

### Details for Static Calculation

**Project:**

**Client:**

**Contractor:**

Nominal Diameter    DN

                              DN

                              DN

Pipe:

HS - pipe, measured Ringstiffness min. 16 kN/m<sup>2</sup>                    (DN/OD 160 - 630)

HS - pipe, measured Ringstiffness min. 12 kN/m<sup>2</sup>                    (DN/OD 110 - 800)

CONNEX - Pipe, measured Ringstiffness min. 8 kN/m<sup>2</sup>                (DN/OD 315 - 800)

KG - Pipe COEX 2000, System Funke                                        (DN/OD 110 - 500)

Profiled Pipe, measured Ringstiffness min. 8 kN/m<sup>2</sup>                    (DN/OD 800 - 1000)

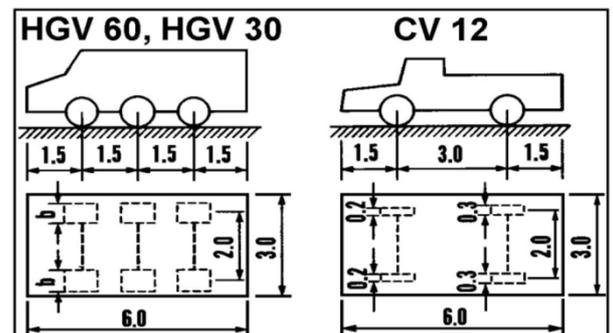
### Load - details

Depth of Cover h =  to  m

Traffic Load - according to:    HGV60    HGV30    GV12    others (please specify)

ATV A 127, Fig. 1                                                       

Standard vehicle	Total load	Wheel load	Width of tyre contact area	Lenght
	kN	kN	m	m
HGV 60	600	100	0,6	0,2
HGV 30	300	50	0,4	0,2
GV12	120	front 20 rear 40	0,2 0,3	0,2 0,2



Type of Soil in Accordance with ATV A 127, Table 1

Existing Natural Soil (Key: 9)                    Backfilling Material (Key: 4)                    Pipeline Zone (Key: 5 + 6)

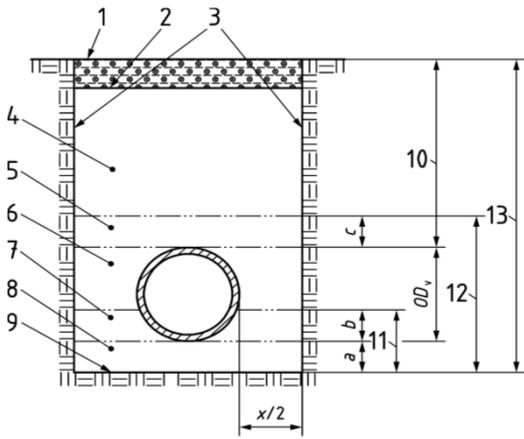
G1 - Non-cohesive soils                                                                                   

G2 - Slightly cohesive soils                                                                               

G3 - Cohesive mixed soils, coarse clay                                                                   

G4 - Cohesive soils (e.g. clay)                                                                           

Density of the existing natural ground                                        % Proctor density



**Key**

- |   |                             |                 |                               |
|---|-----------------------------|-----------------|-------------------------------|
| 1 | surface                     | 9               | trench bottom                 |
| 2 | bottom of road construction | 10              | depth of cover                |
| 3 | trench walls                | 11              | depth of bedding              |
| 4 | main backfill               | 12              | depth of embedment            |
| 5 | initial backfill            | 13              | trench depth                  |
| 6 | sidefill                    | a               | thickness of lower bedding    |
| 7 | upper bedding               | b               | thickness of upper bedding    |
| 8 | lower bedding               | c               | thickness of initial backfill |
|   |                             | OD <sub>v</sub> | vertical outside diameter     |

**Ground (under the pipe):**

- same as the existing natural soil
- very hard, rocky and cragged
- non-bearing soil

**Ground water:**

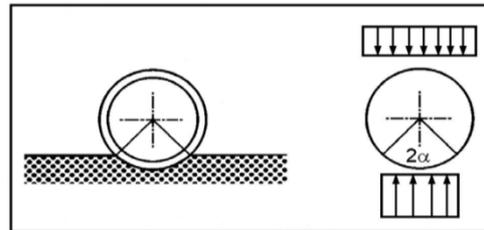
- non-existent
- existing
- Height above ground max  $h_w =$   m

**Bedding (Key: 7 + 8):**

- sand or gravel-sand-bedding
- on the existing natural soil
- other (please specify)

**Bedding angle (2  $\alpha$ ):**

- 60°
- 90°
- 120°
- 180°



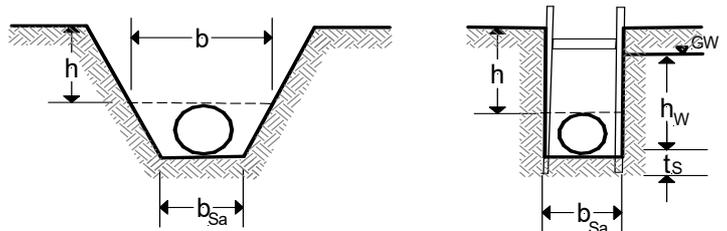
**Trench:**

**Trench Shape**

- Broad trench, backfill or built-up embankment
- single trench
- multiple trench **(please add longitudinal- and cross-section)**
- stepped trench **(please add longitudinal- and cross-section)**

**Slope Angle:**

- 45°
- 60°
- 90°



**Trench Width (including shoring width) :**

- trench width at crown  $b =$   m
- trench width at bottom  $b_{Sa} =$   m

**Execution of Construction Work:**

Trench Shoring:

- no shoring
- horizontal- (also Berlin-) shoring
- trench-lining plates
- vertical trench sheeting
- vertical wooden planks
- vertical sheet pile wall  
clamping depth in the ground under the invert  $t_s =$   m

Dismantling of sheeting:

- step by step during the backfilling
- after the backfilling in one go

**Soil Compaction:**

Embedding:

- compacted against the existing natural soil
- in layers without a proof of the Proctor density
- in layers with a proof of the Proctor density 97%
- non-compacted

Covering:

- compacted against the existing natural soil
- in layers without a proof of the Proctor density
- in layers with a proof of the Proctor density 97%
- non-compacted

Date:

Signature: