

## Attachment- 2, Project Cost

Project Name- "Rehabilitation and Up-gradation of Amravati-Nandgaon-Morshi-Warud-Pandhurna National Highway from existing km 95+670 (on 140+200 NH-53, Nandgaon) to km 52+440 (Morshi) [Design km.0.00 to km. 43.00] ( Package-I) and existing km 52+440 (Morshi) to km 0+000 (Maharashtra/Madhya Pradesh State Border upto Wardha River Bridge) [Design km.43.000 to km. 95.390] ( Package-II) to Two lane with paved shoulders in the state of Maharashtra on Engineering, Procurement & Construction (EPC) Basis Contract".

The construction cost is worked out according to the development proposal. Cost of civil works is calculated bill wise and other non-civil items like R&R cost, land acquisition cost, Utilities relocation cost, Environmental cost, contingencies etc. are added to arrive the project cost. The Abstract of Project Cost is presented under below Table;

### Abstract of Project Cost Construction Package I km. 0.000 to km. 43.000 km (Nandgaon to Morshi)

| Section | Sr. No. | Civil Works                                                                                                                                | Amount        | Amount |
|---------|---------|--------------------------------------------------------------------------------------------------------------------------------------------|---------------|--------|
|         |         |                                                                                                                                            | Rs.           | Crore  |
| A       | 1       | Site Clearance and Dismantling                                                                                                             | 4205289.00    | 0.42   |
|         | 2       | Excavation and Earthwork                                                                                                                   | 268785304.00  | 26.88  |
|         | 3       | Sub-bases, bases (Non Bituminous)                                                                                                          | 335935745.00  | 33.59  |
|         | 4       | Cement concrete Pavement                                                                                                                   | 1062412967.00 | 106.24 |
|         | 5       | Service/Slip Road                                                                                                                          | 27514592.00   | 2.75   |
|         | 6       | Construction of VUP & PUP                                                                                                                  | 110621502.00  | 11.06  |
|         | 7       | Construction of Major Bridges                                                                                                              | 98582345.00   | 9.86   |
|         | 8       | CD Structures ( Minor Bridges, Culverts)                                                                                                   | 275813529.00  | 27.58  |
|         | 9       | Drainage and Protection Works                                                                                                              | 127661237.00  | 12.77  |
|         | 10      | Traffic Signs, Markings & Road Appruntenances                                                                                              | 123653274.00  | 12.37  |
|         | 11      | Miscellaneous (central median/divider, junction improvement ,bus bay with bus shelter, diversion, utility service pipe & utlity duct etc.) | 296103212.00  | 29.61  |
|         | 12      | Toll Plaza                                                                                                                                 | 50101031.00   | 5.01   |
|         | 13      | Rest Area                                                                                                                                  | 5000000.00    | 0.50   |
|         | 14      | Street Lighting & High Mast                                                                                                                | 24856250.00   | 2.49   |
|         |         | TOTAL CIVIL COST (A) =                                                                                                                     | 2811246277.00 | 281.12 |
|         |         | CIVIL COST PER KM ( In Cr.)=                                                                                                               | 6.54          |        |
| B       | i)      | Contingencies @ 2.8 % of (A) above                                                                                                         | 78714895.76   | 7.87   |
|         |         | TOTAL CIVIL CONSTRUCTON COST(B) =                                                                                                          | 2889961172.76 | 289.00 |
| C       | (i)     | Agency charges @ 3% of (B) above                                                                                                           | 86698835.18   | 8.67   |
|         | (ii)    | Quality Control @ 0.25% of (B) above                                                                                                       | 7224902.93    | 0.72   |
|         | (iii)   | Road Safety @ 0.25% of (B) above                                                                                                           | 7224902.93    | 0.72   |
|         | (iv)    | Supervision charges @ 3% of (B) above                                                                                                      | 86698835.18   | 8.67   |

| Section | Sr. No. | Civil Works                                                                                                                                | Amount        | Amount |
|---------|---------|--------------------------------------------------------------------------------------------------------------------------------------------|---------------|--------|
|         |         |                                                                                                                                            | Rs.           | Crore  |
|         | (v)     | 5% per year of A as per phasing Price Escalation                                                                                           | 224899702.16  | 22.49  |
|         | (vi)    | Maintenance charges @ 2.5% of (A) for four years [0.25% for 1st year, 0.5% for 2nd year, 0.75% for 3rd year & 1% for 4th year; total 2.5%] | 70281156.93   | 7.03   |
|         |         | CENTAGES ( C )                                                                                                                             | 483028335.31  | 48.30  |
|         |         | TOTAL PROJECT COST ( B + C )                                                                                                               | 3372989508.07 | 337.30 |
|         |         | PER KM PROJECT COST                                                                                                                        | 7.84          |        |
| D       | (i)     | LA for building & barren land + Plantation                                                                                                 | 235704462.77  | 23.57  |
|         | (ii)    | utility shifting, Forest Clearance and other preconstruction activities                                                                    | 250000000.00  | 25.00  |
|         |         | LA, Utility shifting ( D )                                                                                                                 | 485704462.77  | 48.57  |
|         |         | TOTAL CAPITAL COST OF THE PROJECT (C+D) =                                                                                                  | 3858693971    | 385.87 |
|         |         | TOTAL PER KM CAPITAL COST OF THE PROJECT ( In Cr.) =                                                                                       | 8.97          |        |

#### Abstract of Project Cost Construction Package II

km. 43.000 to km. 95.390 (Morshi to Maharashtra/Madhya Pradesh State Border upto Wardha River Bridge)

| Section | Sr. No. | Civil Works                                                                                                                                 | Amount        | Amount |
|---------|---------|---------------------------------------------------------------------------------------------------------------------------------------------|---------------|--------|
|         |         |                                                                                                                                             | Rs.           | Crore  |
| A       | 1       | Site Clearance and Dismantling                                                                                                              | 8773253.00    | 0.88   |
|         | 2       | Excavation and Earthwork                                                                                                                    | 443703675.00  | 44.37  |
|         | 3       | Sub-Bases, Bases (Non Bituminous)                                                                                                           | 388341581.00  | 38.83  |
|         | 4       | Cement Concrete Pavement                                                                                                                    | 1321813413.00 | 132.18 |
|         | 5       | Construction of Major Bridge                                                                                                                | 67194200.00   | 6.72   |
|         | 6       | CD Structures ( Minor Bridges, Culverts)                                                                                                    | 410652727.00  | 41.07  |
|         | 7       | Drainage and Protection Works                                                                                                               | 163328225.00  | 16.33  |
|         | 8       | Traffic Signs, Markings & Road Appurtenances                                                                                                | 114762927.00  | 11.48  |
|         | 9       | Miscellaneous (Central Median/Divider, Junction Improvement ,Bus bay with bus Shelter, Diversion, Utility Service pipe & utility duct etc.) | 384635978.00  | 38.46  |
|         | 10      | Toll Plaza                                                                                                                                  | 50667218.00   | 5.07   |
|         | 11      | Rest Area                                                                                                                                   | 5000000.00    | 0.50   |
|         | 12      | Street Light & High Mast                                                                                                                    | 27103800.00   | 2.71   |

| Section | Sr. No. | Civil Works                                                                                                                                | Amount        | Amount |
|---------|---------|--------------------------------------------------------------------------------------------------------------------------------------------|---------------|--------|
|         |         |                                                                                                                                            | Rs.           | Crore  |
|         |         | TOTAL CIVIL COST (A) =                                                                                                                     | 3385976997.00 | 338.60 |
|         |         | CIVIL COST PER KM ( In Cr.)=                                                                                                               | 6.46          |        |
| B       | i)      | Contingencies @ 2.8 % of (A) above                                                                                                         | 94807355.92   | 9.48   |
|         |         | SUB TOTAL (B) =                                                                                                                            | 3480784352.92 | 348.08 |
| C       | (i)     | Agency charges @ 3% of (B) above                                                                                                           | 104423530.59  | 10.44  |
|         | (ii)    | Quality Control @ 0.25% of (B) above                                                                                                       | 8701960.88    | 0.87   |
|         | (iii)   | Road Safety @ 0.25% of (B) above                                                                                                           | 8701960.88    | 0.87   |
|         | (iv)    | Supervision charges @ 3% of (B) above                                                                                                      | 104423530.59  | 10.44  |
|         | (v)     | 5% per year of A as per phasing Price Escalation                                                                                           | 270878159.76  | 27.09  |
|         | (vi)    | Maintenance charges @ 2.5% of (A) for four years [0.25% for 1st year, 0.5% for 2nd year, 0.75% for 3rd year & 1% for 4th year; total 2.5%] | 84649424.93   | 8.46   |
|         |         | CENTAGES (C)                                                                                                                               | 581778567.62  | 58.18  |
|         |         | TOTAL PROJECT COST ( B + C )                                                                                                               | 4062562920.54 | 406.26 |
|         |         | PER KM PROJECT COST                                                                                                                        | 7.75          |        |
| D       | (i)     | LA for building & barren land+Plantation                                                                                                   | 353563769.97  | 35.36  |
|         | (ii)    | utility shifting and other preconstruction activities                                                                                      | 300000000.00  | 30.00  |
|         |         | LA, Utility shifting ( D )                                                                                                                 | 653563769.97  | 65.36  |
|         |         | TOTAL CAPITAL COST OF THE PROJECT ( C+D ) =                                                                                                | 4716126690.51 | 471.61 |
|         |         | TOTAL PER KM CAPITAL COST OF THE PROJECT ( In Cr.) =                                                                                       | 9.00          |        |

Total Project cost = Rs 385.87+ Rs 471.61 = Rs 857.48 Crores

Date

Place: -

*Fast*

Executive Engineer  
National Highway Division  
Akola, Maharashtra

Signature & Seal  
**Executive Engineer**  
**National Highway Division**  
**Akola**