



# Piled embankments with basal reinforcement

## 1. General

Project name: \_\_\_\_\_

Company / Client: \_\_\_\_\_

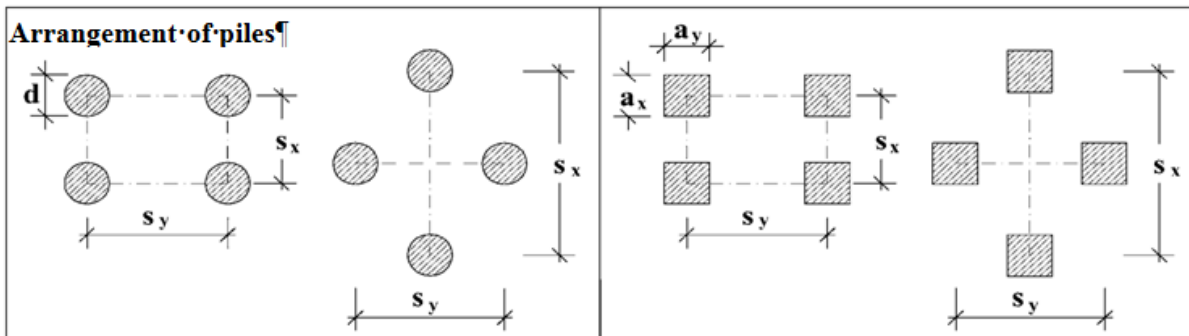
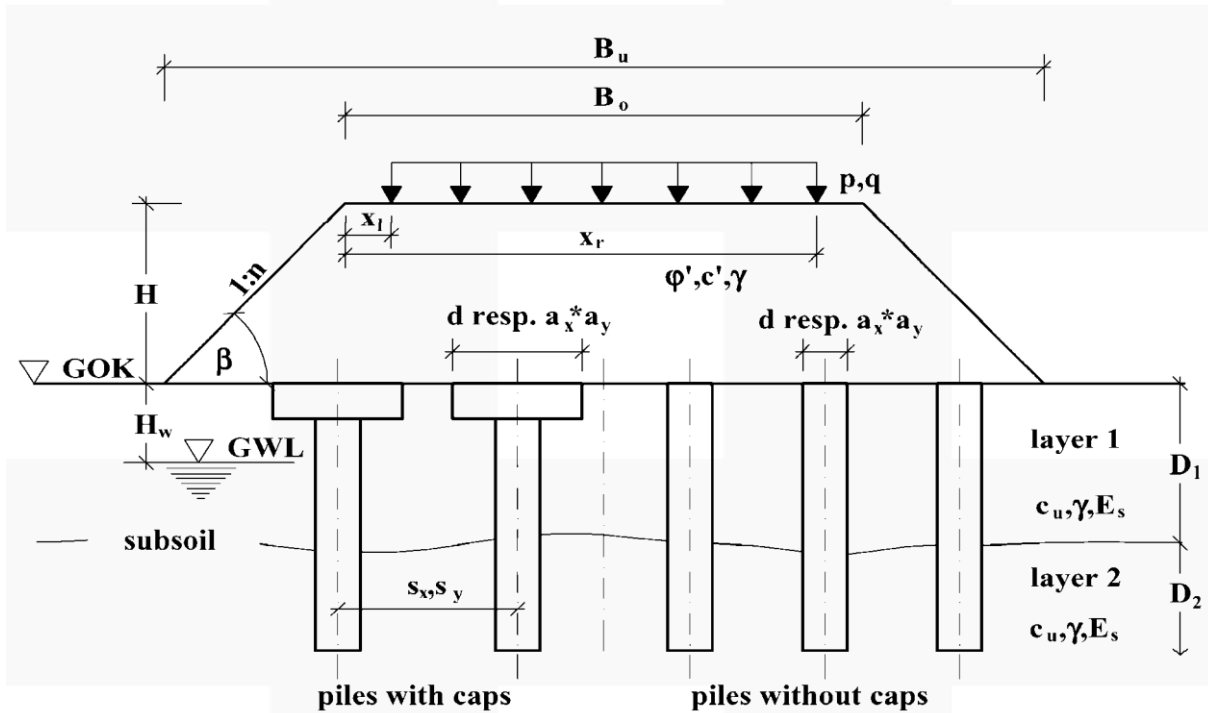
Contact person: \_\_\_\_\_

Telephone number: \_\_\_\_\_

Fax number: \_\_\_\_\_

E-Mail: \_\_\_\_\_

Internal person in charge: \_\_\_\_\_



sketch (please add information if required)



## Piled embankments with basal reinforcement

### 2. Geometry, loads and soil parameters

#### 2.1 Data of the reinforced construction

Geometry			
embankment height	H =		m
crest width	B <sub>0</sub> =		m
base width	B <sub>u</sub> =		m
slope angle	β = °	or 1:n	n =
dam length	L =		m

Loads				
dead load	p =	kN/m <sup>2</sup>	x <sub>1</sub> = m    x <sub>r</sub> = m	
live load	q =	kN/m <sup>2</sup>	x <sub>1</sub> = m    x <sub>r</sub> = m	
type of use	<input type="checkbox"/>	road embankment	<input type="checkbox"/>	railroad embankment
other type of use				
Soil parameter of embankment material				
angle of internal friction	φ' =		°	
cohesion	c' =		kN/m <sup>2</sup>	
soil unit weight	γ =		kN/m <sup>3</sup>	
pH-value (1,0 to 14,0)	alternative: acid <input type="checkbox"/> neutral <input type="checkbox"/> alkaline <input type="checkbox"/>			

#### 2.2 Data of the piles/pillars

type of pile				
geometric arrangement of the piles	<input type="checkbox"/>	rectangular	<input type="checkbox"/>	triangular
diameter of the pile cap or pile, if circular cross section	d =		m	
size of pile cap or pile, if rectangular cross section	a <sub>x</sub> =	a <sub>y</sub> =	m	
distance between the pile axis	s <sub>x</sub> =	s <sub>y</sub> =	m	
bearing capacity of the piles	Q =		kN	
determinate after which norm or standard				

#### 2.3 Data of the subsoil

	Layer 1	Layer 2	
General			
Thickness of the soft soil layer	D =		m
soil unit weight	γ =		kN/m <sup>3</sup>
undrained shear strength	c <sub>u</sub> =		kN/m <sup>2</sup>
oedometric moduls	E <sub>S</sub> =		kN/m <sup>2</sup>
Groundwater level under surface			
Groundwater level	H <sub>W</sub> =		m



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2.4 Brief description of the soil (e.g: cohesive soil, clay, peat,...)

2.5 Additional information (Construction time? Method of compaction?)

2.6 Service life of the embankment

Permanent       temporary      \_\_\_\_\_ months/years

3. Norm/Standard which should be used for the design (e.g. DIN 1054 (old/new), BS 8006)

4. Target date of project completion

In addition to this Questionnaire a representative cross section of the intended structure, illustrating soil stratification, trenches, roads etc., is required.

Date: \_\_\_\_\_

Signature: \_\_\_\_\_