

**Resolutions of the Fifth meeting of the
Panel for Soils and Foundations, CED 46:P5
held in hybrid mode on 13 March 2024**

| Resolution No. | Resolution/Decision |
|-----------------------|--|
| 1 | <p>Shri Ajay Kumar Sinha and Shri Aman Garg to represent Military Engineer Services, New Delhi.</p> <p>To write to HoD (Civil Engineering) of IIT Madras, Chennai for their fresh nomination.</p> <p>To co-opt M/s National Capital Region Transport Corporation, New Delhi on the Panel.</p> <p>To co-opt Dr Chandan Ghosh (Fuidyn–India, Bengaluru) in view of his superannuation from NIDM, New Delhi.</p> <p>Shri Mani Bhushan, NTPC Ltd to formally arrange a communication of revised nominations on the Panel.</p> <p>Shri T Madhusudhan Rao to represent BHEL as their alternate representative.</p> <p>Shri Sorabh Gupta to represent Cengrs Geotechnica Pvt Ltd, Noida as their Alternate–II member.</p> |
| 2 | <p>The following organizations to send their fresh nominations in 15 days through email to ced46@bis.gov.in for BIS' records:</p> <ul style="list-style-type: none"> • DDA, New Delhi • ITD Cementation Pvt Ltd, Mumbai • The Institution of Engineers (India), Kolkata • AFCONS Infrastructure Limited, Mumbai |
| 3 | <p>To address the following aspects also in the revision:</p> <ul style="list-style-type: none"> • Briefly address the typical contents of the Report of Geotechnical Investigation (to aid in uniformity in reporting) • Deep excavation related provisions considering the accident involved • Subsurface geotechnical investigation • Detailed provisions on ground improvement techniques • Testing on piles • Foundations on rocks |

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|---|--|---------|-----|---------------|----------------------|------------------|---|----------|---|----------|-----------------------------|---|--|-----------|--|-----------|--|
| | <ul style="list-style-type: none"> • Provisions on instrumentation and observation from the foundation (post construction and during usage of a building) particularly for those housing over 600 occupants • To cover all the recent developments in the new and revision of standards of CED 43 • To include provisions regarding piled raft foundation and combined raft foundation • To define 'Building' considering the same may be in residential, business, educational, industrial scenario, etc. • Precautions regarding expansive soils and liquefiable soils for both shallow foundations and deep foundations. • Settlement due to urban tunnelling (<i>CBRI agreed to send the write up.</i>) • Aspects of Micro Piles in the Chapter of Pile foundation | | | | | | | | | | | | | | | | |
| 4 | Members to send in writing (by 01 April 2024) their inputs/comments/suggestions on the Working Draft of Part 6/Sec 2 circulated to email dated 04 March 2024. | | | | | | | | | | | | | | | | |
| 5 | <p>Expert Groups as below were constituted to consider the inputs to be received and prepare the modifications/changes to the existing chapter and include new clauses/provisions of the Code:</p> <table border="1" data-bbox="432 1245 1331 2018"> <tbody> <tr> <td data-bbox="432 1245 884 1285">1 Scope</td> <td data-bbox="884 1245 1331 1285">BIS</td> </tr> <tr> <td data-bbox="432 1285 884 1326">2 Terminology</td> <td data-bbox="884 1285 1331 1326">Dr Aditya Singh, IGS</td> </tr> <tr> <td data-bbox="432 1326 884 1435">Clauses 3, 4 & 5</td> <td data-bbox="884 1326 1331 1435">Shri Jitendra, NCRTC Shri Mani Bhushan, NTPC Shri TMS Rao, BHEL</td> </tr> <tr> <td data-bbox="432 1435 884 1583">Clause 6</td> <td data-bbox="884 1435 1331 1583">Dr Abhay Gupta, IAStructE Shri Aman Deep CSIR-CBRI Shri Manish Gupta</td> </tr> <tr> <td data-bbox="432 1583 884 1659">Clause 7</td> <td data-bbox="884 1583 1331 1659">Shri Aman Deep CSIR-CBRI</td> </tr> <tr> <td data-bbox="432 1659 884 1794">Clauses 8 to 12 <i>(to be merged as one Chapter under the title Pile foundation)</i></td> <td data-bbox="884 1659 1331 1794">Dr A. P. Singh, IGS Dr Ayothiravan, IIT Delhi Dr Aditya Singh, IGS</td> </tr> <tr> <td data-bbox="432 1794 884 1904">Clause 13</td> <td data-bbox="884 1794 1331 1904">Dr Abhay Gupta, IAStructE Shri Aman Deep CSIR-CBRI</td> </tr> <tr> <td data-bbox="432 1904 884 2018">Clause 14</td> <td data-bbox="884 1904 1331 2018">Ms Neelima Satyam, IGS M/s Keller Shri TMS Rao, BHEL</td> </tr> </tbody> </table> | 1 Scope | BIS | 2 Terminology | Dr Aditya Singh, IGS | Clauses 3, 4 & 5 | Shri Jitendra, NCRTC Shri Mani Bhushan, NTPC Shri TMS Rao, BHEL | Clause 6 | Dr Abhay Gupta, IAStructE Shri Aman Deep CSIR-CBRI Shri Manish Gupta | Clause 7 | Shri Aman Deep CSIR-CBRI | Clauses 8 to 12 <i>(to be merged as one Chapter under the title Pile foundation)</i> | Dr A. P. Singh, IGS Dr Ayothiravan, IIT Delhi Dr Aditya Singh, IGS | Clause 13 | Dr Abhay Gupta, IAStructE Shri Aman Deep CSIR-CBRI | Clause 14 | Ms Neelima Satyam, IGS M/s Keller Shri TMS Rao, BHEL |
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| Clauses 3, 4 & 5 | Shri Jitendra, NCRTC Shri Mani Bhushan, NTPC Shri TMS Rao, BHEL | | | | | | | | | | | | | | | | |
| Clause 6 | Dr Abhay Gupta, IAStructE Shri Aman Deep CSIR-CBRI Shri Manish Gupta | | | | | | | | | | | | | | | | |
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| | New clause on Deep Excavation | Dr Abhay Gupta, IAStructE Shri Aman Deep CSIR-CBRI IGS |
| | New clause on Piled Raft | CSIR-CBRI Dr Dipankar Chaudhary, IITB NPCIL |
| | New clause on instrumentation & monitoring (preloading & post loading) | CSIR-CBRI M/s Geo Dynamics AIMIL India Shri Jaydeep Wagh, Geocon Intl Pvt Ltd |
| | The above Groups to address in the draft chapter including the respective annexes the necessary updates and provide their inputs in the form of draft clauses by May 2024 . | |
| 6 | Next meeting shall be in physical mode in May 2024 | |
| 7 | To issue the wide circulation of revision of this chapter by October & November 2024 | |

Formal minutes of the meeting will be sent separately.

PS: All members are encouraged to visit the BIS' Standardization Portal, <https://www.manakonline.in/MANAK/login>

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