | | | | |
| | 5460.76 | normal dewatering, preparing the bed for foundation and excluding back filling. etc.complete. Lift 0.0 -1.5 M. Basic Rate Add 10 % for M.C Total Lift 1.50 -3.0 M. Basic Rate Add 10 % for M.C | 141.00 14.10 155.10 153.00 | Cum | | | | | |
| | | normal dewatering, preparing the bed for foundation and excluding back filling. etc.complete. Lift 0.0 -1.5 M. Basic Rate Add 10 % for M.C Total Lift 1.50 -3.0 M. Basic Rate Add 10 % for M.C | 141.00 14.10 155.10 153.00 15.30 | Cum | | | | | |
| | | normal dewatering, preparing the bed for foundation and excluding back filling. etc.complete. Lift 0.0 -1.5 M. Basic Rate Add 10 % for M.C Total Lift 1.50 -3.0 M. Basic Rate Add 10 % for M.C Total (CSR 2016-17, P. 35 I. 1) | 141.00 14.10 155.10 153.00 15.30 168.30 | Cum | | | | | |
| | | normal dewatering, preparing the bed for foundation and excluding back filling. etc.complete. Lift 0.0 -1.5 M. Basic Rate Add 10 % for M.C Total Lift 1.50 -3.0 M. Basic Rate Add 10 % for M.C Total (CSR 2016-17, P. 35 I. 1) Excavation for foundation / pipe trenches in hard murum & | 141.00 14.10 155.10 153.00 15.30 168.30 | Cum | | | | | |
| | | normal dewatering, preparing the bed for foundation and excluding back filling. etc.complete. Lift 0.0 -1.5 M. Basic Rate Add 10 % for M.C Total Lift 1.50 -3.0 M. Basic Rate Add 10 % for M.C Total (CSR 2016-17, P. 35 I. 1) Excavation for foundation / pipe trenches in hard murum & boulders , WBM road includng removing the excavated | 141.00 14.10 155.10 153.00 15.30 168.30 | Cum | | | | | |
| 2 | | normal dewatering, preparing the bed for foundation and excluding back filling. etc.complete. Lift 0.0 -1.5 M. Basic Rate Add 10 % for M.C Total Lift 1.50 -3.0 M. Basic Rate Add 10 % for M.C Total (CSR 2016-17, P. 35 I. 1) Excavation for foundation / pipe trenches in hard murum & boulders , WBM road includng removing the excavated material up to a distance of 50 m. and lift as below, stacking | 141.00 14.10 155.10 153.00 15.30 168.30 | Cum | | | | | |
| 2 | | normal dewatering, preparing the bed for foundation and excluding back filling. etc.complete. Lift 0.0 -1.5 M. Basic Rate Add 10 % for M.C Total Lift 1.50 -3.0 M. Basic Rate Add 10 % for M.C Total (CSR 2016-17, P. 35 I. 1) Excavation for foundation / pipe trenches in hard murum & boulders , WBM road includng removing the excavated material up to a distance of 50 m. and lift as below, stacking and spreading as directed by the Engineer-in- charge, normal | 141.00 14.10 155.10 153.00 15.30 168.30 | Cum | | | | | |
| 2 | | normal dewatering, preparing the bed for foundation and excluding back filling. etc.complete. Lift 0.0 -1.5 M. Basic Rate Add 10 % for M.C Total Lift 1.50 -3.0 M. Basic Rate Add 10 % for M.C Total (CSR 2016-17, P. 35 I. 1) Excavation for foundation / pipe trenches in hard murum & boulders , WBM road includng removing the excavated material up to a distance of 50 m. and lift as below, stacking and spreading as directed by the Engineer-in- charge, normal dewatering, preparing the bed for foundation and excluding | 141.00 14.10 155.10 153.00 15.30 168.30 | Cum | | | | | |
| 2 | | normal dewatering, preparing the bed for foundation and excluding back filling. etc.complete. Lift 0.0 -1.5 M. Basic Rate Add 10 % for M.C Total Lift 1.50 -3.0 M. Basic Rate Add 10 % for M.C Total (CSR 2016-17, P. 35 I. 1) Excavation for foundation / pipe trenches in hard murum & boulders , WBM road includng removing the excavated material up to a distance of 50 m. and lift as below, stacking and spreading as directed by the Engineer-in- charge, normal dewatering, preparing the bed for foundation and excluding back filling. etc.complete. | 141.00 14.10 155.10 153.00 15.30 168.30 | Cum | | | | | |
| 2 | | normal dewatering, preparing the bed for foundation and excluding back filling. etc.complete. Lift 0.0 -1.5 M. Basic Rate Add 10 % for M.C Total Lift 1.50 -3.0 M. Basic Rate Add 10 % for M.C Total (CSR 2016-17, P. 35 I. 1) Excavation for foundation / pipe trenches in hard murum & boulders , WBM road includng removing the excavated material up to a distance of 50 m. and lift as below, stacking and spreading as directed by the Engineer-in- charge, normal dewatering, preparing the bed for foundation and excluding back filling. etc.complete. Lift 0 -1.5 M. | 141.00 14.10 155.10 153.00 15.30 168.30 | Cum | | | | | |
| 2 | | normal dewatering, preparing the bed for foundation and excluding back filling. etc.complete. Lift 0.0 -1.5 M. Basic Rate Add 10 % for M.C Total Lift 1.50 -3.0 M. Basic Rate Add 10 % for M.C Total (CSR 2016-17, P. 35 I. 1) Excavation for foundation / pipe trenches in hard murum & boulders , WBM road includng removing the excavated material up to a distance of 50 m. and lift as below, stacking and spreading as directed by the Engineer-in- charge, normal dewatering, preparing the bed for foundation and excluding back filling. etc.complete. | 141.00 14.10 155.10 153.00 15.30 168.30 | Cum | 846963. 297726. | | | | |

| S. No. | Quantity | ITEM DESCRIPTION | Rate | Unit | Amount Rs. |
|-----------|----------|---|-----------------|------|------------|
| | | Lift 0 -1.5 M. | | | |
| | | Basic Rate | 192.00 | | |
| | | Add 10 % for M.C | 19.20 | | |
| | 885.18 | Total (CSR 2016-17, P. 35 I. 3) | 211.20 | Cum | 186950.02 |
| | | Excavation for pipe trenches in soft rock and old cement and | | | |
| 3 | | lime masonary foundation, ashphalt road includng removing the excavated material up to a distance of 50 m. and lift as below, stacking and spreading as directed by the Engineer-in- charge, normal dewatering, preparing the bed for foundation and excluding back filling. etc.complete. | | | |
| | | Lift 0 -1.5 M. | | | |
| | | Basic Rate | 443.00 | | |
| | | Add 10 % for M.C | 44.30 | | |
| | 2183.32 | Total | 487.30 | Cum | 1063931.84 |
| | | Lift 1.5 -3.0 M. | | | |
| | | Basic Rate | 463.00 | | |
| | | Add 10 % for M.C | 46.30 | | 4=00/ |
| | 8847.78 | | 509.30 | Cum | 4506174.35 |
| | | (CSR 2016-17, P. 35 I. 5) | | | |
| 4 | | Excavation for pipe trenches in hard rock and concrete road, by chiselling, wedging, lime drilling by mechanical means or by all means other than blasting, including trimming and levelling the bed, removing the excavated material up to a distance of 50 m. and lift as below, stacking and spreading as directed by the Engineer-in- charge, normal dewatering, preparing the bed for foundation and excluding back filling. etc.complete. | | | |
| | | Lift 1.5 -3.0 M. | | | |
| | | Basic Rate | 771.00 | | |
| | | Add 10 % for M.C | 77.10 | | |
| | 1769.02 | Total | 848.10 | Cum | 1500305.86 |
| | | Lift 3.0 -4.5 M. | | | |
| | | Basic Rate | 791.00 | | |
| | | Add 10 % for M.C | 79.10 | | |
| | 3778.00 | Total | 870.10 | Cum | 3287237.80 |
| | | Lift 4.5-6.0 M. | 044.00 | | |
| | | Basic Rate | 811.00 | | |
| | 453.00 | Add 10 % for M.C Total | 81.10 892.10 | Cum | 404121.30 |
| | 455.00 | (CSR 2016-17, P. 36 I. 7) | 092.10 | Cum | 404121.30 |
| 5 | | Providing dry trap/ granite/quartzite/ gneiss, rubble stone soling in 15 cm to 20 cm thick layers including hand packing and compacting etc.complete. | | | |
| | | Basic Rate | 912.00 | | |
| | | Add 5% for M.C | 45.60 | | |
| | 1292.85 | | 957.60 | Cum | 1238033.16 |
| | | (CSR 2016-17, P. 39 I.18) | | | |
| 6 | | Providing & filling in sand boxing in pipeline or for foundation with sand of approved quality including watering and compaction, etc. complete. | | | |
| | | Basic Rate | 931.00 | | |
| | | Add 5% for M.C | 46.55 | | |
| | 164.66 | | 977.55 | Cum | 160961.49 |
| | | (CSR 2016-17, P. 39 I. 19) | | | |

| S. No. | Quantity | ITEM DESCRIPTION | Rate | Unit | Amount Rs. |
|-----------|----------|---|-----------------|------------|------------|
| | | Providing murum bodding in transhas with approved murum | | | |
| 7 | | Providing murum bedding in trenches with approved murum from excavated materials from foundation in 15 cm. to 20 cm. layers including watering & compaction complete. | | | |
| | | Basic Rate | 64.00 | | |
| | | Add 5% for M.C | 3.20 | | |
| | 1481.92 | | 67.20 | Cum | 99585.19 |
| | 1101.02 | (CSR 2016-17, P. 39, I. 16) | 01.20 | Odin | |
| 8 | | Lowering laying and jointing in proper grade and alignment R.C.C. pipes with collar joints in CM 1:1 proportion or socketed R.C.C. pipes with rubbar joints (excluding cost of rubber ring or R.C.C. collor), including cost of conveyance from stores to site of works, cost of jointing material, labour, giving hydraulic testing, etc.complete as directed by Engineer-in-charge | | | |
| | | 300 mm dia. | | | |
| | | Basic Rate | 115.00 | | |
| | | Add 5% for M.C | 5.75 | | |
| | 787.00 | | 120.75 | Rmt | 95030.25 |
| | | 350 mm dia. | | | |
| | | Basic Rate | 118.00 | | |
| | | Add 5% for M.C | 5.90 | | |
| | 687.00 | Total | 123.90 | Rmt | 85119.30 |
| | | 450 mm dia. | | | |
| | | Basic Rate | 180.00 | | |
| | | Add 5% for M.C | 9.00 | | |
| | 1753.00 | Total | 189.00 | Rmt | 331317.00 |
| | | 500 mm dia. | | | |
| | | Basic Rate | 197.00 | | |
| | | Add 5% for M.C | 9.85 | | |
| | 819.00 | | 206.85 | Rmt | 169410.15 |
| | | 600 mm dia. | | | |
| | | Basic Rate | 248.00 | | |
| | 4000.00 | Add 5% for M.C | 12.40 | D (| 007000.00 |
| | 1298.00 | | 260.40 | Rmt | 337999.20 |
| | | 700 mm dia. | 004.00 | | |
| | | Basic Rate | 281.00 | | |
| | 25.00 | Add 5% for M.C Total | 14.05 295.05 | Rmt | 7376.25 |
| | 20.00 | 1000 mm dia. | 293.03 | IXIII | 1310.25 |
| | | Basic Rate | 532.00 | | |
| | | Add 5% for M.C | 26.60 | | |
| | 2535.00 | | 558.60 | Rmt | 1416051.00 |
| | _000.00 | (CSR 2016-17, P. 105, I. 2) | | | |
| | | ······································ | | | |

| 9 in 9 pu 9 pu 9 pu 1 ga 1 | ITEM DESCRIPTION | Rate | Unit | Amount Rs. |
|---|---|----------|------|------------|
| 9 pu 9 pu 1 | Hydraulic testing of RCC pipe line to specified pressure including cost of all materials and labour and water for testing for specified length including cutting, placing end cap making arrangement for filling safe water using reciprocating type | | | |
| Image: Constraint of the sector of the se | pumps which should be able to provide specified test pressure | | | |
| Image: Sector of the sector | gauges and other necessary equipments, labour, operation charges, etc. required for testing. The rate under this item shall also include cost of retesting, if necessary and reinstating to | | | |
| 0.79 0.79 38 0.69 48 0.69 48 0.69 48 0.69 48 0.69 48 0.69 48 0.69 60 0.03 10 696.60 W 1.30 10 696.60 W 1.10 | original position. | | | |
| | 300 mm dia. | 40000.00 | | |
| | Basic Rate | | | |
| | Add 5% for M.C | | | 10740 55 |
| 0.69 0.69 1.75 1.75 0.82 0.82 0.82 0.82 0.82 0.82 0.82 0.82 0.82 0.82 0.83 0.83 0.83 0.83 0.83 0.83 0.83 0.83 0.83 0.83 0.03 <t< td=""><td></td><td>13650.00</td><td>KM</td><td>10742.55</td></t<> | | 13650.00 | KM | 10742.55 |
| 10 | 350 mm dia. | 12000.00 | | |
| 1.75 1.75 1.75 1.75 1.75 0.82 0.82 0.82 0.82 1.30 <t< td=""><td>Basic Rate</td><td></td><td></td><td></td></t<> | Basic Rate | | | |
| 10 | Add 5% for M.C | | | 0277 55 |
| Image: Sector of the sector | 450 mm dia. | 13650.00 | KM | 9377.55 |
| Image: Sector of the sector | Basic Rate | 20000.00 | | |
| Image: Sector of the sector | Add 5% for M.C | 1000.00 | | |
| 10 0.82 0.82 0.82 0.82 0 0.82 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 | Total | 21000.00 | KM | 36813.00 |
| Image: state of the state | 500 mm dia. | | | |
| Image: state of the state | Basic Rate | 22000.00 | | |
| Image: state of the state | Add 5% for M.C | 1100.00 | | |
| 1.30 1.30 1.30 7(0.03 0.03 10 2.54 (C 2.54 0 0 10 0 10 10 10 10 10 10 1 | Total | 23100.00 | KM | 18918.90 |
| 10 | 600 mm dia. | | | |
| 10 | Basic Rate | 28000.00 | | |
| 10 | Add 5% for M.C | 1400.00 | | |
| 10 0.03 0.03 0.03 0 10 0.03 0 10 0 0.03 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 | Total | 29400.00 | KM | 38161.20 |
| 10 2.54 2.54 (C 2.54 (C 0 0 0 0 0 0 0 0 0 0 0 0 0 | 700 mm dia. | | | |
| 10 2.54 2.54 (C 2.54 (C 0 0 0 0 0 0 0 0 0 0 0 0 0 | Basic Rate | 31000.00 | | |
| 10 2.54 2.54 (C 2.54 (C 0 0 0 0 0 0 0 0 0 0 0 0 0 | Add 5% for M.C | 1550.00 | | |
| 10 2.54 (C 2.54 (C 0 5 0 5 0 10 10 10 10 10 10 10 10 10 | Total | 32550.00 | KM | 813.75 |
| 10 (C 10 Sh 10 bo ar of 0 Li 696.60 W Li 0 Li | 1000 mm dia. | | | |
| 10 (C 10 Sh 10 bo ar of 0 Li 696.60 W Li 0 Li | Basic Rate | 44000.00 | | |
| 10 (C 10 O sh ne bo ar of Ni Li 696.60 W Li 0 0 0 0 0 0 0 0 0 0 0 0 0 | Add 5% for M.C | 2200.00 | | |
| 10 O sh ne bo ar of 0 0 0 0 0 0 0 0 0 0 0 0 0 | Total | 46200.00 | KM | 117117.00 |
| 10 sh he bo ar of 20 Ni 20 Ni | (CSR 2016-17, P. 105, I. 2) | | | |
| 10 sh he bo ar of 20 N 10 10 10 10 10 10 10 10 10 10 10 10 10 | Open timbering in trenches of depth more than 1.5 m for | | | |
| 10 ne bo ar of | shoring and strutting including use of and waste of all | | | |
| 10 bo ar of N Li Li 696.60 W Li | necessary timber works including walling, strutts, open polling | | | |
| ar of Ni Li Li 696.60 W Li | boards/ horizontal sheeting, runners, etc. as may be necessary | | | |
| of N Li Li 696.60 W Li | and fixing and removal complete. (Measurements to be taken | | | |
| Li 696.60 W Li | of the face/area timbered) | | | |
| 696.60 W | Non Water Logged Area | | | |
| U U U U U U U U U U U U U U U U U U U | Lift 1.50 to 3.00 m. | | | |
| U U U U U U U U U U U U U U U U U U U | Basic Rate | | | |
| Li | Add 5% for M.C | 12.00 | | |
| Li | Total | 252.00 | Sqm | 175543.20 |
| | Water Logged Area | | | |
| 464 40 | Lift 1.50 to 3.00 m. | | | |
| 164 40 | Basic Rate | 239.00 | | |
| 164 10 | Add 5% for M.C | 11.95 | | |
| 404.40 | Total | 250.95 | Sqm | 116541.18 |
| (0 | (CSR 2016-17, P. 39, I. 20a / b) | | | |

| S. No. | Quantity | ITEM DESCRIPTION | Rate | Unit | Amount Rs. |
|-----------|----------|---|----------|-------|------------|
| 11 | | Providing and laying in situ cement concrete 1:2:4 of trap/ granite / quartzite/ gneiss metal for foundation and bedding including bailing out water manually , formwork, compacting and curring etc. complete. | | | |
| | | Basic Rate | 4233.00 | | |
| | | Add 5% for M.C | | | |
| | 561.78 | | 4444.65 | Cum | 2496932.07 |
| | | (CSR 2016-17, P. 43, I. 1b) | | | |
| 12 | | Dewatering the excavated trenches and pools of water in the pipeline trenches, well works by using pumps and other divices including disposing off water to safe distance as directed by Engineer-in- charge (including cost of machionary, labour,fuel) etc.complete. | | | |
| | | Basic Rate | 62.00 | | |
| | | Add 5% for M.C | 3.10 | | |
| | 16200.00 | Total | 65.10 | HP/Hr | 1054620.00 |
| | | (CSR 2016-17, P. 38, I. 14) | | | |
| 13 | | Providing and constructing on sewer, B.B. masonary circular manhole with concentric cone 1.2 M. dia. at bottom and 0.5 M. from top and up to depth of 2 m. with 23 cm thick brick work up to depth of 2 M in CM 1:4 proportion with 20 mm thick smooth plaster on both sides in CM 1:2 proportion excluding excavation including foundation concrete 250 mm thick and haunches and channels in C.C. 1:2:4 proportion, finishing channels in smooth rendering, providing C.I. dapuri type steps each weighing 5.5 Kg., 1:2:4 coping and providing and fixing approved make and quality S.F.R.C. frame and cover of 56 cm dia. etc.complete as directed by Engineer-in- charge. | | | |
| | | Upto 1.50 m depth. | | | |
| | | Basic Rate | 17299.00 | | |
| | | Add 5% for M.C | 864.95 | | |
| | 10.00 | | 18163.95 | No. | 181639.50 |
| | | Upto 2 m depth. | | | |
| | | Basic Rate | | | |
| | | Add 5% for M.C | | | 0-10-2-2-2 |
| | 45.00 | | 21155.40 | No. | 951993.00 |
| | | (CSR 2016-17, P. 272, I. 6) a) Rebate for every decrease in depth of 50 cm or part there of Rs.2849/-Add 5%for M.C=Rs.2991.45 | | | |

UIEW

| Providing and constructing on sever, B.B. masonary circular manhole with concentric cone 1.5 M. dia. at bottom and 0.5 M. from top and up to depth of 5 m. with 23 cm thick bick work for remaining depth up to 5 Min CM 1.4 proportion with 20 mm thick smooth plaster on both sides in CM 1.2 proportion excluding exavation including foundation concrete 250 mm thick and haunches and channels in CC. 1.24 proportion, finishing cavavation including foundation concrete 250 mm thick and haunches and channels in CC. 1.24 proportion, finishing approved make and quality S.F.R.C. trame and cover of 66 cm dia. etc.complete as directed by Engineer-in- charge. Upto 2.5 m depth. Basic Rate 28011.00 Add 5% for M.C 1400.55 100 Upto 3.0 m depth. Basic Rate 33901.00 41.00 Total 29411.55 No. 120587 41.00 Total 29411.155 No. 120587 41.00 Total 29411.55 No. 163741 Upto 3.0 m depth. Basic Rate 39971.00 Add 5% for M.C 1995.05 41.00 Total 4780.55 No. 14780.55 No. 14780.55 40.00 Total 4780.50 No. 67151 Upto 4.0 m depth. Basic Rate 51571.00 Add 5% for M.C 2878.55 4.00 Total 4780.50 <td< th=""><th>S. No.</th><th>Quantity</th><th>ITEM DESCRIPTION</th><th>Rate</th><th>Unit</th><th>Amount Rs.</th></td<> | S. No. | Quantity | ITEM DESCRIPTION | Rate | Unit | Amount Rs. |
|--|-----------|--------------|---|----------|------|------------|
| Basic Rate 28011.00 41.00 Add 5% for M.C 1400.55 41.00 Total 29411.55 No. 120587 Upto 3.0 m depth. Basic Rate 33901.00 1635.05 1637.41 Upto 3.50 m depth. Total 3599.05 No. 1637.41 Upto 3.50 m depth. Add 5% for M.C 1639.55 1637.41 Upto 4.0 m depth. Basic Rate 39791.00 399.55 170.00 1637.41 Upto 4.0 m depth. Basic Rate 46681.00 41780.55 No. 41780.55 10.00 Total 47965.05 No. 67151 14780.55 No. 67151 Upto 4.5 m depth. Basic Rate 51571.00 | | | manhole with concentric cone 1.5 M. dia. at bottom and 0.5 M. from top and up to depth of 5 m. with 23 cm thick brick work up to depth of 2 M from top and 35 cm thick brick work for remaining depth up to 5 M in CM 1:4 proportion with 20 mm thick smooth plaster on both sides in CM 1:2 proportion excluding excavation including foundation concrete 250 mm thick and haunches and channels in C.C. 1:2:4 proportion, finishing channels in smooth rendering, providing C.I. dapuri type steps each weighing 5.5 Kg., 1:2:4 coping and providing and fixing approved make and quality S.F.R.C. frame and cover of 56 cm dia. etc.complete as directed by Engineer-in- | | | |
| Add 5% for M.C 1400.55 41.00 Total 29411.55 No. 120587 Upto 3.0 m depth. Basic Rate 3901.00 1635.05 46.00 Total 35596.05 No. 163741 Upto 3.50 m depth. Basic Rate 39791.00 163741 Upto 3.50 m depth. Basic Rate 39791.00 163741 Upto 4.0 m depth. Basic Rate 39791.00 163741 Upto 4.0 m depth. Basic Rate 39791.00 163741 Upto 4.0 m depth. Basic Rate 556.5 No. 41780.55 10.00 Total 47965.05 No. 67151 Upto 4.0 m depth. Basic Rate 51571.00 1440.05 14.00 Total 47965.05 No. 67151 Upto 4.5 m depth. Basic Rate 51571.00 14065.05 No. 21659 4.00 Add 5% for M.C 2878.55 14.00 2178.55 14.00 14180.55 No. 21659 4.00 CSR 2016-17, P. 273, I. 7) Gas340.55 No. | | | Upto 2.5 m depth. | | | |
| 41.00 Total 29411.55 No. 120587 Upto 3.0 m depth. Basic Rate 33901.00 120587 46.00 Total 35580.65 No. 163741 Upto 3.50 m depth. Basic Rate 39791.00 163741 Upto 3.50 m depth. Basic Rate 39791.00 163741 Upto 4.0 m depth. Basic Rate 39791.00 143780.55 No. 143780.55 10.00 Total 47780.55 No. 41780 14780.55 No. 41780 Upto 4.0 m depth. Basic Rate 45681.00 147965.05 No. 67151 Upto 4.5 m depth. Basic Rate 51571.00 2284.05 144.00 144965.05 No. 21659 4.00 Total 47965.05 No. 21659 144.00 278.55 1400 Upto 5.0 m depth. Basic Rate 57461.00 1449.55 No. 21659 4.00 Total 60334.05 No. 18100 16334.05 No. 18100 | | | | | | |
| Upto 3.0 m depth. Basic Rate 33901.00 Add 5% for M.C 1695.05 46.00 Total 35596.05 No. 163741 Upto 3.50 m depth. Basic Rate 39791.00 Add 5% for M.C 1989.55 10.00 Add 5% for M.C 1989.55 10.00 Total 41780.55 No. 41780.55 10.00 Add 5% for M.C 2284.05 5 14.00 Add 5% for M.C 2284.05 67151 Upto 4.5 m depth. Basic Rate 51571.00 67151 Upto 5.0 m depth. Basic Rate 51751.00 67151 Upto 5.0 m depth. Basic Rate 57461.00 60334.05 No. 21655 4.00 Total 54149.55 No. 21655 0 Upto 5.0 m depth. Basic Rate 57461.00 18100 (CSR 2016-17, P. 273, I. 7) a) Rebate for every decrease in depth of 50 cm or part there of Rs.5890/-Add 5% for M.C =Rs.6184.50 Rs.5890/-Add 5% for M.C =Rs.6184.50 18100 (CSR 2016-17, P. 273, I. 7) | | 44.00 | | | | |
| Basic Rate 33901.00 Add 5% for M.C 1685.05 46.00 Total 35596.05 No. Upto 3.50 m depth. Basic Rate 39791.00 Add 5% for M.C 1989.55 10.00 Total 41780.55 No. 41780.55 No. 41780.55 10.00 Total 41780.55 No. 41780.56 No. 41780.55 10.00 Total 41780.55 No. 41780.57 No. 41780.55 14.00 Total 41780.55 No. 414.00 Total 41780.55 No. 67151 Upto 4.5 m depth. Basic Rate 51571.00 Add 5% for M.C 2278.55 4.00 Total 57461.00 Total 57461.00 18100 3.00 CSR 2016-17, P. 273, I. 7) Total 60334.05 No. 18100 3.00 CSR 2016-17, P. 273, I. 7) Total 60334.05 No. 18100 Add 5% for M.C 28 | | 41.00 | | 29411.55 | NO. | 1205873.55 |
| Add 5% for M.C 1695.05 46.00 Total 35596.05 No. 163741 Upto 3.50 m depth. Basic Rate 39791.00 163741 Add 5% for M.C 1989.55 10.00 Total 41780.55 No. 41780. Upto 4.0 m depth. Basic Rate 3668.05 No. 41780. 41780. Upto 4.0 m depth. Basic Rate 45681.00 1637.01 1637.01 1637.01 Upto 4.5 m depth. Basic Rate 51571.00 1637.05 1637.00 1641.757.00 1657.05 1657.00< | -+ | | | 33901 00 | | |
| 46.00 Total 35596.05 No. 163741 Upto 3.50 m depth. Basic Rate 39791.00 | | | | | | |
| Basic Rate 39791.00 Add 5% for M.C 1989.55 10.00 Total 41780.55 Vipto 4.0 m depth. Basic Rate 45681.00 Add 5% for M.C 2284.05 14.00 Upto 4.5 m depth. Basic Rate 45681.00 Upto 4.5 m depth. Basic Rate 51571.00 Upto 5.0 m depth. Basic Rate 51571.00 Add 5% for M.C 2287.55 2287.55 4.00 Total 51449.55 No. 21659 Upto 5.0 m depth. Basic Rate 57461.00 2873.05 3.00 Total 60334.05 No. 18100 (CSR 2016-17, P. 273, I. 7) Total 60334.05 No. 18100 (CSR 2016-17, P. 273, I. 7) Total 60334.05 No. 18100 (CSR 2016-17, P. 273, I. 7) Total 60334.05 No. 18100 (CSR 2016-17, P. 273, I. 7) Total 60334.05 No. 18100 (CSR 2016-17, P. 273, I. 7) Total 60334.05 No. 18100< | | 46.00 | | | | 1637418.30 |
| Add 5% for M.C 1989.55 10.00 Total 41780.55 No. 41780.55 10.00 Total 41780.55 No. 41780.55 10.00 Add 5% for M.C 2284.05 14.00 Total 47965.05 No. 67151 14.00 Total 47965.05 No. 67151 14.00 Add 5% for M.C 2284.05 67151 14.00 Total 47965.05 No. 67151 14.00 Total 51571.00 67151 14.00 Total 54149.55 No. 21652 4.00 Total 54149.55 No. 21652 10.00 Total 54149.55 No. 21652 10.01 CSR 2016-17, P. 273, I. 7) Total 6033.05 No. 18100 10.02 CSR 2016-17, P. 273, I. 7) Total 6033.05 No. 18100 10.03.00 CSR 2016-17, P. 273, I. 7) a) Rebate for every decrease in depth of 50 cm or part there of Rs.5890/-Add 5% for M.C. =Rs.6184.50 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> | | | | | | |
| 10.00 Total 41780.55 No. 41780 Upto 4.0 m depth. Basic Rate 45681.00 41780 Add 5% for M.C 2284.05 2284.05 67151 Upto 4.5 m depth. Total 47965.05 No. 67151 Upto 4.5 m depth. Basic Rate 51571.00 67151 Upto 5.0 m depth. Basic Rate 51571.00 67151 Upto 5.0 m depth. Total 54149.55 No. 21659 Upto 5.0 m depth. Basic Rate 57461.00 60334.05 No. 18100 (CSR 2016-17, P. 273, I. 7) Total 60334.05 No. 18100 (CSR 2016-17, P. 273, I. 7) a) Rebate for every decrease in depth of 50 cm or part there of Rs.5890/-Add 5% for M.C.=Rs.6184.50 Rs.5890/-Add 5% for M.C.=Rs.6184.50 Providing and constructing on sewer, B.B. masonary circular manhole with concentric cone 1.5 M. dia. at bottom and 0.5 M. from top and 35 cm thick brick work for depth of 2 M and 45 cm thick brick work for remaining depth up to 9 M in CM 1:4 proportion with 20 mm thick smooth plaster on both sides in CM 1:2 proportion excluding excavation including foundation concrete 250 mm thick and haunches and channels in Smooth rendering, providing C.I. dapuri type steps each weighing 5.5 Kg., 1:2:4 coping and prov | | | | | | |
| Upto 4.0 m depth. Basic Rate 45681.00 Add 5% for M.C 2284.05 14.00 Total 47965.05 No. 67151 Upto 4.5 m depth. Basic Rate 51571.00 Add 5% for M.C 2578.55 2578.55 4.00 Total 54149.55 No. 21659 Upto 5.0 m depth. Basic Rate 57461.00 3404 5% for M.C 2873.05 3.00 Total 60334.05 No. 18100 (CSR 2016-17, P. 273, I. 7) Add 5% for M.C 2873.05 18100 a) Rebate for every decrease in depth of 50 cm or part there of Rs.5890/-Add 5% for M.C.=Rs.6184.50 Rs.5890/-Add 5% for M.C.=Rs.6184.50 18100 Providing and constructing on sewer, B.B. masonary circular manhole with concentric cone 1.5 M. dia. at bottom and 0.5 M. from top and 35 cm thick brick work for depth of 2 M and 45 cm thick brick work for depth of 2 M and 45 cm thick brick work for depth of 2 M and 45 cm thick brick work for depth of 2 M and 45 cm thick brick work for memaining depth up to 9 M in CM 1:4 proportion with 20 mm thick smooth plaster on both sides in CM 1:2 proportion excluding excavation including foundation concrete 250 mm thick and haunches and channels in C.C. 1:2:4 proportion, finishing channels in smooth rendering, providing C.I. dapuri type steps each weighing 5.5 Kg., 1:2:4 coping and providing and fixing approved make and quality S.F.R.C. frame and cover of 56 cm dia. etc.co | | 10.00 | | | No | 417905 50 |
| 14.00 Add 5% for M.C 2284.05 14.00 Total 47965.05 No. 67151 Upto 4.5 m depth. Basic Rate 51571.00 Add 5% for M.C 2578.55 21659 4.00 Total 47965.05 No. 21659 Upto 5.0 m depth. Total 54149.55 No. 21659 0 Add 5% for M.C 2873.05 No. 18100 0 Add 5% for M.C 2873.05 No. 18100 0 CCSR 2016-17, P. 273, I. 7) Total 60334.05 No. 18100 0 (CSR 2016-17, P. 273, I. 7) Total 60334.05 No. 18100 10 (CSR 2016-17, P. 273, I. 7) Total 60334.05 No. 18100 10 (CSR 2016-17, P. 273, I. 7) Total 60334.05 No. 18100 11 a) Rebate for every decrease in depth of 50 cm or part there of Rs.5890/-Add 5% for M.C.=Rs.6184.50 Rs.5890/-Add 5% for M.C.=Rs.6184.50 Rs.5890/-Add 5% for M.C. 12 Providing and constructing on sewer, B.B. masonary circular manhole with concentric cone 1.5 M. dia. at bottom and 0.5 M. from top and 35 cm thick brick work for depth of 2 M and 45 cm thick brick work for depth of 2 M and 45 cm thick brick work for depth of 2 M and 45 | | 10.00 | | 41760.00 | INO. | 417605.50 |
| Add 5% for M.C 2284.05 14.00 Total 47965.05 No. 67151 Upto 4.5 m depth. Basic Rate 51571.00 Add 5% for M.C 2578.55 25 4.00 Total 54149.55 No. 21659 Upto 5.0 m depth. Basic Rate 57461.00 2873.05 3.00 Add 5% for M.C 2873.05 2834.05 No. 18100 (CSR 2016-17, P. 273, I.7) Total 60334.05 No. 18100 (CSR 2016-17, P. 273, I.7) Total 60334.05 No. 18100 (CSR 2016-17, P. 273, I.7) Total 60334.05 No. 18100 (CSR 2016-17, P. 273, I.7) Total 60334.05 No. 18100 a) Rebate for every decrease in depth of 50 cm or part there of Rs.5890/-Add 5% for M.C.=Rs.6184.50 Rs.5890/-Add 5% for M.C.=Rs.6184.50 Rs.50 Providing and constructing on sewer, B.B. masonary circular manhole with concentric cone 1.5 M. dia. at bottom and 0.5 M. from top and 35 cm thick brick work for depth of 2 M and 45 cm thick brick work for remaining depth up to 9 M in CM 1:4 proportion with 20 mm thick smooth plaster on both sides in CM 1:2 proportion excluding excavation including foundation concrete 250 mm thick and haunches and channels in C.C. 1: | | | | 45681.00 | | |
| Upto 4.5 m depth. Basic Rate 51571.00 Add 5% for M.C 2578.55 4.00 Total 54149.55 No. 21659 Upto 5.0 m depth. Basic Rate 57461.00 57461.00 Add 5% for M.C 2873.05 2873.05 5 3.00 Total 60334.05 No. 18100 (CSR 2016-17, P. 273, I. 7) Total 60334.05 No. 18100 (CSR 2016-17, P. 273, I. 7) a) Rebate for every decrease in depth of 50 cm or part there of Rs.5890/-Add 5% for M.C.=Rs.6184.50 No. 18100 Providing and constructing on sewer, B.B. masonary circular manhole with concentric cone 1.5 M. dia. at bottom and 0.5 M. from top and 35 cm thick brick work for depth of 2 M and 45 cm thick brick work for remaining depth up to 9 M in CM 1:4 proportion with 20 mm thick smooth plaster on both sides in CM 1:2 proportion excluding excavation including foundation concrete 250 mm thick and haunches and channels in C.C. 1:2:4 proportion, finishing channels in smooth rendering, providing C.I. dapuri type steps each weighing 5.5 Kg., 1:2:4 coping and providing and fixing approved make and quality S.F.R.C. frame and cover of 56 cm dia. etc.complete as directed by Engineer-in- charge. 5.50 m depth. 5.50 m depth. Add 5% for M.C 3591.15 | | | | | | |
| Basic Rate 51571.00 Add 5% for M.C 2578.55 4.00 Total 54149.55 No. 21659 Upto 5.0 m depth. Basic Rate 57461.00 Add 5% for M.C 2873.05 2873.05 3.00 Total 60334.05 No. 18100 (CSR 2016-17, P. 273, I. 7) Total 60334.05 No. 18100 a) Rebate for every decrease in depth of 50 cm or part there of Rs.5890/-Add 5% for M.C.=Rs.6184.50 Providing and constructing on sewer, B.B. masonary circular manhole with concentric cone 1.5 M. dia. at bottom and 0.5 M. from top and 35 cm thick brick work for depth of 2 M and 45 cm thick brick work for remaining depth up to 9 M in CM 1:4 proportion with 20 mm thick smooth plaster on both sides in CM 1:2 proportion excluding excavation including foundation concrete 250 mm thick and haunches and channels in C.C. 1:2:4 proportion, finishing channels in smooth rendering, providing C.I. dapuri type steps each weighing 5.5 Kg., 1:2:4 coping and providing and fixing approved make and quality S.F.R.C. frame and cover of 56 cm dia. etc.complete as directed by Engineer-in- charge. 5.50 m depth. Engineer-in- charge. Engineer-in- charge. 5.50 m depth. Add 5% for M.C. 3591.15 Engineer-in- | | 14.00 | | 47965.05 | No. | 671510.70 |
| Add 5% for M.C 2578.55 4.00 Total 54149.55 No. 21659 Upto 5.0 m depth. Basic Rate 57461.00 Add 5% for M.C 2873.05 2873.05 3.00 Total 60334.05 No. 18100 (CSR 2016-17, P. 273, I. 7) Total 60334.05 No. 18100 a) Rebate for every decrease in depth of 50 cm or part there of Rs.5890/-Add 5% for M.C.=Rs.6184.50 Providing and constructing on sewer, B.B. masonary circular manhole with concentric cone 1.5 M. dia. at bottom and 0.5 M. from top and 35 cm thick brick work for depth of 2 M and 45 cm thick brick work for remaining depth up to 9 M in CM 1:4 proportion with 20 mm thick smooth plaster on both sides in CM 1:2 proportion excluding excavation including foundation concrete 250 mm thick and haunches and channels in C.C. 1:2:4 proportion, finishing channels in smooth rendering, providing C.I. dapuri type steps each weighing 5.5 Kg., 1:2:4 coping and providing and fixing approved make and quality S.F.R.C. frame and cover of 56 cm dia. etc.complete as directed by Engineer-in- charge. 5.50 m depth. Easic Rate 71823.00 Add 5% for M.C 3591.15 | | | | 54574.00 | | |
| 4.00 Total 54149.55 No. 21659 Upto 5.0 m depth. Basic Rate 57461.00 Add 5% for M.C 2873.05 3.00 Total 60334.05 No. 18100 (CSR 2016-17, P. 273, I. 7) a) Rebate for every decrease in depth of 50 cm or part there of Rs.5890/-Add 5% for M.C.=Rs.6184.50 Providing and constructing on sewer, B.B. masonary circular manhole with concentric cone 1.5 M. dia. at bottom and 0.5 M. from top and 35 cm thick brick work for depth of 2 M and 45 cm thick brick work for remaining depth up to 9 M in CM 1:4 proportion with 20 mm thick smooth plaster on both sides in CM 1:2 proportion excluding excavation including foundation concrete 250 mm thick and haunches and channels in C.C. 1:2:4 proportion, finishing channels in smooth rendering, providing C.I. dapuri type steps each weighing 5.5 Kg., 1:2:4 coping and providing and fixing approved make and quality S.F.R.C. frame and cover of 56 cm dia. etc.complete as directed by Engineer-in- charge. 5.50 m depth. Easic Rate 71823.00 Add 5% for M.C 3591.15 | | | | | | |
| Upto 5.0 m depth. Basic Rate 57461.00 Add 5% for M.C 2873.05 3.00 Total 60334.05 No. 18100 (CSR 2016-17, P. 273, I. 7) a) Rebate for every decrease in depth of 50 cm or part there of Rs.5890/-Add 5% for M.C.=Rs.6184.50 Providing and constructing on sewer, B.B. masonary circular manhole with concentric cone 1.5 M. dia. at bottom and 0.5 M. from top and 35 cm thick brick work for depth of 2 M and 45 cm thick brick work for remaining depth up to 9 M in CM 1.4 proportion with 20 mm thick smooth plaster on both sides in CM 1:2 proportion excluding excavation including foundation concrete 250 mm thick and haunches and channels in C.C. 1:2:4 proportion, finishing channels in smooth rendering, providing C.I. dapuri type steps each weighing 5.5 Kg., 1:2:4 coping and providing and fixing approved make and quality S.F.R.C. frame and cover of 56 cm dia. etc.complete as directed by Engineer-in- charge. 5.50 m depth. Basic Rate 71823.00 Add 5% for M.C 3591.15 | | 4.00 | | | No. | 216598.20 |
| Add 5% for M.C 2873.05 3.00 Total 60334.05 No. 18100 (CSR 2016-17, P. 273, I. 7) a) Rebate for every decrease in depth of 50 cm or part there of Rs.5890/-Add 5% for M.C.=Rs.6184.50 Add 5% No. 18100 Providing and constructing on sewer, B.B. masonary circular manhole with concentric cone 1.5 M. dia. at bottom and 0.5 M. from top and 35 cm thick brick work for depth of 2 M and 45 cm thick brick work for remaining depth up to 9 M in CM 1:4 proportion with 20 mm thick smooth plaster on both sides in CM 1:2 proportion excluding excavation including foundation concrete 250 mm thick and haunches and channels in C.C. 1:2:4 proportion, finishing channels in smooth rendering, providing C.I. dapuri type steps each weighing 5.5 Kg., 1:2:4 coping and providing and fixing approved make and quality S.F.R.C. frame and cover of 56 cm dia. etc.complete as directed by Engineer-in- charge. 5.50 m depth. Basic Rate 71823.00 Add 5% for M.C 3591.15 | | | | | | |
| 3.00 Total 60334.05 No. 18100 (CSR 2016-17, P. 273, I. 7) a) Rebate for every decrease in depth of 50 cm or part there of Rs.5890/-Add 5%for M.C.=Rs.6184.50 b b Providing and constructing on sewer, B.B. masonary circular manhole with concentric cone 1.5 M. dia. at bottom and 0.5 M. from top and 35 cm thick brick work for depth of 2 M and 45 cm thick brick work for remaining depth up to 9 M in CM 1:4 proportion with 20 mm thick smooth plaster on both sides in CM 1:2 proportion excluding excavation including foundation concrete 250 mm thick and haunches and channels in C.C. 1:2:4 proportion, finishing channels in smooth rendering, providing C.I. dapuri type steps each weighing 5.5 Kg., 1:2:4 coping and providing and fixing approved make and quality S.F.R.C. frame and cover of 56 cm dia. etc.complete as directed by Engineer-in- charge. 5.50 m depth. Basic Rate 71823.00 Add 5% for M.C 3591.15 | | | Basic Rate | 57461.00 | | |
| Image: construction of the system of the | | | | | | |
| a) Rebate for every decrease in depth of 50 cm or part there of Rs.5890/-Add 5%for M.C.=Rs.6184.50 Providing and constructing on sewer, B.B. masonary circular manhole with concentric cone 1.5 M. dia. at bottom and 0.5 M. from top and 35 cm thick brick work for depth of 2 M and 45 cm thick brick work for remaining depth up to 9 M in CM 1:4 proportion with 20 mm thick smooth plaster on both sides in CM 1:2 proportion excluding excavation including foundation concrete 250 mm thick and haunches and channels in C.C. 1:2:4 proportion, finishing channels in smooth rendering, providing C.I. dapuri type steps each weighing 5.5 Kg., 1:2:4 coping and providing and fixing approved make and quality S.F.R.C. frame and cover of 56 cm dia. etc.complete as directed by Engineer-in- charge. 5.50 m depth. Basic Rate 71823.00 Add 5% for M.C | | 3.00 | | 60334.05 | No. | 181002.15 |
| manhole with concentric cone 1.5 M. dia. at bottom and 0.5 M. from top and 35 cm thick brick work for depth of 2 M and 45 cm thick brick work for remaining depth up to 9 M in CM 1:4 proportion with 20 mm thick smooth plaster on both sides in CM 1:2 proportion excluding excavation including foundation concrete 250 mm thick and haunches and channels in C.C. 1:2:4 proportion, finishing channels in smooth rendering, providing C.I. dapuri type steps each weighing 5.5 Kg., 1:2:4 coping and providing and fixing approved make and quality S.F.R.C. frame and cover of 56 cm dia. etc.complete as directed by Engineer-in- charge. 5.50 m depth. Basic Rate 71823.00 Add 5% for M.C 3591.15 | | | a) Rebate for every decrease in depth of 50 cm or part there of | | | |
| Basic Rate 71823.00 Add 5% for M.C 3591.15 | 15 | | manhole with concentric cone 1.5 M. dia. at bottom and 0.5 M. from top and 35 cm thick brick work for depth of 2 M and 45 cm thick brick work for remaining depth up to 9 M in CM 1:4 proportion with 20 mm thick smooth plaster on both sides in CM 1:2 proportion excluding excavation including foundation concrete 250 mm thick and haunches and channels in C.C. 1:2:4 proportion, finishing channels in smooth rendering, providing C.I. dapuri type steps each weighing 5.5 Kg., 1:2:4 coping and providing and fixing approved make and quality S.F.R.C. frame and cover of 56 cm dia. etc.complete as | | | |
| Add 5% for M.C 3591.15 | | | 5.50 m depth. | | | |
| | | | Basic Rate | | | |
| | | A A T | | | | |
| (CSR 2016-17, P. 273, I. 8) | | 2.00 | | 75414.15 | No. | 150828.30 |

| S. | Quantitu | | Dete | 11 | Armount Do |
|-----|----------|---|-----------|-------|-------------|
| No. | Quantity | ITEM DESCRIPTION | Rate | Unit | Amount Rs. |
| | | a) Rebate for every decrease in depth of 50 cm or part there of Rs.7410/-Add 5% for M.C=Rs.7780.50 | | | |
| 16 | | Providing and fixing in position steel bar reinforcement of various diameters for RCC piles, caps, footings, foundations, lintels, parodies, copings, fins, arches, etc. as per detailed designs, drawings and schedules; including cutting, bending, hooking the bars, binding with wires or tack welding and supporting as required, etc. complete. (including cost of binding wire). | | | |
| | | Tor Steel | | | |
| | | Basic Rate | | | |
| | 4.40 | Add 5% for M.C | | N 4-T | 040047.07 |
| | 4.40 | | 54803.70 | MT | 240917.07 |
| | | (CSR 2016-17, P. 46, I. 8b) | | | |
| | | | | | |
| 17 | | Refilling the trenches with available excavated stuff with soft material first over pipe line and then hard material in 15 cm layers with all leads and lifts including consolidation, surcharging, etc.complete. | | | |
| | | Basic Rate | | | |
| | 00001.0- | Add 5% for M.C | | - | 1700000 - 1 |
| | 26621.97 | Total | 67.20 | Cum | 1788996.54 |
| | | (CSR 2016-17, P. 38, I.15) | | | |
| 18 | | Dispossing of surplus excavated stuff from site of work up to a distance of 2 Km.including, loading, unloading, transportation etc.complete or as directed by the Engineering- in- charge. | | | |
| | | (CSR 2016-17, P. 22, Statement VI) | | | |
| | 905.63 | Basic Rate | 195.62 | Cum | 177159.55 |
| 19 | | Providing, fixing and erecting RCC (M20) Vent shaft with cowl, 125mm x 225mm internal and external dia respectively at top, 300mm and 450mm internal and external dia at bottom and 9.10m over all length, bottom 1.25m below ground level fixed in the pit 900mmx900mmx1500mm with PCC M15, 250mm in bed and 200mm around with top 150mm in cement concrete 1:2:4 (1 cement 2 coarse sand and 4 graded stone aggregate of 20mm nominal size) junction of vent shaft and concrete grouted with cement mortar 1:2 (1 cement and 2 fine sand) including making connection with sewer manhole with 150 mm dia NP4 RCC pipe (IS 458- ammended upto date) for 5.0 m length including Murum bedding complete and as per standard design and finished with water proofing cement of approved brand of required shade as per drawings and/or as directed by Engineer.Providing and fixing RCC ventilation shaft, making connection to manhole etc. complete as directed by EIC. | | | |
| | 3.00 | | 18432.00 | No. | 55296.00 |
| | 0.00 | (As per Rate Analysis) | 10-102.00 | | 00200.00 |
| | | | | | |
| | - | • | • | | |

| S. No. | Quantity | ITEM DESCRIPTION | Rate | Unit | Amount Rs. |
|-----------|----------|---|----------|---------|-------------|
| 20 | | Highway Crossing | | | |
| | | Pushing of M.S. pipe of following dia. For road crossing and railway crossing by push through metod in all types of strata by using hydraulic jack and drilling machine of required diameter of below MS casing pipes, loweing, laying & jointing of material , requred welding machinery , tripod, chain pully block , crain , blower, compressor, loading & unloading of machinery into the trench , etc. transportation and dewatering , etc. complete as directed by Engineer-in-charge but excluding the cost of MS pipes500 to 1000 mm dia. MS Pipe | | | |
| | | | | | |
| | | Basic Rate | 28476.00 | | |
| | | Add 5% for M.C | 1423.80 | | |
| | 150.00 | | 29899.80 | Rmt | 4484970.00 |
| | | (CSR 2016-17, P. 58, I. 14b) | | | |
| | | MS Pipe 1500 mm (ID) 12 mm thick | | | |
| | 150.00 | Basic Rate | 23550.00 | Rmt | 3532500.00 |
| | | (CSR 2016-17, P.197, I.2AA) | | | |
| | | | | Ir Cost | |
| | | Total Material + | | | 56946291.01 |
| | | | | iy Rs. | 56946292.00 |
| | | | | Lakhs | 569.46 |
| | | | Say Rs. | Crores | 5.69 |

SUB ESTIMATE NO. :- TRUNK MAIN FOR ZONE XI

(Underground Sewerage Network -300 to 1000 mm dia RCC Pipes, L=7.904 Km) **MEASUREMENT No. 3A**

| | (Underground Sewerage Network -300 to 1000 mm dia RCC Pipes, L=7.904 Km) MEASUREMENT No. 3A | | | | | | | | | |
|------------|---|---------------------|-----------------|---------|---------|-----------------|------------|--|--|--|
| ltem No | ITEM DESCRIPTION | No | L | В | D/H | Quantity | Unit | | | |
| | MATERIAL : | | | | | | | | | |
| 1 | Providing ISI Standard RCC pipes in standard | | | | | | | | | |
| | length of following class and diameter, | | | | | | | | | |
| | etc.complete. | | | | | | | | | |
| | RCC NP 3 Class | | | | | | | | | |
| | 300 mm dia. | 1.00 | 787.00 | | | 787.00 | Rmt | | | |
| | 350 mm dia. | 1.00 | 657.00 | | | 657.00 | Rmt | | | |
| | 450 mm dia. | 1.00 | 1660.00 | | | 1660.00 | Rmt | | | |
| | 500 mm dia. 700 mm dia. | <u>1.00</u> 1.00 | 759.00 25.00 | | | 759.00 25.00 | Rmt | | | |
| | 1000 mm dia. | 1.00 | 2535.00 | | | 2535.00 | Rmt Rmt | | | |
| | | 1.00 | 2000.00 | | | 2555.00 | Rmt | | | |
| | RCC NP 4 Class | | | | | | | | | |
| | 350 mm dia. | 1.00 | 30.00 | | | 30.00 | Rmt | | | |
| | 450 mm dia. | 1.00 | 93.00 | | | 93.00 | Rmt | | | |
| | 500 mm dia. | 1.00 | 60.00 | | | 60.00 | Rmt | | | |
| | 600 mm dia. | 1.00 | 1298.00 | | | 1298.00 | Rmt | | | |
| | | | | | | | | | | |
| | LABOUR : | | | | | | | | | |
| | EXCAVATION DETAILS -From computer | | | | | | | | | |
| | generated design sheet | | | | | | | | | |
| Dt | 0-1.5 | 1.5-3.0 | 3.0 - 4.5 | 4.5-6.0 | 6.0-7.5 | TOTAL | | | | |
| Ex Line | 14708.08 | 11663.60 | 3359.95 | 375.89 | 0.00 | 30107.52 | Cum | | | |
| Ex MH | 1671.07 | 1607.19 | 418.42 | 76.79 | 0.00 | 3773.46 | Cum | | | |
| Say | 16379.00 | 13271.00 | 3778.00 | 453.00 | 0.00 | 33881.00 | Cum | | | |
| | | | | | | | | | | |
| 1 | Excavation for foundation / pipe trenches in earth, soils of all types , sand, gravel, and soft murum etc.complete. | | | | | | | | | |
| | Lift 0.0 -1.5 M. | | | | | 5460.76 | Cum | | | |
| | Lift 1.5-3.0 M. | | | | | 1769.02 | Cum | | | |
| 2 | Excavation for foundation / pipe trenches in hard murum & boulders, WBM road etc.complete. | | | | | | | | | |
| | Lift 0.0 -1.5 M. | | | | | 8734.92 | Cum | | | |
| | Lift 1.5-3.0 M. | | | | | 885.18 | | | | |
| | | | | | | 000.10 | Cum | | | |
| 3 | Excavation for pipe trenches in soft rock and old cement and lime masonary foundation, ashphalt road etc.complete. | | | | | | | | | |
| | Lift 0.0-1.50 M. | | | | | 2183.32 | Cum | | | |
| | Lift 1.5-3.0 M. | | | | | 8847.78 | Cum | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| 4 | Excavation for pipe trenches in hard rock and | | | | | | | | | |
| 4 | concrete road, by chiselling, wedging, lime drilling | | | | | | | | | |
| 4 | concrete road, by chiselling, wedging, lime drilling by mechanical means or by all means other than | | | | | | | | | |
| 4 | concrete road, by chiselling, wedging, lime drilling by mechanical means or by all means other than blasting, etc.complete. | | | | | | | | | |
| 4 | concrete road, by chiselling, wedging, lime drilling by mechanical means or by all means other than blasting, etc.complete. Lift 1.5-3.0 M. | | | | | 1769.02 | Cum | | | |
| 4 | concrete road, by chiselling, wedging, lime drilling by mechanical means or by all means other than blasting, etc.complete. Lift 1.5-3.0 M. Lift 3.0-4.5 M. | | | | | 3778.00 | Cum | | | |
| 4 | concrete road, by chiselling, wedging, lime drilling by mechanical means or by all means other than blasting, etc.complete. Lift 1.5-3.0 M. | | | | | | Cum | | | |
| | concrete road, by chiselling, wedging, lime drilling by mechanical means or by all means other than blasting, etc.complete. Lift 1.5-3.0 M. Lift 3.0-4.5 M. Lift 4.5-6.0 M. | | | | | 3778.00 | Cum | | | |
| | concrete road, by chiselling, wedging, lime drilling by mechanical means or by all means other than blasting, etc.complete. Lift 1.5-3.0 M. Lift 3.0-4.5 M. | | | | | 3778.00 | Cum | | | |
| | concrete road, by chiselling, wedging, lime drilling by mechanical means or by all means other than blasting, etc.complete. Lift 1.5-3.0 M. Lift 3.0-4.5 M. Lift 4.5-6.0 M. Providing dry trap/ granite/quartzite/ gneiss, rubble | | 2535.00 | 1.70 | 0.30 | 3778.00 | Cum | | | |

Zone XI- Trunk Sewer Measurement

| Item No | ITEM DESCRIPTION | No | L | В | D/H | Quantity | Unit |
|------------|---|---------------------|------------------|------|----------|------------------|--------|
| 6 | Providing & filling in sand boxing in pipeline or for | | | | | | |
| | foundation etc.complete. | | | | | 164.66 | Cum |
| | (As per Computer generated sheet) | | | | | 164.66 | Cum |
| 7 | Providing murum bedding in trenches with approved murum from excavated materials etc.n complete. | | | | | | |
| | (As per Computer generated sheet) | | | | | 1481.92 | Cum |
| 8 | Lowering laying and jointing in proper grade and alignment R.C.C. pipes etc.complete | | | | | | |
| | 300 mm dia. | 1.00 | 787.00 | | | 787.00 | Rmt |
| | 350 mm dia. | 1.00 | 687.00 | | | 687.00 | |
| | 450 mm dia. | 1.00 | 1753.00 | | | 1753.00 | |
| | 500 mm dia. | 1.00 | 819.00 | | | 819.00 | |
| | 600 mm dia. | 1.00 | 1298.00 | | | 1298.00 | |
| | 700 mm dia. 1000 mm dia. | <u>1.00</u> 1.00 | 25.00 2535.00 | | | 25.00 2535.00 | |
| | | 1.00 | 2555.00 | | | 2555.00 | Rmt |
| 9 | Hydraulic testing of RCC pipe line to specified pressure including cost of all materials and labour and water for testing for specified length including cutting, placing end cap making arrangement for filling safe water using reciprocating type pumps which should be able to provide specified test pressure gauges and other necessary equipments, labour, operation charges, etc. required for testing. The rate under this item shall also include cost of retesting, if necessary and reinstating to original position. | | | | | | |
| | 300 mm dia. | 1.00 | 0.79 | | | 0.79 | KM |
| | 350 mm dia. | 1.00 | 0.69 | | | 0.69 | KM |
| | 450 mm dia. | 1.00 | 1.75 | | | 1.75 | |
| | 500 mm dia. | 1.00 | 0.82 | | | 0.82 | |
| | 600 mm dia. | 1.00 | 1.30 | | | 1.30 | |
| | 700 mm dia. | 1.00 | 0.03 | | | 0.03 | |
| | 1000 mm dia. | 1.00 | 2.54 | | | 2.54 | KM |
| 10 | Open timbering in trenches of depth more than 1.5 m for shoring and strutting etc. complete. | | | | | | |
| | Non Water Logged Area Lift 1.50 to 3.00 m. | 2.00 | 232.20 | | 1.50 | 696.60 | Carro |
| | Water Logged Area | 2.00 | 232.20 | | 1.50 | 090.00 | Sqm |
| | Lift 1.50 to 3.00 m. | 2.00 | 154.80 | | 1.50 | 464.40 | Sqm |
| | | | | | | | |
| 11 | Providing and laying in situ cement concrete 1:2:4 of trap/ granite / quartzite/ gneiss metal for foundation and bedding etc. complete. | | | | | | |
| | Provision of anchor block Made for trunk sewer along nallah | 250.00 | 1.80 | 1.80 | 0.60 | 486.00 | |
| | Deduct | 250.00 | 0.79 | 1.44 | 0.60 | 169.56 | |
| | Net Qty | | | | | 316.44 | |
| | (As per Computer generated sheet) | | | | | 245.34 | |
| | Total Qty | | | | | 561.78 | Cum |
| 12 | Dewatering the excavated trenches and pools of water in the pipeline trenches, etc.complete. | | | | | | |
| | | | 180.00 | 5.00 | 6.00 | 40000.00 | Bhp/hr |
| | For nalla / where water table high | 3.00 | 100.00 | 0.00 | 0.00 | 16200.00 | DIII |

Zone XI- Trunk Sewer Measurement

| ltem No | ITEM DESCRIPTION | No | L | В | D/H | Quantity | Unit |
|------------|--|------|------|---|-----|----------|------|
| 13 | Providing and constructing on sewer, B.B. masonary circular manhole with concentric cone 1.2 M. dia. at bottom and 0.5 M. from top and up to depth of 2 m. with 23 cm thick brick work up to depth of 2 Metr.complete | | | | | | |
| | Upto 1.50 m depth. | | | | | 10.00 | No. |
| | Upto 2.0 m depth. | | | | | 45.00 | No. |
| | (As per Computer generated sheet) | | | | | | |
| 14 | Providing and constructing on sewer, B.B. masonary circular manhole with concentric cone 1.5 M. dia. at bottom and 0.5 M. from top and up to depth of 5 m. with 23 cm thick brick work up to depth of 2 M from top and 35 cm thick brick work for remaining depth up to 5 M etc.complete | | | | | | |
| | Upto 2.50 m depth. | | | | | 41.00 | No. |
| | Upto 3.0 m depth. | | | | | 46.00 | No. |
| | Upto 3.5 m depth. | | | | | 10.00 | No. |
| | Upto 4.0 m depth. | | | | | 14.00 | No. |
| | Upto 4.5 m depth. | | | | | 4.00 | No. |
| | Upto 5.0 m depth. | | | | | 3.00 | No. |
| | (As per Computer generated sheet) | | | | | | |
| | | | | | | | |
| | masonary circular manhole with concentric cone 1.5 M. dia. at bottom and 0.5 M. from top and 35 cm thick brick work for depth of 2 M and 45 cm thick brick work for remaining depth up to 9 M in etc.complete | | | | | | |
| | Upto 5.5 m depth. | | | | | 2.00 | No. |
| | (As per Computer generated sheet) | | | | | | - |
| | | | | | | | |
| 16 | Providing and fixing in position steel bar reinforcement etc. complete | | | | | | |
| | Wt of Steel = 0.1% of Concrete Qty = | 0.56 | 4396 | | | 4.40 | MT |
| | | | | | | | |
| 17 | Refilling the trenches with available excavated stuff etc.complete. | | | | | | |
| | (As per Computer generated sheet) | | | | | 26621.97 | Cum |
| | | | 1 | 1 | 1 | | |
| 18 | Dispossing of surplus excavated stuff from site of work up to a distance of 2Km etc.complete | | | | | | |
| | (As per Computer generated sheet) | | | | | 905.63 | Cum |
| 19 | Providing, fixing and erecting RCC (M20) Vent shaft etc. complete | | | | | | |
| | | 3 | | | | 3 | No. |
| | | | | | | | |
| | (As per Rate Analysis) | | | | | 5.00 | Km |
| | | | | | | | |
| 20 | Highway Crossing | | 1 | | 1 | | |

| | | | | | | |
|---------|--|---|----|--|-----|-----|
| | Pushing of M.S. pipe of following dia. For road | | | | | |
| | crossing and railway crossing by push through | | | | | |
| | metod in all types of strata by using hydraulic jack | | | | | |
| | and drilling machine etc. complete | | | | | |
| | MS Pipe 1500 mm (ID) 12 mm thick | 5 | 30 | | 150 | Rmt |

Zone XI- Trunk Sewer Measurement

| | | SOLAPUR MUNICIPAL CORPORAT MAHARASHTRA JEEVAN PRADHIKARAN DIVIS | - | | |
|-------|----------|---|------------|--------------|-------------|
| | S | COLAPUR CITY UNDERGROUND SEWERAGE SC | | - | |
| | | SUB ESTIMATE NO. :- TRUNK MAIN F | | | |
| | (Under | ground Sewerage Network -350 to 1100 mm dia R | | |) Km) |
| | (| ABSTRACT No.3B |) | | , |
| S.No. | Quantity | ITEM DESCRIPTION | Rate | Unit | Amount Rs. |
| | | MATERIAL : | | | |
| 1 | | Providing ISI Standard RCC pipes in standard length of following class and diameter, suitable for either collor joints or rubber ring joints, including all taxes (central and local) inspection charges, transport to departmental store / site unloading and stacking etc.complete. | | | |
| | | Notes :- One rubber ring should be supplied with each full length of socketed pipe, cost included in the rates below. | | | |
| | | RCC NP 3 Class | | | |
| | 298.00 | 350 mm dia. | 1260.00 | Rmt | 375480.00 |
| | | 500 mm dia. | 1785.00 | Rmt | 806820.00 |
| | 1776.00 | 1100 mm dia. | 6916.00 | Rmt | 12282816.00 |
| | | RCC NP 4 Class | | | |
| | | 350 mm dia. | 1344.00 | | 176064.00 |
| | | 450 mm dia. | 1575.00 | | 96075.00 |
| | 1191.00 | 500 mm dia. | 1943.00 | Rmt | 2314113.00 |
| | | (CSR 2016-17, P. 103,104, I. E, F) | | | |
| | | | Material C | `oct | 16051368.00 |
| | | LABOUR : | Material | <i>.</i> 051 | 10051300.00 |
| 1 | | Excavation for foundation / pipe trenches in earth, soils of all types , sand, gravel, and soft murum includng removing the excavated material up to a distance of 50 m. and lift as below, stacking and spreading as directed by the Engineer-in- charge, normal dewatering, preparing the bed for foundation and excluding back filling. etc.complete. | | | |
| | | Lift 0.0 -1.5 M. | | | |
| | | Basic Rate | 141.00 | | |
| | | Add 10 % for M.C | 14.10 | | |
| | 3852.56 | | 155.10 | Cum | 597532.06 |
| | | Lift 1.50 -3.0 M. | | | |
| | | | | | |
| | | Basic Rate | | | |
| | | Basic Rate Add 10 % for M.C | 15.30 | | |
| | 2143.20 | Basic Rate Add 10 % for M.C | | | 360700.56 |

| S.No. | Quantity | ITEM DESCRIPTION | Rate | Unit | Amount Rs. |
|-------|----------|---|-----------------|---------------|------------|
| 2 | | Excavation for foundation / pipe trenches in hard murum & boulders , WBM road includng removing the excavated material up to a distance of 50 m. and lift as below, stacking and spreading as directed by the Engineer-in- charge, normal dewatering, preparing the bed for foundation and excluding back filling. etc.complete. | | | |
| | | Lift 0 -1.5 M. | | | |
| | | Basic Rate | 180.00 | | |
| | 5405 45 | Add 10 % for M.C | 18.00 | | 4040750 70 |
| | 5135.15 | | 198.00 | Cum | 1016759.70 |
| | | Lift 0 -1.5 M. Basic Rate | 192.00 | | |
| | | Add 10 % for M.C | 192.00 | | |
| | 1428.44 | | 211.20 | Cum | 301686.53 |
| | | (CSR 2016-17, P. 35 I. 3) | | | |
| | | | | | |
| 3 | | Excavation for pipe trenches in soft rock and old cement and lime masonary foundation, ashphalt road includng removing the excavated material up to a distance of 50 m. and lift as below, stacking and spreading as directed by the Engineer-in- charge, normal dewatering, preparing the bed for foundation and excluding back filling. etc.complete. | | | |
| | | Lift 0 -1.5 M. | | | |
| | | Basic Rate | 443.00 | | |
| | | Add 10 % for M.C | 44.30 | - | |
| | 641.29 | | 487.30 | Cum | 312500.62 |
| | | Lift 1.5 -3.0 M. | 402.00 | | |
| | | Basic Rate Add 10 % for M.C | 463.00 46.30 | | |
| | 5714.84 | | 509.30 | Cum | 2910568.01 |
| | 071104 | (CSR 2016-17, P. 35 I. 5) | 000.00 | U 4111 | |
| 4 | | Excavation for pipe trenches in hard rock and concrete road, by chiselling, wedging, lime drilling by mechanical means or by all means other than blasting, including trimming and levelling the bed, removing the excavated material up to a distance of 50 m. and lift as below, stacking and spreading as directed by the Engineer-in- charge, normal dewatering, preparing the bed for foundation and excluding back filling. etc.complete. | | | |
| | | Lift 1.5 -3.0 M. | | | |
| | | Basic Rate | 771.00 | | |
| | | Add 10 % for M.C | 77.10 | | |
| | 1429.51 | Total | 848.10 | Cum | 1212367.43 |

| S.No. | Quantity | ITEM DESCRIPTION | Rate | Unit | Amount Rs. |
|-------|----------|--|---------------|------|------------|
| | | Lift 3.0 -4.5 M. | | | |
| | | Basic Rate | 791.00 | | |
| | | Add 10 % for M.C | 79.10 | | |
| | 4712.00 | | 870.10 | Cum | 4099911.20 |
| | | Lift 4.5-6.0 M. | | | |
| | | Basic Rate | 811.00 | | |
| | COE 00 | Add 10 % for M.C | 81.10 | Cum | E20720 E0 |
| | 605.00 | Total (CSR 2016-17, P. 36 I. 7) | 892.10 | Cum | 539720.50 |
| | | | | | |
| 5 | | Providing dry trap/ granite/quartzite/ gneiss, rubble stone soling in 15 cm to 20 cm thick layers including hand packing and compacting etc.complete. | | | |
| | | Basic Rate | 912.00 | | |
| | | Add 5 % for M.C | 45.60 | | |
| | 1172.70 | Total | 957.60 | Cum | 1122977.52 |
| | | (CSR 2016-17, P. 39 I.18) | | | |
| | | | | | |
| 6 | | Providing & filling in sand boxing in pipeline or for foundation with sand of approved quality including watering and compaction, etc. complete. | | | |
| | | Basic Rate | 931.00 | | |
| | | Add 5 % for M.C | 46.55 | | |
| | 60.49 | | 977.55 | Cum | 59132.00 |
| | | (CSR 2016-17, P. 39 I. 19) | | | |
| 7 | | Providing murum bedding in trenches with approved murum from excavated materials from foundation in 15 cm. to 20 cm. layers including watering & compaction complete. | | | |
| | | Decis Dete | 64.00 | | |
| | | Basic Rate Add 5 % for M.C. | 64.00 3.20 | | |
| | 730.11 | Total | 67.20 | | 49063.39 |
| | 730.11 | (CSR 2016-17, P. 39, I. 16) | 07.20 | Cum | 49003.39 |
| | | | | | |
| 8 | | Lowering laying and jointing in proper grade and alignment R.C.C. pipes with collar joints in CM 1:1 proportion or socketed R.C.C. pipes with rubbar joints (excluding cost of rubber ring or R.C.C. collor), including cost of conveyance from stores to site of works, cost of jointing material, labour, giving hydraulic testing, etc.complete as directed by Engineer-in-charge | | | |
| | | 350 mm dia. | | | |
| | | Basic Rate | 118.00 | | |
| | | Add 5 % for M.C | 5.90 | | |
| | 429.00 | Total | 123.90 | Rmt | 53153.10 |

| S.No. | Quantity | ITEM DESCRIPTION | Rate | Unit | Amount Rs. |
|-------|----------|---|----------|------------|------------|
| | | 450 mm dia. | | | |
| | | Basic Rate | 180.00 | | |
| | | Add 5 % for M.C | 9.00 | | |
| | 61.00 | | 189.00 | Rmt | 11529.00 |
| | | 500 mm dia. | | | |
| | | Basic Rate | | | |
| | | Add 5 % for M.C. | 9.85 | | |
| | 1643.00 | | 206.85 | Rmt | 339854.55 |
| | | 1100 mm dia. | | | |
| | | Basic Rate | | | |
| | 4770.00 | Add 5 % for M.C | 26.60 | D (| 000070.00 |
| | 1776.00 | Total (CSR 2016-17, P. 105, I. 2) | 558.60 | Rmt | 992073.60 |
| 9 | | Hydraulic testing of RCC pipe line to specified pressure including cost of all materials and labour and water for testing for specified length including cutting, placing end cap making arrangement for filling safe water using reciprocating type pumps which should be able to provide specified test pressure gauges and other necessary equipments, labour, operation charges, etc. required for testing. The rate under this item shall also include cost of retesting, if necessary and reinstating to original position. | | | |
| | | 350 mm dia. | | | |
| | | Basic Rate | | | |
| | | Add 5 % for M.C | 650.00 | | |
| | 0.43 | | 13650.00 | KM | 5855.85 |
| | | 450 mm dia. | | | |
| | | Basic Rate | | | |
| | | Add 5 % for M.C | 1000.00 | | 4004.00 |
| | 0.06 | | 21000.00 | KM | 1281.00 |
| | | 500 mm dia. | 22000.00 | | |
| | | Basic Rate | | | |
| | 1.64 | Add 5 % for M.C | 1100.00 | | 27052 20 |
| | 1.04 | | 23100.00 | KM | 37953.30 |
| | | 1100 mm dia. Basic Rate | 50000 00 | | |
| | | Add 5 % for M.C | 2950.00 | | |
| | 1.78 | | 61950.00 | KM | 110023.20 |
| | 1.70 | (CSR 2016-17, P. 105, I. 2) | 51550.00 | 1 XIVI | 110020.20 |
| | | | | | |

| S.No. | Quantity | ITEM DESCRIPTION | Rate | Unit | Amount Rs. |
|--|----------|--|-----------------|-------|------------|
| 1.5 m for shown and waste of a walling, strutts sheeting, runne fixing and rem | | Open timbering in trenches of depth more than 1.5 m for shoring and strutting including use of and waste of all necessary timber works including walling, strutts, open polling boards/ horizontal sheeting, runners, etc. as may be necessary and fixing and removal complete. (Measurements to be taken of the face/area timbered) | | | |
| | | Non Water Logged Area | | | |
| | | Lift 1.50 to 3.00 m. | 0.40.00 | | |
| | | Basic Rate | 240.00 | | |
| | 180.00 | Add 5 % for M.C Total | 12.00 252.00 | Sqm | 45360.00 |
| | 100.00 | Water Logged Area | 252.00 | Sym | 45500.00 |
| | | Lift 1.50 to 3.00 m. | | | |
| | | Basic Rate | 239.00 | | |
| | | Add 5 % for M.C | 11.95 | | |
| | 120.00 | Total | 250.95 | Sqm | 30114.00 |
| | | (CSR 2016-17, P. 39, I. 20a / b) | | | |
| | | | | | |
| 11 | | Providing and laying in situ cement concrete 1:2:4 of trap/ granite / quartzite/ gneiss metal for foundation and bedding including bailing out water manually , formwork, compacting and curring etc. complete. | | | |
| | | Basic Rate | 4233.00 | | |
| | | Add 5 % for M.C | 211.65 | | |
| | 659.42 | | 4444.65 | Cum | 2930872.73 |
| | | (CSR 2016-17, P. 43, I. 1b) | | | |
| 12 | | Dewatering the excavated trenches and pools of water in the pipeline trenches, well works by using pumps and other divices including disposing off water to safe distance as directed by Engineer-in- charge (including cost of machionary, labour,fuel) etc.complete. | | | |
| | | Basic Rate | 62.00 | | |
| | | Add 5 % for M.C | 3.10 | | |
| | 16200.00 | Total | 65.10 | HP/Hr | 1054620.00 |
| | | (CSR 2016-17, P. 38, I. 14) | | | |
| | | a) Rebate for every decrease in depth of 50 cm or part there of Rs.2849/-Add 5% for M.C=Rs.2991.45 | | | |
| | | | | | |

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| S.No. | Quantity | ITEM DESCRIPTION | Rate | Unit | Amount Rs. |
|-------|----------|---|----------|------|------------|
| 13 | | Providing and constructing on sewer, B.B. masonary circular manhole with concentric cone 1.5 M. dia. at bottom and 0.5 M. from top and up to depth of 5 m. with 23 cm thick brick work up to depth of 2 M from top and 35 cm thick brick work for remaining depth up to 5 M in CM 1:4 proportion with 20 mm thick smooth plaster on both sides in CM 1:2 proportion excluding excavation including foundation concrete 250 mm thick and haunches and channels in C.C. 1:2:4 proportion, finishing channels in smooth rendering, providing C.I. dapuri type steps each weighing 5.5 Kg., 1:2:4 coping and providing and fixing approved make and quality S.F.R.C. frame and cover of 56 cm dia. etc.complete as directed by Engineer-in- charge. | | | |
| | | Upto 2.5 m depth. | | | |
| | | Basic Rate | 28011.00 | | |
| | | Add 5 % for M.C | 1400.55 | | |
| | 2.00 | Total | 29411.55 | No. | 58823.10 |
| | | Upto 3.0 m depth. | | | |
| | | Basic Rate | | | |
| | | Add 5 % for M.C. | 1695.05 | | |
| | 2.00 | | 35596.05 | No. | 71192.10 |
| | | Upto 3.50 m depth. | | | |
| | | Basic Rate | | | |
| | | Add 5 % for M.C | | | |
| | 6.00 | | 41780.55 | No. | 250683.30 |
| | | Upto 4.0 m depth. | 45694.00 | | |
| | | Basic Rate Add 5 % for M.C | 2284.05 | | |
| | 7.00 | | | No. | 335755.35 |
| | 7.00 | Upto 4.5 m depth. | 11000.00 | 110. | 000700.00 |
| | | Basic Rate | 51571.00 | | |
| | | Add 5 % for M.C | 2578.55 | | |
| | 5.00 | | | No. | 270747.75 |
| | | Upto 5.0 m depth. | | | |
| | | Basic Rate | 57461.00 | | |
| | | Add 5 % for M.C | 2873.05 | | |
| | 6.00 | | 60334.05 | No. | 362004.30 |
| | | (CSR 2016-17, P. 273, I. 7) | | | |
| | | a) Rebate for every decrease in depth of 50 cm or part there of Rs.5890/-Add 5% for M.C=Rs.6184.50 | | | |
| | | | | | |

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| S.No. | Quantity | ITEM DESCRIPTION | Rate | Unit | Amount Rs. |
|-------|----------|---|----------|------|------------|
| 14 | | Providing and constructing on sewer, B.B. masonary circular manhole with concentric cone 1.5 M. dia. at bottom and 0.5 M. from top and 35 cm thick brick work for depth of 2 M and 45 cm thick brick work for remaining depth up to 9 M in CM 1:4 proportion with 20 mm thick smooth plaster on both sides in CM 1:2 proportion excluding excavation including foundation concrete 250 mm thick and haunches and channels in C.C. 1:2:4 proportion, finishing channels in smooth rendering, providing C.I. dapuri type steps each weighing 5.5 Kg., 1:2:4 coping and providing and fixing approved make and quality S.F.R.C. frame and cover of 56 cm dia. etc.complete as directed by Engineer-incharge. | | | |
| | | 5.50 m depth. | | | |
| | | Basic Rate | | | |
| | 4.00 | Add 5 % for M.C | | | 004050.00 |
| | 4.00 | l otal (CSR 2016-17, P. 273, I. 8) | 75414.15 | No. | 301656.60 |
| | | a) Rebate for every decrease in depth of 50 cm or part there of Rs7410/-Add 5% for M.C .=Rs.7780.50 | | | |
| 15 | | Providing and fixing in position steel bar reinforcement of various diameters for RCC piles, caps, footings, foundations, lintels, parodies, copings, fins, arches, etc. as per detailed designs, drawings and schedules; including cutting, bending, hooking the bars, binding with wires or tack welding and supporting as required, etc. complete | | | |
| | | Tor Steel | | | |
| | | Basic Rate | | | |
| | E 40 | Add 5 % for M.C | | | 202027 07 |
| | 5.18 | (CSR 2016-17, P. 46, I. 8b) | 54803.70 | | 283937.97 |
| | | | | | |
| 16 | | Refilling the trenches with available excavated stuff with soft material first over pipe line and then hard material in 15 cm layers with all leads and lifts including consolidation, surcharging, etc.complete. | | | |
| | | Basic Rate | 64.00 | | |
| | | Add 5 % for M.C | 3.20 | | |
| | 20003.47 | Total (CSR 2016-17, P. 38, I.15) | 67.20 | Cum | 1344233.23 |
| | | | | | |

| S.No. | Quantity | ITEM DESCRIPTION | Rate | Unit | Amount Rs. |
|-------|----------|--|----------|------|------------|
| 17 | | Dispossing of surplus excavated stuff from site of work up to a distance of 2 Km.including, loading, unloading, transportation etc.complete or as directed by the Engineering- in- charge. | | | |
| | | (CSR 2015-16, P. 22, Statement VI) | | | |
| | 1734.15 | Basic Rate | 195.62 | Cum | 339234.59 |
| 18 | | Providing, fixing and erecting RCC (M20) Vent shaft with cowl, 125mm x 225mm internal and external dia respectively at top, 300mm and 450mm internal and external dia at bottom and 9.10m over all length, bottom 1.25m below ground level fixed in the pit 900mmx900mmx1500mm with PCC M15, 250mm in bed and 200mm around with top 150mm in cement concrete 1:2:4 (1 cement 2 coarse sand and 4 graded stone aggregate of 20mm nominal size) junction of vent shaft and concrete grouted with cement mortar 1:2 (1 cement and 2 fine sand) including making connection with sewer manhole with 150 mm dia NP4 RCC pipe (IS 458- ammended upto date) for 5.0 m length including Murum bedding complete and as per standard design and finished with water proofing cement of approved brand of required shade as per drawings and/or as directed by Engineer.Providing and fixing RCC ventilation shaft, making connection to manhole etc. complete as directed by EIC. | | | |
| | 1.00 | | 18432.00 | No. | 18432.00 |
| 19 | | Shifting of Utilities: All utilities like Electric Poles, waterline & Communication line Shifting while Manhole and Line Laying work etc., complete as per specifications and or as directed by engineer- in-charge. | | | |
| | 1.00 | (As per Rate Analysis) | 13506.00 | Km | 13506.00 |
| | | | | | |

| S.No. | Quantity | ITEM DESCRIPTION | ITEM DESCRIPTION Rate Unit | | Amount Rs. |
|-------|----------|--|----------------------------|---------|-------------|
| 20 | | Highway Crossing | | | |
| | | Pushing of M.S. pipe of following dia. For road crossing and railway crossing by push through metod in all types of strata by using hydraulic jack and drilling machine of required diameter of below MS casing pipes, loweing, laying & jointing of material, requred welding machinery, tripod, chain pully block, crain, blower, compressor, loading & unloading of machinery into the trench, etc. transportation and dewatering, etc. complete as directed by Engineer-in-charge but excluding the cost of MS pipes500 to 1000 mm dia. MS Pipe | | | |
| | | | | | |
| | | Basic Rate | 28476.00 | | |
| | | Add 5 % for M.C | 1423.80 | | |
| | 150.00 | Total | 29899.80 | Rmt | 4484970.00 |
| | | (CSR 2016-17, P. 58, I. 14b) | | | |
| | | MS Pipe 1500 mm (ID) 12 mm thick | | | |
| | 150.00 | Basic Rate | 23550.00 | Rmt | 3532500.00 |
| | | (CSR 2016-17, P.197, I.2AA) | | | |
| | | | | ır Cost | |
| | | Total Material + | | | 45914654.14 |
| | | | | y Rs. | 45914655.00 |
| | | | | Lakhs | 459.15 |
| | | | Say Rs. | Crores | 4.59 |

SOLAPUR MUNICIPAL CORPORATION MAHARASHTRA JEEVAN PRADHIKARAN DIVISION SOLAPUR SOLAPUR CITY UNDERGROUND SEWERAGE SCHEME (AMRUT) SUB ESTIMATE NO. :- TRUNK MAIN FOR ZONE XII

(Underground Sewerage Network -350 to 1100 mm dia RCC Pipes, L=3.909 Km)

| | MEASUR | REMENT | No. 3B | | - | | |
|------------|---|----------|-----------|---------|---------|----------|-------|
| ltem No | ITEM DESCRIPTION | No | L | В | D/H | Quantity | Unit |
| | MATERIAL : | | | | | | |
| 1 | Providing ISI Standard RCC pipes in standard | | | | | | |
| | length of following class and diameter, | | | | | | |
| | etc.complete. | | | | | | |
| | RCC NP 3 Class | | | | | | |
| | 350 mm dia. | 1.00 | 298.00 | | | 298.00 | Rmt |
| | 500 mm dia. | 1.00 | 452.00 | | | 452.00 | Rmt |
| | 1100 mm dia. | 1.00 | 1776.00 | | | 1776.00 | Rmt |
| | RCC NP 4 Class | | | | | | |
| | 350 mm dia. | 1.00 | 131.00 | | | 131.00 | Rmt |
| | 450 mm dia. | 1.00 | 61.00 | | | 61.00 | Rmt |
| | 500 mm dia. | 1.00 | 1191.00 | | | 1191.00 | Rmt |
| | LABOUR : | | | | | | |
| | EXCAVATION DETAILS -From computer generated design sheet | | | | | | |
| Dt | 0-1.5 | 1.5-3.0 | 3.0 - 4.5 | 4.5-6.0 | 6.0-7.5 | TOTAL | |
| Ex Line | 8515.11 | 8438.73 | 3902.27 | 469.49 | 0.00 | 21325.60 | Cum |
| Ex MH | 1113.44 | 2277.15 | 809.41 | 135.38 | 0.00 | 4335.38 | Cum |
| Say | 9629.00 | 10716.00 | 4712.00 | 605.00 | 0.00 | 25661.00 | Cum |
| | | | | | | | |
| 1 | Excavation for foundation / pipe trenches in | | | | | | |
| | earth, soils of all types , sand, gravel, and soft | | | | | | |
| | murum etc.complete. | | | | | | |
| | Lift 0.0 -1.5 M. | | | | | 3852.56 | |
| | Lift 1.5-3.0 M. | | | | | 2143.20 | Cum |
| 2 | Excavation for foundation / pipe trenches in hard murum & boulders , WBM road etc.complete. | | | | | | |
| | Lift 0.0 -1.5 M. | | | | | 5135.15 | Cum |
| | Lift 1.5-3.0 M. | | | | | 1428.44 | |
| | Lift 1.3-3.0 Wi. | | | | | 1420.44 | Cum |
| 3 | Excavation for pipe trenches in soft rock and old cement and lime masonary foundation, ashphalt road etc.complete. | | | | | | |
| | Lift 0.0-1.50 M. | | | | | 641.29 | Cum |
| | Lift 1.5-3.0 M. | | | | | 5714.84 | |
| 4 | Excavation for pipe trenches in hard rock and | | | | | | |
| | concrete road, by chiselling, wedging, lime drilling by mechanical means or by all means other than blasting, etc.complete. | | | | | | |
| | Lift 0.0-1.50 M. | | | | | 0.00 | Cum |
| | Lift 1.5-3.0 M. | | | | | 1429.51 | Cum |
| | Lift 3.0-4.5 M. | | | | | 4712.00 | Cum |
| | Lift 4.5-6.0 M. | | | | | 605.00 | Cum |
| 5 | Providing dry trap/ granite/quartzite/ gneiss, rubble stone soling etc.complete. | | | | | | |
| | Provision Made for trunk sewer along nallah | 1.00 | 1954.50 | 2.00 | 0.30 | 1172.70 | Cum |
| | | 1.00 | 1004.00 | 2.00 | 0.00 | 1112.10 | Carri |

| tem No | ITEM DESCRIPTION | No | L | В | D/H | Quantity | Unit |
|-----------|--|--------------|--------------|------|------|--------------|----------|
| 6 | Providing & filling in sand boxing in pipeline or foundation etc.complete. | | | | | | |
| | (As per Computer generated sheet) | | | | | 60.49 | Cum |
| 7 | Providing murum bedding in trenches with approved murum from excavated materials etc.n complete. | | | | | | |
| | (As per Computer generated sheet) | | | | | 730.11 | Cum |
| 8 | Lowering laying and jointing in proper grade and alignment R.C.C. pipes etc.complete | | | | | | |
| | 350 mm dia. | 1.00 | 429.00 | | | 429.00 | Rmt |
| | 450 mm dia. | 1.00 | 61.00 | | | 61.00 | Rmt |
| | 500 mm dia. | 1.00 | 1643.00 | | | 1643.00 | Rmt |
| | 1100 mm dia. | 1.00 | 1776.00 | | | 1776.00 | Rmt |
| 9 | Hydraulic testing of RCC pipe line to specified pressure including cost of all materials and labour and water for testing for specified length including cutting, placing end cap making arrangement for filling safe water using reciprocating type pumps which should be able to provide specified test pressure gauges and other necessary equipments, labour, operation charges, etc. required for testing. The rate under this item shall also include cost of retesting, if necessary and reinstating to original position. | | 2.40 | | | 0.40 | |
| | 350 mm dia. | 1.00 | 0.43 | | | 0.43 | KM |
| | 450 mm dia. | 1.00 | 0.06 | | | 0.06 | |
| | 500 mm dia. 1100 mm dia. | 1.00 1.00 | 1.64 1.78 | | | 1.64 1.78 | KM KM |
| | | | | | | | |
| 10 | Open timbering in trenches of depth more than 1.5 m for shoring and strutting etc. complete. | | | | | | |
| | Non Water Logged Area | | | | | | |
| | Lift 1.50 to 3.00 m. | 2.00 | 60.00 | | 1.50 | 180.00 | Sqm |
| | Water Logged Area Lift 1.50 to 3.00 m. | 2.00 | 40.00 | | 1.50 | 120.00 | Sqm |
| | | 2.00 | 10.00 | | 1.00 | 120.00 | - Oqini |
| 11 | Providing and laying in situ cement concrete 1:2:4 of trap/ granite / quartzite/ gneiss metal for foundation and bedding etc. complete. | | | | | | |
| | Provision of anchor block Made for trunk sewer along nallah | 200.00 | 2.00 | 2.00 | 0.60 | 480.00 | |

| | _ | | | | | | |
|----|--|--------|--------|------|------|----------|--------|
| | Deduct | 200.00 | 0.79 | 1.44 | 0.60 | 135.65 | |
| | Net Qty | | | | | 344.35 | Cum |
| | (As per Computer generated sheet) | | | | | 315.06 | Cum |
| | Total Qty | | | | | 659.42 | Cum |
| | | | | | | | |
| 12 | Dewatering the excavated trenches and pools of water in the pipeline trenches, etc.complete. | | | | | | |
| | For nalla / where water table high | 3.00 | 180.00 | 5.00 | 6.00 | 16200.00 | Bhp/hr |
| | 3 Fronts, 5 BHP Pump- 6Hrs- 180 Days | | | | | | |
| | | | | | | | |

| Item | | | _ | _ | | | |
|------|---|------|------|---|----------|----------|------|
| No | ITEM DESCRIPTION | Νο | L | В | D/H | Quantity | Unit |
| 13 | Providing and constructing on sewer, B.B. | | | | | | |
| | masonary circular manhole with concentric | | | | | | |
| | cone 1.5 M. dia. at bottom and 0.5 M. from | | | | | | |
| | top and up to depth of 5 m. with 23 cm thick | | | | | | |
| | brick work up to depth of 2 M from top and 35 | | | | | | |
| | cm thick brick work for remaining depth up to | | | | | | |
| | 5 M etc.complete Upto 2.50 m depth. | | | | | 2.00 | No. |
| | Upto 3.0 m depth. | | | | | 2.00 | No. |
| | Upto 3.5 m depth. | | | | | 6.00 | No. |
| | Upto 4.0 m depth. | | | | | 7.00 | No. |
| | Upto 4.5 m depth. | | | | | 5.00 | No. |
| | Upto 5.0 m depth. | | | | | 6.00 | No. |
| | (As per Computer generated sheet) | | | | | | - |
| | | | | | | | |
| 14 | Providing and constructing on sewer, B.B. | | | | | | |
| | masonary circular manhole with concentric | | | | | | |
| | cone 1.5 M. dia. at bottom and 0.5 M. from | | | | | | |
| | top and 35 cm thick brick work for depth of 2 | | | | | | |
| | M and 45 cm thick brick work for remaining | | | | | | |
| | depth up to 9 M in etc.complete | | | | | | |
| | Upto 5.5 m depth. | | | | | 4.00 | No. |
| | (As per Computer generated sheet) | | | | | | |
| 15 | Providing and fixing in position steel bar | | | | | | |
| 15 | reinforcement etc. complete | | | | | | |
| | Wt of Steel = 0.1% of Concrete Qty = | 0.66 | E101 | | | 5.18 | NAT |
| | | 0.66 | 5181 | | | 5.10 | MT |
| | | | | | | | |
| 16 | Refilling the trenches with available excavated stuff etc.complete. | | | | | | |
| | (As per Computer generated sheet) | | | | | 20003.47 | Cum |
| 17 | Dispossing of surplus excavated stuff from site of work up to a distance of 2Km etc.complete | | | | | | |
| | (As per Computer generated sheet) | | | | | 1734.15 | Cum |
| | | | | | | | |
| | | | | | | | |
| 18 | Providing, fixing and erecting RCC (M20) Vent shaft etc. complete | | | | | | |
| | | 1 | | | | 1 | No. |
| 40 | Chiffing of Hillitian All within the Electric | | | | | | |
| 19 | Shifting of Utilities: All utilities like Electric Poles, waterline & Communication line Shifting while Manhole and Line Laying etc., complete as per specifications and or as directed by engineer- in-charge. | | | | | | |
| | | | | | | 1.00 | 17 |
| | (As per Rate Analysis) | | | | | 1.00 | Km |
| 20 | Highway Crossing | | | | | | |
| | Pushing of M.S. pipe of following dia. For road | | | | | | |
| | crossing and railway crossing by push through | | | | | | |
| | metod in all types of strata by using hydraulic | | | | | | |
| | jack and drilling machine etc. complete | | | | | | |
| | | | | | | | |
| | MS Pipe 1500 mm (ID) 12 mm thick | 5 | 30 | | | 150 | Rmt |

Zone XII- Trunk Sewer Measurement

SOLAPUR MUNICIPAL CORPORATION MAHARASHTRA JEEVAN PRADHIKARAN DIVISION SOLAPUR SOLAPUR CITY UNDERGROUND SEWERAGE SCHEME (AMRUT) SUB ESTIMATE NO. :- TRUNK SEWER FOR ZONE XIII

(Underground Sewerage Network -1100 to 1200 mm dia RCC Pipes, L=3.709 Km)

ABSTRACT No.3C

| S. No | Quantity | ITEM DESCRIPTION | Rate | Unit | Amount Rs. |
|----------|----------|---|--------------|------|-------------|
| | | MATERIAL : | | | |
| 1 | | Providing ISI Standard RCC pipes in standard length of following class and diameter, suitable for either collor joints or rubber ring joints, including all taxes (central and local) inspection charges, transport to departmental store / site unloading and stacking etc.complete. | | | |
| | | Notes :- One rubber ring should be supplied with each full length of socketed pipe, cost included in the rates below. | | | |
| | | RCC NP 3 Class | | | |
| | 1786.00 | 1100 mm dia. | 6916.00 | Rmt | 12351976.00 |
| | 1593.00 | 1200 mm dia. | 7884.00 | Rmt | 12559212.00 |
| | | RCC NP 4 Class | | | |
| | 220.00 | 1100 mm dia. | 8463.00 | Rmt | 1861860.00 |
| | 110.00 | 1200 mm dia. | 8578.00 | Rmt | 943580.00 |
| | | (CSR 2016-17, P. 103,104, I. E, F) | | | |
| | | | laterial Cos | st | 27716628.00 |
| | | LABOUR : | | | |
| 1 | | Excavation for foundation / pipe trenches in earth, soils of all types , sand, gravel, and soft murum includng removing the excavated material up to a distance of 50 m. and lift as below, stacking and spreading as directed by the Engineer-in- charge, normal dewatering, preparing the bed for foundation and excluding back filling. etc.complete. | | | |
| | | Lift 0.0 -1.5 M. | | | |
| | | Basic Rate | | | |
| | | Add 10 % for M.C | 14.10 | | |
| | 13168.09 | Total | 155.10 | Cum | 2042370.76 |
| | | Lift 1.50 -3.0 M. | 450.00 | | |
| | | Basic Rate | | | |
| | 11666 17 | Add 10 % for M.C | 15.30 | Cum | 1062416 44 |
| | 11666.17 | Total (CSR 2016-17, P. 35 I. 1) | 168.30 | Cum | 1963416.41 |
| | | | | | |

| S. No | Quantity | ITEM DESCRIPTION | Rate | Unit | Amount Rs. |
|----------|-----------|---|--------|------|-------------|
| 2 | | Excavation for foundation / pipe trenches in hard murum & boulders, WBM road includng removing the excavated material up to a distance of 50 m. and lift as below, stacking and spreading as directed by the Engineer-in- charge, normal dewatering, preparing the bed for foundation and excluding back filling. etc.complete. | | | |
| | | Lift 0 -1.5 M. | | | |
| | | Basic Rate | 180.00 | | |
| | | Add 10 % for M.C | 18.00 | | |
| | 17551.97 | | 198.00 | Cum | 3475290.06 |
| | | Lift 0 -1.5 M. | | | |
| | | Basic Rate | | | |
| | | Add 10 % for M.C | 19.20 | | |
| | 7000.40 | Total | 211.20 | Cum | 1478484.48 |
| | | (CSR 2016-17, P. 35 I. 3) | | | |
| 3 | | Excavation for pipe trenches in soft rock and old | | | |
| | | cement and lime masonary foundation, ashphalt road includng removing the excavated material up to a distance of 50 m. and lift as below, stacking and spreading as directed by the Engineer-in- charge, normal dewatering, preparing the bed for foundation and excluding back filling. etc.complete. | | | |
| | | Lift 0 -1.5 M. | | | |
| | | Basic Rate | 443.00 | | |
| | | Add 10 % for M.C | 44.30 | | |
| | 2191.94 | Total | 487.30 | Cum | 1068132.36 |
| | | Lift 1.5 -3.0 M. | | | |
| | | Basic Rate | 463.00 | | |
| | 4 4000 00 | Add 10 % for M.C | 46.30 | 0 | 7400007.44 |
| | 14000.80 | Total | 509.30 | Cum | 7130607.44 |
| | | Lift 3.0 -4.5 M. Basic Rate | 483.00 | | |
| | | Add 10 % for M.C. | 48.30 | | |
| | 29735.00 | Total | 531.30 | Cum | 15798205.50 |
| | | Lift 4.5-6.0 M. | | | |
| | | Basic Rate | 503.00 | | |
| | | Add 10 % for M.C | 50.30 | | |
| | 13419.00 | Total | 553.30 | Cum | 7424732.70 |
| | | Lift 6.0-7.50 M. | | | |
| | | Basic Rate | 523.00 | | |
| | | Add 10 % for M.C | 52.30 | | |
| | 119.00 | Total | 575.30 | Cum | 68460.70 |
| | | (CSR 2016-17, P. 35 I. 5) | | | |
| | | | | | |
| | | | | | |

| S. No | Quantity | ITEM DESCRIPTION | Rate | Unit | Amount Rs. |
|----------|----------|---|--------|------|------------|
| 4 | | Excavation for pipe trenches in hard rock and concrete road, by chiselling, wedging, lime drilling by mechanical means or by all means other than blasting, including trimming and levelling the bed, removing the excavated material up to a distance of 50 m. and lift as below, stacking and spreading as directed by the Engineer-in- charge, normal dewatering, preparing the bed for foundation and excluding back filling. etc.complete. | | | |
| | | Lift 1.5 -3.0 M. | | | |
| | | Basic Rate | 751.00 | | |
| | | Add 10 % for M.C | 75.10 | | |
| | 2334.63 | Total | 826.10 | Cum | 1928637.84 |
| | 2001.00 | (CSR 2016-17, P. 36 I. 7) | 020.10 | Cum | 1020001.01 |
| 5 | | Providing dry trap/ granite/quartzite/ gneiss, rubble stone soling in 15 cm to 20 cm thick layers including hand packing and compacting etc.complete. | | | |
| | | Basic Rate | 912.00 | | |
| | | Add 5 % for M.C | 45.60 | | |
| | 2225.40 | Total | 957.60 | Cum | 2131043.04 |
| | | (CSR 2016-17, P. 39 I.18) | | | |
| 6 | | Providing & filling in sand boxing in pipeline or for foundation with sand of approved quality including watering and compaction etc.complete. | | | |
| | | Basic Rate | 931.00 | | |
| | | Add 5 % for M.C | 46.55 | | |
| | 25.33 | Total (CSR 2016-17, P. 39 I. 19) | 977.55 | Cum | 24761.34 |
| | | | | | |
| 7 | | Providing murum bedding in trenches with approved murum from excavated materials from foundation in 15 cm. to 20 cm. layers including watering & compaction complete. | | | |
| | | Basic Rate | 64.00 | | |
| | | Add 5 % for M.C | 3.20 | | |
| | 227.98 | Total (CSR 2016-17, P. 39, I. 16) | 67.20 | Cum | 15320.26 |
| | | | | | |

| S. No | Quantity | ITEM DESCRIPTION | Rate | Unit | Amount Rs. |
|----------|------------|--|----------|--------|------------|
| 8 | | Lowering laying and jointing in proper grade and alignment R.C.C. pipes with collar joints in CM 1:1 proportion or socketed R.C.C. pipes with rubbar joints (excluding cost of rubber ring or R.C.C. collor), including cost of conveyance from stores to site of works, cost of jointing material, labour, giving hydraulic testing, etc.complete as directed by Engineer-in-charge | | | |
| | | 1100 mm dia. | | | |
| | | Basic Rate | 532.00 | | |
| | | Add 5 % for M.C | 26.60 | | |
| | 2006.00 | Total | 558.60 | Rmt | 1120551.60 |
| | | 1200 mm dia. | | | |
| | | Basic Rate | | | |
| | | Add 5 % for M.C | 28.30 | | |
| | 1703.00 | Total | 594.30 | Rmt | 1012092.90 |
| | 0.1.100.00 | (CSR 2016-17, P. 105, I. 2) | | | |
| 9 | 24106.00 | Hydraulic testing of RCC pipe line to specified | | | |
| | | pressure including cost of all materials and labour and water for testing for specified length including cutting, placing end cap making arrangement for filling safe water using reciprocating type pumps which should be able to provide specified test pressure gauges and other necessary equipments, labour, operation charges, etc. required for testing. The rate under this item shall also include cost of retesting, if necessary and reinstating to original position. | | | |
| | | 1100 mm dia. | | | |
| | | Basic Rate | | | |
| | 0.04 | Add 5 % for M.C | 2950.00 | | 404074 70 |
| | 2.01 | Total | 61950.00 | Rmt | 124271.70 |
| | | 1200 mm dia. Basic Rate | 63000.00 | | |
| | | Add 5 % for M.C | 3150.00 | | |
| | 1.70 | Total | | Rmt | 112653.45 |
| | 1.70 | (CSR 2016-17, P. 105, I. 2) | 00100.00 | ixiiit | 112000.40 |
| | | | | | |
| 10 | | Open timbering in trenches of depth more than 1.5 m for shoring and strutting including use of and waste of all necessary timber works including walling, strutts, open polling boards/ horizontal sheeting, runners, etc. as may be necessary and fixing and removal complete. (Measurements to be taken of the face/area timbered) Non Water Logged Area | | | |

| S. No | Quantity | ITEM DESCRIPTION | Rate | Unit | Amount Rs. |
|----------|----------|---|---------|-------|------------|
| • | | Lift 1.50 to 3.00 m. | | | |
| | | Basic Rate | 240.00 | | |
| | | Add 5 % for M.C | 12.00 | | |
| | 3121.20 | Total | 252.00 | Sqm | 786542.40 |
| | | Water Logged Area | | | |
| | | Lift 1.50 to 3.00 m. | | | |
| | | Basic Rate | 239.00 | | |
| | | Add 5 % for M.C | 11.95 | | |
| | 2080.80 | Total | 250.95 | Sqm | 522176.76 |
| | | (CSR 2016-17, P. 39, I. 20a / b) | | | |
| 11 | | Providing and laying in situ cement concrete 1:2:4 of trap/ granite / quartzite/ gneiss metal for foundation and bedding including bailing out water manually, formwork, compacting and curring etc. complete. | | | |
| | | Basic Rate | 4233.00 | | |
| | | Add 5 % for M.C | 211.65 | | |
| | 759.53 | Total | 4444.65 | Cum | 3375837.75 |
| | | (CSR 2016-17, P. 43, I. 1b) | | | |
| 12 | | Dewatering the excavated trenches and pools of | | | |
| | | water in the pipeline trenches, well works by using pumps and other divices including disposing off water to safe distance as directed by Engineer-in- charge (including cost of machionary, labour,fuel) etc.complete. | | | |
| | | Basic Rate | 62.00 | | |
| | | Add 5 % for M.C | 3.10 | | |
| | 16200.00 | Total | 65.10 | HP/Hr | 1054620.00 |
| | | (CSR 2016-17, P. 38, I. 14) | | | |
| 13 | | Providing and constructing on sewer, B.B. masonary circular manhole with concentric cone 1.5 M. dia. at bottom and 0.5 M. from top and up to depth of 5 m. with 23 cm thick brick work up to depth of 2 M from top and 35 cm thick brick work for remaining depth up to 5 M in CM 1:4 proportion with 20 mm thick smooth plaster on both sides in CM 1:2 proportion excluding excavation including foundation concrete 250 mm thick and haunches and channels in C.C. 1:2:4 proportion, finishing channels in smooth rendering, providing C.I. dapuri type steps each weighing 5.5 Kg., 1:2:4 coping and providing and fixing approved make and quality S.F.R.C. frame and cover of 56 cm dia. etc.complete as directed by Engineer-in- charge. | | | |

| S. No | Quantity | ITEM DESCRIPTION | Rate | Unit | Amount Rs. |
|----------|----------|--|---------------------|------|------------|
| - | | Upto 3.50 m depth. | | | |
| | | Basic Rate | 39791.00 | | |
| | | Add 5 % for M.C | 1989.55 | | |
| | 1.00 | Total | 41780.55 | No. | 41780.55 |
| | | Upto 4.0 m depth. | | | |
| | | Basic Rate | | | |
| | | Add 5 % for M.C | 2284.05 | | |
| | 1.00 | Total | 47965.05 | No. | 47965.05 |
| | | Upto 4.5 m depth. | 54574.00 | | |
| | | Basic Rate | | | |
| | 4.00 | Add 5 % for M.C | 2578.55 | N L | 54440.55 |
| | 1.00 | Total | 54149.55 | No. | 54149.55 |
| | | Upto 5.0 m depth. | 57404.00 | | |
| | | Basic Rate Add 5 % for M.C | 57461.00 2873.05 | | |
| | 2 | | | No | 120669 10 |
| | ۷ | Total | 60334.05 | No. | 120668.10 |
| | | (CSR 2016-17, P. 273, I. 7) | | | |
| | | a) Rebate for every decrease in depth of 50 cm or | | | |
| | | part there of Rs.5890/-Add 5% for | | | |
| | | M.C=Rs.6184.50 | | | |
| | | M.O13.0104.00 | | | |
| 14 | | Providing and constructing on sewer, B.B. masonary circular manhole with concentric cone 1.5 M. dia. at bottom and 0.5 M. from top and 35 cm thick brick work for depth of 2 M and 45 cm thick brick work for remaining depth up to 9 M in CM 1:4 proportion with 20 mm thick smooth plaster on both sides in CM 1:2 proportion excluding excavation including foundation concrete 250 mm thick and haunches and channels in C.C. 1:2:4 proportion, finishing channels in smooth rendering, providing C.I. dapuri type steps each weighing 5.5 Kg., 1:2:4 coping and providing and fixing approved make and quality S.F.R.C. frame and cover of 56 cm dia. etc.complete as directed by Engineer-in-charge. | | | |
| | | 5.50 m depth. | | | |
| | | Basic Rate | | | |
| | | Add 5 % for M.C | 3591.15 | | |
| | 6.00 | | 75414.15 | No. | 452484.90 |
| | | 6.0 m depth. | | | |
| | | Basic Rate | | | |
| | | Add 5 % for M.C | 3961.65 | | |
| | 3.00 | Total | 83194.65 | No. | 249583.95 |
| | | (CSR 2016-17, P. 273, I. 8) | | | |
| | | a) Rebate for every decrease in depth of 50 cm or part there of Rs7410/-Add 5% for M.C | | | |
| | | | | | |

| UIEW |
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| |

| S. | | | | | |
|----|----------|---|----------|------|------------|
| No | Quantity | ITEM DESCRIPTION | Rate | Unit | Amount Rs. |
| 15 | | Providing and fixing in position steel bar reinforcement of various diameters for RCC piles, caps, footings, foundations, lintels, parodies, copings, fins, arches, etc. as per detailed designs, drawings and schedules; including cutting, bending, hooking the bars, binding with wires or tack welding and supporting as required, etc. complete. (including cost of binding wire). | | | |
| | | Tor Steel | | | |
| | | Basic Rate | | | |
| | E 07 | Add 5 % for M.C | | NAT | 226059.97 |
| | 5.97 | Total (CSR 2016-17, P. 46, I. 8b) | 54803.70 | MT | 326958.87 |
| | | | | | |
| | | | | | |
| 16 | | Refilling the trenches with available excavated stuff with soft material first over pipe line and then hard material in 15 cm layers with all leads and lifts including consolidation, surcharging, etc.complete. | | | |
| | | Basic Rate | 64.00 | | |
| | | Add 5 % for M.C | 3.20 | | |
| | 38648.24 | Total (CSR 2016-17, P. 38, I.15) | 67.20 | Cum | 2597162.02 |
| 17 | | Dispossing of surplus excavated stuff from site of work up to a distance of 2 Km.including, loading, unloading, transportation etc.complete or as directed by the Engineering- in- charge. | | | |
| | | (CSR 2015-16, P. 22, Statement VI) | | | |
| | 3374.54 | Basic Rate | 195.62 | Cum | 660127.51 |
| | | | | | |

| S. No | Quantity | ITEM DESCRIPTION | Rate | Unit | Amount Rs. |
|----------|----------|---|-------------|-----------------|-----------------------|
| 18 | | Providing, fixing and erecting RCC (M20) Vent | | | |
| | | shaft with cowl, 125mm x 225mm internal and | | | |
| | | external dia respectively at top, 300mm and | | | |
| | | 450mm internal and external dia at bottom and | | | |
| | | 9.10m over all length, bottom 1.25m below ground level fixed in the pit 900mmx900mmx1500mm with | | | |
| | | PCC M15, 250mm in bed and 200mm around with | | | |
| | | top 150mm in cement concrete 1:2:4 (1 cement 2 | | | |
| | | coarse sand and 4 graded stone aggregate of | | | |
| | | 20mm nominal size) junction of vent shaft and concrete grouted with cement mortar 1:2 (1 | | | |
| | | cement and 2 fine sand) including making | | | |
| | | connection with sewer manhole with 150 mm dia | | | |
| | | NP4 RCC pipe (IS 458- ammended upto date) for | | | |
| | | 5.0 m length including Murum bedding complete and as per standard design and finished with | | | |
| | | water proofing cement of approved brand of | | | |
| | | required shade as per drawings and/or as directed | | | |
| | | by Engineer.Providing and fixing RCC ventilation | | | |
| | | shaft, making connection to manhole etc. complete as directed by EIC. | | | |
| | | complete as directed by LIC. | | | |
| | 4.00 | | 18432.00 | No. | 73728.00 |
| | 4.00 | (As per Rate Analysis) | 10452.00 | INU. | 13120.00 |
| | | | | | |
| 19 | | Highway Crossing | | | |
| | | Pushing of M.S. pipe of following dia. For road crossing and railway crossing by push through | | | |
| | | metod in all types of strata by using hydraulic jack | | | |
| | | and drilling machine of required diameter of below | | | |
| | | MS casing pipes, loweing, laying & jointing of | | | |
| | | material, required welding machinery, tripod, | | | |
| | | chain pully block , crain , blower, compressor, loading & unloading of machinery into the trench , | | | |
| | | etc. transportation and dewatering , etc. complete | | | |
| | | as directed by Engineer-in-charge but excluding | | | |
| | | the cost of MS pipes500 to 1000 mm dia. MS | | | |
| | | Pipe | | | |
| | | Basic Rate | 28476.00 | | |
| | | Add 5 % for M.C | | | |
| | 90.00 | Total | | Rmt | 2690982.00 |
| | | (CSR 2016-17, P. 58, I. 14b) | | | |
| | 90.00 | MS Pipe 1500 mm (ID) 12 mm thick Basic Rate | 23550.00 | Rmt | 2119500.00 |
| | 90.00 | (CSR 2016-17, P.197, I.2AA) | 23330.00 | IXIII | 2119300.00 |
| | | | 62093299.96 | | |
| | | Total Material | | | |
| | | | | iy Rs. | 89809928.00 898.10 |
| | | | | Lakhs Crores | 8.98 |
| L | | | 2.0.00 | | |

SOLAPUR MUNICIPAL CORPORATION MAHARASHTRA JEEVAN PRADHIKARAN DIVISION SOLAPUR SOLAPUR CITY UNDERGROUND SEWERAGE SCHEME (AMRUT) SUB ESTIMATE NO. :- TRUNK SEWER FOR ZONE XIII

(Underground Sewerage Network -1100 to 1200 mm dia RCC Pipes, L=3.709 Km)

MEAGUDEMENT No 20

| | MEASUREMENT No.3C | | | | | | | | | | |
|------------|--|----------|-----------|---------|---------|----------------------|--------------------|--|--|--|--|
| ltem No | ITEM DESCRIPTION | No | L | В | D/H | Quantity | Unit | | | | |
| | MATERIAL : | | | | | | | | | | |
| 1 | Providing ISI Standard RCC pipes in standard length of following class and diameter, etc.complete. | | | | | | | | | | |
| | RCC NP 3 Class | | | | | | | | | | |
| | 1100 mm dia. | 1.00 | 1786.00 | | | 1786.00 | Rmt | | | | |
| | 1200 mm dia. | 1.00 | 1593.00 | | | 1593.00 | Rmt | | | | |
| | RCC NP 4 Class | | | | | | | | | | |
| | 1100 mm dia. | 1.00 | 220.00 | | | 220.00 | Rmt | | | | |
| | 1200 mm dia. | 1.00 | 110.00 | | | 110.00 | Rmt | | | | |
| | LABOUR : | | | | | | | | | | |
| | EXCAVATION DETAILS -From computer generated design sheet | | | | | | | | | | |
| | 0-1.5 | 1.5-3.0 | 3.0 - 4.5 | 4.5-6.0 | 6.0-7.5 | TOTAL | | | | | |
| | 21941.07 | 23334.59 | 19823.36 | 8945.77 | 79.22 | 74124.01 | Cum | | | | |
| | 10970.54 | 11667.30 | 9911.68 | 4472.88 | 39.61 | 37062.01 | Cum | | | | |
| | 32912.00 | 35002.00 | 29735.00 | 13419.0 | 119.00 | 111186.00 | Cum | | | | |
| | | | | | | | | | | | |
| 1 | Excavation for foundation / pipe trenches in earth, soils of all types , sand, gravel, and soft murum etc.complete. | | | | | | | | | | |
| | Lift 0.0 -1.5 M. | | | | | 13168.09 | Cum | | | | |
| | Lift 1.5-3.0 M. | | | | | 11666.17 | Cum | | | | |
| | | | | | | | 0 0 | | | | |
| 2 | Excavation for foundation / pipe trenches in hard murum & boulders , WBM road etc.complete. | | | | | | | | | | |
| | Lift 0.0 -1.5 M. | | | | | 17551.97 | Cum | | | | |
| | Lift 1.5-3.0 M. | | | | | 7000.40 | Cum | | | | |
| 3 | Excavation for pipe trenches in soft rock and old cement and lime masonary foundation, ashphalt road etc.complete. | | | | | | | | | | |
| | Lift 0.0-1.50 M. | | | | | 2191.94 | Cum | | | | |
| | Lift 1.5-3.0 M. | | | | | 14000.80 | Cum | | | | |
| | Lift 3.0-4.5 M. | | | | | 29735.00 | Cum | | | | |
| | Lift 4.5-6.0 M. | | | | | 13419.00 | Cum | | | | |
| | Lift 6.0-7.5 M. | | | | | 119.00 | Cum | | | | |
| | | | | | | 7 | mli Ca | | | | |
| | <u> </u> | 182 | | | | Zone XIII-Tru Mea | nk Sewe suremen | | | | |
| | | | | | | ivied | ושווכו | | | | |

Measurement

| Cum |
|-----|
| Cum |
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| |
| Cum |
| |
| Cum |
| |
| Rmt |
| Rmt |
| |
| KM |
| KM |
| |

| 10 | | | L | В | D/H | Quantity | Unit |
|----|---|--------|---------|------|------|----------|-------|
| | Open timbering in trenches of depth more than 1.5 m for shoring and strutting etc. complete. | | | | | | |
| | Non Water Logged Area | | | | | | |
| | Lift 1.50 to 3.00 m. | 2.00 | 1040.40 | | 1.50 | 3121.20 | Sqm |
| | Water Logged Area | | | | | | |
| | Lift 1.50 to 3.00 m. | 2.00 | 693.60 | | 1.50 | 2080.80 | Sqm |
| 11 | Providing and laying in situ cement concrete 1:2:4 of trap/ granite / quartzite/ gneiss metal for foundation and bedding etc. complete. | | | | | | |
| | Provision of anchor block Made for trunk sewer along nallah | 250.00 | 2.00 | 2.00 | 0.60 | 600.00 | |
| | Deduct | 250.00 | 0.79 | 1.69 | 0.60 | 199.00 | |
| | Net Qty | | | | | 401.00 | Cum |
| | (As per Computer generated sheet) | | | | | 358.53 | Cum |
| | Total Qty | | | | | 759.53 | Cum |
| 12 | Dewatering the excavated trenches and pools of water in the pipeline trenches, etc.complete. | | | | | | |
| | For nalla / where water table high | 3.00 | 180.00 | 5.00 | 6.00 | 16200.00 | Bhp/h |
| | 1 Fronts, 5 BHP Pump- 6Hrs- 180 Days | | | | | | |
| 13 | Providing and constructing on sewer, B.B. masonary circular manhole with concentric cone 1.5 M. dia. at bottom and 0.5 M. from top and up to depth of 5 m. with 23 cm thick brick work up to depth of 2 M from top and 35 cm thick brick work for remaining depth up to 5 M etc.complete | | | | | | |
| | Upto 3.5 m depth. | | | | | 1.00 | No. |
| | Upto 4.0 m depth. | | | | | 1.00 | No. |
| | Upto 4.5 m depth. | | | | | 1.00 | No. |
| | Upto 5.0 m depth. | | | | | 2.00 | No. |
| | (As per Computer generated sheet) | | | | | | |
| 14 | Providing and constructing on sewer, B.B. masonary circular manhole with concentric cone 1.5 M. dia. at bottom and 0.5 M. from top and 35 cm thick brick work for depth of 2 M and 45 cm thick brick work for remaining depth up to 9 M in etc.complete | | | | | | |
| | Upto 5.5 m depth. | | | | | 6.00 | No. |

| ltem No | ITEM DESCRIPTION | No | L | В | D/H | Quantity | Unit |
|------------|---|------|------|---|-----|----------|------|
| | Upto 6.0 m depth. | | | | | 3.00 | No. |
| | (As per Computer generated sheet) | | | | | | |
| 15 | Providing and fixing in position steel bar reinforcement etc. complete | | | | | | |
| | Wt of Steel = 0.1% of Concrete Qty = | 0.76 | 5966 | | | 5.97 | MT |
| 16 | Refilling the trenches with available excavated stuff etc.complete. | | | | | | |
| | (As per Computer generated sheet) | | | | | 38648.24 | Cun |
| 17 | Dispossing of surplus excavated stuff from site of work up to a distance of 2Km etc.complete | | | | | | |
| | (As per Computer generated sheet) | | | | | 3374.54 | Cur |
| 18 | Providing, fixing and erecting RCC (M20) Vent shaft etc. complete | | | | | | |
| | | 4 | | | | 4 | No |
| 19 | Highway Crossing | | | | | | |
| | Pushing of M.S. pipe of following dia. For road crossing and railway crossing by push through metod in all types of strata by using hydraulic jack and drilling machine etc. complete | | | | | | |
| | MS Pipe 1500 mm (ID) 12 mm thick | 3 | 30 | | | 90 | Rm |

| | | SOLAPUR MUNICIPAL CORPORATION | | | |
|-------|----------|--|-----------------|------|------------|
| | | MAHARASHTRA JEEVAN PRADHIKARAN DIVISION S | OLAPUR | | |
| | | SOLAPUR CITY UNDERGROUND SEWERAGE SCHEME | | | |
| | | SUB ESTIMATE NO. :- SEWERAGE SYSTEM FOR | | | |
| | | (Underground Sewerage Network -250 to 300 mm dia RCC Pip ABSTRACT No.4A | bes L=2.95 | ۲m) | |
| | | | | | |
| S.No. | Quantity | ITEM DESCRIPTION | Rate | Unit | Amount Rs. |
| | | MATERIAL : | | | |
| 1 | | Providing ISI Standard RCC pipes in standard length of | | | |
| | | following class and diameter, suitable for either collor joints or | | | |
| | | rubber ring joints, including all taxes (central and local) | | | |
| | | inspection charges, transport to departmental store / site unloading and stacking etc.complete. | | | |
| | | Notes :- One rubber ring should be supplied with each full | | | |
| | | length of socketed pipe, cost included in the rates below. | | | |
| | | RCC NP 3 Class | | | |
| | 1177.00 | | 757.00 | Dmt | 800080.00 |
| | 1177.00 | 300 mm dia. RCC NP 4 Class | 757.00 | Rmt | 890989.00 |
| | 884.00 | 300 mm dia. | 945.00 | Rmt | 835380.00 |
| | | (CSR 2016-17, P. 103,104, I. E, F) | 0.000 | | |
| | | | | | |
| 2 | | Providing and supplying in standard lengths Polyethelene (PE) | | | |
| | | Pipes for non pressure underground drainage and sewerage | | | |
| | | with smooth internal and corrugated (profiled) external surface | | | |
| | | with anti rodent property conforming to ISO-21138-3:2007 with necessary jointing material like mechanical connectors, i.e. | | | |
| | | thread/ insert joint/quick release coupler joint/ compression | | | |
| | | fitting joint or flanged joint, including all taxes (Central and | | | |
| | | local), transportation and freight charges, inspection charges, | | | |
| | | loading/ unloading charges, conveyance to the departmental | | | |
| | | stores/site and stacking the same in closed shade duly | | | |
| | | protecting from sunrays and rains, etc. complete. | | | |
| | | | | | |
| | | H.D.P.E. DWC pipes for Drainage Class SN 8 | | | |
| | 892.00 | 250 mm dia.(ID) | 1007.00 | Rmt | 898244.00 |
| | | (CSR 2016-17, P. 132,133 I. 2) | | | |
| | | | Material C | ost | 2624613.00 |
| | | LABOUR : | | | 2024010100 |
| 1 | | Excavation for foundation / pipe trenches in earth, soils of all | | | |
| | | types, sand, gravel, and soft murum includng removing the | | | |
| | | excavated material up to a distance of 50 m. and lift as below, | | | |
| | | stacking and spreading as directed by the Engineer-in- | | | |
| | | charge, normal dewatering, preparing the bed for foundation and excluding back filling. etc.complete. | | | |
| | | | | | |
| | ļ | Lift 0.0 -1.5 M. | | | |
| | | Basic Rate | | | |
| | | Add 10 % for M.C Total | 14.10 | | 110051 5 |
| | 1 015 00 | ISIO | 155.10 | Cum | 142054.54 |
| | 915.89 | | | | |
| | 915.89 | (CSR 2016-17, P. 35 I. 1) | | | |
| 2 | 915.89 | | | | |
| 2 | 915.89 | (CSR 2016-17, P. 35 I. 1) Excavation for foundation / pipe trenches in hard murum & boulders , WBM road includng removing the excavated | | | |
| 2 | 915.89 | (CSR 2016-17, P. 35 I. 1) Excavation for foundation / pipe trenches in hard murum & boulders , WBM road includng removing the excavated material up to a distance of 50 m. and lift as below, stacking | | | |
| 2 | 915.89 | (CSR 2016-17, P. 35 I. 1) Excavation for foundation / pipe trenches in hard murum & boulders, WBM road includng removing the excavated material up to a distance of 50 m. and lift as below, stacking and spreading as directed by the Engineer-in- charge, normal | | | |
| 2 | 915.89 | (CSR 2016-17, P. 35 I. 1) Excavation for foundation / pipe trenches in hard murum & boulders , WBM road includng removing the excavated material up to a distance of 50 m. and lift as below, stacking and spreading as directed by the Engineer-in- charge, normal dewatering, preparing the bed for foundation and excluding | | | |
| 2 | 915.89 | (CSR 2016-17, P. 35 I. 1) Excavation for foundation / pipe trenches in hard murum & boulders , WBM road includng removing the excavated material up to a distance of 50 m. and lift as below, stacking and spreading as directed by the Engineer-in- charge, normal dewatering, preparing the bed for foundation and excluding back filling. etc.complete. | | | |
| 2 | 915.89 | (CSR 2016-17, P. 35 I. 1) Excavation for foundation / pipe trenches in hard murum & boulders , WBM road includng removing the excavated material up to a distance of 50 m. and lift as below, stacking and spreading as directed by the Engineer-in- charge, normal dewatering, preparing the bed for foundation and excluding back filling. etc.complete. Lift 0 -1.5 M. | | | |
| 2 | 915.89 | (CSR 2016-17, P. 35 I. 1) Excavation for foundation / pipe trenches in hard murum & boulders , WBM road includng removing the excavated material up to a distance of 50 m. and lift as below, stacking and spreading as directed by the Engineer-in- charge, normal dewatering, preparing the bed for foundation and excluding back filling. etc.complete. Lift 0 -1.5 M. Basic Rate | 180.00 | | |
| 2 | 915.89 | (CSR 2016-17, P. 35 I. 1) Excavation for foundation / pipe trenches in hard murum & boulders , WBM road includng removing the excavated material up to a distance of 50 m. and lift as below, stacking and spreading as directed by the Engineer-in- charge, normal dewatering, preparing the bed for foundation and excluding back filling. etc.complete. Lift 0 -1.5 M. Basic Rate Add 10 % for M.C | 180.00 18.00 | Cum | 263872.62 |

| S.No. | Quantity | ITEM DESCRIPTION | Rate | Unit | Amount Rs. |
|-------|----------|---|--------|-------|------------|
| 3 | | Excavation for pipe trenches in soft rock and old cement and lime masonary foundation, ashphalt road includng removing the excavated material up to a distance of 50 m. and lift as below, stacking and spreading as directed by the Engineer-in- charge, normal dewatering, preparing the bed for foundation | | | |
| | | and excluding back filling. etc.complete. Lift 0 -1.5 M. | | | |
| | | Basic Rate | 443.00 | | |
| | | Add 10 % for M.C. | 44.30 | | |
| | 2942.53 | | 487.30 | Cum | 1433894.87 |
| | | Lift 1.5 -3.0 M. | | | |
| | | Basic Rate | 463.00 | | |
| | | Add 10 % for M.C | 46.30 | - | |
| | 1886.75 | | 509.30 | Cum | 960921.78 |
| | | (CSR 2016-17, P. 35 I. 5) | | | |
| 4 | | Excavation for pipe trenches in hard rock and concrete road, by chiselling, wedging, lime drilling by mechanical means or by all means other than blasting, including trimming and levelling the bed, removing the excavated material up to a distance of 50 m. and lift as below, stacking and spreading as directed by the Engineer-in- charge, normal dewatering, preparing the bed for foundation and excluding back filling. etc.complete. | | | |
| | | Lift 0-1.50 M. | | | |
| | | Basic Rate | 751.00 | | |
| | | Add 10 % for M.C. | 75.10 | | |
| | 221.93 | | 826.10 | Cum | 183336.37 |
| | | Lift 1.5 -3.0 M. | | | |
| | | Basic Rate | 771.00 | | |
| | 2200.00 | Add 10 % for M.C | 77.10 | Curre | 2057000.04 |
| | 3368.82 | Total Lift 3.0 -4.5 M. | 848.10 | Cum | 2857096.24 |
| | | Basic Rate | 791.00 | | |
| | | Add 10 % for M.C. | 79.10 | | |
| | 1541.72 | | 870.10 | Cum | 1341450.51 |
| | | Lift 4.5-6.0 M. | 0.0.10 | | |
| | | Basic Rate | 811.00 | | |
| | | Add 10 % for M.C | 81.10 | | |
| | 68.33 | Total | 892.10 | Cum | 60958.51 |
| | | (CSR 2016-17, P. 36 I. 7) | | | |
| 5 | | Providing dry trap/ granite/quartzite/ gneiss, rubble stone soling in 15 cm to 20 cm thick layers including hand packing and compacting etc.complete. | | | |
| | | Basic Rate | 912.00 | | |
| | | Add 5 % for M.C | 45.60 | | |
| | 192.00 | | 957.60 | Cum | 183859.20 |
| | | (CSR 2016-17, P. 39 I.18) | | | |
| | | (CSR 2016-17, P. 39 I. 19) | | | |
| 6 | | Providing murum bedding in trenches with approved murum from excavated materials from foundation in 15 cm. to 20 cm. layers including watering & compaction complete. | | | |
| | | Basic Rate | 64.00 | | |
| | | Add 5 % for M.C. | 3.20 | | |
| | 505.77 | Total | 67.20 | Cum | 33987.74 |
| | | (CSR 2016-17, P. 39, I. 16) | | | |

| S.No. | Quantity | ITEM DESCRIPTION | Rate | Unit | Amount Rs. |
|-------|----------|--|----------|-------|------------|
| 7 | | Lowering laying and jointing in proper grade and alignment R.C.C. pipes with collar joints in CM 1:1 proportion or socketed R.C.C. pipes with rubbar joints (excluding cost of rubber ring or R.C.C. collor), including cost of conveyance from stores to site of works, cost of jointing material, labour, giving hydraulic testing, etc.complete as directed by Engineer-in-charge | | | |
| | | 300 mm dia. | | | |
| | | Basic Rate | 115.00 | | |
| | | Add 5 % for M.C. | 5.75 | | |
| | 2061.00 | | 120.75 | Rmt | 248865.75 |
| | | (CSR 2016-17, P. 105, I. 2) | | | |
| 8 | | Hydraulic testing of RCC pipe line to specified pressure including cost of all materials and labour and water for testing for specified length including cutting, placing end cap making arrangement for filling safe water using reciprocating type pumps which should be able to provide specified test pressure gauges and other necessary equipments, labour, operation charges, etc. required for testing. The rate under this item shall also include cost of retesting, if necessary and reinstating to original position. New item to be added | | | |
| | | 300 mm dia. | 10000.00 | | |
| | | Basic Rate Add 5 % for M.C | | | |
| | 2.06 | | 13650.00 | Km | 28132.65 |
| | 2.00 | (CSR 2016-17, P. 105, I. 2) | 10000.00 | IXIII | 20102.00 |
| | | | | | |
| 9 | | Lowering, laying and jointing H.D.P.E. Double Wall Corrugated Pipes for nonpressure Underground drainage and Sewerage applications and specials offollowing class and diameter includingcost of conveyance from stores to site of works including cost of all labour,material except O ring coupler giving satisfactory hydraulic testing as per relevent ISO, etc. complete | | | |
| | | H.D.P.E. DWC pipes for Drainage CLASS SN 8 | | | |
| | | 250 mm dia.(ID) Basic Rate | 47.00 | | |
| | | Add 5 % for M.C | 2.35 | | |
| | 892.00 | | | Rmt | 44020.20 |
| | | (CSR 2016-17, P. 134, I. 4) | | | |
| 10 | | Hydraulic testing of HDPE double wall corrugated pipe for non pressure underground line to specified pressure including cost of all materials and labour and water for testing for specified length including cutting, placing end cap making arrangement for filling safe water using reciprocating type pumps which should be able to provide specified test pressure gauges and other necessary equipments, labour, operation charges, etc. required for testing. The rate under this item shall also include cost of retesting, if necessary and reinstating to original position., etc. complete | | | |
| | | H.D.P.E. DWC pipes for Drainage CLASS SN 8 | | | |
| | | 250 mm dia.(ID) | | | |
| | ļ | Basic Rate | | | |
| | 0.00 | Add 5 % for M.C | 250.00 | 1/ | 4000.00 |
| | 0.89 | Total (CSR 2016-17, P. , I. 6) | 5250.00 | Km | 4683.00 |
| | | | | | |
| | | (CSR 2016-17, P. 39, I. 20a / b) | | | |
| | | | | | |

| S.No. | Quantity | ITEM DESCRIPTION | Rate | Unit | Amount Rs. |
|-------|----------|---|----------|-------|------------|
| 11 | | Providing and laying in situ cement concrete 1:2:4 of trap/ | | | |
| •• | | granite / quartzite/ gneiss metal for foundation and bedding | | | |
| | | including bailing out water manually, formwork, compacting | | | |
| | | and curring etc. complete. | | | |
| | | Basic Rate | 4233.00 | | |
| | | Add 5 % for M.C. | 211.65 | | |
| | 63.60 | Total | 4444.65 | Cum | 282682.12 |
| | | (CSR 2016-17, P. 43, I. 1b) | | | |
| 12 | | Dewatering the excavated trenches and pools of water in the | | | |
| | | pipeline trenches, well works by using pumps and other | | | |
| | | divices including disposing off water to safe distance as | | | |
| | | directed by Engineer-in- charge (including cost of machionary, | | | |
| | | labour,fuel) etc.complete. | | | |
| | | Basic Rate | 62.00 | | |
| | | Add 5 % for M.C. | 3.10 | | |
| | 21000.00 | Total | 65.10 | HP/Hr | 1367100.00 |
| | | (CSR 2016-17, P. 38, I. 14) | | | |
| | | | | | |
| 13 | | Providing and constructing on sewer, B.B. masonary circular | | | |
| | | manhole with concentric cone 1.2 M. dia. at bottom and 0.5 | | | |
| | | M. from top and up to depth of 2 m. with 23 cm thick brick | | | |
| | | work up to depth of 2 M in CM 1:4 proportion with 20 mm | | | |
| | | thick smooth plaster on both sides in CM 1:2 proportion | | | |
| | | excluding excavation including foundation concrete 250 mm | | | |
| | | thick and haunches and channels in C.C. 1:2:4 proportion, finishing channels in smooth rendering, providing C.I. dapuri | | | |
| | | type steps each weighing 5.5 Kg., 1:2:4 coping and providing | | | |
| | | and fixing approved make and quality S.F.R.C. frame and | | | |
| | | cover of 56 cm dia. etc.complete as directed by Engineer-in- | | | |
| | | charge. | | | |
| | | Upto 1.50 m depth. | | | |
| | | Basic Rate | 17299.00 | | |
| | | Add 5 % for M.C | 864.95 | | |
| | 3.00 | Total | 18163.95 | No. | 54491.85 |
| | | Upto 2 m depth. | | | |
| | | Basic Rate | | | |
| | | Add 5 % for M.C. | 1007.40 | | |
| | 7.00 | | 21155.40 | No. | 148087.80 |
| | | (CSR 2016-17, P. 272, I. 6) | | | |
| | | a) Rebate for every decrease in depth of 50 cm or part there of Rs.2849/-Add 5% for M.C=Rs.2991.45 | | | |
| | İ | | | | |

| S.No. | Quantity | ITEM DESCRIPTION | Rate | Unit | Amount Rs. |
|-------|----------|---|---------------------|------|------------|
| 14 | | Providing and constructing on sewer, B.B. masonary circular manhole with concentric cone 1.5 M. dia. at bottom and 0.5 M. from top and up to depth of 5 m. with 23 cm thick brick work up to depth of 2 M from top and 35 cm thick brick work for remaining depth up to 5 M in CM 1:4 proportion with 20 mm thick smooth plaster on both sides in CM 1:2 proportion excluding excavation including foundation concrete 250 mm thick and haunches and channels in C.C. 1:2:4 proportion, finishing channels in smooth rendering, providing C.I. dapuri type steps each weighing 5.5 Kg., 1:2:4 coping and providing and fixing approved make and quality S.F.R.C. frame and cover of 56 cm dia. etc.complete as directed by Engineer-incharge. | | | |
| | | Upto 2.5 m depth. | | | |
| | | Basic Rate | | | |
| | | Add 5 % for M.C. | | | |
| | 13.00 | | 29411.55 | No. | 382350.15 |
| | | Upto 3.0 m depth. Basic Rate | 33901.00 | | |
| | | Add 5 % for M.C | | | |
| | 12.00 | | 35596.05 | No. | 427152.60 |
| | | Upto 3.50 m depth. | | | |
| | | Basic Rate | | | |
| | 04.00 | Add 5 % for M.C | | NI- | 4005407.05 |
| | 31.00 | Upto 4.0 m depth. | 41780.55 | No. | 1295197.05 |
| | | Basic Rate | 45681.00 | | |
| | | Add 5 % for M.C | | | |
| | 25.00 | | 47965.05 | No. | 1199126.25 |
| | | Upto 4.5 m depth. | | | |
| | | Basic Rate | | | |
| | 9.00 | Add 5 % for M.C | 2578.55 54149.55 | No. | 487345.95 |
| | 9.00 | Upto 5.0 m depth. | 54149.55 | INU. | 407 345.95 |
| | | Basic Rate | 57461.00 | | |
| | | Add 5 % for M.C. | 2873.05 | | |
| | 1.00 | Total | 60334.05 | No. | 60334.05 |
| | | (CSR 2016-17, P. 273, I. 7) | | | |
| | | a) Rebate for every decrease in depth of 50 cm or part there of Rs.5890/-Add 5% for M.C=Rs.6184.50 | | | |
| 15 | | Providing and constructing on sewer, B.B. masonary circular manhole with concentric cone 1.5 M. dia. at bottom and 0.5 M. from top and 35 cm thick brick work for depth of 2 M and 45 cm thick brick work for remaining depth up to 9 M in CM 1:4 proportion with 20 mm thick smooth plaster on both sides in CM 1:2 proportion excluding excavation including foundation concrete 250 mm thick and haunches and channels in C.C. 1:2:4 proportion, finishing channels in smooth rendering, providing C.I. dapuri type steps each weighing 5.5 Kg., 1:2:4 coping and providing and fixing approved make and quality S.F.R.C. frame and cover of 56 cm dia. etc.complete as directed by Engineer-in-charge. | | | |
| | | 5.50 m depth. | | | |
| | | Basic Rate | 71823.00 | | |
| | | Add 5 % for M.C. | | | |
| | 2.00 | Total | 75414.15 | No. | 150828.30 |
| | | (CSR 2016-17, P. 273, I. 8) a) Rebate for every decrease in depth of 50 cm or part there of Rs7410/-Add 5% for M.C .=Rs.7780.50 | | | |
| | | | | | |

| S.No. | Quantity | ITEM DESCRIPTION | Rate | Unit | Amount Rs. |
|-------|----------|--|----------|------|------------|
| 16 | | Providing and fixing in position steel bar reinforcement of various diameters for RCC piles, caps, footings, foundations, lintels, parodies, copings, fins, arches, etc. as per detailed designs, drawings and schedules; including cutting, bending, hooking the bars, binding with wires or tack welding and supporting as required, etc. complete. | | | |
| | | (including cost of binding wire). | | | |
| | | Tor Steel | | | |
| | | Basic Rate | | | |
| | 0.47 | Add 5 % for M.C | | NAT | |
| | 0.47 | (CSR 2016-17, P. 46, I. 8b) | 54803.70 | MT | 25812.54 |
| 17 | | Refilling the trenches with available excavated stuff with soft material first over pipe line and then hard material in 15 cm | | | |
| | | layers with all leads and lifts including consolidation, surcharging, etc.complete. | | | |
| | | Basic Rate | 64.00 | | |
| | | Add 5 % for M.C | 3.20 | | |
| | 10160.11 | | 67.20 | Cum | 682759.43 |
| | | (CSR 2016-17, P. 38, I.15) | | | |
| 18 | | Dispossing of surplus excavated stuff from site of work up to a distance of 2 Km.including, loading, unloading, transportation etc.complete or as directed by the Engineering- in- charge. | | | |
| | | (CSR 2015-16, P. 22, Statement VI) | | | |
| | 1612.79 | | 195.62 | Cum | 315494.52 |
| 19 | | WBM Road restoration: Reinstating the road surface with supplying & spreading 60mm metal of 20 cm thick with Hard murum & 40mm metal of 15 cm thick with Soft murum as a blindage, above WBM surfaceFor all the above layers watering & compacting with Power roller, including Excavation of required depth for road reinstating or as directed by Engineer-in-charge etc. complete. | | | |
| | 2635.50 | (As per Rate Analysis) | 208.74 | Sqm | 550134.27 |
| 20 | | Asphalt Road restoration: Reinstatement of road by excavating the potholes in rectangular shape and filling of potholes by one layers of one layer of 80 mm trap metal of 200 mm thick, one layer of 40 mm trap metal of 100 mm thick including supplying and spreading of stone dust/murrum of 100 mm thick, watering compaction and 75 mm thick bituminous bound macadam with cold emulsion 60/70 grade and bituminous macadam of 50 mm thick with bitumen of S-65 grade and 20 mm thick asphalt concrete with S-35 grade of bitumen including compaction by vibratory roller of all layers and providing and applying tack coat of 50 Kg / 100 m2 on black top surface and seal coat of 1kg/sqm. B.B.M. surface and disposal of surplus soil etc., complete. for pipeline trenches of various diameter etc., complete as per specifications and or as directed by engineer- in-charge. | | | |
| | 1933.00 | (As per Rate Analysis) | 873.47 | Sqm | 1688417.51 |
| | 1000.00 | | 5, 5, 7, | Squi | 1000 11.01 |

| S.No. | Quantity | ITEM DESCRIPTION | Rate | Unit | Amount Rs. |
|---------|----------|--|-------------------|------|------------|
| 21 | | Concrete Road restoration :Reinstatement of Concrete road by excavating the concrete panels in rectangular shape and filling the trench with one layer of natural sand of 300 mm thick , one layer of M20 grade PCC of 150 mm thick and one layer | | | |
| | | of PCC M30 grade of 300 mm thick including dewatering etc., complete. for pipeline trenches of various diameter etc., complete as per specifications and or as directed by engineer- in-charge. | | | |
| | | Item No. 25a Providing and filling in the foundation with sand of ap-proved quality including watering, compaction complete. Spec. No.: Bd.A.13 Page No. 264 | | | |
| | | PWD DSR 17-18, Item No. 12 / 1 BDA 13, Pg-17 | | | |
| | | Basic Rate | 451.00 | | |
| | 07.00 | Add 5% for M.C | 22.55 | 0 | 44577.00 |
| | 87.80 | Total | 473.55 | Cum | 41577.69 |
| | | Item No. 25b Providing and casting in situ cement concrete M- 15 of trap / granite / quartzite / gneiss metal for steps including centering, formwork, compacting, roughening them if special finish is to be provided and curing and finishing if required complete, with fully automatic micro processor based PLC with SCADA enabled reversible Drum Type mixer With natural sand. Spec. No.: Bd.E.2 Page No. 288 and B.7 Page No 38 | | | |
| | | | | | |
| | | PWD DSR 2017-18, I. No. 2 i a 4, Pg. No. 25 | 5000.00 | | |
| | | Basic Rate | 5380.00 | | |
| | 87.80 | Add 5% for M.C Total | 269.00 5649.00 | Cum | 495982.20 |
| | 07.00 | | 3049.00 | Cum | 490902.20 |
| | | Item No. 25c: Providing and laying in situ cement concrete M - 30 with tremix treatment for 200 mm thickness for Concrete Road is including laying plastic sheet for 125 micron thickness with groove cutting of 4 mm wide and 20 mm deep with necessary refilling with bitumen (excluding reinforcement) with Natural sand etc. complete Spec : As directed by Engineer incharge | | | |
| | | PWD DSR 2017-18, I. No. 93 / 23 MORTH, Pg. No. 228 | | | |
| | | Basic Rate | 6362.00 | | |
| | 43.90 | Add 5% for M.C Total | 318.10 6680.10 | Cum | 293256.39 |
| | | | | | |
| 22 A | | Utility Shifting Reconnection of existing damaged connection including 15 mm dia. CPVC pipe with necessary fittings, remaking good the demolished portion etc. complete including all labour, etc. complete. as directed by Engineer in charge. | | | |
| | | Water Supply Connections - 15 mm dia | 4.07 | | |
| | | Basic Rate | 167 | | |
| | 30 | Add 5% for M.C. Total | 8.35 175.35 | Rmt | 5260.5 |
| | | (Similar Item PWD CSR 2016-17, P. 166, I No 42.62) | | | |
| | | Water Supply Connections - 20 mm dia | | Rmt | |
| | | Basic Rate | 196 | | |
| | | | | | |
| | | Add 5% for M.C. | 9.8 | | |

| S.No. | Quantity | ITEM DESCRIPTION | Rate | Unit | Amount Rs. |
|-------|----------|---|-----------|---------|-------------|
| В | | Electrical Lines & Poles | | | |
| | | Electrical Poles - RA for 10 km | | | |
| i) | | Pole Foundation : Providing cement concrete foundation | | | |
| | | including excavation for the pole 60 cms x 60 cms x 1.5 mtr | | | |
| | | deep in1:3:6 cement concrete (20x 25 mm stone metal) and | | | |
| | | 45 cm x 45cm x45 cm / 45 cm x 45 cm height plinth duly | | | |
| | | plaster and with necessary curing & finishing in above manner (for 9 mtr pole) | | | |
| | 1 | | 2771.00 | Nos | 2771 |
| | | PWD DSR 15-16, E & M, Item No. 16.3.2, P.No. 161 | | | |
| ii) | | Dismantling of existing poles above 6 mtr height with | | | |
| | | brackets. Clamps, insulators stay from the cement concrete | | | |
| | | foundation and making the site clear by refilling the pits with | | | |
| | | excavated materials and bringing it to ground level | | | |
| | 1 | | 701.00 | Nos | 701 |
| | | PWD DSR 15-16, E & M, Item No. 8.8.2, P.No. 110 | | | |
| iii) | | Re-Erecting: Supplying and erecting steel tubular swaged pole | | | |
| | | 165.1 X 139.7 X 114.3 mm dia with 4.5 X 4.5 X3.65 mm thick | | | |
| | | (5+2+2m) length respectively and total 9 m long with pole cap, base plate in provided foundation (weight 147 kg) as per | | | |
| | | specifications. | | | |
| | 1 | | 12722.00 | Nos | 12722 |
| | | PWD DSR 15-16, E&M, Item No. 8.1.3, Page No.98 | | | |
| iv) | | Earthling : Providing erecting pipe type earthling of 40 mm GI | | | |
| - | | pipe dia with double earthling to the all equipments as per | | | |
| | 1 | Detailed specifications. | 1585.00 | Nos | 1585 |
| | | PWD DSR 14-15 E&M, Item No. 9.1.4, Page No.111 | 1000.00 | 1103 | 1000 |
| С | | Electrical Cable - Providing and Jointing | | | |
| | | Communication Cable - Jelly Filled telephone lines and optical Fibre Cable | | | |
| i) | | Supply & Erecting of Jelly filled armoured telephone cable 10 | | | |
| - | | pair with 0.5 mm dia laid in provided trench as per | | | |
| | 3 | specification no. WG-TW | 83.00 | Rmt | 249 |
| | | PWD DSR 15-16 Item 1-10-10, P No 17 | | | |
| ii) | | Supply & erecting of FR grade PVC armourd multi mode | | | |
| - | | Optical Fibre Cable with 6 fibres with core dia 50 µM , suitable | | | |
| | | for 1 GBps Ethernet distance at 850 nm of wavelength on wall/ | | | |
| | | ceiling or laid in provided pipe / trench as per specification no. | | | |
| | 3 | WG- COC/ OFC | 247.00 | Rmt | 741 |
| | | PWD DSR 15-16 Item 1-12-8, P No 20 | | | 171 |
| iii) | | Supply & fixing of wall /rack type 12 port light guide | | | |
| , | | interconnection unit for termination of optical fibre cable on | | | |
| | | wall /provided U rack complete as per specification no. EG- | | | |
| | | NAS / LIU | 4000.00 | Naa | 4000 |
| | 1 | PWD DSR 15-16 Item 1-14-5 P No 21 | 4366.00 | Nos | 4366 |
| | | | | | |
| | | | Labou | ır Cost | 17764483.35 |
| | | Total Material + | Labour Co | ost Rs. | 20389096.35 |
| | | | Sa | ıy Rs. | 20389097.00 |
| | | | | Lakhs | 203.89 |
| | | | Say Rs. | Crores | 2.04 |

SOLAPUR MUNICIPAL CORPORATION MAHARASHTRA JEEVAN PRADHIKARAN DIVISION SOLAPUR SOLAPUR CITY UNDERGROUND SEWERAGE SCHEME (AMRUT) SUB ESTIMATE NO. :- SEWERAGE SYSTEM FOR ZONE I

(Underground Sewerage Network -250 to 300 mm dia RCC Pipes, HDPE DWC SN 8 Pipes , L=2.95 Km) **MFASURFMENT**

| MEASUREMENT | | | | | | | |
|-------------|---|---------|-----------|-------|---------|----------|------|
| ltem No | ITEM DESCRIPTION | No | L | В | D/H | Quantity | Unit |
| | MATERIAL : | | | | | | |
| 1 | Providing ISI Standard RCC pipes in standard length of following class and diameter, etc.complete. | | | | | | |
| | RCC NP 3 Class | | | | | | |
| | 300 mm dia. | 1.00 | 1177.00 | | | 1177.00 | Rmt |
| | RCC NP 4 Class | | | | | | |
| | 300 mm dia. | 1.00 | 884.00 | | | 884.00 | Rmt |
| 2 | Providing and supplying in standard lengths Polyethelene (PE) Pipes for non pressure underground drainage and sewerage , etc. complete. | | | | | | |
| | H.D.P.E. pipes for Drainage CLASS SN 8 | | | | | | |
| | 250 mm dia.(ID) | 1.00 | 892.00 | | | 892.00 | Rmt |
| | LABOUR : | | | | | | |
| | EXCAVATION DETAILS -From computer | | | | | | |
| | generated design sheet | | | | | | |
| Dt Ex | 0-1.5 | 1.5-3.0 | 3.0 - 4.5 | | 6.0-7.5 | | |
| Line | 4180.11 | 3708.87 | 1152.72 | 51.18 | 0.00 | 9092.88 | Cum |
| Ex MH | 1232.94 | 1546.70 | | 17.16 | 0.00 | 3185.80 | Cum |
| Say | 5413.04 | 5255.58 | 1541.72 | 68.33 | 0.00 | 12278.67 | Cum |
| 1 | Excavation for foundation / pipe trenches in earth, soils of all types , sand, gravel, and soft murum etc.complete. Lift 0.0 -1.5 M. | | | | | 915.89 | Cum |
| 2 | Excavation for foundation / pipe trenches in hard murum & boulders, WBM road etc.complete. Lift 0.0 -1.5 M. | | | | | 1332.69 | Cum |
| 3 | Excavation for pipe trenches in soft rock and old cement and lime masonary foundation, ashphalt road etc.complete. | | | | | | |
| | Lift 0.0-1.50 M. | | | | | 2942.53 | |
| | Lift 1.5-3.0 M. | | | | | 1886.75 | Cum |
| 4 | Excavation for pipe trenches in hard rock and concrete road, by chiselling, wedging, lime drilling by mechanical means or by all means other than blasting, etc.complete. | | | | | | |
| | Lift 0.0-1.50 M. | | | | | 221.93 | Cum |
| | Lift 1.5-3.0 M. | | | | | 3368.82 | Cum |
| | Lift 3.0-4.5 M. | | | | | 1541.72 | Cum |
| | Lift 4.5-6.0 M. | | | | | 68.33 | Cum |
| 5 | Providing dry trap/ granite/quartzite/ gneiss, rubble stone soling etc.complete. | | | | | | |
| | Provision Made for trunk sewer along nallah | 1.00 | 400.00 | 1.60 | 0.30 | 192.00 | Cum |
| 6 | Providing murum bedding in trenches with approved murum from excavated materials etc.n complete. | | | | | | |
| | (As per Computer generated sheet) | | | | | 505.77 | Cum |
| | | 1 | | | | | |

| ltem No | ITEM DESCRIPTION | No | L | В | D/H | Quantity | Unit |
|----------------------------|--|-------|---------|------|------|----------|-------|
| | Lowering laying and jointing in proper grade and alignment R.C.C. pipes etc.complete | | | | | | |
| | 300 mm dia. | 1.00 | 2061.00 | | | 2061.00 | Rmt |
| | Hydraulic testing of RCC pipe line to specified pressure etc.complete | | | | | | |
| | 300 mm dia. | 1.00 | 2.06 | | | 2.06 | Rmt |
| 9 | Lowering, laying and jointing H.D.P.E.Double Wall Corrugated Pipes for nonpressure Underground drainage and Sewerage applications etc. complete | | | | | | |
| | H.D.P.E. pipes for Drainage CLASS SN 8 | | | | | | |
| | 250 mm dia.(ID) | 1.00 | 892.00 | | | 892.00 | Rmt |
| | Hydraulic testing of HDPE double wall corrugated pipe for non pressure underground line to specified pressure etc.complete | | | | | | |
| | 250 mm dia.(ID) | 1.00 | 0.89 | | | 0.89 | Km |
| | | | | | | | |
| | Providing and laying in situ cement concrete 1:2:4 of trap/ granite / quartzite/ gneiss metal for foundation and bedding etc. complete. | | | | | | |
| | Provision of anchor block Made for trunk sewer along nallah | 40.00 | 1.50 | 1.50 | 0.60 | 54.00 | |
| | Deduct | 40.00 | 0.79 | 1.00 | 0.60 | 18.84 | |
| | Net Qty | | | | | 35.16 | |
| | (As per Computer generated sheet) | | | | | 28.44 | |
| | Total Qty | | | | | 63.60 | Cum |
| 10 11 11 12 13 | Dewatering the excavated trenches and pools of water in the pipeline trenches, etc.complete. | | | | | | |
| | For nalla / where water table high | 7.00 | 100.00 | 5.00 | 6.00 | 21000.00 | Bhp/h |
| | 7 Fronts, 5 BHP Pump- 6Hrs- 180 Days | | | | | | |
| | Providing and constructing on sewer, B.B. masonary circular manhole with concentric cone 1.2 M. dia. at bottom and 0.5 M. from top and up to depth of 2 m. with 23 cm thick brick work up to depth of 2 Metc.complete | | | | | | |
| | Upto 1.50 m depth. | | | | | 3.00 | No. |
| | Upto 2.0 m depth. (As per Computer generated sheet) | | | | | 7.00 | No. |
| | (it's per computer generated sheet) | | | | | | |
| | Providing and constructing on sewer, B.B. masonary circular manhole with concentric cone 1.5 M. dia. at bottom and 0.5 M. from top and up to depth of 5 m. with 23 cm thick brick work up to depth of 2 M from top and 35 cm thick brick work for remaining depth up to 5 M etc.complete | | | | | | |
| | Upto 2.50 m depth. | | | | | 13.00 | No. |
| | | | | | | | |

| | | | 12.00 | INO. |
|-----------------------------------|--|--|-------|------|
| Upto 3.5 m depth. | | | 31.00 | No. |
| Upto 4.0 m depth. | | | 25.00 | No. |
| Upto 4.5 m depth. | | | 9.00 | No. |
| Upto 5.0 m depth. | | | 1.00 | No. |
| (As per Computer generated sheet) | | | | |
| | | | | |

| ltem No | ITEM DESCRIPTION | No | L | В | D/H | Quantity | Unit |
|------------|--|--------|-----|---|------|----------|------|
| 15 | Providing and constructing on sewer, B.B. masonary circular manhole with concentric cone 1.5 M. dia. at bottom and 0.5 M. from top and 35 cm thick brick work for depth of 2 M and 45 cm thick brick work for remaining depth up to 9 M in etc.complete | | | | | | |
| | Upto 5.5 m depth. | | | | | 2.00 | No. |
| | (As per Computer generated sheet) | | | | | | |
| 16 | Providing and fixing in position steel bar reinforcement etc. complete | | | | | | |
| | Wt of Steel = 0.1% of Concrete Qty = | 0.06 | 471 | | | 0.47 | MT |
| 17 | Refilling the trenches with available excavated stuff etc.complete. (As per Computer generated sheet) | | | | | 10160.11 | Cum |
| | | | | | | | Cum |
| 18 | Dispossing of surplus excavated stuff from site of work up to a distance of 2Km etc.complete | | | | | | |
| | (As per Computer generated sheet) | | | | | 1612.79 | Cum |
| 10 | WDM Dead Destantion . Deinstation the read | | | | | | |
| 19 | WBM Road Restoration : Reinstating the road surface with supplying & spreading 60mm metal of 20 cm thick with Hard murum & 40mm metal of 15 cm thick with Soft murum etc. complete. | | | | | | |
| | (As per Computer generated sheet) | | | | | 2635.50 | Sqm |
| 20 | Asphalt Road restoration: Reinstatement of road by excavating the potholes in rectangular shape and filling of potholes by one layers of one layer of 80 mm trap metal of 200 mm thick, one layer of 40 mm trap metal of 100 mm thick etc., complete. | | | | | | |
| | (As per Computer generated sheet) | | | | | 1933.00 | Sqm |
| 21 | Concrete Road restoration : Reinstatement of Concrete road by excavating the concrete panels in rectangular shape and filling the trench with one layer of natural sand of 300 mm thick , one layer of M20 grade PCC of 150 mm thick and one layer of PQC M30 grade of 300 mm thicketc., complete | | | | | | |
| | (As per Computer generated sheet) | | | | | 878.00 | Sqm |
| | Item No. 25a Providing and filling in the foundation with sand of ap-proved quality including watering, compaction complete. Spec. No.: Bd.A.13 Page No. 264 | | | | | | |
| | | 878.00 | | | 0.10 | 87.80 | Cum |
| | Item No. 25b Providing and casting in situ cement concrete M- 15 of trap / granite / quartzite / gneiss metal for etc complete | | | | | | |

| · | | | | | |
|--|--------|--|------|-------|-----|
| | 878.00 | | 0.10 | 87.80 | Cum |
| Item No. 25c Providing and laying in situ cement concrete M -30 with tremix treatment for 300 mm thickness for Concrete Road etc. complete Spec : | | | | | |
| | 878.00 | | 0.05 | 43.90 | Cum |
| | | | | | |

| ltem No | ITEM DESCRIPTION | No | L | В | D/H | Quantity | Unit |
|------------|--|----|---|---|-----|----------|------|
| 22 | Shifting of Utilities: All utilities like Electric Poles, | | | | | | |
| | waterline & Communication line Shifting while | | | | | | |
| | Manhole and Line Laying etc., complete as per specifications and or as directed by engineer- in- | | | | | | |
| | charge. | | | | | | |
| | (As per Rate Analysis) | | | | | 1.00 | Km |
| | | | | | | | |
| Α | Utility Shifting Reconnection of existing damaged connection | | | | | | |
| Λ | including 15 mm dia. CPVC pipe with necessary fittings, remaking good the demolished portion etc. | | | | | | |
| | complete including all labour, etc. complete. as directed by Engineer in charge. | | | | | | |
| | (Similar Item PWD CSR 2016-17, P. 165, I No 42.61) | | | | | | |
| | Water Supply Connections - 15 mm dia | 30 | 1 | | | 30 | Rn |
| | (Similar Item PWD CSR 2016-17, P. 166, I No | | | | | | |
| | 42.62) | | | | | | |
| | Water Supply Connections - 20 mm dia | 4 | 1 | | | 4 | Rr |
| В | Electrical Lines & Poles | | | | | | |
| | Electrical Poles - RA for 10 km | | | | | | |
| i) | Pole Foundation : Providing cement concrete | | | | | | |
| | foundation including excavation for the pole 60 cms | | | | | | |
| | x 60 cms x 1.5 mtr deep in1:3:6 cement concrete | | | | | | |
| | (20x 25 mm stone metal) and 45 cm x 45cm x45 cm | | | | | | |
| | / 45 cm x 45 cm height plinth duly plaster and with necessary curing & finishing in above manner (for 9 | | | | | | |
| | mtr pole) | | | | | | Nia |
| ii) | Dismantling of existing poles above 6 mtr height | 1 | | | | 1 | No |
| "" | with brackets. Clamps, insulators stay from the | | | | | | |
| | cement concrete foundation and making the site | | | | | | |
| | clear by refilling the pits with excavated materials | | | | | | |
| | and bringing it to ground level | | | | | | |
| iii) | Re-Erecting: Supplying and erecting steel tubular | 1 | | | | 1 | No |
| , | swaged pole 165.1 X 139.7 X 114.3 mm dia with 4.5 | | | | | | |
| | X 4.5 X3.65 mm thick (5+2+2m) length respectively | | | | | | |
| | and total 9 m long with pole cap, base plate in | | | | | | |
| | provided foundation (weight 147 kg) as per | | | | | | |
| | specifications. | 1 | | | | 1 | No |
| iv) | Earthling : Providing erecting pipe type earthling of | I | | | | <u> </u> | INU |
| ••) | 40 mm GI pipe dia with double earthling to the all | | | | | | |
| | equipments as per Detailed specifications. | 1 | | | | 1 | No |
| С | Electrical Cable - Providing and Jointing | | | | | | |
| | Communication Cable - Jelly Filled telephone | | | | | | |
| | lines and optical Fibre Cable | | | | | | |
| i) | Supply & Erecting of Jelly filled armoured telephone | | | | | | |
| - | cable 10 pair with 0.5 mm dia laid in provided trench | | | | | | |
| | as per specification no. WG-TW | 1 | 3 | | | 3 | Rrr |
| ii) | Supply & erecting of FR grade PVC armourd multi | | | | | | |
| | mode Optical Fibre Cable with 6 fibres with core dia | | | | | | |
| | 50 μM , suitable for 1 GBps Ethernet distance at 850 | | | | | | |
| | nm of wavelength on wall/ ceiling or laid in provided | | | | Ī | 1 | |

| | nm of wavelength on wall/ ceiling or laid in provided pipe / trench as per specification no. WG- COC/ | | | | |
|------|--|---|---|---|-----|
| | OFC | 1 | 3 | 3 | Rmt |
| iii) | Supply & fixing of wall /rack type 12 port light guide interconnection unit for termination of optical fibre cable on wall /provided U rack complete as per specification no. EG- NAS / LIU | 1 | | 1 | Nos |

| | | MAHARASHTRA JEEVAN PRADHIKARAN DIVISION | SOLAPUR | | |
|-----|----------|---|---------------|------|-----------|
| | | SOLAPUR CITY UNDERGROUND SEWERAGE SCHEM | | | |
| | | SUB ESTIMATE NO. :- SEWERAGE SYSTEM FOR | | | |
| | | (Underground Sewerage Network -500 to 900 mm dia RCC P | pes, L=4.3 Kı | m) | |
| - | | ABSTRACT | | | |
| S. | Quantity | ITEM DESCRIPTION | Rate | Unit | Amount Re |
| No. | | MATERIAL : | | | |
| 1 | | Providing ISI Standard RCC pipes in standard length of | | | |
| 1 | | following class and diameter, suitable for either collor joints or | | | |
| | | rubber ring joints, including all taxes (central and local) | | | |
| | | inspection charges, transport to departmental store / site | | | |
| | | unloading and stacking etc.complete. | | | |
| | | Notes :- One rubber ring should be supplied with each full | | | |
| | | length of socketed pipe, cost included in the rates below. | | | |
| | | RCC NP 3 Class | | | |
| | 109.00 | 500 mm dia. | 1785.00 | Rmt | 194565 |
| | 1456.00 | 800 mm dia. | 3150.00 | Rmt | 4586400 |
| | 1276.00 | 900 mm dia. | 3675.00 | Rmt | 4689300. |
| | | RCC NP 4 Class | | | |
| | 196.00 | 500 mm dia. | 1943.00 | Rmt | 380828. |
| | 800.00 | 600 mm dia. | 2520.00 | Rmt | 2016000. |
| | 374.00 | 800 mm dia. | 3413.00 | Rmt | 1276462 |
| | 74.00 | 900 mm dia. | 3990.00 | Rmt | 295260. |
| | | (CSR 2016-17, P. 103,104, I. E, F) | | | |
| | | | | | |
| | | | Material Cos | st | 13438815. |
| | | LABOUR : | | | |
| 1 | | Excavation for foundation / pipe trenches in earth, soils of all | | | |
| | | types, sand, gravel, and soft murum including removing the | | | |
| | | excavated material up to a distance of 50 m. and lift as below, | | | |
| | | stacking and spreading as directed by the Engineer-in- charge, normal dewatering, preparing the bed for foundation | | | |
| | | and excluding back filling. etc.complete. | | | |
| | | Lift 0.0 -1.5 M. | | | |
| | | Basic Rate | 141.00 | | |
| | | Add 10 % for M.C | 14.10 | | |
| | 1863.78 | | 155.10 | | 289072. |
| | | (CSR 2016-17, P. 35 I. 1) | | | |
| | | | | | |
| 2 | | Excavation for foundation / pipe trenches in hard murum & | | | |
| | | boulders, WBM road includng removing the excavated | | | |
| | | material up to a distance of 50 m. and lift as below, stacking | | | |
| | | and spreading as directed by the Engineer-in- charge, normal | | | |
| | | dewatering, preparing the bed for foundation and excluding | | | |
| | | back filling. etc.complete. | | | |
| | | Lift 0 -1.5 M. | | | |
| | | | | | |
| | | Basic Rate | | | |
| | 007/00 | Add 10 % for M.C | 18.00 | | |
| | 2671.00 | Add 10 % for M.C | | | 528858. |

(CSR 2016-17, P. 35 I. 3)

| S. No. | Quantity | ITEM DESCRIPTION | Rate | Unit | Amount Rs. |
|-----------|----------|---|-----------------|------|------------|
| 3 | | Excavation for pipe trenches in soft rock and old cement and lime masonary foundation, ashphalt road includng removing the excavated material up to a distance of 50 m. and lift as below, stacking and spreading as directed by the Engineer-in- | | | |
| | | charge, normal dewatering, preparing the bed for foundation and excluding back filling. etc.complete. | | | |
| | | Lift 0 -1.5 M. | 442.00 | | |
| | | Basic Rate Add 10 % for M.C. | 443.00 44.30 | | |
| | 6149.24 | | 487.30 | Cum | 2996524.65 |
| | 0110.21 | Lift 1.5 -3.0 M. | 101.00 | Cam | 2000021100 |
| | | Basic Rate | 463.00 | | |
| | | Add 10 % for M.C | 46.30 | | |
| | 4389.33 | Total | 509.30 | Cum | 2235485.77 |
| | | (CSR 2016-17, P. 35 I. 5) | | | |
| 4 | | Excavation for pipe trenches in hard rock and concrete road, by chiselling, wedging, lime drilling by mechanical means or by all means other than blasting, including trimming and levelling the bed, removing the excavated material up to a distance of 50 m. and lift as below, stacking and spreading as directed by the Engineer-in- charge, normal dewatering, preparing the bed for foundation and excluding back filling. etc.complete. | | | |
| | | Lift 0-1.50 M. | | | |
| | | Basic Rate | 751.00 | | |
| | | Add 10 % for M.C | 75.10 | | |
| | 496.41 | Total | 826.10 | Cum | 410084.30 |
| | | Lift 1.5 -3.0 M. | | | |
| | | Basic Rate | 771.00 | | |
| | 0055.50 | Add 10 % for M.C | 77.10 | 0 | 7000004.00 |
| | 8355.53 | Total | 848.10 | Cum | 7086324.99 |
| | | Basic Rate | 791.00 | | |
| | | Add 10 % for M.C. | 79.10 | | |
| | 5791.18 | | 870.10 | Cum | 5038906.61 |
| | | Lift 4.5-6.0 M. | 070.10 | Cam | 00000000 |
| | | Basic Rate | 811.00 | | |
| | | Add 10 % for M.C | 81.10 | | |
| | 426.99 | Total | 892.10 | Cum | 380920.24 |
| | | Lift 6.0-7.5 M. | | | |
| | | Basic Rate | 831.00 | | |
| | | Add 10 % for M.C | 83.10 | | |
| | 44.25 | | 914.10 | Cum | 40447.11 |
| | | (CSR 2016-17, P. 36 I. 7) | | | |
| 5 | | Providing dry trap/ granite/quartzite/ gneiss, rubble stone soling in 15 cm to 20 cm thick layers including hand packing and compacting etc.complete. | | | |
| | | Basic Rate | 912.00 | | |
| | | Add 5 % for M.C | 45.60 | | |
| | 878.40 | | 957.60 | Cum | 841155.84 |
| | | (CSR 2016-17, P. 39 I.18) | | | |
| 7 | | Providing murum bedding in trenches with approved murum from excavated materials from foundation in 15 cm. to 20 cm. layers including watering & compaction complete. | | | |
| | | Basic Rate | 64.00 | | |
| | | Add 5 % for M.C | 3.20 | | |
| | 1054.66 | | 67.20 | Cum | 70873.15 |
| | | (CSR 2016-17, P. 39, I. 16) | | | |
| | | | | | |

| UIEW |
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|------|

| S. No. | Quantity | ITEM DESCRIPTION | Rate | Unit | Amount Rs. |
|-----------|----------|---|---------------------|--------|------------|
| 8 | | Lowering laying and jointing in proper grade and alignment R.C.C. pipes with collar joints in CM 1:1 proportion or socketed R.C.C. pipes with rubbar joints (excluding cost of rubber ring or R.C.C. collor), including cost of conveyance from stores to site of works, cost of jointing material, labour, giving hydraulic testing, etc.complete as directed by Engineer-in-charge | | | |
| | | 500 mm dia. | | | |
| | | Basic Rate | 197.00 | | |
| | | Add 5 % for M.C | 9.85 | | |
| | 305.00 | Total | 206.85 | Rmt | 63089.25 |
| | | 600 mm dia. | 0.40.00 | | |
| | | Basic Rate | 248.00 | | |
| | 000.00 | Add 5 % for M.C | 12.40 | Direct | 200220.00 |
| | 800.00 | Total | 260.40 | Rmt | 208320.00 |
| | | 700 mm dia. Basic Rate | 281.00 | | |
| | | Add 5 % for M.C. | 14.05 | | |
| | 0.00 | Total | 295.05 | Rmt | 0.00 |
| | 0.00 | 800 mm dia. | 233.03 | IXIII | 0.00 |
| | | Basic Rate | 325.00 | | |
| | | Add 5 % for M.C. | 16.25 | | |
| | 1830.00 | Total | 341.25 | Rmt | 624487.50 |
| | | 900 mm dia. | | | |
| | | Basic Rate | 359.00 | | |
| | | Add 5 % for M.C. | 17.95 | | |
| | 1350.00 | Total | 376.95 | Rmt | 508882.50 |
| | | (CSR 2016-17, P. 105, I. 2) | | | |
| 9 | | Hydraulic testing of RCC pipe line to specified pressure including cost of all materials and labour and water for testing for specified length including cutting, placing end cap making arrangement for filling safe water using reciprocating type pumps which should be able to provide specified test pressure gauges and other necessary equipments, labour, operation charges, etc. required for testing. The rate under this item shall also include cost of retesting, if necessary and reinstating to original position. New item to be added | | | |
| | | 500 mm dia. | | | |
| | | Basic Rate | 22000.00 | | |
| | <u> </u> | Add 5 % for M.C | 1100.00 | | |
| | 0.31 | Total | 23100.00 | Km | 7045.50 |
| | | 600 mm dia. | 20000.00 | | |
| | | Basic Rate | 28000.00 | | |
| | 0.00 | Add 5 % for M.C | 1400.00 | 1/ | 00500.00 |
| | 0.80 | | 29400.00 | Km | 23520.00 |
| | | 800 mm dia. | 26000.00 | | |
| | | Basic Rate | 36000.00 | | |
| | 1.83 | Add 5 % for M.C | 1800.00 37800.00 | Km | 60174 00 |
| | 1.83 | | 37000.00 | ۲\(II | 69174.00 |
| | | 900 mm dia. Basic Rate | 40000 00 | | |
| | | | 40000.00 | | |
| | 4 05 | Add 5 % for M.C | 2000.00 | 1/m | E6700 00 |
| | 1.35 | | 42000.00 | Km | 56700.00 |
| | | (CSR 2016-17, P. 105, I. 2) | | | |

| S. No. | Quantity | ITEM DESCRIPTION | Rate | Unit | Amount Rs. |
|-----------|----------|---|--|-------|------------|
| 12 | | Open timbering in trenches of depth more than 1.5 m for shoring and strutting including use of and waste of all necessary timber works including walling, strutts, open polling | 5 m for e of all n polling may be rements sic Rate 240.00 for M.C 12.00 Total 252.00 Sqm sic Rate 239.00 for M.C 11.95 Total 250.95 Sqm for M.C 11.95 Total 250.95 Sqm sic Rate 4233.00 for M.C 211.65 Total 4444.65 Cum sic Rate 62.00 for M.C 3.10 Total 65.10 HP/Hr sic Rate 62.00 for M.C 3.10 Total 65.10 HP/Hr sic Rate 62.00 for M.C 3.10 Total 65.10 HP/Hr | | |
| | | boards/ horizontal sheeting, runners, etc. as may be necessary and fixing and removal complete. (Measurements | | | |
| | | to be taken of the face/area timbered) | | | |
| | | Non Water Logged Area Lift 1.50 to 3.00 m. | | | |
| | | Basic Rate | 240.00 | | |
| | | Add 5 % for M.C. | 12.00 | | |
| | 294.00 | | 252.00 | Sqm | 74088.00 |
| | | Water Logged Area | | | |
| | | Lift 1.50 to 3.00 m. Basic Rate | 239.00 | | |
| | | Add 5 % for M.C. | | | |
| | 294.00 | | | | 73779.30 |
| | | (CSR 2016-17, P. 39, I. 20a / b) | | | |
| 40 | | Dreviding and loving in site comparts concerts 4.2.4 of them | | | |
| 13 | | Providing and laying in situ cement concrete 1:2:4 of trap/ granite / quartzite/ gneiss metal for foundation and bedding including bailing out water manually, formwork, compacting and curring etc. complete. | | | |
| | | Basic Rate | 4233.00 | | |
| | | Add 5 % for M.C. | | | |
| | 214.62 | | 4444.65 | Cum | 953891.23 |
| | | (CSR 2016-17, P. 43, I. 1b) | | | |
| 14 | | Dewatering the excavated trenches and pools of water in the pipeline trenches, well works by using pumps and other divices including disposing off water to safe distance as directed by Engineer-in- charge (including cost of machionary, labour,fuel) etc.complete. | | | |
| | | Basic Rate | | | |
| | 40000.00 | Add 5 % for M.C | | | 0704000.00 |
| | 42000.00 | (CSR 2016-17, P. 38, I. 14) | 65.10 | HP/Hr | 2734200.00 |
| | | | | | |
| 16 | | Providing and constructing on sewer, B.B. masonary circular manhole with concentric cone 1.5 M. dia. at bottom and 0.5 M. from top and up to depth of 5 m. with 23 cm thick brick work up to depth of 2 M from top and 35 cm thick brick work for remaining depth up to 5 M in CM 1:4 proportion with 20 mm thick smooth plaster on both sides in CM 1:2 proportion excluding excavation including foundation concrete 250 mm thick and haunches and channels in C.C. 1:2:4 proportion, finishing channels in smooth rendering, providing C.I. dapuri type steps each weighing 5.5 Kg., 1:2:4 coping and providing and fixing approved make and quality S.F.R.C. frame and cover of 56 cm dia. etc.complete as directed by Engineer-in- charge. | | | |
| | | Upto 2.5 m depth. | | | |
| | | Basic Rate | 28011.00 | | |
| | 14.00 | Add 5 % for M.C Total | <u>1400.55</u> 29411.55 | | 411761.70 |
| | 14.00 | Upto 3.0 m depth. | 23411.00 | INU. | 411/01.70 |
| | | Basic Rate | 33901.00 | | |
| | | Add 5 % for M.C | 1695.05 | | |
| | | | | | |
| | 15.00 | | 35596.05 | No. | 533940.75 |
| | 15.00 | Total Upto 3.50 m depth. Basic Rate | 35596.05 39791.00 | | 533940.75 |

| S. No. | Quantity | ITEM DESCRIPTION | Rate | Unit | Amount Rs. |
|-----------|----------|--|---------------------|-------|------------|
| | 18.00 | | 41780.55 | No. | 752049.90 |
| | | Upto 4.0 m depth. | 1-001.00 | | |
| | | Basic Rate | 45681.00 | | |
| | 58.00 | Add 5 % for M.C Total | 2284.05 47965.05 | No. | 2791072.00 |
| | 56.00 | Upto 4.5 m depth. | 47905.05 | INU. | 2781972.90 |
| | | Basic Rate | 51571.00 | | |
| | | Add 5 % for M.C. | 2578.55 | | |
| | 45.00 | | 54149.55 | No. | 2436729.75 |
| | | Upto 5.0 m depth. | | | |
| | | Basic Rate | 57461.00 | | |
| | | Add 5 % for M.C. | 2873.05 | | |
| | 4.00 | Total | 60334.05 | No. | 241336.20 |
| | | (CSR 2016-17, P. 273, I. 7) | | | |
| | | a) Rebate for every decrease in depth of 50 cm or part there of Rs.5890/-Add 5% for M.C=Rs.6184.50 | | | |
| 17 | | Providing and constructing on sewer, B.B. masonary circular | | | |
| 17 | | manhole with concentric cone 1.5 M. dia. at bottom and 0.5 | | | |
| | | M. from top and 35 cm thick brick work for depth of 2 M and | | | |
| | | 45 cm thick brick work for remaining depth up to 9 M in CM | | | |
| | | 1:4 proportion with 20 mm thick smooth plaster on both sides | | | |
| | | in CM 1:2 proportion excluding excavation including | | | |
| | | foundation concrete 250 mm thick and haunches and | | | |
| | | channels in C.C. 1:2:4 proportion, finishing channels in smooth | | | |
| | | rendering, providing C.I. dapuri type steps each weighing 5.5 | | | |
| | | Kg., 1:2:4 coping and providing and fixing approved make | | | |
| | | and quality S.F.R.C. frame and cover of 56 cm dia. | | | |
| | | etc.complete as directed by Engineer-in- charge. | | | |
| | | 5.50 m depth. | | | |
| | | Basic Rate | 71823.00 | | |
| | | Add 5 % for M.C. | 3591.15 | | |
| | 5.00 | Total | 75414.15 | No. | 377070.75 |
| | | 6.0 m depth. | | | |
| | | Basic Rate | 79233.00 | | |
| | | Add 5 % for M.C. | 3961.65 | | |
| | 2.00 | | 83194.65 | No. | 166389.30 |
| | | 6.5 m depth. | | | |
| | | Basic Rate | 86643.00 | | |
| | | Add 5 % for M.C. | 4332.15 | | |
| | 2.00 | | 90975.15 | No. | 181950.30 |
| | | (CSR 2016-17, P. 273, I. 8) a) Rebate for every decrease in depth of 50 cm or part there of | | | |
| | | Rs7410/-Add 5% for M.C .=Rs.7780.50 | | | |
| 18 | | Providing and fixing in position steel bar reinforcement of | | | |
| | | various diameters for RCC piles, caps, footings, foundations, | | | |
| | | lintels, parodies, copings, fins, arches, etc. as per detailed | | | |
| | | designs, drawings and schedules; including cutting, bending, | | | |
| | | hooking the bars, binding with wires or tack welding and | | | |
| | | supporting as required, etc. complete. | | | |
| | | (including cost of binding wire). | | | |
| | | Tor Steel | 50404.00 | | |
| | | Basic Rate | 52194.00 2609.70 | | |
| | 4 05 | Add 5 % for M.C | 2609.70 | МЛТ | 00040.00 |
| | 1.65 | Total (CSR 2016-17, P. 46, I. 8b) | 54803.70 | IVI I | 90343.90 |
| | | | | | |

| S. No. | Quantity | ITEM DESCRIPTION | Rate | Unit | Amount Rs. |
|-----------|----------|---|-----------------|-------|-------------|
| 20 | | Refilling the trenches with available excavated stuff with soft material first over pipe line and then hard material in 15 cm layers with all leads and lifts including consolidation, surcharging, etc.complete. | | | |
| | | Basic Rate | 64.00 | | |
| | | Add 5 % for M.C. | 3.20 | - | |
| | 23621.08 | Total (CSR 2016-17, P. 38, I.15) | 67.20 | Cum | 1587336.61 |
| 21 | | Dispossing of surplus excavated stuff from site of work up to a distance of 2 Km.including, loading, unloading, transportation etc.complete or as directed by the Engineering- in- charge. | | | |
| | | (CSR 2015-16, P. 22, Statement VI) | | - | |
| | 5511.97 | Basic Rate | 195.62 | Cum | 1078252.32 |
| 23 | | WBM Road restoration: Reinstating the road surface with supplying & spreading 60mm metal of 20 cm thick with Hard murum & 40mm metal of 15 cm thick with Soft murum as a blindage, above WBM surfaceFor all the above layers watering & compacting with Power roller, including Excavation of required depth for road reinstating or as directed by Engineer-in-charge etc. complete. | | | |
| | 5748.75 | (As per Rate Analysis) | 208.74 | Sqm | 1199994.08 |
| | | | 20011 | 0 9 | 110000 1100 |
| 24 | | Asphalt Road restoration: Reinstatement of road by excavating the potholes in rectangular shape and filling of potholes by one layers of one layer of 80 mm trap metal of 200 mm thick, one layer of 40 mm trap metal of 100 mm thick including supplying and spreading of stone dust/murrum of 100 mm thick, watering compaction and 75 mm thick bituminous bound macadam with cold emulsion 60/70 grade and bituminous macadam of 50 mm thick with bitumen of S-65 grade and 20 mm thick asphalt concrete with S-35 grade of bitumen including compaction by vibratory roller of all layers and providing and applying tack coat of 50 Kg / 100 m2 on black top surface and seal coat of 1kg/sqm. B.B.M. surface and disposal of surplus soil etc., complete. for pipeline trenches of various diameter etc., complete as per specifications and or as directed by engineer- in-charge. | | | |
| | 3832.00 | (As per Rate Analysis) | 873.47 | Sqm | 3347137.04 |
| | | | | | |
| 25 | | Concrete Road restoration : Reinstatement of Concrete road by excavating the concrete panels in rectangular shape and filling the trench with one layer of natural sand of 300 mm thick , one layer of M20 grade PCC of 150 mm thick and one layer of PCC M30 grade of 300 mm thick including dewatering etc., complete. for pipeline trenches of various diameter etc., complete as per specifications and or as directed by engineer- in-charge. | | | |
| | | Item No. 25a Providing and filling in the foundation with sand of ap-proved quality including watering, compaction complete. Spec. No.: Bd.A.13 Page No. 264 | | | |
| | | PWD DSR 17-18, Item No. 12 / 1 BDA 13, Pg-17 Basic Rate | 451.00 | | |
| | | Add 5% for M.C. + 5% Sugarcane Area | 451.00 45.10 | | |
| | 229.90 | | 496.10 | | 114053.39 |
| | | | | 20111 | |

| S. No. | Quantity | ITEM DESCRIPTION | Rate | Unit | Amount Rs. |
|-----------|----------|---|-------------------|------|------------|
| | | Item No. 25b Providing and casting in situ cement concrete M- 15 of trap / granite / quartzite / gneiss metal for steps including contaring formwork compacting roughoning them if special | | | |
| | | centering, formwork, compacting, roughening them if special finish is to be provided and curing and finishing if required | | | |
| | | complete, with fully automatic micro processor based PLC with | | | |
| | | SCADA enabled reversible Drum Type mixer With natural | | | |
| | | sand. Spec. No.: Bd.E.2 Page No. 288 and B.7 Page No 38 | | | |
| | | PWD DSR 2017-18, I. No. 2 i a 4, Pg. No. 25 | | | |
| | | Basic Rate Add 5% for M.C. + 5% Sugarcane Area | 5380.00 538.00 | | |
| | 229.90 | <u>_</u> | 538.00 | Cum | 1360548.20 |
| | | Item No. 25c: Providing and laying in situ cement concrete M - | | | |
| | | 30 with tremix treatment for 200 mm thickness for Concrete | | | |
| | | Road is including laying plastic sheet for 125 micron thickness | | | |
| | | with groove cutting of 4 mm wide and 20 mm deep with | | | |
| | | necessary refilling with bitumen (excluding reinforcement) with | | | |
| | | Natural sand etc. complete Spec : As directed by Engineer incharge | | | |
| | | PWD DSR 2017-18, I. No. 93 / 23 MORTH, Pg. No. 228 | | | |
| | | Basic Rate | 6362.00 | | |
| | 114.95 | Add 5% for M.C. + 5% Sugarcane Area Total | 636.20 6998.20 | | 804443.09 |
| | 114.95 | | 0990.20 | Cum | 004445.09 |
| 28 | | Utility Shifting | | | |
| Α | | Reconnection of existing damaged connection including 15 | | | |
| | | mm dia. CPVC pipe with necessary fittings, remaking good the | | | |
| | | demolished portion etc. complete including all labour, etc. complete. as directed by Engineer in charge. | | | |
| | | Water Supply Connections - 15 mm dia | | | |
| | | Basic Rate | 167 | | |
| | | Add 5% for M.C. | 8.35 | | |
| | 50 | Total | 175.35 | Rmt | 8767.5 |
| | | (Similar Item PWD CSR 2016-17, P. 166, I No 42.62) | | | |
| | | Water Supply Connections - 20 mm dia Basic Rate | 196 | Rmt | |
| | | Add 5% for M.C. | 9.8 | | |
| | 15 | | 205.8 | Rmt | 3087 |
| В | | Electrical Lines & Poles | | | |
| | | Electrical Poles - RA for 10 km | | | |
| i) | | Pole Foundation : Providing cement concrete foundation | | | |
| | | including excavation for the pole 60 cms x 60 cms x 1.5 mtr deep in1:3:6 cement concrete (20x 25 mm stone metal) and | | | |
| | | 45 cm x 45cm x45 cm / 45 cm x 45 cm height plinth duly | | | |
| | | plaster and with necessary curing & finishing in above manner | | | |
| | 1 | (for 9 mtr pole) | 2771.00 | Nos | 2771 |
| | | PWD DSR 15-16, E & M, Item No. 16.3.2, P.No. 161 | | | |
| ii) | | Dismantling of existing poles above 6 mtr height with brackets. Clamps, insulators stay from the cement concrete | | | |
| | | foundation and making the site clear by refilling the pits with | | | |
| | | excavated materials and bringing it to ground level | | | |
| | 1 | | 701.00 | Nos | 701 |
| ;;;) | | PWD DSR 15-16, E & M, Item No. 8.8.2, P.No. 110 | | | |
| iii) | | Re-Erecting: Supplying and erecting steel tubular swaged pole 165.1 X 139.7 X 114.3 mm dia with 4.5 X 4.5 X3.65 mm thick | | | |
| | | (5+2+2m) length respectively and total 9 m long with pole cap, | | | |
| | | base plate in provided foundation (weight 147 kg) as per | | | |
| | 1 | specifications. | 12722.00 | Nos | 12722 |
| | | PWD DSR 15-16, E&M, Item No. 8.1.3, Page No.98 | | | |

| SMC | |
|-----|--|
| | |
| | |

| S. No. | Quantity | ITEM DESCRIPTION | Rate | Unit | Amount Rs. |
|-----------|----------|--|---------|--------|-------------|
| iv) | | Earthling : Providing erecting pipe type earthling of 40 mm GI | | | |
| | | pipe dia with double earthling to the all equipments as per | | | |
| | 1 | Detailed specifications. | 1585.00 | Nos | 1585 |
| | | PWD DSR 14-15 E&M, Item No. 9.1.4, Page No.111 | | | |
| С | | Electrical Cable - Providing and Jointing | | | |
| | | Communication Cable - Jelly Filled telephone lines and | | | |
| | | optical Fibre Cable | | | |
| i) | | Supply & Erecting of Jelly filled armoured telephone cable 10 | | | |
| | | pair with 0.5 mm dia laid in provided trench as per | | | |
| | 3 | specification no. WG-TW | 83.00 | Rmt | 249 |
| | | PWD DSR 15-16 Item 1-10-10, P No 17 | | | |
| ii) | | Supply & erecting of FR grade PVC armourd multi mode | | | |
| | | Optical Fibre Cable with 6 fibres with core dia 50 µM, suitable | | | |
| | | for 1 GBps Ethernet distance at 850 nm of wavelength on wall/ | | | |
| | | ceiling or laid in provided pipe / trench as per specification no. | | | |
| | 3 | WG- COC/ OFC | 247.00 | Rmt | 741 |
| | | PWD DSR 15-16 Item 1-12-8, P No 20 | | | |
| iii) | | Supply & fixing of wall /rack type 12 port light guide | | | |
| | | interconnection unit for termination of optical fibre cable on | | | |
| | | wall /provided U rack complete as per specification no. EG- | | | |
| | 1 | NAS / LIU | 4366.00 | Nos | 4366 |
| | | PWD DSR 15-16 Item 1-14-5 P No 21 | | | |
| | | | | | |
| | | | | | |
| | | | | r Cost | 42816129.90 |
| | | Total Material | | | 56254944.90 |
| | | | Sa | | 56254945.00 |
| | | | | Lakhs | 562.55 |
| | | | Say Rs. | Crore | 5.63 |

(Underground Sewerage Network -500 to 900 mm dia RCC Pipes, L=4.3 Km) MEASUREMENT

| MEASUREMENT | | | | | | | | |
|-------------|--|----------|-----------|--------|-------|---|-------|--|
| ltem No | ITEM DESCRIPTION | No | L | В | D/H | Quantity | Unit | |
| | MATERIAL : | | | | | | | |
| 1 | Providing ISI Standard RCC pipes in standard | | | | | | | |
| | length of following class and diameter, | | | | | | | |
| | etc.complete. | | | | | | | |
| | RCC NP 3 Class | | | | | | | |
| | 500 mm dia. | 1.00 | 109.00 | | | 100.00 | Durat | |
| | | | | | | | Rmt | |
| | 800 mm dia. | 1.00 | 1456.00 | | | | Rmt | |
| | 900 mm dia. | 1.00 | 1276.00 | | | 1276.00 | Rmt | |
| | | | | | | | | |
| | RCC NP 4 Class | | | | | | | |
| | 500 mm dia. | 1.00 | 196.00 | | | 196.00 | Rmt | |
| | 600 mm dia. | 1.00 | 800.00 | | | 800.00 | Rmt | |
| | 800 mm dia. | 1.00 | 374.00 | | | 374.00 | Rmt | |
| | 900 mm dia. | 1.00 | 74.00 | | | 74.00 | Rmt | |
| | | | | | | | | |
| | LABOUR : | | | | | | | |
| | EXCAVATION DETAILS -From computer | | | | | | | |
| | generated design sheet | | | | | | | |
| | 0-1.5 | 1.5-3.0 | 3.0 - 4.5 | 1560 | 6075 | ΤΟΤΑΙ | | |
| | | | | | | | | |
| | 9347.26 | 9280.65 | 4668.66 | | | | Cum | |
| | 1833.17 | 3464.22 | 1122.52 | | | | Cum | |
| | 11180.43 | 12744.87 | 5791.18 | 426.99 | 44.25 | 30187.72 | Cum | |
| | | | | | | | | |
| 1 | Excavation for foundation / pipe trenches in earth, | | | | | | | |
| | soils of all types, sand, gravel, and soft murum | | | | | | | |
| | etc.complete. | | | | | | | |
| | | | | | | | | |
| | Lift 0.0 -1.5 M. | | | | | 1863.78 | Cum | |
| | | | | | | | | |
| 2 | Excavation for foundation / pipe trenches in hard | | | | | | | |
| | murum & boulders, WBM road etc.complete. | | | | | | | |
| | | | | | | | | |
| | Lift 0.0 -1.5 M. | | | | | 2671.00 | Cum | |
| | | | | | | | | |
| 3 | Excavation for pipe trenches in soft rock and old | | | | | 374.00 74.00 74.00 5 5 707AL 2 23629.76 2 6557.96 5 30187.72 1863.78 1863.78 6149.24 4389.33 6149.24 4389.33 5791.18 426.99 44.25 | | |
| | cement and lime masonary foundation, ashphalt | | | | | | | |
| | road etc.complete. | | | | | | | |
| | | | | | | 04.40.04 | | |
| | Lift 0.0-1.50 M. | | | | | | Cum | |
| | Lift 1.5-3.0 M. | | | | | 4389.33 | Cum | |
| | | | | | | | | |
| 4 | Excavation for pipe trenches in hard rock and | | | | | | | |
| | concrete road, by chiselling, wedging, lime drilling | | | | | | | |
| | by mechanical means or by all means other than | | | | | | | |
| | blasting, etc.complete. | | | | | | | |
| | Lift 0.0-1.50 M. | | | | | 196 11 | Cum | |
| | Lift 1.5-3.0 M. | | | | | | | |
| | | | | | | | Cum | |
| | Lift 3.0-4.5 M. | | | | | | Cum | |
| | Lift 4.5-6.0 M. | | | | | | Cum | |
| | Lift 6.0-7.5 M. | | | | | 44.25 | Cum | |
| | | | | | | | | |
| | | | | | | | | |
| 5 | Providing dry trap/ granite/quartzite/ gneiss, rubble | | | | | | | |
| 5 | Providing dry trap/ granite/quartzite/ gneiss, rubble stone soling etc.complete. | | | | | | | |
| 5 | stone soling etc.complete. | | | | | | | |
| 5 | | 1.00 | 1830.00 | 1.60 | 0.30 | 878.40 | Cum | |
| 5 | stone soling etc.complete. | | 1830.00 | 1.60 | 0.30 | 878.40 | Cum | |
| 5 | stone soling etc.complete. | | 1830.00 | 1.60 | 0.30 | 878.40 | Cum | |
| | stone soling etc.complete. Provision Made for trunk sewer along nallah | 1.00 | 1830.00 | 1.60 | 0.30 | 878.40 | Cum | |
| | stone soling etc.complete. Provision Made for trunk sewer along nallah Providing murum bedding in trenches with approved | 1.00 | 1830.00 | 1.60 | 0.30 | 878.40 | Cum | |
| | stone soling etc.complete. Provision Made for trunk sewer along nallah | 1.00 | 1830.00 | 1.60 | 0.30 | 878.40 | Cum | |

| ltem No | ITEM DESCRIPTION | Νο | L | В | D/H | Quantity | Unit |
|------------|--|--------|---------|------|------|----------|-------|
| | (As per Computer generated sheet) | | | | | 1054.66 | Cum |
| 8 | Lowering laying and jointing in proper grade and alignment R.C.C. pipes etc.complete | | | | | | |
| | 500 mm dia. | 1.00 | 305.00 | | | 305.00 | Rmt |
| | 600 mm dia. | 1.00 | 800.00 | | | 800.00 | Rmt |
| | 800 mm dia. | 1.00 | 1830.00 | | | 1830.00 | Rmt |
| | 900 mm dia. | 1.00 | 1350.00 | | | 1350.00 | Rmt |
| 9 | Hydraulic testing of RCC pipe line to specified pressure etc.complete | | | | | | |
| | 500 mm dia. | 1.00 | 0.31 | | | 0.31 | Rmt |
| | 600 mm dia. | 1.00 | 0.80 | | | 0.80 | Rmt |
| | 700 mm dia. | 1.00 | 0.00 | | | 0.00 | Rmt |
| | 800 mm dia. | 1.00 | 1.83 | | | 1.83 | Rmt |
| | 900 mm dia. | 1.00 | 1.35 | | | 1.35 | Rmt |
| 12 | Open timbering in trenches of depth more than 1.5 m for shoring and strutting etc. complete. | | | | | | |
| | Non Water Logged Area | | | | | | |
| | Lift 1.50 to 3.00 m. | 2.00 | 98.00 | | 1.50 | 294.00 | Sqm |
| | Water Logged Area | | | | | | |
| | Lift 1.50 to 3.00 m. | 2.00 | 98.00 | | 1.50 | 294.00 | Sqm |
| 13 | Providing and laying in situ cement concrete 1:2:4 of trap/ granite / quartzite/ gneiss metal for foundation and bedding etc. complete. | | | | | | |
| | Provision of anchor block Made for trunk sewer along nallah | 100.00 | 1.50 | 1.50 | 0.60 | 135.00 | |
| | Deduct | 100.00 | 0.79 | 1.00 | 0.60 | 47.10 | |
| | Net Qty | | | | | 87.90 | Cum |
| | (As per Computer generated sheet) | | | | | 126.72 | Cum |
| | Total Qty | | | | | 214.62 | Cum |
| 14 | Dewatering the excavated trenches and pools of water in the pipeline trenches, etc.complete. | | | | | | |
| | For nalla / where water table high | 7.00 | 200.00 | 5.00 | 6.00 | 42000.00 | Bhp/h |
| | 7 Fronts, 5 BHP Pump- 6Hrs- 180 Days | | | | | | |
| 16 | Providing and constructing on sewer, B.B. masonary circular manhole with concentric cone 1.5 M. dia. at bottom and 0.5 M. from top and up to depth of 5 m. with 23 cm thick brick work up to depth of 2 M from top and 35 cm thick brick work for remaining depth up to 5 M etc.complete | | | | | | |
| | Upto 2.50 m depth. | | | | | 14.00 | No. |
| | Upto 3.0 m depth. | | | | | 15.00 | No. |
| | Upto 3.5 m depth. | | | | | 18.00 | No. |
| | Upto 4.0 m depth. | | | | | 58.00 | No. |
| | Upto 4.5 m depth. | | | | | 45.00 | No. |
| | Upto 5.0 m depth. | | 1 | | | 4.00 | No. |

| Upio 5.0 m depin. | | | 4.00 | No. |
|-----------------------------------|--|--|------|-----|
| (As per Computer generated sheet) | | | | |
| | | | | |

| ltem No | ITEM DESCRIPTION | No | L | В | D/H | Quantity | Unit |
|------------|---|---------|--------|---|------|----------|------|
| 17 | Providing and constructing on sewer, B.B. masonary circular manhole with concentric cone 1.5 M. dia. at bottom and 0.5 M. from top and 35 cm thick brick work for depth of 2 M and 45 cm thick brick work for remaining depth up to 9 M in etc.complete | | | | | | |
| | Upto 5.5 m depth. | | | | | 5.00 | No. |
| | Upto 6.0 m depth. | | | | | 2.00 | No. |
| | Upto 6.5 m depth. | | | | | 2.00 | No. |
| | (As per Computer generated sheet) | | | | | | |
| 18 | Providing and fixing in position steel bar reinforcement etc. complete | | | | | | |
| | Wt of Steel = 0.1% of Concrete Qty = | 0.21 | 1648.5 | | | 1.65 | MT |
| 20 | Refilling the trenches with available excavated stuff etc.complete. | | | | | | |
| | (As per Computer generated sheet) | | | | | 23621.08 | Cum |
| 21 | Dispossing of surplus excavated stuff from site of work up to a distance of 2Km etc.complete | | | | | | |
| | (As per Computer generated sheet) | | | | | 5511.97 | Cum |
| | | | | | | | |
| 23 | WBM Road Restoration : Reinstating the road surface with supplying & spreading 60mm metal of 20 cm thick with Hard murum & 40mm metal of 15 cm thick with Soft murum etc. complete. | | | | | | |
| | (As per Computer generated sheet) | | | | | 5748.75 | Sqm |
| 24 | Asphalt Road restoration: Reinstatement of road by excavating the potholes in rectangular shape and filling of potholes by one layers of one layer of 80 mm trap metal of 200 mm thick, one layer of 40 mm trap metal of 100 mm thick etc., complete. | | | | | | |
| | (As per Computer generated sheet) | | | | | 3832.00 | Sqm |
| 25 | Concrete Road restoration : Reinstatement of Concrete road by excavating the concrete panels in rectangular shape and filling the trench with one layer of natural sand of 300 mm thick , one layer of M20 grade PCC of 150 mm thick and one layer of PQC M30 grade of 300 mm thicketc., complete | | | | | | |
| | (As per Computer generated sheet) Item No. 25a Providing and filling in the foundation with sand of ap-proved quality including watering, compaction complete. Spec. No.: Bd.A.13 Page No. 264 | | | | | 2299.00 | Sqm |
| | | 2299.00 | | | 0.10 | 229.90 | Cum |
| | Item No. 25b Providing and casting in situ cement concrete M- 15 of trap / granite / quartzite / gneiss metal for etc complete | | | | | | |
| | | 2299.00 | | | 0.10 | 229.90 | Cum |
| | Item No. 25c Providing and laying in situ cement concrete M -30 with tremix treatment for 300 mm thickness for Concrete Road etc. complete Spec : | | | | | | |
| | | 2299.00 | | | 0.05 | 114.95 | Cum |
| | | | i t | | 1 | | |

| 14. | | | | | | | |
|------------|---|----|---|---|-----|----------|------|
| Item No | ITEM DESCRIPTION | No | L | В | D/H | Quantity | Unit |
| 26 | Shifting of Utilities: All utilities like Electric Poles, waterline & Communication line Shifting while Manhole and Line Laying etc., complete as per | | | | | | |
| | specifications and or as directed by engineer- in- charge. | | | | | | |
| 28 | Utility Shifting | | | 1 | | | |
| A | Reconnection of existing damaged connection including 15 mm dia. CPVC pipe with necessary fittings, remaking good the demolished portion etc. complete including all labour, etc. complete. as directed by Engineer in charge. | | | | | | |
| | (Similar Item PWD CSR 2016-17, P. 165, I No 42.61) | | | | | | |
| | Water Supply Connections - 15 mm dia | 50 | 1 | | | 50 | Rmt |
| | (Similar Item PWD CSR 2016-17, P. 166, I No 42.62) | | | | | | |
| В | Water Supply Connections - 20 mm dia Electrical Lines & Poles | 15 | 1 | | | 15 | Rmt |
| | Electrical Poles - RA for 10 km | | | | | | |
| i) | Pole Foundation : Providing cement concrete foundation including excavation for the pole 60 cms x 60 cms x 1.5 mtr deep in1:3:6 cement concrete (20x 25 mm stone metal) and 45 cm x 45cm x45 cm / 45 cm x 45 cm height plinth duly plaster and with necessary curing & finishing in above manner (for 9 | | | | | | |
| | mtr pole) | 1 | | | | 1 | Nos |
| ii) | Dismantling of existing poles above 6 mtr height with brackets. Clamps, insulators stay from the cement concrete foundation and making the site clear by refilling the pits with excavated materials and bringing it to ground level | 1 | | | | 1 | Nos |
| iii) | Re-Erecting: Supplying and erecting steel tubular swaged pole 165.1 X 139.7 X 114.3 mm dia with 4.5 X 4.5 X3.65 mm thick (5+2+2m) length respectively and total 9 m long with pole cap, base plate in provided foundation (weight 147 kg) as per specifications. | 1 | | | | 1 | |
| iv) | Earthling : Providing erecting pipe type earthling of | I | | | | I | Nos |
| | 40 mm GI pipe dia with double earthling to the all equipments as per Detailed specifications. | 1 | | | | 1 | Nos |
| C | Electrical Cable - Providing and Jointing Communication Cable - Jelly Filled telephone | | | | | | |
| | lines and optical Fibre Cable | | | | | | |
| i) | Supply & Erecting of Jelly filled armoured telephone cable 10 pair with 0.5 mm dia laid in provided trench as per specification no. WG-TW | 1 | 3 | | | 3 | Rmt |
| ii) | Supply & erecting of FR grade PVC armourd multi mode Optical Fibre Cable with 6 fibres with core dia 50 µM , suitable for 1 GBps Ethernet distance at 850 nm of wavelength on wall/ ceiling or laid in provided pipe / trench as per specification no. WG- COC/ OFC | 1 | | | | | |
| iii) | Supply & fixing of wall /rack type 12 port light guide | 1 | 3 | | | 3 | Rmt |
| | interconnection unit for termination of optical fibre cable on wall /provided U rack complete as per specification no. EG- NAS / LIU | | | | | 1 | Nee |
| | • | 1 | | I | 1 | 1 1 | Nos |

| | MAHARASHTRA JEEVAN PRADHIKARAN DIVISION SOLAPUR SOLAPUR CITY UNDERGROUND SEWERAGE SCHEME (AMRUT) | | | | | | | | | |
|-------|---|--|--------------|----------|------------|--|--|--|--|--|
| | SOLAPUR CITY UNDERGROUND SEWERAGE SCHEME (AMRUT) | | | | | | | | | |
| | SOLAPUR CITY UNDERGROUND SEWERAGE SCHEME (AMRUT) SUB ESTIMATE NO. :- SEWERAGE SYSTEM FOR ZONE III (Underground Sewerage Network -450 to 700 mm dia RCC Pipes, L=2.2 Km) ABSTRACT | | | | | | | | | |
| | | | | | | | | | | |
| | | | | <u> </u> | | | | | | |
| I. N. | Quantity | ITEM DESCRIPTION | Rate | Unit | Amount Rs | | | | | |
| | | MATERIAL : | | | | | | | | |
| 1 | | Providing ISI Standard RCC pipes in standard length of following class and diameter, suitable for either collor joints or rubber ring joints, including all taxes (central and local) inspection charges, transport to departmental store / site unloading and stacking etc.complete. | | | | | | | | |
| | | Notes :- One rubber ring should be supplied with each full length of socketed pipe, cost included in the rates below. | | | | | | | | |
| | | RCC NP 3 Class | | | | | | | | |
| | 368.00 | 450 mm dia. | 1449.00 | Rmt | 533232.00 | | | | | |
| | 152.00 | 500 mm dia. | 1785.00 | Rmt | 271320.00 | | | | | |
| | 0.00 | 600 mm dia. | 2100.00 | Rmt | 0.00 | | | | | |
| | 660.00 | 700 mm dia. | 2940.00 | Rmt | 1940400.00 | | | | | |
| | | RCC NP 4 Class | | _ | | | | | | |
| | 71.00 | 450 mm dia. | 1575.00 | Rmt | 111825.00 | | | | | |
| | 190.00 | 500 mm dia. | 1943.00 | Rmt | 369170.00 | | | | | |
| | 679.00 | 600 mm dia. 700 mm dia. | 2520.00 | Rmt | 1711080.00 | | | | | |
| | 71.00 | (CSR 2016-17, P. 103,104, I. E, F) | 3150.00 | Rmt | 223650.00 | | | | | |
| | | | | | | | | | | |
| | | | Material Cos | st | 5160677.00 | | | | | |
| | | LABOUR : | | | | | | | | |
| 1 | | Excavation for foundation / pipe trenches in earth, soils of all types , sand, gravel, and soft murum includng removing the excavated material up to a distance of 50 m. and lift as below, stacking and spreading as directed by the Engineer-in- charge, normal dewatering, preparing the bed for foundation and excluding back filling. etc.complete. | | | | | | | | |
| | | Lift 0.0 -1.5 M. | | | | | | | | |
| | | Basic Rate | 141.00 | | | | | | | |
| | | Add 10 % for M.C | 14.10 | | | | | | | |
| | 1077.33 | Total | 155.10 | Cum | 167093.88 | | | | | |
| | | (CSR 2016-17, P. 35 I. 1) | | | | | | | | |

| I. N. | Quantity | ITEM DESCRIPTION | Rate | Unit | Amount Rs |
|-------|----------|---|---------|------------------|------------|
| 2 | | Excavation for foundation / pipe trenches in hard murum & boulders, WBM road includng removing the excavated material up to a distance of 50 m. | | | |
| | | and lift as below, stacking and spreading as | | | |
| | | directed by the Engineer-in- charge, normal | | | |
| | | dewatering, preparing the bed for foundation and | | | |
| | | excluding back filling. etc.complete. | | | |
| | | Lift 0 -1.5 M. | | | |
| | | Basic Rate | 180.00 | | |
| | | Add 10 % for M.C | 18.00 | - | |
| | 1675.03 | Total | 198.00 | Cum | 331655.94 |
| | | Lift 0 -1.5 M. | | | |
| | | (CSR 2016-17, P. 35 I. 3) | | | |
| 3 | | Excavation for pipe trenches in soft rock and old | | | |
| | | cement and lime masonary foundation, ashphalt road includng removing the excavated material up | | | |
| | | to a distance of 50 m. and lift as below, stacking | | | |
| | | and spreading as directed by the Engineer-in- | | | |
| | | charge, normal dewatering, preparing the bed for | | | |
| | | foundation and excluding back filling. etc.complete. | | | |
| | | Lift 0 -1.5 M. | | | |
| | | Basic Rate | 443.00 | | |
| | | Add 10 % for M.C | 44.30 | | |
| | 2518.34 | Total | 487.30 | Cum | 1227187.08 |
| | | Lift 1.5 -3.0 M. | | | |
| | | Basic Rate | 463.00 | | |
| | | Add 10 % for M.C | 46.30 | | |
| | 2641.62 | Total | 509.30 | Cum | 1345377.07 |
| | | (CSR 2016-17, P. 35 I. 5) | | | |
| 4 | | Excavation for pipe trenches in hard rock and | | | |
| | | concrete road, by chiselling, wedging, lime drilling | | | |
| | | by mechanical means or by all means other than | | | |
| | | blasting, including trimming and levelling the bed, | | | |
| | | removing the excavated material up to a distance of | | | |
| | | 50 m. and lift as below, stacking and spreading as | | | |
| | | directed by the Engineer-in- charge, normal | | | |
| | | dewatering, preparing the bed for foundation and excluding back filling. etc.complete. | | | |
| | | excluding back ming. etc.complete. | | | |
| | | Lift 1.5 -3.0 M. | 774 00 | | |
| | | Basic Rate Add 10 % for M.C | 771.00 | $\left \right $ | |
| | 0005 70 | | 77.10 | 0 | 0545007.40 |
| | 2965.72 | Total Lift 3.0 -4.5 M. | 848.10 | Cum | 2515227.13 |
| | | Basic Rate | 791.00 | | |
| | | Add 10 % for M.C | 79.10 | 1 | |
| | 2899.51 | Total | 870.10 | Cum | 2522867.53 |
| | | Lift 4.5-6.0 M. | 5. 5110 | | |
| | | Basic Rate | 811.00 | 1 | |
| | | Add 10 % for M.C | 81.10 | | |
| | = 10.00 | Total | | Cum | 484136.26 |
| | 542.69 | I Ulai | 892.10 | | 4041.0070 |

| I. N. | Quantity | ITEM DESCRIPTION | Rate | Unit | Amount Rs |
|-------|----------|--|---------|-------|------------|
| 5 | | Providing dry trap/ granite/quartzite/ gneiss, rubble | | | |
| - | | stone soling in 15 cm to 20 cm thick layers including | | | |
| | | hand packing and compacting etc.complete. | | | |
| | | Basic Rate | 912.00 | | |
| | | Add 5 % for M.C. | 45.60 | | |
| | 113.88 | Total | 957.60 | Cum | 109051.49 |
| | | (CSR 2016-17, P. 39 I.18) | | | |
| 6 | | Providing murum bedding in trenches with approved | | | |
| U | | murum from excavated materials from foundation | | | |
| | | in 15 cm. to 20 cm. layers including watering & | | | |
| | | compaction complete. | | | |
| | | Basic Rate | 64.00 | | |
| | | Add 5 % for M.C | 3.20 | | |
| | 339.26 | Total | 67.20 | Cum | 22798.04 |
| | 000.20 | (CSR 2016-17, P. 39, I. 16) | 01.20 | Uum | 221 30.04 |
| - | | | | | |
| 7 | | Lowering laying and jointing in proper grade and | | | |
| | | alignment R.C.C. pipes with collar joints in CM 1:1 proportion or socketed R.C.C. pipes with rubbar | | | |
| | | joints (excluding cost of rubber ring or R.C.C. collor | | | |
| | |), including cost of conveyance from stores to site of | | | |
| | | works, cost of jointing material, labour, giving | | | |
| | | hydraulic testing, etc.complete as directed by | | | |
| | | Engineer-in-charge | | | |
| | | 450 mm dia. | | | |
| | | Basic Rate | 180.00 | | |
| | | Add 5 % for M.C. | 9.00 | | |
| | 439.00 | Total | 189.00 | Rmt | 82971.00 |
| | | 500 mm dia. | | | |
| | | Basic Rate | 197.00 | | |
| | | Add 5 % for M.C | 9.85 | _ | |
| | 342.00 | Total | 206.85 | Rmt | 70742.70 |
| | | 600 mm dia. | 0.40.00 | ┨───┤ | |
| | | Basic Rate | 248.00 | | |
| | 070.00 | Add 5 % for M.C | 12.40 | | 1700/// 67 |
| | 679.00 | Total | 260.40 | Rmt | 176811.60 |
| | | 700 mm dia. | | ┨───┤ | |
| | | Basic Rate | 281.00 | | |
| | | Add 5 % for M.C | 14.05 | | |
| | 731.00 | | 295.05 | Rmt | 215681.55 |
| | | (CSR 2016-17, P. 105, I. 2) | | | |

| I. N. | Quantity | ITEM DESCRIPTION | Rate | Unit | Amount Rs |
|-------|----------|--|----------|------|-----------|
| 8 | | Hydraulic testing of RCC pipe line to specified pressure including cost of all materials and labour and water for testing for specified length including | | | |
| | | cutting, placing end cap making arrangement for filling safe water using reciprocating type pumps | | | |
| | | which should be able to provide specified test pressure gauges and other necessary equipments, | | | |
| | | labour, operation charges, etc. required for testing. The rate under this item shall also include cost of | | | |
| | | retesting, if necessary and reinstating to original position. New item to be added | | | |
| | | 450 mm dia. | | | |
| | | Basic Rate | 20000.00 | | |
| | | Add 5 % for M.C. | 1000.00 | | |
| | 0.44 | Total | 21000.00 | Km | 9219.00 |
| | | 500 mm dia. | | | |
| | | Basic Rate | 22000.00 | | |
| | | Add 5 % for M.C | 1100.00 | | |
| | 0.34 | Total | 23100.00 | Km | 7900.20 |
| | | 600 mm dia. | | | |
| | | Basic Rate | 28000.00 | | |
| | | Add 5 % for M.C | 1400.00 | | |
| | 0.68 | Total | 29400.00 | Km | 19962.60 |
| | | 700 mm dia. | | | |
| | | Basic Rate | 31000.00 | | |
| | | Add 5 % for M.C | 1550.00 | | |
| | 0.73 | Total | 32550.00 | Km | 23794.05 |
| | | (CSR 2016-17, P. 105, I. 2) | | | |
| 9 | | Open timbering in trenches of depth more than 1.5 m for shoring and strutting including use of and | | | |
| | | waste of all necessary timber works including walling, strutts, open polling boards/ horizontal | | | |
| | | sheeting, runners, etc. as may be necessary and | | | |
| | | fixing and removal complete. (Measurements to be taken of the face/area timbered) | | | |
| | | Non Water Logged Area | | | |
| | | Lift 1.50 to 3.00 m. | | | |
| | | Basic Rate | 240.00 | | |
| | | Add 5 % for M.C | 12.00 | | |
| | 350.40 | Total | 252.00 | Sqm | 88300.80 |

| I. N. | Quantity | ITEM DESCRIPTION | Rate | Unit | Amount Rs |
|-------|-----------|---|----------|-------|------------|
| | | Water Logged Area | | | |
| | | Lift 1.50 to 3.00 m. | | | |
| | | Basic Rate | 239.00 | | |
| | | Add 5 % for M.C | 11.95 | | |
| | 525.60 | Total | 250.95 | Sqm | 131899.32 |
| | | (CSR 2016-17, P. 39, I. 20a / b) | | | |
| 10 | | Providing and laying in situ cement concrete 1:2:4 of trap/ granite / quartzite/ gneiss metal for foundation and bedding including bailing out water manually, formwork, compacting and curring etc. complete. | | | |
| | | Basic Rate | 4233.00 | | |
| | | Add 5 % for M.C | 211.65 | | |
| | 274.50 | Total | 4444.65 | Cum | 1220035.68 |
| | | (CSR 2016-17, P. 43, I. 1b) | | | |
| 11 | | Dewatering the excavated trenches and pools of water in the pipeline trenches, well works by using pumps and other divices including disposing off water to safe distance as directed by Engineer-in- charge (including cost of machionary, labour,fuel) etc.complete. | | | |
| | | Basic Rate | 62.00 | | |
| | | Add 5 % for M.C | 3.10 | | |
| | 105000.00 | Total | 65.10 | HP/Hr | 6835500.00 |
| | | (CSR 2016-17, P. 38, I. 14) | | | |
| | | | | | |
| 12 | | Providing and constructing on sewer, B.B. masonary circular manhole with concentric cone 1.2 M. dia. at bottom and 0.5 M. from top and up to depth of 2 m. with 23 cm thick brick work up to depth of 2 M in CM 1:4 proportion with 20 mm thick smooth plaster on both sides in CM 1:2 proportion excluding excavation including foundation concrete 250 mm thick and haunches and channels in C.C. 1:2:4 proportion, finishing channels in smooth rendering, providing C.I. dapuri type steps each weighing 5.5 Kg., 1:2:4 coping and providing and fixing approved make and quality S.F.R.C. frame and cover of 56 cm dia. etc.complete as directed by Engineer-in- charge. | | | |
| | | Upto 2 m depth. | | | |
| | | Basic Rate | 20148.00 | | |
| | | Add 5 % for M.C | 1007.40 | | |
| | 11.00 | Total | 21155.40 | No. | 232709.40 |
| | | (CSR 2016-17, P. 272, I. 6) | | | |
| | | a) Rebate for every decrease in depth of 50 cm or | | 1 1 | |

| I. N. | Quantity | ITEM DESCRIPTION | Rate | Unit | Amount Rs |
|-------|----------|--|----------|------|-----------|
| 13 | | Providing and constructing on sewer, B.B. | | | |
| | | masonary circular manhole with concentric cone 1.5 | | | |
| | | M. dia. at bottom and 0.5 M. from top and up to | | | |
| | | depth of 5 m. with 23 cm thick brick work up to | | | |
| | | depth of 2 M from top and 35 cm thick brick work for | | | |
| | | remaining depth up to 5 M in CM 1:4 proportion | | | |
| | | with 20 mm thick smooth plaster on both sides in | | | |
| | | CM 1:2 proportion excluding excavation including | | | |
| | | foundation concrete 250 mm thick and haunches | | | |
| | | | | | |
| | | and channels in C.C. 1:2:4 proportion, finishing | | | |
| | | channels in smooth rendering, providing C.I. dapuri | | | |
| | | type steps each weighing 5.5 Kg., 1:2:4 coping and | | | |
| | | providing and fixing approved make and quality | | | |
| | | S.F.R.C. frame and cover of 56 cm dia. | | | |
| | | etc.complete as directed by Engineer-in- charge. | | | |
| | | Upto 2.5 m depth. | | | |
| | | Basic Rate | 28011.00 | | |
| | | Add 5 % for M.C | 1400.55 | | |
| | 11.00 | Total | 29411.55 | No. | 323527.05 |
| | | Upto 3.0 m depth. | | | |
| | | Basic Rate | 33901.00 | | |
| | | Add 5 % for M.C | 1695.05 | | |
| | 5.00 | Total | 35596.05 | No. | 177980.25 |
| | | Upto 3.50 m depth. | | | |
| | | Basic Rate | 39791.00 | | |
| | | Add 5 % for M.C | 1989.55 | | |
| | 6.00 | Total | 41780.55 | No. | 250683.30 |
| | | Upto 4.0 m depth. | | | |
| | | Basic Rate | 45681.00 | | |
| | | Add 5 % for M.C | 2284.05 | | |
| | 15.00 | Total | 47965.05 | No. | 719475.75 |
| | | Upto 4.5 m depth. | | | |
| | | Basic Rate | 51571.00 | | |
| | | Add 5 % for M.C | 2578.55 | | |
| | 11.00 | Total | 54149.55 | No. | 595645.05 |
| | | Upto 5.0 m depth. | 01110100 | | |
| | | Basic Rate | 57461.00 | | |
| | | Add 5 % for M.C | 2873.05 | | |
| | 14.00 | Total | 60334.05 | No. | 844676.70 |
| | 14.00 | (CSR 2016-17, P. 273, I. 7) | 00334.03 | INO. | 044070.70 |
| | | a) Rebate for every decrease in depth of 50 cm or | | | |
| | | part there of Rs.5890/-Add 5% for M.C=Rs.6184.50 | | | |
| | | IVI.U=RS.0104.3U | | | |

| I. N. | Quantity | ITEM DESCRIPTION | Rate | Unit | Amount Rs |
|-------|----------|--|---------------------|-------|-----------|
| 14 | | Providing and constructing on sewer, B.B. masonary circular manhole with concentric cone 1.5 | | | |
| | | M. dia. at bottom and 0.5 M. from top and 35 cm | | | |
| | | thick brick work for depth of 2 M and 45 cm thick brick work for remaining depth up to 9 M in CM 1:4 | | | |
| | | proportion with 20 mm thick smooth plaster on both | | | |
| | | sides in CM 1:2 proportion excluding excavation | | | |
| | | including foundation concrete 250 mm thick and | | | |
| | | haunches and channels in C.C. 1:2:4 proportion, | | | |
| | | finishing channels in smooth rendering, providing C.I. dapuri type steps each weighing 5.5 Kg., 1:2:4 | | | |
| | | coping and providing and fixing approved make | | | |
| | | and quality S.F.R.C. frame and cover of 56 cm dia. | | | |
| | | etc.complete as directed by Engineer-in- charge. | | | |
| | | 5.50 m depth. | | | |
| | | Basic Rate | 71823.00 | | |
| | | Add 5 % for M.C | 3591.15 | | |
| | 13.00 | | 75414.15 | No. | 980383.95 |
| | | (CSR 2016-17, P. 273, I. 8) a) Rebate for every decrease in depth of 50 cm or | | | |
| | | part there of Rs7410/-Add 5% for M.C .=Rs.7780.50 | | | |
| 15 | | Providing and fixing in position steel bar | | | |
| _ | | reinforcement of various diameters for RCC piles, caps, footings, foundations, lintels, parodies, | | | |
| | | copings, fins, arches, etc. as per detailed designs, | | | |
| | | drawings and schedules; including cutting, bending, | | | |
| | | hooking the bars, binding with wires or tack welding and supporting as required, etc. complete. | | | |
| | | (including cost of binding wire). | | | |
| | | Tor Steel | | | |
| | | Basic Rate Add 5 % for M.C | 52194.00 | | |
| | 2.12 | Total | 2609.70 54803.70 | MT | 116156.44 |
| | 2.12 | (CSR 2016-17, P. 46, I. 8b) | 04000.70 | | 110100.44 |
| 10 | | | | | |
| 16 | | Refilling the trenches with available excavated stuff with soft material first over pipe line and then hard | | | |
| | | material in 15 cm layers with all leads and lifts | | | |
| | | including consolidation, surcharging, etc.complete. | | | |
| | | Basic Rate | 64.00 | | |
| | 44054.00 | Add 5 % for M.C | 3.20 | Curre | 700040.00 |
| | 11351.93 | Total (CSR 2016-17, P. 38, I.15) | 67.20 | Cum | 762849.62 |
| | | | | | |
| 17 | | Dispossing of surplus excavated stuff from site of | | | |
| | | work up to a distance of 2 Km.including, loading, unloading, transportation etc.complete or as | | | |
| | | directed by the Engineering- in- charge. | | | |
| | | (CSR 2015-16, P. 22, Statement VI) | | | |
| | 2629.07 | Basic Rate | 195.62 | Cum | 514297.77 |

| I. N. | Quantity | ITEM DESCRIPTION | Rate | Unit | Amount Rs |
|-------|----------|--|--------|------|------------|
| 18 | | WBM Road restoration: Reinstating the road surface with supplying & spreading 60mm metal of 20 cm thick with Hard murum & 40mm metal of 15 cm thick with Soft murum as a blindage, above WBM surfaceFor all the above layers watering & compacting with Power roller, including Excavation of required depth for road reinstating or as directed by Engineer-in-charge etc. complete. | | | |
| | 2593.50 | (As per Rate Analysis) | 208.74 | Sqm | 541367.19 |
| 19 | | Asphalt Road restoration: Reinstatement of road by excavating the potholes in rectangular shape and filling of potholes by one layers of one layer of 80 mm trap metal of 200 mm thick, one layer of 40 mm trap metal of 100 mm thick including supplying and spreading of stone dust/murrum of 100 mm thick, watering compaction and 75 mm thick bituminous bound macadam with cold emulsion 60/70 grade and bituminous macadam of 50 mm thick asphalt concrete with S-35 grade and 20 mm thick asphalt concrete with S-35 grade of bitumen including compaction by vibratory roller of all layers and providing and applying tack coat of 50 Kg / 100 m2 on black top surface and seal coat of 1kg/sqm. B.B.M. surface and disposal of surplus soil etc., complete. for pipeline trenches of various diameter etc., complete as per specifications and or as directed by engineer- in-charge. | | | |
| | 1729.00 | (As per Rate Analysis) | 873.47 | Sqm | 1510229.63 |
| 20 | | Concrete Road restoration :Reinstatement of Concrete road by excavating the concrete panels in rectangular shape and filling the trench with one layer of natural sand of 300 mm thick , one layer of M20 grade PCC of 150 mm thick and one layer of PCC M30 grade of 300 mm thick including dewatering etc., complete. for pipeline trenches of various diameter etc., complete as per specifications and or as directed by engineer- in-charge. Item No. 20a Providing and filling in the foundation | | | |
| | | with sand of ap-proved quality including watering, compaction complete. Spec. No.: Bd.A.13 Page No. 264 | | | |
| | | PWD DSR 17-18, Item No. 12 / 1 BDA 13, Pg-17 | | | |
| | | Basic Rate | 451.00 | | |
| | | Add 5% for M.C. + 5% Sugarcane Area | 45.10 | 1 | |

| I. N. | Quantity | ITEM DESCRIPTION | Rate | Unit | Amount Rs |
|-------|----------|---|---------|--------|-----------|
| | | Item No. 20b Providing and casting in situ cement | | | |
| | | concrete M- 15 of trap / granite / quartzite / gneiss | | | |
| | | metal for steps including centering, formwork, | | | |
| | | compacting, roughening them if special finish is to | | | |
| | | be provided and curing and finishing if required | | | |
| | | complete, with fully automatic micro processor | | | |
| | | based PLC with SCADA enabled reversible Drum | | | |
| | | Type mixer With natural sand. Spec. No.: Bd.E.2 | | | |
| | | Page No. 288 and B.7 Page No 38 | | | |
| | | rage No. 200 and D.7 rage No 30 | | | |
| | | PWD DSR 2017-18, I. No. 2 i a 4, Pg. No. 25 | | | |
| | | Basic Rate | 5380.00 | | |
| | | Add 5% for M.C. + 5% Sugarcane Area | 538.00 | | |
| | 69.20 | Total | 5918.00 | Cum | 409525.60 |
| | | | | | |
| | | Item No. 20c: Providing and laying in situ cement | | | |
| | | concrete M -30 with tremix treatment for 200 mm | | | |
| | | thickness for Concrete Road is including laying | | | |
| | | plastic sheet for 125 micron thickness with groove | | | |
| | | cutting of 4 mm wide and 20 mm deep with | | | |
| | | necessary refilling with bitumen (excluding | | | |
| | | reinforcement) with Natural sand etc. complete | | | |
| | | Spec : As directed by Engineer incharge | | | |
| | | | | | |
| | | PWD DSR 2017-18, I. No. 93 / 23 MORTH, Pg. No. | | | |
| | | 228 Basic Rate | 6362.00 | | |
| | | Add 5% for M.C. + 5% Sugarcane Area | 636.20 | | |
| | 34.60 | Total | 6998.20 | Cum | 242137.72 |
| | 0 1100 | | 0000120 | | |
| 21 | | Shifting of Utilities: All utilities like Electric Poles, | | | |
| | | waterline & Communication line Shifting while | | | |
| | | Manhole and Line Laying work etc., complete as | | | |
| | | per specifications and or as directed by engineer- in- | | | |
| | | charge. | | | |
| 22 | | Utility Shifting | | | |
| Α | | Reconnection of existing damaged connection | | | |
| | | including 15 mm dia. CPVC pipe with necessary | | | |
| | | fittings, remaking good the demolished portion etc. | | | |
| | | complete including all labour, etc. complete. as | | | |
| | | directed by Engineer in charge. | | | |
| | | Water Supply Connections - 15 mm dia | | | |
| | | Basic Rate | 167 | | |
| | | Add 5% for M.C. | 8.35 | | |
| | 50 | Total | 175.35 | Rmt | 8767.5 |
| | | (Similar Item PWD CSR 2016-17, P. 166, I No | | | |
| | | 42.62) | | | |
| | | Water Supply Connections - 20 mm dia | | Rmt | |
| | | Basic Rate | 196 | i xint | |
| | | Add 5% for M.C. | 9.8 | | |
| | | | 9.0 | | |

| I. N. | Quantity | ITEM DESCRIPTION | Rate | Unit | Amount Rs. |
|--------------|----------|--|----------|-------------------|----------------------------|
| В | | Electrical Lines & Poles | | | |
| | | Electrical Poles - RA for 10 km | | | |
| i) | | Pole Foundation : Providing cement concrete foundation including excavation for the pole 60 cms | | | |
| | | x 60 cms x 1.5 mtr deep in1:3:6 cement concrete | | | |
| | | (20x 25 mm stone metal) and 45 cm x 45cm x45 cm / 45 cm x 45 cm height plinth duly plaster and with | | | |
| | 1 | necessary curing & finishing in above manner (for 9 mtr pole) | 2771.00 | Nos | 2771 |
| | I | PWD DSR 15-16, E & M, Item No. 16.3.2, P.No. 161 | 2111.00 | 1103 | 2111 |
| ii) | | Dismantling of existing poles above 6 mtr height with brackets. Clamps, insulators stay from the | | | |
| | | cement concrete foundation and making the site | | | |
| | | clear by refilling the pits with excavated materials and bringing it to ground level | | | |
| | 1 | | 701.00 | Nos | 701 |
| iii) | | PWD DSR 15-16, E & M, Item No. 8.8.2, P.No. 110 Re-Erecting: Supplying and erecting steel tubular | | | |
| ··· <i>i</i> | | swaged pole 165.1 X 139.7 X 114.3 mm dia with 4.5 | | | |
| | | X 4.5 X3.65 mm thick (5+2+2m) length respectively and total 9 m long with pole cap, base plate in | | | |
| | | provided foundation (weight 147 kg) as per | | | |
| | 1 | specifications. PWD DSR 15-16, E&M, Item No. 8.1.3, Page No.98 | 12722.00 | Nos | 12722 |
| iv) | | Earthling : Providing erecting pipe type earthling of | | | |
| | | 40 mm GI pipe dia with double earthling to the all equipments as per Detailed specifications. | | | |
| | 1 | PWD DSR 14-15 E&M, Item No. 9.1.4, Page No.111 | 1585.00 | Nos | 1585 |
| С | | Electrical Cable - Providing and Jointing | | | |
| | | Communication Cable - Jelly Filled telephone | | | |
| | | lines and optical Fibre Cable | | | |
| i) | | Supply & Erecting of Jelly filled armoured telephone cable 10 pair with 0.5 mm dia laid in provided trench | | | |
| | 3 | as per specification no. WG-TW | 83.00 | Rmt | 249 |
| ::/ | | PWD DSR 15-16 Item 1-10-10, P No 17 | | | |
| ii) | | Supply & erecting of FR grade PVC armourd multi mode Optical Fibre Cable with 6 fibres with core dia | | | |
| | | 50 µM, suitable for 1 GBps Ethernet distance at 850 | | | |
| | | nm of wavelength on wall/ ceiling or laid in provided pipe / trench as per specification no. WG- COC/ | | | |
| | 3 | OFC | 247.00 | Rmt | 741 |
| iii) | | PWD DSR 15-16 Item 1-12-8, P No 20 Supply & fixing of wall /rack type 12 port light guide | | | |
| , | | interconnection unit for termination of optical fibre | | | |
| | 1 | cable on wall /provided U rack complete as per specification no. EG- NAS / LIU | 4366.00 | Nos | 4366 |
| | | PWD DSR 15-16 Item 1-14-5 P No 21 | | | * |
| | | | | | |
| | | | | ur Cost | |
| | | Total Material | | ost Rs. ay Rs. | 31060883.96 31060884.00 |
| | | | | Lakhs | 310.61 |
| | | | Say | / Crore | 3.11 |

SOLAPUR MUNICIPAL CORPORATION MAHARASHTRA JEEVAN PRADHIKARAN DIVISION SOLAPUR SOLAPUR CITY UNDERGROUND SEWERAGE SCHEME (AMRUT) SUB ESTIMATE NO. :- SEWERAGE SYSTEM FOR ZONE III

(Underground Sewerage Network -450 to 700 mm dia RCC Pipes, L=2.2 Km)

| | MEASUF | | | Pipes, L= | , | | |
|------|--|---------------------|----------------|-----------|---------|----------------|------------|
| ltem | | | | в | | Quantity | Unit |
| No | ITEM DESCRIPTION | No | L | В | D/H | Quantity | Unit |
| | MATERIAL : | | | | | | |
| 1 | Providing ISI Standard RCC pipes in standard length | | | | | | |
| | of following class and diameter, etc.complete. | | | | | | |
| | | | | | | | |
| | RCC NP 3 Class | | | | | | _ |
| | 450 mm dia. | 1.00 | 368.00 | | | 368.00 | Rmt |
| | 500 mm dia. 600 mm dia. | 1.00 | 152.00 | | | 152.00 | Rmt |
| | 700 mm dia. | <u>1.00</u> 1.00 | 0.00 660.00 | | | 0.00 660.00 | Rmt Rmt |
| | | 1.00 | 000.00 | | | 000.00 | KIIII |
| | RCC NP 4 Class | | | | | | |
| | 450 mm dia. | 1.00 | 71.00 | | | 71.00 | Rmt |
| | 500 mm dia. | 1.00 | 190.00 | | | 190.00 | Rmt |
| | 600 mm dia. | 1.00 | 679.00 | | | 679.00 | Rmt |
| | 700 mm dia. | 1.00 | 71.00 | | | 71.00 | Rmt |
| | | | | | | | |
| | LABOUR : | | | | | | |
| | EXCAVATION DETAILS -From computer | | | | | | |
| | generated design sheet 0-1.5 | | | | | | |
| | 0-1.5 | 1.5-3.0 | 3.0 - 4.5 | 4.5-6.0 | 6.0-7.5 | TOTAL | |
| | 4214.42 | 3660.48 | 2195.44 | 420.14 | 0.00 | 10490.48 | Cum |
| | 1056.29 | 1946.85 | 704.08 | 122.55 | 0.00 | 3829.77 | Cum |
| | 5270.71 | 5607.34 | 2899.51 | 542.69 | 0.00 | 14320.25 | Cum |
| | | | | | | | 1 |
| 1 | Excavation for foundation / pipe trenches in earth, | | | | | | |
| | soils of all types , sand, gravel, and soft murum | | | | | | |
| | etc.complete. | | | | | | |
| | Lift 0.0 -1.5 M. | | | | | 1077.33 | Cum |
| 2 | Excavation for foundation / pipe trenches in hard | | | | | | |
| 2 | murum & boulders, WBM road etc.complete. | | | | | | |
| | Lift 0.0 -1.5 M. | | | | | 1675.03 | Cum |
| | | | | | | | |
| 3 | Excavation for pipe trenches in soft rock and old | | | | | | |
| | cement and lime masonary foundation, ashphalt road | | | | | | |
| | etc.complete. | | | | | | |
| | Lift 0.0-1.50 M. | | | | | 2518.34 | Cum |
| | Lift 1.5-3.0 M. | | | | | 2641.62 | Cum |
| 4 | Excavation for pipe trenches in hard rock and | | | | | | |
| - | concrete road, by chiselling, wedging, lime drilling by | | | | | | |
| | mechanical means or by all means other than | | | | | | |
| | blasting, etc.complete. | | | | | | |
| | Lift 1.5-3.0 M. | | | | | 2965.72 | Cum |
| | Lift 3.0-4.5 M. | | | | | 2899.51 | Cum |
| | Lift 4.5-6.0 M. | | | | | 542.69 | Cum |
| F | Droviding dry trop/ granita/guartaita/ gracias with the | | | | | | |
| 5 | Providing dry trap/ granite/quartzite/ gneiss, rubble stone soling etc.complete. | | | | | | |
| | Provision Made for trunk sewer along nallah | 1.00 | 292.00 | 1.30 | 0.30 | 113.88 | Cum |
| | | | | | | | 2 |
| | | | | | | | |

| tem No | ITEM DESCRIPTION | No | L | В | D/H | Quantity | Uni |
|-----------|---|-------|--------|------|------|---------------|----------|
| | | | | | | | |
| 6 | Providing murum bedding in trenches with approved murum from excavated materials etc.n complete. | | | | | | |
| | (As per Computer generated sheet) | | | | | 339.26 | Cur |
| 7 | Lowering loving and idinting in proper grade and | | | | | | |
| 1 | Lowering laying and jointing in proper grade and alignment R.C.C. pipes etc.complete | | | | | | |
| | 450 mm dia. | 1.00 | 439.00 | | | 439.00 | Rm |
| | 500 mm dia. | 1.00 | 342.00 | | | 342.00 | Rrr |
| | 600 mm dia. | 1.00 | 679.00 | | | 679.00 | Rrr |
| | 700 mm dia. | 1.00 | 731.00 | | | 731.00 | Rrr |
| 8 | Hydraulic testing of RCC pipe line to specified pressure etc.complete | | | | | | |
| | 450 mm dia. | 1.00 | 0.44 | | | 0.44 | Rm |
| | 500 mm dia. | 1.00 | 0.34 | | | 0.34 | Rm |
| | 600 mm dia. | 1.00 | 0.68 | | | 0.68 | Rm |
| | 700 mm dia. | 1.00 | 0.73 | | | 0.73 | Rm |
| | | | | | | | |
| 9 | Open timbering in trenches of depth more than 1.5 m | | | | | | |
| 3 | for shoring and strutting etc. complete. | | | | | | |
| | Non Water Logged Area | | | | | | |
| | Lift 1.50 to 3.00 m. | 2.00 | 116.80 | | 1.50 | 350.40 | Sqr |
| | Water Logged Area | | | | | | |
| | Lift 1.50 to 3.00 m. | 2.00 | 175.20 | | 1.50 | 525.60 | Sqr |
| 10 | Providing and laying in situ cement concrete 1:2:4 of trap/ granite / quartzite/ gneiss metal for foundation and bedding etc. complete. | | | | | | |
| | Provision of anchor block Made for trunk sewer along nallah | 40.00 | 1.50 | 1.50 | 0.60 | 54.00 | |
| | Deduct | 40.00 | 0.79 | 1.00 | 0.60 | 18.84 | |
| | Net Qty | | | | | 35.16 | Cu |
| | (As per Computer generated sheet) | | | | | 239.34 | Cu |
| | Total Qty | | | | | 274.50 | Cu |
| 11 | Dewatering the excavated trenches and pools of water in the pipeline trenches, etc.complete. | | | | | | |
| | For nalla / where water table high | 7.00 | 500.00 | 5.00 | 6.00 | 105000.00 | Bhp |
| | 7 Fronts, 5 BHP Pump- 6Hrs- 180 Days | | | | | | |
| 12 | Providing and constructing on sewer, B.B. masonary | | | | | | |
| | circular manhole with concentric cone 1.2 M. dia. at | | | | | | |
| | bottom and 0.5 M. from top and up to depth of 2 m. | | | | | | |
| | with 23 cm thick brick work up to depth of 2 | | | | | | |
| | Metc.complete | | | | | | |
| | Upto 2.0 m depth. | | | | | 11.00 | No |
| | (As per Computer generated sheet) | | | | | | |
| 13 | Providing and constructing on sewer, B.B. masonary | | | | | | |
| | circular manhole with concentric cone 1.5 M. dia. at | | | | | | |
| | bottom and 0.5 M. from top and up to depth of 5 m. | | | | | | |
| | with 23 cm thick brick work up to depth of 2 M from | | | | | | |
| | top and 35 cm thick brick work for remaining depth up | | | | | | 1 |
| | top and oo on anon brok tork for formaling dopar ap | | | | | | 1 |
| | to 5 M etc.complete | | | | | | |
| | to 5 M etc.complete Upto 2.50 m depth. | | | | | 11.00 | No |
| | to 5 M etc.complete | | | | | 11.00 5.00 | No No |

| tem No | ITEM DESCRIPTION | No | L | В | D/H | Quantity | Uni |
|-----------|---|--------|--------|---|------|----------|-----|
| - | Upto 4.0 m depth. | | | | | 15.00 | No |
| | Upto 4.5 m depth. | | | | | 11.00 | Nc |
| | Upto 5.0 m depth. | | | | | 14.00 | No |
| | (As per Computer generated sheet) | | | | | | |
| 14 | Providing and constructing on sewer, B.B. masonary circular manhole with concentric cone 1.5 M. dia. at bottom and 0.5 M. from top and 35 cm thick brick work for depth of 2 M and 45 cm thick brick work for remaining depth up to 9 M in etc.complete | | | | | | |
| | Upto 5.5 m depth. | | | | | 13.00 | No |
| | (As per Computer generated sheet) | | | | | 10.00 | |
| | | | | | | | |
| 15 | Providing and fixing in position steel bar reinforcement etc. complete | | | | | | |
| | Wt of Steel = 0.1% of Concrete Qty = | 0.27 | 2119.5 | | | 2.12 | M |
| 16 | Refilling the trenches with available excavated stuff | | | | | | |
| | etc.complete. (As per Computer generated sheet) | | | | | 11351.93 | Cu |
| | | | | | | 11001100 | 00 |
| 17 | Dispossing of surplus excavated stuff from site of | | | | | | |
| | work up to a distance of 2Km etc.complete | | | | | | |
| | (As per Computer generated sheet) | | | | | 2629.07 | Cu |
| | | | | | | | |
| 18 | WBM Road Restoration : Reinstating the road surface with supplying & spreading 60mm metal of 20 cm thick with Hard murum & 40mm metal of 15 cm thick with Soft murum etc. complete. | | | | | | |
| | (As per Computer generated sheet) | | | | | 2593.50 | Sq |
| 19 | Asphalt Road restoration: Reinstatement of road by excavating the potholes in rectangular shape and filling of potholes by one layers of one layer of 80 mm trap metal of 200 mm thick, one layer of 40 mm trap metal of 100 mm thick etc., complete. | | | | | | |
| | (As per Computer generated sheet) | | | | | 1729.00 | Sq |
| 20 | Concrete Road restoration : Reinstatement of Concrete road by excavating the concrete panels in rectangular shape and filling the trench with one layer of natural sand of 300 mm thick , one layer of M20 grade PCC of 150 mm thick and one layer of PQC M30 grade of 300 mm thicketc., complete | | | | | | |
| | (As per Computer generated sheet) | | | | | 692.00 | Sq |
| | Item No. 20a Providing and filling in the foundation with sand of ap-proved quality including watering, compaction complete. Spec. No.: Bd.A.13 Page No. 264 | | | | | | |
| | How No. 20h Desider and sectors 1. 1 | 692.00 | | | 0.10 | 69.20 | Cu |
| | Item No. 20b Providing and casting in situ cement concrete M- 15 of trap / granite / quartzite / gneiss | | | | | | |
| | metal for etc complete | | | | | | |

| tem | ITEM DESCRIPTION | No | L | В | D/H | Quantity | Uni |
|----------|---|--------|---|---|------|----------|------------|
| No | Item No. 20c Providing and laying in situ cement | | | | | | |
| | concrete M -30 with tremix treatment for 300 mm | | | | | | |
| | thickness for Concrete Road etc. complete Spec : | | | | | | |
| | inickness for concrete Road etc. complete Spec . | | | | | | |
| | | 692.00 | | | 0.05 | 34.60 | Cu |
| | | 002.00 | | | 0.00 | 04.00 | |
| 21 | Shifting of Utilities: All utilities like Electric Poles, | | | | | | |
| | waterline & Communication line Shifting while | | | | | | |
| | Manhole and Line Laying etc., complete as per | | | | | | |
| | specifications and or as directed by engineer- in- | | | | | | |
| | charge. | | | | | | |
| 22 | Utility Shifting | | | | | | |
| <u> </u> | Reconnection of existing damaged connection | | | | | | |
| ~ | including 15 mm dia. CPVC pipe with necessary | | | | | | |
| | fittings, remaking good the demolished portion etc. | | | | | | |
| | complete including all labour, etc. complete. as | | | | | | |
| | directed by Engineer in charge. | | | | | | |
| | (Similar Item PWD CSR 2016-17, P. 165, I No 42.61) | | | | | | <u> </u> |
| | | | | | | | 1 |
| | Water Supply Connections - 15 mm dia | 50 | 1 | | 1 | 50 | Rn |
| | | | | | | | |
| | (Similar Item PWD CSR 2016-17, P. 166, I No 42.62) | | | | | | |
| | | | | | | | |
| | Water Supply Connections - 20 mm dia | 20 | 1 | | | 20 | Rn |
| В | Electrical Lines & Poles | | | | | | |
| | Electrical Poles - RA for 10 km | | | | | | |
| i) | Pole Foundation : Providing cement concrete | | | | | | |
| | foundation including excavation for the pole 60 cms x | | | | | | |
| | 60 cms x 1.5 mtr deep in1:3:6 cement concrete (20x | | | | | | |
| | 25 mm stone metal) and 45 cm x 45cm x45 cm / 45 | | | | | | |
| | cm x 45 cm height plinth duly plaster and with | | | | | | |
| | necessary curing & finishing in above manner (for 9 | | | | | | |
| | mtr pole) | 1 | | | | 1 | No |
| ii) | Dismantling of existing poles above 6 mtr height | | | | | | |
| | with brackets. Clamps, insulators stay from the | | | | | | |
| | cement concrete foundation and making the site clear | | | | | | |
| | by refilling the pits with excavated materials and | | | | | | |
| | bringing it to ground level | 1 | | | | 1 | No |
| iii) | Re-Erecting: Supplying and erecting steel tubular | | | | | | 1 |
| | swaged pole 165.1 X 139.7 X 114.3 mm dia with 4.5 | | | | | | 1 |
| | X 4.5 X3.65 mm thick (5+2+2m) length respectively | | | | | | |
| | and total 9 m long with pole cap, base plate in | | | | | | 1 |
| | provided foundation (weight 147 kg) as per | _ | | | | _ | |
| | specifications. | 1 | | | | 1 | No |
| iv) | Earthling : Providing erecting pipe type earthling of | | | | | | |
| | 40 mm GI pipe dia with double earthling to the all | | | | | | . . |
| ~ | equipments as per Detailed specifications. | 1 | | | | 1 | No |
| С | Electrical Cable - Providing and Jointing | | | | | | |
| | Communication Cable - Jelly Filled telephone | | | | | | |
| :) | lines and optical Fibre Cable | | | | | | |
| i) | Supply & Erecting of Jelly filled armoured telephone | | | | | | 1 |
| | cable 10 pair with 0.5 mm dia laid in provided trench | 1 | 3 | | | 3 | D~ |
| ;:) | as per specification no. WG-TW Supply & erecting of FR grade PVC armourd multi | I | 3 | ļ | - | 3 | Rr |
| ii) | | | | | | | 1 |
| | mode Optical Fibre Cable with 6 fibres with core dia | | | | | | 1 |
| | | | | | | | 1 |
| | 50 μM , suitable for 1 GBps Ethernet distance at 850 | | | | | | |
| | nm of wavelength on wall/ ceiling or laid in provided pipe / trench as per specification no. WG- COC/ OFC | | | | | | |

| ITEM DESCRIPTION | No | L | В | D/H | Quantity | Unit |
|--|---|--|--|--|--|--|
| pply & fixing of wall /rack type 12 port light guide erconnection unit for termination of optical fibre ole on wall /provided U rack complete as per ecification no EG-NAS / LU | 1 | | | | 1 | Nos |
| e S | rconnection unit for termination of optical fibre | rconnection unit for termination of optical fibre le on wall /provided U rack complete as per | rconnection unit for termination of optical fibre le on wall /provided U rack complete as per | rconnection unit for termination of optical fibre le on wall /provided U rack complete as per | rconnection unit for termination of optical fibre le on wall /provided U rack complete as per | rconnection unit for termination of optical fibre le on wall /provided U rack complete as per |

| | M | SOLAPUR MUNICIPAL CORPOR AHARASHTRA JEEVAN PRADHIKARAN D | | APUR | |
|-------|-------------|---|--------------|---------|------------------|
| | | LAPUR CITY UNDERGROUND SEWERAGI | | - |) |
| | | SUB ESTIMATE NO. :- SEWERAGE SYST | | | / |
| (Unde | rground Sew | erage Network -250 to 350 mm dia RCC Pip ABSTRACT | es, HDPE DV | /C SN 8 | 8 Pipes , L=1.25 |
| I. N. | Quantity | ITEM DESCRIPTION | Rate | Unit | Amount Rs. |
| 1 | | MATERIAL : Providing ISI Standard RCC pipes in standard length of following class and diameter, suitable for either collor joints or rubber ring joints, including all taxes (central and local) inspection charges, transport to departmental store / site unloading and stacking etc.complete. | | | |
| | | Notes :- One rubber ring should be supplied with each full length of socketed pipe, cost included in the rates below. | | | |
| | | RCC NP 3 Class | | | |
| | 225.00 | 300 mm dia. | 757.00 | Rmt | 170325.00 |
| | 75.00 | 350 mm dia. RCC NP 4 Class | 1260.00 | Rmt | 94500.00 |
| | 254.00 | 300 mm dia. | 945.00 | Rmt | 240030.00 |
| | 100.00 | 350 mm dia. | 1344.00 | Rmt | 134400.00 |
| | | (CSR 2016-17, P. 103,104, I. E, F) | | | |
| 2 | | Providing and supplying in standard lengths Polyethelene (PE) Pipes for non pressure underground drainage and sewerage with smooth internal and corrugated (profiled) external surface with anti rodent property conforming to ISO-21138-3:2007 with necessary jointing material like mechanical connectors, i.e. thread/ insert joint/quick release coupler joint/ compression fitting joint or flanged joint, including all taxes (Central and local), transportation and freight charges, inspection charges, loading/ unloading charges, conveyance to the departmental stores/site and stacking the same in closed shade duly protecting from sunrays and rains, etc. complete. | | | |
| | | H.D.P.E. DWC pipes for Drainage Class | | | |
| | 603.00 | 250 mm dia.(ID) | 1007.00 | Rmt | 607221.00 |
| | | (CSR 2016-17, P. 132,133 I. 2) | | | |
| | | | Material Cos | st | 1246476.00 |

| I. N. | Quantity | ITEM DESCRIPTION | Rate | Unit | Amount Rs. |
|-------|----------|---|--------|------|------------|
| | | LABOUR : | | | |
| 1 | | Excavation for foundation / pipe trenches in | | | |
| | | earth, soils of all types, sand, gravel, and | | | |
| | | soft murum includng removing the | | | |
| | | excavated material up to a distance of 50 | | | |
| | | m. and lift as below, stacking and | | | |
| | | spreading as directed by the Engineer-in- | | | |
| | | charge, normal dewatering, preparing the | | | |
| | | bed for foundation and excluding back | | | |
| | | filling. etc.complete. | | | |
| | | Lift 0.0 -1.5 M. | | | |
| | | Basic Rate | 141.00 | | |
| | | Add 10 % for M.C | 14.10 | - | |
| | 400.84 | | 155.10 | Cum | 62170.28 |
| | | (CSR 2016-17, P. 35 I. 1) | | | |
| | | | | | |
| 2 | | Excavation for foundation / pipe trenches in | | | |
| | | hard murum & boulders , WBM road | | | |
| | | includng removing the excavated material | | | |
| | | up to a distance of 50 m. and lift as below, | | | |
| | | stacking and spreading as directed by the | | | |
| | | Engineer-in- charge, normal dewatering, | | | |
| | | preparing the bed for foundation and | | | |
| | | excluding back filling. etc.complete. | | | |
| | | Lift 0 -1.5 M. | | | |
| | | Basic Rate | 180.00 | | |
| | | Add 10 % for M.C. | 18.00 | | |
| | 585.88 | Total | 198.00 | Cum | 116004.24 |
| | | (CSR 2016-17, P. 35 I. 3) | | | |
| | | | | | |
| 3 | | Excavation for pipe trenches in soft rock | | | |
| | | and old cement and lime masonary | | | |
| | | foundation, ashphalt road includng | | | |
| | | removing the excavated material up to a | | | |
| | | distance of 50 m. and lift as below, stacking | | | |
| | | and spreading as directed by the Engineer- | | | |
| | | in- charge, normal dewatering, preparing | | | |
| | | the bed for foundation and excluding back | | | |
| | | filling. etc.complete. | | | |
| | | Lift 0 -1.5 M. | | | |
| | | Basic Rate | 443.00 | | |
| | | Add 10 % for M.C | 44.30 | | |
| | 1233.51 | Total | 487.30 | Cum | 601089.42 |
| | | Lift 1.5 -3.0 M. | | | |
| | | Basic Rate | 463.00 | | |
| | | Add 10 % for M.C | 46.30 | | |
| | 721.99 | Total | 509.30 | Cum | 367709.51 |
| | | (CSR 2016-17, P. 35 I. 5) | | | |
| | | | | | |

4

5

6

211.29

| Quantity | ITEM DESCRIPTION | Rate | Unit | Amount Rs. |
|----------|--|-----------------|------|------------|
| | Excavation for pipe trenches in hard rock | | | |
| | and concrete road, by chiselling, wedging, | | | |
| | lime drilling by mechanical means or by all | | | |
| | means other than blasting, including | | | |
| | trimming and levelling the bed, removing | | | |
| | the excavated material up to a distance of 50 m. and lift as below, stacking and | | | |
| | spreading as directed by the Engineer-in- | | | |
| | charge, normal dewatering, preparing the | | | |
| | bed for foundation and excluding back | | | |
| | filling. etc.complete. | | | |
| | | | | |
| | Lift 0-1.50 M. | | | |
| | Basic Rate | 751.00 | | |
| | Add 10 % for M.C | 75.10 | - | |
| 92.52 | Total | 826.10 | Cum | 76430.77 |
| | Lift 1.5 -3.0 M. Basic Rate | 771.00 | | |
| | Add 10 % for M.C | 771.00 77.10 | | |
| 1334.38 | | 848.10 | Cum | 1131687.68 |
| 1334.30 | Lift 3.0 -4.5 M. | 040.10 | Cum | 1131007.00 |
| | Basic Rate | 791.00 | | |
| | Add 10 % for M.C. | 79.10 | | |
| 569.34 | Total | 870.10 | Cum | 495385.90 |
| | Lift 4.5-6.0 M. | | | |
| | Basic Rate | 811.00 | | |
| | Add 10 % for M.C | 81.10 | | |
| 21.54 | Total | 892.10 | Cum | 19216.51 |
| | (CSR 2016-17, P. 36 I. 7) | | | |
| | Dres idio a das tass (sus site (sus staits (sus size | | | |
| | Providing dry trap/ granite/quartzite/ gneiss, | | | |
| | rubble stone soling in 15 cm to 20 cm thick layers including hand packing and | | | |
| | compacting etc.complete. | | | |
| | Basic Rate | 912.00 | | |
| | Add 5 % for M.C. | 45.60 | | |
| 84.00 | Total | 957.60 | Cum | 80438.40 |
| | (CSR 2016-17, P. 39 I.18) | | | |
| | | | | |
| | Providing murum bedding in trenches with | | | |
| | approved murum from excavated | | | |
| | materials from foundation in 15 cm. to 20 | | | |
| | cm. layers including watering & compaction | | | |
| | complete. | | | |
| | Basic Rate | 64.00 | | |
| | Add 5 % for M C | 04.00 | | |

14198.88

(CSR 2016-17, P. 39, I. 16)

Add 5 % for M.C..

Total

3.20

67.20

Cum

| I. N. | Quantity | ITEM DESCRIPTION | Rate | Unit | Amount Rs. |
|-------|----------|---|----------|------|------------|
| 7 | | Lowering laying and jointing in proper grade and alignment R.C.C. pipes with collar joints in CM 1:1 proportion or socketed R.C.C. pipes with rubbar joints (excluding cost of rubber ring or R.C.C. collor), including cost of conveyance from stores to site of works, cost of jointing material, labour, giving hydraulic testing, etc.complete as directed by Engineer-in- charge | | | |
| | | 300 mm dia. | | | |
| | | Basic Rate | 115.00 | | |
| | | Add 5 % for M.C | 5.75 | | |
| | 479.00 | | 120.75 | Rmt | 57839.25 |
| | | 350 mm dia. | 110.00 | | |
| | | Basic Rate | 118.00 | | |
| | 475.00 | Add 5 % for M.C | 5.90 | Dat | 04000 50 |
| | 175.00 | Total (CSR 2016-17, P. 105, I. 2) | 123.90 | Rmt | 21682.50 |
| 8 | | Hydraulic testing of RCC pipe line to specified pressure including cost of all materials and labour and water for testing for specified length including cutting, placing end cap making arrangement for filling safe water using reciprocating type pumps which should be able to provide specified test pressure gauges and other necessary equipments, labour, operation charges, etc. required for testing. The rate under this item shall also include cost of retesting, if necessary and reinstating to original position. New item to be added | | | |
| | | 300 mm dia. | 10000 | | |
| | | Basic Rate | 13000.00 | | |
| | 0.40 | Add 5 % for M.C | 650.00 | 1/m | |
| | 0.48 | Total 350 mm dia. | 13650.00 | Km | 6538.35 |
| | | Basic Rate | 13000.00 | | |
| | | Add 5 % for M.C | 650.00 | | |
| | 0.18 | Total (CSR 2016-17, P. 105, I. 2) | 13650.00 | Km | 2388.75 |
| | | ······································ | | | |

| I. N. | Quantity | ITEM DESCRIPTION | Rate | Unit | Amount Rs. |
|-------|---|---|---------------|---------|------------|
| 10 | Duble Lowering, laying and jointing H.D.P.E. Double Wall Corrugated Pipes for nonpressure Underground drainage and Sewerage applications and specials offollowing class and diameter includingcost of conveyance from stores to site of works including cost of all labour,material except O ring coupler giving satisfactory hydraulic testing as per relevent ISO, etc. complete | | | | |
| | | H.D.P.E. DWC pipes for Drainage CLASS | | | |
| | | SN 8 | | | |
| | | 250 mm dia.(ID) Basic Rate | 47.00 | | |
| | | Add 5 % for M.C | 47.00 2.35 | | |
| | 603.00 | | 49.35 | Rmt | 29758.05 |
| | 000.00 | (CSR 2016-17, P. 134, I. 4) | 10100 | T CITIC | 20100.00 |
| | | | | | |
| 11 | | Hydraulic testing of HDPE double wall corrugated pipe for non pressure underground line to specified pressure including cost of all materials and labour and water for testing for specified length including cutting, placing end cap making arrangement for filling safe water using reciprocating type pumps which should be able to provide specified test pressure gauges and other necessary equipments, labour, operation charges, etc. required for testing. The rate under this item shall also include cost of retesting, if necessary and reinstating to original position., etc. complete | | | |
| | | H.D.P.E. DWC pipes for Drainage CLASS SN 8 | | | |
| | | 250 mm dia.(ID) | | | |
| | | Basic Rate | 5000.00 | | |
| | | Add 5 % for M.C | 250.00 | | |
| | 0.60 | Total | 5250.00 | Km | 3165.75 |
| | | (CSR 2016-17, P. , I. 6) | | | |
| | | | | | |

| I. N. | Quantity | ITEM DESCRIPTION | Rate | Unit | Amount Rs. |
|-------|----------|---|--------------------|-------|------------|
| 12 | | Providing and laying in situ cement concrete 1:2:4 of trap/ granite / quartzite/ gneiss metal for foundation and bedding including bailing out water manually, formwork, compacting and curring etc. complete. | | | |
| | | Basic Rate | 4233.00 | | |
| | 00.57 | Add 5 % for M.C. | 211.65 | 0 | 101110.01 |
| | 29.57 | Total | 4444.65 | Cum | 131449.04 |
| | | (CSR 2016-17, P. 43, I. 1b) | | | |
| 13 | | Dewatering the excavated trenches and pools of water in the pipeline trenches, well works by using pumps and other divices including disposing off water to safe distance as directed by Engineer-in- charge (including cost of machionary, labour,fuel) etc.complete. | | | |
| | | Basic Rate | 62.00 | | |
| | | Add 5 % for M.C | 3.10 | | |
| | 31500.00 | Total | 65.10 | HP/Hr | 2050650.00 |
| | | (CSR 2016-17, P. 38, I. 14) | | | |
| 14 | | Providing and constructing on sewer, B.B. masonary circular manhole with concentric cone 1.2 M. dia. at bottom and 0.5 M. from top and up to depth of 2 m. with 23 cm thick brick work up to depth of 2 M in CM 1:4 proportion with 20 mm thick smooth plaster on both sides in CM 1:2 proportion excluding excavation including foundation concrete 250 mm thick and haunches and channels in C.C. 1:2:4 proportion, finishing channels in smooth rendering, providing C.I. dapuri type steps each weighing 5.5 Kg., 1:2:4 coping and providing and fixing approved make and quality S.F.R.C. frame and cover of 56 cm dia. etc.complete as directed by Engineer-in- charge. | | | |
| | | Upto 1.50 m depth. | 47000.00 | | |
| | | Basic Rate | 17299.00 | | |
| | 2.00 | Add 5 % for M.C Total | 864.95 18163.95 | No. | 36327.90 |
| | 2.00 | Upto 2 m depth. | 10103.93 | INU. | 30327.90 |
| | | Basic Rate | 20148.00 | | |
| | | Add 5 % for M.C. | 1007.40 | | |

| I. N. | Quantity | ITEM DESCRIPTION | Rate | Unit | Amount Rs. |
|-------|----------|---|----------|------|------------|
| | 5.00 | Total | 21155.40 | No. | 105777.00 |
| | | (CSR 2016-17, P. 272, I. 6) | | | |
| | | a) Rebate for every decrease in depth of 50 | | | |
| | | cm or part there of Rs.2849/-Add 5% for | | | |
| | | M.C=Rs.2991.45 | | | |
| 15 | | Providing and constructing on sewer, B.B. masonary circular manhole with concentric cone 1.5 M. dia. at bottom and 0.5 M. from top and up to depth of 5 m. with 23 cm thick brick work up to depth of 2 M from top and 35 cm thick brick work for remaining depth up to 5 M in CM 1:4 proportion with 20 mm thick smooth plaster on both sides in CM 1:2 proportion excluding excavation including foundation concrete 250 mm thick and haunches and channels in C.C. 1:2:4 proportion, finishing channels in smooth rendering, providing C.I. dapuri type steps each weighing 5.5 Kg., 1:2:4 coping and providing and fixing approved make and quality S.F.R.C. frame and cover of 56 cm dia. etc.complete as directed by Engineer-in- charge. | | | |
| | | Upto 2.5 m depth. | | | |
| | | Basic Rate | 28011.00 | | |
| | | Add 5 % for M.C | 1400.55 | | |
| | 8.00 | Total | 29411.55 | No. | 235292.40 |

| I. N. | Quantity | ITEM DESCRIPTION | Rate | Unit | Amount Rs. |
|-------|----------|--|---------------------------------|------|------------|
| | | Upto 3.0 m depth. | | | |
| | | Basic Rate | 33901.00 | | |
| | | Add 5 % for M.C | 1695.05 | | |
| | 3.00 | Total | 35596.05 | No. | 106788.15 |
| | | Upto 3.50 m depth. | | | |
| | | Basic Rate | 39791.00 | | |
| | | Add 5 % for M.C | 1989.55 | | |
| | 15.00 | Total | 41780.55 | No. | 626708.25 |
| | | Upto 4.0 m depth. | | | |
| | | Basic Rate | 45681.00 | | |
| | | Add 5 % for M.C | 2284.05 | | |
| | 10.00 | | 47965.05 | No. | 479650.50 |
| | | Upto 4.5 m depth. | | | |
| | | Basic Rate | 51571.00 | | |
| | | Add 5 % for M.C | 2578.55 | | |
| | 1.00 | Total | 54149.55 | No. | 54149.55 |
| | | Upto 5.0 m depth. | | | |
| | | Basic Rate | 57461.00 | | |
| | | Add 5 % for M.C | 2873.05 | | |
| | 1.00 | Total | 60334.05 | No. | 60334.05 |
| | | (CSR 2016-17, P. 273, I. 7) | | | |
| | | a) Rebate for every decrease in depth of 50 cm or part there of Rs.5890/-Add 5% for M.C=Rs.6184.50 | | | |
| 16 | | Providing and fixing in position steel bar reinforcement of various diameters for RCC piles, caps, footings, foundations, lintels, parodies, copings, fins, arches, etc. as per detailed designs, drawings and schedules; including cutting, bending, hooking the bars, binding with wires or tack welding and supporting as required, etc. complete. (including cost of binding wire). | | | |
| | 0.24 | Tor Steel Basic Rate Add 5 % for M.C Total | 52194.00 2609.70 54803.70 | | 12906.27 |
| | | (CSR 2016-17, P. 46, I. 8b) | | | |

| I. N. | Quantity | ITEM DESCRIPTION | Rate | Unit | Amount Rs. |
|-------|----------|--|--------|------|------------|
| 20 | | Refilling the trenches with available excavated stuff with soft material first over pipe line and then hard material in 15 cm layers with all leads and lifts including consolidation, surcharging, etc.complete. | | | |
| | | Basic Rate | 64.00 | | |
| | | Add 5 % for M.C | 3.20 | | |
| | 4082.22 | Total (CSR 2016-17, P. 38, I.15) | 67.20 | Cum | 274325.09 |
| 21 | | Dispossing of surplus excavated stuff from site of work up to a distance of 2 Km.including, loading, unloading, transportation etc.complete or as directed by the Engineering- in- charge. | | | |
| | | (CSR 2015-16, P. 22, Statement VI) | | | |
| | 666.72 | Basic Rate | 195.62 | Cum | 130424.72 |
| | | | | | |
| 23 | | WBM Road restoration:Reinstating the road surface with supplying & spreading 60mm metal of 20 cm thick with Hard murum & 40mm metal of 15 cm thick with Soft murum as a blindage, above WBM surfaceFor all the above layers watering & compacting with Power roller, including Excavation of required depth for road reinstating or as directed by Engineer-in- charge etc. complete. | | | |
| | 1101.75 | (As per Rate Analysis) | 208.74 | Sqm | 229979.30 |
| | | | | | |

| I. N. | Quantity | ITEM DESCRIPTION | Rate | Unit | Amount Rs. |
|-------|----------|--|-----------------|-------|------------|
| 24 | | Asphalt Road restoration: Reinstatement of road by excavating the potholes in rectangular shape and filling of potholes by one layers of one layer of 80 mm trap metal of 200 mm thick, one layer of 40 mm trap metal of 100 mm thick including supplying and spreading of stone dust/murrum of 100 mm thick, watering compaction and 75 mm thick bituminous bound macadam with cold emulsion 60/70 grade and bituminous macadam of 50 mm thick with bitumen of S- 65 grade and 20 mm thick asphalt concrete with S-35 grade of bitumen including compaction by vibratory roller of all layers and providing and applying tack coat of 50 Kg / 100 m2 on black top surface and seal coat of 1kg/sqm. B.B.M. surface and disposal of surplus soil etc., complete. for pipeline trenches of various diameter etc., complete as per specifications and or as directed by engineer- in-charge. | | | |
| | 881.00 | (As per Rate Analysis) | 873.47 | Sqm | 769527.07 |
| | | | | | |
| 25 | | Concrete Road restoration :Reinstatement of Concrete road by excavating the concrete panels in rectangular shape and filling the trench with one layer of natural sand of 300 mm thick , one layer of M20 grade PCC of 150 mm thick and one layer of PCC M30 grade of 300 mm thick including dewatering etc., complete. for pipeline trenches of various diameter etc., complete as per specifications and or as directed by engineer- in-charge. | | | |
| | | Item No. 25a Providing and filling in the foundation with sand of ap-proved quality including watering, compaction complete. Spec. No.: Bd.A.13 Page No. 264 | | | |
| | | PWD DSR 17-18, Item No. 12 / 1 BDA 13, Pg-17 | | | |
| | | Basic Rate | 451.00 | | |
| | 22.00 | Add 5% for M.C. + 5% Sugarcane Area Total | 45.10 496.10 | Cum | 10914.20 |
| | 22.00 | างเล่า | 490.10 | Culli | 10914.20 |

| Item No. 25c: Providing and laying in situ cement concrete M -30 with tremix treatment for 200 mm thickness for Concrete Road is including laying plastic sheet for 125 micron thickness with groove cutting of 4 mm wide and 20 mm deep with necessary refilling with bitumen (excluding reinforcement) with Natural sand etc. complete Spec : As directed by Engineer incharge PWD DSR 2017-18, I. No. 93 / 23 MORTH, Pg. No. 228 Basic Rate 6362.00 Add 5% for M.C. + 5% Sugarcane Area 636.20 | 0196.00 |
|--|---------|
| Basic Rate 5380.00 Add 5% for M.C. + 5% Sugarcane Area 538.00 22.00 Total 5918.00 Cum 13 Item No. 25c: Providing and laying in situ cement concrete M -30 with tremix treatment for 200 mm thickness for Concrete Road is including laying plastic sheet for 125 micron thickness with groove cutting of 4 mm wide and 20 mm deep with necessary refilling with bitumen (excluding reinforcement) with Natural sand etc. complete Spec : As directed by Engineer incharge PWD DSR 2017-18, I. No. 93 / 23 MORTH, Pg. No. 228 PWD DSR 2017-18, I. No. 93 / 23 MORTH, Pg. No. 228 | 0196.00 |
| Basic Rate 5380.00 Add 5% for M.C. + 5% Sugarcane Area 538.00 22.00 Total 5918.00 Cum 13 Item No. 25c: Providing and laying in situ 5918.00 Cum 13 Concrete No. 25c: Providing and laying in situ 5918.00 Cum 13 Concrete Road is including laying plastic sheet for 125 micron thickness for Concrete Road is including laying plastic sheet for 125 micron thickness with groove cutting of 4 mm wide and 20 mm deep with necessary refilling with bitumen (excluding reinforcement) with Natural sand etc. complete Spec : As directed by Engineer incharge PWD DSR 2017-18, I. No. 93 / 23 MORTH, Pg. No. 228 Basic Rate 6362.00 Add 5% for M.C. + 5% Sugarcane Area 636.20 Add 5% for M.C. + 5% Sugarcane Area | 0196.00 |
| Add 5% for M.C. + 5% Sugarcane Area 538.00 22.00 Total 5918.00 Cum 13 Item No. 25c: Providing and laying in situ cement concrete M -30 with tremix treatment for 200 mm thickness for Concrete Road is including laying plastic sheet for 125 micron thickness with groove cutting of 4 mm wide and 20 mm deep with necessary refilling with bitumen (excluding reinforcement) with Natural sand etc. complete Spec : As directed by Engineer incharge PWD DSR 2017-18, I. No. 93 / 23 MORTH, Pg. No. 228 PWD DSR 2017-18, I. No. 93 / 23 MORTH, Pg. No. 228 Basic Rate 6362.00 | 0196.00 |
| Item No. 25c: Providing and laying in situ cement concrete M -30 with tremix treatment for 200 mm thickness for Concrete Road is including laying plastic sheet for 125 micron thickness with groove cutting of 4 mm wide and 20 mm deep with necessary refilling with bitumen (excluding reinforcement) with Natural sand etc. complete Spec : As directed by Engineer incharge PWD DSR 2017-18, I. No. 93 / 23 MORTH, Pg. No. 228 Basic Rate 6362.00 Add 5% for M.C. + 5% Sugarcane Area 636.20 | 0196.00 |
| cement concrete M -30 with tremix treatment for 200 mm thickness for Concrete Road is including laying plastic sheet for 125 micron thickness with groove cutting of 4 mm wide and 20 mm deep with necessary refilling with bitumen (excluding reinforcement) with Natural sand etc. complete Spec : As directed by Engineer incharge PWD DSR 2017-18, I. No. 93 / 23 MORTH, Pg. No. 228 Basic Rate 6362.00 Add 5% for M.C. + 5% Sugarcane Area 636.20 | |
| Pg. No. 228 Basic Rate 6362.00 Add 5% for M.C. + 5% Sugarcane Area 636.20 | |
| Basic Rate 6362.00 Add 5% for M.C. + 5% Sugarcane Area 636.20 | |
| | |
| 11.00 Total 6998.20 Cum 7 | |
| | 6980.20 |
| 26 Shifting of Utilities: All utilities like Electric | |
| Poles, waterline & Communication line Shifting while Manhole and Line Laying work etc., complete as per specifications and or as directed by engineer- in-charge. | |
| 28 Utility Shifting | |
| A Reconnection of existing damaged connection including 15 mm dia. CPVC pipe with necessary fittings, remaking good the demolished portion etc. complete including all labour, etc. complete. as directed by Engineer in charge. Water Supply Connections - 15 mm dia | |
| Basic Rate 167 | |

UIEW

| I. N. | Quantity ITEM DESCRIPTION | | Rate | Unit | Amount Rs. |
|-------|---------------------------|--|----------|------|------------|
| | | Add 5% for M.C. | 8.35 | | |
| | 30 | Total | 175.35 | Rmt | 5260.5 |
| | | (Similar Item PWD CSR 2016-17, P. 166, I No 42.62) | | | |
| | | Water Supply Connections - 20 mm dia | | Rmt | |
| | | Basic Rate | 196 | | |
| | | Add 5% for M.C. | 9.8 | | |
| | 10 | Total | 205.8 | Rmt | 2058 |
| В | | Electrical Lines & Poles | | | |
| | | Electrical Poles - RA for 10 km | | | |
| i) | | Pole Foundation : Providing cement | | | |
| | | concrete foundation including excavation | | | |
| | | for the pole 60 cms x 60 cms x 1.5 mtr | | | |
| | | deep in1:3:6 cement concrete (20x 25 mm | | | |
| | | stone metal) and 45 cm x 45cm x45 cm / | | | |
| | | 45 cm x 45 cm height plinth duly plaster | | | |
| | | and with necessary curing & finishing in | | | |
| | 1 | above manner (for 9 mtr pole) | 2771.00 | Nos | 2771 |
| | | PWD DSR 15-16, E & M, Item No. 16.3.2, P.No. 161 | 2111.00 | 1100 | |
| ii) | | Dismantling of existing poles above 6 | | | |
| | | mtr height with brackets. Clamps, | | | |
| | | insulators stay from the cement concrete | | | |
| | | foundation and making the site clear by | | | |
| | | refilling the pits with excavated materials | | | |
| | 1 | and bringing it to ground level PWD DSR 15-16, E & M, Item No. 8.8.2, | 701.00 | Nos | 701 |
| | | P.No. 110 | | | |
| iii) | | Re-Erecting: Supplying and erecting steel | | | |
| | | tubular swaged pole 165.1 X 139.7 X 114.3 | | | |
| | | mm dia with 4.5 X 4.5 X3.65 mm thick | | | |
| | | (5+2+2m) length respectively and total 9 m | | | |
| | | long with pole cap, base plate in provided | | | |
| | | foundation (weight 147 kg) as per | | | |
| | 1 | specifications. | 12722.00 | Nos | 12722 |
| | | PWD DSR 15-16, E&M, Item No. 8.1.3, | | | |
| | | Page No.98 | | | |
| iv) | | Earthling : Providing erecting pipe type | | | |
| | | earthling of 40 mm GI pipe dia with double | | | |
| | | earthling to the all equipments as per | | | |
| | 1 | Detailed specifications. | 1585.00 | Nos | 1585 |
| | | PWD DSR 14-15 E&M, Item No. 9.1.4, Page No.111 | | | |

SMC

| I. N. | Quantity | ITEM DESCRIPTION | Rate | Unit | Amount Rs. | |
|-------|----------|---|----------|--------------------|--------------------------|--|
| С | | Electrical Cable - Providing and Jointing | <u> </u> | | | |
| | | Communication Cable - Jelly Filled telephone lines and optical Fibre Cable | | | | |
| | | | | | | |
| i) | | Supply & Erecting of Jelly filled armoured | | | | |
| | | telephone cable 10 pair with 0.5 mm dia | | | | |
| | | laid in provided trench as per specification | | | | |
| | 3 | no. WG-TW | 83.00 | Rmt | 249 | |
| | | PWD DSR 15-16 Item 1-10-10, P No 17 | | | | |
| ii) | | Supply & erecting of FR grade PVC | | | | |
| | | armourd multi mode Optical Fibre Cable | | | | |
| | | with 6 fibres with core dia 50 µM, suitable | | | | |
| | | for 1 GBps Ethernet distance at 850 nm of | | | | |
| | | wavelength on wall/ ceiling or laid in | | | | |
| | | provided pipe / trench as per specification | | | | |
| | 3 | no. WG- COC/ OFC | 247.00 | Rmt | 741 | |
| | | PWD DSR 15-16 Item 1-12-8, P No 20 | | | | |
| iii) | | Supply & fixing of wall /rack type 12 port | | | | |
| | | light guide interconnection unit for | | | | |
| | | termination of optical fibre cable on wall | | | | |
| | | /provided U rack complete as per | | | | |
| | 1 | specification no. EG- NAS / LIU | 4366.00 | Nos | 4366 | |
| | | PWD DSR 15-16 Item 1-14-5 P No 21 | | | | |
| | | | Labor | | 0620527 40 | |
| | | Total Material | | ir Cost ost Rs. | 8638537.42 9885013.42 | |
| | | | Sa | | 9885014.00 | |
| | | | | Lakhs | 98.85 | |
| | | | | Say Cr | 0.99 | |

UIEW

SOLAPUR MUNICIPAL CORPORATION MAHARASHTRA JEEVAN PRADHIKARAN DIVISION SOLAPUR SOLAPUR CITY UNDERGROUND SEWERAGE SCHEME (AMRUT) SUB ESTIMATE NO. :- SEWERAGE SYSTEM FOR ZONE IV

(Underground Sewerage Network -250 to 350 mm dia RCC Pipes, HDPE DWC SN 8 Pipes,

| | ME | ASUREN | IENT | | | | |
|------------|--|---------|-----------|---------|-----|----------|------|
| ltem No | ITEM DESCRIPTION | No | L | В | D/H | Quantity | Unit |
| 1 | MATERIAL : Providing ISI Standard RCC pipes in standard length of following class and diameter, etc.complete. | | | | | | |
| | RCC NP 3 Class | | | | | | |
| | 300 mm dia. | 1.00 | 225.00 | | | 225.00 | Rmt |
| | 350 mm dia. | 1.00 | 75.00 | | | 75.00 | Rmt |
| | | | | | | | |
| | RCC NP 4 Class | | | | | | |
| | 300 mm dia. | 1.00 | 254.00 | | | 254.00 | Rmt |
| | 350 mm dia. | 1.00 | 100.00 | | | 100.00 | Rmt |
| 2 | Providing and supplying in standard lengths Polyethelene (PE) Pipes for non pressure underground drainage and sewerage , etc. complete. | | | | | | |
| | H.D.P.E. pipes for Drainage CLASS | | | | | | |
| | SN 8 | | | | | | |
| | 250 mm dia.(ID) | 1.00 | 603.00 | | | 603.00 | Rmt |
| | LABOUR : | | | | | | |
| | EXCAVATION DETAILS -From computer generated design sheet | | | | | | |
| Dt | 0-1.5 | 1.5-3.0 | 3.0 - 4.5 | 4.5-6.0 | | TOTAL | |
| Ex Line | 1758.50 | 1456.57 | 427.13 | 15.54 | | 3657.74 | Cum |
| Ex MH | 554.48 | 599.80 | 142.22 | 6.00 | | 1302.50 | Cum |
| Say | 2312.98 | 2056.37 | 569.34 | 21.54 | | 4960.24 | Cum |
| 1 | Excavation for foundation / pipe trenches in earth, soils of all types , sand, gravel, and soft murum etc.complete. | | | | | | |
| | Lift 0.0 -1.5 M. | | | | | 400.84 | Cum |
| 2 | Excavation for foundation / pipe trenches in hard murum & boulders , WBM road etc.complete. | | | | | | |
| | Lift 0.0 -1.5 M. | | | | | 585.88 | Cum |
| | | | | | | | |

| ltem No | ITEM DESCRIPTION | No | L | В | D/H | Quantity | Unit |
|------------|---|------|--------|------|------|----------|------|
| 3 | Excavation for pipe trenches in soft rock and old cement and lime masonary foundation, ashphalt road etc.complete. | | | | | | |
| | Lift 0.0-1.50 M. | | | | | 1233.51 | Cum |
| | Lift 1.5-3.0 M. | | | | | 721.99 | Cum |
| 4 | Excavation for pipe trenches in hard rock and concrete road, by chiselling, wedging, lime drilling by mechanical means or by all means other than blasting, etc.complete. | | | | | | |
| | Lift 0.0-1.50 M. | | | | | 92.52 | Cum |
| | Lift 1.5-3.0 M. | | | | | 1334.38 | Cum |
| | Lift 3.0-4.5 M. | | | | | 569.34 | Cum |
| | Lift 4.5-6.0 M. | | | | | 21.54 | Cum |
| | | | | | | | |
| 5 | Providing dry trap/ granite/quartzite/ gneiss, rubble stone soling etc.complete. | | | | | | |
| | Provision Made for trunk sewer along nallah | 1.00 | 175.00 | 1.60 | 0.30 | 84.00 | Cum |
| 6 | Providing murum bedding in trenches with approved murum from excavated materials etc.n complete. | | | | | | |
| | (As per Computer generated sheet) | | | | | 211.29 | Cum |
| 7 | Lowering laying and jointing in proper grade and alignment R.C.C. pipes etc.complete | | | | | | |
| | 300 mm dia. | 1.00 | 479.00 | | | 479.00 | Rmt |
| | 350 mm dia. | 1.00 | 175.00 | | | 175.00 | Rmt |
| 8 | Hydraulic testing of RCC pipe line to specified pressure etc.complete | | | | | | |
| | 300 mm dia. | 1.00 | 0.48 | | | 0.48 | Rmt |
| | 350 mm dia. | 1.00 | 0.40 | | | 0.40 | Rmt |
| | | | | | | | |
| | | | | | | | |

| ltem No | ITEM DESCRIPTION | No | L | В | D/H | Quantity | Unit |
|------------|---|-------|--------|------|------|----------------|--------|
| 9 | Lowering, laying and jointing H.D.P.E.Double Wall Corrugated Pipes for nonpressure Underground drainage and Sewerage applications etc. complete | | | | | | |
| | H.D.P.E. pipes for Drainage CLASS | | | | | | |
| | 250 mm dia.(ID) | 1.00 | 603.00 | | | 603.00 | Rmt |
| 10 | Hydraulic testing of HDPE double wall corrugated pipe for non pressure underground line to specified pressure etc.complete | | | | | | |
| | 250 mm dia.(ID) | 1.00 | 0.60 | | | 0.60 | Km |
| 11 | Providing and laying in situ cement concrete 1:2:4 of trap/ granite / quartzite/ gneiss metal for foundation and bedding etc. complete. | | | | | | |
| | Provision of anchor block Made for trunk sewer along nallah | 20.00 | 1.50 | 1.50 | 0.60 | 27.00 | |
| | Deduct | 20.00 | 0.79 | 1.00 | 0.60 | 9.42 | |
| | Net Qty (As per Computer generated sheet) | | | | | 17.58 11.99 | |
| | Total Qty | | | | | 29.57 | Cum |
| 12 | Dewatering the excavated trenches and pools of water in the pipeline trenches, etc.complete. | | | | | | |
| | For nalla / where water table high 7 Fronts, 5 BHP Pump- 6Hrs- 180 | 7.00 | 150.00 | 5.00 | 6.00 | 31500.00 | Bhp/hr |
| 13 | Days Providing and constructing on sewer, B.B. masonary circular manhole with concentric cone 1.2 M. dia. at bottom and 0.5 M. from top and up to depth of 2 m. with 23 cm thick brick work up to depth of 2 Metc.complete | | | | | | |
| | Upto 1.50 m depth. | | | | | 2.00 | No. |
| | Upto 2.0 m depth. (As per Computer generated sheet) | | | | | 5.00 | No. |
| | | | | | | | |

| ltem No | ITEM DESCRIPTION | No | L | В | D/H | Quantity | Unit |
|------------|--|------|-------|---|-----|----------|--------|
| 14 | Providing and constructing on sewer, B.B. masonary circular manhole with concentric cone 1.5 M. dia. at bottom and 0.5 M. from top and up to depth of 5 m. with 23 cm thick brick work up to depth of 2 M from top and 35 cm thick brick work for remaining depth up to 5 M etc.complete | | | | | | |
| | Upto 2.50 m depth. | | | | | 8.00 | No. |
| | Upto 3.0 m depth. | | | | | 3.00 | No. |
| | Upto 3.5 m depth. | | | | | 15.00 | No. |
| | Upto 4.0 m depth. | | | | | 10.00 | No. |
| | Upto 4.5 m depth. | | | | | 1.00 | No. |
| | Upto 5.0 m depth. | | | | | 1.00 | No. |
| | (As per Computer generated sheet) | | | | | | |
| 15 | Providing and fixing in position steel bar reinforcement etc. complete | | | | | | |
| | Wt of Steel = 0.1% of Concrete Qty = | 0.03 | 235.5 | | | 0.24 | MT |
| 16 | Refilling the trenches with available excavated stuff etc.complete. | | | | | | |
| | (As per Computer generated sheet) | | | | | 4082.22 | Cum |
| 17 | Dispossing of surplus excavated stuff from site of work up to a distance of 2Km etc.complete (As per Computer generated sheet) | | | | | 666.72 | Cum |
| | | | | | | | |
| 18 | WBM Road Restoration : Reinstating the road surface with supplying & spreading 60mm metal of 20 cm thick with Hard murum & 40mm metal of 15 cm thick with Soft murum etc. complete. | | | | | | |
| | (As per Computer generated sheet) | | | | | 1101.75 | Sqm |
| 18 | Reinstating the road surface with supplying & spreading 60mm metal of 20 cm thick with Hard murum & 40mm metal of 15 cm thick with Soft murum etc. complete. | | | | | 1 | 101.75 |

| ltem No | ITEM DESCRIPTION | No | L | В | D/H | Quantity | Unit |
|------------|--|--------|---|---|------|----------|------|
| 19 | Asphalt Road restoration: Reinstatement of road by excavating the potholes in rectangular shape and filling of potholes by one layers of one layer of 80 mm trap metal of 200 mm thick, one layer of 40 mm trap metal of 100 mm thick etc., complete. | | | | | | |
| | (As per Computer generated sheet) | | | | | 881.00 | Sqm |
| 20 | Concrete Road restoration : Reinstatement of Concrete road by excavating the concrete panels in rectangular shape and filling the trench with one layer of natural sand of 300 mm thick , one layer of M20 grade PCC of 150 mm thick and one layer of PQC M30 grade of 300 mm thicketc., complete | | | | | | |
| | (As per Computer generated sheet) | | | | | 220.00 | Sqm |
| | Item No. 25a Providing and filling in the foundation with sand of ap- proved quality including watering, compaction complete. Spec. No.: Bd.A.13 Page No. 264 | | | | | | |
| | Item No. 25b Providing and casting in situ cement concrete M- 15 of trap / granite / quartzite / gneiss metal for etc complete | 220.00 | | | 0.10 | 22.00 | Cum |
| | Item No. 25c Providing and laying in situ cement concrete M -30 with tremix treatment for 300 mm thickness for Concrete Road etc. complete Spec : | 220.00 | | | 0.10 | 22.00 | Cum |
| | | 220.00 | | | 0.05 | 11.00 | Cum |

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| ltem No | ITEM DESCRIPTION | No | L | В | D/H | Quantity | Unit |
|------------|--|----|---|---|-----|----------|------|
| 21 | Shifting of Utilities: All utilities like Electric Poles, waterline & Communication line Shifting while Manhole and Line Laying etc., complete as per specifications and or as directed by engineer- in- charge. | | | | | | |
| | Utility Shifting | | | | | | |
| A | Reconnection of existing damaged connection including 15 mm dia. CPVC pipe with necessary fittings, remaking good the demolished portion etc. complete including all labour, etc. complete. as directed by Engineer in charge. | | | | | | |
| | (Similar Item PWD CSR 2016-17, P. 165, I No 42.61) | | | | | | |
| | Water Supply Connections - 15 mm dia | 30 | 1 | | | 30 | Rmt |
| | (Similar Item PWD CSR 2016-17, P. 166, I No 42.62) | | | | | | |
| | Water Supply Connections - 20 mm dia | 10 | 1 | | | 10 | Rmt |

| ltem No | ITEM DESCRIPTION | No | L | В | D/H | Quantity | Unit |
|------------|--|----|---|---|-----|----------|------|
| В | Electrical Lines & Poles | | | | | | |
| | Electrical Poles - RA for 10 km | | | | | | |
| i) | Pole Foundation : Providing | | | | | | |
| | cement concrete foundation | | | | | | |
| | including excavation for the pole 60 | | | | | | |
| | cms x 60 cms x 1.5 mtr deep in1:3:6 | | | | | | |
| | cement concrete (20x 25 mm stone | | | | | | |
| | metal) and 45 cm x 45cm x45 cm / | | | | | | |
| | 45 cm x 45 cm height plinth duly plaster and with necessary curing & | | | | | | |
| | finishing in above manner (for 9 mtr | | | | | | |
| | pole) | 1 | | | | 1 | Nos |
| ii) | Dismantling of existing poles | | | | | I | 1103 |
| | above 6 mtr height with brackets. | | | | | | |
| | Clamps, insulators stay from the | | | | | | |
| | cement concrete foundation and | | | | | | |
| | making the site clear by refilling the | | | | | | |
| | , , , | | | | | | |
| | pits with excavated materials and | | | | | | |
| iii) | bringing it to ground level Re-Erecting: Supplying and erecting | 1 | | | | 1 | Nos |
| , | | | | | | | |
| | steel tubular swaged pole 165.1 X 139.7 X 114.3 mm dia with 4.5 X 4.5 | | | | | | |
| | X3.65 mm thick (5+2+2m) length | | | | | | |
| | respectively and total 9 m long with | | | | | | |
| | pole cap, base plate in provided | | | | | | |
| | foundation (weight 147 kg) as per | | | | | | |
| | specifications. | 1 | | | | 1 | Nos |
| iv) | Earthling : Providing erecting pipe | I | | | | 1 | 1105 |
| | type earthling of 40 mm GI pipe dia | | | | | | |
| | with double earthling to the all | | | | | | |
| | equipments as per Detailed | | | | | | |
| | specifications. | 1 | | | | 1 | Nos |

LIU

as per specification no. EG- NAS /

| ltem No | ITEM DESCRIPTION | No | L | В | D/H | Quantity | Unit |
|------------|---|------|---|---|-----|----------|------|
| С | Electrical Cable - Providing and Join | ting | | | | | |
| | Communication Cable - Jelly | | | | | | I |
| | Filled telephone lines and optical | | | | | | 1 |
| | Fibre Cable | | | | | | |
| i) | Supply & Erecting of Jelly filled | | | | | | 1 |
| | armoured telephone cable 10 pair | | | | | | 1 |
| | with 0.5 mm dia laid in provided | | | | | | I |
| | trench as per specification no. WG- | | | | | | I |
| | TW | 1 | 3 | | | 3 | Rmt |
| ii) | Supply & erecting of FR grade PVC | | | | | | |
| | armourd multi mode Optical Fibre | | | | | | I |
| | Cable with 6 fibres with core dia 50 | | | | | | l |
| | µM, suitable for 1 GBps Ethernet | | | | | | l |
| | distance at 850 nm of wavelength on | | | | | | l |
| | wall/ ceiling or laid in provided pipe / | | | | | | 1 |
| | trench as per specification no. WG- | | | | | | 1 |
| | COC/ OFC | 1 | 3 | | | 3 | Rmt |
| iii) | Supply & fixing of wall /rack type 12 | | | | | | |
| | port light guide interconnection unit | | | | | | 1 |
| | for termination of optical fibre cable | | | | | | 1 |
| | on wall /provided U rack complete | | | | | | 1 |
| | | | | | 1 | | |

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| | SOLAPUR MUNICIPAL CORPORATION | | | | | | | |
|-------|--|---|--------------|-----|------------|--|--|--|
| | MAHARASHTRA JEEVAN PRADHIKARAN DIVISION SOLAPUR | | | | | | | |
| | SOLAPUR CITY UNDERGROUND SEWERAGE SCHEME (AMRUT) | | | | | | | |
| | SUB ESTIMATE NO. :- SEWERAGE SYSTEM FOR ZONE VI | | | | | | | |
| | (Underground Sewerage Network -350 to 600 mm dia RCC Pipes L=5.5 Km) | | | | | | | |
| | | ABSTRACT | | | | | | |
| I. N. | Quantity | Amount Rs. | | | | | | |
| | | MATERIAL : | | | | | | |
| 1 | 628.00 | Providing ISI Standard RCC pipes in standard length of following class and diameter, suitable for either collor joints or rubber ring joints, including all taxes (central and local) inspection charges, transport to departmental store / site unloading and stacking etc.complete. Notes :- One rubber ring should be supplied with each full length of socketed pipe, cost included in the rates below. RCC NP 3 Class 350 mm dia. | | Rmt | 791280.00 | | | |
| | | 400 mm dia. | 1344.00 | | 1013376.00 | | | |
| | | 450 mm dia. | 1449.00 | | 1054872.00 | | | |
| | | 500 mm dia. | 1785.00 | | 4048380.00 | | | |
| | 0.00 | 600 mm dia. RCC NP 4 Class | 2940.00 | Rmt | 0.00 | | | |
| | 289.00 | 350 mm dia. | 617.00 | Rmt | 178313.00 | | | |
| | 0.00 | 400 mm dia. | 945.00 | Rmt | 0.00 | | | |
| | 126.00 | 450 mm dia. | 1344.00 | Rmt | 169344.00 | | | |
| | 0.00 | 500 mm dia. | 1470.00 | Rmt | 0.00 | | | |
| | 729.00 | 600 mm dia. | 2520.00 | Rmt | 1837080.00 | | | |
| | | (CSR 2016-17, P. 103,104, I. E, F) | | | | | | |
| | | | Material Cos | st | 9092645.00 | | | |

| I. N. | Quantity | ITEM DESCRIPTION | Rate | Unit | Amount Rs. |
|-------|----------|--|--------|---------|------------|
| | | LABOUR : | | | |
| 1 | | Excavation for foundation / pipe trenches in earth, soils of all types, sand, gravel, and soft murum includng removing the excavated material up to a distance of 50 m. and lift as below, stacking and spreading as directed by the Engineer-in- charge, normal dewatering, preparing the bed for | | | |
| | | foundation and excluding back filling. | | | |
| | | etc.complete. Lift 0.0 -1.5 M. | | | |
| | | Basic Rate | 141.00 | | |
| | | Add 10 % for M.C. | 141.00 | | |
| | 1963.95 | Total | 155.10 | Cum | 304608.65 |
| | 1903.93 | (CSR 2016-17, P. 35 I. 1) | 155.10 | Cum | 304000.03 |
| | | | | | |
| 2 | | Excavation for foundation / pipe trenches in hard murum & boulders , WBM road includng removing the excavated material up to a distance of 50 m. and lift as below, stacking and spreading as directed by the Engineer-in- charge, normal dewatering, preparing the bed for foundation and excluding back filling. etc.complete. | | | |
| | | Lift 0 -1.5 M. | | | |
| | | Basic Rate | 180.00 | | |
| | | Add 10 % for M.C | 18.00 | | |
| | 2945.92 | Total (CSR 2016-17, P. 35 I. 3) | 198.00 | Cum | 583292.16 |
| | | | | | |
| 3 | | Excavation for pipe trenches in soft rock and old cement and lime masonary foundation, ashphalt road includng removing the excavated material up to a distance of 50 m. and lift as below, stacking and spreading as directed by the Engineer- in- charge, normal dewatering, preparing the bed for foundation and excluding back filling. etc.complete. | | | |
| | | Lift 0 -1.5 M. | | | |
| | | Basic Rate | 443.00 | | |
| | | Add 10 % for M.C | 44.30 | | |
| | 5891.85 | | 487.30 | Cum | 2871098.51 |
| | | Lift 1.5 -3.0 M. | 400.00 | | |
| | | Basic Rate | 463.00 | | |
| | | Add 10 % for M.C | 46.30 | <u></u> | |
| | 2458.55 | Total (CSR 2016-17, P. 35 I. 5) | 509.30 | Cum | 1252139.52 |

4

5

6

946.91

| Quantity | ITEM DESCRIPTION | Rate | Unit | Amount Rs. |
|----------|--|--------|------|------------|
| | Excavation for pipe trenches in hard rock | | | |
| | and concrete road, by chiselling, wedging, | | | |
| | lime drilling by mechanical means or by all | | | |
| | means other than blasting, including | | | |
| | trimming and levelling the bed, removing | | | |
| | the excavated material up to a distance of | | | |
| | 50 m. and lift as below, stacking and | | | |
| | spreading as directed by the Engineer-in- | | | |
| | charge, normal dewatering, preparing the | | | |
| | bed for foundation and excluding back | | | |
| | filling. etc.complete. | | | |
| | Lift 0-1.50 M. | | | |
| | Basic Rate | 751.00 | | |
| | Add 10 % for M.C | 75.10 | | |
| 420.85 | Total | 826.10 | Cum | 347664.19 |
| | Lift 1.5 -3.0 M. | | | |
| | Basic Rate | 771.00 | | |
| | Add 10 % for M.C. | 77.10 | | |
| 4245.98 | Total | 848.10 | Cum | 3601015.64 |
| | Lift 3.0 -4.5 M. | | | |
| | Basic Rate | 791.00 | | |
| | Add 10 % for M.C | 79.10 | | |
| 3278.84 | Total | 870.10 | Cum | 2852914.77 |
| | Lift 4.5-6.0 M. | | | |
| | Basic Rate | 811.00 | | |
| | Add 10 % for M.C | 81.10 | | |
| 1424.18 | Total | 892.10 | Cum | 1270512.93 |
| | Lift 6.0-7.5 M. | | | |
| | Basic Rate | 831.00 | | |
| | Add 10 % for M.C | 83.10 | | |
| 879.11 | Total | 914.10 | Cum | 803590.41 |
| | (CSR 2016-17, P. 36 I. 7) | | | |
| | Providing dry trap/ granite/quartzite/ gneiss, | | | |
| | rubble stone soling in 15 cm to 20 cm thick | | | |
| | layers including hand packing and | | | |
| | compacting etc.complete. | | | |
| | Basic Rate | 912.00 | | |
| | Add 5 % for M.C | 45.60 | | |
| 349.92 | | 957.60 | Cum | 335083.39 |
| | (CSR 2016-17, P. 39 I.18) | _ | | |
| | Providing murum hadding in transhas with | | | |
| | Providing murum bedding in trenches with approved murum from excavated materials | | | |
| | from foundation in 15 cm. to 20 cm. layers | | | |
| | including watering & compaction complete. | | | |
| | including watching a compaction complete. | | | |
| | | | | |
| | Basic Rate | 64.00 | | |
| | | 3 20 | | |

63632.35

3.20

67.20 Cum

(CSR 2016-17, P. 39, I. 16)

Add 5 % for M.C..

Total

7

8

0.92

400 mm dia.

| Quantity | ITEM DESCRIPTION | Rate | Unit | Amount Rs. |
|----------|--|----------|-------|------------|
| | | | | |
| | Lowering laying and jointing in proper grade | | | |
| | and alignment R.C.C. pipes with collar | | | |
| | joints in CM 1:1 proportion or socketed | | | |
| | R.C.C. pipes with rubbar joints (excluding | | | |
| | cost of rubber ring or R.C.C. collor), | | | |
| | including cost of conveyance from stores to | | | |
| | site of works, cost of jointing material, | | | |
| | labour, giving hydraulic testing, | | | |
| | etc.complete as directed by Engineer-in- charge | | | |
| | 350 mm dia. | | | |
| | Basic Rate | 118.00 | | |
| | Add 5 % for M.C. | 5.90 | | |
| 917.00 | Total | 123.90 | Rmt | 113616.30 |
| 317.00 | 400 mm dia. | 123.30 | IXIII | 113010.30 |
| | Basic Rate | 151.00 | | |
| | Add 5 % for M.C. | 7.55 | | |
| 754.00 | Total | 158.55 | Rmt | 119546.70 |
| 734.00 | 450 mm dia. | 100.00 | IXIII | 113040.70 |
| | Basic Rate | 180.00 | | |
| | Add 5 % for M.C. | 9.00 | | |
| 854.00 | Total | 189.00 | Rmt | 161406.00 |
| 004.00 | 500 mm dia. | 100.00 | TXIII | 101400.00 |
| | Basic Rate | 197.00 | | |
| | Add 5 % for M.C. | 9.85 | | |
| 2268.00 | Total | 206.85 | Rmt | 469135.80 |
| 2200.00 | 600 mm dia. | 200.00 | | 100100.00 |
| | Basic Rate | 248.00 | | |
| | Add 5 % for M.C. | 12.40 | | |
| 729.00 | Total | 260.40 | Rmt | 189831.60 |
| | (CSR 2016-17, P. 105, I. 2) | | | |
| | | | | |
| | Hydraulic testing of RCC pipe line to | | | |
| | specified pressure including cost of all | | | |
| | materials and labour and water for testing | | | |
| | for specified length including cutting, | | | |
| | placing end cap making arrangement for | | | |
| | filling safe water using reciprocating type | | | |
| | pumps which should be able to provide | | | |
| | specified test pressure gauges and other | | | |
| | necessary equipments, labour, operation | | | |
| | charges, etc. required for testing. The rate | | | |
| | under this item shall also include cost of | | | |
| | retesting, if necessary and reinstating to | | | |
| | original position. | | | |
| | New item to be added | | | |
| | 350 mm dia. | | | |
| | Basic Rate | 13000.00 | | |
| | Add 5 % for M C | | | |

12517.05

Add 5 % for M.C.

Total

650.00

Km

13650.00

| I. N. | Quantity | ITEM DESCRIPTION | Rate | Unit | Amount Rs. |
|-------|----------|---|----------|------|------------|
| | | Basic Rate | 17000.00 | | |
| | | Add 5 % for M.C | 850.00 | | |
| | 0.75 | Total | 17850.00 | Km | 13458.90 |
| | | 450 mm dia. | | | |
| | | Basic Rate | 20000.00 | | |
| | | Add 5 % for M.C | 1000.00 | | |
| | 0.85 | Total | 21000.00 | Km | 17934.00 |
| | | 500 mm dia. | | | |
| | | Basic Rate | 22000.00 | | |
| | | Add 5 % for M.C | 1100.00 | | |
| | 2.27 | Total | 23100.00 | Km | 52390.80 |
| | | 600 mm dia. | | | |
| | | Basic Rate | 28000.00 | | |
| | | Add 5 % for M.C | 1400.00 | | |
| | 0.73 | Total | 29400.00 | Km | 21432.60 |
| | | (CSR 2016-17, P. 105, I. 2) | | | |
| 9 | | Open timbering in trenches of depth more than 1.5 m for shoring and strutting including use of and waste of all necessary timber works including walling, strutts, open polling boards/ horizontal sheeting, runners, etc. as may be necessary and fixing and removal complete. (Measurements to be taken of the face/area timbered) | | | |
| | | Non Water Logged Area | | | |
| | | | | | |

Basic Rate

Total

Add 5 % for M.C.

240.00

12.00

252.00 Sqm

Lift 1.50 to 3.00 m.

328.50

82782.00

10

11

12

| Quantity | ITEM DESCRIPTION | Rate | Unit | Amount Rs. |
|----------|---|----------|-------|------------|
| | Water Logged Area | | | |
| | Lift 1.50 to 3.00 m. | | | |
| | Basic Rate | 239.00 | | |
| | Add 5 % for M.C | 11.95 | | |
| 328.50 | | 250.95 | Sqm | 82437.08 |
| | (CSR 2016-17, P. 39, I. 20a / b) | | | |
| | Providing and laying in situ cement concrete 1:2:4 of trap/ granite / quartzite/ gneiss metal for foundation and bedding including bailing out water manually, formwork, compacting and curring etc. complete. Basic Rate | 4233.00 | | |
| | Add 5 % for M.C | 211.65 | | |
| 169.96 | | 4444.65 | Cum | 755410.34 |
| | (CSR 2016-17, P. 43, I. 1b) | | | |
| | Dewatering the excavated trenches and pools of water in the pipeline trenches, well works by using pumps and other divices including disposing off water to safe distance as directed by Engineer-in- charge (including cost of machionary, labour,fuel) etc.complete. Basic Rate | 62.00 | | |
| | Add 5 % for M.C | | | |
| | | 3.10 | | |
| 37800.00 | Total | 65.10 | HP/Hr | 2460780.00 |
| | (CSR 2016-17, P. 38, I. 14) | | | |
| | Providing and constructing on sewer, B.B. masonary circular manhole with concentric cone 1.2 M. dia. at bottom and 0.5 M. from top and up to depth of 2 m. with 23 cm thick brick work up to depth of 2 M in CM 1:4 proportion with 20 mm thick smooth plaster on both sides in CM 1:2 proportion excluding excavation including foundation concrete 250 mm thick and haunches and channels in C.C. 1:2:4 proportion, finishing channels in smooth rendering, providing C.I. dapuri type steps each weighing 5.5 Kg., 1:2:4 coping and providing and fixing approved make and quality S.F.R.C. frame and cover of 56 cm dia. etc.complete as directed by Engineer-in- charge. | | | |
| | Upto 1.50 m depth. | | | |
| | Basic Rate | | | |
| | Add 5 % for M.C | 864.95 | | |
| 95.00 | Total | 18163.95 | No. | 1725575.25 |

UIEW

| I. N. | Quantity | ITEM DESCRIPTION | Rate | Unit | Amount Rs. | | | |
|-------|----------|--|---|------|------------|--|--|--|
| | | Upto 2 m depth. | | | | | | |
| | | Basic Rate | 20148.00 | | | | | |
| | | Add 5 % for M.C | 1007.40 | | | | | |
| | 67.00 | Total | 21155.40 | No. | 1417411.80 | | | |
| | | (CSR 2016-17, P. 272, I. 6) | | | | | | |
| | | a) Rebate for every decrease in depth of 50 | | | | | | |
| | | cm or part there of Rs.2849/-Add 5% for | 2, I. 6) ecrease in depth of 50 s.2849/-Add 5% for Fucting on sewer, B.B. anhole with concentric bottom and 0.5 M. from of 5 m. with 23 cm to depth of 2 M from thick brick work for to 5 M in CM 1:4 m thick smooth plaster CM 1:2 proportion | | | | | |
| | | M.C=Rs.2991.45 | | | | | | |
| | | | | | | | | |
| 13 | | masonary circular manhole with concentric cone 1.5 M. dia. at bottom and 0.5 M. from top and up to depth of 5 m. with 23 cm thick brick work up to depth of 2 M from top and 35 cm thick brick work for remaining depth up to 5 M in CM 1:4 proportion with 20 mm thick smooth plaster | | | | | | |
| | | Upto 2.5 m depth. | | | | | | |
| | | Basic Rate | 28011.00 | | | | | |
| | | Add 5 % for M.C. | 1400.55 | | | | | |
| | 5.00 | Total | 29411.55 | No. | 147057.75 | | | |

SMC

| I. N. | Quantity | ITEM DESCRIPTION | Rate | Unit | Amount Rs. |
|-------|----------|--|--|------|-------------|
| | | Upto 3.0 m depth. | | | |
| | | Basic Rate | 33901.00 | | |
| | | Add 5 % for M.C | Basic Rate 33901.00 Add 5 % for M.C 1695.05 Total 35596.05 No. | | |
| | 6.00 | | 35596.05 | No. | 213576.30 |
| | | Upto 3.50 m depth. | | | |
| | | | | | |
| | | | | | |
| | 1.00 | | 41780.55 | No. | 41780.55 |
| | | Upto 4.0 m depth. | 45004.00 | | |
| | | | | | |
| | 0.00 | | | N.L. | 4 40005 4 5 |
| | 3.00 | | 47965.05 | NO. | 143895.15 |
| | | Upto 4.5 m depth. | E4 E 74 00 | | |
| | | | | | |
| | 2.00 | | | Nia | 400440.05 |
| | 3.00 | | 54149.55 | INO. | 162448.65 |
| | | Upto 5.0 m depth. | 57461 00 | | |
| | | | Basic Rate 57461.00 Add 5 % for M.C 2873.05 | | |
| | 1.00 | | | No | 60224.05 |
| | 1.00 | | 00334.05 | INO. | 60334.05 |
| | | (CSR 2016-17, P. 273, I. 7) a) Rebate for every decrease in depth of 50 | | | |
| | | cm or part there of Rs.5890/-Add 5% for | | | |
| | | M.C=Rs.6184.50 | | | |
| | | | | | |
| 14 | | Providing and constructing on sewer, B.B. | | | |
| | | masonary circular manhole with concentric | | | |
| | | cone 1.5 M. dia. at bottom and 0.5 M. from | | | |
| | | top and 35 cm thick brick work for depth of | | | |
| | | 2 M and 45 cm thick brick work for | | | |
| | | remaining depth up to 9 M in CM 1:4 | | | |
| | | proportion with 20 mm thick smooth plaster | | | |
| | | on both sides in CM 1:2 proportion | | | |
| | | excluding excavation including foundation | | | |
| | | concrete 250 mm thick and haunches and | | | |
| | | channels in C.C. 1:2:4 proportion, finishing | | | |
| | | channels in smooth rendering, providing | | | |
| | | C.I. dapuri type steps each weighing 5.5 | | | |
| | | Kg., 1:2:4 coping and providing and fixing | | | |
| | | approved make and quality S.F.R.C. frame | | | |
| | | and cover of 56 cm dia. etc.complete as | | | |
| | | directed by Engineer-in- charge. | | | |
| | | | | | |
| | | 5.50 m depth. | | | |
| | | Basic Rate | 71823.00 | | |
| | | Add 5 % for M.C | 3591.15 | | |
| | 1.00 | Total | 75414.15 | | 75414.15 |
| | | 6.0 m depth. | | | |
| | | Basic Rate | 79233.00 | | |
| | | Add 5 % for M.C | 3961.65 | | |
| | 3.00 | Total | 83194.65 | | 249583.95 |
| | | | - | | |

| I. N. | Quantity | ITEM DESCRIPTION | Rate | Unit | Amount Rs. |
|-------|----------|---|----------|------|------------|
| | | Basic Rate | 86643.00 | | |
| | | Add 5 % for M.C | 4332.15 | | |
| | 2.00 | Total | 90975.15 | No. | 181950.30 |
| | | (CSR 2016-17, P. 273, I. 8) | | | |
| | | a) Rebate for every decrease in depth of 50 cm or part there of Rs7410/-Add 5% for M.C .=Rs.7780.50 | | | |
| 15 | | Providing and fixing in position steel bar reinforcement of various diameters for RCC piles, caps, footings, foundations, lintels, parodies, copings, fins, arches, etc. as per detailed designs, drawings and schedules; including cutting, bending, hooking the bars, binding with wires or tack welding and supporting as required, etc. complete. (including cost of binding wire). | | | |
| | | Tar Staal | | | |
| | | | 52104.00 | | |
| | | | | | |
| | 1 33 | | | МТ | 73135.54 |
| | 1.55 | | 54003.70 | | 73133.34 |
| | | | | | |
| 16 | | Refilling the trenches with available excavated stuff with soft material first over pipe line and then hard material in 15 cm layers with all leads and lifts including consolidation, surcharging, etc.complete. | | | |
| | | Basic Rate | 64 00 | | |
| | | | | | |
| ļ | 16132.60 | | | Cum | 1084110.88 |
| | | (CSR 2016-17, P. 38, I.15) | | | |
| 17 | | Dispossing of surplus excavated stuff from site of work up to a distance of 2 Km.including, loading, unloading, transportation etc.complete or as directed by the Engineering- in- charge. (CSR 2015-16 P 22 Statement VI) | | | |
| | 6429.70 | | 195.62 | Cum | 1257778.34 |
| | ļ | detailed designs, drawings and schedules; including cutting, bending, hooking the bars, binding with wires or tack welding and supporting as required, etc. complete. (including cost of binding wire). Image: Cost of binding wire). Tor Steel Image: Cost of binding wire). Mark 100 Add 5 % for M.C 2609.70 1.33 Total 54803.70 MT (CSR 2016-17, P. 46, I. 8b) Refilling the trenches with available excavated stuff with soft material first over pipe line and then hard material in 15 cm layers with all leads and lifts including consolidation, surcharging, etc.complete. Basic Rate 64.00 Add 5 % for M.C 3.20 5132.60 Total 67.20 CSR 2016-17, P. 38, I.15) Image: Cost of the cost of 2 Km.including, loading, unloading, transportation etc.complete or as directed by the Engineering- in- charge. Image: Cost of the cost of 2 Km.including, loading, unloading, transportation etc.complete or as directed by the Engineering- in- charge. Image: Cost of the cost of 2 Km.including, loading, unloading, transportation etc.complete or as directed by the Engineering- in- charge. | | | |
| | | | | | |

| I. N. | Quantity | ITEM DESCRIPTION | Rate | Unit | Amount Rs. |
|-------|----------|--|--------|------|------------|
| 18 | | WBM Road restoration: Reinstating the road surface with supplying & spreading 60mm metal of 20 cm thick with Hard murum & 40mm metal of 15 cm thick with Soft murum as a blindage, above WBM surfaceFor all the above layers watering & compacting with Power roller, including Excavation of required depth for road reinstating or as directed by Engineer-in- charge etc. complete. | | | |
| | 5042.25 | (As per Rate Analysis) | 208.74 | Sqm | 1052519.27 |
| 19 | | charge etc. complete.25 (As per Rate Analysis)Asphalt Road restoration: Reinstatement of road by excavating the potholes in rectangular shape and filling of potholes by one layers of one layer of 80 mm trap metal of 200 mm thick, one layer of 40 mm trap metal of 100 mm thick including supplying and spreading of stone dust/murrum of 100 mm thick, watering compaction and 75 mm thick bituminous bound macadam with cold emulsion 60/70 grade and bituminous macadam of 50 mm thick with bitumen of S- 65 grade and 20 mm thick asphalt concrete with S-35 grade of bitumen including compaction by vibratory roller of all layers and providing and applying tack coat of 50 Kg / 100 m2 on black top surface and seal coat of 1kg/sqm. B.B.M. surface and disposal of surplus soil etc., complete. for pipeline trenches of various diameter etc., complete as per specifications and or as directed by engineer- in-charge. | | | |
| | 2689.00 | (As per Rate Analysis) | 873.47 | Sqm | 2348760.83 |
| 20 | | ConcreteRoadrestoration:ReinstatementofConcreteroadbyexcavatingtheconcretepanelsinrectangular shape and filling the trench withonelayer of natural sand of 300 mm thick ,onelayer of M20 grade PCC of 150 mmthick and onelayer of PCC M30 grade of300 mmthick including dewatering etc.,complete.for pipelinetrenchesof variousdiameteretc.,complete.for pipelinespecificationsand orasdirectedbyengineer- in-charge.ItemNo.25aProvidingandfilling inthefoundationwithsandofap-provedqualityincludingwatering,compactioncomplete.Spec.No.:Bd.A.13PageNo.264 | | | |

| I. N. | Quantity | ITEM DESCRIPTION | Rate | Unit | Amount Rs. |
|-------|----------|--|---------|----------|------------|
| | | PWD DSR 17-18, Item No. 12 / 1 BDA 13, Pa-17 | | | |
| | | | 451.00 | | |
| | | | | | |
| | 67.20 | PWD DSR 17-18, Item No. 12 / 1 BDA 13, Pg-17 Basic Rate 451.00 Add 5% for M.C. + 5% Sugarcane Area 45.10 67.20 Total 496.10 Item No. 25b Providing and casting in situ cement concrete M- 15 of trap / granite / quartzite / gneiss metal for steps including centering, formwork, compacting, roughening them if special finish is to be provided and curing and finishing if required complete, with fully automatic micro processor based PLC with SCADA enabled reversible Drum Type mixer With natural sand. Spec. No.: Bd.E.2 Page No. 288 and B.7 Page No 38 PWD DSR 2017-18, I. No. 2 i a 4, Pg. No. 25 Basic Rate 538.00 67.20 Total 5918.00 Cum Item No. 25c: Providing and laying in situ cement concrete M -30 with tremix treatment for 200 mm thickness for Concrete Road is including laying plastic sheet for 125 micron thickness with groove cutting of 4 mm wide and 20 mm deep with necessary refilling with bitumen (excluding reinforcement) with Natural sand etc. complete Spec : As directed by Engineer incharge WD DSR 2017-18, I. No. 93 / 23 MORTH, Pg. No. 228 PWD DSR 2017-18, I. No. 93 / 23 MORTH, Pg. No. 228 PWD DSR 2017-18, I. No. 93 / 23 MORTH, | | 33337.92 | |
| | | | | | |
| | | cement concrete M- 15 of trap / granite / quartzite / gneiss metal for steps including centering, formwork, compacting, roughening them if special finish is to be provided and curing and finishing if required complete,with fully automatic micro processor based PLC with SCADA enabled reversible Drum Type mixer With natural sand. Spec. No.: Bd.E.2 Page No. 288 and | | | |
| | | - | | | |
| | | Basic Rate | 5380.00 | | |
| | | Add 5% for M.C. + 5% Sugarcane Area | 538.00 | | |
| | 67.20 | Total | 5918.00 | Cum | 397689.60 |
| | | cement concrete M -30 with tremix treatment for 200 mm thickness for Concrete Road is including laying plastic sheet for 125 micron thickness with groove cutting of 4 mm wide and 20 mm deep with necessary refilling with bitumen (excluding reinforcement) with Natural sand etc. complete Spec : As directed by Engineer incharge | | | |
| | | | | | |
| | | | | | |
| | | Add 5% for M.C. + 5% Sugarcane Area | | | 005400 50 |
| | 33.60 | Total | 6998.20 | Cum | 235139.52 |
| 21 | | Shifting of Utilities: All utilities like Electric Poles, waterline & Communication line Shifting while Manhole and Line Laying work etc., complete as per specifications and or as directed by engineer- in-charge. | | | |
| | | Utility Shifting | | | |

| I. N. | Quantity | ITEM DESCRIPTION | Rate | Unit | Amount Rs. |
|-------|----------|---|----------|------|------------|
| Α | | Reconnection of existing damaged | | | |
| | | connection including 15 mm dia. CPVC | | | |
| | | pipe with necessary fittings, remaking good | | | |
| | | the demolished portion etc. complete | | | |
| | | including all labour, etc. complete. as | | | |
| | | directed by Engineer in charge. | | | |
| | | Water Supply Connections - 15 mm dia | | | |
| | | Basic Rate | 167 | | |
| | | Add 5% for M.C. | 8.35 | | |
| | 30 | Total | 175.35 | Rmt | 5260.5 |
| | | | | | |
| | | (Similar Item PWD CSR 2016-17, P. 166, I No 42.62) | | | |
| | | Water Supply Connections - 20 mm dia | | Rmt | |
| | | Basic Rate | 196 | | |
| | | Add 5% for M.C. | 9.8 | | |
| | 4 | | 205.8 | Rmt | 823.2 |
| В | | Electrical Lines & Poles | | | |
| | | Electrical Poles - RA for 10 km | | | |
| i) | | Pole Foundation : Providing cement | | | |
| | | concrete foundation including excavation | | | |
| | | for the pole 60 cms x 60 cms x 1.5 mtr deep | | | |
| | | in1:3:6 cement concrete (20x 25 mm stone metal) and 45 cm x 45cm x45 cm / 45 cm x | | | |
| | | 45 cm height plinth duly plaster and with | | | |
| | | necessary curing & finishing in above | | | |
| | | manner (for 9 mtr pole) | | | |
| | 1 | | 2771.00 | Nos | 2771 |
| | | PWD DSR 15-16, E & M, Item No. 16.3.2, | | | |
| | | P.No. 161 | | | |
| ii) | | Dismantling of existing poles above 6 mtr | | | |
| | | height with brackets. Clamps, insulators | | | |
| | | stay from the cement concrete foundation | | | |
| | | and making the site clear by refilling the pits | | | |
| | 1 | with excavated materials and bringing it to ground level | 701.00 | Nos | 701 |
| | 1 | PWD DSR 15-16, E & M, Item No. 8.8.2, | 701.00 | 1105 | 701 |
| | | P.No. 110 | | | |
| iii) | | Re-Erecting: Supplying and erecting steel | | | |
| , | | tubular swaged pole 165.1 X 139.7 X 114.3 | | | |
| | | mm dia with 4.5 X 4.5 X3.65 mm thick | | | |
| | | (5+2+2m) length respectively and total 9 m | | | |
| | | long with pole cap, base plate in provided | | | |
| | | foundation (weight 147 kg) as per | | | |
| | 1 | specifications. | 12722.00 | Nos | 12722 |
| | | PWD DSR 15-16, E&M, Item No. 8.1.3, Page No.98 | | | |
| iv) | | Earthling : Providing erecting pipe type | | | |
| | | earthling of 40 mm GI pipe dia with double | | | |
| | | earthling to the all equipments as per | | | |
| | 1 | Detailed specifications. | 1585.00 | Nos | 1585 |

| I. N. | Quantity | ITEM DESCRIPTION | Rate | Unit | Amount Rs. |
|-------|----------|---|------|------|------------|
| | | PWD DSR 14-15 E&M, Item No. 9.1.4, Page No.111 | | | |

| I. N. | Quantity | ITEM DESCRIPTION | Rate | Unit | Amount Rs. |
|--|---|---|-------------|---------|-------------|
| С | | Electrical Cable - Providing and Jointing | | | |
| | | Communication Cable - Jelly Filled | | | |
| | | telephone lines and optical Fibre Cable | | | |
| i) | | Supply & Erecting of Jelly filled armoured telephone cable 10 pair with 0.5 mm dia laid in provided trench as per specification no. | 83.00 | Rmt | 249 |
| 3 WG-TW PWD DSR 15-16 Item 1-10-10, P No 17 | | 03.00 | IXIII | 249 | |
| ii) | | | | | |
| | 3 | no. WG- COC/ OFC | 247.00 | Rmt | 741 |
| | | PWD DSR 15-16 Item 1-12-8, P No 20 | | | |
| iii) | iii) Supply & fixing of wall /rack type 12 port light guide interconnection unit for termination of optical fibre cable on wall /provided U rack complete as per | | 4366.00 | Nos | 4366 |
| | I | specification no. EG- NAS / LIU PWD DSR 15-16 Item 1-14-5 P No 21 | 4300.00 | 1103 | 4300 |
| | | | | | |
| | | | Labou | ır Cost | 29768950.16 |
| | | Total Material | + Labour Co | ost Rs. | 38861595.16 |
| | | | Sa | ny Rs. | 38861596.00 |
| | | | | Lakhs | 388.62 |
| | | | Say | Crore | 3.89 |

SOLAPUR MUNICIPAL CORPORATION MAHARASHTRA JEEVAN PRADHIKARAN DIVISION SOLAPUR SOLAPUR CITY UNDERGROUND SEWERAGE SCHEME (AMRUT) SUB ESTIMATE NO. :- SEWERAGE SYSTEM FOR ZONE VI

(Underground Sewerage Network - 350 to 600 mm dia RCC Pipes, L=5.5 Km)

| | ME | EASURE | MENT | | | | |
|------------|---|---------|-----------|---------|---------|----------|------|
| ltem No | ITEM DESCRIPTION | No | L | В | D/H | Quantity | Unit |
| 1 | MATERIAL : Providing ISI Standard RCC pipes in standard length of following class and diameter, etc.complete. | | | | | | |
| | RCC NP 3 Class | | | | | | |
| | 350 mm dia. | 1.00 | 628.00 | | | 628.00 | Rmt |
| | 400 mm dia. | 1.00 | 754.00 | | | 754.00 | Rmt |
| | 450 mm dia. | 1.00 | 728.00 | | | 728.00 | Rmt |
| | 500 mm dia. | 1.00 | 2268.00 | | | 2268.00 | Rmt |
| | 600 mm dia. | 1.00 | 0.00 | | | 0.00 | Rmt |
| | RCC NP 4 Class | | | | | | |
| | 350 mm dia. | 1.00 | 289.00 | | | 289.00 | Rmt |
| | 400 mm dia. | 1.00 | 0.00 | | | 0.00 | Rmt |
| | 450 mm dia. | 1.00 | 126.00 | | | 126.00 | Rmt |
| | 500 mm dia. | 1.00 | 0.00 | | | 0.00 | Rmt |
| | 600 mm dia. | 1.00 | 729.00 | | | 729.00 | Rmt |
| | | | | | | | |
| | LABOUR : | | | | | | |
| | EXCAVATION DETAILS -From computer generated design sheet | | | | | | |
| | 0-1.5 | 1.5-3.0 | 3.0 - 4.5 | | 6.0-7.5 | | |
| | 8720.88 | 1474.54 | | 319.52 | 8.73 | 11186.61 | Cum |
| | 2501.69 | 5229.99 | | | | | Cum |
| | 11222.57 | 6704.53 | 3278.84 | 1424.18 | 879.11 | 23509.22 | Cum |
| 1 | Excavation for foundation / pipe trenches in earth, soils of all types , sand, gravel, and soft murum etc.complete. | | | | | | |
| | Lift 0.0 -1.5 M. | | | | | 1963.95 | Cum |
| 2 | Excavation for foundation / pipe trenches in hard murum & boulders , WBM road etc.complete. | | | | | | |
| | Lift 0.0 -1.5 M. | | | | | 2945.92 | Cum |
| 3 | Excavation for pipe trenches in soft rock and old cement and lime masonary foundation, ashphalt road etc.complete. | | | | | | |
| | Lift 0.0-1.50 M. | | | | | 5891.85 | Cum |
| | | | | | | 2458.55 | |

| ltem No | ITEM DESCRIPTION | No | L | В | D/H | Quantity | Unit |
|------------|---|------|---------|------|------|----------|------|
| | | | | | | | |
| 4 | Excavation for pipe trenches in hard rock and concrete road, by chiselling, wedging, lime drilling by mechanical means or by all means | | | | | | |
| | other than blasting, etc.complete. | | | | | | |
| | Lift 0.0-1.50 M. | | | | | 420.85 | |
| | Lift 1.5-3.0 M. | | | | | 4245.98 | |
| | Lift 3.0-4.5 M. | | | | | 3278.84 | |
| | Lift 4.5-6.0 M. | | | | | 1424.18 | |
| | Lift 6.0-7.5 M. | | | | | 879.11 | Cum |
| 5 | Providing dry trap/ granite/quartzite/ gneiss, rubble stone soling etc.complete. | | | | | | |
| | Provision Made for trunk sewer along nallah | 1.00 | 729.00 | 1.60 | 0.30 | 349.92 | Cum |
| | | | | | | | |
| 6 | Providing murum bedding in trenches with approved murum from excavated materials etc.n complete. | | | | | | |
| | (As per Computer generated sheet) | | | | | 946.91 | Cum |
| 7 | Lowering laying and jointing in proper grade and alignment R.C.C. pipes etc.complete | | | | | | |
| | 350 mm dia. | 1.00 | 917.00 | | | 917.00 | Rmt |
| | 400 mm dia. | 1.00 | 754.00 | | | 754.00 | |
| | 450 mm dia. | 1.00 | 854.00 | | | 854.00 | |
| | 500 mm dia. | 1.00 | 2268.00 | | | 2268.00 | Rmt |
| | 600 mm dia. | 1.00 | 729.00 | | | 729.00 | Rmt |
| 8 | Hydraulic testing of RCC pipe line to specified pressure etc.complete | | | | | | |
| | 350 mm dia. | 1.00 | 0.92 | | 1 | 0.92 | Rmt |
| | 400 mm dia. | 1.00 | 0.75 | | | 0.75 | |
| | 450 mm dia. | 1.00 | 0.85 | | | 0.85 | Rmt |
| | 500 mm dia. | 1.00 | 2.27 | | | 2.27 | Rmt |
| | 600 mm dia. | 1.00 | 0.73 | | | 0.73 | Rmt |
| 9 | Open timbering in trenches of depth more than 1.5 m for shoring and strutting etc. complete. | | | | | | |
| | Non Water Logged Area | | | | | | |
| | Lift 1.50 to 3.00 m. | 2.00 | 109.50 | | 1.50 | 328.50 | Sqm |
| | Water Logged Area | 0.00 | 400 50 | | 4 50 | | |
| | Lift 1.50 to 3.00 m. | 2.00 | 109.50 | | 1.50 | 328.50 | Sqm |

| ltem No | ITEM DESCRIPTION | No | L | В | D/H | Quantity | Unit |
|------------|--|--------|--------|------|------|--------------|--------|
| 10 | Providing and laying in situ cement concrete 1:2:4 of trap/ granite / quartzite/ gneiss metal for foundation and bedding etc. complete. | | | | | | |
| | Provision of anchor block Made for trunk sewer along nallah | 100.00 | 1.50 | 1.50 | 0.60 | 135.00 | |
| | Deduct | 100.00 | 0.79 | 1.00 | 0.60 | 47.10 | |
| | Net Qty | | | | | 87.90 | Cum |
| | (As per Computer generated sheet) | | | | | 82.06 | |
| | Total Qty | | | | | 169.96 | Cum |
| 11 | Dewatering the excavated trenches and pools of water in the pipeline trenches, etc.complete. | | | | | | |
| | For nalla / where water table high | 7.00 | 180.00 | 5.00 | 6.00 | 37800.00 | Bhp/hr |
| | 7 Fronts, 5 BHP Pump- 6Hrs- 180 Days | | | | | | |
| 12 | Providing and constructing on sewer, B.B. masonary circular manhole with concentric cone 1.2 M. dia. at bottom and 0.5 M. from top and up to depth of 2 m. with 23 cm thick brick work up to depth of 2 Metc.complete | | | | | | |
| | Upto 1.50 m depth. | | | | | 95.00 | No. |
| | Upto 2.0 m depth. | | | | | 67.00 | No. |
| | (As per Computer generated sheet) | | | | | | |
| 13 | Providing and constructing on sewer, B.B. masonary circular manhole with concentric cone 1.5 M. dia. at bottom and 0.5 M. from top and up to depth of 5 m. with 23 cm thick brick work up to depth of 2 M from top and 35 cm thick brick work for remaining depth up to 5 M etc.complete | | | | | | |
| | Upto 2.50 m depth. | | | | | 5.00 | No. |
| | Upto 3.0 m depth. | | | | | 6.00 | No. |
| | Upto 3.5 m depth. | | | | | 1.00 | No. |
| | Upto 4.0 m depth. | | | | | 3.00 | No. |
| | Upto 4.5 m depth. | | | | | 3.00 1.00 | No. |
| | Upto 5.0 m depth. (As per Computer generated sheet) | | | | | 1.00 | No. |
| | | | | | | | |

| ltem No | ITEM DESCRIPTION | No | L | В | D/H | Quantity | Unit |
|------------|--|------|--------|---|-----|----------|------|
| 14 | Providing and constructing on sewer, B.B. masonary circular manhole with concentric cone 1.5 M. dia. at bottom and 0.5 M. from top and 35 cm thick brick work for depth of 2 M and 45 cm thick brick work for remaining depth up to 9 M in etc.complete | | | | | | |
| | Upto 5.5 m depth. | | | | | 1.00 | No. |
| | Upto 6.0 m depth. | | | | | 3.00 | No. |
| | Upto 6.5 m depth. | | | | | 2.00 | No. |
| | (As per Computer generated sheet) | | | | | | |
| 15 | Providing and fixing in position steel bar reinforcement etc. complete | | | | | | |
| | Wt of Steel = 0.1% of Concrete Qty = | 0.17 | 1334.5 | | | 1.33 | MT |
| 16 | Refilling the trenches with available excavated stuff etc.complete. | | | | | | |
| | (As per Computer generated sheet) | | | | | 16132.60 | Cum |
| 17 | Dispossing of surplus excavated stuff from site of work up to a distance of 2Km etc.complete (As per Computer generated sheet) | | | | | 6429.70 | Cum |
| | | | | | | | |
| 18 | WBM Road Restoration : Reinstating the road surface with supplying & spreading 60mm metal of 20 cm thick with Hard murum & 40mm metal of 15 cm thick with Soft murum etc. complete. | | | | | | |
| | (As per Computer generated sheet) | | | | | 5042.25 | Sqm |
| 19 | Asphalt Road restoration: Reinstatement of road by excavating the potholes in rectangular shape and filling of potholes by one layers of one layer of 80 mm trap metal of 200 mm thick, one layer of 40 mm trap metal of 100 mm thick etc., complete. | | | | | | |
| | (As per Computer generated sheet) | | | | | 2689.00 | Sqm |

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| ltem No | ITEM DESCRIPTION | No | L | В | D/H | Quantity | Unit |
|------------|--|--------|---|---|------|----------|------|
| 20 | Concrete Road restoration : Reinstatement of Concrete road by excavating the concrete panels in rectangular shape and filling the trench with one layer of natural sand of 300 mm thick , one layer of M20 grade PCC of 150 mm thick and one layer of PQC M30 grade of 300 mm thicketc., complete | | | | | | |
| | (As per Computer generated sheet) | | | | | 672.00 | Sqm |
| | Item No. 25a Providing and filling in the foundation with sand of ap- proved quality including watering, compaction complete. Spec. No.: Bd.A.13 Page No. 264 | | | | | | |
| | | 672.00 | | | 0.10 | 67.20 | Cum |
| | Item No. 25b Providing and casting in situ cement concrete M- 15 of trap / granite / quartzite / gneiss metal for etc complete | | | | | | |
| | | 672.00 | | | 0.10 | 67.20 | Cum |
| | Item No. 25c Providing and laying in situ cement concrete M -30 with tremix treatment for 300 mm thickness for Concrete Road etc. complete Spec : | | | | | | |
| | | 672.00 | | | 0.05 | 33.60 | Cum |
| 21 | Shifting of Utilities: All utilities like Electric Poles, waterline & Communication line Shifting while Manhole and Line Laying etc., complete as per specifications and or as directed by engineer- in- charge. | | | | | | |
| _ | Utility Shifting | | | | | | |
| A | Reconnection of existing damaged connection including 15 mm dia. CPVC pipe with necessary fittings, remaking good the demolished portion etc. complete including all labour, etc. complete. as directed by Engineer in charge. | | | | | | |
| | (Similar Item PWD CSR 2016-17, P. 165, I No 42.61) | | | | | | |
| | Water Supply Connections - 15 mm | 30 | 1 | | | 30 | Rmt |
| | (Similar Item PWD CSR 2016-17, P. 166, I No 42.62) | | | | | | |
| | Water Supply Connections - 20 mm | 4 | 1 | | | 4 | Rmt |

| ltem No | ITEM DESCRIPTION | No | L | В | D/H | Quantity | Unit |
|------------|--|----|---|---|-----|----------|------|
| В | Electrical Lines & Poles | | | | | | |
| | Electrical Poles - RA for 10 km | | | | | | |
| i) | Pole Foundation : Providing | | | | | | |
| | cement concrete foundation | | | | | | |
| | including excavation for the pole 60 cms x 60 cms x 1.5 mtr deep in1:3:6 | | | | | | |
| | cement concrete (20x 25 mm stone | | | | | | |
| | metal) and 45 cm x 45cm x45 cm / | | | | | | |
| | 45 cm x 45 cm height plinth duly | | | | | | |
| | plaster and with necessary curing & | | | | | | |
| | finishing in above manner (for 9 mtr | | | | | | |
| ::> | pole) | 1 | | | | 1 | Nos |
| ii) | Dismantling of existing poles above 6 mtr height with brackets. | | | | | | |
| | Clamps, insulators stay from the | | | | | | |
| | cement concrete foundation and | | | | | | |
| | making the site clear by refilling the | | | | | | |
| | pits with excavated materials and | | | | | | |
| | bringing it to ground level | 1 | | | | 1 | Nos |
| iii) | Re-Erecting: Supplying and erecting | | | | | | |
| | steel tubular swaged pole 165.1 X | | | | | | |
| | 139.7 X 114.3 mm dia with 4.5 X 4.5 | | | | | | |
| | X3.65 mm thick (5+2+2m) length | | | | | | |
| | respectively and total 9 m long with | | | | | | |
| | pole cap, base plate in provided | | | | | | |
| | foundation (weight 147 kg) as per | | | | | | |
| | specifications. | 1 | | | | 1 | Nos |
| iv) | Earthling : Providing erecting pipe | | | | | | |
| | type earthling of 40 mm GI pipe dia with double earthling to the all | | | | | | |
| | equipments as per Detailed | | | | | | |
| | specifications. | 1 | | | | 1 | Nos |

| ltem No | ITEM DESCRIPTION | No | L | В | D/H | Quantity | Unit |
|------------|---|------|---|---|-----|----------|-------|
| С | Electrical Cable - Providing and Join | ting | | | | | |
| | Communication Cable - Jelly | | | | | | |
| | Filled telephone lines and optical | | | | | | |
| | Fibre Cable | | | | | | |
| i) | Supply & Erecting of Jelly filled | | | | | | |
| | armoured telephone cable 10 pair | | | | | | |
| | with 0.5 mm dia laid in provided | | | | | | |
| | trench as per specification no. WG- | 4 | 2 | | | 2 | Drest |
| ::) | TW Supply & erecting of FR grade PVC | 1 | 3 | | | 3 | Rmt |
| ii) | armourd multi mode Optical Fibre | | | | | | |
| | Cable with 6 fibres with core dia 50 | | | | | | |
| | μ M, suitable for 1 GBps Ethernet | | | | | | |
| | distance at 850 nm of wavelength on | | | | | | |
| | wall/ ceiling or laid in provided pipe / | | | | | | |
| | trench as per specification no. WG- | | | | | | |
| | COC/ OFC | 1 | 3 | | | 3 | Rmt |
| iii) | Supply & fixing of wall /rack type 12 | | | | | | |
| | port light guide interconnection unit | | | | | | |
| | for termination of optical fibre cable | | | | | | |
| | on wall /provided U rack complete as | | | | | | |
| | per specification no. EG- NAS / LIU | 1 | | | | 1 | Nos |
| | | | | | | | |

SOLAPUR MUNICIPAL CORPORATION MAHARASHTRA JEEVAN PRADHIKARAN DIVISION SOLAPUR SOLAPUR CITY UNDERGROUND SEWERAGE SCHEME (AMRUT) PROPERTY CONNECTION FOR ZONE I,II,III,IV,VI ABSTRACT

| ltem No | Quantit | у | ITEM DESCRIPTION | | Rate | Unit | Amount Rs. |
|------------|-----------|-------|---|------------------------------|----------|------|---------------|
| 1 | | | Providing and supplying in standard lengths P (PE) Pipes for non pressure underground di sewerage with smooth internal and corrugate external surface with anti rodent property co ISO-21138-3:2007 with necessary jointing r mechanical connectors, i.e. thread/ insert release coupler joint/ compression fitting join joint, including all taxes (Central and local), tra and freight charges, inspection charges unloading charges, conveyance to the d stores/site and stacking the same in closed protecting from sunrays and rains, etc. comple | | | | |
| | | | H.D.P.E. DWC pipes for Drainage Class SN 8 | } | | | |
| | 34428.00 | Rmt | 150 mm dia.(ID) | | 378.00 | Rmt | 13013784.00 |
| | | | (CSR 2016-17, P. 132,133 I. 2) | | | | |
| 2 | | | Providing, laying & fixing, jointing Supreme 110 mm SN 8 Nu- Drain Upvc pipes or of make, manufacture as per EN 13476 or equiv I.S.15328 with fittings such a bends, tees, of jointing with rubber lubricant including excavation, trench refilling with selective material etc. complete. Spec : As directed by Engineer In Charge HDPE Pipes - Class SN8 | | | | |
| | 137712.00 | Rmt | 110 mm dia.(OD) | | 318.00 | Rmt | 43792416.00 |
| | 137712.00 | IXIII | (PWD CSR 2017-18, P. 176, I. 88/20) | | 510.00 | TAIL | 457 524 10.00 |
| 3 | | | Providing and constructing B.B. masonry val- with 15 cm thick 1:3:6 proportion PCC bedding excavation, B.B. masonry in CM 1:5 proport S.F.R.C.frame and cover, etc. complete as Engineer-in-charge. Inspection Chamber {900 x 600x 1200} | g, excluding tion precast | | | |
| | 5738.00 | No. | | | 11608.80 | No. | 66611294.40 |
| | | | Basic Rate | 11056.00 | | | |
| | | | Add 5% for M.C. | 552.80 | | | |
| | | | Total (CSR 2016-17, P. 275 I. 13) | 11608.80 | | | |
| 4 | | | Excavation for pipe trenches in soft rock and old cement and lime masonary foundation, ashphalt road includng removing the excavated material up to a distance of 50 m. and lift as below, stacking and spreading as directed by the Engineer-in- charge, normal dewatering, preparing the bed for foundation and excluding back filling. | | | | |
| | 23525.80 | Cum | etc.complete. Lift 0 -1.5 M. | | 487.30 | Cum | 11464122.34 |
| | | | Basic Rate | 443.00 | | | |
| | | | Add 10% for M.C. | 44.30 | | | |
| | | | Total | 487.30 | | | |
| | | | (CSR 2016-17, P. 35 I. 5) | | | | |

| ltem No | Quantit | у | ITEM DESCRIPTION | | Rate | Unit | Amount Rs. |
|------------|----------|--------|---|--|---------|--------|------------|
| 5 | | | Excavation for foundation / pipe trenches in of all types, sand, gravel, and soft mure removing the excavated material up to a dis m. and lift as below, stacking and spreading by the Engineer-in- charge, normal dewaterin the bed for foundation and excluding etc.complete. | um includng stance of 50 as directed g, preparing | | | |
| | 23525.80 | Cum | Lift 0.0 -1.5 M. | | 155.10 | Cum | 3648851.58 |
| | | | Basic Rate | | | | |
| | | | Add 10% for M.C. | | | | |
| 6 | | | Total 155.10 Excavation for foundation / pipe trenches in hard murum & boulders, WBM road includng removing the excavated material up to a distance of 50 m. and lift as below, stacking and spreading as directed by the Engineer-in- charge, normal dewatering, preparing the bed for foundation and excluding back filling. etc.complete. | | | | |
| | 23525.80 | Cum | Lift 0 -1.5 M. | | 198.00 | Cum | 4658108.40 |
| | | | Basic Rate | 180.00 | | | |
| | | | Add 10% for M.C. | 18.00 | | | |
| | | | Total | 198.00 | | | |
| 7 | | | Providing murum bedding in trenches wi murum from excavated materials from foun cm. to 20 cm. layers including watering & complete. | | | | |
| | 4131.36 | Cum | | | 67.20 | Cum | 277627.39 |
| | | | Basic Rate | | | | |
| | | | Add 5% for M.C. | | | | |
| | | | Total (CSR 2016-17, P. 39, I. 16) | 67.20 | | | |
| 8 | | | Lowering, laying and jointing H.D.P.E.D Corrugated Pipes for nonpressure L drainage and Sewerage applications an offollowing class and diameter includ conveyance from stores to site of works inclu- all labour,material except O ring cou- satisfactory hydraulic testing as per releve complete H.D.P.E. DWC pipes for Drainage CLASS SN | | | | |
| | 34428.00 | Rmt | | | 33.60 | Rmt | 1156780.80 |
| | | | Basic Rate | 32.00 | | | |
| | | | Add 5% for M.C. | 1.60 | | | |
| | | | Total | 33.60 | | | |
| 9 | | | (CSR 2016-17, P. 134, I. 4) Hydraulic testing of HDPE double wall corrugated pressure underground line to specified pressure of all materials and labour and water for testing length including cutting, placing end cap making for filling safe water using reciprocating type should be able to provide specified test pressure other necessary equipments, labour, operation required for testing. The rate under this item sha cost of retesting, if necessary and reinstatin position. | | | | |
| | 34.428 | KM | H.D.P.E. DWC pipes for Drainage CLASS SN | 18 | 3150.00 | KM | 108448.20 |
| | 51.720 | 1 (171 | Basic Rate | | 0.00.00 | 4 2121 | 100110.20 |
| | | | Add 5% for M.C. | 150.00 | | | |
| | | | Total | 3150.00 | | | |
| | | | (CSR 2016-17, P. 134, I. 4) | | | | |

| ltem No | Quantit | у | ITEM DESCRIPTION | | Rate | Unit | Amount Rs. |
|--------------------|----------|-----|--|--|----------|--------|--------------|
| 10 | | | Refilling the trenches with available excavat soft material first over pipe line and then har 15 cm layers with all leads and lift consolidation, surcharging, etc.complete. | d material in | | | |
| | 58203.43 | Cum | | | 67.20 | Cum | 3911270.50 |
| | | | Basic Rate | 64.00 | | | |
| | | | Add 5% for M.C. | 3.20 | | | |
| | | | Total | 67.20 | | | |
| 11 | | | (CSR 2016-17, P. 38, I.15) | oito of work | | | |
| | 4739.75 | Cum | Dispossing of surplus excavated stuff from up to a distance of 2 Km.including, loading transportation etc.complete or as direct Engineering- in- charge. | , unloading, | 195.62 | Cum | 927189.90 |
| | | | (CSR 2016-17, P. 22, Statement VI) | | | | |
| 12 | | | Asphalt Road restoration: Reinstatement excavating the potholes in rectangular shap of potholes by one layers of one layer of metal of 200 mm thick, one layer of 40 mm t 100 mm thick including supplying and spread dust/murrum of 100 mm thick, watering com 75 mm thick bituminous bound macadar emulsion 60/70 grade and bituminous mac mm thick with bitumen of S-65 grade and 2 asphalt concrete with S-35 grade of bitum compaction by vibratory roller of all layers a and applying tack coat of 50 Kg / 100 m2 of surface and seal coat of 1kg/sqm. B.B.M. disposal of surplus soil etc., complete. trenches of various diameter etc., compl specifications and or as directed by engineer- | Basic Rate 195.62 Asphalt Road restoration: Reinstatement of road by excavating the potholes in rectangular shape and filling of potholes by one layers of one layer of 80 mm trap metal of 200 mm thick, one layer of 40 mm trap metal of 100 mm thick including supplying and spreading of stone dust/murrum of 100 mm thick, watering compaction and 75 mm thick bituminous bound macadam with cold emulsion 60/70 grade and bituminous macadam of 50 mm thick with bitumen of S-65 grade and 20 mm thick asphalt concrete with S-35 grade of bitumen including compaction by vibratory roller of all layers and providing and applying tack coat of 50 Kg / 100 m2 on black top surface and seal coat of 1kg/sqm. B.B.M. surface and disposal of surplus soil etc., complete. for pipeline trenches of various diameter etc., complete as per | | | |
| | 25821.00 | Sqm | | | 873.47 | Sqm | 22553868.87 |
| 13 | | | Reconnection of existing damaged connecti 15 mm dia. CPVC pipe with necessary fitting good the demolished portion etc. complete labour, etc. complete. as directed by Enginee | gs, remaking including all | | | |
| | 5738.00 | No. | (Similar Item PWD CSR 2017-18, P. 165, I No 442.61 | · · · · · · · · · · · · · · · · · · · | 175.35 | No. | 1006158.30 |
| \mid | | | Basic Rate | 167.00 | | | |
| $\left - \right $ | | | Add 5% for M.C. | 8.35 | | | |
| $\left - \right $ | | | Total | 175.35 | Total Co | st De | 173129920.67 |
| ┝──┤ | | | | | | y Rs. | |
| | | | | Cost for one | | y 1.3. | 43282480.25 |
| | | | | Say Rs. | | 432.82 | |
| | | | | Say in Cro | res | | 4.33 |

SOLAPUR MUNICIPAL CORPORATION MAHARASHTRA JEEVAN PRADHIKARAN DIVISION SOLAPUR SOLAPUR CITY UNDERGROUND SEWERAGE SCHEME (AMRUT) PROPERTY CONNECTION FOR ZONE I,II,III,IV,VI

| PROPERTY CONNECTION FOR ZONE I,II,III,IV,VI MEASUREMENT SHEET | | | | | | | | | |
|---|----------------|-------|----------|---------|-----------|-------|--|--|--|
| DESCRIPTION | NO | L/D | В | H/D | QTY | UNIT | | | |
| For Zone I | 400 | 270 | | | | | | | |
| For Zone II | 1200 | | | | | | | | |
| For Zone III | 1200 | | | | | | | | |
| For Zone IV | 788 | | | | | | | | |
| For Zone VI | 1850 | | | | | | | | |
| | 5738.00 | | | | | | | | |
| Total | 5736.00 | | | | | | | | |
| Total Nos. of Properties in Zone - | 22952 | Nos. | | | | | | | |
| | | INUS. | | | 5738.00 | Nos. | | | |
| Considering four Property have one IC chamber size 90 x 60 x 120 cm ,common for 4 property | 5736.00 | | | | 5736.00 | 1105. | | | |
| | | | | | | | | | |
| | | | Total IC | chamber | 5738.00 | Nos. | | | |
| Item No. 1'Providing and supplying in standard | | | TOTALIO | | 3730.00 | 1105. | | | |
| lengths Polyethelene (PE) Pipes for non | | | | | | | | | |
| | | | | | | | | | |
| pressure underground drainage and sewerage | | | | | | | | | |
| with smooth internal and corrugated (profiled) | | | | | | | | | |
| external surface with anti rodent property | | | | | | | | | |
| conforming to ISO-21138-3:2007 with necessary | | | | | | | | | |
| jointing material like mechanical connectors, i.e. | | | | | | | | | |
| thread/ insert joint/quick release coupler joint/ | | | | | | | | | |
| compression fitting joint or flanged joint, | | | | | | | | | |
| including all taxes (Central and local), | | | | | | | | | |
| transportation and freight charges, inspection | | | | | | | | | |
| charges, loading/ unloading charges, | | | | | | | | | |
| conveyance to the departmental stores/site and | | | | | | | | | |
| stacking the same in closed shade duly | | | | | | | | | |
| protecting from sunrays and rains, etc. | | | | | | | | | |
| complete. | | | | | | | | | |
| H.D.P.E. pipes for Drainage 'CLASS SN 8 | | | | | | | | | |
| 150 mm dia.(ID) | 5738.00 | 6.00 | | | 34428.00 | Rmt | | | |
| Item No.2 : Providing , laying & fixing ,jointing | | | | | | | | | |
| Supreme Eco- drain 110 mm SN 8 Nu- Drain | | | | | | | | | |
| Upvc pipes or of equivalent make, manufacture | | | | | | | | | |
| as per EN 13476 or equivalent as per I.S.15328 | | | | | | | | | |
| with fittings such a bends, tees, coupler, etc, | | | | | | | | | |
| jointing with rubber lubricant including | | | | | | | | | |
| necessary excavation, trench refilling with | | | | | | | | | |
| selective excavated material etc. complete. | | | | | | | | | |
| Spec : As directed by Engineer In Charge | | | | | | | | | |
| | | | | | | | | | |
| From House Chamber to IC Chamber | | | | | | | | | |
| HDPE Pipes - Class SN8 | | | | | | | | | |
| 110 mm dia. (OD) | 22952.00 | 6.00 | | | 137712.00 | | | | |
| | | | | Total | 137712.00 | RMI | | | |
| Item No. 3 : Providing and constructing B.B. | | | | | | | | | |
| masonry valve chamber with 15 cm thick 1:3:6 | | | | | | | | | |
| proportion PCC bedding, excluding excavation, | | | | | | | | | |
| B.B. masonry in CM 1:5 proportion precast | | | | | | | | | |
| S.F.R.C.frame and cover, etc. complete as | | | | | | | | | |
| directed by Engineer-in-charge. | | | | | | | | | |
| | F700.00 | | | | F700 0- | | | | |
| Inspection Chamber {900 x 600x 1200} | 5738.00 | | | | 5738.00 | NOS. | | | |
| Item No. 4: Excavation for foundation/ pipes | | | | | | | | | |
| | | | | | | | | | |
| trenches by all mean in soft rock & old cement | | | | | | | | | |
| and lime masonry foundation asphalt road | | | | | | | | | |
| excluding backfilling, etc. complete | hala | | | | | | | | |
| a) Excavation : for pipe line from IC to street Man | | 0.00 | 0.00 | 0.70 | 40774.00 | | | | |
| i} 0 to 1.5 m | | 6.00 | 0.80 | 0.50 | 13771.20 | Cum | | | |
| b) Excavation for Property chamber of 900 x 600 | | | - | | | | | | |
| i} 0 to 1.5 m | 5738.00 | 2.00 | 1.70 | | | | | | |
| | | | | Total | 23525.80 | Cum | | | |
| | 1 | | | I | 1 | 1 | | | |

| MEAS | SUREME | NT SHEET | | | | |
|---|-----------|------------------|-------------|------------|----------|------|
| DESCRIPTION | NO | L/D | В | H/D | QTY | UNIT |
| Item No. 5: Excavation for foundation/ pipes | | | | | | |
| trenches in earth, soil of all types ,sand ,gravel | | | | | | |
| and soft murum & excluding backfilling, | | | | | | |
| etc. complete | | | | | | |
| a) Excavation : for pipe line from IC to street Man | hole | | | | | |
| i} 0 to 1.5 m | | 6.00 | 0.80 | 0.50 | 13771.20 | Cum |
| b) Excavation for Property chamber of 900 x 600 | x 1200 | | | | | |
| i} 0 to 1.5 m | 5738.00 | 2.00 | 1.70 | 0.50 | 9754.60 | Cum |
| | | | | Total | 23525.80 | Cum |
| | | | | | | |
| Item no. 6 Excavation for foundation/pipe | | | | | | |
| trenches in Hard Murum & excluding the | | | | | | |
| back filling, etc complete | | | | | | |
| a) Excavation : for pipe line from IC to street Man | hole | | | | | |
| i} 0 to 1.5 m | | 6.00 | 0.80 | 0.50 | 13771.20 | Cum |
| b) Excavation for Property chamber of 900 x 600 | | | | | | |
| i} 0 to 1.5 m | 5738.00 | 2.00 | 1.70 | | 9754.60 | |
| | | | | Total | 23525.80 | Cum |
| Item No : 7 : Providing murum bedding in | | | | | | |
| trenches with approved murum from excavated | | | | | | |
| materials from foundation in 15 cm. to 20 cm. | | | | | | |
| layers including watering & compaction | | | | | | |
| complete. | | | | | | |
| for pipe line from IC to street Manhole | 5738.00 | 6.00 | 0.80 | 0.15 | 4131.36 | Cum |
| | | | | Total | 4131.36 | Cum |
| | | | | | | |
| Item No.8 Lowering ,Laying and jointing HDPE | | | | | | |
| Double Wall Corrugated Pipes for non pressure | | | | | | |
| Underground drainage and Sewerage | | | | | | |
| applications etc complete | | | | | | |
| for pipe line from IC to street Manhole | 5738.00 | 6.00 | | | 34428.00 | RMT |
| | | | | | | |
| Item No.9 :Hydraulic testing of HDPE double | | | | | | |
| wall corrugated pipe for non pressure | | | | | | |
| underground line to specified pressure including | | | | | | |
| cost of all materials and labour and water for | | | | | | |
| testing . | | | | | | |
| H.D.P.E. DWC pipes for Drainage CLASS SN 8 | 5738.00 | 6.00 | | | 0.006 | KM |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| Item No.10: Refilling the trenches with | Total ref | illing Qty = Tot | tal Ex. Qty | - (Sand | | |
| approved excavated stuff with soft materials | | dding Qty + P | | • | | |
| etc. Complete. | | | • | , | | |
| Pipe Volume: | 5700.00 | | 0.45 | 0.45 | | 0 |
| for pipe line from IC to street Manhole | | | | | 608.39 | |
| Chamber Vol. | 5738.00 | 1.40 | 1.10 | | 7634.22 | |
| | | | | Total | 8242.61 | |
| | | | Refilling C | Quantity : | 58203.43 | Cum |
| Item No. 11: 'Dispossing of surplus excavated | | | | | | |
| stuff from site of work up to a distance of | | | | | | |
| 2Km.including, loading, unloading, | | | | | | |
| transportation etc.complete or as directed by the | | | | | | |
| Engineering- in- charge. | Disposa | al = Bedding C | | | | |
| | | 4131.36 | + | 608.39 | 4739.75 | Cum |
| | | | | | | |

| MEAS | SUREMEN | NT SHEET | | | | |
|--|---------|----------|------|-----|----------|------|
| DESCRIPTION | NO | L/D | В | H/D | QTY | UNIT |
| Item No. 12 : Asphalt Road restoration: Reinstatement of road by excavating the potholes in rectangular shape and filling of potholes by one layers of one layer of 80 mm trap metal of 200 mm thick, one layer of 40 mm trap metal of 100 mm thick including supplying and spreading of stone dust/murrum of 100 mm thick, watering compaction and 75 mm thick bituminous bound macadam with cold emulsion 60/70 grade and bituminous macadam of 50 mm thick with bitumen of S-65 grade and 20 mm thick asphalt concrete with S-35 grade of bitumen including compaction by vibratory roller of all layers and providing and applying tack coat of 50 Kg / 100 m2 on black top surface and seal coat of 1kg/sqm. B.B.M. surface and disposal of surplus soil etc., complete. for pipeline trenches of various diameter etc., complete as per specifications and or as directed by engineer- in-charge. | | | | | | |
| | 50% | 34428.00 | 1.50 | | 25821.00 | Sqm |
| Item No. 13 :Reconnection of existing damaged connection including 15 mm dia. CPVC pipe with necessary fittings, remaking good the demolished portion etc. complete including all labour, etc. complete. as directed by Engineer in charge. | | | | | | |
| 15 mm Dia. | 25% | 22952.00 | 0.00 | | 5738.00 | No |

| Quantity | No | Item of work | Rate | Unit | Amount |
|----------|----|-----------------------------|------------|------|--------|
| 1 | | 2 | 3 | 4 | 5 |
| 350 mm | | Nalla aresting work - 50.0M | 1350400.00 | | |
| | | chamber (3.75) | 435961.00 | | |
| | | | 1786361.00 | | |

| Quantity | No | Item of work | Rate | Unit | Amount |
|----------|----|-----------------------------|------------|------|--------|
| 1 | | 2 | 3 | 4 | 5 |
| 350 mm | | Nalla aresting work - 50.0M | 1258947.00 | | |
| | | chamber (3.75) | 435961.00 | | |
| | | | 1694908.00 | | |

| Quantity | No | Item of work | Rate | Unit | Amount |
|----------|----|-----------------------------|------------|------|--------|
| 1 | | 2 | 3 | 4 | 5 |
| 350 mm | | Nalla aresting work - 50.0M | 1384013.00 | | |
| | | chamber (3.75) | 462408.00 | | |
| | | | 1846421.00 | | |

| Quantity | No | Item of work | Rate | Unit | Amount |
|----------|----|----------------|----------------------------------|-------------------------------------|---|
| 1 | | 2 | 350 mm | 600 mm | 900 mm |
| | | K T WIER | 1258947.00 | 1533311.00 | 1541528.00 |
| | | SCREEN CHAMBER | 435961.00 | 257298.00 | 257298.00 |
| | | | 1694908.00 | 1790609.00 | 1798826.00 |
| | | | NO OF K T WIERS IN ZONE 1 & 4 | NO OF K T WIERS IN ZONE 2. 3 & 6 | NO OF K T WIERS IN ZONE 11, 12 & 13 |
| | | | 2 | 3 | 3 |
| | | | 3389816.00 | 5371827.00 | 5396478.00 |
| | | | | | |
| | | TOTAL COST - | 14158121.00 | | |

| MISCELLANEOUS WORKS | | | | | |
|---------------------|------------------|---------|--|--|--|
| Sr. No. | Item of work | Amount | | | |
| | 2 | 5 | | | |
| 1 | Road Crossing | 2000000 | | | |
| 2 | Railway Crossing | 2000000 | | | |
| | Total | 4000000 | | | |
| | Say in Lakhs | 40 | | | |
| | Say in Crores | 0.4 | | | |