

12/1/26

MARIAN ENGINEERING COLLEGE

Menamkulam,
Kazhakuttom
Phone: 0471 2707111
9495707222

No. No.MEC/QR/510/ao2026-27-1.

24 -01.2026

QUOTATION NOTICE

Sealed quotations are invited from competent, experienced and approved contractors for the execution of **re-tarring** work of the Campus Road. Quotations should be furnished to the Office of this College on or before 11-02 -2026 at 3 PM. The details of work are mentioned below.

1.Type of work

- | | |
|----------------------|----------------------|
| 1. Nature of tarring | -Bituminous Concrete |
| 2. Approximate Area | -3550 M ² |
| 3. Thickness | - 40 mm |

2.TECHNICAL SPECIFICATIONS

The work consists of providing and laying Bituminous Concrete (BC) for the internal road network of Marian Edu-City. This includes surface preparation, application of a tack coat, and the spreading and compaction of the bituminous mix to the specified thickness and grade.

3.SURFACE PREPARATION (MANDATORY PRE-REQUISITES)

The contractor shall ensure the existing base is prepared to the following standards before any fresh bituminous material is laid:

Scratching:

Cleaning: The existing surface must be thoroughly cleaned of dust, dirt, mud, and loose organic materials using mechanical brooms and high-pressure air compressors.

Pothole & Rut Rectification: All existing potholes, ruts, and cracks must be filled with premix carpet and compacted using vibratory rollers/hand rammers at least 24 hours prior to the BC overlay.

Profile Levelling Course (PLC): Adequate **Scratching** should be done on the existing tarred surface. In areas where the existing road has depressions exceeding 15mm, a levelling course of **Dense Bituminous Macadam (DBM)** shall be applied to ensure a uniform cross-section and grade.

4.TACK COAT APPLICATION

To ensure a monolithic bond between the old road and the new BC layer:

Material: Bitumen Emulsion conforming to **Grade RS-1**.

Application Rate: 0.20 kg to 0.30 kg per square meter, applied uniformly using a mechanical sprayer.

Curing: The tack coat must be allowed to "break" (visually turning from brown to black) before any BC mix is spread.

5.MIX DESIGN & MATERIAL SPECIFICATIONS

The Bituminous Concrete shall be a high-quality mix of coarse aggregates, fine aggregates, mineral filler, and bitumen binder.

Feature	Specification Requirement
Bitumen Grade	VG-30 or VG-40 (as per climate/traffic load)
Binder Content	5.0% to 6.0% by weight of the total mix
Compacted Thickness	30mm / 40mm / 50mm (Refer to BOQ for specific sections)
Mixing Temperature	150°C to 165°C at the Hot Mix Plant
Laying Temperature	Minimum 140°C at the site

6. LAYING AND COMPACTION PROCEDURES

Spreading: The mix shall be spread using a **Self-Propelled Sensor Paver** equipped with electronic sensors to maintain the required grade, level, and camber.

Compaction Sequence:

1. **Breakdown Rolling:** Use an 8–10 tonne smooth wheel roller immediately after spreading.
2. **Intermediate Rolling:** Use a **Pneumatic Tyred Roller (PTR)** to achieve maximum density and seal surface pores.

smooth finish.

4. **Temperature Control:** All compaction activity must be completed before the mix temperature falls below **90°C**.

7. QUALITY ASSURANCE AND TESTING

The contractor is responsible for conducting the following tests at the specified frequency:

- **Aggregate Gradation:** To ensure the rock sizes match the design mix.
- **Binder Content:** Extraction tests to verify the percentage of bitumen.
- **Field Density:** Core cutting tests must confirm at least **98% of the laboratory Marshall Density**.
- **Surface Evenness:** Checked with a **3-meter straight edge**; maximum permissible variation is 6mm.

8. SITE CONSTRAINTS & SAFETY

- **Weather Restrictions:** Bituminous works shall not be carried out during rain, fog, or if the base surface is wet.
- **Traffic Management:** The newly laid road must be cordoned off and closed to traffic for **10 to 24 hours** to allow the mix to cool to ambient temperature.
- **Safety:** Workers must wear appropriate PPE, and the site must be marked with reflective signage during night hours.

9. Special Attention

To ensure a smooth transition and proper integration between different materials during road construction, special attention is crucial at the points where Bituminous Concrete (BC) meets existing interlock bricks, kerbs, and vertical walls. Proper preparation and sealing at these interfaces are essential for long-term durability and preventing issues like water infiltration and edge deterioration.

Key considerations for special care at these transition points:

1. **Interface with Interlock Bricks:** When laying BC next to existing interlock paving, the edge of the interlock bricks should be prepared to create a clean, stable surface. Sealing the joint between the BC and the bricks is important to prevent water penetration. The final level of the BC should be carefully controlled at this interface.
2. **Interface with Kerbs and Vertical Walls:** The vertical surfaces of kerbs, drainage structures, and walls that come into contact with BC need to be treated before the BC is placed. Applying a suitable sealing material to these vertical faces helps create a bond and prevents

water from seeping between the BC and the vertical structure. Compaction at these edges is also critical to ensure a dense and seamless joint, preventing gaps or voids.

Conditions

1. Quotations should be submitted in sealed cover before the last date and late submissions on any reason will be rejected summarily. Quotations submitted incomplete in any respect such as unattested, with errors and corrections etc. will be summarily rejected. A copy of ID proof need be submitted along with the quotation
2. The Rate quoted should be **on square metre basis**, separately stating price and GST. Details of the work with item wise specifications should be given in the quotation
3. The rate should include all types of cost such as material, labour, loading unloading, and all incidental works if necessary.
4. The contractor should complete the work within 15 days of issuing the work order
5. Contractor shall appoint qualified engineering representative at site to supervise the work.
6. The period of Defects liability shall be 36 months from the date of completion of the work.
7. The final decision on the acceptance/rejection/finalisation/postponement of the quotation is solely rests with the Management and the claim of any sort cannot be entertained in this matter.
8. The measurement shown in the quotation is only approximate and are subject to variation and if found necessary. The contractor is bound to do additional quantities if necessary up to **25%** above the estimated quantities at the quoted rate.
9. As far as possible, the work should be done on holidays or without affecting the regular working hours and plying of vehicles.
10. The execution this work shall never causes to happen any type of damage/loss to the college property, constructions, flora etc. and the Contractor shall be liable for such losses.
11. The successful bidder shall deposit performance security for a period of 3 years to an amount equivalent to 5%

For more details, please contact in the above numbers or the College office during working hours.


AO


Bursar


Manager