



PROVINCIA DI SAVONA
DIFESA DEL SUOLO E TUTELA AMBIENTALE

VERIFICHE IDRAULICHE

Bacino: QUILIANO

RIO VIARZO

PROFILI DI RIGURGITO

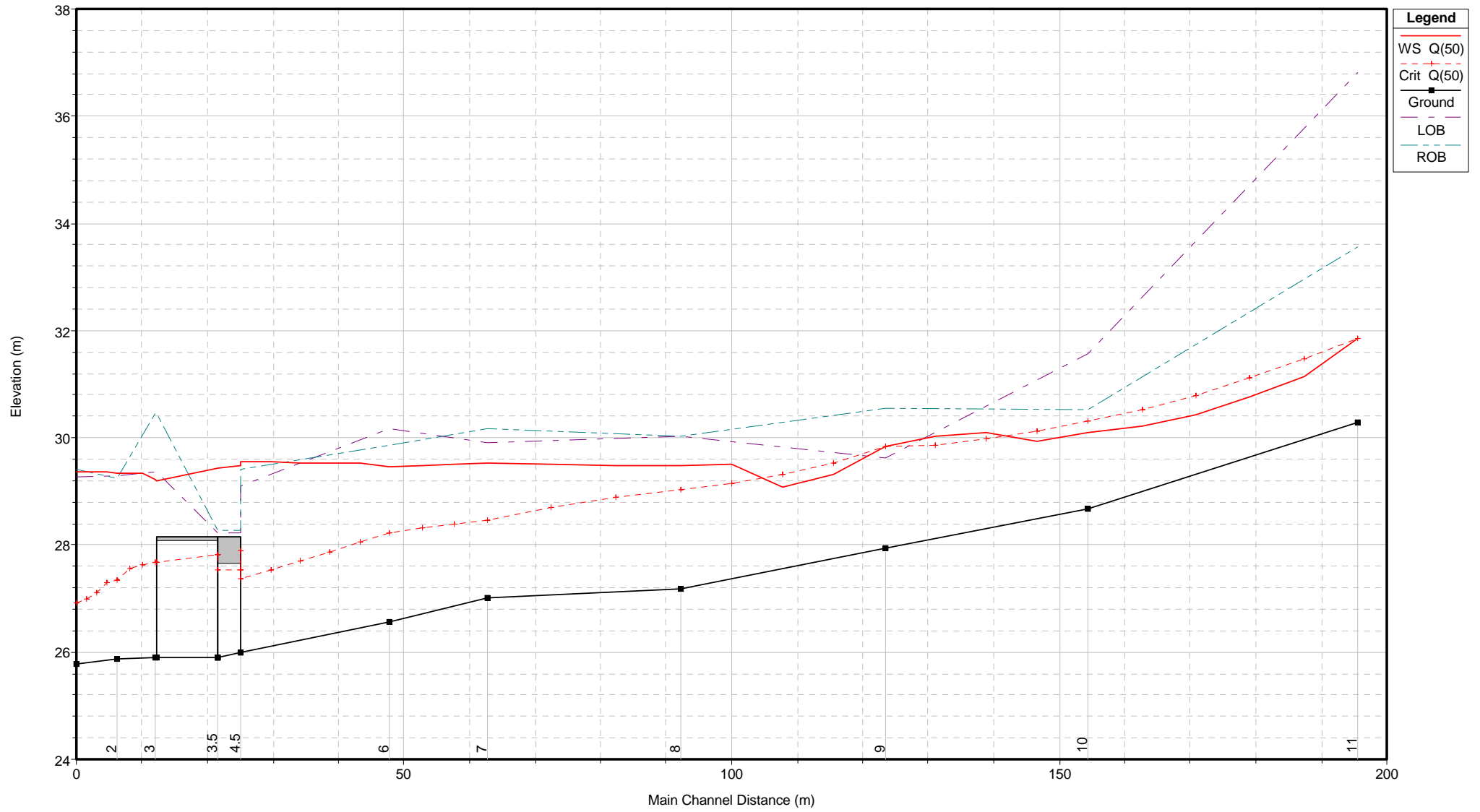
PER LE PORTATE

T=50, 200, 500 ANNI

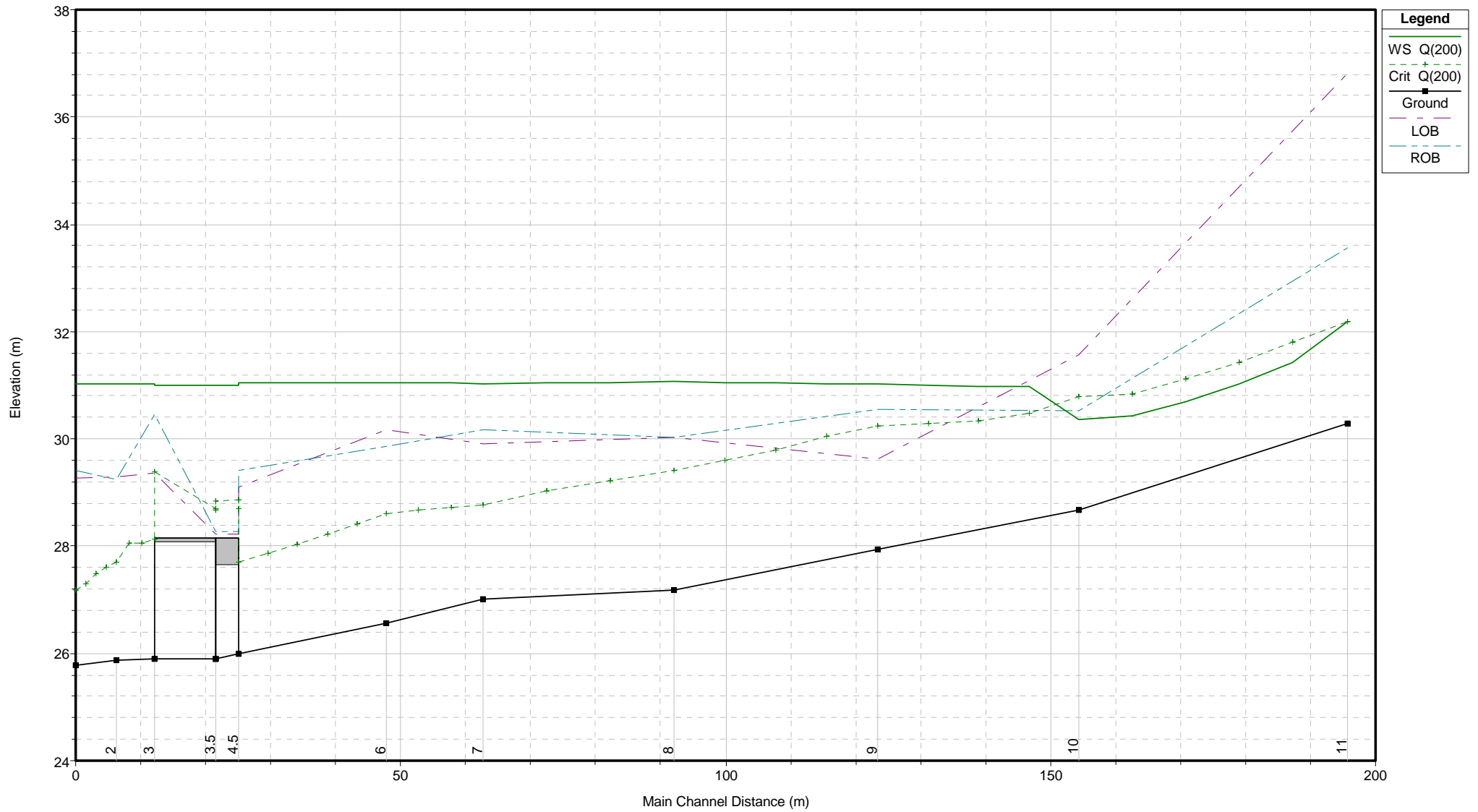
RIO VIARZO

Dalla sez. 1 alla sez. 11

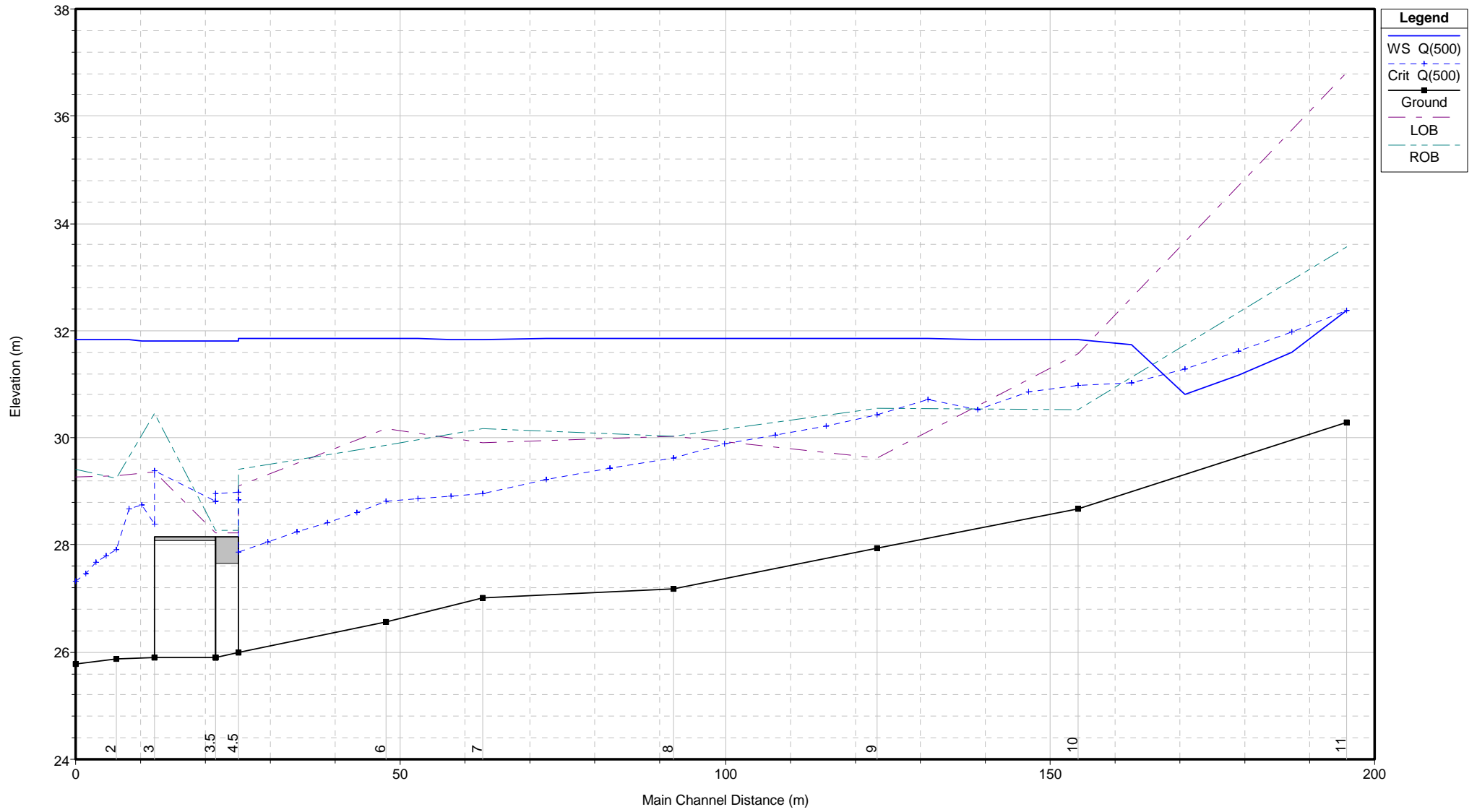
Rio Viarzo – Profilo longitudinale di moto permanente per T=50 anni



Rio Viarzo – Profilo longitudinale di moto permanente per T=200 anni



Rio Viarzo – Profilo longitudinale di moto permanente per T=500 anni



GEOMETRIA DELLE SEZIONI

E LIVELLI IDRICI

PER LE PORTATE

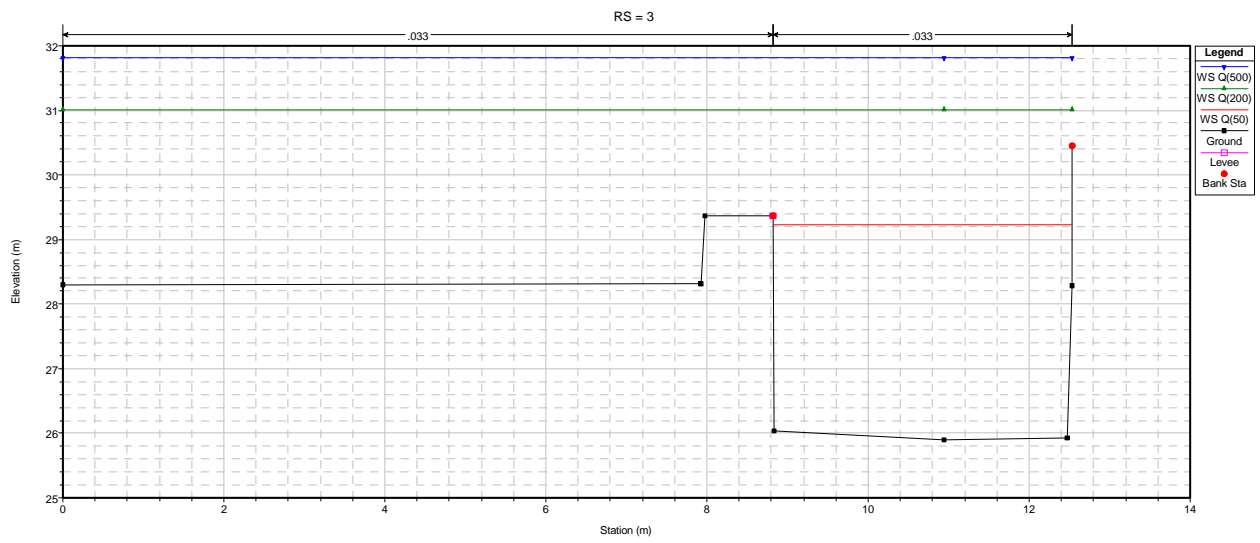
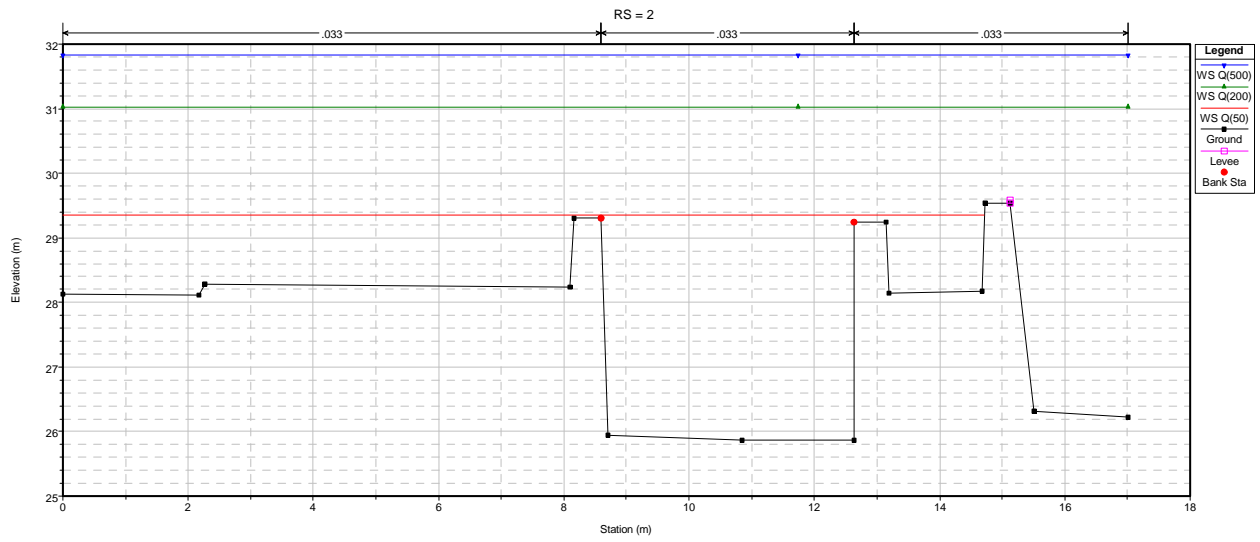
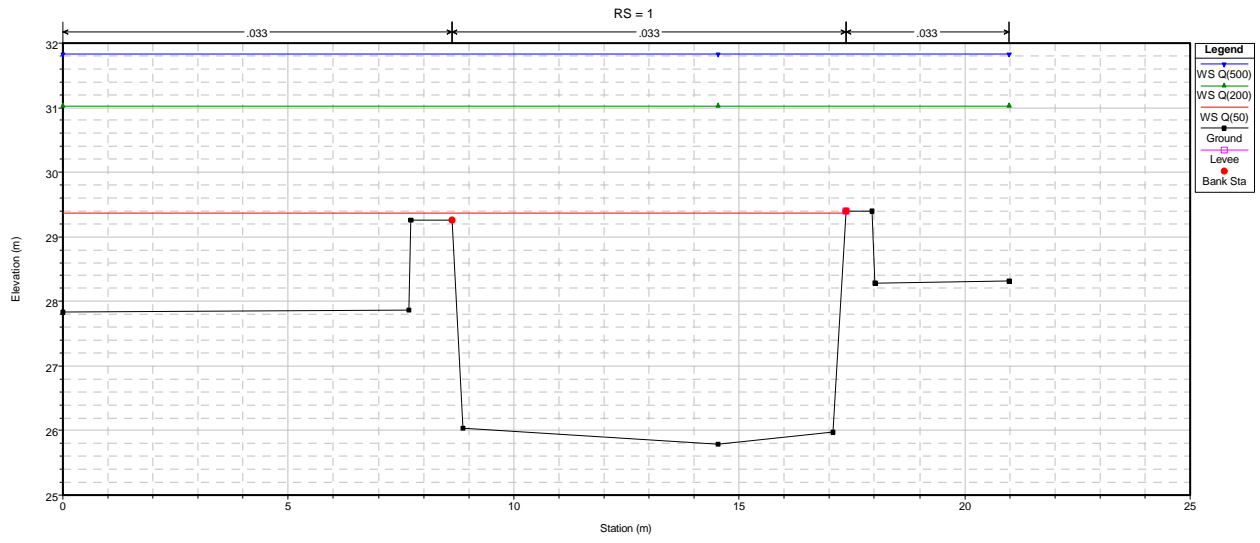
T=50, 200, 500 ANNI

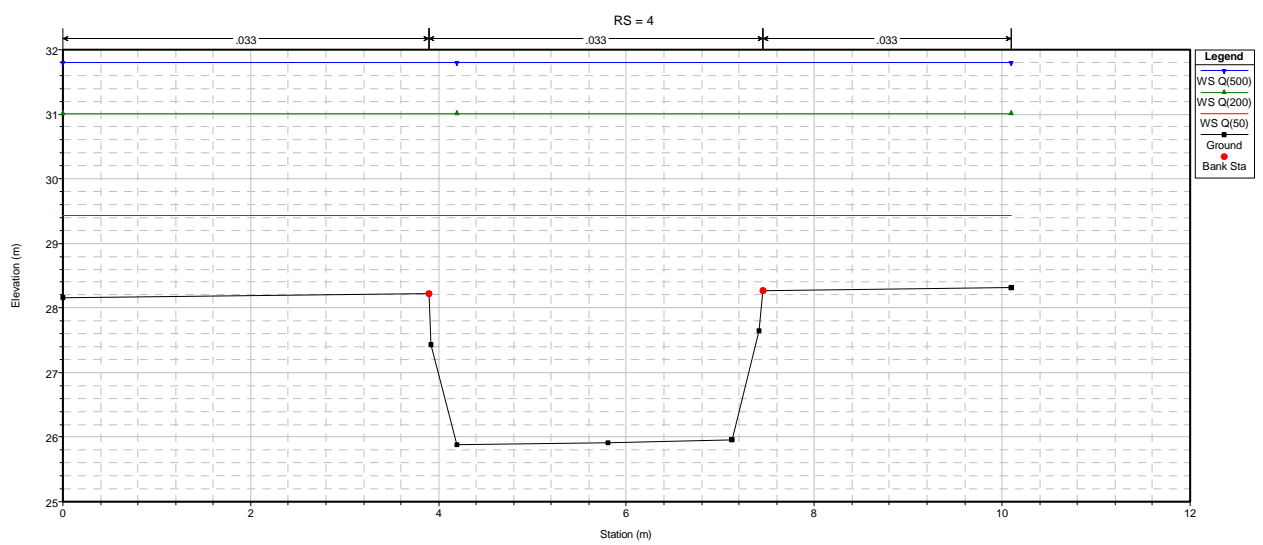
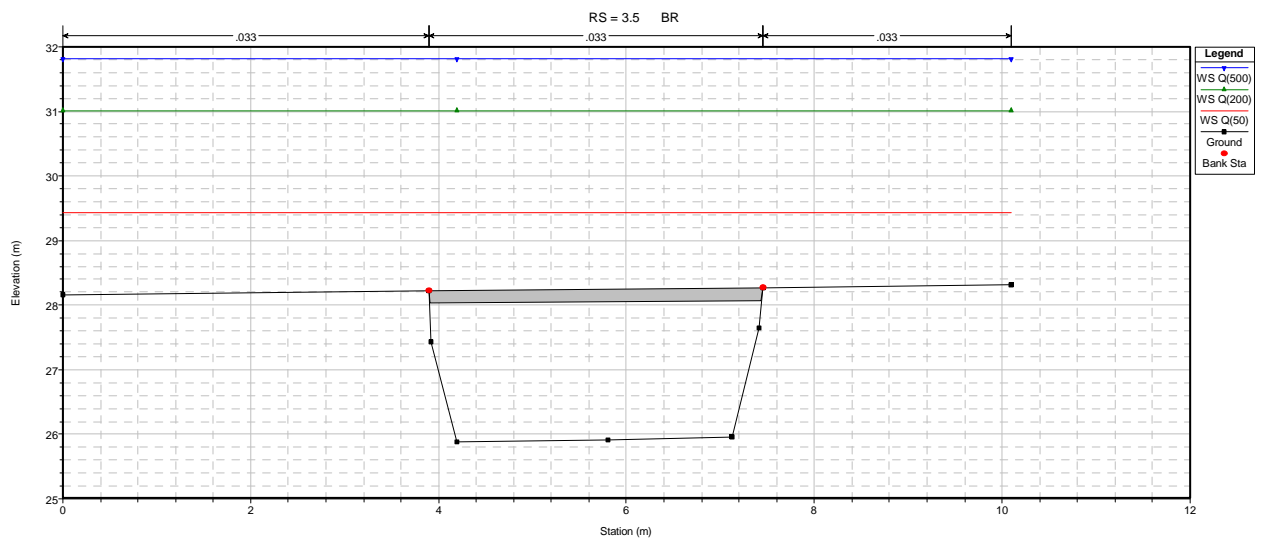
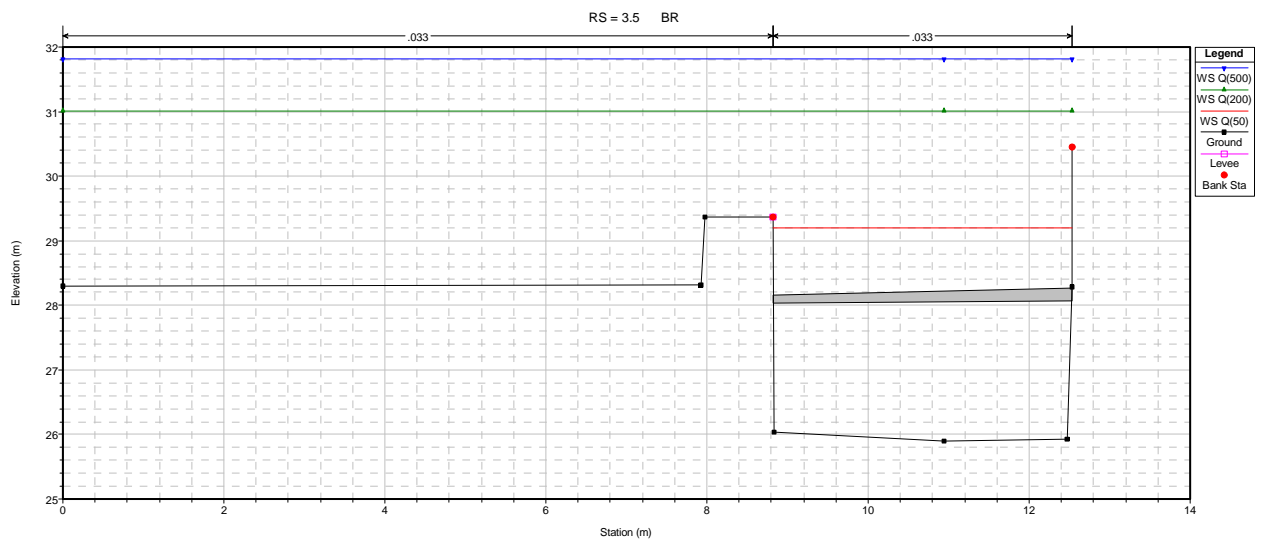
RIO VIARZO

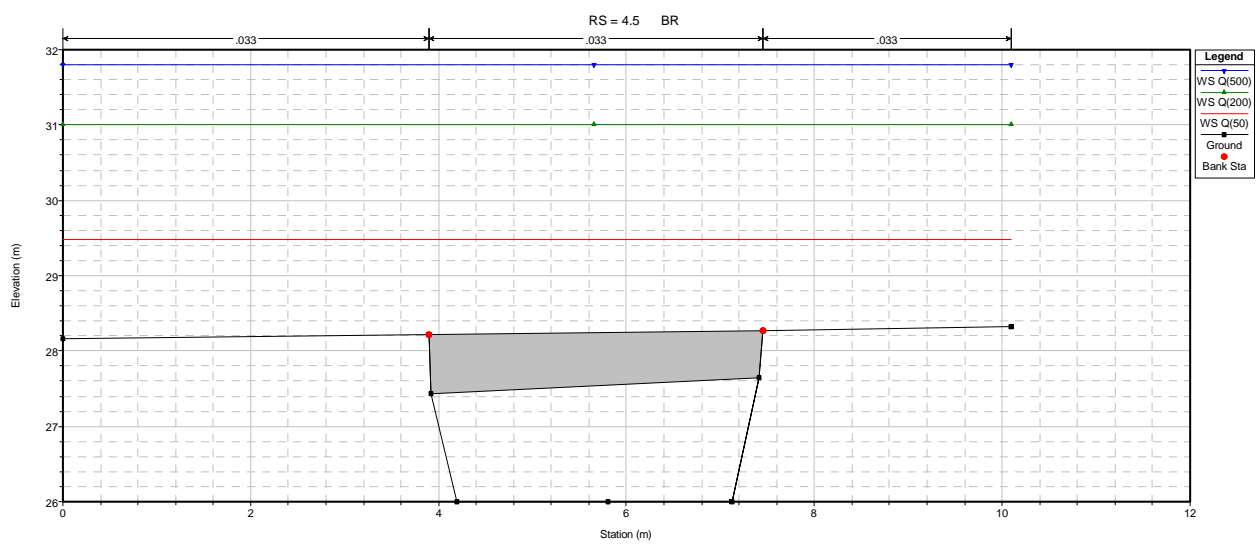
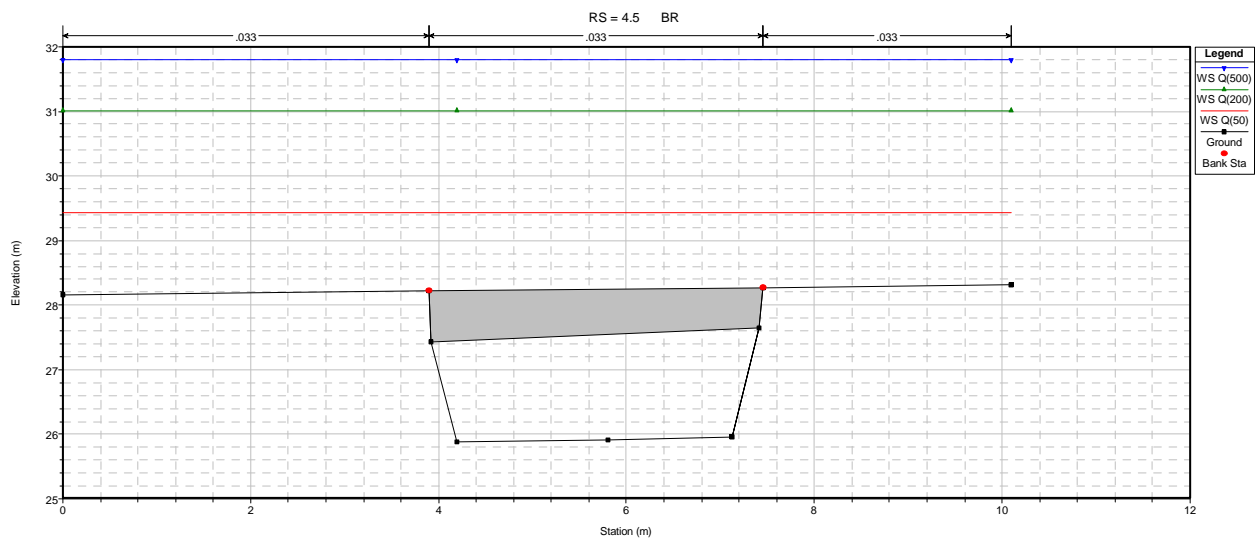
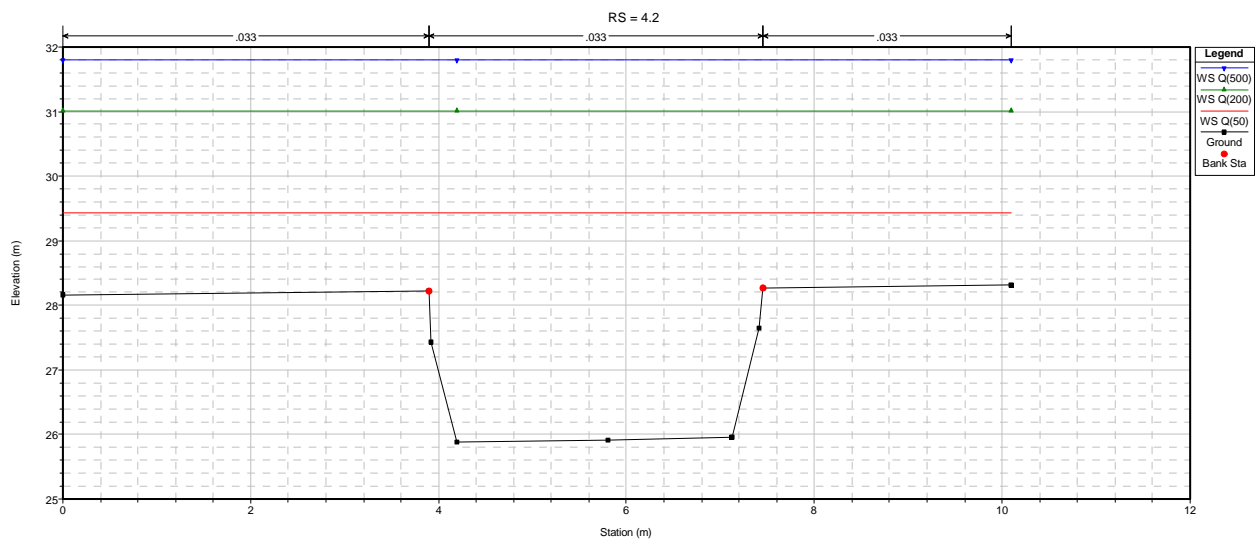
Dalla sez. 1 alla sez. 11

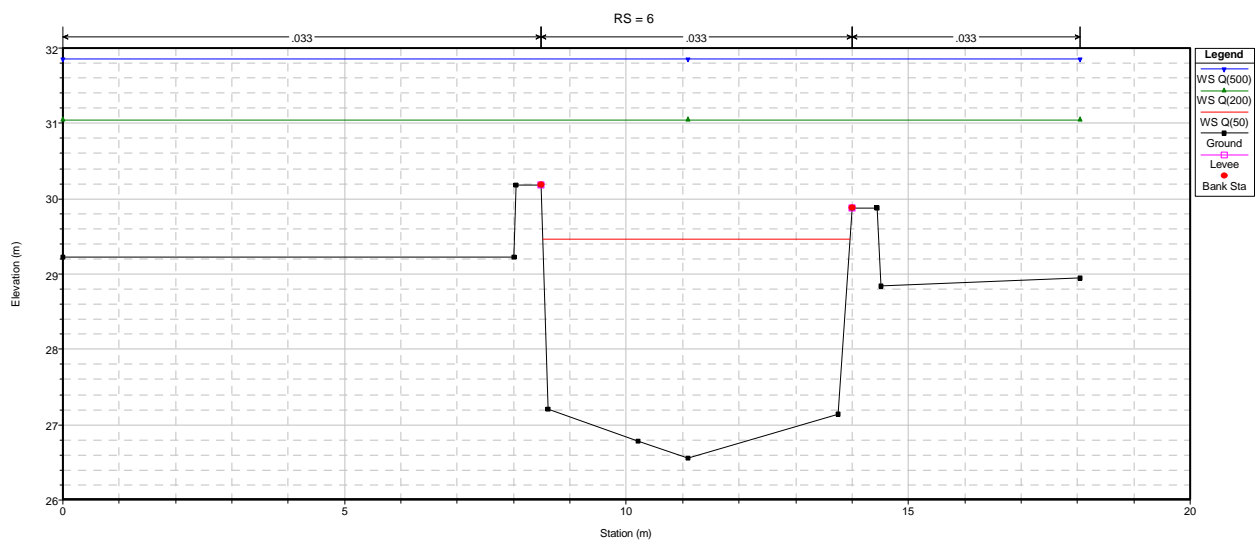
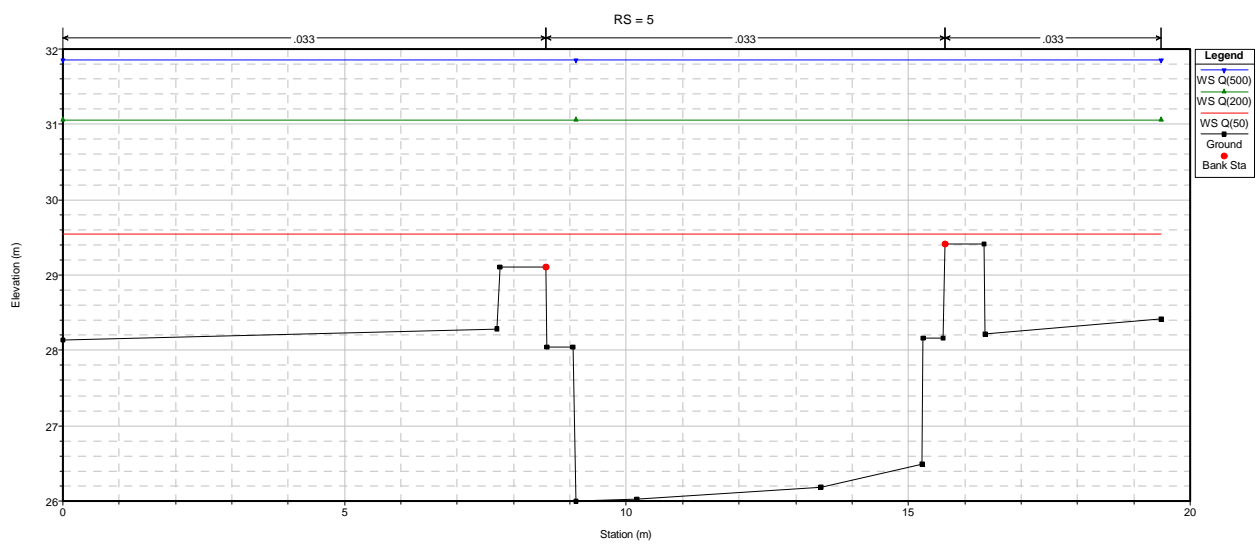
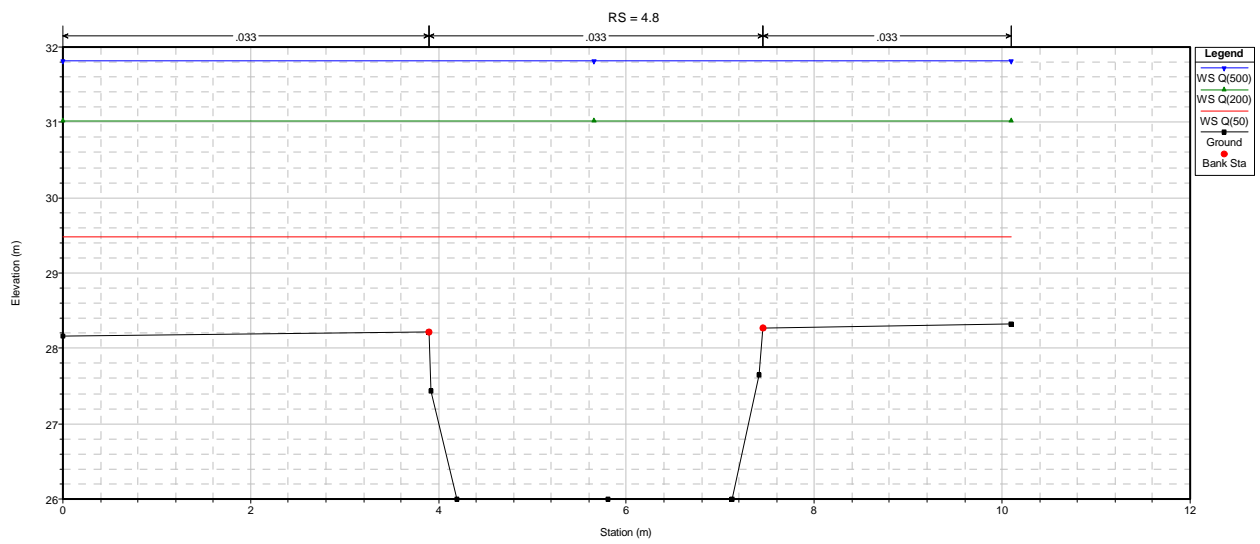
RIO VIARZO

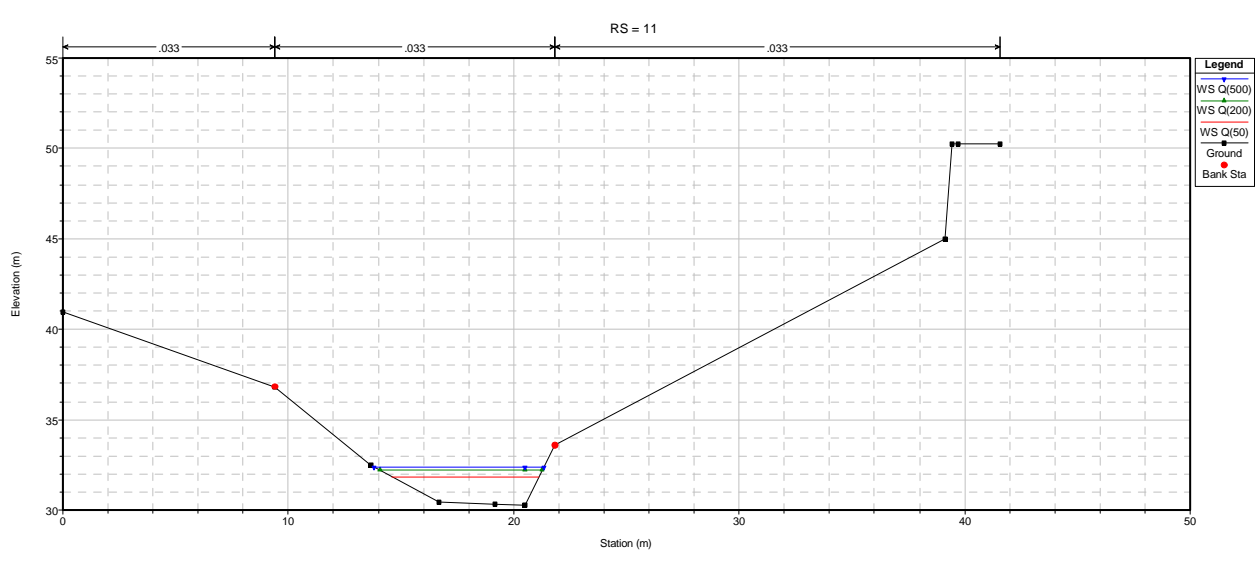
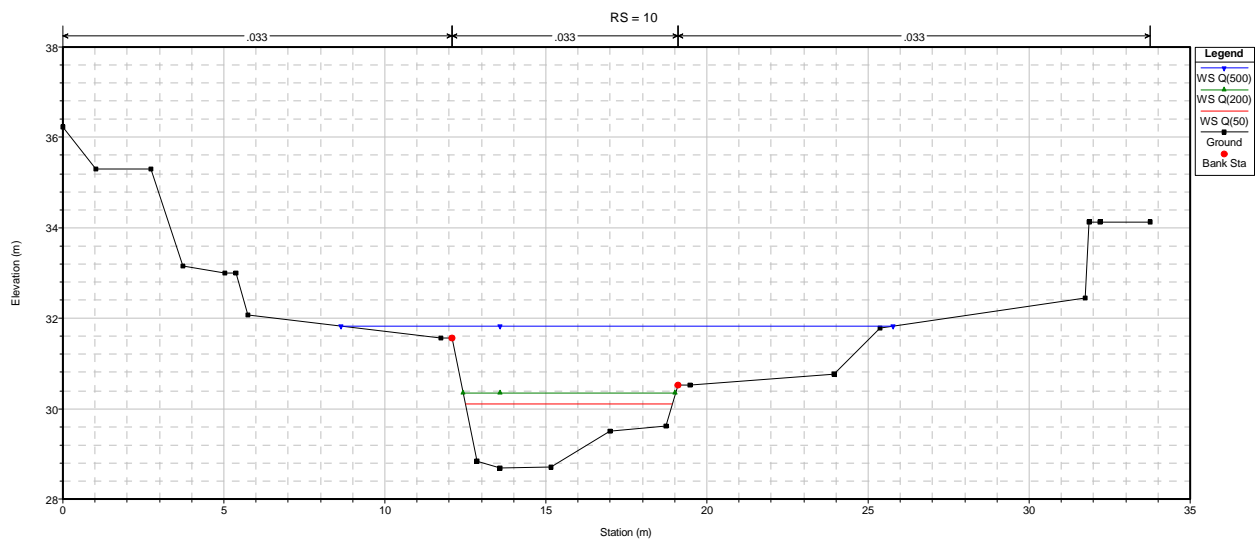
Sezioni trasversali











**TABELLE DELLE GRANDEZZE
IDRAULICHE SIGNIFICATIVE**

PER LE PORTATE

T=50, 200, 500 ANNI

RIO VIARZO

Dalla sez. 1 alla sez. 11

| Rio Viarzo T=50 anni | | | | | | | | | | |
|----------------------|-----------------------|-----------------|---------------------|-------------------|-----------------|------------------------|-------------|----------------|-------------------|-----------|
| Sezioni | Portata totale (m³/s) | Fondo alveo (m) | Argine sinistro (m) | Argine destro (m) | Pelo libero (m) | Profondità critica (m) | Energia (m) | Velocità (m/s) | Area bagnata (m²) | N° Froude |
| 11 | 26 | 30.29 | 36.82 | 33.57 | 31.85 | 31.85 | 32.43 | 3.39 | 7.67 | 1 |
| 10 | 26 | 28.68 | 31.56 | 30.53 | 30.1 | 30.32 | 30.99 | 4.17 | 6.23 | 1.35 |
| 9 | 26 | 27.93 | 29.63 | 30.56 | 29.84 | 29.84 | 30.45 | 3.48 | 7.62 | 0.94 |
| 8 | 26 | 27.19 | 30.03 | 30.02 | 29.47 | 29.02 | 29.87 | 2.8 | 9.3 | 0.66 |
| 7 | 26 | 27.01 | 29.91 | 30.17 | 29.52 | 28.46 | 29.68 | 1.76 | 14.73 | 0.38 |
| 6 | 26 | 26.56 | 30.18 | 29.87 | 29.46 | 28.23 | 29.64 | 1.9 | 13.72 | 0.38 |
| 5 | 26 | 26 | 29.11 | 29.41 | 29.55 | 27.37 | 29.57 | 0.82 | 36.88 | 0.15 |
| 4.8 | 26 | 26 | 28.22 | 28.27 | 29.47 | 27.9 | 29.57 | 1.49 | 19.9 | 0.26 |
| 4.5 | Bridge | | | | | | | | | |
| 4.2 | 26 | 25.89 | 28.22 | 28.27 | 29.43 | 27.83 | 29.53 | 1.51 | 19.72 | 0.26 |
| 4 | 26 | 25.89 | 28.22 | 28.27 | 29.43 | 27.83 | 29.53 | 1.51 | 19.72 | 0.26 |
| 3.5 | Bridge | | | | | | | | | |
| 3 | 26 | 25.9 | 29.37 | 30.45 | 29.22 | 27.67 | 29.46 | 2.15 | 12.1 | 0.38 |
| 2 | 26 | 25.87 | 29.3 | 29.25 | 29.35 | 27.34 | 29.39 | 1.04 | 29.95 | 0.18 |
| 1 | 26 | 25.79 | 29.26 | 29.4 | 29.36 | 26.91 | 29.38 | 0.71 | 40.88 | 0.12 |

| Rio Viarzo T=200 anni | | | | | | | | | | |
|-----------------------|-----------------------|-----------------|---------------------|-------------------|-----------------|------------------------|--------------|----------------|-------------------|-----------|
| Sezioni | Portata totale (m³/s) | Fondo alveo (m) | Argine sinistro (m) | Argine destro (m) | Pelo libero (m) | Profondità critica (m) | Energia (m²) | Velocità (m/s) | Area bagnata (m²) | N° Froude |
| 11 | 37 | 30.29 | 36.82 | 33.57 | 32.19 | 32.19 | 32.89 | 3.7 | 10 | 1 |
| 10 | 37 | 28.68 | 31.56 | 30.53 | 30.36 | 30.78 | 31.48 | 4.7 | 7.87 | 1.37 |
| 9 | 37 | 27.93 | 29.63 | 30.56 | 31.03 | 30.25 | 31.2 | 2.01 | 21.91 | 0.4 |
| 8 | 37 | 27.19 | 30.03 | 30.02 | 31.06 | 29.4 | 31.13 | 1.26 | 34.72 | 0.22 |
| 7 | 37 | 27.01 | 29.91 | 30.17 | 31.03 | 28.78 | 31.1 | 1.25 | 33.2 | 0.21 |
| 6 | 37 | 26.56 | 30.18 | 29.87 | 31.05 | 28.6 | 31.09 | 0.94 | 45.75 | 0.15 |
| 5 | 37 | 26 | 29.11 | 29.41 | 31.06 | 27.7 | 31.08 | 0.63 | 66.34 | 0.09 |
| 4.8 | 37 | 26 | 28.22 | 28.27 | 31.01 | 28.7 | 31.07 | 1.19 | 35.43 | 0.17 |
| 4.5 | Bridge | | | | | | | | | |
| 4.2 | 37 | 25.89 | 28.22 | 28.27 | 31.01 | 28.66 | 31.07 | 1.18 | 35.64 | 0.17 |
| 4 | 37 | 25.89 | 28.22 | 28.27 | 31.01 | 28.66 | 31.07 | 1.18 | 35.64 | 0.17 |
| 3.5 | Bridge | | | | | | | | | |
| 3 | 37 | 25.9 | 29.37 | 30.45 | 31.01 | 28.13 | 31.05 | 0.83 | 41.72 | 0.12 |
| 2 | 37 | 25.87 | 29.3 | 29.25 | 31.02 | 27.7 | 31.05 | 0.7 | 58.38 | 0.1 |
| 1 | 37 | 25.79 | 29.26 | 29.4 | 31.03 | 27.18 | 31.04 | 0.54 | 79.07 | 0.08 |

| Rio Viarzo T=500 anni | | | | | | | | | | |
|-----------------------|-----------------------|-----------------|---------------------|-------------------|-----------------|------------------------|--------------|----------------|-------------------|-----------|
| Sezioni | Portata totale (m³/s) | Fondo alveo (m) | Argine sinistro (m) | Argine destro (m) | Pelo libero (m) | Profondità critica (m) | Energia (m²) | Velocità (m/s) | Area bagnata (m²) | N° Froude |
| 11 | 44 | 30.29 | 36.82 | 33.57 | 32.38 | 32.38 | 33.14 | 3.86 | 11.41 | 1 |
| 10 | 44 | 28.68 | 31.56 | 30.53 | 31.82 | 30.97 | 32 | 1.98 | 24.98 | 0.39 |
| 9 | 44 | 27.93 | 29.63 | 30.56 | 31.85 | 30.42 | 31.93 | 1.43 | 36.33 | 0.25 |
| 8 | 44 | 27.19 | 30.03 | 30.02 | 31.86 | 29.62 | 31.9 | 1.04 | 49.17 | 0.16 |
| 7 | 44 | 27.01 | 29.91 | 30.17 | 31.83 | 28.96 | 31.89 | 1.16 | 43.4 | 0.18 |
| 6 | 44 | 26.56 | 30.18 | 29.87 | 31.85 | 28.81 | 31.88 | 0.83 | 60.15 | 0.12 |
| 5 | 44 | 26 | 29.11 | 29.41 | 31.85 | 27.88 | 31.87 | 0.61 | 81.83 | 0.08 |
| 4.8 | 44 | 26 | 28.22 | 28.27 | 31.81 | 28.84 | 31.87 | 1.17 | 43.48 | 0.16 |
| 4.5 | Bridge | | | | | | | | | |
| 4.2 | 44 | 25.89 | 28.22 | 28.27 | 31.81 | 28.82 | 31.86 | 1.16 | 43.71 | 0.16 |
| 4 | 44 | 25.89 | 28.22 | 28.27 | 31.81 | 28.82 | 31.86 | 1.16 | 43.71 | 0.16 |
| 3.5 | Bridge | | | | | | | | | |
| 3 | 44 | 25.9 | 29.37 | 30.45 | 31.81 | 28.39 | 31.85 | 0.76 | 51.76 | 0.1 |
| 2 | 44 | 25.87 | 29.3 | 29.25 | 31.82 | 27.91 | 31.84 | 0.66 | 71.99 | 0.09 |
| 1 | 44 | 25.79 | 29.26 | 29.4 | 31.83 | 27.33 | 31.84 | 0.53 | 95.86 | 0.07 |