



COMUNE DI
SAN GIULIANO TERME

**STUDIO IDROLOGICO IDRAULICO A SUPPORTO DI UNA
VARIANTE URBANISTICA NELLA UTOE N.31 CARRAIA
DEL PIANO OPERATIVO DI SAN GIULIANO TERME**

CODICE:

A03

ELABORATO:

Profili longitudinali

SCALA

-



Orisha s.r.l. ramo di azienda West Systems
Sede operativa Via Livorno, 8/37
- 50142 Firenze - FI

Sistema qualità certificato da:



Dasa-Rägister

UNI EN ISO 9001:2015
IQ-0524-08
UNI ISO 45001:2018
IS-0225-02

PROGETTISTA:

Ing. David Settesoldi

COLLABORATORI TECNICI:

Ing. Giulio Sommani
Ing. Filippo Cioni
Geom. Daniele Natali
Geom. Francesco Matteini

COMMITTENTE:

**COMUNE DI SAN GIULIANO
TERME**
Via Giovanni Battista Niccolini
56017 San Giuliano Terme (PI)
Tel. 0508 19111

05					
04					
03					
02					
01					
00	EMISSIONE	16/04/2025	Ing. Filippo Cioni	Ing. Giulio Sommani	Ing. David Settesoldi
NUM.	DESCRIZIONE	DATA	REDATTO	VERIFICATO	APPROVATO

1 PREMESSA

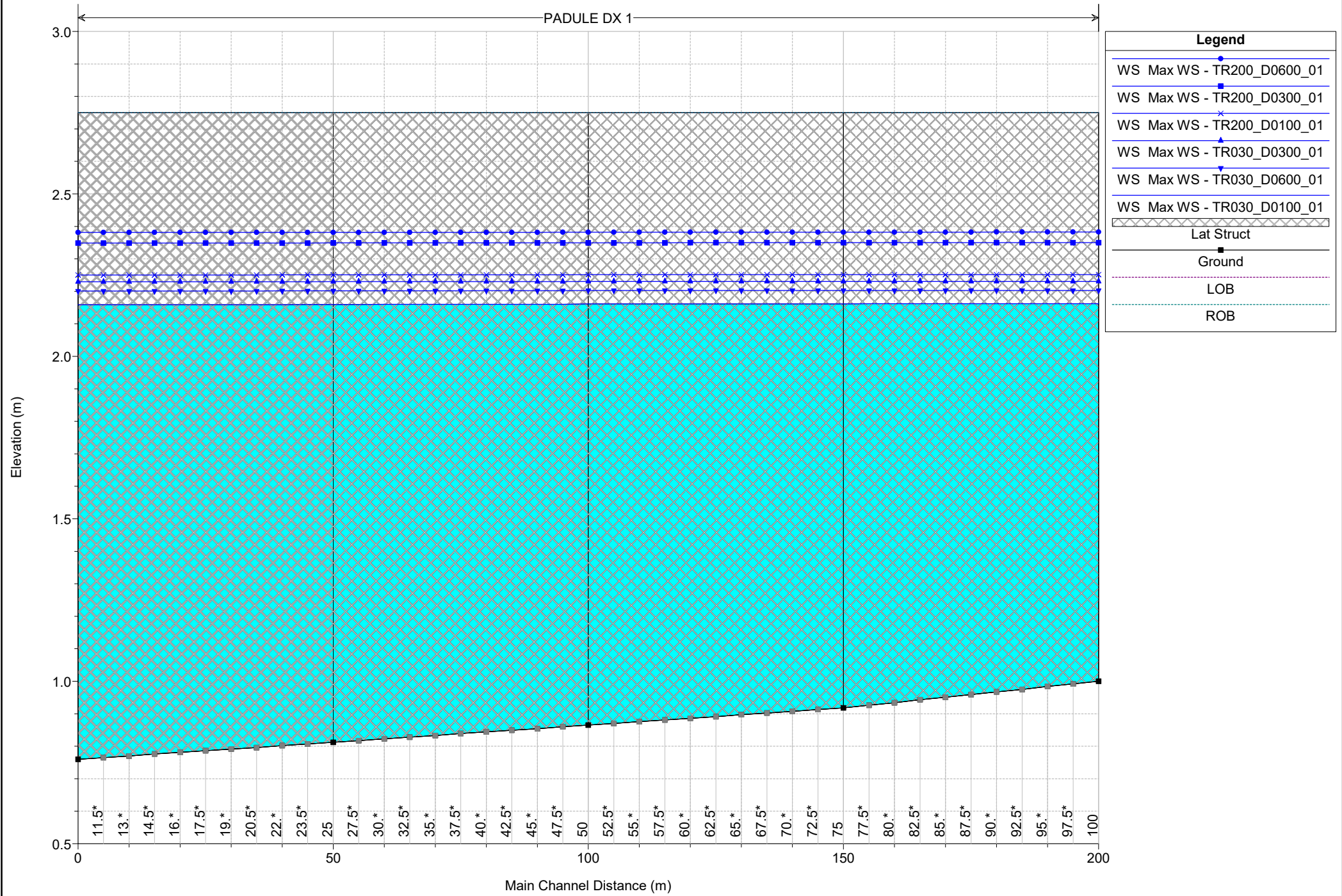
Il presente documento costituisce gli allegati della verifica idraulica a supporto di una variante urbanistica nella UTOE n. 31 comprato 4 Carraia del Piano Operativo del comune di San Giuliano Terme finalizzata alla proposta di realizzazione del “Campus Sant’Anna San Giuliano -Polo Scienze della Vita e dell’Ambiente” della Scuola Superiore Sant’Anna.

La verifica idraulica stata condotta per tempo di ritorno di 30 e 200 anni e per le durate di 1, 3, 6, ore.

Per lo scenario verificato si riporta nei seguenti paragrafi:

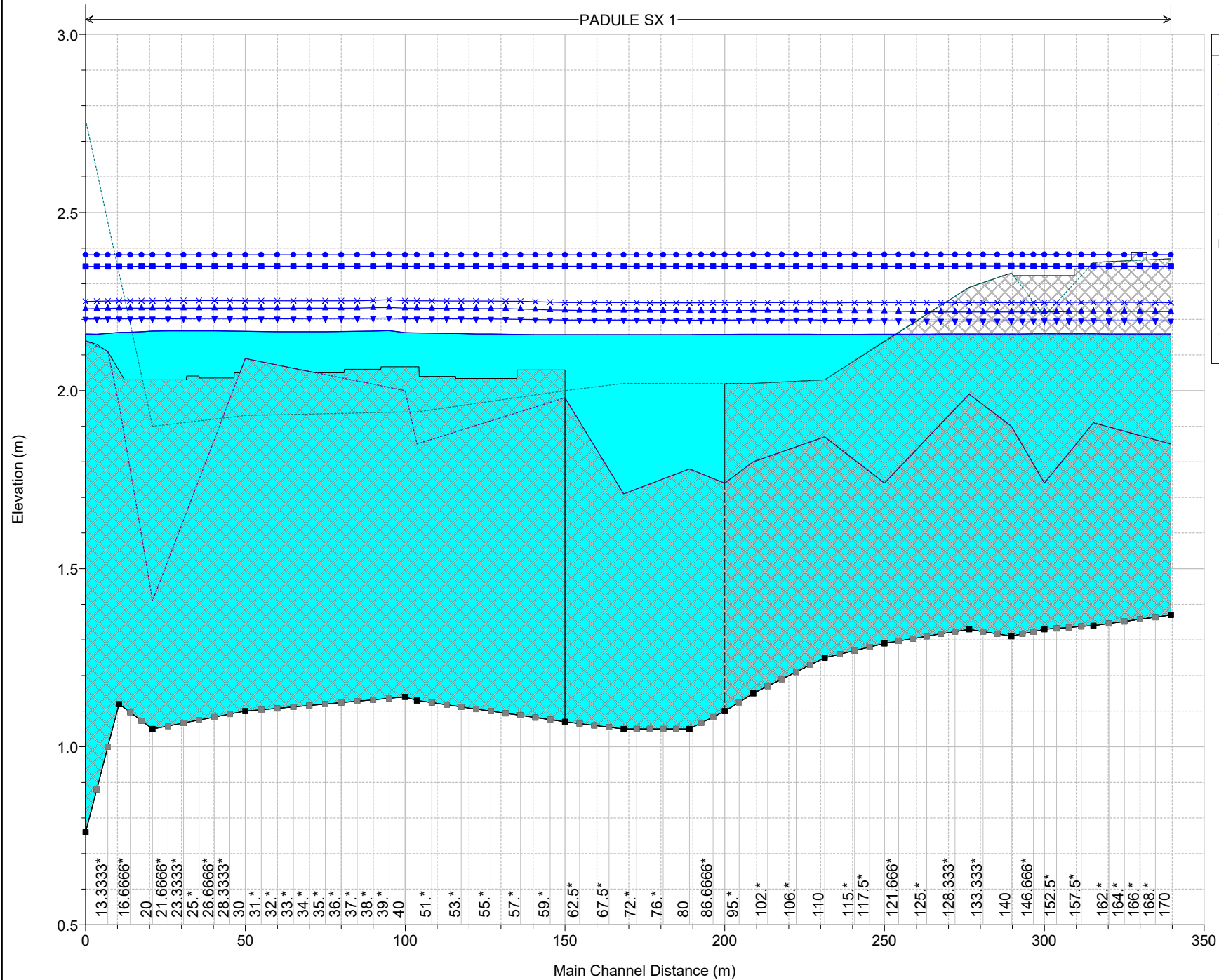
- Profili longitudinali configurazione 1 Tr30 e Tr200;
- Profili longitudinali configurazione 2 Tr30 e Tr200;
- Profili longitudinali configurazione 3 Tr30 e Tr200.

PROFILO LONGITUDINALE VERIFICA IDRAULICA CONFIGURAZIONE 1 – FOSSO PALUDE DESTRO



PROFILO LONGITUDINALE VERIFICA IDRAULICA CONFIGURAZIONE 1 – FOSSO PALUDE SINISTRO

PADULE SX 1



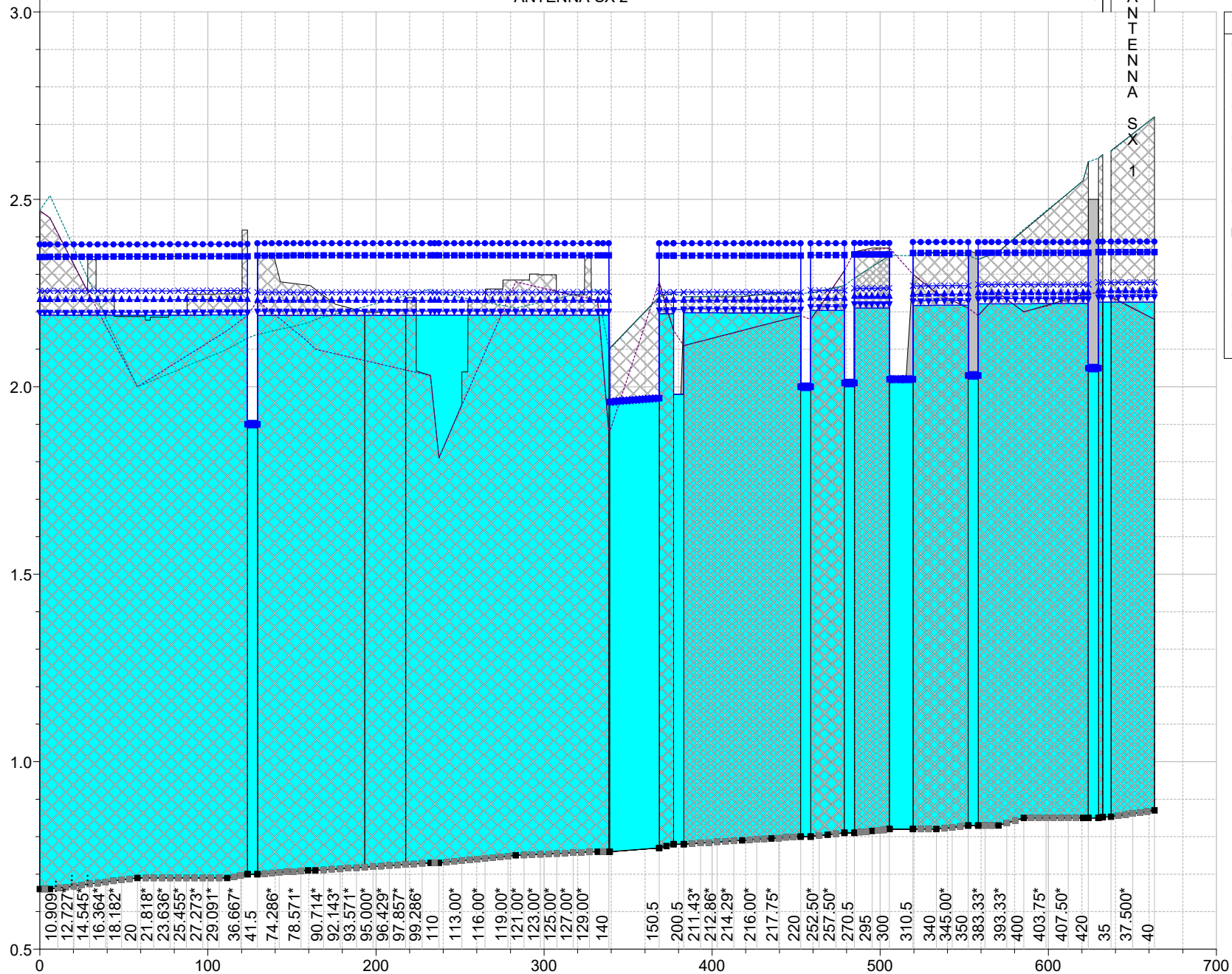
Legend

- WS Max WS - TR200_D0600_01
- WS Max WS - TR200_D0300_01
- WS Max WS - TR200_D0100_01
- WS Max WS - TR030_D0300_01
- WS Max WS - TR030_D0600_01
- WS Max WS - TR030_D0100_01
- Lat Struct
- Ground
- LOB
- ROB

PROFILO LONGITUDINALE VERIFICA IDRAULICA CONFIGURAZIONE 1 – FOSSO ANTENNA SINISTRA

ANTENNA SX 2

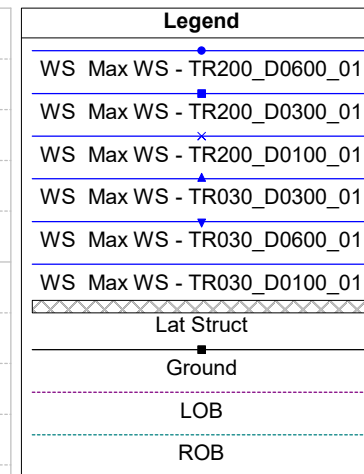
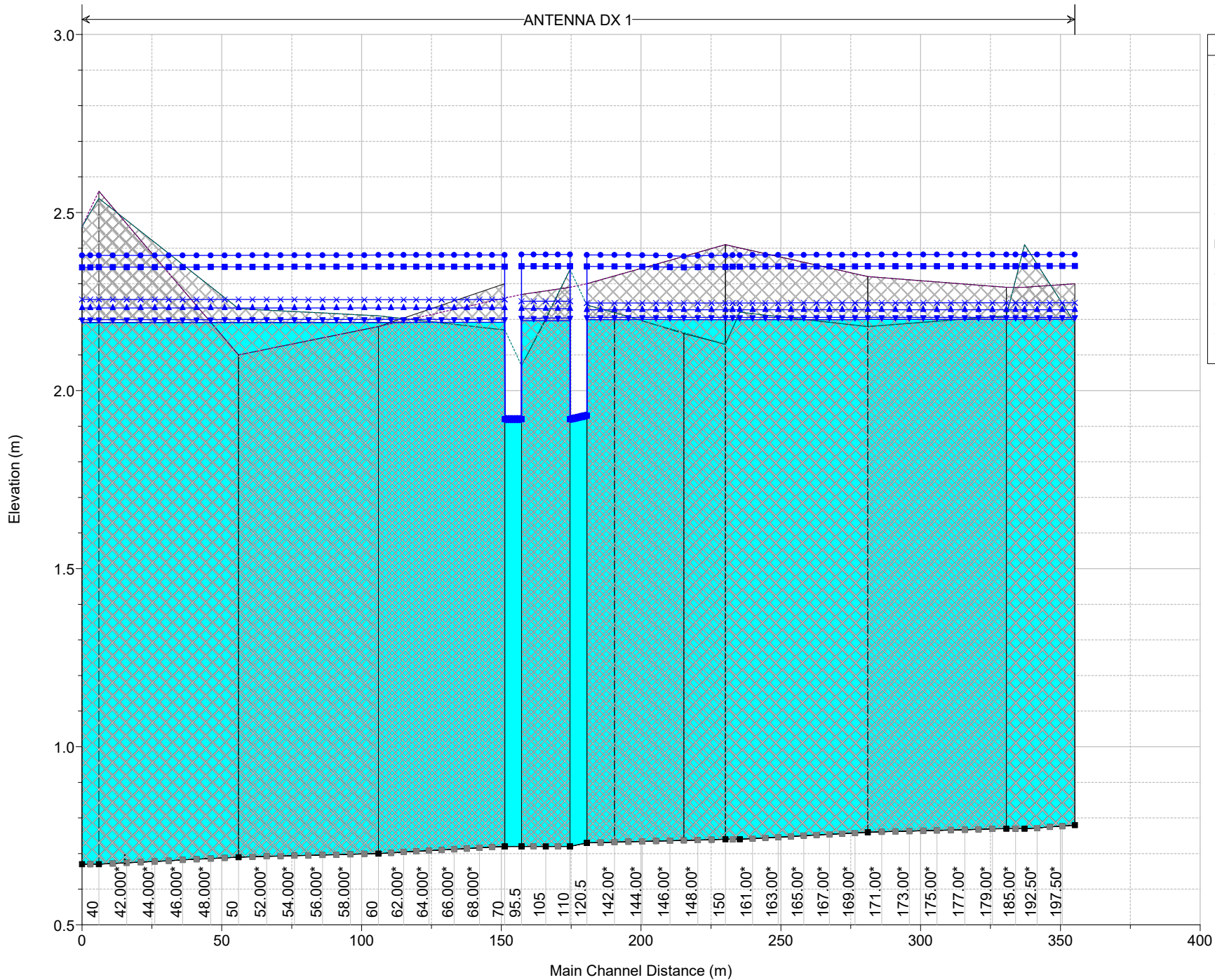
Elevation (m)



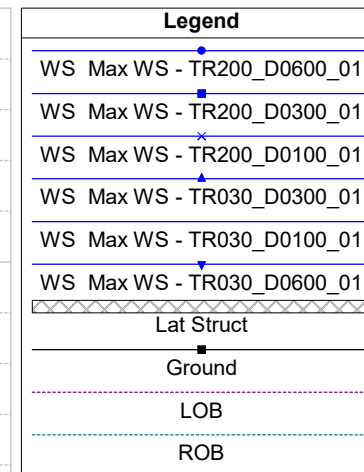
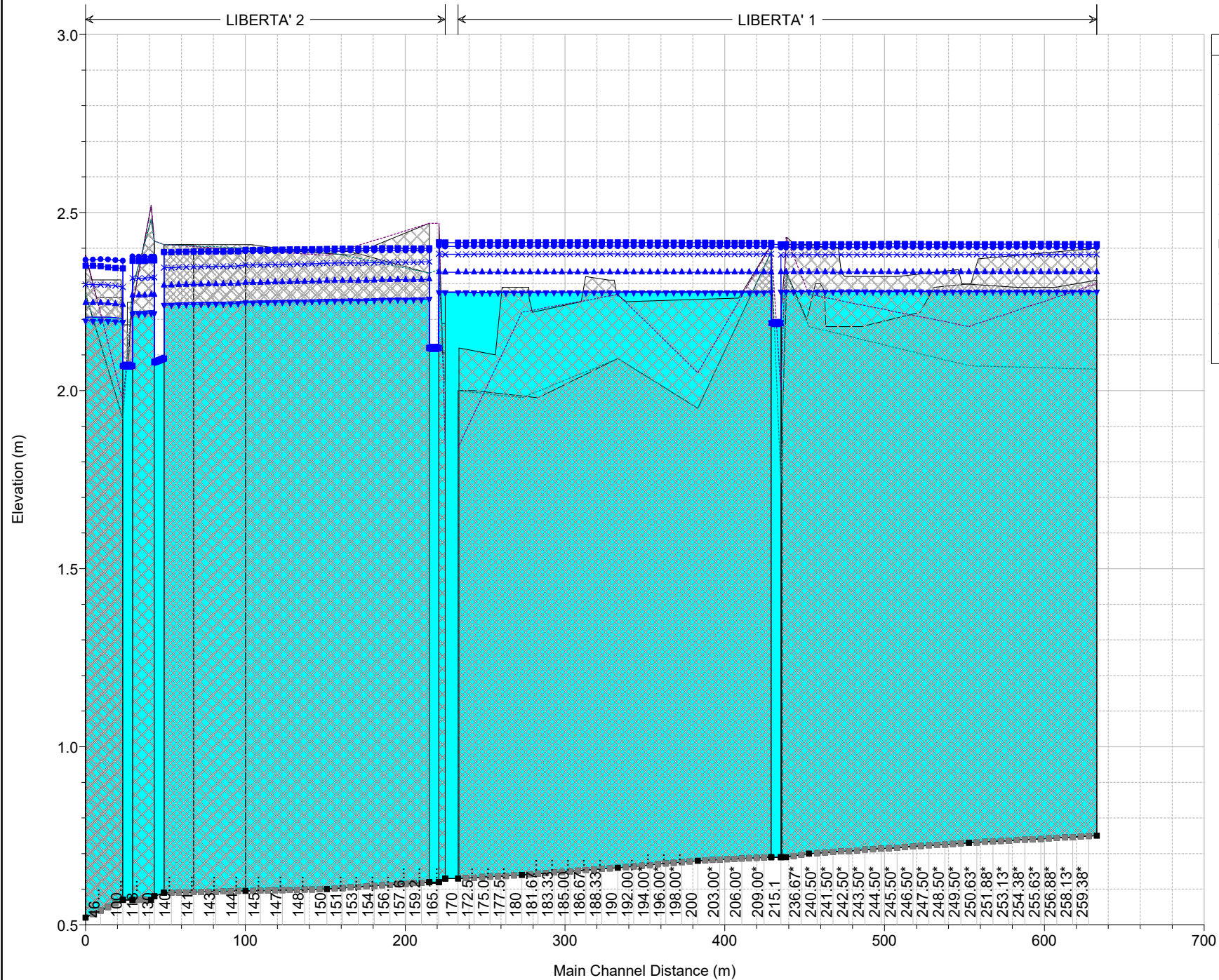
Legend

- WS Max WS - TR200_D0600_01
- WS Max WS - TR200_D0300_01
- WS Max WS - TR200_D0100_01
- WS Max WS - TR030_D0300_01
- WS Max WS - TR030_D0600_01
- WS Max WS - TR030_D0100_01
- Lat Struct
- Ground
- LOB
- ROB

PROFILO LONGITUDINALE VERIFICA IDRAULICA CONFIGURAZIONE 1 – FOSSO ANTENNA DESTRA



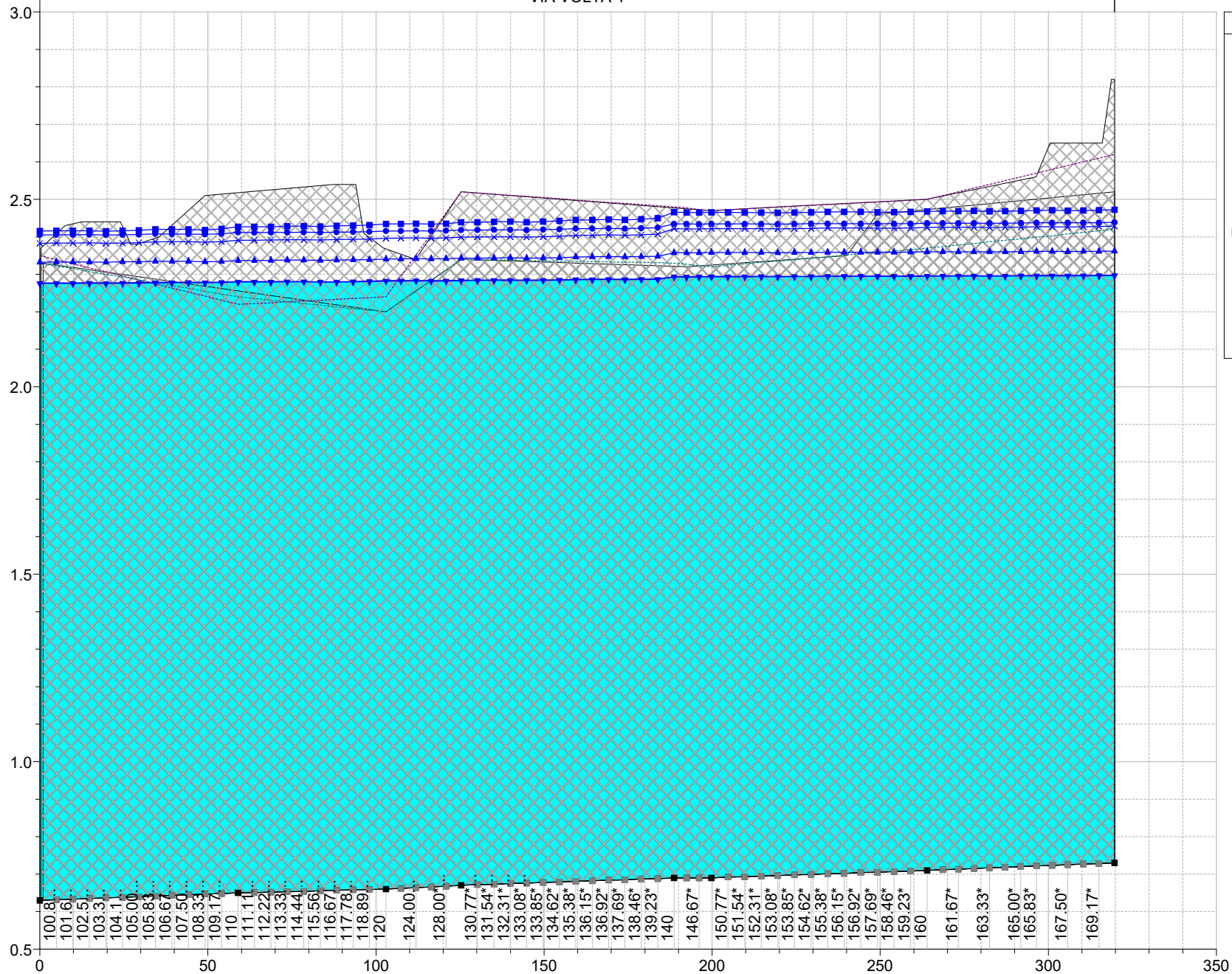
PROFILO LONGITUDINALE VERIFICA IDRAULICA CONFIGURAZIONE 1 – FOSSO LIBERTA'



PROFILO LONGITUDINALE VERIFICA IDRAULICA CONFIGURAZIONE 1 – FOSSO VIA VOLTA

VIA VOLTA 1

Elevation (m)

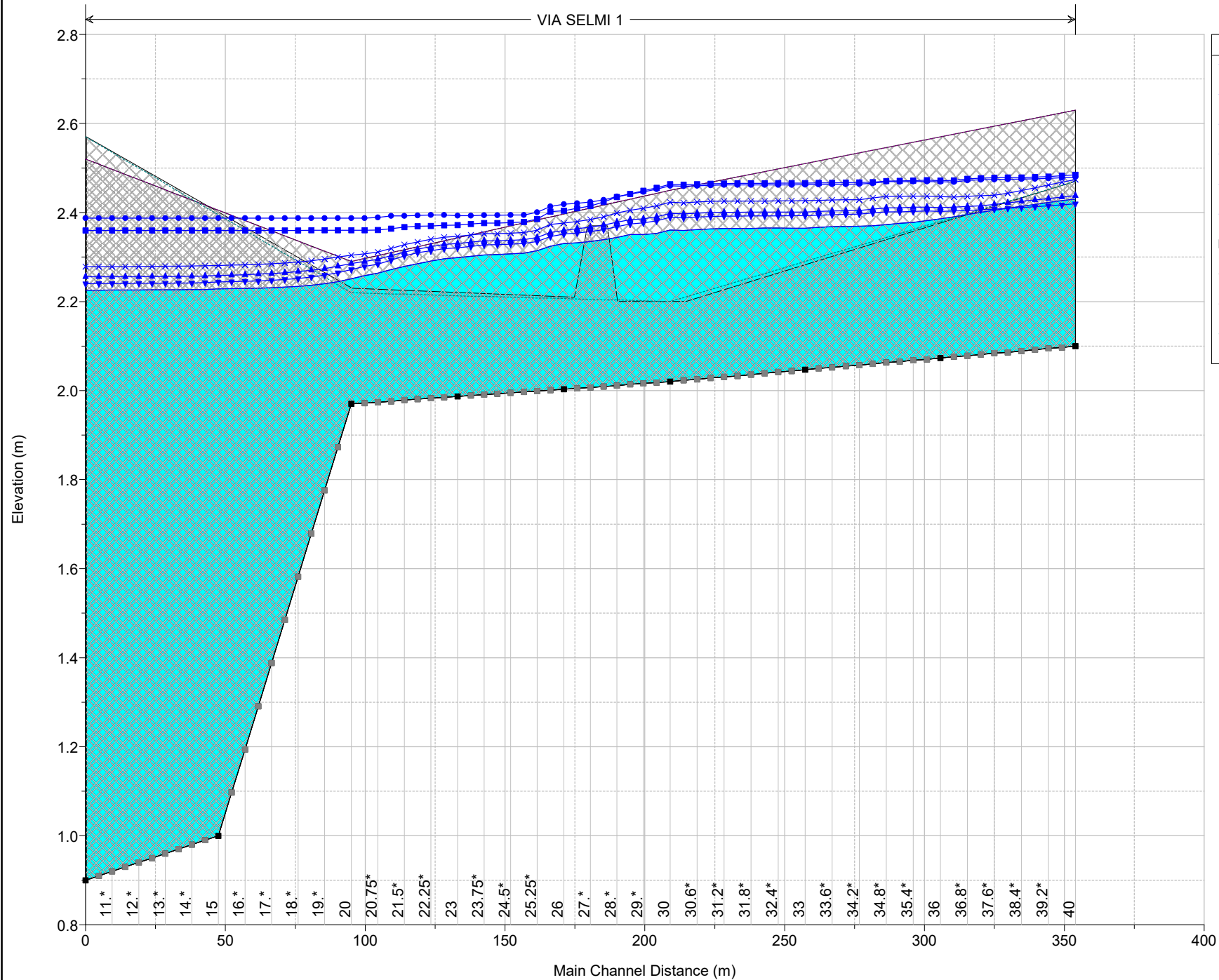


Legend

- WS Max WS - TR200_D0300_01
- WS Max WS - TR200_D0600_01
- WS Max WS - TR200_D0100_01
- WS Max WS - TR030_D0300_01
- WS Max WS - TR030_D0100_01
- WS Max WS - TR030_D0600_01
- Lat Struct
- Ground
- LOB
- ROB

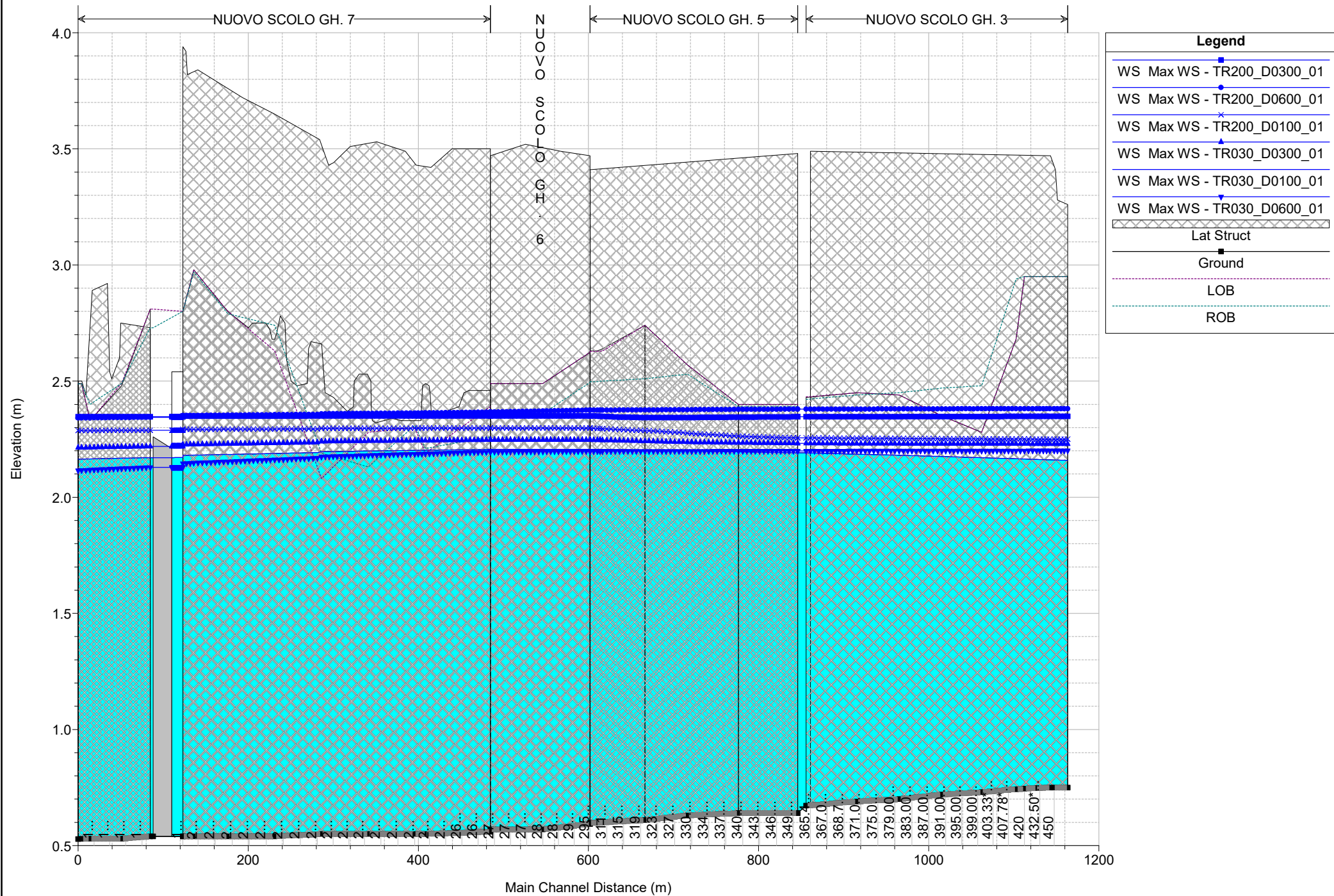
PROFILO LONGITUDINALE VERIFICA IDRAULICA CONFIGURAZIONE 1 – FOSSO VIA SELMI

VIA SELMI 1



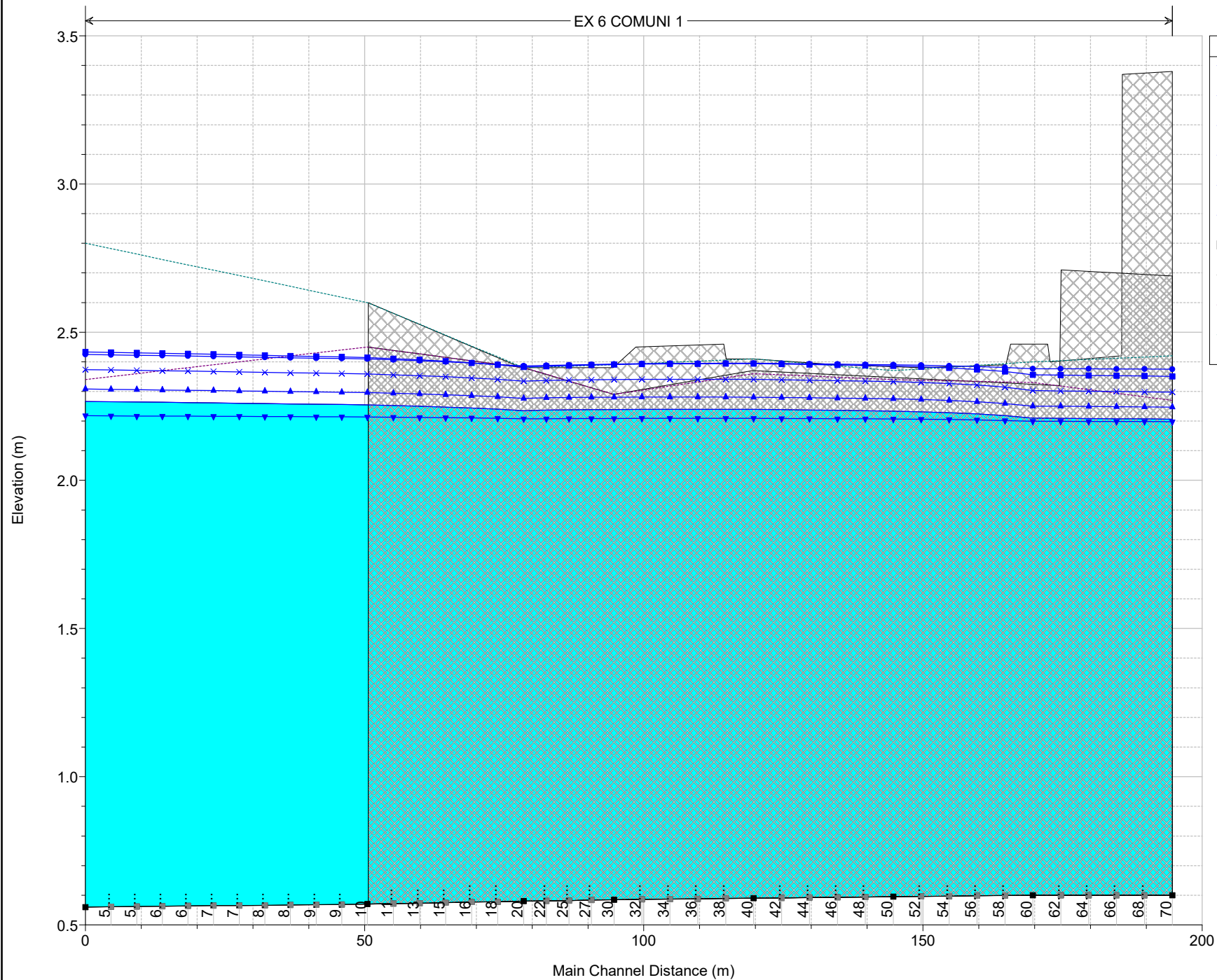
Legend	
WS Max WS - TR200_D0600_01	●
WS Max WS - TR200_D0300_01	■
WS Max WS - TR200_D0100_01	×
WS Max WS - TR030_D0300_01	▲
WS Max WS - TR030_D0600_01	▼
WS Max WS - TR030_D0100_01	◆
Lat Struct	▨
Ground	■
LOB	---
ROB	...

PROFILO LONGITUDINALE VERIFICA IDRAULICA CONFIGURAZIONE 1 – FOSSO NUOVO SCOLO GHEZZANO



PROFILO LONGITUDINALE VERIFICA IDRAULICA CONFIGURAZIONE 1 – EX 6 COMUNI

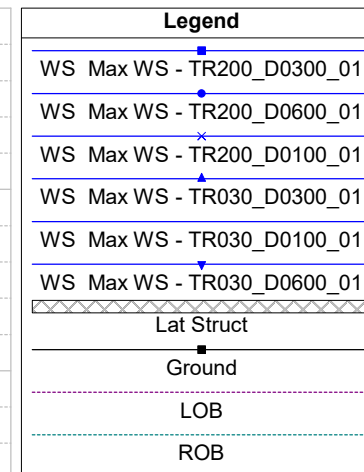
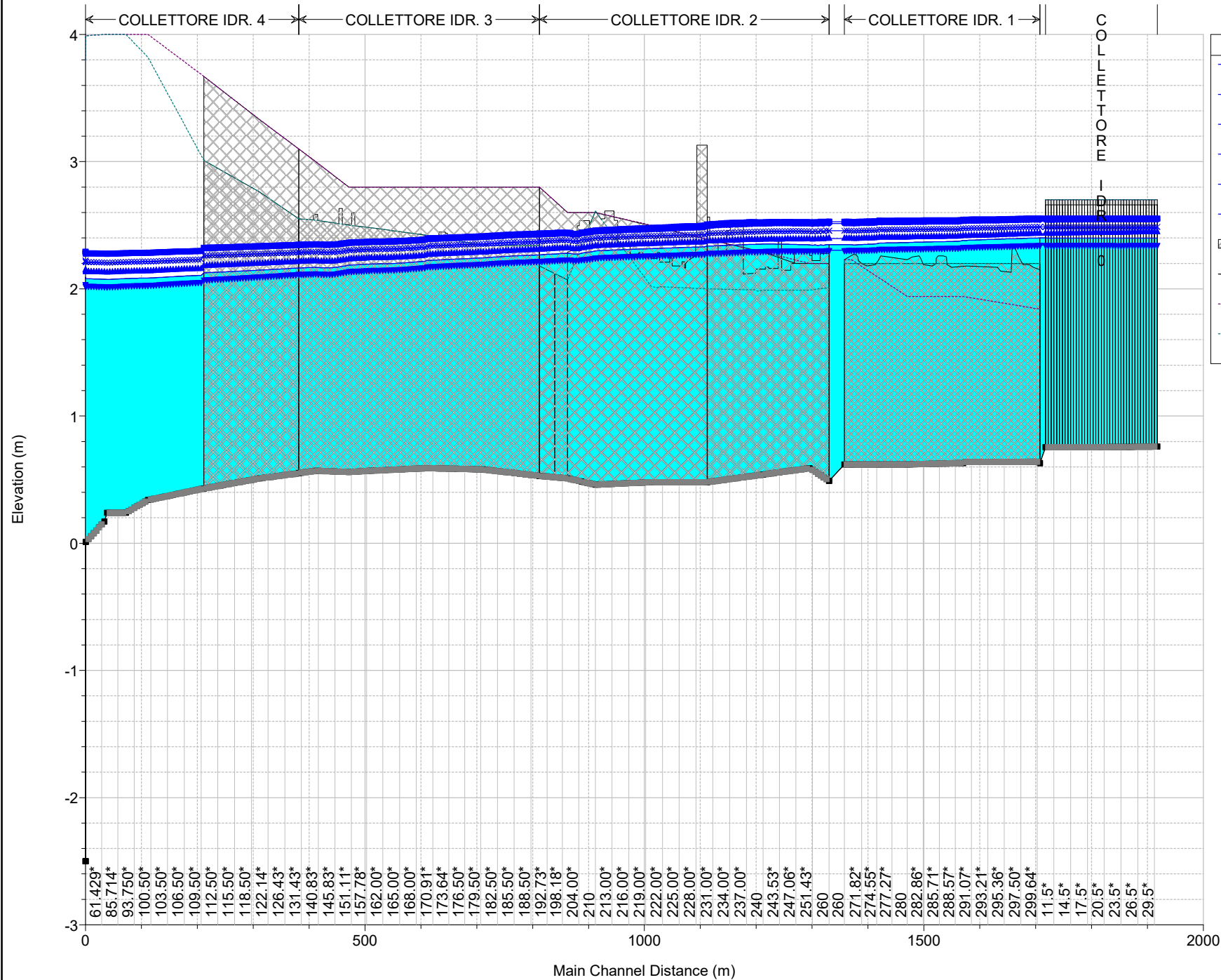
EX 6 COMUNI 1



Legend

- WS Max WS - TR200_D0300_01
- WS Max WS - TR200_D0600_01
- WS Max WS - TR200_D0100_01
- WS Max WS - TR030_D0300_01
- WS Max WS - TR030_D0100_01
- WS Max WS - TR030_D0600_01
- Lat Struct
- Ground
- LOB
- ROB

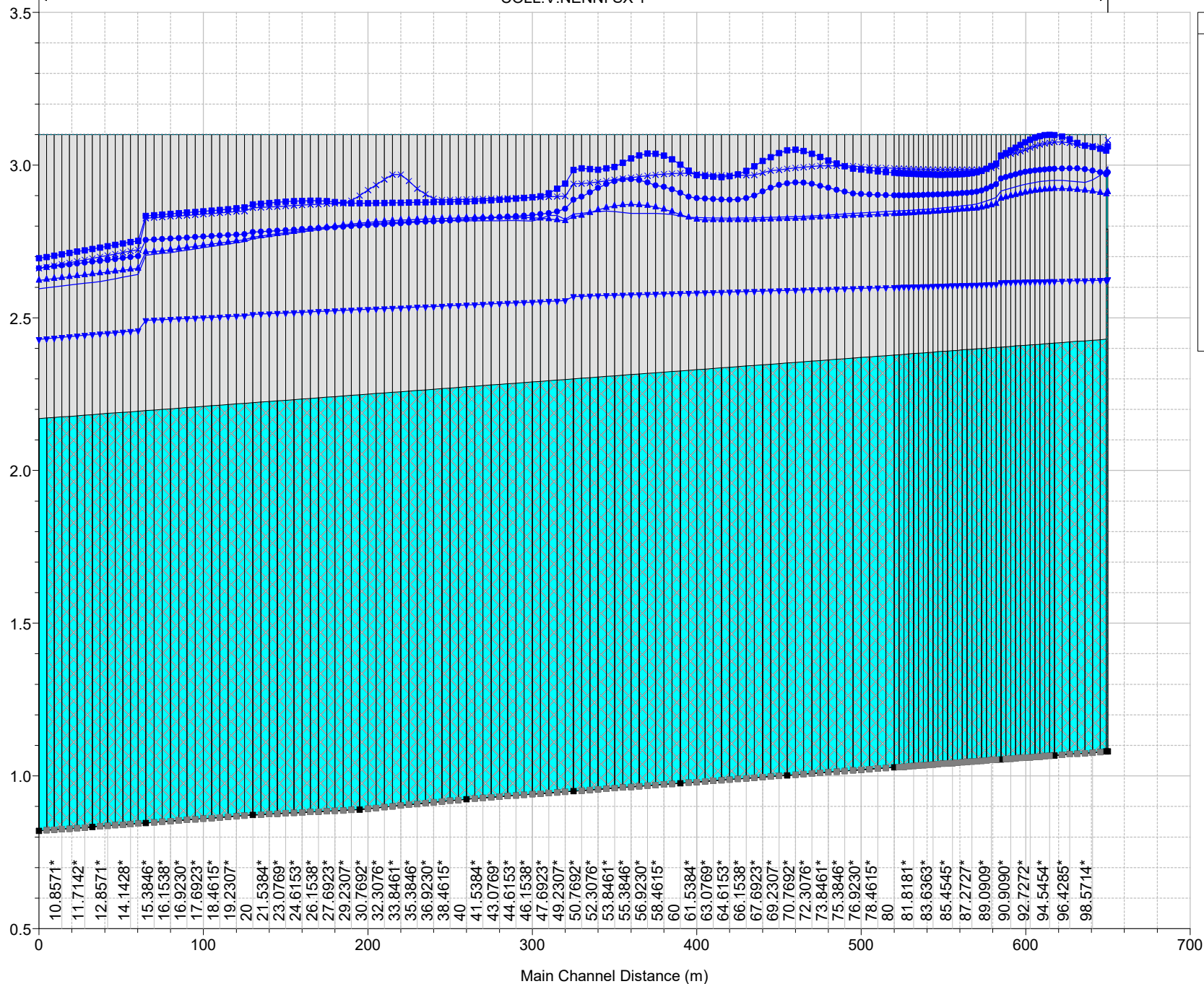
PROFILO LONGITUDINALE VERIFICA IDRAULICA CONFIGURAZIONE 1 – COLLETTORE IDRAULICO



PROFILO LONGITUDINALE VERIFICA IDRAULICA CONFIGURAZIONE 1 – COLLETTORE VIA NENNI SINISTRO

COLL.V.NENNI SX 1

Elevation (m)



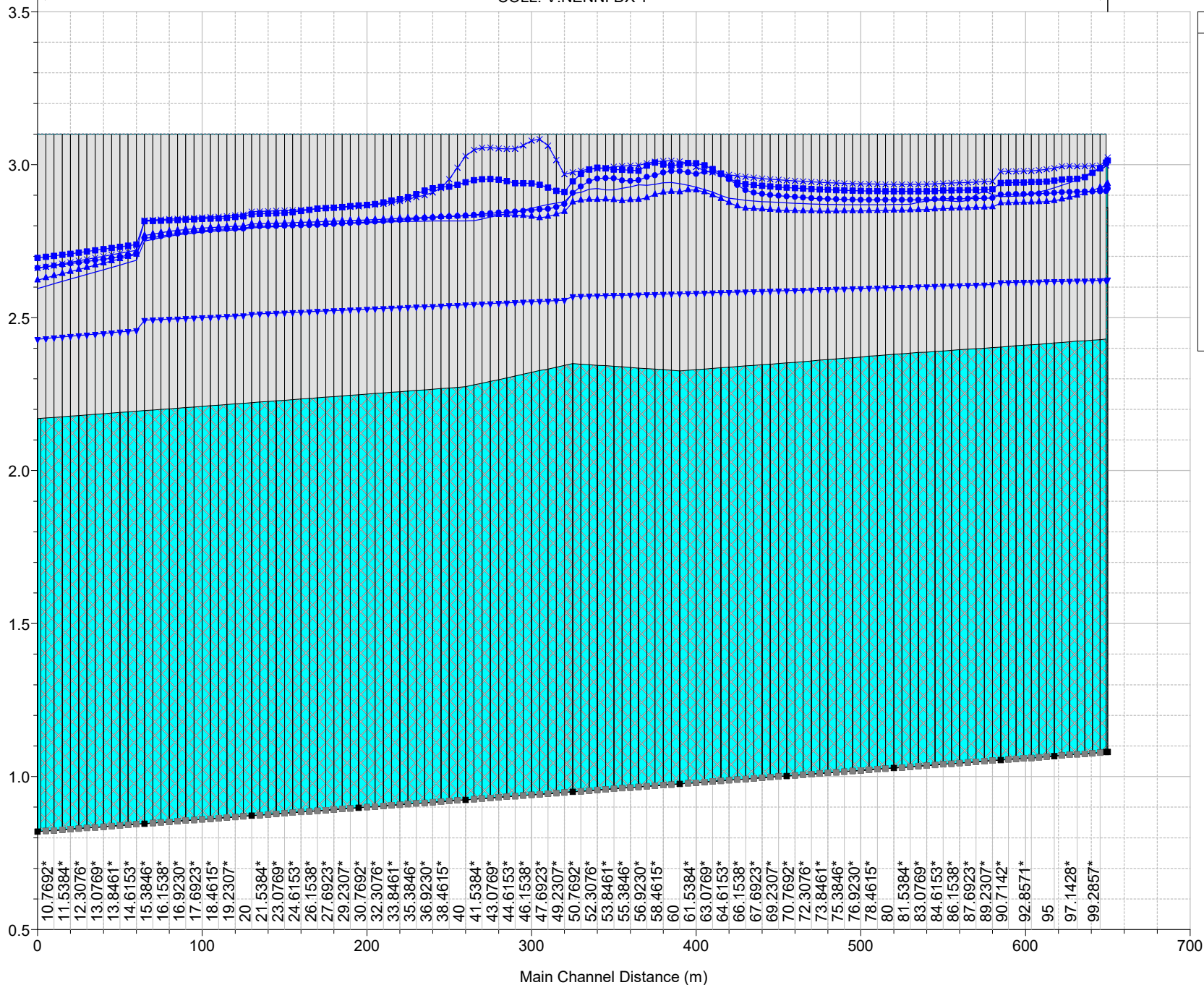
Legend

- WS Max WS - TR200_D0300_01
- WS Max WS - TR200_D0600_01
- WS Max WS - TR200_D0100_01
- WS Max WS - TR030_D0300_01
- WS Max WS - TR030_D0100_01
- WS Max WS - TR030_D0600_01
- Lat Struct
- Ground
- LOB
- ROB

PROFILO LONGITUDINALE VERIFICA IDRAULICA CONFIGURAZIONE 1 – COLLETTORE VIA NENNI DESTRO

COLL. V.NENNI DX 1

Elevation (m)

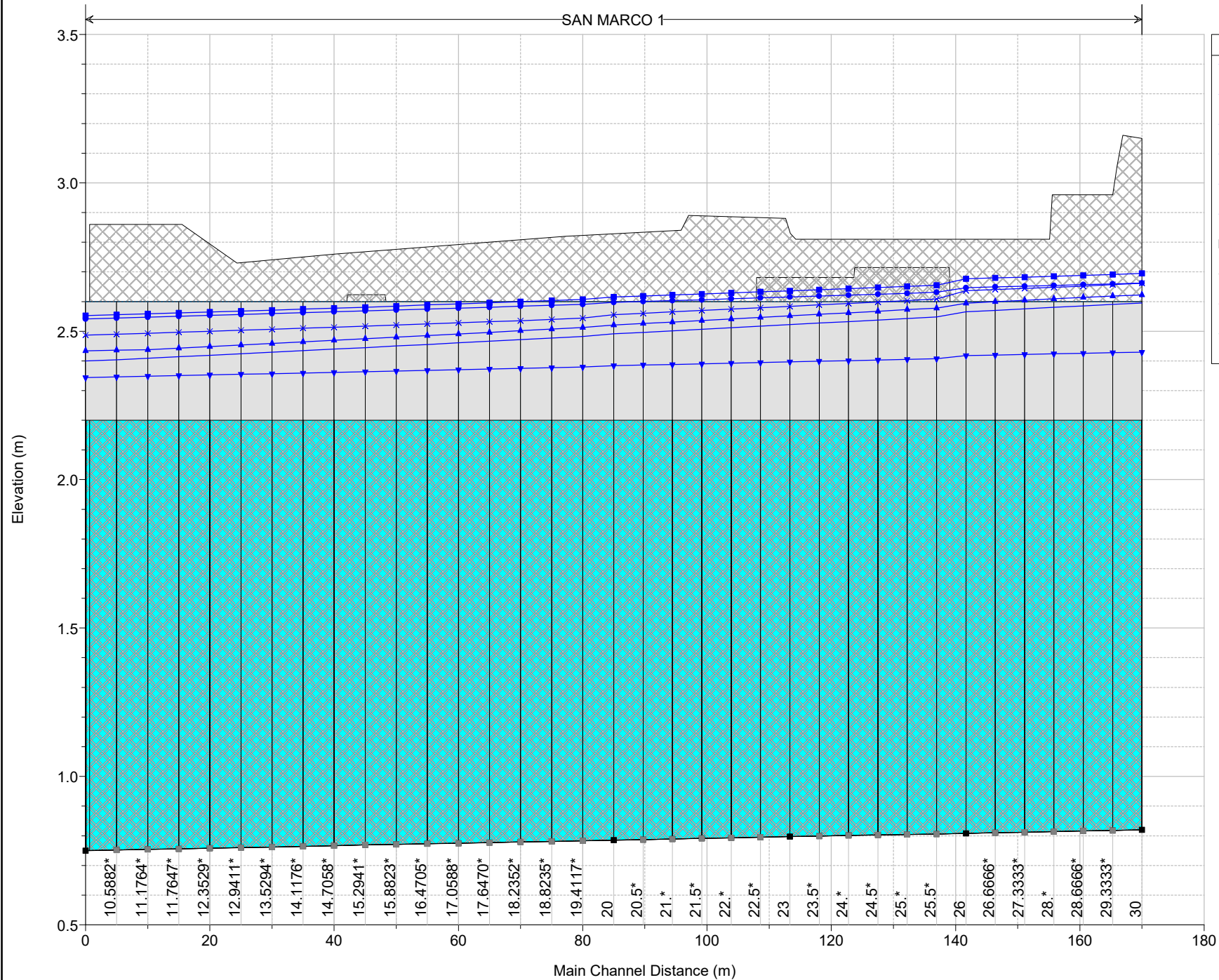


Legend

- WS Max WS - TR200_D0300_01
- WS Max WS - TR200_D0600_01
- WS Max WS - TR200_D0100_01
- WS Max WS - TR030_D0300_01
- WS Max WS - TR030_D0100_01
- WS Max WS - TR030_D0600_01
- Lat Struct
- Ground
- LOB
- ROB

PROFILO LONGITUDINALE VERIFICA IDRAULICA CONFIGURAZIONE 1 – COLLETTORE SAN MARCO

SAN MARCO 1

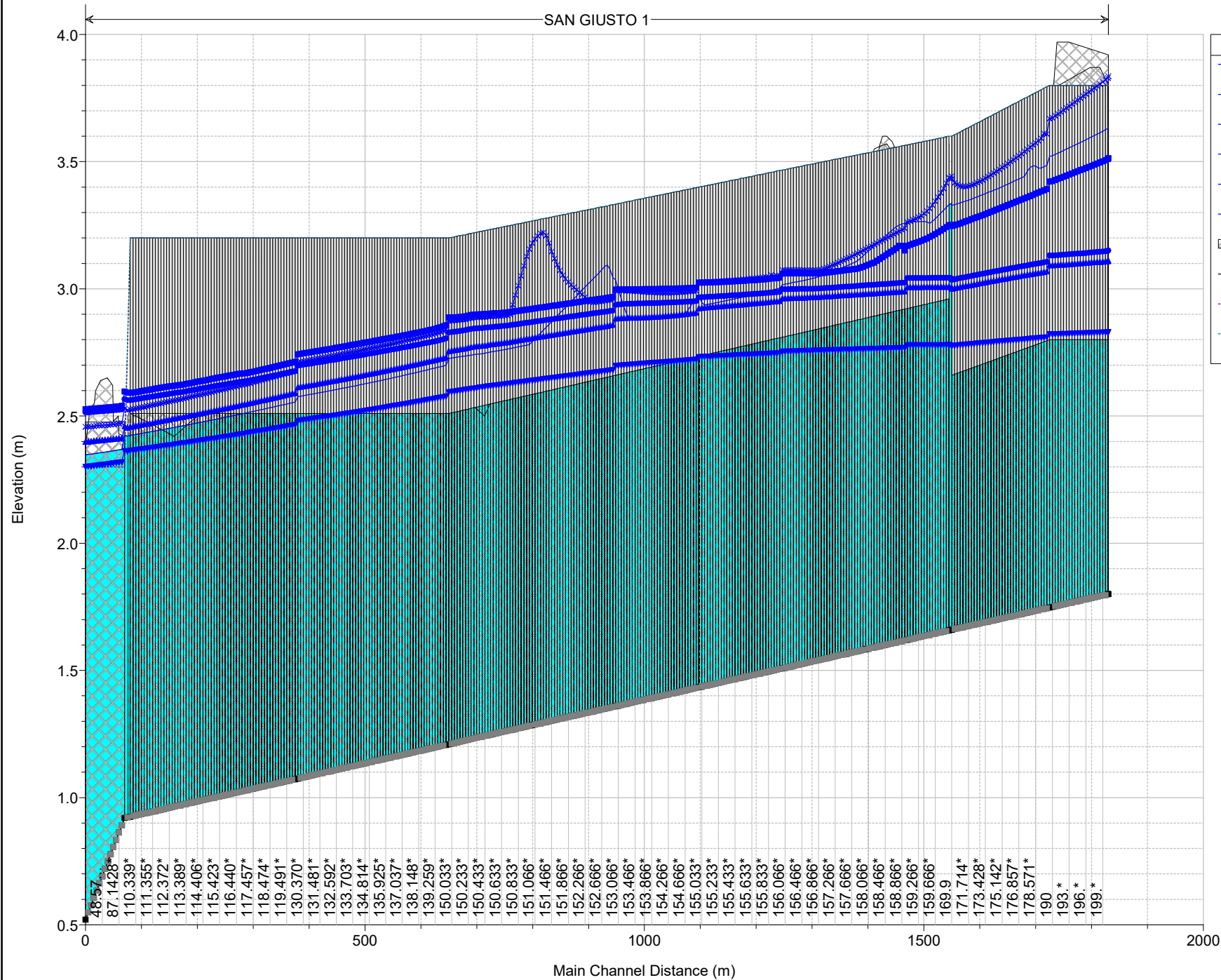


Legend

- WS Max WS - TR200_D0300_01
- WS Max WS - TR200_D0600_01
- WS Max WS - TR200_D0100_01
- WS Max WS - TR030_D0300_01
- WS Max WS - TR030_D0100_01
- WS Max WS - TR030_D0600_01
- Lat Struct
- Ground
- LOB
- ROB

PROFILO LONGITUDINALE VERIFICA IDRAULICA CONFIGURAZIONE 1 – COLLETTORE SAN GIUSTO

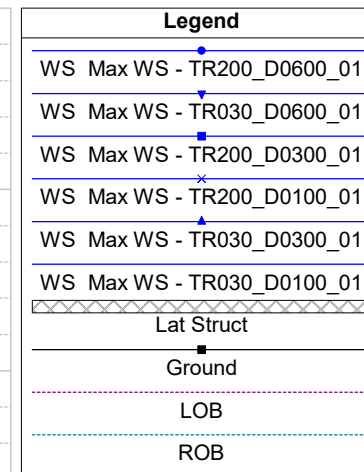
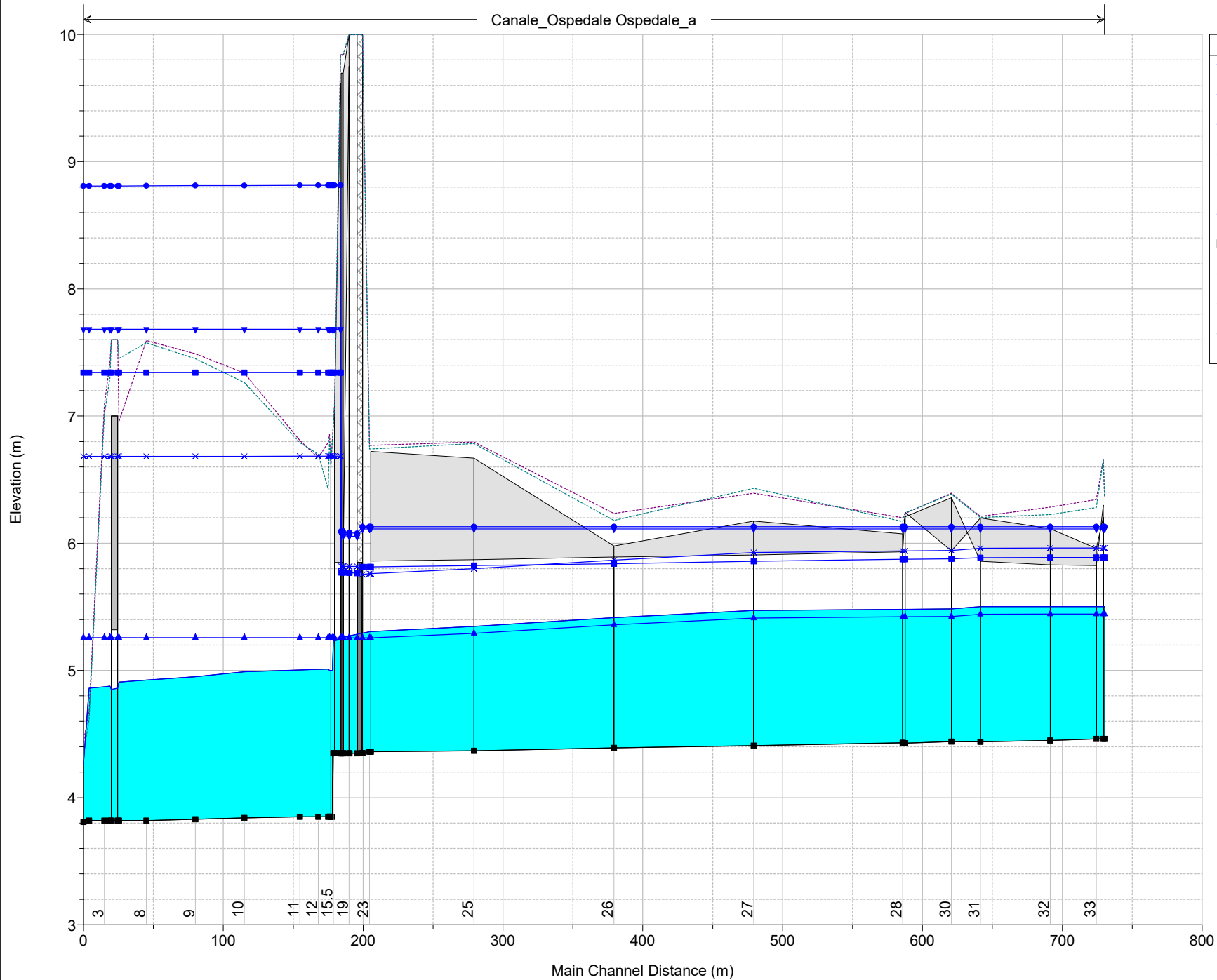
SAN GIUSTO 1



Legend

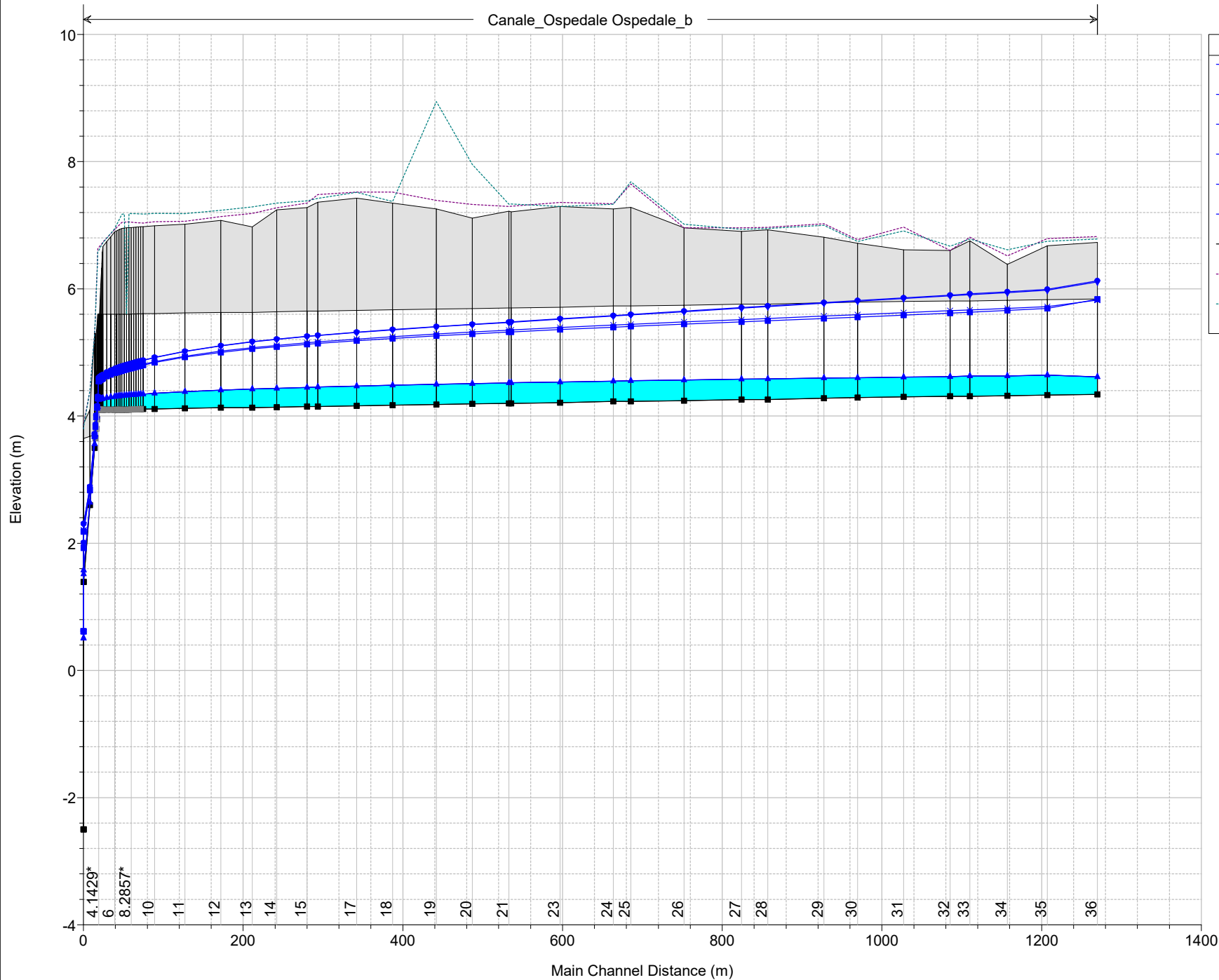
- WS Max WS - TR200_D0300_01
- WS Max WS - TR200_D0600_01
- WS Max WS - TR200_D0100_01
- WS Max WS - TR030_D0300_01
- WS Max WS - TR030_D0100_01
- WS Max WS - TR030_D0600_01
- Lat Struct
- Ground
- LOB
- ROB

PROFILO LONGITUDINALE VERIFICA IDRAULICA CONFIGURAZIONE 1 – CANALE OSPEDALE A



PROFILO LONGITUDINALE VERIFICA IDRAULICA CONFIGURAZIONE 1 – CANALE OSPEDALE B

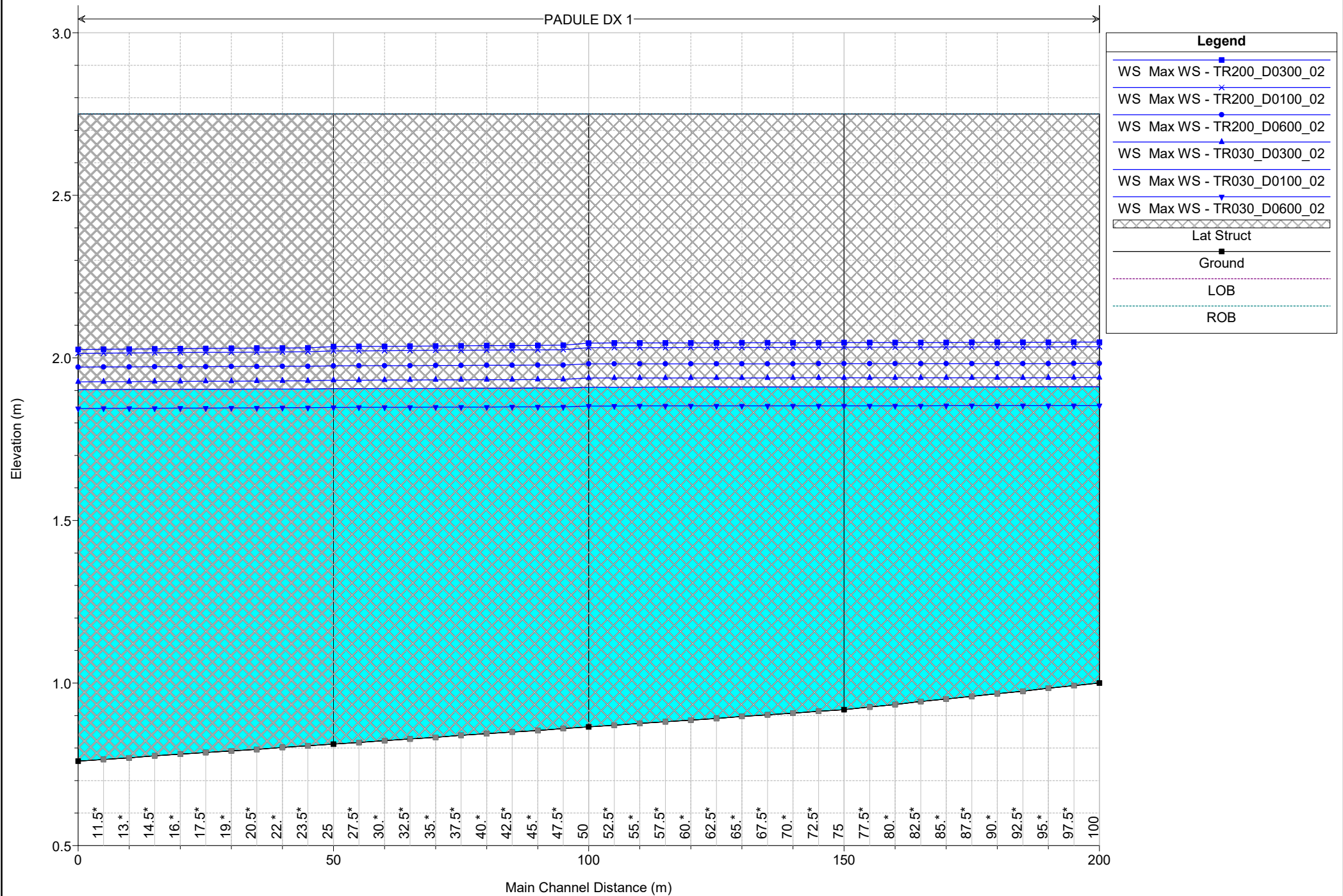
Canale_Ospedale Ospedale_b



Legend

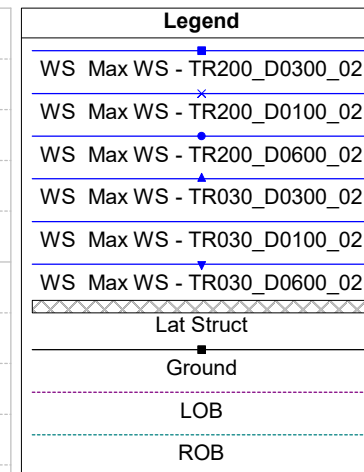
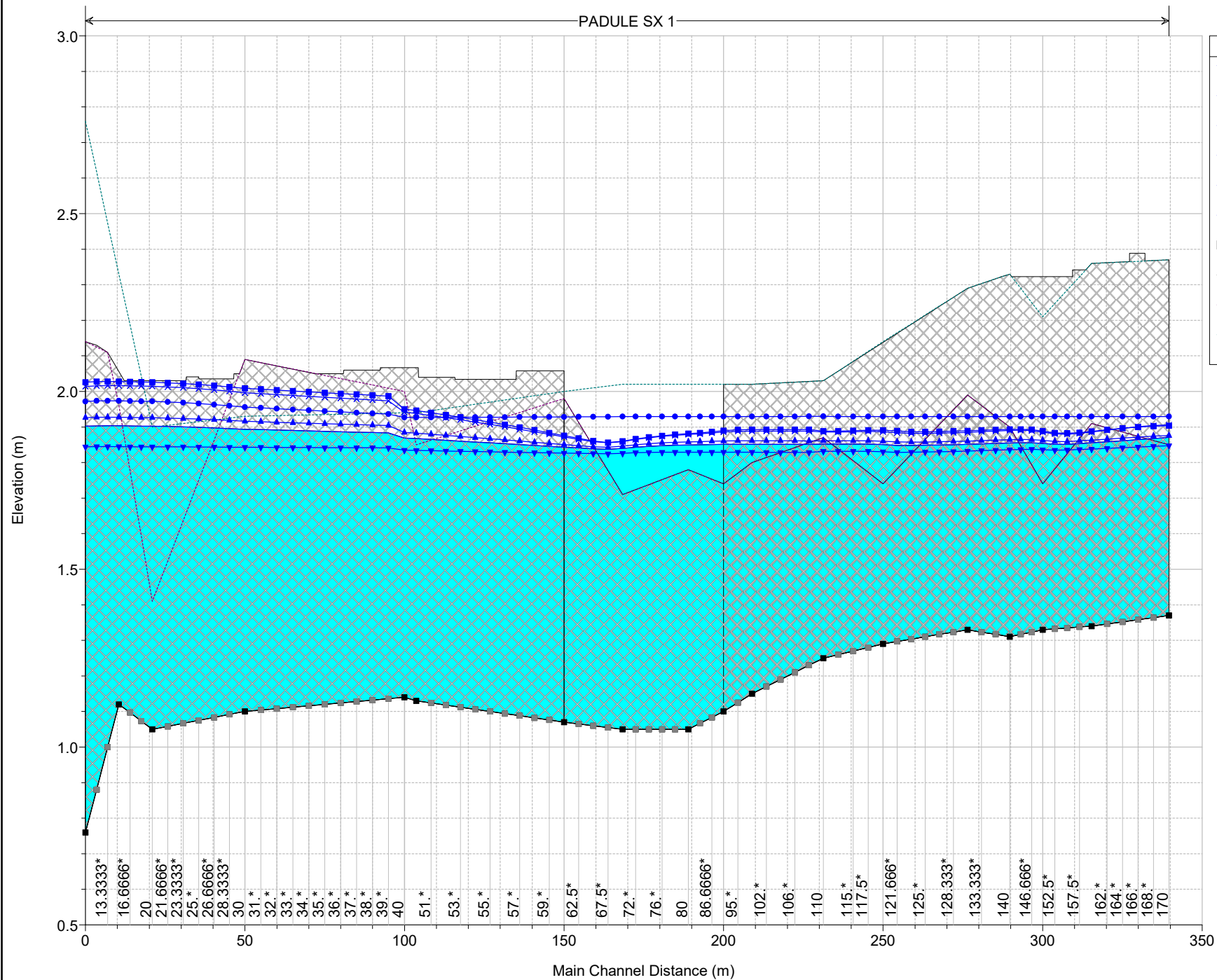
- WS Max WS - TR200_D0300_01
- WS Max WS - TR030_D0600_01
- WS Max WS - TR200_D0600_01
- WS Max WS - TR200_D0100_01
- WS Max WS - TR030_D0300_01
- WS Max WS - TR030_D0100_01
- Ground
- LOB
- ROB

PROFILO LONGITUDINALE VERIFICA IDRAULICA CONFIGURAZIONE 2 – FOSSO PALUDE DESTRO



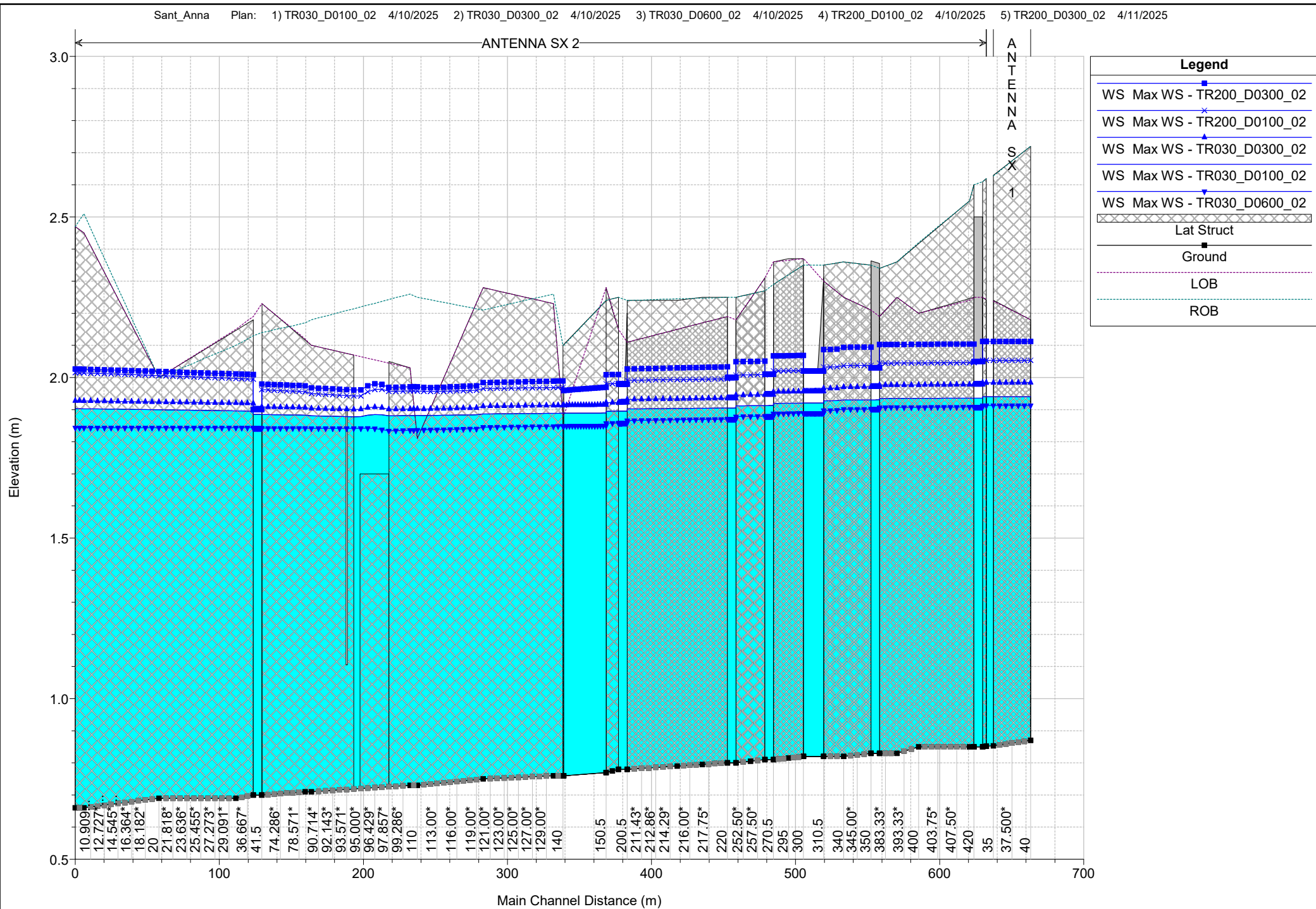
PROFILO LONGITUDINALE VERIFICA IDRAULICA CONFIGURAZIONE 2 – FOSSO PALUDE SINISTRO

PADULE SX 1



PROFILO LONGITUDINALE VERIFICA IDRAULICA CONFIGURAZIONE 2 – FOSSO ANTENNA SINISTRA

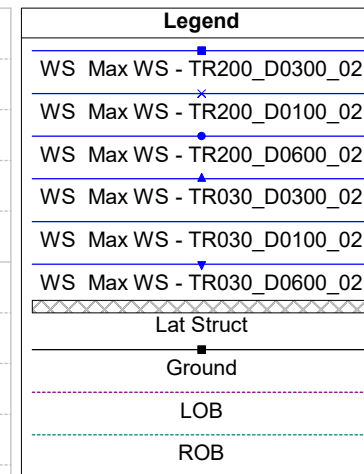
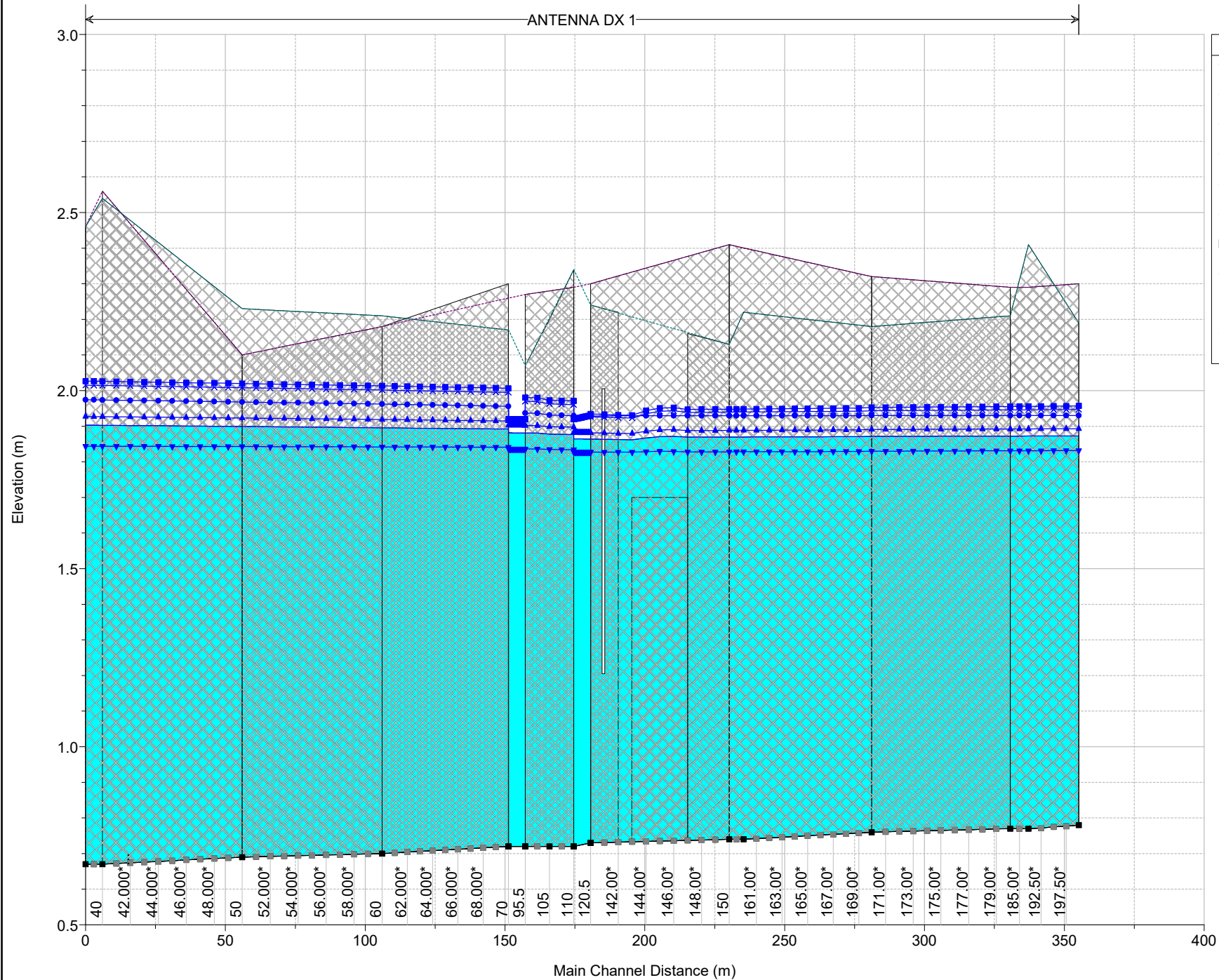
ANTENNA SX 2



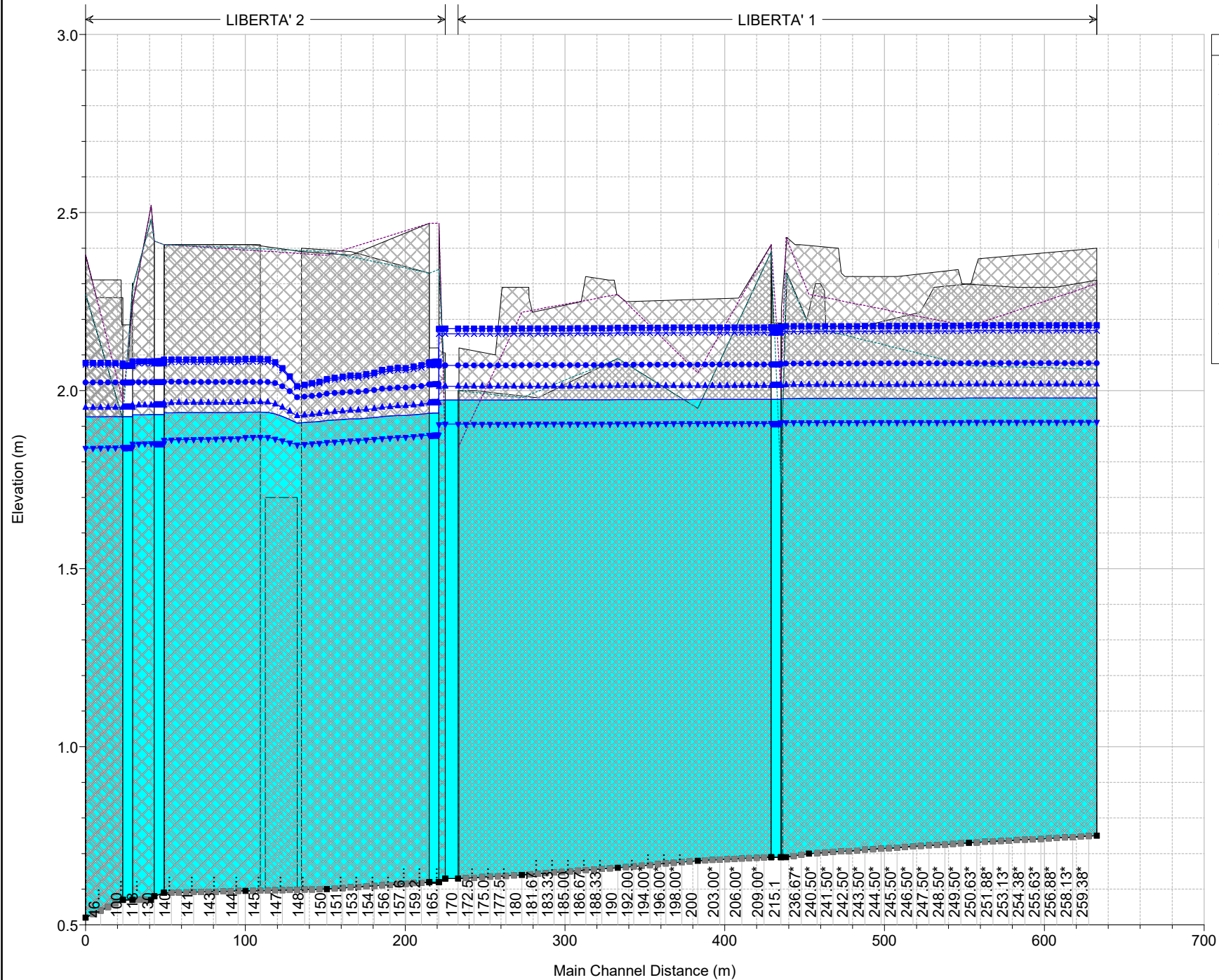
Legend	
WS Max WS - TR200_D0300_02	■
WS Max WS - TR200_D0100_02	x
WS Max WS - TR030_D0300_02	▲
WS Max WS - TR030_D0100_02	▼
WS Max WS - TR030_D0600_02	◆
Lat Struct	▨
Ground	■
LOB	- - -
ROB	- - -

PROFILO LONGITUDINALE VERIFICA IDRAULICA CONFIGURAZIONE 2 – FOSSO ANTENNA DESTRA

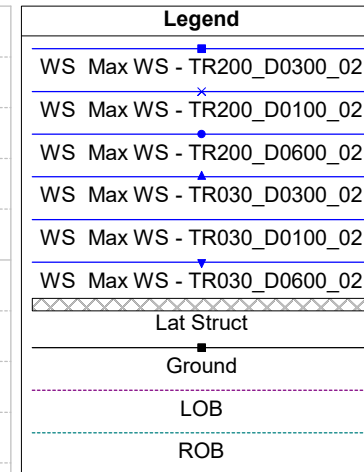
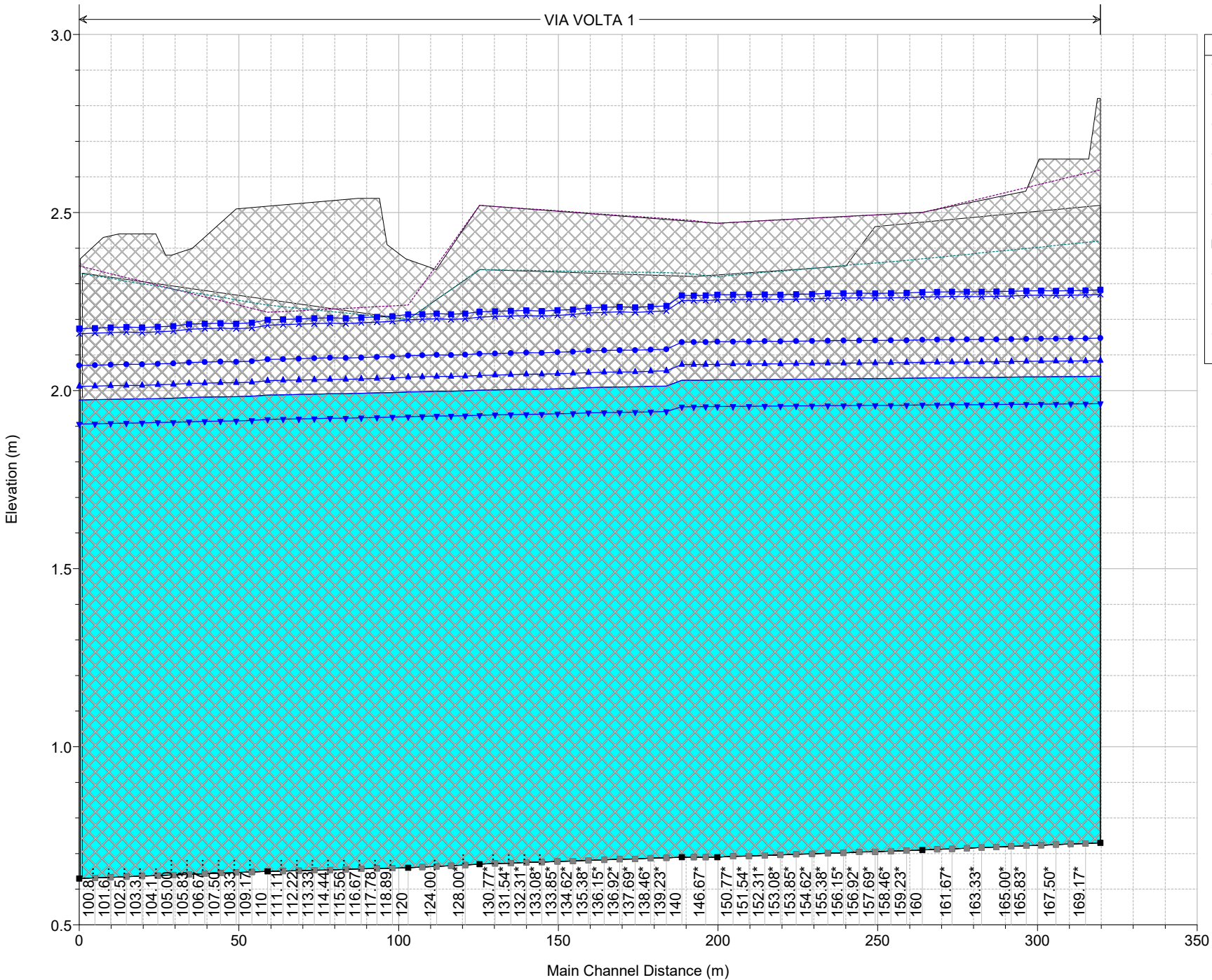
ANTENNA DX 1



PROFILO LONGITUDINALE VERIFICA IDRAULICA CONFIGURAZIONE 2 – FOSSO LIBERTA'

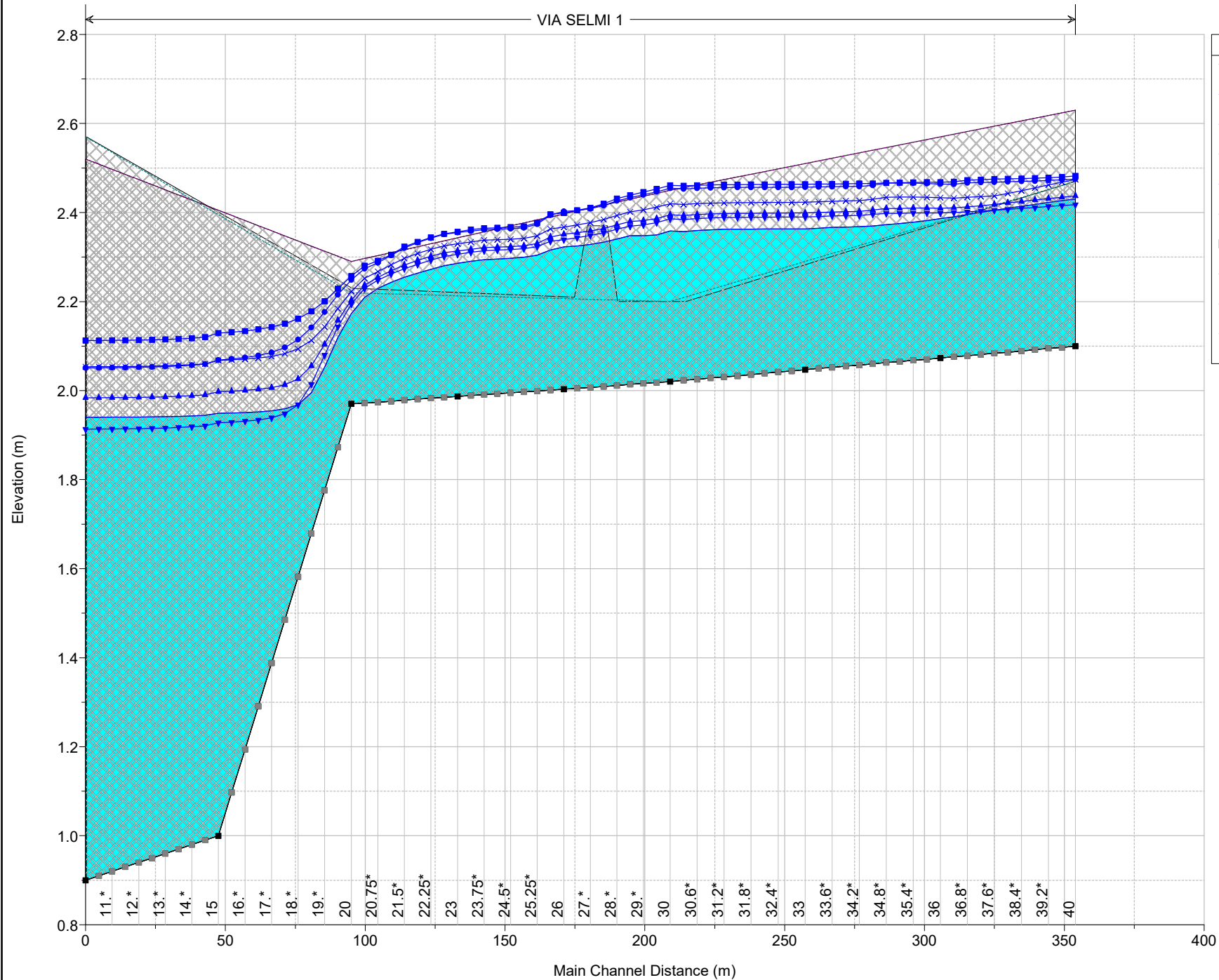


PROFILO LONGITUDINALE VERIFICA IDRAULICA CONFIGURAZIONE 2 – FOSSO VIA VOLTA



PROFILO LONGITUDINALE VERIFICA IDRAULICA CONFIGURAZIONE 2 – FOSSO VIA SELMI

VIA SELMI 1

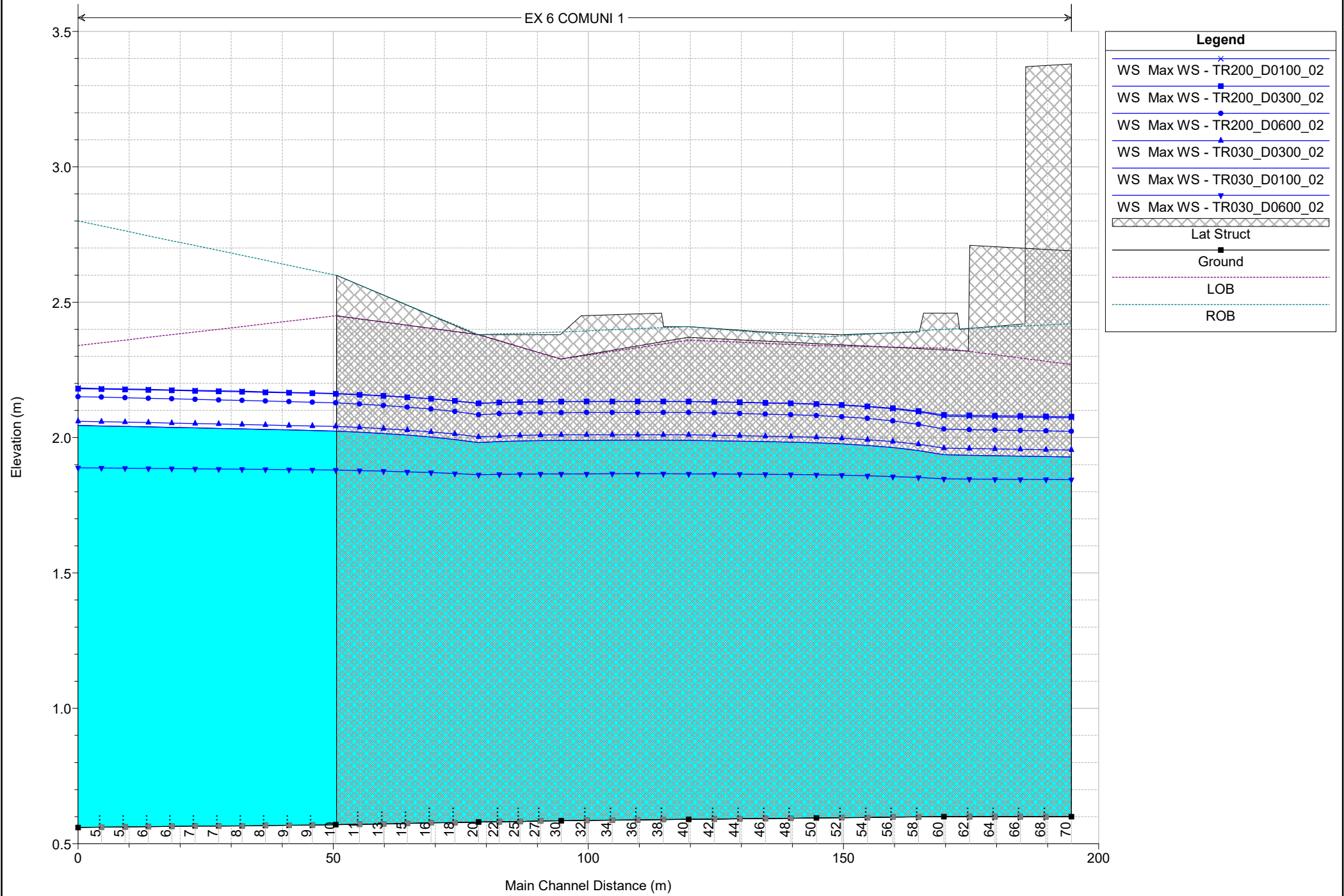


Legend

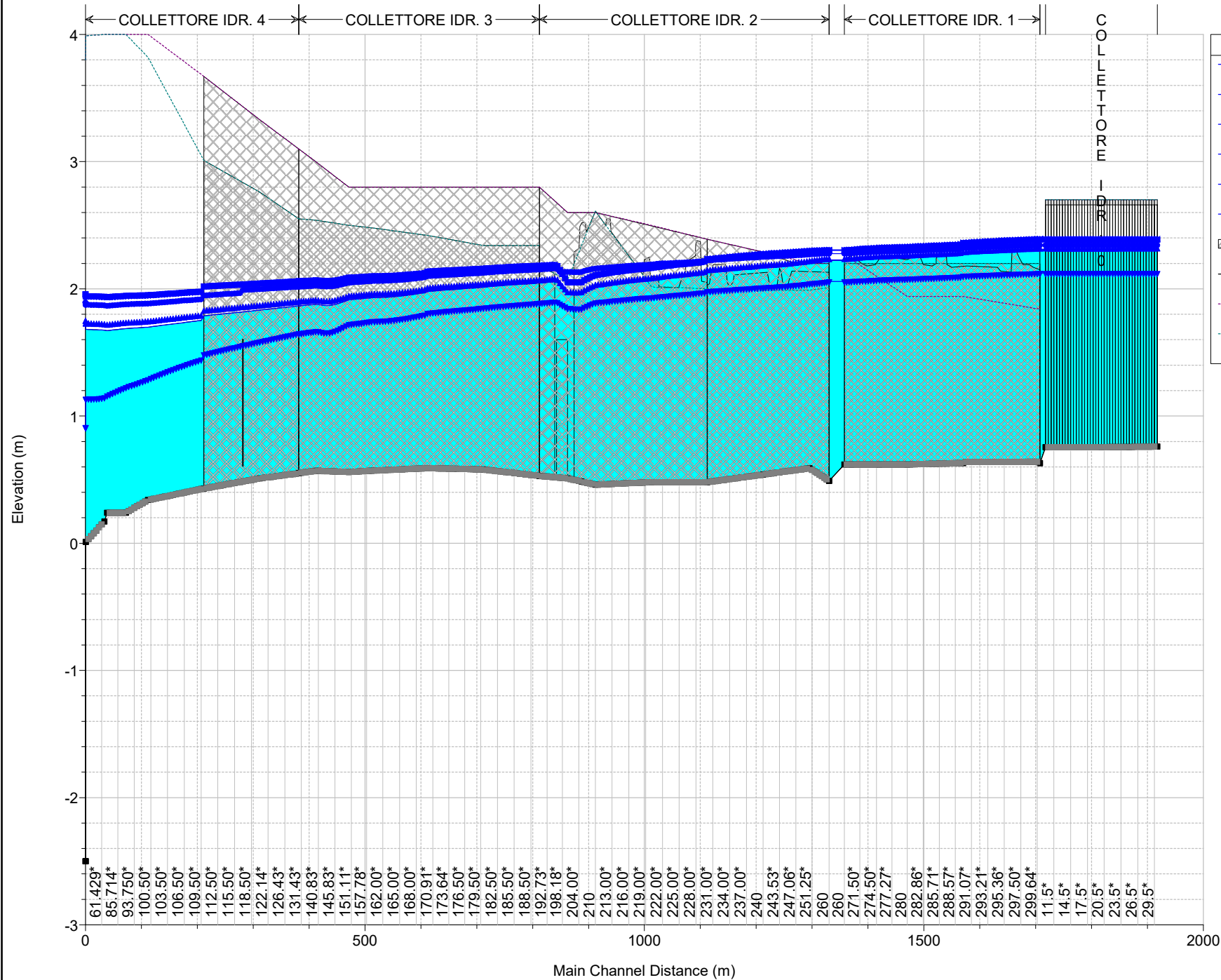
- WS Max WS - TR200_D0300_02
- WS Max WS - TR200_D0100_02
- WS Max WS - TR200_D0600_02
- WS Max WS - TR030_D0300_02
- WS Max WS - TR030_D0100_02
- WS Max WS - TR030_D0600_02
- Lat Struct
- Ground
- LOB
- ROB

PROFILO LONGITUDINALE VERIFICA IDRAULICA CONFIGURAZIONE 2 – FOSSO NUOVO SCOLO GHEZZANO

PROFILO LONGITUDINALE VERIFICA IDRAULICA CONFIGURAZIONE 2 – EX 6 COMUNI



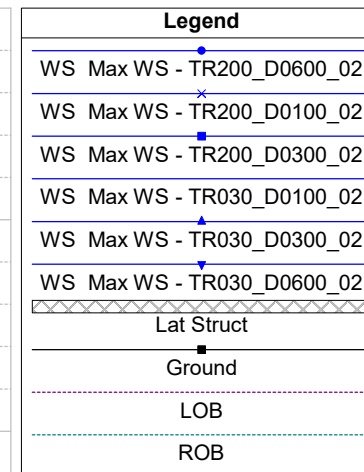
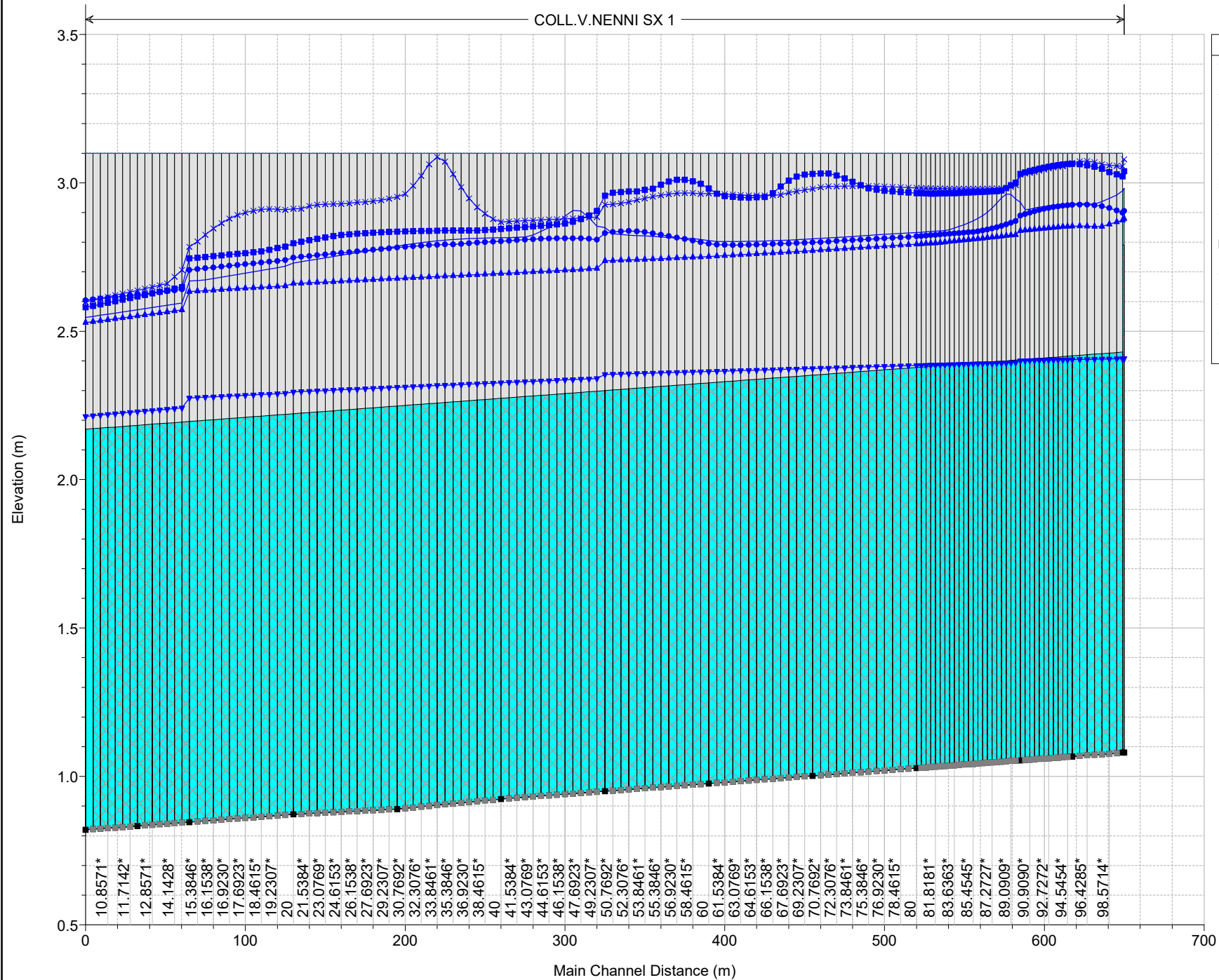
PROFILO LONGITUDINALE VERIFICA IDRAULICA CONFIGURAZIONE 2 – COLLETTORE IDRAULICO



Legend	
WS Max WS - TR200_D0300_02	■
WS Max WS - TR200_D0100_02	×
WS Max WS - TR200_D0600_02	●
WS Max WS - TR030_D0300_02	▲
WS Max WS - TR030_D0100_02	▼
WS Max WS - TR030_D0600_02	◆
Lat Struct	▨
Ground	■
LOB	---
ROB	---

PROFILO LONGITUDINALE VERIFICA IDRAULICA CONFIGURAZIONE 2 – COLLETTORE VIA NENNI SINISTRO

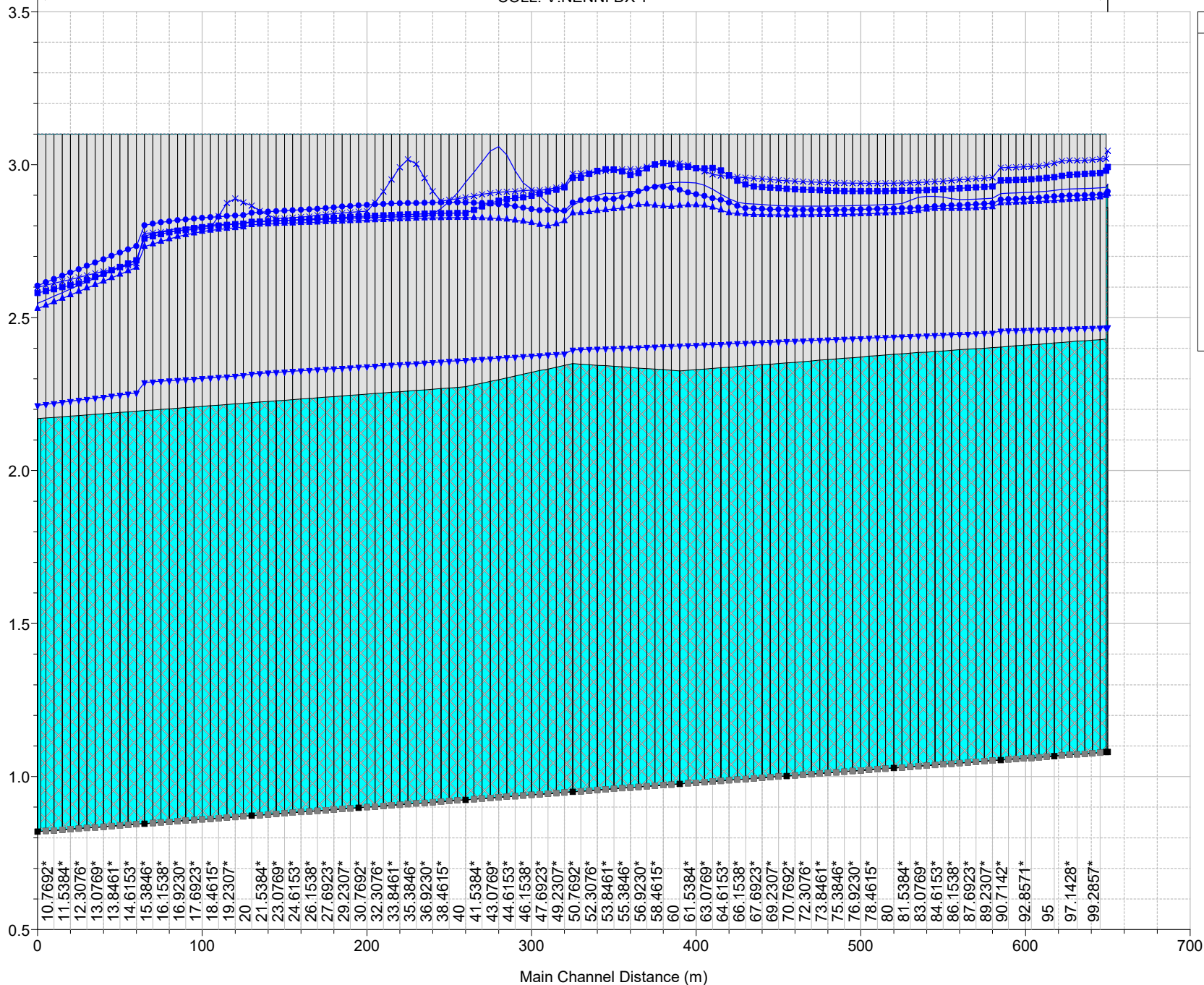
COLL.V.NENNI SX 1



PROFILO LONGITUDINALE VERIFICA IDRAULICA CONFIGURAZIONE 2 – COLLETTORE VIA NENNI DESTRO

COLL. V.NENNI DX 1

Elevation (m)

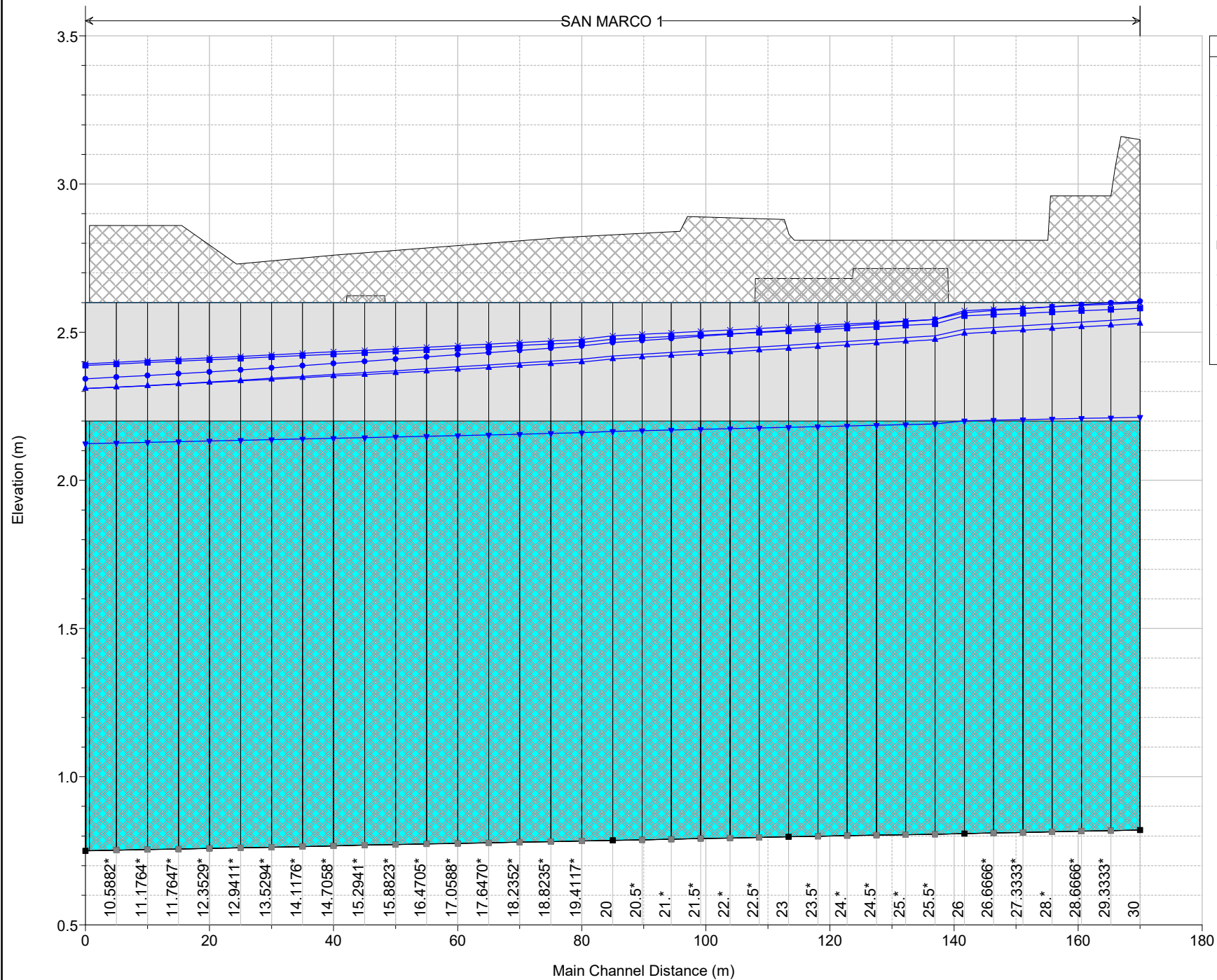


Legend

- WS Max WS - TR200_D0600_02
- WS Max WS - TR200_D0100_02
- WS Max WS - TR200_D0300_02
- WS Max WS - TR030_D0100_02
- WS Max WS - TR030_D0300_02
- WS Max WS - TR030_D0600_02
- Lat Struct
- Ground
- LOB
- ROB

PROFILO LONGITUDINALE VERIFICA IDRAULICA CONFIGURAZIONE 2 – COLLETTORE SAN MARCO

SAN MARCO 1

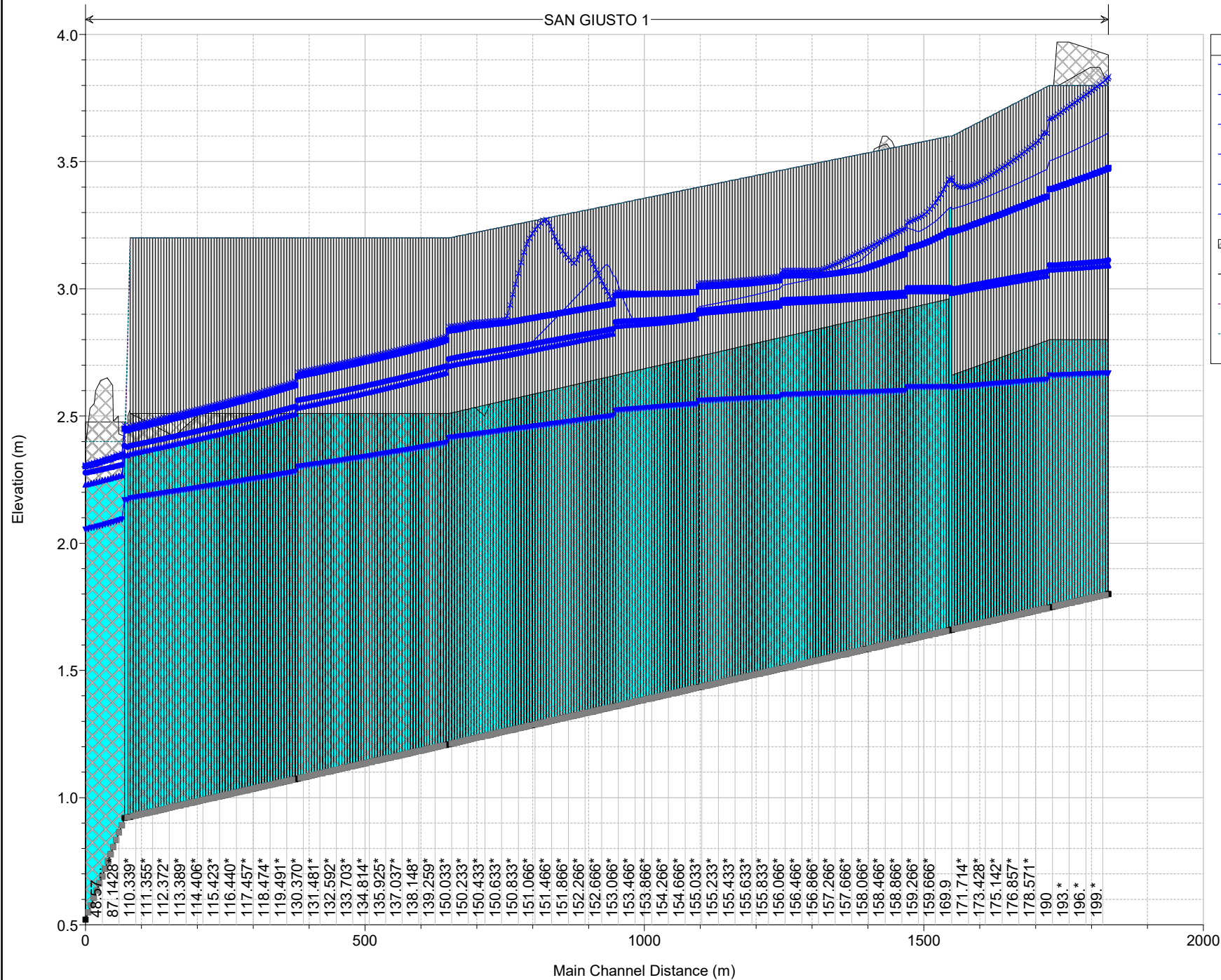


Legend

- WS Max WS - TR200_D0100_02
- WS Max WS - TR200_D0300_02
- WS Max WS - TR200_D0600_02
- WS Max WS - TR030_D0100_02
- WS Max WS - TR030_D0300_02
- WS Max WS - TR030_D0600_02
- Lat Struct
- Ground
- LOB
- ROB

PROFILO LONGITUDINALE VERIFICA IDRAULICA CONFIGURAZIONE 2 – COLLETTORE SAN GIUSTO

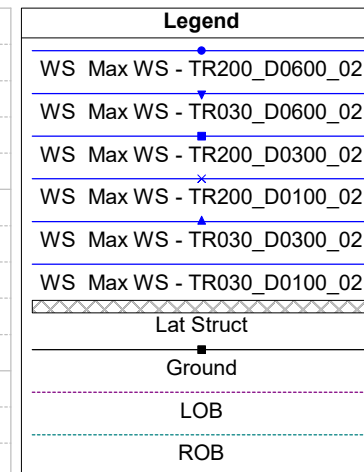
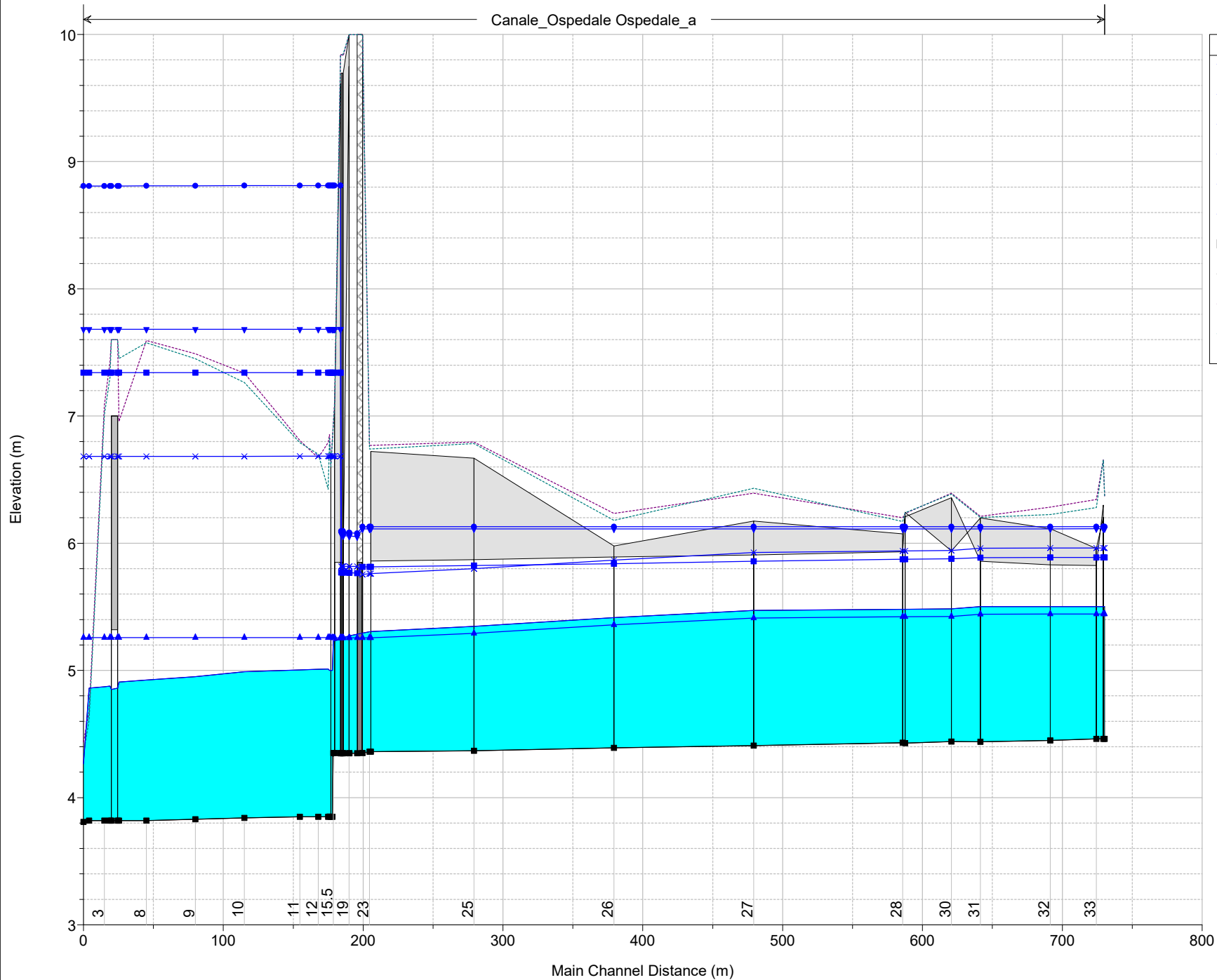
SAN GIUSTO 1



Legend

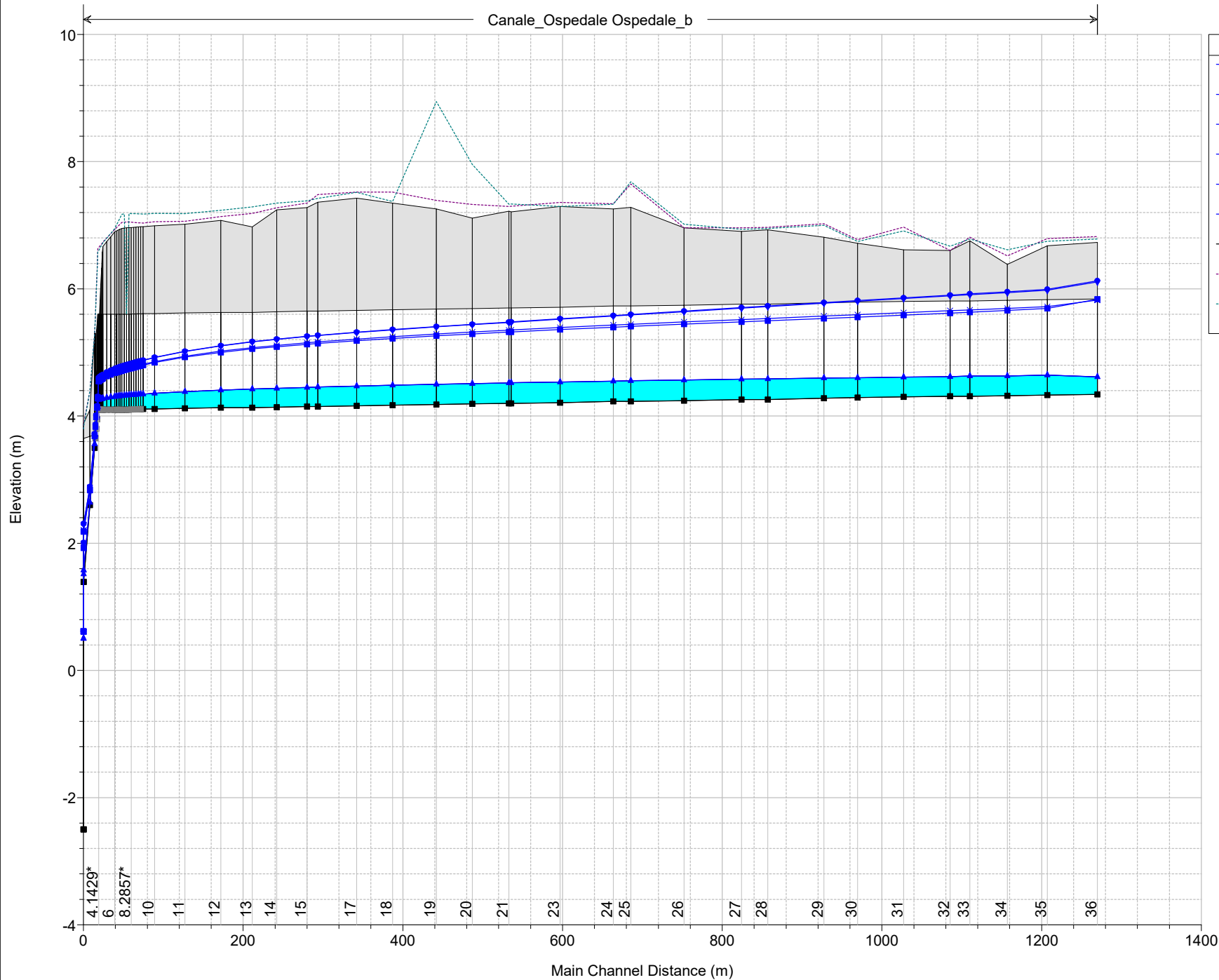
- WS Max WS - TR200_D0100_02
- WS Max WS - TR200_D0300_02
- WS Max WS - TR200_D0600_02
- WS Max WS - TR030_D0300_02
- WS Max WS - TR030_D0100_02
- WS Max WS - TR030_D0600_02
- Lat Struct
- Ground
- LOB
- ROB

PROFILO LONGITUDINALE VERIFICA IDRAULICA CONFIGURAZIONE 2 – CANALE OSPEDALE A

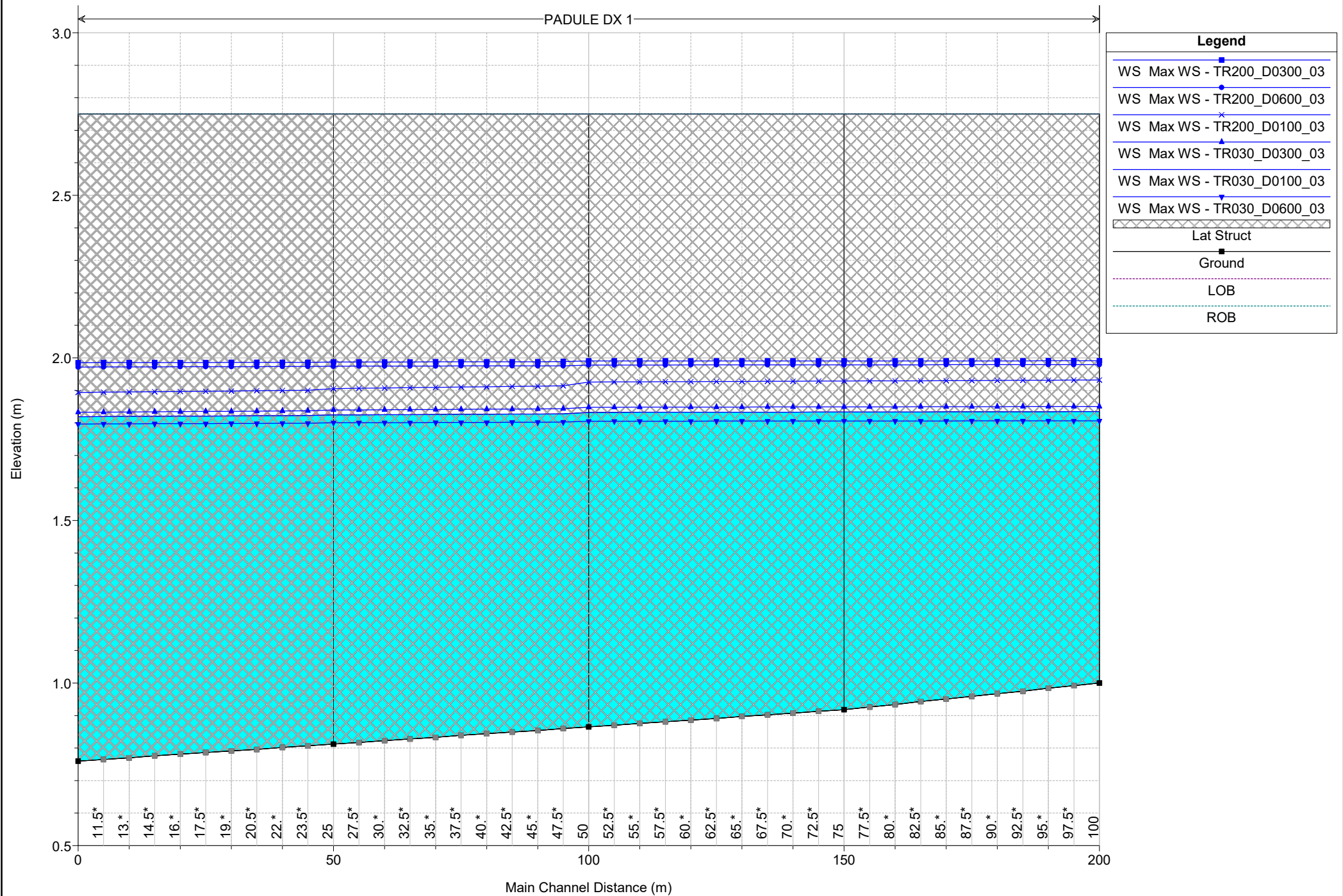


PROFILO LONGITUDINALE VERIFICA IDRAULICA CONFIGURAZIONE 2 – CANALE OSPEDALE B

Canale_Ospedale Ospedale_b

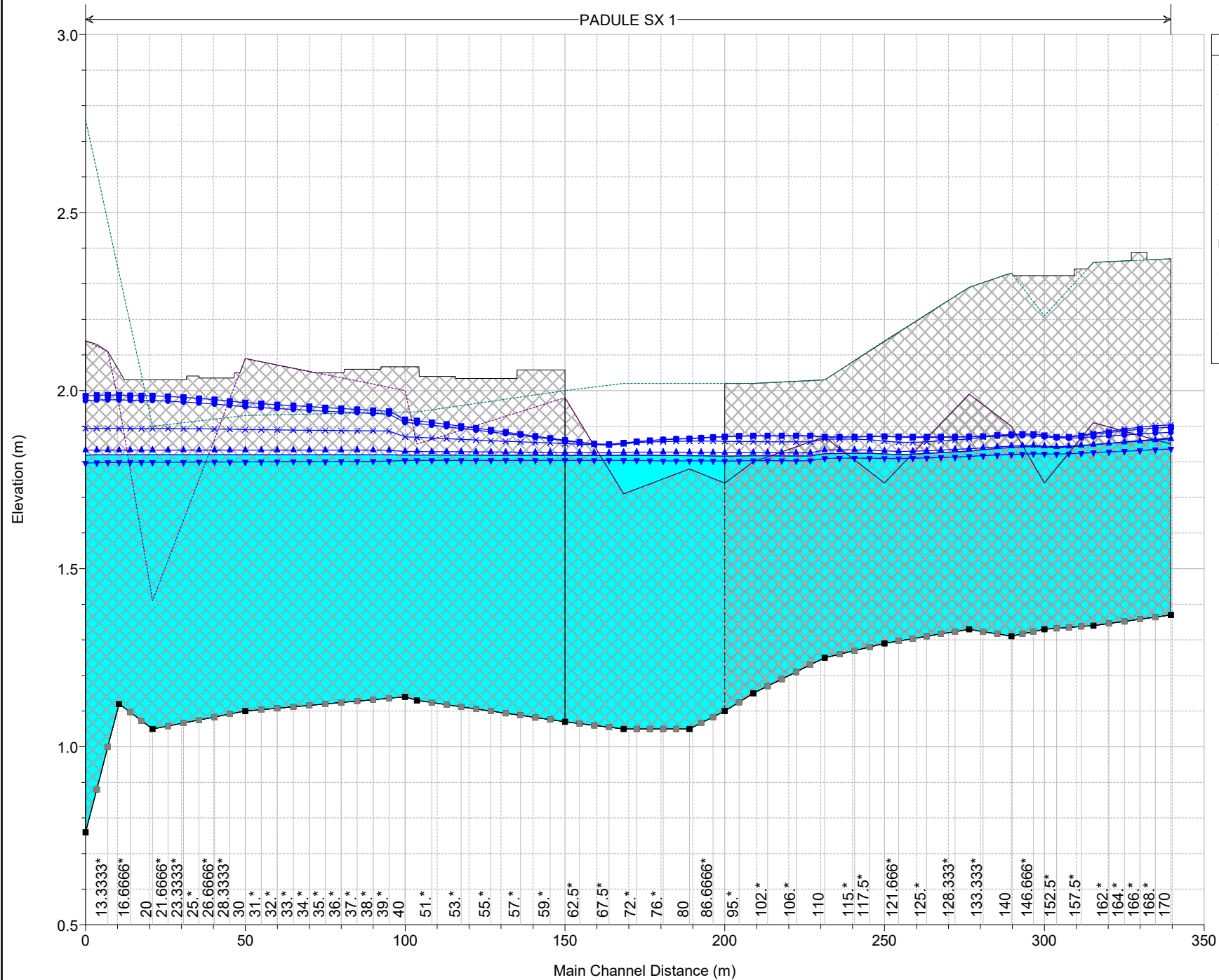


PROFILO LONGITUDINALE VERIFICA IDRAULICA CONFIGURAZIONE 3 – FOSSO PALUDE DESTRO



PROFILO LONGITUDINALE VERIFICA IDRAULICA CONFIGURAZIONE 3 – FOSSO PALUDE SINISTRO

PADULE SX 1

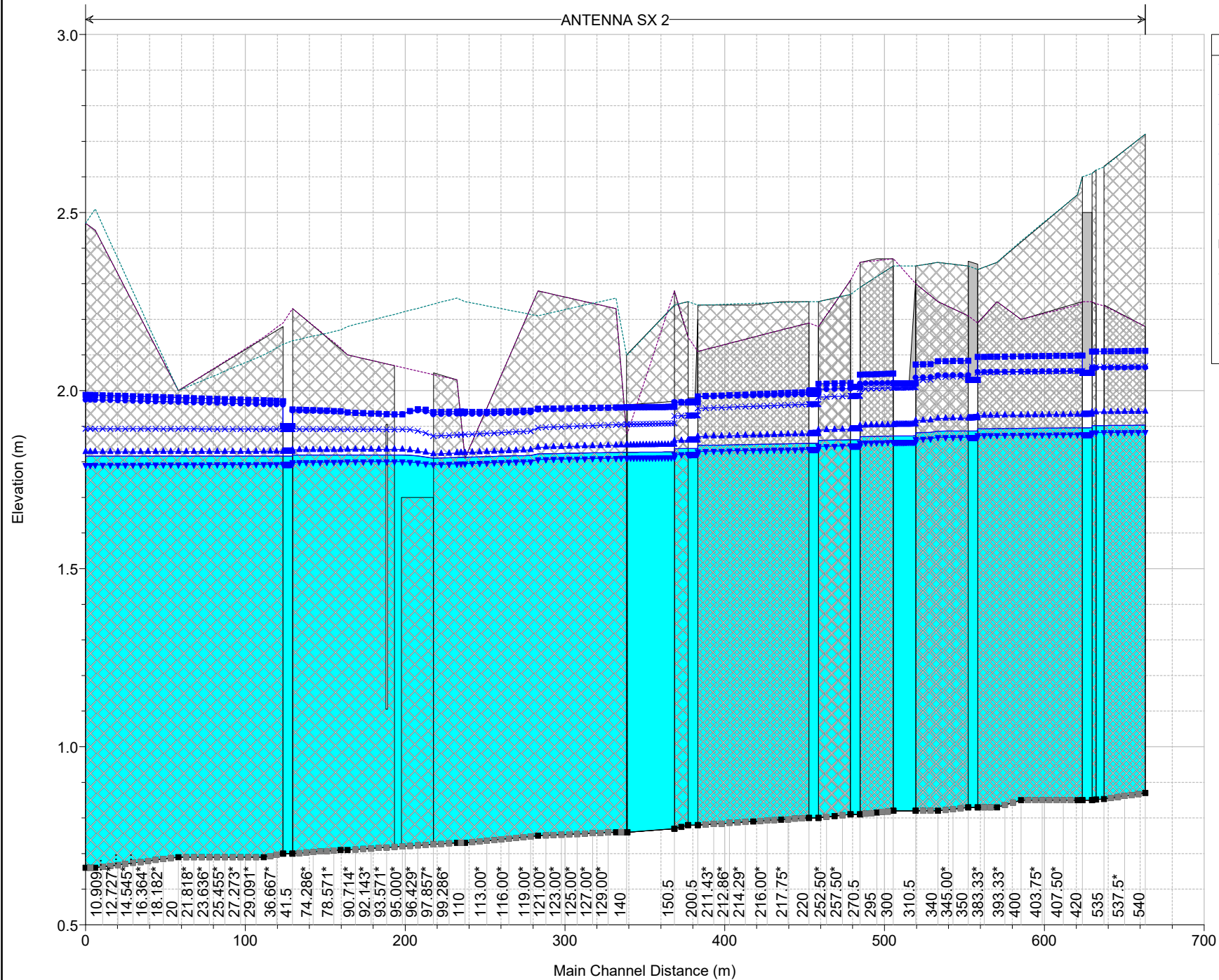


Legend

- WS Max WS - TR200_D0300_03
- WS Max WS - TR200_D0600_03
- WS Max WS - TR200_D0100_03
- WS Max WS - TR030_D0300_03
- WS Max WS - TR030_D0100_03
- WS Max WS - TR030_D0600_03
- Lat Struct
- Ground
- LOB
- ROB

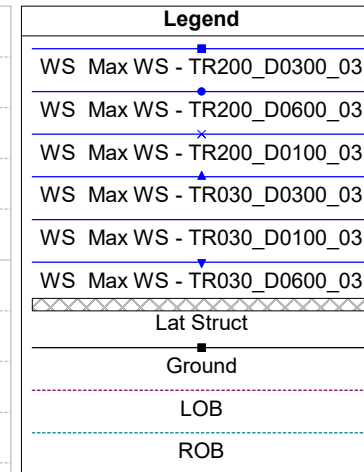
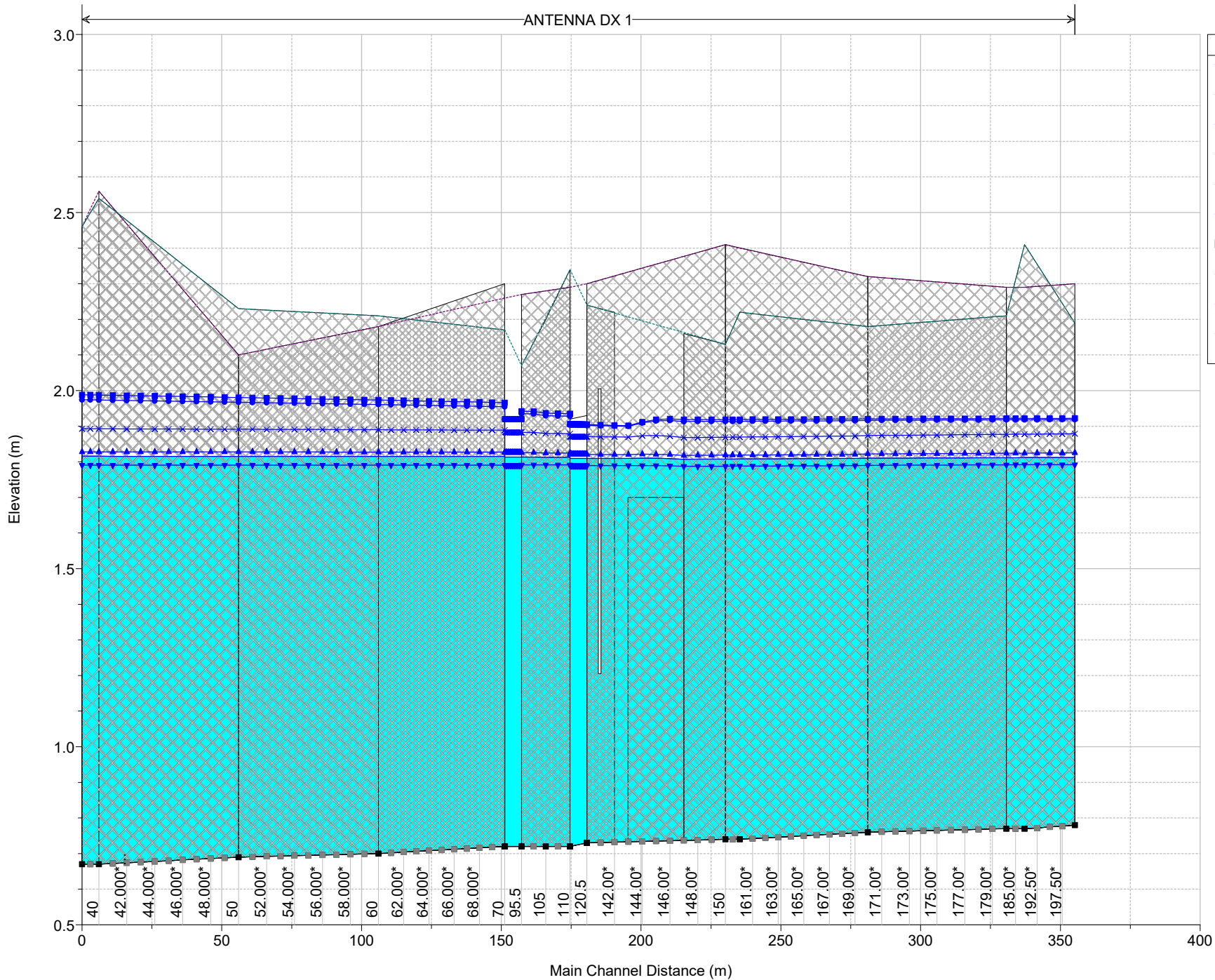
PROFILO LONGITUDINALE VERIFICA IDRAULICA CONFIGURAZIONE 3 – FOSSO ANTENNA SINISTRA

ANTENNA SX 2

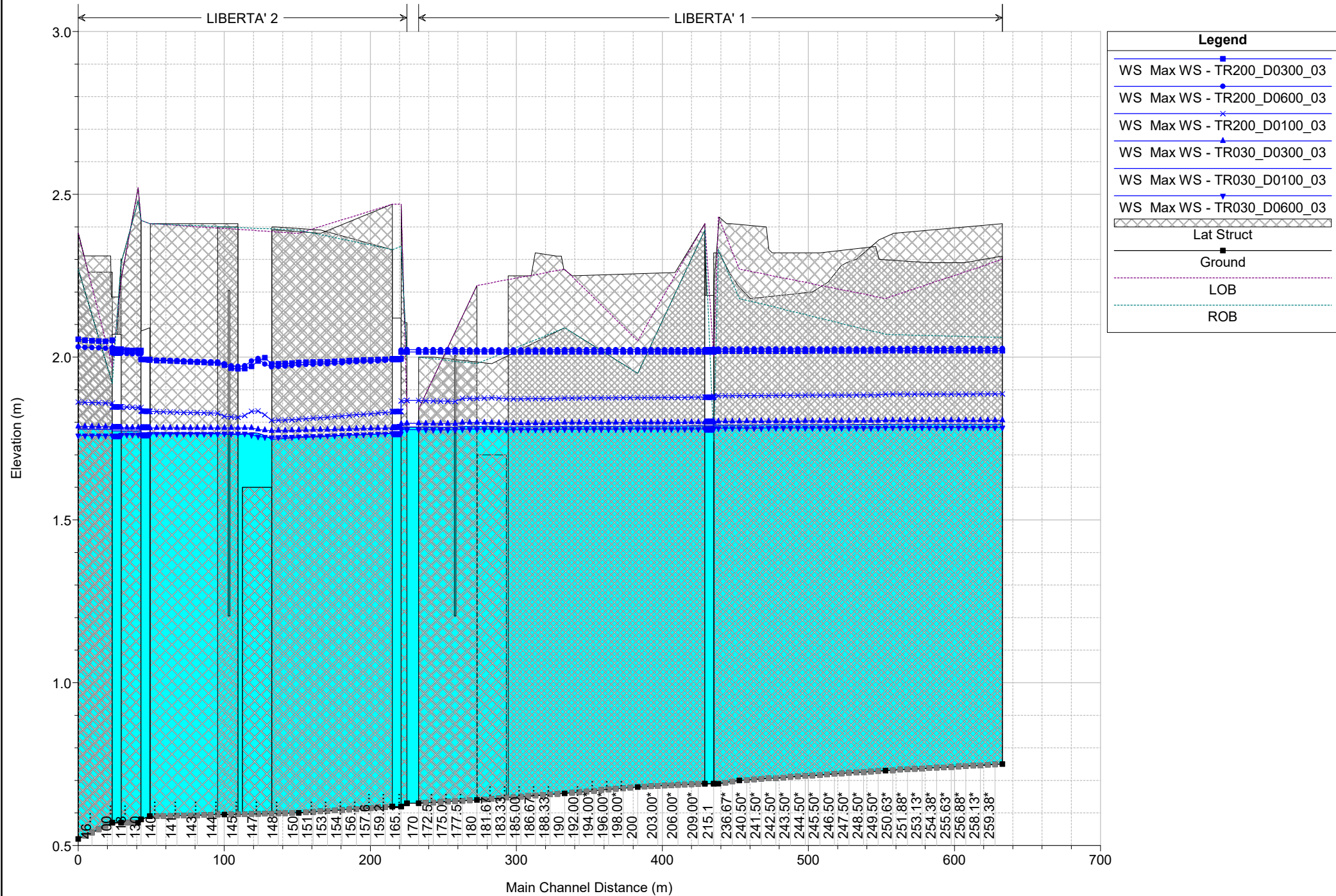


10.909*
12.727*
14.545*
16.364*
18.182*
20
21.818*
23.636*
25.455*
27.273*
29.091*
36.667*
41.5
74.286*
78.571*
90.714*
92.143*
93.571*
95.000*
96.429*
97.857*
99.286*
110
113.00*
116.00*
119.00*
121.00*
123.00*
125.00*
127.00*
129.00*
140
150.5
200.5
211.43*
212.86*
214.29*
216.00*
217.75*
220
252.50*
257.50*
270.5
295
300
310.5
340
345.00*
350
383.33*
393.33*
400
403.75*
407.50*
420
535
537.5
540

PROFILO LONGITUDINALE VERIFICA IDRAULICA CONFIGURAZIONE 3 – FOSSO ANTENNA DESTRA

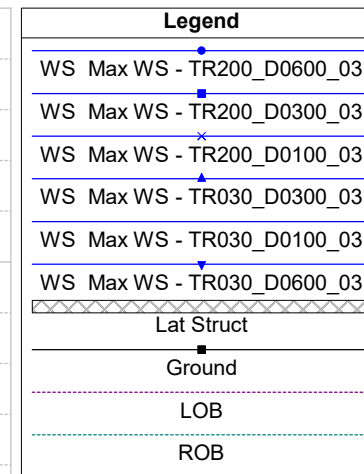
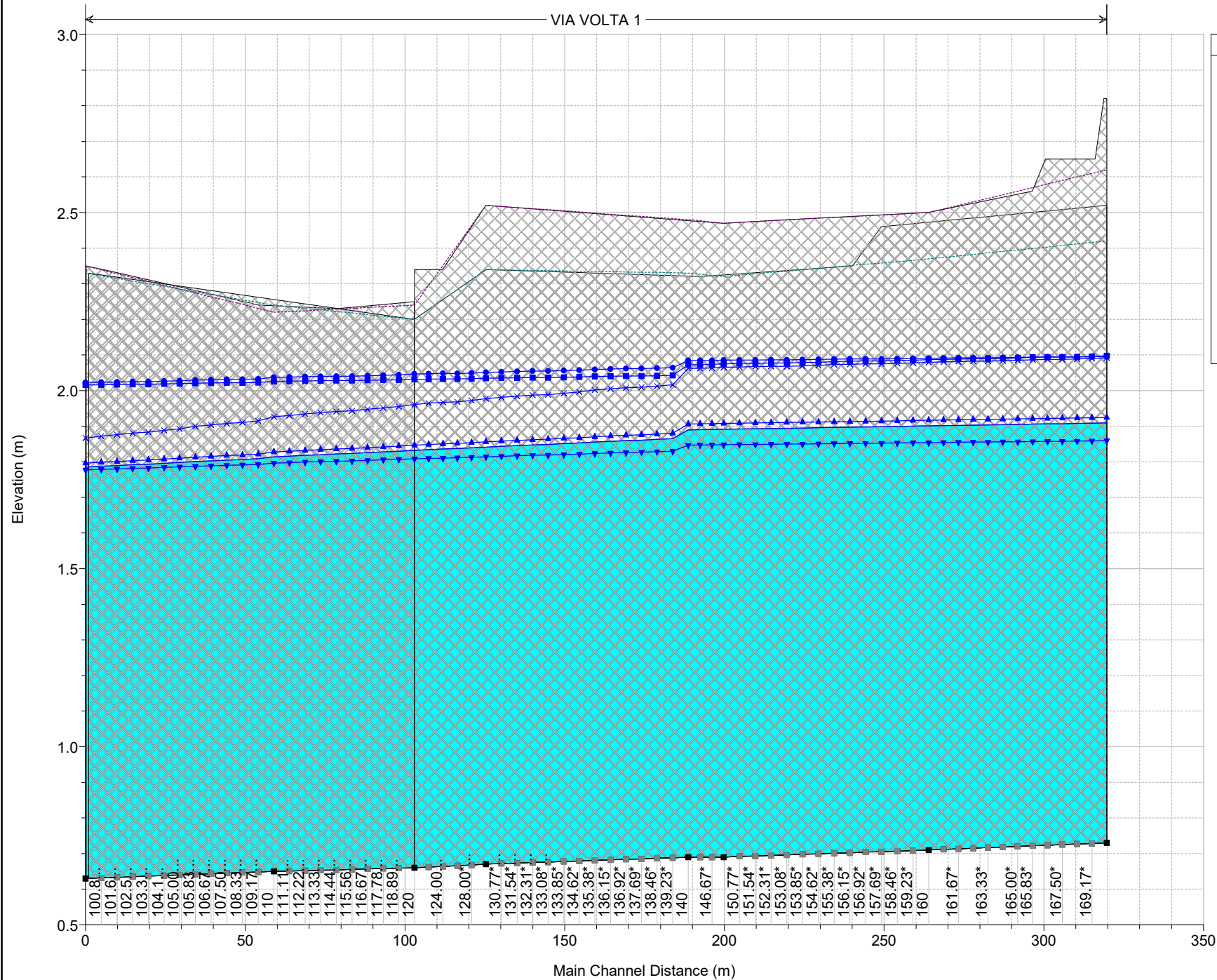


PROFILO LONGITUDINALE VERIFICA IDRAULICA CONFIGURAZIONE 3 – FOSSO LIBERTA'

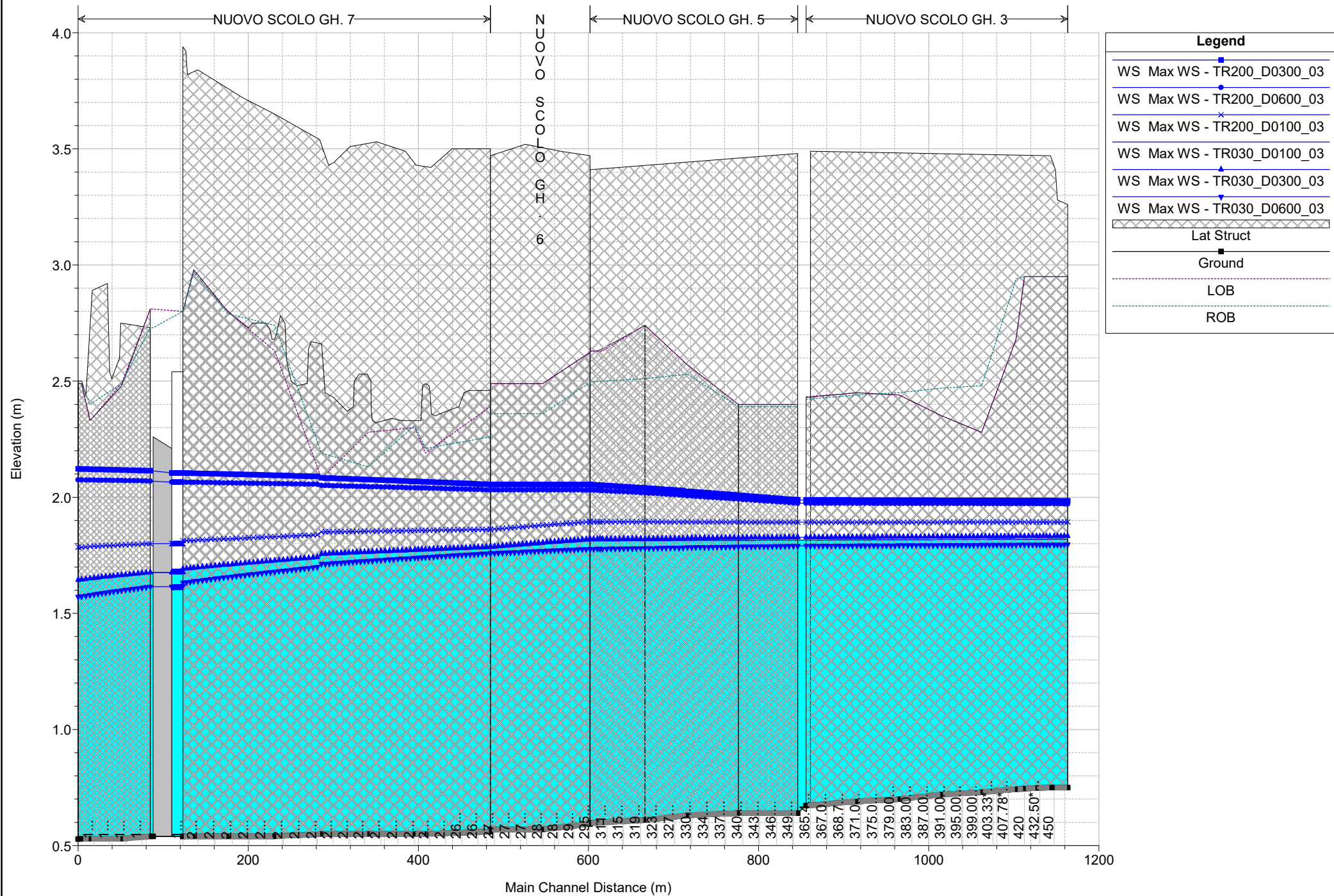


PROFILO LONGITUDINALE VERIFICA IDRAULICA CONFIGURAZIONE 3 – FOSSO VIA VOLTA

VIA VOLTA 1

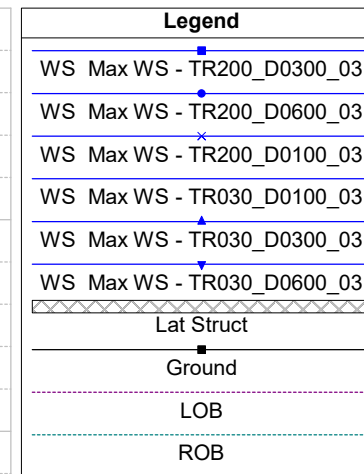
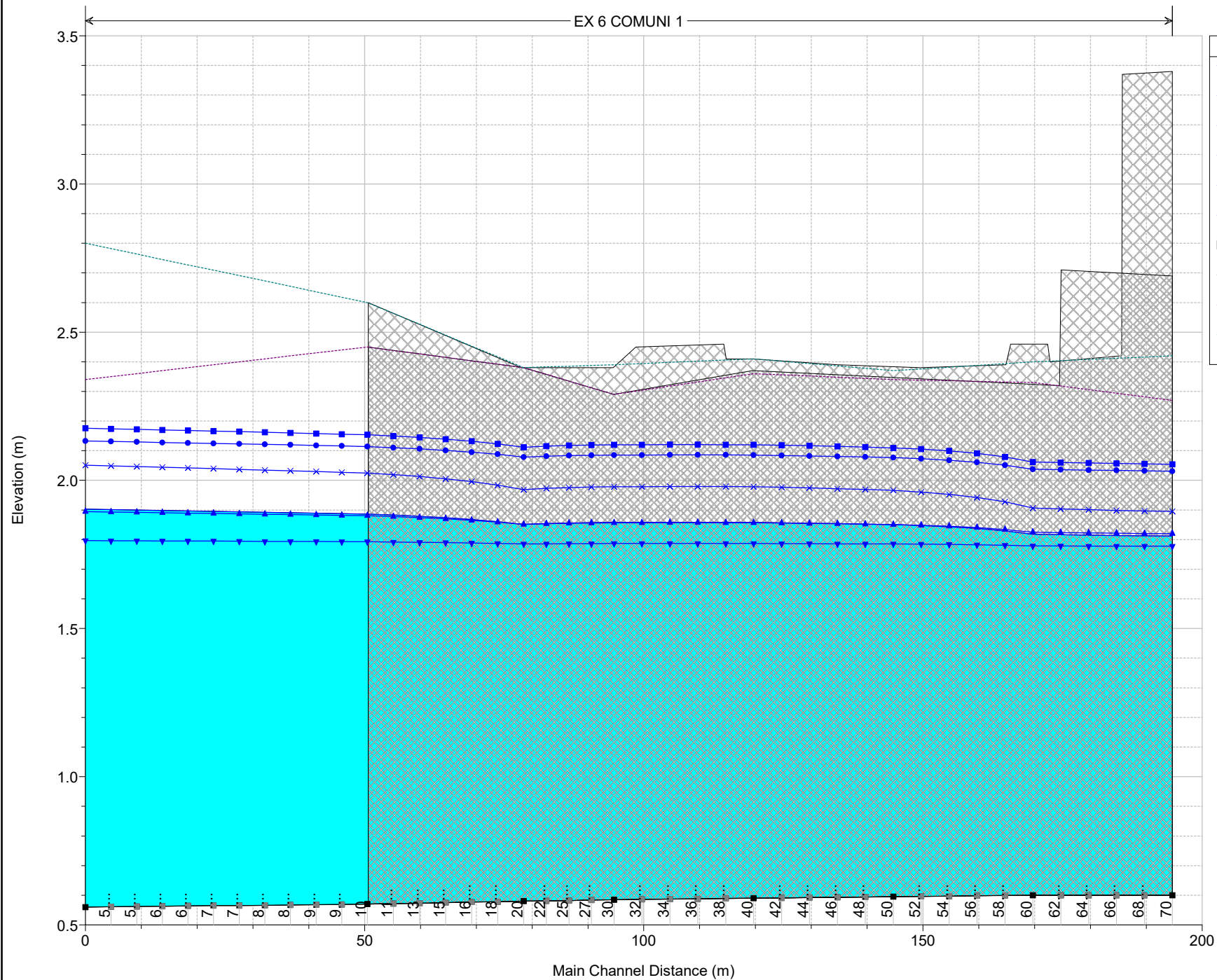


PROFILO LONGITUDINALE VERIFICA IDRAULICA CONFIGURAZIONE 3 – FOSSO NUOVO SCOLO GHEZZANO

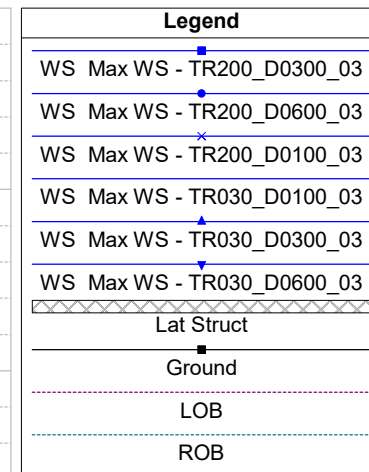
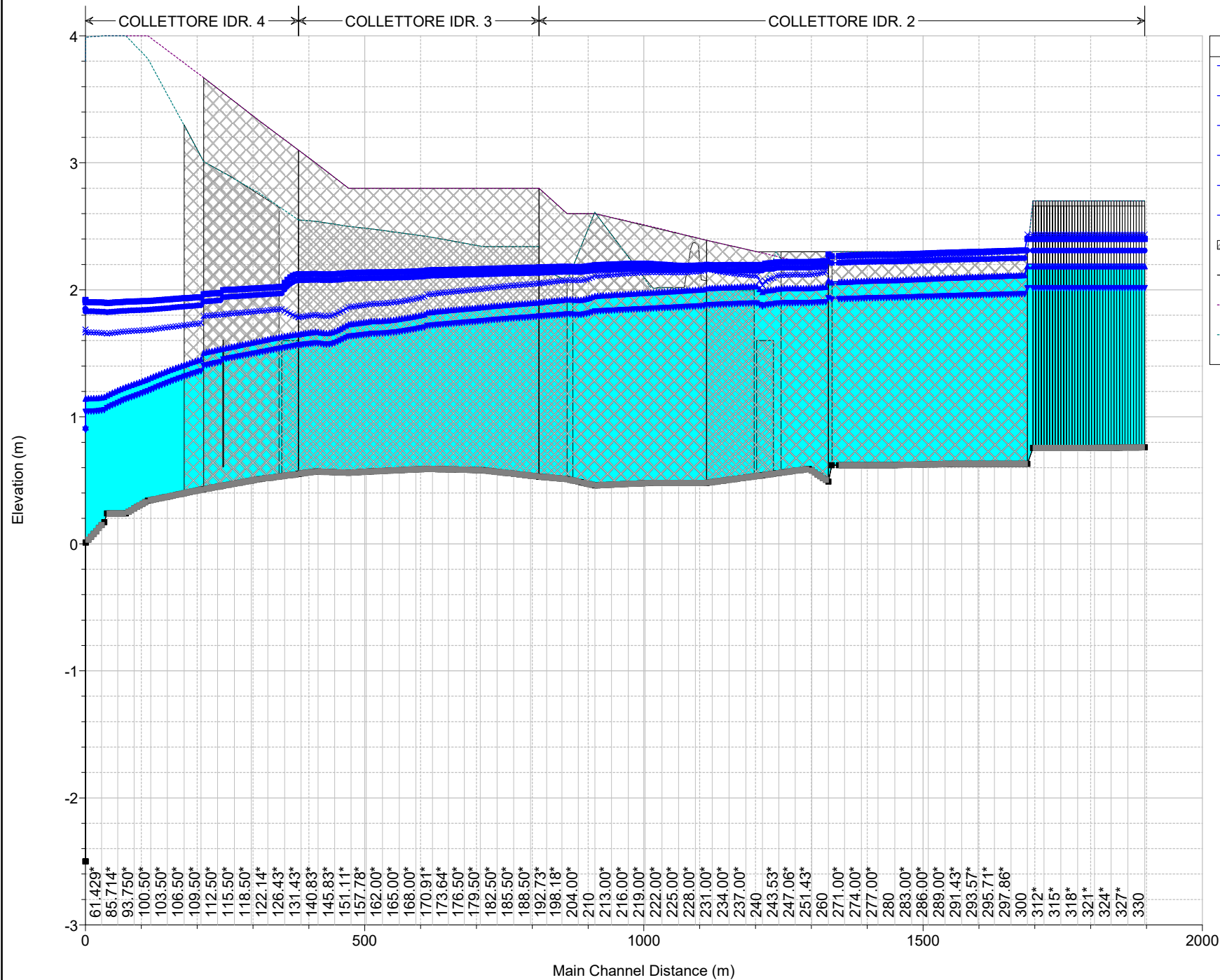


PROFILO LONGITUDINALE VERIFICA IDRAULICA CONFIGURAZIONE 3 – EX 6 COMUNI

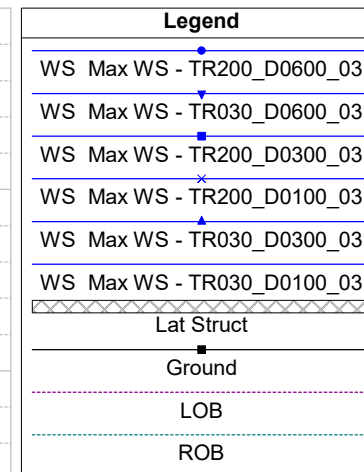
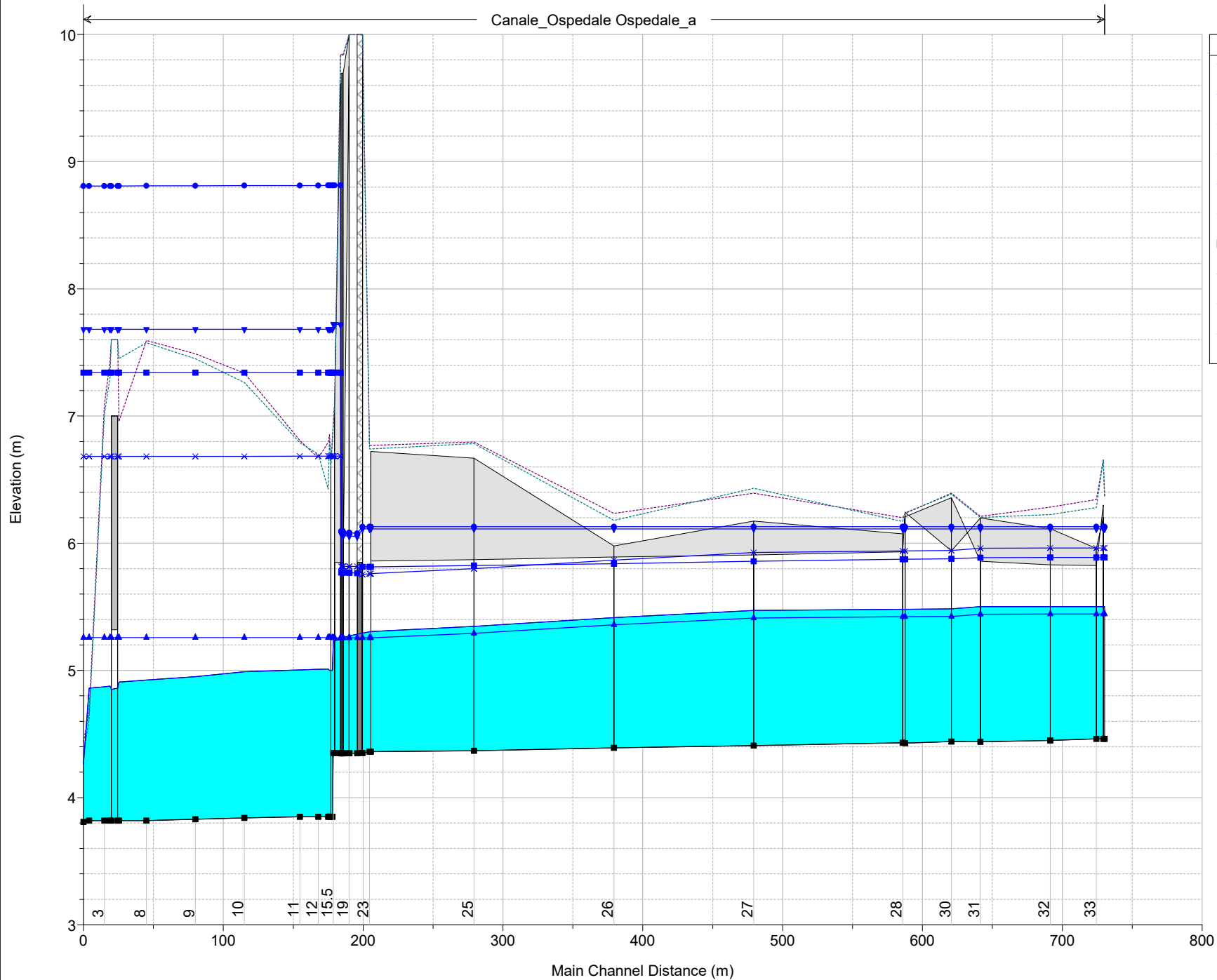
EX 6 COMUNI 1



PROFILO LONGITUDINALE VERIFICA IDRAULICA CONFIGURAZIONE 3 – COLLETTORE IDRAULICO

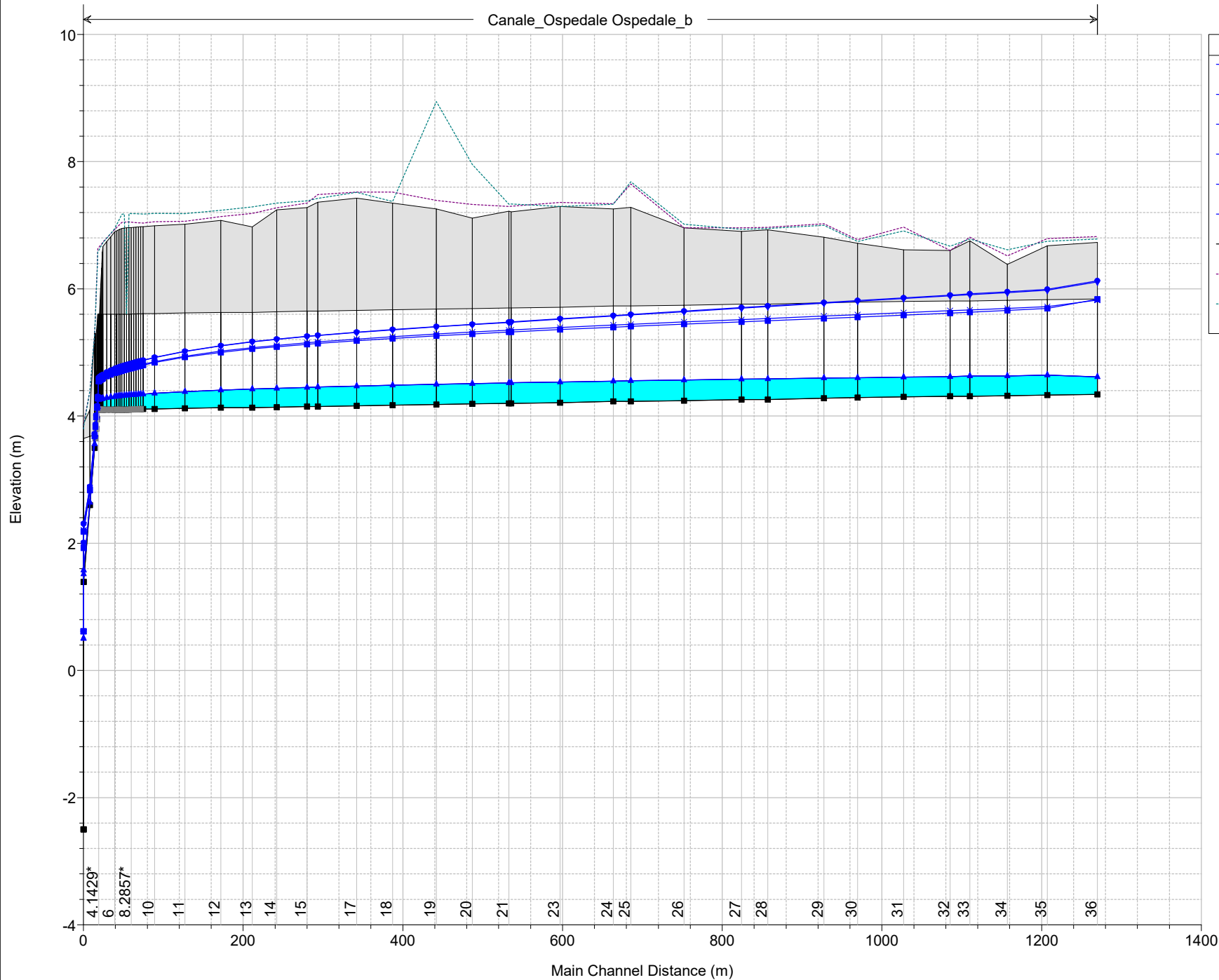


PROFILO LONGITUDINALE VERIFICA IDRAULICA CONFIGURAZIONE 3 – CANALE OSPEDALE A



PROFILO LONGITUDINALE VERIFICA IDRAULICA CONFIGURAZIONE 3 – CANALE OSPEDALE B

Canale_Ospedale Ospedale_b



Legend

- WS Max WS - TR200_D0100_03
- WS Max WS - TR200_D0300_03
- WS Max WS - TR200_D0600_03
- WS Max WS - TR030_D0600_03
- WS Max WS - TR030_D0300_03
- WS Max WS - TR030_D0100_03
- Ground
- LOB
- ROB