

ΕΛΛΗΝΙΚΗ ΔΗΜΟΚΡΑΤΙΑ  
ΠΕΡΙΦΕΡΕΙΑ ΔΥΤΙΚΗΣ ΕΛΛΑΔΑΣ  
ΔΗΜΟΣ ΑΝΔΡΙΤΣΑΙΝΑΣ - ΚΡΕΣΤΕΝΩΝ  
ΔΙΕΥΘΥΝΣΗ ΤΕΧΝΙΚΩΝ ΥΠΗΡΕΣΙΩΝ

ΤΙΤΛΟΣ ΕΡΓΟΥ : ΑΠΟΚΑΤΑΣΤΑΣΕΙΣ ΟΔΟΠΟΙΑΣ ΔΗΜΟΥ  
ΑΝΔΡΙΤΣΑΙΝΑΣ - ΚΡΕΣΤΕΝΩΝ

ΑΡΙΘΜΟΣ ΜΕΛΕΤΗΣ : 18 / 2019

ΠΡΟΫΠΟΛΟΓΙΣΜΟΣ : 1.024.415,03 €

ΤΙΜΟΛΟΓΙΟ ΜΕΛΕΤΗΣ

ΚΡΕΣΤΕΝΑ, 9/4 /2019

Η ΣΥΝΤΑΞΑΣΑ



ΚΑΛΟΓΕΡΟΠΟΥΛΟΥ ΓΕΩΡΓΙΑ

ΠΟΛΙΤΙΚΟΣ ΜΗΧΑΝΙΚΟΣ Π.Ε. M.Sc.

ΘΕΩΡΗΘΗΚΕ

ΚΡΕΣΤΕΝΑ, 9/4 /2019

Η ΠΡΟΪΣΤΑΜΕΝΗ Δ.Τ.Υ



ΣΟΦΙΑΝΟΥ ΓΕΩΡΓΙΑ

ΠΟΛΙΤΙΚΟΣ ΜΗΧΑΝΙΚΟΣ Π.Ε.





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1.2

36259/1757/ 103/2010 ( 1312 /2010),  
4834/25-1-2013

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(1) 3,0 m,

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1.19

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q

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1.23

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1.27

(1)

(2)

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(18%)

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(1)

\_\_\_\_\_, PVC \_\_\_\_\_

$D_N$

$D_N / D_M$

$D_N$ :

$D_M$ :

DM

(2)

\_\_\_\_\_FLEXCELL\_\_\_\_\_

$D_N$

(12 mm),

12 mm,

:

$D_N / 12$

$D_N$ :

mm.

(3)

\_\_\_\_\_HYDROFOIL PVC\_\_\_\_\_

$N$

(240 mm),

240 mm,

:

$N / 240$

:

mm



[\*]

**Öm³.km**

-	< 5 km	<b>0,28</b>
-	~ 5 km	<b>0,21</b>
.		
-	< 5 km	<b>0,20</b>
-	~ 5 km	<b>0,19</b>
.		
-	< 5 km	<b>0,25</b>
-	~ 5 km	<b>0,21</b>
.		
-	< 3 km	<b>0,22</b>
-	~ 3 km	<b>0,20</b>
(	,	<b>0,03</b>

o

[\*]

(m³),

m³

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02-01-02-00

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**2,09**

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, 02-02-01-00.

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- , 5,00 m  
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- , 5,00 m,

- Cut and Cover

- Cut and Cover

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(Proctor Modified EN 13286-2). 90% Proctor

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: 2,41



-18

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, C&C

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02-06-00-00 "

-18.2 :

( \_\_\_\_\_ 4

-1510)

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13,00

-20

( \_\_\_\_\_ -1530)

02-07-01-00 "

:

90% 95%

Proctor (Proctor modified

EN 13286-2)

90%  
Proctor

95%

Proctor,

" ( \_\_\_\_\_ ),

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(repairs)

:

- , Cut and Cover, (
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**1,05**

2,0 m

**B:**

-1 \_\_\_\_\_ &  
5,00 m  
( \_\_\_\_\_ -2151)

( \_\_\_\_\_ , \_\_\_\_\_ , \_\_\_\_\_ ), 5,0 m, \_\_\_\_\_ ( \_\_\_\_\_ , \_\_\_\_\_ )  
04-00-00 " \_\_\_\_\_ " \_\_\_\_\_ 02-

- \_\_\_\_\_ , \_\_\_\_\_
- \_\_\_\_\_ , \_\_\_\_\_ ( \_\_\_\_\_ )
- \_\_\_\_\_ , \_\_\_\_\_
- \_\_\_\_\_ , \_\_\_\_\_ ) ( \_\_\_\_\_ )
- \_\_\_\_\_ , \_\_\_\_\_
- \_\_\_\_\_ , \_\_\_\_\_ , \_\_\_\_\_
- \_\_\_\_\_ , \_\_\_\_\_ , \_\_\_\_\_
- \_\_\_\_\_ , \_\_\_\_\_
- \_\_\_\_\_ , \_\_\_\_\_
- \_\_\_\_\_ , \_\_\_\_\_ ( \_\_\_\_\_ )
- \_\_\_\_\_ , \_\_\_\_\_

100 m<sup>2</sup>, \_\_\_\_\_ 5,00 m









01-02-01-00 "

( . . . ) .

( B500A, B500C )

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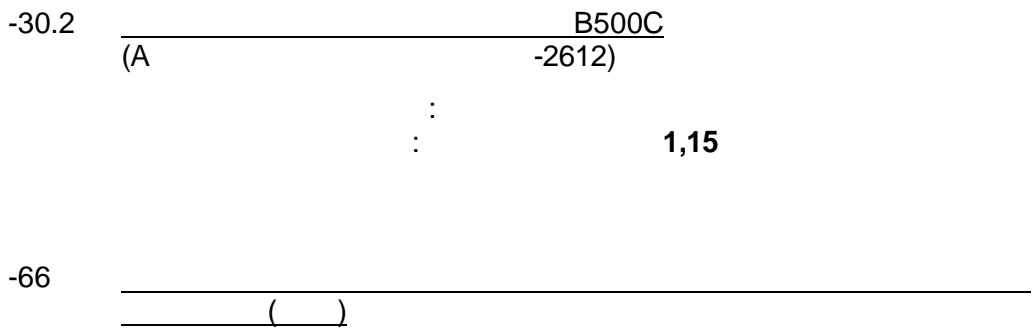
-2008,

3-1

(mm)						(mm <sup>2</sup> )
	B500C	B500	B500C	B500	B500C	
5,0		√		√		19,6
5,5		√		√		23,8
6,0	√	√	√	√	√	28,3
6,5		√		√		33,2
7,0		√		√		38,5
7,5		√		√		44,2
8,0	√	√	√	√	√	50,3
10,0	√		√		√	78,5
12,0	√		√		√	113
14,0	√		√		√	154
16,0	√		√		√	201
18,0	√					254
20,0	√					314
22,0	√					380
25,0	√					491
28,0	√					616
32,0	√					804
40,0	√					1257

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(spacers)  
( ISO 15835-2),  
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- 1200 mm
- h = 1,00 m

-66.1:  $\frac{1}{( \quad )}$  ( )

-2548)

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**438,00**

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-1 \_\_\_\_\_  
-1.1 \_\_\_\_\_  
( \_\_\_\_\_ -3121. )

05-03-03-00 "

0,10 m,

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OX

21,00

-2 \_\_\_\_\_  
-2.2 \_\_\_\_\_  
0,10 m ( \_\_\_\_\_ -155)  
( \_\_\_\_\_ -3211. )

0,10 m  
05-03-03-00 "

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OX

0.10 m

2,15

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-3

( \_\_\_\_\_ -4110)

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05-03-11-04 " 31,5 40,  
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**86,40**

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05-03-11-04 " 12,5 20,  
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05-03-11-04,

\_\_\_\_\_ : \_\_\_\_\_

-8.1 \_\_\_\_\_ 0,05 m

( \_\_\_\_\_ -4521 )

\_\_\_\_\_ :

\_\_\_\_\_ : **8,40**

**E:** \_\_\_\_\_ - \_\_\_\_\_

-1 \_\_\_\_\_ ( \_\_\_\_\_ )

1.

' ( ) \_\_\_\_\_ 1317, \_\_\_\_\_ -

\_\_\_\_\_ :

\_\_\_\_\_ , \_\_\_\_\_ , \_\_\_\_\_ ( . . . . ).

\_\_\_\_\_ 1317-2

\_\_\_\_\_ :

- : 2, 1, 2, 4b

- :
- W1: ≤ 0,60 m
- W2: ≤ 0,80 m
- W3: ≤ 1,00 m
- W4: ≤ 1,30 m
- W5: ≤ 1,70 m
- W6: ≤ 2,10 m
- W7: ≤ 2,50 m
- W8: ≤ 3,50 m

- : , , C

- : \_\_\_\_\_ , \_\_\_\_\_
- CE \_\_\_\_\_ 1317-5

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(installation manual)  
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q /

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EN ISO 1461.

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q ( , / )

, , 0,10 m.

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q ( , / ),

, 0,25 m,

0,75 m (

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• , , , 0,10 m.

( q ),  
( ),

4.

( ),

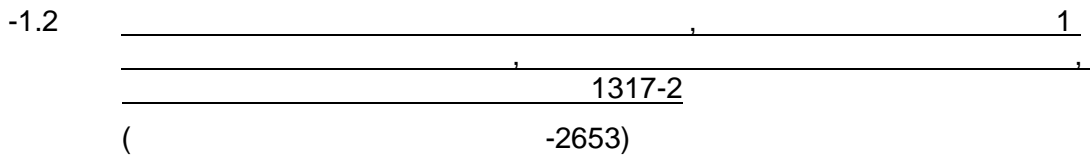


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q  
( , / .)  
0,10 m,

- 

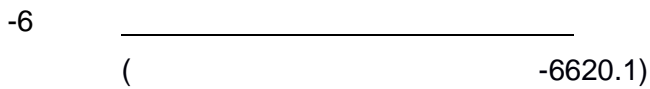
1 4,



-1.2.1 1,

W5

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: 50,00



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05-04-04-00 ㄷ ( )

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: **11,50**

-9 \_\_\_\_\_

12899-1, 05-04-06-00 ㄷ  
( ) ㄷ

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-9.1 \_\_\_\_\_ 0,90 m

( -6541)

:  
: **53,70**

-9.4

( -6541)

:  
: ( -1) 0,90 m  
: ( -2) 0,90 m  
: ( -3, -4) 0,60 m  
: ( -6) 0,65 m  
: 0,65 m

:  
: **53,70**

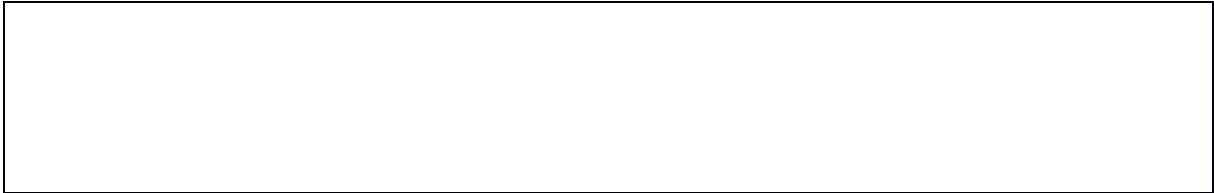
-10 \_\_\_\_\_

-10.1 \_\_\_\_\_ DN 40 mm (1 ½ ㄷ)

( -2653)

10255, S195T, L ( ), DN 40 mm  
( : thread size R = 1 ½ ㄷ d = 48,3 mm, 3,2 mm),  
2,50 m, 05-04-07-00 ㄷ  
ㄷ





12. -

**12.01** \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_  
\_\_\_\_\_ 1916.

\_\_\_\_\_ , \_\_\_\_\_ , \_\_\_\_\_ , 1916,  
\_\_\_\_\_ 40 MPa \_\_\_\_\_ CE,  
681-1.  
:  
[ ] \_\_\_\_\_ (DN) \_\_\_\_\_ mm  
[ ] \_\_\_\_\_ : \_\_\_\_\_ , \_\_\_\_\_ ,  
[ ] \_\_\_\_\_ : \_\_\_\_\_ - \_\_\_\_\_ (O-gee pipes), o " "  
(bell-sochet pipes)  
[ ] \_\_\_\_\_ : \_\_\_\_\_ ,  
\_\_\_\_\_ (pipe-jacking).  
[ ] \_\_\_\_\_ ( \_\_\_\_\_ , strength class), \_\_\_\_\_ (DN),  
kN/m, \_\_\_\_\_ 1/1000 \_\_\_\_\_ 1916  
\_\_\_\_\_ / \_\_\_\_\_ (bedding  
factor), \_\_\_\_\_ , \_\_\_\_\_ 1295-1,  
\_\_\_\_\_  
/ \_\_\_\_\_ , \_\_\_\_\_ ,  
( \_\_\_\_\_ , \_\_\_\_\_ ,  
\_\_\_\_\_ )  
\_\_\_\_\_ ( \_\_\_\_\_ / \_\_\_\_\_ ).  
\_\_\_\_\_ 120,  
( \_\_\_\_\_ - \_\_\_\_\_ )  
\_\_\_\_\_ ,  
206-1 \_\_\_\_\_ .  
681-1

