

CURRICULUM VITAE

Personal details

Name with Initials : De Silva L. I. N.
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 Address(Residence) : 96/B/08, Salmalmawatha, Nampamunuwa, Piliyandala
 Address(Office) : Department of Civil Engineering, University of Moratuwa
 Designation : Senior Lecturer/Senior Geotechnical Engineer



Educational qualifications

- PhD (2008, University of Tokyo, Japan)
- M.Eng (2004, University of Tokyo, Japan)
- B.Sc Eng (1st Class Honours) (2001, University of Moratuwa, Sri Lanka)

Professional qualifications

- Chartered Engineer and a Corporate Member of Institution of Engineers, Sri Lanka (since 2011)
- Member - Sri Lankan Geotechnical Society (from 2009)
- Member - International Society of Soil Mechanics and Geotechnical Engineering (since 2009)

Short Courses and Training Programmes

- Training Program on Dam Safety & Risk Assessment : Five day resident workshop on dam risk assessment Conducted by Hydro-Electric Corporation, Australia
- Safety Evaluation of Existing Dams : Six days resident workshop conducted by United States Bureau of Reclamation (USBR) (2011)
- Certificate in Teaching in Higher Education : Ten-month training program conducted by the staff development centre, University of Colombo (2011). I am a Staff and Educational Development Association (SEDA), UK accredited university academic.
- Three months research fellowship sponsored by Japan Society for Promotion of Science (JSPS) at the University of Tokyo, Japan.
- Training on Outcomes Based Education (OBE) and accreditation : Attended several training programmes, seminars, workshops on OBE and Washington Accord Accreditation
- Computer analysis of Structures : Short course conducted by the Department of Civil Engineering, University of Moratuwa (2001)
- Workshop on landslide monitoring, early warning and mitigation: Three-day workshop in Chiang Rai, Thailand on 25th January 2015 - 28th January 2015.

Career Summary

Designation	Work Place	Duration From(mm/yy) – To(mm/yy)
Senior Geotechnical Engineer, Central Expressway Project Section 1	AVEK Engineering Consultants (Pvt) Ltd.	07/2018 – 09/2019
Senior Lecturer	University of Moratuwa	04/2009 – todate
Post Doctoral Research Fellow	Institute of Industrial Science, University of Tokyo, Japan	10/2008 – 04/2009
Civil Engineer	Access Engineering Ltd	01/2005 – 09/2005
Temporary Lecturer	University of Moratuwa	09/2001 – 09/2002
Visiting Lecturer	Institution of Engineers Sri Lanka	09/2001 – 09/2002 and 05/2009 – 12/2014
Visiting Lecturer	General Sir John Kothalawala Defence Academy	09/2001 – 09/2002

Summary of Skills

- Competent in *Plaxis 2D* and *Plaxis 3D* software
- Competent in Geo-slope International *Slope/W*, *Sigma/W* and *Seep/W* software
- Competent in *Visual Fortran* programming language
- Experience in advanced laboratory testing of soils and laboratory soil testing procedures
- Experience in curriculum development, OBE and accreditation related matters

Teaching and Research Experience

April 2009 to date – Senior Lecturer: University of Moratuwa, Sri Lanka

Undergraduate and post graduate Teaching and Research

- Lecturing geotechnical engineering to B.Sc. Engineering students.
- Lecturing computer application in geotechnics and FEM
- Supervising final year undergraduate research projects.
- Conducting laboratory classes in geotechnical engineering
- Conducting geotechnical engineering design classes
- Conducting postgraduate lectures and research

In addition, I have been serving as a resource person for the following workshops and short courses

- A training programme on triaxial testing of soils for engineers at SLLRDC.
- Short course on Design using Euro codes conducted by the Department of Civil Engineering, University of Moratuwa.
- Short course on Highway Material Testing conducted by the Department of Civil Engineering, University of Moratuwa.
- Refresher Course for Engineers in the Central Province, Sri Lanka – A workshop organized by the National Building Research Organization to refresh the geotechnical engineering knowledge of engineers in the Central Province
- A Short Course on laboratory soil testing for the engineers in North Central Province and Agrarian Services Development Board, Sri Lanka
- A workshop on laboratory soil testing for the engineers working at Puttlam- Mannar Road Project (sponsored by China Harbour Engineering Company)

2009- todate

I have been directly involved in testing, analyzing the results and in the preparation of reports for various laboratory tests such as particle size distribution tests, tests on plasticity characteristics, field and laboratory permeability tests, compaction tests, insitu density measurements, UU, CU, CD and Multistage triaxial tests, direct shear tests, consolidation tests, tests on swelling characteristics, tests on rocks and field tests such as plate loading test, Mackintosh tests and vane shear tests.

Full-time Field Experience

2018 July - 2019 September

Project : Central Expressway Project, Section 1
Position : Senior Geotechnical Engineer
Job : Design of pile foundations for piers, viaducts, design of abutment foundations, design of
description retaining walls, slope stability assessment.

2005 April – 2005 September

Project : Five Storey Office Building for Access Engineering Ltd, Boralasgamuwa
Position : Civil Engineer

Job description : Overseen the ground improvement work and foundation construction work. Performed overall site management duties including cost controlling, on-site quality management, progress monitoring, preparing procurement schedules and progress reports. Conducted all the surveying work.

Other Responsibilities

- Lecturer In-charge, Soil Mechanics Laboratory and Rock Mechanics Laboratory, Department of Civil Engineering, University of Moratuwa (2010 – to date).
- Post Graduate Coordinator of the M.Eng/PG Diploma in Foundation Engineering and Earth Retaining Systems Course (2013 – to date).
- Executive Committee Member, Sri Lanka Geotechnical Society (2010 – to date).
- Department representative of the Engineering Research Unit, University of Moratuwa.
- Senior Treasurer of the Civil Engineering Society of University of Moratuwa (2011 to 2016).
- Co-Secretary of Civil Engineering research Symposium 2012 and 2014.
- Department Coordinator for *EXMO 2010* engineering exhibition (2010).
- Member of the department accreditation subcommittee.

Awards and Honours

- Presidential award in 2015 for outstanding research publication.
- Awarded the Senate Research Capital Grant (3.96 million Rupees) for the supervision of M.Phil degree in 2015.
- Awarded the Senate Research Grant (Rs. 455,000/=) for the supervision of a full-time masters degree in 2011.
- Best research paper award at the 10th international summer symposium organized by the Japan Society of Civil Engineers, Tokyo, Japan, 2008.
- Mombukagakusho scholarship awarded by the Japanese government to read PhD degree at the University of Tokyo, Japan (2005-2008) (Approx. 61500 US\$).
- Asian Development Bank (ADB) scholarship to read M.Eng degree at the University of Tokyo, Japan (2002-2004) (Approx. 48000 US\$).
- Professor C. Patuwathawithana Memorial Award for the engineering graduate who has obtained the highest average of over 70% at the BSc. (Engineering) Final Part III Examination for the academic year 1998/99.
- Prabath Kaushalya Saparamadu Merit Award for the best civil engineering graduand in Construction Engineering and Management for the academic year 1998/99.
- Mahapola merit scholarship to read BSc degree at University of Moratuwa, Sri Lanka (1996-2001).
- Buddhadasa Gunarathne Memorial Scholarship for the achievement at G.C.E. (O/L) examination (1991).

Invited Lectures

- "Geotechnical simulation of Deep Basements", Presented on invitation at a seminar organized by Society of Structural Engineers, Sri Lanka (2019).
- "Behavior of Sand Subjected to Large Cyclic Loadings and their Modelling", presented on invitation by Sri Lanka Geotechnical Society at their monthly Geotechnical forum at IESL (2011).

Research Publications in Refereed Journals

1. M.T.R. Jayasinghe, C. Jayasinghe, K.K.G.K.D. Kariyawasam, and L.I.N. De Silva (2018) SEMI-TIERED HOUSING FOR LATERITE EARTH SLOPING LANDS—A SUSTAINABLE SOLUTION WITH ALTERNATIVE MATERIALS AND METHODS. *Journal of Green Building*: Winter 2018, Vol. 13, No. 1, pp. 56-72.
2. MP Amarasinghe, LIN De Silva, C Gallage (2018), The effect of lateral confinement on the settlement characteristics of shallow foundations on sand, *Int. J. GEOMATE* 15 (51), 258-265.
3. K. H. S. M. Sampath ., L. I. N. De Silva ., M. S. A. Perera (2016), "Effective usage of poker vibrator for compacting quarry dust: an application to ground improvement in shallow foundation design", *Journal of Geomechanics and Geophysics for Geo-Energy and Geo-Resources*, October 2016, pp. 1-11, DOI 10.1007/s40948-016-0041.
4. De Silva, L. I. N., Koseki, J. Gabriele, C.(2015):“A stress–strain description of saturated sand under undrained cyclic torsional shear loading”, *Soils and Foundations*, 55(3), pp.559-574.
5. De Silva, L. I. N., Koseki, J., Wahyudi, S. (2014): “Stress-dilatancy relationships of sand in the simulation of volumetric behavior during cyclic torsional shear loadings”, *Soils and Foundations*, 54(4): pp.845-858.
6. De Silva, L. I. N., Koseki, J., Sato, T. and Wang, L.(2005): “High capacity hollow cylinder apparatus with local strain measurements”, *Geotechnical Special Publication, ASCE*, 156, pp. 16-28.
7. Chiaro, G., Koseki, J. & De Silva, L.I.N. (2017): “Modelling the Effects of Static Shear on the Undrained Cyclic Torsional Simple Shear Behavior of Liquefiable Sand”, *Geotechnical Engineering Journal, SEAGS, Special Issue on Modelling Aspects of Soil Behaviour*, 48(4): pp. 1-9.
8. Chiaro G., Koseki J. & De Silva L.I.N. (2013). A density- and stress-dependent elasto-plastic model for sands subjected to monotonic torsional shear loading. *SEAGS Geotechnical Engineering Journal*, 44(2): 18-26.
9. De Silva, L. I. N., Koseki, J. Gabriele, C.: “A cyclic constitutive model to describe drained cyclic behaviour of saturated sand”, will be submitted for possible publication in *Geotechnique Journal*.

Research Publications in Refereed Conferences/Symposia

1. G Athmarajah, L. I. N De Silva (2019), Analysis of Stability Enhancement of Soldier Pile Retaining Wall Moratuwa Engineering Research Conference (MERCon), 644-650.
2. E Havisanth, LIN De Silva, A Bandara, YWR Amarasinghe (2019), Study on Development of Arching Action of Sand Using an Earth Pressure Cell, Moratuwa Engineering Research Conference (MERCon), 394-399.
3. S Suloshini, LIN De Silva (2019), An Experimental Investigation on Shaft Resistance of Cast In-Situ Bored Piles in Intact Rock, Moratuwa Engineering Research Conference (MERCon), 651-655.
4. A. M. D. C. Bandara, L. I. N. de Silva, Y. W. R. Amarasinghe (2018), Development of an Earth Pressure Cell to Evaluate the Total and Effective Stresses of Soil, MERCon Conference Proceedings.
5. L. I. N. de Silva, H. M. J. T. Wijayawardhana (2017), Strength, deformation and permeability characteristics of soil-cement-bentonite slurry cut off materials, Proceedings of the 19th International Conference on Soil Mechanics and Geotechnical Engineering, Seoul, pp. 341-344.
6. A Bandara, YWR Amarasinghe, L .I. N de Silva (2018), Development of a 1-DoF Force Sensor with an Aluminum Cross-Beam Structure for Earth Pressure Measurement System, Proceedings of International Conference on Sustainable Design and Manufacturing, Gold Coast, Australia, 228-238.
7. M. P. Amarasinghe and L. I. N. de Silva. (2017), "Experimental study on the effect of presence of deep embedded retaining walls on the settlement of shallow foundations", *IESL Annual transactions*, pp. 11 - 16.
8. C. Sanjei, L. I. N. de Silva (2016): Numerical modelling of the behaviour of model shallow foundations on geocell reinforced sand, Proceedings of MERCon, pp. 216 - 221. 978-1-5090-0645-8/16/\$31.00 , 2016 IEEE
9. C. Sanjei and L.I.N. de Silva (2016): Feasibility Study of Shallow Foundation on Geocell Reinforced Soil in Sri Lanka, Proceedings of Annual Sessions of IESL, pp. 1 - 10.
10. Gabriele Chiaro, Junichi Koseki, Nalin L.I. De Silva and Takashi Kiyota (2016): Modeling the monotonic undrained torsional shear response of loose and dense Toyoura sand, Proceedings of the 15th Asian Regional Conference on Soil Mechanics and Geotechnical Engineering, Japanese Geotechnical Society Special Publication, Fukuoka, Japan, <http://doi.org/10.3208/jgssp.TC101-01>, pp. 407-410.
11. Chiaro G., Koseki J., De Silva L. I. N. & Kiyota T. (2015). Calibration and performance of a newly developed cyclic model to describe the liquefaction behaviour of loose and dense sand under torsional simple shear conditions. In: Proc. of the International Conference on Geotechnical Engineering, Aug. 10-11, Colombo, Sri Lanka, pp. 137-140.

12. T.H.K. Nawarathna., L. I. N. De Silva, (2015): Applicability of the Field Deformation Measurement Data in Predicting the Stability of Embankment Slopes, In: Proc. of the International Conference on Geotechnical Engineering, Aug. 10-11, Colombo, Sri Lanka, pp.577- 580.
13. Nawarathna, T. H. K., De Silva, L. I. N. (2014): "Applicability of the Limit Equilibrium Method and the Finite Element Method in Predicting the Stability of Embankment Slopes", Annual Transactions of IESL 2014; pp. 11-17.
14. L. I. N. De Silva & J. Koseki (2012):"Modelling of sand behavior in drained cyclic shear ", Proc. of the 2nd International Conference on Advances in Transportation Geotechnics ii, Taylor & Francis Group, ISBN 978-0-415-62135-9,IS Hokkaido, Japan, pp. 686-691.
15. De Silva, L. I. N., Koseki, J., Sato, T., Kiyota, T. and Honda, T.(2008): "Quasi-elastic bulk modulus of sand based on volume change and local deformation measurement of hollow cylindrical specimen", Proc. of the 4th International Symposium on Deformation Characteristics of Geomaterials (IS-Atlanta 2008), USA, pp. 105-111.
16. De Silva, L. I. N., Koseki, J., Sato, T.(2006): "Effects of different pluviation techniques on deformation property of hollow cylinder sand specimens", Proc. of the International Symposium on Geomechanics and Geotechnics of Particulate Media, Taylor & Francis Group, ISBN 0-415-41097-5, Ube, Yamaguchi, Japan, pp. 29-33.
17. Kiyota, T., De Silva, L. I. N., Sato, T. and Koseki, J.(2006): "Small strain deformation characteristics of granular materials in torsional shear and triaxial tests with local deformation measurements", Soil Stress - Strain Behavior: Measurement, Modeling and Analysis, A collection of Papers of the Geotechnical Symposium in Rome, Series: Solid Mechanics and its Applications, Vol. 146, pp. 557-566.
18. Tsutomu NAMIKAWA, Junichi KOSEKI, Laddu Indika Nalin DE SILVA (2011): "Three-dimensional Modelling of Stress-Strain Relationship of Sand Subjected to Large Cyclic Loading", Proceedings of 5th International Conference on Earthquake Geotechnical Engineering, Santiago, Chile, January 2011, published in CD-ROM
19. L. I. N. De Silva and Junichi Koseki (2011): "Modelling of Drained and Undrained Cyclic Shear Behavior of Sand", Proceedings of 14th Asian Regional Conference on Soil Mechanics and Geotechnical Engineering, ISSMGE, Hong Kong, China, pp.1293-1298.
20. De Silva, L. I. N. (2011): "Development of High Capacity Torsional Shear Apparatus for the Measurement of Small Strain Deformation Properties of Soils", Geotechnical Journal, Sri Lanka Geotechnical Society, ISSN 1391-6149, Volume 5, Number 1, December, pp. 1-8.
21. Chiaro, G., De Silva, L. I. N., Kiyota, T., and Koseki, J.(2011): "An elasto-plastic model to describe the undrained cyclic behavior of saturated sand with initial static shear", Proc. of 5th International Symposium on Deformation Characteristics of Geomaterials (IS-Seoul 2011), Seoul, South Korea, September 1-3, Volume 2, pp. 1026-1033.
22. Premkumar, S., De Silva, L. I. N.(2012):"Quantitative Risk Assessment of Ancient Earth dams in Sri Lanka: Preliminary Assessment of Nachchaduwa Dam as a Case Study", Proceedings of Annual Transactions of IESL, Volume 1, Part B, pp. 76-84.
23. Premkumar, S., De Silva, L. I. N.(2012):"Development of a Risk Assessment Framework for Safety Evaluation of Earthen Dams in Sri Lanka", Proceedings of Annual Transactions of IESL, Volume 1, Part B, pp. 85-94.
24. Chiaro, G., Koseki, J. & De Silva, L.I.N. (2012): "An elasto-plastic model for liquefiable sands subjected to torsional shear loadings", In: Proc. of 2nd International Symposium on Constitutive Modeling of Geomaterials: Advances and New Applications, Constitutive Modeling of Geomaterials, Springer Series in Geomechanics and Geoengineering, October 15-16, Beijing, China, pp.519-526.
25. Gopinath Kathiravelu, Bavendan P., Warnapura S.P., De Silva L.I.N.(2012): "Lateral Displacements of Commonly Found Gravity Retaining Walls in Sri Lanka due to Seismic Action", Proc. of the 2nd International Conference on Sustainable Built Environment, Kandy, Sri Lanka.
26. Madanayaka A., De Silva L.I.N., Dharmarathne P.G.R. (2012): "Study on Ground Vibration Due to Rock Blasting of Metal Quarry: A Case Study", Proc. of CERIS 2012 Symposium, University of Moratuwa, Sri Lanka, pp. 26-31.
27. Kumarasiri , C., De Silva L.I.N., Abeykoon, S. (2012): "Evaluation of Soil Liquefaction in Sri Lanka- Dynamic Approach Using Geotechnical Investigation Data", Proc. of CERIS 2012 Symposium, University of Moratuwa, Sri Lanka, pp. 32-37.
28. Koorala S.K.D.C.P., Kumara M.K.S.N., Edirisinghe E.A.L., De Silva, L.I.N.(2012): "Investigation on Uplift Capacity of Shallow Foundations on Cohesionless Soil", Proc. of CERIS 2012 Symposium, University of Moratuwa, Sri Lanka, pp. 22-25.
29. Kumarasiri, H. C., De Silva, L. I. N., Abayakoon, S. B. S. (2011): "Liquefaction Potential in Sri Lanka- Preparing A Liquefaction Hazard Map Using Geotechnical Investigation Data, Proceedings of Annual

- Transactions IESL, Volume 1, Part B, pp. 110-117
30. Chiaro, G., Koseki, J. and De Silva, L. I. N. (2011): "Modeling the cyclic undrained behavior of sand with initial static shear stress", Bulletin of Earthquake Resistance Structures, Institute of Industrial Science, University of Tokyo, Volume 44, March 2011, pp. 87-99.
 31. Premkumar, S., De Silva, L. I. N.(2011): "Evaluation of Liquefaction Potential of Western and Eastern Coastal Areas in Sri Lanka", Proceedings of IESL-SSMS Joint International Symposium on Social Management Systems, Colombo, Sri Lanka, September 14 – 16, pp. 703-709.
 32. Chiaro, G., Kiyota, T., De Silva, L. I. N., Sato, T. and Koseki, J.(2010): "Undrained cyclic torsional shear behavior of saturated sand with static shear", Bulletin of Earthquake Resistant Structures, Institute of Industrial Science, University of Tokyo, Volume 43, pp. 161-172.
 33. Chiaro, G., Kiyota, T., De Silva, L. I. N., Sato, T. and Koseki, J.(2009): "Extremely large post-liquefaction deformations of saturated sand under cyclic torsional shear loading", Proc. of Earthquake Geotechnical Engineering Satellite Conference, 17th ICSMGE, Alexandria, Egypt, CD-ROM, Paper-ID:03, October 2-3, pp. 1-10.
 34. Chiaro, G., Kiyota, T., De Silva, L. I. N., Sato, T. and Koseki, J. (2009): "Effect of static shear stress on undrained cyclic behavior of saturated sand", Bulletin of Earthquake Resistant Structures, Institute of Industrial Science, University of Tokyo, Volume 42, 2009, pp. 63-71.
 35. Kulathilaka, S. A. S. and De Silva, L. I. N.(2003): "Optimum geometrical shapes for gravity retaining structures", Proceedings of the 97th Annual Session of the Institute of Engineers, Sri Lanka, pp. 101-110.

Research Publications in Non - Refereed Conferences/Symposia

1. De Silva, L. I. N., Sato, T. and Koseki, J. (2008): "Modeling of drained cyclic shear behavior of sand", Proc. of the 10th International Summer symposium, JSCE, Tokyo, Japan, pp. 73-76.
2. De Silva, L. I. N., Sato, T., Kiyota, T., Honda, T. and Koseki, J. (2007): "Use of electronic balance in measurement of small volumetric strain of hollow cylinder sand specimens", Proc. of the 9th International Summer Symposium, JSCE, Yokohama, Japan, pp. 167-170.
3. De Silva, L. I. N., Sato, T. and Koseki, J. (2006): "Variations of shear strain along height and perimeter of hollow cylinder specimens during cyclic torsional shear loadings", Proc. of the 8th International Summer symposium, JSCE, Nagoya, Japan, pp. 143-146.
4. De Silva, L. I. N., Sato, T., Koseki, J. and Wang, L.(2004): "Local and external measurement of quasi-elastic deformation properties of dry Toyoura sand in torsional shear and triaxial tests", Proc. of the 6th International Summer Symposium, JSCE, Saitama, Japan, pp. 221-224.
5. Koseki, J., De Silva, L. I. N. (2008): "Improved modeling of cyclic shear stress-strain relations of sand and its effect on accumulation of volumetric strains (in Japanese)", Proc. of the 43rd Annual Conference of JGS, Japan (2008).
6. Koseki, J., De Silva, L. I. N. (2008): "Modeling of dilatancy property and simulation of undrained cyclic shear behavior of dense Toyoura sand (in Japanese) ", Proc. of the 63rd Annual Conference of the Japan Society of Civil Engineers, JSCE, Japan, in CD ROM.
7. Mulmi, S., Nakajima, S., De Silva, L. I. N., and Koseki, J. (2007): "Shear stress-strain response analysis of backfill soil of model retaining wall using shaking table", Proc. of the 9th International Summer symposium, JSCE, Yokohama, Japan, pp. 151-154.
8. Kiyota, T., De Silva, L. I. N., Sato, T. and Koseki, J. (2005): "Small deformation characteristics of gravel in torsional shear and triaxial tests with local deformation measurements", Proc. of the 40th Annual Conference of JGS, Japan, CD-ROM.
12. Koseki, J., Sato, T. and De Silva, L. I. N. (2005): "Improvement of local deformation measurement for hollow cylindrical specimens in torsional shear and triaxial tests", Proc. of the 40th Annual Conference of JGS, Japan, CD-ROM.
13. SetoWahyudi, Gabriele Chiaro, L. I. N. De Silva and Junichi Koseki (2010): "Stress-Dilatancy Behavior of Loose Sand during Drained Cyclic Torsional Shear Loading", Submitted for the possible publication in the proceedings of 12th International Summer Symposium, Japan Society of Civil Engineers, Hokkaido, Japan, pp. 183-186..
14. De Silva, L. I. N., Premkumar, S., Sujeevan, N., Nainanayaka, N. P. A. R. K. (2010): "Liquefaction Potential of Sand Deposits in Sri Lanka", Proceedings of 16th ERU Symposium, Sri Lanka, pp. 15 -17.

Research Monographs

1. 'Deformation Characteristics of Sand Subjected to Cyclic Drained and Undrained Torsional Loadings and Their Modelling', PhD Thesis, University of Tokyo, Japan (2008).
2. 'Locally measured quasi-elastic deformation properties of geomaterials under torsional shear and triaxial loadings', Master of Engineering thesis, University of Tokyo, Japan (2004).
3. 'Optimum Geometric Shapes for Gravity type Retaining Structures', Undergraduate project report, University of Moratuwa (2002).

Major Consultancy Assignments

2020 January

Project : Portcity Project
Client : China Harbour Engineering Corporation
Tasks : Review of backfill methodology around underground water retaining structures at Port City.

2019 October

Project : Southern Expressway Extension Project
Client : CATIC International Engineering Ltd.
Tasks : Review of soil nail design for stabilization of failed slope section.

2019 September

Project : Supporting Electricity Supply Reliability Improvement Project (SESRIP) Package 4, Construction of 33kV Tower Lines and Gantries.
Client : St. Theresa Industries (Pvt) Ltd.
Tasks : Geotechnical consultant for the project.

2018 July to date

Project : Central Expressway Project Section 1
Client : Metallurgical Corporation of China (MCC)
Tasks : Design of a deep foundations for piers, abutments and other expressway structures

2019 march

Project : Raintree Apartment Project
Client : H N J Towers (Pvt) Ltd
Tasks : Design of a deep excavation support system

2018 July

Project : Sethsiripaya Stage 3 Project
Client : San Piling (Pvt) Ltd
Tasks : Design of a deep excavation support system

2017 July

Project : Construction of a salinity barrier for Nilwala river,
Client : Ceywater Consultants (Pvt) Ltd
Tasks : Design of a shoring system to facilitate the construction of the salinity barrier across Nilwala river, Matara

2017 July to date

Project : Construction of Central Expressway, Package 2 from Meerigama to Rilloluwa,
Client : ICC, Access, Nawaloka-KDESH Consortium
Tasks : Geotechnical consultant for the contractor. Major responsibilities include design of soft ground treatment and slope stability analysis

2017 June

Project :Hotel project in Nuwaraeliya
Client :Abans (Pvt) Ltd
Task :Analysis of the stability of slopes and design of the foundation system.

2017 May

Client :Lanka Consulting (Pvt) Ltd
Task :Analysis of the behaviour of a slot channel under various loading conditions at an airport in Norway.

2017 Feb

Project :Acheilleion 7star apartment project, Bambalapitiya.
Client : San piling (Pvt) Ltd
Task :Design of a diaphragm wall shoring system to support a 13 m deep excavation.

Dec 2016

Project :Capitol Twin Peaks Condominium Project
Client :Sanken Constructions (Pvt) Ltd.
Task :Design of a shoring system for a multi level excavation of the Capitol Twin Peaks Project.

Dec 2016

Project :Central Expressway Project
Client :Engineering Laboratory Services (Pvt) Ltd.
Task :Interpretation of subsurface characteristics and providing recommendations for ground improvement and pier foundations of the Central Expressway Project.

Oct 2016 - to date

Project :Pannipitiya to Padukka Transmission Line Project
Client :Engineering Laboratory Services (Pvt) Ltd.
Task :Interpretation of subsurface characteristics and providing recommendations for ground improvement and transmission tower foundations.

2016 Jan

Project : New Kelani Bridge Project
Client : Road Development Authority
Tasks : Analysis on the effects of vibration on radioactive waste storage due to construction activities of the above project and provide recommendations to mitigate the issues.

2015 December

Project : Jaffna Police Station Project
Client : Department of Police, Sri Lanka.
Tasks : Assessment of the subsurface conditions to investigate the applicability of a raft foundation for the New Jaffa Police Station Building.

2015 August

Project : New Kelani Bridge Project
Client : Oriental Consultants (Pvt) Ltd.
Tasks : Analysis of the subsurface characteristics and propose recommendations for ground improvement for the approach embankment of the above project..

2015Jan – to date

Project : ITC Hotel Project, Galle Face
Client : Access Engineering Ltd
Tasks : Design of a dewatering system for a 14 m deep excavation.
Review of geotechnical instrumentation data

2015 Sep - to date

Project : Kandy City Waste Water Management Project, JICA Funded
Client : JFE Engineering Corporation, Japan
Tasks : Review of Geotechnical Investigation Reports and geotechnical design reports
Provide recommendations for foundations for various structures of the above project.
Slope stability assessment at several locations.

2015 Sep

Project : Rehabilitation of Negombo Hospital

Client : State Engineering Corporation
Tasks : Estimation of the carrying capacity of cast insitu bored piles

2015 June

Project : Sath Mahala Building Project
Client : Ananda College, Colombo 10.
Tasks : Estimation of the carrying capacity of cast insitu bored piles

2015 May

Project : Gampaha Water Supply Project
Client : National Water Supply and Drainage Board.
Tasks : Assessment of the stability of slope at Nikahetikanda for the construction of a water tank.
Provide recommendations for the foundation of the proposed water tank

2015 June

Project : Multi-Purpose Entertainment Complex Project, Rajagiriya
Client : EAP Holdings, (Pvt) Ltd.
Tasks : Estimation of the carrying capacity of cast insitu bored piles

2014 Sep – to date

Project : Southern Expressway Extension Project
Client : Road Development Authority/ National Building Research Organization
Task : Propose conceptual design for ground improvement work for the above project and carry out detailed design of ground improvement work including preloading + PVD's with surcharge, gravel compaction pile and piled embankments

2014 May - to date

Project : Badulla, Ella, Haliela water supply project
Client : Tetra Tech (Pvt) Ltd, USA
Task : Analysis of the stability of existing slopes, cut and fill slopes at the proposed dam site, water treatment plant site, Udawela and Judges Hill tank sites of the above project

2014 March

Project : Project no 3: land reclamation works (cut and fill project) Prima mill, Trincomalee
Client : Neat Solutions (Pvt) Ltd
Task : Design of a 35 m tall cut slope + rock slope, design of an embankment

2014 February

Project : Northern Railway Development Project
Client : IRCON International, INDIA
Task : Investigate the causal factors for the failures of railway embankments and bridge approaches between Puliyankulam and Mankulam railway stations and design remedial measures.

2014 January

Project : Greater Ratnapura water supply and sewer project
Client : National Water Supply and Drainage Board, Sri Lanka
Task : Preparation of geotechnical investigation report and provide recommendation for foundation design of water tanks, office buildings and staff quarters, treatment plant, intake reservoir and other structures.

2013 December

Project : 20 storey apartment building project at Borella
Client : Atlantis Developers
Task : Preparation of geotechnical investigation report and provide recommendation for the design of pile foundation.

2013 December

Project : Jaffna water supply and sewer project

Client : National Water Supply and Drainage Board, Sri Lanka
Task : Preparation of geotechnical investigation report and provide recommendation for pipe bedding, foundation design of water tanks and other structures.

2013 October

Project : Colombo Port Expansion Project
Client : Ports Authority of Sri Lanka
Task : Review of the design of a 22m tall and 9.5 m wide quay wall. This includes finite element modelling of the behaviour of the quay wall during different construction stages.

2013 June

Project : 10 Storey Apartment Building with three basements at Gregory's Road, Colombo, Sanken Lanka Ltd
Client : Sanken Lanka (Pvt) Ltd
Task : Review the foundation design and numerical modelling of the behaviour of proposed raft foundation of the above building.

2013 June

Project : Proposed Five Storey Building for Central Bank at Rajagiriya
Client : Central Bank of Sri Lanka
Task : Review the inverted T type foundation design and propose recommendations for foundation construction work and ground improvement work. Numerical modelling on the behaviour of the foundation.

2013 May

Project : Puttlam- Mannar (B403) Road project, China Harbour Pvt Ltd
Client : China Harbour Engineering Company
Task : Estimation of Anticipated Settlement along Chainage 8+000 km to 12+000 km at B-379 and B-403 Roads and propose recommendations for ground improvement work at some critical sections of the above road project.

2013 May

Project : Pamankada- Kesbewa (B084) Road Project, Keangnam Enterprises Pvt Ltd
Client : Keangnam Enterprises (Pvt) Ltd
Task : Estimation of Anticipated Settlement along Chainage 0+000 km to 2+860 km at the Kesbewa bypass of the above road project and propose recommendations for ground improvement work at some critical locations.

2013 April

Project : 10 Storey Apartment Building with three basements at Gregory's Road, Colombo, Sanken Lanka Ltd
Client : Sanken Lanka (Pvt) Ltd
Task : Numerical modelling of the behaviour of proposed concrete soldier pile retaining wall to support a 6.5 m deep excavation using Plaxis 2D software.

2013 March

Project : Oil Tank project, Maldives
Client : Oil Tank Project Company
Task : Numerical modelling of the behaviour of 36m and 14m diameter circular raft foundations for oil tanks in Maldives using Plaxis 3D foundation software.

2013 February

Project : Iconic Telecommunication Tower Lotus Tower Project, Sri Lanka
Client : China National Electronics Imp. & Exp. Corp (CEIEC)
Task : Numerical modelling of the behaviour of 53m diameter raft foundation for Lotus Tower, Sri Lanka using Plaxis 3D foundation software.

2012 -2013

Project : Weras Ganga Flood Control Project, Access Engineering Ltd
Client : Access Engineering Ltd
Task 1 : Analysis of subsurface conditions and evaluate basic soil properties for the design of structures of the

Task 2 : above project
: Provide recommendations for ground improvement work

2011 February

Project : Ratmalana/Moratuwa and Jaela/Ekala Waste Water Disposal System Project, E.Pihl & Sons Pvt Ltd
Client : EPihl & Sons A. S.
Description of the issue : Excessive settlements have occurred in the flexible pipes installed at Ratmalana/Moratuwa and Jaela/Ekala Waste Water Disposal System Project
Task 1 : Check the suitability of the available material as a backfill material for the above project
Task 2 : Review the pipe bedding details and propose recommendations
Task 3 : Propose recommendations to control settlements.

2010 - 2011

Project : Southern Transport Development Project (STDP)
Client : Road Development Authority, Sri Lanka
Description of the issue : Some metal underpasses (soil-steel structures) have failed at STDP. It was requested to analyse and check structural capacities of existing metal underpasses and propose remedial measures to ensure the long term durability and capacities of the structures.
Task 1 : Numerical modelling of the performance of metal underpasses using *Plaxis* software
Task 2 : Propose recommendations for ground improvement

2010 May

Project : Gateway International School Project
Client : Gateway International School
Description of the issue : Adjacent buildings were damaged allegedly due to piling work at Gateway International School premises.
Task : Investigate the issue and propose recommendations to continue piling work

2010 March

Project : AsupiniAlla mini hydro power project
Client : LTL Holdings
Description of the issue : A section of the penstock at AsupiniAlla mini hydro power project was damaged due to the impact caused by large boulder/boulders that came down the hill
Task 1 : Investigate the site to identify any potential threats of rock falls in the future
Task 2 : Propose remedial actions to prevent any further damages to the penstock and design a gabion wall with a supporting structure for the above purpose.

2010 February

Project : Seethawaka Industrial Park Project
Client : Board of Investment of Sri Lanka
Description of the issue : A medium scale landslide has occurred due to heavy rainfall in November 2006 at Seethawaka Industrial Park.
Task 1 : Review the stabilization measures proposed by different geotechnical firms
Task 2 : Propose geotechnical investigations for the stability analysis of the above slope
Task 3 : Analyse the stability of the slope and propose remedial measures for the stabilization of the above slope
Task 4 : Design a retaining wall for the stabilization of the slope

2010 January

Project : Narah Building Project, Welisara.
Client : Narah
Description of the issue : Excessive settlements have caused severe damages to Narah factory building, Welisara
Task 1 : Propose detailed geotechnical investigations to investigate the issue
Task 2 : Estimation of secondary consolidation settlement of peat layer underlying the building and propose recommendation for remedial measures to mitigate the settlement

2009 May

Project : Denawaka Ganga Mini Hydro Power Project
Client : K.D.U Mini Hydro Power Pvt Ltd
Task : Failures have occurred in several areas in the slopes due to the excavation work for the construction of concrete channel at Denawaka Ganga mini hydro power project. Stability of slopes susceptible to failure at the project site was assessed and recommendations to improve the stability.

2009

Project : New Building for Architecture Faculty, University of Moratuwa
Client : State Engineering Corporation
Task : Design a shoring system to support a 6m deep excavation adjacent to an existing five storey building for the construction of the basement of the new architecture faculty building