

CIVIL ENGINEERING TECHNOLOGY 1

FOUNDATIONS Deep Foundations

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TYPES OF FOUNDATION

Types of foundation

Shallow foundations

Not more than 5 m deep

Not special equipment for earthworks

Deep foundations

More than 5 m deep

Special equipment required



DEEP FOUNDATIONS

Types of deep foundations

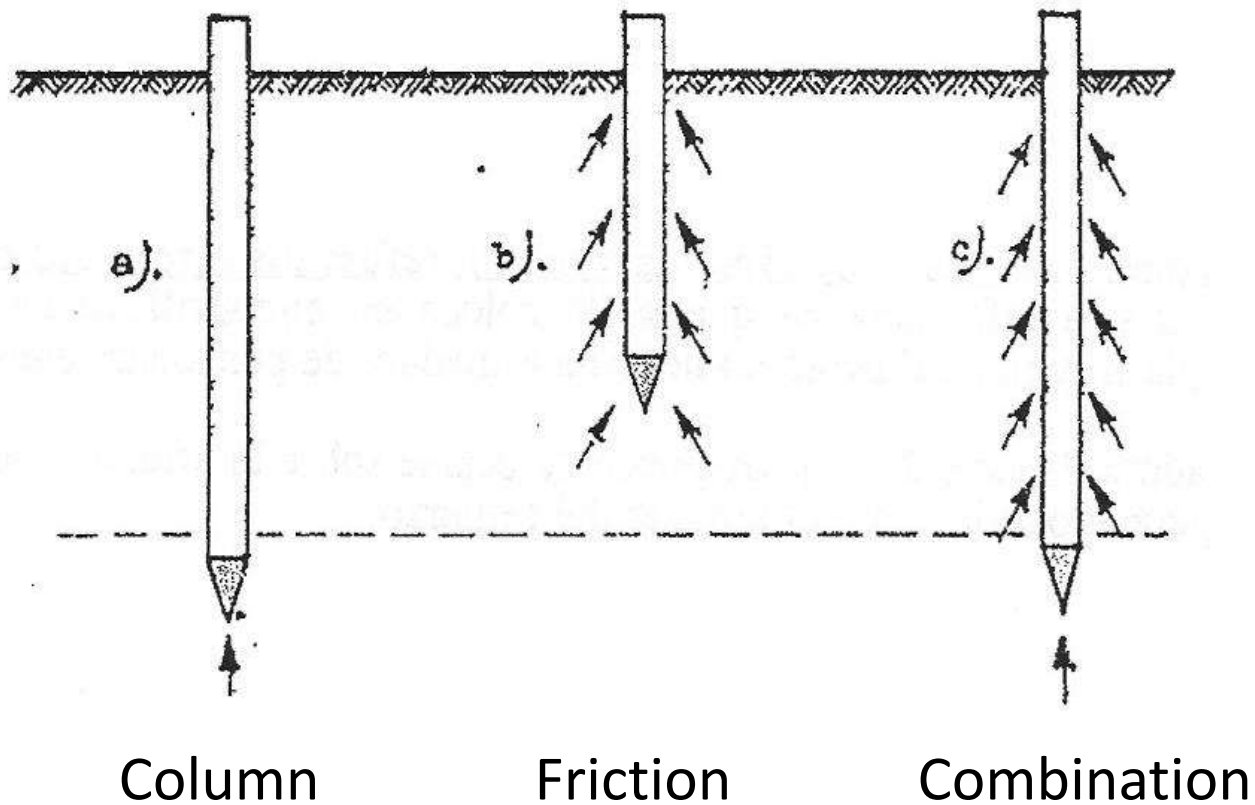
Piles

Diaphragm walls



DEEP FOUNDATIONS

PILES LOAD TRANSMISSION





DEEP FOUNDATIONS

EXERCISE

In groups, explain the construction of any of these systems for deep foundations

- Piles
- Diaphragm walls



DEEP FOUNDATIONS

CLASSIFICATION OF PILES

Displacement piles

- Driven cast in situ

Permanent casing

Temporary casing

- Preformed

Concrete

Steel

Timber

Replacement piles

- Supported

Permanent casing

Temporary casing

Casing

Drilling mud

- Unsupported



DEEP FOUNDATIONS

Construction of diaphragm walls

<https://www.youtube.com/watch?v=pgMZGGShvF4>

Construction of bored piles

<https://www.youtube.com/watch?v=KwqF075AzaE>

Driving piles

<https://www.youtube.com/watch?v=BxXJLzu89Og>