

- ACI Committee 230, S.Cement., American Concrete Institute., 2009. Report on Soil Cement (ACI 230.1R-09). American Concrete Institute.
- Acosta, H.A., Edil, T.B. and Benson, C.H., 2003. Soil Stabilization and Drying using Fly Ash. Geo Engineering Report, Wisconsin.
- Amhadi, T. S., & Assaf, G. J., 2021. Improvement of pavement subgrade by adding cement and fly ash to natural desert sand. *Infrastructures*, 6(11). <https://doi.org/10.3390/infrastructures6110151>.
- Al-Rawas, A.A., Goosen, M.F.A., 2006. *Expansive Soils: Recent Advances in Characterization and Treatment*. Taylor & Francis Group, London.
- Andriani, Yuliet, R., Leo Fernandez, F., 2012. PENGARUH PENGGUNAAN SEMEN SEBAGAI BAHAN STABILISASI PADA TANAH LEMPUNG DAERAH LAMBUNG BUKIT TERHADAP NILAI CBR TANAH. *Jurnal Rekayasa Teknik Sipil* 8.
- Anggraini, A.D., 2018. Perbaikan Tanah Dasar Tol Semarang – Demak Menggunakan Bahan Aditif dan Perjuatan Kolom Stabilisasi. Magister Teknik Sipil UGM, Yogyakarta.
- Ariyanti, R., 2005. Stabilisasi Tanah Lempung Ekspansif dengan Campuran Kapur dan Abu Sabut Kelapa Sawit. S2 Teknik Sipil UGM, Yogyakarta.
- Astuti, D.I., 2005. Stabilisasi Tanah Lempung Tanon Sragen dengan Semen Cleanset untuk Lapisan Fondasi Badan Jalan. S2 Teknik Sipil UGM, Yogyakarta.
- Badan Pengatur Jalan Tol, 2018. Rencana Pembangunan Jalan Tol Trans Sumatera. Kementerian PUPR, Padang.
- Badan Penelitian dan Pengembangan, 2002. Pedoman/Petunjuk Teknik dan Manual (Bagian :1, Tanah (Panduan Geoteknik)). Edisi Pertama, Departemen Permukiman dan Prasarana Wilayah, Jakarta.

FINAL. Kementerian Pekerjaan Umum Dan Perumahan Rakyat Direktorat Jenderal Bina Marga, Jakarta.

Biswal, T., Panda, R.B., 2018. Impact of Fly Ash on Soil Properties and Productivity Microwave-Assisted Preparation of Biodegradable Water Absorbent Polyacrylonitrile/Montmorillonite Clay Nanocomposite. International Journal of Agriculture, Environment and Biotechnology (IJAEB).  
<https://doi.org/10.30954/0974-1712.04.2018.8>

Bowles, J.E., 1991. Sifat-Sifat Fisis dan Geoteknis (Mekanika Tanah) Edisi Kedua. Erlangga, Jakarta.

Chen, F.H., 1975. Foundation of Expansive Soils. American Elsevier Science Publication, New York.

Chen, F.H., 1988. Foundation of Expansive Soil, 2nd, Ed, Development in Geotechnical Eng. Vol 54. Elsevier Science Publishing Company, Amsterdam.

Chethan, B. A., & Ravi Shankar, A. U., 2021. Strength and Durability Characteristics of Cement and Class F Fly Ash-Treated Black Cotton Soil. Indian Geotechnical Journal, 51(5), 1121–1133. <https://doi.org/10.1007/s40098-020-00488-2>

Das, B.M., 1994. Principles of Foundation Engineering. PWS-Kent Publishing Company, Boston, USA.

Das, B.M., 2005. Fundamentals Of Geotechnical Engineering, 2nd Edition. Thomson, U.S.A.

Departemen Pekerjaan Umum, 1987. Petunjuk Perencanaan Tebal Perkerasan Lentur Jalan Raya dengan Metode Analisa Komponen. SKBI-2.3.26.1987, Jakarta.

Fernandez, G.J.W., 2006. Kajian Karakteristik Lempung Bobonaro di Provinsi Nusa Tenggara Timur. Puslitbang Prasarana Transportasi, Bandung.

Hangge, E. E., Bella, R. A., & Ullu, M. C., 2021. Pemanfaatan Fly Ash Untuk Stabilisasi Tanah Dasar Lempung Ekspansif. Jurnal Teknik Sipil (Vol. 10, Issue 1).

Hardiyatmo, H.C., 2017a. Tanah Ekspansif Permasalahan dan Penanganannya. Gadjah Mada University Press, Yogyakarta.

Hardiyatmo, H.C., 2017b. Mekanika Tanah I, Edisi Ketujuh. ed. Gadjah Mada University Press, Yogyakarta.

Hardiyatmo, H.C., 2017c. Mekanika Tanah II, Edisi Ketujuh. ed. Gadjah Mada University Press, Yogyakarta.

Hardiyatmo, H.C., 2013. Stabilisasi Tanah untuk Perkerasan Jalan. Gadjah Mada University Press, Yogyakarta.

Herlambang, 1998. Stabilisasi Tanah Lempung Menggunakan Fly Ash. Tugas Akhir Program Ekstensi Teknik Sipil Fakultas Teknik Universitas Gadjah Mada, Yogyakarta.

Ibrahim, 2014. Stabilitas Tanah Lempung Dengan Bahan Aditif Fly Ash Sebagai Lapisan Pondasi Dasar Jalan (Subgrade). Jurnal Teknik Sipil Volume 10 No 1, Palembang: Teknik Sipil Politeknik Negeri Sriwijaya.

Indonesian Coal Society, 2007. History of Indonesian Coal Society. <http://www.ics.or.id/index.php>, tanggal 20 Mei 2023.

Ingles, O.G., Metcalf, J.B., 1972. Soil Stabilization: Principles and Practice. Butterworths, Sydney.

Ismanti, S., and Yasufuku, N., 2017. Effect of Bamboo Leaf Ash Addition in Cemented Bamboo Chips Sand Soil Mixture. Research Paper, Lowland Technology International, Volume 19.

Jamsawang, P., Adulyamet, B., Voottipruex, P., Jongpradist, P., Likitlersuang, S., Tantayopin, K., 2023. The free swell potential of expansive clays stabilized with the shallow bottom ash mixing method. Eng Geol 315. <https://doi.org/10.1016/j.enggeo.2023.107027>

Lambe, T.W., 1962. Soil Stabilization, Foundation Engineering. G. A Leonard, McGrawhill, New York.

Lambe, T.W and Whitman, R.V., 1969. Soil Mechanics, SI Version. Jhon Wiley & Sons, New York.

Li, L., Tastan, O., Benson, C. H., & Edil, T. B., 2009. Field Evaluation of Fly Ash Stabilized Subgrade in US 12 Highway. IFCEE, 385–392.  
[https://doi.org/10.1061/41023\(337\)49](https://doi.org/10.1061/41023(337)49)

Look, B. G., 2007. Handbook of Geotechnical Investigation and Design Tables. London: Taylor & Francis Group.

Maya Widya Ekaputri, A., & Wulandari, S., 2021. Pengaruh Fraksi Tanah Dan Mineral Tanah Lempung Terhadap Nilai CBR. Jurnal Teknik Sipil, 16(3), 187–196.

Mohamed, A. A. M. S., Yuan, J., Al-Ajamee, M., Dong, Y., Ren, Y., & Hakuzweyezu, T., 2023. Improvement Of Expansive Soil Characteristics Stabilized with Sawdust Ash, High Calcium Fly Ash and Cement. Case Studies in Construction Materials, 18.  
<https://doi.org/10.1016/j.cscm.2023.e01894>

Mukherjee, S., & Ghosh, P., 2021. Soil Behavior and Characterization: Effect of Improvement in CBR Characteristics of Soil Subgrade on Design of Bituminous Pavements. Indian Geotechnical Journal, 51(3), 567–582.  
<https://doi.org/10.1007/s40098-021-00533-8>

Mulyani, S., 2006. Stabilisasi Tanah Lempung dengan Menggunakan Abu Terbang dan Kapur. S2 Teknik Sipil UGM, Yogyakarta.

Nguyen, N., & Truong, S. B., 2019. An Experimental Study of Reusing Coal Ash for Base Course of Road Pavement in Viet Nam Utilizing Coal Bottom Ash from Thermal Power Plants in Vietnam as Partial Replacement of Aggregates in Concrete Pavement View project. Electronic Journal of Geotechnical Engineering.  
<https://www.researchgate.net/publication/337720845>

Nguyen, V. L., Phan, V. T. A., & Tran, H. B., 2022. Potential of Fly Ash, Cement, and Enzyme Stabilized Soil for Road Construction. Transportation Infrastructure Geotechnology. <https://doi.org/10.1007/s40515-022-00254-2>

Nur, A., 2018. Stabilisasi Tanah Ekspansif Menggunakan Kapur dan Spent Catalyst. Tesis, Magister Sistem dan Teknik Transportasi UGM, Yogyakarta.

Panduan Geoteknik Indonesia, 2001. Panduan Geoteknik 4 Desain dan Konstruksi. Pusat Litbang Prasarana dan Transportasi.

Peck, R.B., 1996. Teknik Fondasi, Edisi 2, Terjemahan Muslikh. Gadjah Mada University Press, Yogyakarta.

Peraturan Pemerintah Republik Indonesia No. 21 Tahun 2022, Tentang: Penyelenggaraan Perlindungan Dan Pengelolaan Lingkungan Hidup.

Pratama, F., 2018. Stabilisasi Tanah Lempung Ekspansif dengan Menggunakan Kapur dan Portland Cement Pada Tanah Dasar Konstruksi Jalan. Tesis, Magister Sistem dan Teknik Transportasi UGM, Yogyakarta.

Pratiwi, A.Y., Prasetya, I., Perina, Y.A., Effendi, R., 2021. Stabilization of soft soil using industrial waste, dalam: IOP Conference Series: Earth and Environmental Science. IOP Publishing Ltd. <https://doi.org/10.1088/1755-1315/758/1/012007>

Rai, P., Qiu, W., Pei, H., Chen, J., Ai, X., Liu, Y., & Ahmad, M., 2021. Effect of Fly Ash and Cement on the Engineering Characteristic of Stabilized Subgrade Soil: An Experimental Study. Geofluids, 2021. <https://doi.org/10.1155/2021/1368194>

Razali, M. R., & Wijaya, O. (2016). Nilai CBR pada Stabilisasi Tanah dengan Semen Jalan Budi Utomo Unib Depan. Jurnal Inersia Oktober, 8(2), 67.

Rifa'i, A., 2002. Mekanika Kontinum. Program Pascasarjana Fakultas Teknik UGM, Yogyakarta.

Rifa'i, A., Yasufuku, N., 2014. Effect of Volcanic Ash Utilization as Substitution Material for Soil Stabilization in View Point of Geo-Environment. Ground Improvement and Geosynthetics GSP 238 © ASCE 2014.

Rollings, M.P., Rollings Jr., 1996. Geotechnical Materials in Construction, McGraw Hill, New Jersey, USA.

SII 0013-81, 1981. Mutu dan Cara Uji Semen Portland. Badan Penerbit Departemen Perindustrian, Indonesia.

SK SNI S-04-1989-F, 1989. Spesifikasi Bahan Bangunan Bagian A. Departemen Pekerjaan Umum.

Seed, H., B., Woodward, R., J., and Lundgren, R., 1962. Prediction of Swelling Potential for Compacted Clay. *Journal ASCE, Soil Mechanics and Foundation, Div, Vol. 88.*

Senol, A., Edil, T. B., Bin-Shafique, M. S., Acosta, H. A., & Benson, C. H., 2006. Soft Subgrades' Stabilization by Using Various Fly Ashes. *Conservation and Recycling, 46(4), 365–376.* <https://doi.org/10.1016/j.resconrec.2005.08.005>

Skempton, A.W., 1953. The Colloidal Activity of Clays. *Proc. 3rd Int. Conf. Soil Mech. Found. Eng, Switzerland, V.1.*

Soekoto, 1984. *Mempersiapkan Lapisan Dasar Konstruksi.* Badan Penerbit Pekerjaan Umum.

Sukirman, S., 1992. *Perkerasan Lentur Jalan Raya.* Nova, Bandung.

Tallama, A.D., 2010. *PEMANFAATAN BAHAN LIMBAH COAL ASH UNTUK LAPISAN SUBGRADE.* Universitas Gadjah Mada, Yogyakarta.

Tastan, E. O., Edil, T. B., Benson, C. H., & Aydilek, A. H., 2011. Stabilization of Organic Soils with Fly Ash. *Journal of Geotechnical and Geoenvironmental Engineering, 137(9), 819–833.* [https://doi.org/10.1061/\(asce\)gt.1943-5606.0000502](https://doi.org/10.1061/(asce)gt.1943-5606.0000502)

Taylor, D.W., 1948. *Fundamental in Soil Mechanics.* John Wiley & Son, New York.

Terzaghi, K., 1987. *Mekanika Tanah dalam Praktek Rekayasa Jilid 1 Edisi Kedua.* Jakarta: Erlangga.

Turan, C., Javadi, A. A., & Vinai, R., 2022. Effects of Class C and Class F Fly Ash on Mechanical and Microstructural Behavior of Clay Soil—A Comparative Study. *MDPI Journal, 15(5).* <https://doi.org/10.3390/ma15051845>

U.S. Navy, 1971. *Design Manual: Soil Mechanics, Foundations and Earth Structures.* USA.

U.S. Navy, 1982. *Soil Mechanics – Design Manual 7.1.* Department of The Navy, Naval Facilities Engineering Command, U.S. Government Printing Office, Washington D.C.

Widiyanto, A. dan Wiyono, S., 2014. Pengaruh Kadar Air dan Bahan Ikat Semen Terhadap Tren Keretakan Lapis Perkerasan Tanah Semen. Makassar: Konferensi Regional Teknik Jalan ke 13.

Wijaya, W., 2020. Pemanfaatan Abu Daun Bambu Sebagai Bahan Tambah Pozzolan Alami Dalam Perbaikan Tanah Ekspansif. Thesis, Universitas Gadjah Mada, Yogyakarta.

Zaika, Y., Harimurti, Fahara, A., Safira, N., & Darmawan, W., 2021. The Effect of Cement to Develop Strength of Grati Soft Soil. International Journal of GEOMATE, 21(86), 17–22. <https://doi.org/10.21660/2021.86.Gx298>

Zimar, Z., Robert, D., Sidiq, A., Zhou, A., Giustozzi, F., Setunge, S., & Kodikara, J., 2022. Waste-to-energy Ash for Treating Highly Expansive Clays in Road Pavements. Journal of Cleaner Production, 374. <https://doi.org/10.1016/j.jclepro.2022.1338>