Consorzio di Bonifica
PIANURA DI FERRARA

# CONSORZIO DI BONIFICA PIANURA DI FERRARA

Sede legale e recapito postale:
44121 Ferrara - Via Borgo dei Leoni, 28 - C.F. 93076450381
web: www.bonificaferrara.it - e-mail: info@bonificaferrara.it
pec: posta.certificata@pec.bonificaferrara.it
aderente all'ANBI
Associazione Nazionale Bonifiche, Irrigazioni e Miglioramenti Fondiari

## PROGETTO ESPURGHI

## PROGETTO ESECUTIVO

**Provincia di Ferrara**

## Ricalibratura della rete di bonifica ai fini del recupero della capacità di invaso e di portata

## 2° STRALCIO

## ELABORATI GRAFICI CANALI

# FOSSA DI PORTOMAGGIORE

## SEZIONI TRASVERSALI DALLA 10F2 ALLA 19F

Data: **03.09.2024**

Elab.: **7.8.7**

**IL PROGETTISTA**
(Dott. Ing. Laura Montanari)

ORDINE INGEGNERI PROV. BOLOGNA
INGEGNERE
LAURA MONTANARI
LAUREA SPECIALISTICA
Sezione: A
N° 7792 / A
Settori civile, ambientale, industriale, dell'informazione

**IL RESPONSABILE UNICO DEL PROGETTO**
(Dott. Ing. Valeria Chierici)

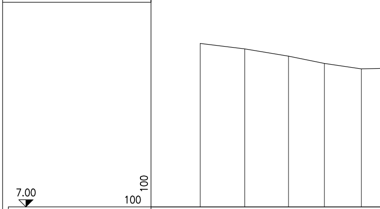
Valeria Chierici

| Rev. | Descrizione | Redatto | Data |
|---|---|---|---|
| 00 | Emissione | Mazzanti C. | 03.09.2024 |
| | | | |
| | | | |

**Codice Intervento**

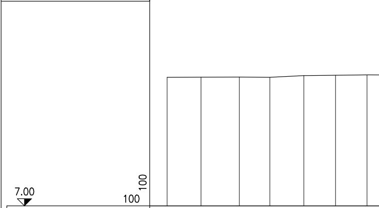
**OC168**

PROFILO PORTO
SEZIONE 10F2
PROGRESSIVA 5273



| | | | | | |
|---|---|---|---|---|---|
| QUOTE TERRENO | 12.71 | 12.52 | 12.26 | 12.01 | 11.82 |
| PROGRESSIVE TERRENO | −16.78 | −15.21 | −13.68 | −12.43 | −11.13 |
| QUOTE PROGETTO | | | | | |
| PROGRESSIVE PROGETTO | | | | | |

PROFILO PORTO
SEZIONE 11
PROGRESSIVA 5963



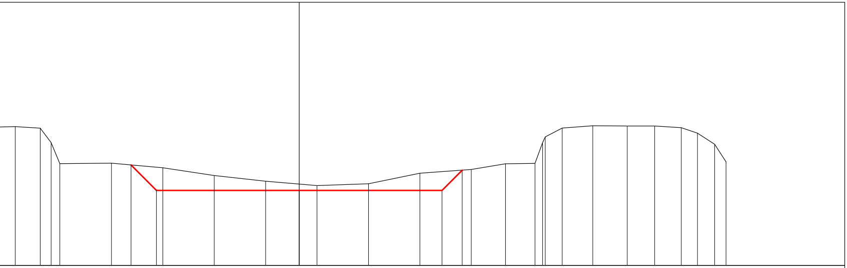
| | | | | | | | |
|---|---|---|---|---|---|---|---|
| QUOTE TERRENO | 11.49 | 11.50 | 11.50 | 11.49 | 11.55 | 11.57 | 11.58 |
| PROGRESSIVE TERRENO | −17.89 | −16.70 | −15.36 | −14.30 | −13.11 | −12.00 | −10.90 |
| QUOTE PROGETTO | | | | | | | |
| PROGRESSIVE PROGETTO | | | | | | | |

Esecuzione e restituzione grafica rilievo: CAVALLINI M.

PROFILO PORTO

SEZIONE 12

PROGRESSIVA 6565



7.00

100

100

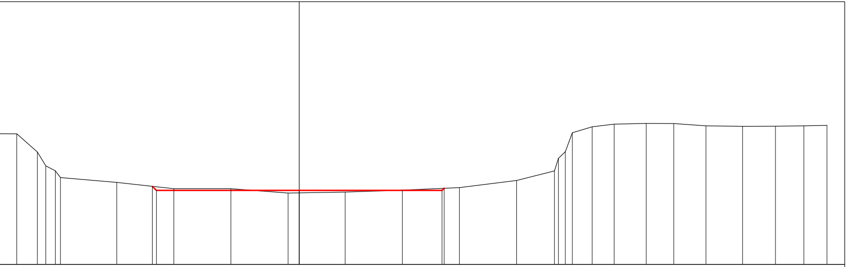
| PROGRESSIVE TERRENO | QUOTE TERRENO |
|---|---|
| −9.94 | 11.85 |
| −9.07 | 11.79 |
| −8.69 | 11.29 |
| −8.38 | 10.56 |
| −6.58 | 10.57 |
| −4.78 | 10.41 |
| −2.98 | 10.14 |
| −1.18 | 9.94 |
| 0.62 | 9.79 |
| 2.42 | 9.85 |
| 4.22 | 10.22 |
| 6.02 | 10.35 |
| 7.22 | 10.55 |
| 8.25 | 10.56 |
| 8.52 | 11.29 |
| 8.61 | 11.49 |
| 9.21 | 11.80 |
| 10.28 | 11.88 |
| 11.48 | 11.87 |
| 12.44 | 11.87 |
| 13.38 | 11.81 |
| 13.94 | 11.62 |
| 14.54 | 11.23 |
| 14.94 | 10.62 |

| PROGRESSIVE PROGETTO | QUOTE PROGETTO |
|---|---|
| −5.89 | 10.51 |
| −5.00 | 9.62 |
| 0.00 | 9.62 |
| 5.00 | 9.62 |
| 5.71 | 10.33 |

PROFILO PORTO

SEZIONE 13

PROGRESSIVA 7217



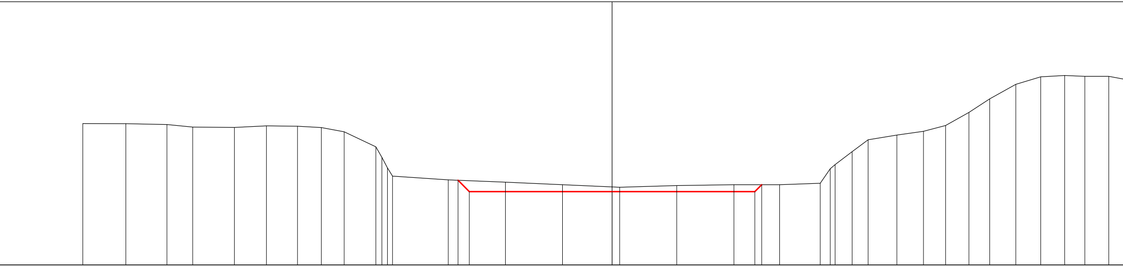
7.00

100

100

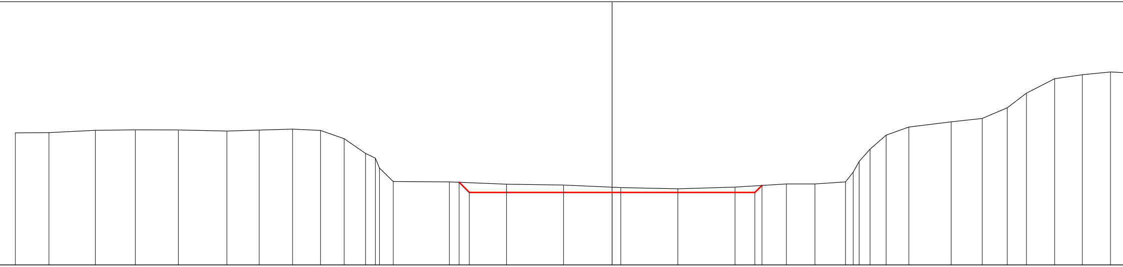
| PROGRESSIVE TERRENO | QUOTE TERRENO |
|---|---|
| −9.89 | 11.57 |
| −9.17 | 10.94 |
| −8.88 | 10.45 |
| −8.54 | 10.28 |
| −8.36 | 10.04 |
| −6.39 | 9.87 |
| −4.39 | 9.65 |
| −2.39 | 9.65 |
| −0.39 | 9.50 |
| 1.61 | 9.53 |
| 3.61 | 9.60 |
| 5.61 | 9.69 |
| 7.61 | 9.94 |
| 8.94 | 10.27 |
| 9.08 | 10.72 |
| 9.32 | 10.95 |
| 9.56 | 11.61 |
| 10.26 | 11.82 |
| 11.03 | 11.91 |
| 12.15 | 11.94 |
| 13.11 | 11.93 |
| 14.24 | 11.85 |
| 15.52 | 11.84 |
| 16.67 | 11.84 |
| 17.67 | 11.85 |
| 18.48 | 11.87 |

| PROGRESSIVE PROGETTO | QUOTE PROGETTO |
|---|---|
| −5.14 | 9.73 |
| −5.00 | 9.59 |
| 0.00 | 9.59 |
| 5.00 | 9.59 |
| 5.08 | 9.67 |



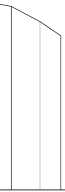
| | |
|---|---|
| 11.94 | −18.54 |
| 11.93 | −17.03 |
| 11.90 | −15.59 |
| 11.82 | −14.69 |
| 11.80 | −13.23 |
| 11.86 | −12.11 |
| 11.84 | −11.02 |
| 11.80 | −10.18 |
| 11.65 | −9.38 |
| 11.13 | −8.27 |
| 10.76 | −8.06 |
| 10.39 | −7.87 |
| 10.10 | −7.69 |
| 9.97 | −5.74 |
| 9.89 | −3.74 |
| 9.80 | −1.74 |
| 9.71 | 0.26 |
| 9.77 | 2.26 |
| 9.80 | 4.26 |
| 9.80 | 5.86 |
| 9.85 | 7.29 |
| 10.36 | 7.64 |
| 10.50 | 7.81 |
| 10.96 | 8.41 |
| 11.37 | 8.96 |
| 11.54 | 9.97 |
| 11.67 | 10.90 |
| 11.87 | 11.68 |
| 12.33 | 12.49 |
| 12.80 | 13.22 |
| 13.31 | 14.14 |
| 13.57 | 15.01 |
| 13.62 | 15.85 |
| 13.59 | 16.55 |
| 13.59 | 17.39 |

| | |
|---|---|
| 9.96 | −5.40 |
| 9.56 | −5.00 |
| 9.56 | 0.00 |
| 9.56 | 5.00 |
| 9.80 | 5.24 |



| | |
|---|---|
| 11.62 | −20.90 |
| 11.62 | −19.72 |
| 11.71 | −18.09 |
| 11.72 | −16.70 |
| 11.72 | −15.19 |
| 11.68 | −13.49 |
| 11.71 | −12.36 |
| 11.75 | −11.19 |
| 11.70 | −10.21 |
| 11.41 | −9.38 |
| 10.90 | −8.63 |
| 10.73 | −8.29 |
| 10.38 | −8.15 |
| 9.92 | −7.66 |
| 9.90 | −5.70 |
| 9.82 | −3.70 |
| 9.79 | −1.70 |
| 9.70 | 0.30 |
| 9.66 | 2.30 |
| 9.72 | 4.30 |
| 9.83 | 6.10 |
| 9.83 | 7.10 |
| 9.90 | 8.17 |
| 10.24 | 8.44 |
| 10.61 | 8.65 |
| 11.04 | 9.03 |
| 11.54 | 9.59 |
| 11.82 | 10.39 |
| 12.00 | 11.87 |
| 12.12 | 12.96 |
| 12.49 | 13.84 |
| 13.00 | 14.51 |
| 13.51 | 15.49 |
| 13.65 | 16.46 |
| 13.74 | 17.45 |

| | |
|---|---|
| 9.89 | −5.36 |
| 9.53 | −5.00 |
| 9.53 | 0.00 |
| 9.53 | 5.00 |
| 9.78 | 5.25 |

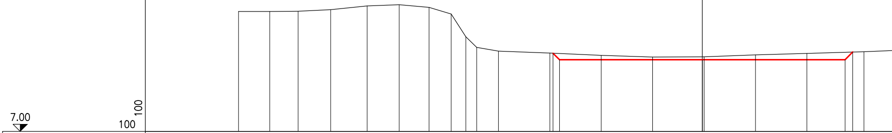


| | | | |
|---|---|---|---|
| | 13.42 | 12.89 | 12.40 |
| | 18.28 | 19.28 | 20.00 |

PROFILO PORTO

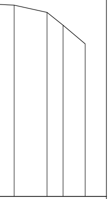
SEZIONE 14

PROGRESSIVA 7636



| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| QUOTE TERRENO | 11.20 | 11.20 | 11.21 | 11.26 | 11.39 | 11.44 | 11.34 | 11.11 | 10.32 | 9.94 | 9.81 | 9.74 | 9.66 | 9.60 | 9.61 | 9.68 | 9.73 | 9.79 |
| PROGRESSIVE TERRENO | −16.24 | −15.15 | −14.15 | −13.01 | −11.73 | −10.61 | −9.56 | −8.79 | −8.28 | −7.90 | −7.14 | −5.34 | −3.54 | −1.74 | 0.06 | 1.86 | 3.66 | 5.66 |

| | | | |
|---|---|---|---|
| QUOTE PROGETTO | 9.74<br>9.51 | 9.51 | 9.51<br>9.78 |
| PROGRESSIVE PROGETTO | −5.23<br>−5.00 | 0.00 | 5.00<br>5.27 |

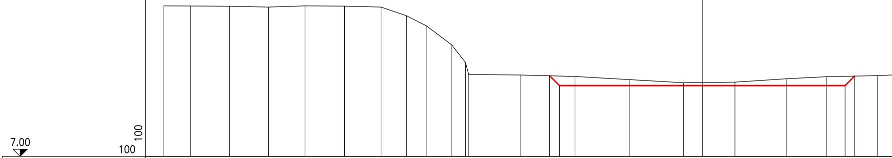


| | | | | |
|---|---|---|---|---|
| | 13.70 | 13.44 | 13.00 | 12.35 |
| | 18.38 | 19.53 | 20.09 | 20.86 |

PROFILO PORTO

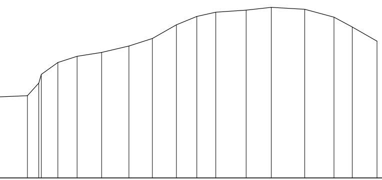
SEZIONE 15

PROGRESSIVA 8156



| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| QUOTE TERRENO | 12.27 | 12.26 | 12.26 | 12.23 | 12.27 | 12.26 | 12.23 | 11.92 | 11.58 | 10.90 | 10.29 | 9.87 | 9.85 | 9.80 | 9.69 | 9.58 | 9.60 | 9.72 | 9.79 | 9.83 |
| PROGRESSIVE TERRENO | −18.85 | −17.92 | −16.56 | −15.19 | −13.91 | −12.53 | −11.25 | −10.35 | −9.67 | −8.77 | −8.29 | −8.18 | −6.35 | −4.45 | −2.55 | −0.65 | 1.15 | 2.95 | 4.35 | 6.15 |

| | | | |
|---|---|---|---|
| QUOTE PROGETTO | 9.82<br>9.48 | 9.48 | 9.48<br>9.81 |
| PROGRESSIVE PROGETTO | −5.34<br>−5.00 | 0.00 | 5.00<br>5.33 |

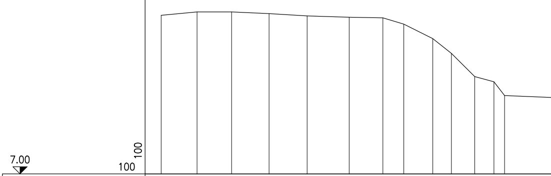


| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 9.87 | 10.31 | 10.61 | 11.03 | 11.25 | 11.38 | 11.60 | 11.87 | 12.34 | 12.64 | 12.79 | 12.86 | 12.96 | 12.89 | 12.61 | 12.27 | 11.77 |
| 7.61 | 8.00 | 8.09 | 8.67 | 9.35 | 10.20 | 11.16 | 11.98 | 12.83 | 13.54 | 14.20 | 15.27 | 16.15 | 17.32 | 18.35 | 18.98 | 19.85 |

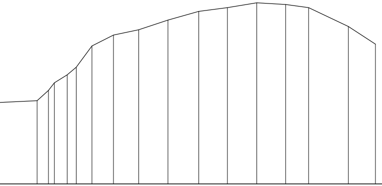
PROFILO PORTO

SEZIONE 16F1

PROGRESSIVA 8642



| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| QUOTE TERRENO | 12.55 | 12.67 | 12.67 | 12.61 | 12.53 | 12.49 | 12.46 | 12.24 | 11.74 | 11.22 | 10.41 | 10.22 | 9.74 |
| PROGRESSIVE TERRENO | −20.43 | −19.18 | −17.97 | −16.66 | −15.32 | −13.85 | −12.67 | −11.94 | −10.92 | −10.27 | −9.45 | −8.78 | −8.41 |
| QUOTE PROGETTO | | | | | | | | | | | | | |
| PROGRESSIVE PROGETTO | | | | | | | | | | | | | |

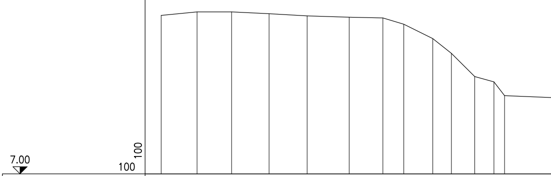


| | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 9.91 | 10.27 | 10.54 | 10.82 | 11.08 | 11.83 | 12.21 | 12.40 | 12.73 | 13.04 | 13.17 | 13.34 | 13.28 | 13.17 | 12.51 | 11.89 |
| 7.94 | 8.34 | 8.55 | 9.00 | 9.31 | 9.86 | 10.62 | 11.50 | 12.53 | 13.61 | 14.61 | 15.64 | 16.65 | 17.45 | 18.85 | 19.80 |

PROFILO PORTO

SEZIONE 16F2

PROGRESSIVA 8648

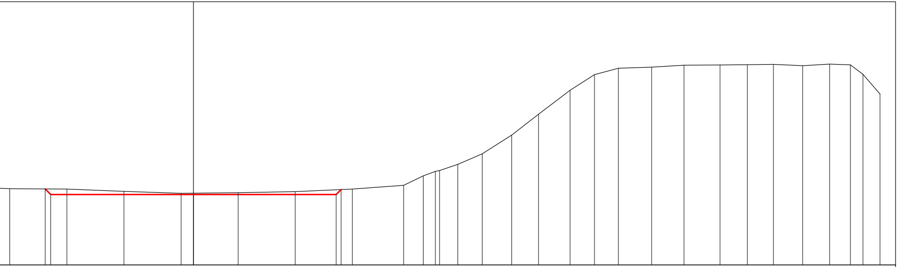


| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| QUOTE TERRENO | 12.55 | 12.67 | 12.67 | 12.61 | 12.53 | 12.49 | 12.46 | 12.24 | 11.74 | 11.22 | 10.41 | 10.22 | 9.74 |
| PROGRESSIVE TERRENO | −20.43 | −19.18 | −17.97 | −16.66 | −15.32 | −13.85 | −12.67 | −11.94 | −10.92 | −10.27 | −9.45 | −8.78 | −8.41 |
| QUOTE PROGETTO | | | | | | | | | | | | | |
| PROGRESSIVE PROGETTO | | | | | | | | | | | | | |

PROFILO PORTO

SEZIONE 16

PROGRESSIVA 8715



| PROGRESSIVE TERRENO | QUOTE TERRENO |
|---|---|
| −6.43 | 9.66 |
| −4.43 | 9.65 |
| −2.43 | 9.57 |
| −0.43 | 9.50 |
| 1.57 | 9.52 |
| 3.57 | 9.56 |
| 5.57 | 9.65 |
| 7.37 | 9.78 |
| 8.05 | 10.11 |
| 8.47 | 10.27 |
| 8.62 | 10.30 |
| 9.26 | 10.51 |
| 10.12 | 10.88 |
| 11.15 | 11.54 |
| 12.09 | 12.27 |
| 13.20 | 13.10 |
| 14.05 | 13.65 |
| 14.89 | 13.87 |
| 16.05 | 13.91 |
| 17.19 | 13.98 |
| 18.45 | 13.99 |
| 19.40 | 14.00 |
| 20.32 | 14.01 |
| 21.34 | 13.96 |
| 22.29 | 14.02 |
| 23.02 | 13.99 |
| 23.46 | 13.66 |
| 24.05 | 12.97 |

| PROGRESSIVE PROGETTO | QUOTE PROGETTO |
|---|---|
| −5.19 | 9.65 |
| −5.00 | 9.46 |
| 0.00 | 9.46 |
| 5.00 | 9.46 |
| 5.17 | 9.63 |

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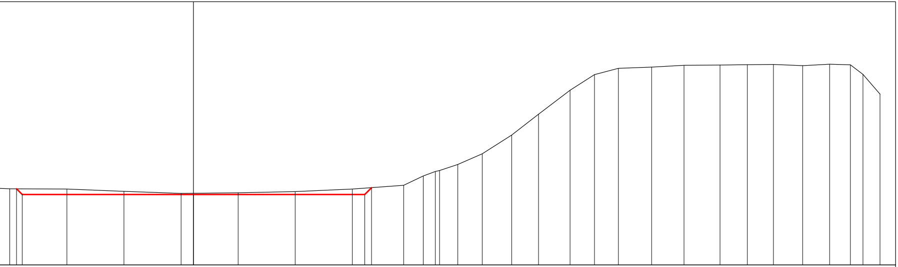
PROFILO PORTO

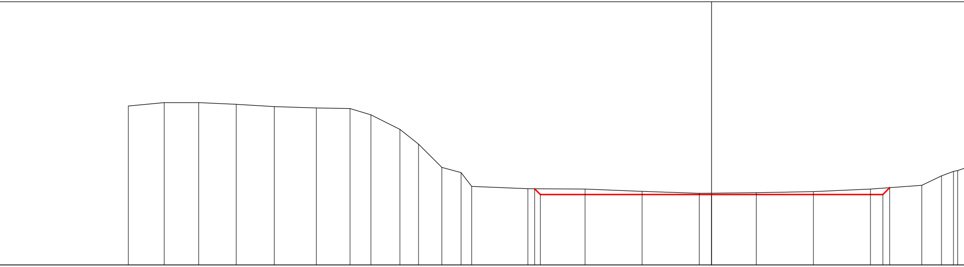
SEZIONE 17

PROGRESSIVA 9138



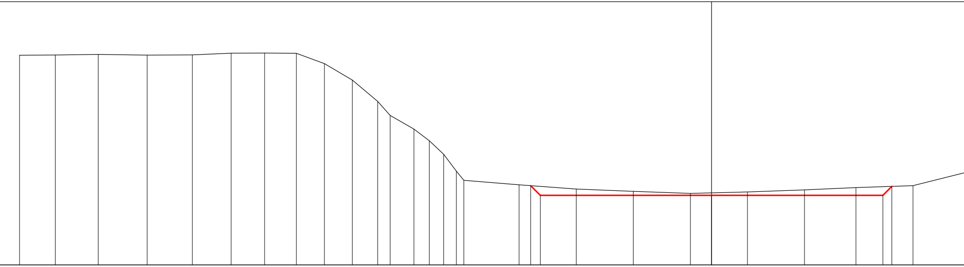
| PROGRESSIVE TERRENO | QUOTE TERRENO |
|---|---|
| −6.43 | 9.66 |
| −4.43 | 9.65 |
| −2.43 | 9.57 |
| −0.43 | 9.50 |
| 1.57 | 9.52 |
| 3.57 | 9.56 |
| 5.57 | 9.65 |
| 7.37 | 9.78 |
| 8.05 | 10.11 |
| 8.47 | 10.27 |
| 8.62 | 10.30 |
| 9.26 | 10.51 |
| 10.12 | 10.88 |
| 11.15 | 11.54 |
| 12.09 | 12.27 |
| 13.20 | 13.10 |
| 14.05 | 13.65 |
| 14.89 | 13.87 |
| 16.05 | 13.91 |
| 17.19 | 13.98 |
| 18.45 | 13.99 |
| 19.40 | 14.00 |
| 20.32 | 14.01 |
| 21.34 | 13.96 |
| 22.29 | 14.02 |
| 23.02 | 13.99 |
| 23.46 | 13.66 |
| 24.05 | 12.97 |

| PROGRESSIVE PROGETTO | QUOTE PROGETTO |
|---|---|
| −6.20 | 9.66 |
| −6.00 | 9.46 |
| 0.00 | 9.46 |
| 6.00 | 9.46 |
| 6.24 | 9.70 |



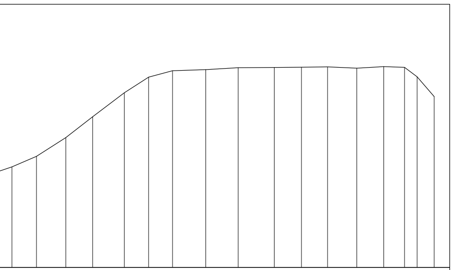
| | |
|---|---|
| 12.55 | −20.43 |
| 12.67 | −19.18 |
| 12.67 | −17.97 |
| 12.61 | −16.66 |
| 12.53 | −15.32 |
| 12.49 | −13.85 |
| 12.46 | −12.67 |
| 12.24 | −11.94 |
| 11.74 | −10.92 |
| 11.22 | −10.27 |
| 10.41 | −9.45 |
| 10.22 | −8.78 |
| 9.74 | −8.41 |
| 9.66 | −6.43 |
| 9.65 | −4.43 |
| 9.57 | −2.43 |
| 9.50 | −0.43 |
| 9.52 | 1.57 |
| 9.56 | 3.57 |
| 9.65 | 5.57 |
| 9.78 | 7.37 |
| 10.11 | 8.05 |
| 10.27 | 8.47 |
| 10.30 | 8.62 |

| | |
|---|---|
| 9.66 | −6.20 |
| 9.46 | −6.00 |
| 9.46 | 0.00 |
| 9.46 | 6.00 |
| 9.70 | 6.24 |



| | |
|---|---|
| 14.33 | −24.24 |
| 14.34 | −22.99 |
| 14.36 | −21.49 |
| 14.33 | −19.78 |
| 14.34 | −18.19 |
| 14.40 | −16.83 |
| 14.40 | −15.66 |
| 14.39 | −14.55 |
| 14.04 | −13.57 |
| 13.46 | −12.59 |
| 12.71 | −11.70 |
| 12.22 | −11.26 |
| 11.75 | −10.43 |
| 11.34 | −9.89 |
| 10.87 | −9.39 |
| 10.28 | −8.94 |
| 9.96 | −8.68 |
| 9.80 | −6.74 |
| 9.65 | −4.74 |
| 9.57 | −2.74 |
| 9.50 | −0.74 |
| 9.55 | 1.26 |
| 9.62 | 3.26 |
| 9.70 | 5.06 |
| 9.77 | 7.06 |

| | |
|---|---|
| 9.77 | −6.34 |
| 9.43 | −6.00 |
| 9.43 | 0.00 |
| 9.43 | 6.00 |
| 9.74 | 6.31 |

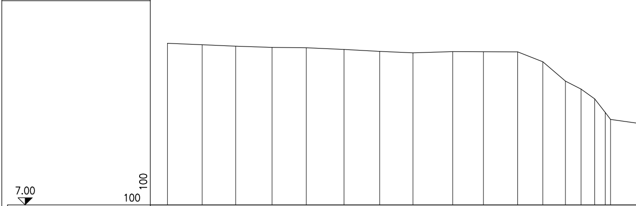


| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 10.51 | 10.88 | 11.54 | 12.27 | 13.10 | 13.65 | 13.87 | 13.91 | 13.98 | 13.99 | 14.00 | 14.01 | 13.96 | 14.02 | 13.99 | 13.66 | 12.97 |
| | 9.26 | 10.12 | 11.15 | 12.09 | 13.20 | 14.05 | 14.89 | 16.05 | 17.19 | 18.45 | 19.40 | 20.32 | 21.34 | 22.29 | 23.02 | 23.46 | 24.05 |
| | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | |

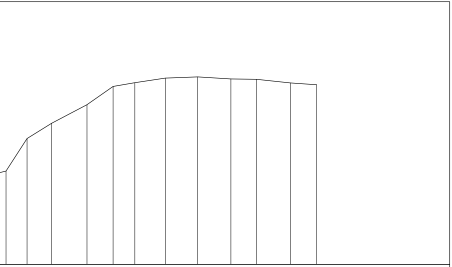
PROFILO PORTO

SEZIONE 18

PROGRESSIVA 10185



| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| QUOTE TERRENO | 12.66 | 12.61 | 12.55 | 12.51 | 12.50 | 12.44 | 12.38 | 12.32 | 12.36 | 12.36 | 12.36 | 12.01 | 11.33 | 11.05 | 10.71 | 10.24 | 9.99 |
| PROGRESSIVE TERRENO | −23.90 | −22.68 | −21.51 | −20.24 | −19.04 | −17.72 | −16.47 | −15.31 | −13.91 | −12.84 | −11.64 | −10.76 | −9.97 | −9.42 | −8.94 | −8.57 | −8.39 |
| QUOTE PROGETTO | | | | | | | | | | | | | | | | | |
| PROGRESSIVE PROGETTO | | | | | | | | | | | | | | | | | |



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|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 10.27 | 11.41 | 11.94 | 12.59 | 13.23 | 13.37 | 13.52 | 13.56 | 13.50 | 13.48 | 13.35 | 13.29 |
| | 9.06 | 9.79 | 10.65 | 11.89 | 12.81 | 13.57 | 14.63 | 15.77 | 16.93 | 17.83 | 19.02 | 19.94 |
| | | | | | | | | | | | | |
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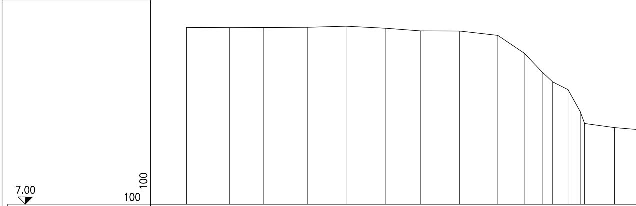
PROFILO PORTO

SEZIONE 19

PROGRESSIVA 10786



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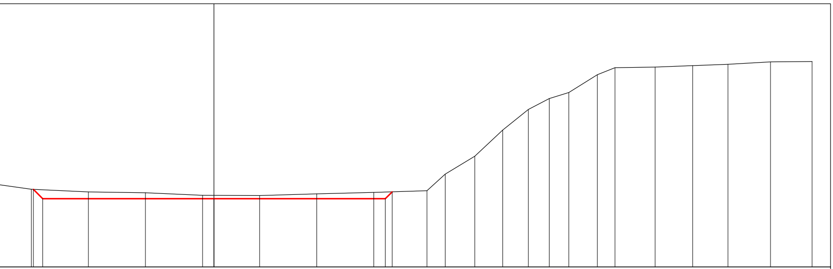
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| QUOTE TERRENO | 13.19 | 13.18 | 13.18 | 13.19 | 13.23 | 13.16 | 13.07 | 13.06 | 12.91 | 12.29 | 11.63 | 11.28 | 11.01 | 10.24 | 9.83 | 9.68 |
| PROGRESSIVE TERRENO | −23.24 | −21.73 | −20.53 | −19.00 | −17.65 | −16.25 | −15.03 | −13.67 | −12.33 | −11.40 | −10.78 | −10.41 | −9.87 | −9.44 | −9.29 | −8.24 |
| QUOTE PROGETTO | | | | | | | | | | | | | | | | |
| PROGRESSIVE PROGETTO | | | | | | | | | | | | | | | | |

PROFILO PORTO
SEZIONE 19F
PROGRESSIVA 11530

7.00
100
100



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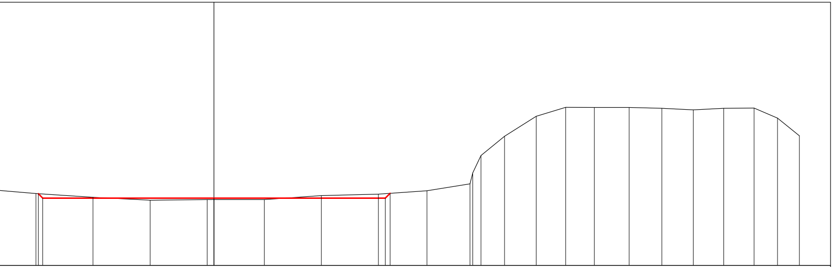
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| QUOTE TERRENO | 9.71 | | 9.62 | 9.59 | 9.50 | | 9.49 | 9.55 | 9.60 | | 9.66 | 10.24 | 10.87 | 11.78 | 12.50 | 12.88 | 13.09 | 13.72 | 13.96 | 13.98 | 14.03 | 14.08 | 14.17 | 14.18 |
| PROGRESSIVE TERRENO | −6.40 | | −4.40 | −2.40 | −0.40 | | 1.60 | 3.60 | 5.60 | | 7.46 | 8.10 | 9.14 | 10.12 | 11.01 | 11.75 | 12.43 | 13.43 | 14.05 | 15.46 | 16.77 | 18.01 | 19.50 | 20.95 |
| QUOTE PROGETTO | | 9.71<br>9.38 | | | | 9.38 | | | | 9.38<br>9.62 | | | | | | | | | | | | | | |
| PROGRESSIVE PROGETTO | | −6.33<br>−6.00 | | | | 0.00 | | | | 6.00<br>6.24 | | | | | | | | | | | | | | |



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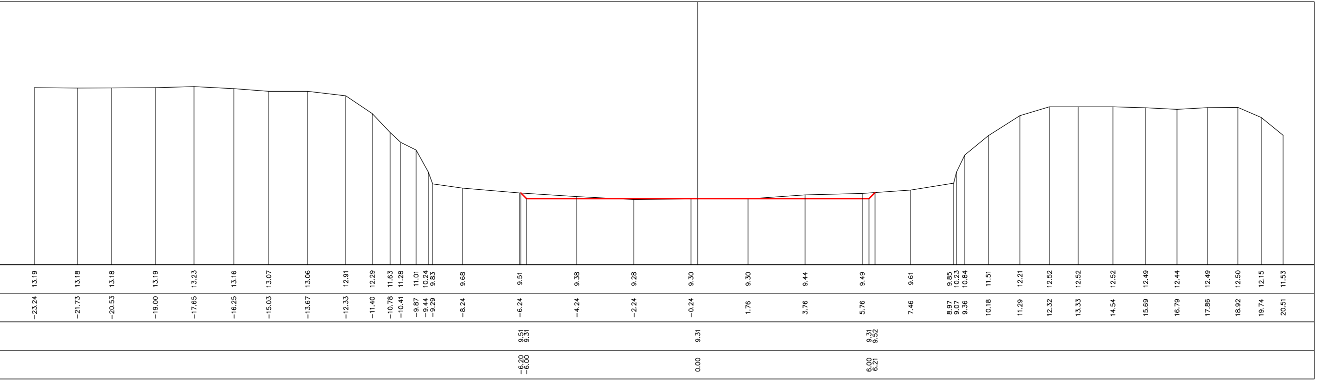
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| QUOTE TERRENO | 9.51 | | 9.38 | 9.28 | 9.30 | | 9.30 | 9.44 | 9.49 | | 9.61 | 9.85 | 10.23 | 10.84 | 11.51 | 12.21 | 12.52 | 12.52 | 12.52 | 12.49 | 12.44 | 12.49 | 12.50 | 12.15 | 11.53 |
| PROGRESSIVE TERRENO | −6.24 | | −4.24 | −2.24 | −0.24 | | 1.76 | 3.76 | 5.76 | | 7.46 | 8.97 | 9.07 | 9.36 | 10.18 | 11.29 | 12.32 | 13.33 | 14.54 | 15.69 | 16.79 | 17.86 | 18.92 | 19.74 | 20.51 |
| QUOTE PROGETTO | | 9.50<br>9.35 | | | | 9.35 | | | | 9.35<br>9.52 | | | | | | | | | | | | | | | |
| PROGRESSIVE PROGETTO | | −6.15<br>−6.00 | | | | 0.00 | | | | 6.00<br>6.17 | | | | | | | | | | | | | | | |



7.8.X - OC168.PE0 - FPortomaggiore - Profilo e Sezioni 1=0.1