

Index

A

Anchor piles, 194
Askari, S., 140-156
ASTM Standard D 3966, 230
Aurora, R. P., 56-71

B

Beam on elastic foundation, 5, 36, 221
Beikae, M., 3-20
Bhushan, K., 140-156
Bored piles, *see* piles
Briaud, J.-L., 97-111, 172-181

C

Caissons, *see* piles
Chameau, J.-L. A., 182-193
Clay, 6, 67, 204, 214, 230
Coefficient of subgrade reaction, 5, 11, 113
 Definition, 22
 Values, 25, 31
Computer analysis, 35, 72, 183
Cone penetration tests, 141
Constant of horizontal subgrade reaction
 Definition, 23
 Values, 24-29
Cox, W. R., 122-139
Cyclic loading, 5, 60, 75, 154, 172, 232

D

Damping ratio, 169
Deep foundations, *see* piles

Deflection, 154, 217
 Lateral, 147
 Predicted versus observed, 150, 223
 Slope, 147
 Versus ultimate load, 240
Dixon, D. A., 122-139
Drilled piers, *see* piles
Dynamic loading, 157
Dziedzic, E., 194-213

E

Elastic continuum, 3, 113, 116
Elastic stiffness, 49, 58, 64, 73, 103
Embedded piles, *see* piles

F-G

Finite difference, 3, 8
Finite element, 3, 183
Friction resistance, 103
Gle, D. R., 157-171
Gleser, S. M., 72, 96
Goen, L., 194-213

H

Habibagahi, K., 21-34
Helical piles, *see* anchor piles
Heliostat foundations, 140
Horvath, J. S., 112-122
Hughes, J. M. O., 229-238

I-K

Instrumentation, 59, 129, 146, 201
Johnson, L. D., 172-181
 k_h , *see* coefficient of subgrade reaction

L

- Landslides, 183
- Langer, J. A., Ed., 1, 2, 21-34, 245-250
- Lateral load tests, 152
 - Dynamic, 157
 - Full scale, 141, 195
 - In sand, 141
 - Model, 122, 195, 201
- Laterally loaded piles, *see* lateral load tests
- Limiting equilibrium, 196
- Load distribution, 136
- Loading, 216
- Loading sequence, 146, 218, 243
- Long, J. H., 214-228

M

- Methods of analysis, 105
- Meyer, B., 97-111
- Modulus of elasticity, 5, 58, 63
 - Factor affecting, 12
 - Initial tangent, 13
 - Versus consolidation stress, 15
- Modulus of subgrade reaction, 5, 11
 - Definition, 22
 - From strength tests, 177
- Moments, 69
- Mosley, E. T., Ed., 245-250
- Murphy, B. S., 122-139

N

- n_h , *see* constant of horizontal subgrade reaction

O

- Oakland, M. W., 182-193
- Offshore piling, 214

P

- Parametric effects, 225
- Piles
 - Deep foundations, 157
 - Drilled piers, 140
 - Efficiency, 122
 - Embedded, 49
 - Fixity, 73, 83
 - Group, 57
 - Installation methods, 158, 230
 - Isolated, 49
 - Loading methods, 173
 - Spacing, 243
- Pressuremeter, 97, 143, 175, 178
 - Driven, 229
 - In sand, 241
- p - y curves, 3, 6, 73, 105, 113, 178, 221, 230, 234
- Puri, V. K., 194-213
- Pyke, R., 3-20

R

- Reese, L. C., 56-71, 214-228
- Resonant frequency, 158, 169
- Robertson, P. K., 229-238

S

- Sand, 143, 166, 201, 204, 214
- Saturated conditions, 140, 172
- Secant modulus, 5, 14
- Shape factor, 80
- Slope stability, 182
- Sogge, R. L., 35-48
- Smith, T., 97-111
- Soil disturbance, 242
- Soil dynamics, *see* dynamic loading
- Soil pressure, allowable, 42
- Soil reinforcement, 183
- Soil strength, 175
- Soil stress, 35

Soil structure interaction, 35, 101
 Standard penetration tests, 141
 Static loads, 60, 203
 Stephenson, R. W., 194-213
 Stiffness
 Soil, 4, 42
 Pile, 108, 183
 Stress versus deflection, 63
 Stroman, V. R., 172-181
 Sy, A., 229-238

T

Thompson, C. D., Ed., 245-250
 Torsion, 49

W

Winkler model, 3, 113, 196
 Woods, R. D., 157-171
 Wright, S. G., 56-71

Y

Young's modulus, *see* modulus of elasticity