EXPRESSION OF INTEREST (EOI)

For Soil Investigation Work

Name of Work: Soil Investigation for Proposed Construction for Maharashtra National Law University (MNLU), Kh. No. 140/2, Waranga, Taluka – Nagpur, (Rural), Off Nagpur – Wardha Road, District - Nagpur, Maharashtra

The MNLU, Nagpur hereby calls for Expression of Interest from NABL accredited laboratories only, for carrying out the Soil Investigation work comprising **7 (Seven) Trial Pits up to 3 (Three) meters depth** and **4 (Four) Boreholes up to 15 meters depth**, for determining Soil Characteristics, Safe Bearing Capacity (SBC), and Foundation Recommendations for the proposed construction.

Schedule	**Date / Amount**
Release of EOI	March 05, 2026
Last date of submission	March 11, 2026, 2:00 p.m.
Date of opening	March 11, 2026, 3:00 p.m.

Scope of Work

A. Trial Pits – 7 nos. up to 3 (Three) meters

- Excavation up to 3m depth
- Collection of soil samples
- Recording soil strata and groundwater table
- Backfilling after completion

B. Boreholes – 4 Nos. (Up to 15 m Depth Each)

- Drilling up to 15 meters' depth
- Collection of disturbed/undisturbed samples
- Preparation of detailed bore logs

C. Laboratory Testing

- Soil Bearing Capacity
- Shear strength parameters

D. Reporting

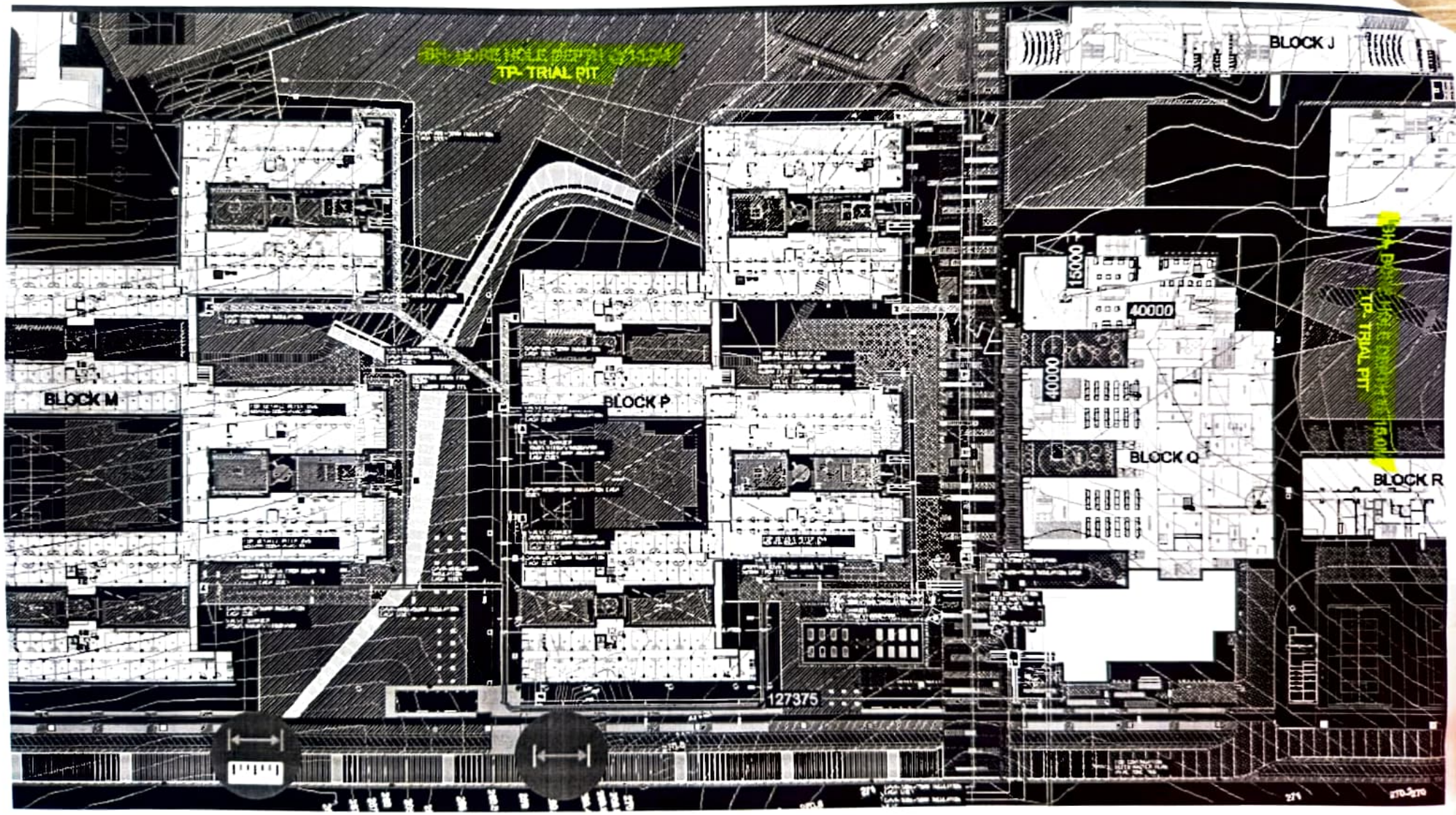
- Detailed geotechnical report including:
    - Bore logs
    - Laboratory results
    - Safe Bearing Capacity
    - Foundation recommendations
    - Groundwater table details

- It shall be enclosed in the master envelope superscribed with **"Expression of Interest (EOI) for Soil Investigation Work" and should be submitted to the following address:**

  University Engineer cum Estate Officer,
  Maharashtra National Law University, Nagpur
  Near Village Waranga, PO: Dongargaon (Butibori), Nagpur - 441108, Maharashtra, India.

Declaration

We confirm that we possess the required technical expertise, equipment, and qualified geotechnical professionals to execute the above work efficiently and within the stipulated timeline.


TP- TRIAL PIT
BLOCK J
BLOCK M
BLOCK P
BLOCK Q
BLOCK R
15000
40000
40000
127375

8. Data used for bearing capacity calculations in rocks

Bearing Capacity for shallow foundations resting on rocks (IS 12070)		
Applicability of methods for the determination of safe bearing pressure on rock (as per section 4 & table 1 of the code)		
Net safe bearing pressure as per classification of rock mass (table 2 of the IS 12070) in T/m²	Correction Factor for Submerged Condition Under Water Table	
	Correction Factor for Cavities	
	Correction Factor for Slope	
	Net safe bearing pressure	q_{ns}
Net safe bearing pressure as per rock mass rating (RMR) (table 3 of the IS 12070) in T/m³		q_{ns}
Net Safe Bearing Pressure from Core Strength	Average uniaxial compressive strength of rock cores	q_0
	Thickness of discontinuities in cm	d
	Spacing of discontinuities in em)	S
	Footing width in cm	B_f
	Empirical coefficient depending on the spacing of discontinuities (as per Table 4 and Fig. 1 of the code)	N_j
	Correction Factor for Submerged Condition Under Water Table	
	Correction Factor for Cavities	
	Correction Factor for Slope	
	Safe bearing pressure (gross)	q_s
Net safe bearing pressure from pressure meter test	Limit pressure determined by the pressure meter (t/m²)	P_L
	Unit weight of soil or rock (t/m²)	γ
	Depth of foundation (m)	D_f
	Constant given in Table 5.	K_d
	Correction Factor for Submerged Condition Under Water Table	
	Correction Factor for Cavities	
	Correction Factor for Slope	
	Net safe bearing pressure (t/m²)	q_{ns}
Net safe bearing pressure from Plate Load Test	Rock type Massive or Sound Rocks / Laminated or Poor Rocks	
	Suspected bearing Pressure (T/m²)	
	Settlement of plate (mm)	S_p
	Settlement of footing (mm)	S_f
	Width of plate (cm)	B_p
	Width of footing (cm)	B_f
	Correction Factor for Submerged Condition Under Water Table	
	Correction Factor for Cavities	
	Correction Factor for Slope	
	Safe bearing pressure from pressure-settlement curve	q_{ns}

Note: ***Provide sample calculations***

Data Required in Geotechnical Investigation Report

1. Geotechnical investigation report should normally be given in formats suggested in IS 1892, presented data should lead to;
    a. Understanding classification of sub-soils / rocks at site
    b. Parameters needed for determining bearing capacities as per relevant sections of IS 6403, IS 12070, IS 8009 or any other relevant standard.
    c. Parameters needed for the design of foundations in sub-soils.
    d. Parameters needed in estimating foundation settlement.
2. Sub-soil classification should be based on the provisions of IS 1498:1970
3. Borehole locations and pit locations specifically marked in the plan of site should also be included in the report.
4. Sample bearing Capacity calculations should be given for the type of soil found in the pit or borehole, relevant section of the IS code 6403 should also be mentioned.
5. Sample calculations for estimating safe bearing pressure / load carrying capacities as per relevant standards, especially IS 2911 1-2 and IS 14593 as per the case.
6. 'N' Value and Corrections, if any done on SPT 'N' value with reference to IS 2131 along with calculations.
7. **Data used for bearing capacity calculations in soils**

Data used for Bearing Capacity Calculations as per IS 6403 (As per soil & method used)

Relevant Section /(s) of the IS 6403 used		
Cohesive Soils	Cohesion	C
Cohesive / Cohesionless Soils	Standard Penetration Value	N
	Corrected standard penetration value (Mentioning relevant provisions of Indian Standard)	N
	Angle of shearing resistance of soil in degrees	ϕ
	Unit Weight of subsoil (t/m^3)	Υ
	Failure case considered General Shear / Local Shear	
	Bearing Capacity Factors	Nc, Nq, Nr **or** N'c, N'q, N'r
	Depth Factors	dc, dq, dγ
	Shape Factors	sc, sq, sγ
	Relative Density (needed as per section 5.2.2.1 (Table 3))	
	Voids Ratio (needed as per section 5.2.2.1 (Table 3))	
	Depth of water table	
	Ultimate net Bearing Capacity	qd or q'd
	Net safe bearing Capacity	

Calculations as per IS 8009		
Detailed calculations of safe bearing pressure from settlement in case of cohesive soils		
In case of dry cohesionless soils	Permissible settlement as per IS 1904	
	Settlement in meters per unit pressure of ($1kg/cm^2$)	d
	Water table correction	W'
Safe bearing pressure from settlement criteria		

Net safe bearing capacity of soils (minimum of the above two criteria)	

Note: ***Provide sample calculations for both the approaches***

9. **Any additional data or methodology**

   Provide details on any additional data, any methodology followed other than those prescribed in Indian standards.

10. ***After reaching desired level of excavation, bearing capacity may be reaffirmed by carrying out desired tests.***