

Contract Data

Items marked "N/A" do not apply in this Contract.

| The following documents are also part of the Contract: | Clause Reference |
|---|---------------------|
| - The Schedule of Operating and Maintenance Manuals | [58] |
| - The Schedule of Other Contractors | [8] |
| - The Schedule of Key Personnel | [9] |
| - The Methodology and Program of Construction & Environmental Management Plan | [27] |
| - The Schedule of Key and Critical equipment to be deployed n the work as per agreed program of construction | [27] |
| - Site Investigation reports | [14] |
| The Borrower is Government of India and the Employer is Governor, Government of Gujarat acting through Principal Secretary, R&B Department, Govt. of Gujarat. | [1.1] |
| [name of Borrower and statement of relationship with the Employer, if different from the Borrower]. | |
| The World Bank means International Bank for Reconstruction and Development (IBRD) | [1.1] |
| [insert "International Bank for Reconstruction and Development (IBRD)" orInternational Development Association (IDA), "as appropriate], | |
| and loan refers to an IBRD Loan | |
| [insert "IBRD Loan" or "IDA Credit", as appropriate] | |
| The above insertions should correspond to the information provided in the Invitatio | n of Bids. |
| The Employer is | |
| Name: Governor, Government of Gujarat, actingthroughPrincipal Secretary, R&B Department, Govt. of Gujarat. | (1.1) |
| Address: 14/2, SardarBhavan, NewSachivalaya, Gandhinagar, Gujarat. | |
| Name of authorized Representative: Chief Engineer (WB) | |
| The Engineer is | (1.1) |
| Name: To be notified later | |
| Address: | |

| Name of Authorized Representative: | |
|--|---------|
| The Adjudicator appointed jointly by the Employer and Contractor is: | (1.1) |
| *Name : | |
| *Address: | |
| (*to be filled in after the Adjudicator has been appointed) | |
| The name of the work: Widening and Strengthening of Dhansura - | - Meghr |

Road km-38+501 to 64+583 (Dhansura-Malpur) and km-67+711 to 84+986 (Malpur to Meghraj) SH No-145

No. of Contract: GSHP-II/NCB/07

[insert name and number as indicated in the Invitation for Bids (or Prequalification, if any].

[1.1]

The Works consist of (1.1)

- Conducting confirmatory sub-soil exploration including analysis, interpretation and reporting of the results thereof;
- Site clearance, removal of tree stumps and dismantling of obstructions, etc. before commencement of the works;
- Setting out all layouts of works by Distomat and levelling by Auto-levels including setting up of Bench Marks as directed by the Engineer.
- Earthwork in widening the existing roadway including raising wherever necessary, realignments and sub-grade improvements.
- Widening the existing carriageway to wherever the existing width is deficient and strengthening by bituminous overlays over existing bituminous surfaces after the application of suitable treatments to distressed areas and correction of profile and camber, or lightly scarifying the bituminous surfacing layer and laying granular and bound overlays; or scarifying the entire thickness of existing pavement and rebuilding the same. In the latter case the existing pavement material will be incorporated in the new construction.
- Full depth pavement in shoulders with bituminous surfacing in part width and granular surfacing in part width.
- Improvement of existing horizontal and vertical geometric deficiencies by realignments and profile adjustments.
- Remodelling /construction of major and minor intersections, bus stops, lay-bys.
- Repairs to the existing road including Potholes / Patch repairs, sealing of cracks and slurry seals before the overlay is done wherever required.
- Provision of road markings with thermoplastic material, Traffic signs with retro-reflecting sheeting, kilometre stones, delineators and other road furniture.
- Widening of culverts, and minor bridges.
- Dismantling and reconstruction of damaged cross drainage structures including construction of service roads etc.

- Construction of new cross drainage structures including construction of culvert, minor bridge, major bridge, construction of service roads and other related items of works;
- Rehabilitation of existing culverts and bridges by grouting/guniting including sealing of cracks by Epoxy/polymer modified cementitious mortar.
- Dismantling and reconstruction of Parapets/railings of culverts and bridges.
- Dismantling and relaying of wearing coat on major and minor bridges including providing new expansion joints.
- Removal and replacement of damaged bearings in bridges including lifting the decks, etc.
- Repair and rectification of articulation joints in major bridges.
- Provision of suitably designed protective works.
- Provision of lighting in sections passing through urban areas.
- Setting up a laboratory including maintenance thereof and provision of testing equipment and consumables.
- All aspects of quality assurance of various components of the works;
- Clearing of site and handing over of the works;
- Rectification of the defects in the completed works during the Defects Liability Period;
- Submission of "As Built Drawings" and other related documents;
- During the period of the Contract the Right of Way and all existing roads shall
 be kept open for traffic and maintained in a safe and usable condition.
 Residents along and adjacent to the Works are to be provided with safe
 convenient access to their properties at all times. Traffic control and diversions
 shall be used as necessary to protect the Works and maintenance will be carried
 out as provided in the Contact or as directed by the Engineer;
- All aspects of environmental management during the execution of various components of the Work.Implementation of HIV prevention plan.
- Application of all aspects of labour regulations during the currency of the contract.
- Repair of cracks, spallings, and honey combing exposed reinforcement of existing culverts & bridges.
- Dismantling and reconstruction of damaged cantilevers portion in part or full for major bridges.
- Construction of river training works in certain major bridges.
- Dismantling and reconstruction of displaced wing walls and dirt walls in certain major bridges.
- Connecting diaphragm to deck slab in major bridges and repair of vertical cracks in diaphragm
- Maintaining the highway as per Annex B to particular conditions during two year maintenance period after the end of Defects Liability Period

The Start Date shall be the date of issue of notice to proceed with the work.

Maintenance Period means the period for identification of repair and maintenance requirement in the designated sections which extends over twenty

(1.1)

(1.1)

four months beyond "Defect Liability Period" (including extension of Defects Liability Period if any) and carry out the maintenance works as pay items in accordance with Clause 7 of "Special Conditions of Contract - F"

The Intended Completion Date for the wholeof the Works is 24 months after [17, 28] date of issue of work order with the following milestones:

Milestone dates: Physical works to be completed period from the date of issue of

notice to proceed with the work

Milestone 1 i.e. Completion of Section 1 21 months.

Milestone 2 i.e.Completion of Section 2 24 months

Add Sub Clause 19.2 as under:

[19]

This Clause has been for non-compliance of safety measures during Construction

"The contractor has to follow all traffic safety measures as defined in the Technical Specification Rs.2000/- per day per location will be cut from the payment due to contractor if engineer finds non – conformity of traffic safety measures."

"The contractor has to ensure that sufficient numbers and good quality Personnel Protective Equipment's

are provided to staff, labour and road safety items as listed under EMP all time at construction zone as per Construction Safety Management Plan. Rs 5000/-per occurrence will be cut from the payment due to contractor if engineer finds non – conformity."

The following documents also form part of the Contract:

[2.3]

As specified above at the beginning of Contract Data

The Contractor shall submit a revised Program including Environmental Management Plan for the Works (in such form and detail as theengineer shall reasonably prescribe) within 14 days of delivery of the Letter of Acceptance.

[27]

[This program should be in adequate detail and generally conform to the program submitted along with bid in response to ITB Clause 4.3 (k). Deviations if any from that should be clearly explained and should be satisfactory to the Engineer]

The Site Possession Dates shall be:

[21]

The site of work shall be handed over in following sections:

Section 1: Dhansura – Malpur Km. 38.500 to 64.584 to be handed over at start of work

Section 2: Malpur – Meghraj Km. 67.712 to 84.987 to be handed over at 6th month after start of work

The Site is located at Dhansura – Meghrajand is defined in drawings nos. [1]

The Defects Liability Period is 365 days from the date of certification of completion of works. (where sectional completion certificate is issued this will apply from those dates for those sections).

Replace words"Defect Liability Period" in paragraph 1 by "Maintenance

[13.1]

Guarantee Period" In paragraph 1 by "Maintenance

The Maintenance Period is 730 days beyond the Defect Liability Period.

[35]

Insurance requirements are as under:

[13]

| | | Minimum Cover | Maximum |
|-------|--------------------------|---------------------|--------------------|
| | | for Insurance | deductible for |
| | | | Insurance |
| (i) | Works and Plant and | | |
| | Materials | | |
| | a) During | a)Rs 350 million | a)Rs 1,00,000 |
| | Construction | | |
| | Period | | |
| | b) During | b)Rs 100 million | b) Rs 1,00,000 |
| | Maintenance | | |
| | Period (Including | | |
| | D L P) | | |
| (ii) | Loss or damage to | Rs 10 million | Rs 1,00,000 |
| | Equipment | | |
| (iii) | Other Property | Rs 1 million | Rs 1,00,000 |
| (iv) | Personal injury or death | | |
| | insurance: | | |
| | | | |
| | a) for other people; | Rs 2 million | Rs 1,00,000 |
| | , , , , | | , , |
| | b) for Contractor's | In accordance | with the statutory |
| | Employees | requirements applic | cable to Indi |

The following events shall also be Compensation Events: Nil

[44]

The period between Program updates shall be 45 days.

[27]

The amount to be withheld for late submission of an updated Program shall be RsTenlacs

[27]

The language of the Contract documents is English

[3]

The law which applies to the Contract is the laws of Union of India

[3]

The currency of the Contract is Indian Rupees.

[46]

Fees and types of reimbursable expenses to be paid to the Adjudicator

[25]

Fees:

Rs 5,000/- per day,

Type of reimbursable expenses:

Actual economy air fare/First AC train fare: No upper limit

Actual charges for boarding, lodging and Local Travel: Maximum Rs. 6000/- per day and

Actual expenses incurred in case of site visits duly supported by Invoice: Maximum Rs. 5000/- per day.

Appointing Authority for the Adjudicator: President, Executive Committee, IndianRoads Congress, New Delhi [26]

The formula(e) for adjustment of prices are: [47]

R = Value of work as defined in Clause 47.1 of Conditions of Contract.

Adjustment for labour component

(i) Price adjustment for increase or decrease in the cost due to labour shall be paid in accordance with the following formula:

$$V_L = 0.85 \times P_1/100 \times R \times (L_i - L_0)/L_0$$

- V_L = increase or decrease in the cost of work during the quarter under consideration due to changes in rates for local labour.
- L_o = the average consumer price index for industrial workers for *Gandhinagar* centre for the quarter preceding the date of opening of Bids as published by Labour Bureau, Ministry of Labour, Government of India.
- L_i = The average consumer price index for industrial workers for $\emph{Gandhinagar}$ centre for the quarter under consideration as published by Labour Bureau, Ministry of Labour, Government of India.
- P_1 = Percentage of labour component of the work.

Adjustment for cement component

(ii) Price adjustment for increase or decrease in the cost of cement procured by the contractor shall be paid in accordance with the following formula.

$$V_c = 0.85 \text{ x P}_c/100 \text{ x R x } (C_i - C_o)/C_o$$

- V_c = Increase or decrease in the cost of work during the quarter under consideration due to changes in the rates for cement
- C_o = The all India average wholesale price index for cement for the quarter preceding the date of opening of Bids as published by the Ministry of Industrial Development, Government of India, New Delhi
- C_i = The all India average wholesale price index for cement for the quarter under consideration as published by Ministry of Industrial Development, Government of India, New Delhi
- P_c = Percentage of cement component of the work

Adjustment for steel component

(iii) Price adjustment for increase or decrease in the cost of steel procured by the Contractor shall be paid in accordance with the following formula:

$$V_s = 0.85 \text{ x P}_s/100 \text{ x R x } (S_i - S_o)/S_o$$

- V_s = Increase or decrease in the cost of work during the quarter under consideration due to changes in the rates for steel
- S_o = The all India average wholesale price index for steel (Bars and Rods) for the quarter preceding the date of opening of Bids as published by the Ministry of Industrial Development, Government of India, New Delhi
- $S_i = \begin{array}{lll} \text{The all India average wholesale price index for steel (Bars and Rods) for the} \\ \text{quarter under consideration as published by Ministry of Industrial} \\ \text{Development, New Delhi} \end{array}$
- P_s = Percentage of steel component of the work

Note: For the application of this clause, index of Bars and Rods has been chosen to represent steel group.

Adjustment of Bitumen component

(iv) Price adjustment for increase or decrease in the cost of bitumen shall be paid in accordance with the following formula:

$$V_b = 0.85 \text{ x } P_b/100 \text{ x } R \text{ x } (B_i - B_o)/B_o$$

- V_b = Increase or decrease in the cost of work during the quarter under consideration due to changes in the rate for bitumen.
- B_0 = The average official retail price of bitumen at the IOC depot at *Vadodara* on the day 30 days prior to date of opening of Bids.
- B_i = The average official retail price of bitumen at IOC depot at *Vadodara* for the 15th day of the middle calendar month of the quarter under consideration.
- P_b = Percentage of bitumen component of the work.

Adjustment of POL (fuel and lubricant) component

(v) Price adjustment for increase or decrease in cost POL (fuel and lubricant) shall be paid in accordance with the following formula:

$$V_f = 0.85 \text{ x } P_f / 100 \text{ x } R \text{ x } (F_i - F_o) / F_o$$

- V_f = Increase or decrease in the cost of work during the quarter under consideration due to changes in rates for fuel and lubricants.
- F_o = The average official retail price of High Speed Diesel (HSD) at the existing consumer pumps of IOC at *Himmatnagar* on the day thirty days prior to the date of opening of Bids.
- F_i = The average official retail price of HSD at the existing consumer pumps of IOC at *Himmatnagar* for the 15th day of the middle calendar month of the quarter

under consideration.

 P_f = Percentage of fuel and lubricants component of the work.

Note: For the application of this clause, the price of High Speed Diesel oil has been chosen to represent fuel and lubricants group.

Adjustment for Plant and Machinery Spares component

(vi) Price adjustment for increase or decrease in the cost of plant and machinery spares procured by the Contractor shall be paid in accordance with the following formula:

$$V_p = 0.85 \text{ x } P_p/100 \text{ x } R \text{ x } (P_i - P_o)/P_o$$

- V_p = Increase or decrease in the cost of work during the quarter under consideration due to changes in the rates for plant and machinery spares
- P_o = The all India average wholesale price index for heavy machinery and parts for the quarter preceding the date of opening of Bids as published by the Ministry of Industrial Development, Government of India, New Delhi
- P_i = The all India average wholesale price index for heavy machinery and parts for the quarter under consideration as published by Ministry of Industrial Development, New Delhi
- P_p = Percentage of plant and machinery spares component of the work

Note: For the application of this clause, index of Heavy Machinery and Parts has been chosen to represent the Plant and Machinery Spares group.

Adjustment of Local materials

(vii) Price adjustment for increase or decrease in cost of local materials other than cement, steel, bitumen and POL procured by the contractor shall be paid in accordance with the following formula:

$$V_m = 0.85 \text{ x P}_m/100 \text{ x R x } (M_i - M_o)/M_o$$

- V_m = Increase or decrease in the cost of work during the quarter under consideration due to changes in rates for local materials other than cement, steel, bitumen and POL.
- $M_{\rm o}=$ The all India average wholesale price index (all commodities) for the quarter preceding the date of opening of Bids, as published by the Ministry of Industrial Development, Government of India, New Delhi.
- M_i = The all India average wholesale price index (all commodities) for the quarter under consideration as published by Ministry of Industrial Development, Government of India, New Delhi.
- P_m = Percentage of local material component (other than cement, steel, bitumen and POL) of the work.

The following percentages will govern the price adjustment for the entire contract:

| 1. | Labour - P ₁ | 8% |
|----|---|-----|
| 2. | Cement - P _c | 5% |
| 3. | Steel - P _s | 8% |
| 4. | Bitumen - P _b | 28% |
| 5. | POL - P _f | 8% |
| 6. | Plant & Machinery Spares - P _P | 27% |
| 7. | Other materials - P _m | 16% |

Total 100%

The proportion of payments retained (retention money) shall be 6% from each bill subject to a maximum of 5% of final contract price

[48]

Replace Sub-Clause 48.2 on Retention by the following:

48.2 On Completion of the whole of the Works half the total amount retained is repaid to the Contractor and half when the Maintenance Period has passed and the Engineer has certified that all Defects notified by the Engineer to the Contractor before the end of this period have been corrected.

49.1The liquidated damages for the whole of the works are

Rs.0.606 Million (*amount*) per day and that for the milestone are as under:[49] 1 Completion of Section1if not completed after 21 MonthsRs. 0.365 Million per day

2Completion of Section2 if not completed after 24 MonthsRs. 0.241Million per day

The maximum amount of liquidated damages for the whole of the works is ten percent of final contract price. [49]

The amounts of the advance payment are:

[51]

| Nature of Advance | Amount (Rs.) | Conditions to be fulfilled |
|---|--|--|
| 1. Mobilization | 5% of the Contract price | On submission of un-conditional Bank Guarantee. (to be drawn before end of 20% of Contract period) |
| 2. Equipment (This advance is not applicable for equipment already owned or hired/ leased by the contractor.) | 90% for new and 50% of depreciated value for old equipment. Total amount will be subject to a maximum of 5%/of the Contract price. | After equipment is brought to site as per agreed construction program (provided the Engineer is satisfied that the equipment is required for performance of the contract) and on submission of unconditional Bank Guarantee for amount of advance. |
| 3. Secured advance for non-perishable materials | 75% of Invoice value or Market value - lower of the two. | a) The materials are in-accordance with the specification for Works;b) Such materials have been delivered to site, and are properly stored and |

brought to site

- protected against damage or deterioration to the satisfaction of the Engineer. The contractor shall store the bulk material in measurable stacks.;
- c) The Contractor's records of the requirements, orders, receipt and use of materials are kept in a form approved by the Engineer and such records shall be available for inspection by the Engineer;
- d) The contractor has submitted with his monthly statement the estimated value of the materials on site together with such documents as may be required by the Engineer for the purpose of valuation of the materials and providing evidence of ownership and payment thereof;
- e) Ownership of such materials shall be deemed to vest in the Employer for which the Contractor has submitted an Indemnity Bond in an acceptable format; and
- f) The quantity of materials are not excessive and shall be used within 3 months. determined by the Engineer.
- g) On submission of unconditional bank guarantee for amount of advance.

(The advance payment will be paid to the Contractor no later than 15 days after fulfilment of the above conditions).

Repayment of advance payment for mobilization and equipment:

[51]

The advance shall be repaid with percentage deductions from the interim payments certified by the Engineer under the Contract. Deductions shall commence in the next Interim Payment Certificate following that in which the total of all such payments to the Contractor has reached not less than 15 per cent of the Contract Price or 6 months from the date of payment of first instalment of advance, whichever period concludes earlier, and shall be made at the rate of 15 per cent of the amounts of all Interim Payment Certificates until such time as the advance has been repaid, always provided that the advance shall be completely repaid prior to the time when eighty per cent (80%) of the Accepted Contract Amount has been certified for payment or expiry of the original time for completion which ever concludes earlier.

Repayment of secured advance:

The advance shall be repaid from each succeeding monthly payments to the extent materials [for which advance was previously paid pursuant to Clause 51.4 of G.C.C. and 51(3) of Contract Data on prepage] have been incorporated into the Works.

The Securities shall be for the following minimum amounts equivalent as a percentage of the Contract Price:

[52]

Performance Security for 5 per cent of contract price plus Rs. (to be filled after the evaluation of the Bids) as additional security for unbalanced bids [in terms of ITB Clause 29.5].

The standard form of Performance Security acceptable to the Employer shall be an unconditional Bank Guarantee of the type as presented in Section 8 of the Bidding Documents.

Replace Sub-Clause 52.1 on Performance Security by the following:

52.1 The Performance Security shall be provided to the Employer no later than the date specified in the Letter of Acceptance and shall be issued in an amount and form and by a bank or surety acceptable to the Employer, and denominated in Indian Rupees. The Performance Security shall be valid until a date 28 days from the date of expiry of Maintenance Period and submission of "As Built Drawings" and the additional security for unbalanced bids shall be valid until a date 28 days from the date of issue of the certificate of completion. The performance security of a joint venture shall have the name of the joint venture as the name of Contractor'

Replace Sub-Clause 57.1 on Final Account by the following:

57.1 The Contractor shall supply to the Engineer a detailed account of the total amount that the Contractor considers payable under the Contract before the end of the Maintenance Period. The Engineer shall issue a Defect Liability and Maintenance Certificates and certify any final payment that is due to the Contractor within 56 days of receiving the Contractor's account if it is correct and complete. If it is not, the Engineer shall issue within 56 days a schedule that states the scope of the corrections or additions that are necessary. If the Final Account is still unsatisfactory after it has been resubmitted, the Engineer shall decide on the amount payable to the Contractor and issue a payment certificate, within 56 days of receiving the Contractor's revised account.

*The date by which "as-built" drawings (in scale ...) in 2 sets are required is within 28 days of issue of certificate of completion of whole or section of the work, as the case may be.

[58]

The amount to be withheld for failing to supply "as built" drawings by the date required is **Rs.Two and half million**

[58]

following events shall also be fundamental breach of contract in addition to the events specified in Conditions of Contract:

[59.2]

- 1. The contractor (in case of joint venture) has modified the composition of the joint venture and/or the responsibility of each member of the joint venture from what is stated in joint venture agreement without prior approval of the Employer; or other partner(s) fail to intimate to the Employer of any other partner leaving the joint venture within 30 days of such event.
- 2. The Contractor has contravened Sub-clause 7 of GCC read with SCC and Clause 9.0 of GCC
- 3. The contractor does not adhere to the agreed construction program and agreed environmental management plan (Clause 27 of GCC) and also

- fails to take satisfactory remedial action as per agreements reached in the management meetings (Clause 31) for a period of 60 days.
- 4. The contractor fails to carry out of the instructions of Engineer within a reasonable time determined by the Engineer in accordance with GCC Clause 16.1 and 23.1.
- 5. Subcontracting the works more than 25% of the Accepted Contract Amount in terms of value including the work subcontracted to nominated Subcontractors.
- 6. Non-Compliance of Safety Plan for more than 180 days collectively.

The percentage to apply to the value of the work not completed representing the Employer's additional cost for completing the Works shall be <u>20</u>percent.

[60]