REGIONE: REGIONE LIGURIA

PROVINCIA: PROVINCIA DI IMPERIA

COMMITTENTE: REGIONE PIEMONTE

PROGETTO:

S.P. 97 delle Salse – Lavori di ricostruzione del ponte sul Rio Bavera al km 29+900

CUP:I81B21004530001



Coordinate: Latitudine 44.078393 - Longitudine 07.745743

PROGETTO DI FATTIBILITÀ TECNICO-ECONOMICA

ai sensi del D.Lgs 36/2023

ALLEGATO N°

4

RELAZIONE IDRAULICA

DATA: **Maggio 2024**

PROTOCOLLO: **012-2024**

PROGETTISTI:

Ing. Giorgio Scioldo

Ing. Roberto Sperandio

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2 RIFERIMENTI NORMATIVI

2.1 DISCIPLINA DEI CONTRATTI PUBBLICI

- Disposizioni integrative e correttive al decreto legislativo 18 aprile 2016, n. 50».
- Decreto Legislativo 18 aprile 2016, n. 50 - «Attuazione delle direttive 2014/23/UE, 2014/24/UE e 2014/25/UE sull'aggiudicazione dei contratti di concessione, sugli appalti pubblici e sulle procedure d'appalto degli enti erogatori nei settori dell'acqua, dell'energia, dei trasporti e dei servizi postali, nonché per il riordino della disciplina vigente in materia di contratti pubblici relativi a lavori, servizi e forniture.»
- D.P.R. 5 ottobre 2010, n. 207 - Regolamento di esecuzione ed attuazione del Decreto Legislativo 12 aprile 2006, n. 163, recante «Codice dei contratti pubblici relativi

2.2 DISCIPLINA DELLE OPERE IN CONGLOMERATO CEMENTIZIO

- Legge n. 1086 del 05/11/1971. Norme per la disciplina delle opere in conglomerato cementizio, normale e precompresso ed a struttura metallica.
- Legge n. 64 del 02/02/1974. Provvedimenti per le costruzioni con particolari prescrizioni per le zone sismiche.
- D.M. LL.PP. del 11/03/1988. Norme tecniche riguardanti le indagini sui terreni e sulle rocce, la stabilità dei pendii naturali e delle scarpate, i criteri generali e le prescrizioni per la progettazione, l'esecuzione e il collaudo delle opere di sostegno delle terre e delle opere di fondazione.
- Testo Unico delle Norme Tecniche per le Costruzioni, approvato con DM Infrastrutture 14 gennaio 2008
- Circolare Ministeriale n. 617 del 2 febbraio 2009

2.3 DISCIPLINA DELLE OPERE DI FONDAZIONE E DI SOSTEGNO DELLE TERRE

- D.M. LL.PP. del 14/02/1992. Norme tecniche per l'esecuzione delle opere in cemento armato normale e precompresso e per le strutture metalliche.
- D.M. 9 gennaio 1996 Norme Tecniche per il calcolo, l'esecuzione ed il collaudo delle strutture in cemento armato normale e precompresso e per le strutture metalliche.
- D.M. 16 gennaio 1996 Norme Tecniche relative ai “Criteri generali per la verifica di sicurezza delle costruzioni e dei carichi e sovraccarichi”.
- D.M. 16 gennaio 1996 Norme Tecniche per le costruzioni in zone sismiche. - Circolare Ministero LL.PP. 15 ottobre 1996 N. 252 AA.GG./S.T.C. Istruzioni per l'applicazione delle Norme Tecniche di cui al D.M. 9 gennaio 1996.
- Circolare Ministero LL.PP. 10 aprile 1997 N. 65/AA.GG. Istruzioni per l'applicazione delle Norme Tecniche per le costruzioni in zone sismiche di cui al D.M. 16 gennaio 1996.
- Ordinanza del Presidente del Consiglio dei Ministri n. 3274 del 20 marzo 2003, recante “Primi elementi in materia di criteri generali per la classificazione sismica del territorio nazionale e di normative tecniche per le costruzioni in zona sismica” e successive modificazioni
- Testo Unico delle Norme Tecniche per le Costruzioni, approvato con DM Infrastrutture 14/01/2008
- Circolare Ministeriale n. 617 del 2 febbraio 2009
- Aggiornamento delle Norme Tecniche per le Costruzioni, approvato con DM Infrastrutture 17/01/2018
- Circolare Ministeriale n. 7 del 21 gennaio 2019

3 PREMESSA

Come riportato sulla scheda dell'ARPA Piemonte relativa all'evento in oggetto, la testata della valle Tanaro, posta a cavallo fra Liguria (Provincia di Imperia) e Piemonte (Provincia di Cuneo), è formata da due corsi d'acqua, il Negrone e il Tanarello; il primo caratterizza la frazione Viozene del comune di Ormea, mentre il secondo, dopo un tratto in territorio ligure a monte della confluenza con il Negrone da cui nasce il Tanaro, va a costituire, con l'affluente Bavera, il confine fra le due regioni e in particolare fra il comune di Briga Alta (CN), frazione Piaggia, e i comuni di Triora (IM), frazione Monesi di Triora, e di Mendatica (IM), frazione Monesi di Mendatica.

Per il periodo 21-25 novembre, le stazioni della rete piemontese registrano, nel settore comprendente le testate delle valli Tanaro, Casotto, Bormida, cumulate da 450 a 650 mm; nella zona di testata della Valle Tanarello si registrano i massimi piemontesi dell'evento come testimoniato dal rilievo della stazione di Piaggia (CN) (oltre 650 mm di cumulata). Nel novembre 1994 erano stati registrati valori complessivi di circa 300 mm, conseguenti a piogge avvenute in gran parte nella sola giornata del 5 novembre.

Le piogge nel 2016 nell'alta valle Tanaro sono iniziate il 21 novembre, con apporti dell'ordine dei 100 mm/giorno per poi calare il giorno seguente intorno a 20-30 mm; il 23 si registrano piogge rilevanti con una media di circa 120-130 mm/g, ma è nella giornata del 24 novembre che si rileva il maggiore apporto di pioggia con valori medi intorno a 250-300 mm/giorno; segue la coda della precipitazione con in media un ulteriore apporto di 20-30 mm.

Nella notte fra il 23 e il 24 novembre le ingenti piogge scatenano una violenta attività torrentizia lungo il corso del T. Tanarello e del suo affluente T. Bavera; gli effetti sono erosioni della base dei versanti, innesco di frane, ingente trasporto solido, formazione di colate detritiche e deposito di materiale alluvionale. L'attività violenta del corso d'acqua prosegue per tutta la giornata del 24, quando avviene il picco delle precipitazioni. I rii minori si ingrossano a dismisura e le acque ruscellanti corrono lungo i versanti fuori dal reticolo.

Si verificano le prime frane. Il versante destro della valle, in territorio ligure, appare più vulnerabile in quanto caratterizzato da preesistenti accumuli di frana di grandi dimensioni e da sfavorevoli condizioni strutturali (substrato a franapoggio fra i 20 e i 50°, costituito da Flysch ad Helmintoidi – calcari e arenarie fittamente stratificati). Una grande frana coinvolgente all'incirca una superficie di 6 ettari (con un volume stimabile in alcune decine di migliaia di m3) si stacca dal versante destro del Vallone Punta S. Maria (affluente del Bavera) intorno a 1600 m e collassa nel torrente, alimentando ondate di colate detritiche che si ripercuotono a valle nel Bavera e nel Tanarello che incide la valle fra le frazioni di Piaggia (CN) a nord e Monesi di Mendatica (IM) a sud.

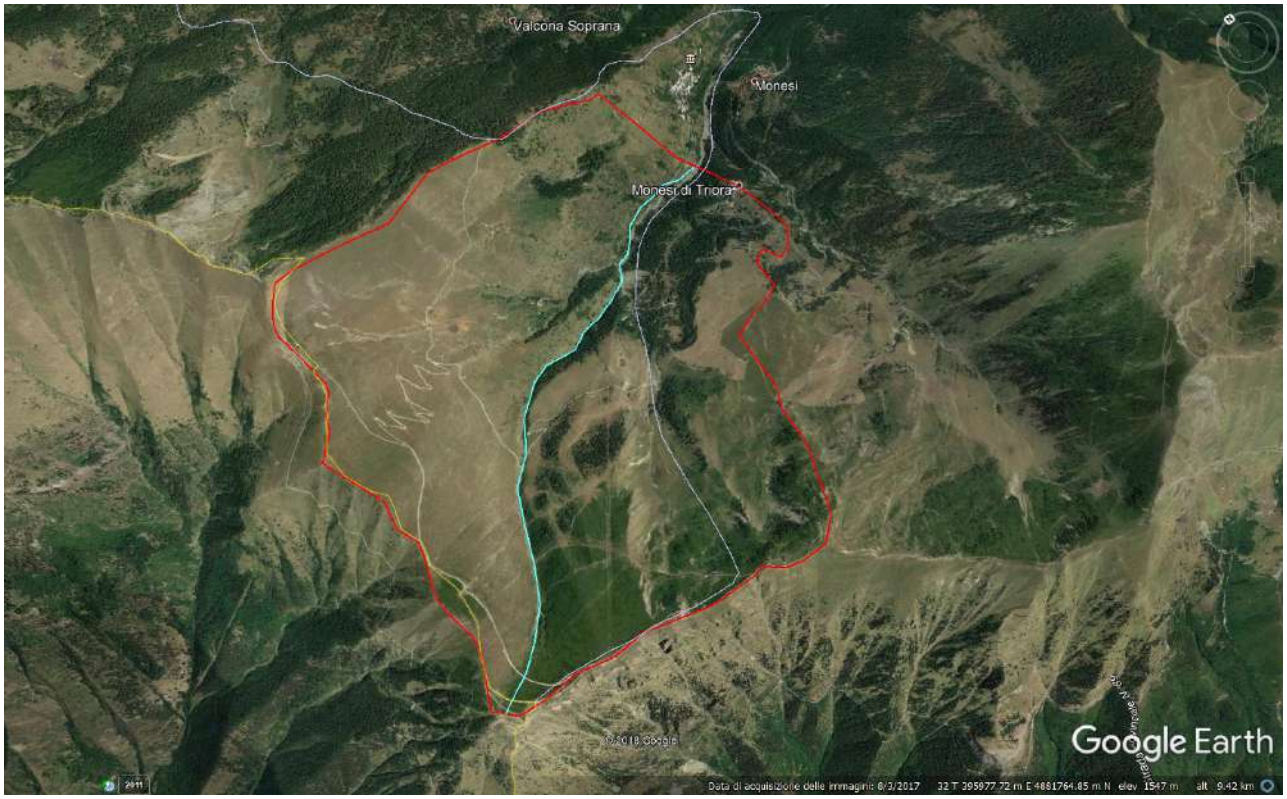
Sotto l'abitato di Monesi di M. nella notte fra il 23 e il 24 novembre, si innesca una prima frana che coinvolge una centrale idroelettrica che viene scalzata e trascinata verso il fondovalle del Tanarello; nei giorni seguenti l'edificio verrà ulteriormente spinto e finirà in alveo andando ad ostacolare il deflusso delle colate detritiche, costituendo una specie di briglia che tratterrà il trasporto solido dando luogo a monte ad una vasta piana di sedimentazione.

Lungo il corso del Bavera prosegue la violenta attività torrentizia che distrugge nella giornata del 24 l'attraversamento stradale inferiore che collegava Liguria e Piemonte. Il ponte, alto circa 6 m, viene completamente ostruito dalle colate detritiche mentre il rilevato di sinistra viene sfondato e percorso dal

nuovo alveo; cordoni detritici ai lati dell'alveo testimoniano depositi di altezza plurimetrica superiori al paramento di imposta di alcune briglie presenti fra la strada bassa e il viadotto superiore di collegamento fra Liguria e Piemonte.

I depositi vengono smantellati ed erosi nei giorni seguenti, mentre a valle dell'attraversamento basso, a partire dalla confluenza Tanarello/Bavera, la valle appare totalmente sovralluvionata, perlomeno fino al rudere della centrale idroelettrica; in questo punto si stima un deposito di 5-7 m di ghiaie e ciottoli, che ha coperto un ponticello pedonale (cosiddetto "Ponte romano") e i due edifici abbandonati del vecchio mulino di Piaggia. I depositi delle colate detritiche forniranno materiale per il trasporto solido del Tanaro a valle, con riattivazioni ad ogni impulso di piena che dureranno per un lungo periodo.

Nell'immagine sottostante è identificato il bacino a monte del "Ponte Romano", con un'area di 5,74 km^2 ed una lunghezza del tratto di asta torrentizia di 3,8 km.



Nell'immagine a pagina seguente è riportata un'immagine tratta da Google Earth della frana in territorio ligure lungo il Rio Punta S. Maria, affluente di destra del Torrente Bavera, che ha portato al cospicuo accumulo di materiale detritico l'ungo l'asta torrentizia del Bavera.



Nelle immagini riportate nella a pagina seguente l'alveo del Torrente Bavera nel corso della fase parossistica dell'evento meteorologico e franoso.

Nella pagina successiva è invece riportata una più foto recente, in cui il torrente ha inciso un nuovo d'alveo in sinistra orografica, lateralmente al "Ponte Romano", tuttora semisepolto dai depositi della colata detritica.




Provincia di
CUNEO



4 CALCOLI IDRAULICI PRELIMINARI

Il presente progetto prevede il ripristino della funzionalità del "Ponte Romano", che si presentava come nella sottostante immagine di repertorio, realizzando due muri a pianta leggermente trapezoidale all'interno delle vecchie spalle, fondati su palificate in barre tipo Dywidag ed ancorati verso monte, così da offrire un sostegno all'antica muratura ed un appoggio sicuro all'impalcato.



4.1 TEMPO DI CORRIVAZIONE

I parametri del bacino sono i seguenti:

PARAMETRI DEL BACINO		
Area bacino	5.74	km^2
z_{media}	1725	m
z_{min}	1280	m
z_{max}	2170	m
PARAMETRI DELL'ASTA		
Lunghezza asta	3.80	km
Pendenza media bacino	23.42%	-
CARATTERISTICHE DEL BACINO		
C (coeff. suolo)	0.50	-

I tempi di corrivazione secondo i diversi Autori sono i seguenti (espressi in ore):

TEMPI DI CORRIVAZIONE		
Autore	Tempo [h]	Tempo [min]
Giandotti	0.91	54
Puglisi	1.52	91
Ventura	0.63	38
Pezzoli	0.43	26
Viparelli	0.66	40
Tournon	1.60	96

4.2 PORTATA MASSIMA ATTESA

Il Piano stralcio per l'Assetto Idrogeologico (PAI) – "Interventi sulla rete idrografica e sui versanti" fornisce i dati necessari al calcolo della possibilità pluviometrica.

I parametri delle curve di possibilità pluviometrica sono stati ricavati dall'Area AX160, posta alle coordinate 399000 E e 4881000 N, che contiene l'intera aera in oggetto, e sono i seguenti:

PARAMETRI DELLE CURVE DI POSSIBILITA' PLUVIOMETRICA				
Tempo di ritorno	20 anni	100 anni	200 anni	500 anni
a	40.91	50.9	55.29	60.95
n	0.53	0.538	0.54	0.542

Quindi le rispettive intensità di pioggia saranno ottenute dalla formula:

$$h = a \cdot {T_R}^n$$

CURVE DI POSSIBITA' PLUVIOMETRICA				
Tempo di ritorno	20 anni	100 anni	200 anni	500 anni
Altezza cumulata (h)	39.9882574	49.73606169	54.02102913	59.54600456
Intensità di pioggia (i=h/Tc)	41.74515375	51.92123082	56.39445961	62.16217653

Usando la formula razionale si calcola la portata prevista per i diversi tempi di ritorno:

$$Q = \frac{C \cdot h \cdot A_b}{3.6 \cdot T_c}$$

Le portate del Torrente Bavera in corrispondenza del "Ponte Romano", per tempi di ritorno di 20, 100 e 200 anni sono rispettivamente di:

PORTATE DI PROGETTO				
Tempo di ritorno	20 anni	100 anni	200 anni	500 anni
Portata Q [m^3/s]	33.28016424	41.39275901	44.95891642	49.55706851

4.3 METODO TCEV

A seguito del rapporto TCEV del progetto VAPI si riporta la formula che lega il coefficiente di crescita K_T: con il periodo di ritorno T:

$$K_T = \varepsilon + \frac{\alpha}{k}\left(1 - e^{-k\,y_T}\right)$$

Tab. 4.2: Parametri della distribuzione di probabilità GEV del coefficiente di crescita K_T per le zone omogenee di piena dell'Italia Nord Occidentale (N indica la numerosità del campione utilizzato).

	Zona	N	α	ε	k
A	Alpi e Prealpi Centrali	316	0.365	0.745	-0.110
B	Alpi e Prealpi Occidentali	347	0.352	0.635	-0.320
C	Appennino NW & Bacini Tirrenici	753	0.377	0.643	-0.276
D	Appennino NE	439	0.334	0.775	-0.089
aa	Alto Adige e suoi affluenti	467	0.292	0.804	-0.088

Nel caso in esame per un periodo di 200 anni si ricava:

- Parametri Zona C:

$$\alpha = 0{,}377 \;;\; \varepsilon = 0{,}673 \;;\; k = -0{,}276$$
$$K_T = \varepsilon + \frac{\alpha}{k}\left(1 - e^{-k\,y_T}\right) = 5{,}17$$

- Parametri Zona Piaggia:

$$\alpha = 0{,}248 \;;\; \varepsilon = 0{,}84 \;;\; k = -0{,}064 \;;\; a = 25{,}8\frac{mm}{h} \;;\; n = 0.507$$
$$K_T = \varepsilon + \frac{\alpha}{k}\left(1 - e^{-k\,y_T}\right) = 2{,}40$$

Località	Num. anni	ε	α	k	a	n
Piaggia	39	0.840	0.248	-0.064	25.8	0.507

Le leggi di probailità pluviomentrica definiscono come varia la media del massimo annuale dell'altezza di pioggia su una durata fissata d,m[h(d)] La curva di possibilità pluviometrica è così definita:

$m[h(d)] = a_1 d^n$

Si ricavano le portate riportate nella tabella sottostante

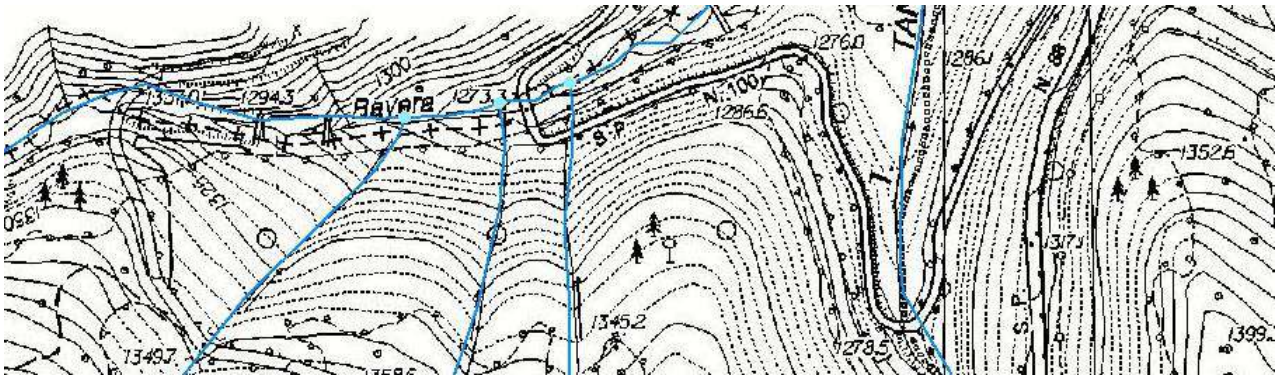
PORTATE DI PROGETTO					
Tempo di ritorno	20 anni	50 anni	100 anni	200 anni	500 anni
Portata Q [m^3/s]	32.56	38.24	42.73	47.40	53.89

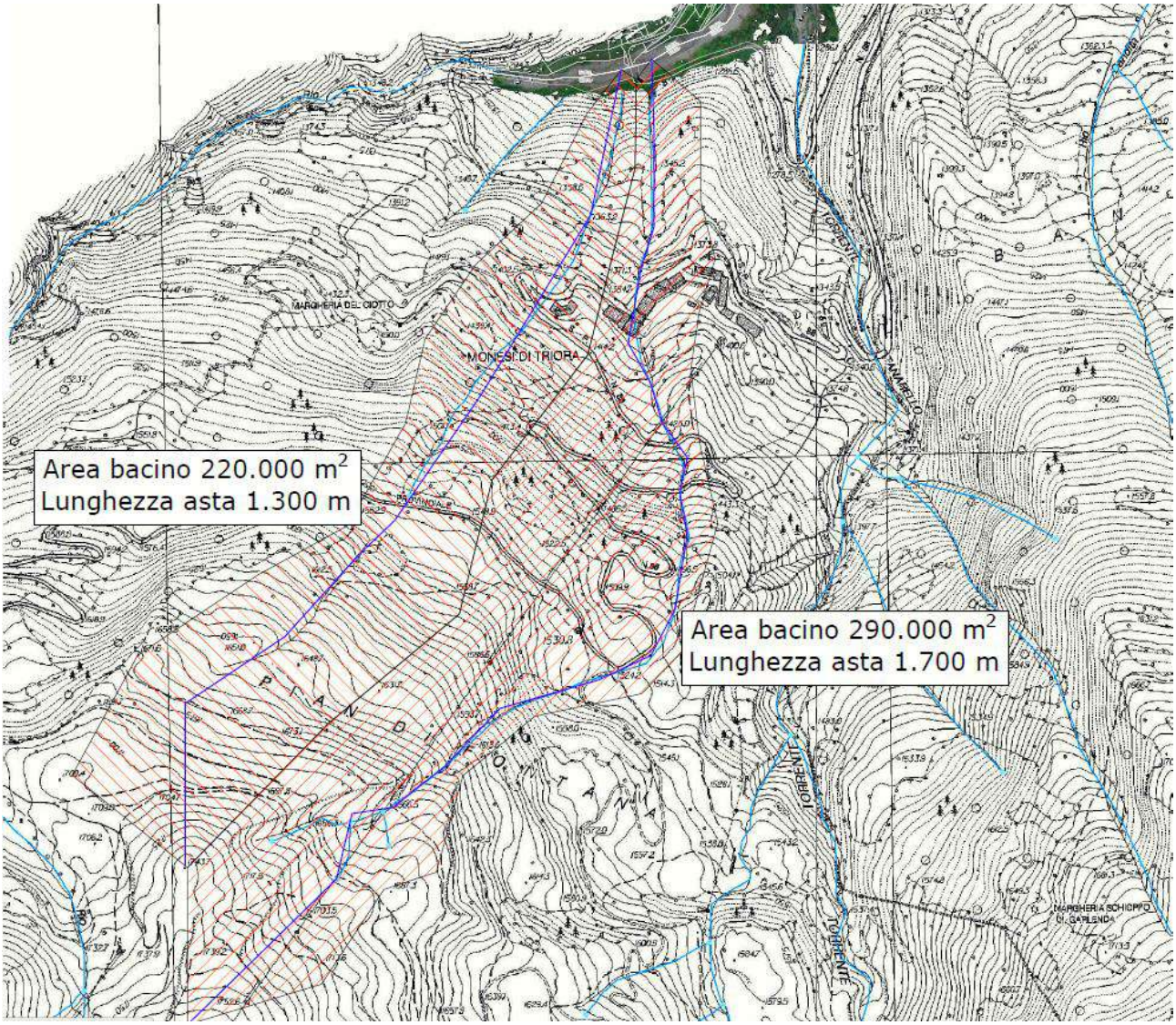
Le portate risultano essere comparabili con il modello razionale descritto nel capitolo precedente.

All’interno del modello idraulico sono state utilizzate le portate del capitolo 4.2.

5 CALCOLI IDRAULICI ALVEI SECONDARI

In corrispondenza del ponte come son presenti due Rii secondari come rappresentato nelle immagini seguenti:





5.1 TEMPO DI CORRIVAZIONE RIO A

I parametri del bacino sono i seguenti:

PARAMETRI DEL BACINO		
Area bacino	0.29	km^2
z_{media}	1500	m
z_{min}	1273	m
z_{max}	1770	m
PARAMETRI DELL'ASTA		
lung asta	1.70	km
Pendenza media bacino	29.24%	-
CARATTERISTICHE DEL BACINO		
C (coeff. suolo)	0.45	km

I tempi di corrivazione secondo i diversi Autori sono i seguenti (espressi in ore):

TEMPI DI CORRIVAZIONE		
Autore	Tempo [h]	Tempo [min]
Giandotti	0.39	23
Puglisi	1.08	65
Ventura	0.13	8
Pezzoli	0.17	10

5.1.1 Portata massima attesa Rio A

Facendo riferimento al torrente identificato come Rio A si riportano le portate relative al metodo Tcev.

PORTATE DI PROGETTO					
Tempo di ritorno	20 anni	50 anni	100 anni	200 anni	500 anni
Portata Q [m^3/s]	3.553407388	4.173052087	4.662218664	5.171831311	5.879836698

5.2 TEMPO DI CORRIVAZIONE RIO B

I parametri del bacino sono i seguenti:

PARAMETRI DEL BACINO		
Area bacino	0.22	km^2
z media	1500	m
z min	1273	m
zmax	1743	m
PARAMETRI DELL'ASTA		
lung asta	1.30	km
Pendenza media bacino	36.15%	-
CARATTERISTICHE DEL BACINO		
C (coeff. suolo)	0.45	km

I tempi di corrivazione secondo i diversi Autori sono i seguenti (espressi in ore):

TEMPI DI CORRIVAZIONE		
Autore	Tempo [h]	Tempo [min]
Giandotti	0.32	19
Puglisi	0.92	55
Ventura	0.10	6
Pezzoli	0.12	7

5.2.1 Portata massima attesa Rio B

Facendo riferimento al torrente identificato come Rio B si riportano le portate relative al metodo Tcev.

PORTATE DI PROGETTO					
Tempo di ritorno	20 anni	50 anni	100 anni	200 anni	500 anni
Portata Q [m^3/s]	3.156321552	3.706722253	4.141225489	4.59388999	5.222777257

6 PORTATA SOLIDA PER TRASCINAMENTO DI FONDO

In letteratura sono presenti diverse formule che permettono di quantificare la portata solida generata dal trascinamento di fondo in una corrente a pelo libero, ciascuna con un proprio campo di applicazione dipendente dalle metodologie adottate per ricavarle, ma la complessità del fenomeno rende difficile individuare a priori la formula che interpreta meglio il fenomeno.
La portata solida per trascinamento di fondo può essere valutata mediante diversi approcci:

- deterministico, si basa su relazioni tra variabili dipendenti ed indipendenti e sulla valutazione delle condizioni di incipiente movimento, espresse come eccesso di una fissata grandezza rispetto al suo valore critico:
  - tensione tangenziale (shear stress) (approccio di Du Boys);
  - portata (approccio di Schoklitsch);
  - potenza (stream power) (approccio di Bagnold);
  - parametro di mobilità;
  - velocità;
  - numero di Froude;
  - pendenza.
- probabilistico (approccio di Einstein);

Riguardo l'approccio deterministico, va notato che è molto difficile riuscire a valutare sul campo la condizione di incipiente movimento per cui è necessario fare riferimento alle misure sperimentali ed alla dispersione dei risultati relativi alle diverse formule di trasporto va sommata la dispersione dei risultati relativi alle diverse condizioni di incipiente movimento. Pertanto, è opportuno utilizzare formule di trasporto e di incipiente movimento omogenee dal punto di vista concettuale e dei dati utilizzati per la taratura al fine di minimizzare la dispersione dei risultati.

6.1 VALUTAZIONE DEL COEFFICIENTE CARATTERISTICO DEI SEDIMENTI Ψ

Schoklitsch (1914)

Schoklitsch (1914), mediante esperienze di laboratorio su sabbie e porcellane di granulometria uniforme, ha ricavato la seguente espressione:

$$\psi = \frac{0.54}{(\gamma_s - \gamma)}$$

Straub (1935)

Straub (1935), a partire da dati di laboratorio, ha ricavato il seguente legame:

$$\psi \propto d^{-3/4}$$

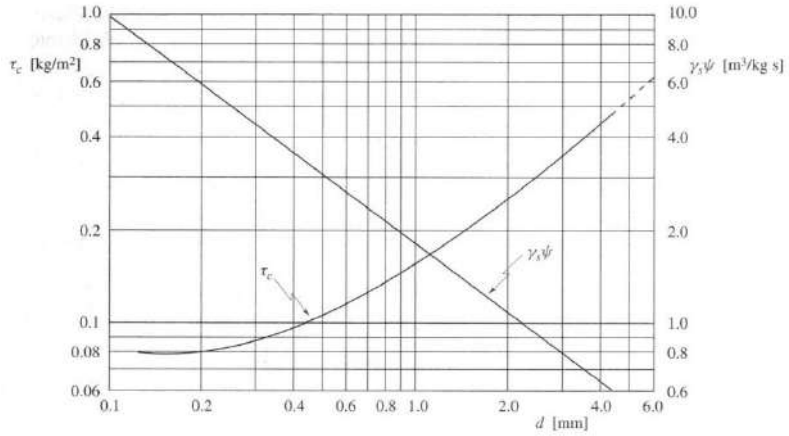
Campo di validità:

- $0.125 < d < 4$ mm

Zeller (1963)

Zeller (1963) ha ricavato un grafico che fornisce i valori di ψ e τ_c in funzione del diametro caratteristico delle particelle d e si basa sulla relazione:

$$\psi = \frac{1.8143}{\gamma_s \, d^{0.7453}}$$ con d in [mm].



Abaco di Zeller.

Shields (1936)

La formula di Shields (1936) è poco utilizzata ed è stata ricavata analizzando diversi materiali (ambra, lignite, quarzo, granito):

$$q_s \left[\text{kg/s m}\right] = 10 \, q \, i \frac{\left(\tau - \tau_c\right)}{\left(s - 1\right) d}$$

Campo di validità:

- 1.06 < s < 4.25;
- 1.56 ≤ d ≤ 2.47 mm.

Kalinske (1947)

Kalinske (1947), applicando l'equazione di continuità, hanno ricavato la seguente formula:

$$q_s = 2 \, u_* \, d \exp\left(\frac{\tau_{cr}}{\tau}\right)$$

Si tratta di un'espressione che non interpreta efficacemente le misure sperimentali in presenza di rilevante portata solida di fondo.

Campo di validità:

- 0.0625 < d < 2.

Pezzoli (1978)

Pezzoli (1978), partendo dalla formula di Kalinske (1947), ha analizzato il caso di un corso d'acqua il cui fondo è costituito da particelle incoerenti di diametro d disposte in strati e ha dedotto la distribuzione di velocità del materiale trasportato. Integrando tale distribuzione tra il fondo e la profondità a cui si annulla la velocità del materiale solido, ed ipotizzando che il parametro di Shields assuma il valore asintotico, ha ricavato la seguente espressione:

$$q_s = u_* \, d \, K_P \left(\frac{\tau_{cr}}{\tau} \right)^{1/6} \left(\sqrt{\frac{\tau}{\tau_{cr}}} - 1 \right)^{5/3}$$

con K_p costante numerica da ricavare per via sperimentale (Pezzoli ha ricavato un valore pari a 0.66). Tale espressione interpreta efficacemente le misure sperimentali anche in presenza di rilevante portata solida di fondo.

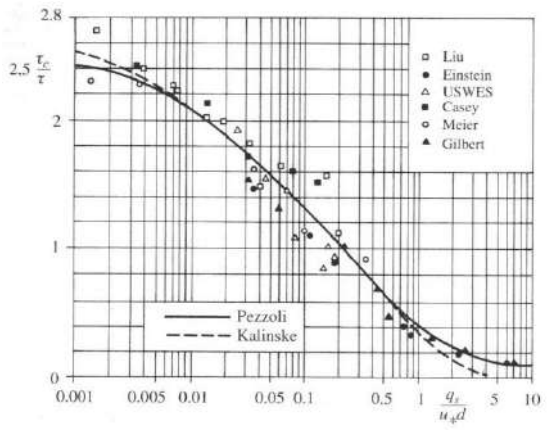


Fig. 1 – Formule di Kalinske-Frijlink (1947) e Pezzoli (1978)

Meyer-Peter et al. (1934)

$$\frac{i}{d} = \frac{0.17}{q_s^{2/3}} + 0.4 \, \frac{p^{2/3}}{d}$$

con:

$p = \frac{q_s}{\rho \, q}$ rapporto tra portata solida e portata liquida.

Si tratta di un'espressione ricavata mediante esperimenti condotti su materiali a granulometria uniforme, a partire dalla quale è possibile osservare che la pendenza di equilibrio è inversamente proporzionale alla portata liquida specifica e direttamente proporzionale alla portata solida ed alla granulometria del materiale di fondo.

Meyer-Peter e Muller (1948)

Meyer-Peter e Muller (1948) hanno esteso la formula di Meyer-Peter et al. (1934) al caso di materiali a granulometria non uniforme, conducendo esperimenti nel Laboratory for Hydraulic Research della Eidgenossische Technische Hochshule di Zurigo in un canale a pendenza variabile con formazione di forme di

fondo che hanno permesso di separare gli effetti della resistenza dovuta alle particelle solide da quelli dovuti alla morfologia del fondo ed hanno ottenuto la seguente espressione:

$$q_s = \Phi\, g^{1/2}\, d^{3/2} (s-1)^{1/2}$$

Si tratta di una formula che permette di ottenere risultati in linea con quelli ottenuti in via sperimentale ed il cui campo di validità è:

- 0.01 < h < 1.2 m;
- 0.0004 < i < 0.023;
- 0.4 < d < 30 mm;
- 1.25 < s <4.2.

6.2 VALUTAZIONE DEL PARAMETRO DI TRASPORTO Φ

Bathurst et al. (1987)

Bathurst et al. (1987) hanno ricavato un'espressione valida per pendenze rilevanti:

$$\Phi = 8\left[\theta - \theta_{cr}^{0}\right]^{3/2}$$

Il campo di validità della formula è:

- 0.0025 < i < 0.2;
- d = 11.5, 22.2, 44.3 mm.

Rickenmann (1990)

Rickenmann (1990), mediante esperimenti condotti all'ETH di Zurigo, ha ricavato la seguente espressione:

$$q_s = 12.6\left(\frac{d_{90}}{d_{30}}\right)^{0.2} i^2 (q - q_{cr})(s-1)^{-1.6}$$

Il campo di validità della formula è:

- 0.0004 < i < 0.2;
- d = 10 mm.

Rickenmann (2001)

Rickenmann (2001), analizzando i dati di misurati in 19 torrenti ed i dati degli esperimenti condotti da Meyer-Peter e Muller (1948), Smart e Jaeggi (1983) e Rickenmann (1990), ha modificato la sua espressione del 1990:

$$q_s = 3.1\left(\frac{d_{90}}{d_{30}}\right)^{0.2} i^{1.5}(q - q_{cr})(s - 1)^{-1.5}$$

Il campo di validità della formula è:

- $0.03 < i < 0.2$;
- $0.4 < d < 80$ mm. (Nota: negli esperimenti di laboratorio $d \leq 30$ mm, i valori superiori sono relativi ai dati di campo).

6.3 CONDIZIONI CRITICHE

Le condizioni critiche sono state ricavate nelle ipotesi di:

- alveo con fondo orizzontale;
- alta sommergenza (la corrente sommerge totalmente i sedimenti), che si realizza per $h > 6\ d$;
- materiale di fondo omogeneo con assenza di forze di coesione tra le particelle;
- assenza di materiale lungo le sponde dell'alveo fluviale.

Nel caso in cui tali ipotesi non siano verificate, il parametro critico va moltiplicato per opportuni fattori correttivi.

6.3.1 Parametro di mobilità

Bathurst et al. (1987)

$\theta_{cr} = 0.047$

6.3.2 Tensione critica

Schoklitsch

$$\tau_{cr} = \sqrt{0.201\gamma(\gamma_s - \gamma)\lambda d^3}$$

6.3.3 Portata

Rickenmann (1990)

$$q_{cr} = 0.065(s - 1)^{1.67}\sqrt{g\ d^3}\ i^{-1.12}$$

6.4 FATTORI CORRETTIVI - ALVEO NON ORIZZONTALE

In un alveo con fondo non orizzontale la stabilità delle particelle diminuisce a causa della riduzione dell'effetto stabilizzante della forza di gravità.

Smart e Jaeggi (1983)

$$\theta_{cr} = \theta_{cr}^{0} \cos \arctan i\left(1 - \frac{i}{\tan \phi}\right)$$

6.5 BASSA SOMMERGENZA

In alvei caratterizzati da bassa sommergenza (situazione tipica dei corsi d'acqua montani caratterizzati da granulometria grossolana) l'elevata scabrezza del fondo disturba la corrente che presenta, nelle fasi di piena, intensi fenomeni dissipativi (agitazioni, salti, cascatelle, macrovorticità, forti aerazioni ed emulsionamenti). Il parametro critico, pertanto, aumenta al diminuire della sommergenza a causa della ridotta mobilità delle particelle.

Suszka (1991)

$$\theta_{cr}^{0} = 0.0851 \left(\frac{h}{d}\right)^{-0.266}$$

Fornisce risultati validi solo per h/d < 6.

Armanini e Scotton (1994)

$$\theta_{cr}^{0} = 0.06 \left(1 + 0.67\sqrt{\frac{d}{h}}\right)$$

Fornisce risultati validi anche per h/d >6.

6.6 PRESENZA DI MATERIALE SULLE SPONDE

L'inclinazione delle sponde provoca sulle particelle solide un effetto instabilizzante analogo all'effetto dell'inclinazione del fondo.

$$\theta_{cr} = \theta_{cr}^{0} \sqrt{1 - \frac{\sin^2 \alpha_S}{\sin^2 \phi}}$$



Alveo con presenza di materiale sulle sponde.

6.7 PRESENZA DI SEDIMENTI DISOMOGENEI

La presenza di materiale disomogeneo comporta l'insorgere dei fenomeni di nascondimento delle particelle e di corazzamento dell'alveo. La formula generale per calcolare il coefficiente correttivo per la j-esima frazione granulometrica è:

$$\theta_{cr} = \theta_{cr}^{0} \left(\frac{d}{d_j} \right)^{n}$$

con n coefficiente minore o uguale all'unità: se è pari ad 1 tutte le particelle costituenti la miscela hanno identica mobilità (condizione di equimobilità);.

Hunziker e Jaeggi (2002)

$$\theta_{cr} = \theta_{cr}^{0} \left(\frac{d_{90}}{d} \right)^{2/3}$$

Badoux e Rickenmann (2008)

$$q_{cr} = q_{cr} \left(\frac{d_{90}}{d} \right)^{10/9}$$

6.8 EFFETTO DELLE FORME DI FONDO

Il movimento dei sedimenti tende a conformare il letto dell'alveo fluviale secondo diverse ondulazioni ("forme di fondo"), variabili per misura, forma, disposizione, a loro volta in movimento e la cui natura dipende dai parametri della corrente. Tali forme generano macroscabrezze che influiscono sulla resistenza dell'alveo e, per ridotti tiranti idrici, inducono oscillazioni sulla superficie libera. Si tratta di un fenomeno significativo nei fiumi e poco significativo nei torrenti.

La presenza di forme di fondo va computata nel parametro θ, che va moltiplicato per la quantità:

$$\left(\frac{K}{K_g} \right)^{3/2}$$

Nel caso di fondo piano K coincide con K_g in quanto le resistenze al moto sono imputabili solo alle particelle solide presenti sul fondo. In presenza di forme di fondo, invece, il rapporto K/K_g assume valori all'unità e può essere assunto pari a 0.5 quando le resistenze al moto sono imputabili principalmente alle forme di fondo (strong bedforms) (Graf, 1984).

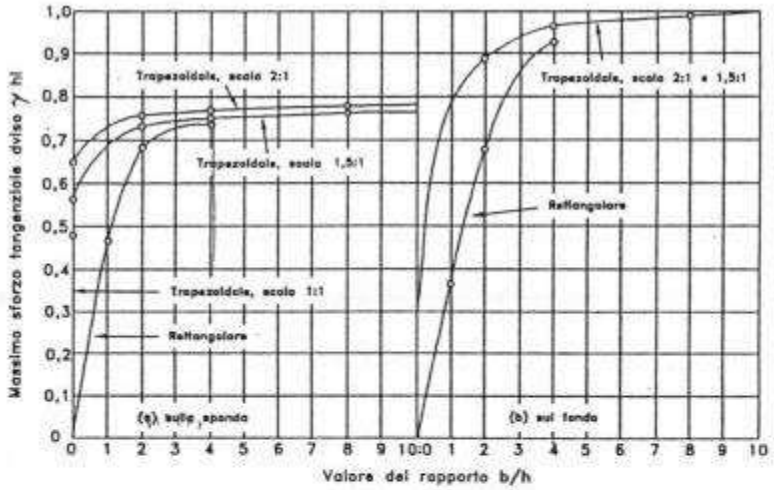
6.9 OSSERVAZIONI

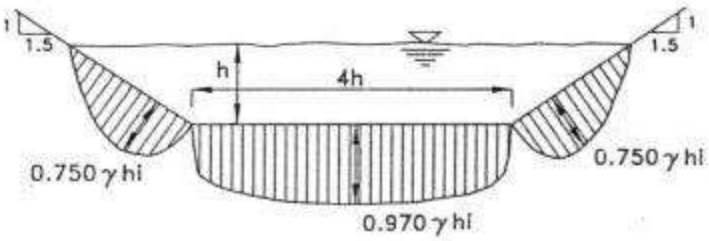
Gli effetti della pendenza e della bassa sommergenza sulla mobilità dei sedimenti sono contrastanti: la prima ne riduce la stabilità mentre la seconda la aumenta ed il legame è univoco solo in condizioni di moto uniforme.

Le formule sono state tarate in condizioni di moto uniforme, in cui pendenza i e cadente piezometrica J coincidono, per valori elevati del numero di Reynolds e per sezioni molto larghe (con correnti indefinite in senso trasversale) in cui il raggio idraulico R_h si può approssimare al tirante idrico h e la tensione è uniformemente distribuita all'interno della sezione.

Le formule non dipendenti da Δ o dalla densità dei sedimenti sono state tarate per valori standard (ρs = 2650 kg/m^3).

Per sezioni di forma generica è necessario inserire il raggio idraulico in luogo di h e, in termini di tensioni, bisogna valutare i punti critici separatamente per fondo e sponde moltiplicando τ per un coefficiente R_t dipendente dalla tipologia di sezione e dal rapporto b/h.





6.10 LEGENDA - LISTA DEI SIMBOLI

α_A	angolo che il fondo forma con l'orizzontale;
α_S	angolo che la sponda forma con l'orizzontale;
γ_s	peso specifico dei sedimenti [kg/m^3];
γ	peso specifico dell'acqua [kg/m^3];
$\Delta = \frac{\gamma_s}{\gamma_a} - 1$	densità specifica dei sedimenti;
$\theta = \frac{u_*^2}{g \Delta d} = \frac{\tau}{(\gamma_s - \gamma) d}$	parametro di mobilità di Shields;
ν	viscosità cinematica dell'acqua [m^2/s];

ρ_s	densità dei sedimenti [kg*s^2/m^4];
ρ	densità dell'acqua [kg*s^2/m^4];
$\tau = \gamma h i$	tensione tangenziale della corrente [kg/m^2];
τ_c	tensione tangenziale critica [kg/m^2];
Φ	parametro di trasporto;
ϕ	angolo di attrito interno del materiale;
Ψ	coefficiente caratteristico dei sedimenti [m^6/kg^{2}s];
a	costante di proporzionalità;
$C = \frac{v}{u_*}$	coefficiente di resistenza di Chezy;
d	diametro caratteristico dei sedimenti (pari al diametro del setaccio che consente il passaggio del 50% dei sedimenti, se non altrimenti specificato) [m];
d_{30}	diametro del setaccio che consente il passaggio del 30% dei sedimenti [m];
d_{40}	diametro del setaccio che consente il passaggio del 40% dei sedimenti [m];
d_{90}	diametro del setaccio che consente il passaggio del 90% dei sedimenti [m];
$F_R = \frac{v}{\sqrt{g h}}$	numero di Froude;
g	accelerazione di gravità [m/s^2];
h	tirante idrico [m];
i	pendenza del fondo dell'alveo;
K	coefficiente di Gauckler-Strickler relativo al complesso delle resistenze al moto della corrente;
K_g	coefficiente di Gauckler-Strickler relativo alla resistenza delle sole particelle solide (grain resistance);
M	coefficiente di uniformità;
n	coefficiente di Manning;
n_r	coefficiente di Manning associato al solo attrito;
q	portata liquida specifica (per unità di larghezza dell'alveo) [m^3/sm];
q_s	portata solida specifica (per unità di larghezza dell'alveo) [m^3/sm];

$R_{E_*} = \frac{u_* d}{\nu}$ numero di Reynolds sul fondo;

$s = \frac{\gamma_s}{\gamma} = \frac{\rho_s}{\rho}$ densità relativa dei sedimenti;

$u_* = \sqrt{\frac{\tau_0}{\rho}}$ velocità della corrente sul fondo [m/s];

v velocità media della corrente [m/s].

Il pedice 0 identifica le condizioni di fondo piano.

6.11 CARATTERISTICHE ALVEO

Formulazione: Meyer-Peter Muller (1948)
PARAMETRO DI MOBILITA': Numero di Shields (Bathurst et al. (1987))

Sezione	Rettangolare		
Altezza di moto uniforme	hi:	1	m
Larghezza dell'alveo	Bi:	15	m
Peso per unità di volume dell'acqua	γw:	1000	kg/m³
Peso per unità di volume del sedimento	γs:	2650	kg/m³
Pendenza media dell'alveo	i:	0.25	m/m
Diametro del setaccio del 50% di passante	d50:	0.01	m

6.12 RISULTATI

Portata specifica dei sedimenti	qs:	1.889412	m³/(m s)
Tensione tangenziale della corrente	τ:	250.000	kg/m
Portata solida	Qs:	28.341	m³/s

7 ANALISI IDRAULICA CON MODELLAZIONE HEC RAS

L'analisi idraulica è stata condotta con modello numerico di moto permanente (o gradualmente variato) HEC-RAS - Version 4.1 – by Hydrologic Engineering Center of US Army Corp of Engineering.

Per il calcolo del profilo di corrente in moto permanente (o gradualmente variato) il codice HEC-RAS utilizza un procedimento iterativo passo a passo basato sulla soluzione dell'equazione di bilancio energetico tra sezioni successive.

$$WS_2 + \frac{(\alpha_1 \cdot V_2^2)}{2g} = WS_1 + \frac{(\alpha_2 \cdot V_1^2)}{2g} + h_e$$

Dove:

WS1 e *WS2* rappresentano il livello idrico rispettivamente di valle e di monte;

V1 e *V2* indicano la velocità media rispettivamente di valle e di monte;

α*1* e α*2* sono coefficienti numerici di velocità;

g è l'accelerazione di gravita;

he rappresenta la perdita di carico.

7.1 CONDIZIONI AL CONTORNO

Il software hec ras richiede la definizione di condizioni al contorno nel tratto di monte e valle del corpo idrico analizzato. La funzione Reach boundary conditions definisce le condizioni al contorno (selezionando la posizione: monte/valle), per le quali HEC-RAS permette di scegliere fra quattro possibili opzioni:

- Known W.S.: si fornisce il valore noto di altezza del pelo libero, indicato rispetto alla quota del piano di riferimento assunto per le quote relative alle sezioni trasversali;

- Critical depth: si assume come altezza del pelo libero l'altezza critica, automaticamente calcolata per ogni profilo;

- Normal depth: si assume come altezza del pelo libero l'altezza relativa al moto uniforme che il programma calcola per ogni profilo; bisogna fornire in questo caso la pendenza della linea dei carichi totali, che si può approssimare con la pendenza del tratto di canale a monte;

- Rating curve: si fornisce la scala di deflusso relativa alla sezione considerata (curva altezza portata), attraverso la quale il programma procede mediante interpolazione per la determinazione dell'altezza correlata.

Per quanto riguarda l'estremo di monte si è assunta la condizione al contorno Normal depth ed è stata inserita la pendenza media del tratto a monte della sezione iniziale

Pendenza di monte i_m = 0.02

7.2 COEFFICIENTI DI SCABREZZA

Il tratto del torrente Bavera in esame attraversa presenta sponde con scabrezze differenti.

Questa varietà di copertura del suolo determina la presenza di diversi gradi di resistenza offerta al moto dell'acqua, quindi perdite di carico idraulico che cambiano a seconda della rugosità del terreno. Per questo motivo è stato necessario valutare nel dettaglio i valori da attribuire alla scabrezza per le varie classi di uso del suolo, al fine di ottenere una corretta analisi del moto della corrente.

La scabrezza è stata valutata tramite il coefficiente di Strickler k [m1/3s-1], e utilizzata nei modelli attraverso il coefficiente di Manning n=1/k [m-1/3s]. Particolare attenzione è stata dedicata all'individuazione della scabrezza delle superfici su cui avviene il deflusso. Tale parametro riveste una notevole importanza nel calcolo delle reali sezioni di deflusso e, quindi, delle eventuali aree esondate. Tuttavia, il valore del coefficiente di Manning, che rappresenta la scabrezza, non è facilmente determinabile, in quanto variabile da sezione a sezione e all'interno di ogni sezione, a seconda delle caratteristiche idrauliche dell'onda di piena in arrivo, e persino in funzione del periodo dell'anno in cui accade l'evento; questa indeterminatezza si ripercuote sui risultati del calcolo.

La scabrezza di ogni sezione, espressa tramite il coefficiente di Manning, viene stimata a partire da un rilievo diretto volto (secondo la metodologia proposta da Cowan e dall'U.S. Soil Conservation Service) a specificare le caratteristiche qualitative dell'alveo che hanno influenza sulla scabrezza. Sulla base di queste rilevazioni è stato stimato il coefficiente di Manning sezione per sezione seguendo la classificazione proposta da V.T. Chow e mediante confronto con casi reali osservati e presentati dall'U.S. Geological Survey1.

Per quanto riguarda le sezioni naturali del torrente Bavera si sono considerati i valori di scabrezza seguenti:

• 0,03 s/m1/3 per la porzione centrale

Il materiale presente in alveo è riconducibile ad una pezzatura media, con diffusa presenza di ciottoli e grossi blocchi in parte sommersi, in parte emergenti. Le sponde sono fittamente vegetate, con arbusti ed alberi fino a ridosso della corrente. I parametri caratteristici che si possono stimare sulla base di un esame visivo

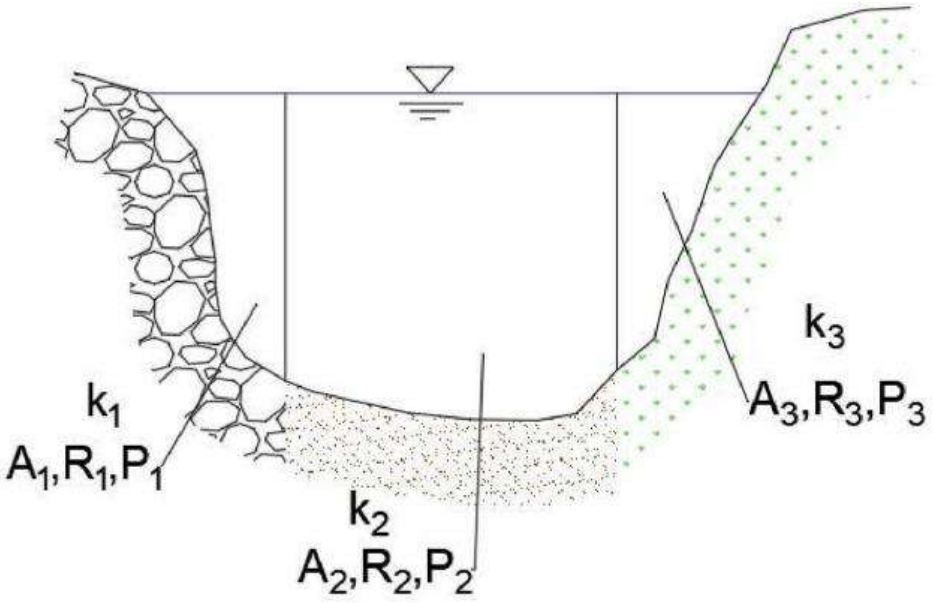
sono:

- d90 = 300 mm;

- d50 = 50 mm.

Dalla letteratura è stato infine determinato un valore per il coefficiente di scabrezza di base.

Poiché le sezioni trasversali del corso d'acqua sono generalmente costituite da tratti a scabrezza diversa, è stato necessario riferirsi a un coefficiente di scabrezza equivalente. Per il calcolo di questo coefficiente sono state individuate diverse situazioni che si verificano lungo il corso del fiume. L'area di ciascuna sezione è stata suddivisa in sotto aree, separate da linee verticali, lungo le quali gli sforzi tangenziali sono stati considerati nulli e all'interno delle quali in moto si è supposto uniforme.



Esempio di suddivisione di una sezione tipo in sub aree a scabrezza differente.

Per ciascuna sezione tipo è stato calcolato il coefficiente di scabrezza equivalente, secondo la formulazione di Lotter-Engelund, sotto l'ipotesi di alveo inciso completamente pieno, dal momento che l'analisi riguarda condizioni di piena tali per cui tutta la sezione dell'alveo attivo risulta interessata dal flusso dell'acqua.

I valori ottenuti sulle singole sezioni sono stati poi estesi all'intero tratto di cui ogni sezione era rappresentativa.

Considerando una sezione costituita dai tratti a scabrezza costante si ha:

$$K_{eq} = \frac{\sum k_i A_i R_i^{0.67}}{A\, R_{eq}^{0.67}}$$

Dove:

k_i è la scabrezza relativa ogni tratto;
A_i è l'area bagnata relativa a ogni tratto;
Ri è il raggio idraulico di ogni tratto;
A è l'area bagnata della sezione;
R_{eq} è il raggio idraulico equivalente

I valori di scabrezza relativi presenti in letteratura ciascun tronco omogeneo, sono riportati nella tabella seguente:

Tipologia del corso d'acqua	Gauckler-Strickler [$m^{1/3}s^{-1}$]
CORSI D'ACQUA MINORI (Raggio idraulico ˜ 2 m; larghezza di piena < 30 m)	
Corsi d'acqua di pianura	
- alvei con fondo compatto, senza irregolarità	40÷45
- alvei regolari con vegetazione erbacea	30÷35
- alvei con ciottoli e irregolarità modeste	25÷30
- alvei fortemente irregolari	15÷25
Torrenti montani	
- fondo alveo con prevalenza di ghiaia e ciottoli, pochi grossi massi	25÷30
- alveo in roccia regolare	25÷30
- fondo alveo con ciottoli e molti grossi massi	15÷20
- alveo in roccia irregolare	15÷20
CORSI D'ACQUA MAGGIORI (Raggio idraulico ˜ 4 m; larghezza di piena > 30 m)	
- sezioni con fondo limoso, scarpate regolari a debole copertura erbosa	40÷45
- sezioni in depositi alluvionali, fondo sabbioso, scarpate regolari a copertura erbosa	35
- sezioni in depositi alluvionali, fondo regolare, scarpate irregolari con vegetazione arbustiva e arborea	25÷30
- in depositi alluvionali, fondo irregolare, scarpate irregolari con forte presenza di vegetazione arbustiva e arborea	20÷25
AREE GOLENALI (Raggio idraulico ˜ 1m)	
- a pascolo, senza vegetazione arbustiva	20÷40
- coltivate	20÷50
- con vegetazione arbustiva spontanea	10÷25
- con vegetazione arborea coltivata	20÷30
Alveo artificiale in terra	
- materiale compatto, liscio	60
- sabbia compatta, con argilla o pietrisco	50
- sabbia e ghiaia, scarpata lastricata	45÷50
- ghiaietto 10-30 mm	45
- ghiaia media 20-60 mm	40
- ghiaia grossa 50-150 mm	35
- limo in zolle	30
- grosse pietre	25÷30
- sabbia, limo o ghiaia, con forte rivestimento vegetale	20÷25
Alveo artificiale in roccia	
- con lavorazione accurata	25÷30
- con lavorazione media	20÷25
- con lavorazione grossolana	15÷20
Alveo artificiale in muratura	
- muratura in pietra da taglio	70÷80
- muratura accurata in pietra da cava	70
- muratura normale in pietra da cava	60
- pietre grossolonamente squadrate	50
- scarpate lastricate, fondo in sabbia e ghiaia	45÷50
Alveo artificiale in calcestruzzo	
- pavimentazione in cemento	100
- calcestruzzo con casseforme metalliche	90÷100
- calcestruzzo con intonaco	90÷95
- calcestruzzo lisciato	90
- intonaco di cemento intatto	80÷90
- calcestruzzo con casseforme in legno, senza intonaco	65÷70
- calcestruzzo costipato, superficie liscia	60÷65
- calcestruzzo vecchio, superficie pulita	60
- rivestimento in calcestruzzo ruvido	55
- superfici irregolari in calcestruzzo	50

Coefficiente scabrezza c di Gauckler-Strickler per corsi d'acqua naturali

Per quanto riguarda i valori utilizzati all'interno del modello si riporta un estratto relativo al R.R. 14/07/2011 della Regione Liguria.

A ciascuna classe è stato innanzitutto attribuito un valore di coefficiente di scabrezza di riferimento Ks0

Descrizione corso d'acqua	Coeff. di scabrezza di Gauckler-Strickler Ks (m1/3s-1)
Tratti di corsi d'acqua naturali con salti, rocce o vegetazione anche arbustiva-arborea in alveo	25-30
Corsi d'acqua naturali con vegetazione e movimento di materiale sul fondo	30-35
Tratti urbanizzati di corsi d'acqua naturali con argini cementati (e/o platee) in buono stato	35-40
Corsi d'acqua con fondo ed argini totalmente cementati in ottimo stato ed assenza di manufatti (tubi, cavi, ecc.) o discontinuità interferenti con le acque	40-45

Le caratteristiche di scabrezza applicate in funzione dei livelli idrici raggiunti sono le seguenti:

Fondo alveo: Ks=30 n = 0.033

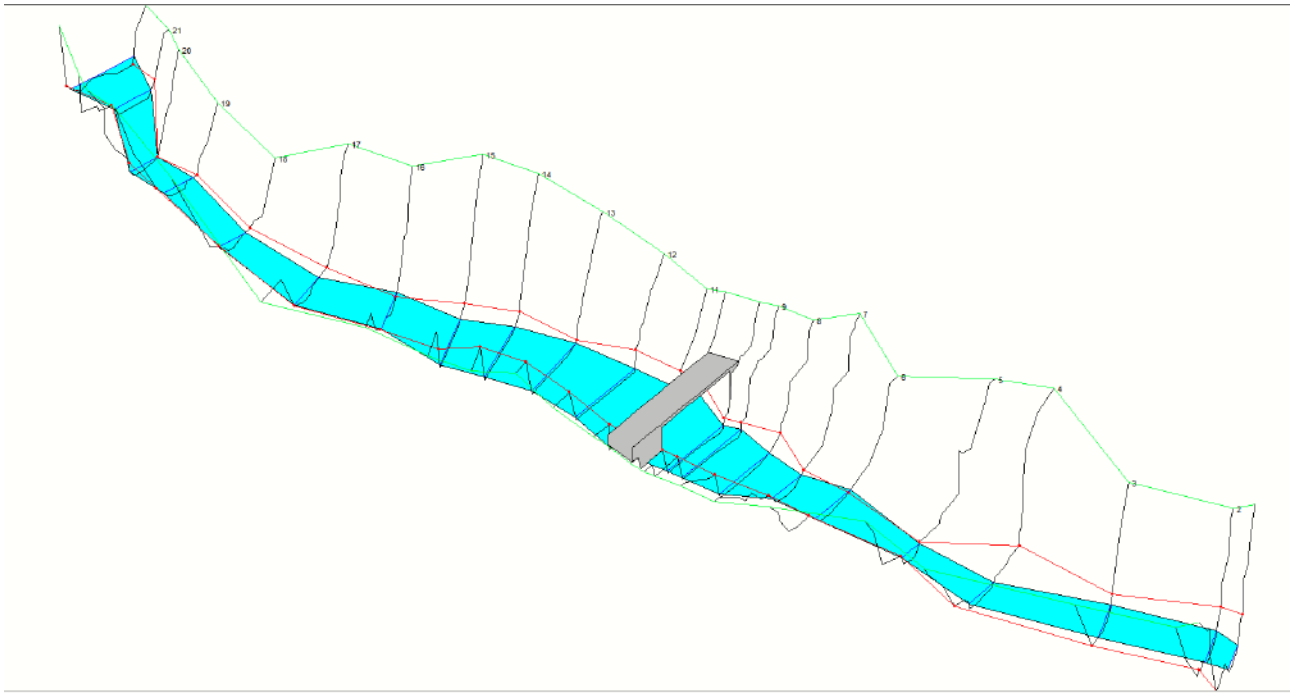
Pareti in terra (area golenale) Ks=25 n = 0.04

8 MODELLO IDRAULICO

Per la modellazione matematica dell'analisi matematica è stato utilizzato il software HecRas, in cui è stata inserita la geometria del torrente analizzato nel caso studio.

Inoltre, sono state analizzate le diverse soglie andando a inserire due sezioni ravvicinate con una diversa quota dei punti in modo tale da rappresentare il salto che il flusso subisce a causa del cambio di geometria dovuto alla presenza del manufatto inserito lungo il percorso.

Nell'immagine sottostante è riportata la rappresentazione del modello matematico utilizzato con il software Hec Ras.



Il modello è stato sviluppato nel tratto compreso tra due briglie esistenti che rappresentano due interruzioni reali al modello fluidodinamico.

Per tale motivo le condizioni iniziali al modello sono poco influenti al modello idraulico oggetto di studio.

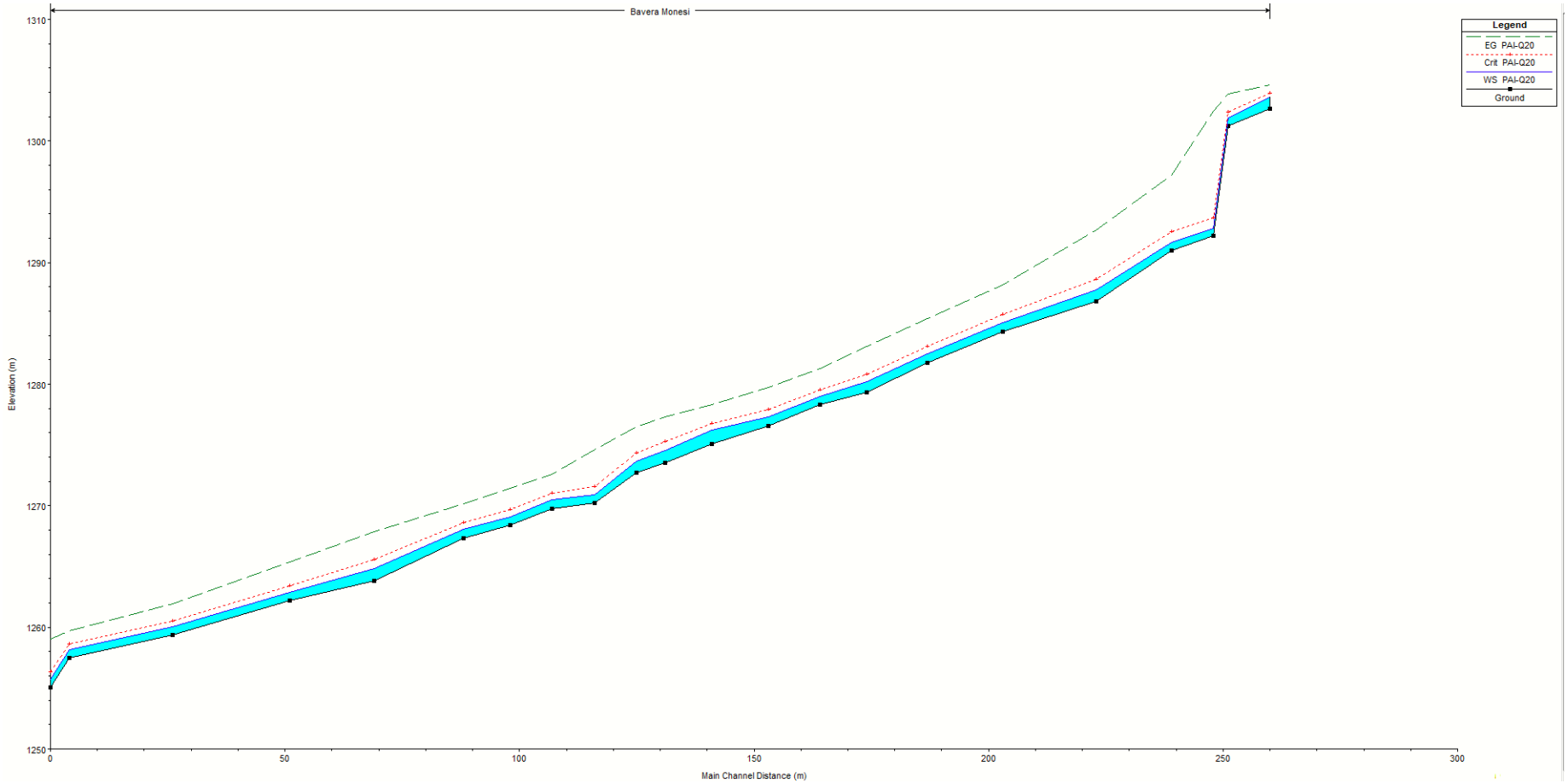
9 STATO ATTUALE

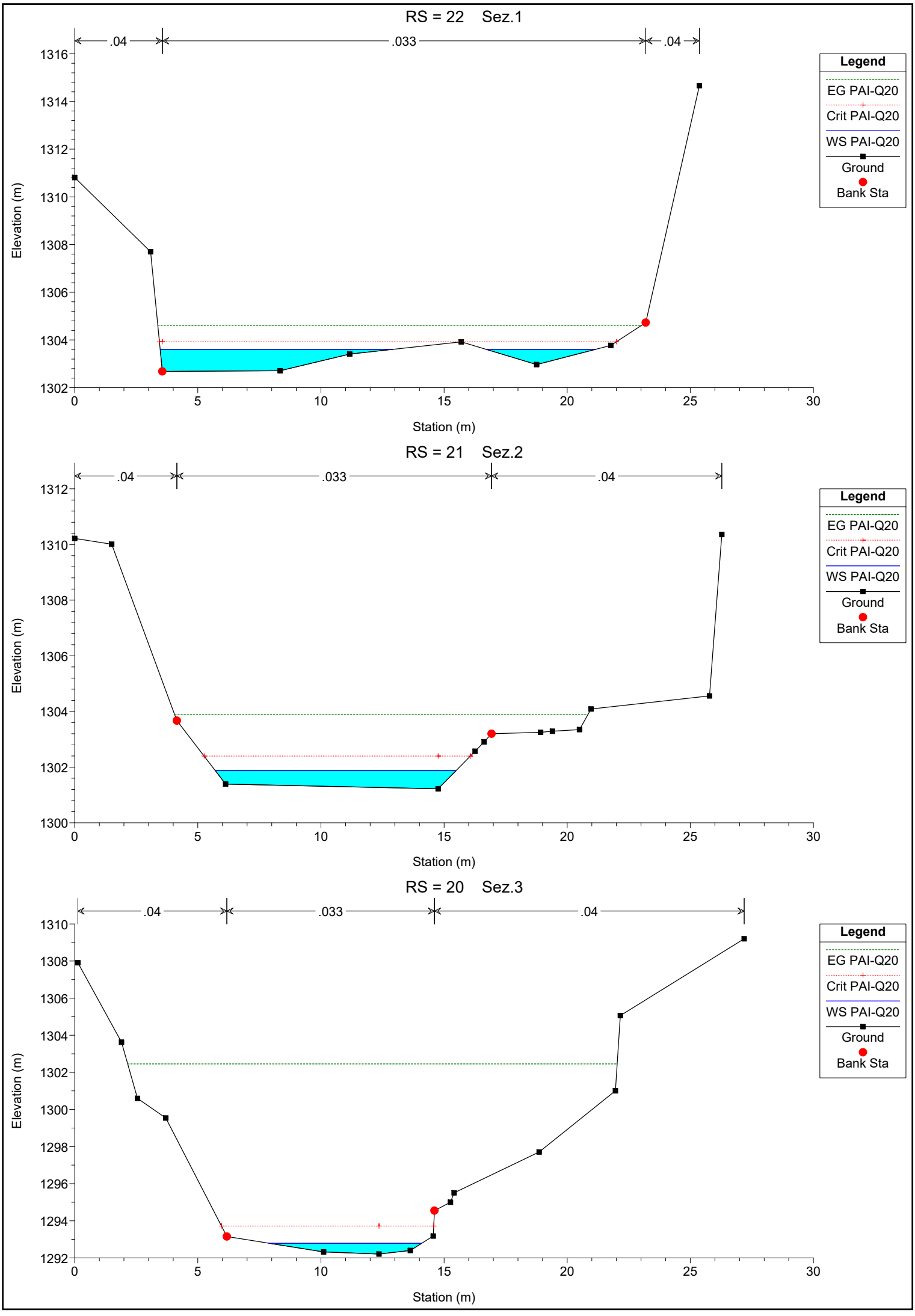
Nell'immagine seguente è riportata la planimetria dello stato di Attuale

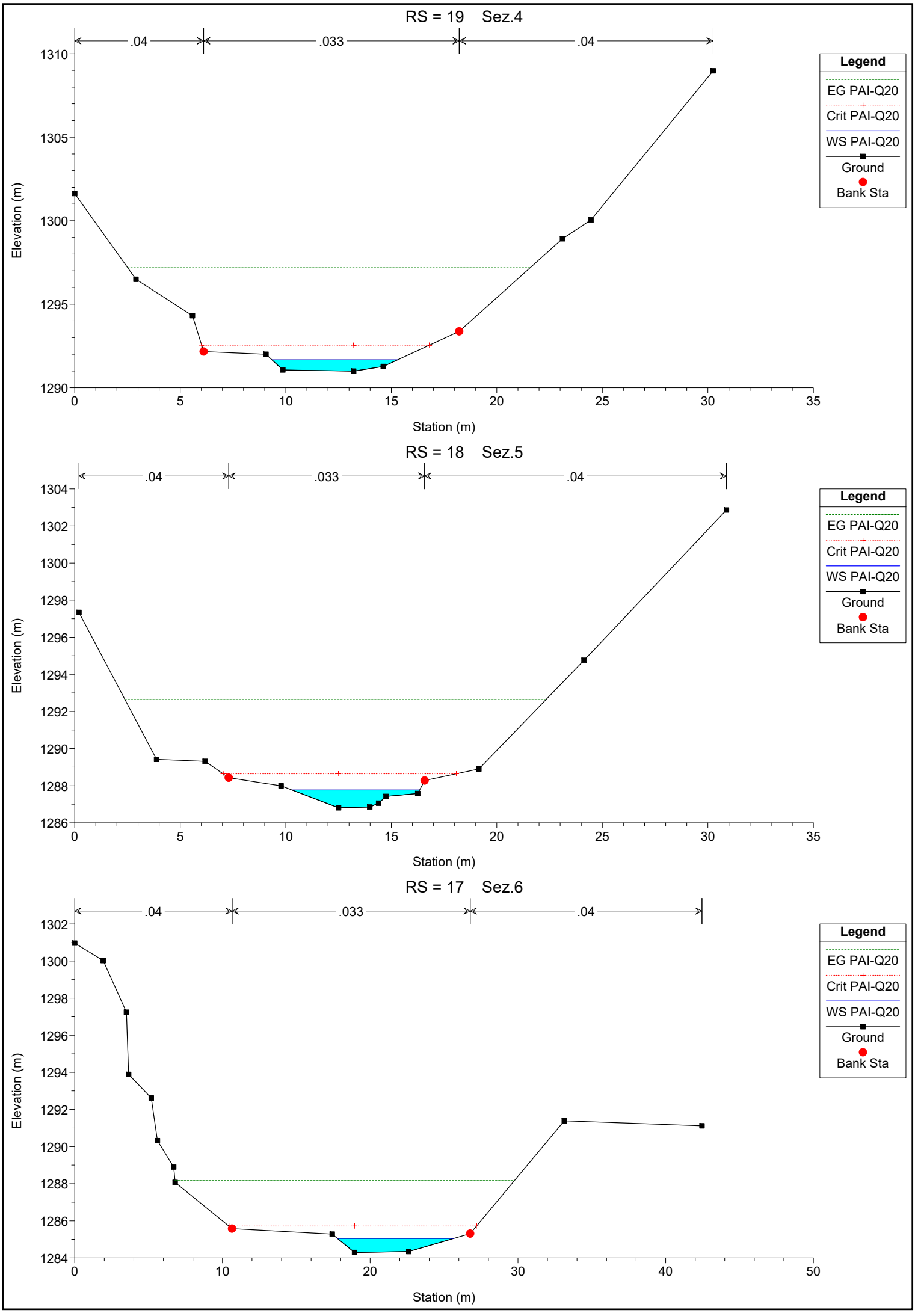


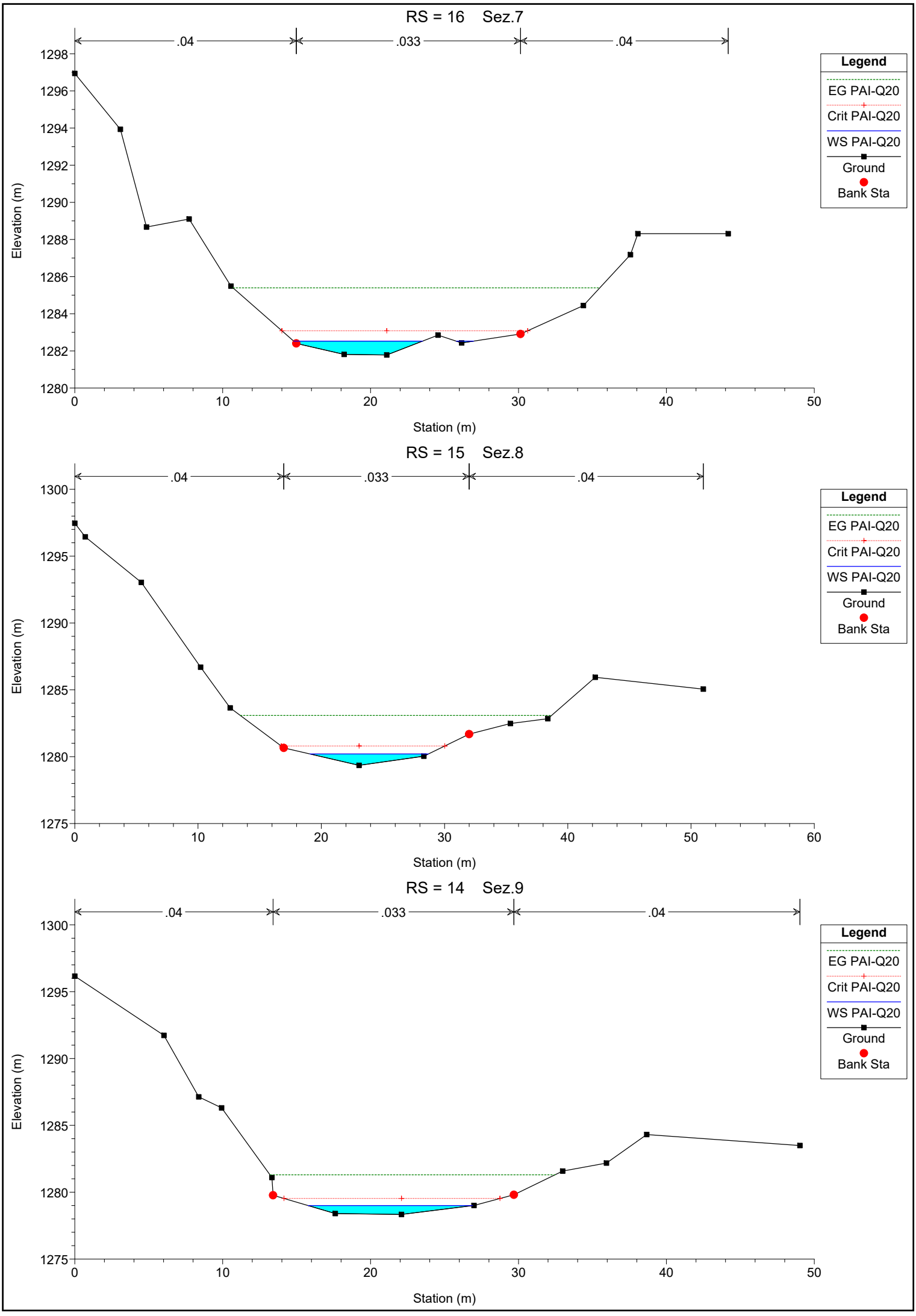
Nelle pagine seguenti sono riportati le sezioni e i tabulati relativi allo stato attuale.

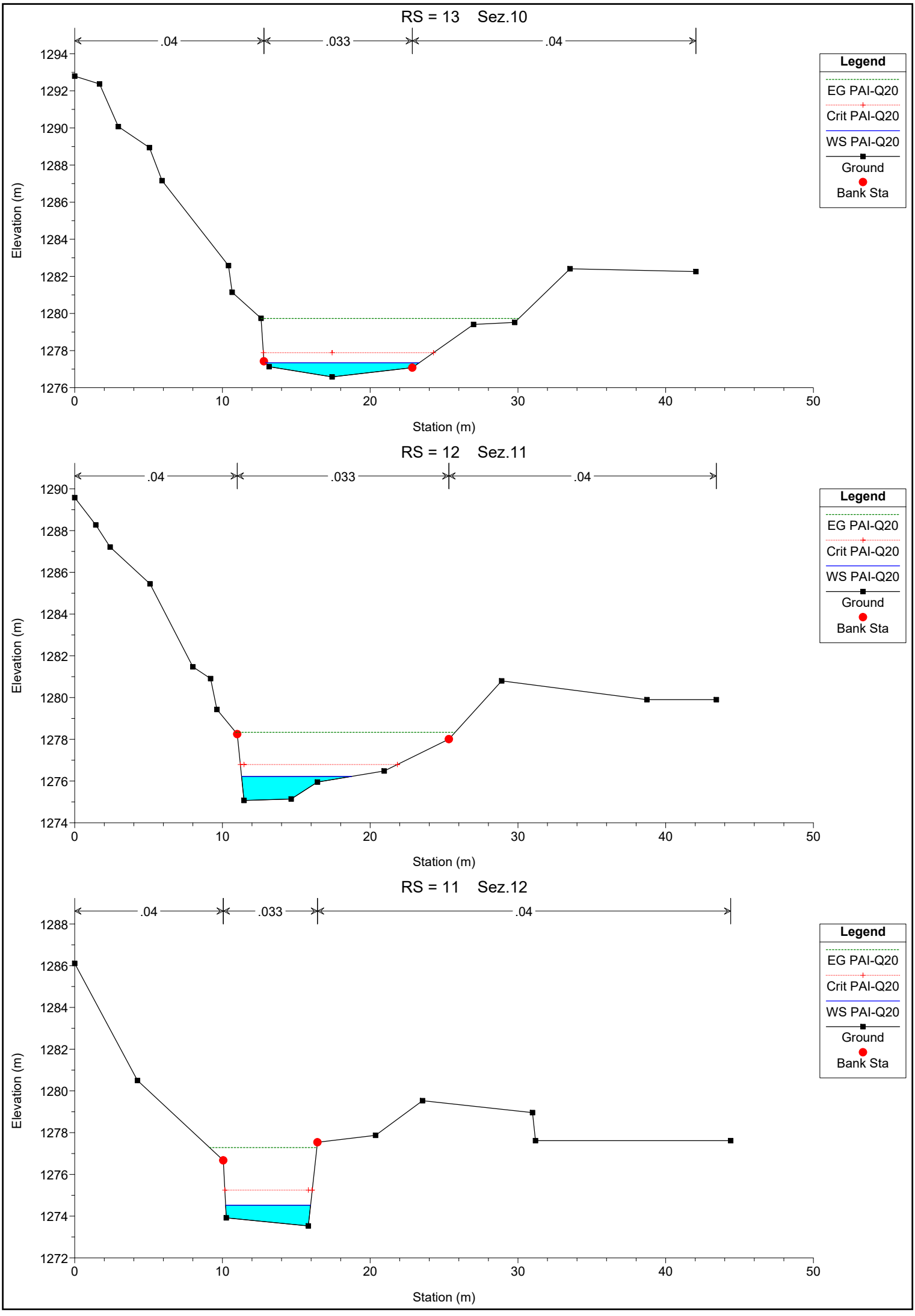
Q20 - PAI

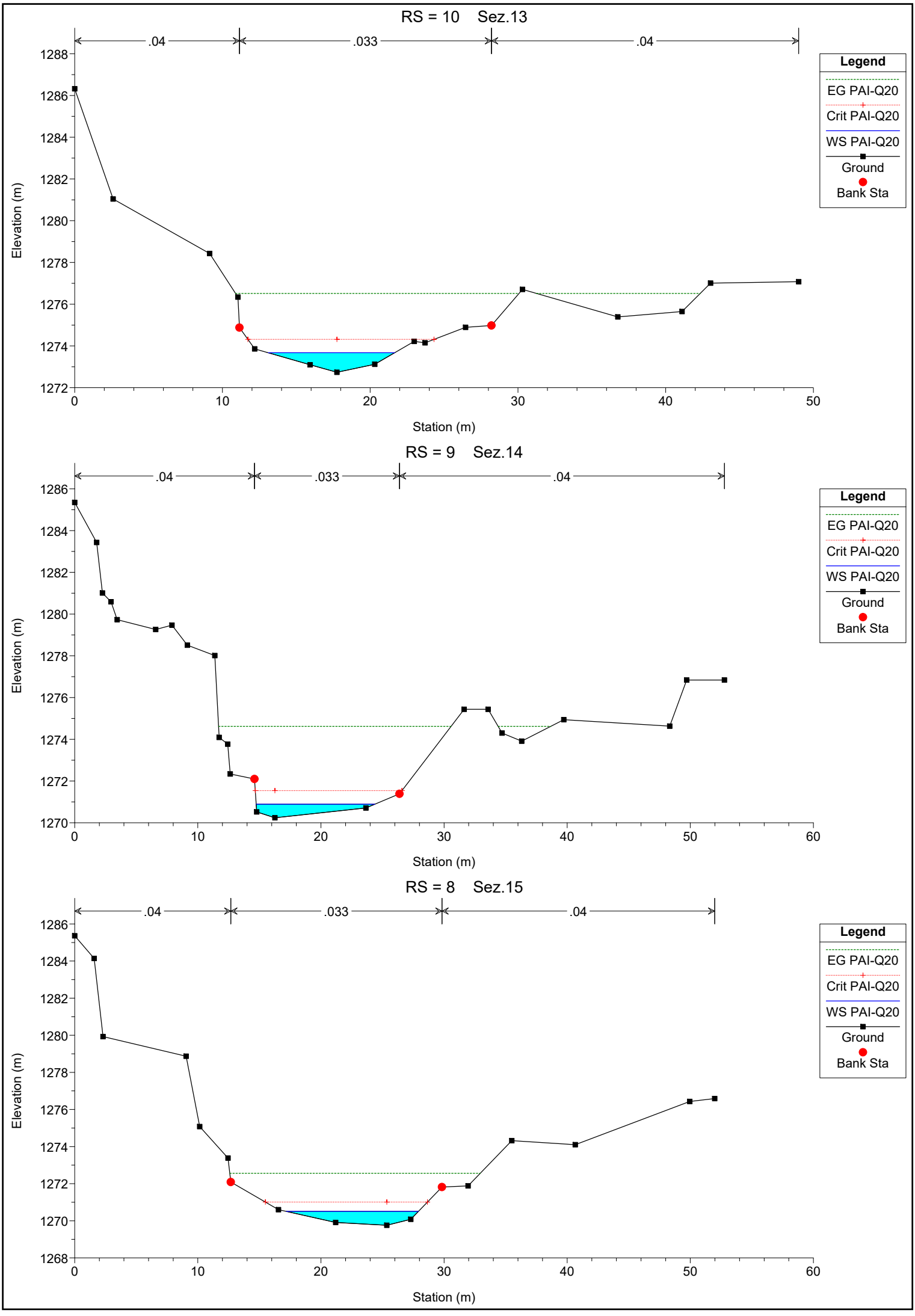

Bavera Monesi
Legend
EG PAI-Q20
Crit PAI-Q20
WS PAI-Q20
Ground
Elevation (m)
1310
1300
1290
1280
1270
1260
1250
0
50
100
150
200
250
300
Main Channel Distance (m)

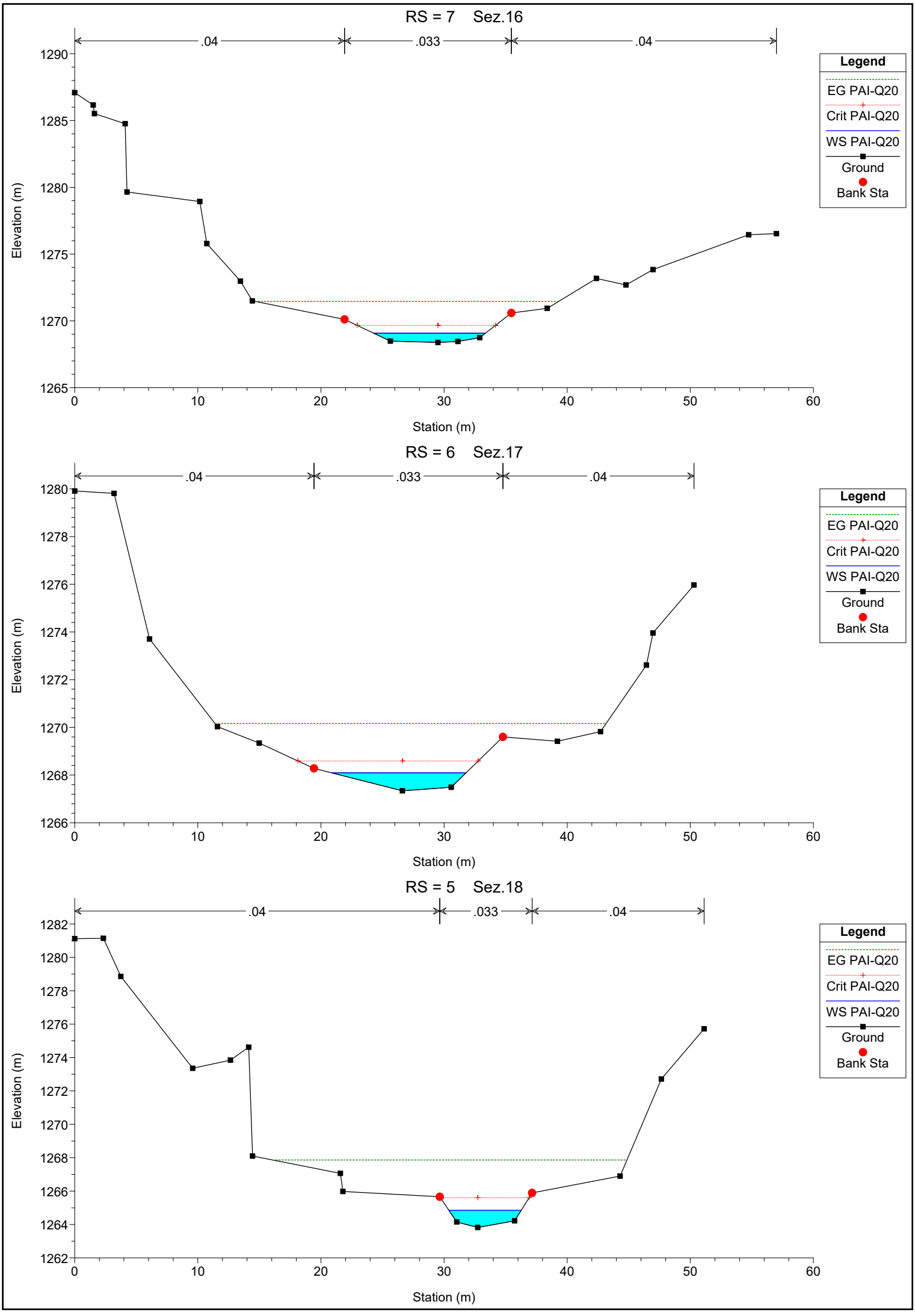

RS = 22 Sez.1
.04
.033
.04
Legend
EG PAI-Q20
Crit PAI-Q20
WS PAI-Q20
Ground
Bank Sta
Elevation (m)
Station (m)
RS = 21 Sez.2
.04
.033
.04
Legend
EG PAI-Q20
Crit PAI-Q20
WS PAI-Q20
Ground
Bank Sta
Elevation (m)
Station (m)
RS = 20 Sez.3
.04
.033
.04
Legend
EG PAI-Q20
Crit PAI-Q20
WS PAI-Q20
Ground
Bank Sta
Elevation (m)
Station (m)

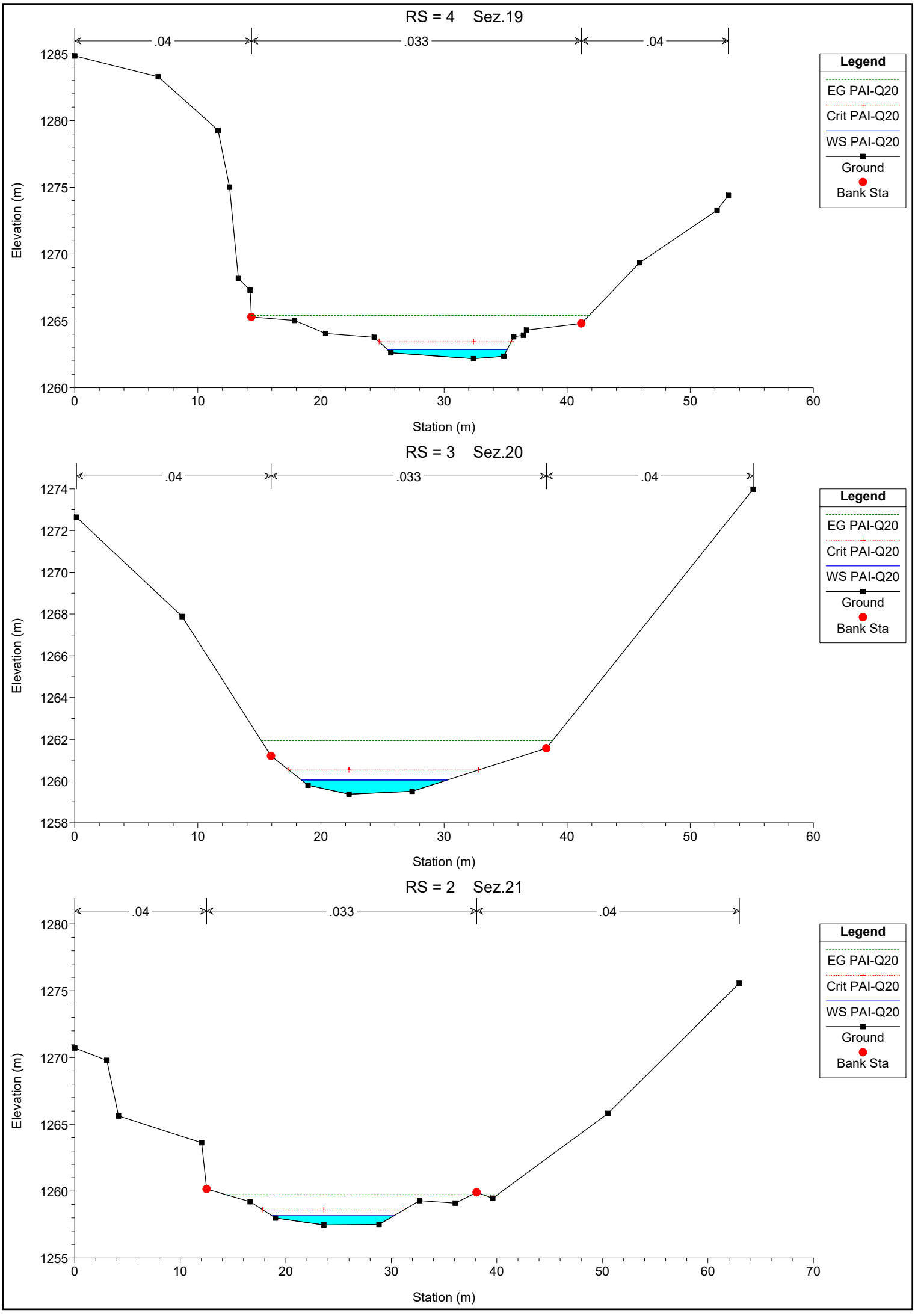

RS = 19 Sez.4
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG PAI-Q20
Crit PAI-Q20
WS PAI-Q20
Ground
Bank Sta
RS = 18 Sez.5
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG PAI-Q20
Crit PAI-Q20
WS PAI-Q20
Ground
Bank Sta
RS = 17 Sez.6
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG PAI-Q20
Crit PAI-Q20
WS PAI-Q20
Ground
Bank Sta

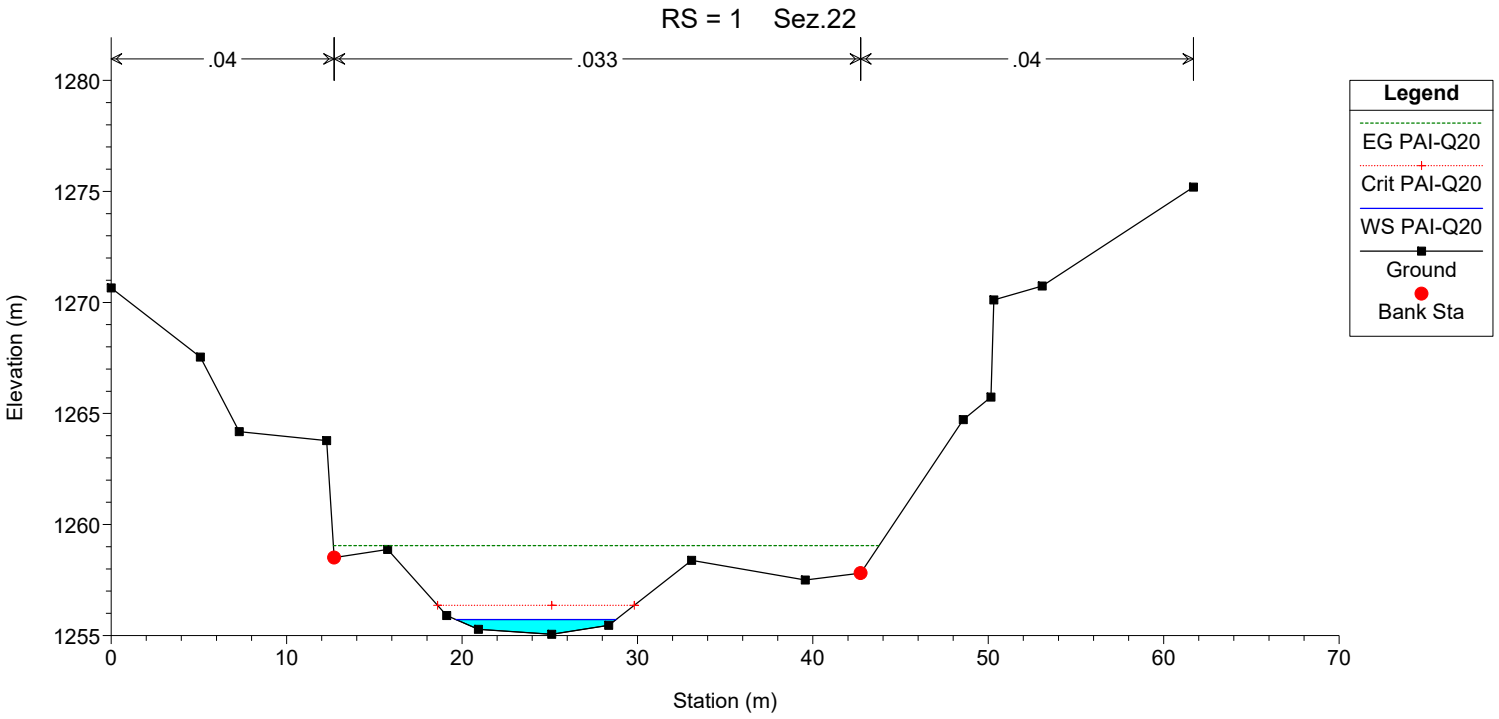

RS = 16 Sez.7
.04
.033
.04
Legend
EG PAI-Q20
Crit PAI-Q20
WS PAI-Q20
Ground
Bank Sta
Elevation (m)
Station (m)
RS = 15 Sez.8
.04
.033
.04
Legend
EG PAI-Q20
Crit PAI-Q20
WS PAI-Q20
Ground
Bank Sta
Elevation (m)
Station (m)
RS = 14 Sez.9
.04
.033
.04
Legend
EG PAI-Q20
Crit PAI-Q20
WS PAI-Q20
Ground
Bank Sta
Elevation (m)
Station (m)


RS = 13 Sez.10
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG PAI-Q20
Crit PAI-Q20
WS PAI-Q20
Ground
Bank Sta
RS = 12 Sez.11
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG PAI-Q20
Crit PAI-Q20
WS PAI-Q20
Ground
Bank Sta
RS = 11 Sez.12
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG PAI-Q20
Crit PAI-Q20
WS PAI-Q20
Ground
Bank Sta

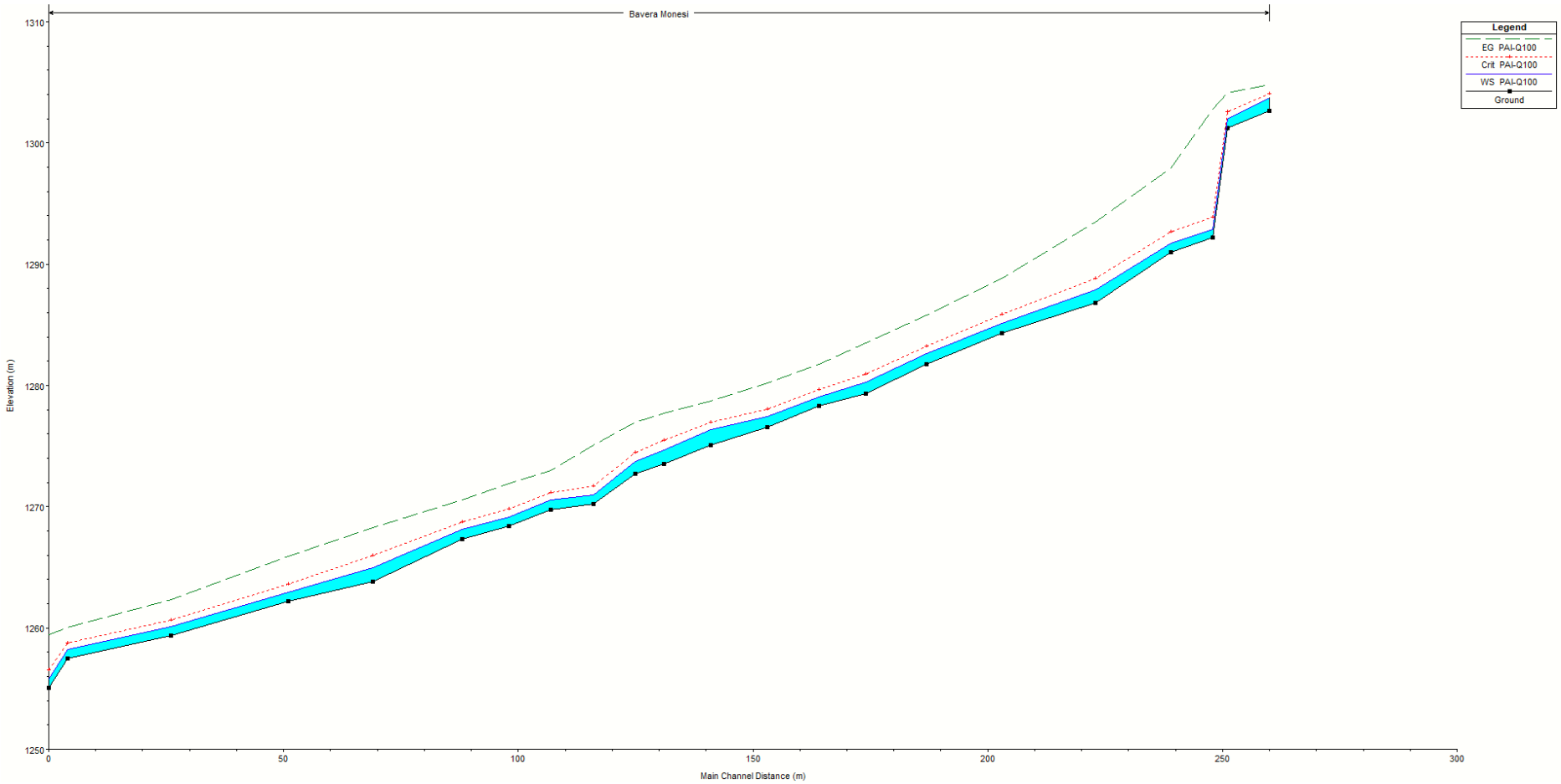

RS = 10 Sez.13
.04
.033
.04
Legend
EG PAI-Q20
Crit PAI-Q20
WS PAI-Q20
Ground
Bank Sta
Elevation (m)
Station (m)
RS = 9 Sez.14
.04
.033
.04
Legend
EG PAI-Q20
Crit PAI-Q20
WS PAI-Q20
Ground
Bank Sta
Elevation (m)
Station (m)
RS = 8 Sez.15
.04
.033
.04
Legend
EG PAI-Q20
Crit PAI-Q20
WS PAI-Q20
Ground
Bank Sta
Elevation (m)
Station (m)

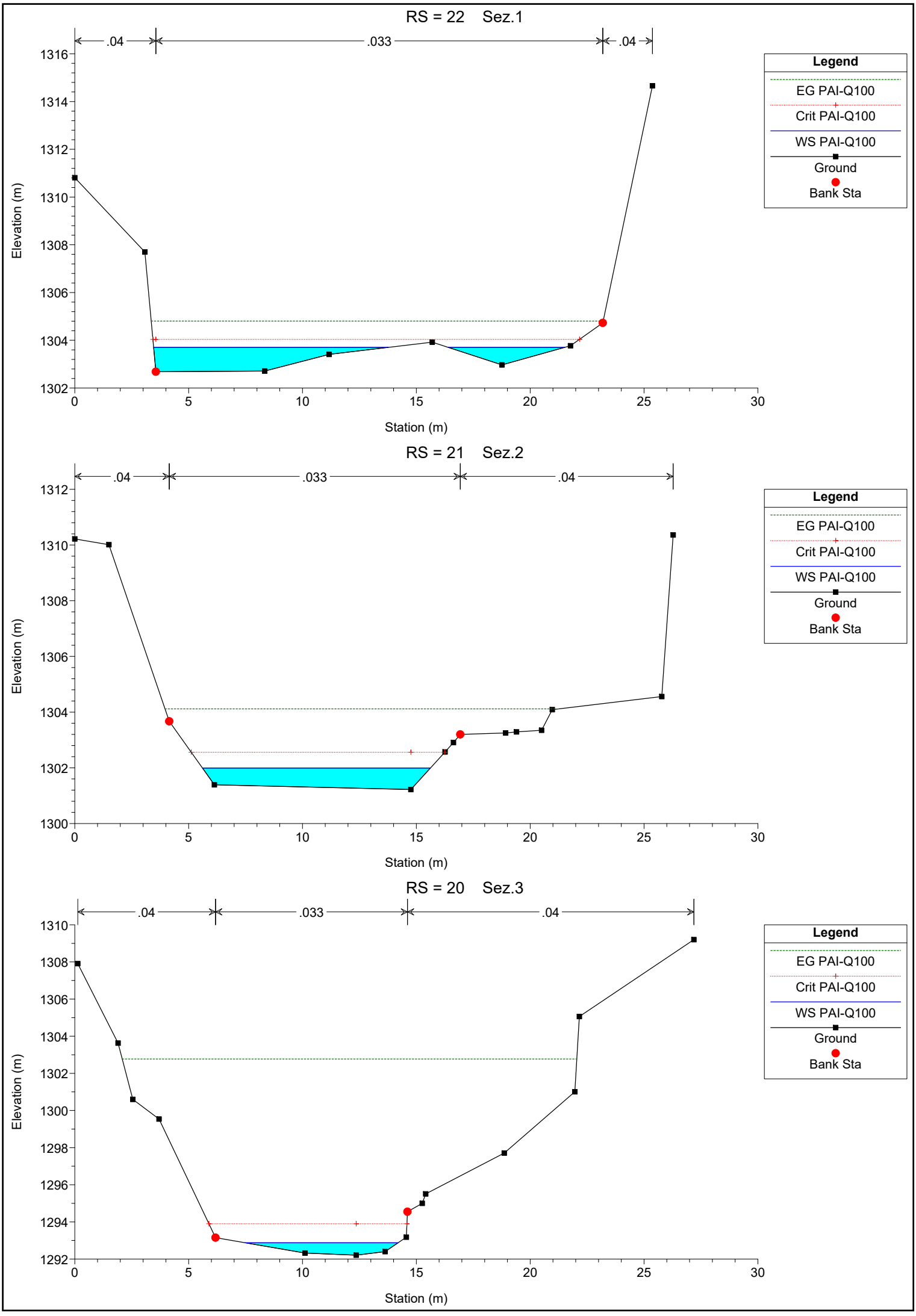

RS = 7 Sez.16
.04
.033
.04
Legend
EG PAI-Q20
Crit PAI-Q20
WS PAI-Q20
Ground
Bank Sta
Elevation (m)
Station (m)
RS = 6 Sez.17
.04
.033
.04
Legend
EG PAI-Q20
Crit PAI-Q20
WS PAI-Q20
Ground
Bank Sta
Elevation (m)
Station (m)
RS = 5 Sez.18
.04
.033
.04
Legend
EG PAI-Q20
Crit PAI-Q20
WS PAI-Q20
Ground
Bank Sta
Elevation (m)
Station (m)

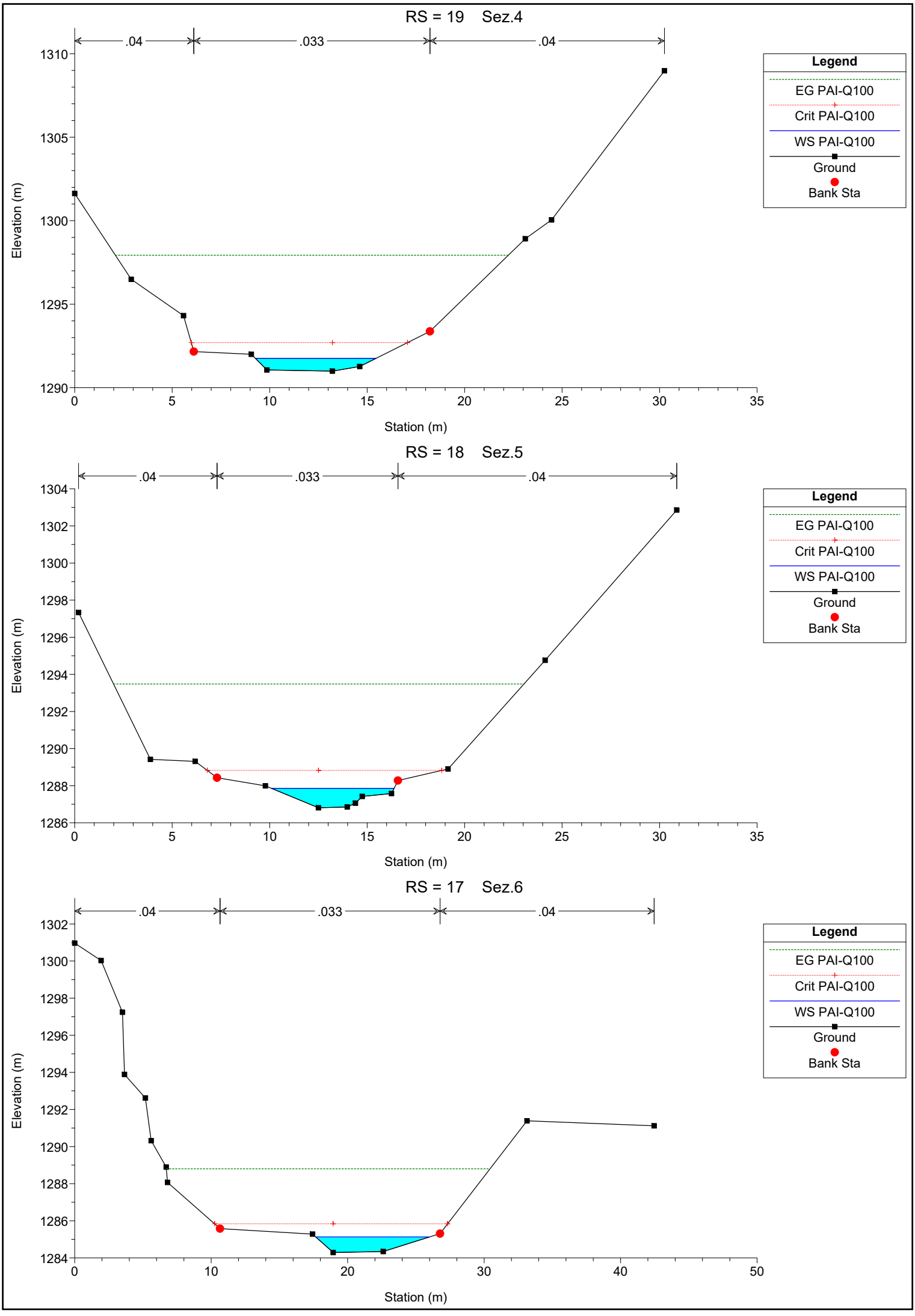

RS = 4 Sez.19
.04
.033
.04
Legend
EG PAI-Q20
Crit PAI-Q20
WS PAI-Q20
Ground
Bank Sta
Elevation (m)
Station (m)
RS = 3 Sez.20
.04
.033
.04
Legend
EG PAI-Q20
Crit PAI-Q20
WS PAI-Q20
Ground
Bank Sta
Elevation (m)
Station (m)
RS = 2 Sez.21
.04
.033
.04
Legend
EG PAI-Q20
Crit PAI-Q20
WS PAI-Q20
Ground
Bank Sta
Elevation (m)
Station (m)

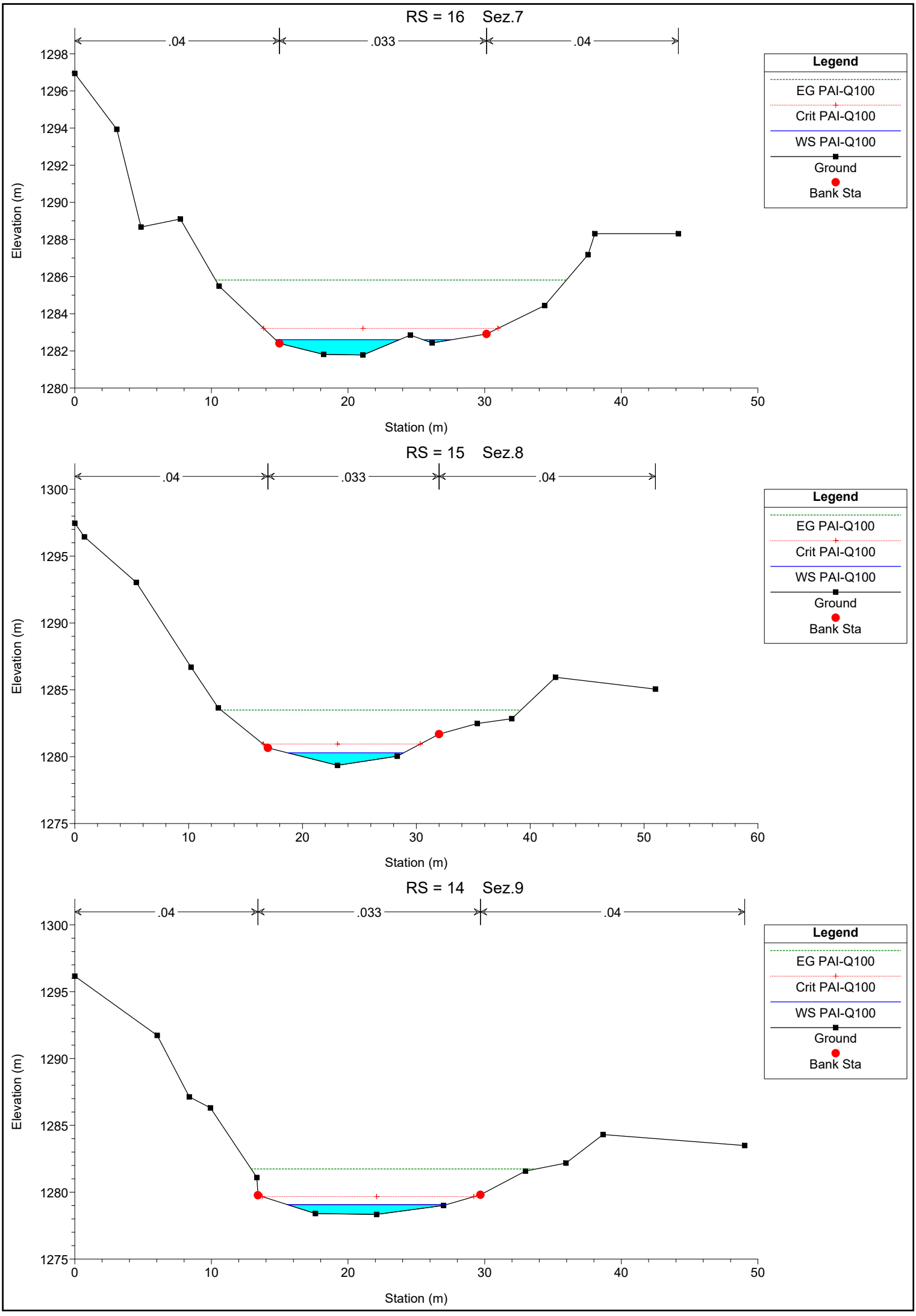

RS = 1 Sez.22
.04
.033
.04
Legend
EG PAI-Q20
Crit PAI-Q20
WS PAI-Q20
Ground
Bank Sta
Elevation (m)
1280
1275
1270
1265
1260
1255
0
10
20
30
40
50
60
70
Station (m)

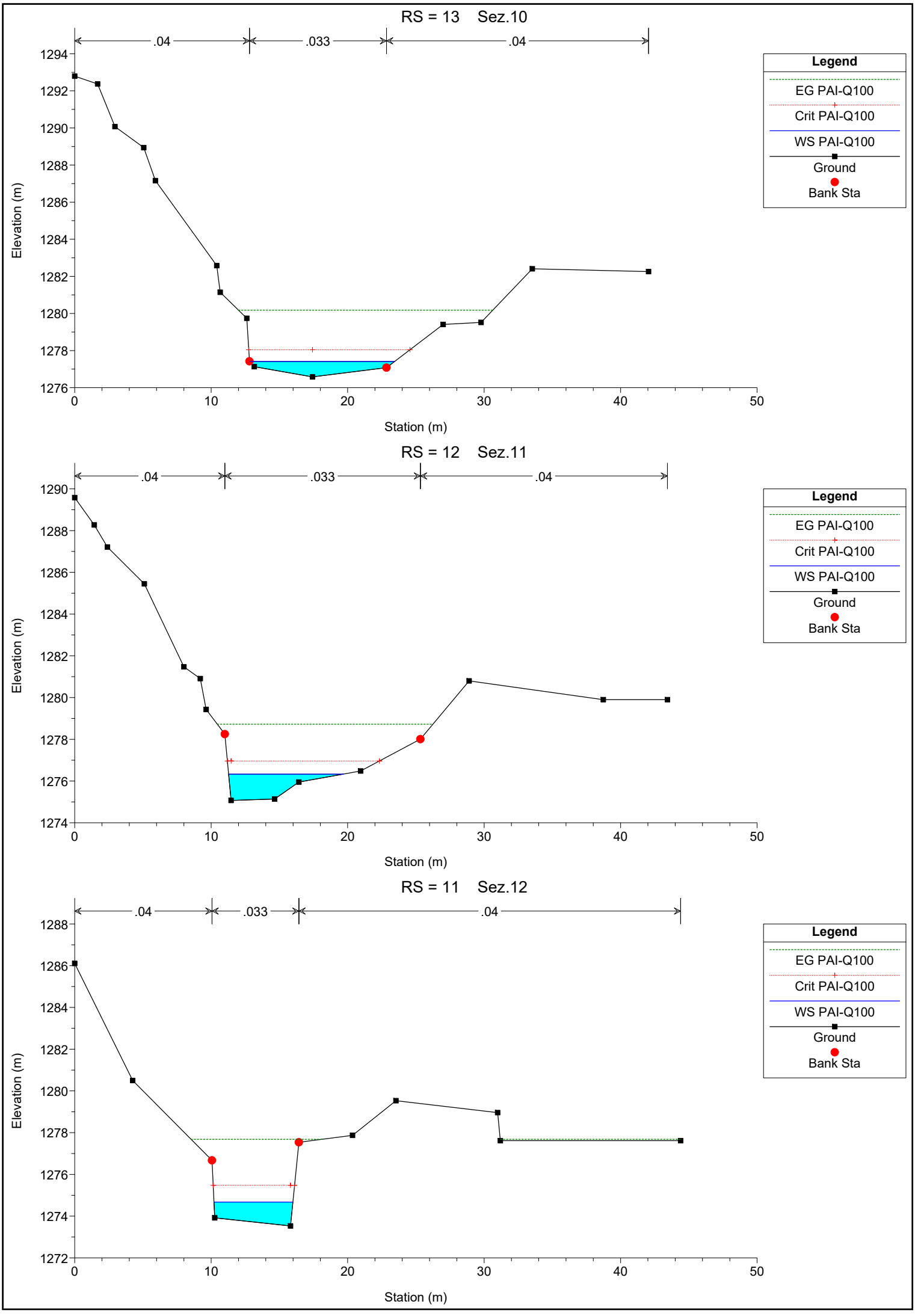
Q100 - PAI

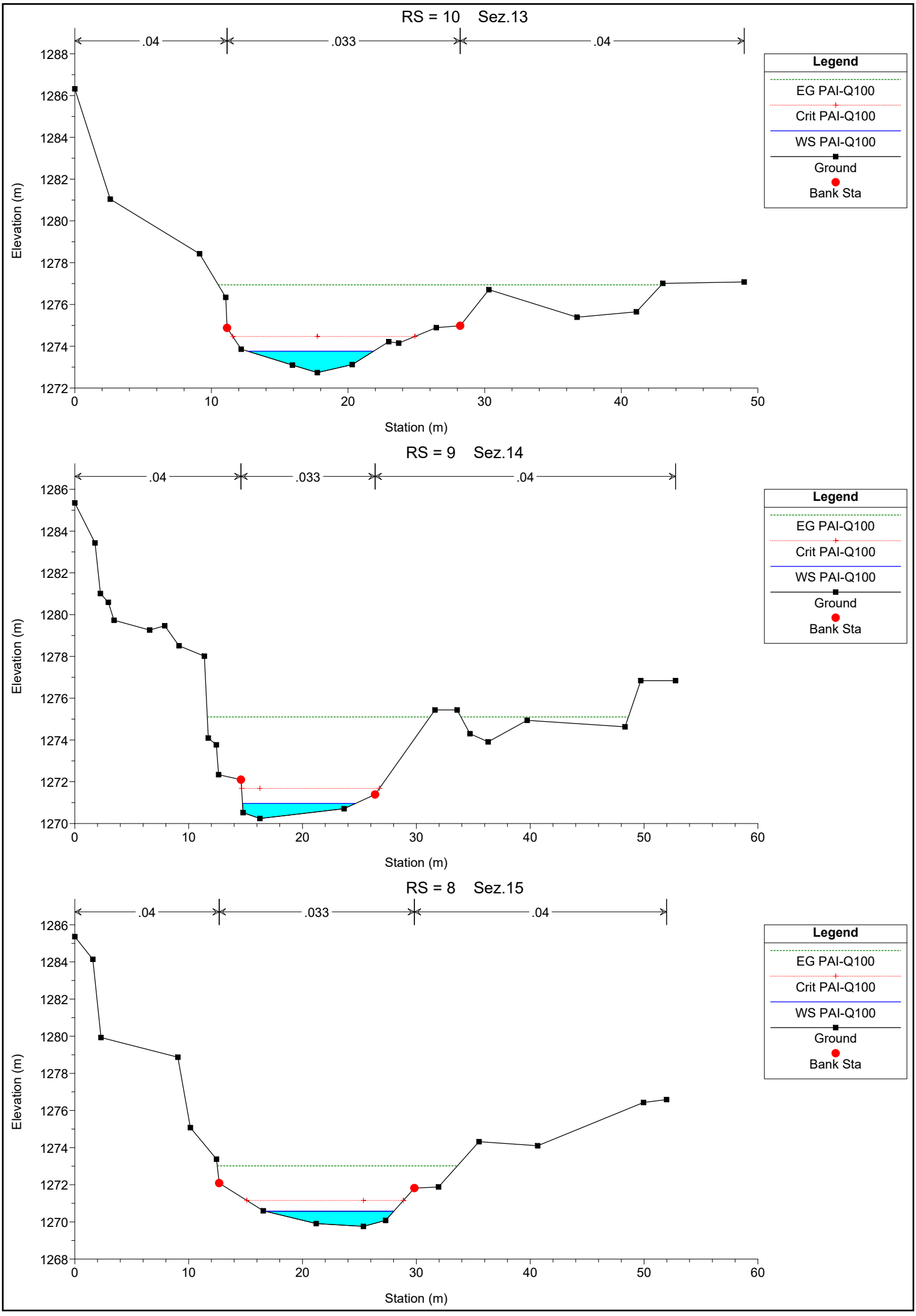

Bavera Monesi
Legend
EG PAI-Q100
Crit PAI-Q100
WS PAI-Q100
Ground
Elevation (m)
1310
1300
1290
1280
1270
1260
1250
0
50
100
150
200
250
300
Main Channel Distance (m)

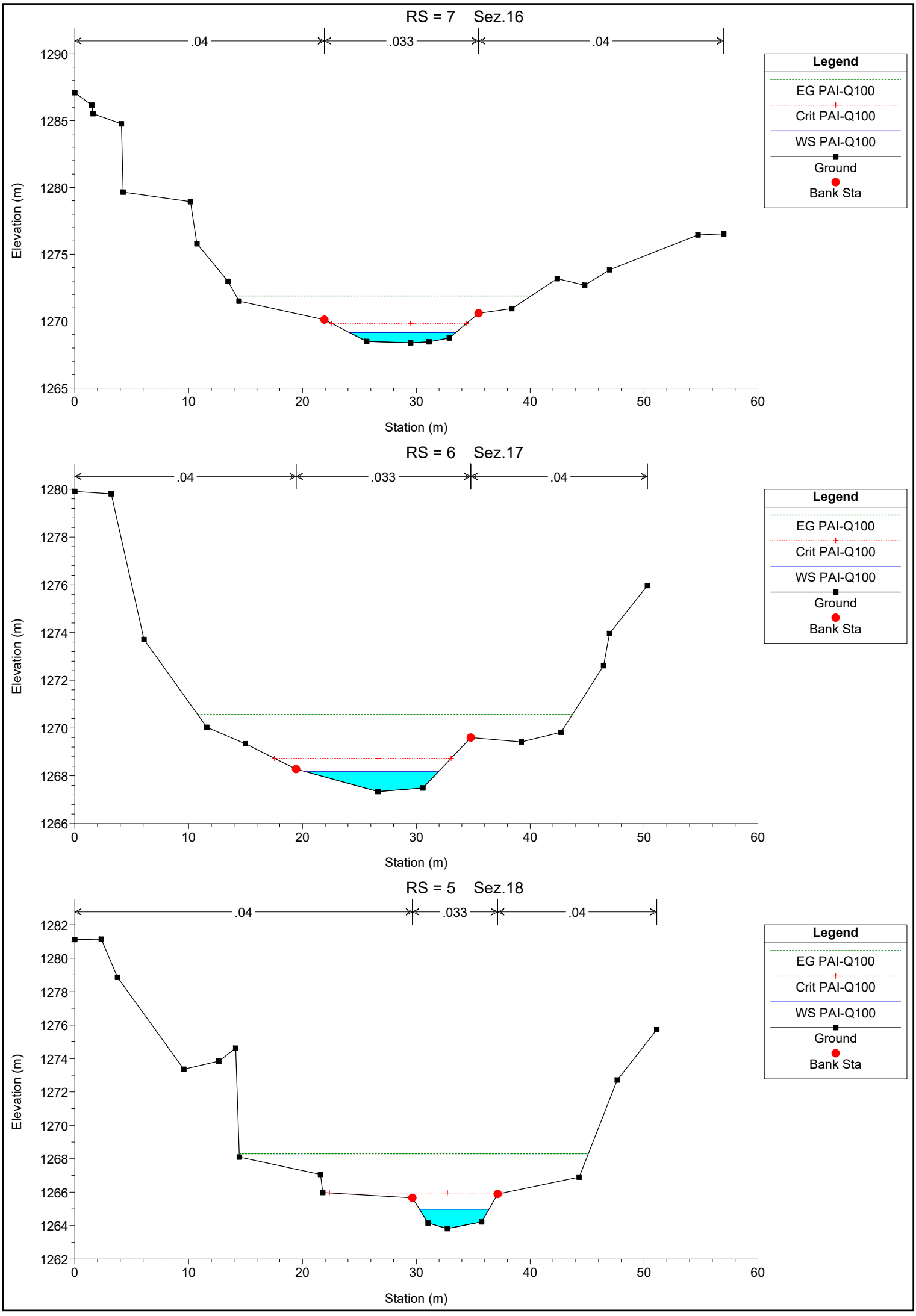

RS = 22 Sez.1
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG PAI-Q100
Crit PAI-Q100
WS PAI-Q100
Ground
Bank Sta
RS = 21 Sez.2
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG PAI-Q100
Crit PAI-Q100
WS PAI-Q100
Ground
Bank Sta
RS = 20 Sez.3
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG PAI-Q100
Crit PAI-Q100
WS PAI-Q100
Ground
Bank Sta

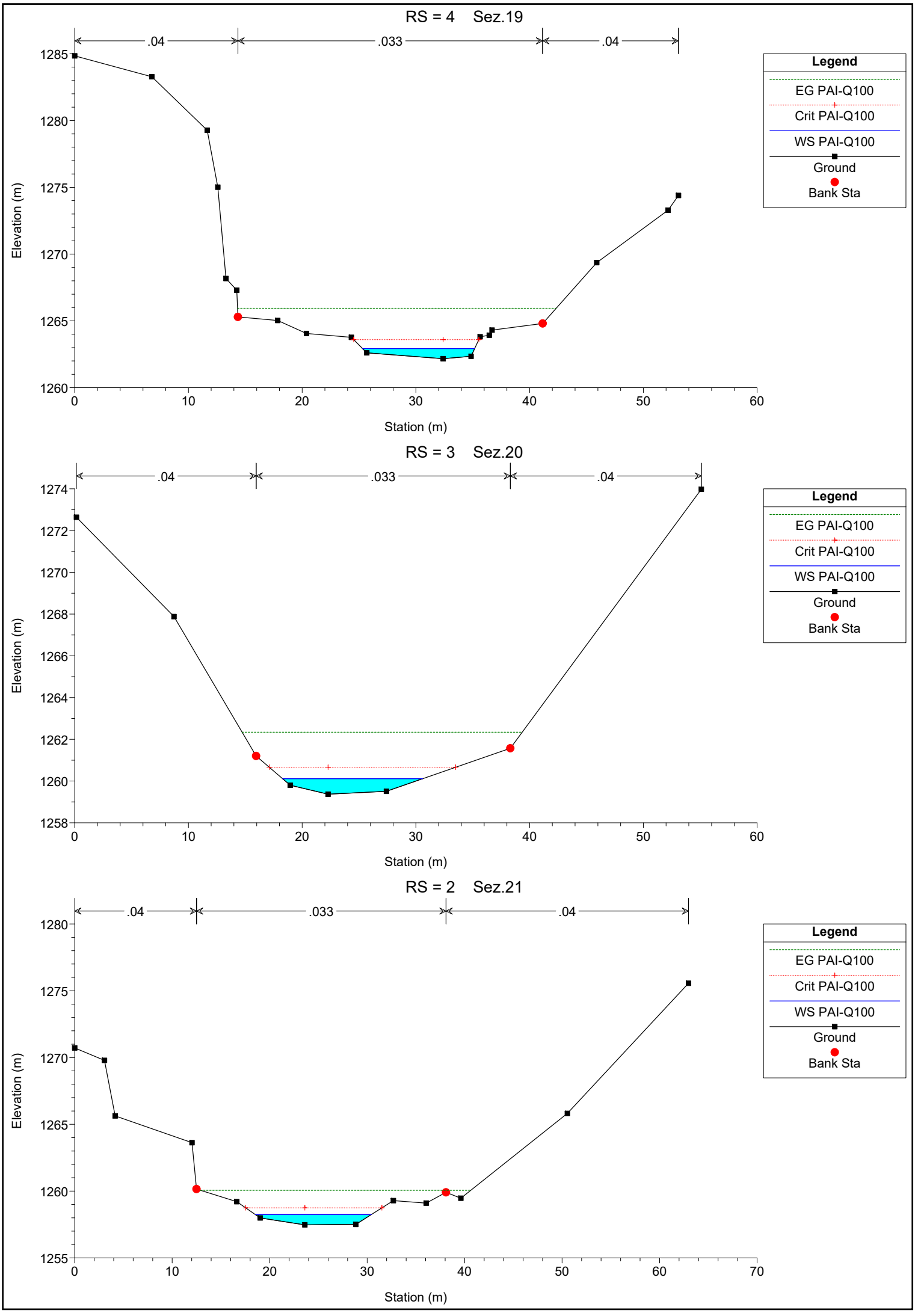

RS = 19 Sez.4
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG PAI-Q100
Crit PAI-Q100
WS PAI-Q100
Ground
Bank Sta
RS = 18 Sez.5
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG PAI-Q100
Crit PAI-Q100
WS PAI-Q100
Ground
Bank Sta
RS = 17 Sez.6
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG PAI-Q100
Crit PAI-Q100
WS PAI-Q100
Ground
Bank Sta

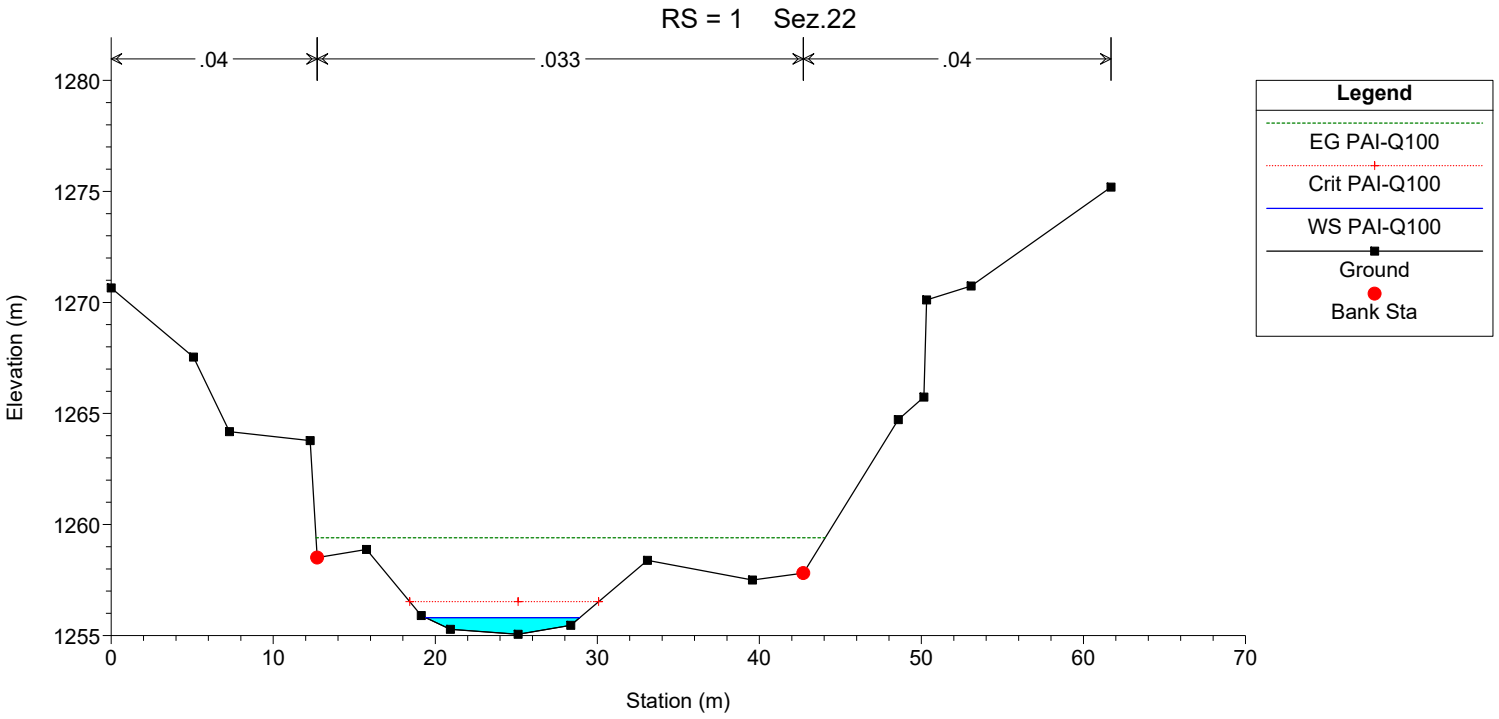

RS = 16 Sez.7
.04
.033
.04
Legend
EG PAI-Q100
Crit PAI-Q100
WS PAI-Q100
Ground
Bank Sta
Elevation (m)
Station (m)
RS = 15 Sez.8
.04
.033
.04
Legend
EG PAI-Q100
Crit PAI-Q100
WS PAI-Q100
Ground
Bank Sta
Elevation (m)
Station (m)
RS = 14 Sez.9
.04
.033
.04
Legend
EG PAI-Q100
Crit PAI-Q100
WS PAI-Q100
Ground
Bank Sta
Elevation (m)
Station (m)


RS = 13 Sez.10
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG PAI-Q100
Crit PAI-Q100
WS PAI-Q100
Ground
Bank Sta
RS = 12 Sez.11
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG PAI-Q100
Crit PAI-Q100
WS PAI-Q100
Ground
Bank Sta
RS = 11 Sez.12
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG PAI-Q100
Crit PAI-Q100
WS PAI-Q100
Ground
Bank Sta

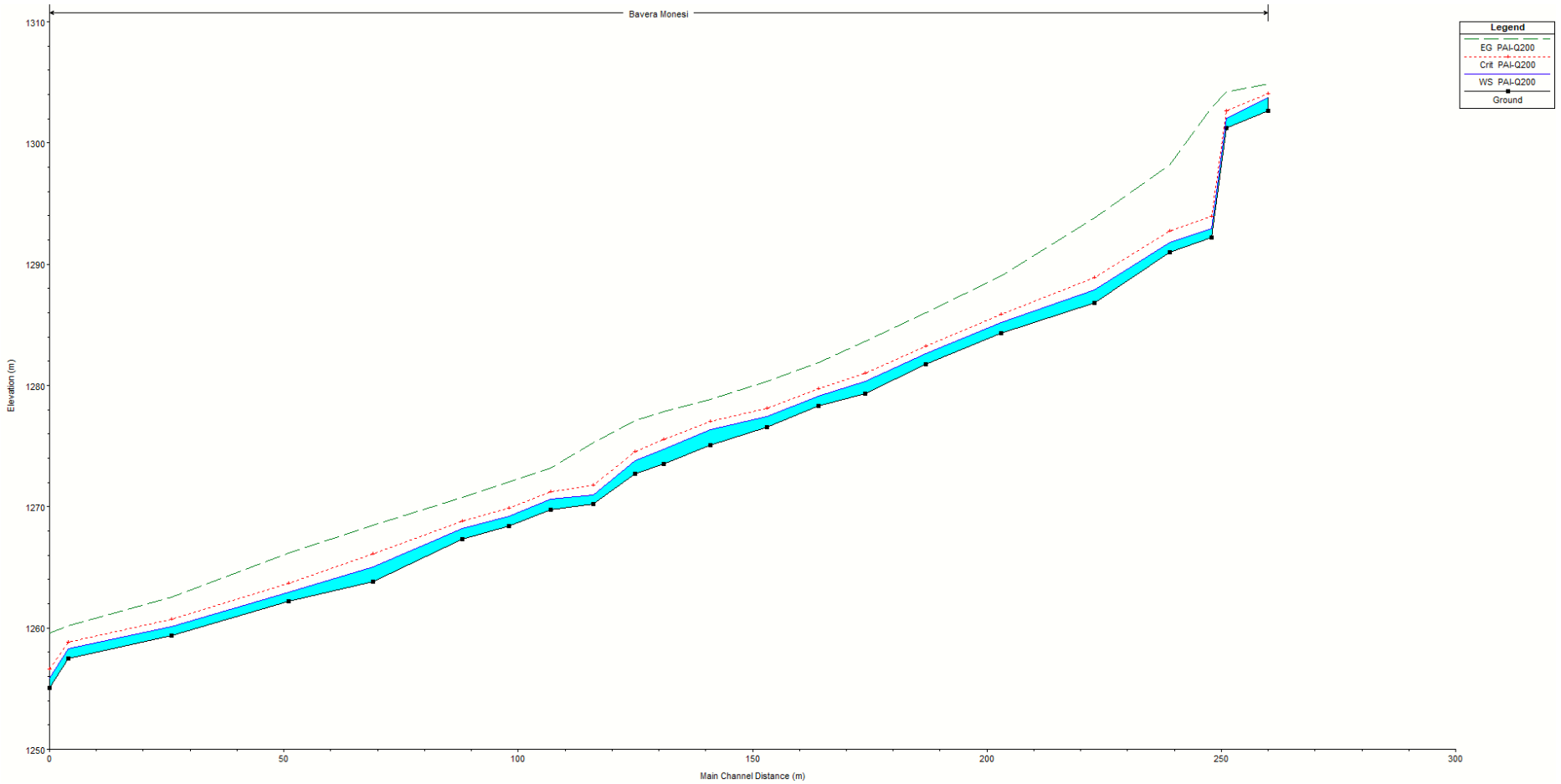

RS = 10 Sez.13
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG PAI-Q100
Crit PAI-Q100
WS PAI-Q100
Ground
Bank Sta
RS = 9 Sez.14
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG PAI-Q100
Crit PAI-Q100
WS PAI-Q100
Ground
Bank Sta
RS = 8 Sez.15
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG PAI-Q100
Crit PAI-Q100
WS PAI-Q100
Ground
Bank Sta

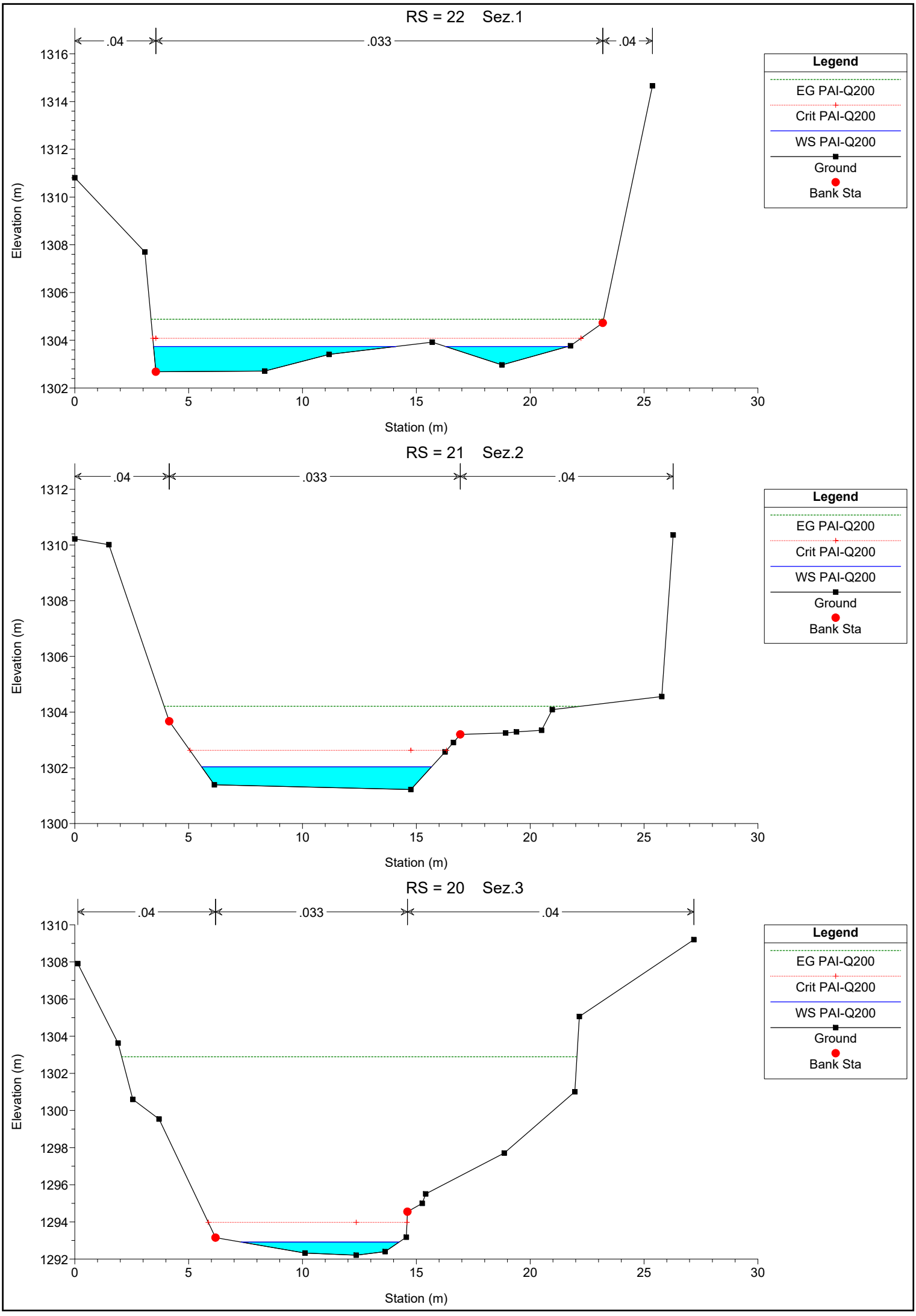

RS = 7 Sez.16
.04
.033
.04
Legend
EG PAI-Q100
Crit PAI-Q100
WS PAI-Q100
Ground
Bank Sta
Elevation (m)
Station (m)
RS = 6 Sez.17
.04
.033
.04
Legend
EG PAI-Q100
Crit PAI-Q100
WS PAI-Q100
Ground
Bank Sta
Elevation (m)
Station (m)
RS = 5 Sez.18
.04
.033
.04
Legend
EG PAI-Q100
Crit PAI-Q100
WS PAI-Q100
Ground
Bank Sta
Elevation (m)
Station (m)

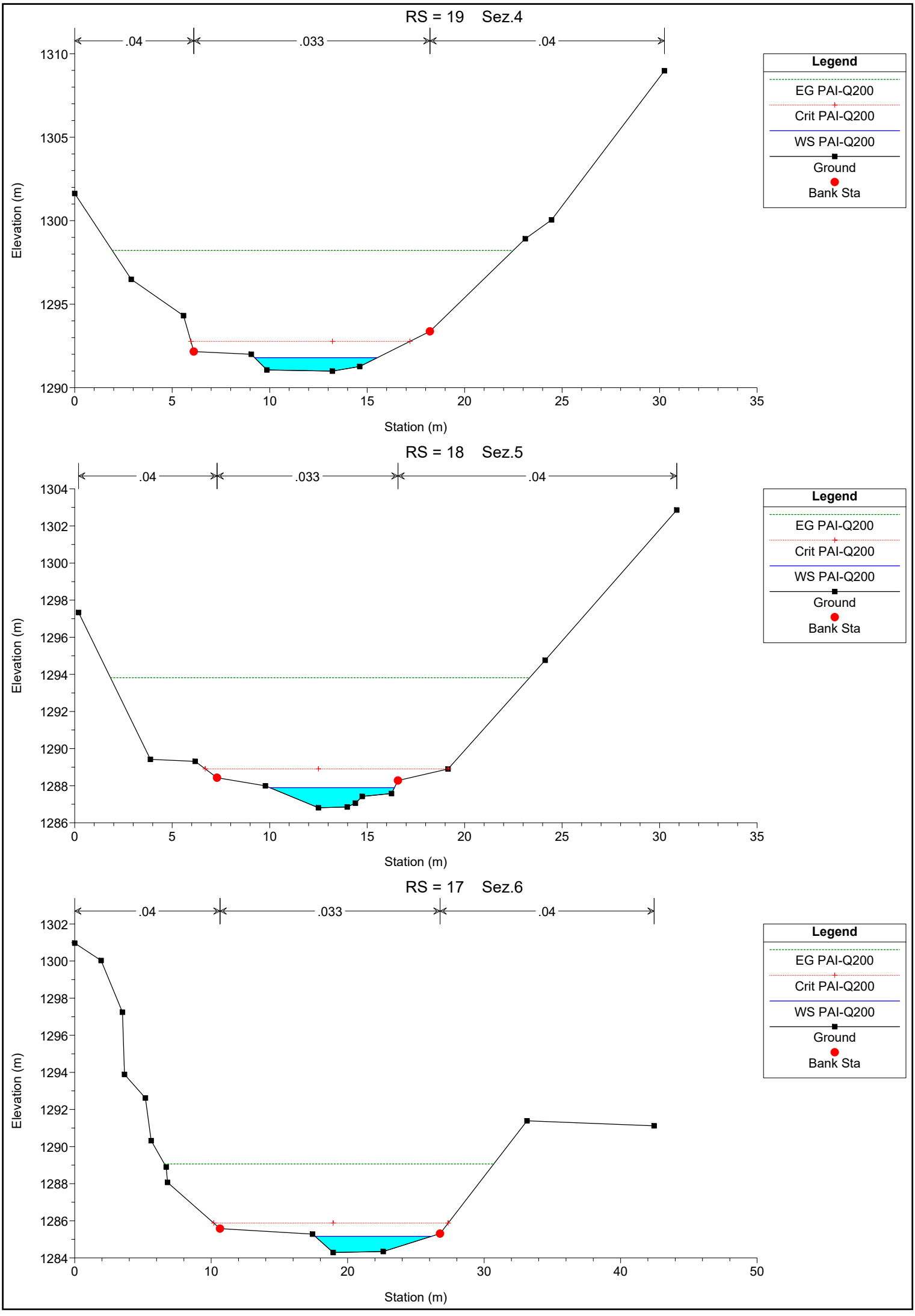

RS = 4 Sez.19
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG PAI-Q100
Crit PAI-Q100
WS PAI-Q100
Ground
Bank Sta
RS = 3 Sez.20
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG PAI-Q100
Crit PAI-Q100
WS PAI-Q100
Ground
Bank Sta
RS = 2 Sez.21
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG PAI-Q100
Crit PAI-Q100
WS PAI-Q100
Ground
Bank Sta

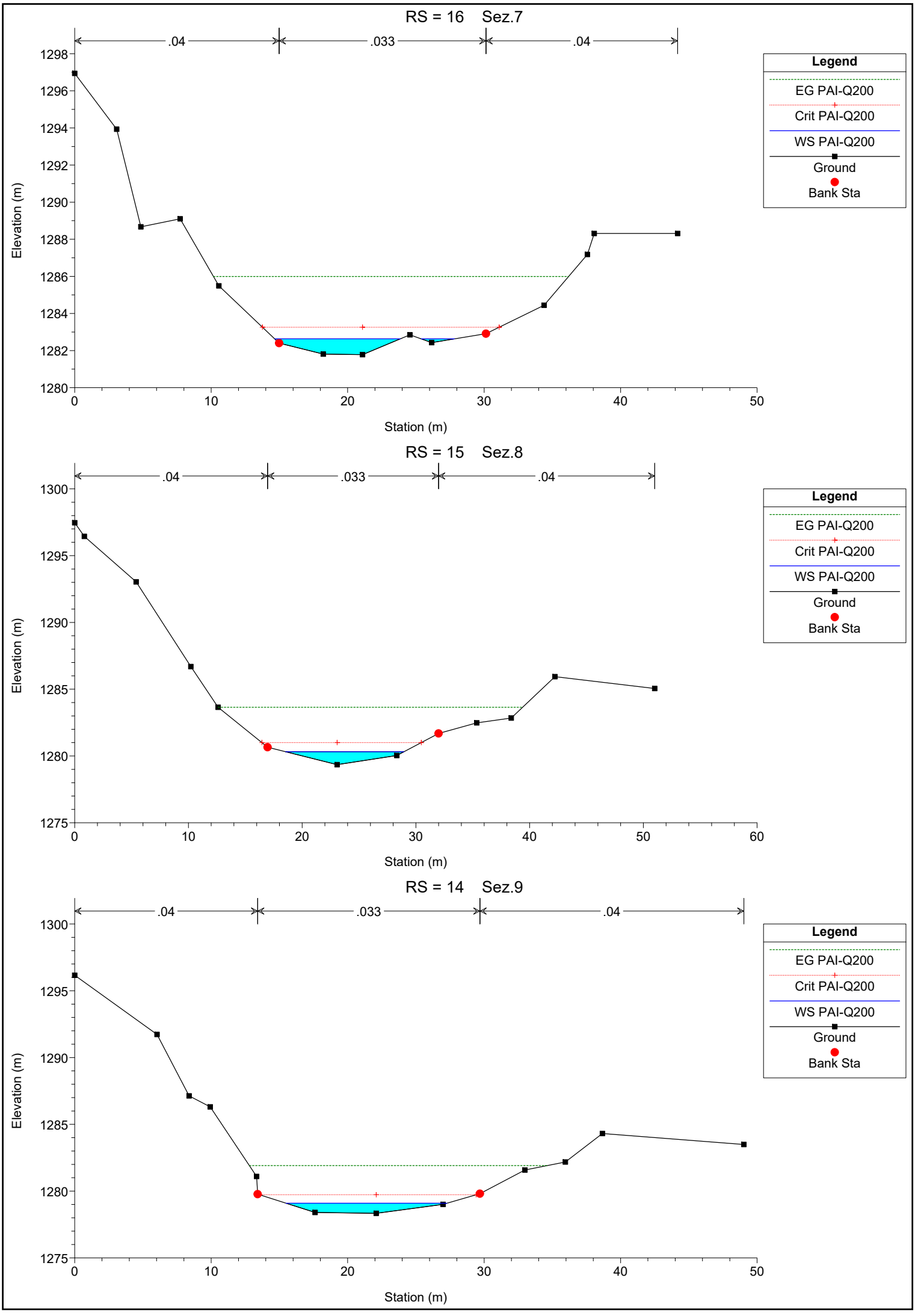

RS = 1 Sez.22
.04
.033
.04
Legend
EG PAI-Q100
Crit PAI-Q100
WS PAI-Q100
Ground
Bank Sta
Elevation (m)
Station (m)
1280
1275
1270
1265
1260
1255
0
10
20
30
40
50
60
70

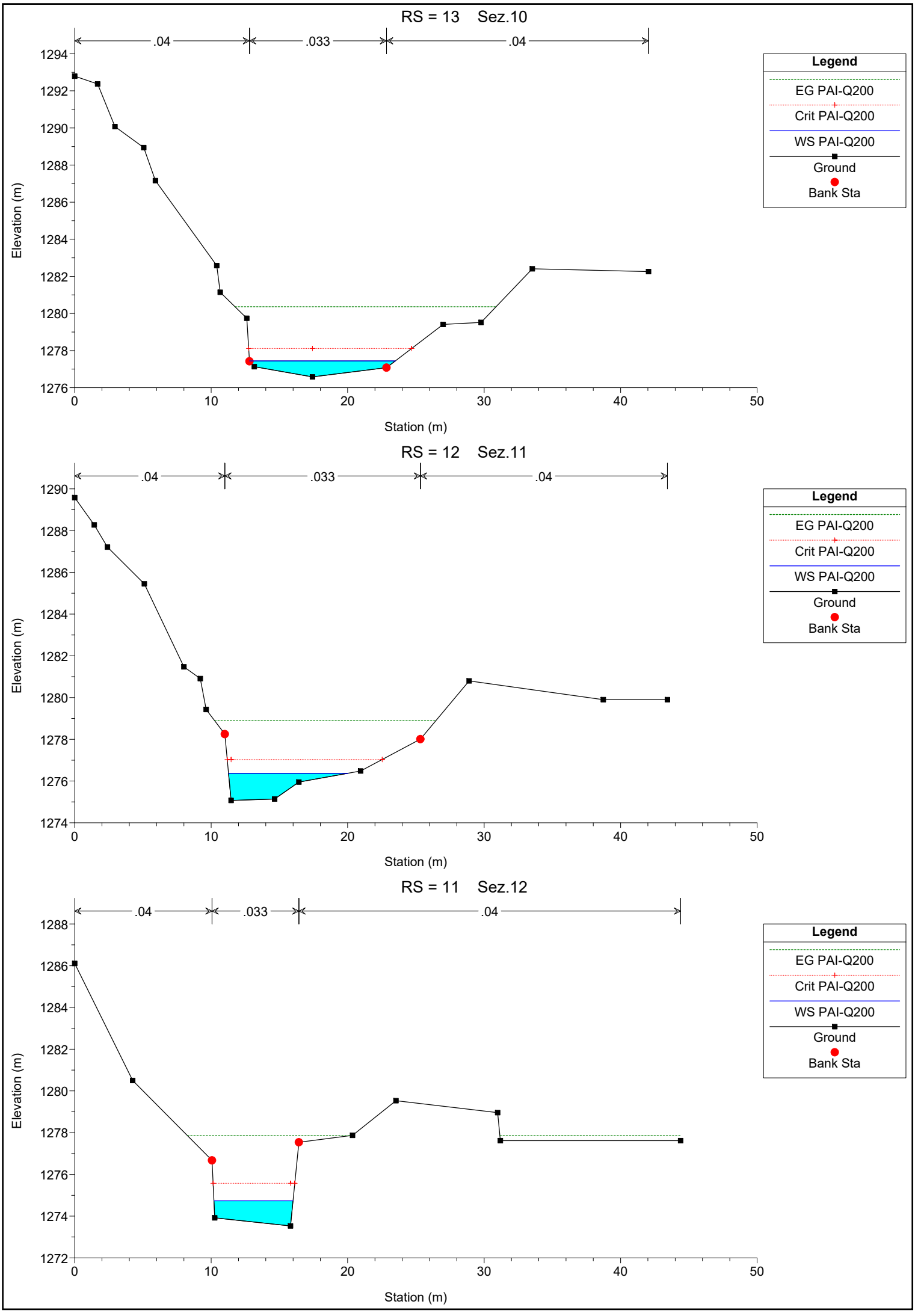
Q200 - PAI

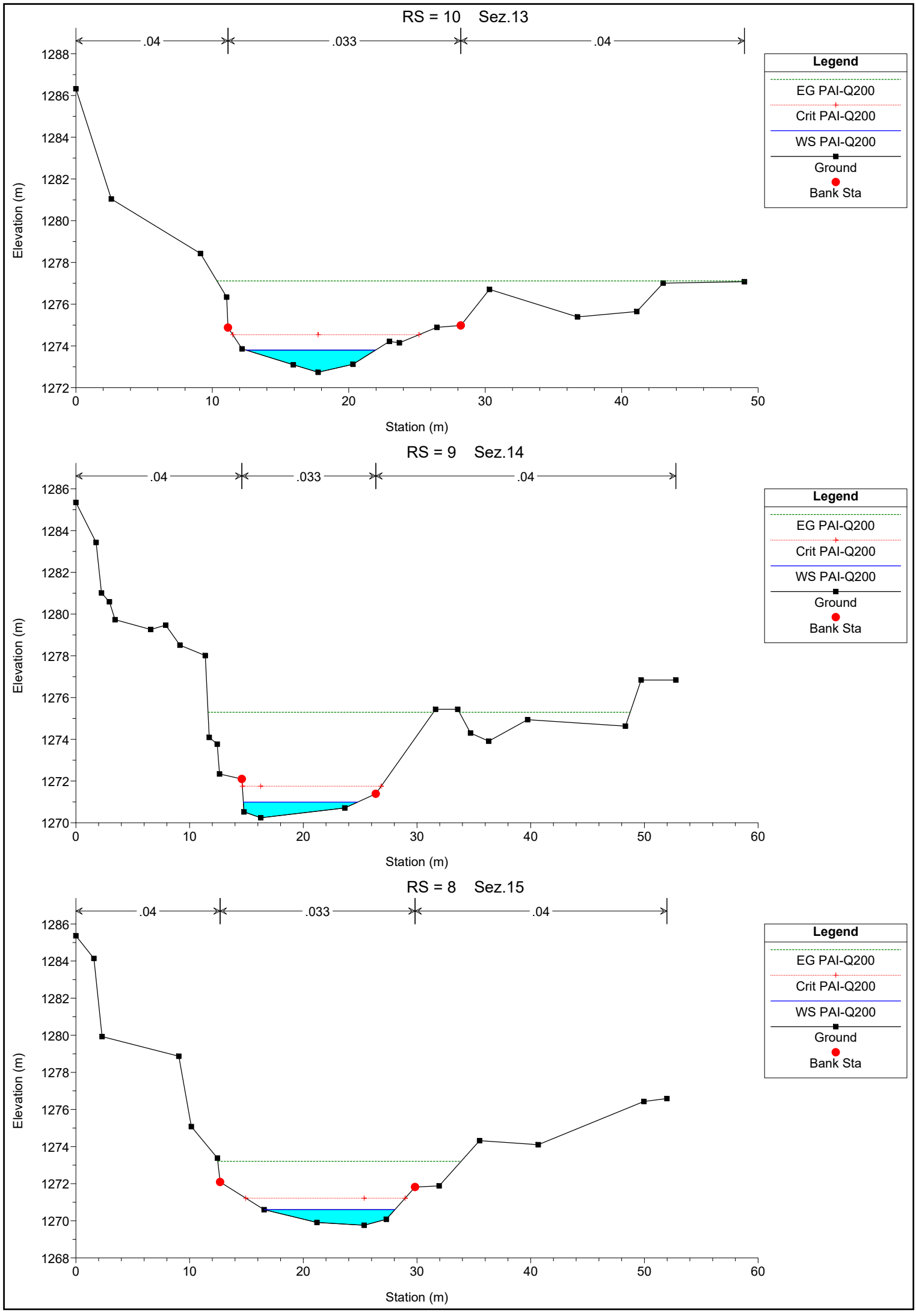

Bavera Monesi
Legend
EG PAI-Q200
Crit PAI-Q200
WS PAI-Q200
Ground
Elevation (m)
1310
1300
1290
1280
1270
1260
1250
0
50
100
150
200
250
300
Main Channel Distance (m)

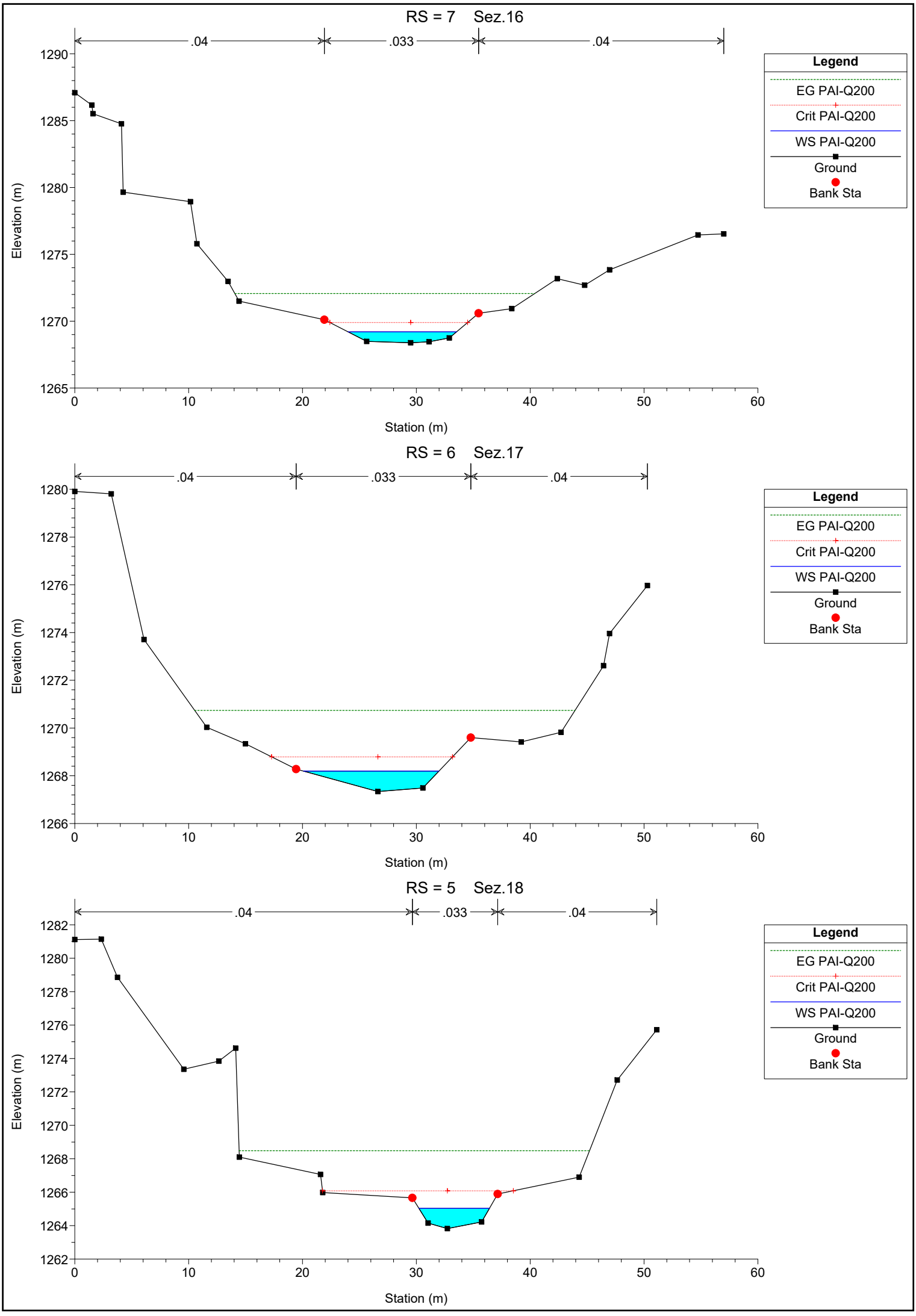

RS = 22 Sez.1
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG PAI-Q200
Crit PAI-Q200
WS PAI-Q200
Ground
Bank Sta
RS = 21 Sez.2
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG PAI-Q200
Crit PAI-Q200
WS PAI-Q200
Ground
Bank Sta
RS = 20 Sez.3
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG PAI-Q200
Crit PAI-Q200
WS PAI-Q200
Ground
Bank Sta

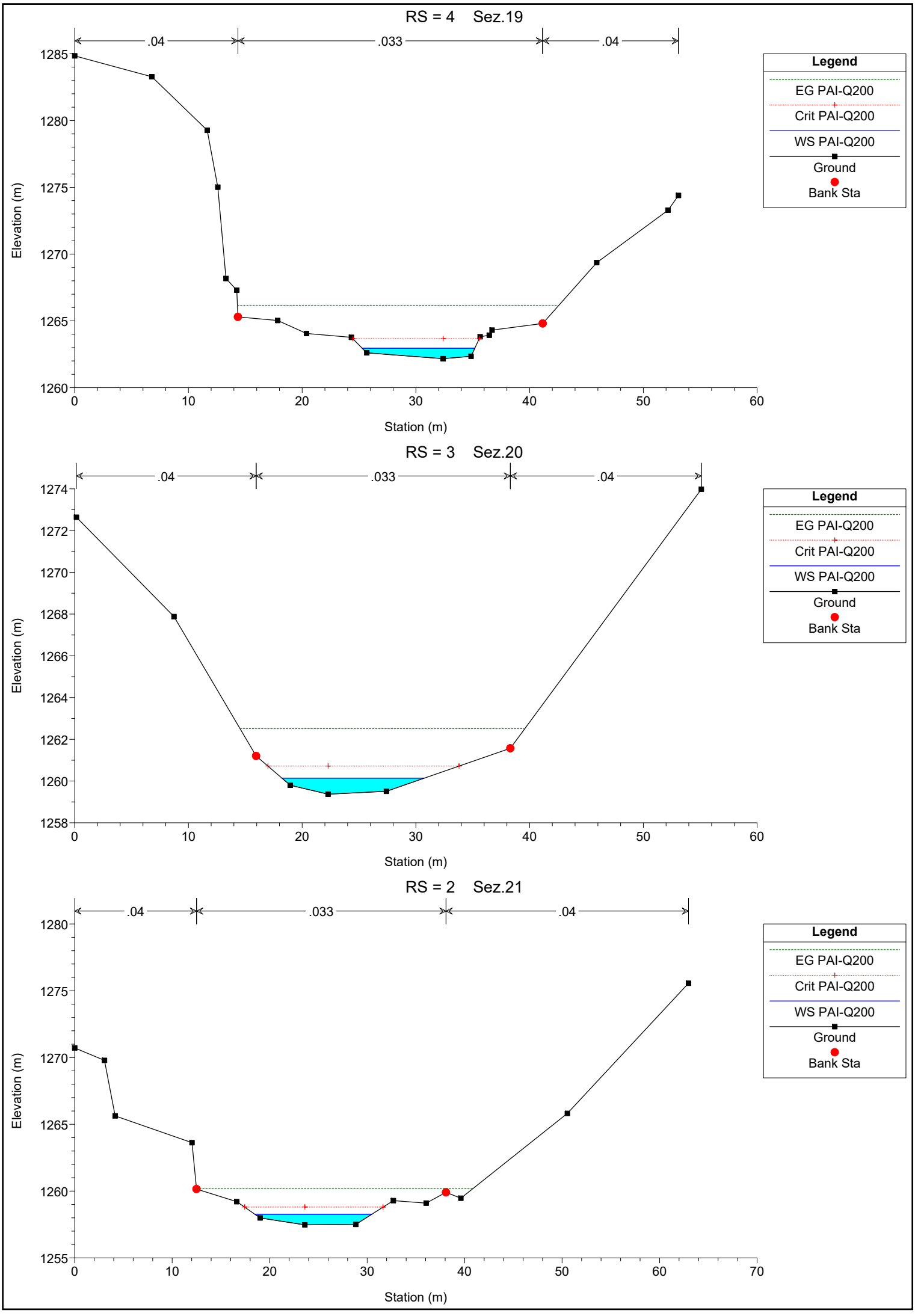

RS = 19 Sez.4
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG PAI-Q200
Crit PAI-Q200
WS PAI-Q200
Ground
Bank Sta
RS = 18 Sez.5
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG PAI-Q200
Crit PAI-Q200
WS PAI-Q200
Ground
Bank Sta
RS = 17 Sez.6
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG PAI-Q200
Crit PAI-Q200
WS PAI-Q200
Ground
Bank Sta

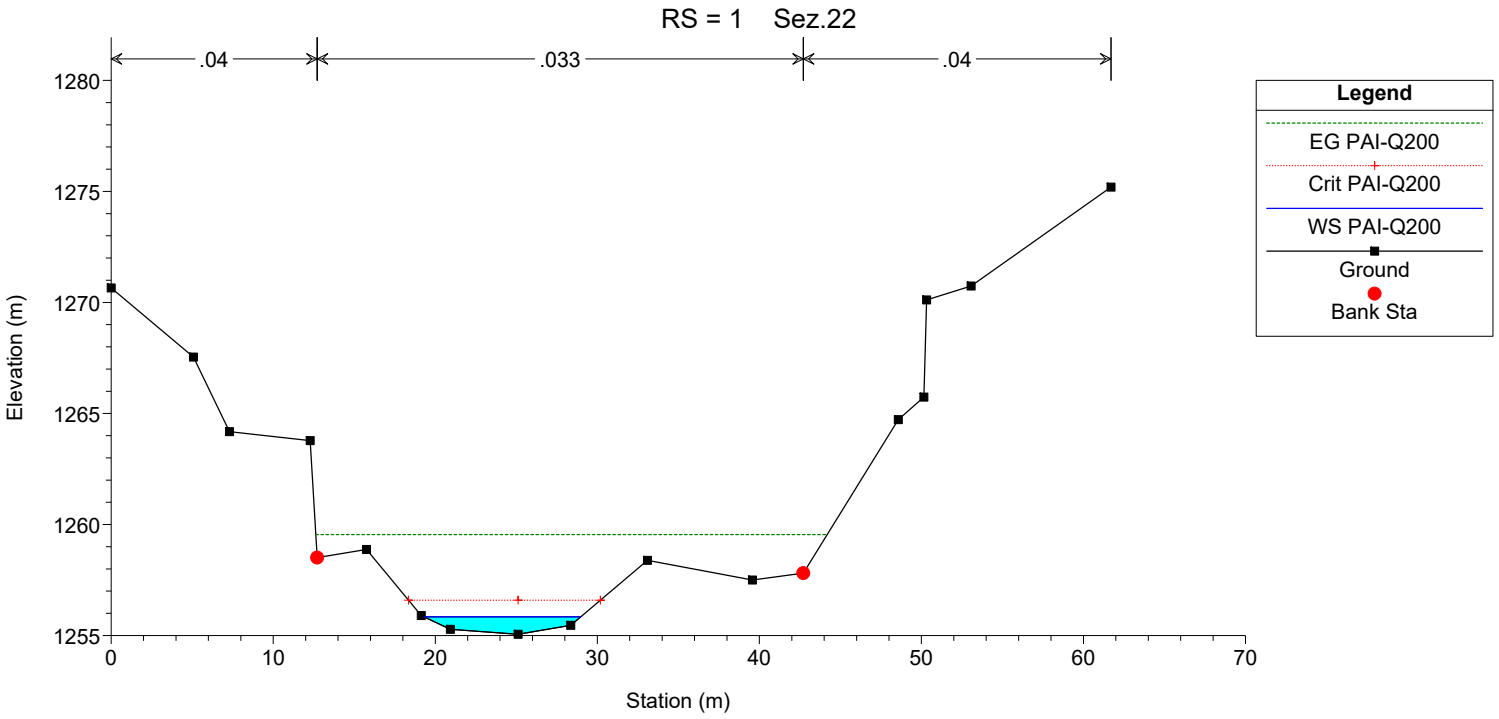

RS = 16 Sez.7
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG PAI-Q200
Crit PAI-Q200
WS PAI-Q200
Ground
Bank Sta
RS = 15 Sez.8
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG PAI-Q200
Crit PAI-Q200
WS PAI-Q200
Ground
Bank Sta
RS = 14 Sez.9
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG PAI-Q200
Crit PAI-Q200
WS PAI-Q200
Ground
Bank Sta


RS = 13 Sez.10
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG PAI-Q200
Crit PAI-Q200
WS PAI-Q200
Ground
Bank Sta
RS = 12 Sez.11
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG PAI-Q200
Crit PAI-Q200
WS PAI-Q200
Ground
Bank Sta
RS = 11 Sez.12
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG PAI-Q200
Crit PAI-Q200
WS PAI-Q200
Ground
Bank Sta

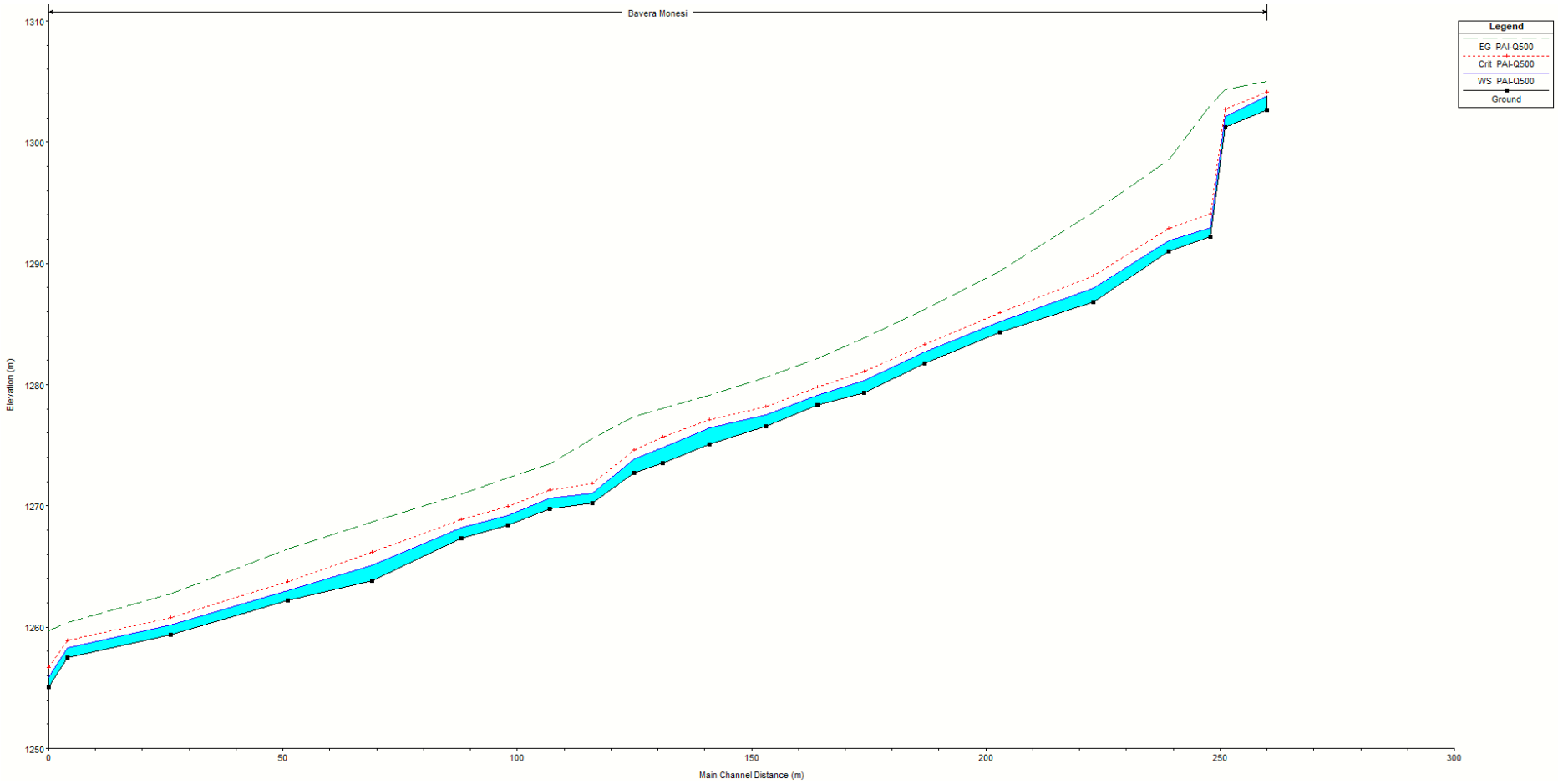

RS = 10 Sez.13
.04
.033
.04
Legend
EG PAI-Q200
Crit PAI-Q200
WS PAI-Q200
Ground
Bank Sta
Elevation (m)
Station (m)
RS = 9 Sez.14
.04
.033
.04
Legend
EG PAI-Q200
Crit PAI-Q200
WS PAI-Q200
Ground
Bank Sta
Elevation (m)
Station (m)
RS = 8 Sez.15
.04
.033
.04
Legend
EG PAI-Q200
Crit PAI-Q200
WS PAI-Q200
Ground
Bank Sta
Elevation (m)
Station (m)

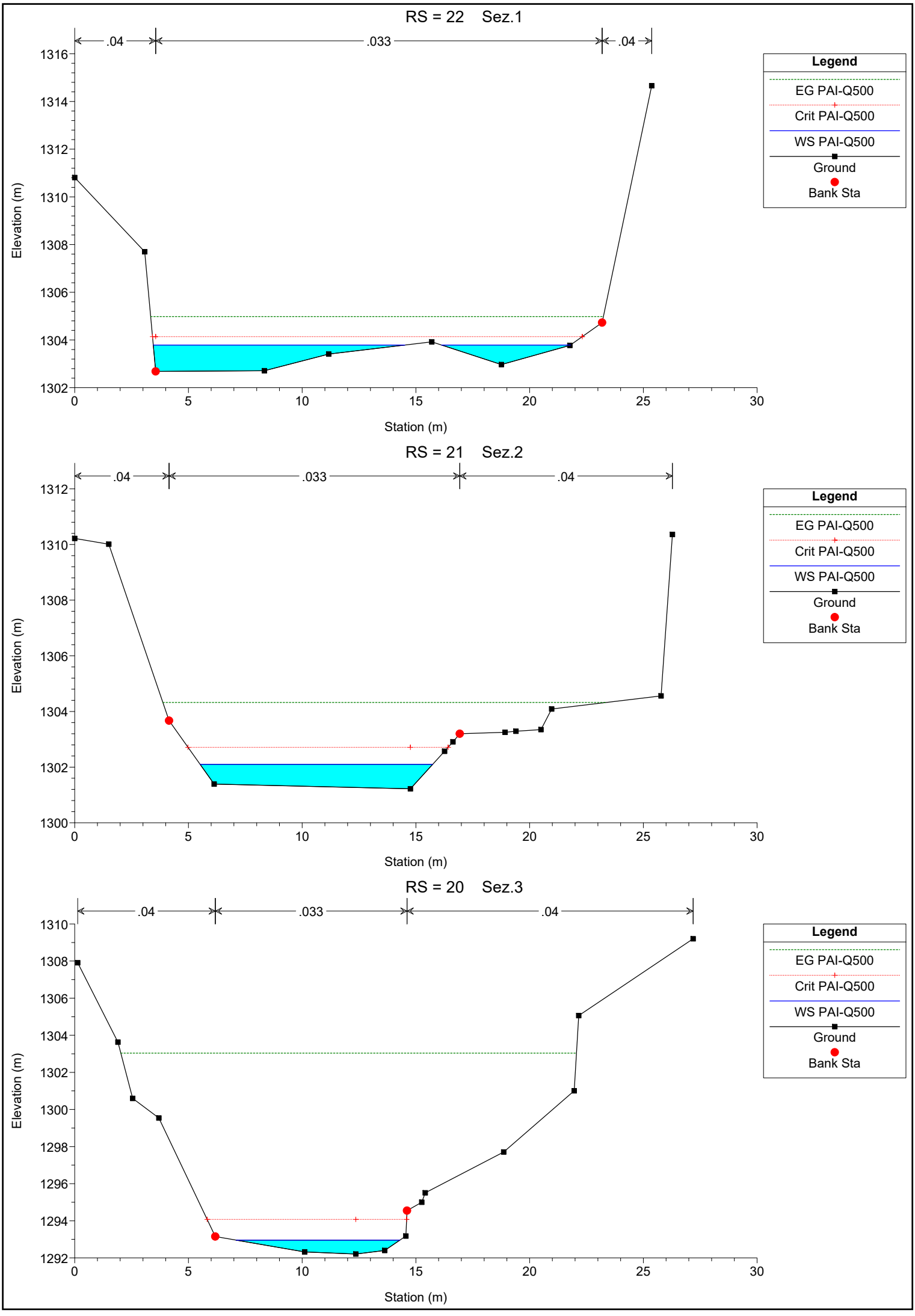

RS = 7 Sez.16
.04
.033
.04
Legend
EG PAI-Q200
Crit PAI-Q200
WS PAI-Q200
Ground
Bank Sta
Elevation (m)
Station (m)
RS = 6 Sez.17
.04
.033
.04
Legend
EG PAI-Q200
Crit PAI-Q200
WS PAI-Q200
Ground
Bank Sta
Elevation (m)
Station (m)
RS = 5 Sez.18
.04
.033
.04
Legend
EG PAI-Q200
Crit PAI-Q200
WS PAI-Q200
Ground
Bank Sta
Elevation (m)
Station (m)

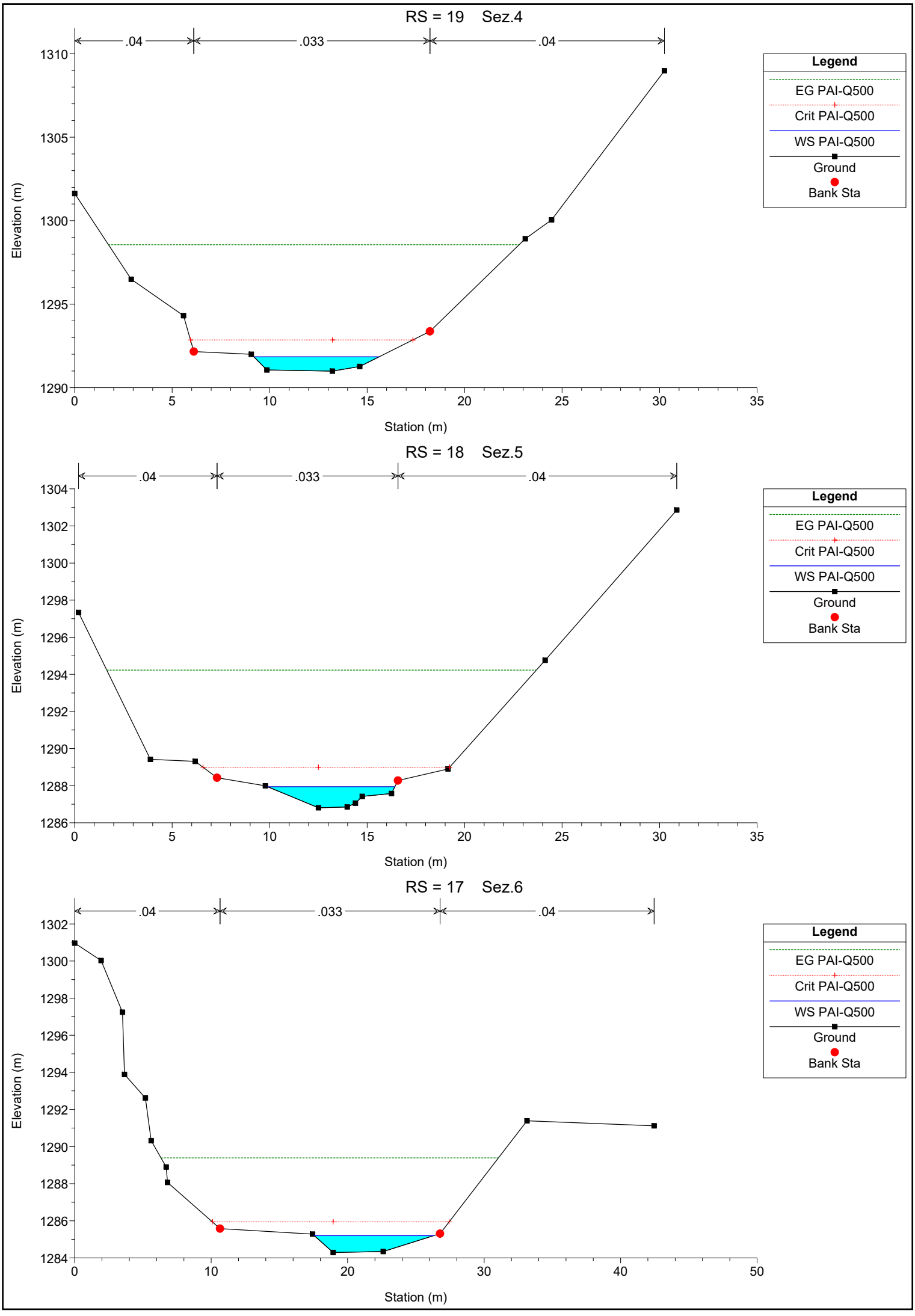

RS = 4 Sez.19
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG PAI-Q200
Crit PAI-Q200
WS PAI-Q200
Ground
Bank Sta
RS = 3 Sez.20
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG PAI-Q200
Crit PAI-Q200
WS PAI-Q200
Ground
Bank Sta
RS = 2 Sez.21
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG PAI-Q200
Crit PAI-Q200
WS PAI-Q200
Ground
Bank Sta

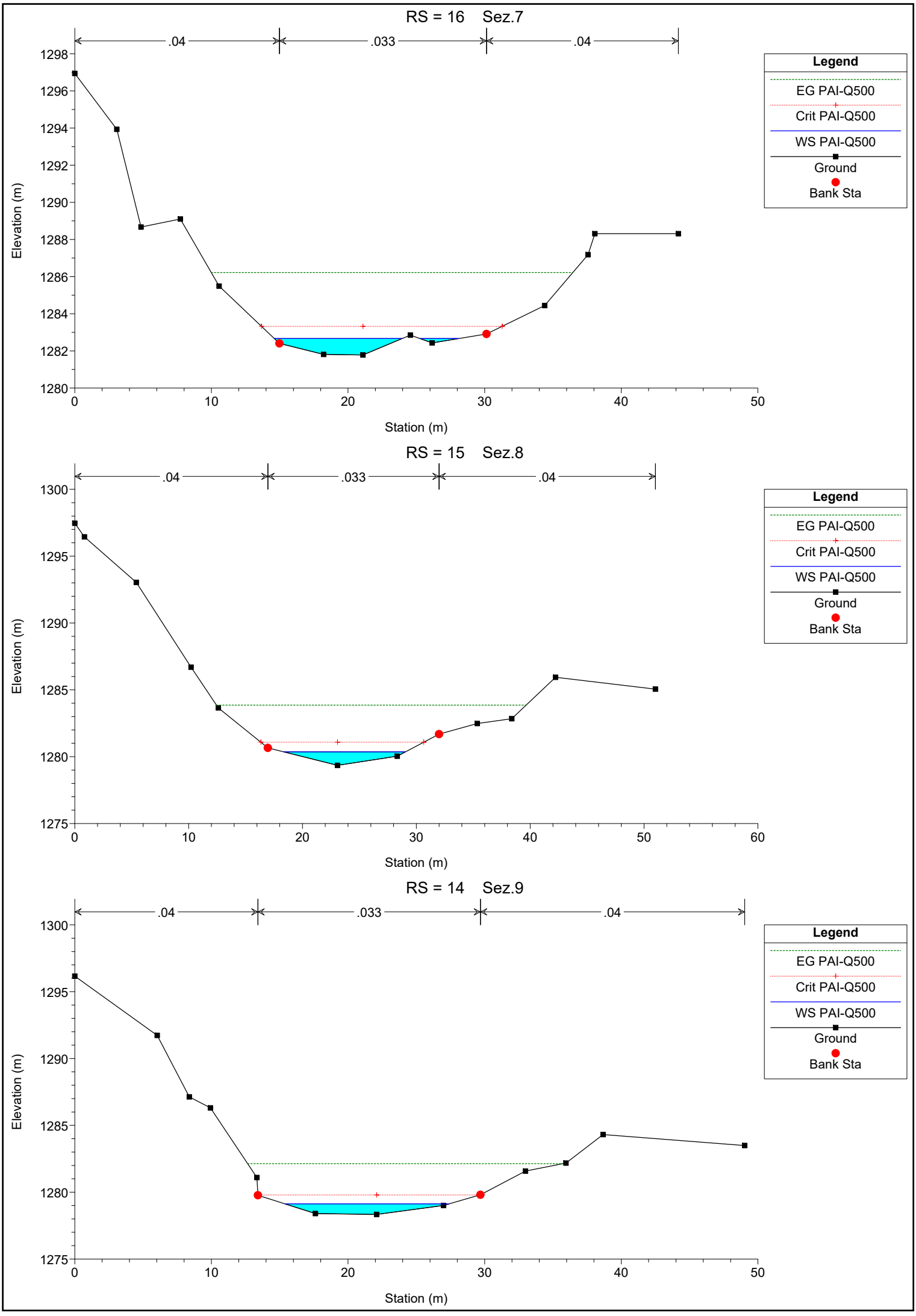

RS = 1 Sez.22
.04
.033
.04
Legend
EG PAI-Q200
Crit PAI-Q200
WS PAI-Q200
Ground
Bank Sta
Elevation (m)
1280
1275
1270
1265
1260
1255
0
10
20
30
40
50
60
70
Station (m)

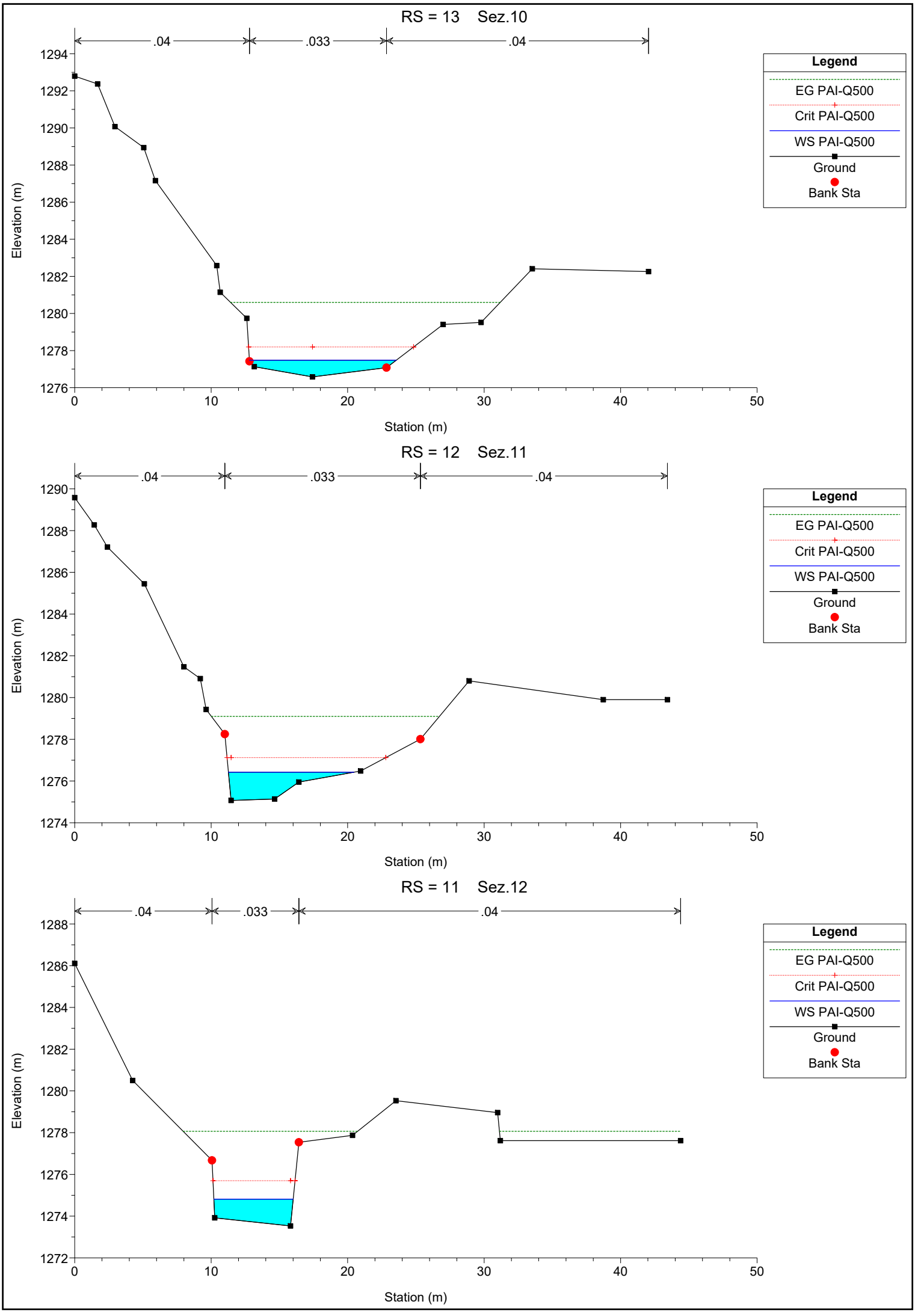
Q500 - PAI

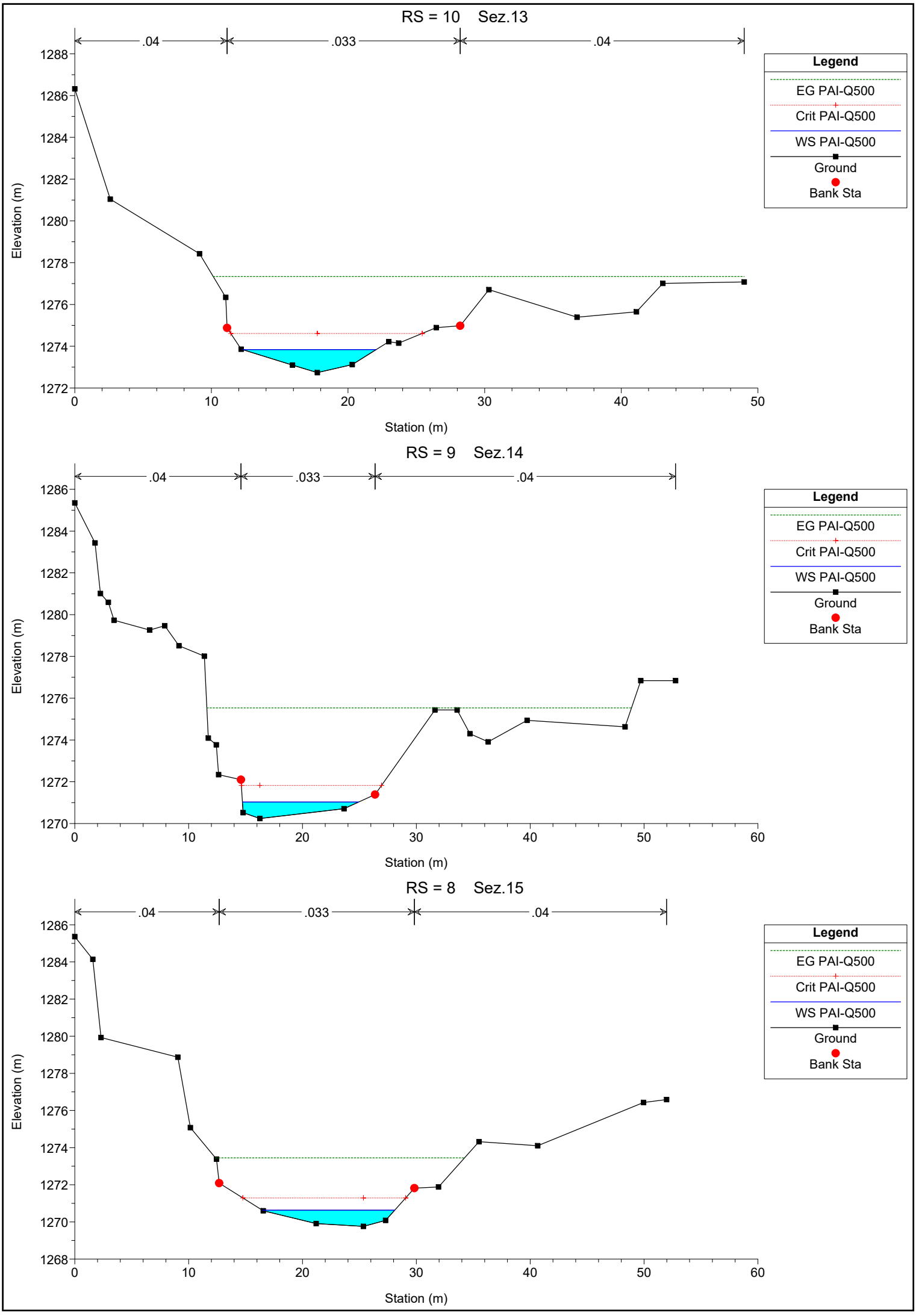

Bavera Monesi
Legend
EG PAI-Q500
Crit PAI-Q500
WS PAI-Q500
Ground
Elevation (m)
1310
1300
1290
1280
1270
1260
1250
0
50
100
150
200
250
300
Main Channel Distance (m)

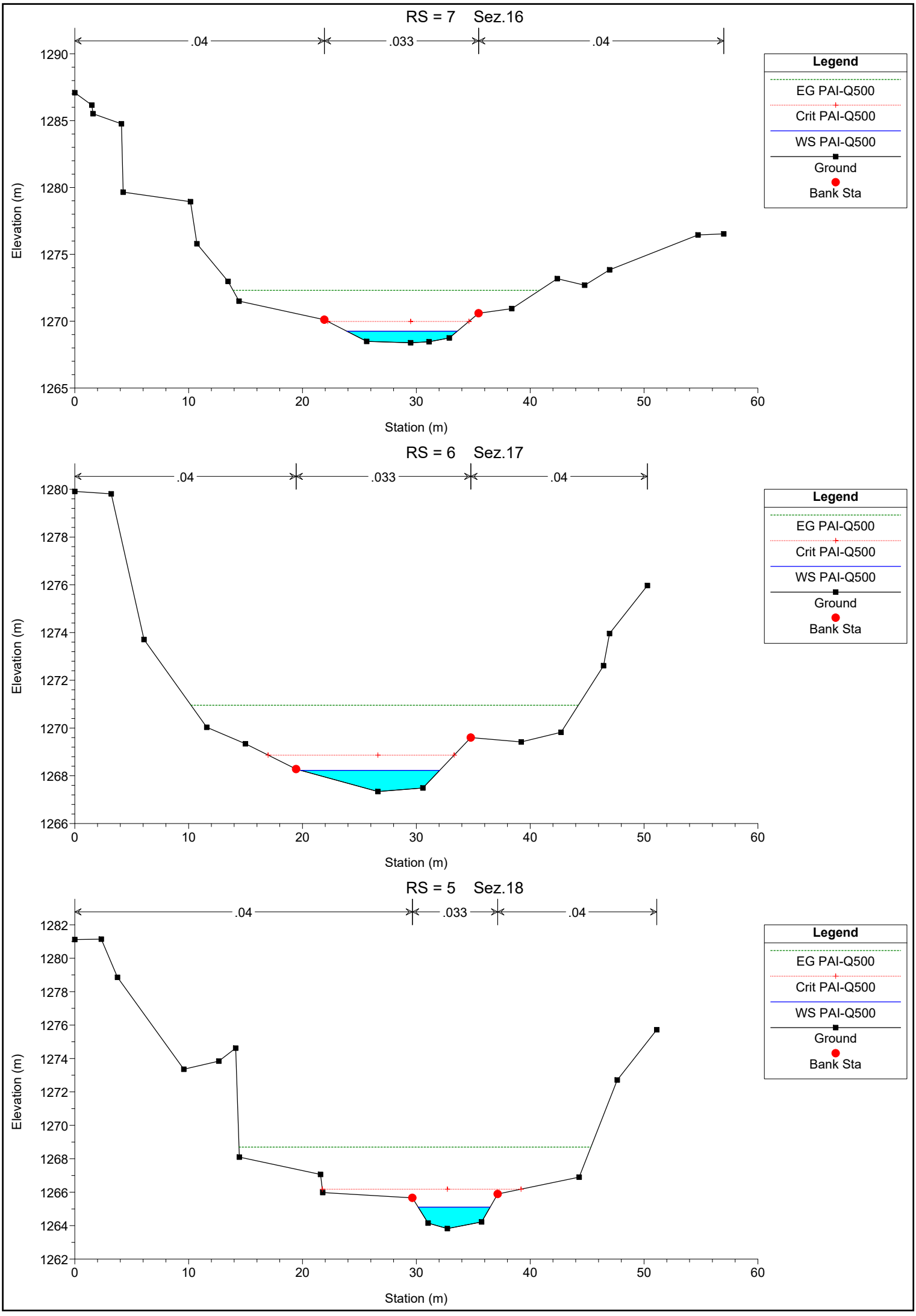

RS = 22 Sez.1
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG PAI-Q500
Crit PAI-Q500
WS PAI-Q500
Ground
Bank Sta
RS = 21 Sez.2
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG PAI-Q500
Crit PAI-Q500
WS PAI-Q500
Ground
Bank Sta
RS = 20 Sez.3
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG PAI-Q500
Crit PAI-Q500
WS PAI-Q500
Ground
Bank Sta

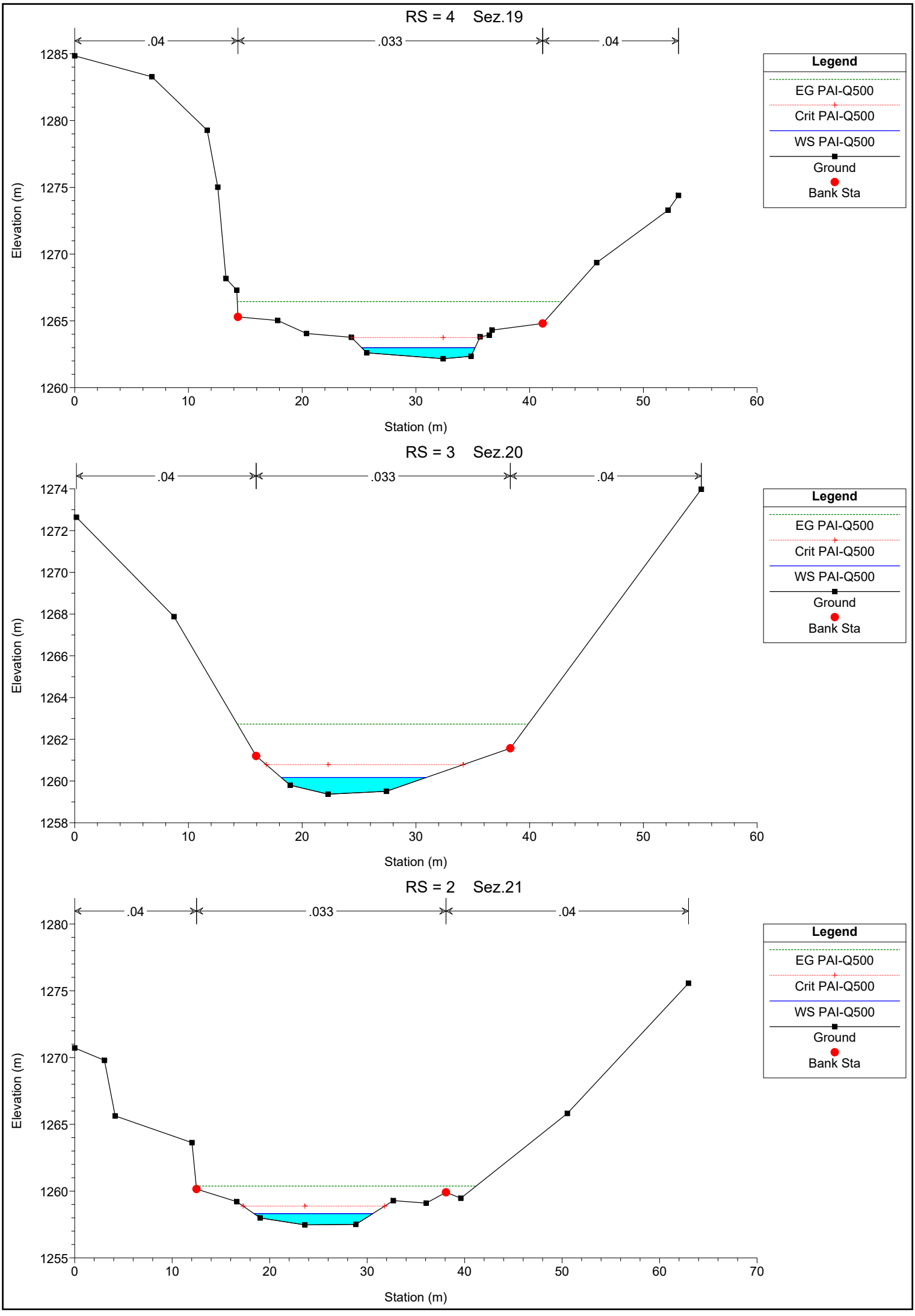

RS = 19 Sez.4
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG PAI-Q500
Crit PAI-Q500
WS PAI-Q500
Ground
Bank Sta
RS = 18 Sez.5
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG PAI-Q500
Crit PAI-Q500
WS PAI-Q500
Ground
Bank Sta
RS = 17 Sez.6
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG PAI-Q500
Crit PAI-Q500
WS PAI-Q500
Ground
Bank Sta

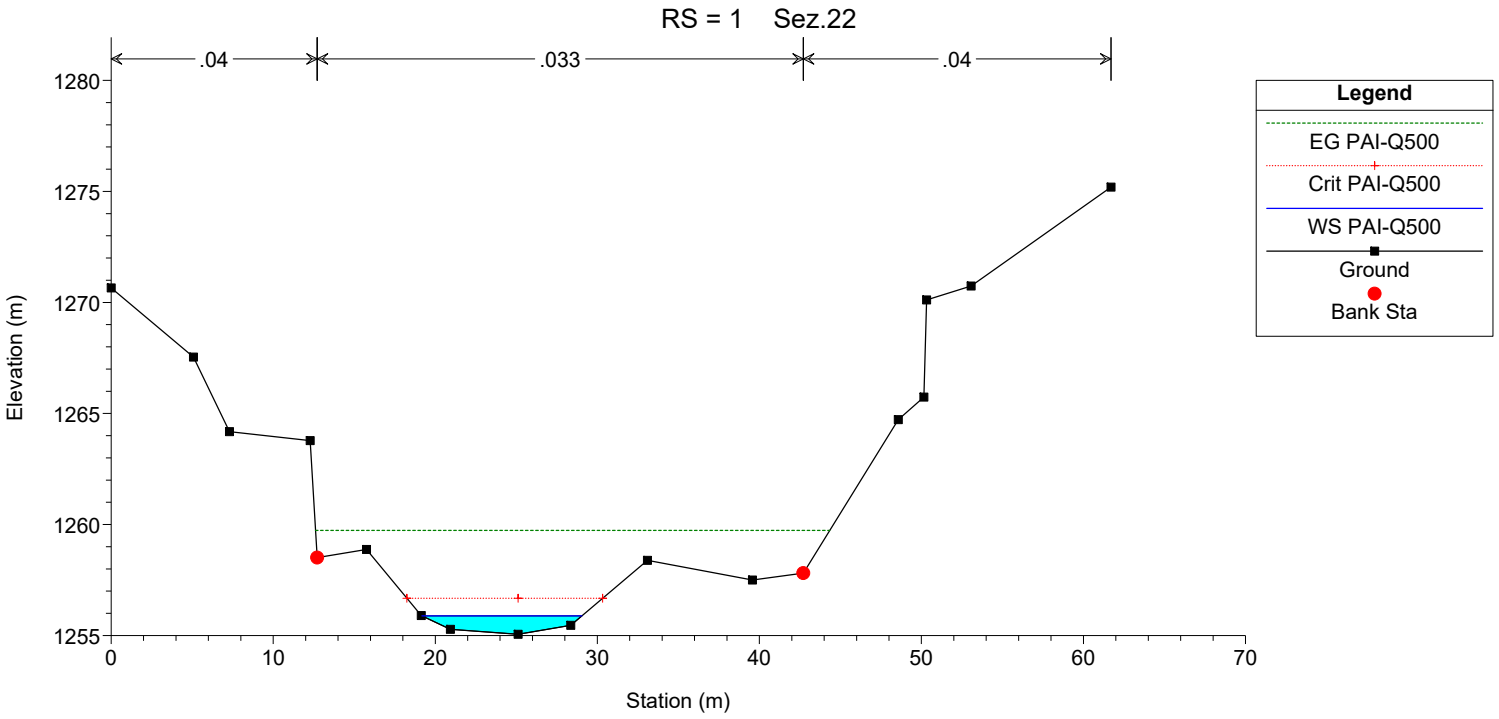

RS = 16 Sez.7
.04
.033
.04
Legend
EG PAI-Q500
Crit PAI-Q500
WS PAI-Q500
Ground
Bank Sta
Elevation (m)
Station (m)
RS = 15 Sez.8
.04
.033
.04
Legend
EG PAI-Q500
Crit PAI-Q500
WS PAI-Q500
Ground
Bank Sta
Elevation (m)
Station (m)
RS = 14 Sez.9
.04
.033
.04
Legend
EG PAI-Q500
Crit PAI-Q500
WS PAI-Q500
Ground
Bank Sta
Elevation (m)
Station (m)


RS = 13 Sez.10
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG PAI-Q500
Crit PAI-Q500
WS PAI-Q500
Ground
Bank Sta
RS = 12 Sez.11
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG PAI-Q500
Crit PAI-Q500
WS PAI-Q500
Ground
Bank Sta
RS = 11 Sez.12
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG PAI-Q500
Crit PAI-Q500
WS PAI-Q500
Ground
Bank Sta

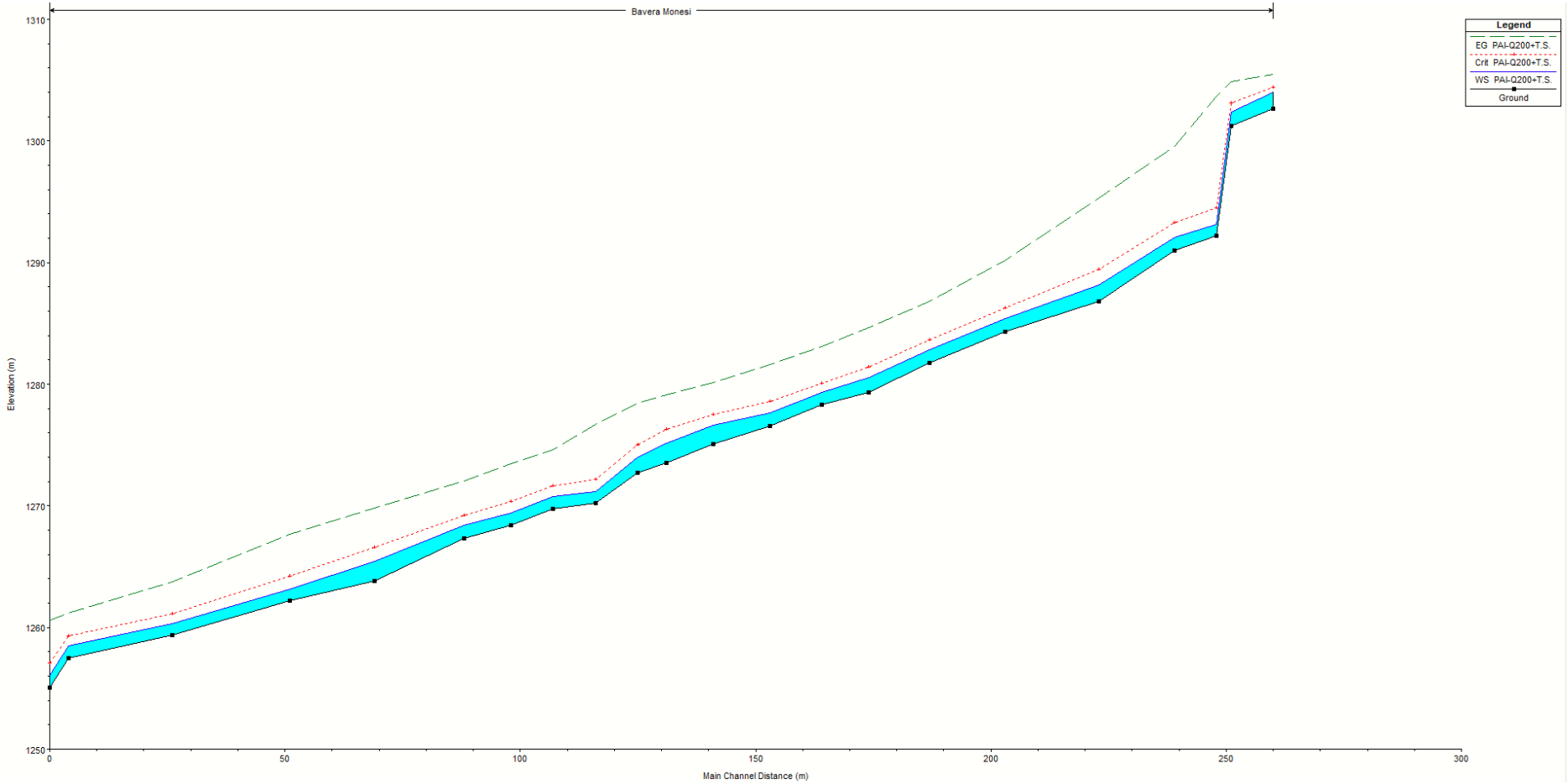

RS = 10 Sez.13
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG PAI-Q500
Crit PAI-Q500
WS PAI-Q500
Ground
Bank Sta
RS = 9 Sez.14
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG PAI-Q500
Crit PAI-Q500
WS PAI-Q500
Ground
Bank Sta
RS = 8 Sez.15
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG PAI-Q500
Crit PAI-Q500
WS PAI-Q500
Ground
Bank Sta

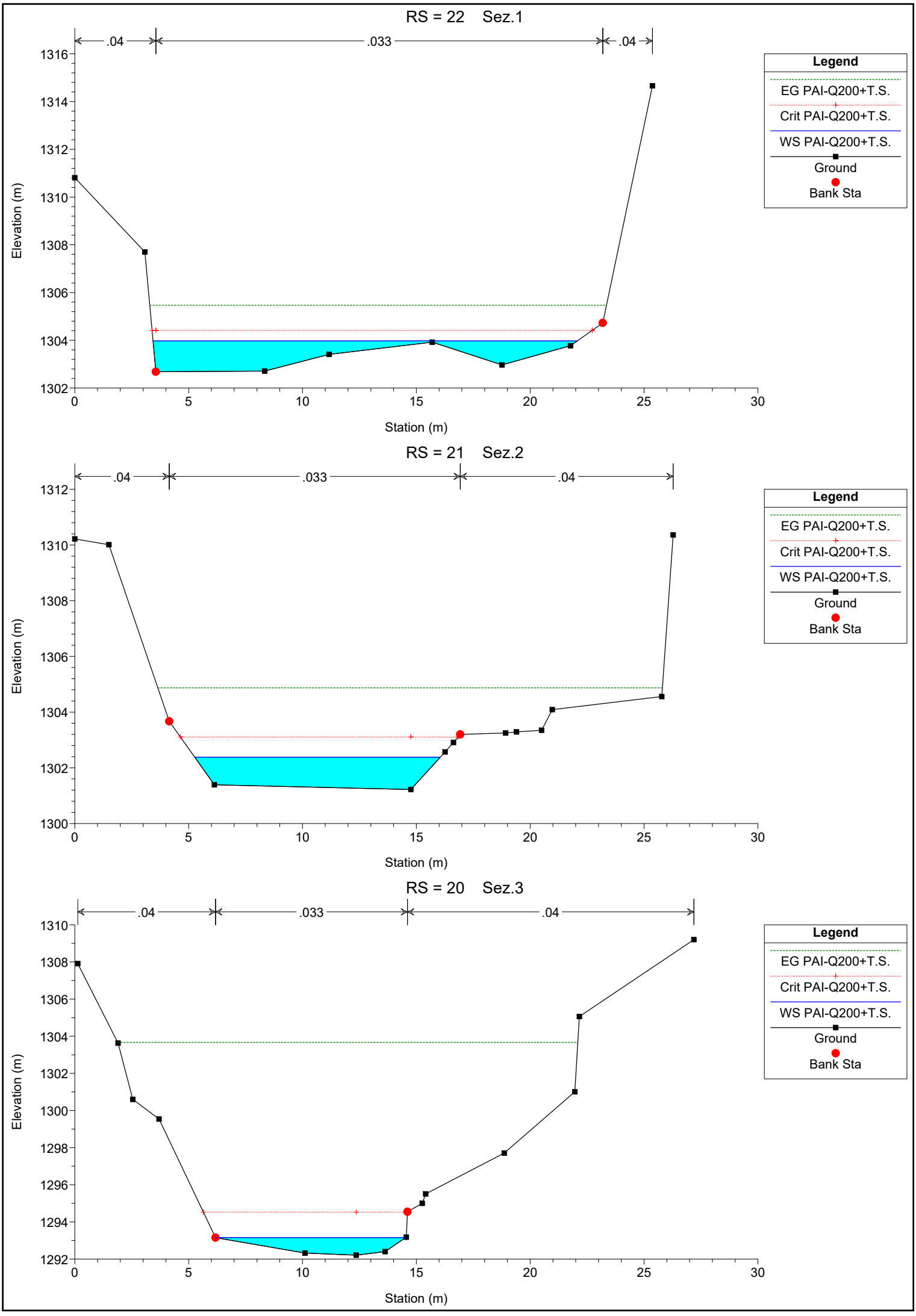

RS = 7 Sez.16
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG PAI-Q500
Crit PAI-Q500
WS PAI-Q500
Ground
Bank Sta
RS = 6 Sez.17
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG PAI-Q500
Crit PAI-Q500
WS PAI-Q500
Ground
Bank Sta
RS = 5 Sez.18
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG PAI-Q500
Crit PAI-Q500
WS PAI-Q500
Ground
Bank Sta

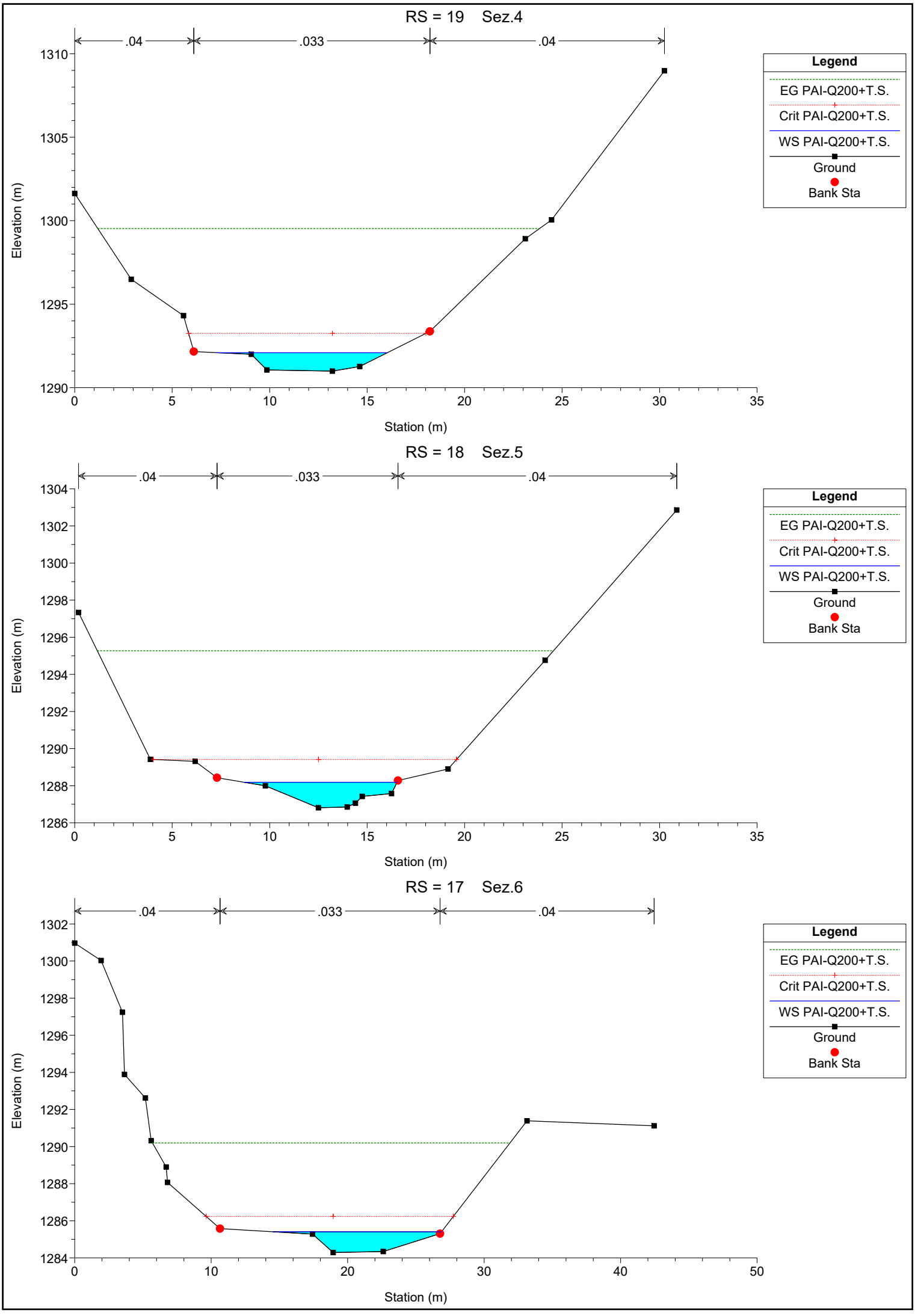

RS = 4 Sez.19
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG PAI-Q500
Crit PAI-Q500
WS PAI-Q500
Ground
Bank Sta
RS = 3 Sez.20
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG PAI-Q500
Crit PAI-Q500
WS PAI-Q500
Ground
Bank Sta
RS = 2 Sez.21
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG PAI-Q500
Crit PAI-Q500
WS PAI-Q500
Ground
Bank Sta

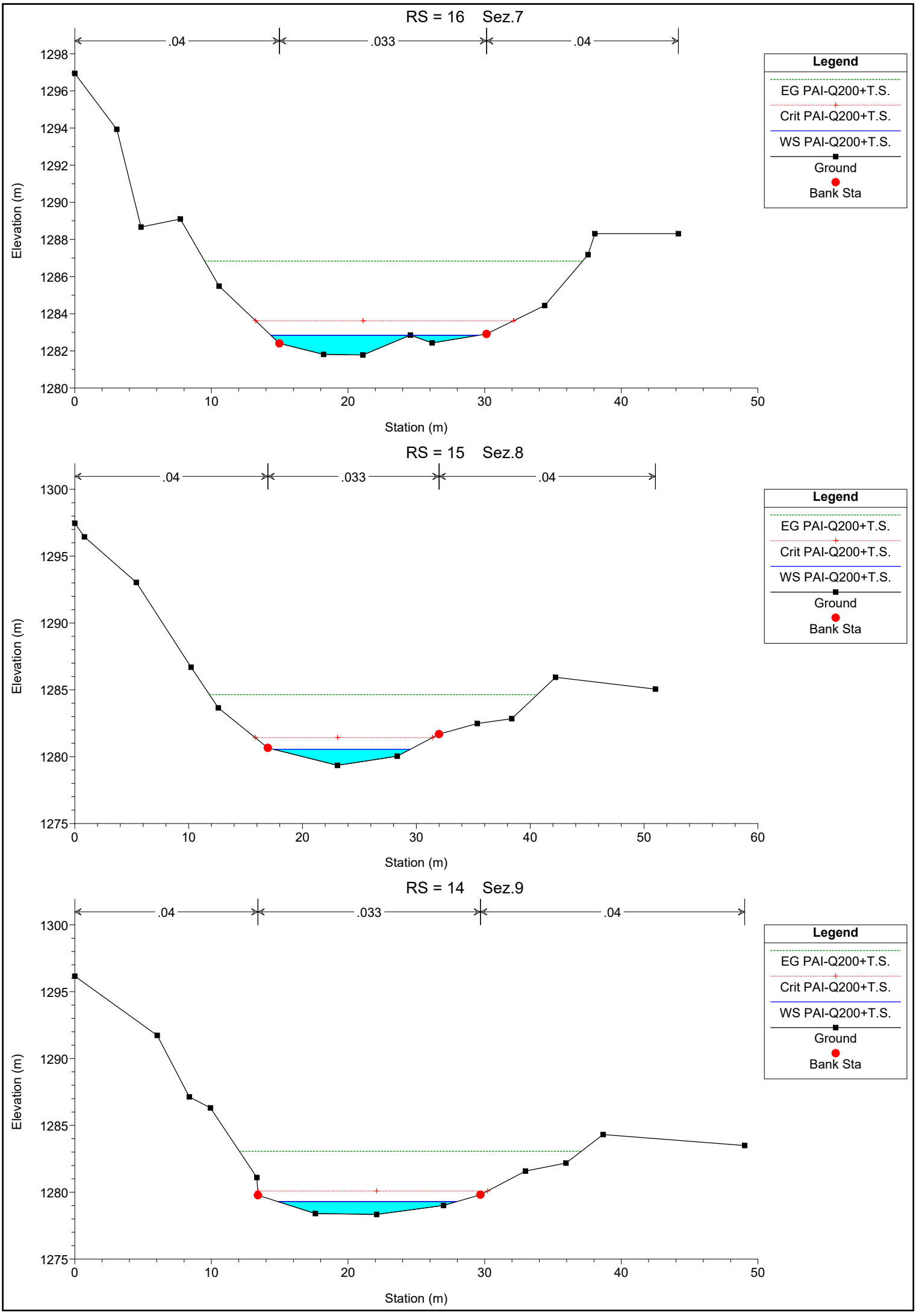

RS = 1 Sez.22
.04
.033
.04
Legend
EG PAI-Q500
Crit PAI-Q500
WS PAI-Q500
Ground
Bank Sta
Elevation (m)
1280
1275
1270
1265
1260
1255
0
10
20
30
40
50
60
70
Station (m)

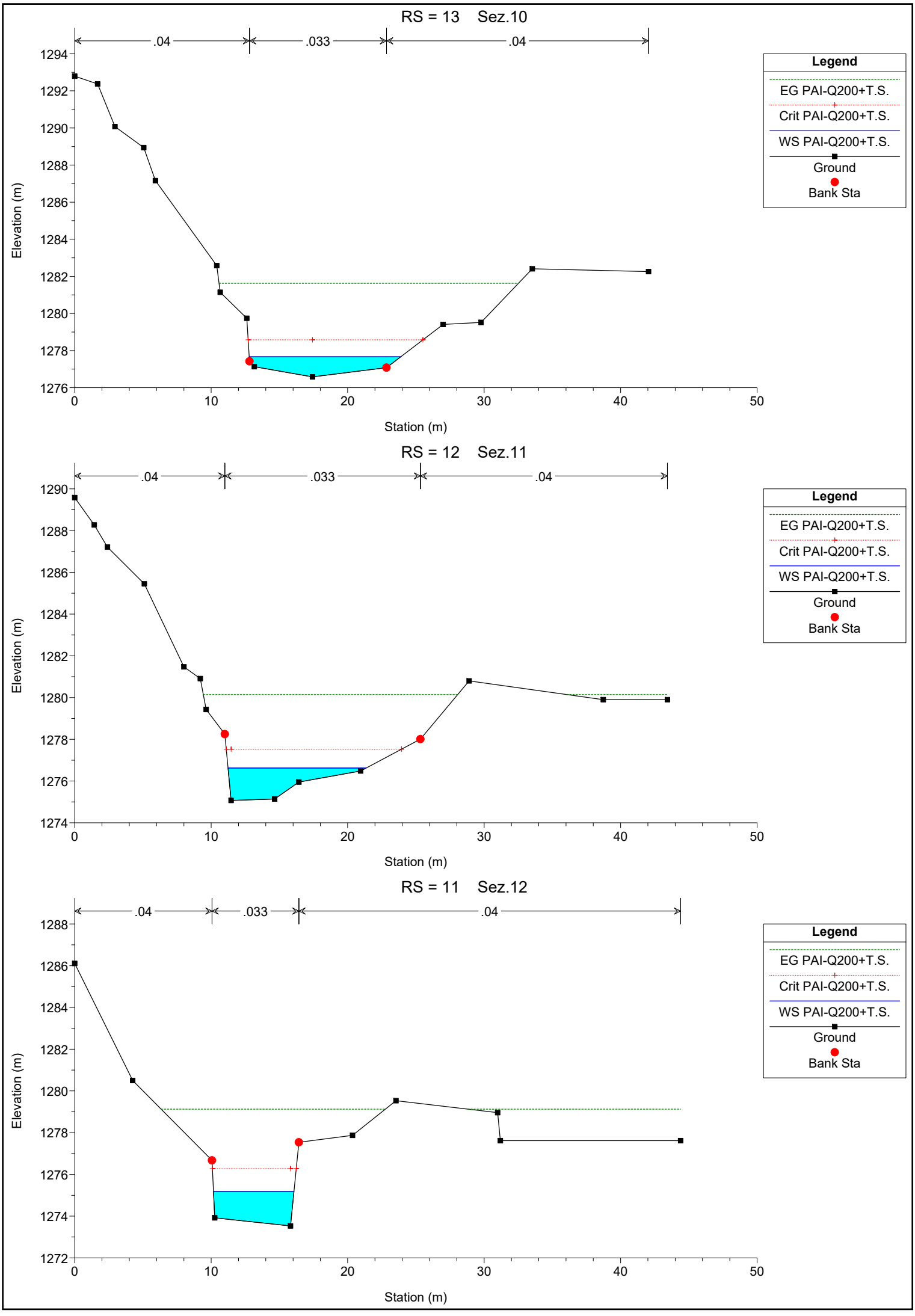
Q200 + TS - PAI

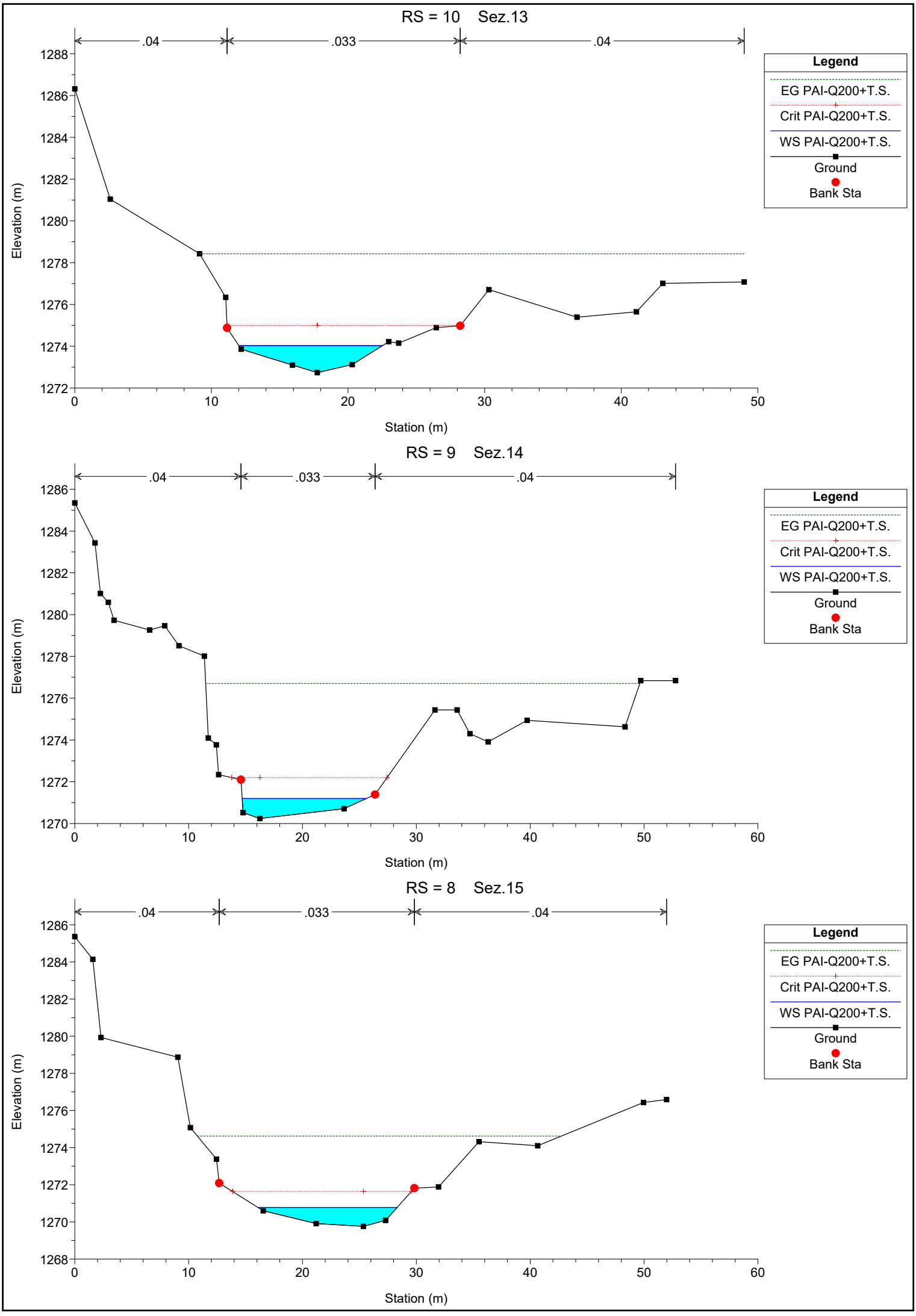

Bavera Monesi
Legend
EG PAI-Q200+T.S.
Crit PAI-Q200+T.S.
WS PAI-Q200+T.S.
Ground
Elevation (m)
1310
1300
1290
1280
1270
1260
1250
0
50
100
150
200
250
300
Main Channel Distance (m)

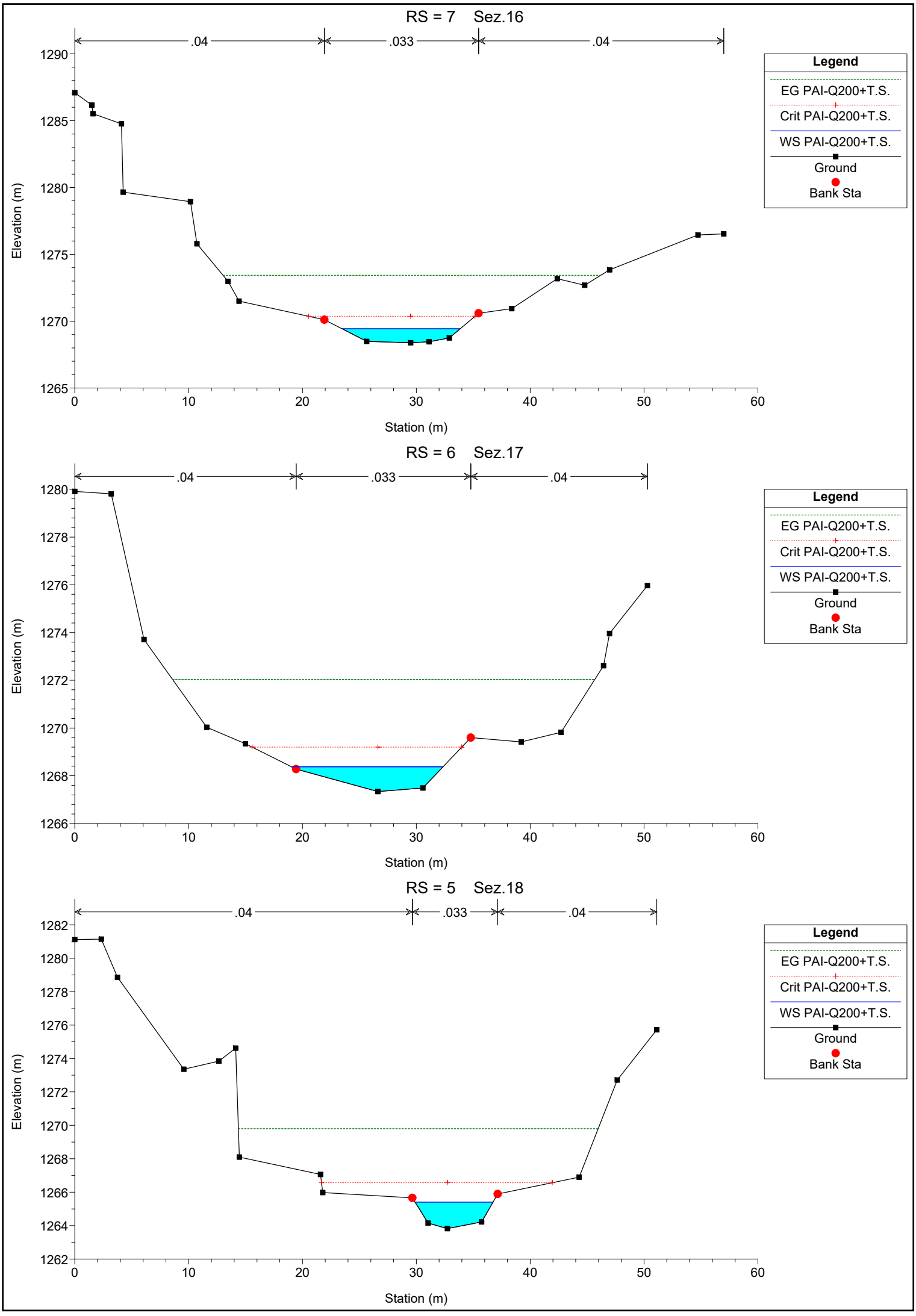

RS = 22 Sez.1
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG PAI-Q200+T.S.
Crit PAI-Q200+T.S.
WS PAI-Q200+T.S.
Ground
Bank Sta
RS = 21 Sez.2
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG PAI-Q200+T.S.
Crit PAI-Q200+T.S.
WS PAI-Q200+T.S.
Ground
Bank Sta
RS = 20 Sez.3
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG PAI-Q200+T.S.
Crit PAI-Q200+T.S.
WS PAI-Q200+T.S.
Ground
Bank Sta

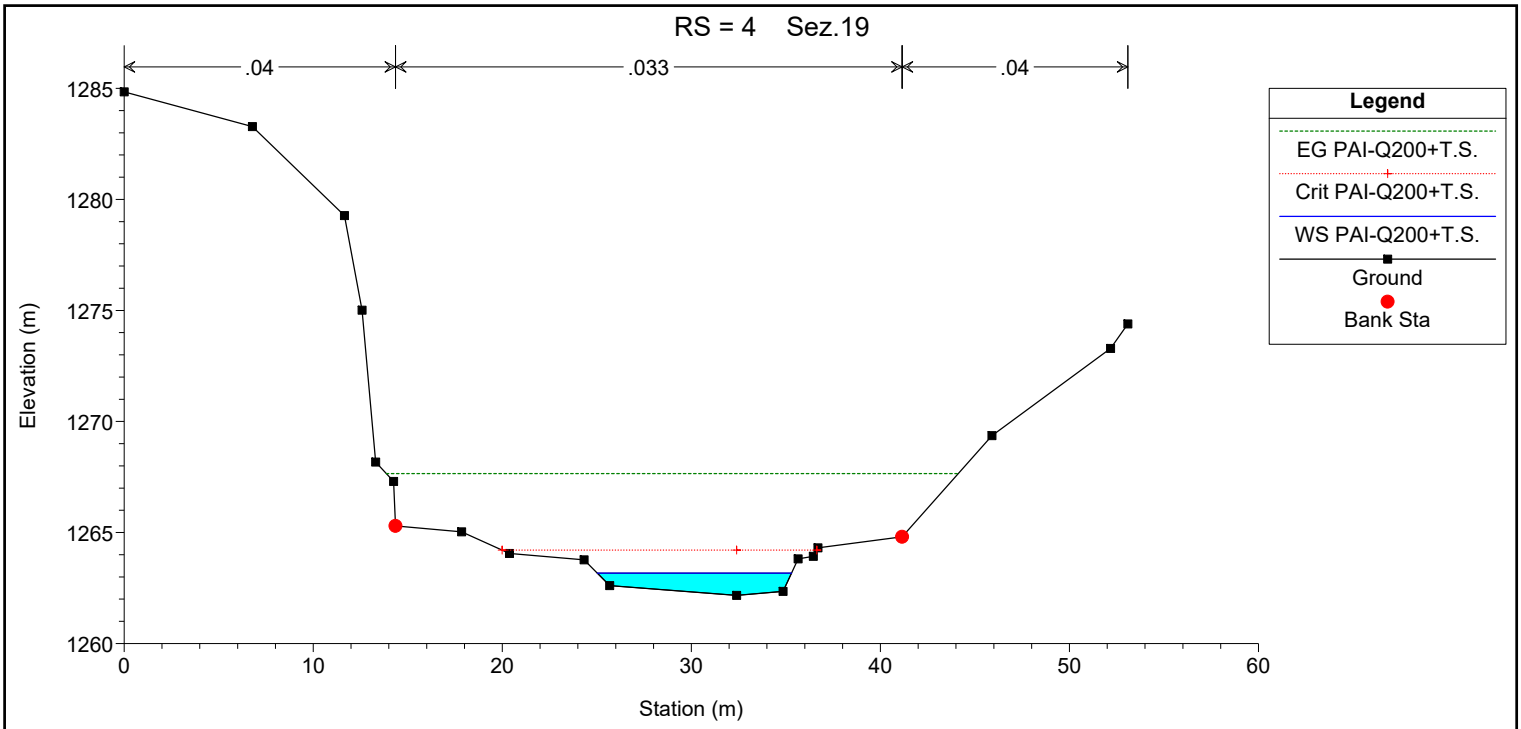

RS = 19 Sez.4
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG PAI-Q200+T.S.
Crit PAI-Q200+T.S.
WS PAI-Q200+T.S.
Ground
Bank Sta
RS = 18 Sez.5
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG PAI-Q200+T.S.
Crit PAI-Q200+T.S.
WS PAI-Q200+T.S.
Ground
Bank Sta
RS = 17 Sez.6
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG PAI-Q200+T.S.
Crit PAI-Q200+T.S.
WS PAI-Q200+T.S.
Ground
Bank Sta

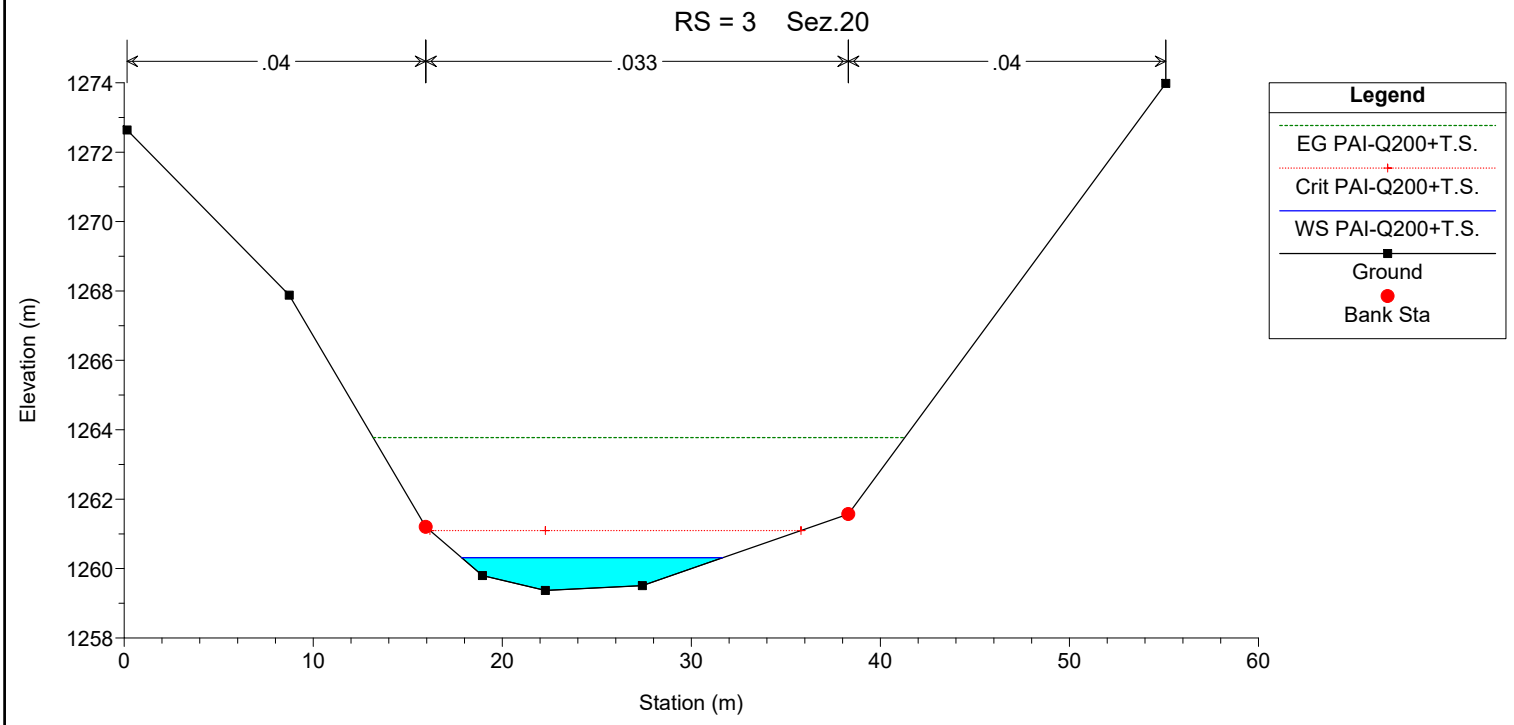

RS = 16 Sez.7
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG PAI-Q200+T.S.
Crit PAI-Q200+T.S.
WS PAI-Q200+T.S.
Ground
Bank Sta
RS = 15 Sez.8
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG PAI-Q200+T.S.
Crit PAI-Q200+T.S.
WS PAI-Q200+T.S.
Ground
Bank Sta
RS = 14 Sez.9
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG PAI-Q200+T.S.
Crit PAI-Q200+T.S.
WS PAI-Q200+T.S.
Ground
Bank Sta

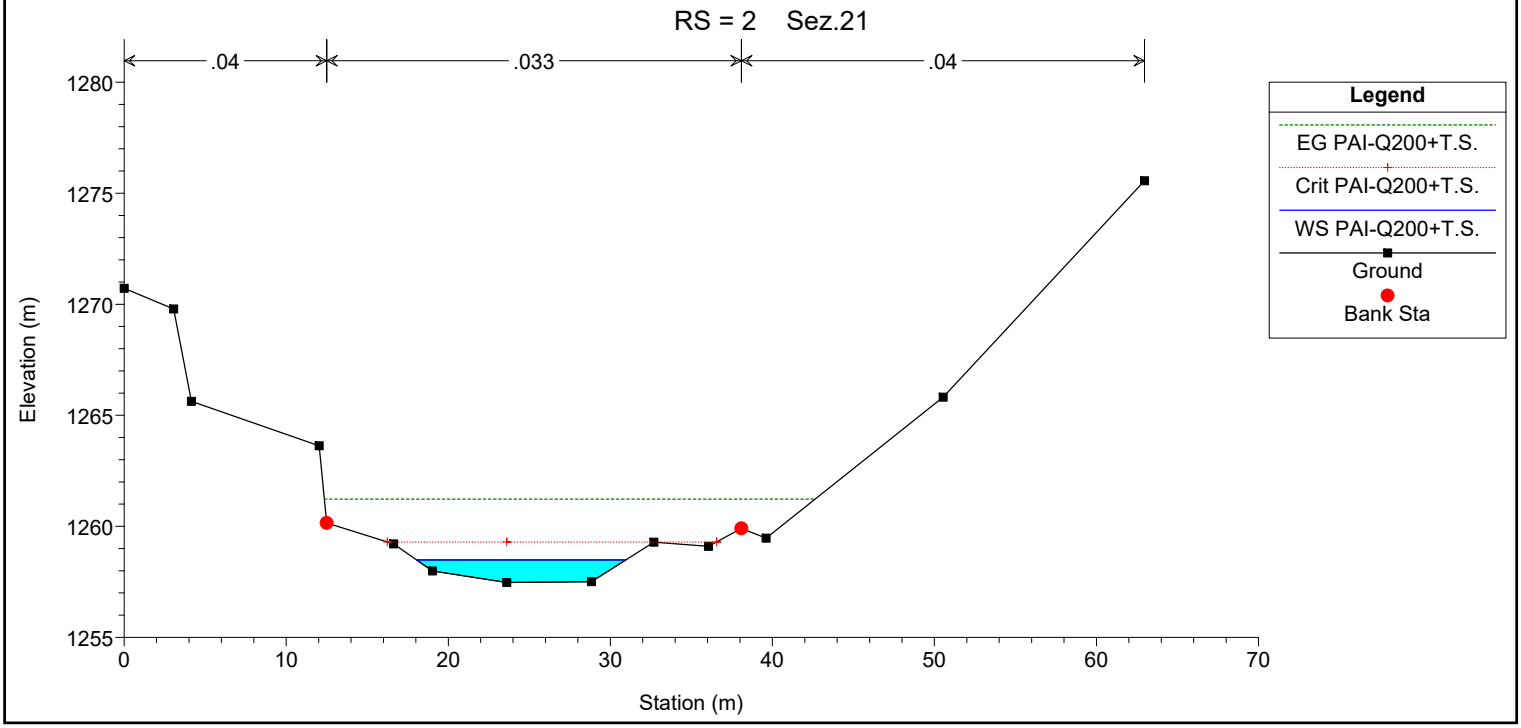

RS = 13 Sez.10
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG PAI-Q200+T.S.
Crit PAI-Q200+T.S.
WS PAI-Q200+T.S.
Ground
Bank Sta
RS = 12 Sez.11
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG PAI-Q200+T.S.
Crit PAI-Q200+T.S.
WS PAI-Q200+T.S.
Ground
Bank Sta
RS = 11 Sez.12
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG PAI-Q200+T.S.
Crit PAI-Q200+T.S.
WS PAI-Q200+T.S.
Ground
Bank Sta

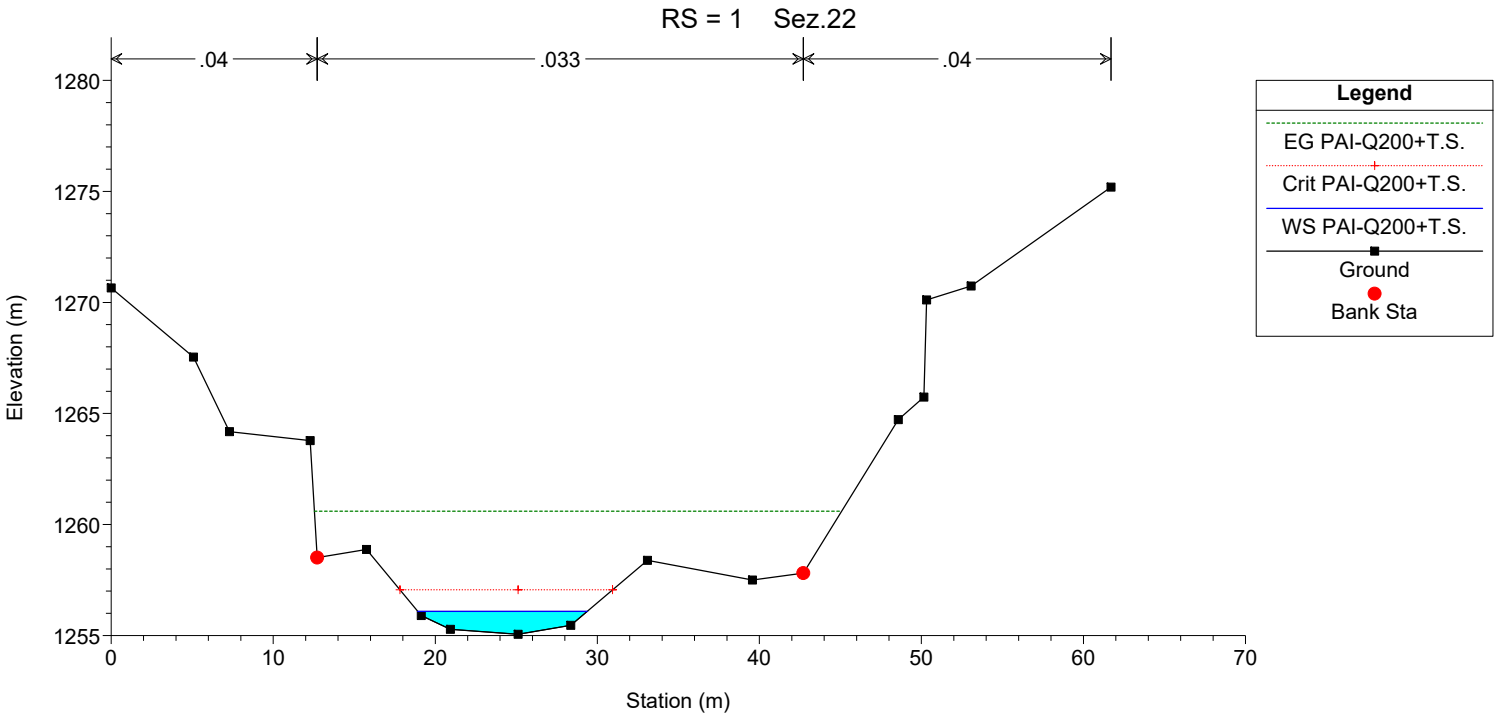

RS = 10 Sez.13
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG PAI-Q200+T.S.
Crit PAI-Q200+T.S.
WS PAI-Q200+T.S.
Ground
Bank Sta
RS = 9 Sez.14
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG PAI-Q200+T.S.
Crit PAI-Q200+T.S.
WS PAI-Q200+T.S.
Ground
Bank Sta
RS = 8 Sez.15
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG PAI-Q200+T.S.
Crit PAI-Q200+T.S.
WS PAI-Q200+T.S.
Ground
Bank Sta


RS = 7 Sez.16
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG PAI-Q200+T.S.
Crit PAI-Q200+T.S.
WS PAI-Q200+T.S.
Ground
Bank Sta
RS = 6 Sez.17
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG PAI-Q200+T.S.
Crit PAI-Q200+T.S.
WS PAI-Q200+T.S.
Ground
Bank Sta
RS = 5 Sez.18
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG PAI-Q200+T.S.
Crit PAI-Q200+T.S.
WS PAI-Q200+T.S.
Ground
Bank Sta

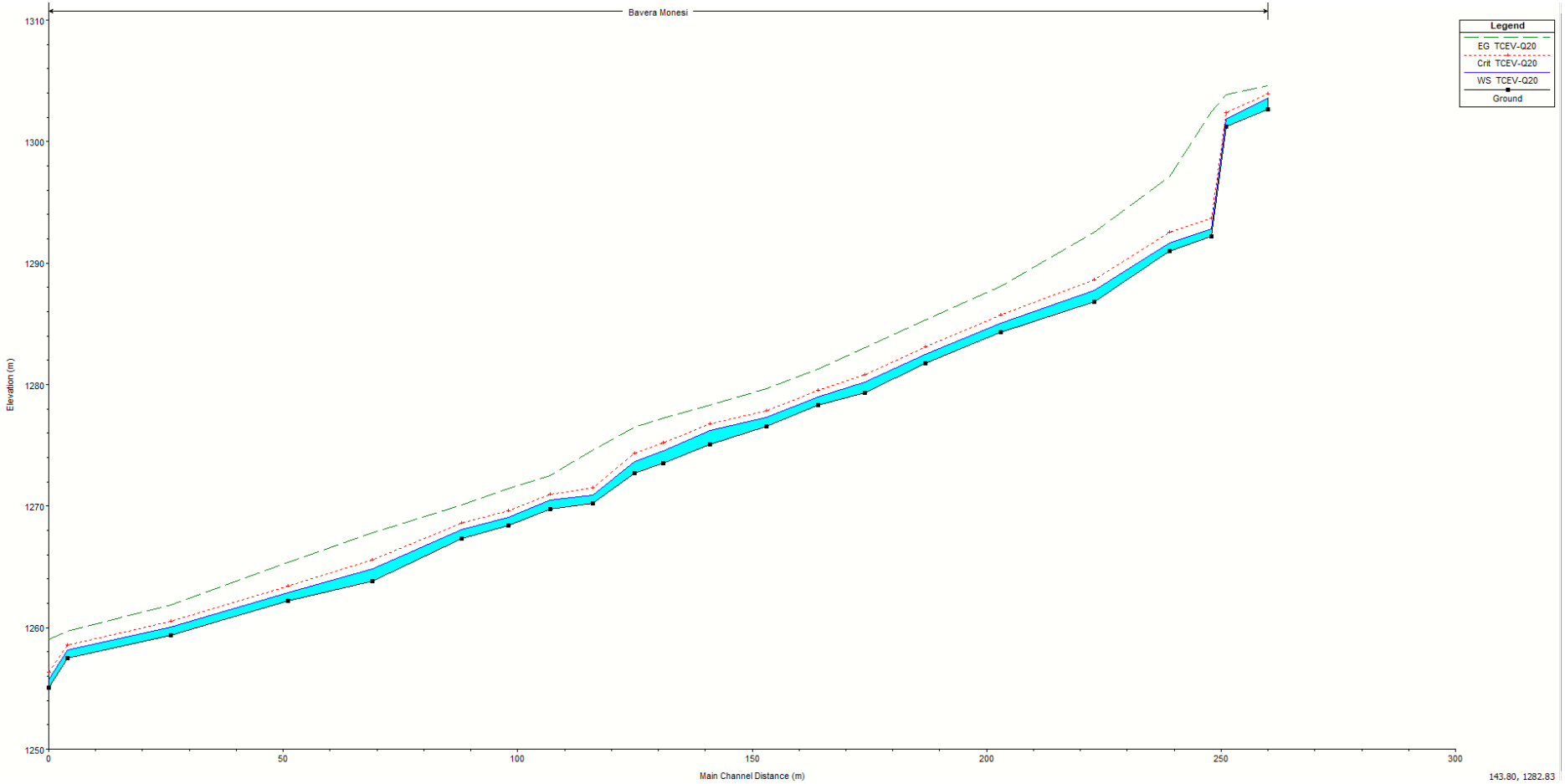

RS = 4 Sez.19
.04
.033
.04
1285
1280
1275
1270
1265
1260
Elevation (m)
0
10
20
30
40
50
60
Station (m)
Legend
EG PAI-Q200+T.S.
Crit PAI-Q200+T.S.
WS PAI-Q200+T.S.
Ground
Bank Sta

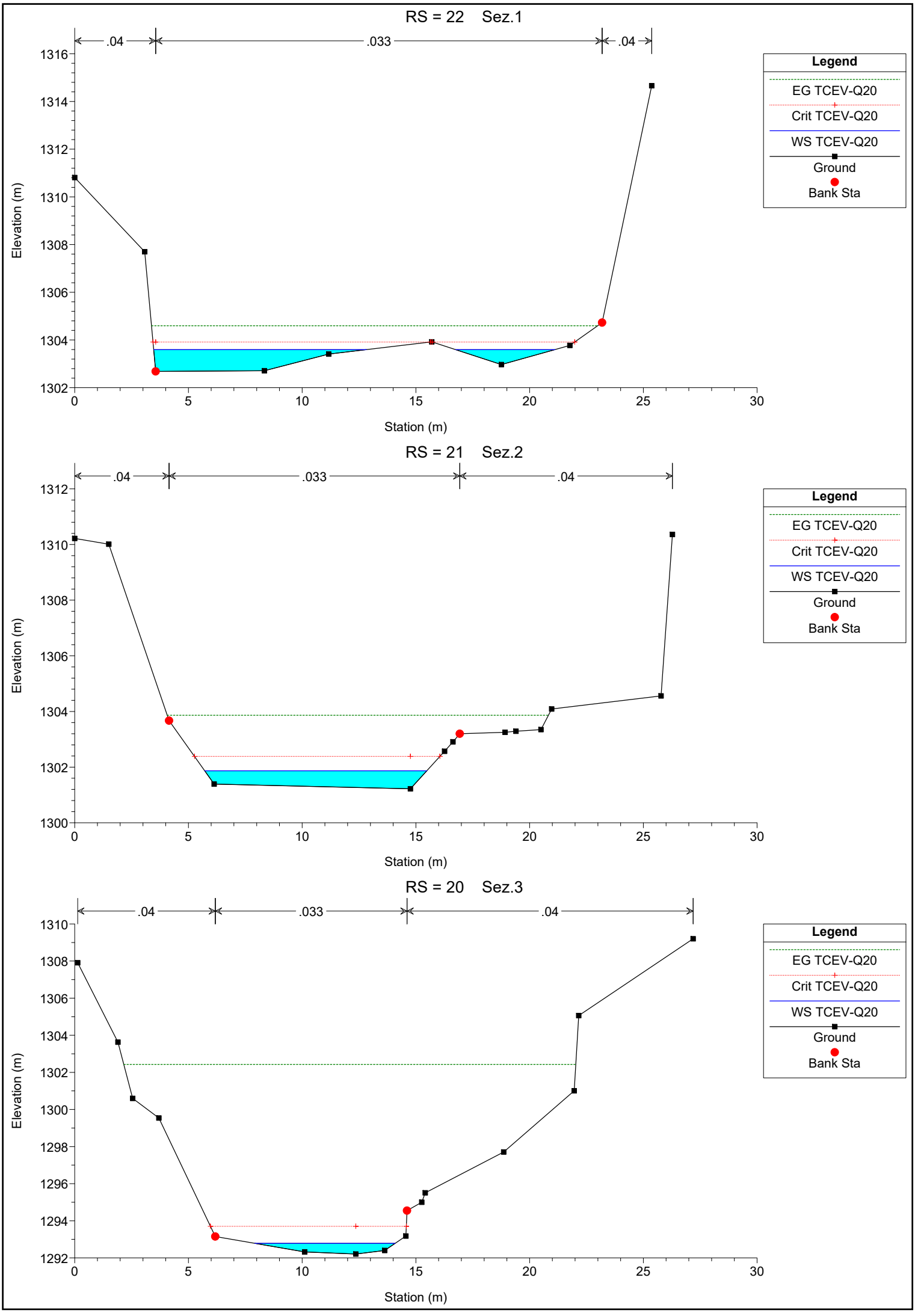

RS = 3 Sez.20
.04
.033
.04
1274
1272
1270
1268
1266
1264
1262
1260
1258
Elevation (m)
0
10
20
30
40
50
60
Station (m)
Legend
EG PAI-Q200+T.S.
Crit PAI-Q200+T.S.
WS PAI-Q200+T.S.
Ground
Bank Sta

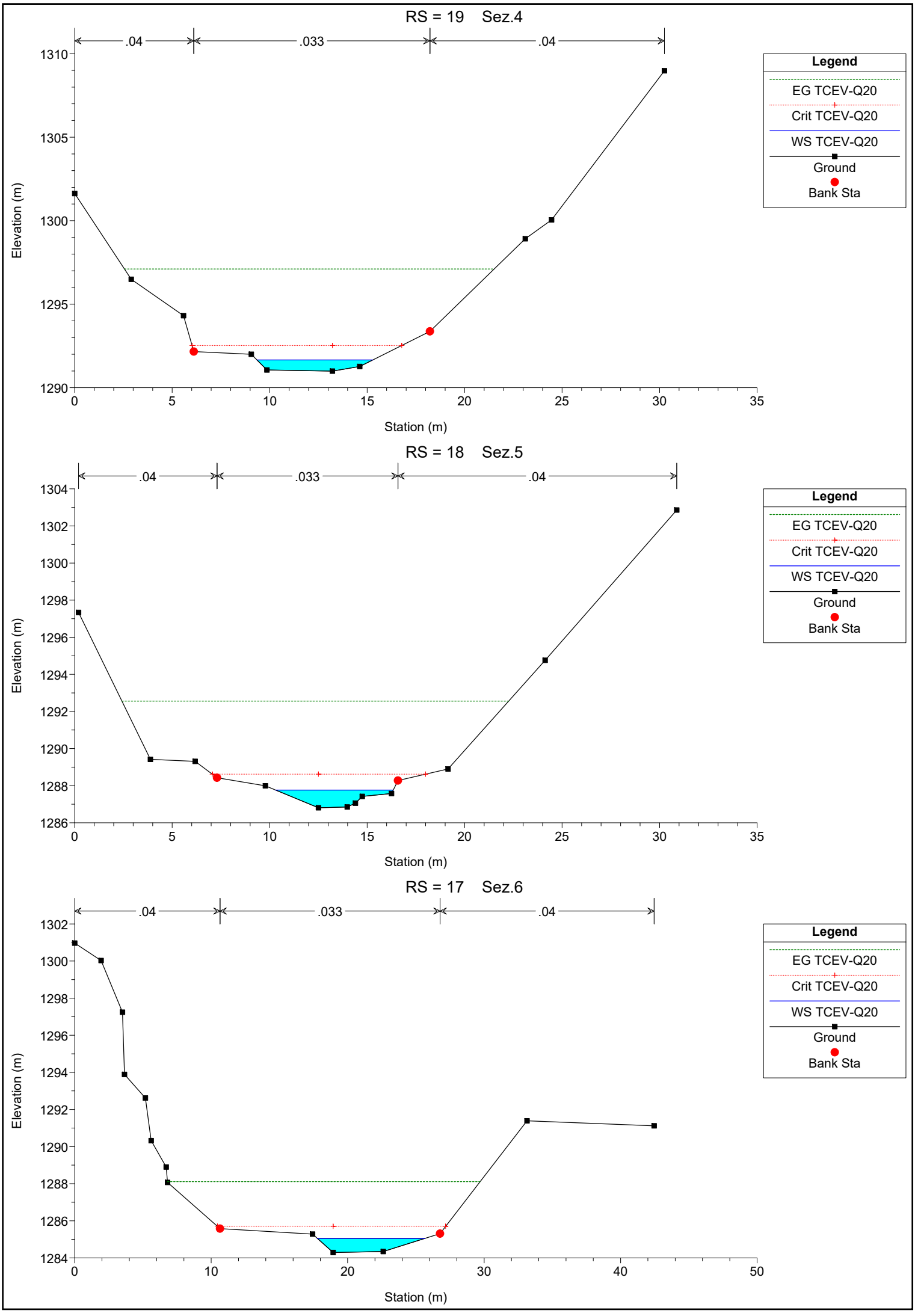

RS = 2 Sez.21
.04
.033
.04
1280
1275
1270
1265
1260
1255
Elevation (m)
0
10
20
30
40
50
60
70
Station (m)
Legend
EG PAI-Q200+T.S.
Crit PAI-Q200+T.S.
WS PAI-Q200+T.S.
Ground
Bank Sta

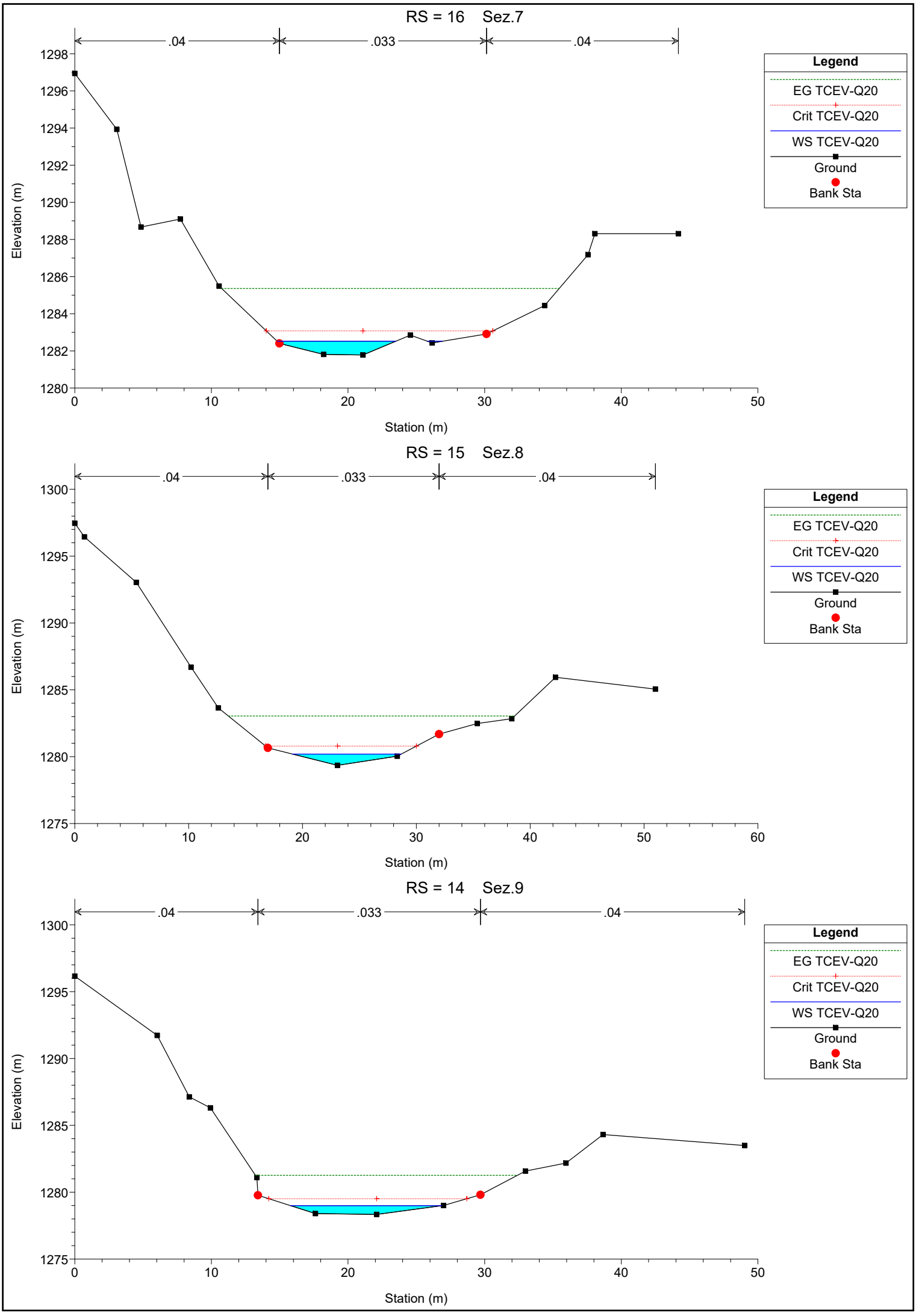

RS = 1 Sez.22
.04
.033
.04
1280
1275
1270
1265
1260
1255
Elevation (m)
0
10
20
30
40
50
60
70
Station (m)
Legend
EG PAI-Q200+T.S.
Crit PAI-Q200+T.S.
WS PAI-Q200+T.S.
Ground
Bank Sta

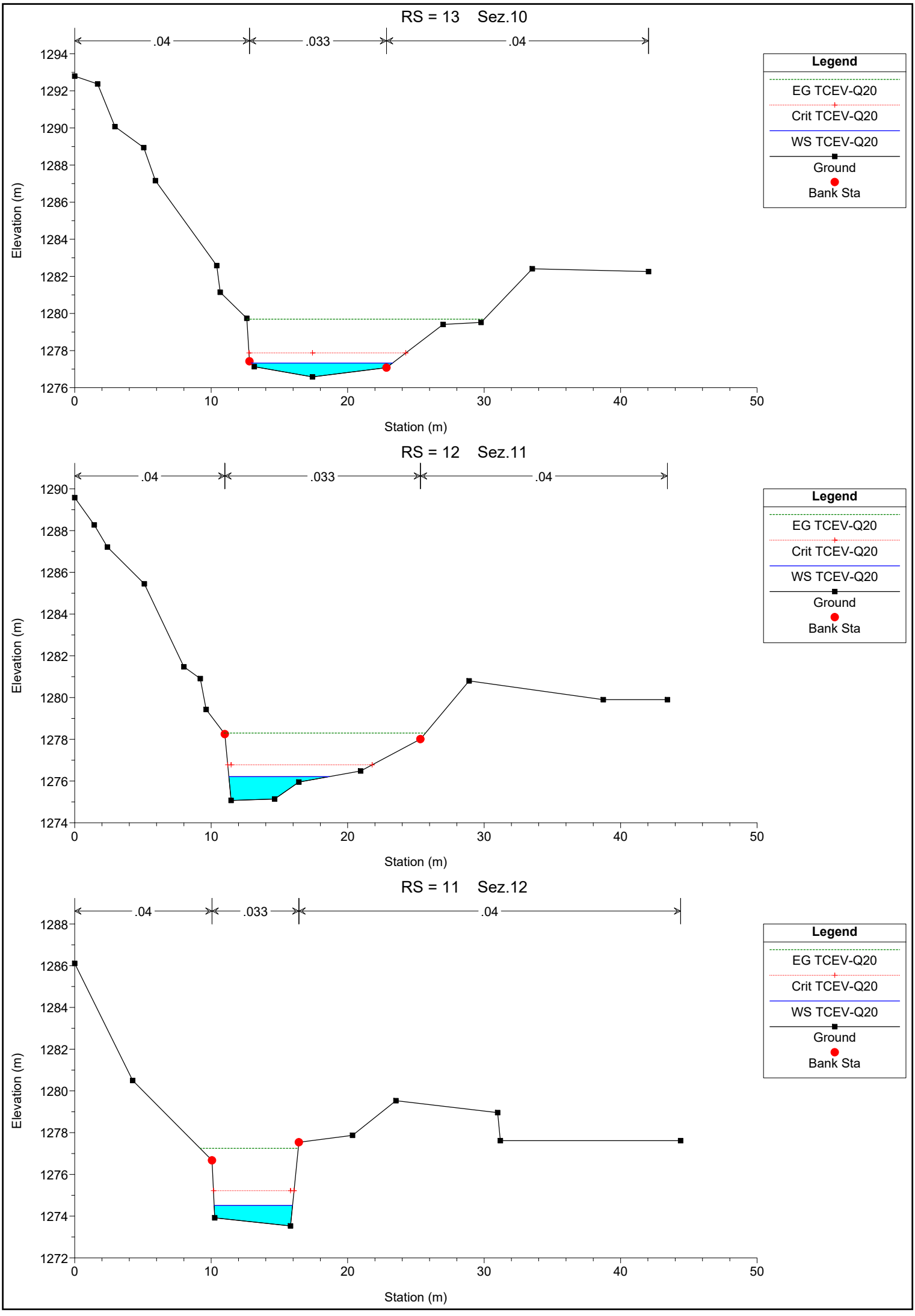
Q20 - Tcev

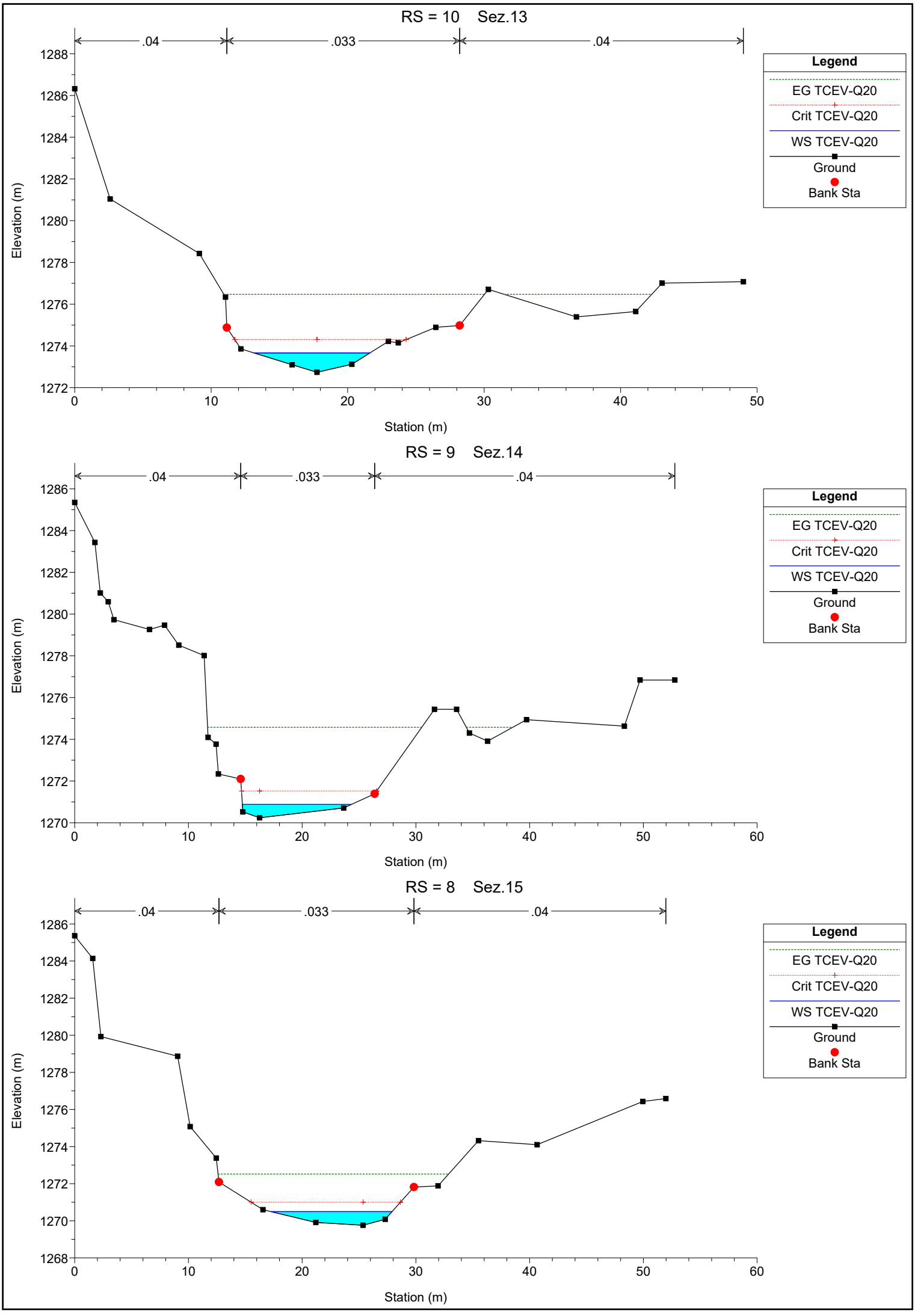

Bavera Monesi
Legend
EG TCEV-Q20
Crit TCEV-Q20
WS TCEV-Q20
Ground
Elevation (m)
1310
1300
1290
1280
1270
1260
1250
0
50
100
150
200
250
300
Main Channel Distance (m)
143.80, 1282.83

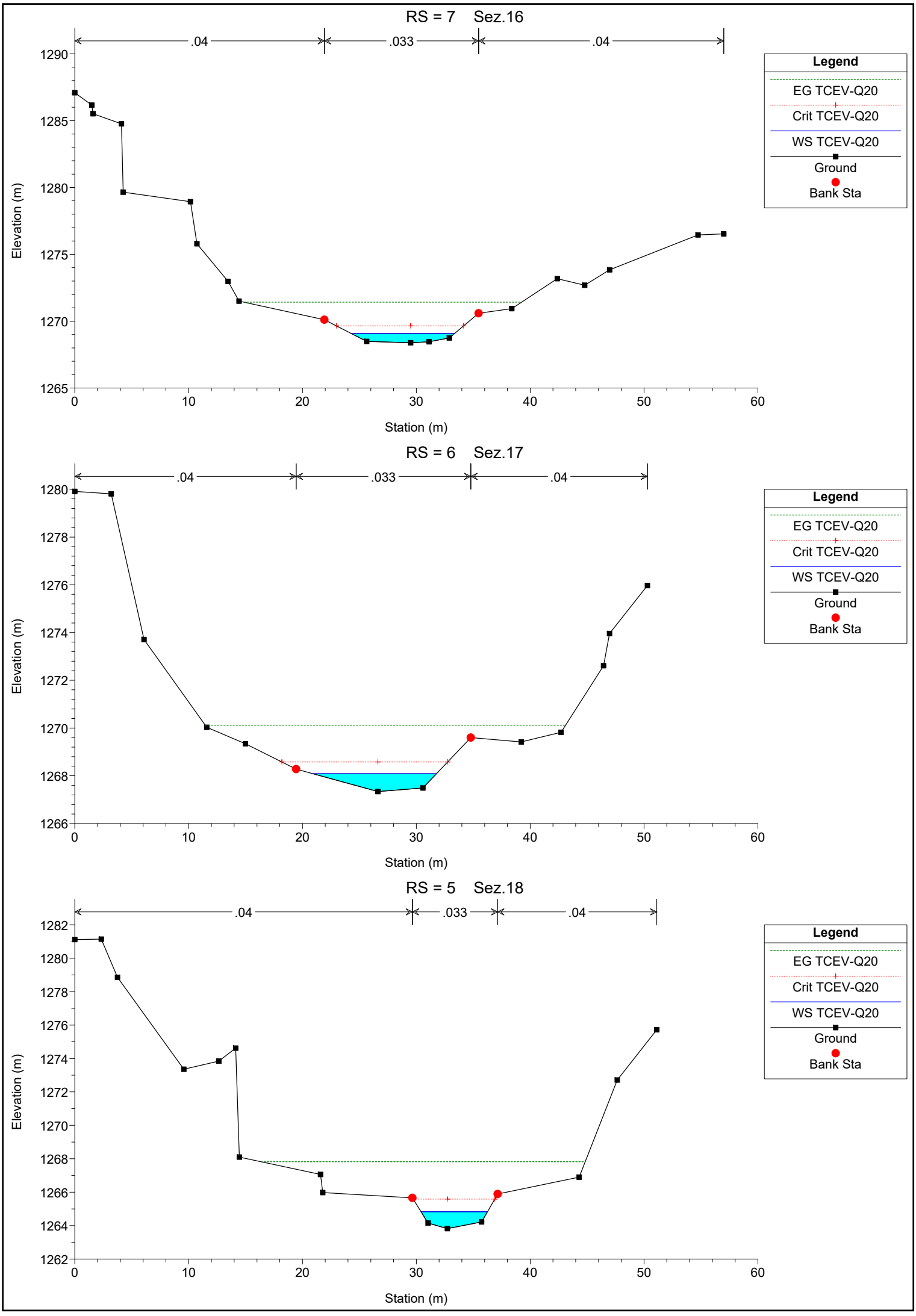

RS = 22 Sez.1
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG TCEV-Q20
Crit TCEV-Q20
WS TCEV-Q20
Ground
Bank Sta
RS = 21 Sez.2
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG TCEV-Q20
Crit TCEV-Q20
WS TCEV-Q20
Ground
Bank Sta
RS = 20 Sez.3
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG TCEV-Q20
Crit TCEV-Q20
WS TCEV-Q20
Ground
Bank Sta

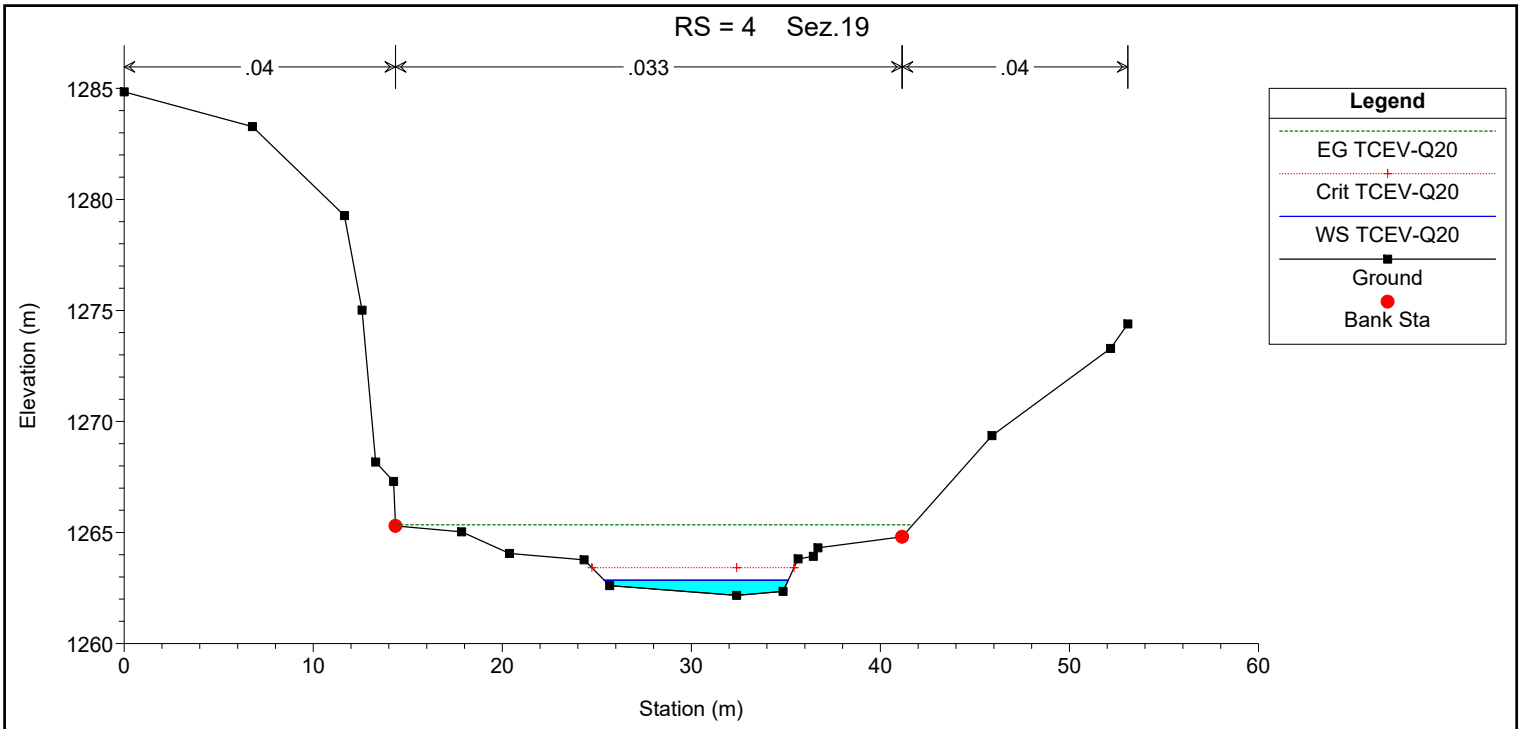

RS = 19 Sez.4
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG TCEV-Q20
Crit TCEV-Q20
WS TCEV-Q20
Ground
Bank Sta
RS = 18 Sez.5
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG TCEV-Q20
Crit TCEV-Q20
WS TCEV-Q20
Ground
Bank Sta
RS = 17 Sez.6
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG TCEV-Q20
Crit TCEV-Q20
WS TCEV-Q20
Ground
Bank Sta

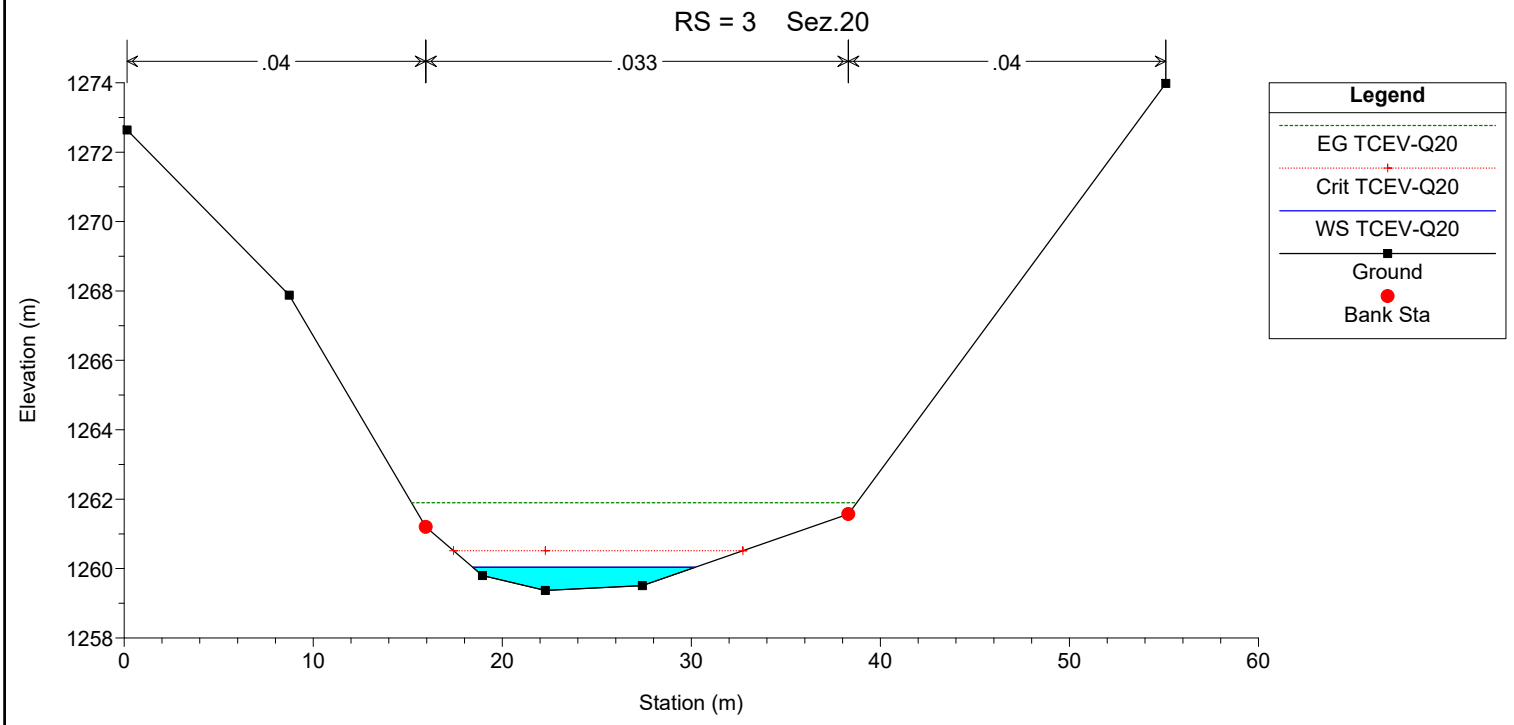

RS = 16 Sez.7
.04
.033
.04
Legend
EG TCEV-Q20
Crit TCEV-Q20
WS TCEV-Q20
Ground
Bank Sta
Elevation (m)
Station (m)
RS = 15 Sez.8
.04
.033
.04
Legend
EG TCEV-Q20
Crit TCEV-Q20
WS TCEV-Q20
Ground
Bank Sta
Elevation (m)
Station (m)
RS = 14 Sez.9
.04
.033
.04
Legend
EG TCEV-Q20
Crit TCEV-Q20
WS TCEV-Q20
Ground
Bank Sta
Elevation (m)
Station (m)

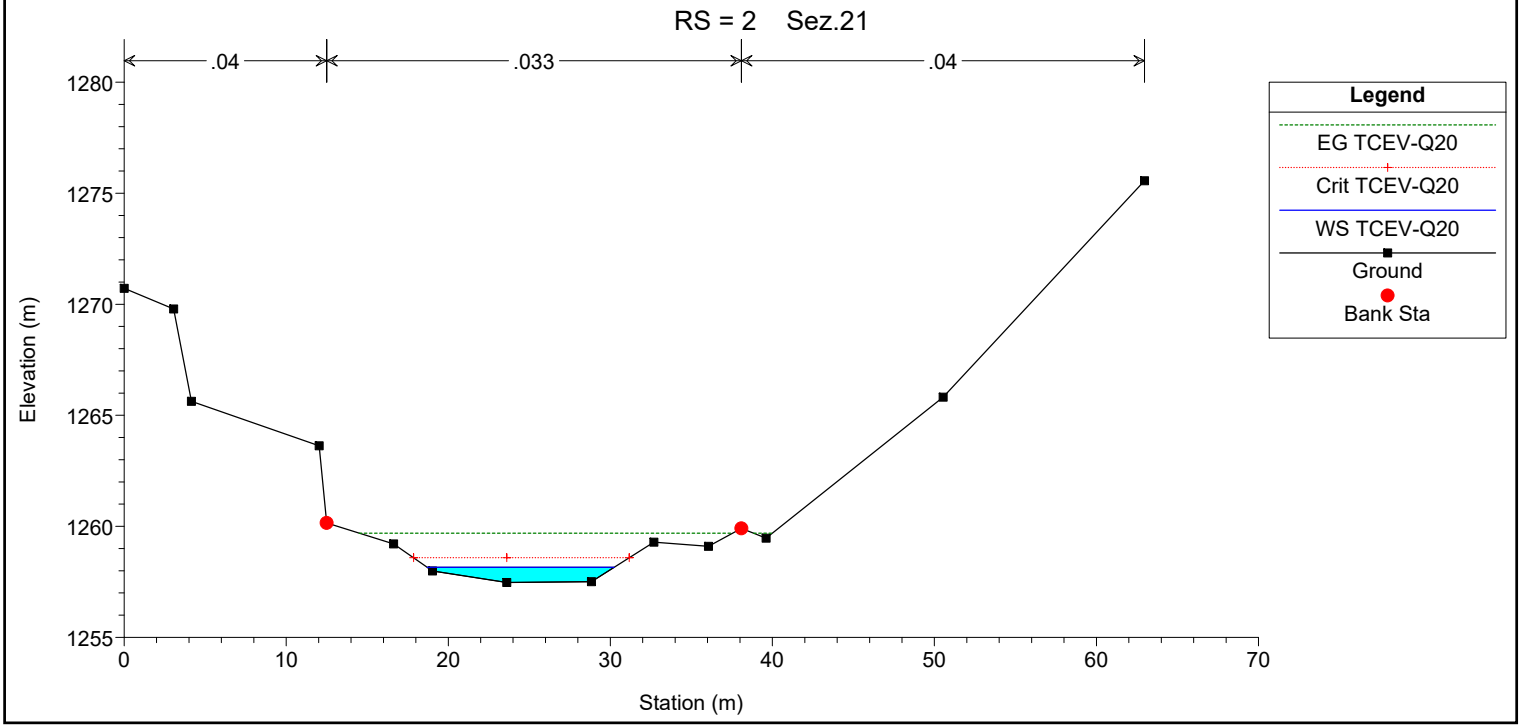

RS = 13 Sez.10
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG TCEV-Q20
Crit TCEV-Q20
WS TCEV-Q20
Ground
Bank Sta
RS = 12 Sez.11
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG TCEV-Q20
Crit TCEV-Q20
WS TCEV-Q20
Ground
Bank Sta
RS = 11 Sez.12
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG TCEV-Q20
Crit TCEV-Q20
WS TCEV-Q20
Ground
Bank Sta

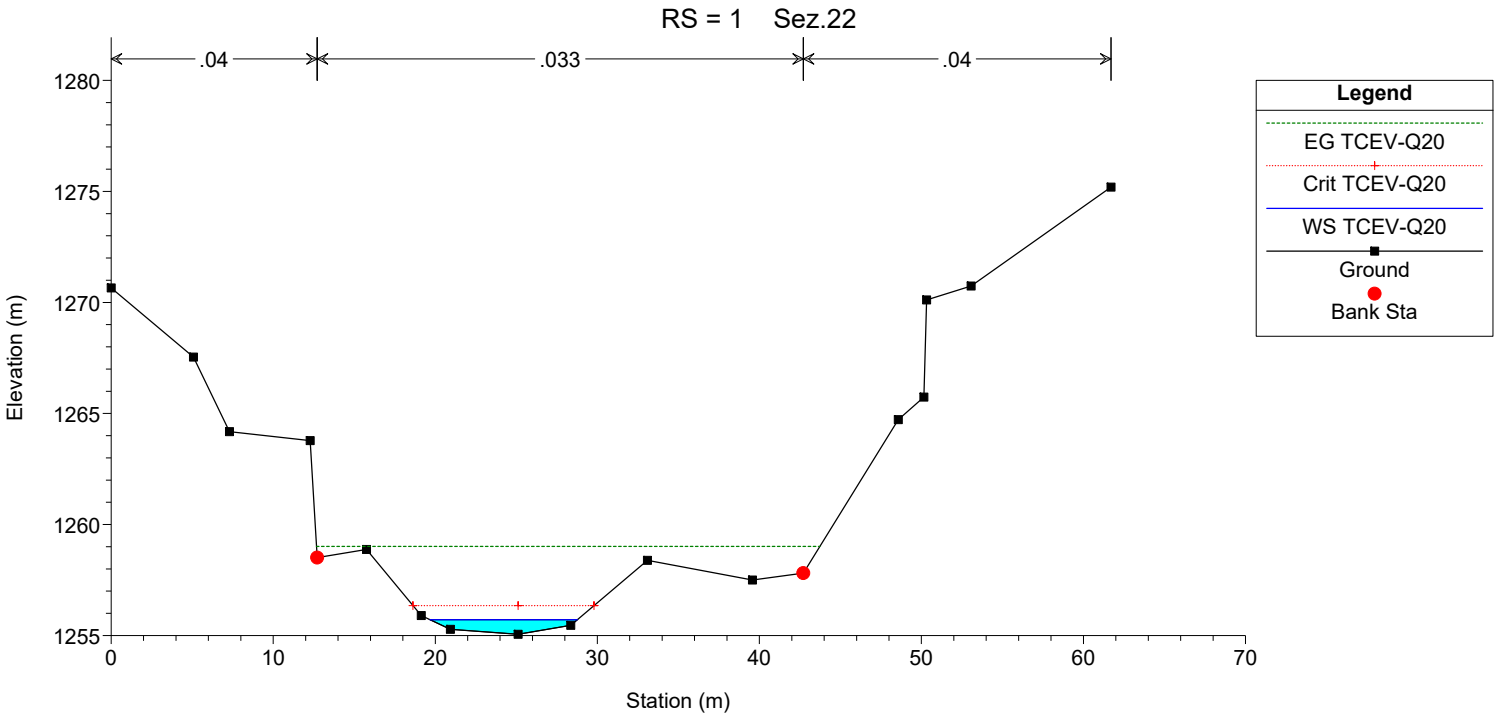

RS = 10 Sez.13
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG TCEV-Q20
Crit TCEV-Q20
WS TCEV-Q20
Ground
Bank Sta
RS = 9 Sez.14
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG TCEV-Q20
Crit TCEV-Q20
WS TCEV-Q20
Ground
Bank Sta
RS = 8 Sez.15
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG TCEV-Q20
Crit TCEV-Q20
WS TCEV-Q20
Ground
Bank Sta


RS = 7 Sez.16
.04
.033
.04
Legend
EG TCEV-Q20
Crit TCEV-Q20
WS TCEV-Q20
Ground
Bank Sta
Elevation (m)
Station (m)
RS = 6 Sez.17
.04
.033
.04
Legend
EG TCEV-Q20
Crit TCEV-Q20
WS TCEV-Q20
Ground
Bank Sta
Elevation (m)
Station (m)
RS = 5 Sez.18
.04
.033
.04
Legend
EG TCEV-Q20
Crit TCEV-Q20
WS TCEV-Q20
Ground
Bank Sta
Elevation (m)
Station (m)

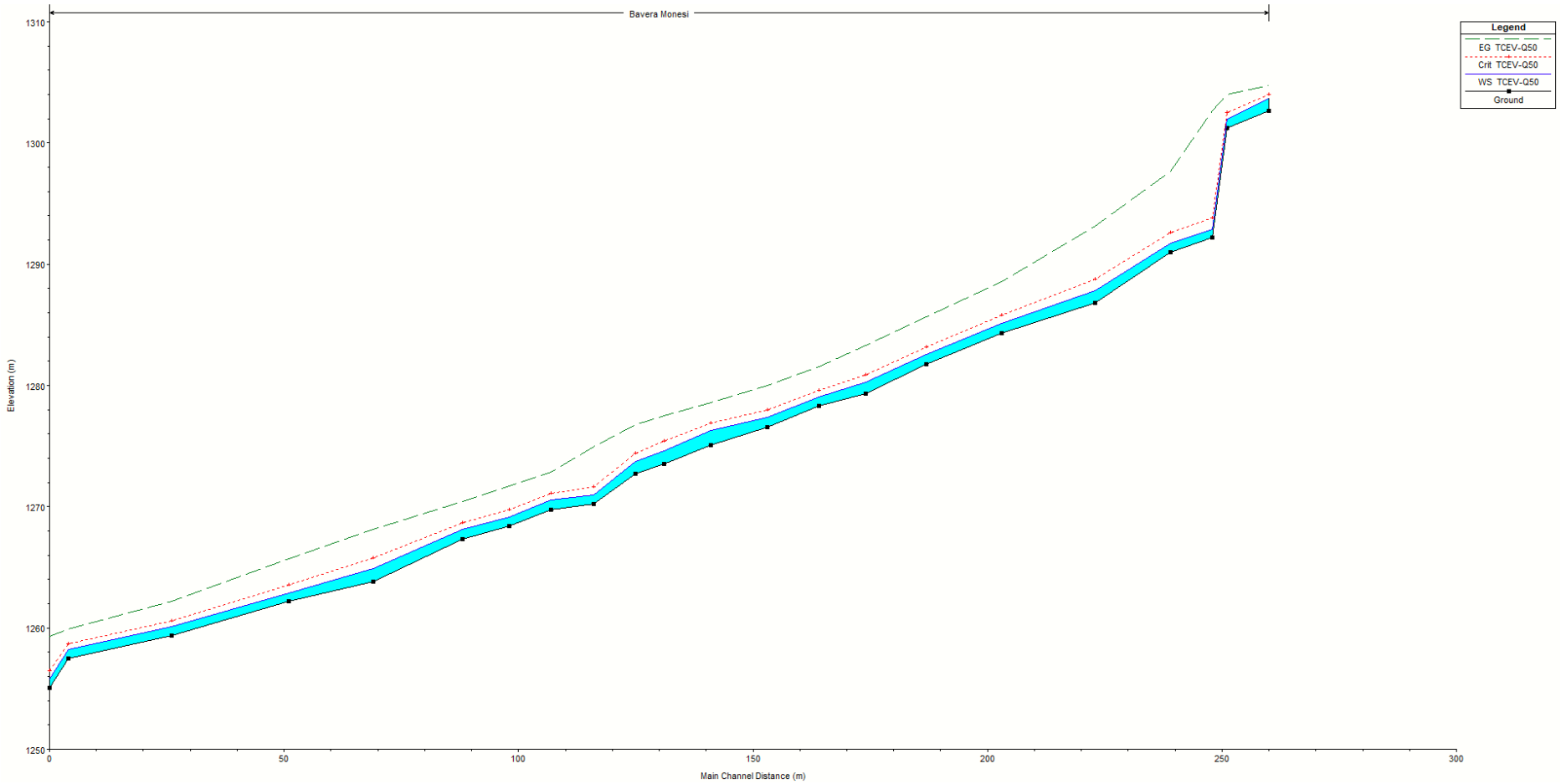

RS = 4 Sez.19
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG TCEV-Q20
Crit TCEV-Q20
WS TCEV-Q20
Ground
Bank Sta

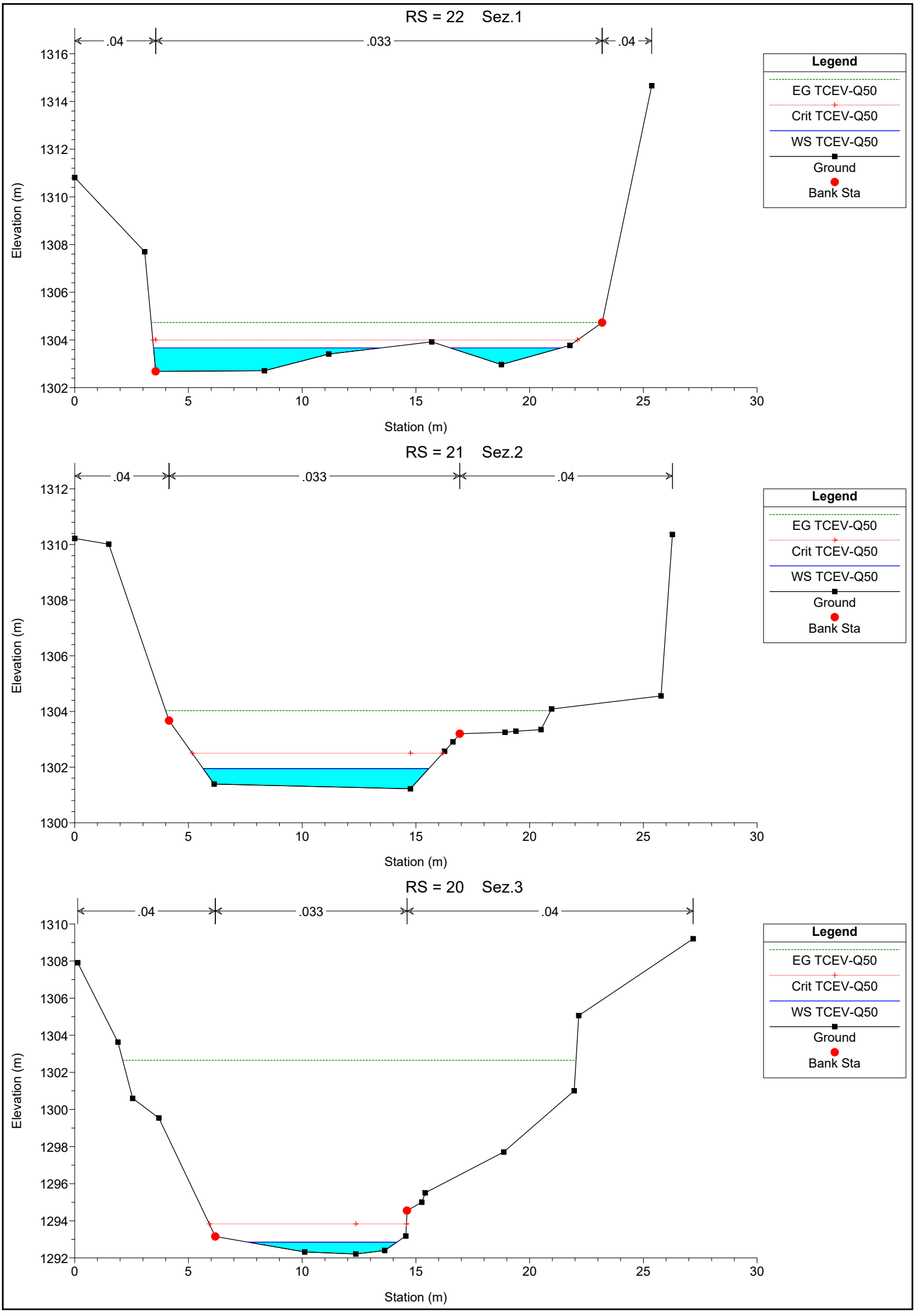

RS = 3 Sez.20
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG TCEV-Q20
Crit TCEV-Q20
WS TCEV-Q20
Ground
Bank Sta

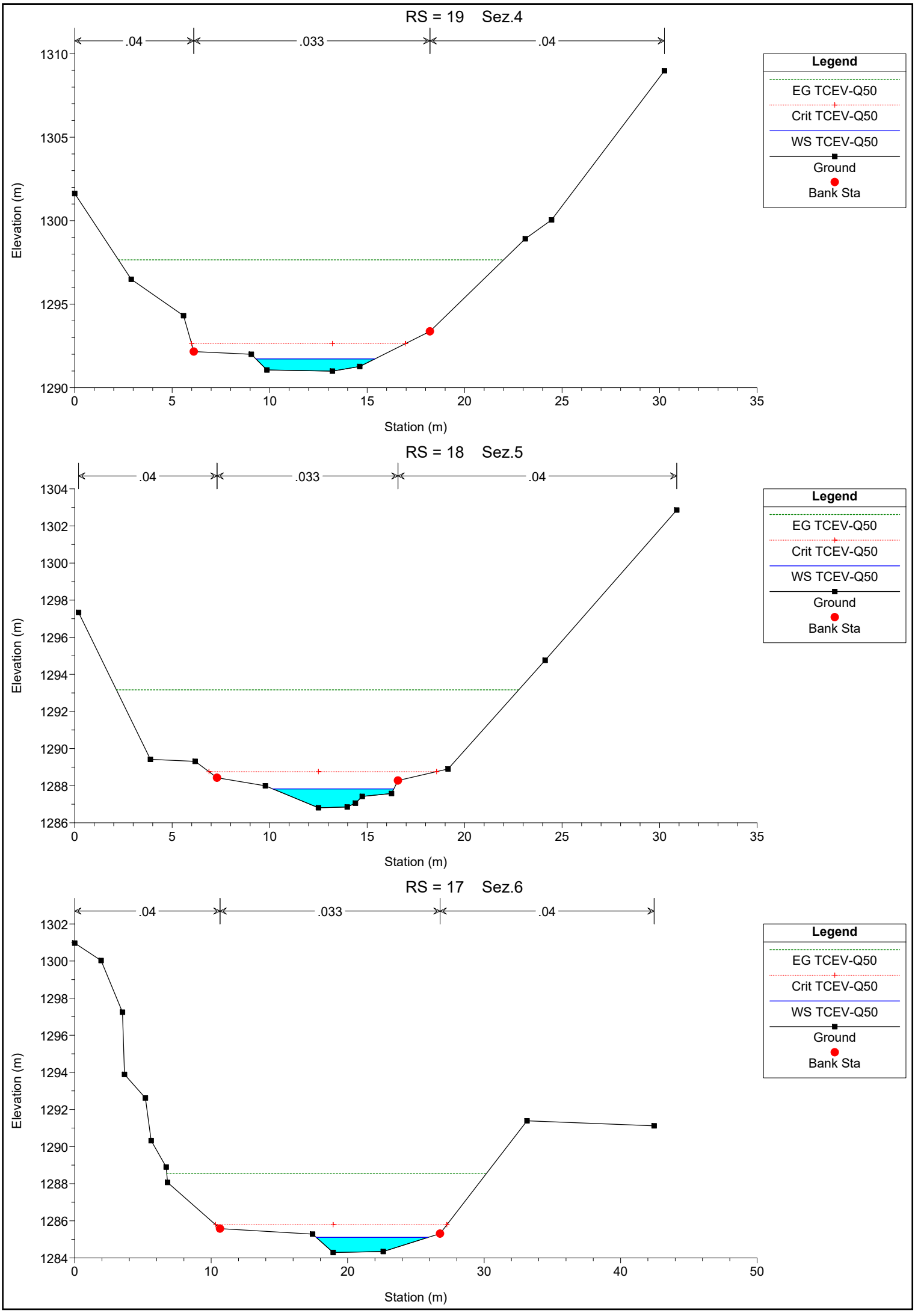

RS = 2 Sez.21
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG TCEV-Q20
Crit TCEV-Q20
WS TCEV-Q20
Ground
Bank Sta

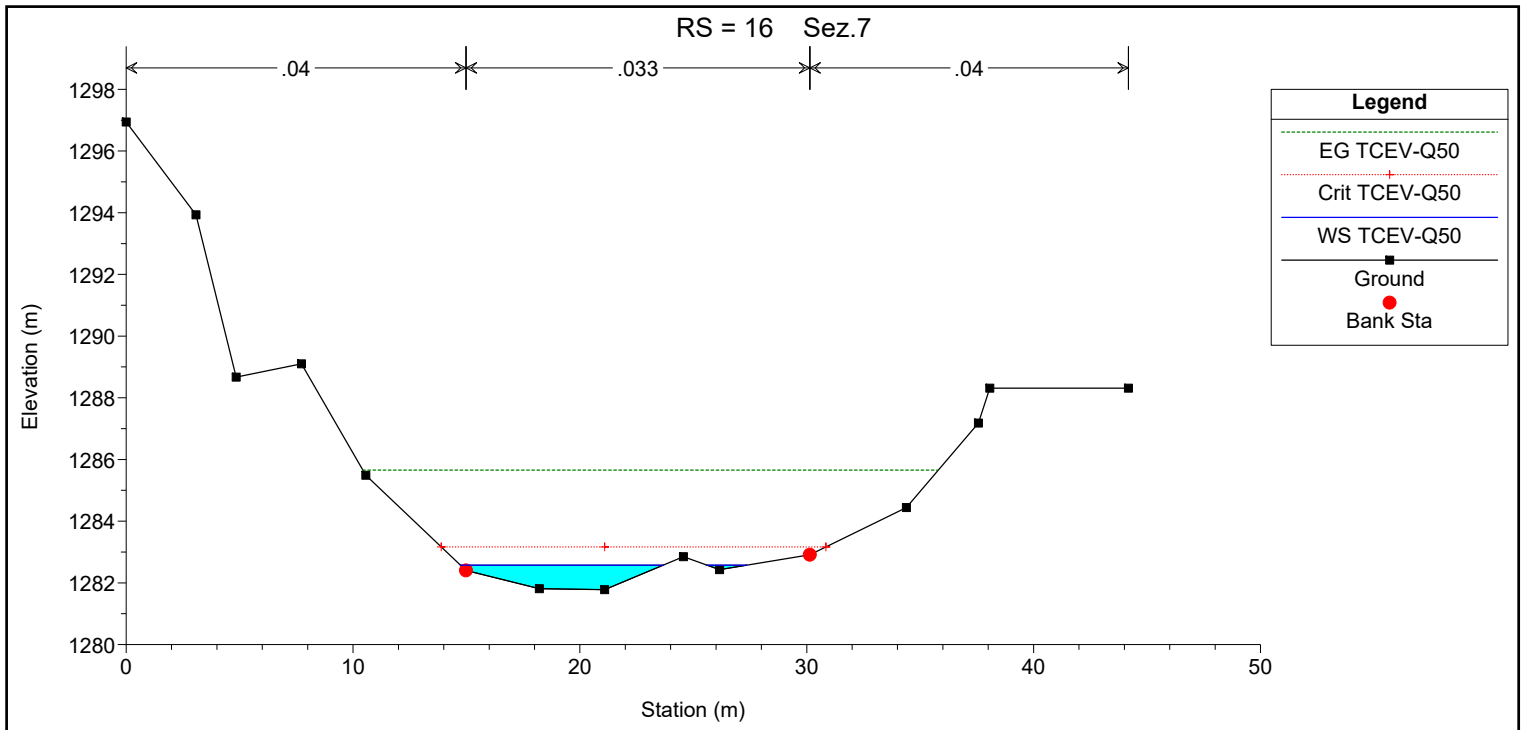

RS = 1 Sez.22
.04
.033
.04
Legend
EG TCEV-Q20
Crit TCEV-Q20
WS TCEV-Q20
Ground
Bank Sta
Elevation (m)
Station (m)
1280
1275
1270
1265
1260
1255
0
10
20
30
40
50
60
70

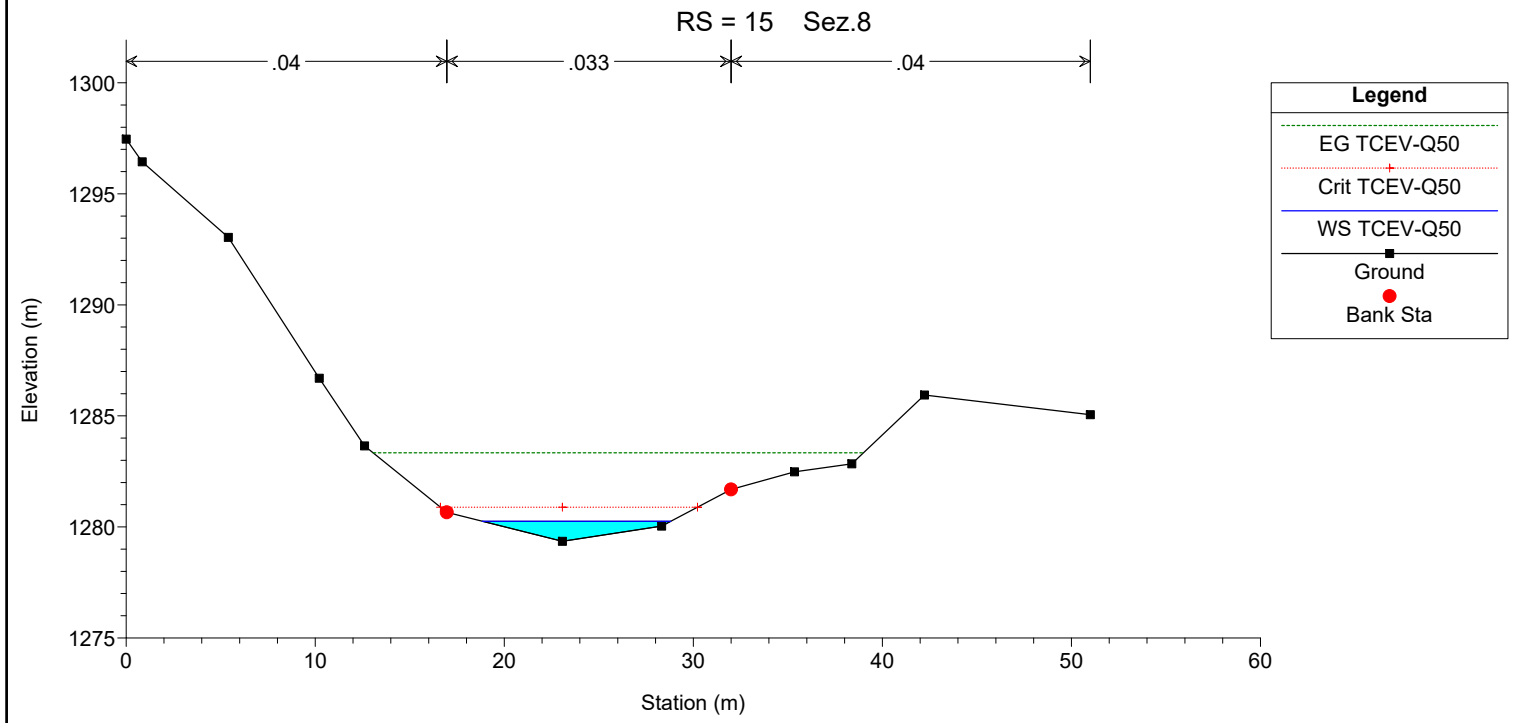
Q50 - Tcev

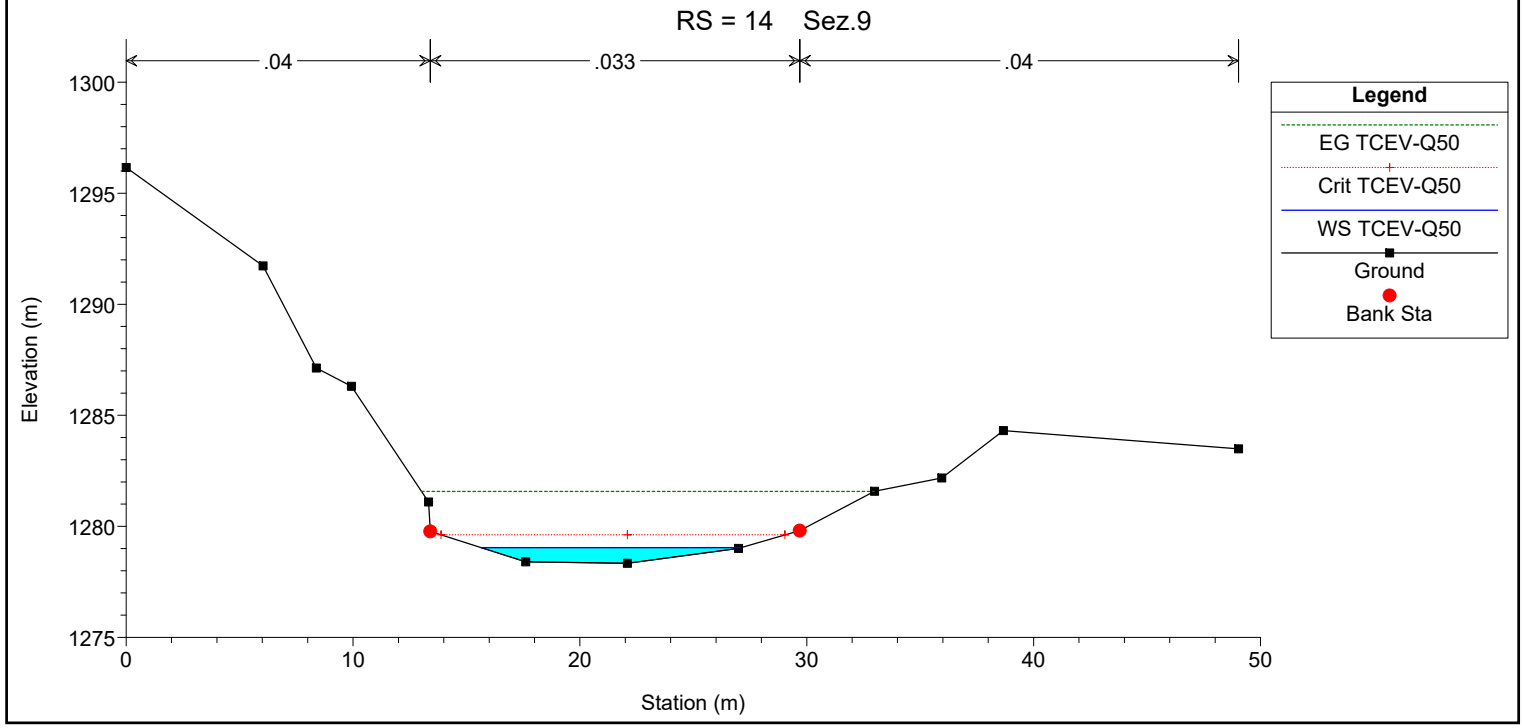

Bavera Monesi
Legend
EG TCEV-Q50
Crit TCEV-Q50
WS TCEV-Q50
Ground
Elevation (m)
1310
1300
1290
1280
1270
1260
1250
0
50
100
150
200
250
300
Main Channel Distance (m)

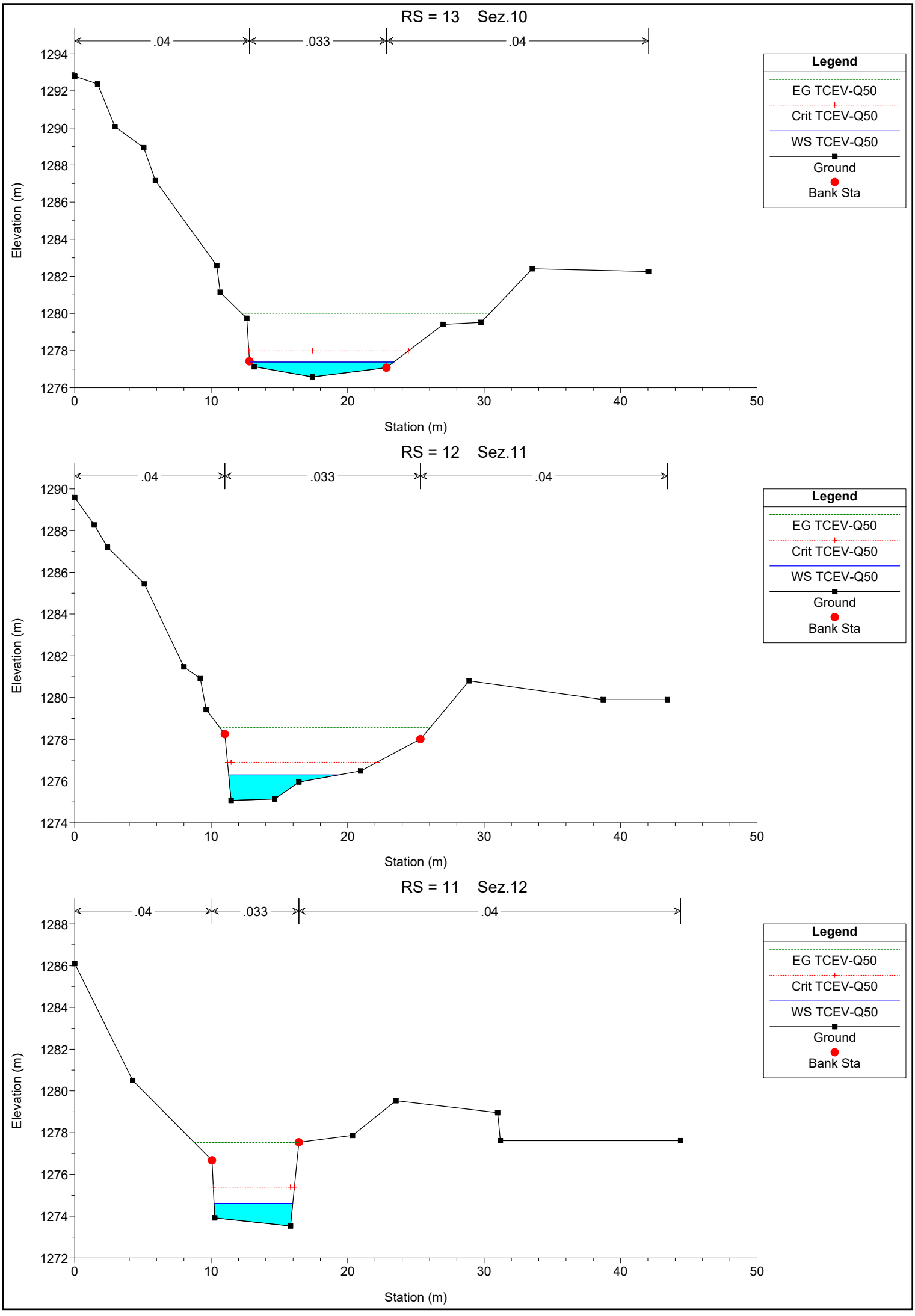

RS = 22 Sez.1
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG TCEV-Q50
Crit TCEV-Q50
WS TCEV-Q50
Ground
Bank Sta
RS = 21 Sez.2
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG TCEV-Q50
Crit TCEV-Q50
WS TCEV-Q50
Ground
Bank Sta
RS = 20 Sez.3
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG TCEV-Q50
Crit TCEV-Q50
WS TCEV-Q50
Ground
Bank Sta

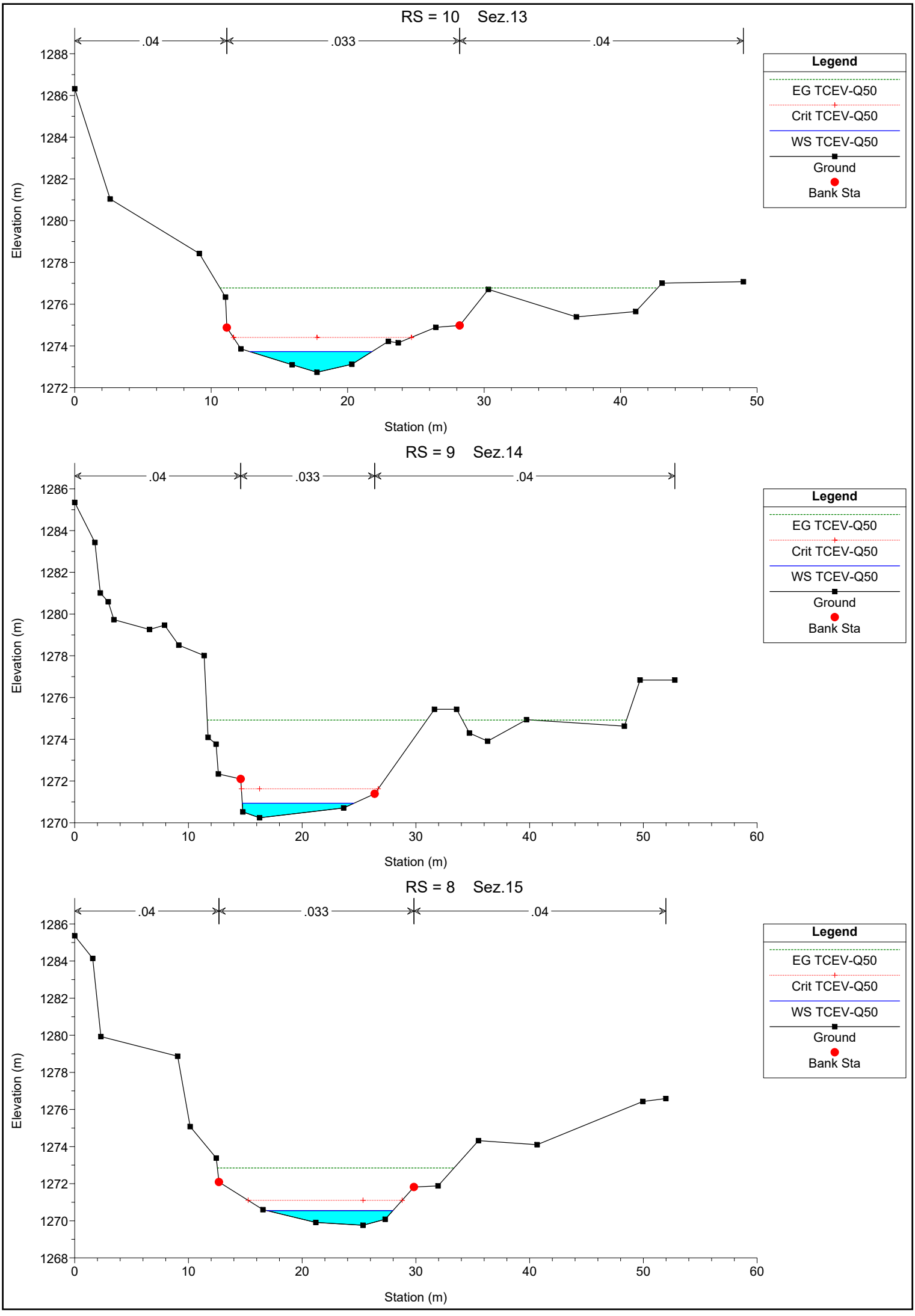

RS = 19 Sez.4
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG TCEV-Q50
Crit TCEV-Q50
WS TCEV-Q50
Ground
Bank Sta
RS = 18 Sez.5
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG TCEV-Q50
Crit TCEV-Q50
WS TCEV-Q50
Ground
Bank Sta
RS = 17 Sez.6
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG TCEV-Q50
Crit TCEV-Q50
WS TCEV-Q50
Ground
Bank Sta

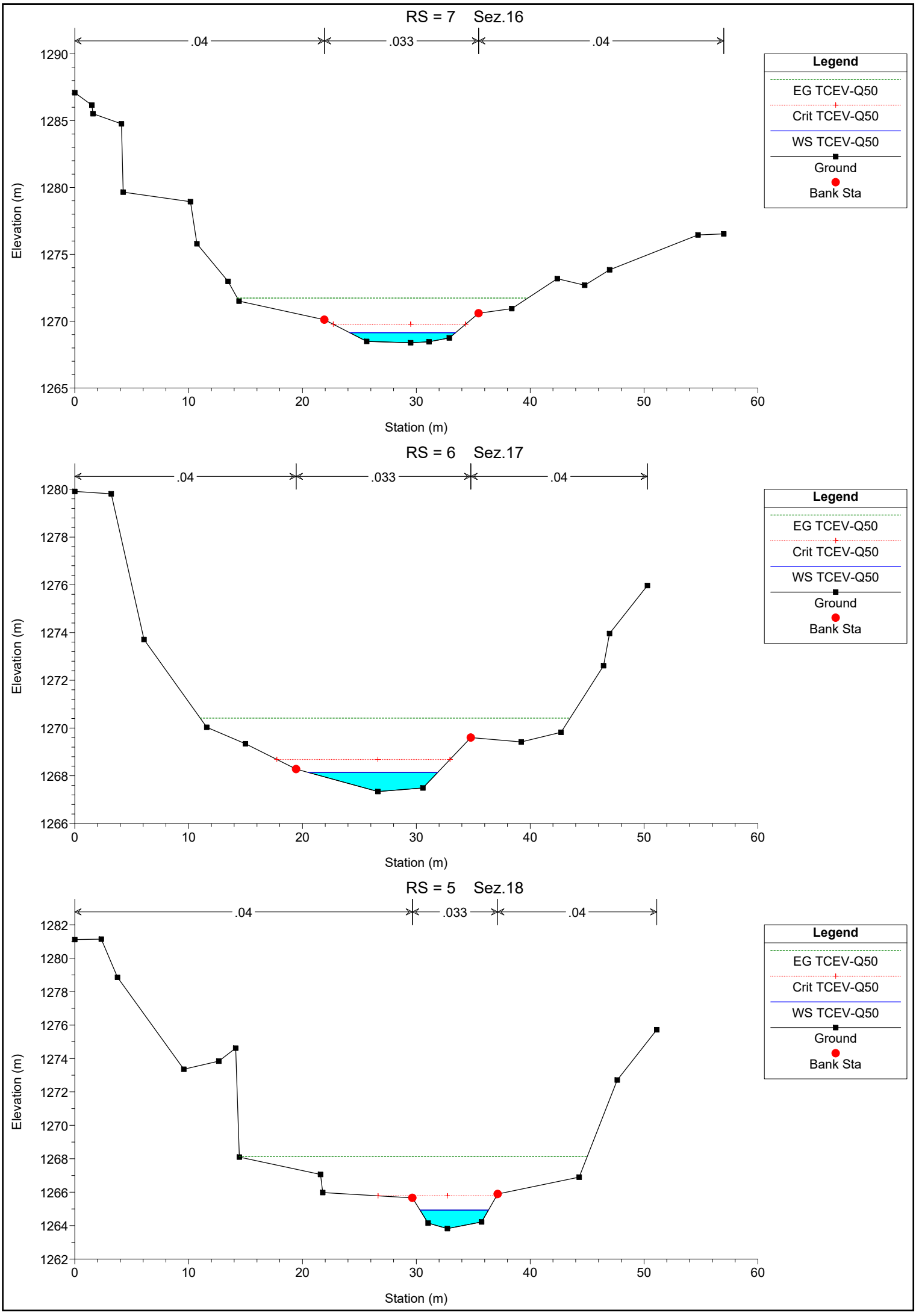

RS = 16 Sez.7
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG TCEV-Q50
Crit TCEV-Q50
WS TCEV-Q50
Ground
Bank Sta

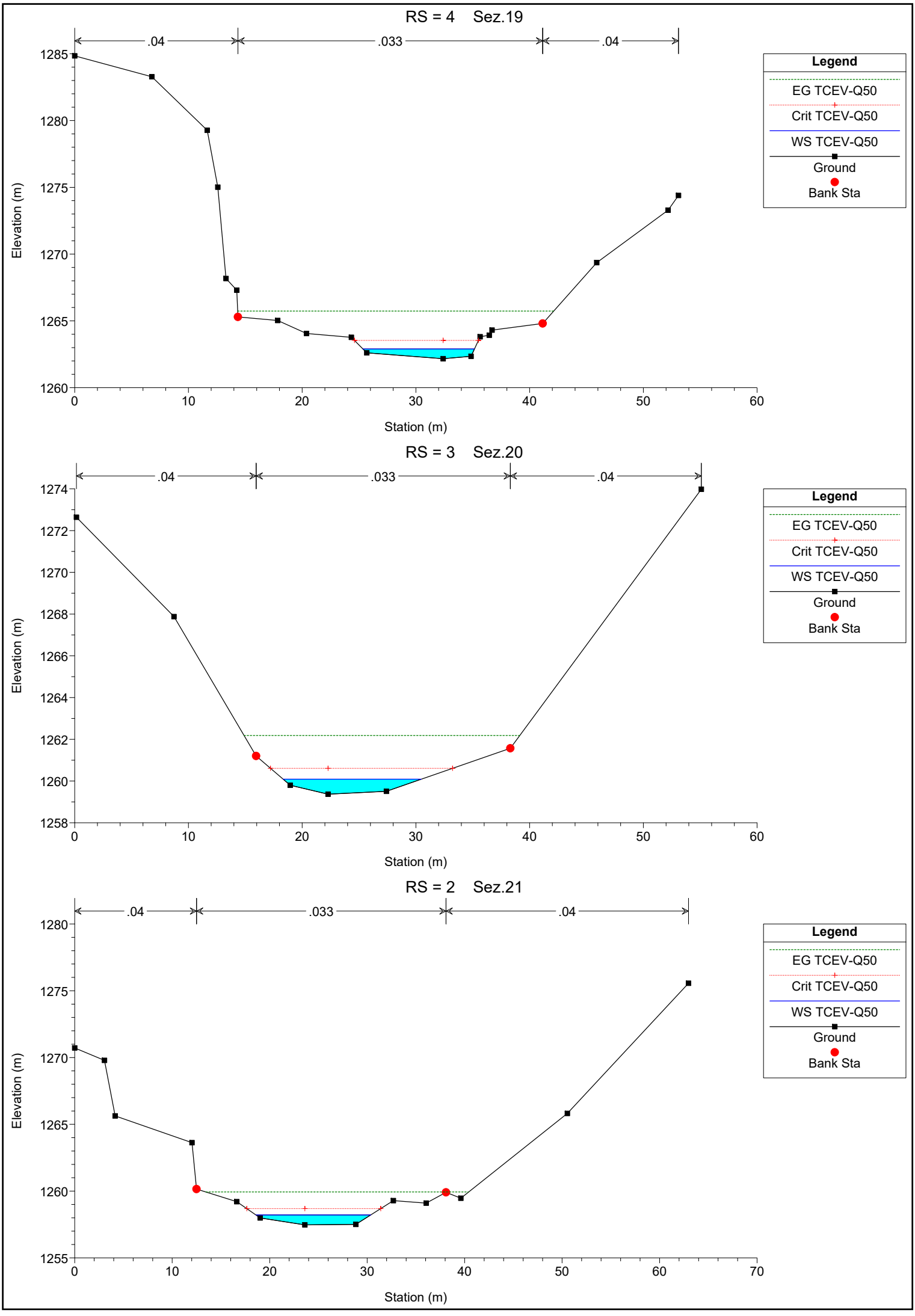

RS = 15 Sez.8
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG TCEV-Q50
Crit TCEV-Q50
WS TCEV-Q50
Ground
Bank Sta

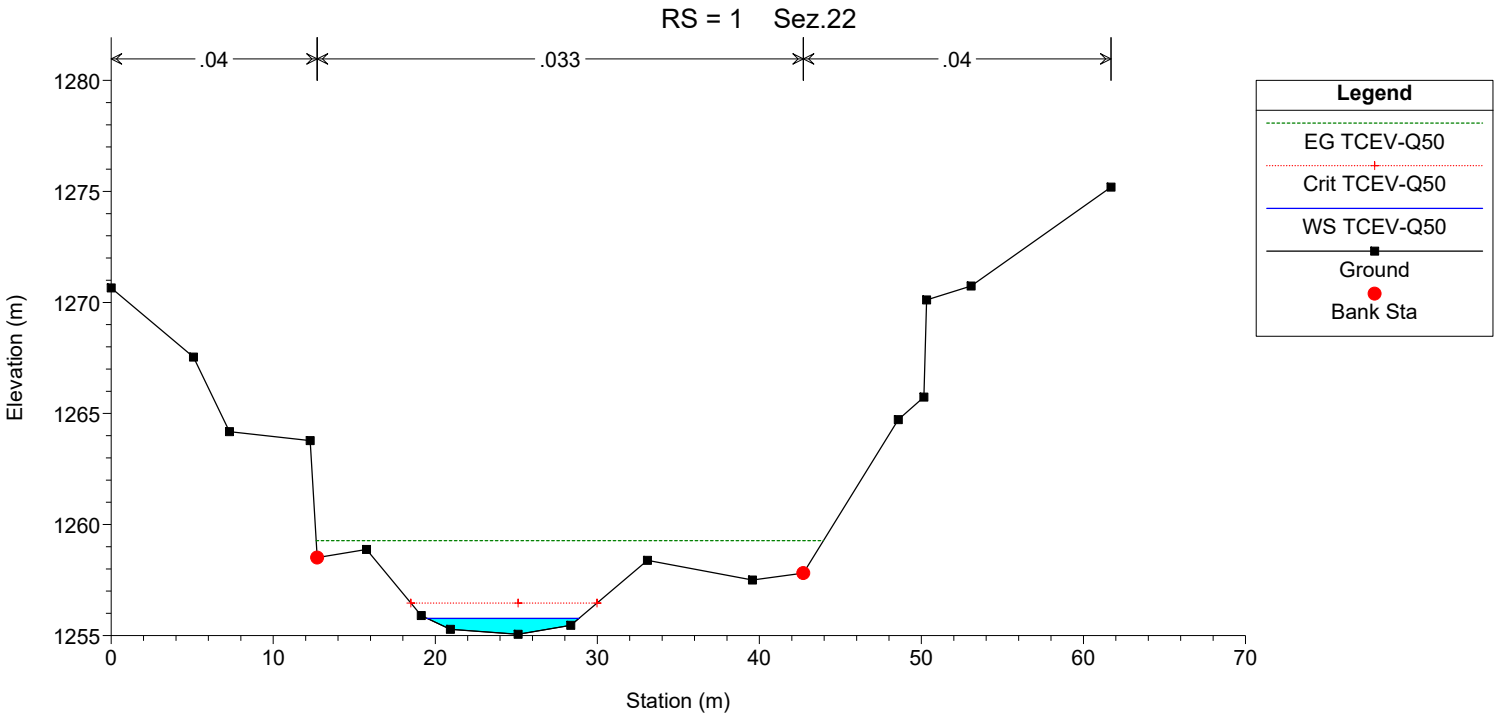

RS = 14 Sez.9
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG TCEV-Q50
Crit TCEV-Q50
WS TCEV-Q50
Ground
Bank Sta


RS = 13 Sez.10
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG TCEV-Q50
Crit TCEV-Q50
WS TCEV-Q50
Ground
Bank Sta
RS = 12 Sez.11
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG TCEV-Q50
Crit TCEV-Q50
WS TCEV-Q50
Ground
Bank Sta
RS = 11 Sez.12
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG TCEV-Q50
Crit TCEV-Q50
WS TCEV-Q50
Ground
Bank Sta

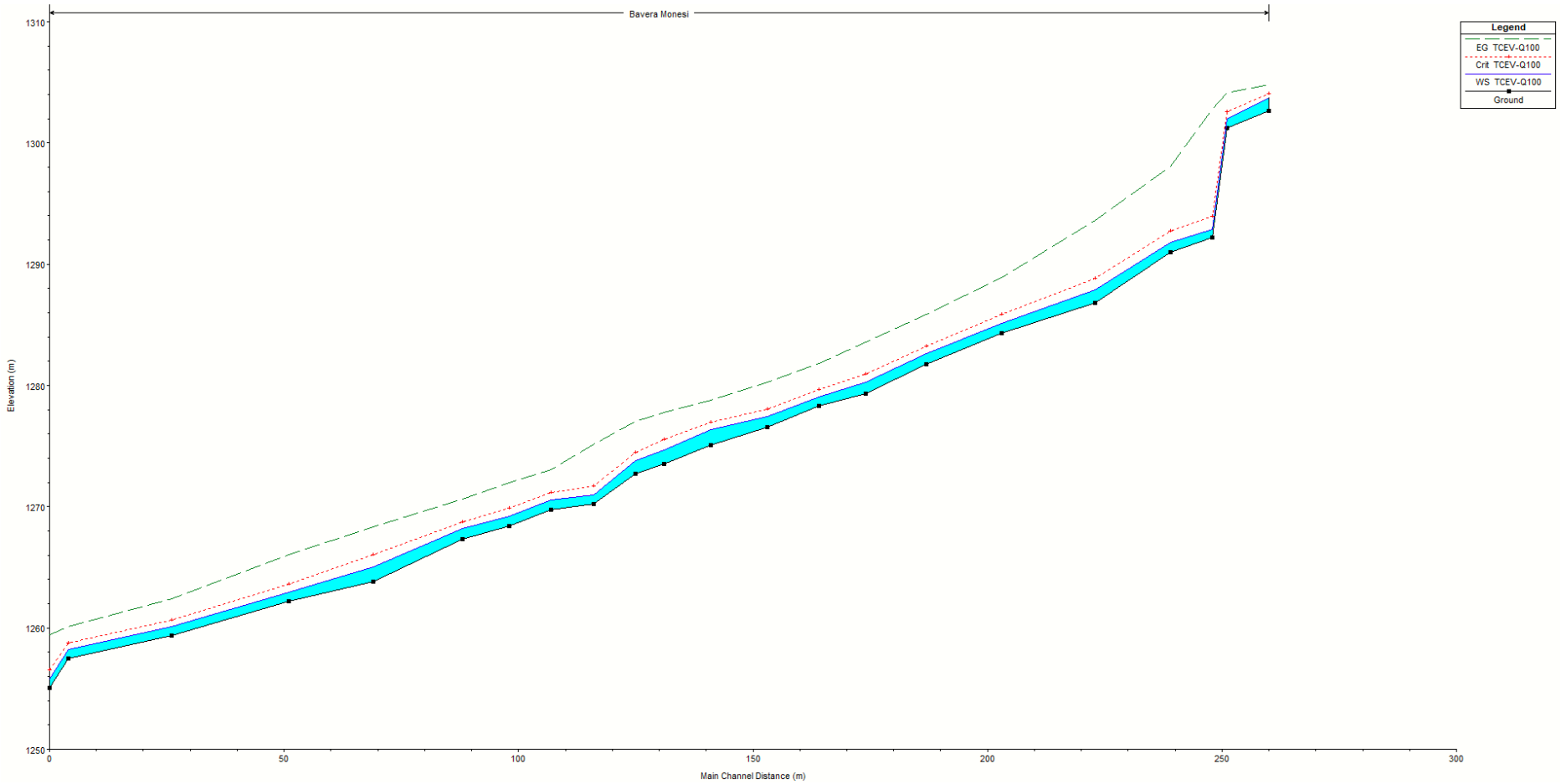

RS = 10 Sez.13
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG TCEV-Q50
Crit TCEV-Q50
WS TCEV-Q50
Ground
Bank Sta
RS = 9 Sez.14
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG TCEV-Q50
Crit TCEV-Q50
WS TCEV-Q50
Ground
Bank Sta
RS = 8 Sez.15
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG TCEV-Q50
Crit TCEV-Q50
WS TCEV-Q50
Ground
Bank Sta

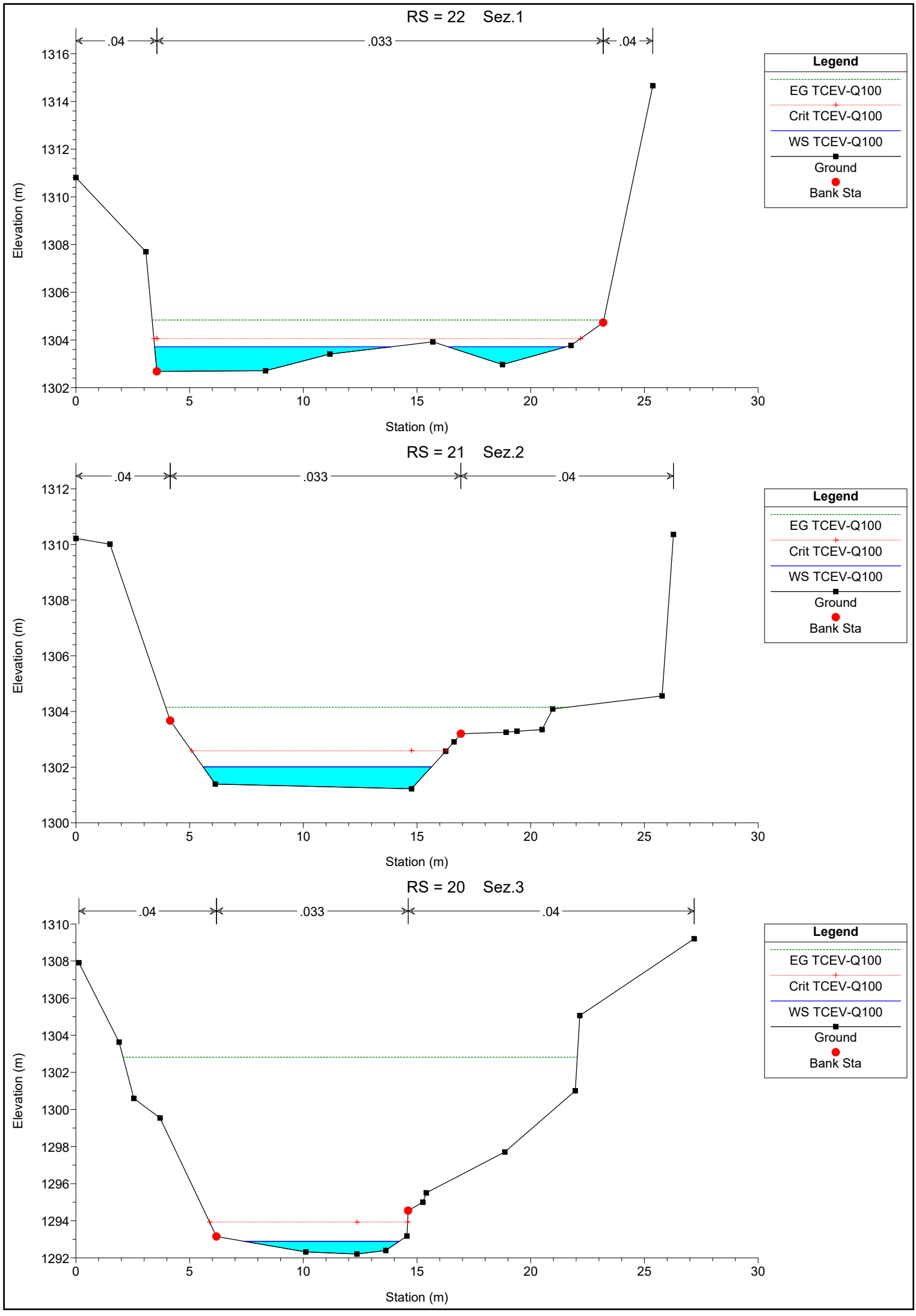

RS = 7 Sez.16
.04
.033
.04
Legend
EG TCEV-Q50
Crit TCEV-Q50
WS TCEV-Q50
Ground
Bank Sta
Elevation (m)
Station (m)
RS = 6 Sez.17
.04
.033
.04
Legend
EG TCEV-Q50
Crit TCEV-Q50
WS TCEV-Q50
Ground
Bank Sta
Elevation (m)
Station (m)
RS = 5 Sez.18
.04
.033
.04
Legend
EG TCEV-Q50
Crit TCEV-Q50
WS TCEV-Q50
Ground
Bank Sta
Elevation (m)
Station (m)

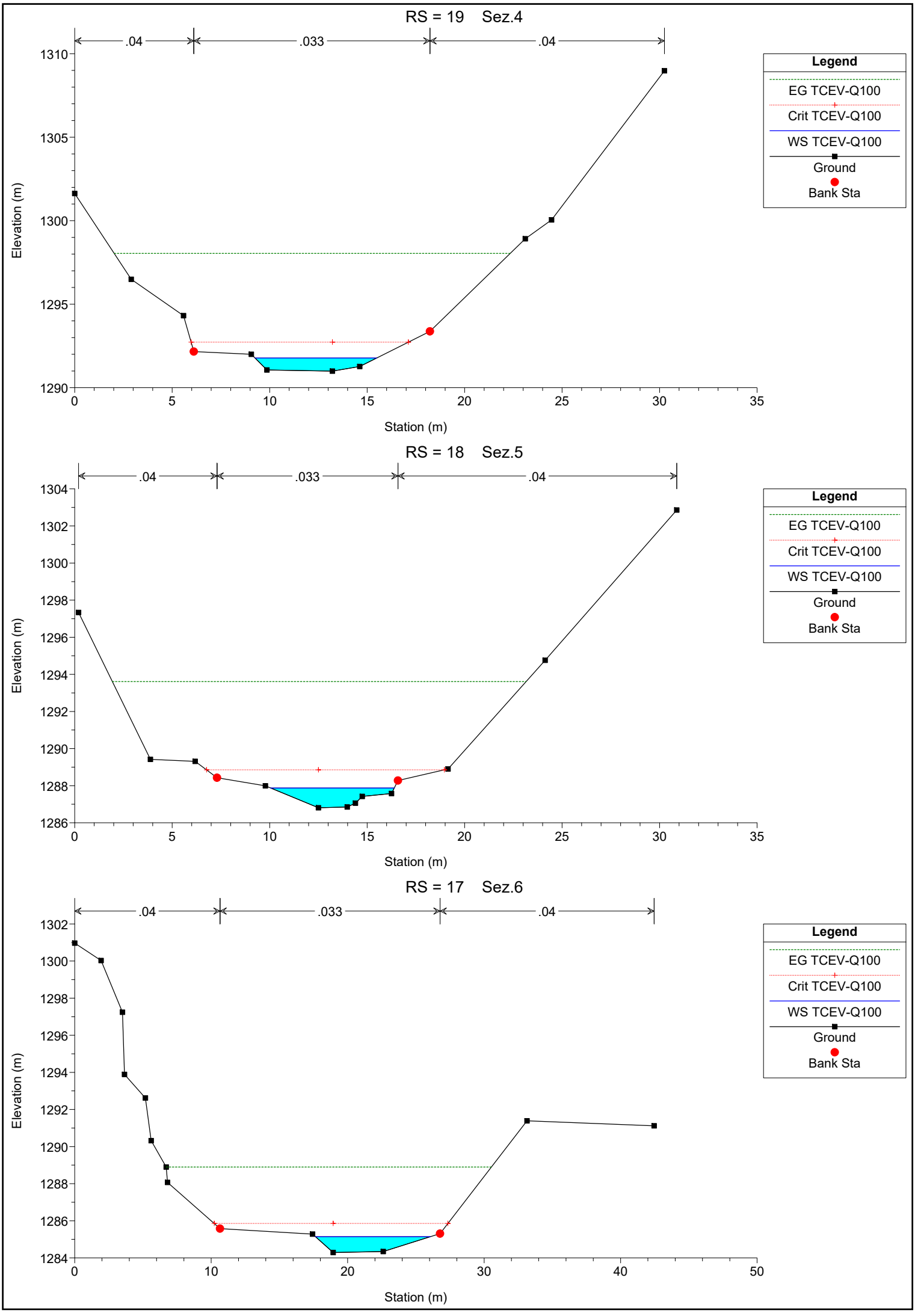

RS = 4 Sez.19
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG TCEV-Q50
Crit TCEV-Q50
WS TCEV-Q50
Ground
Bank Sta
RS = 3 Sez.20
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG TCEV-Q50
Crit TCEV-Q50
WS TCEV-Q50
Ground
Bank Sta
RS = 2 Sez.21
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG TCEV-Q50
Crit TCEV-Q50
WS TCEV-Q50
Ground
Bank Sta

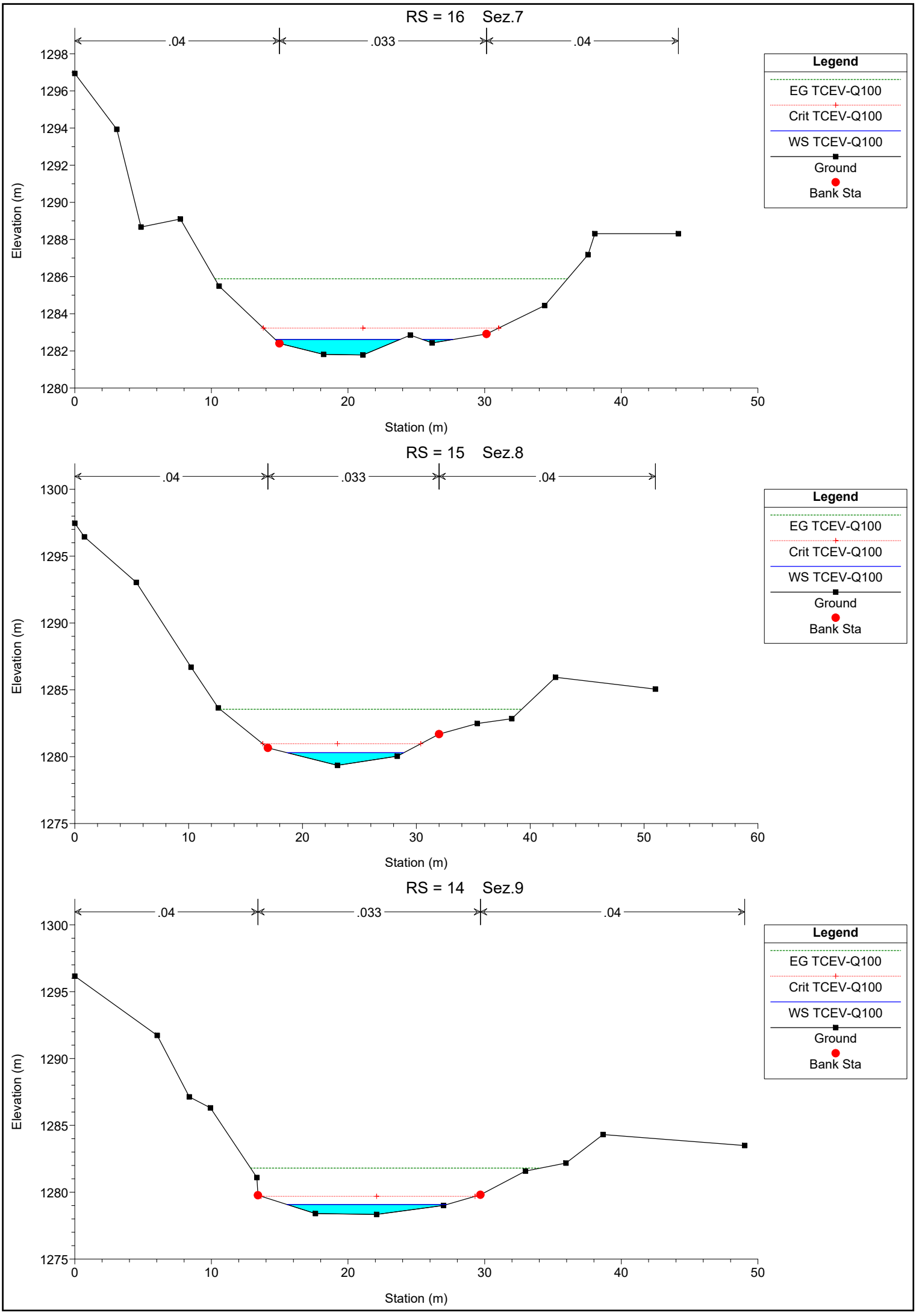

RS = 1 Sez.22
.04
.033
.04
Legend
EG TCEV-Q50
Crit TCEV-Q50
WS TCEV-Q50
Ground
Bank Sta
Elevation (m)
Station (m)
1280
1275
1270
1265
1260
1255
0
10
20
30
40
50
60
70

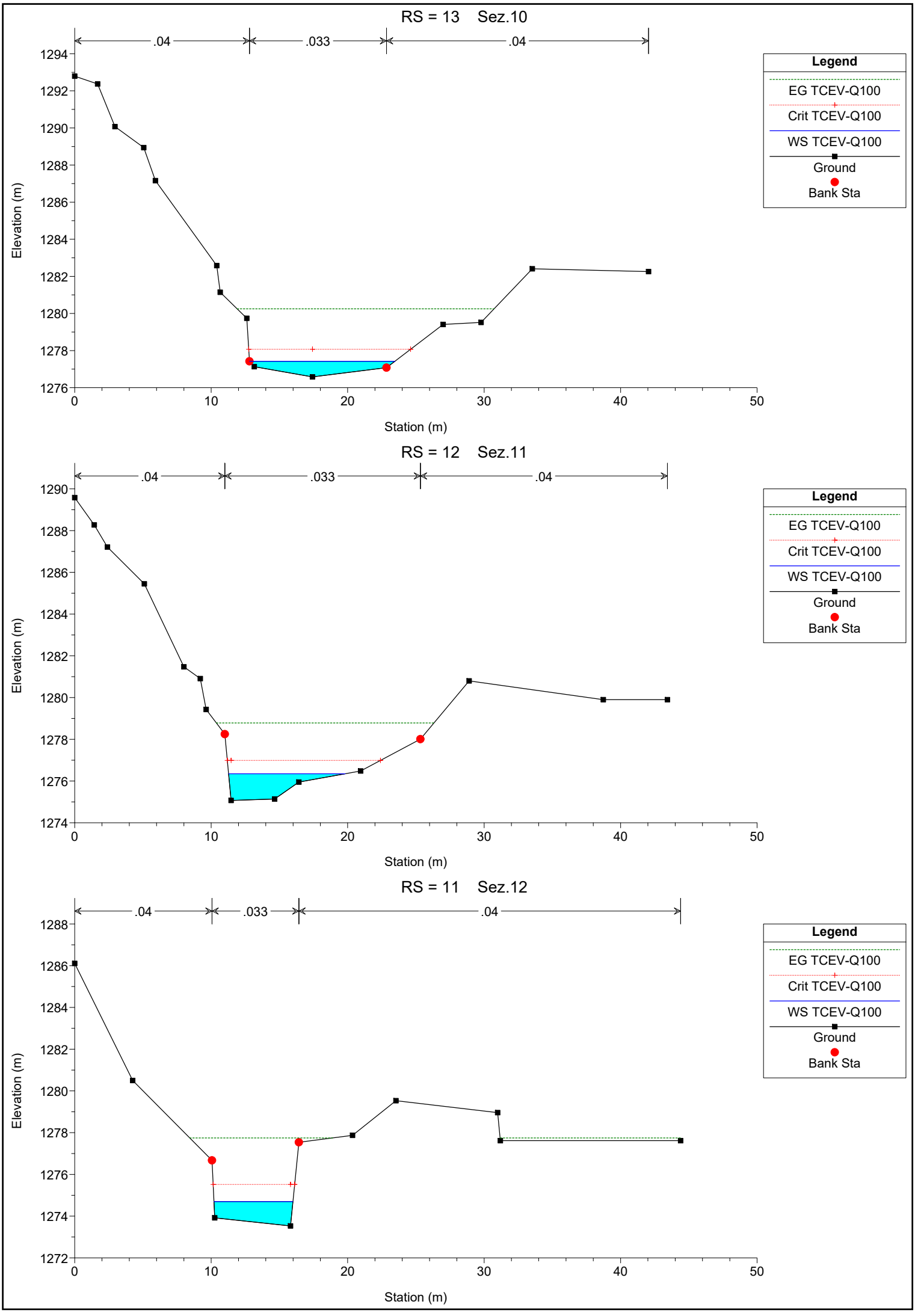
Q100 - Tcev

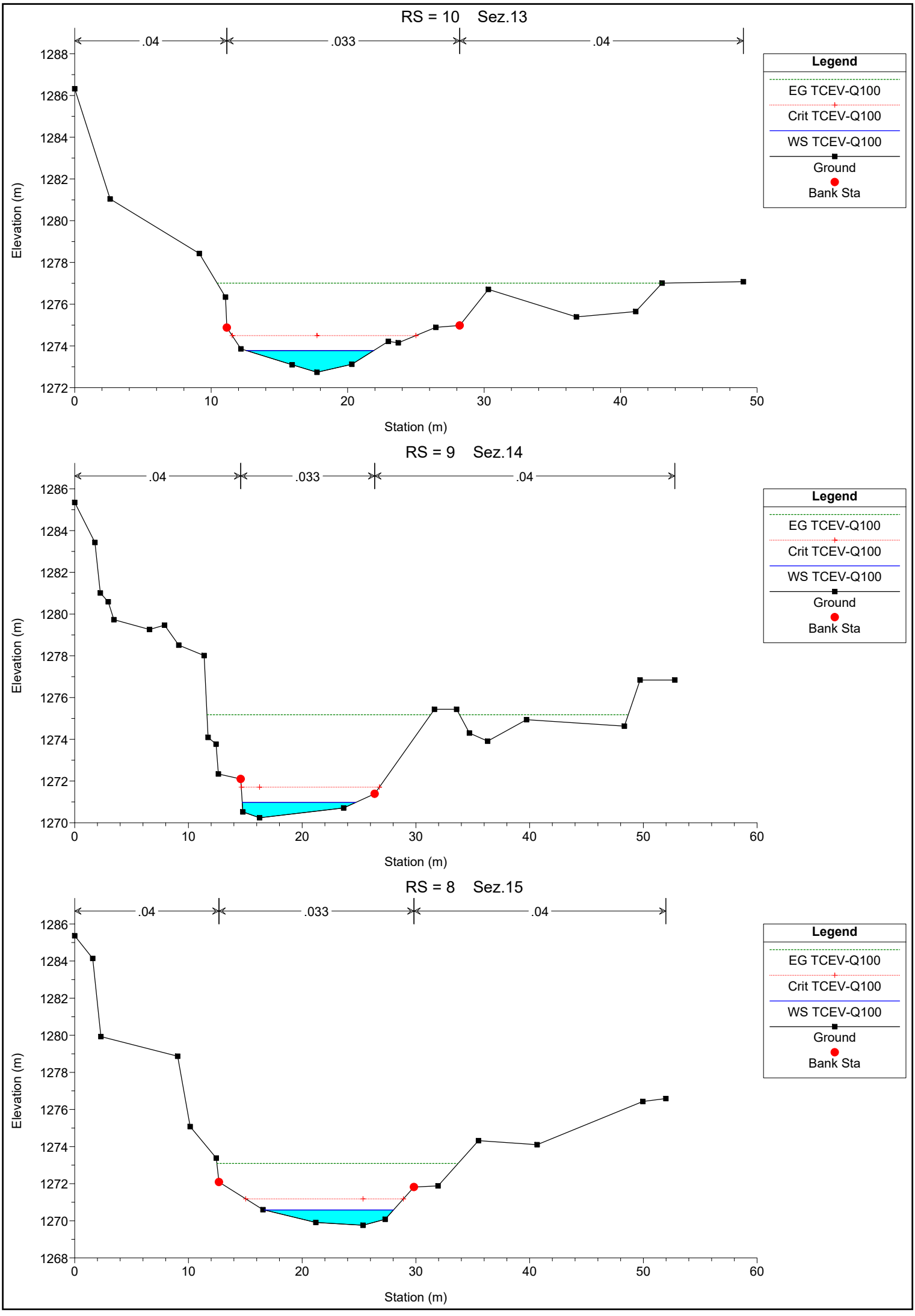

Bavera Monesi
Legend
EG TCEV-Q100
Crit TCEV-Q100
WS TCEV-Q100
Ground
Elevation (m)
1310
1300
1290
1280
1270
1260
1250
0
50
100
150
200
250
300
Main Channel Distance (m)

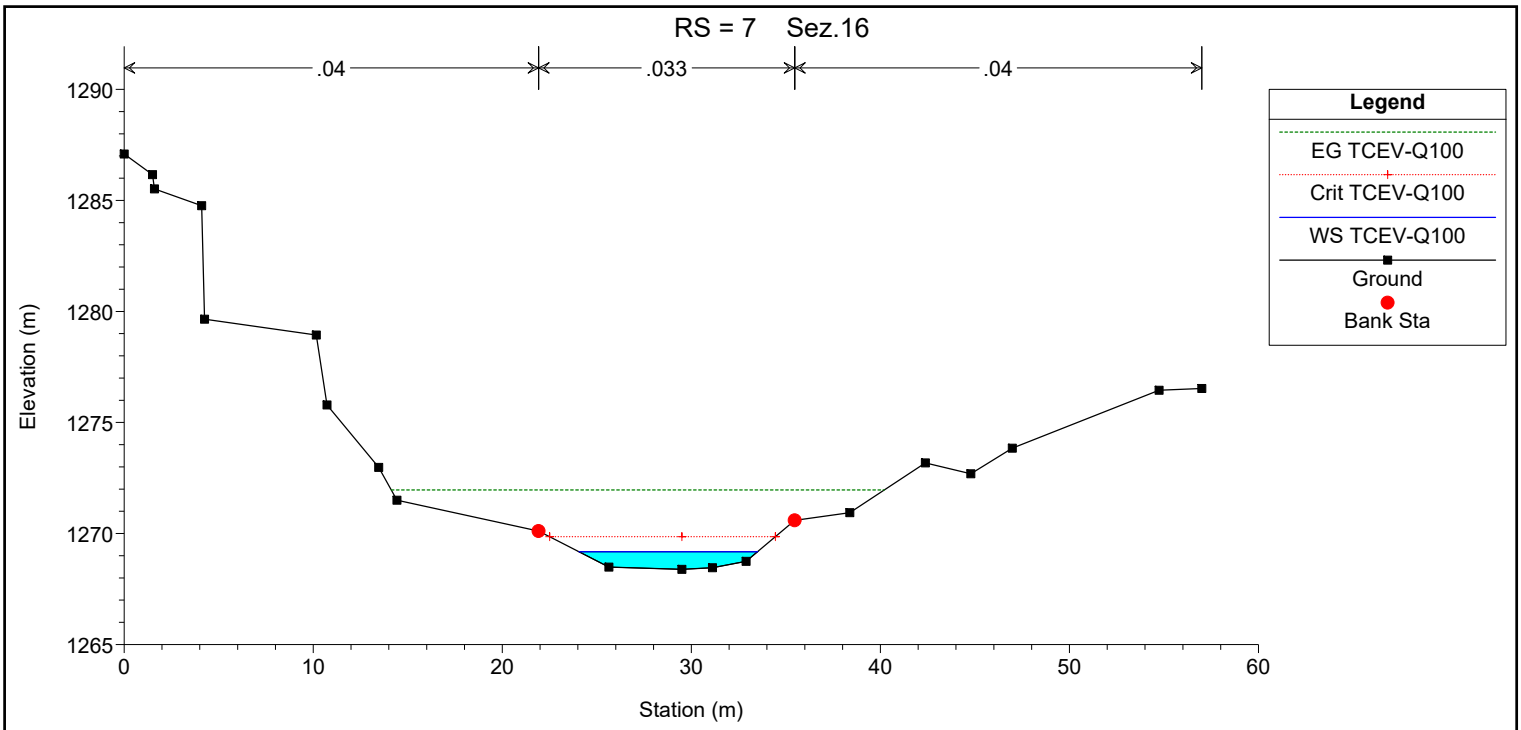

RS = 22 Sez.1
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG TCEV-Q100
Crit TCEV-Q100
WS TCEV-Q100
Ground
Bank Sta
RS = 21 Sez.2
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG TCEV-Q100
Crit TCEV-Q100
WS TCEV-Q100
Ground
Bank Sta
RS = 20 Sez.3
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG TCEV-Q100
Crit TCEV-Q100
WS TCEV-Q100
Ground
Bank Sta

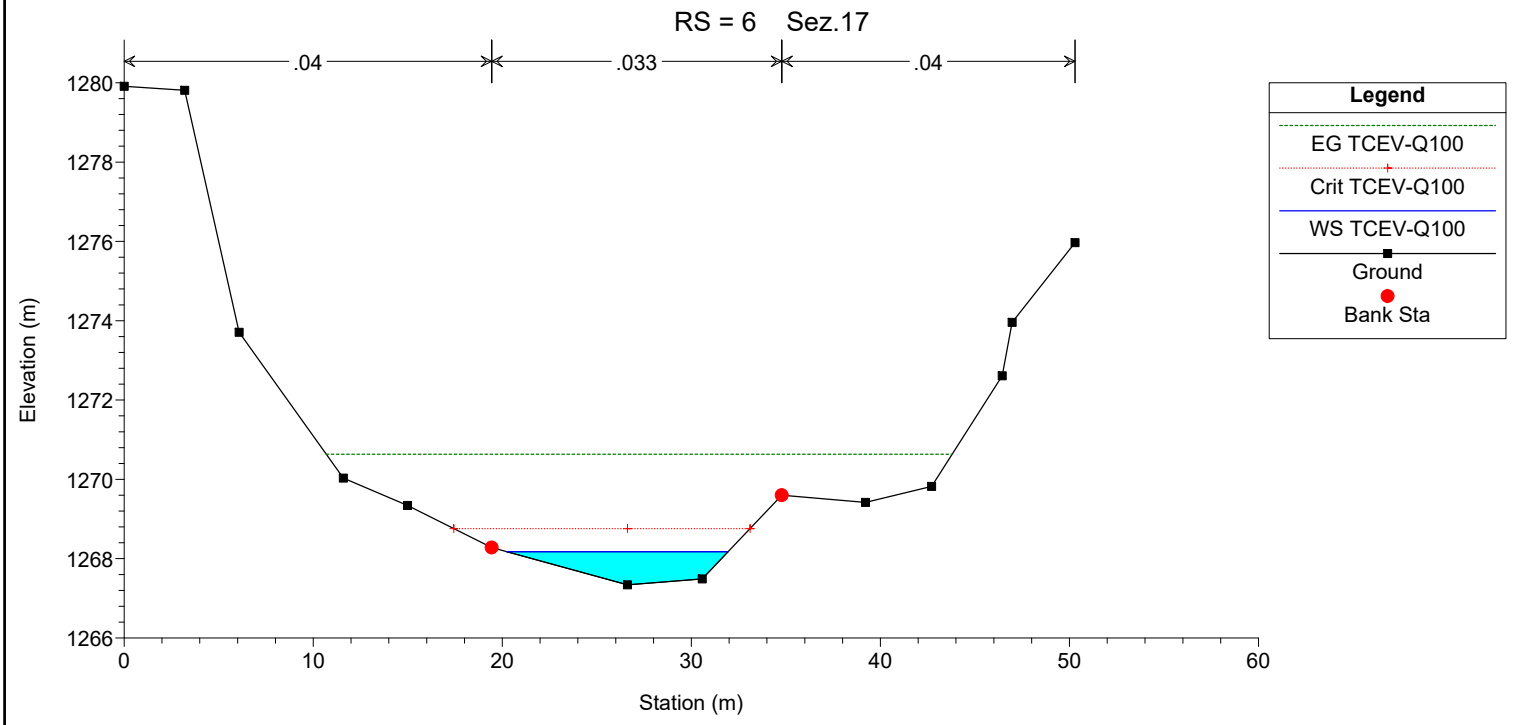

RS = 19 Sez.4
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG TCEV-Q100
Crit TCEV-Q100
WS TCEV-Q100
Ground
Bank Sta
RS = 18 Sez.5
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG TCEV-Q100
Crit TCEV-Q100
WS TCEV-Q100
Ground
Bank Sta
RS = 17 Sez.6
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG TCEV-Q100
Crit TCEV-Q100
WS TCEV-Q100
Ground
Bank Sta

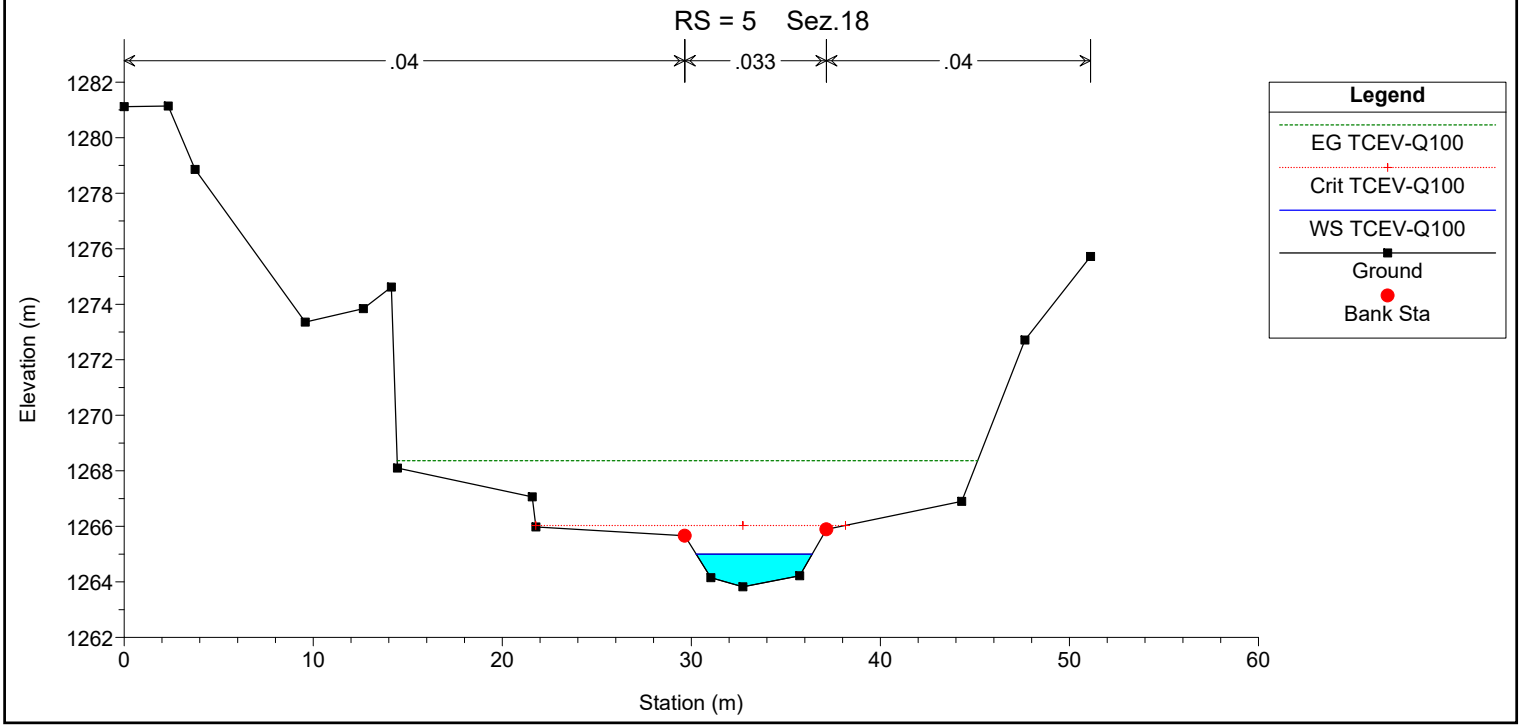

RS = 16 Sez.7
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG TCEV-Q100
Crit TCEV-Q100
WS TCEV-Q100
Ground
Bank Sta
RS = 15 Sez.8
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG TCEV-Q100
Crit TCEV-Q100
WS TCEV-Q100
Ground
Bank Sta
RS = 14 Sez.9
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG TCEV-Q100
Crit TCEV-Q100
WS TCEV-Q100
Ground
Bank Sta

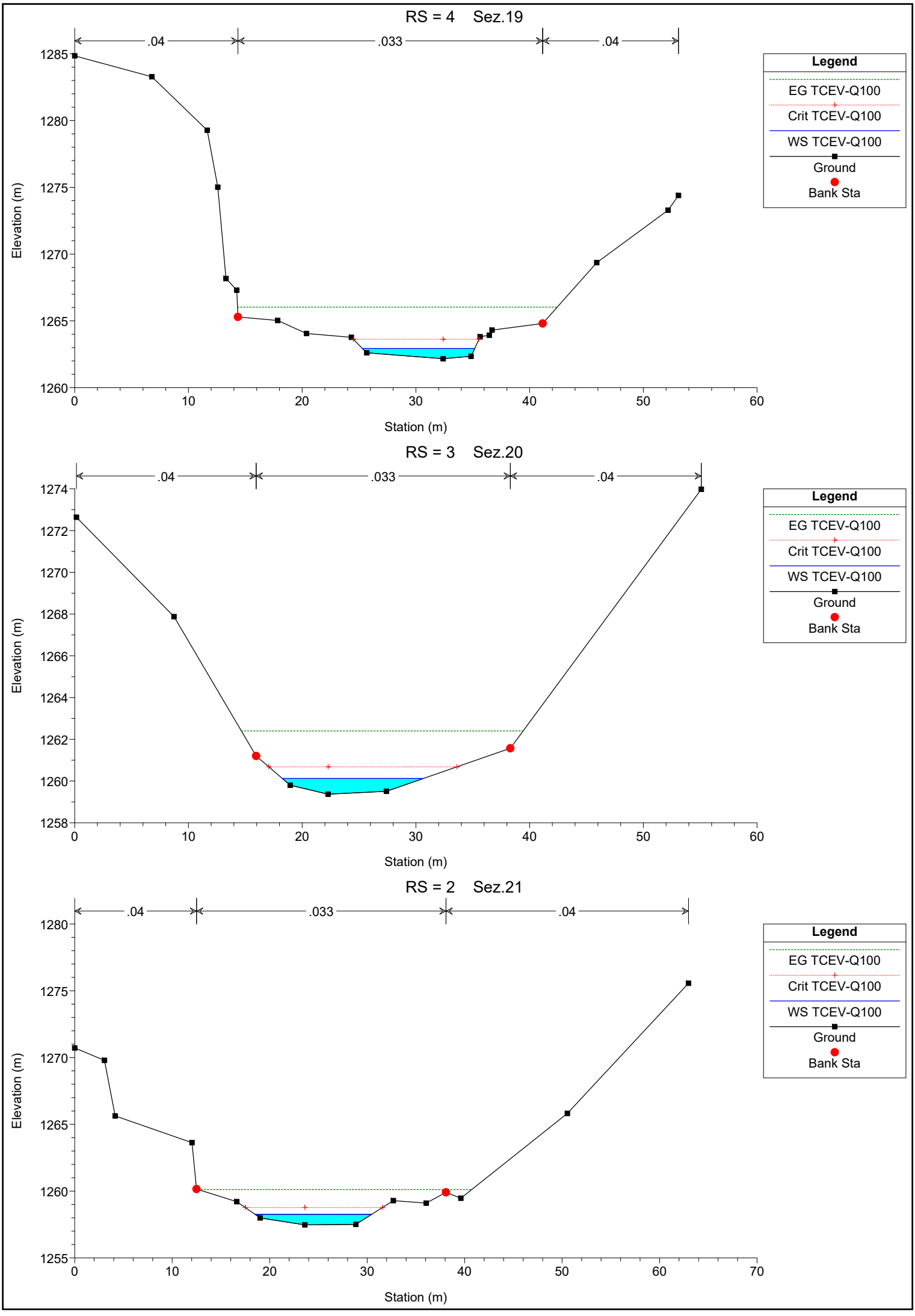

RS = 13 Sez.10
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG TCEV-Q100
Crit TCEV-Q100
WS TCEV-Q100
Ground
Bank Sta
RS = 12 Sez.11
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG TCEV-Q100
Crit TCEV-Q100
WS TCEV-Q100
Ground
Bank Sta
RS = 11 Sez.12
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG TCEV-Q100
Crit TCEV-Q100
WS TCEV-Q100
Ground
Bank Sta

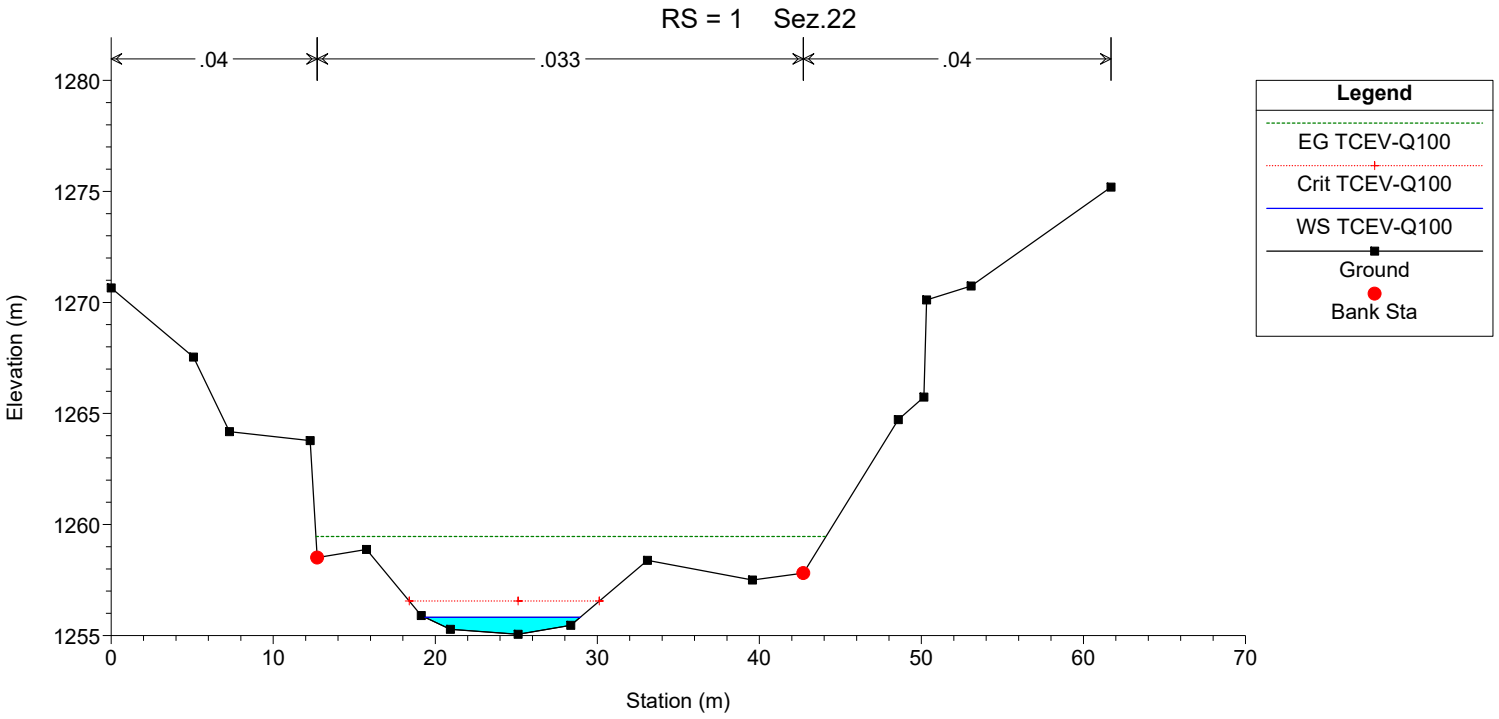

RS = 10 Sez.13
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG TCEV-Q100
Crit TCEV-Q100
WS TCEV-Q100
Ground
Bank Sta
RS = 9 Sez.14
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG TCEV-Q100
Crit TCEV-Q100
WS TCEV-Q100
Ground
Bank Sta
RS = 8 Sez.15
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG TCEV-Q100
Crit TCEV-Q100
WS TCEV-Q100
Ground
Bank Sta


RS = 7 Sez.16
.04
.033
.04
Legend
EG TCEV-Q100
Crit TCEV-Q100
WS TCEV-Q100
Ground
Bank Sta
Elevation (m)
Station (m)

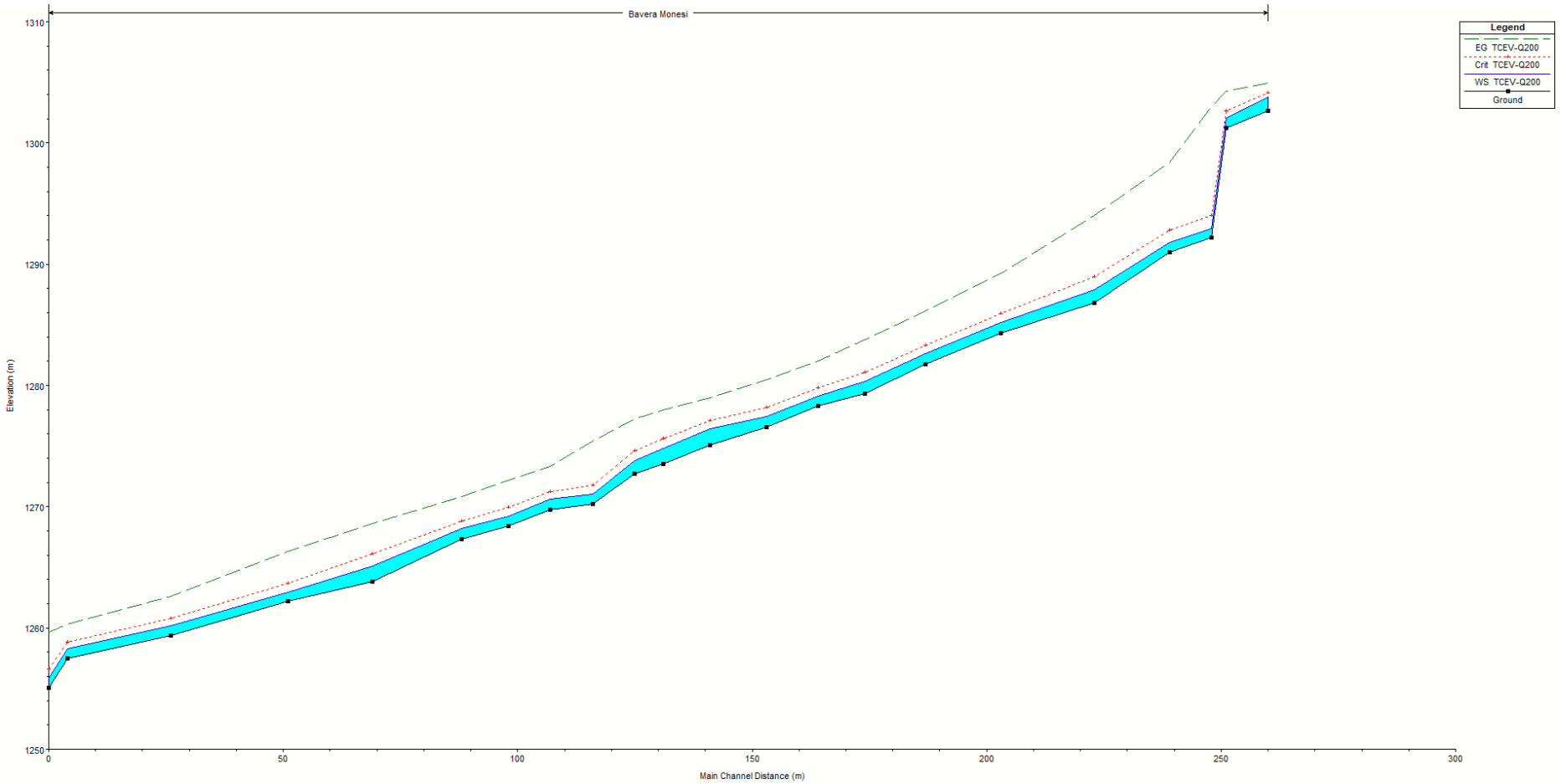

RS = 6 Sez.17
.04
.033
.04
Legend
EG TCEV-Q100
Crit TCEV-Q100
WS TCEV-Q100
Ground
Bank Sta
Elevation (m)
Station (m)

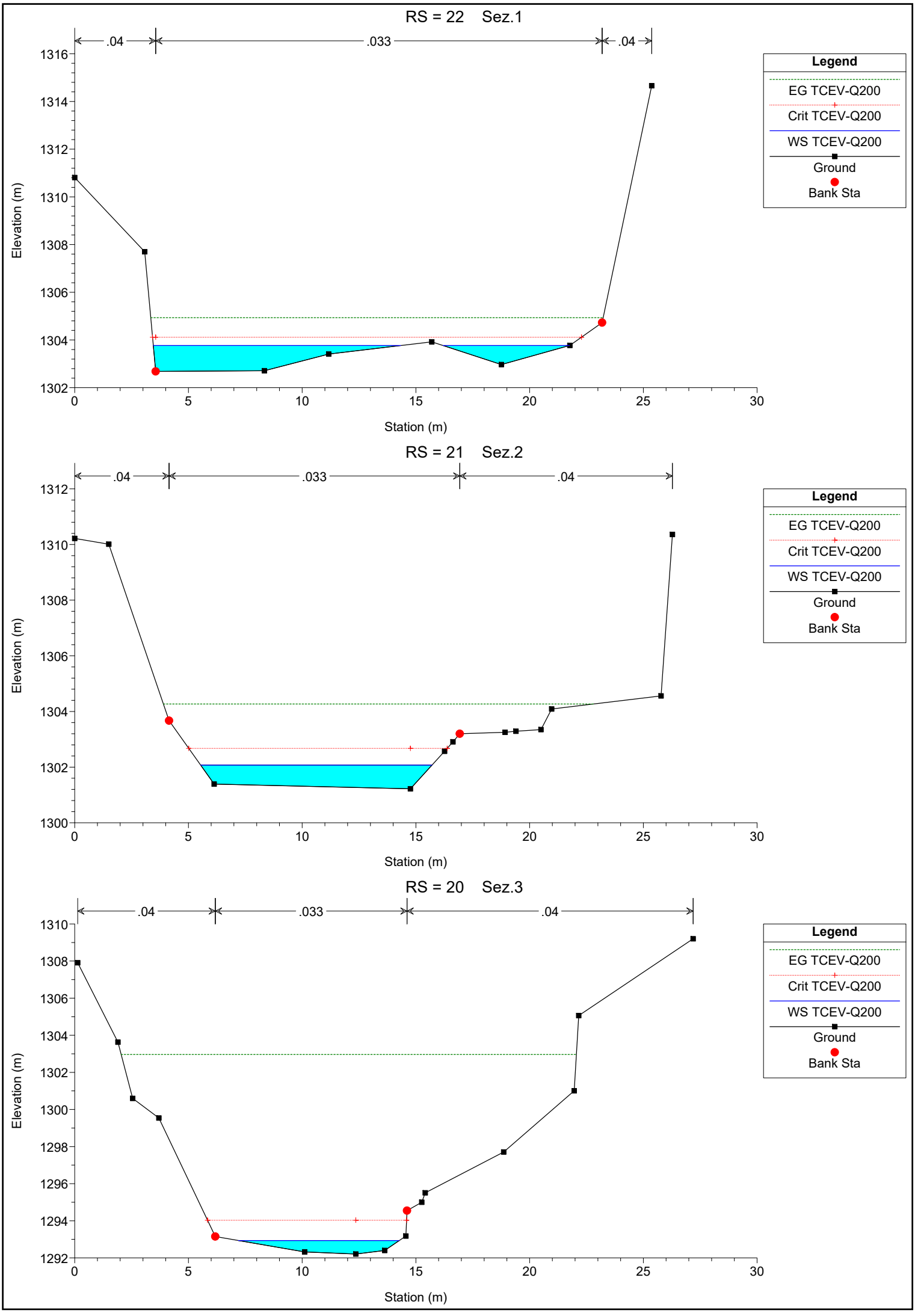

RS = 5 Sez.18
.04
.033
.04
Legend
EG TCEV-Q100
Crit TCEV-Q100
WS TCEV-Q100
Ground
Bank Sta
Elevation (m)
Station (m)

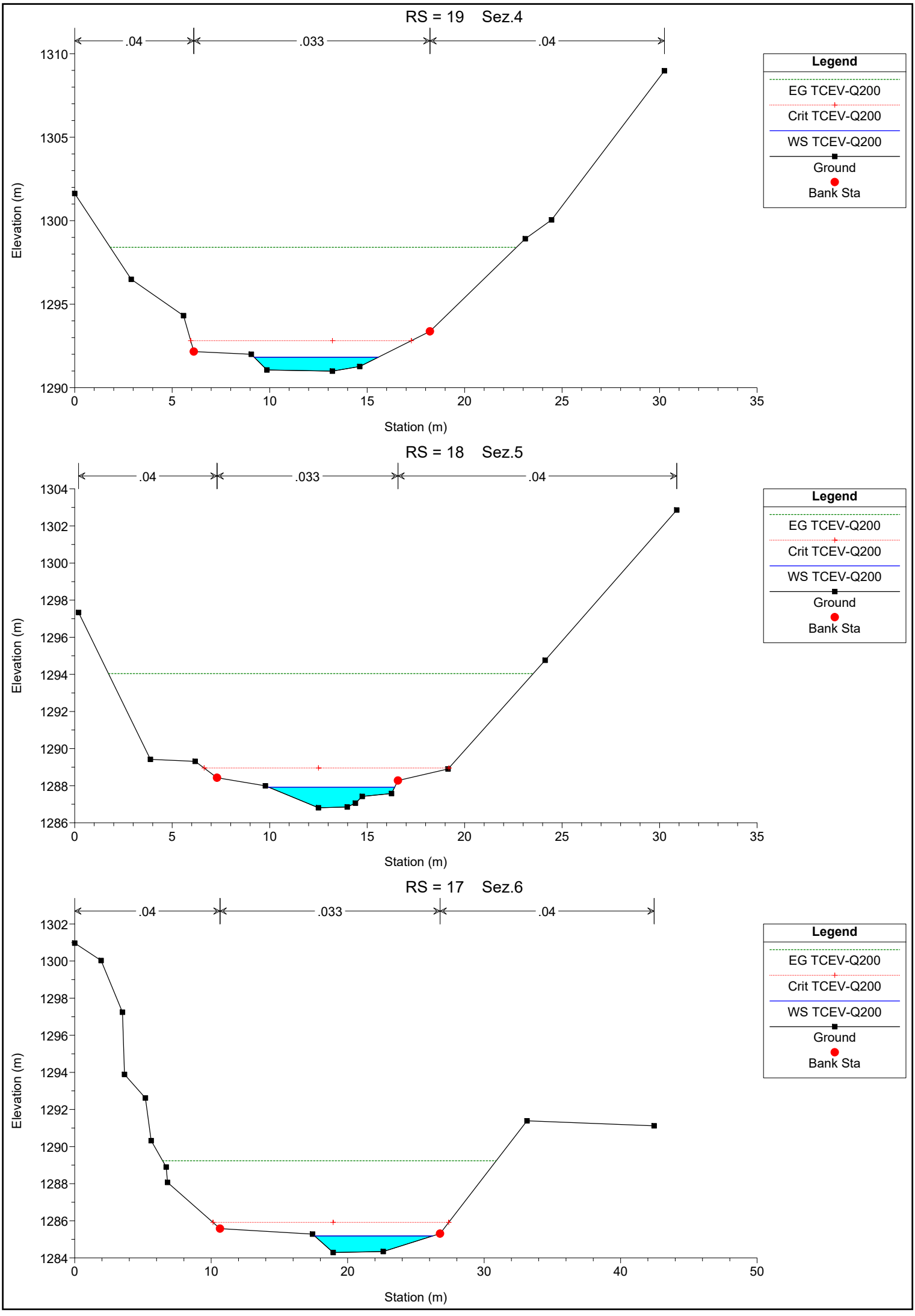

RS = 4 Sez.19
.04
.033
.04
Legend
EG TCEV-Q100
Crit TCEV-Q100
WS TCEV-Q100
Ground
Bank Sta
Elevation (m)
Station (m)
RS = 3 Sez.20
.04
.033
.04
Legend
EG TCEV-Q100
Crit TCEV-Q100
WS TCEV-Q100
Ground
Bank Sta
Elevation (m)
Station (m)
RS = 2 Sez.21
.04
.033
.04
Legend
EG TCEV-Q100
Crit TCEV-Q100
WS TCEV-Q100
Ground
Bank Sta
Elevation (m)
Station (m)

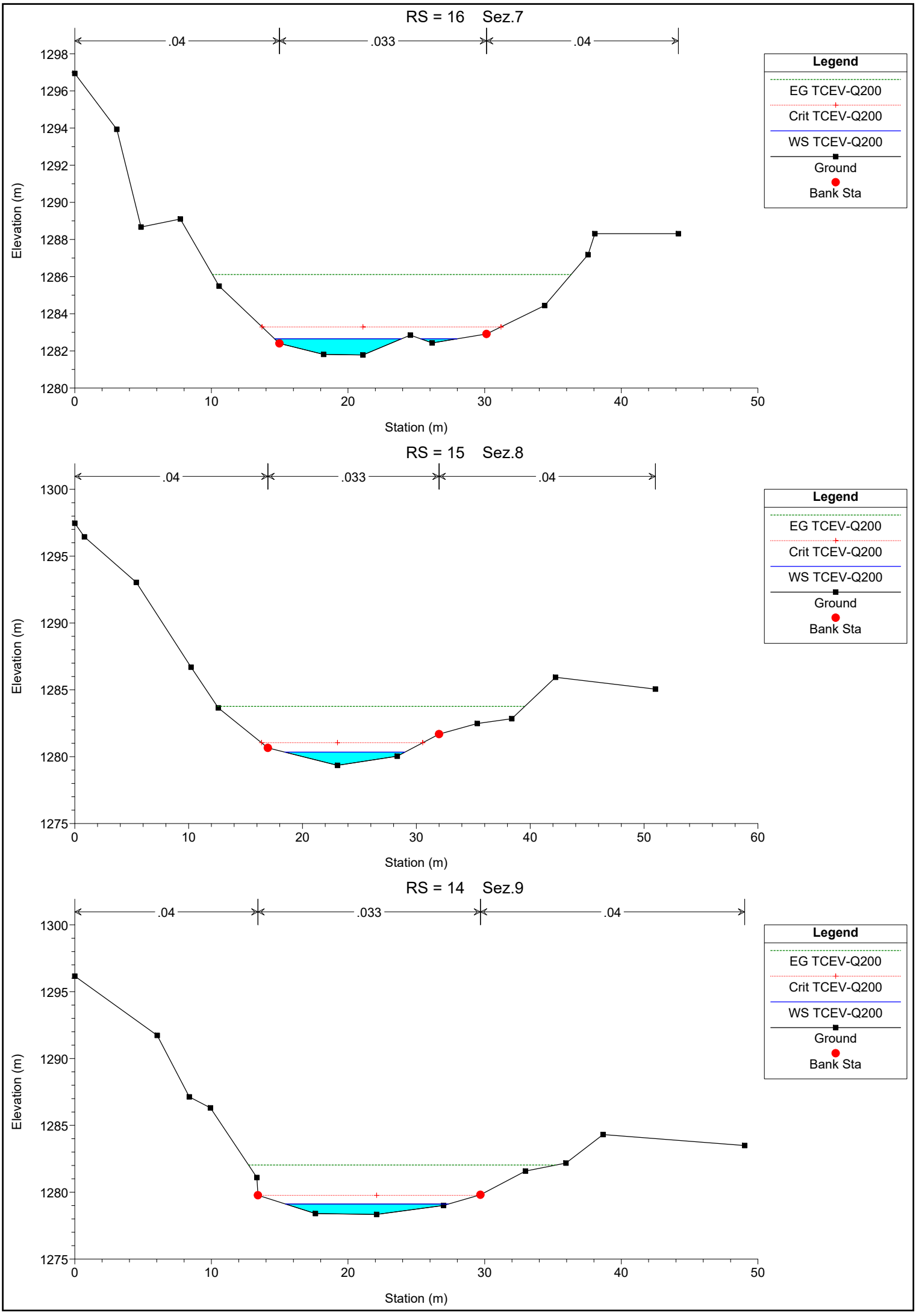

RS = 1 Sez.22
.04
.033
.04
1280
1275
1270
1265
1260
1255
Elevation (m)
0
10
20
30
40
50
60
70
Station (m)
Legend
EG TCEV-Q100
Crit TCEV-Q100
WS TCEV-Q100
Ground
Bank Sta

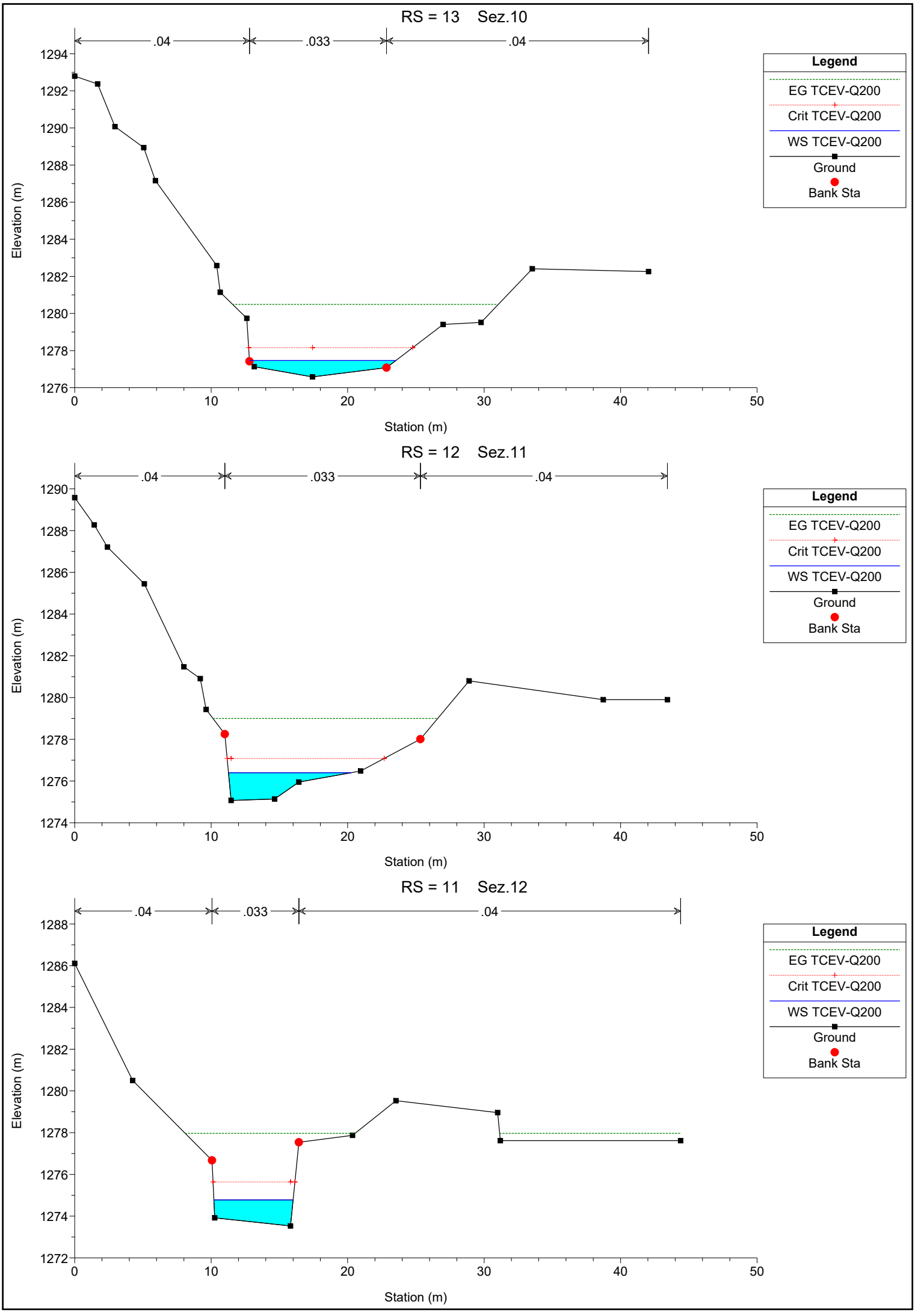
Q200 - Tcev

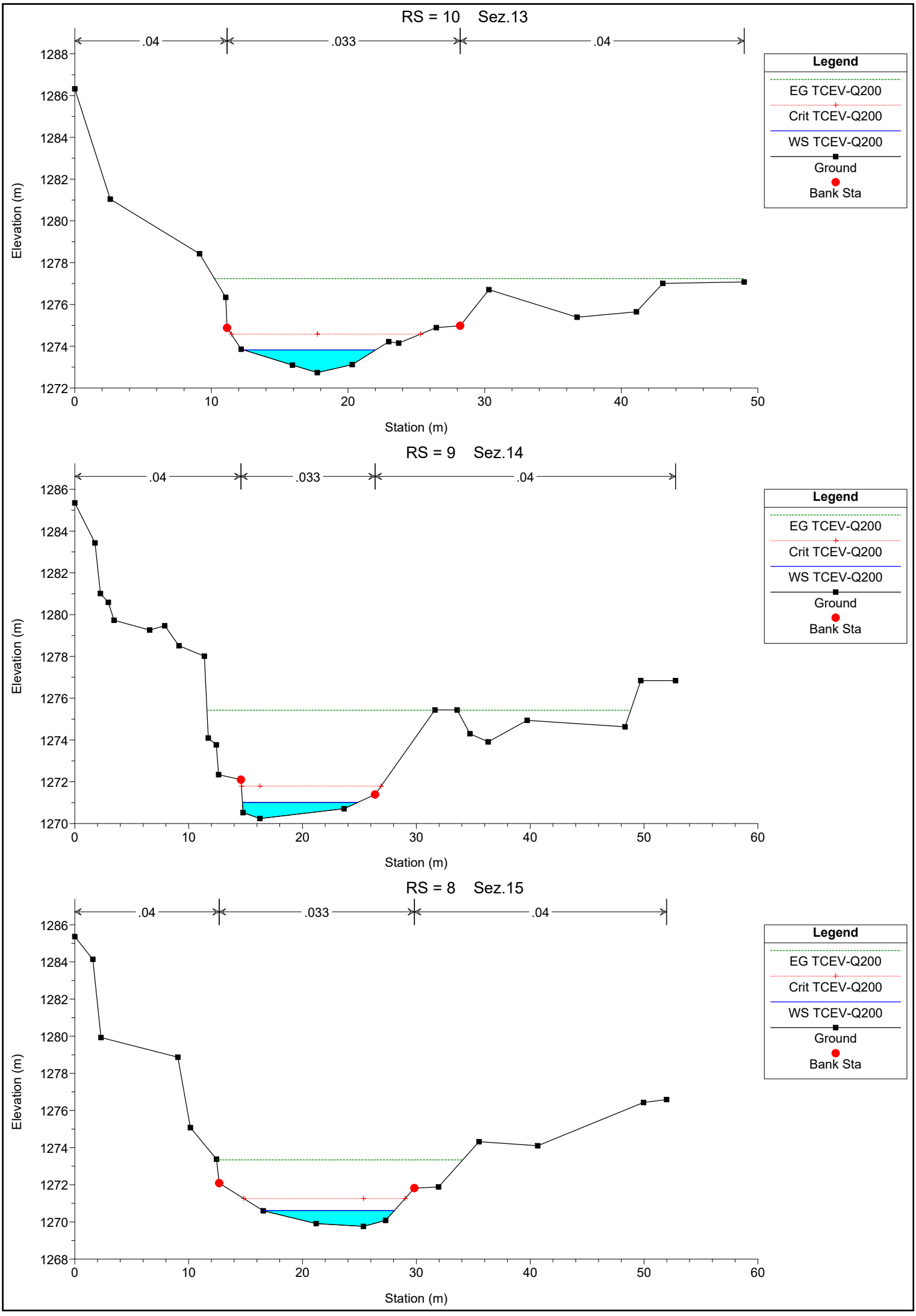

Bavera Monesi
Legend
EG TCEV-Q200
Crit TCEV-Q200
WS TCEV-Q200
Ground
Elevation (m)
1310
1300
1290
1280
1270
1260
1250
0
50
100
150
200
250
300
Main Channel Distance (m)

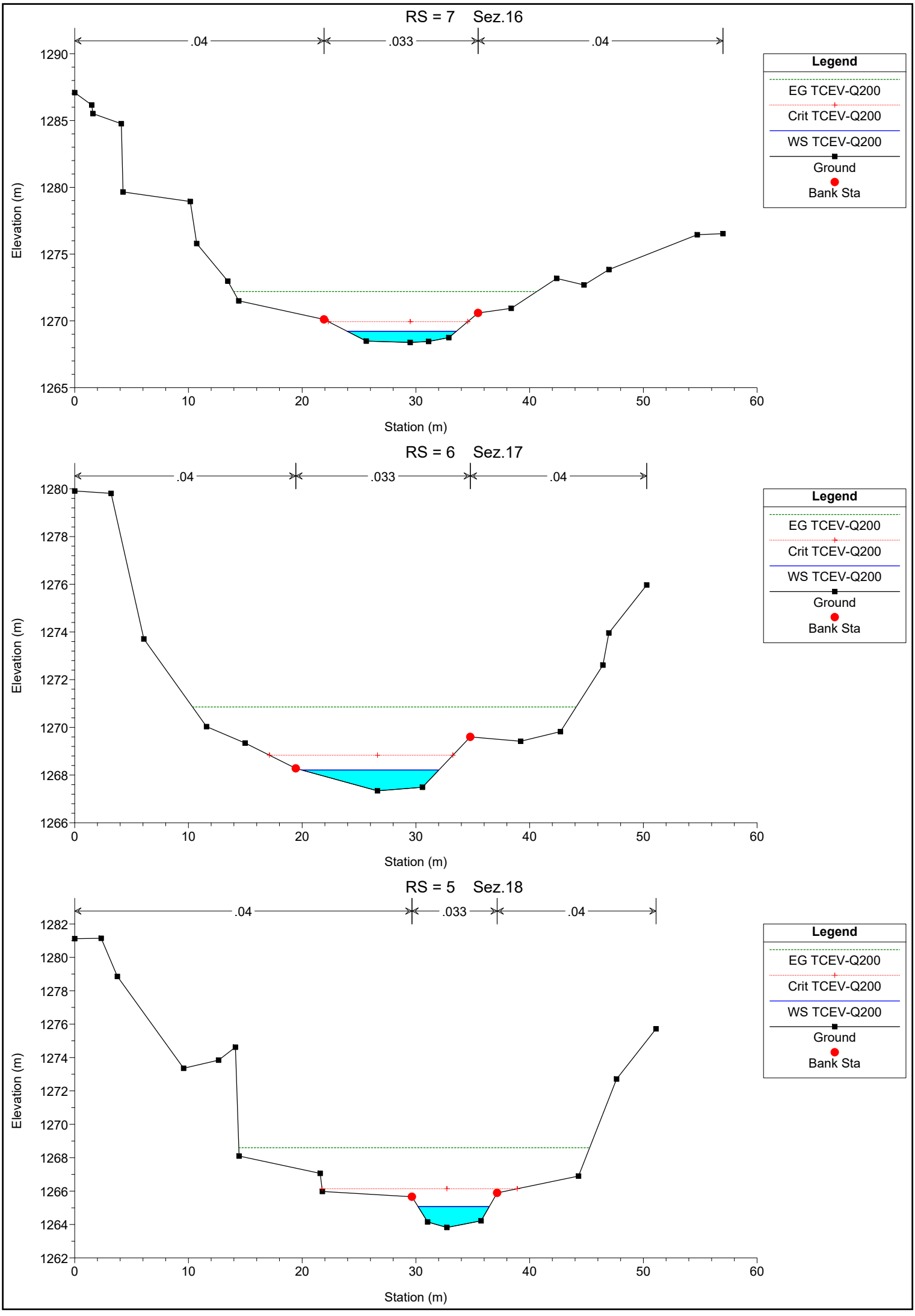

RS = 22 Sez.1
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG TCEV-Q200
Crit TCEV-Q200
WS TCEV-Q200
Ground
Bank Sta
RS = 21 Sez.2
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG TCEV-Q200
Crit TCEV-Q200
WS TCEV-Q200
Ground
Bank Sta
RS = 20 Sez.3
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG TCEV-Q200
Crit TCEV-Q200
WS TCEV-Q200
Ground
Bank Sta

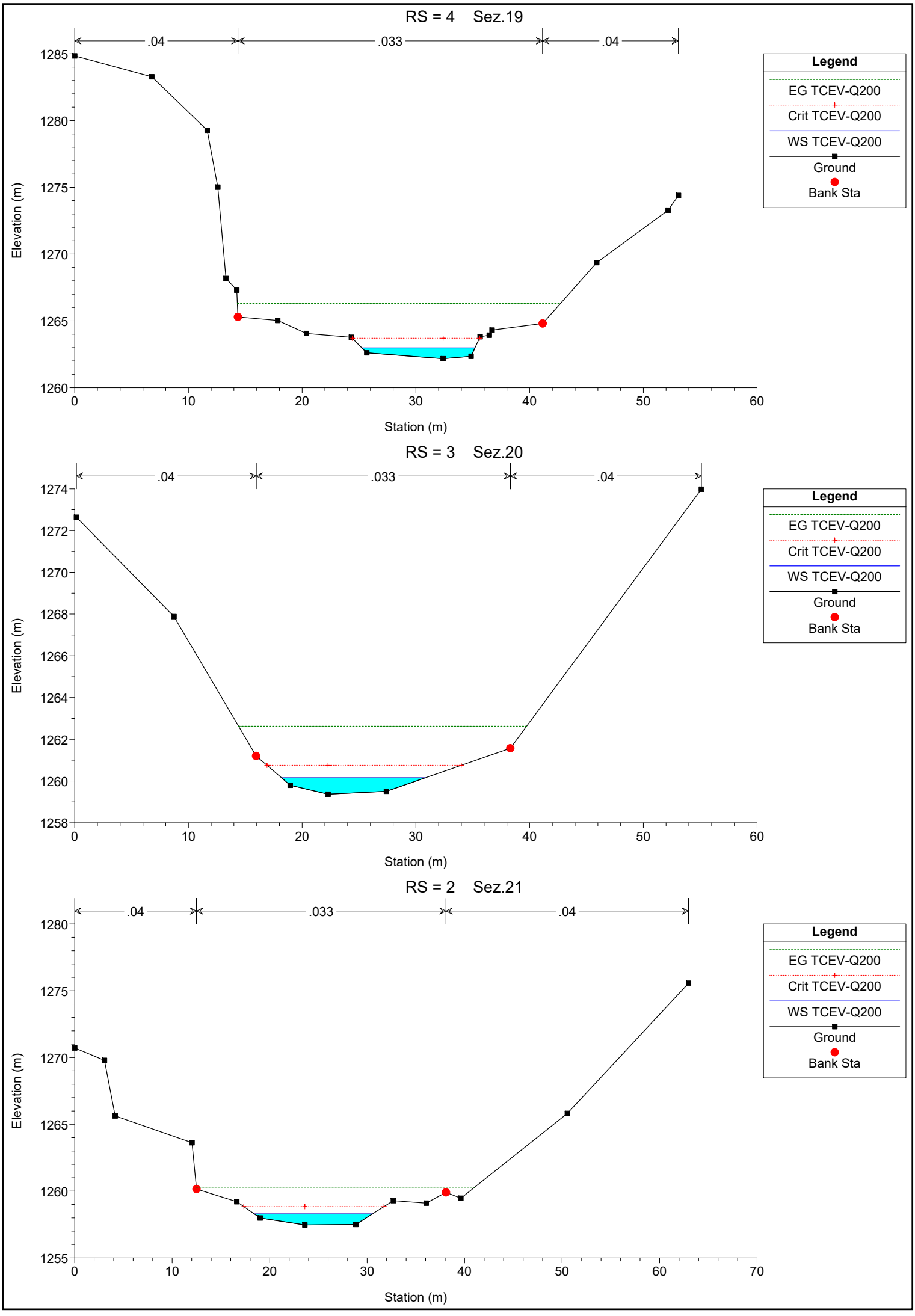

RS = 19 Sez.4
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG TCEV-Q200
Crit TCEV-Q200
WS TCEV-Q200
Ground
Bank Sta
RS = 18 Sez.5
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG TCEV-Q200
Crit TCEV-Q200
WS TCEV-Q200
Ground
Bank Sta
RS = 17 Sez.6
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG TCEV-Q200
Crit TCEV-Q200
WS TCEV-Q200
Ground
Bank Sta

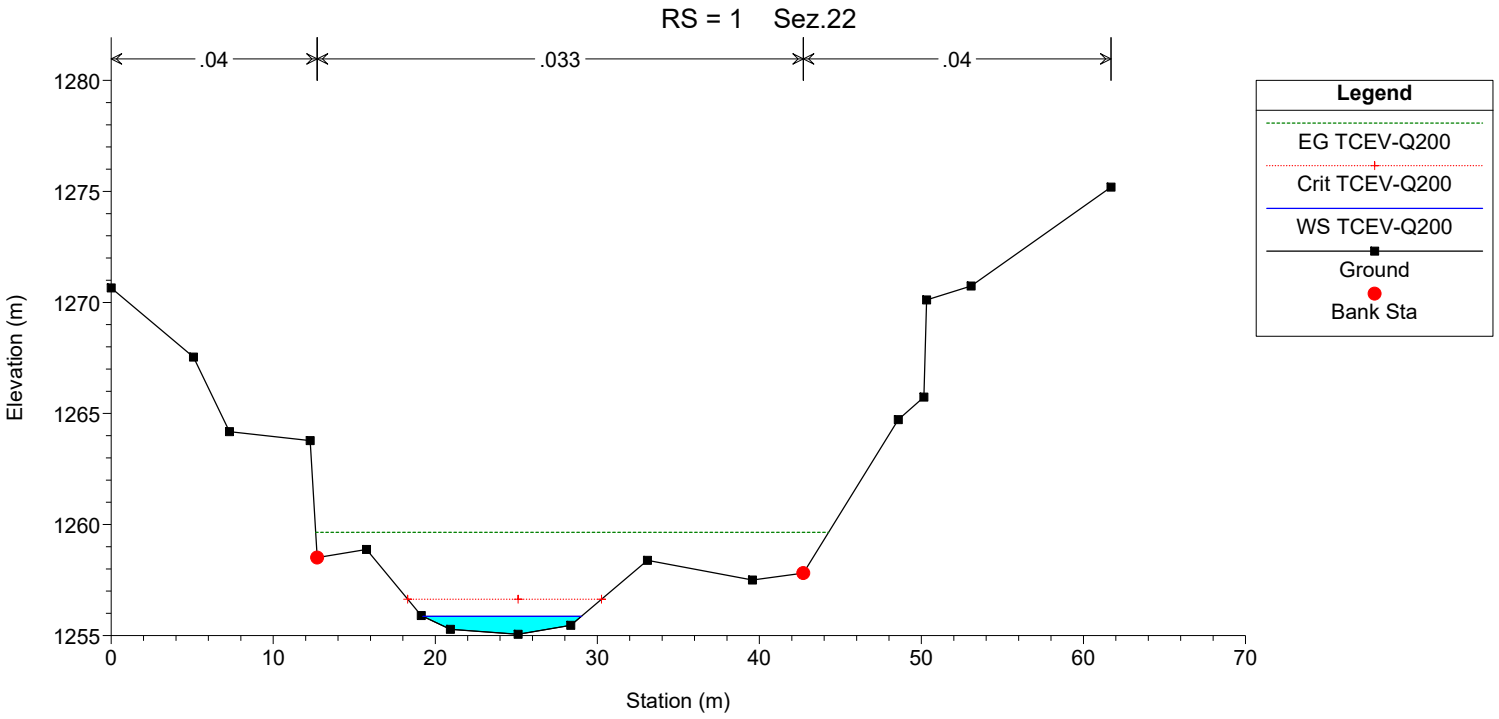

RS = 16 Sez.7
.04
.033
.04
Legend
EG TCEV-Q200
Crit TCEV-Q200
WS TCEV-Q200
Ground
Bank Sta
Elevation (m)
Station (m)
RS = 15 Sez.8
.04
.033
.04
Legend
EG TCEV-Q200
Crit TCEV-Q200
WS TCEV-Q200
Ground
Bank Sta
Elevation (m)
Station (m)
RS = 14 Sez.9
.04
.033
.04
Legend
EG TCEV-Q200
Crit TCEV-Q200
WS TCEV-Q200
Ground
Bank Sta
Elevation (m)
Station (m)


RS = 13 Sez.10
.04
.033
.04
Legend
EG TCEV-Q200
Crit TCEV-Q200
WS TCEV-Q200
Ground
Bank Sta
Elevation (m)
Station (m)
RS = 12 Sez.11
.04
.033
.04
Legend
EG TCEV-Q200
Crit TCEV-Q200
WS TCEV-Q200
Ground
Bank Sta
Elevation (m)
Station (m)
RS = 11 Sez.12
.04
.033
.04
Legend
EG TCEV-Q200
Crit TCEV-Q200
WS TCEV-Q200
Ground
Bank Sta
Elevation (m)
Station (m)

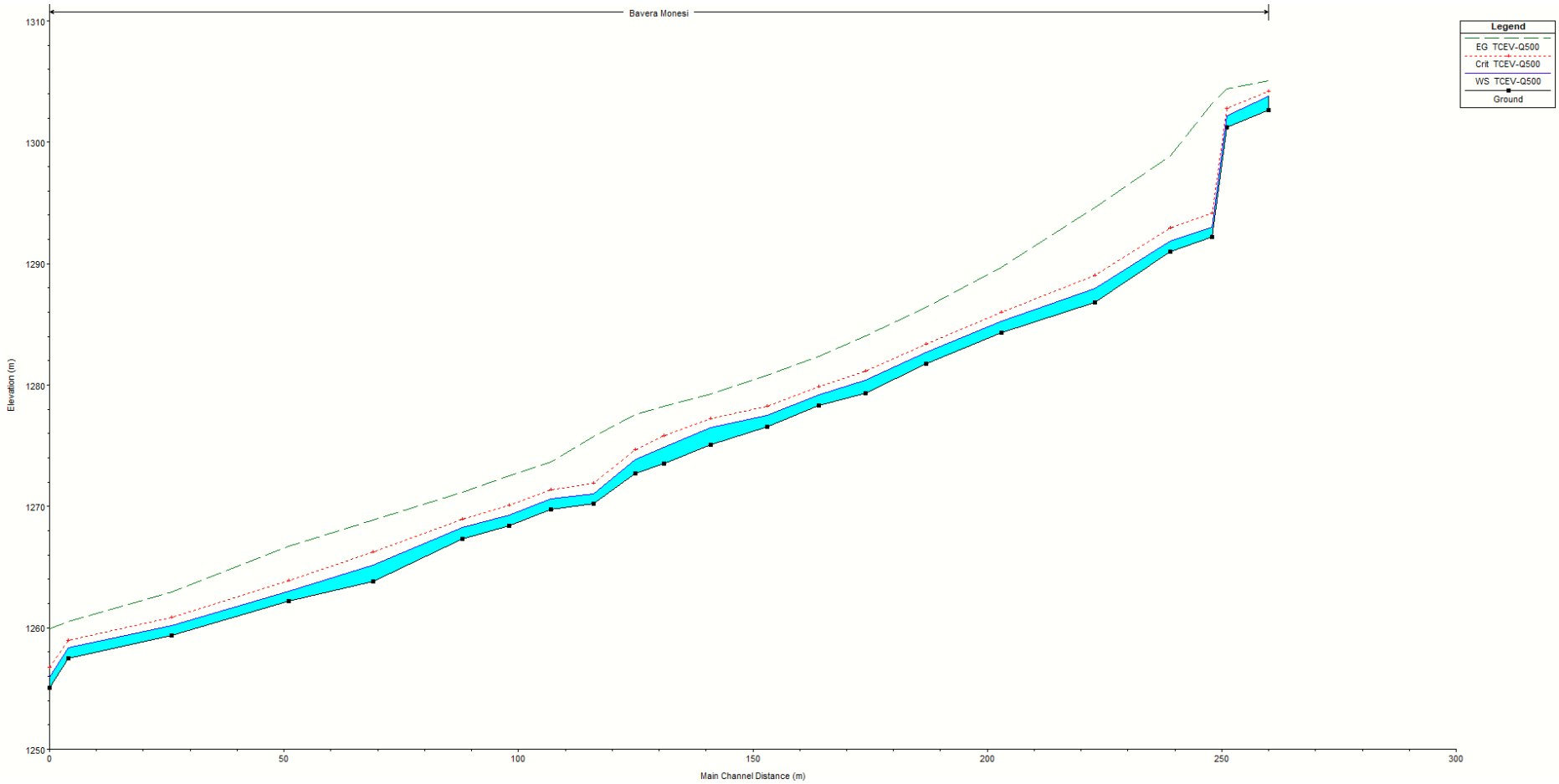

RS = 10 Sez.13
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG TCEV-Q200
Crit TCEV-Q200
WS TCEV-Q200
Ground
Bank Sta
RS = 9 Sez.14
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG TCEV-Q200
Crit TCEV-Q200
WS TCEV-Q200
Ground
Bank Sta
RS = 8 Sez.15
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG TCEV-Q200
Crit TCEV-Q200
WS TCEV-Q200
Ground
Bank Sta

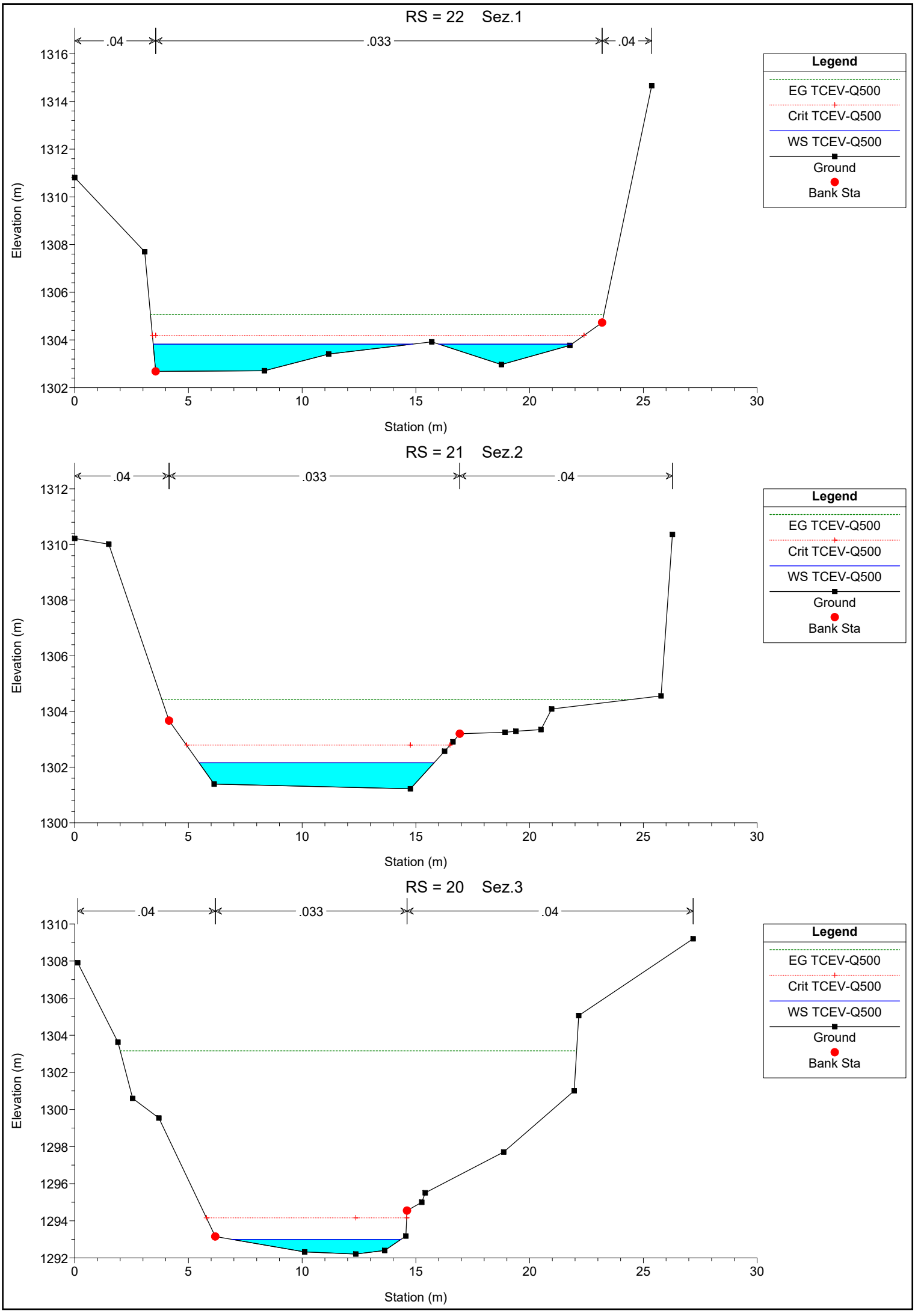

RS = 7 Sez.16
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG TCEV-Q200
Crit TCEV-Q200
WS TCEV-Q200
Ground
Bank Sta
RS = 6 Sez.17
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG TCEV-Q200
Crit TCEV-Q200
WS TCEV-Q200
Ground
Bank Sta
RS = 5 Sez.18
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG TCEV-Q200
Crit TCEV-Q200
WS TCEV-Q200
Ground
Bank Sta

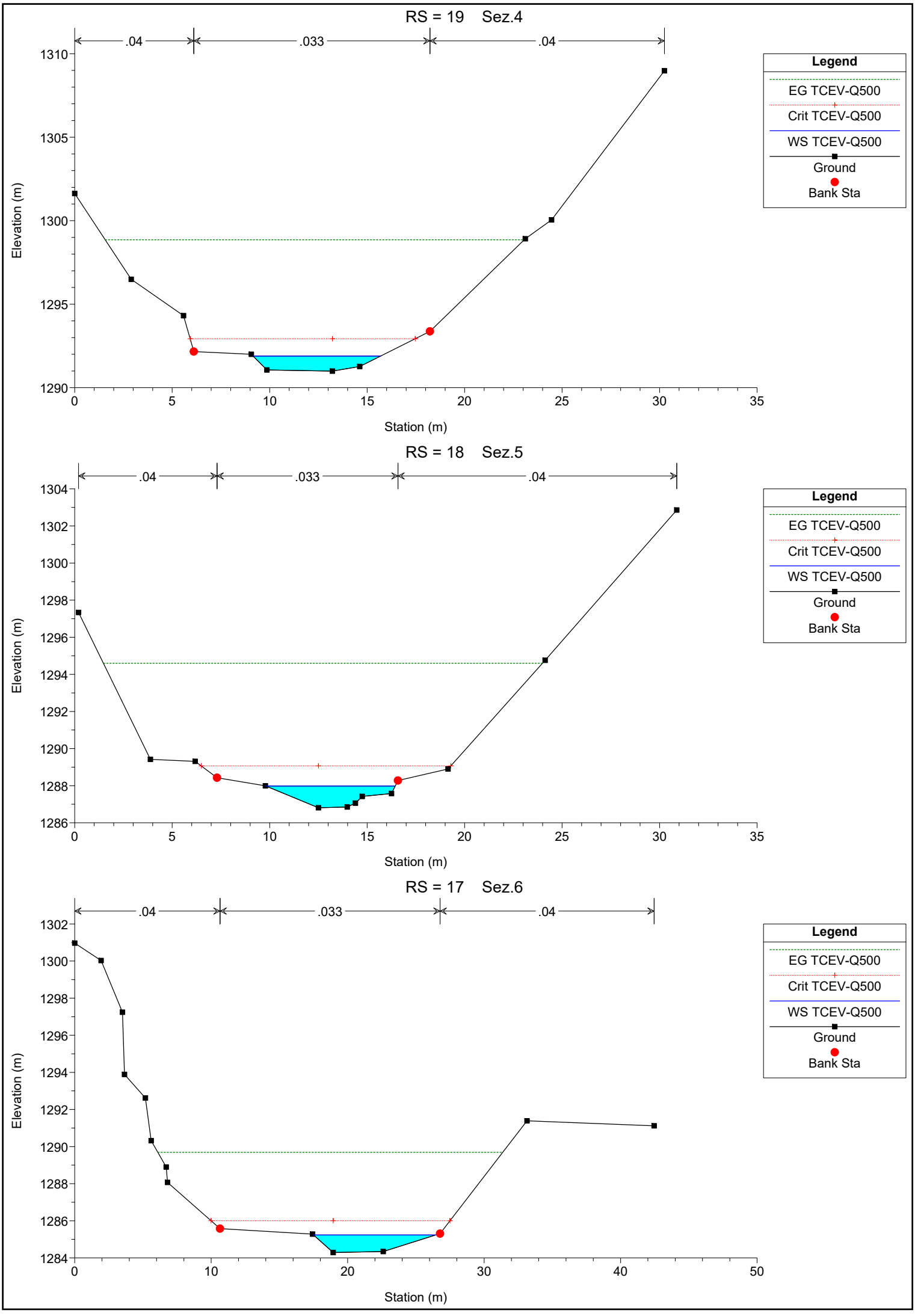

RS = 4 Sez.19
.04
.033
.04
Legend
EG TCEV-Q200
Crit TCEV-Q200
WS TCEV-Q200
Ground
Bank Sta
Elevation (m)
Station (m)
RS = 3 Sez.20
.04
.033
.04
Legend
EG TCEV-Q200
Crit TCEV-Q200
WS TCEV-Q200
Ground
Bank Sta
Elevation (m)
Station (m)
RS = 2 Sez.21
.04
.033
.04
Legend
EG TCEV-Q200
Crit TCEV-Q200
WS TCEV-Q200
Ground
Bank Sta
Elevation (m)
Station (m)

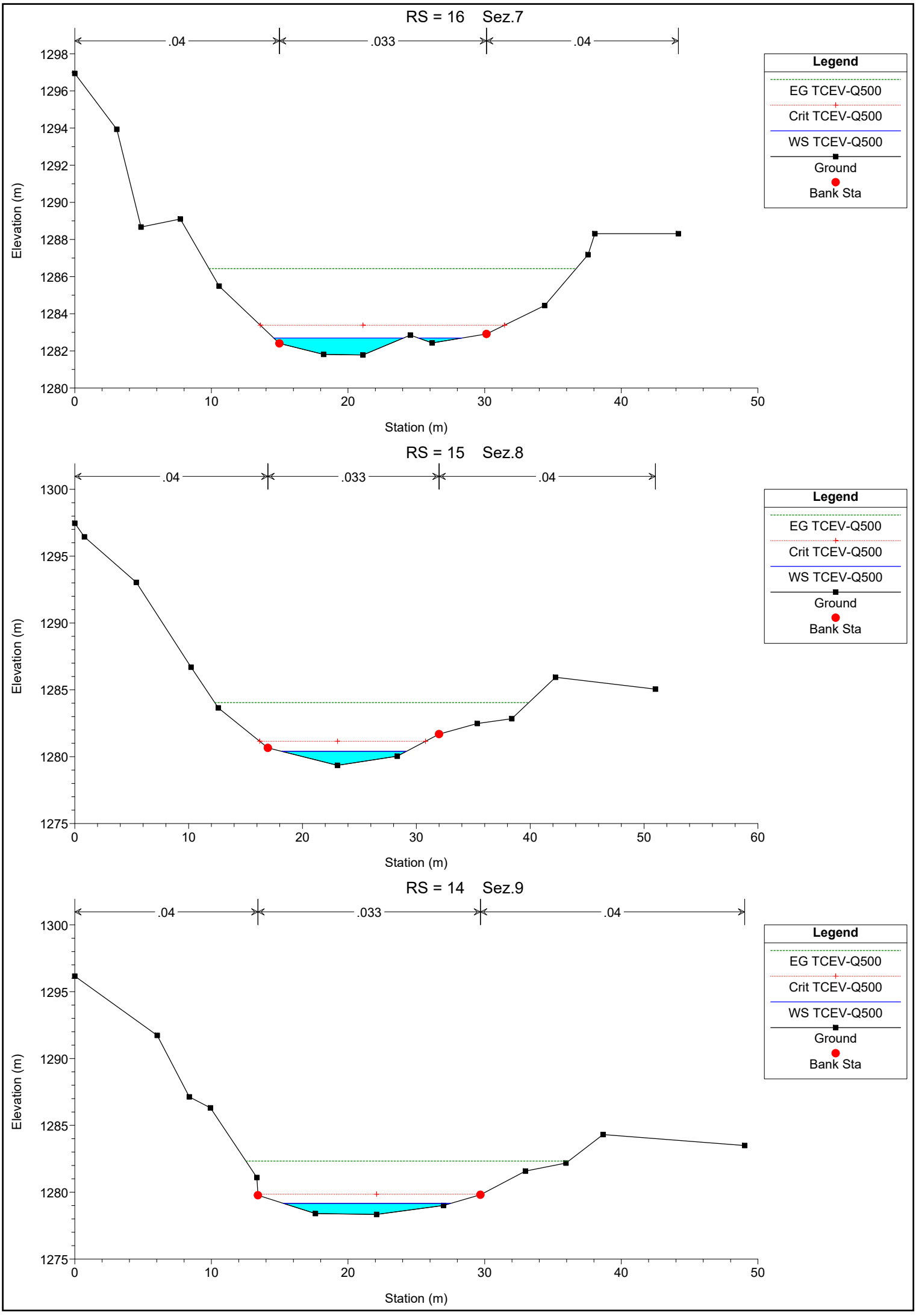

RS = 1 Sez.22
.04
.033
.04
1280
1275
1270
1265
1260
1255
Elevation (m)
0
10
20
30
40
50
60
70
Station (m)
Legend
EG TCEV-Q200
Crit TCEV-Q200
WS TCEV-Q200
Ground
Bank Sta

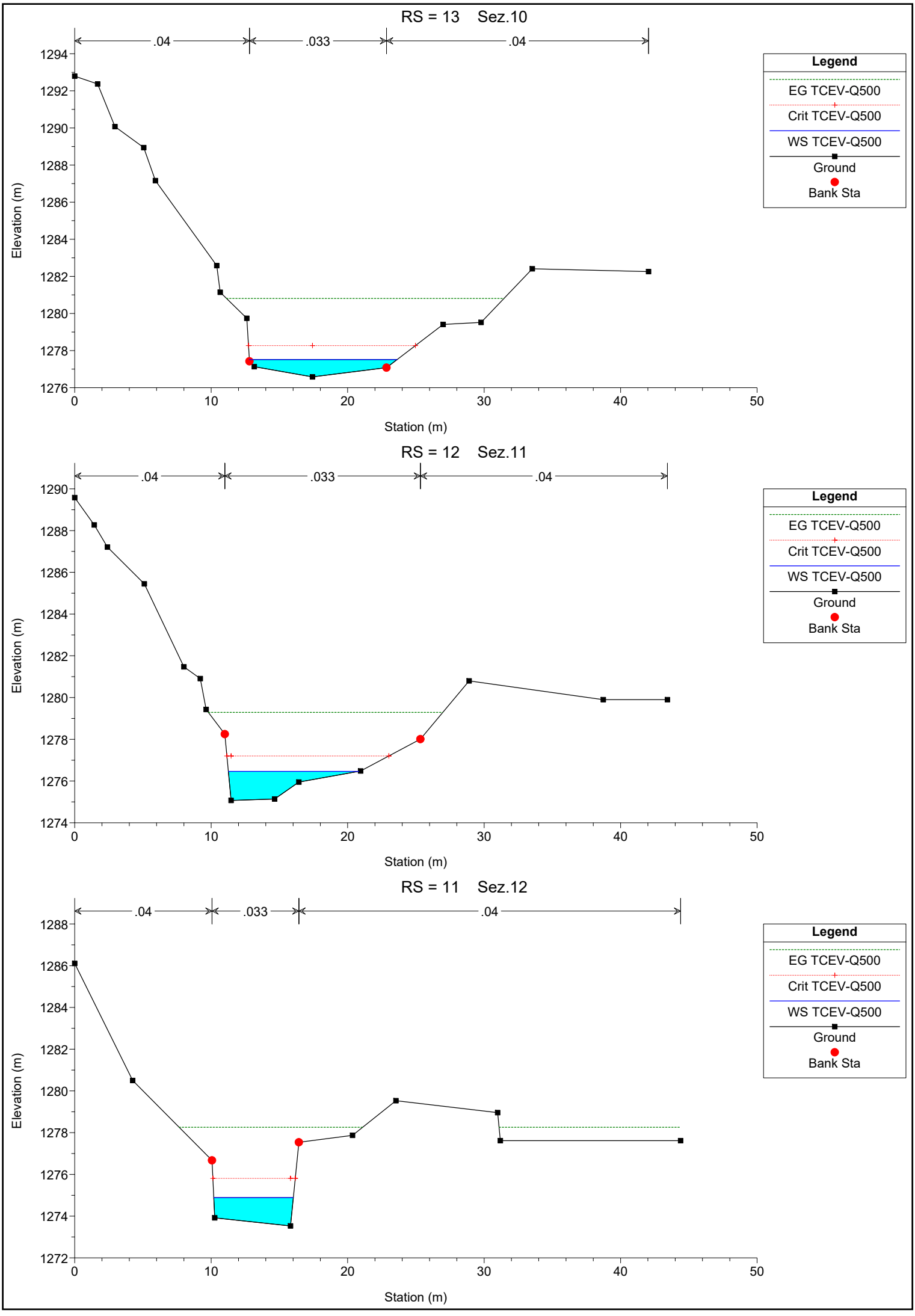
Q500 - Tcev

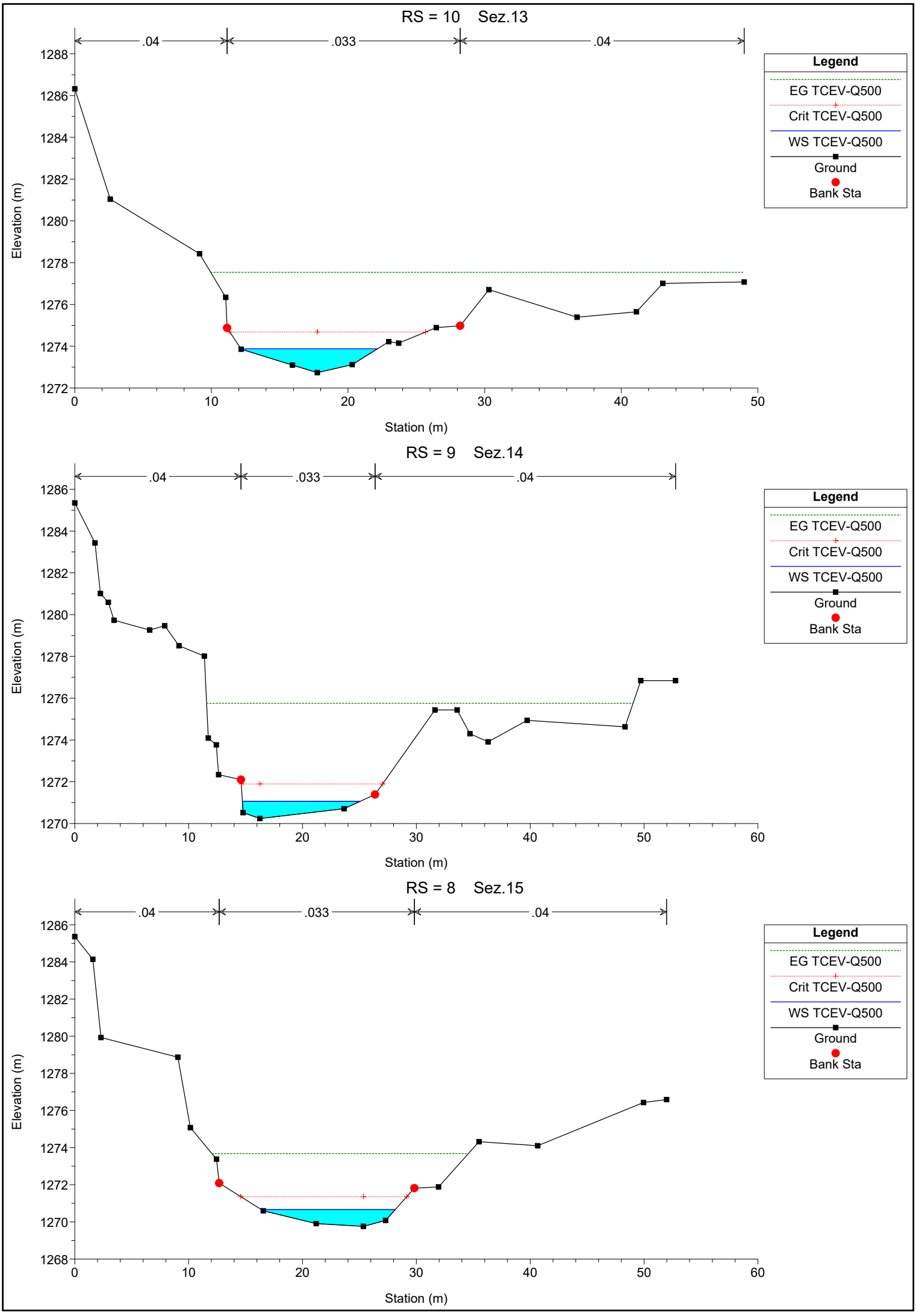

Bavera Monesi
Legend
EG TCEV-Q500
Crit TCEV-Q500
WS TCEV-Q500
Ground
Elevation (m)
1310
1300
1290
1280
1270
1260
1250
0
50
100
150
200
250
300
Main Channel Distance (m)

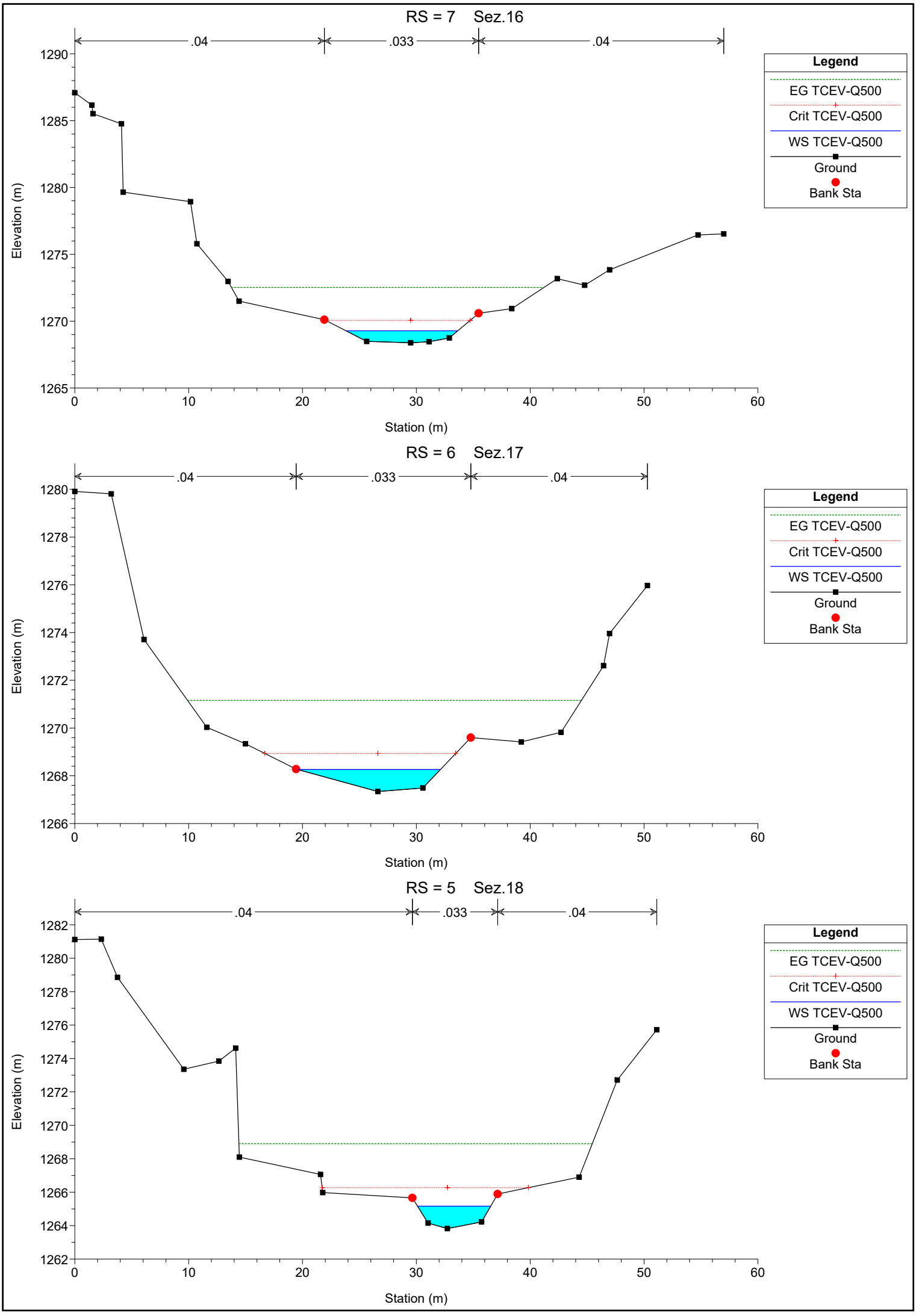

RS = 22 Sez.1
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG TCEV-Q500
Crit TCEV-Q500
WS TCEV-Q500
Ground
Bank Sta
RS = 21 Sez.2
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG TCEV-Q500
Crit TCEV-Q500
WS TCEV-Q500
Ground
Bank Sta
RS = 20 Sez.3
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG TCEV-Q500
Crit TCEV-Q500
WS TCEV-Q500
Ground
Bank Sta

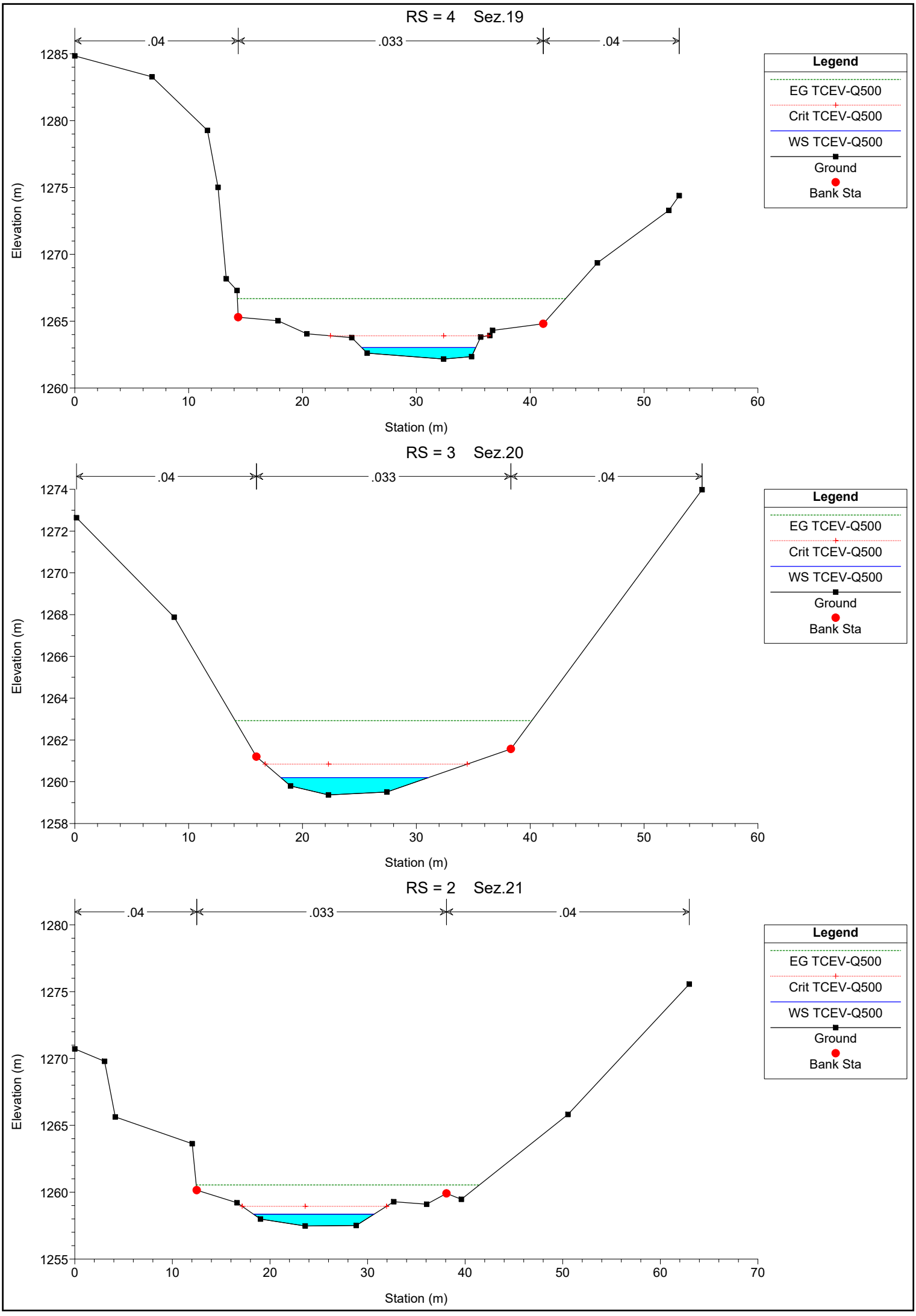

RS = 19 Sez.4
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG TCEV-Q500
Crit TCEV-Q500
WS TCEV-Q500
Ground
Bank Sta
RS = 18 Sez.5
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG TCEV-Q500
Crit TCEV-Q500
WS TCEV-Q500
Ground
Bank Sta
RS = 17 Sez.6
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG TCEV-Q500
Crit TCEV-Q500
WS TCEV-Q500
Ground
Bank Sta

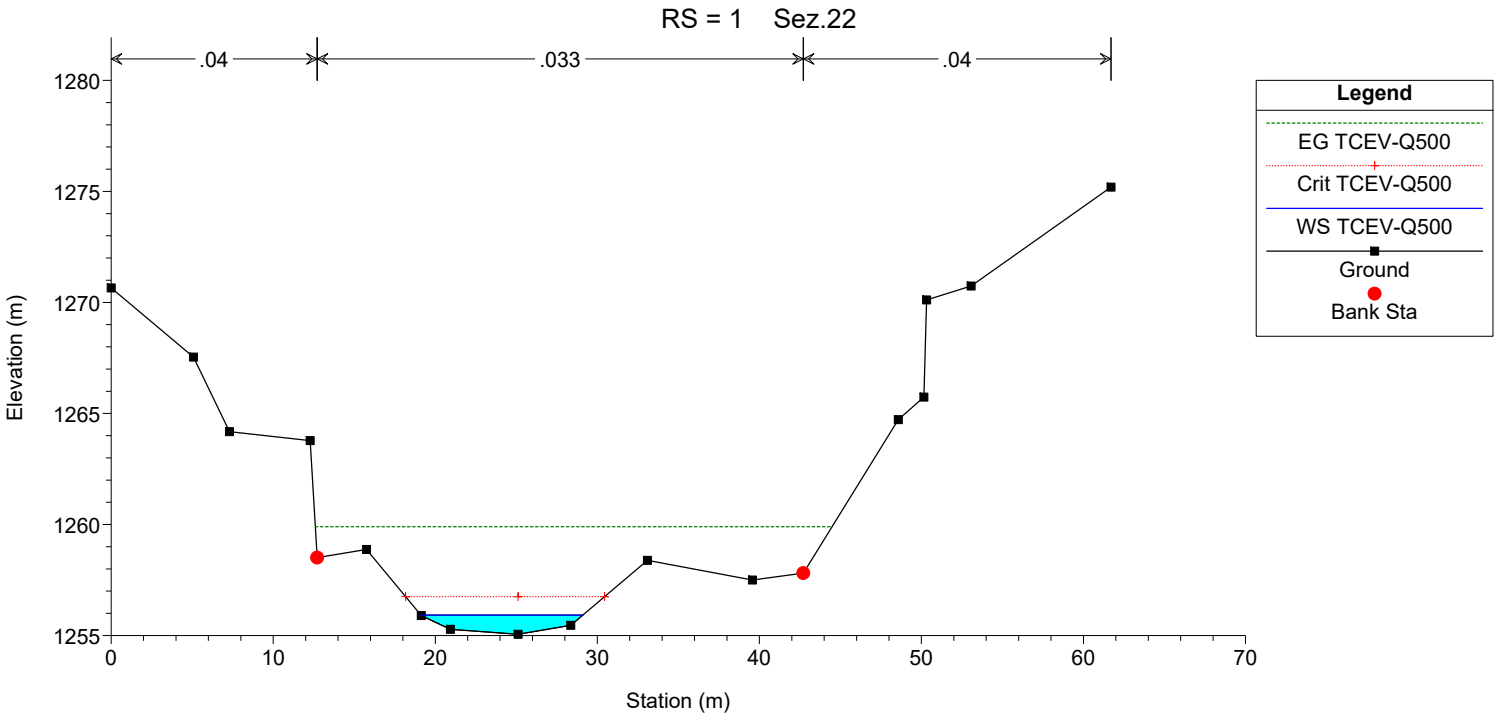

RS = 16 Sez.7
.04
.033
.04
Legend
EG TCEV-Q500
Crit TCEV-Q500
WS TCEV-Q500
Ground
Bank Sta
Elevation (m)
Station (m)
RS = 15 Sez.8
.04
.033
.04
Legend
EG TCEV-Q500
Crit TCEV-Q500
WS TCEV-Q500
Ground
Bank Sta
Elevation (m)
Station (m)
RS = 14 Sez.9
.04
.033
.04
Legend
EG TCEV-Q500
Crit TCEV-Q500
WS TCEV-Q500
Ground
Bank Sta
Elevation (m)
Station (m)


RS = 13 Sez.10
.04
.033
.04
Legend
EG TCEV-Q500
Crit TCEV-Q500
WS TCEV-Q500
Ground
Bank Sta
Elevation (m)
Station (m)
RS = 12 Sez.11
.04
.033
.04
Legend
EG TCEV-Q500
Crit TCEV-Q500
WS TCEV-Q500
Ground
Bank Sta
Elevation (m)
Station (m)
RS = 11 Sez.12
.04
.033
.04
Legend
EG TCEV-Q500
Crit TCEV-Q500
WS TCEV-Q500
Ground
Bank Sta
Elevation (m)
Station (m)

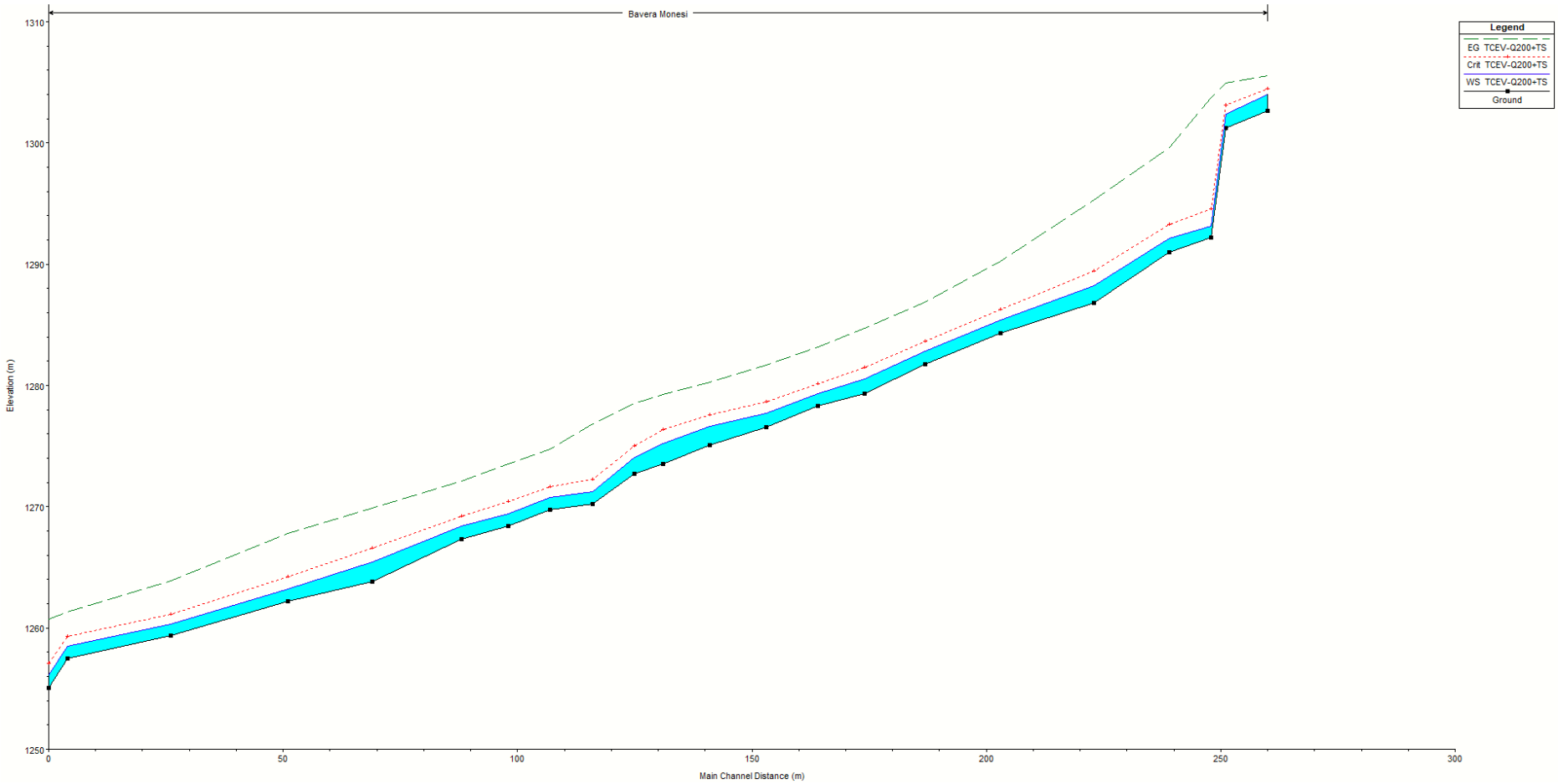

RS = 10 Sez.13
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG TCEV-Q500
Crit TCEV-Q500
WS TCEV-Q500
Ground
Bank Sta
RS = 9 Sez.14
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG TCEV-Q500
Crit TCEV-Q500
WS TCEV-Q500
Ground
Bank Sta
RS = 8 Sez.15
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG TCEV-Q500
Crit TCEV-Q500
WS TCEV-Q500
Ground
Bank Sta

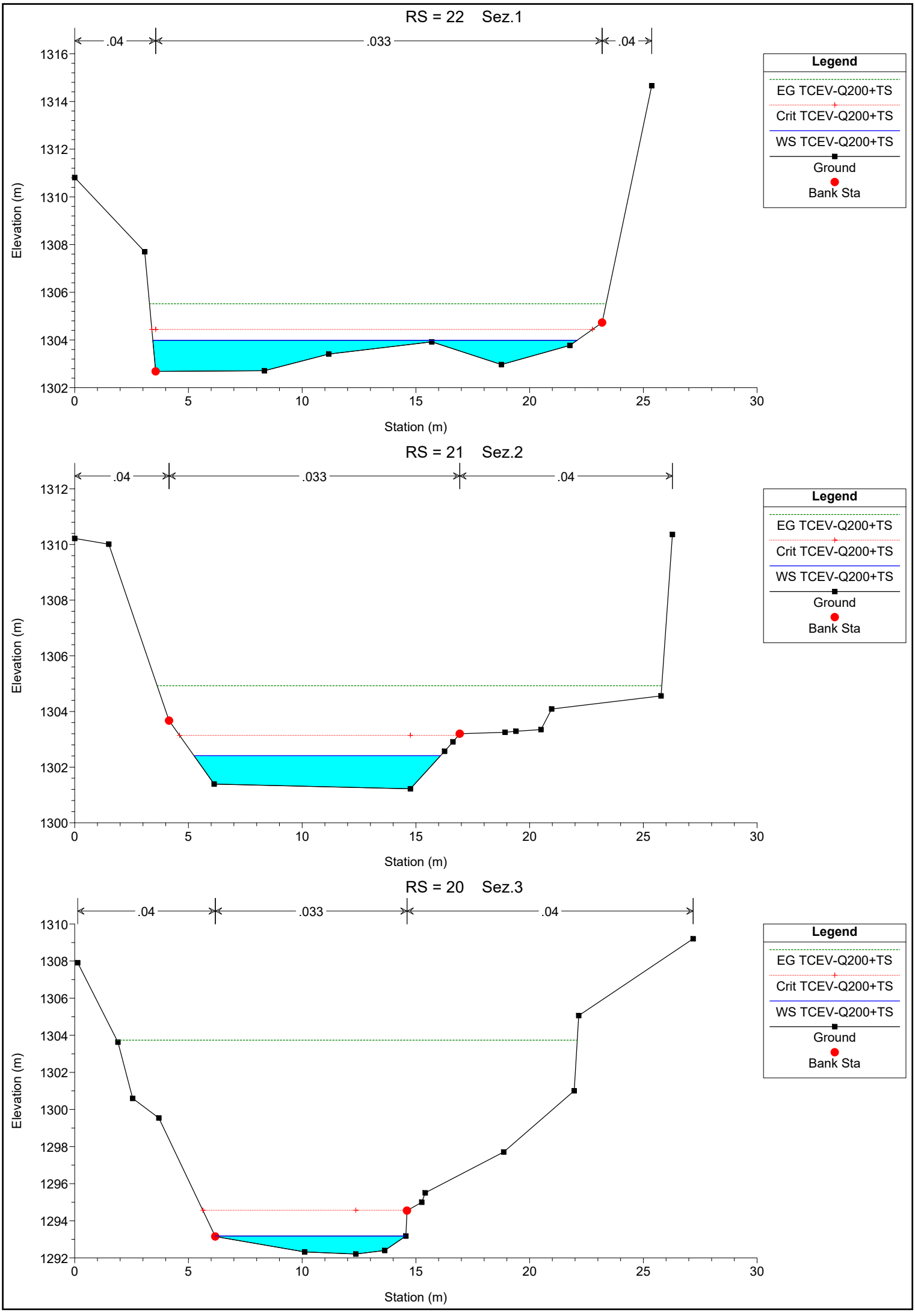

RS = 7 Sez.16
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG TCEV-Q500
Crit TCEV-Q500
WS TCEV-Q500
Ground
Bank Sta
RS = 6 Sez.17
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG TCEV-Q500
Crit TCEV-Q500
WS TCEV-Q500
Ground
Bank Sta
RS = 5 Sez.18
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG TCEV-Q500
Crit TCEV-Q500
WS TCEV-Q500
Ground
Bank Sta

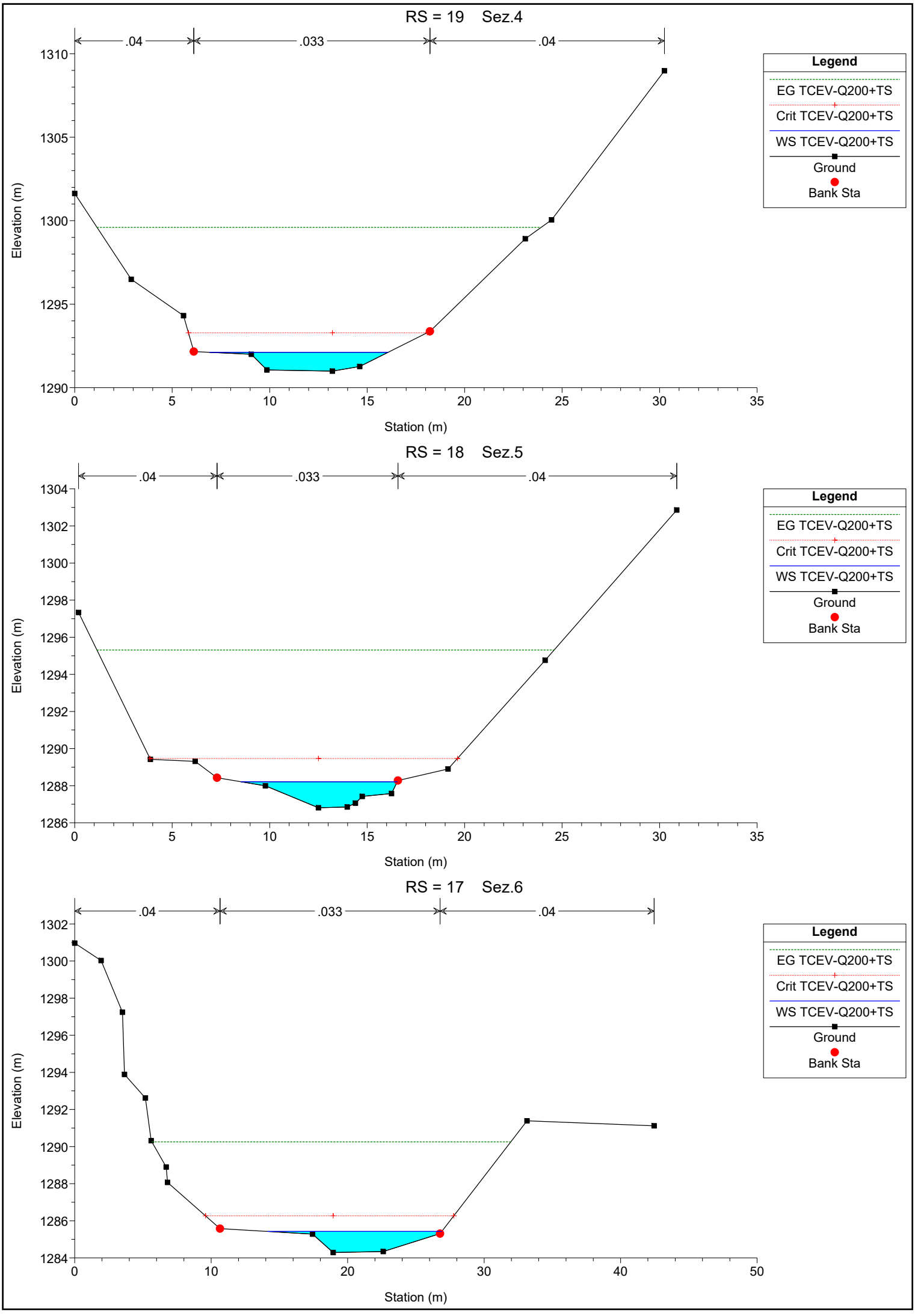

RS = 4 Sez.19
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG TCEV-Q500
Crit TCEV-Q500
WS TCEV-Q500
Ground
Bank Sta
RS = 3 Sez.20
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG TCEV-Q500
Crit TCEV-Q500
WS TCEV-Q500
Ground
Bank Sta
RS = 2 Sez.21
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG TCEV-Q500
Crit TCEV-Q500
WS TCEV-Q500
Ground
Bank Sta

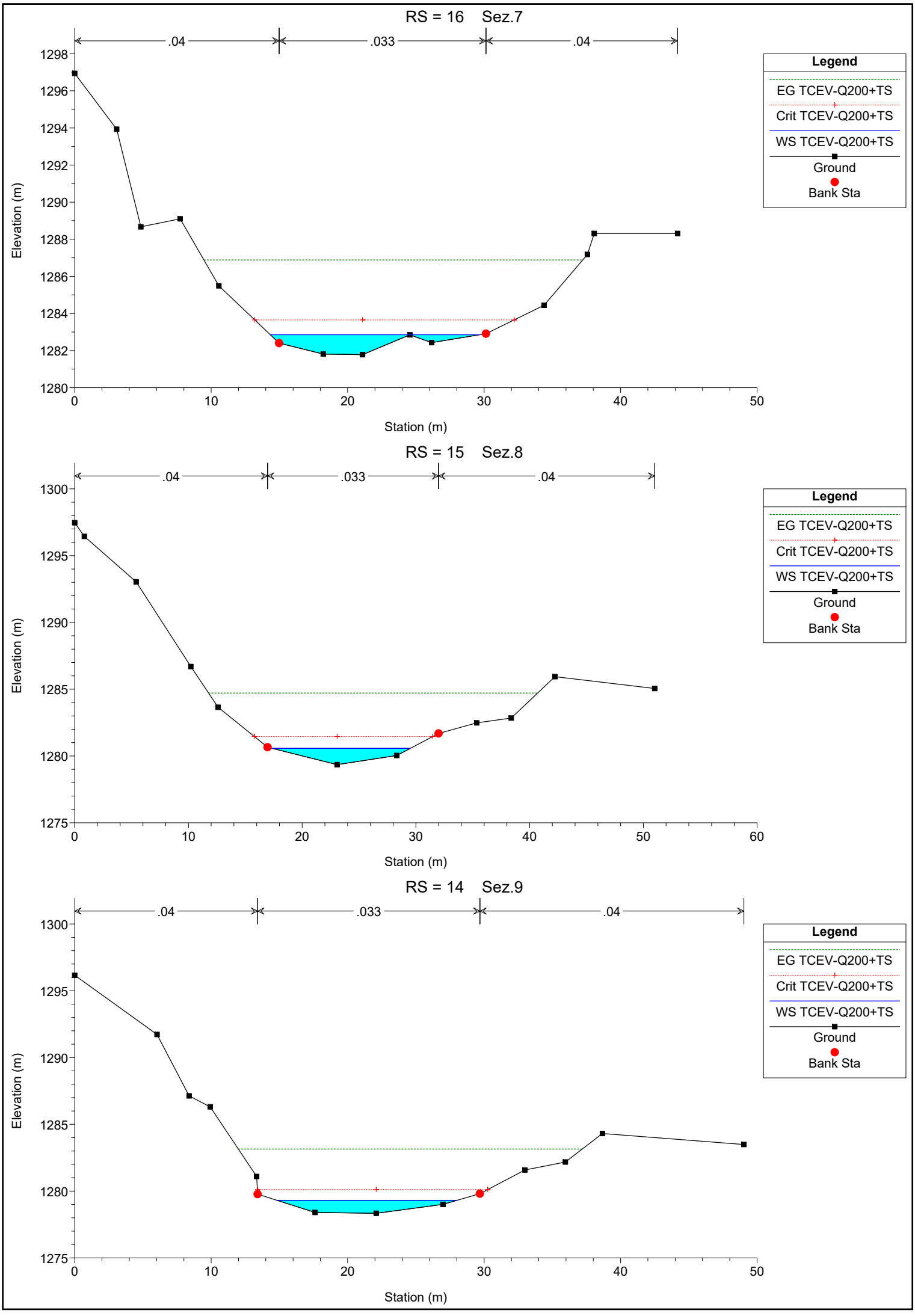

RS = 1 Sez.22
.04
.033
.04
1280
1275
1270
1265
1260
1255
Elevation (m)
0
10
20
30
40
50
60
70
Station (m)
Legend
EG TCEV-Q500
Crit TCEV-Q500
WS TCEV-Q500
Ground
Bank Sta

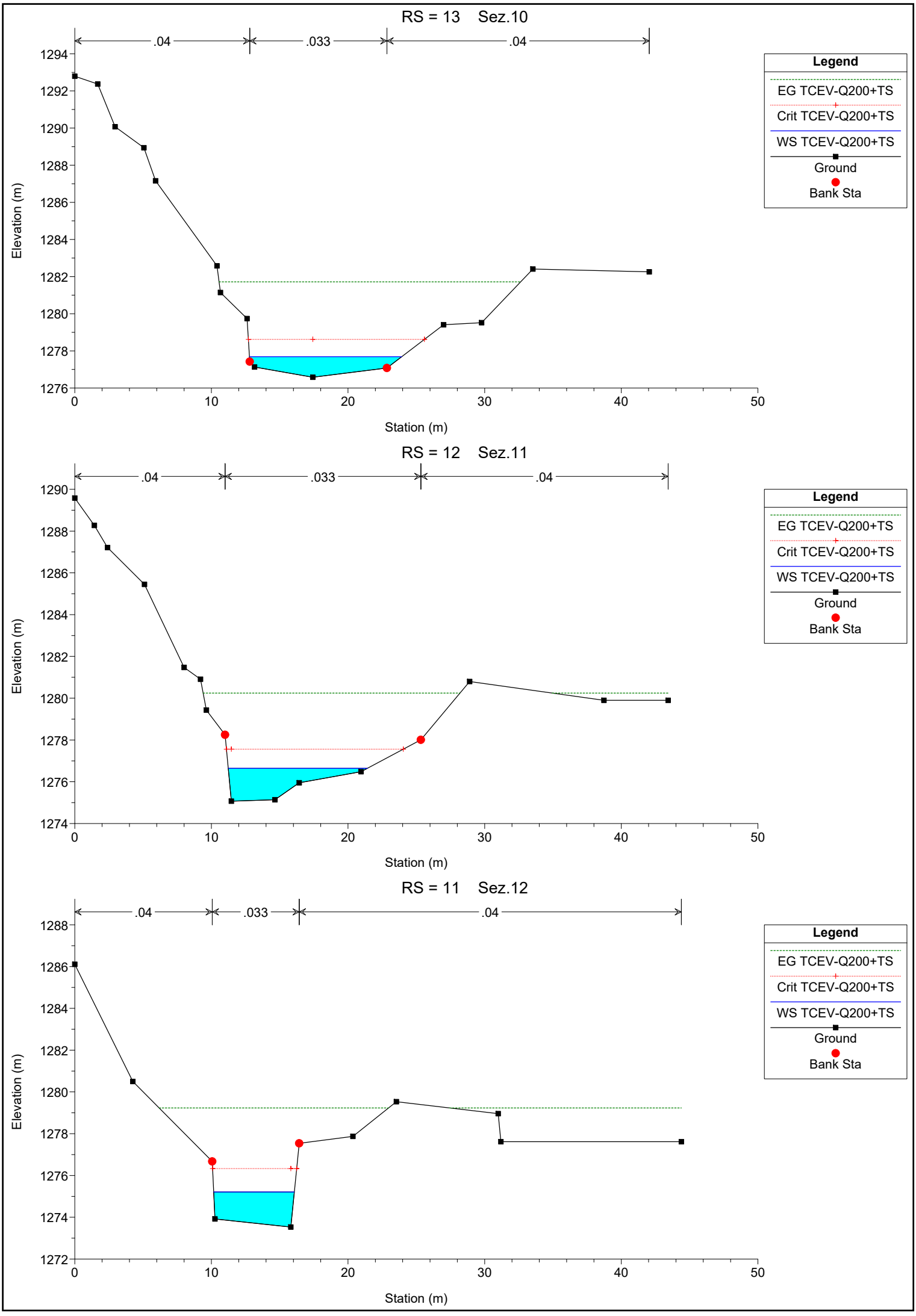
Q200 + TS - Tcev

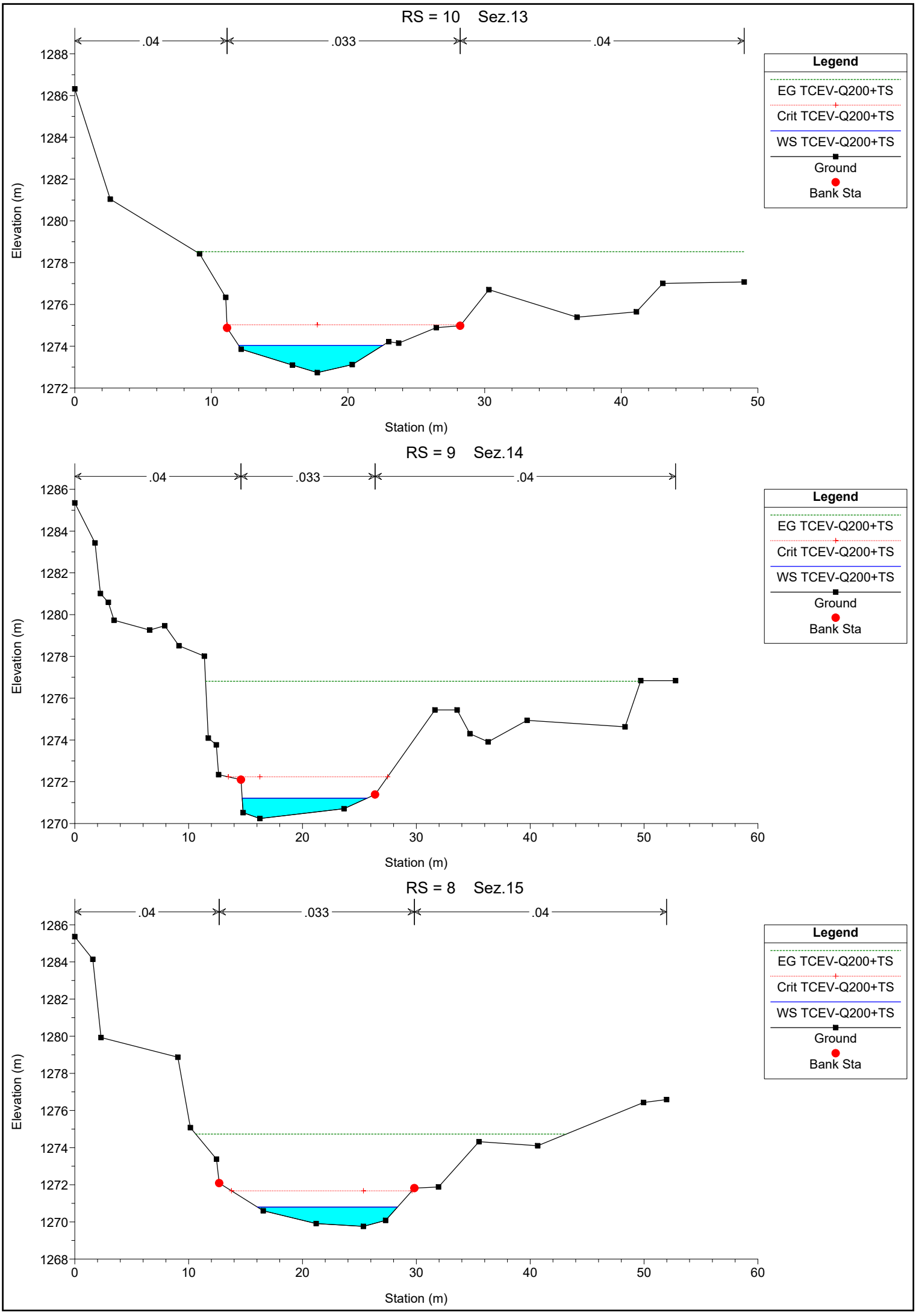

Bavera Monesi
Legend
EG TCEV-Q200+TS
Crit TCEV-Q200+TS
WS TCEV-Q200+TS
Ground
Elevation (m)
1310
1300
1290
1280
1270
1260
1250
0
50
100
150
200
250
300
Main Channel Distance (m)

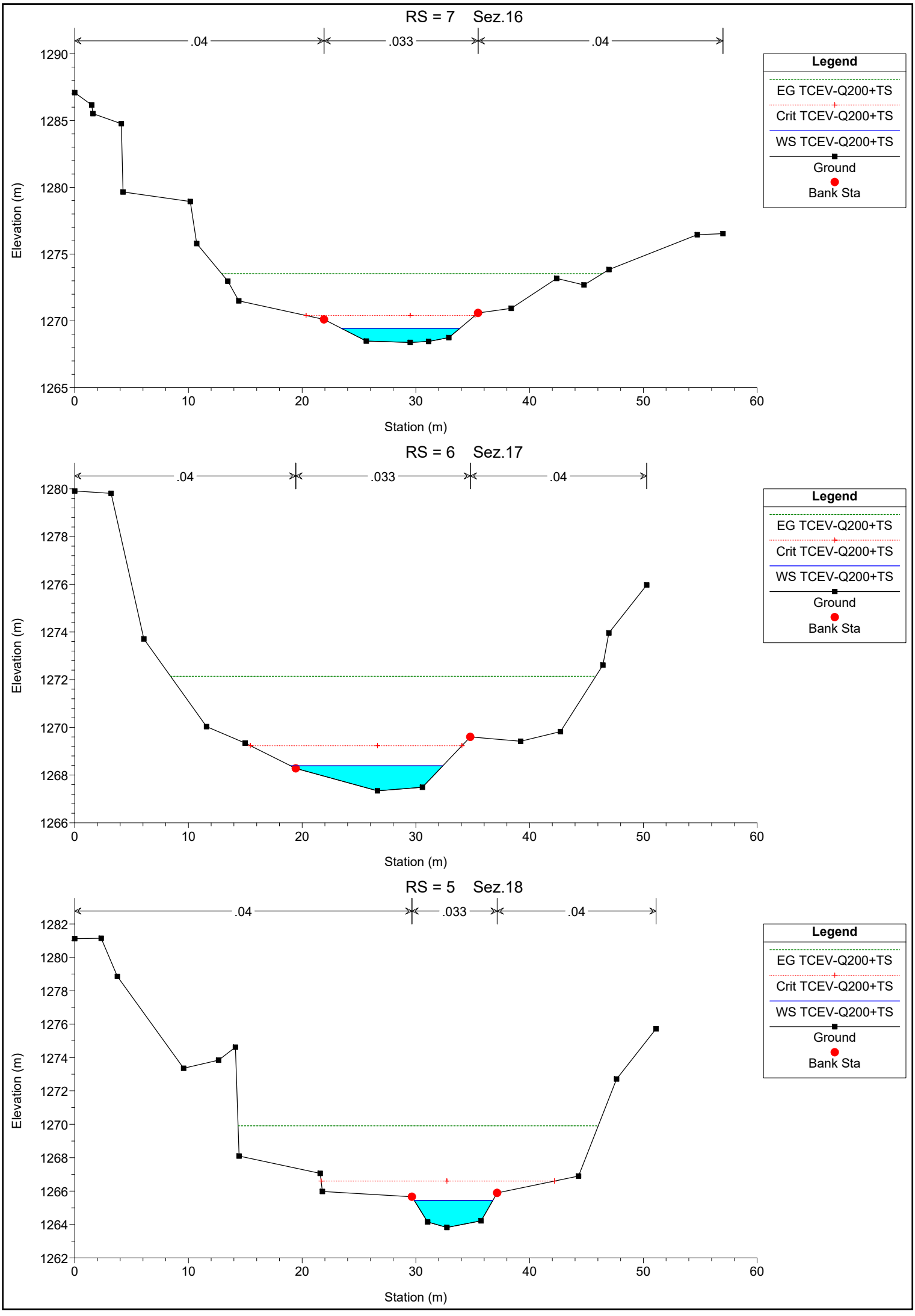

RS = 22 Sez.1
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG TCEV-Q200+TS
Crit TCEV-Q200+TS
WS TCEV-Q200+TS
Ground
Bank Sta
RS = 21 Sez.2
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG TCEV-Q200+TS
Crit TCEV-Q200+TS
WS TCEV-Q200+TS
Ground
Bank Sta
RS = 20 Sez.3
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG TCEV-Q200+TS
Crit TCEV-Q200+TS
WS TCEV-Q200+TS
Ground
Bank Sta

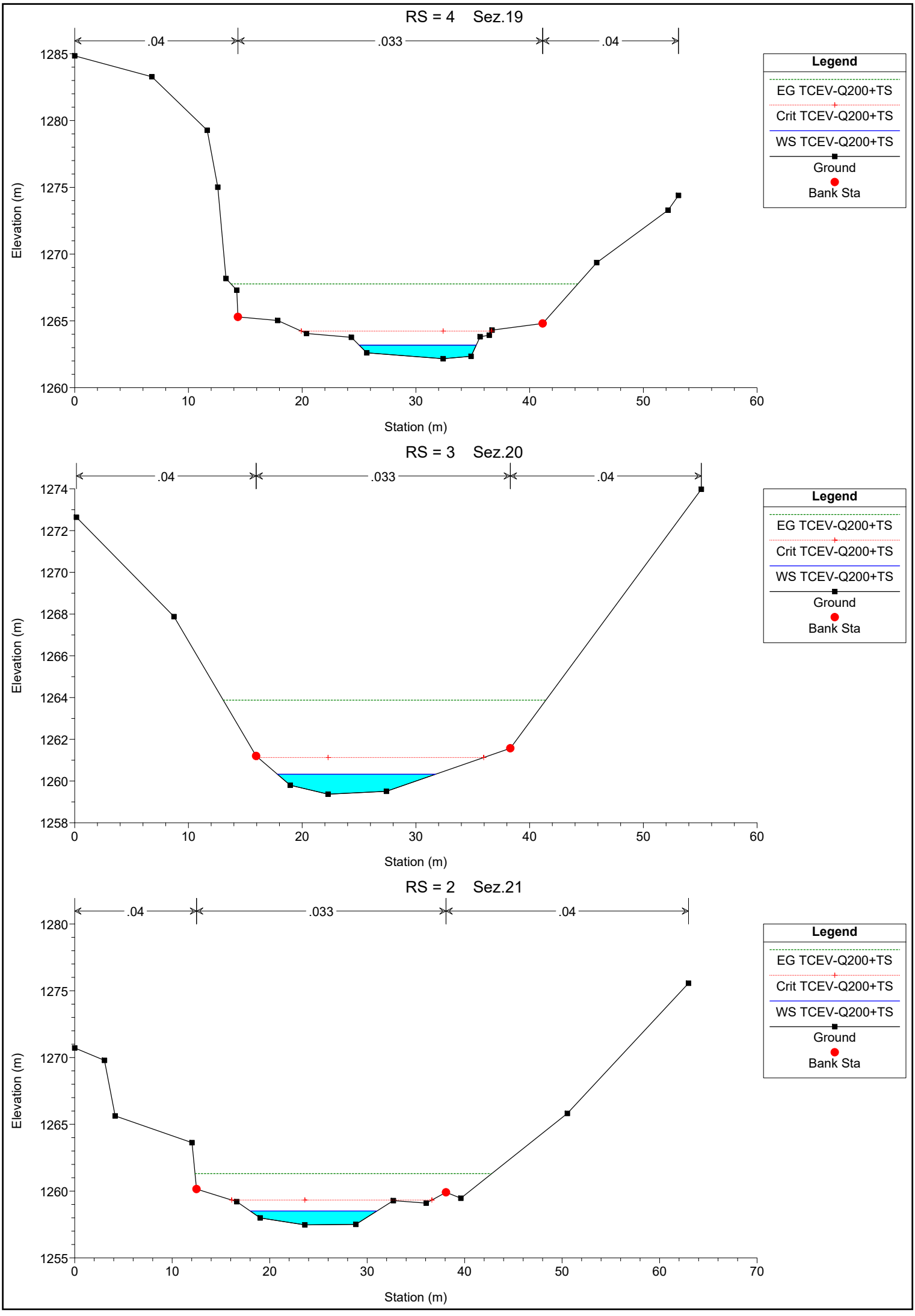

RS = 19 Sez.4
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG TCEV-Q200+TS
Crit TCEV-Q200+TS
WS TCEV-Q200+TS
Ground
Bank Sta
RS = 18 Sez.5
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG TCEV-Q200+TS
Crit TCEV-Q200+TS
WS TCEV-Q200+TS
Ground
Bank Sta
RS = 17 Sez.6
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG TCEV-Q200+TS
Crit TCEV-Q200+TS
WS TCEV-Q200+TS
Ground
Bank Sta

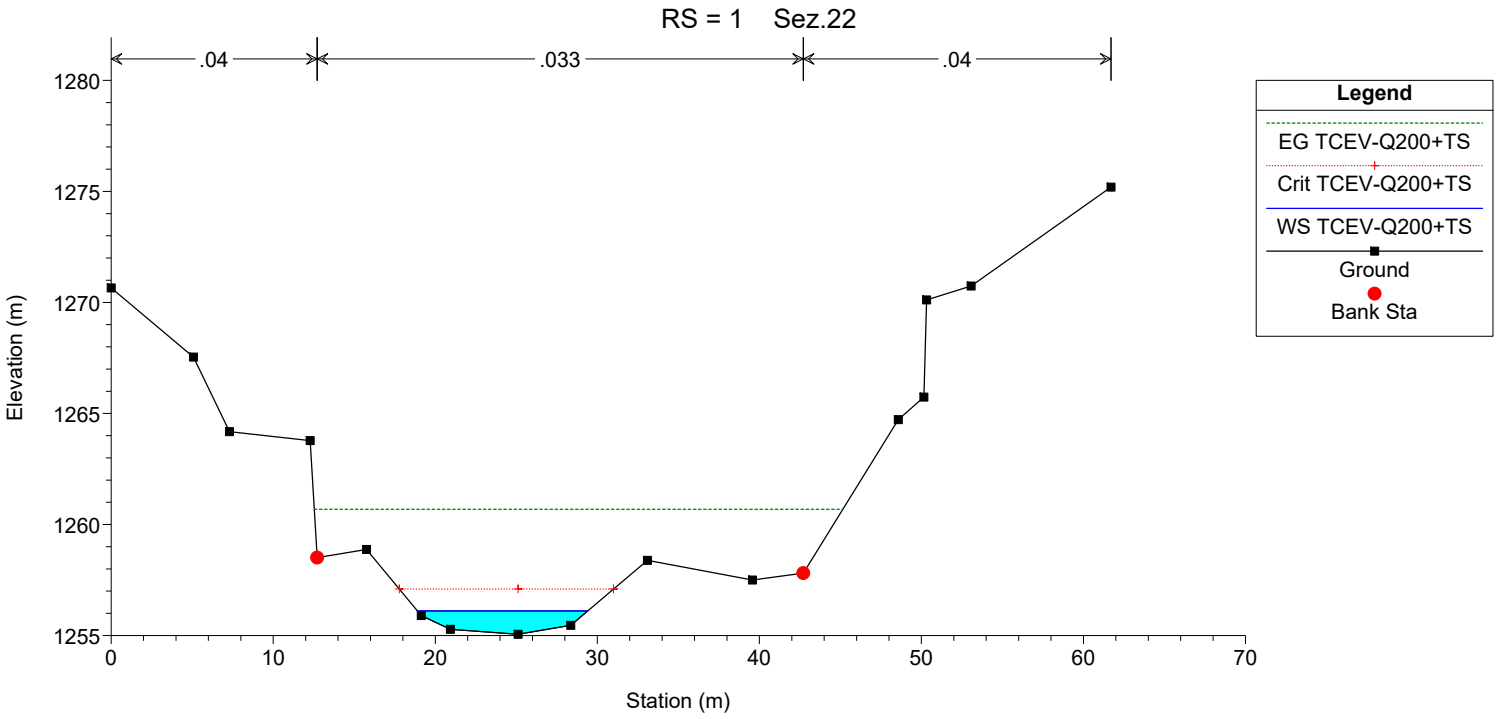

RS = 16 Sez.7
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG TCEV-Q200+TS
Crit TCEV-Q200+TS
WS TCEV-Q200+TS
Ground
Bank Sta
RS = 15 Sez.8
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG TCEV-Q200+TS
Crit TCEV-Q200+TS
WS TCEV-Q200+TS
Ground
Bank Sta
RS = 14 Sez.9
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG TCEV-Q200+TS
Crit TCEV-Q200+TS
WS TCEV-Q200+TS
Ground
Bank Sta


RS = 13 Sez.10
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG TCEV-Q200+TS
Crit TCEV-Q200+TS
WS TCEV-Q200+TS
Ground
Bank Sta
RS = 12 Sez.11
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG TCEV-Q200+TS
Crit TCEV-Q200+TS
WS TCEV-Q200+TS
Ground
Bank Sta
RS = 11 Sez.12
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG TCEV-Q200+TS
Crit TCEV-Q200+TS
WS TCEV-Q200+TS
Ground
Bank Sta


RS = 10 Sez.13
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG TCEV-Q200+TS
Crit TCEV-Q200+TS
WS TCEV-Q200+TS
Ground
Bank Sta
RS = 9 Sez.14
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG TCEV-Q200+TS
Crit TCEV-Q200+TS
WS TCEV-Q200+TS
Ground
Bank Sta
RS = 8 Sez.15
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG TCEV-Q200+TS
Crit TCEV-Q200+TS
WS TCEV-Q200+TS
Ground
Bank Sta


RS = 7 Sez.16
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG TCEV-Q200+TS
Crit TCEV-Q200+TS
WS TCEV-Q200+TS
Ground
Bank Sta
RS = 6 Sez.17
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG TCEV-Q200+TS
Crit TCEV-Q200+TS
WS TCEV-Q200+TS
Ground
Bank Sta
RS = 5 Sez.18
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG TCEV-Q200+TS
Crit TCEV-Q200+TS
WS TCEV-Q200+TS
Ground
Bank Sta


RS = 4 Sez.19
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG TCEV-Q200+TS
Crit TCEV-Q200+TS
WS TCEV-Q200+TS
Ground
Bank Sta
RS = 3 Sez.20
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG TCEV-Q200+TS
Crit TCEV-Q200+TS
WS TCEV-Q200+TS
Ground
Bank Sta
RS = 2 Sez.21
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG TCEV-Q200+TS
Crit TCEV-Q200+TS
WS TCEV-Q200+TS
Ground
Bank Sta


RS = 1 Sez.22
.04
.033
.04
1280
1275
1270
1265
1260
1255
Elevation (m)
0
10
20
30
40
50
60
70
Station (m)
Legend
EG TCEV-Q200+TS
Crit TCEV-Q200+TS
WS TCEV-Q200+TS
Ground
Bank Sta

HEC-RAS Plan: Plan 01 River: Bavera Reach: Monesi

Reach	River Sta	Profile	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
			(m3/s)	(m)	(m)	(m)	(m)	(m/m)	(m/s)	(m2)	(m)	
Monesi	22	PAI-Q20	33.28	1302.68	1303.61	1303.92	1304.61	0.049990	4.45	7.52	13.87	1.93
Monesi	22	PAI-Q100	41.40	1302.68	1303.70	1304.04	1304.81	0.050048	4.65	8.94	15.42	1.95
Monesi	22	PAI-Q200	44.96	1302.68	1303.74	1304.08	1304.88	0.050041	4.73	9.54	16.03	1.96
Monesi	22	PAI-Q500	49.56	1302.68	1303.79	1304.14	1304.98	0.050060	4.84	10.29	16.72	1.97
Monesi	22	PAI-Q200+T.S.	73.30	1302.68	1303.97	1304.42	1305.47	0.049993	5.41	13.60	18.63	2.02
Monesi	22	TCEV-Q20	32.56	1302.68	1303.60	1303.91	1304.60	0.050004	4.43	7.39	13.72	1.93
Monesi	22	TCEV-Q50	38.24	1302.68	1303.67	1304.00	1304.73	0.049985	4.57	8.40	14.85	1.94
Monesi	22	TCEV-Q100	42.73	1302.68	1303.72	1304.06	1304.84	0.050072	4.68	9.16	15.65	1.95
Monesi	22	TCEV-Q200	47.40	1302.68	1303.77	1304.12	1304.93	0.050059	4.79	9.94	16.43	1.97
Monesi	22	TCEV-Q500	53.89	1302.68	1303.83	1304.19	1305.07	0.050074	4.94	10.96	17.26	1.98
Monesi	22	TCEV-Q200+TS	75.74	1302.68	1303.99	1304.44	1305.52	0.049999	5.48	13.88	18.66	2.03
Monesi	21	PAI-Q20	33.28	1301.22	1301.88	1302.40	1303.89	0.103457	6.28	5.30	9.79	2.72
Monesi	21	PAI-Q100	41.40	1301.22	1301.99	1302.56	1304.12	0.088572	6.46	6.41	10.01	2.58
Monesi	21	PAI-Q200	44.96	1301.22	1302.04	1302.63	1304.21	0.083495	6.52	6.89	10.10	2.52
Monesi	21	PAI-Q500	49.56	1301.22	1302.10	1302.71	1304.32	0.078001	6.60	7.50	10.22	2.46
Monesi	21	PAI-Q200+T.S.	73.30	1301.22	1302.39	1303.11	1304.87	0.061240	6.98	10.50	10.79	2.26
Monesi	21	TCEV-Q20	32.56	1301.22	1301.87	1302.39	1303.87	0.105055	6.26	5.20	9.77	2.74
Monesi	21	TCEV-Q50	38.24	1301.22	1301.95	1302.50	1304.03	0.093722	6.39	5.98	9.92	2.63
Monesi	21	TCEV-Q100	42.73	1301.22	1302.01	1302.59	1304.15	0.086622	6.48	6.59	10.04	2.56
Monesi	21	TCEV-Q200	47.40	1301.22	1302.07	1302.68	1304.27	0.080405	6.57	7.22	10.17	2.49
Monesi	21	TCEV-Q500	53.89	1301.22	1302.15	1302.79	1304.43	0.073755	6.68	8.07	10.33	2.41
Monesi	21	TCEV-Q200+TS	75.74	1301.22	1302.41	1303.14	1304.93	0.060338	7.02	10.78	10.84	2.25
Monesi	20	PAI-Q20	33.28	1292.21	1292.79	1293.72	1302.46	0.760115	13.77	2.42	6.22	7.05
Monesi	20	PAI-Q100	41.40	1292.21	1292.88	1293.90	1302.77	0.658959	13.93	2.97	6.72	6.69
Monesi	20	PAI-Q200	44.96	1292.21	1292.91	1293.98	1302.89	0.624789	13.99	3.21	6.93	6.56
Monesi	20	PAI-Q500	49.56	1292.21	1292.96	1294.07	1303.04	0.587155	14.06	3.52	7.20	6.41
Monesi	20	PAI-Q200+T.S.	73.30	1292.21	1293.16	1294.53	1303.67	0.459414	14.36	5.11	8.36	5.87
Monesi	20	TCEV-Q20	32.56	1292.21	1292.78	1293.70	1302.43	0.771523	13.75	2.37	6.17	7.09
Monesi	20	TCEV-Q50	38.24	1292.21	1292.84	1293.83	1302.66	0.693656	13.87	2.76	6.53	6.82
Monesi	20	TCEV-Q100	42.73	1292.21	1292.89	1293.93	1302.82	0.645533	13.95	3.06	6.80	6.64
Monesi	20	TCEV-Q200	47.40	1292.21	1292.94	1294.03	1302.97	0.603782	14.03	3.38	7.07	6.48
Monesi	20	TCEV-Q500	53.89	1292.21	1293.00	1294.16	1303.16	0.556950	14.12	3.82	7.43	6.29
Monesi	20	TCEV-Q200+TS	75.74	1292.21	1293.18	1294.57	1303.74	0.445075	14.39	5.26	8.39	5.80
Monesi	19	PAI-Q20	33.28	1290.99	1291.67	1292.54	1297.18	0.295093	10.40	3.20	5.96	4.53
Monesi	19	PAI-Q100	41.40	1290.99	1291.76	1292.70	1297.94	0.283543	11.01	3.76	6.19	4.51
Monesi	19	PAI-Q200	44.96	1290.99	1291.80	1292.77	1298.22	0.278118	11.22	4.01	6.29	4.49
Monesi	19	PAI-Q500	49.56	1290.99	1291.85	1292.86	1298.56	0.271524	11.48	4.32	6.42	4.47
Monesi	19	PAI-Q200+T.S.	73.30	1290.99	1292.10	1293.25	1299.53	0.285589	12.08	6.07	8.73	4.63
Monesi	19	TCEV-Q20	32.56	1290.99	1291.66	1292.53	1297.11	0.296083	10.34	3.15	5.93	4.53
Monesi	19	TCEV-Q50	38.24	1290.99	1291.72	1292.64	1297.66	0.288035	10.79	3.54	6.10	4.52
Monesi	19	TCEV-Q100	42.73	1290.99	1291.77	1292.73	1298.04	0.281498	11.09	3.85	6.23	4.50
Monesi	19	TCEV-Q200	47.40	1290.99	1291.83	1292.82	1298.41	0.274627	11.36	4.17	6.36	4.48
Monesi	19	TCEV-Q500	53.89	1290.99	1291.89	1292.93	1298.86	0.265314	11.69	4.61	6.54	4.44
Monesi	19	TCEV-Q200+TS	75.74	1290.99	1292.12	1293.29	1299.60	0.292698	12.12	6.25	9.14	4.68
Monesi	18	PAI-Q20	33.28	1286.81	1287.77	1288.64	1292.64	0.250806	9.77	3.41	6.06	4.16
Monesi	18	PAI-Q100	41.40	1286.81	1287.86	1288.82	1293.48	0.253686	10.50	3.94	6.30	4.24
Monesi	18	PAI-Q200	44.96	1286.81	1287.90	1288.91	1293.82	0.254180	10.78	4.17	6.40	4.26
Monesi	18	PAI-Q500	49.56	1286.81	1287.94	1288.99	1294.23	0.254251	11.11	4.46	6.52	4.29
Monesi	18	PAI-Q200+T.S.	73.30	1286.81	1288.19	1289.41	1295.27	0.237444	11.79	6.22	7.86	4.23
Monesi	18	TCEV-Q20	32.56	1286.81	1287.76	1288.62	1292.56	0.250372	9.70	3.36	6.04	4.15
Monesi	18	TCEV-Q50	38.24	1286.81	1287.83	1288.76	1293.17	0.252838	10.24	3.74	6.21	4.21
Monesi	18	TCEV-Q100	42.73	1286.81	1287.87	1288.85	1293.61	0.253962	10.61	4.03	6.34	4.25
Monesi	18	TCEV-Q200	47.40	1286.81	1287.92	1288.95	1294.04	0.254288	10.96	4.33	6.47	4.28
Monesi	18	TCEV-Q500	53.89	1286.81	1287.98	1289.07	1294.60	0.254071	11.39	4.73	6.64	4.31
Monesi	18	TCEV-Q200+TS	75.74	1286.81	1288.21	1289.47	1295.31	0.234180	11.80	6.42	8.02	4.21
Monesi	17	PAI-Q20	33.28	1284.29	1285.06	1285.72	1288.17	0.159482	7.81	4.26	7.91	3.40
Monesi	17	PAI-Q100	41.40	1284.29	1285.13	1285.84	1288.80	0.169085	8.48	4.88	8.35	3.54
Monesi	17	PAI-Q200	44.96	1284.29	1285.16	1285.88	1289.06	0.172814	8.75	5.14	8.53	3.60
Monesi	17	PAI-Q500	49.56	1284.29	1285.20	1285.94	1289.39	0.177083	9.07	5.47	8.75	3.66
Monesi	17	PAI-Q200+T.S.	73.30	1284.29	1285.41	1286.24	1290.20	0.202946	9.69	7.57	12.33	3.94
Monesi	17	TCEV-Q20	32.56	1284.29	1285.05	1285.70	1288.11	0.158552	7.75	4.20	7.86	3.38
Monesi	17	TCEV-Q50	38.24	1284.29	1285.10	1285.79	1288.56	0.165443	8.23	4.65	8.18	3.49
Monesi	17	TCEV-Q100	42.73	1284.29	1285.14	1285.86	1288.90	0.170526	8.58	4.98	8.42	3.56
Monesi	17	TCEV-Q200	47.40	1284.29	1285.18	1285.92	1289.24	0.175070	8.92	5.31	8.65	3.63
Monesi	17	TCEV-Q500	53.89	1284.29	1285.23	1286.01	1289.69	0.180985	9.35	5.76	8.94	3.72
Monesi	17	TCEV-Q200+TS	75.74	1284.29	1285.43	1286.27	1290.25	0.205164	9.73	7.79	12.76	3.96
Monesi	16	PAI-Q20	33.28	1281.78	1282.53	1283.08	1285.40	0.178724	7.50	4.44	9.89	3.55
Monesi	16	PAI-Q100	41.40	1281.78	1282.60	1283.21	1285.82	0.187898	7.94	5.23	11.15	3.66
Monesi	16	PAI-Q200	44.96	1281.78	1282.63	1283.26	1285.99	0.191731	8.13	5.56	11.63	3.71
Monesi	16	PAI-Q500	49.56	1281.78	1282.67	1283.32	1286.22	0.196604	8.36	5.96	12.20	3.77
Monesi	16	PAI-Q200+T.S.	73.30	1281.78	1282.84	1283.62	1286.83	0.188145	8.88	8.34	15.12	3.77
Monesi	16	TCEV-Q20	32.56	1281.78	1282.52	1283.08	1285.36	0.177831	7.46	4.37	9.76	3.53
Monesi	16	TCEV-Q50	38.24	1281.78	1282.58	1283.16	1285.65	0.184431	7.78	4.93	10.69	3.62
Monesi	16	TCEV-Q100	42.73	1281.78	1282.61	1283.23	1285.88	0.189407	8.01	5.36	11.33	3.68
Monesi	16	TCEV-Q200	47.40	1281.78	1282.65	1283.29	1286.11	0.194255	8.25	5.78	11.94	3.74

HEC-RAS Plan: Plan 01 River: Bavera Reach: Monesi (Continued)

Reach	River Sta	Profile	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
			(m3/s)	(m)	(m)	(m)	(m)	(m/m)	(m/s)	(m2)	(m)	
Monesi	16	TCEV-Q500	53.89	1281.78	1282.69	1283.38	1286.43	0.200883	8.57	6.33	12.69	3.83
Monesi	16	TCEV-Q200+TS	75.74	1281.78	1282.86	1283.65	1286.88	0.186415	8.92	8.58	15.35	3.76
Monesi	15	PAI-Q20	33.28	1279.35	1280.21	1280.80	1283.08	0.176835	7.51	4.43	9.62	3.53
Monesi	15	PAI-Q100	41.40	1279.35	1280.29	1280.95	1283.49	0.170428	7.92	5.23	10.17	3.53
Monesi	15	PAI-Q200	44.96	1279.35	1280.32	1281.01	1283.65	0.168202	8.08	5.56	10.40	3.53
Monesi	15	PAI-Q500	49.56	1279.35	1280.36	1281.09	1283.86	0.166032	8.28	5.98	10.67	3.53
Monesi	15	PAI-Q200+T.S.	73.30	1279.35	1280.55	1281.43	1284.64	0.150300	8.96	8.18	12.01	3.46
Monesi	15	TCEV-Q20	32.56	1279.35	1280.20	1280.79	1283.05	0.177546	7.47	4.36	9.57	3.54
Monesi	15	TCEV-Q50	38.24	1279.35	1280.26	1280.89	1283.34	0.172768	7.77	4.92	9.96	3.53
Monesi	15	TCEV-Q100	42.73	1279.35	1280.30	1280.97	1283.55	0.169599	7.98	5.35	10.26	3.53
Monesi	15	TCEV-Q200	47.40	1279.35	1280.34	1281.05	1283.76	0.167055	8.19	5.79	10.54	3.53
Monesi	15	TCEV-Q500	53.89	1279.35	1280.40	1281.15	1284.05	0.164584	8.46	6.37	10.92	3.54
Monesi	15	TCEV-Q200+TS	75.74	1279.35	1280.57	1281.46	1284.71	0.148940	9.01	8.40	12.14	3.46
Monesi	14	PAI-Q20	33.28	1278.34	1279.00	1279.53	1281.30	0.147273	6.72	4.95	11.13	3.22
Monesi	14	PAI-Q100	41.40	1278.34	1279.07	1279.67	1281.74	0.149186	7.24	5.72	11.61	3.29
Monesi	14	PAI-Q200	44.96	1278.34	1279.09	1279.73	1281.91	0.149418	7.43	6.05	11.79	3.32
Monesi	14	PAI-Q500	49.56	1278.34	1279.13	1279.79	1282.13	0.149868	7.68	6.45	12.01	3.34
Monesi	14	PAI-Q200+T.S.	73.30	1278.34	1279.29	1280.09	1283.07	0.146016	8.60	8.52	13.07	3.40
Monesi	14	TCEV-Q20	32.56	1278.34	1278.99	1279.51	1281.26	0.146738	6.67	4.88	11.07	3.21
Monesi	14	TCEV-Q50	38.24	1278.34	1279.04	1279.62	1281.57	0.148755	7.04	5.43	11.45	3.27
Monesi	14	TCEV-Q100	42.73	1278.34	1279.08	1279.69	1281.80	0.149239	7.31	5.84	11.68	3.30
Monesi	14	TCEV-Q200	47.40	1278.34	1279.11	1279.77	1282.03	0.149705	7.57	6.26	11.91	3.33
Monesi	14	TCEV-Q500	53.89	1278.34	1279.16	1279.85	1282.33	0.150045	7.89	6.83	12.21	3.37
Monesi	14	TCEV-Q200+TS	75.74	1278.34	1279.31	1280.12	1283.15	0.145540	8.68	8.72	13.17	3.41
Monesi	13	PAI-Q20	33.28	1276.58	1277.34	1277.89	1279.73	0.136933	6.87	4.89	10.40	3.15
Monesi	13	PAI-Q100	41.40	1276.58	1277.41	1278.05	1280.18	0.132963	7.39	5.67	10.62	3.17
Monesi	13	PAI-Q200	44.96	1276.58	1277.44	1278.11	1280.37	0.130972	7.59	6.00	10.69	3.17
Monesi	13	PAI-Q500	49.56	1276.58	1277.48	1278.19	1280.60	0.128573	7.85	6.41	10.76	3.17
Monesi	13	PAI-Q200+T.S.	73.30	1276.58	1277.67	1278.58	1281.62	0.115414	8.86	8.46	11.11	3.14
Monesi	13	TCEV-Q20	32.56	1276.58	1277.33	1277.87	1279.69	0.137414	6.82	4.81	10.37	3.15
Monesi	13	TCEV-Q50	38.24	1276.58	1277.38	1277.98	1280.01	0.134303	7.19	5.37	10.53	3.16
Monesi	13	TCEV-Q100	42.73	1276.58	1277.42	1278.07	1280.25	0.132243	7.46	5.79	10.65	3.17
Monesi	13	TCEV-Q200	47.40	1276.58	1277.46	1278.16	1280.49	0.129714	7.73	6.21	10.72	3.17
Monesi	13	TCEV-Q500	53.89	1276.58	1277.52	1278.27	1280.81	0.126363	8.07	6.79	10.82	3.17
Monesi	13	TCEV-Q200+TS	75.74	1276.58	1277.69	1278.62	1281.72	0.114248	8.95	8.66	11.14	3.14
Monesi	12	PAI-Q20	33.28	1275.07	1276.22	1276.79	1278.34	0.089517	6.44	5.17	7.44	2.47
Monesi	12	PAI-Q100	41.40	1275.07	1276.33	1276.96	1278.72	0.095806	6.85	6.05	8.41	2.58
Monesi	12	PAI-Q200	44.96	1275.07	1276.37	1277.03	1278.89	0.098553	7.02	6.40	8.76	2.62
Monesi	12	PAI-Q500	49.56	1275.07	1276.42	1277.12	1279.10	0.101981	7.24	6.84	9.19	2.68
Monesi	12	PAI-Q200+T.S.	73.30	1275.07	1276.62	1277.52	1280.15	0.109682	8.31	8.82	10.13	2.84
Monesi	12	TCEV-Q20	32.56	1275.07	1276.21	1276.78	1278.30	0.088959	6.41	5.08	7.34	2.46
Monesi	12	TCEV-Q50	38.24	1275.07	1276.29	1276.90	1278.57	0.093445	6.69	5.71	8.06	2.54
Monesi	12	TCEV-Q100	42.73	1275.07	1276.35	1276.99	1278.78	0.096773	6.91	6.18	8.54	2.59
Monesi	12	TCEV-Q200	47.40	1275.07	1276.40	1277.08	1279.00	0.100404	7.14	6.64	8.99	2.65
Monesi	12	TCEV-Q500	53.89	1275.07	1276.46	1277.20	1279.29	0.105103	7.45	7.24	9.56	2.73
Monesi	12	TCEV-Q200+TS	75.74	1275.07	1276.64	1277.56	1280.25	0.110054	8.41	9.01	10.18	2.85
Monesi	11	PAI-Q20	33.28	1273.53	1274.52	1275.25	1277.29	0.109244	7.36	4.52	5.75	2.65
Monesi	11	PAI-Q100	41.40	1273.53	1274.67	1275.48	1277.68	0.099470	7.68	5.39	5.78	2.54
Monesi	11	PAI-Q200	44.96	1273.53	1274.74	1275.58	1277.85	0.096460	7.81	5.75	5.80	2.50
Monesi	11	PAI-Q500	49.56	1273.53	1274.82	1275.70	1278.06	0.093457	7.98	6.21	5.81	2.47
Monesi	11	PAI-Q200+T.S.	73.30	1273.53	1275.18	1276.28	1279.13	0.086607	8.80	8.33	5.90	2.37
Monesi	11	TCEV-Q20	32.56	1273.53	1274.51	1275.22	1277.25	0.110367	7.33	4.44	5.74	2.66
Monesi	11	TCEV-Q50	38.24	1273.53	1274.62	1275.39	1277.53	0.102727	7.56	5.06	5.77	2.58
Monesi	11	TCEV-Q100	42.73	1273.53	1274.70	1275.52	1277.75	0.098293	7.73	5.53	5.79	2.53
Monesi	11	TCEV-Q200	47.40	1273.53	1274.78	1275.64	1277.97	0.094889	7.91	5.99	5.81	2.49
Monesi	11	TCEV-Q500	53.89	1273.53	1274.89	1275.81	1278.26	0.091124	8.13	6.63	5.83	2.44
Monesi	11	TCEV-Q200+TS	75.74	1273.53	1275.21	1276.33	1279.23	0.086321	8.88	8.53	5.90	2.36
Monesi	10	PAI-Q20	33.28	1272.74	1273.67	1274.31	1276.52	0.149992	7.47	4.46	8.55	3.30
Monesi	10	PAI-Q100	41.40	1272.74	1273.76	1274.47	1276.94	0.149146	7.90	5.24	9.20	3.34
Monesi	10	PAI-Q200	44.96	1272.74	1273.80	1274.54	1277.12	0.149077	8.07	5.57	9.46	3.36
Monesi	10	PAI-Q500	49.56	1272.74	1273.84	1274.61	1277.34	0.149337	8.28	5.98	9.78	3.38
Monesi	10	PAI-Q200+T.S.	73.30	1272.74	1274.03	1275.00	1278.42	0.144187	9.29	7.89	10.50	3.42
Monesi	10	TCEV-Q20	32.56	1272.74	1273.67	1274.31	1276.48	0.150003	7.42	4.39	8.49	3.30
Monesi	10	TCEV-Q50	38.24	1272.74	1273.73	1274.41	1276.78	0.149370	7.74	4.94	8.96	3.33
Monesi	10	TCEV-Q100	42.73	1272.74	1273.78	1274.50	1277.01	0.149108	7.96	5.37	9.30	3.35
Monesi	10	TCEV-Q200	47.40	1272.74	1273.82	1274.58	1277.24	0.149348	8.19	5.79	9.63	3.37
Monesi	10	TCEV-Q500	53.89	1272.74	1273.88	1274.68	1277.54	0.148580	8.48	6.36	9.99	3.39
Monesi	10	TCEV-Q200+TS	75.74	1272.74	1274.05	1275.03	1278.53	0.143832	9.38	8.08	10.56	3.42
Monesi	9	PAI-Q20	33.28	1270.24	1270.89	1271.54	1274.62	0.281783	8.56	3.89	9.63	4.30
Monesi	9	PAI-Q100	41.40	1270.24	1270.96	1271.68	1275.10	0.262495	9.01	4.60	9.93	4.23
Monesi	9	PAI-Q200	44.96	1270.24	1270.99	1271.75	1275.29	0.255889	9.19	4.89	10.05	4.20
Monesi	9	PAI-Q500	49.56	1270.24	1271.03	1271.83	1275.53	0.248479	9.40	5.27	10.21	4.18
Monesi	9	PAI-Q200+T.S.	73.30	1270.24	1271.20	1272.20	1276.70	0.228468	10.39	7.05	10.91	4.13
Monesi	9	TCEV-Q20	32.56	1270.24	1270.88	1271.52	1274.58	0.283858	8.51	3.83	9.61	4.31

HEC-RAS Plan: Plan 01 River: Bavera Reach: Monesi (Continued)

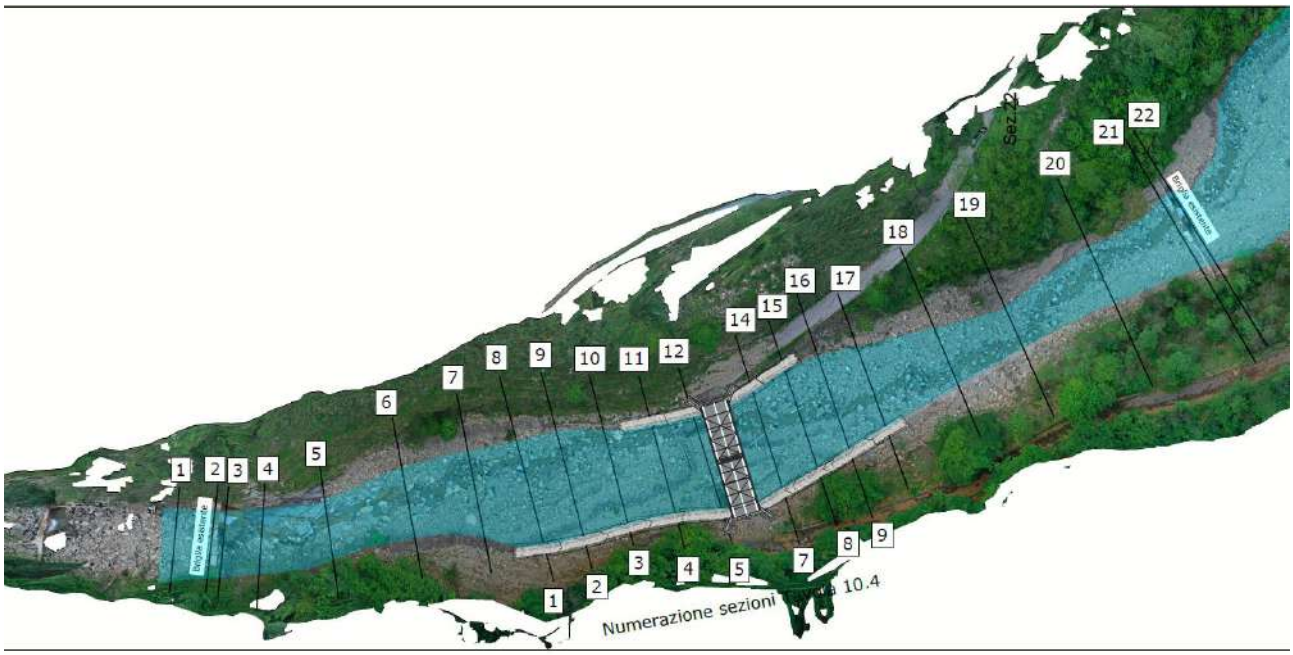
Reach	River Sta	Profile	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
			(m3/s)	(m)	(m)	(m)	(m)	(m/m)	(m/s)	(m2)	(m)	
Monesi	9	TCEV-Q50	38.24	1270.24	1270.93	1271.63	1274.92	0.269458	8.84	4.32	9.82	4.26
Monesi	9	TCEV-Q100	42.73	1270.24	1270.97	1271.71	1275.17	0.259883	9.08	4.71	9.98	4.22
Monesi	9	TCEV-Q200	47.40	1270.24	1271.01	1271.79	1275.42	0.251885	9.30	5.10	10.14	4.19
Monesi	9	TCEV-Q500	53.89	1270.24	1271.06	1271.90	1275.76	0.243065	9.59	5.62	10.35	4.16
Monesi	9	TCEV-Q200+TS	75.74	1270.24	1271.21	1272.24	1276.81	0.227002	10.48	7.23	10.97	4.12
Monesi	8	PAI-Q20	33.28	1269.76	1270.50	1271.01	1272.56	0.117190	6.35	5.24	10.72	2.90
Monesi	8	PAI-Q100	41.40	1269.76	1270.57	1271.16	1273.02	0.125044	6.93	5.98	11.27	3.04
Monesi	8	PAI-Q200	44.96	1269.76	1270.60	1271.22	1273.21	0.127981	7.15	6.29	11.50	3.09
Monesi	8	PAI-Q500	49.56	1269.76	1270.63	1271.29	1273.45	0.130295	7.44	6.66	11.63	3.14
Monesi	8	PAI-Q200+T.S.	73.30	1269.76	1270.78	1271.64	1274.62	0.139242	8.68	8.45	12.24	3.33
Monesi	8	TCEV-Q20	32.56	1269.76	1270.50	1271.00	1272.52	0.116418	6.30	5.17	10.67	2.89
Monesi	8	TCEV-Q50	38.24	1269.76	1270.55	1271.10	1272.85	0.122330	6.72	5.69	11.07	2.99
Monesi	8	TCEV-Q100	42.73	1269.76	1270.58	1271.18	1273.09	0.126204	7.01	6.09	11.36	3.06
Monesi	8	TCEV-Q200	47.40	1269.76	1270.62	1271.26	1273.34	0.129307	7.31	6.49	11.57	3.12
Monesi	8	TCEV-Q500	53.89	1269.76	1270.66	1271.36	1273.68	0.132289	7.69	7.01	11.75	3.18
Monesi	8	TCEV-Q200+TS	75.74	1269.76	1270.80	1271.67	1274.73	0.139967	8.79	8.62	12.30	3.35
Monesi	7	PAI-Q20	33.28	1268.39	1269.08	1269.66	1271.46	0.120840	6.83	4.87	9.08	2.98
Monesi	7	PAI-Q100	41.40	1268.39	1269.17	1269.83	1271.89	0.119247	7.31	5.66	9.40	3.01
Monesi	7	PAI-Q200	44.96	1268.39	1269.20	1269.90	1272.07	0.118746	7.50	5.99	9.53	3.02
Monesi	7	PAI-Q500	49.56	1268.39	1269.24	1269.98	1272.31	0.119098	7.75	6.40	9.68	3.05
Monesi	7	PAI-Q200+T.S.	73.30	1268.39	1269.43	1270.37	1273.43	0.122081	8.86	8.28	10.38	3.17
Monesi	7	TCEV-Q20	32.56	1268.39	1269.07	1269.65	1271.42	0.121139	6.78	4.80	9.05	2.97
Monesi	7	TCEV-Q50	38.24	1268.39	1269.14	1269.77	1271.73	0.119817	7.13	5.36	9.28	3.00
Monesi	7	TCEV-Q100	42.73	1268.39	1269.18	1269.86	1271.96	0.119037	7.38	5.79	9.45	3.01
Monesi	7	TCEV-Q200	47.40	1268.39	1269.23	1269.94	1272.20	0.118944	7.63	6.21	9.61	3.03
Monesi	7	TCEV-Q500	53.89	1268.39	1269.28	1270.06	1272.52	0.119611	7.97	6.76	9.82	3.07
Monesi	7	TCEV-Q200+TS	75.74	1268.39	1269.45	1270.40	1273.54	0.122364	8.96	8.46	10.44	3.18
Monesi	6	PAI-Q20	33.28	1267.34	1268.09	1268.59	1270.16	0.120638	6.36	5.23	10.93	2.94
Monesi	6	PAI-Q100	41.40	1267.34	1268.17	1268.73	1270.57	0.125980	6.86	6.03	11.61	3.04
Monesi	6	PAI-Q200	44.96	1267.34	1268.19	1268.79	1270.74	0.128210	7.07	6.36	11.88	3.08
Monesi	6	PAI-Q500	49.56	1267.34	1268.23	1268.87	1270.96	0.131115	7.31	6.78	12.21	3.14
Monesi	6	PAI-Q200+T.S.	73.30	1267.34	1268.38	1269.20	1272.04	0.137167	8.47	8.67	13.30	3.31
Monesi	6	TCEV-Q20	32.56	1267.34	1268.09	1268.58	1270.12	0.120048	6.31	5.16	10.86	2.93
Monesi	6	TCEV-Q50	38.24	1267.34	1268.14	1268.68	1270.41	0.124050	6.68	5.72	11.35	3.00
Monesi	6	TCEV-Q100	42.73	1267.34	1268.18	1268.76	1270.63	0.126940	6.94	6.15	11.71	3.06
Monesi	6	TCEV-Q200	47.40	1267.34	1268.21	1268.83	1270.86	0.129751	7.20	6.58	12.06	3.11
Monesi	6	TCEV-Q500	53.89	1267.34	1268.26	1268.94	1271.16	0.133826	7.54	7.15	12.50	3.18
Monesi	6	TCEV-Q200+TS	75.74	1267.34	1268.39	1269.23	1272.14	0.137474	8.58	8.84	13.39	3.32
Monesi	5	PAI-Q20	33.28	1263.82	1264.85	1265.61	1267.86	0.111372	7.69	4.33	5.87	2.86
Monesi	5	PAI-Q100	41.40	1263.82	1264.98	1265.96	1268.30	0.104784	8.07	5.13	6.10	2.81
Monesi	5	PAI-Q200	44.96	1263.82	1265.04	1266.08	1268.48	0.102661	8.22	5.47	6.20	2.79
Monesi	5	PAI-Q500	49.56	1263.82	1265.10	1266.18	1268.70	0.100337	8.40	5.90	6.32	2.78
Monesi	5	PAI-Q200+T.S.	73.30	1263.82	1265.41	1266.57	1269.80	0.095818	9.28	7.89	6.86	2.76
Monesi	5	TCEV-Q20	32.56	1263.82	1264.83	1265.59	1267.82	0.112144	7.66	4.25	5.84	2.87
Monesi	5	TCEV-Q50	38.24	1263.82	1264.93	1265.78	1268.13	0.107035	7.93	4.82	6.01	2.83
Monesi	5	TCEV-Q100	42.73	1263.82	1265.00	1266.03	1268.37	0.103961	8.12	5.26	6.14	2.80
Monesi	5	TCEV-Q200	47.40	1263.82	1265.07	1266.14	1268.60	0.101423	8.32	5.70	6.27	2.78
Monesi	5	TCEV-Q500	53.89	1263.82	1265.17	1266.27	1268.90	0.098615	8.56	6.29	6.43	2.76
Monesi	5	TCEV-Q200+TS	75.74	1263.82	1265.43	1266.60	1269.91	0.095719	9.37	8.08	6.90	2.77
Monesi	4	PAI-Q20	33.28	1262.17	1262.86	1263.43	1265.40	0.150957	7.06	4.71	9.74	3.24
Monesi	4	PAI-Q100	41.40	1262.17	1262.93	1263.60	1265.94	0.153825	7.69	5.38	9.85	3.32
Monesi	4	PAI-Q200	44.96	1262.17	1262.96	1263.67	1266.17	0.154377	7.94	5.66	9.90	3.35
Monesi	4	PAI-Q500	49.56	1262.17	1262.99	1263.75	1266.44	0.154599	8.22	6.03	9.96	3.38
Monesi	4	PAI-Q200+T.S.	73.30	1262.17	1263.17	1264.21	1267.66	0.150974	9.38	7.81	10.27	3.44
Monesi	4	TCEV-Q20	32.56	1262.17	1262.85	1263.42	1265.35	0.150558	7.00	4.65	9.73	3.23
Monesi	4	TCEV-Q50	38.24	1262.17	1262.90	1263.54	1265.74	0.153009	7.46	5.13	9.81	3.30
Monesi	4	TCEV-Q100	42.73	1262.17	1262.94	1263.62	1266.03	0.154149	7.79	5.49	9.87	3.34
Monesi	4	TCEV-Q200	47.40	1262.17	1262.97	1263.71	1266.31	0.154572	8.09	5.86	9.94	3.37
Monesi	4	TCEV-Q500	53.89	1262.17	1263.02	1263.91	1266.69	0.154508	8.47	6.36	10.02	3.40
Monesi	4	TCEV-Q200+TS	75.74	1262.17	1263.19	1264.24	1267.77	0.150400	9.48	7.99	10.30	3.44
Monesi	3	PAI-Q20	33.28	1259.37	1260.05	1260.53	1261.93	0.114425	6.08	5.47	11.82	2.86
Monesi	3	PAI-Q100	41.40	1259.37	1260.11	1260.66	1262.34	0.119053	6.61	6.27	12.31	2.96
Monesi	3	PAI-Q200	44.96	1259.37	1260.14	1260.72	1262.51	0.121101	6.82	6.59	12.51	3.00
Monesi	3	PAI-Q500	49.56	1259.37	1260.17	1260.79	1262.73	0.123642	7.08	7.00	12.75	3.05
Monesi	3	PAI-Q200+T.S.	73.30	1259.37	1260.31	1261.10	1263.77	0.135662	8.24	8.90	13.81	3.28
Monesi	3	TCEV-Q20	32.56	1259.37	1260.04	1260.51	1261.90	0.114089	6.04	5.39	11.78	2.85
Monesi	3	TCEV-Q50	38.24	1259.37	1260.09	1260.61	1262.18	0.117204	6.41	5.96	12.13	2.92
Monesi	3	TCEV-Q100	42.73	1259.37	1260.12	1260.68	1262.40	0.119739	6.69	6.39	12.39	2.97
Monesi	3	TCEV-Q200	47.40	1259.37	1260.16	1260.75	1262.63	0.122428	6.96	6.81	12.64	3.03
Monesi	3	TCEV-Q500	53.89	1259.37	1260.20	1260.85	1262.93	0.126002	7.31	7.37	12.96	3.10
Monesi	3	TCEV-Q200+TS	75.74	1259.37	1260.33	1261.13	1263.88	0.136721	8.34	9.08	13.91	3.30
Monesi	2	PAI-Q20	33.28	1257.47	1258.17	1258.60	1259.73	0.081641	5.53	6.02	11.57	2.45
Monesi	2	PAI-Q100	41.40	1257.47	1258.24	1258.75	1260.06	0.082027	5.97	6.93	11.89	2.50
Monesi	2	PAI-Q200	44.96	1257.47	1258.28	1258.80	1260.20	0.082183	6.15	7.32	12.03	2.52

HEC-RAS Plan: Plan 01 River: Bavera Reach: Monesi (Continued)

Reach	River Sta	Profile	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
			(m3/s)	(m)	(m)	(m)	(m)	(m/m)	(m/s)	(m2)	(m)	
Monesi	2	PAI-Q500	49.56	1257.47	1258.31	1258.88	1260.38	0.082590	6.36	7.79	12.19	2.54
Monesi	2	PAI-Q200+T.S.	73.30	1257.47	1258.49	1259.30	1261.22	0.085053	7.32	10.01	12.92	2.65
Monesi	2	TCEV-Q20	32.56	1257.47	1258.16	1258.59	1259.69	0.081599	5.49	5.93	11.54	2.44
Monesi	2	TCEV-Q50	38.24	1257.47	1258.21	1258.69	1259.93	0.081821	5.81	6.59	11.77	2.48
Monesi	2	TCEV-Q100	42.73	1257.47	1258.26	1258.77	1260.12	0.082103	6.04	7.08	11.94	2.51
Monesi	2	TCEV-Q200	47.40	1257.47	1258.30	1258.85	1260.30	0.082401	6.26	7.57	12.11	2.53
Monesi	2	TCEV-Q500	53.89	1257.47	1258.35	1258.95	1260.54	0.082971	6.55	8.22	12.33	2.56
Monesi	2	TCEV-Q200+TS	75.74	1257.47	1258.51	1259.33	1261.31	0.085322	7.41	10.23	12.99	2.67
Monesi	1	PAI-Q20	33.28	1255.06	1255.72	1256.37	1259.05	0.210957	8.08	4.12	9.12	3.84
Monesi	1	PAI-Q100	41.40	1255.06	1255.81	1256.53	1259.41	0.190446	8.40	4.93	9.51	3.73
Monesi	1	PAI-Q200	44.96	1255.06	1255.84	1256.60	1259.55	0.183740	8.53	5.27	9.68	3.69
Monesi	1	PAI-Q500	49.56	1255.06	1255.89	1256.68	1259.74	0.176792	8.69	5.70	9.88	3.65
Monesi	1	PAI-Q200+T.S.	73.30	1255.06	1256.09	1257.06	1260.60	0.149849	9.41	7.79	10.46	3.48
Monesi	1	TCEV-Q20	32.56	1255.06	1255.71	1256.35	1259.02	0.213139	8.05	4.04	9.08	3.85
Monesi	1	TCEV-Q50	38.24	1255.06	1255.77	1256.47	1259.27	0.197338	8.28	4.62	9.37	3.77
Monesi	1	TCEV-Q100	42.73	1255.06	1255.82	1256.55	1259.46	0.187820	8.45	5.06	9.58	3.71
Monesi	1	TCEV-Q200	47.40	1255.06	1255.87	1256.64	1259.65	0.179911	8.62	5.50	9.78	3.67
Monesi	1	TCEV-Q500	53.89	1255.06	1255.93	1256.75	1259.90	0.170409	8.83	6.10	10.01	3.61
Monesi	1	TCEV-Q200+TS	75.74	1255.06	1256.11	1257.10	1260.69	0.148040	9.47	7.99	10.52	3.47

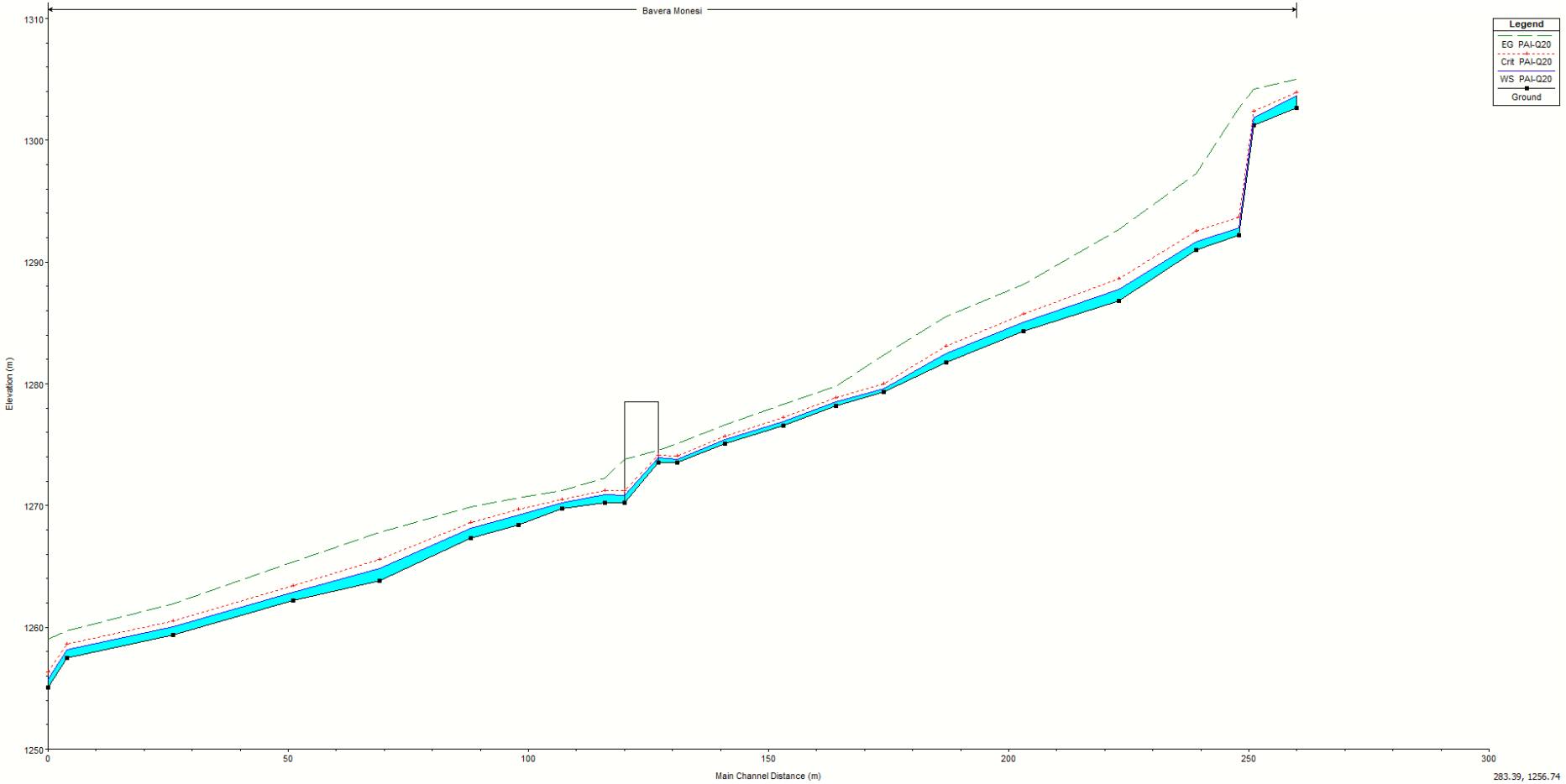
10 STATO DI PROGETTO

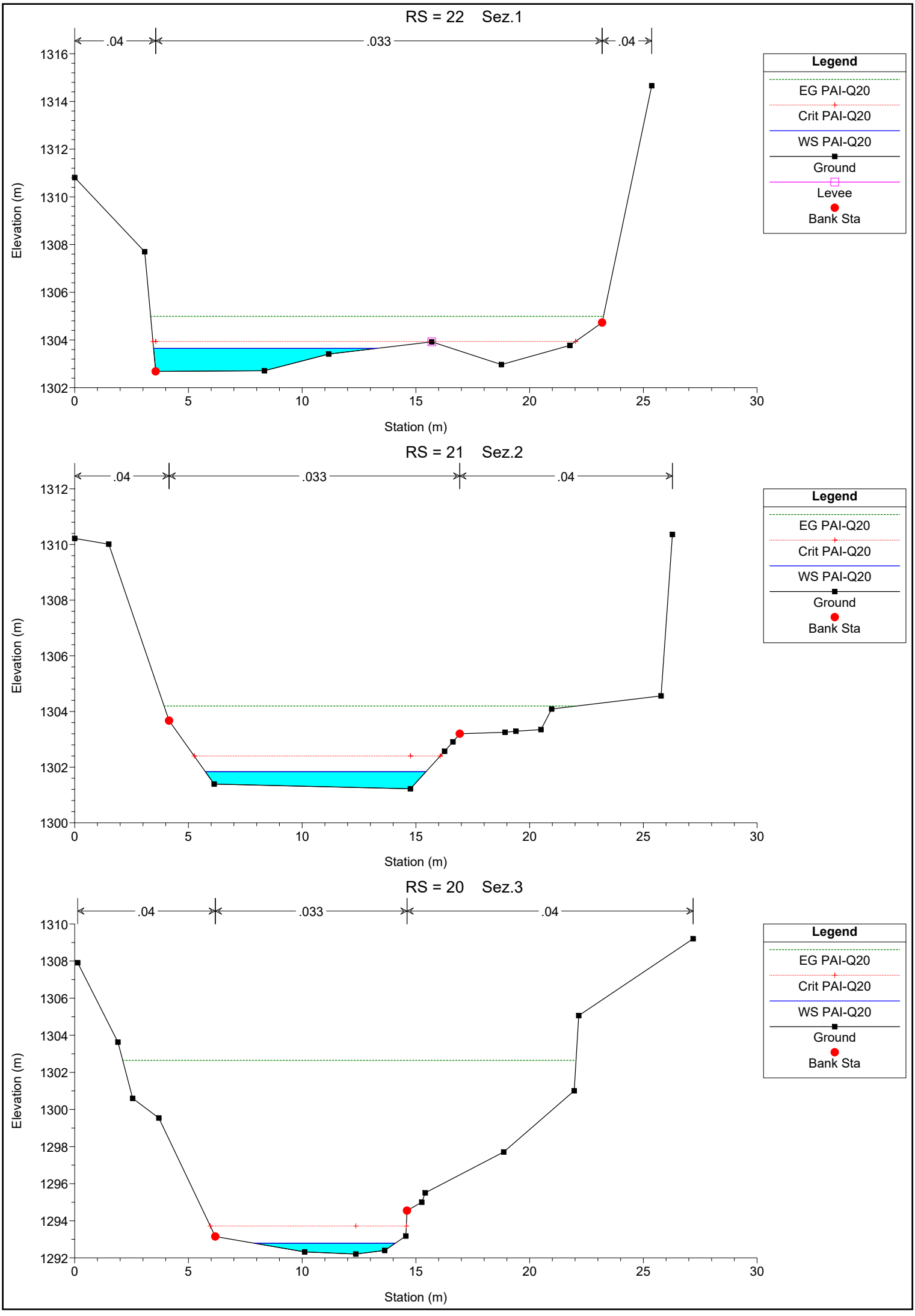
Nell'immagine seguente è riportata la planimetria

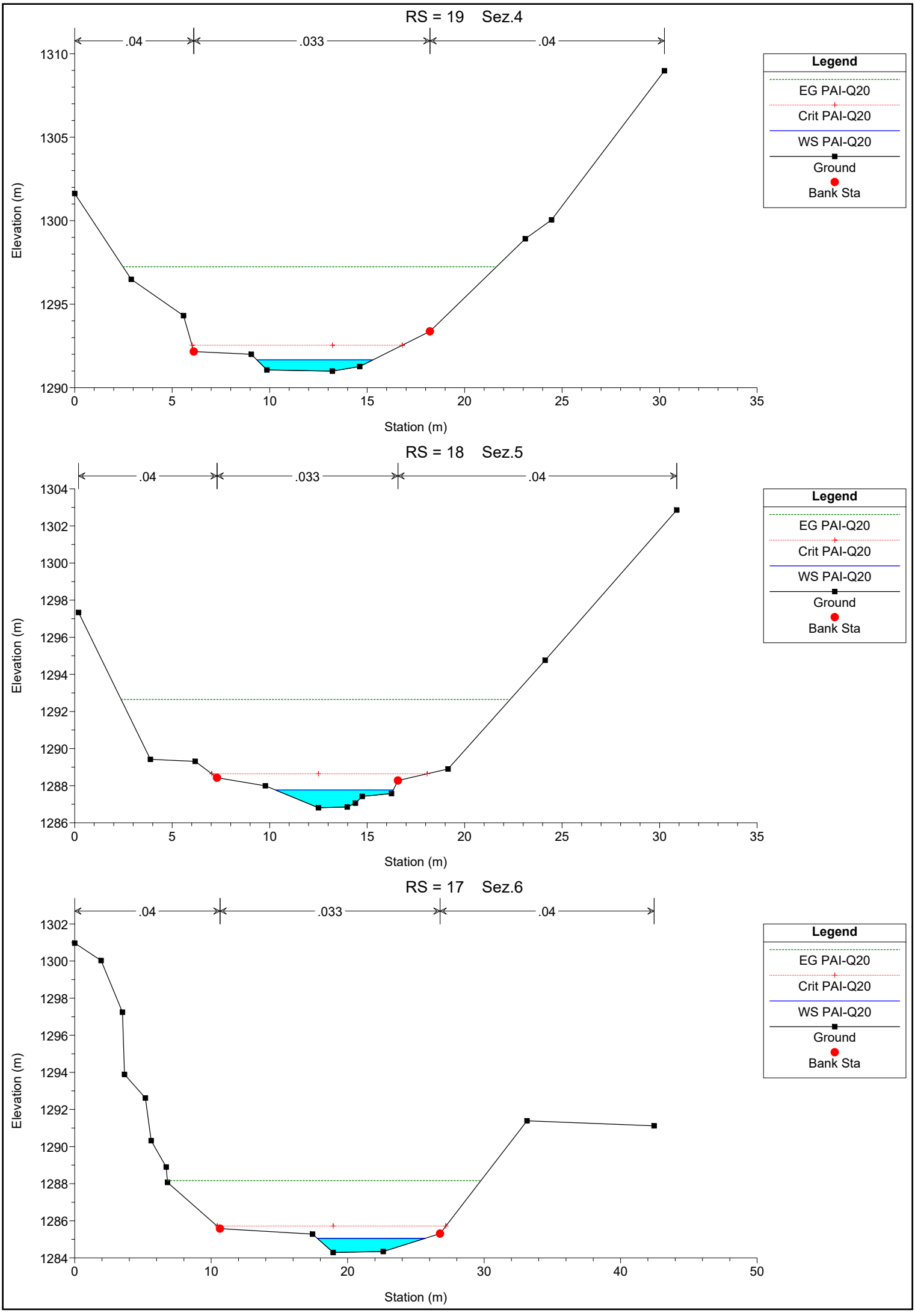


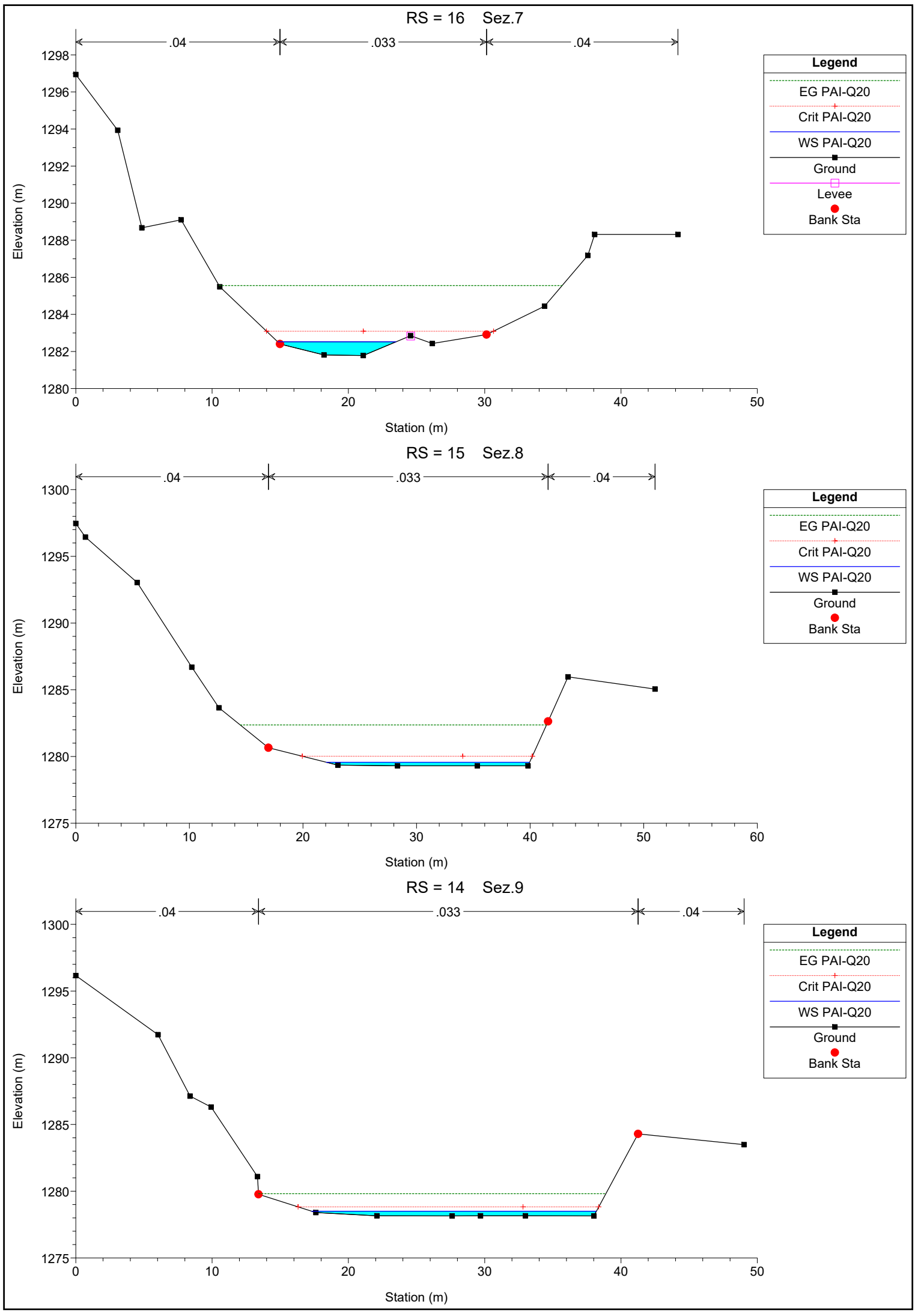
Nelle pagine seguenti sono riportati le sezioni e i tabulati relativi allo stato di progetto (ripristino situazione originale)

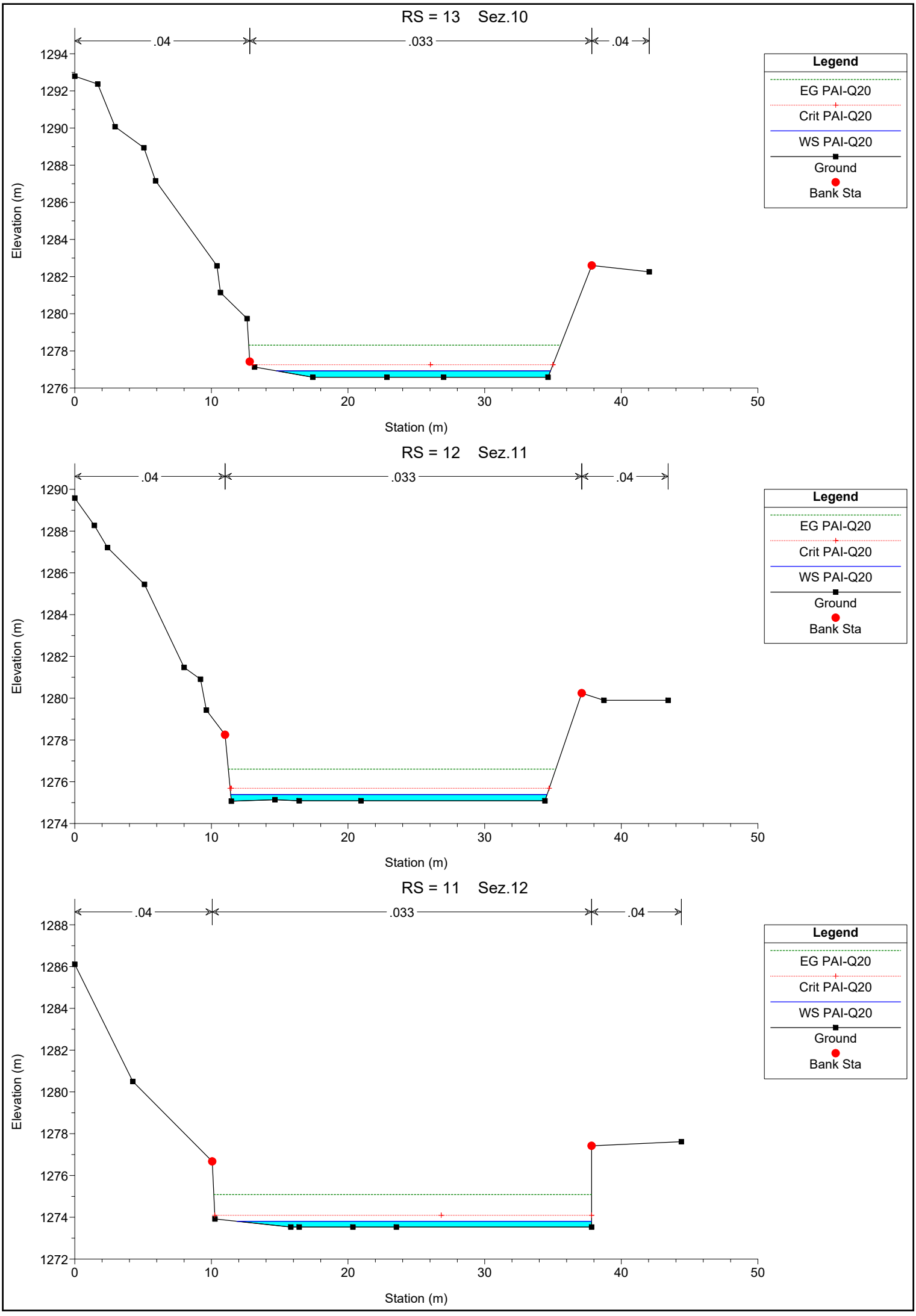
Q20 - PAI

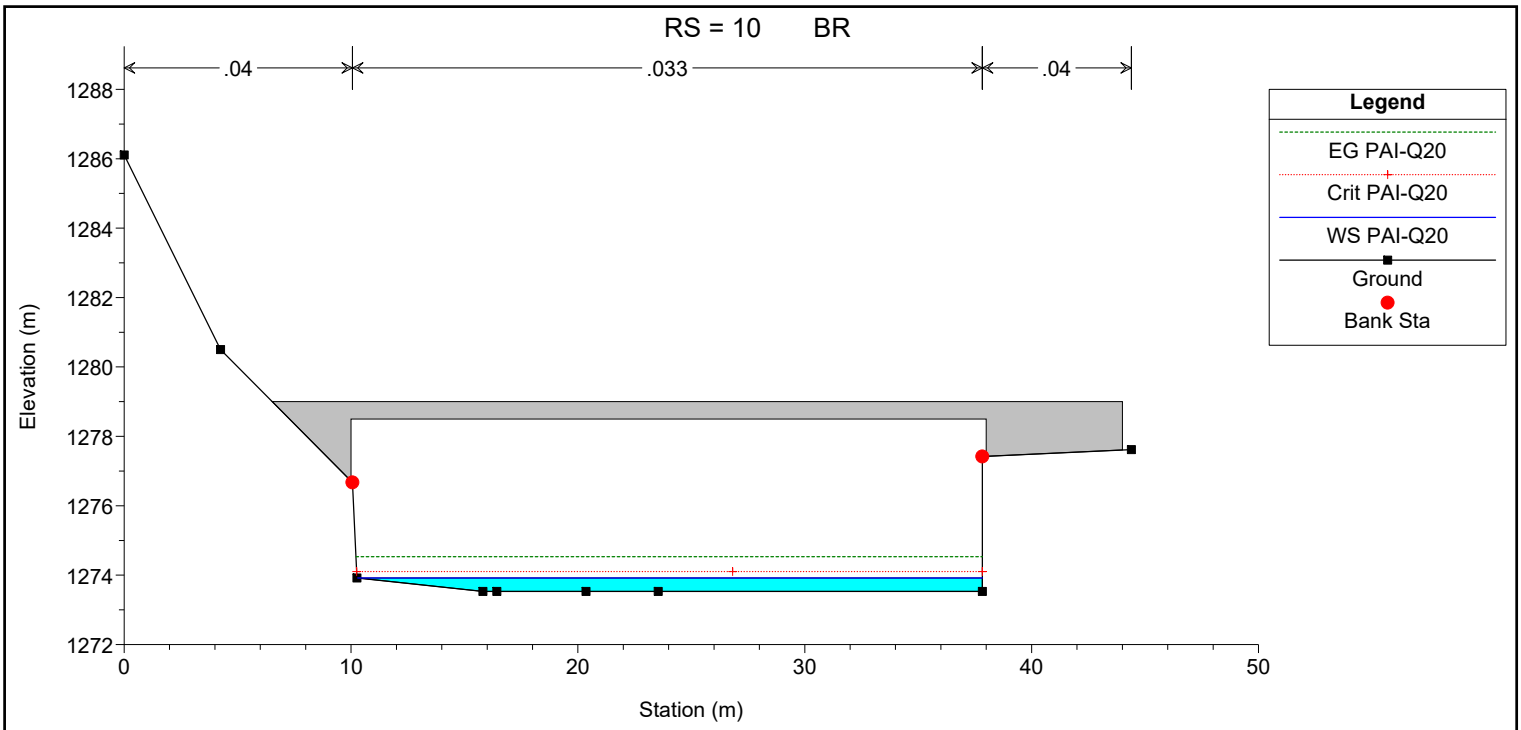

Bavera Monesi
Legend
EG PAI-Q20
Crit PAI-Q20
WS PAI-Q20
Ground
Elevation (m)
1310
1300
1290
1280
1270
1260
1250
0
50
100
150
200
250
300
Main Channel Distance (m)
283.39, 1256.74

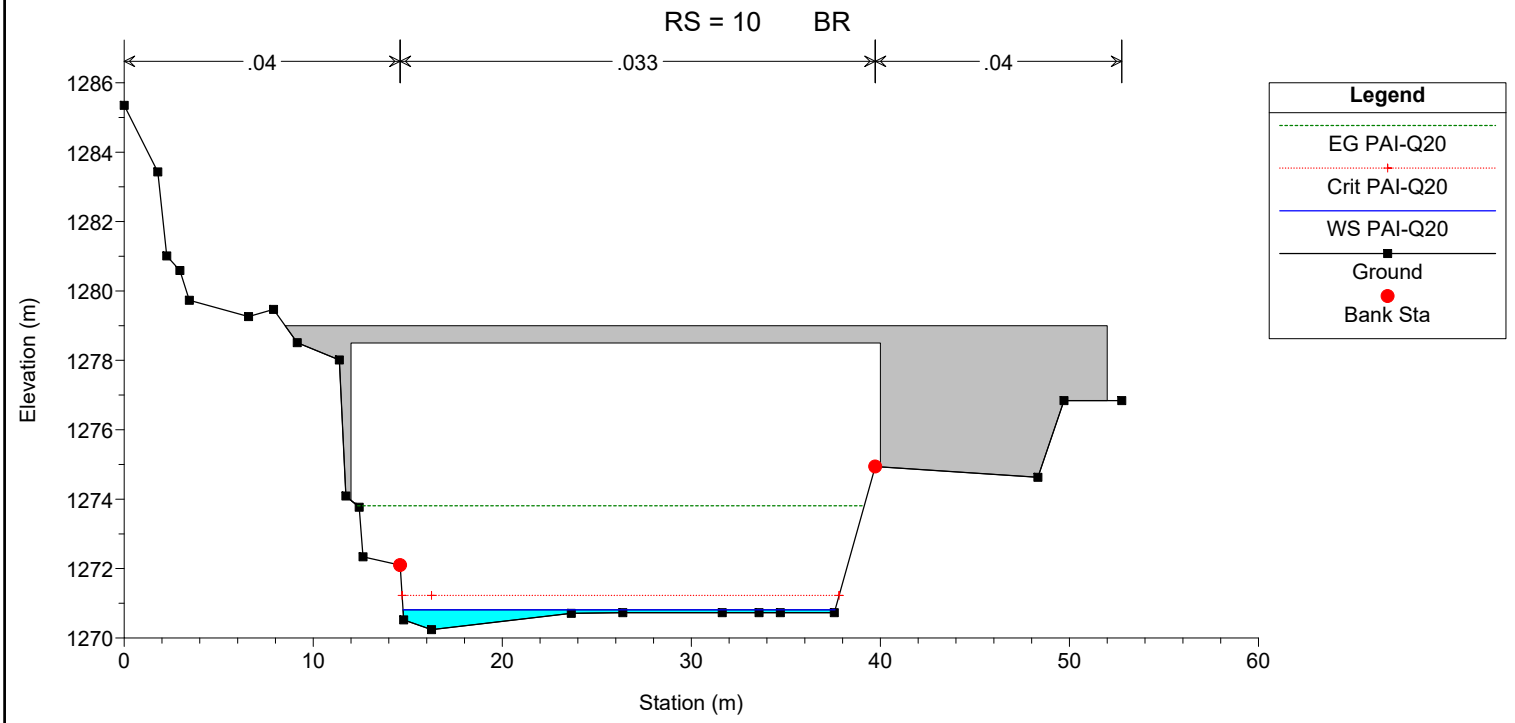

RS = 22 Sez.1
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG PAI-Q20
Crit PAI-Q20
WS PAI-Q20
Ground
Levee
Bank Sta
RS = 21 Sez.2
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG PAI-Q20
Crit PAI-Q20
WS PAI-Q20
Ground
Bank Sta
RS = 20 Sez.3
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG PAI-Q20
Crit PAI-Q20
WS PAI-Q20
Ground
Bank Sta

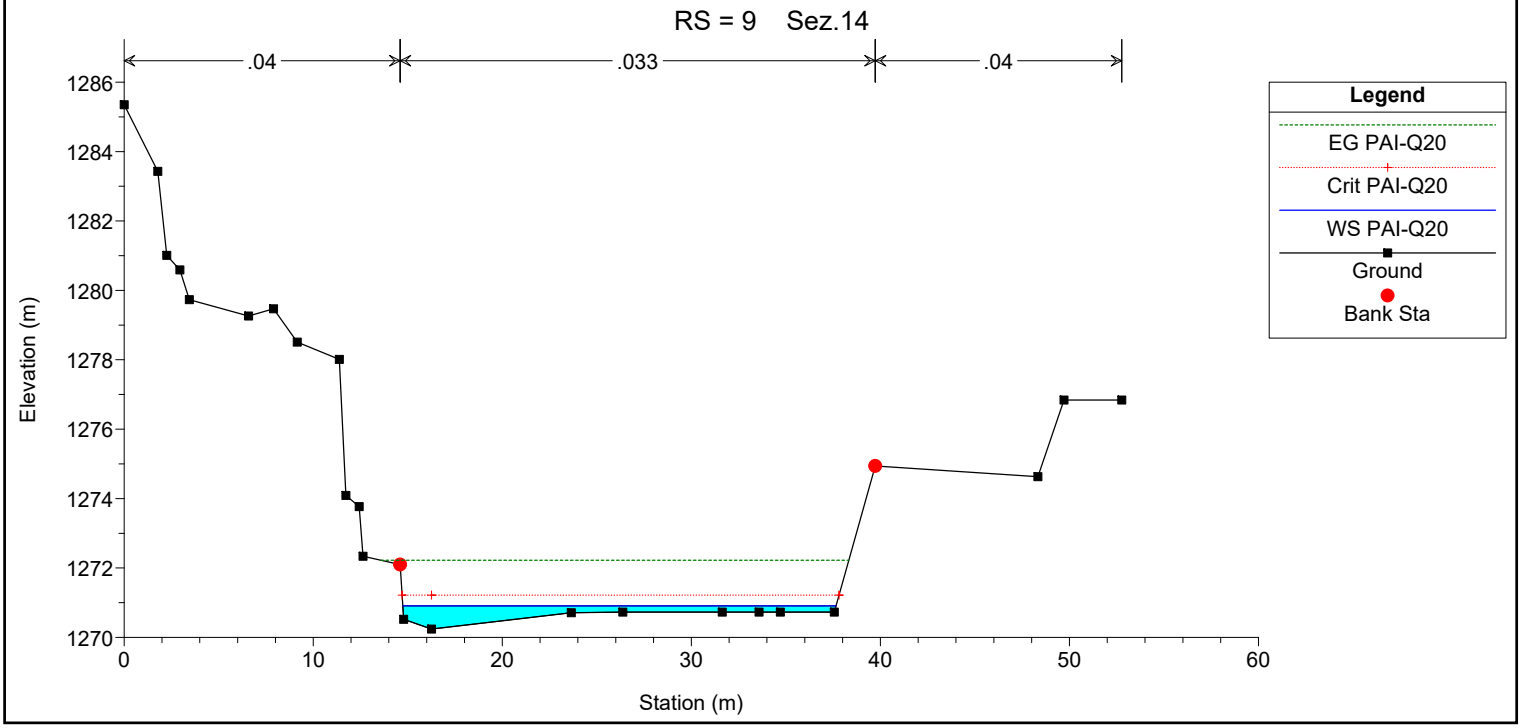

RS = 19 Sez.4
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG PAI-Q20
Crit PAI-Q20
WS PAI-Q20
Ground
Bank Sta
RS = 18 Sez.5
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG PAI-Q20
Crit PAI-Q20
WS PAI-Q20
Ground
Bank Sta
RS = 17 Sez.6
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG PAI-Q20
Crit PAI-Q20
WS PAI-Q20
Ground
Bank Sta

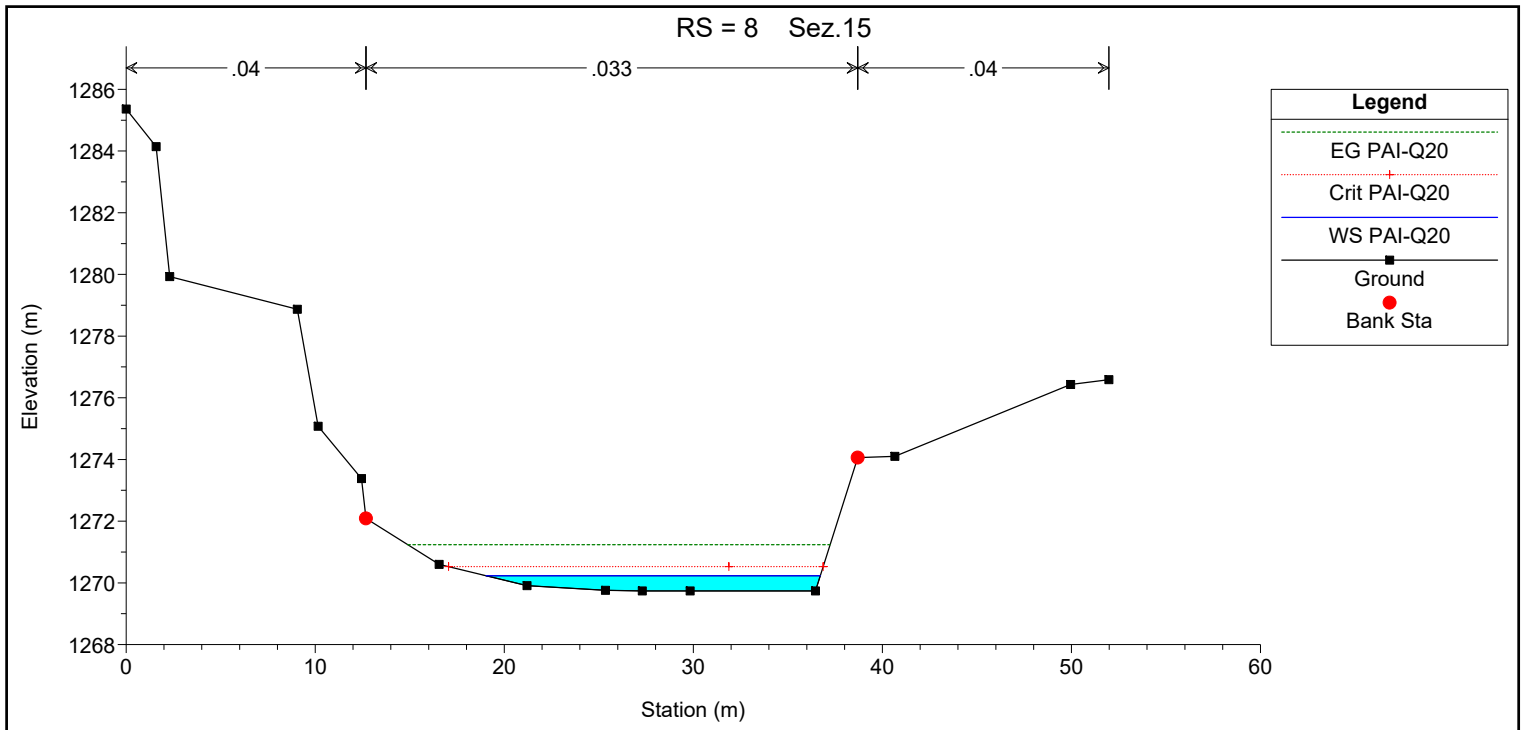

RS = 16 Sez.7
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG PAI-Q20
Crit PAI-Q20
WS PAI-Q20
Ground
Levee
Bank Sta
RS = 15 Sez.8
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG PAI-Q20
Crit PAI-Q20
WS PAI-Q20
Ground
Bank Sta
RS = 14 Sez.9
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG PAI-Q20
Crit PAI-Q20
WS PAI-Q20
Ground
Bank Sta

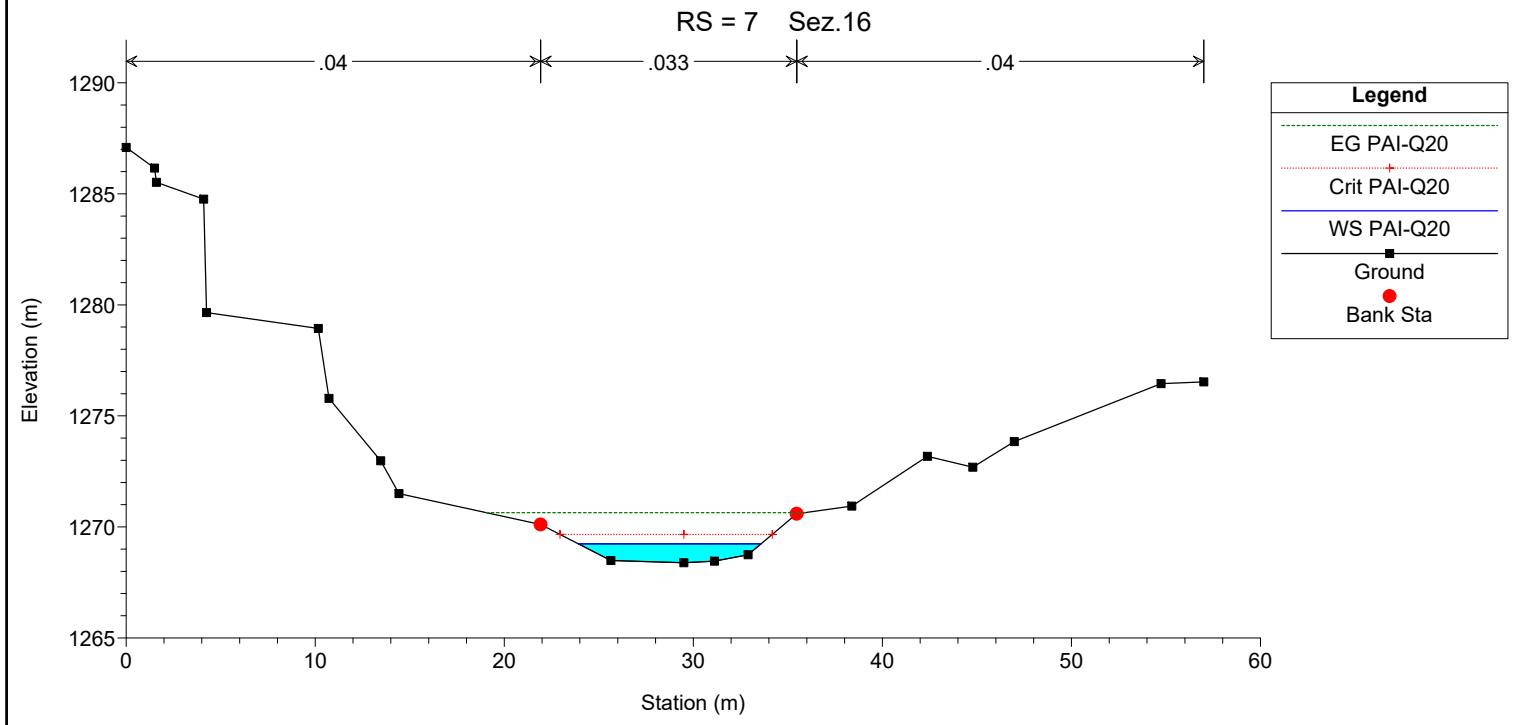

RS = 13 Sez.10
.04
.033
.04
Legend
EG PAI-Q20
Crit PAI-Q20
WS PAI-Q20
Ground
Bank Sta
Elevation (m)
Station (m)
RS = 12 Sez.11
.04
.033
.04
Legend
EG PAI-Q20
Crit PAI-Q20
WS PAI-Q20
Ground
Bank Sta
Elevation (m)
Station (m)
RS = 11 Sez.12
.04
.033
.04
Legend
EG PAI-Q20
Crit PAI-Q20
WS PAI-Q20
Ground
Bank Sta
Elevation (m)
Station (m)

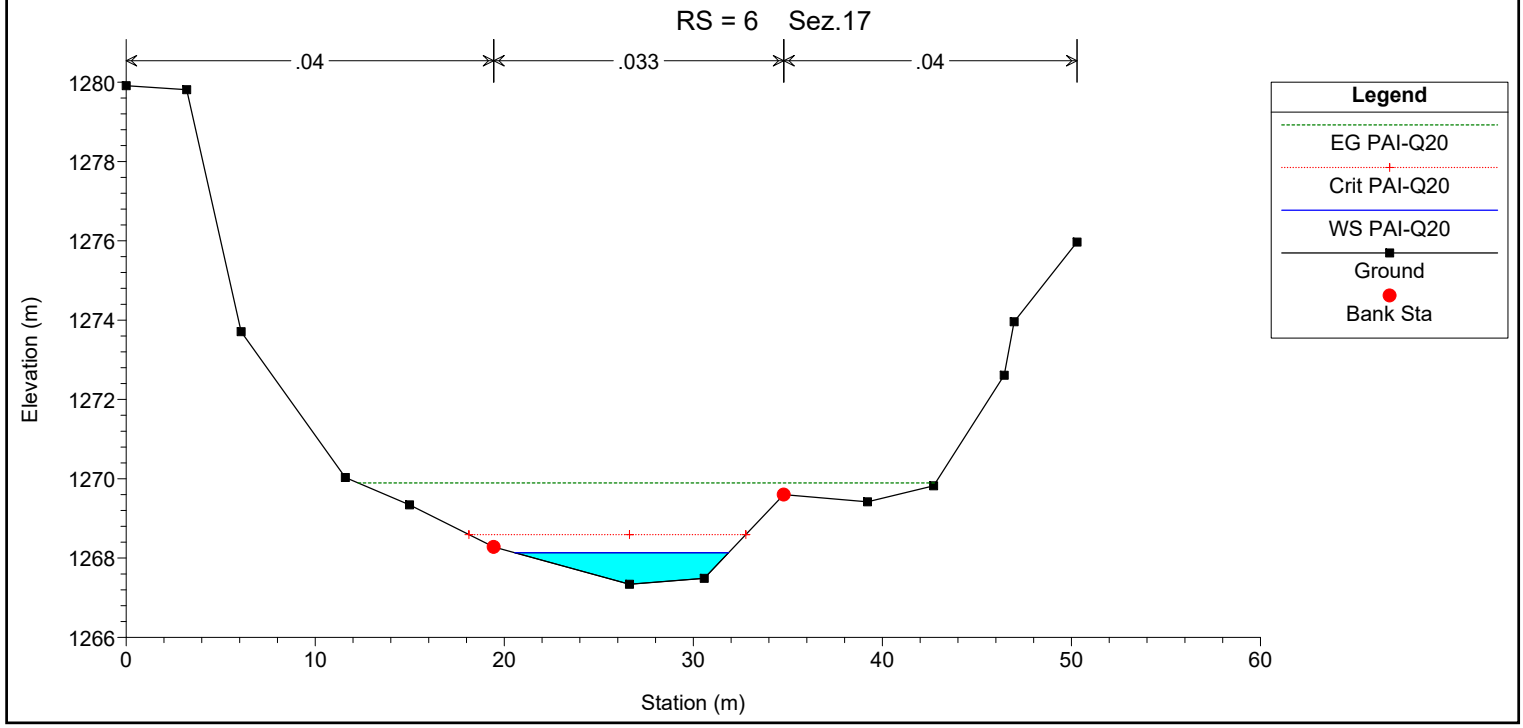

RS = 10 BR
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG PAI-Q20
Crit PAI-Q20
WS PAI-Q20
Ground
Bank Sta

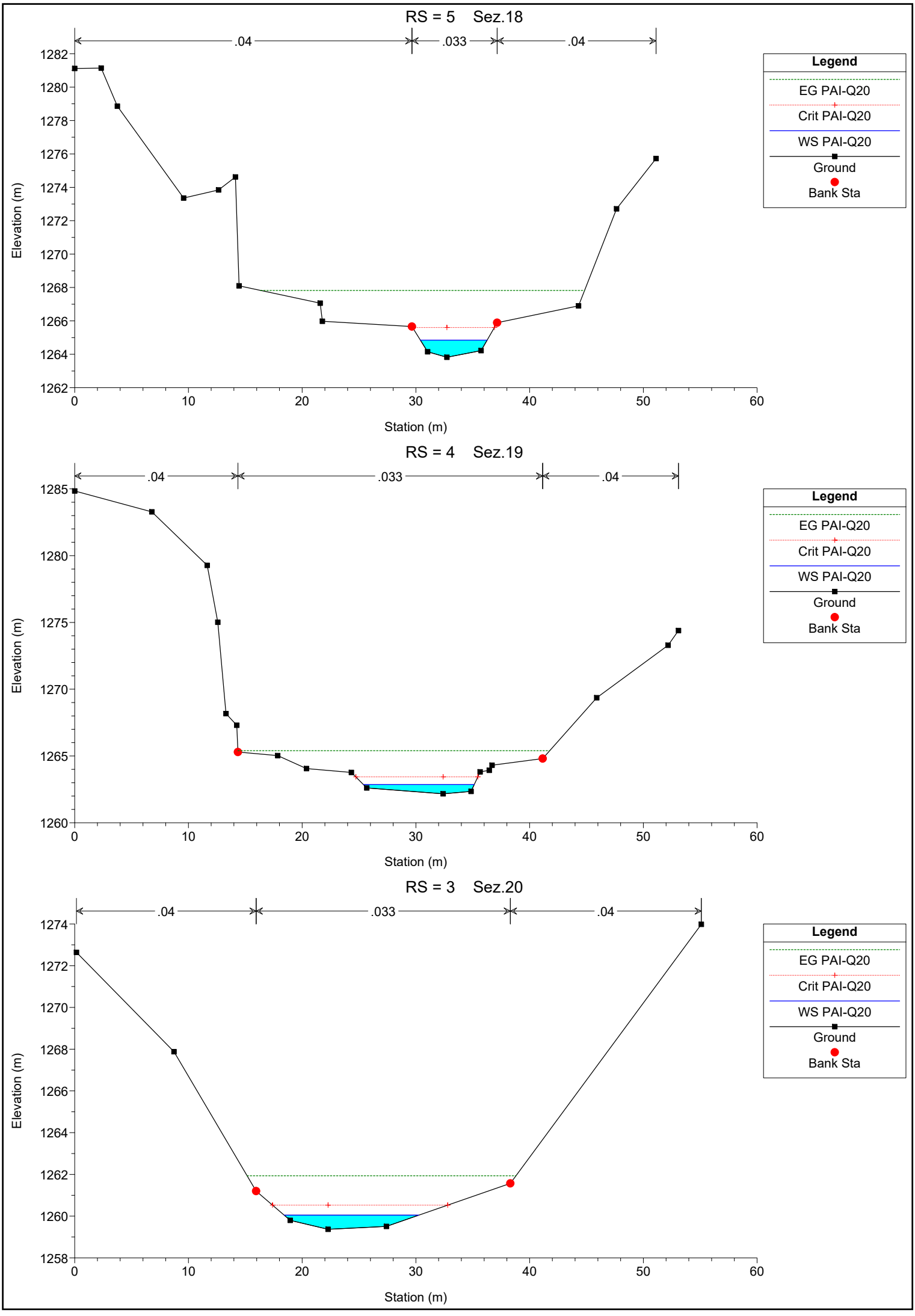

RS = 10 BR
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG PAI-Q20
Crit PAI-Q20
WS PAI-Q20
Ground
Bank Sta

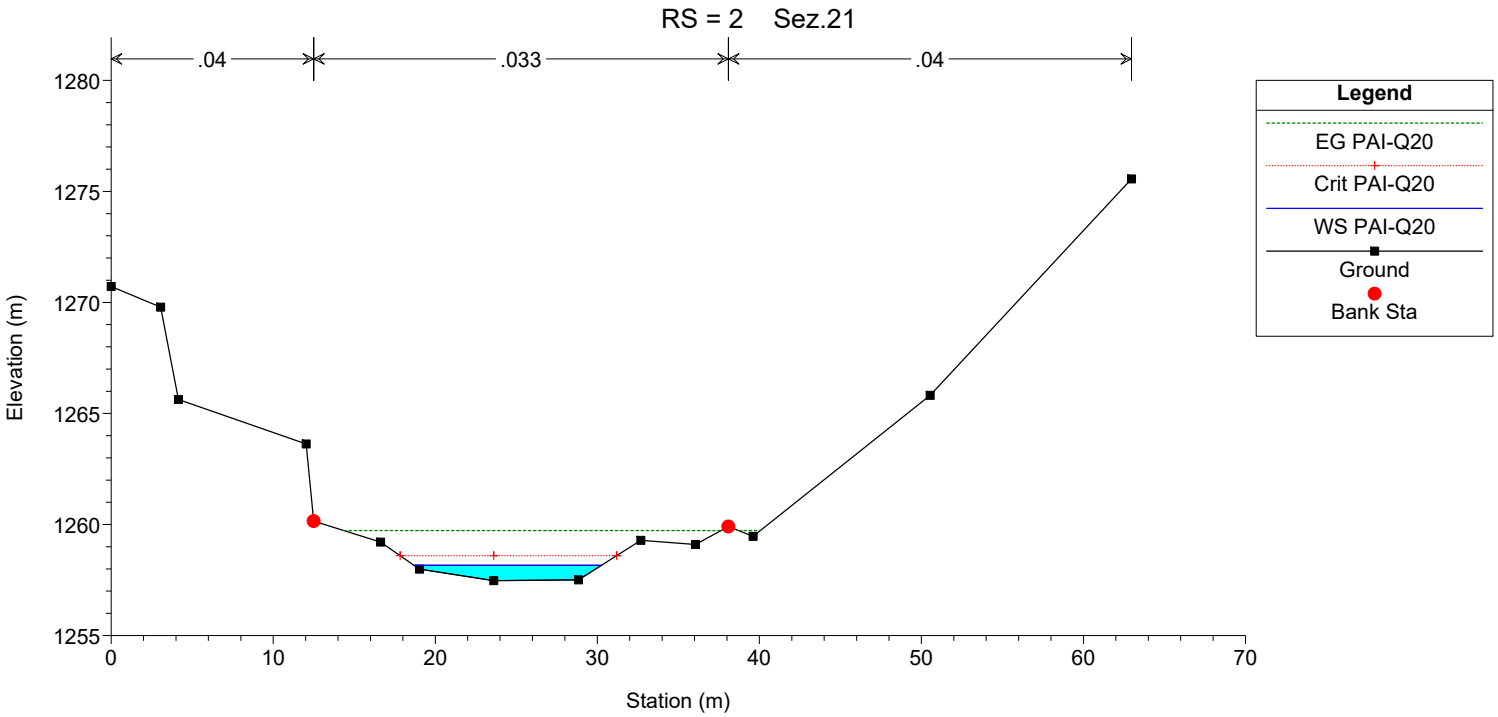

RS = 9 Sez.14
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG PAI-Q20
Crit PAI-Q20
WS PAI-Q20
Ground
Bank Sta

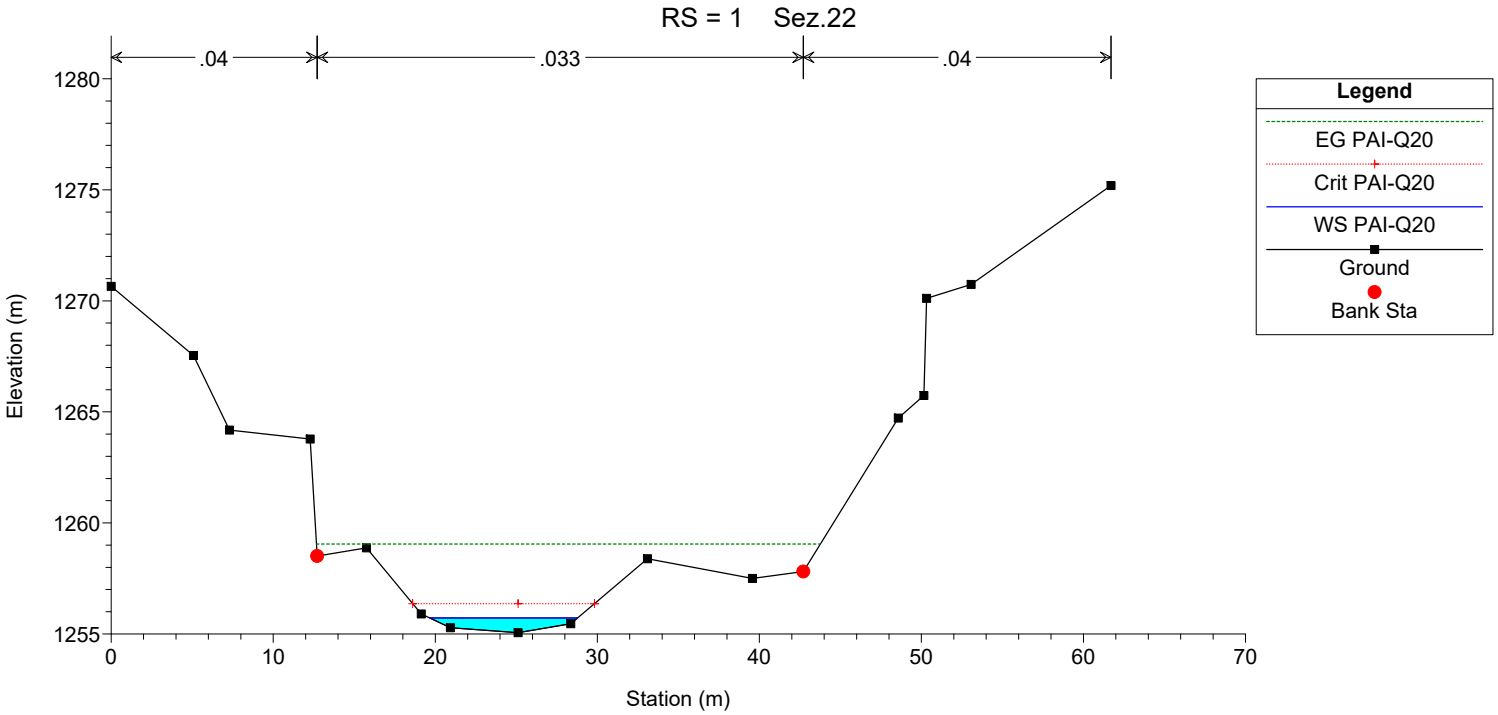

RS = 8 Sez.15
.04
.033
.04
Legend
EG PAI-Q20
Crit PAI-Q20
WS PAI-Q20
Ground
Bank Sta
Elevation (m)
Station (m)


RS = 7 Sez.16
.04
.033
.04
Legend
EG PAI-Q20
Crit PAI-Q20
WS PAI-Q20
Ground
Bank Sta
Elevation (m)
Station (m)

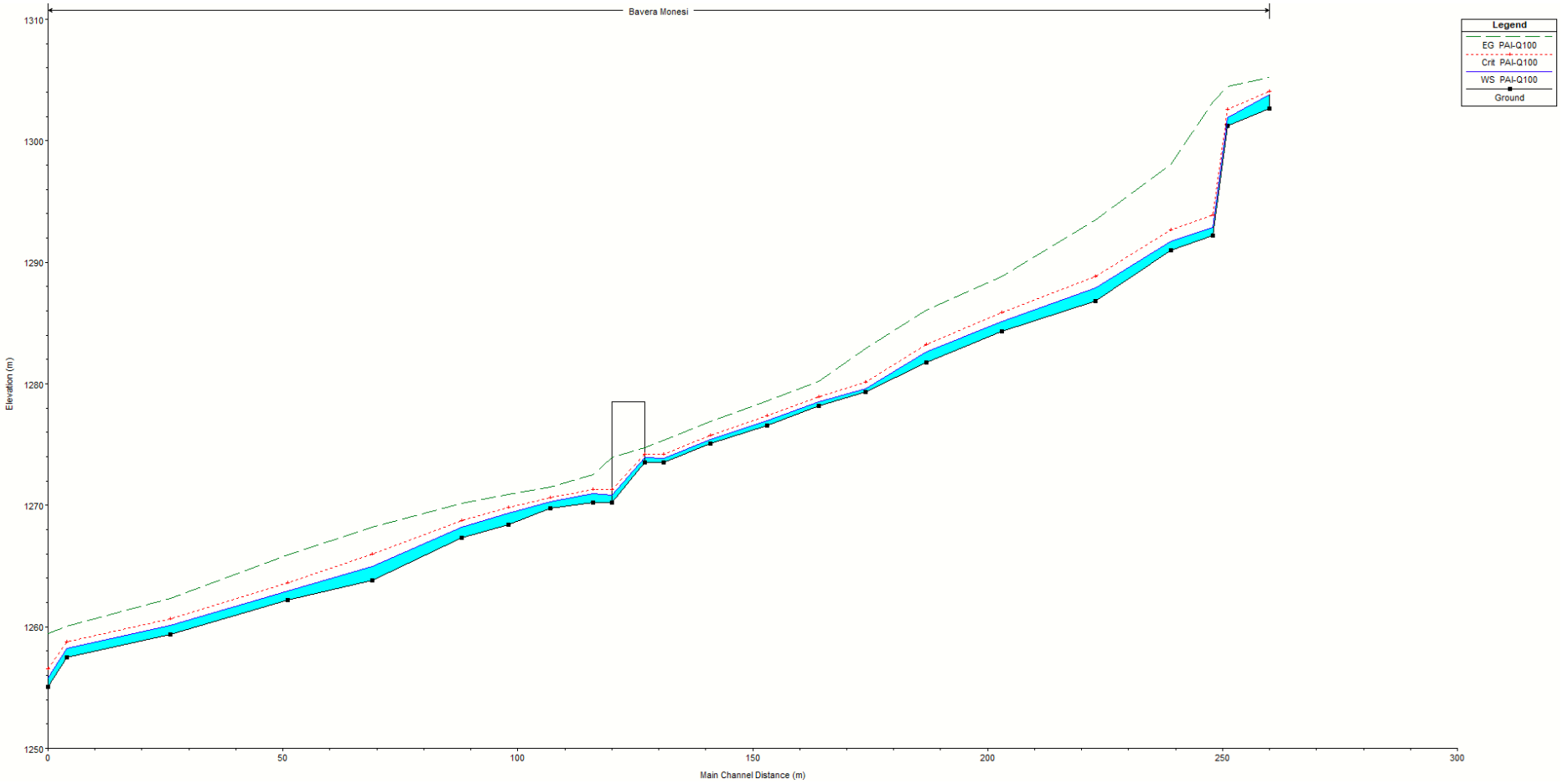

RS = 6 Sez.17
.04
.033
.04
Legend
EG PAI-Q20
Crit PAI-Q20
WS PAI-Q20
Ground
Bank Sta
Elevation (m)
Station (m)

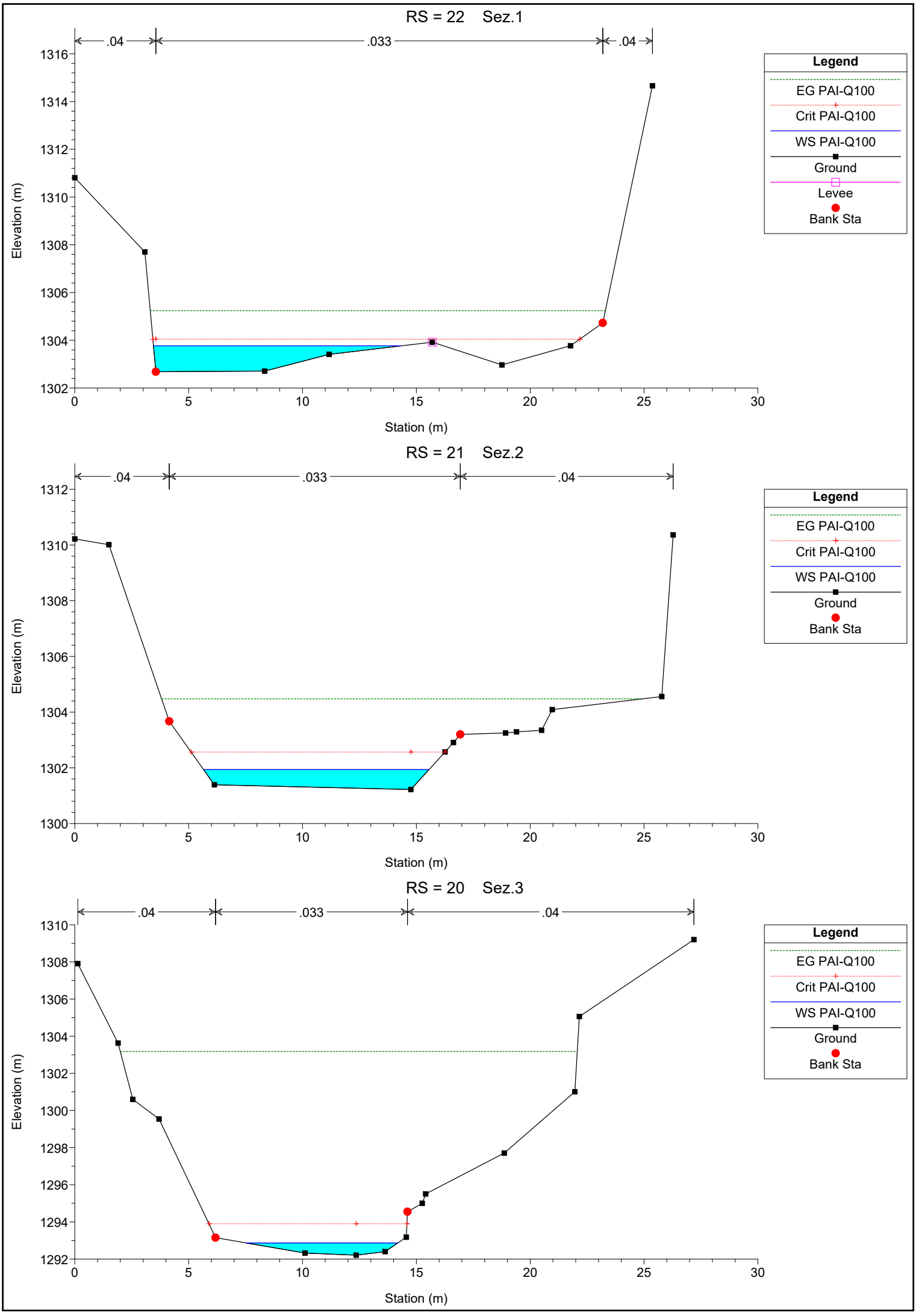

RS = 5 Sez.18
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG PAI-Q20
Crit PAI-Q20
WS PAI-Q20
Ground
Bank Sta
RS = 4 Sez.19
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG PAI-Q20
Crit PAI-Q20
WS PAI-Q20
Ground
Bank Sta
RS = 3 Sez.20
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG PAI-Q20
Crit PAI-Q20
WS PAI-Q20
Ground
Bank Sta

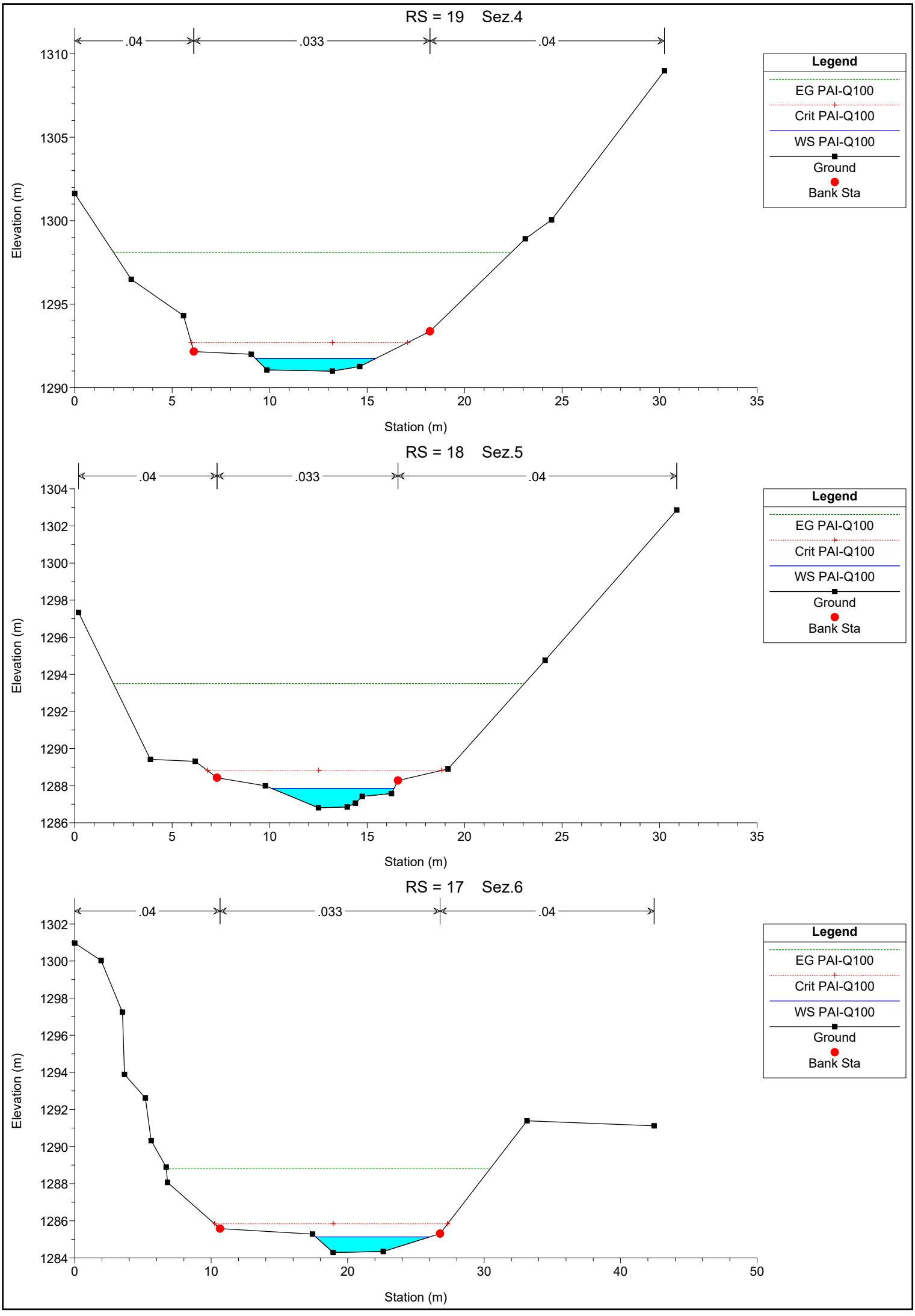

RS = 2 Sez.21
.04
.033
.04
Legend
EG PAI-Q20
Crit PAI-Q20
WS PAI-Q20
Ground
Bank Sta
Elevation (m)
Station (m)
1280
1275
1270
1265
1260
1255
0
10
20
30
40
50
60
70

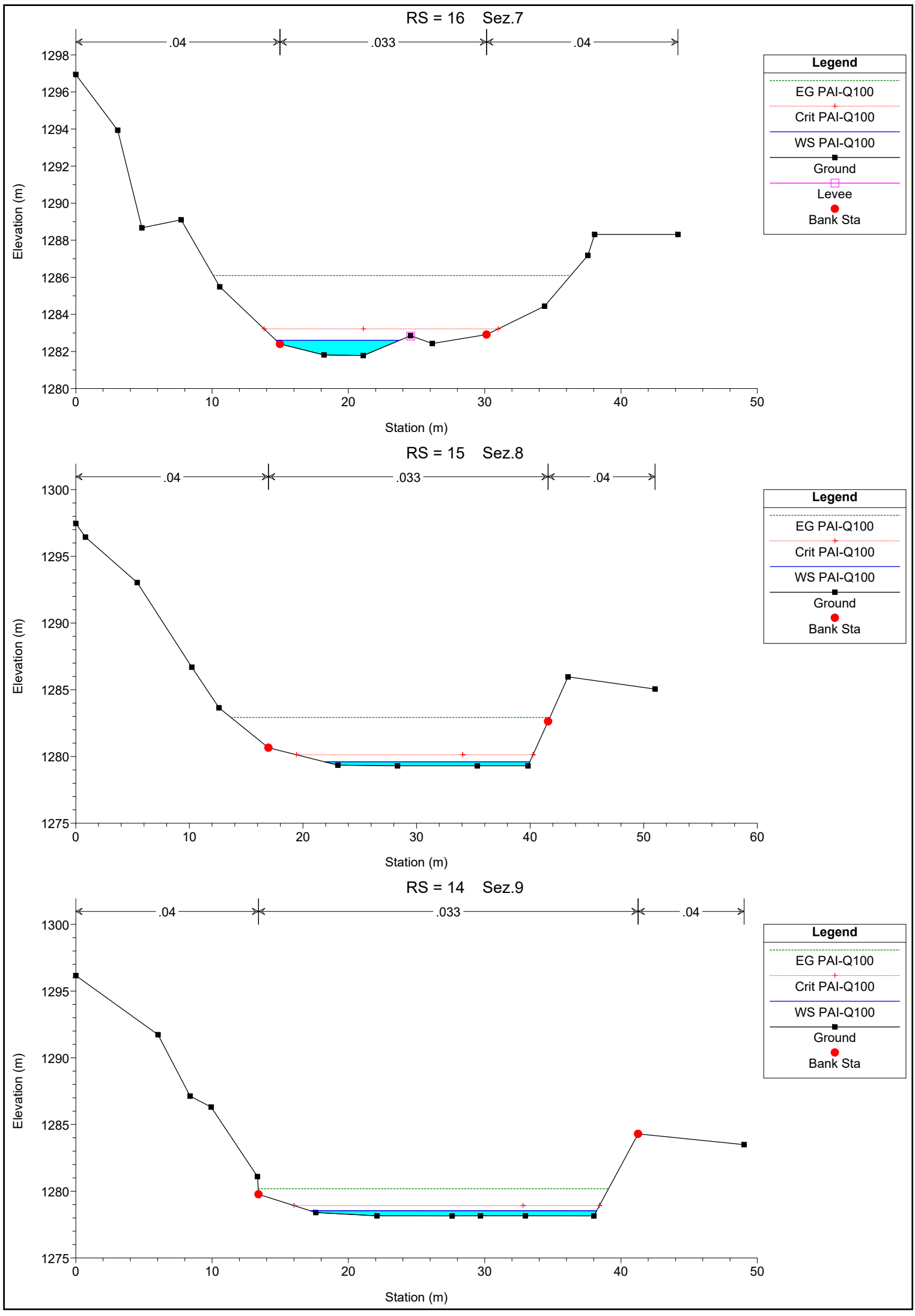

RS = 1 Sez.22
.04
.033
.04
Legend
EG PAI-Q20
Crit PAI-Q20
WS PAI-Q20
Ground
Bank Sta
Elevation (m)
Station (m)
1280
1275
1270
1265
1260
1255
0
10
20
30
40
50
60
70

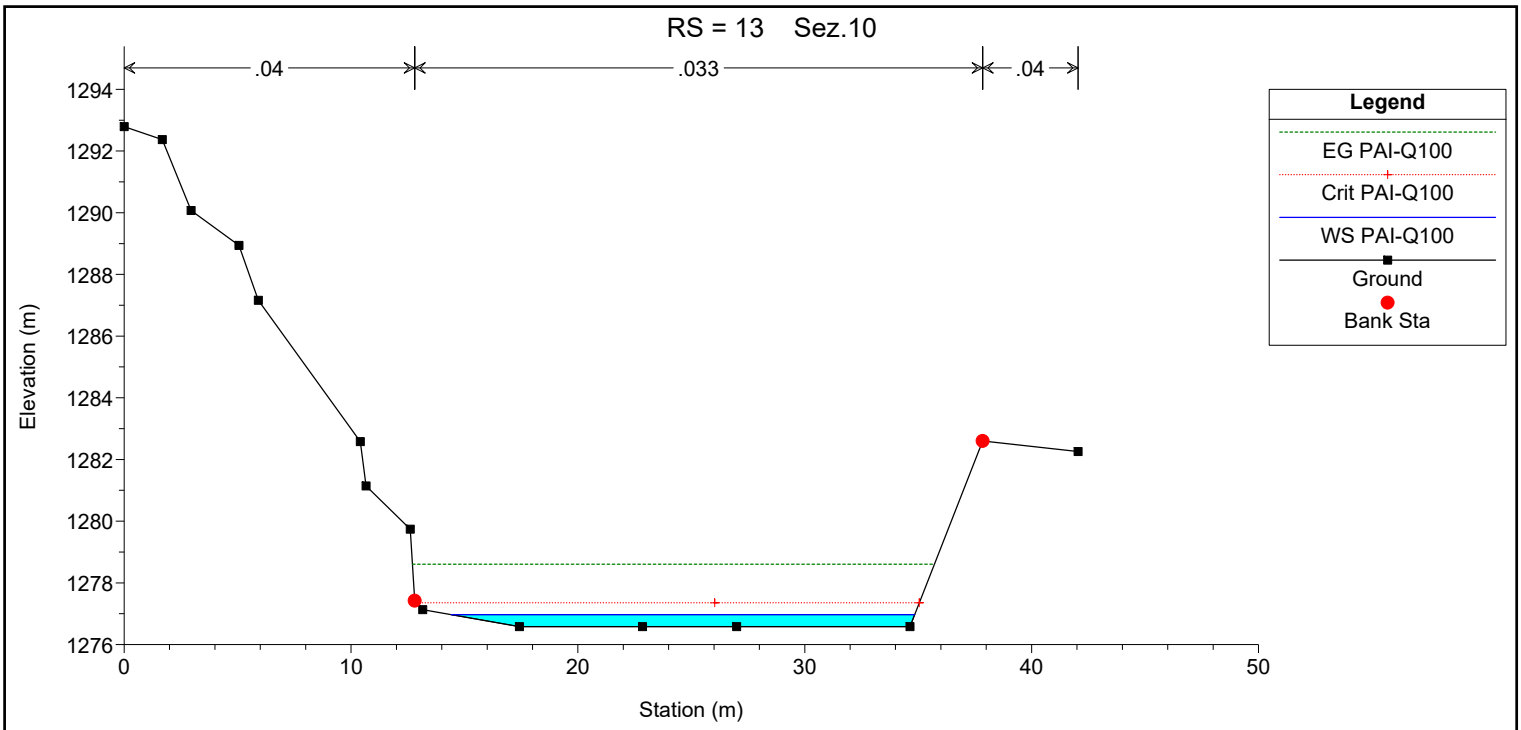
Q100 - PAI

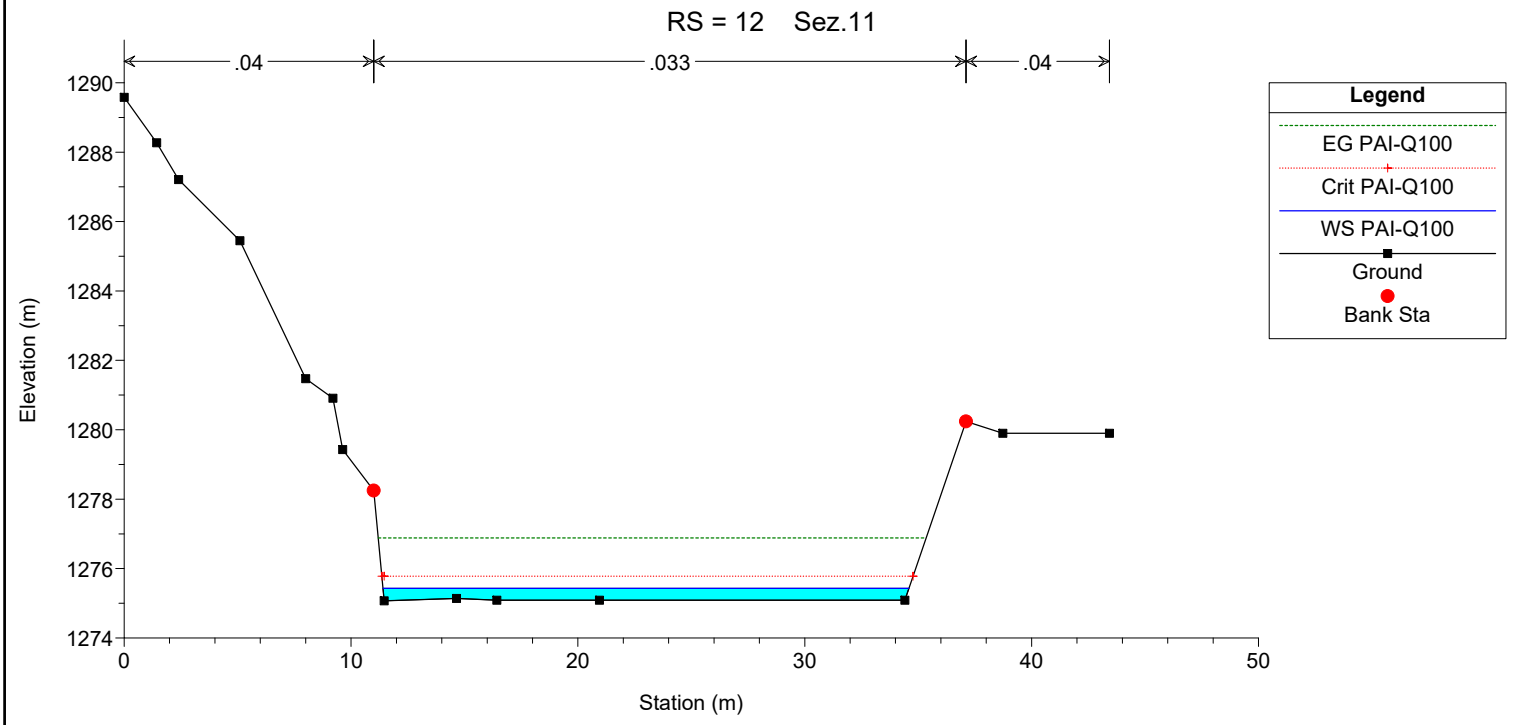

Bavera Monesi
Legend
EG PAI-Q100
Crit PAI-Q100
WS PAI-Q100
Ground
Elevation (m)
1310
1300
1290
1280
1270
1260
1250
0
50
100
150
200
250
300
Main Channel Distance (m)

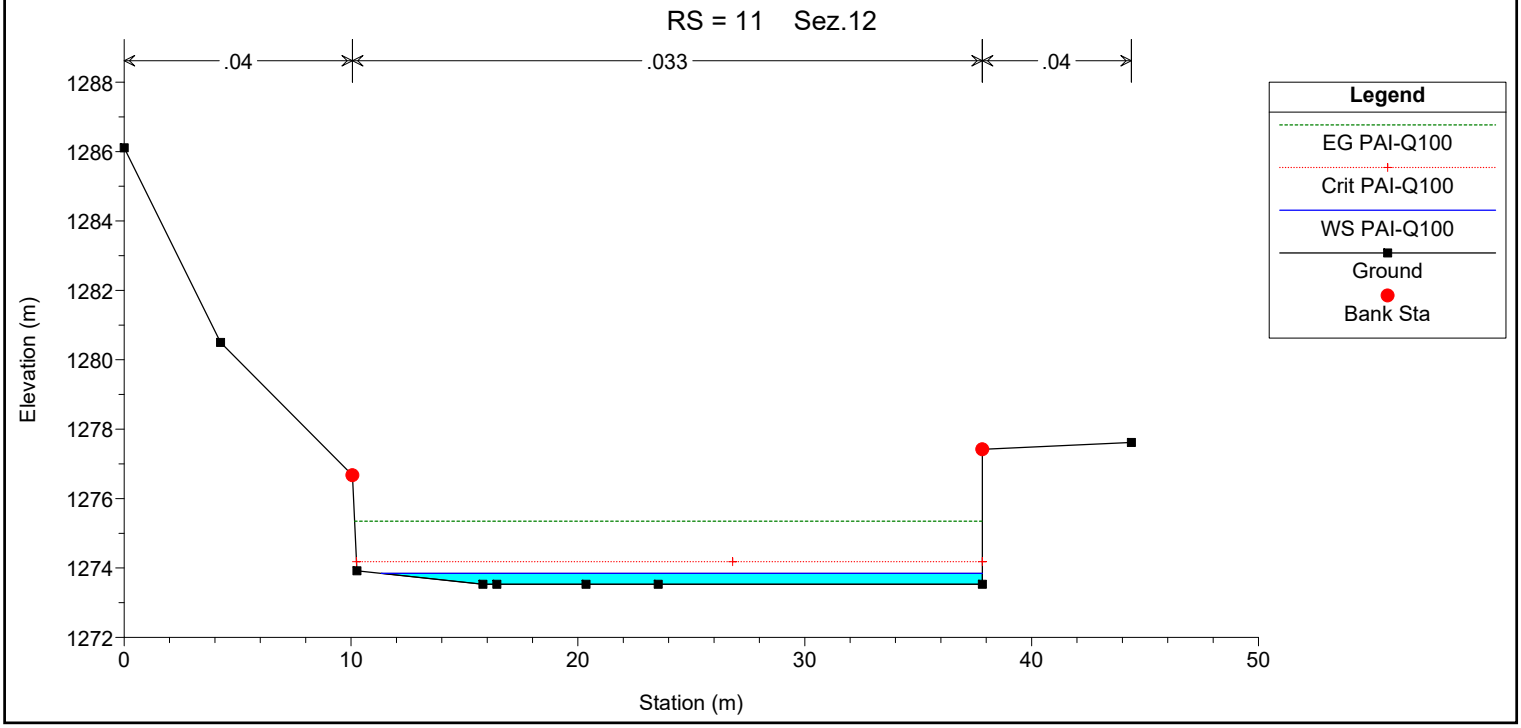

RS = 22 Sez.1
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG PAI-Q100
Crit PAI-Q100
WS PAI-Q100
Ground
Levee
Bank Sta
RS = 21 Sez.2
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG PAI-Q100
Crit PAI-Q100
WS PAI-Q100
Ground
Bank Sta
RS = 20 Sez.3
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG PAI-Q100
Crit PAI-Q100
WS PAI-Q100
Ground
Bank Sta

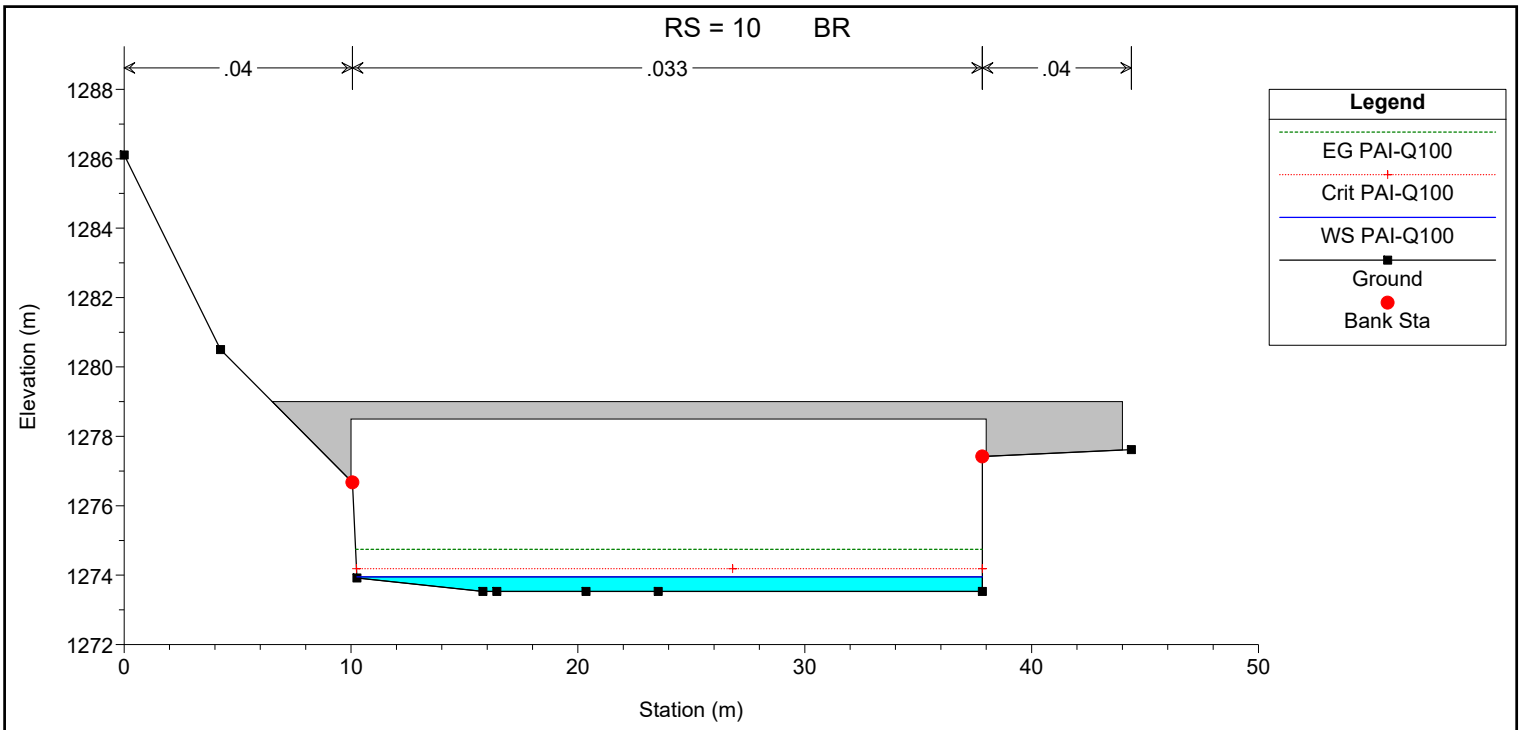

RS = 19 Sez.4
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG PAI-Q100
Crit PAI-Q100
WS PAI-Q100
Ground
Bank Sta
RS = 18 Sez.5
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG PAI-Q100
Crit PAI-Q100
WS PAI-Q100
Ground
Bank Sta
RS = 17 Sez.6
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG PAI-Q100
Crit PAI-Q100
WS PAI-Q100
Ground
Bank Sta

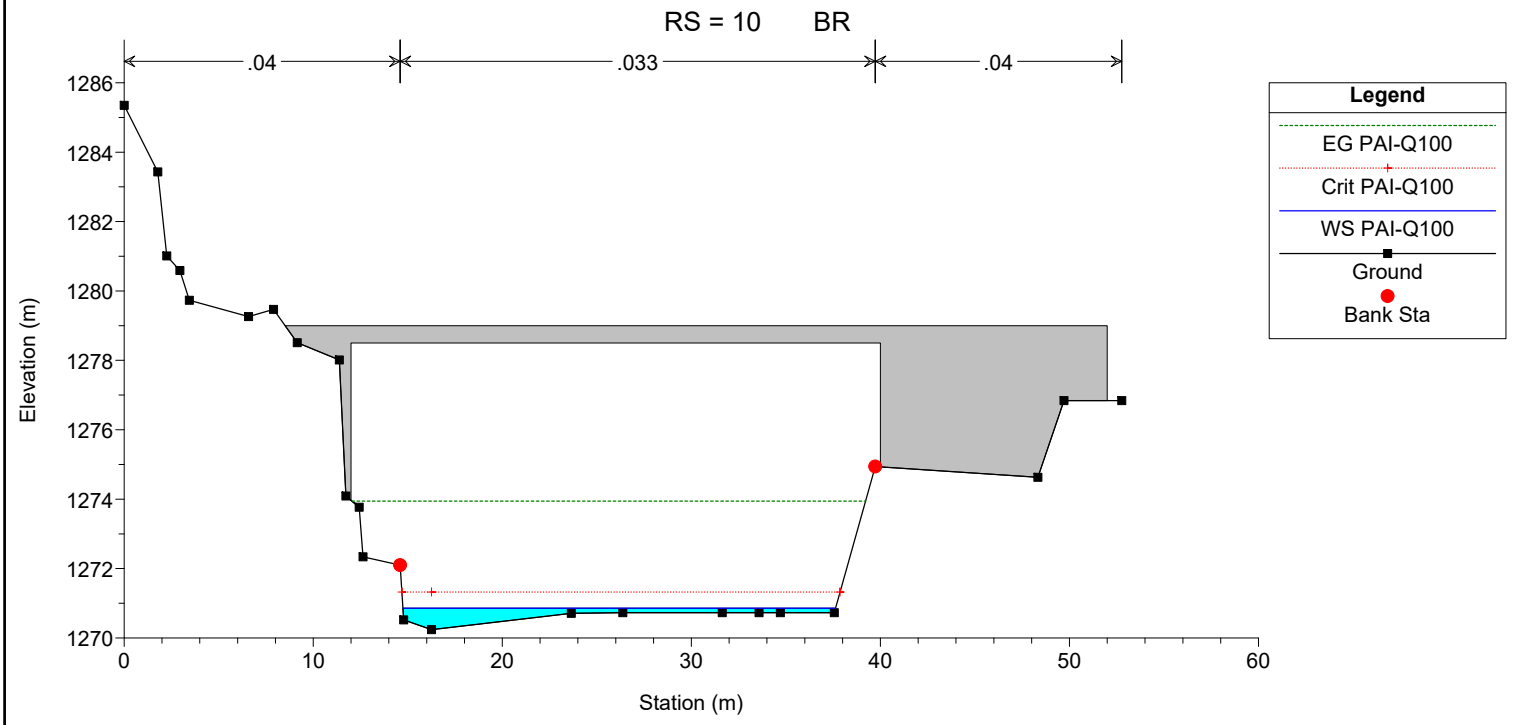

RS = 16 Sez.7
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG PAI-Q100
Crit PAI-Q100
WS PAI-Q100
Ground
Levee
Bank Sta
RS = 15 Sez.8
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG PAI-Q100
Crit PAI-Q100
WS PAI-Q100
Ground
Bank Sta
RS = 14 Sez.9
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG PAI-Q100
Crit PAI-Q100
WS PAI-Q100
Ground
Bank Sta

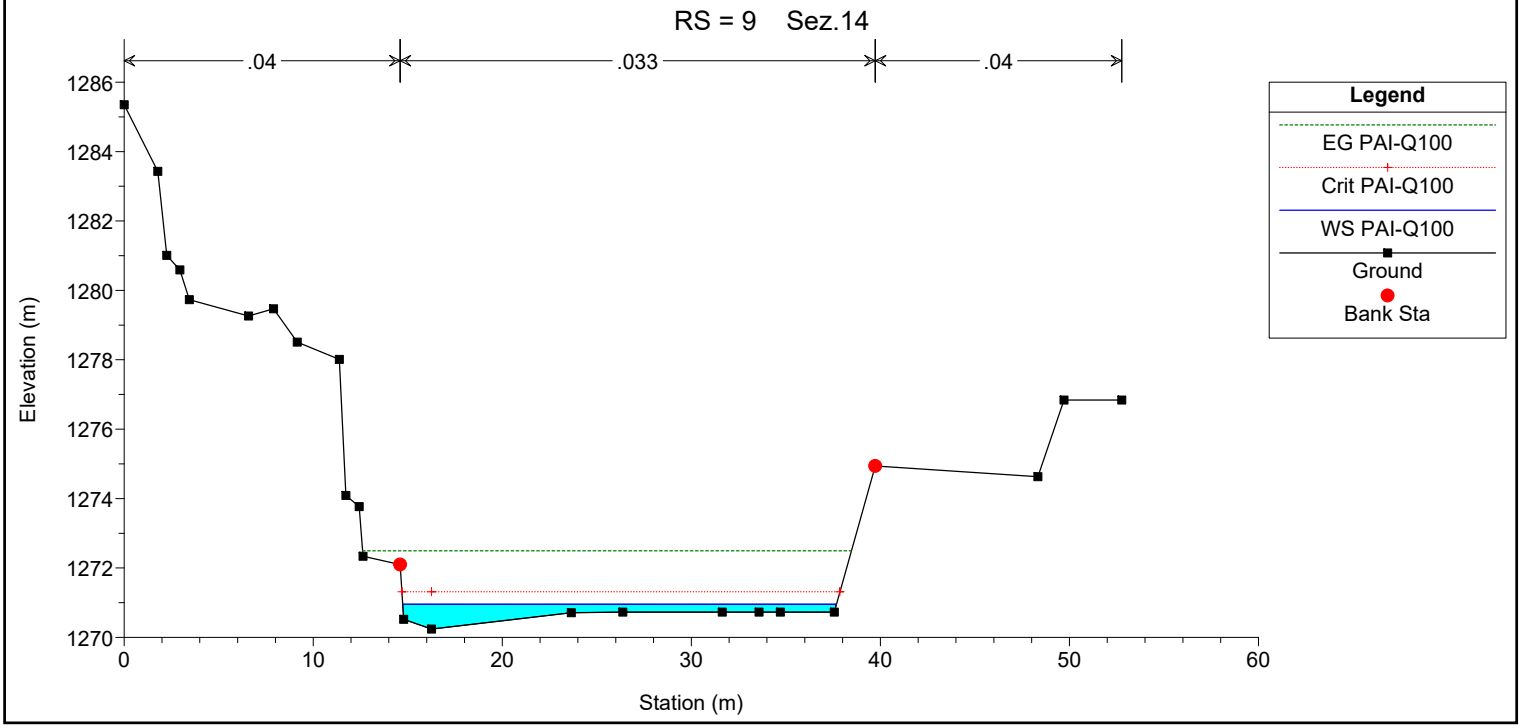

RS = 13 Sez.10
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG PAI-Q100
Crit PAI-Q100
WS PAI-Q100
Ground
Bank Sta

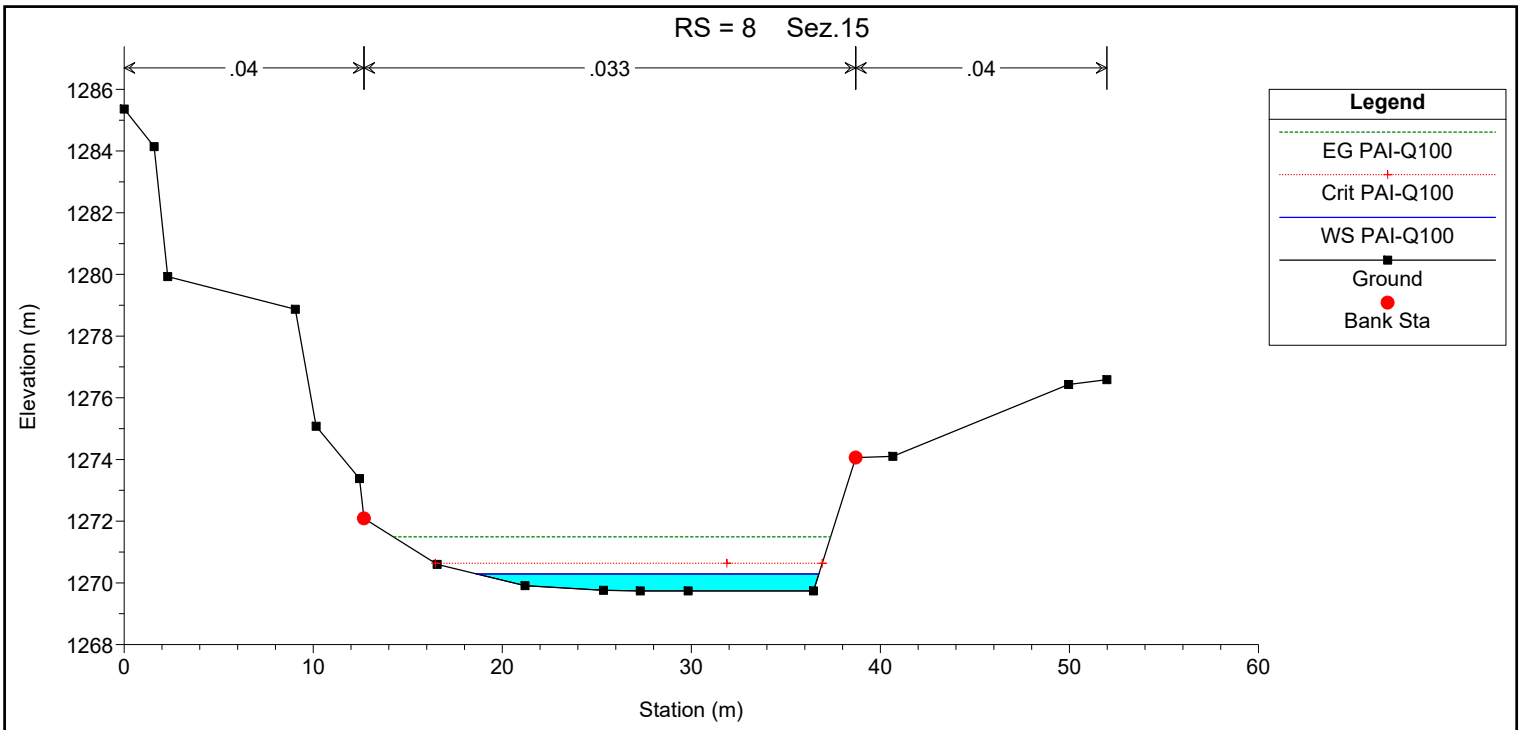

RS = 12 Sez.11
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG PAI-Q100
Crit PAI-Q100
WS PAI-Q100
Ground
Bank Sta

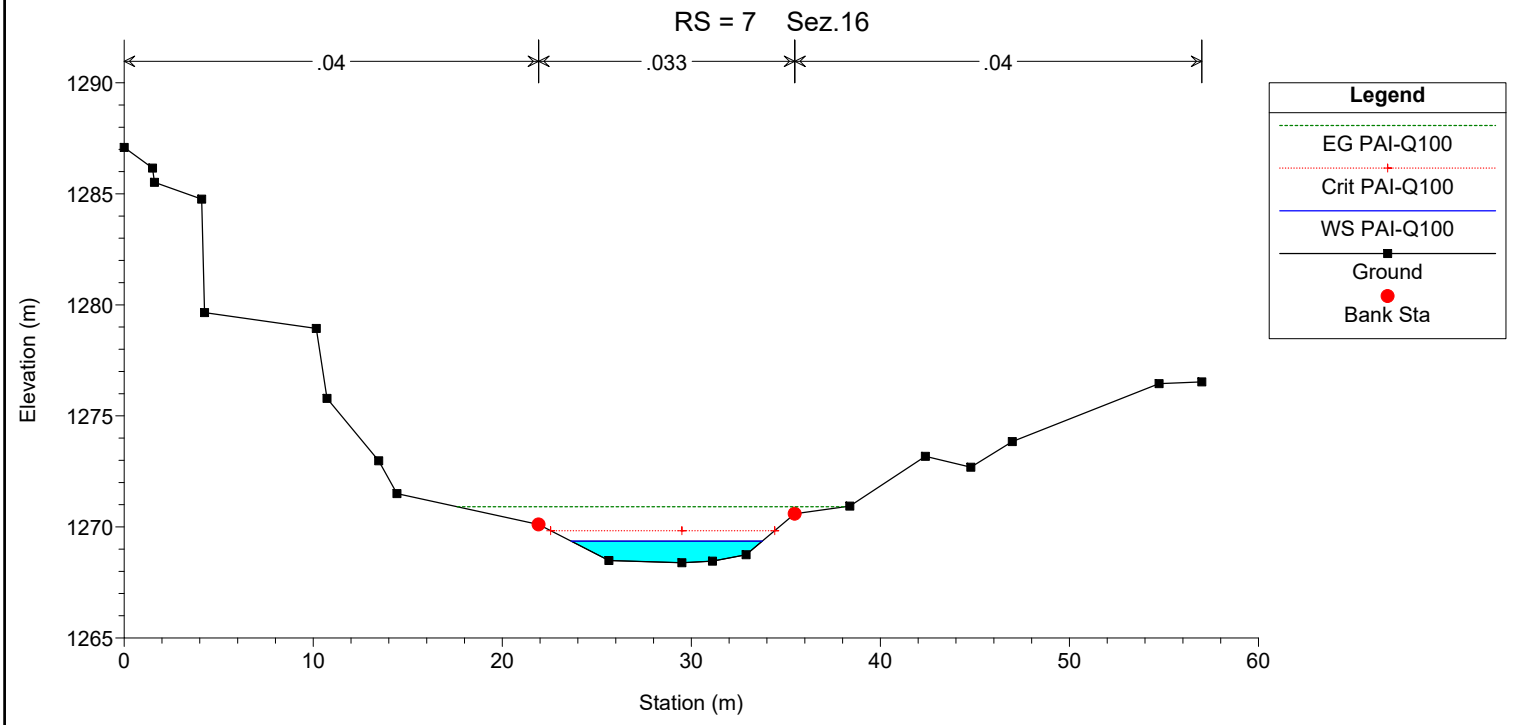

RS = 11 Sez.12
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG PAI-Q100
Crit PAI-Q100
WS PAI-Q100
Ground
Bank Sta

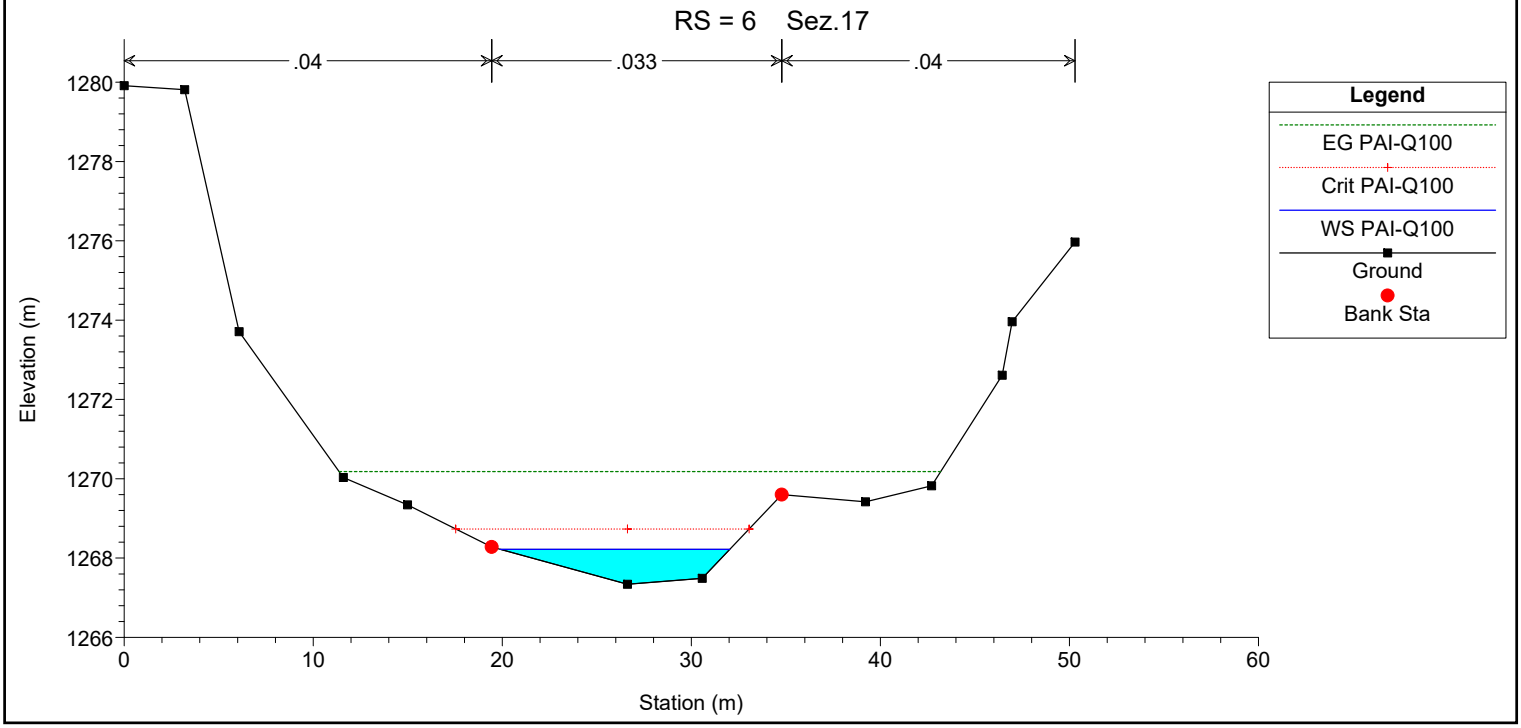

RS = 10 BR
.04
.033
.04
Legend
EG PAI-Q100
Crit PAI-Q100
WS PAI-Q100
Ground
Bank Sta
Elevation (m)
Station (m)

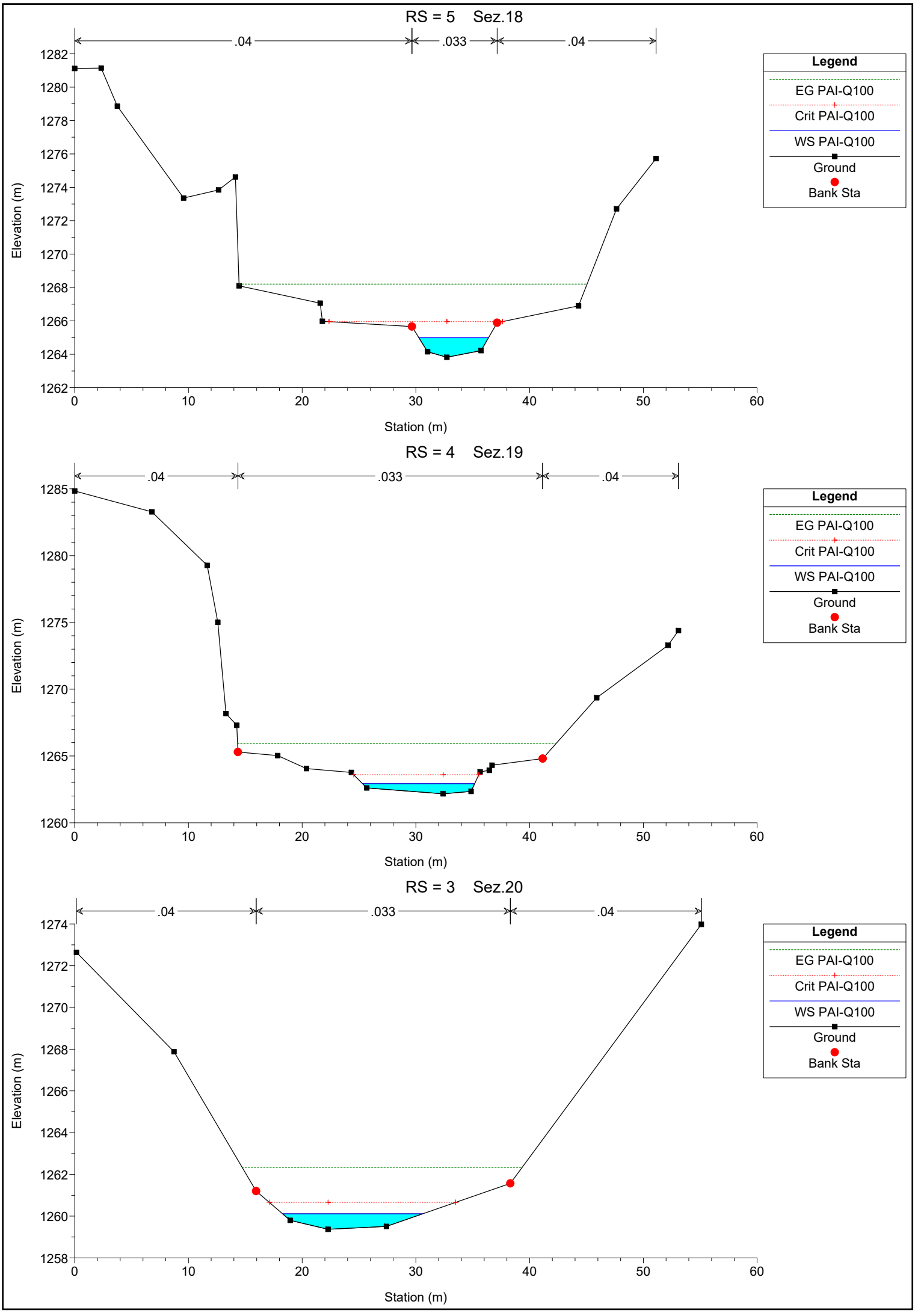

RS = 10 BR
.04
.033
.04
Legend
EG PAI-Q100
Crit PAI-Q100
WS PAI-Q100
Ground
Bank Sta
Elevation (m)
Station (m)

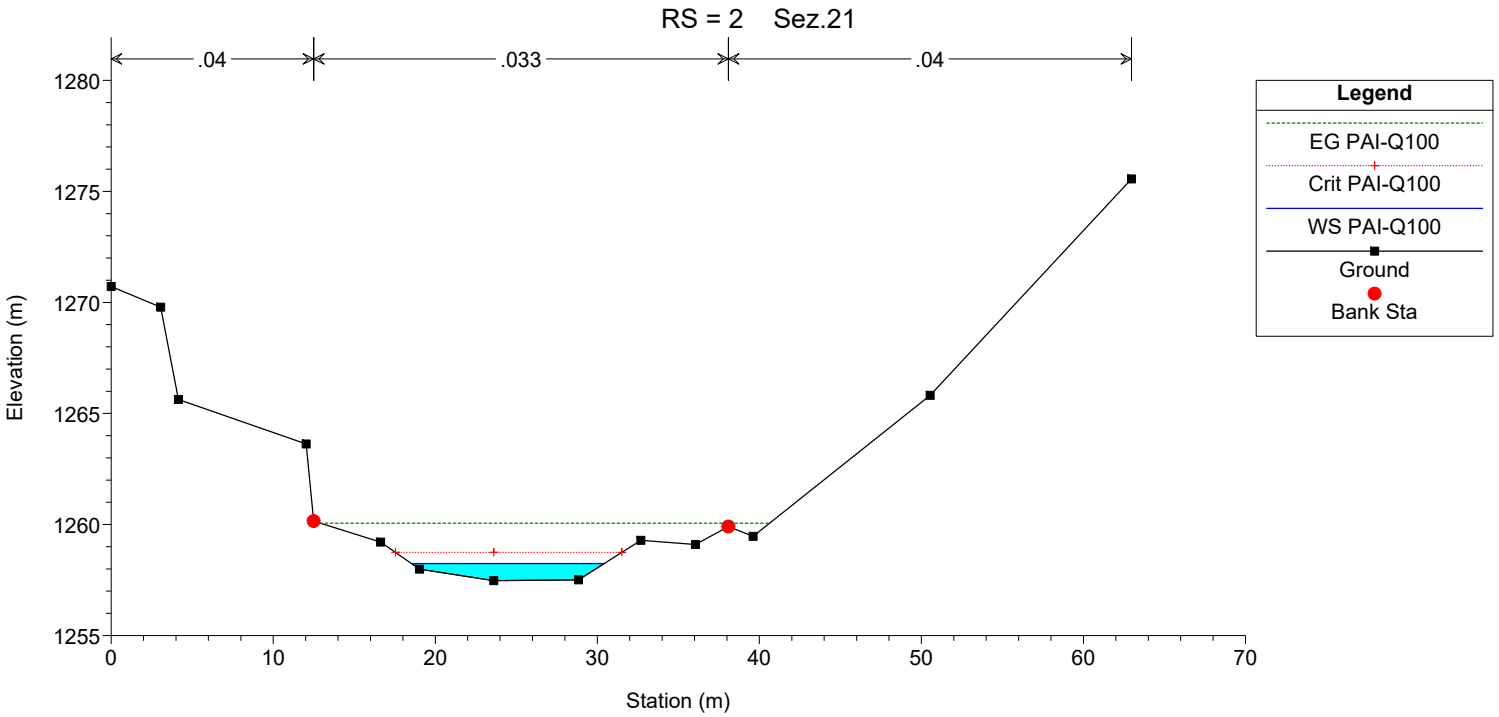

RS = 9 Sez.14
.04
.033
.04
Legend
EG PAI-Q100
Crit PAI-Q100
WS PAI-Q100
Ground
Bank Sta
Elevation (m)
Station (m)

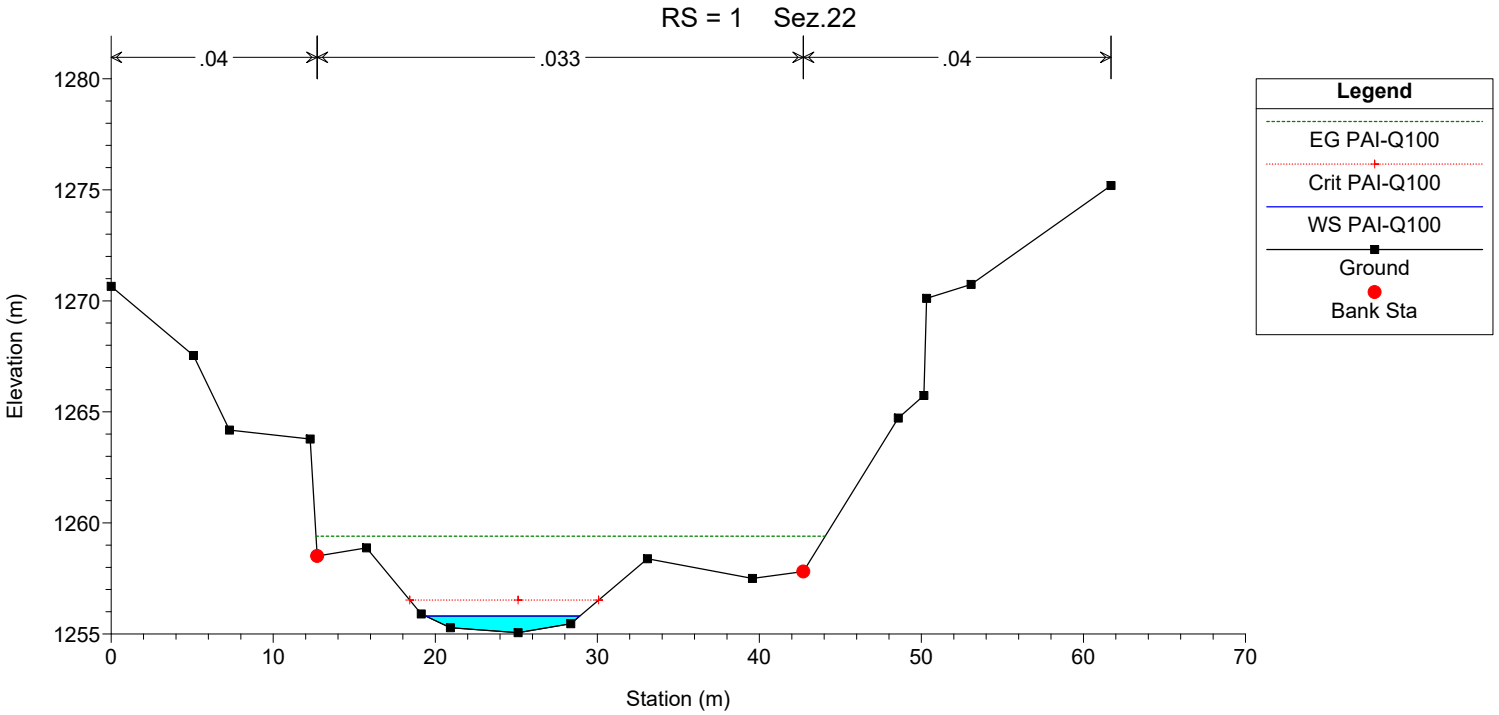

RS = 8 Sez.15
.04
.033
.04
Legend
EG PAI-Q100
Crit PAI-Q100
WS PAI-Q100
Ground
Bank Sta
Elevation (m)
Station (m)


RS = 7 Sez.16
.04
.033
.04
Legend
EG PAI-Q100
Crit PAI-Q100
WS PAI-Q100
Ground
Bank Sta
Elevation (m)
Station (m)

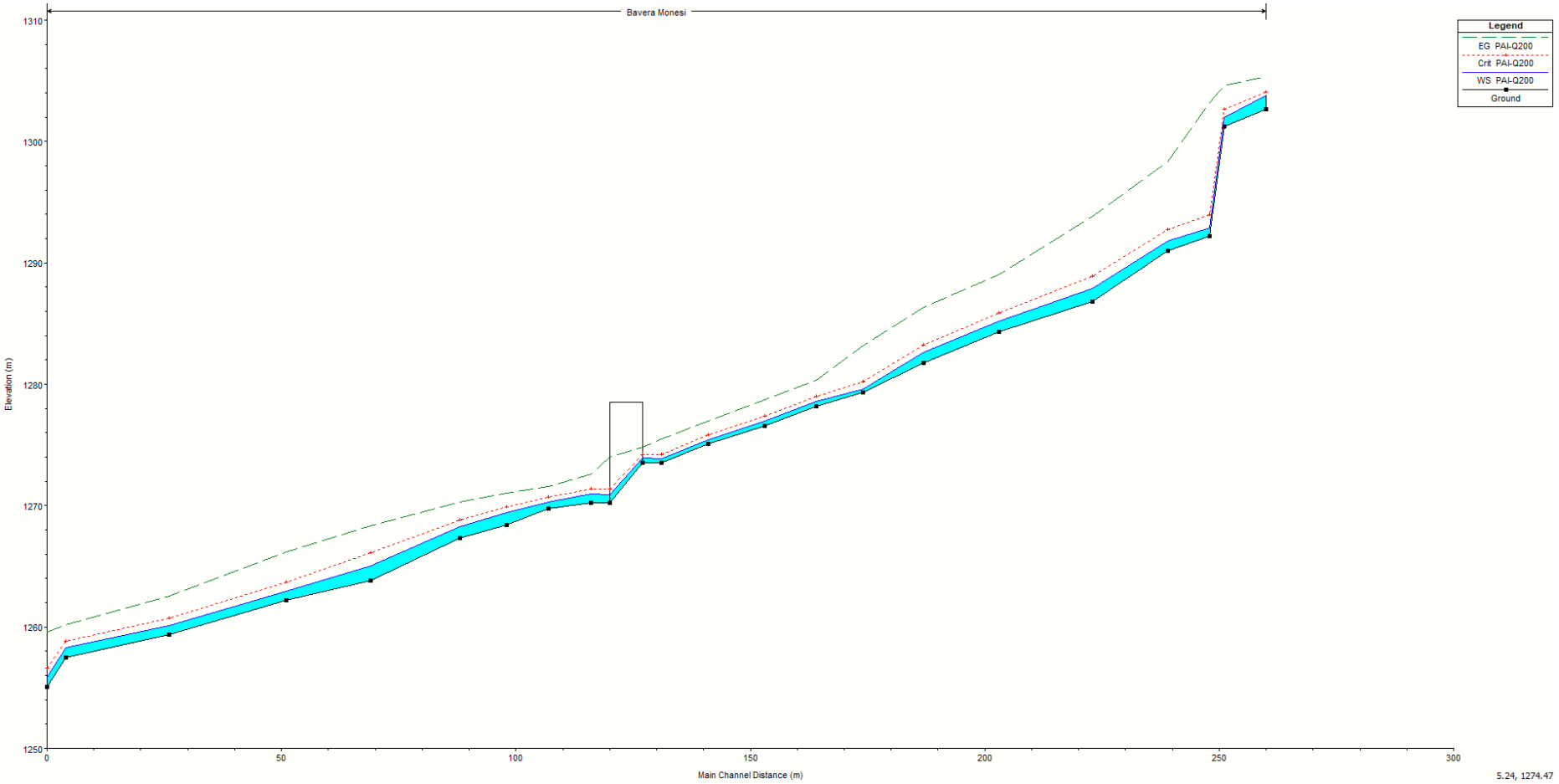

RS = 6 Sez.17
.04
.033
.04
Legend
EG PAI-Q100
Crit PAI-Q100
WS PAI-Q100
Ground
Bank Sta
Elevation (m)
Station (m)

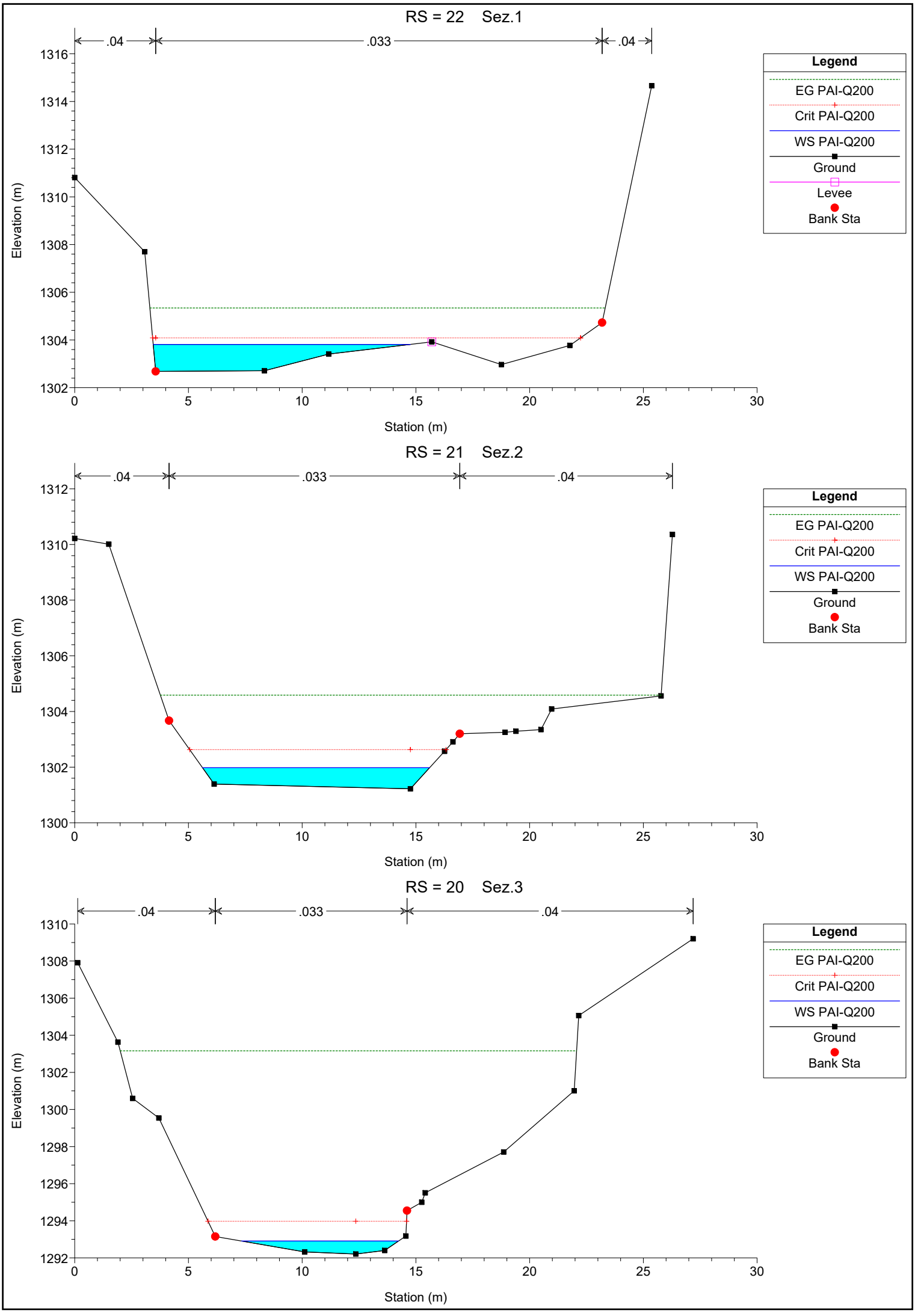

RS = 5 Sez.18
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG PAI-Q100
Crit PAI-Q100
WS PAI-Q100
Ground
Bank Sta
RS = 4 Sez.19
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG PAI-Q100
Crit PAI-Q100
WS PAI-Q100
Ground
Bank Sta
RS = 3 Sez.20
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG PAI-Q100
Crit PAI-Q100
WS PAI-Q100
Ground
Bank Sta

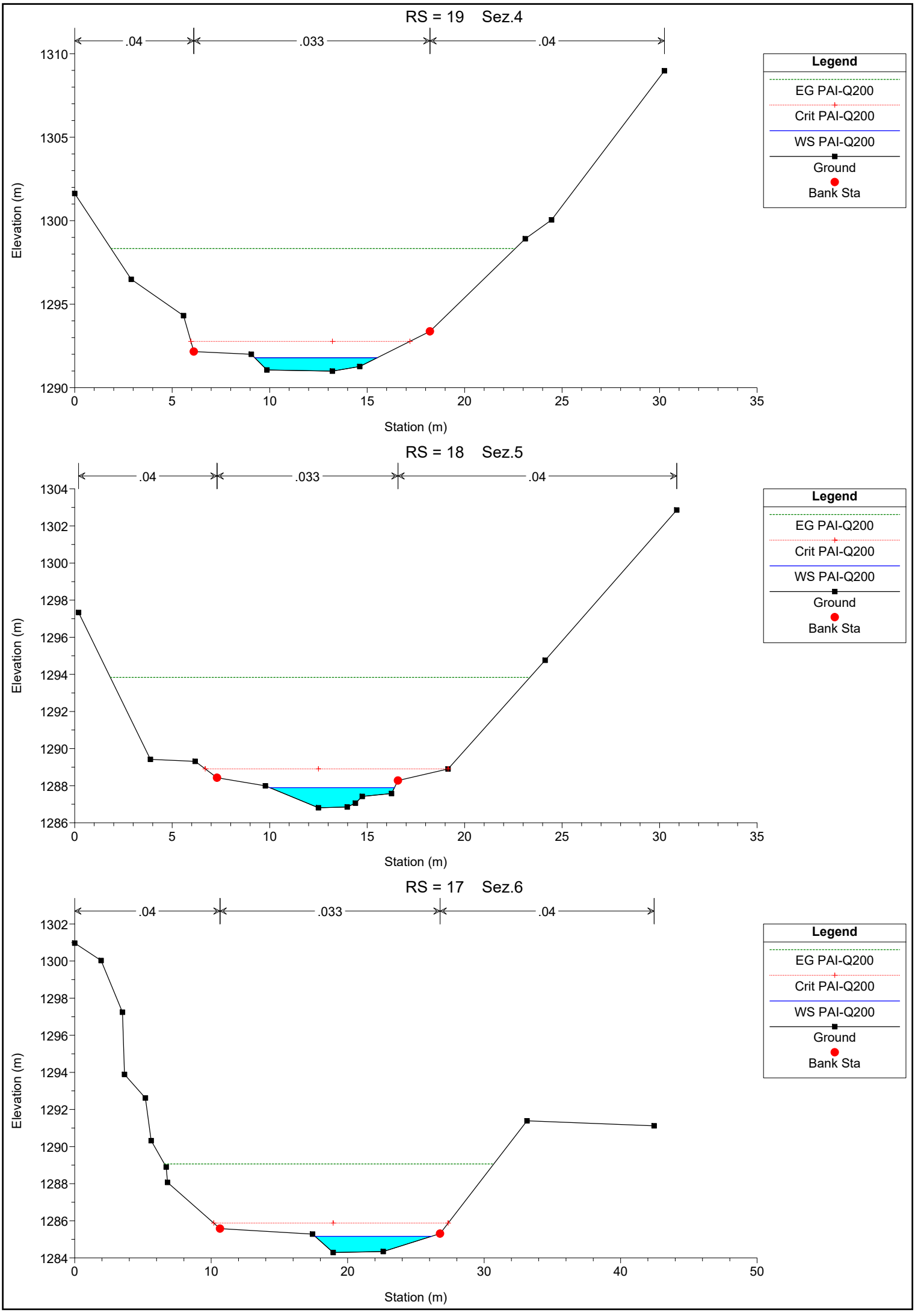

RS = 2 Sez.21
.04
.033
.04
Legend
EG PAI-Q100
Crit PAI-Q100
WS PAI-Q100
Ground
Bank Sta
Elevation (m)
Station (m)
1280
1275
1270
1265
1260
1255
0
10
20
30
40
50
60
70

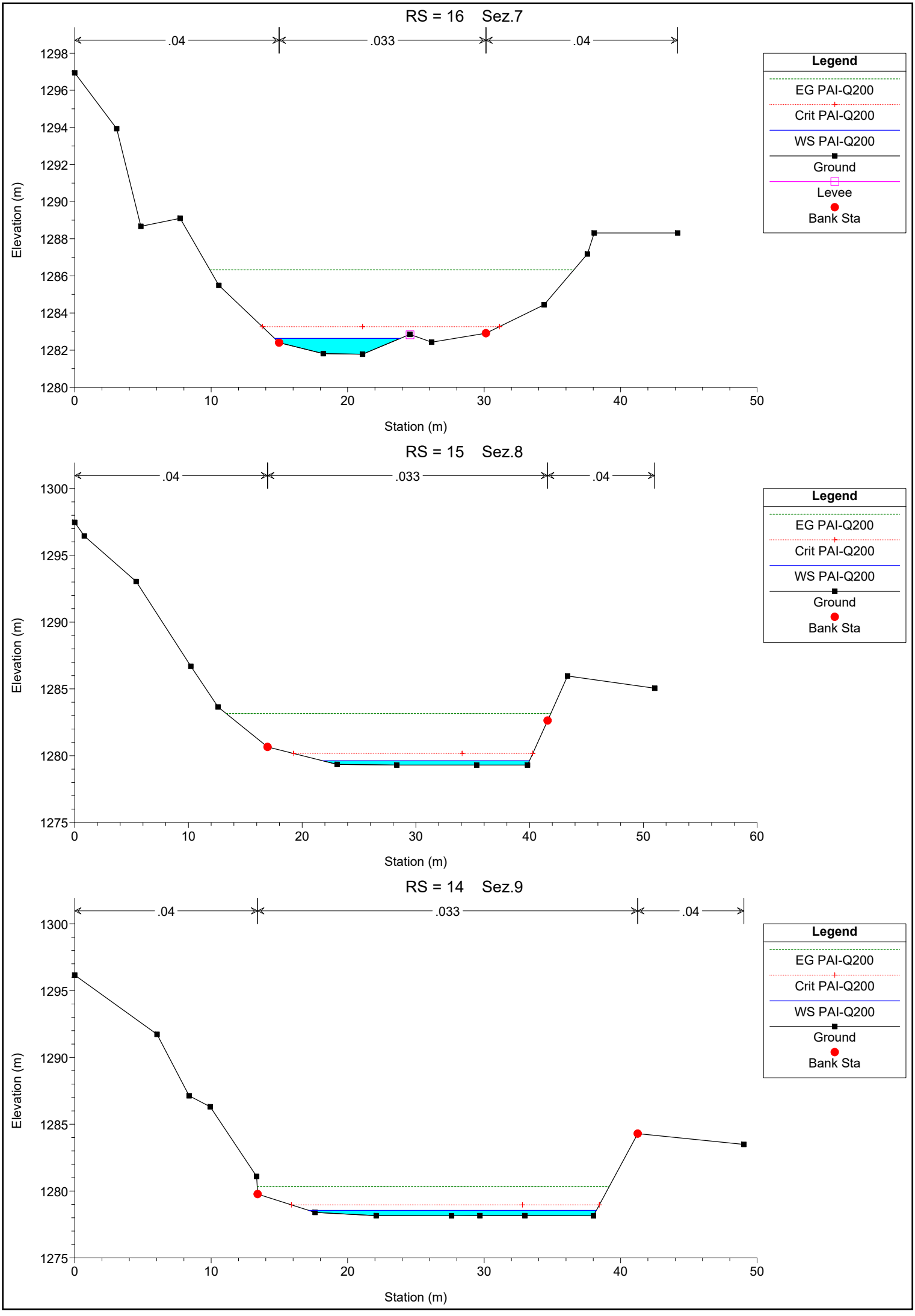

RS = 1 Sez.22
.04
.033
.04
Legend
EG PAI-Q100
Crit PAI-Q100
WS PAI-Q100
Ground
Bank Sta
Elevation (m)
Station (m)
1280
1275
1270
1265
1260
1255
0
10
20
30
40
50
60
70

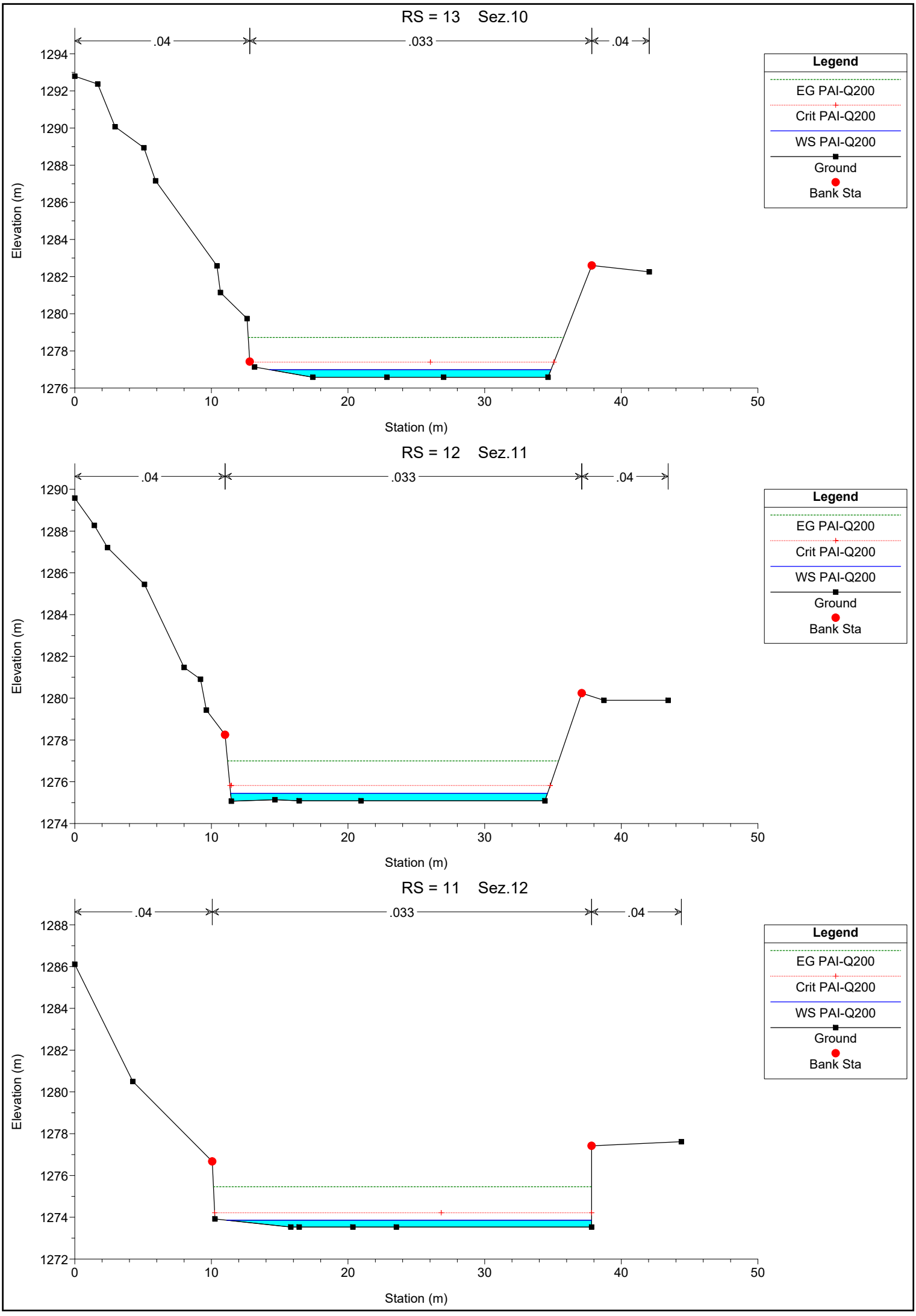
Q200 - PAI


Bavera Monesi
Legend
EG PAI-Q200
Crit PAI-Q200
WS PAI-Q200
Ground
Elevation (m)
1310
1300
1290
1280
1270
1260
1250
0
50
100
150
200
250
300
Main Channel Distance (m)
5.24, 1274.47

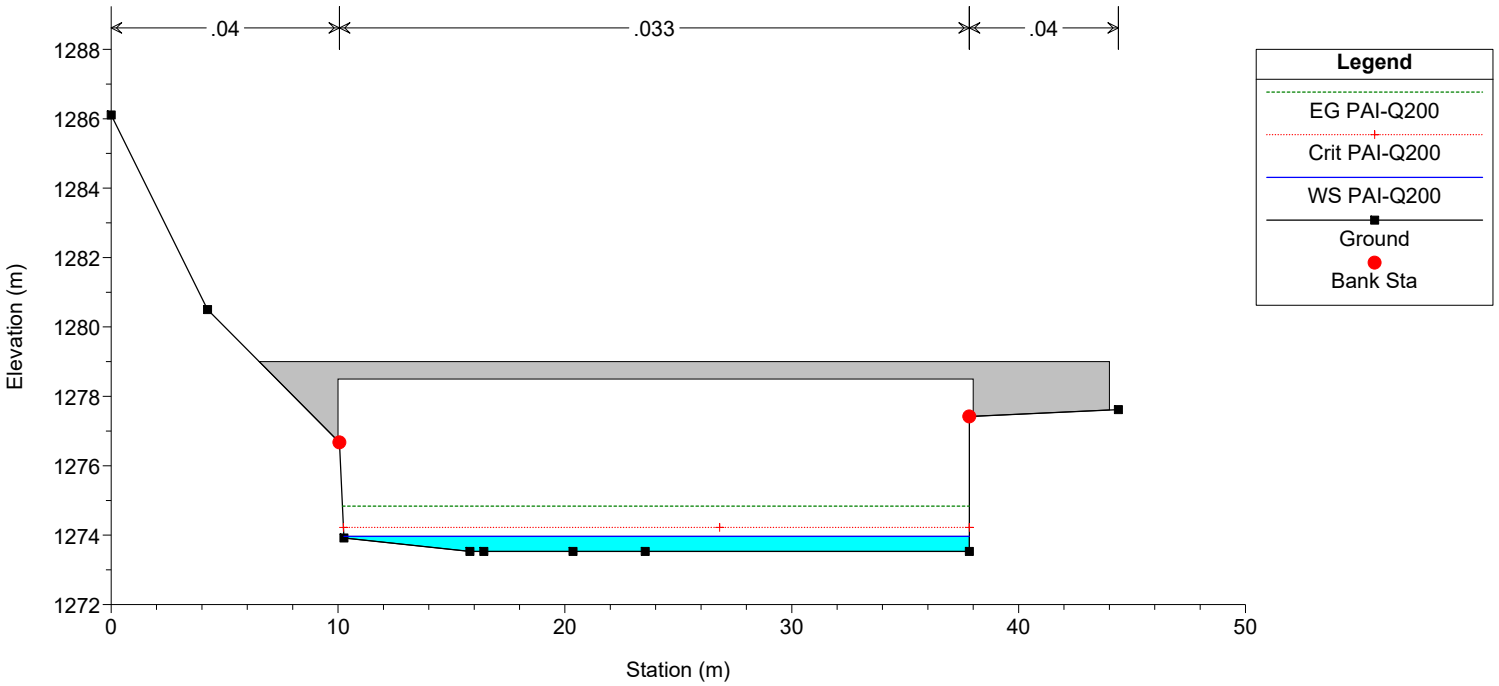

RS = 22 Sez.1
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG PAI-Q200
Crit PAI-Q200
WS PAI-Q200
Ground
Levee
Bank Sta
RS = 21 Sez.2
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG PAI-Q200
Crit PAI-Q200
WS PAI-Q200
Ground
Bank Sta
RS = 20 Sez.3
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG PAI-Q200
Crit PAI-Q200
WS PAI-Q200
Ground
Bank Sta


RS = 19 Sez.4
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG PAI-Q200
Crit PAI-Q200
WS PAI-Q200
Ground
Bank Sta
RS = 18 Sez.5
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG PAI-Q200
Crit PAI-Q200
WS PAI-Q200
Ground
Bank Sta
RS = 17 Sez.6
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG PAI-Q200
Crit PAI-Q200
WS PAI-Q200
Ground
Bank Sta

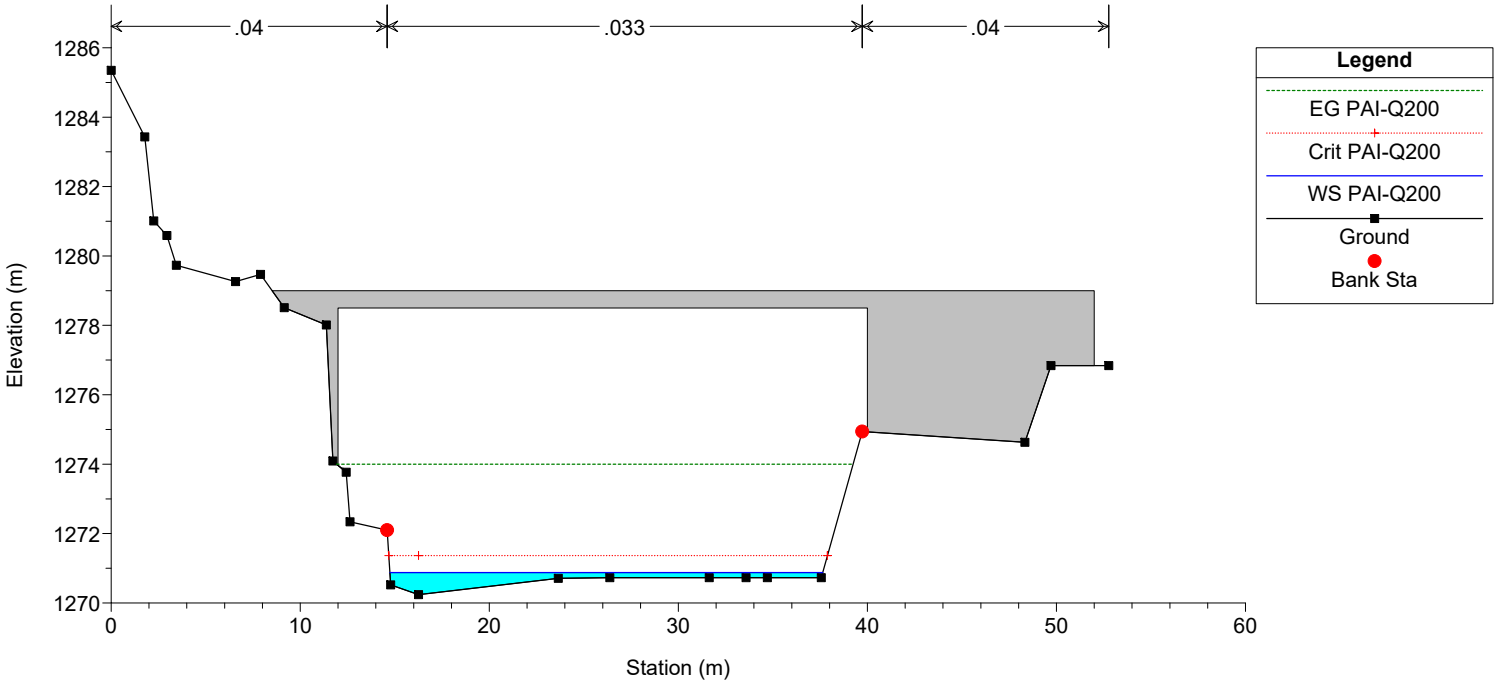

RS = 16 Sez.7
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG PAI-Q200
Crit PAI-Q200
WS PAI-Q200
Ground
Levee
Bank Sta
RS = 15 Sez.8
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG PAI-Q200
Crit PAI-Q200
WS PAI-Q200
Ground
Bank Sta
RS = 14 Sez.9
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG PAI-Q200
Crit PAI-Q200
WS PAI-Q200
Ground
Bank Sta


RS = 13 Sez.10
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG PAI-Q200
Crit PAI-Q200
WS PAI-Q200
Ground
Bank Sta
RS = 12 Sez.11
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG PAI-Q200
Crit PAI-Q200
WS PAI-Q200
Ground
Bank Sta
RS = 11 Sez.12
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG PAI-Q200
Crit PAI-Q200
WS PAI-Q200
Ground
Bank Sta

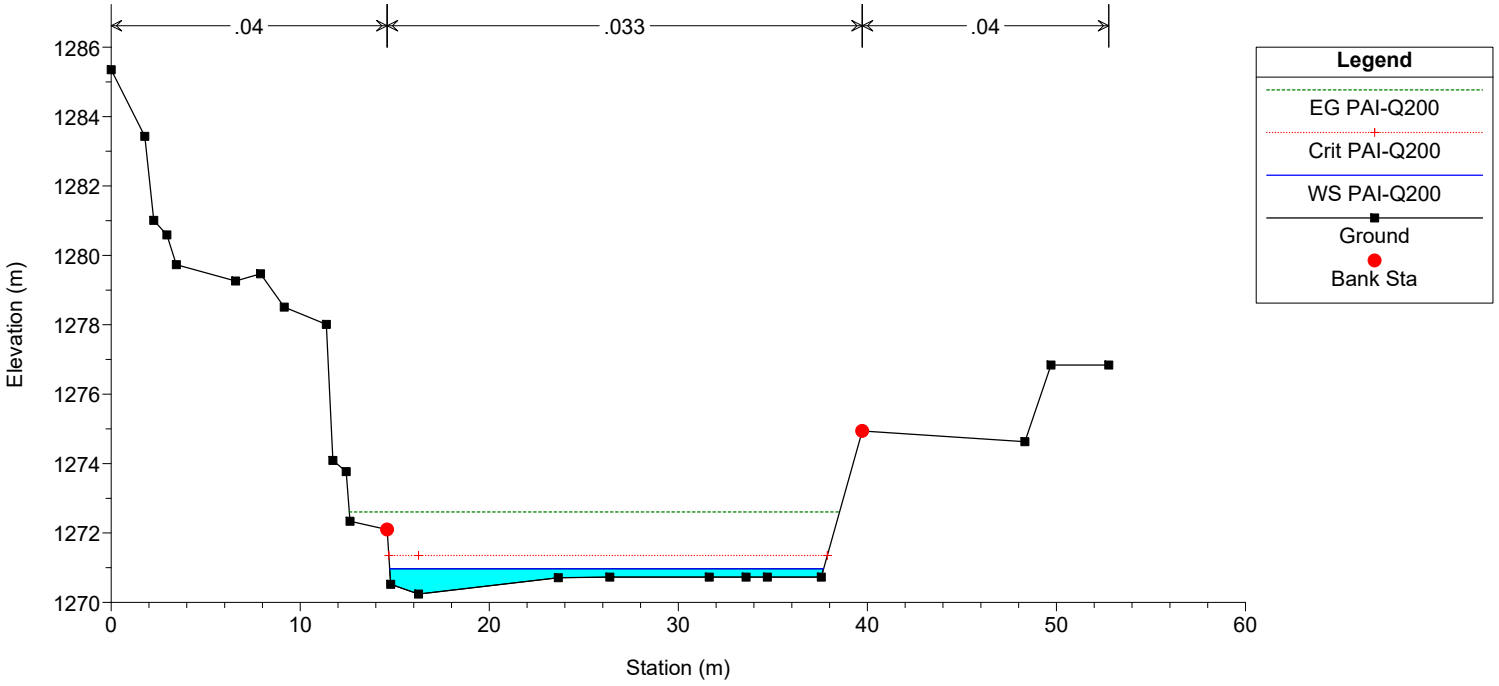
RS = 10 BR

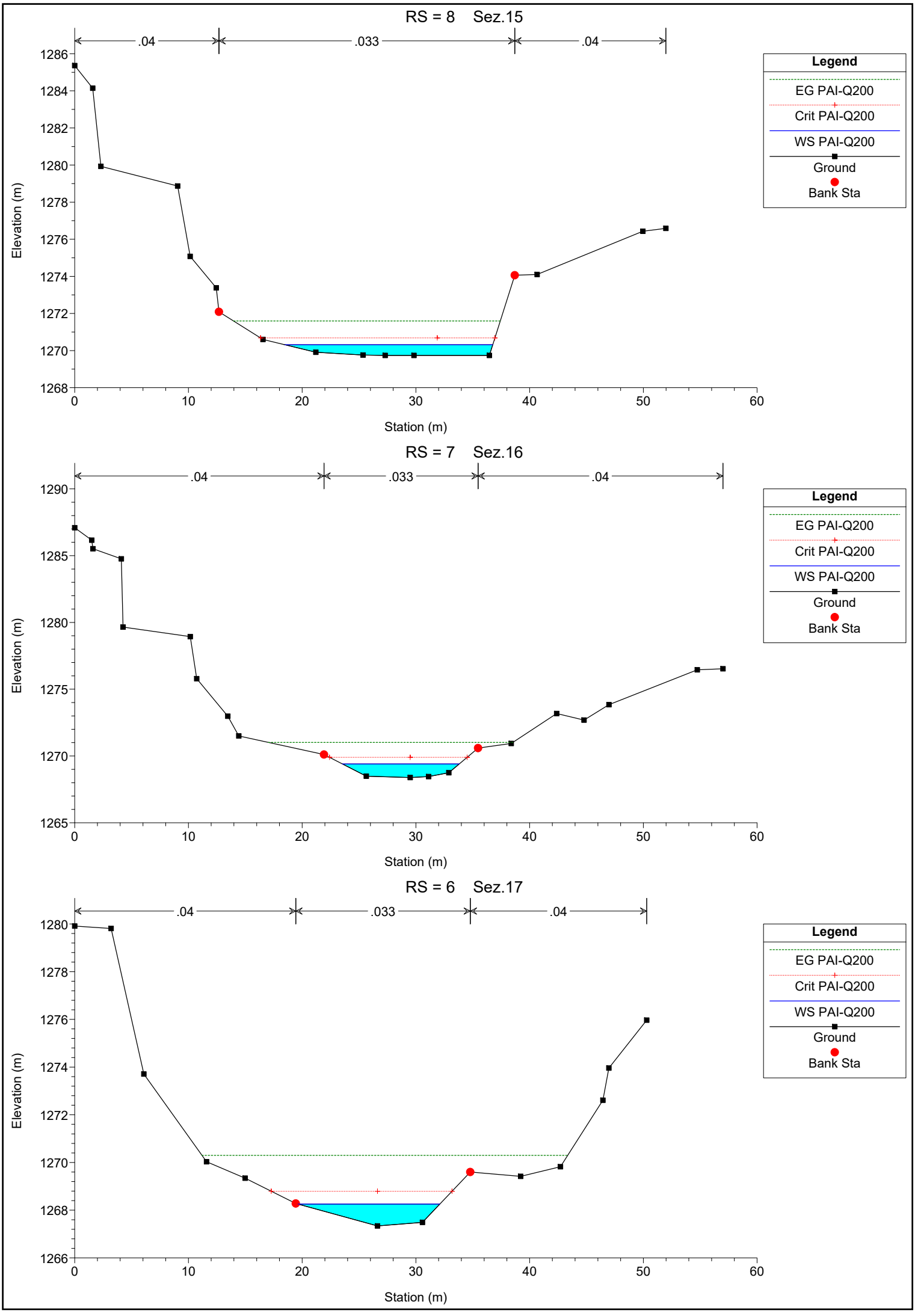


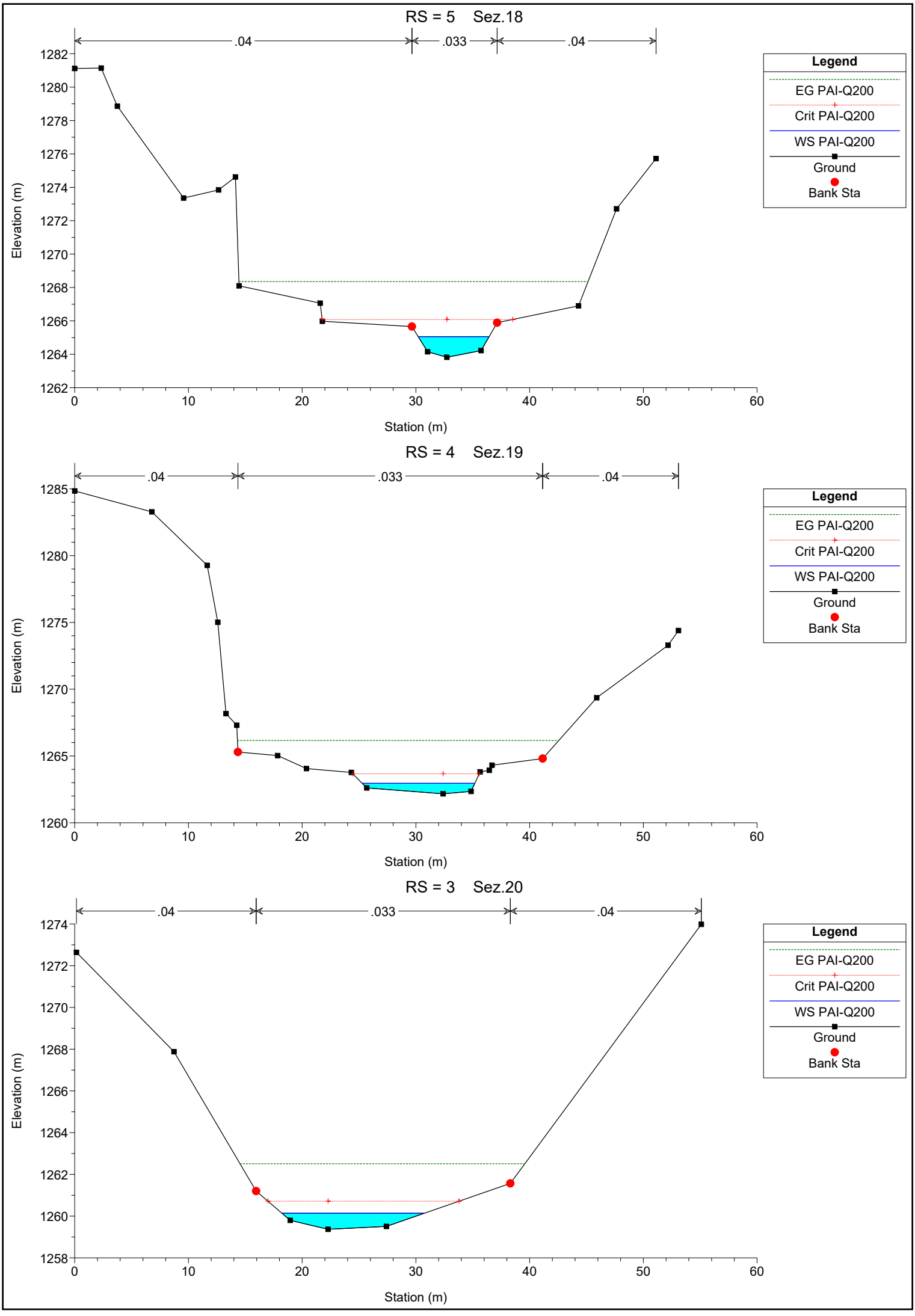
RS = 10 BR

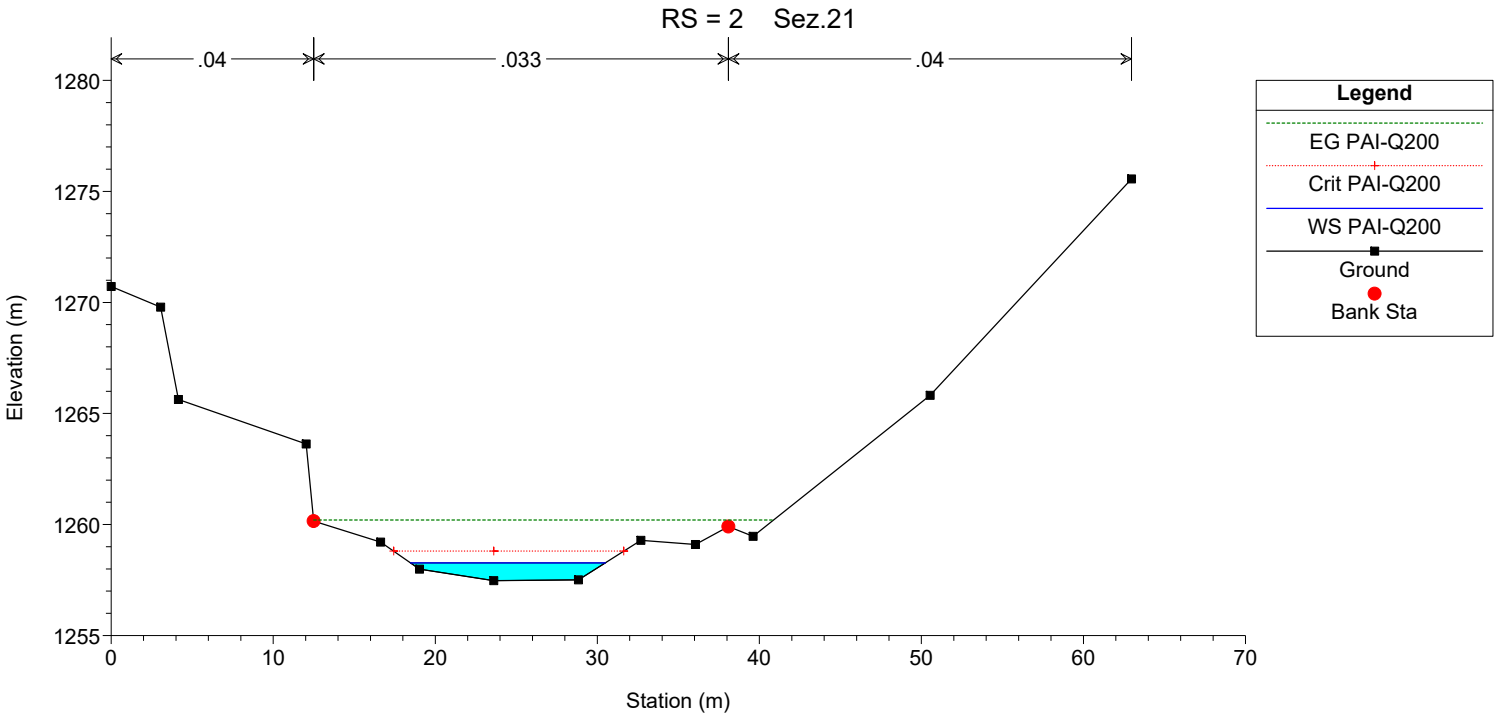


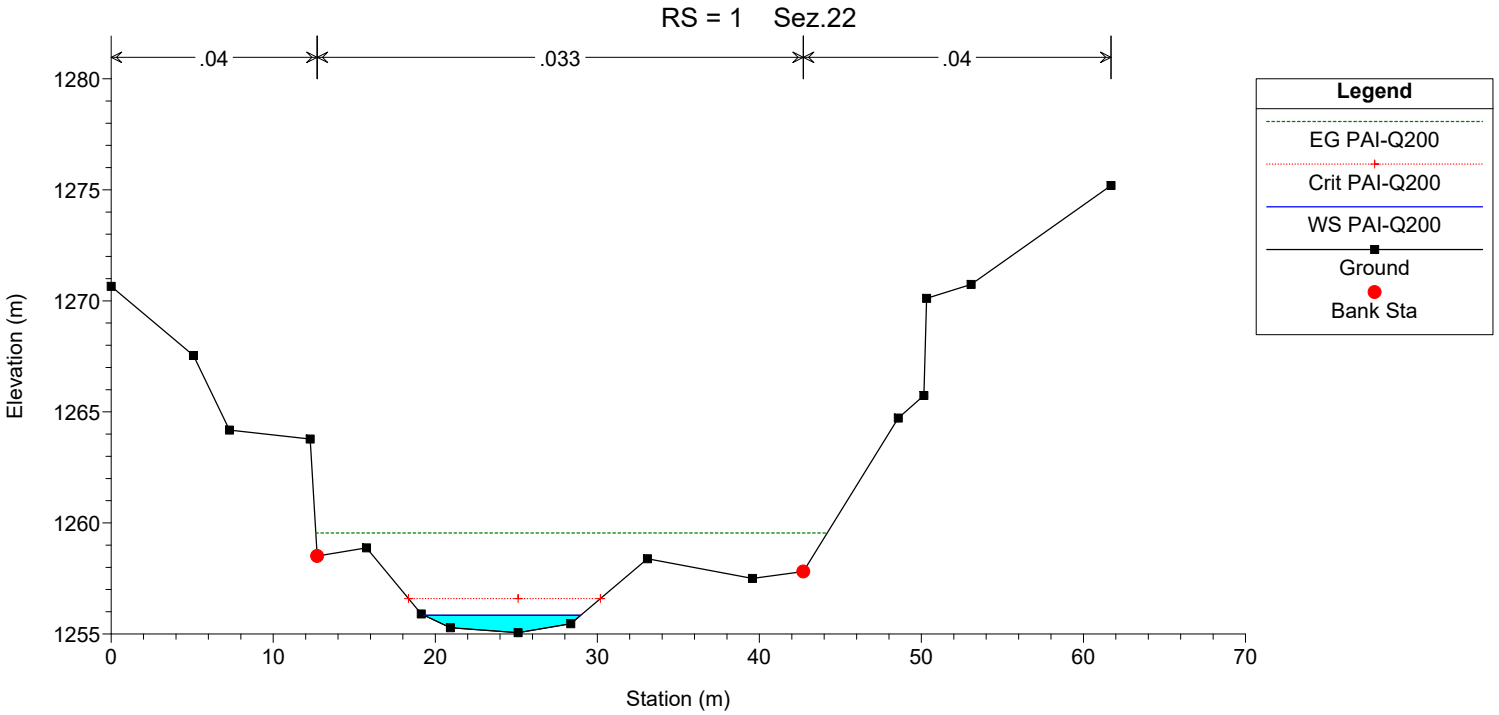
RS = 9 Sez.14



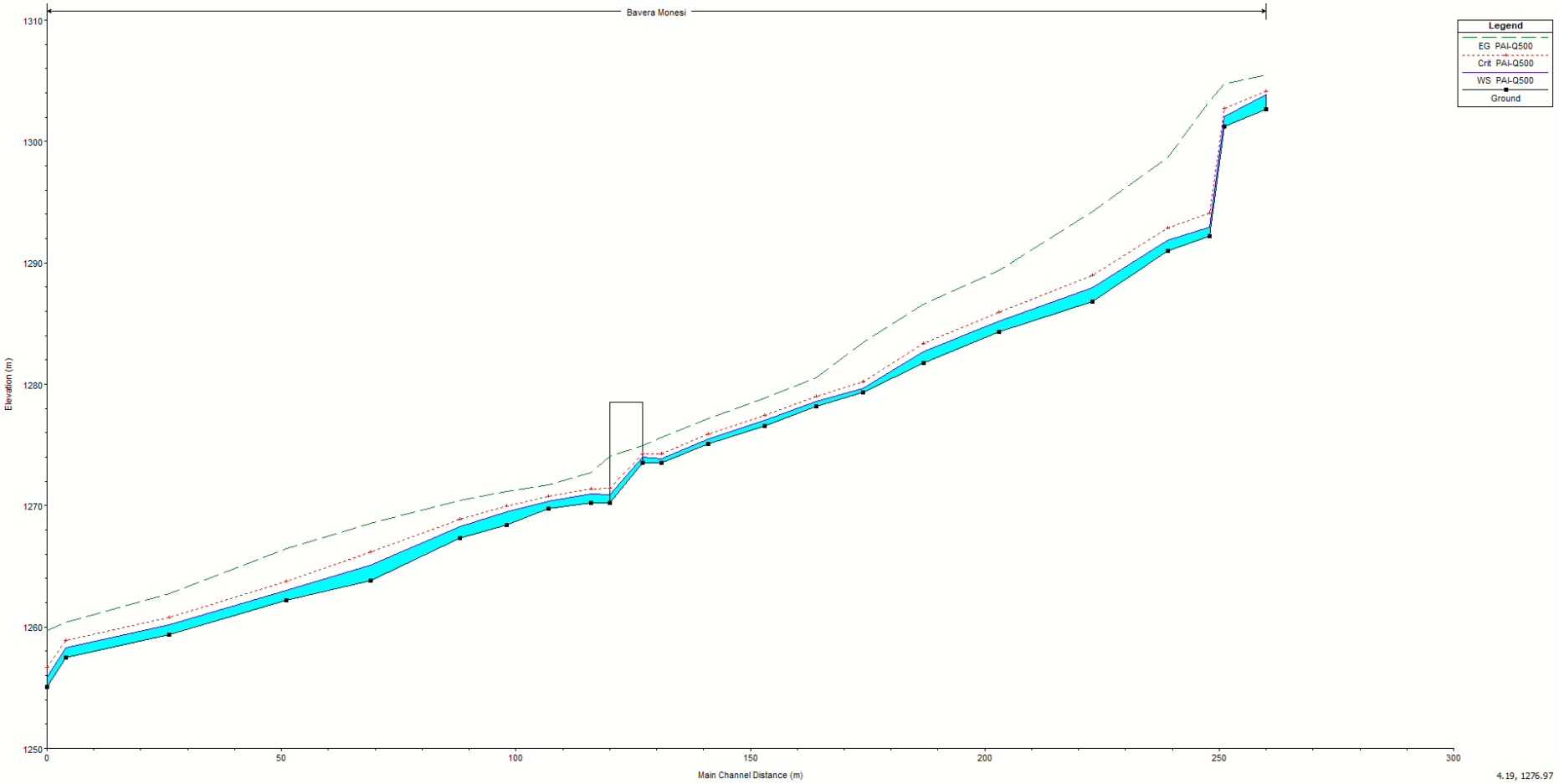

RS = 8 Sez.15
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG PAI-Q200
Crit PAI-Q200
WS PAI-Q200
Ground
Bank Sta
RS = 7 Sez.16
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG PAI-Q200
Crit PAI-Q200
WS PAI-Q200
Ground
Bank Sta
RS = 6 Sez.17
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG PAI-Q200
Crit PAI-Q200
WS PAI-Q200
Ground
Bank Sta

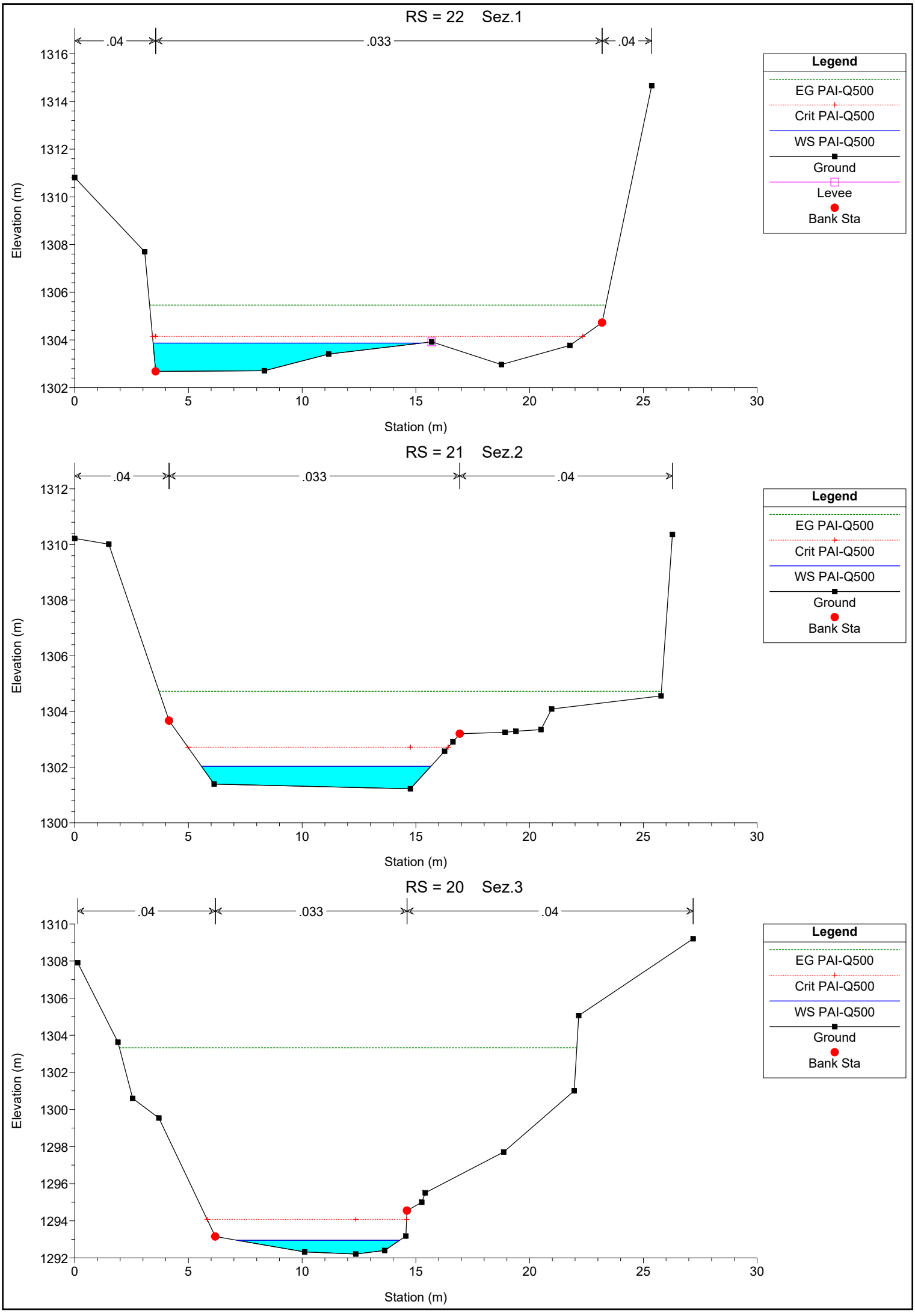

RS = 5 Sez.18
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG PAI-Q200
Crit PAI-Q200
WS PAI-Q200
Ground
Bank Sta
RS = 4 Sez.19
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG PAI-Q200
Crit PAI-Q200
WS PAI-Q200
Ground
Bank Sta
RS = 3 Sez.20
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG PAI-Q200
Crit PAI-Q200
WS PAI-Q200
Ground
Bank Sta

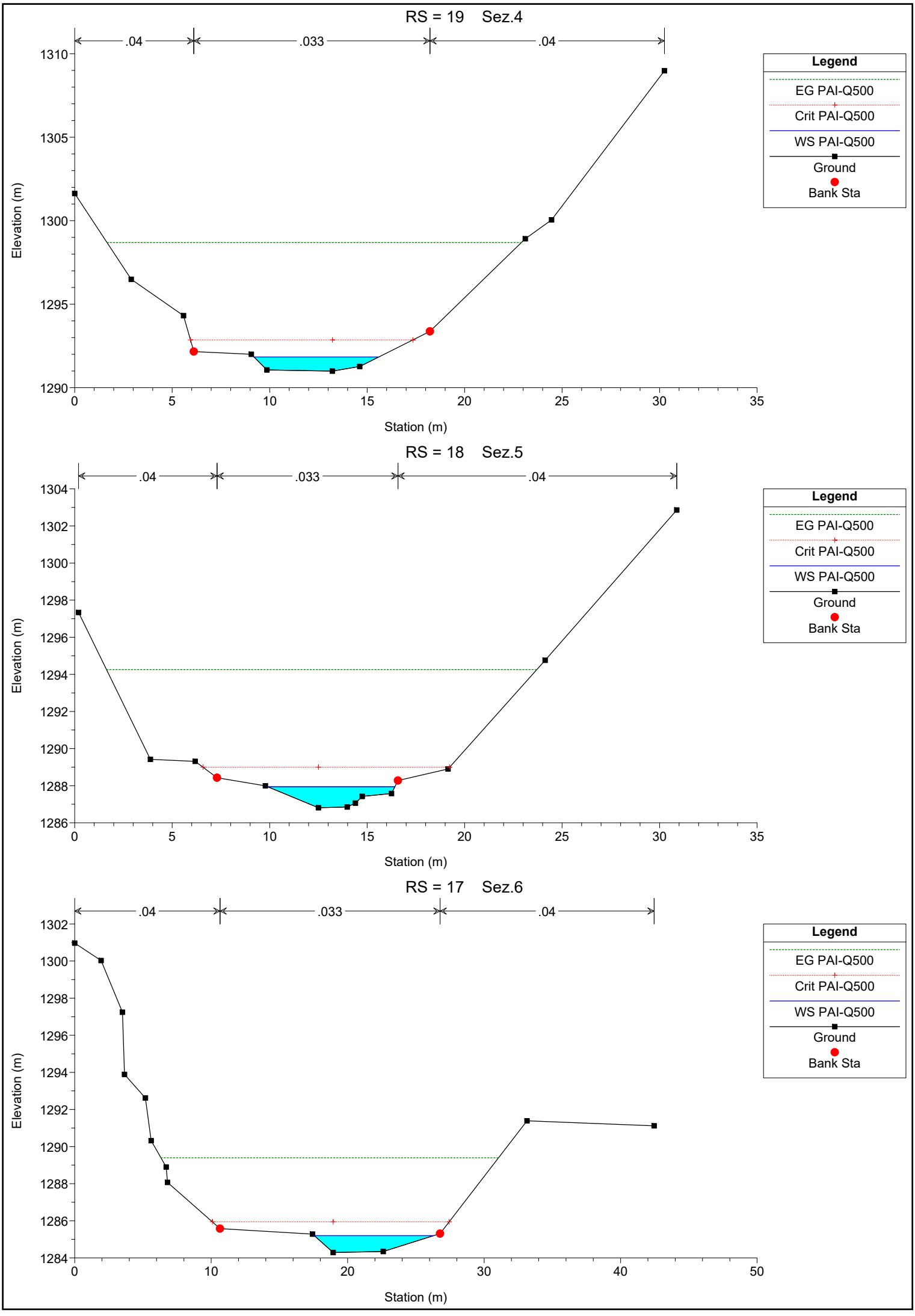

RS = 2 Sez.21
.04
.033
.04
Legend
EG PAI-Q200
Crit PAI-Q200
WS PAI-Q200
Ground
Bank Sta
Elevation (m)
Station (m)
1280
1275
1270
1265
1260
1255
0
10
20
30
40
50
60
70

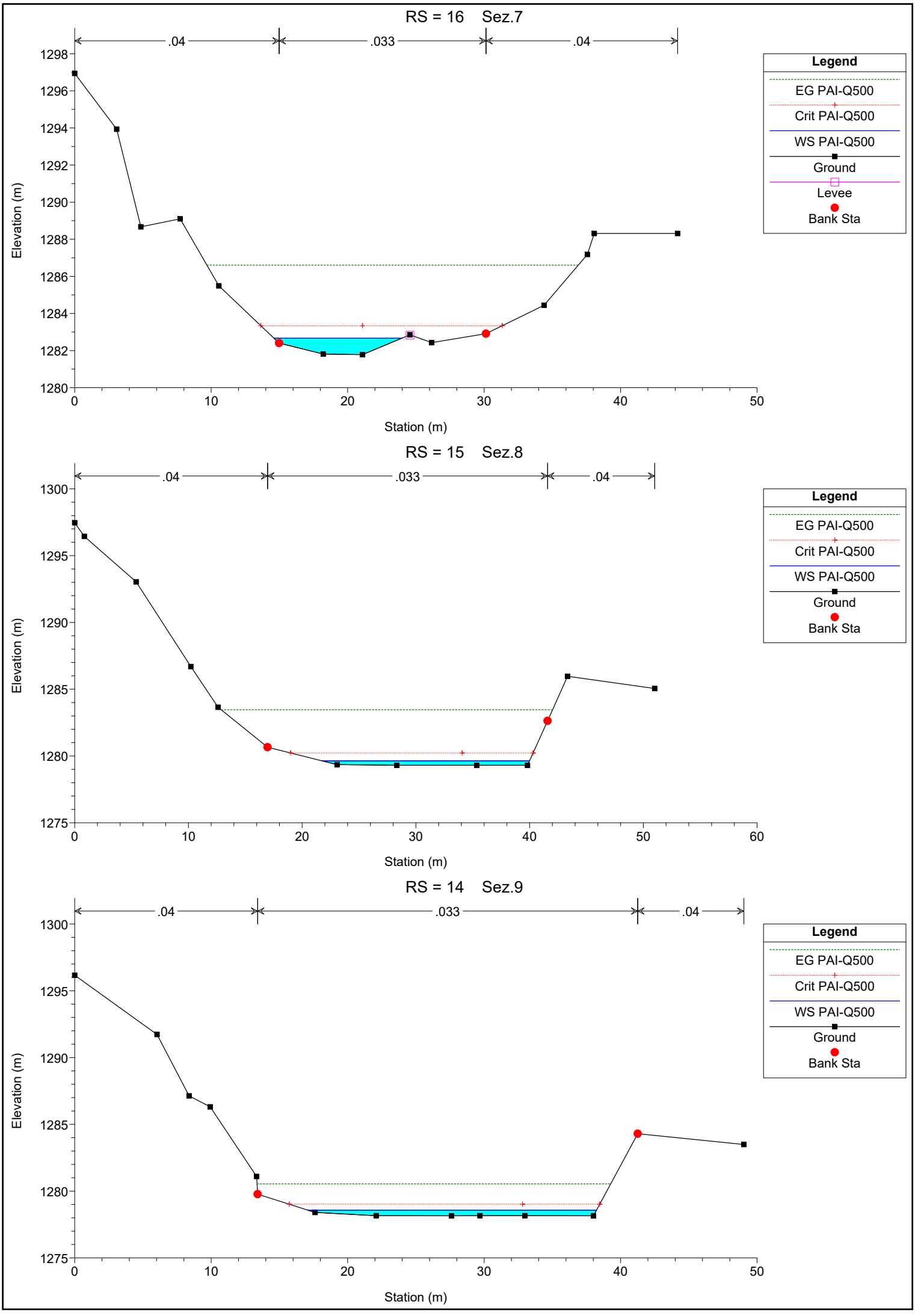

RS = 1 Sez.22
.04
.033
.04
Legend
EG PAI-Q200
Crit PAI-Q200
WS PAI-Q200
Ground
Bank Sta
Elevation (m)
Station (m)
1280
1275
1270
1265
1260
1255
0
10
20
30
40
50
60
70

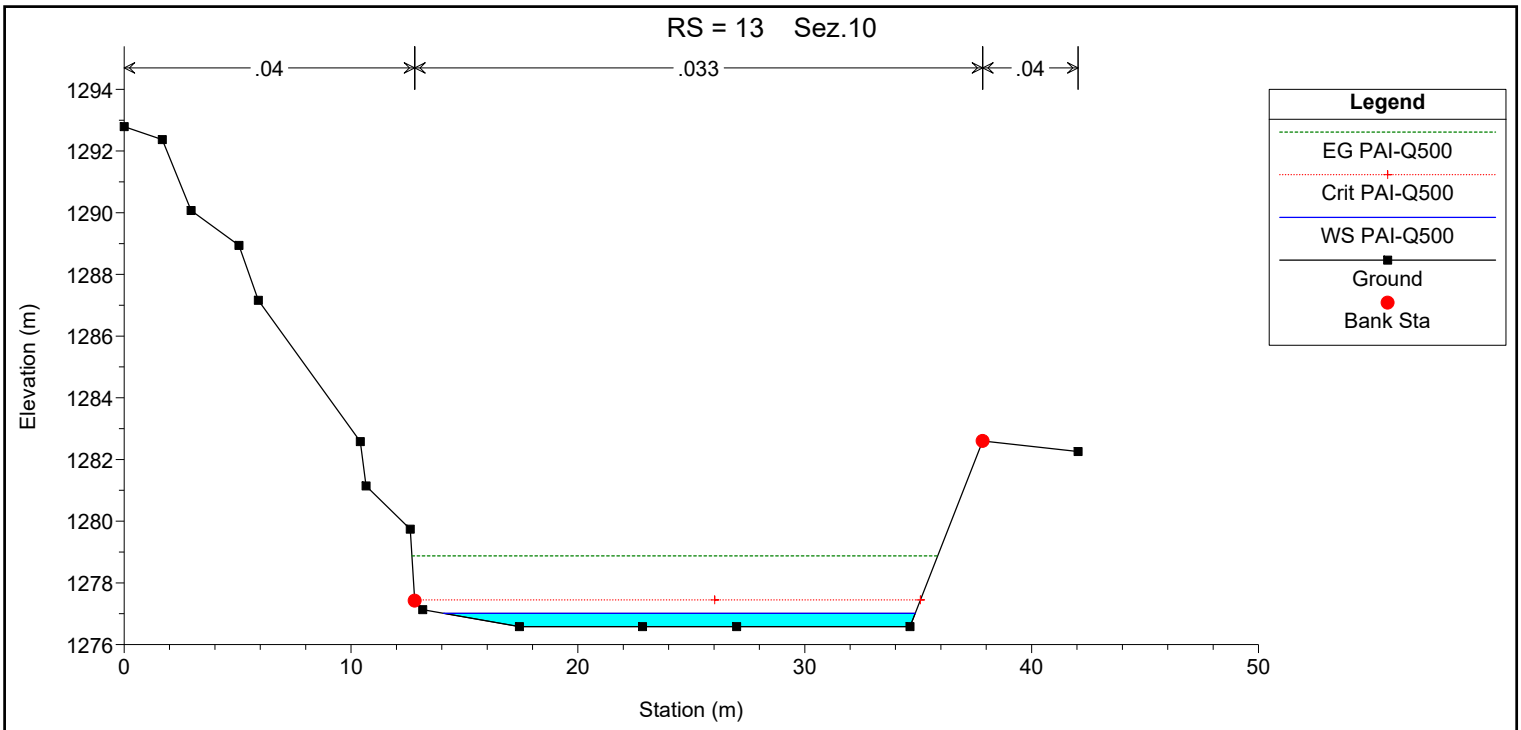
Q500 - PAI

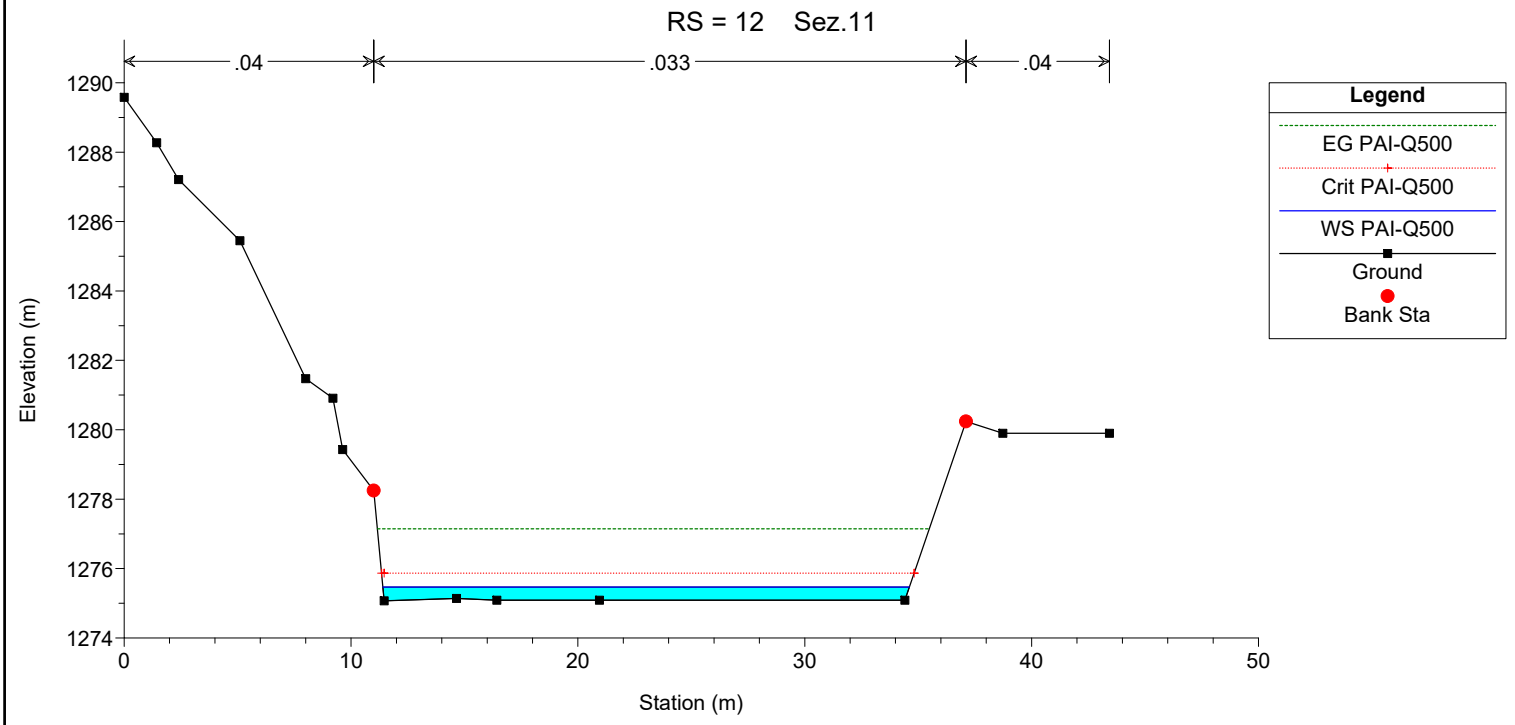

Bavera Monesi
Legend
EG PAI-Q500
Crit PAI-Q500
WS PAI-Q500
Ground
Elevation (m)
1310
1300
1290
1280
1270
1260
1250
0
50
100
150
200
250
300
Main Channel Distance (m)
4.19, 1276.97

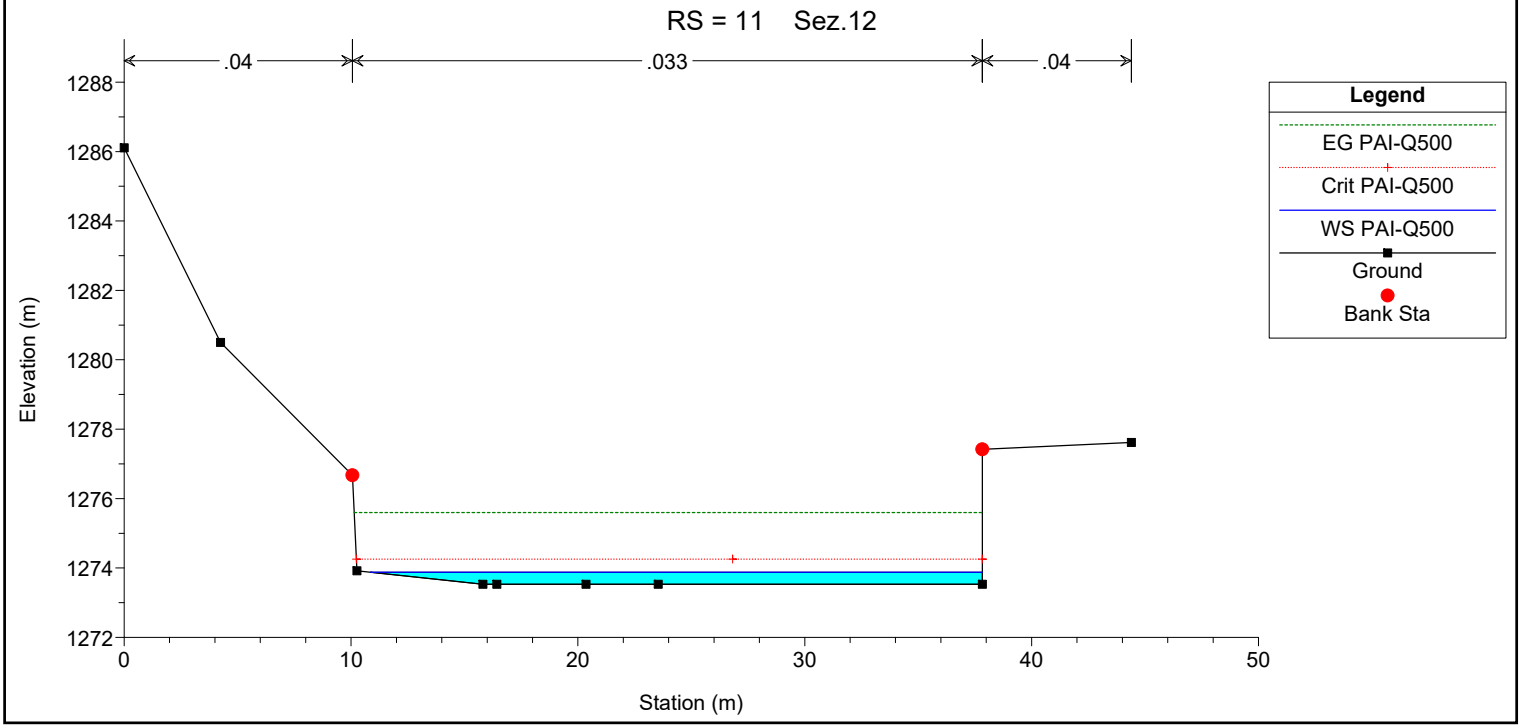

RS = 22 Sez.1
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG PAI-Q500
Crit PAI-Q500
WS PAI-Q500
Ground
Levee
Bank Sta
RS = 21 Sez.2
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG PAI-Q500
Crit PAI-Q500
WS PAI-Q500
Ground
Bank Sta
RS = 20 Sez.3
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG PAI-Q500
Crit PAI-Q500
WS PAI-Q500
Ground
Bank Sta

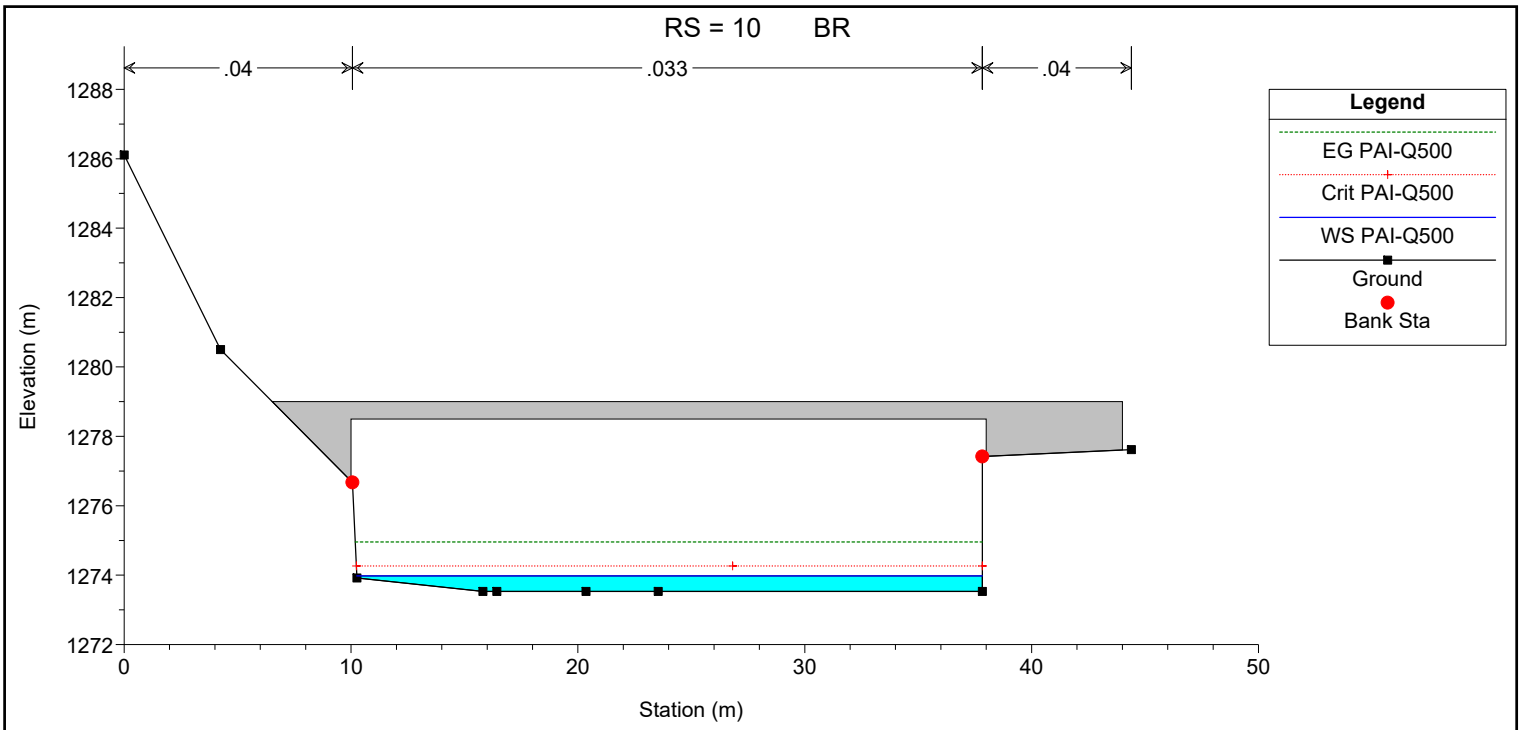

RS = 19 Sez.4
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG PAI-Q500
Crit PAI-Q500
WS PAI-Q500
Ground
Bank Sta
RS = 18 Sez.5
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG PAI-Q500
Crit PAI-Q500
WS PAI-Q500
Ground
Bank Sta
RS = 17 Sez.6
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG PAI-Q500
Crit PAI-Q500
WS PAI-Q500
Ground
Bank Sta

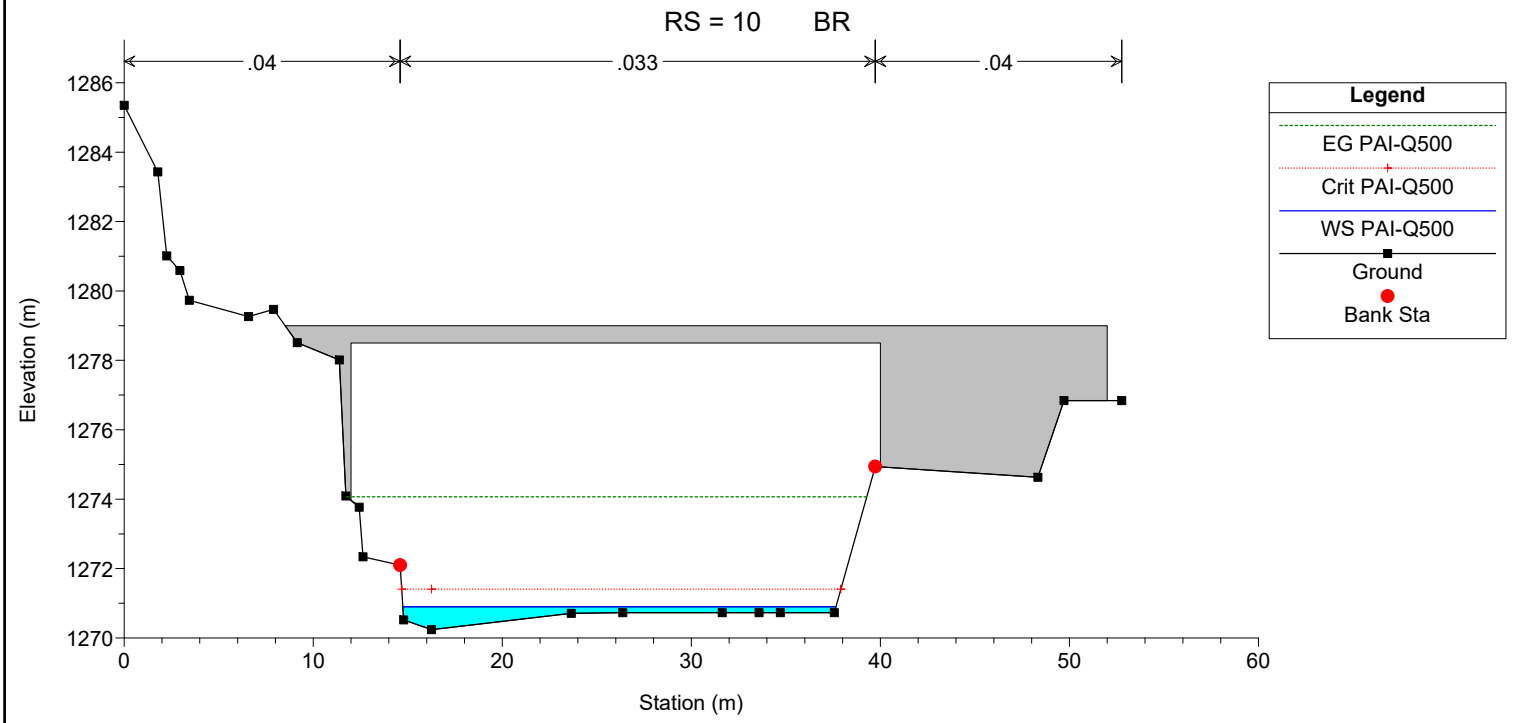

RS = 16 Sez.7
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG PAI-Q500
Crit PAI-Q500
WS PAI-Q500
Ground
Levee
Bank Sta
RS = 15 Sez.8
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG PAI-Q500
Crit PAI-Q500
WS PAI-Q500
Ground
Bank Sta
RS = 14 Sez.9
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG PAI-Q500
Crit PAI-Q500
WS PAI-Q500
Ground
Bank Sta

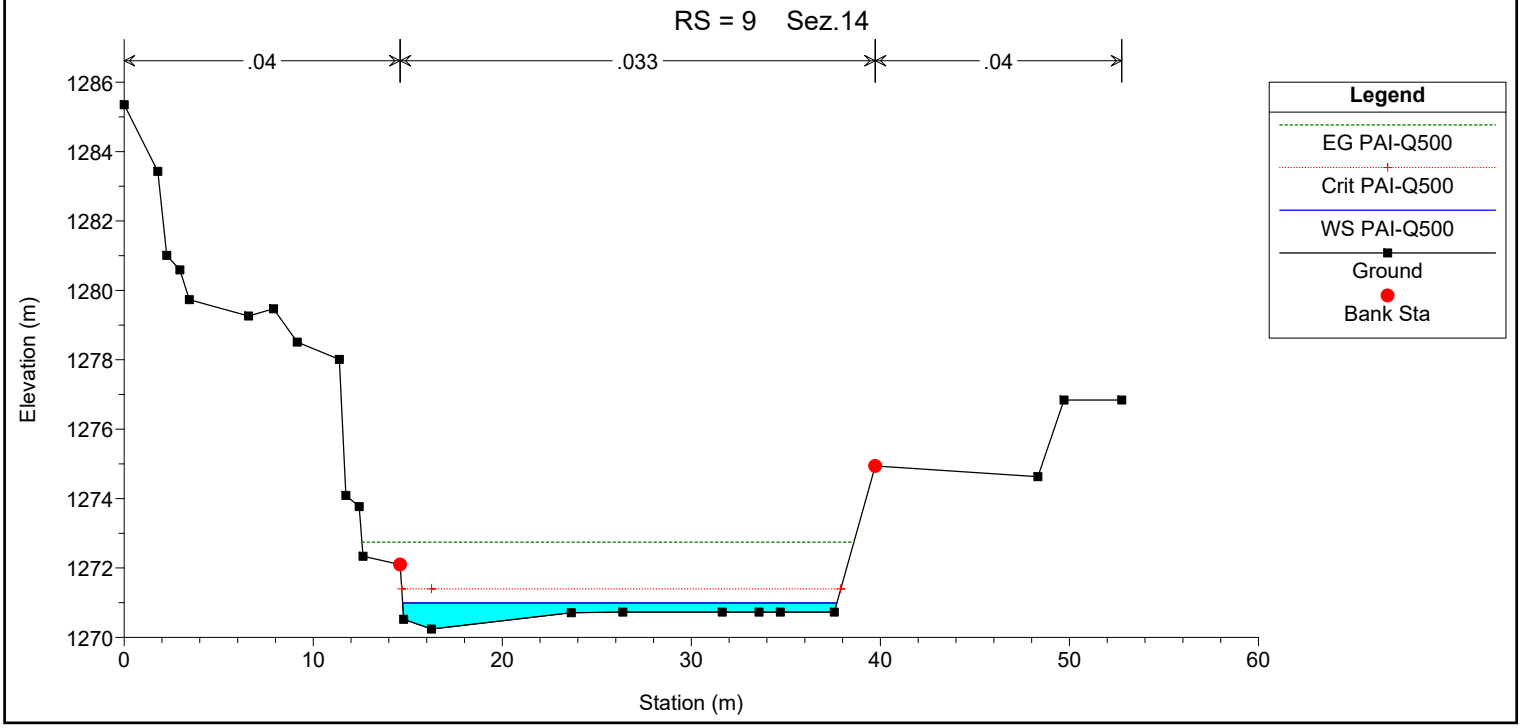

RS = 13 Sez.10
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG PAI-Q500
Crit PAI-Q500
WS PAI-Q500
Ground
Bank Sta

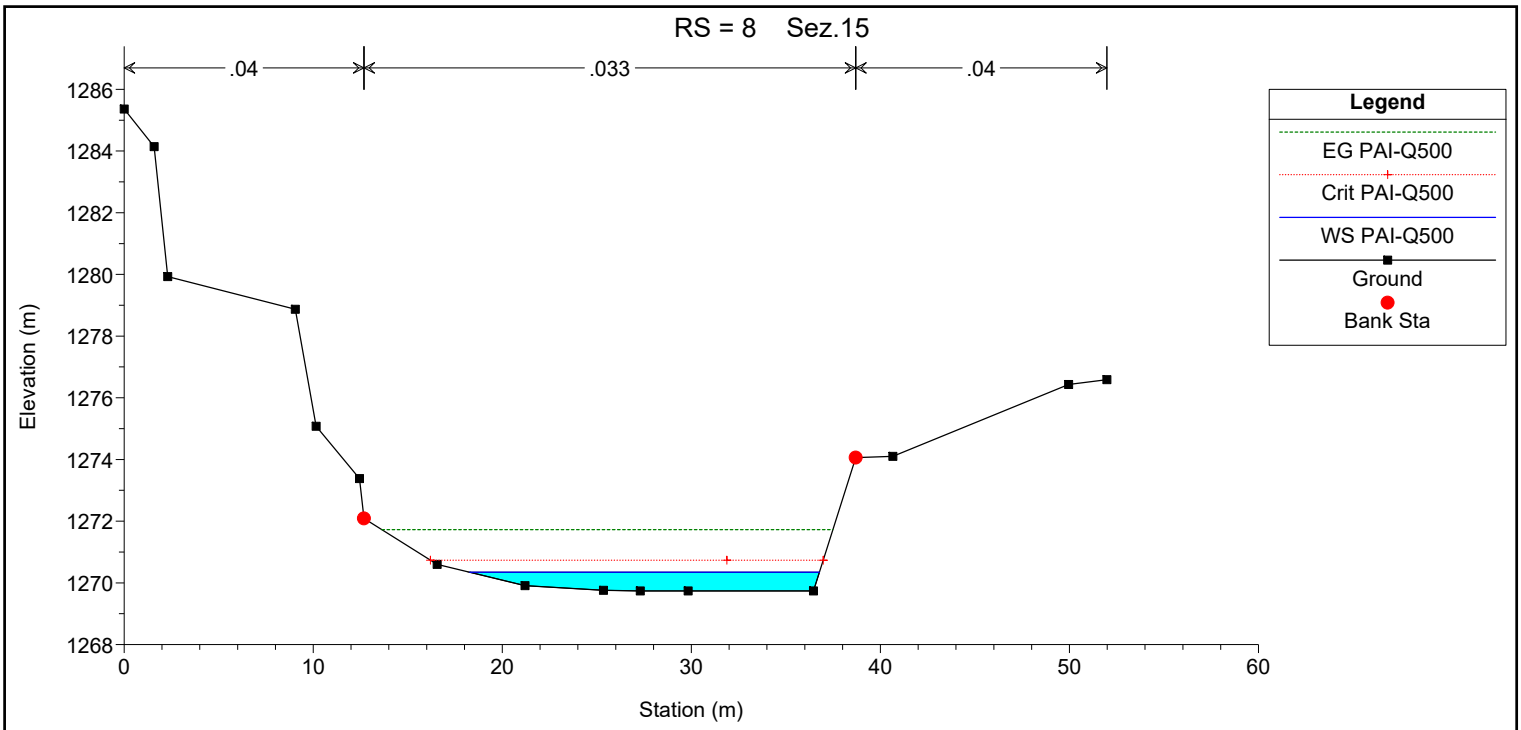

RS = 12 Sez.11
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG PAI-Q500
Crit PAI-Q500
WS PAI-Q500
Ground
Bank Sta

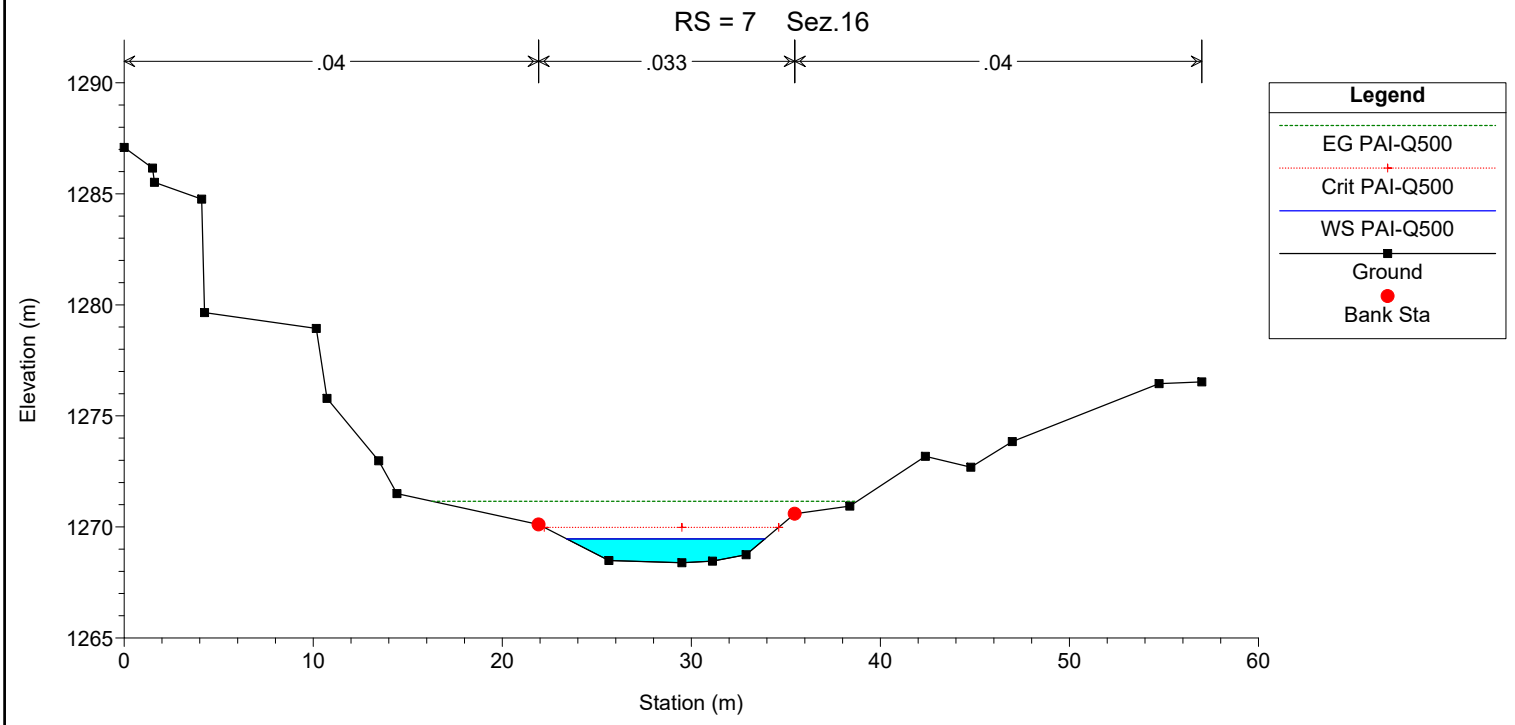

RS = 11 Sez.12
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG PAI-Q500
Crit PAI-Q500
WS PAI-Q500
Ground
Bank Sta

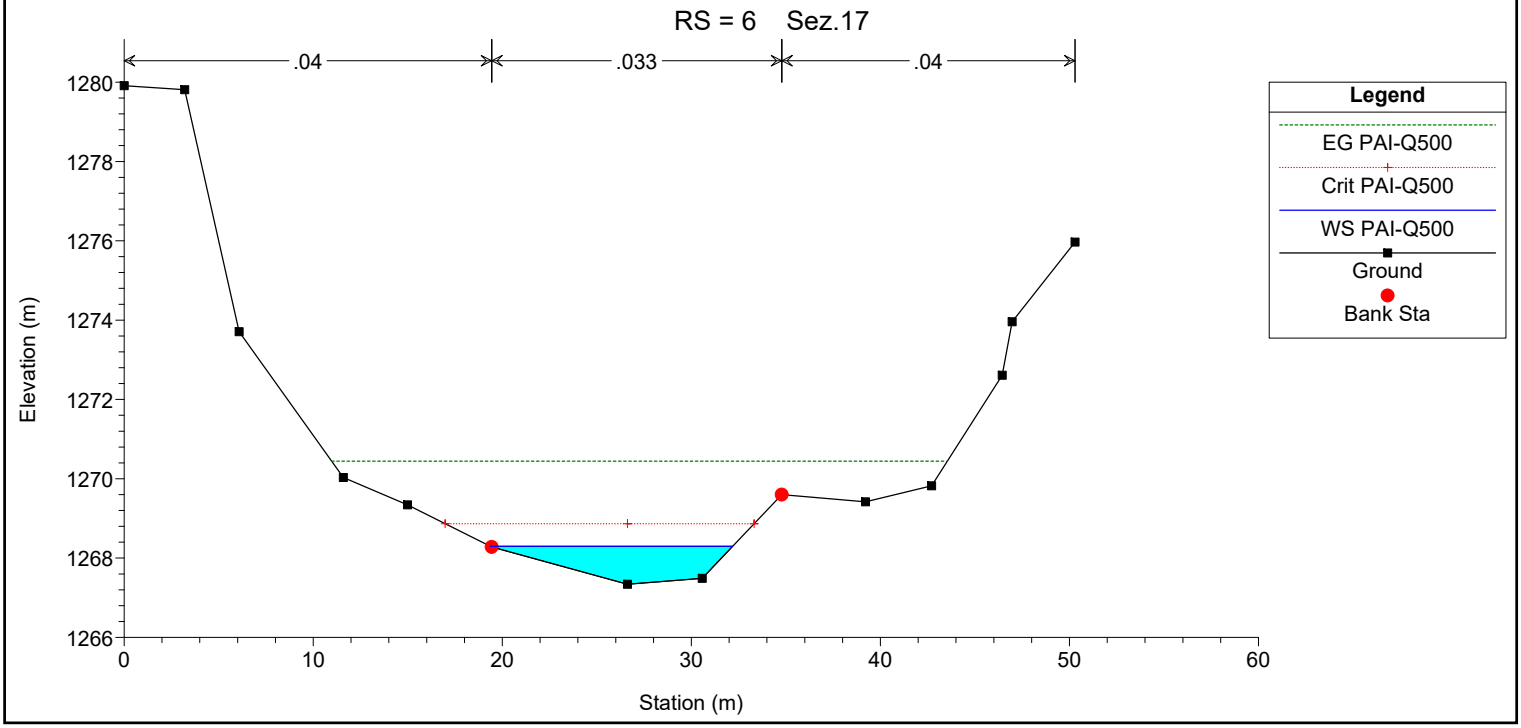

RS = 10 BR
.04
.033
.04
Legend
EG PAI-Q500
Crit PAI-Q500
WS PAI-Q500
Ground
Bank Sta
Elevation (m)
Station (m)

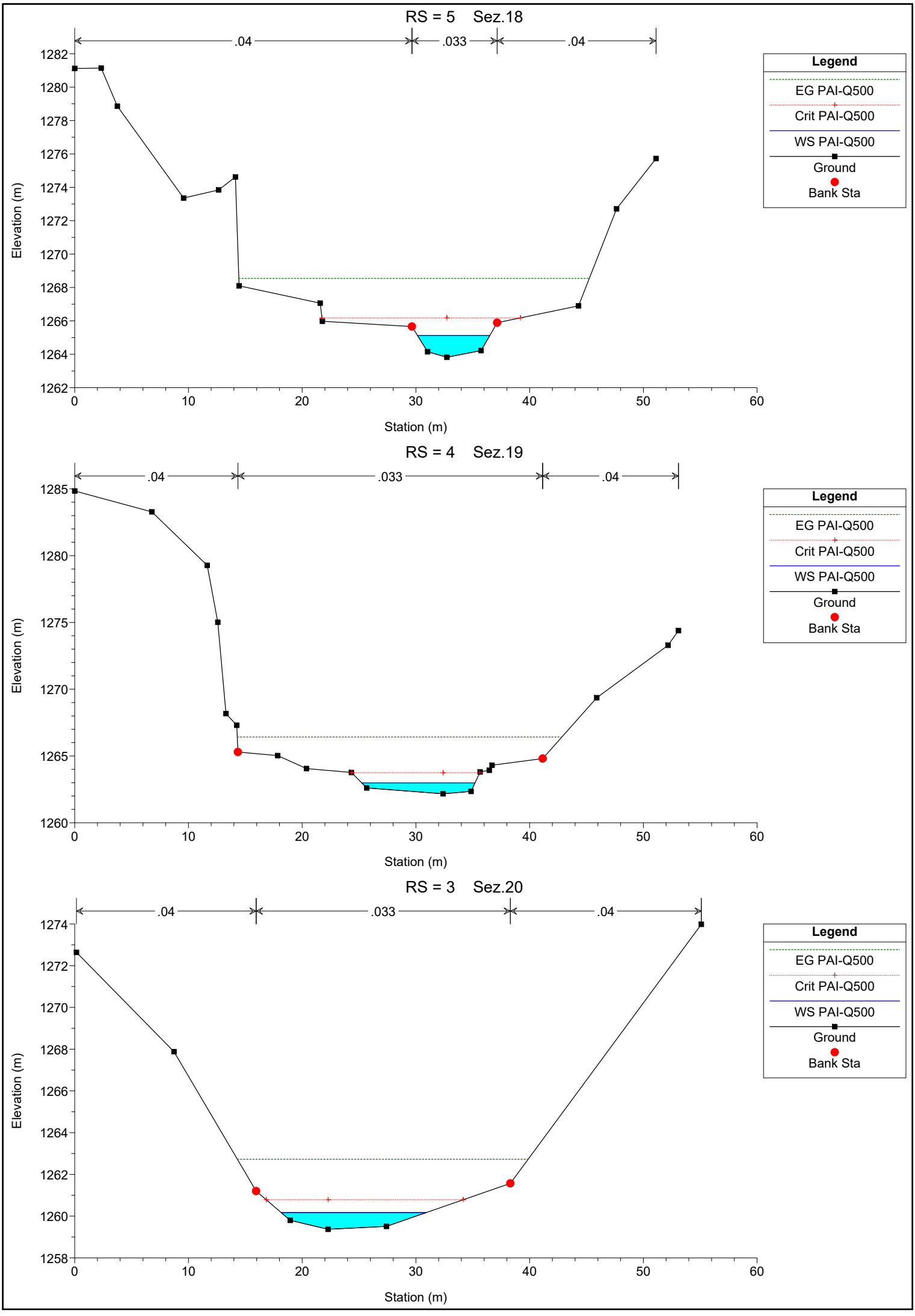

RS = 10 BR
.04
.033
.04
Legend
EG PAI-Q500
Crit PAI-Q500
WS PAI-Q500
Ground
Bank Sta
Elevation (m)
Station (m)

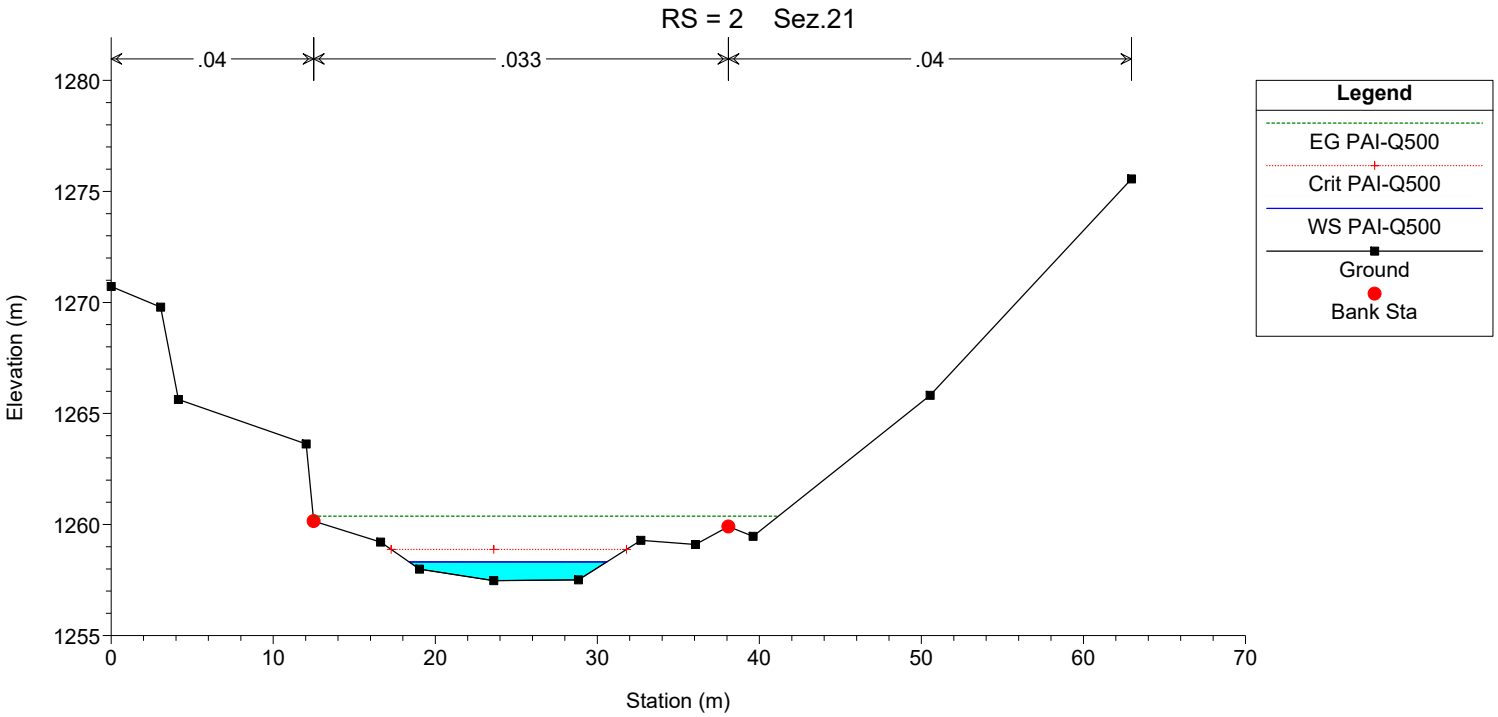

RS = 9 Sez.14
.04
.033
.04
Legend
EG PAI-Q500
Crit PAI-Q500
WS PAI-Q500
Ground
Bank Sta
Elevation (m)
Station (m)

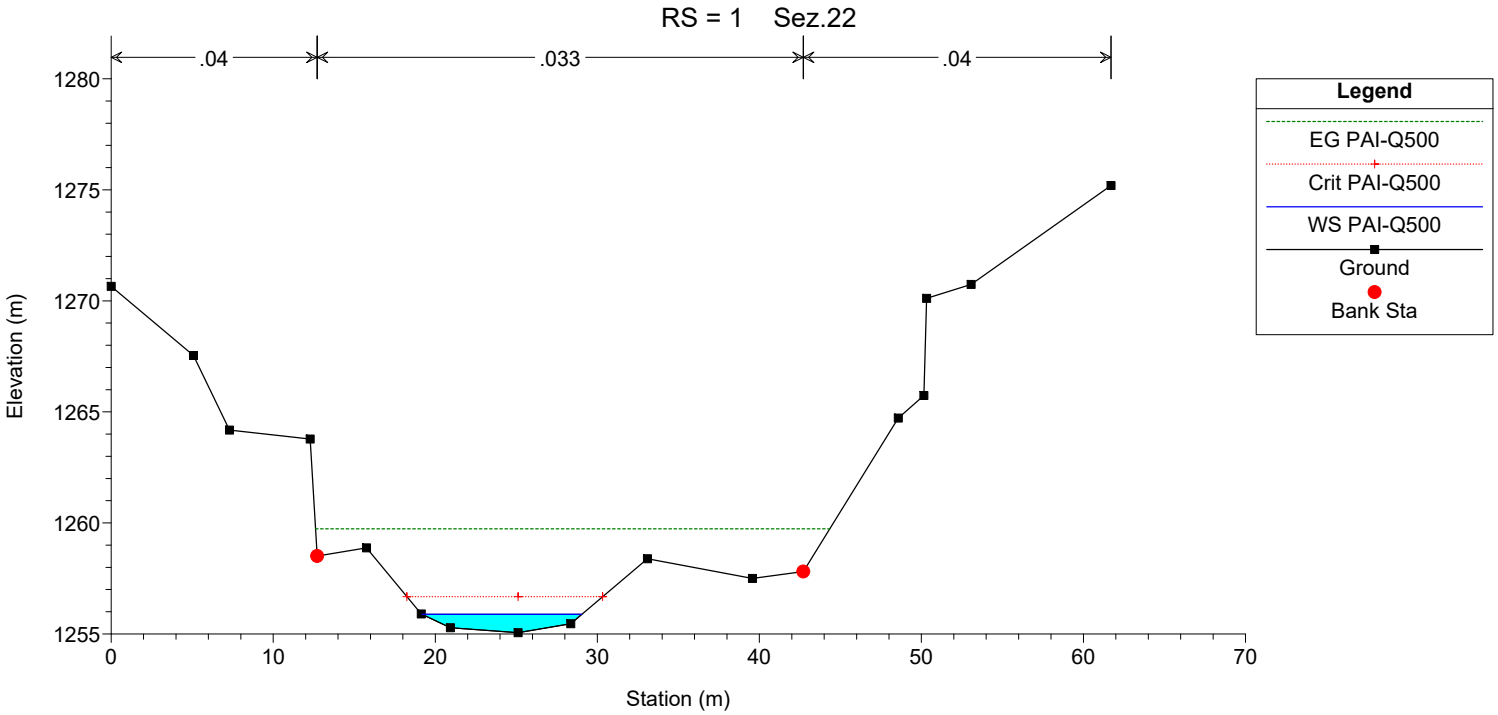

RS = 8 Sez.15
.04
.033
.04
Legend
EG PAI-Q500
Crit PAI-Q500
WS PAI-Q500
Ground
Bank Sta
Elevation (m)
Station (m)


RS = 7 Sez.16
.04
.033
.04
Legend
EG PAI-Q500
Crit PAI-Q500
WS PAI-Q500
Ground
Bank Sta
Elevation (m)
Station (m)

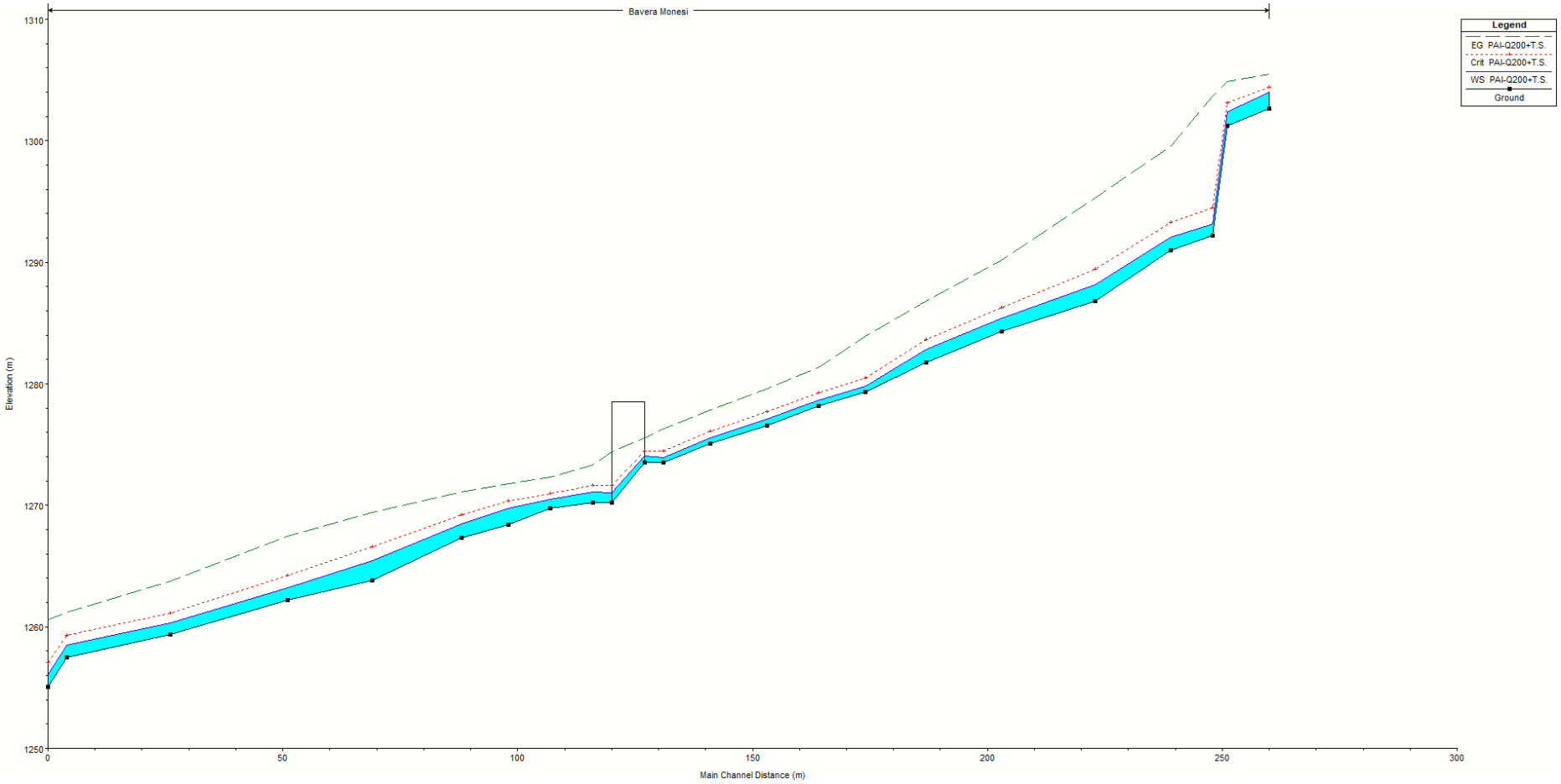

RS = 6 Sez.17
.04
.033
.04
Legend
EG PAI-Q500
Crit PAI-Q500
WS PAI-Q500
Ground
Bank Sta
Elevation (m)
Station (m)

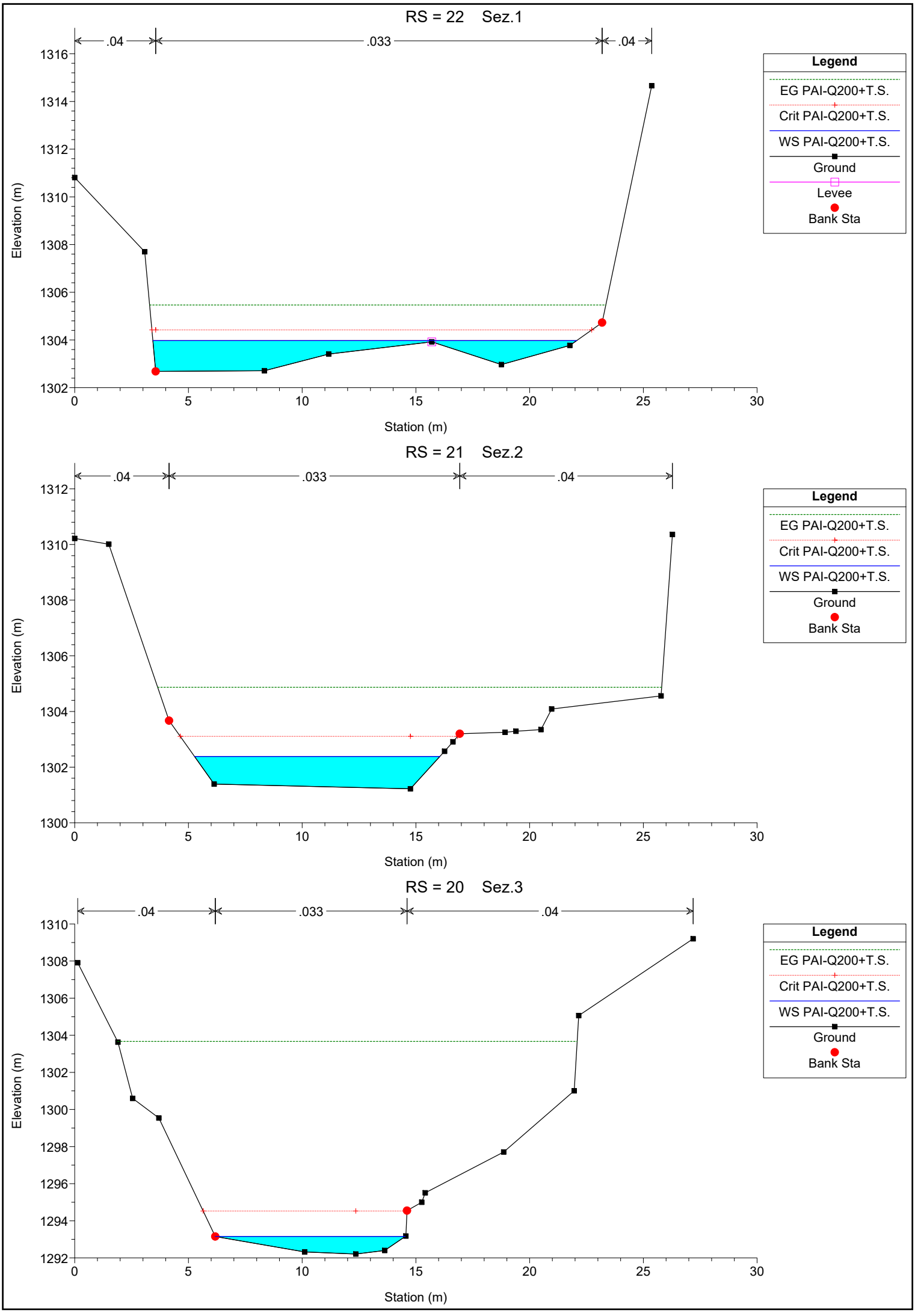

RS = 5 Sez.18
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG PAI-Q500
Crit PAI-Q500
WS PAI-Q500
Ground
Bank Sta
RS = 4 Sez.19
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG PAI-Q500
Crit PAI-Q500
WS PAI-Q500
Ground
Bank Sta
RS = 3 Sez.20
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG PAI-Q500
Crit PAI-Q500
WS PAI-Q500
Ground
Bank Sta

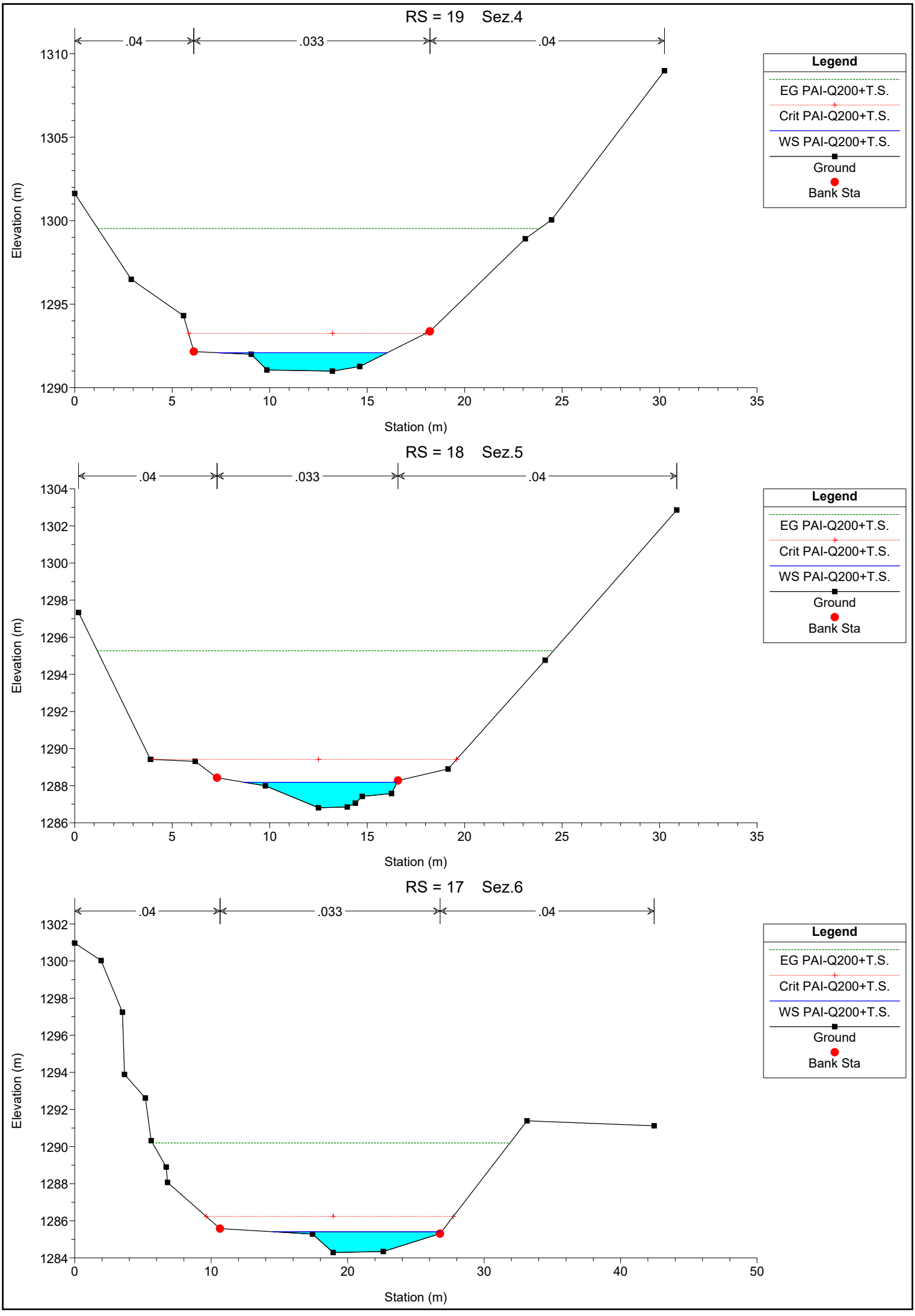

RS = 2 Sez.21
.04
.033
.04
Legend
EG PAI-Q500
Crit PAI-Q500
WS PAI-Q500
Ground
Bank Sta
Elevation (m)
Station (m)
1280
1275
1270
1265
1260
1255
0
10
20
30
40
50
60
70

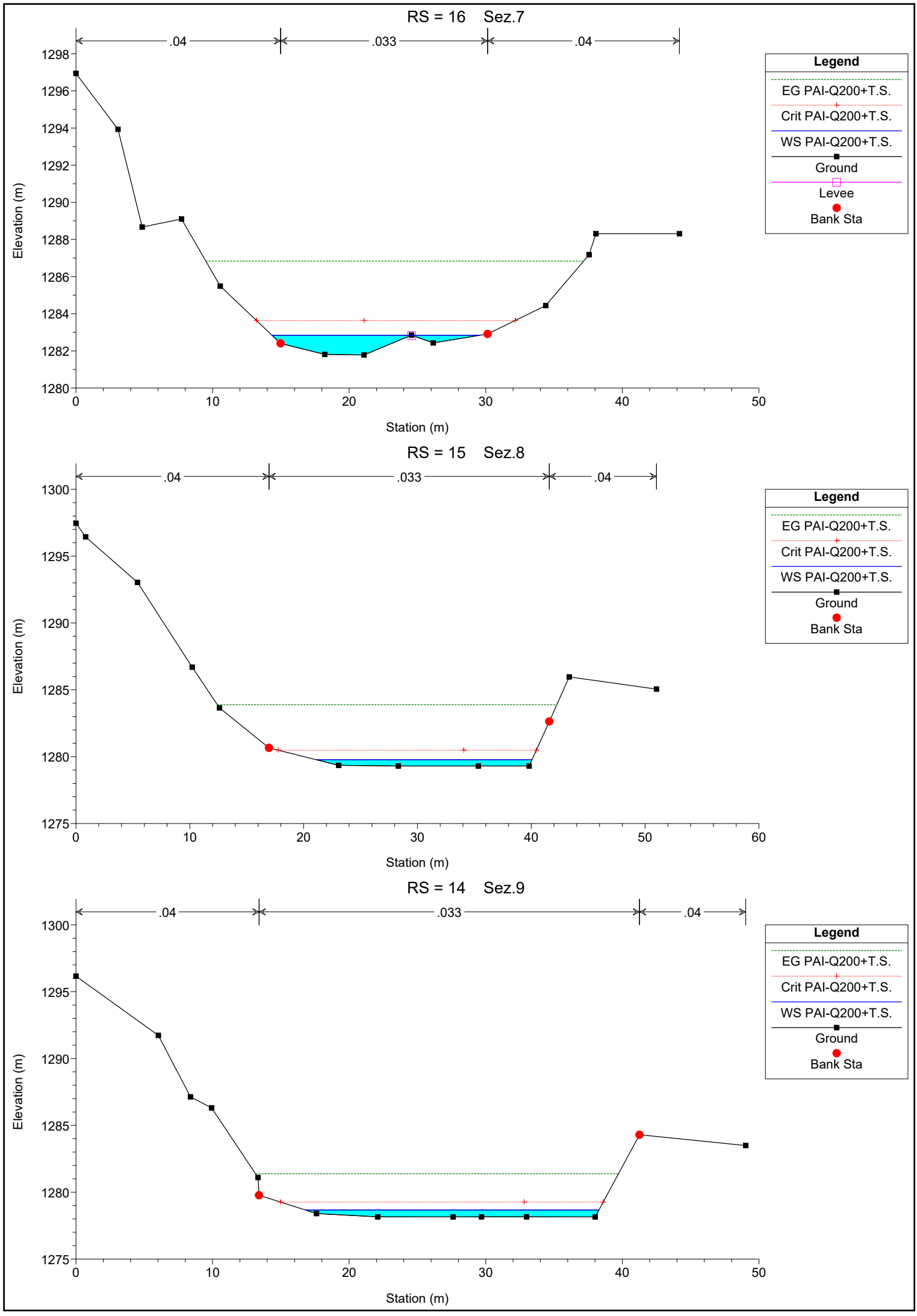

RS = 1 Sez.22
.04
.033
.04
Legend
EG PAI-Q500
Crit PAI-Q500
WS PAI-Q500
Ground
Bank Sta
Elevation (m)
Station (m)
1280
1275
1270
1265
1260
1255
0
10
20
30
40
50
60
70

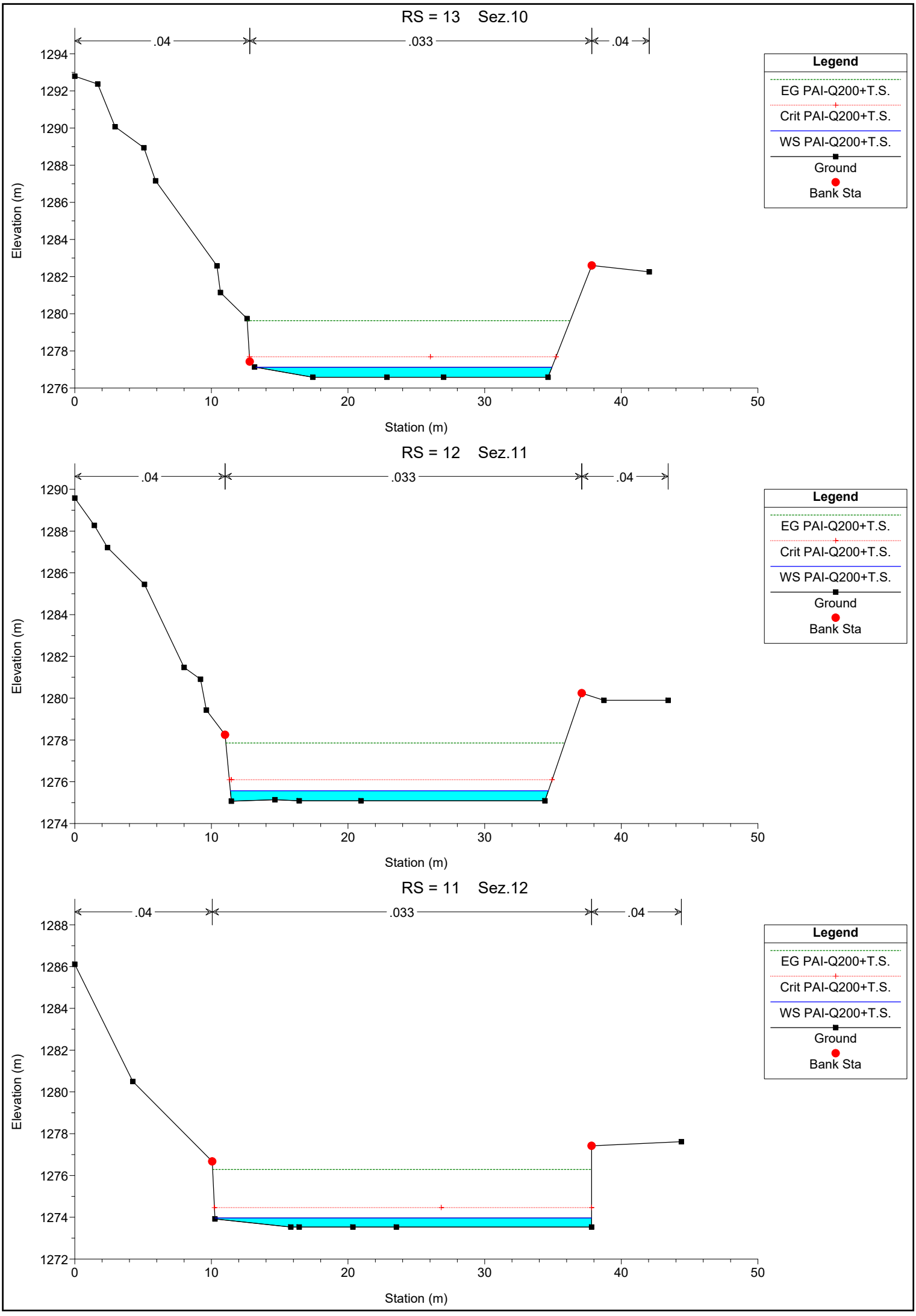
Q200 + TS - PAI

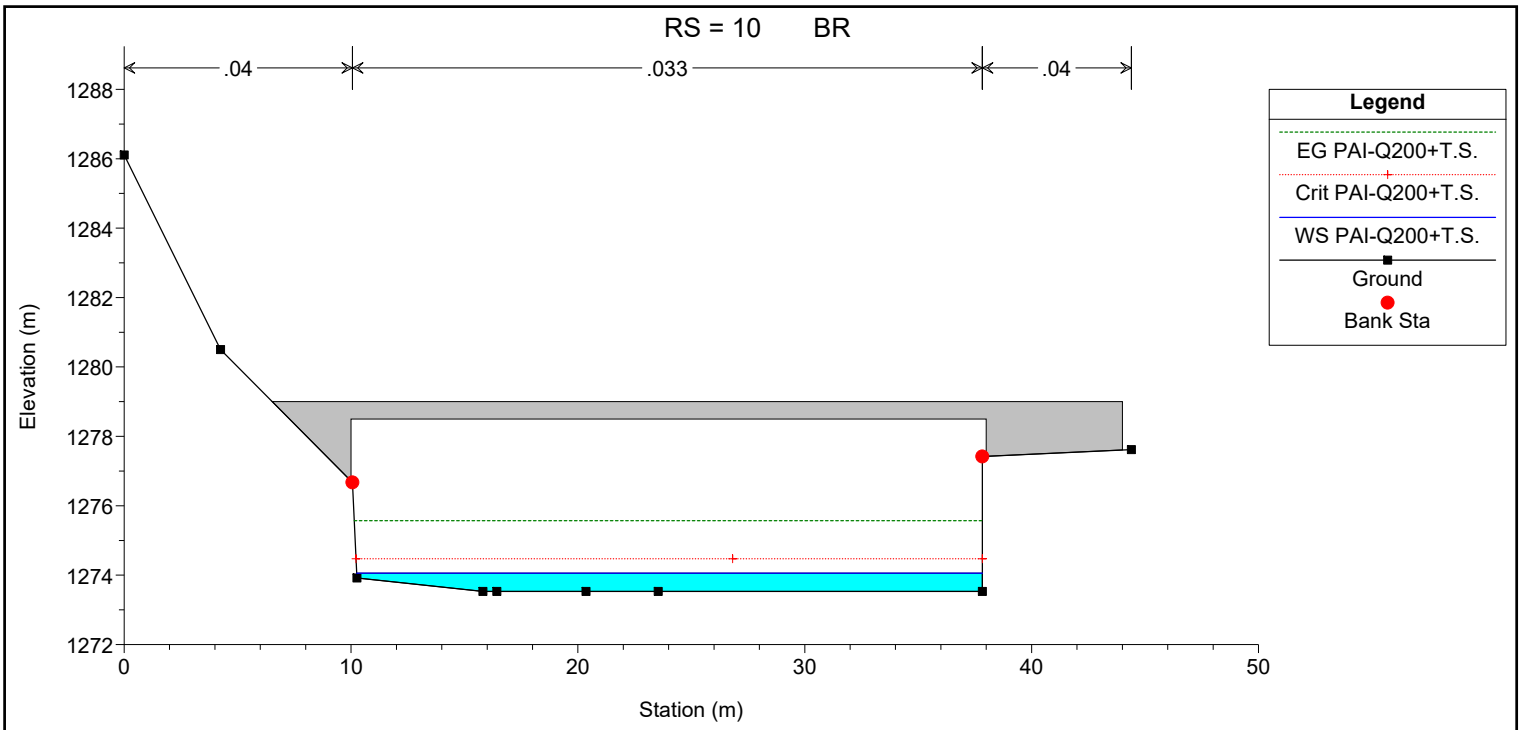

Bavera Monesi
Legend
EG PAI-Q200+T.S.
Crit PAI-Q200+T.S.
WS PAI-Q200+T.S.
Ground
Elevation (m)
1310
1300
1290
1280
1270
1260
1250
0
50
100
150
200
250
300
Main Channel Distance (m)

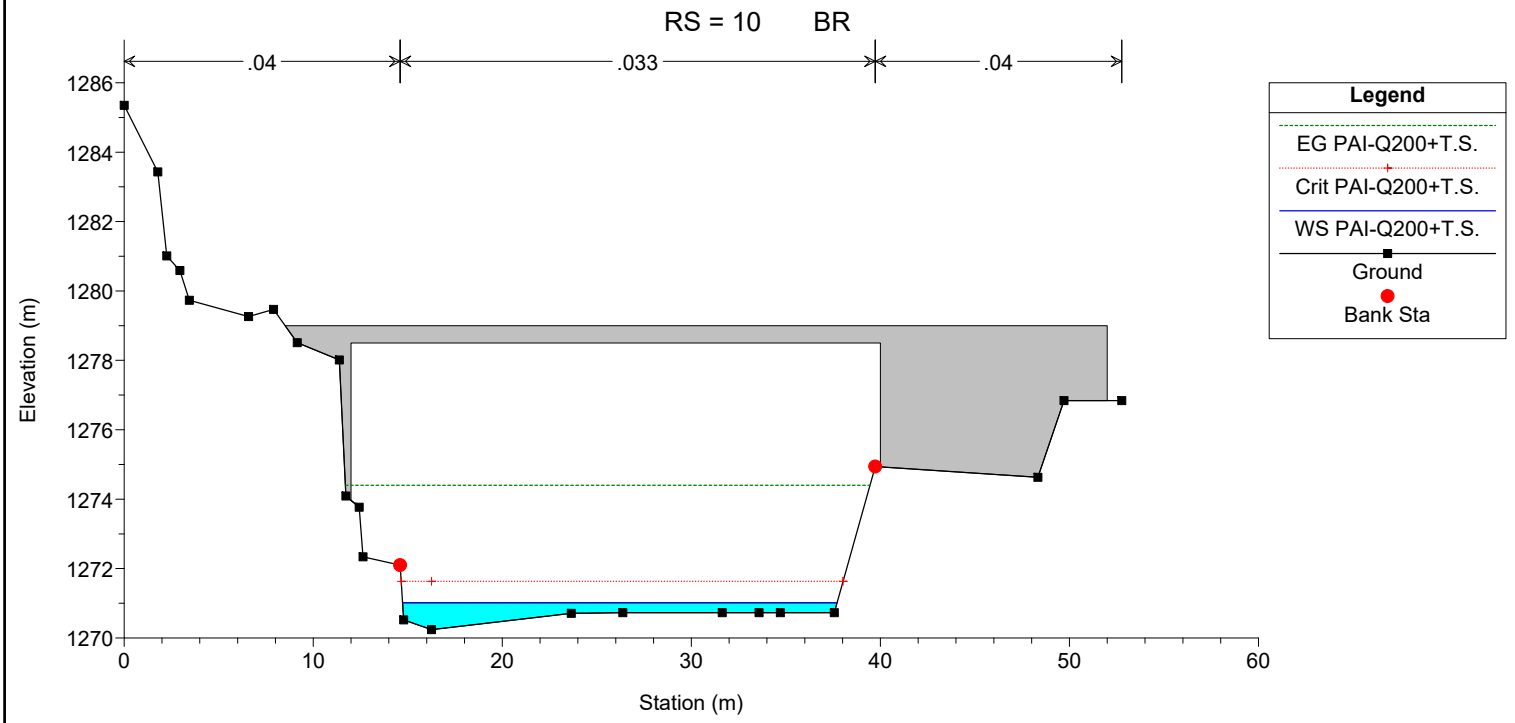

RS = 22 Sez.1
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG PAI-Q200+T.S.
Crit PAI-Q200+T.S.
WS PAI-Q200+T.S.
Ground
Levee
Bank Sta
RS = 21 Sez.2
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG PAI-Q200+T.S.
Crit PAI-Q200+T.S.
WS PAI-Q200+T.S.
Ground
Bank Sta
RS = 20 Sez.3
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG PAI-Q200+T.S.
Crit PAI-Q200+T.S.
WS PAI-Q200+T.S.
Ground
Bank Sta

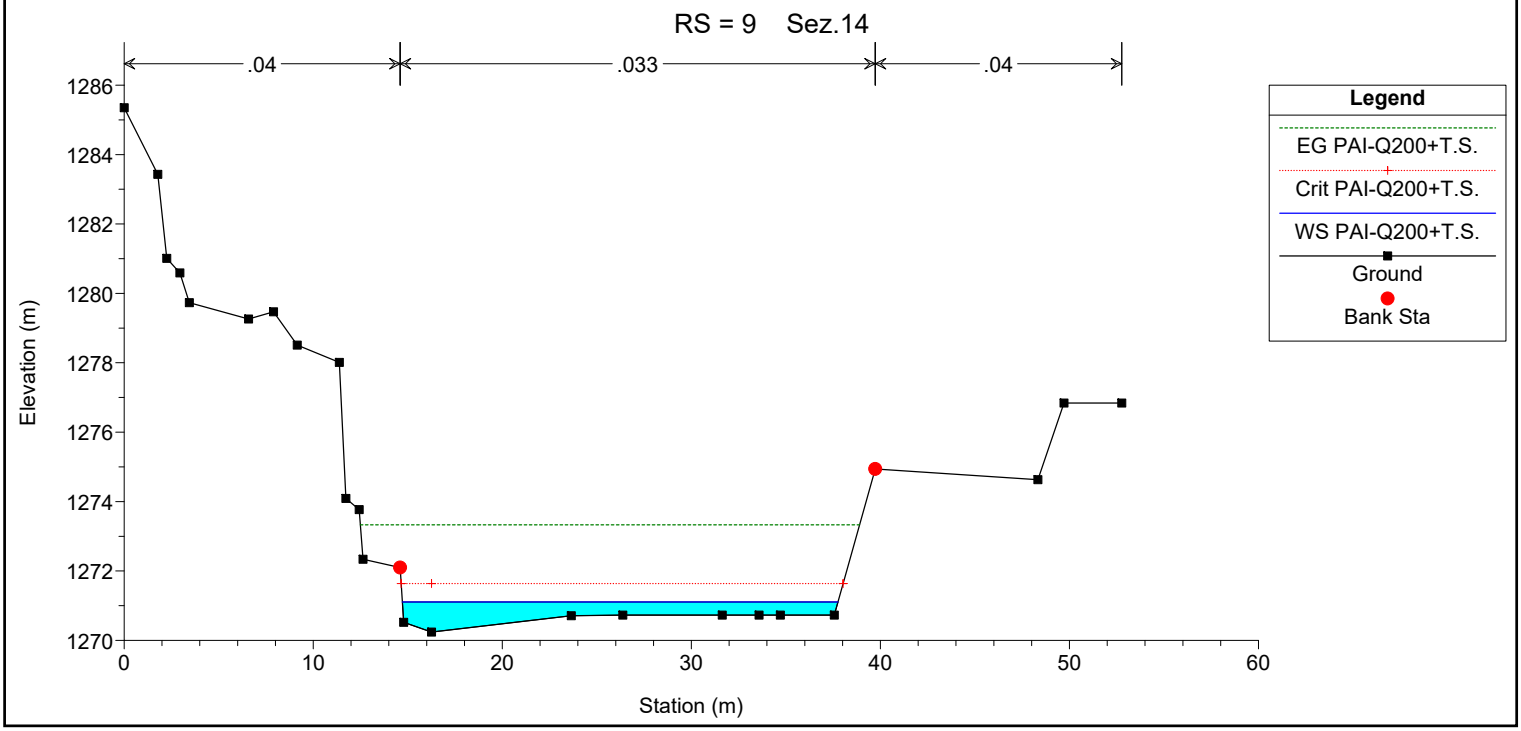

RS = 19 Sez.4
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG PAI-Q200+T.S.
Crit PAI-Q200+T.S.
WS PAI-Q200+T.S.
Ground
Bank Sta
RS = 18 Sez.5
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG PAI-Q200+T.S.
Crit PAI-Q200+T.S.
WS PAI-Q200+T.S.
Ground
Bank Sta
RS = 17 Sez.6
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG PAI-Q200+T.S.
Crit PAI-Q200+T.S.
WS PAI-Q200+T.S.
Ground
Bank Sta

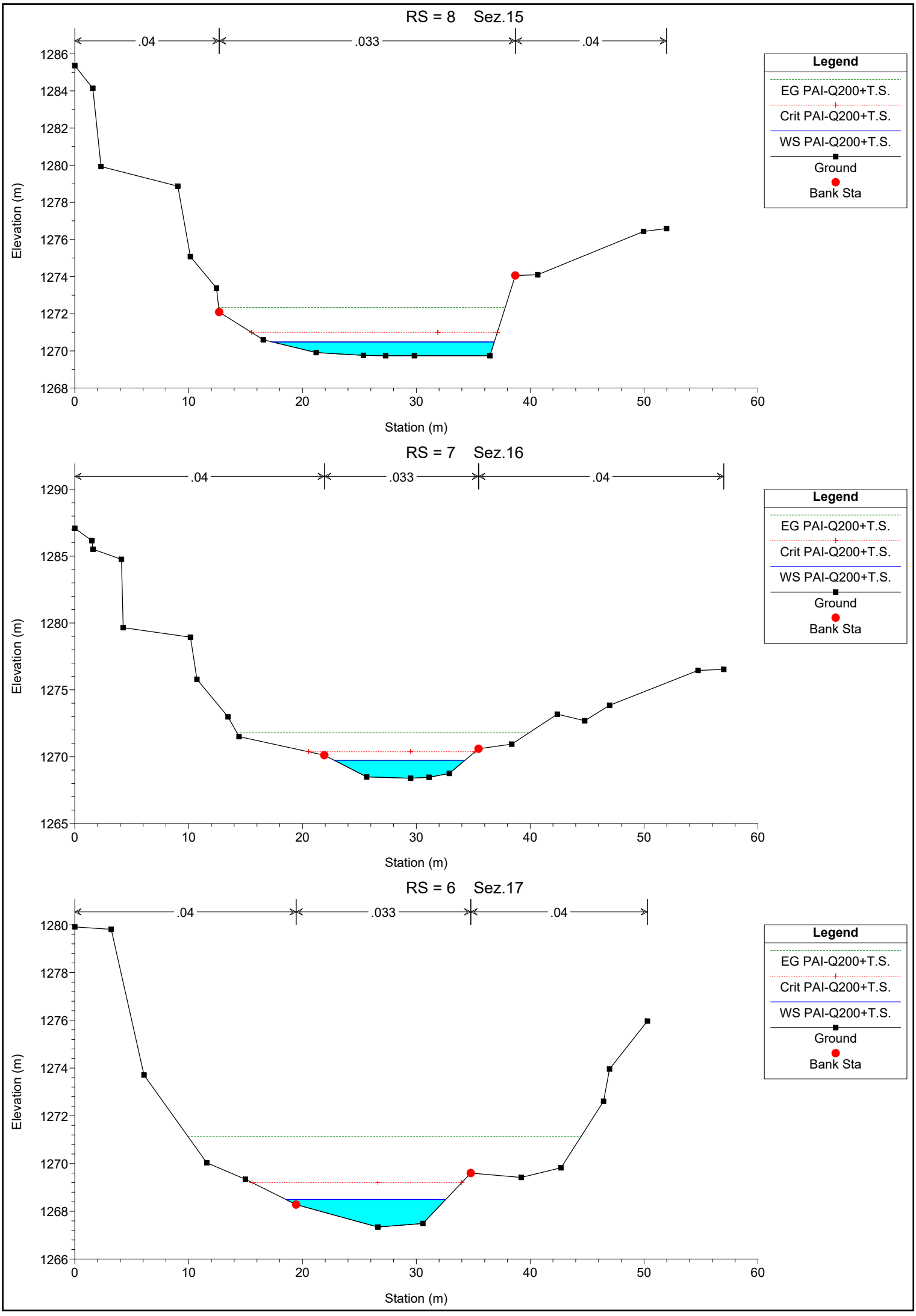

RS = 16 Sez.7
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG PAI-Q200+T.S.
Crit PAI-Q200+T.S.
WS PAI-Q200+T.S.
Ground
Levee
Bank Sta
RS = 15 Sez.8
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG PAI-Q200+T.S.
Crit PAI-Q200+T.S.
WS PAI-Q200+T.S.
Ground
Bank Sta
RS = 14 Sez.9
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG PAI-Q200+T.S.
Crit PAI-Q200+T.S.
WS PAI-Q200+T.S.
Ground
Bank Sta

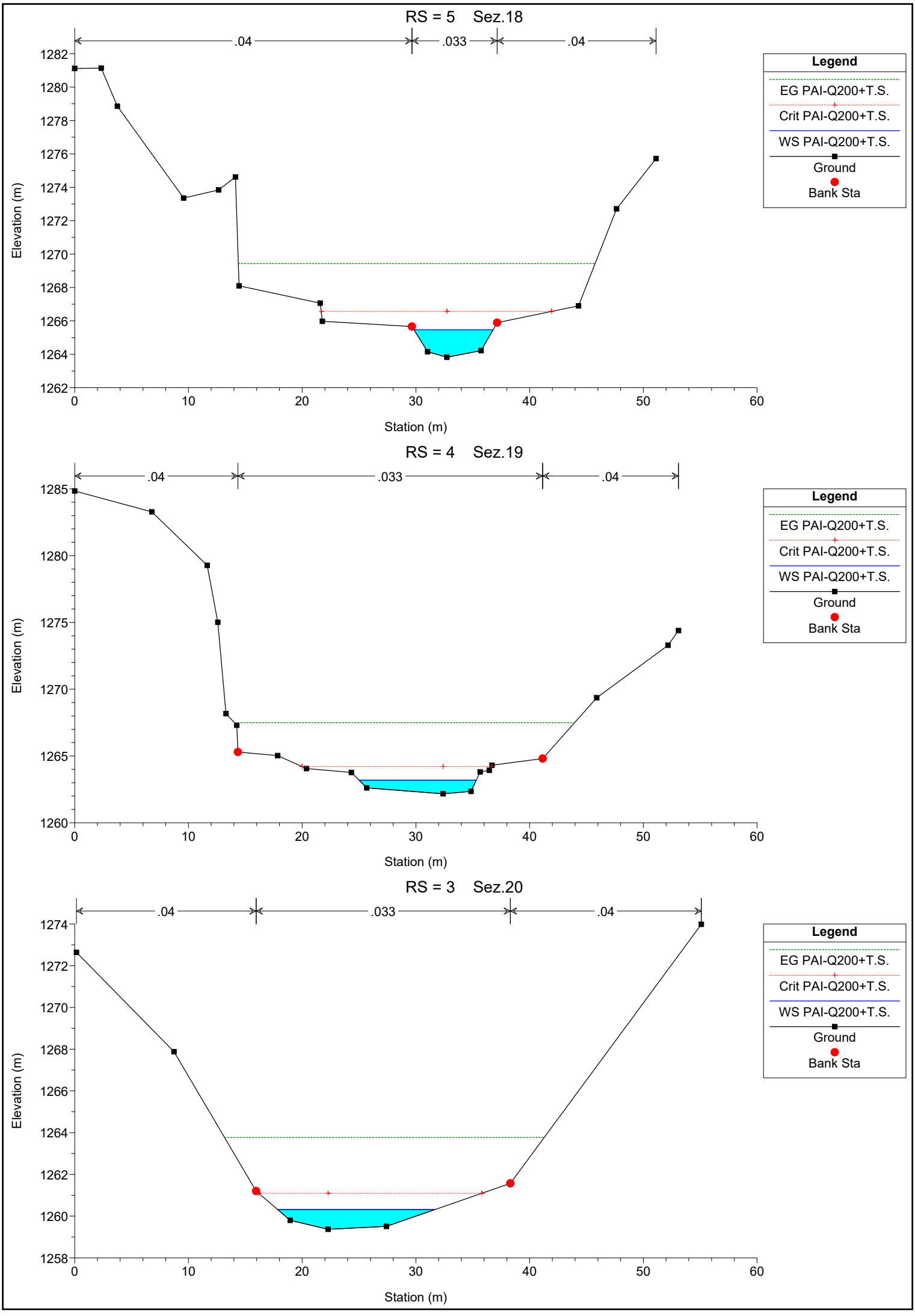

RS = 13 Sez.10
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG PAI-Q200+T.S.
Crit PAI-Q200+T.S.
WS PAI-Q200+T.S.
Ground
Bank Sta
RS = 12 Sez.11
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG PAI-Q200+T.S.
Crit PAI-Q200+T.S.
WS PAI-Q200+T.S.
Ground
Bank Sta
RS = 11 Sez.12
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG PAI-Q200+T.S.
Crit PAI-Q200+T.S.
WS PAI-Q200+T.S.
Ground
Bank Sta

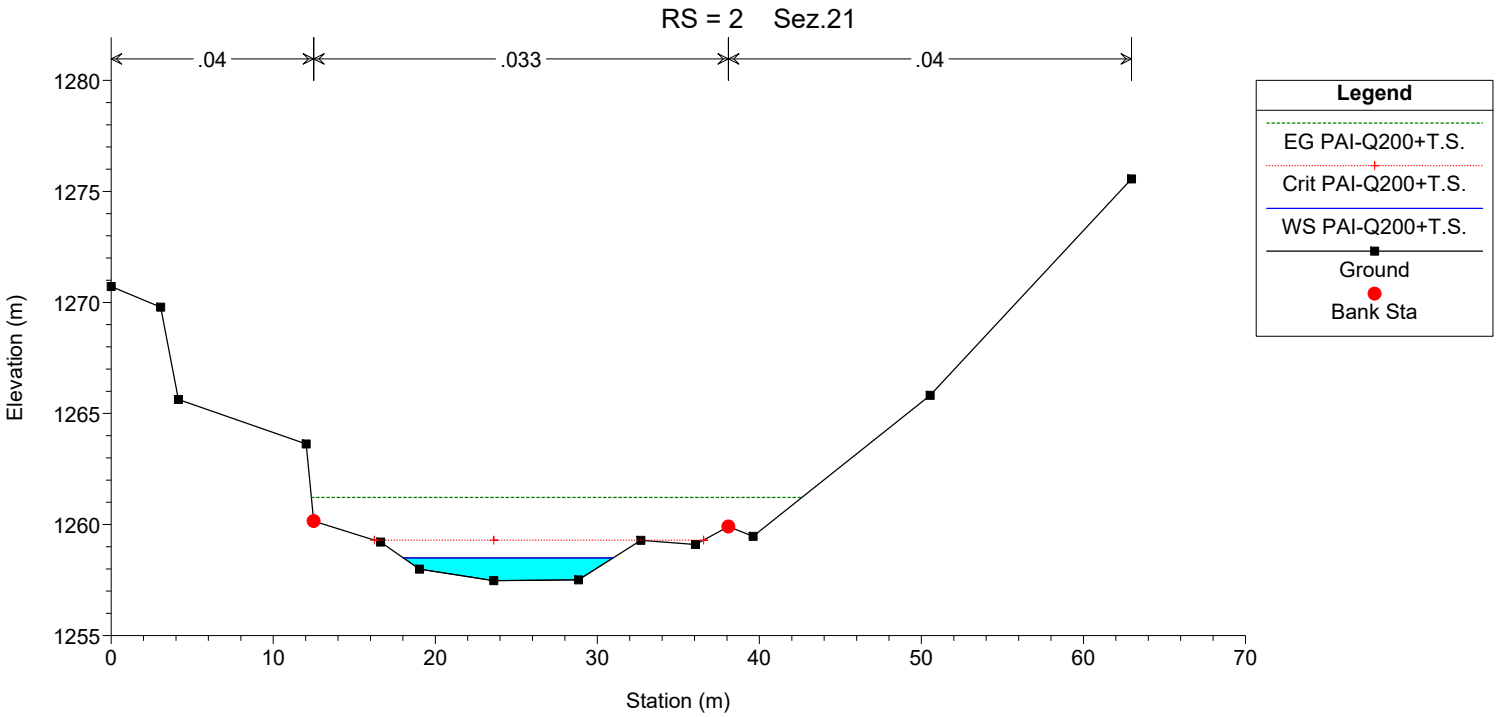

RS = 10 BR
.04
.033
.04
1288
1286
1284
1282
1280
1278
1276
1274
1272
Elevation (m)
0
10
20
30
40
50
Station (m)
Legend
EG PAI-Q200+T.S.
Crit PAI-Q200+T.S.
WS PAI-Q200+T.S.
Ground
Bank Sta

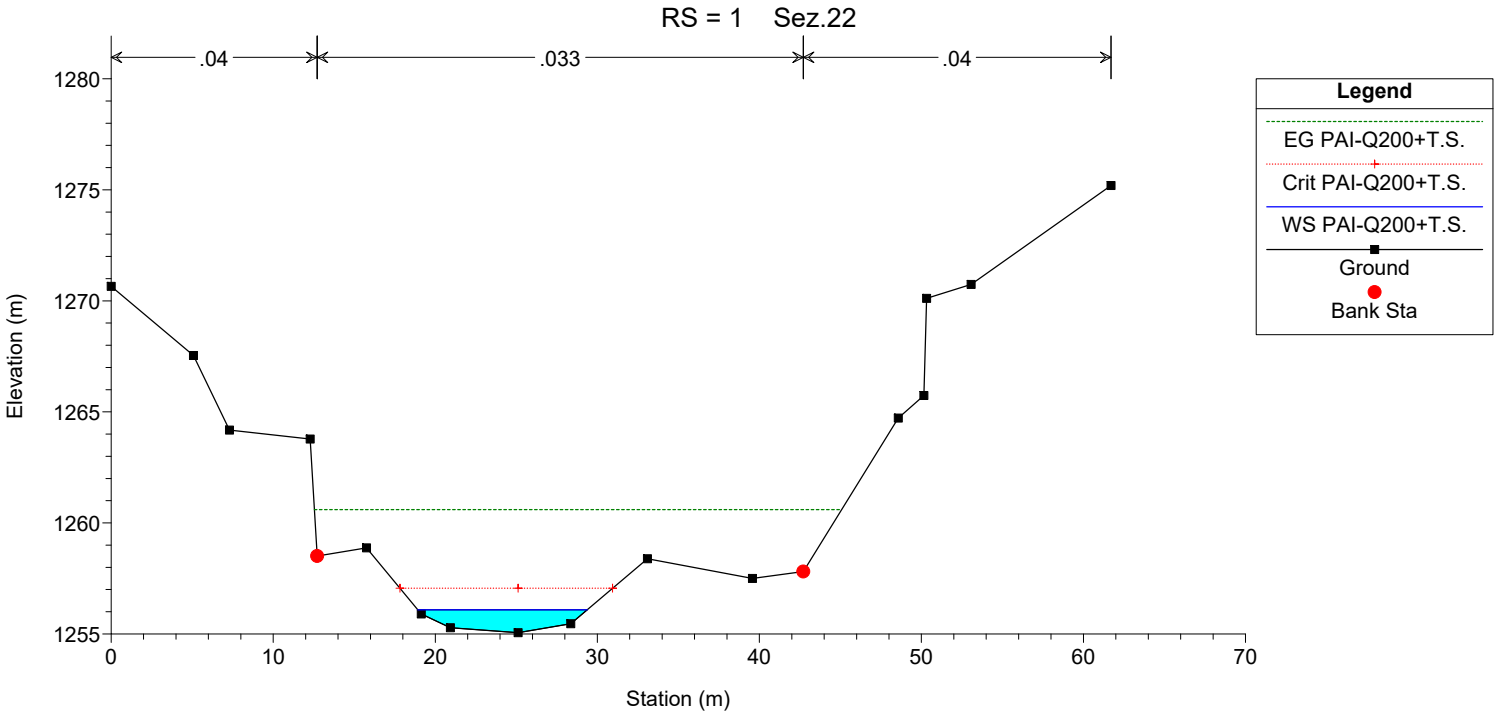

RS = 10 BR
.04
.033
.04
1286
1284
1282
1280
1278
1276
1274
1272
1270
Elevation (m)
0
10
20
30
40
50
60
Station (m)
Legend
EG PAI-Q200+T.S.
Crit PAI-Q200+T.S.
WS PAI-Q200+T.S.
Ground
Bank Sta


RS = 9 Sez.14
.04
.033
.04
1286
1284
1282
1280
1278
1276
1274
1272
1270
Elevation (m)
0
10
20
30
40
50
60
Station (m)
Legend
EG PAI-Q200+T.S.
Crit PAI-Q200+T.S.
WS PAI-Q200+T.S.
Ground
Bank Sta

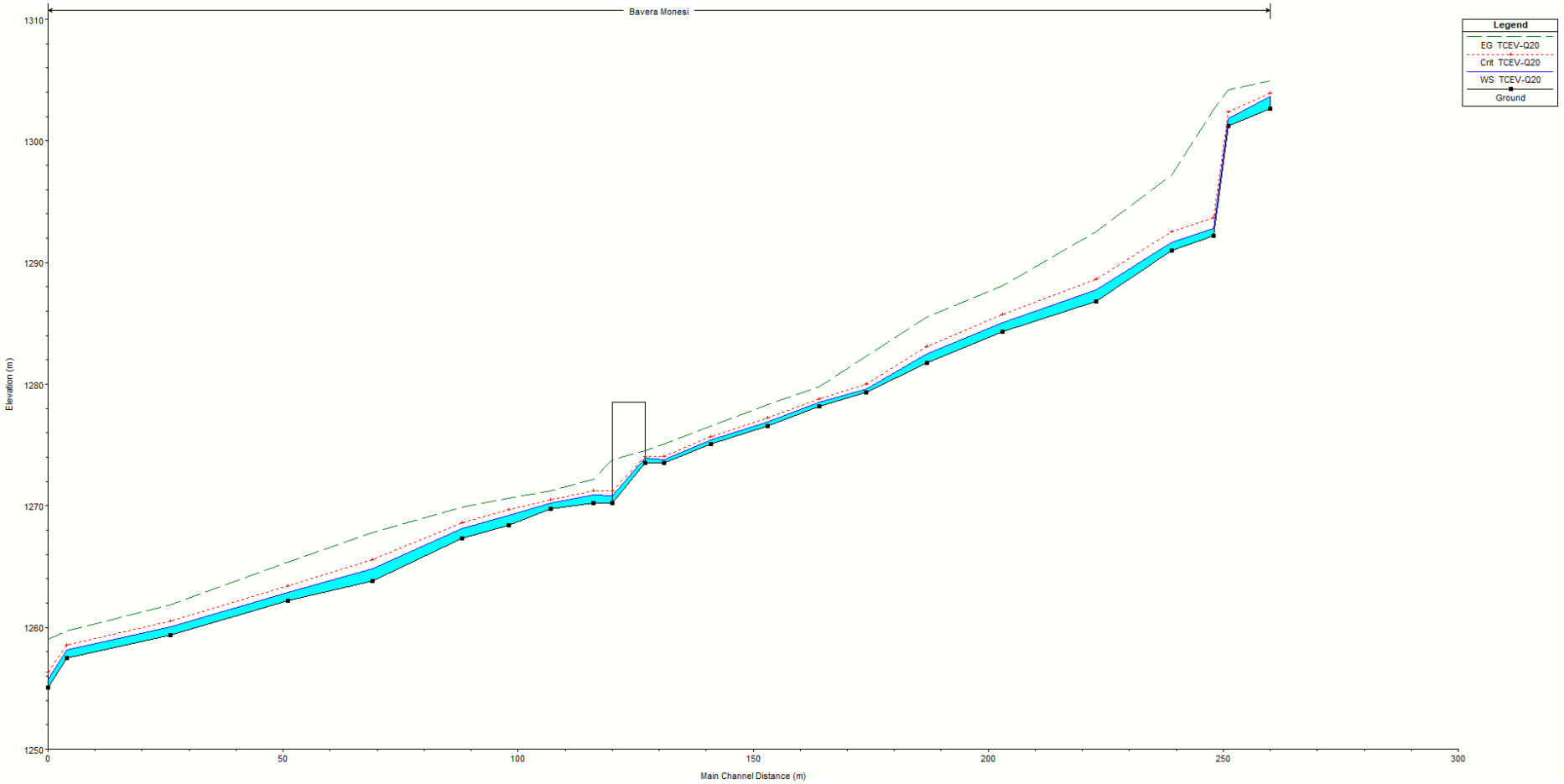

RS = 8 Sez.15
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG PAI-Q200+T.S.
Crit PAI-Q200+T.S.
WS PAI-Q200+T.S.
Ground
Bank Sta
RS = 7 Sez.16
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG PAI-Q200+T.S.
Crit PAI-Q200+T.S.
WS PAI-Q200+T.S.
Ground
Bank Sta
RS = 6 Sez.17
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG PAI-Q200+T.S.
Crit PAI-Q200+T.S.
WS PAI-Q200+T.S.
Ground
Bank Sta

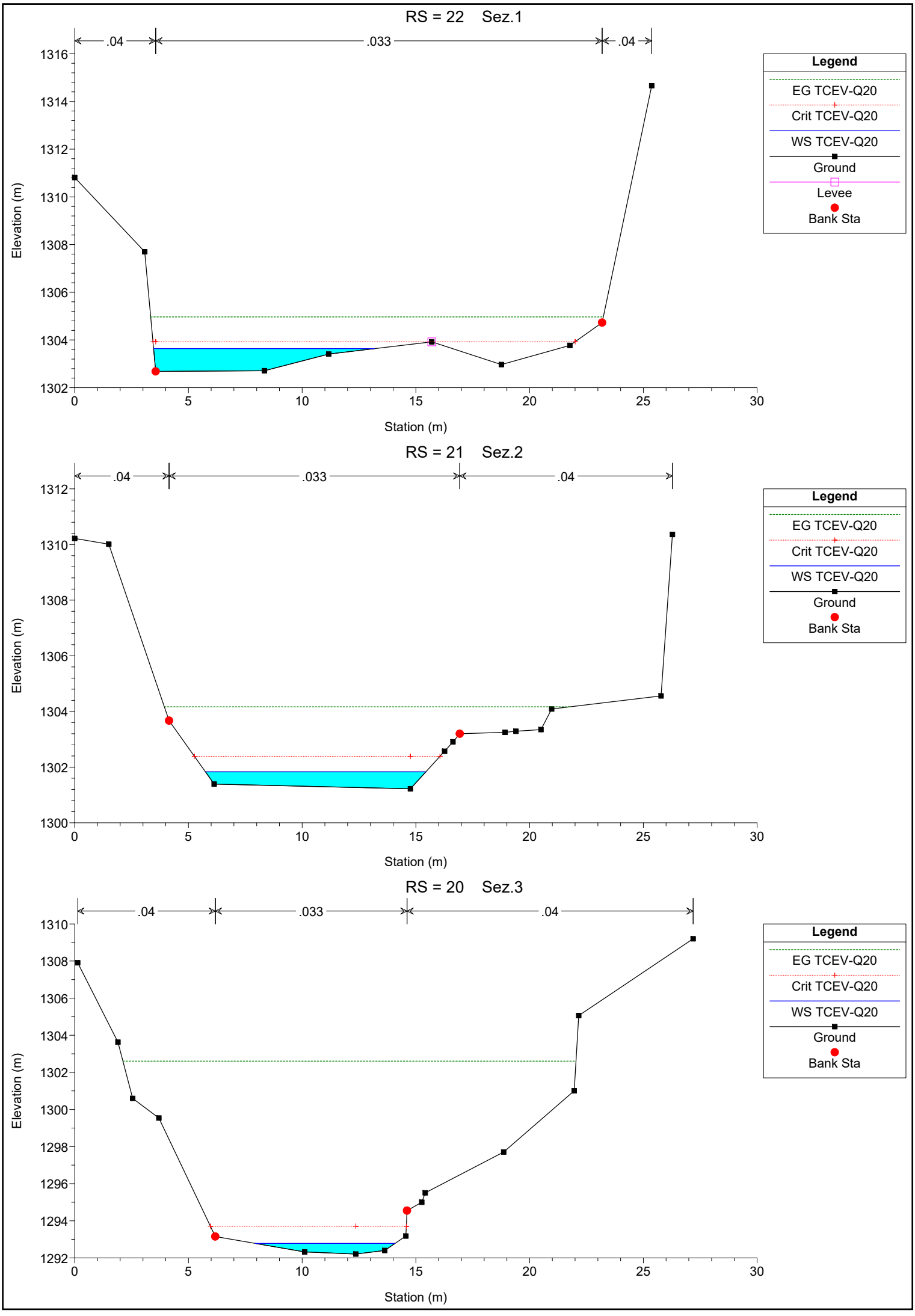

RS = 5 Sez.18
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG PAI-Q200+T.S.
Crit PAI-Q200+T.S.
WS PAI-Q200+T.S.
Ground
Bank Sta
RS = 4 Sez.19
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG PAI-Q200+T.S.
Crit PAI-Q200+T.S.
WS PAI-Q200+T.S.
Ground
Bank Sta
RS = 3 Sez.20
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG PAI-Q200+T.S.
Crit PAI-Q200+T.S.
WS PAI-Q200+T.S.
Ground
Bank Sta

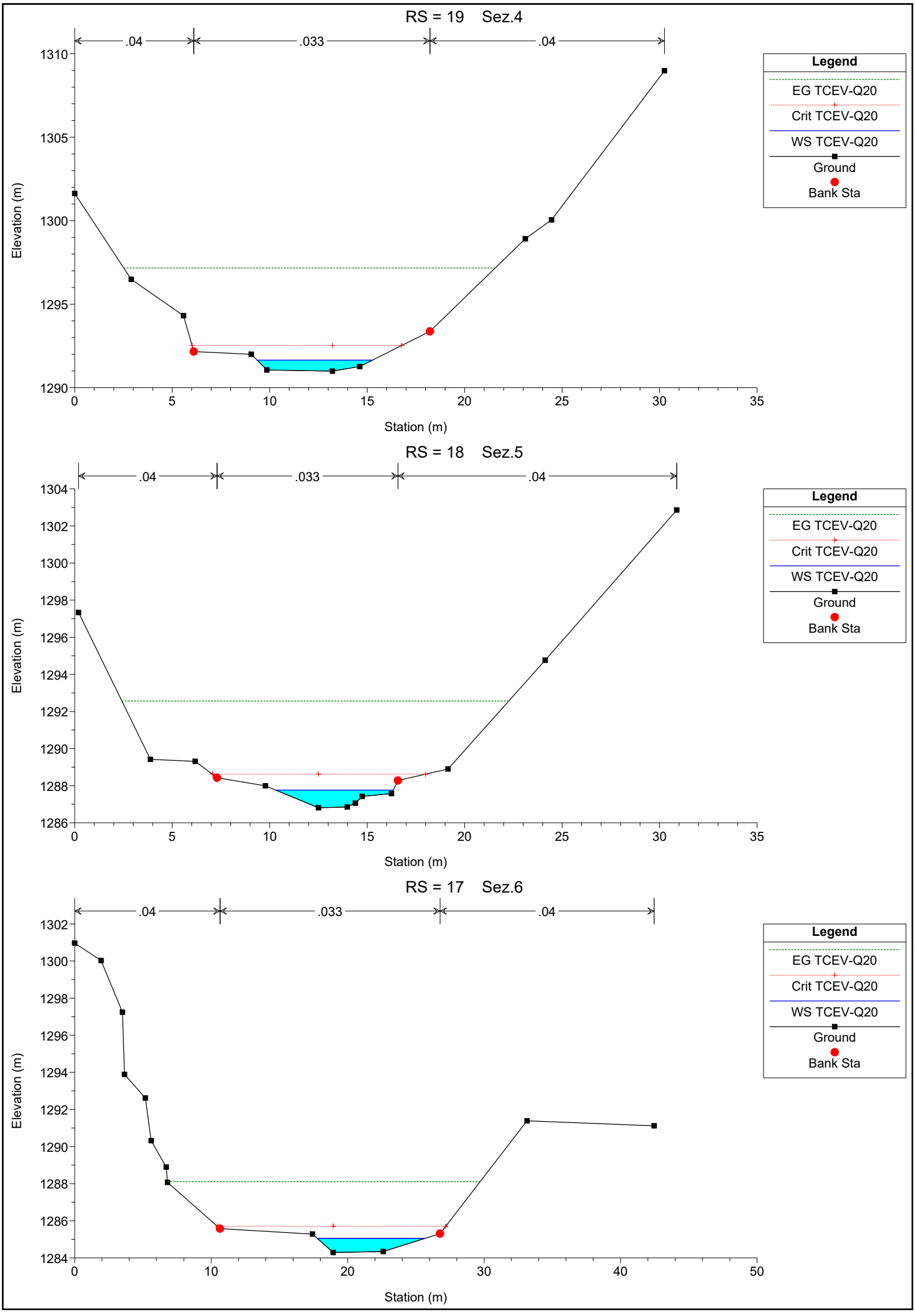

RS = 2 Sez.21
.04
.033
.04
1280
1275
1270
1265
1260
1255
Elevation (m)
0
10
20
30
40
50
60
70
Station (m)
Legend
EG PAI-Q200+T.S.
Crit PAI-Q200+T.S.
WS PAI-Q200+T.S.
Ground
Bank Sta

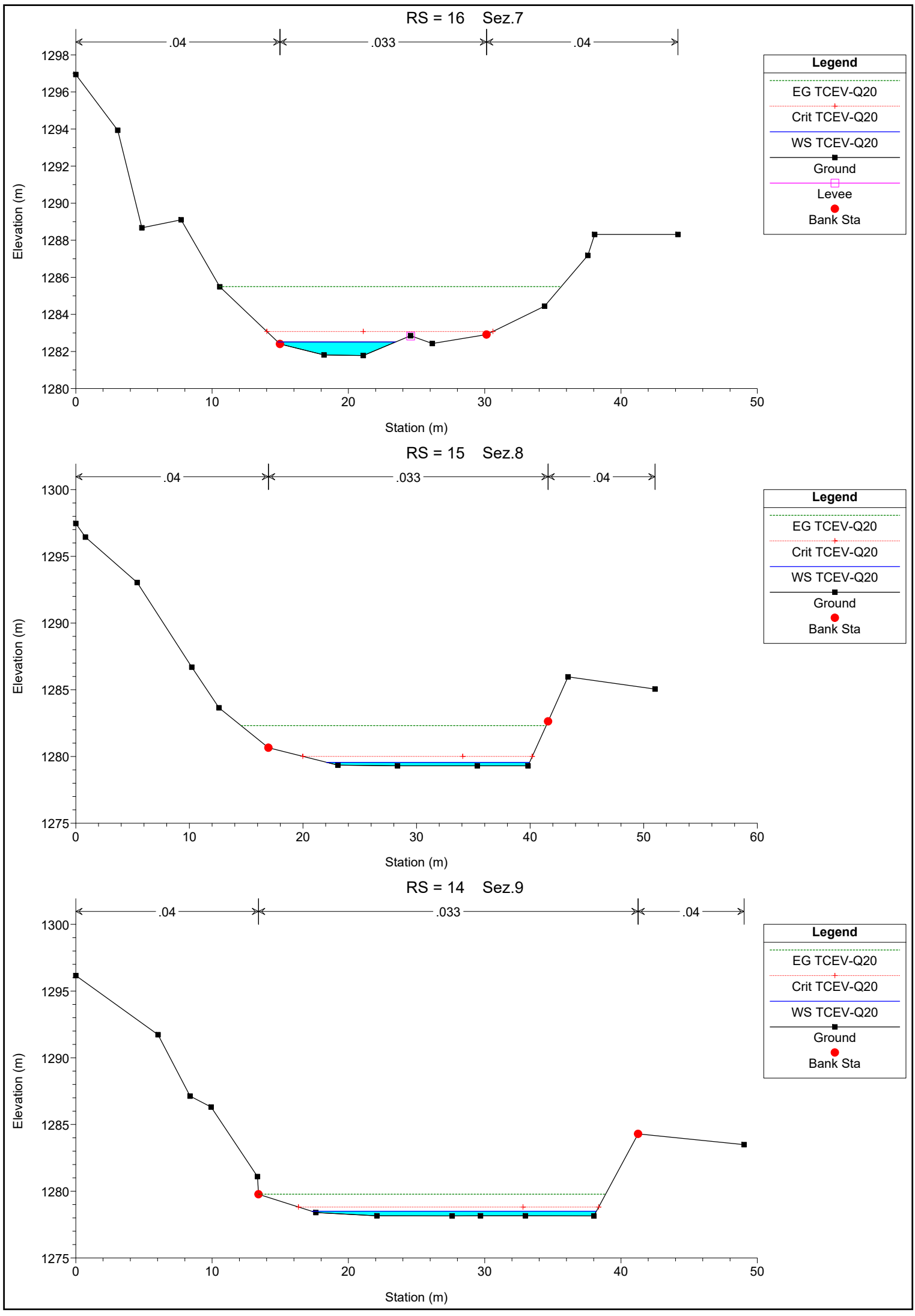

RS = 1 Sez.22
.04
.033
.04
1280
1275
1270
1265
1260
1255
Elevation (m)
0
10
20
30
40
50
60
70
Station (m)
Legend
EG PAI-Q200+T.S.
Crit PAI-Q200+T.S.
WS PAI-Q200+T.S.
Ground
Bank Sta

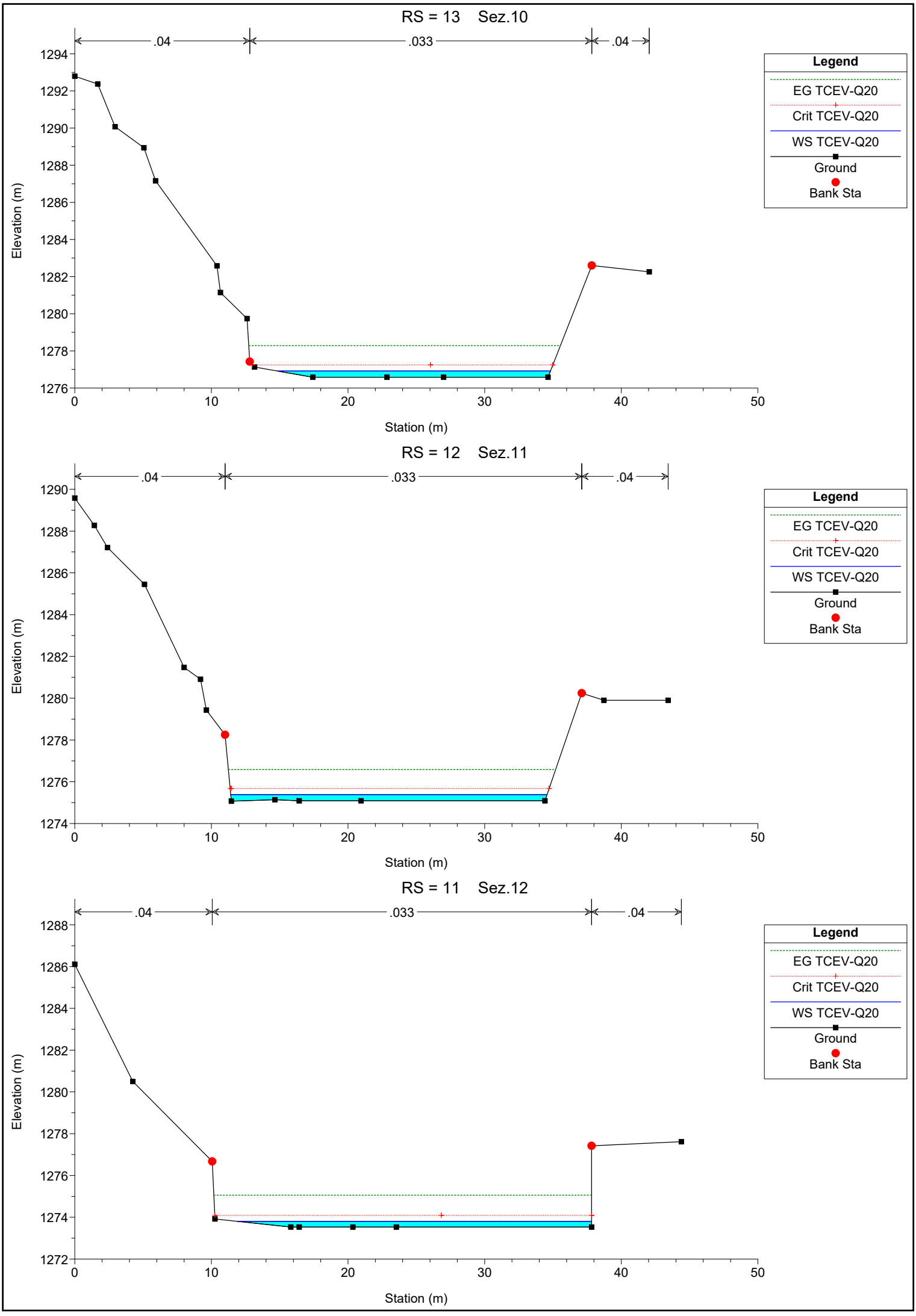
Q20 - Tcev

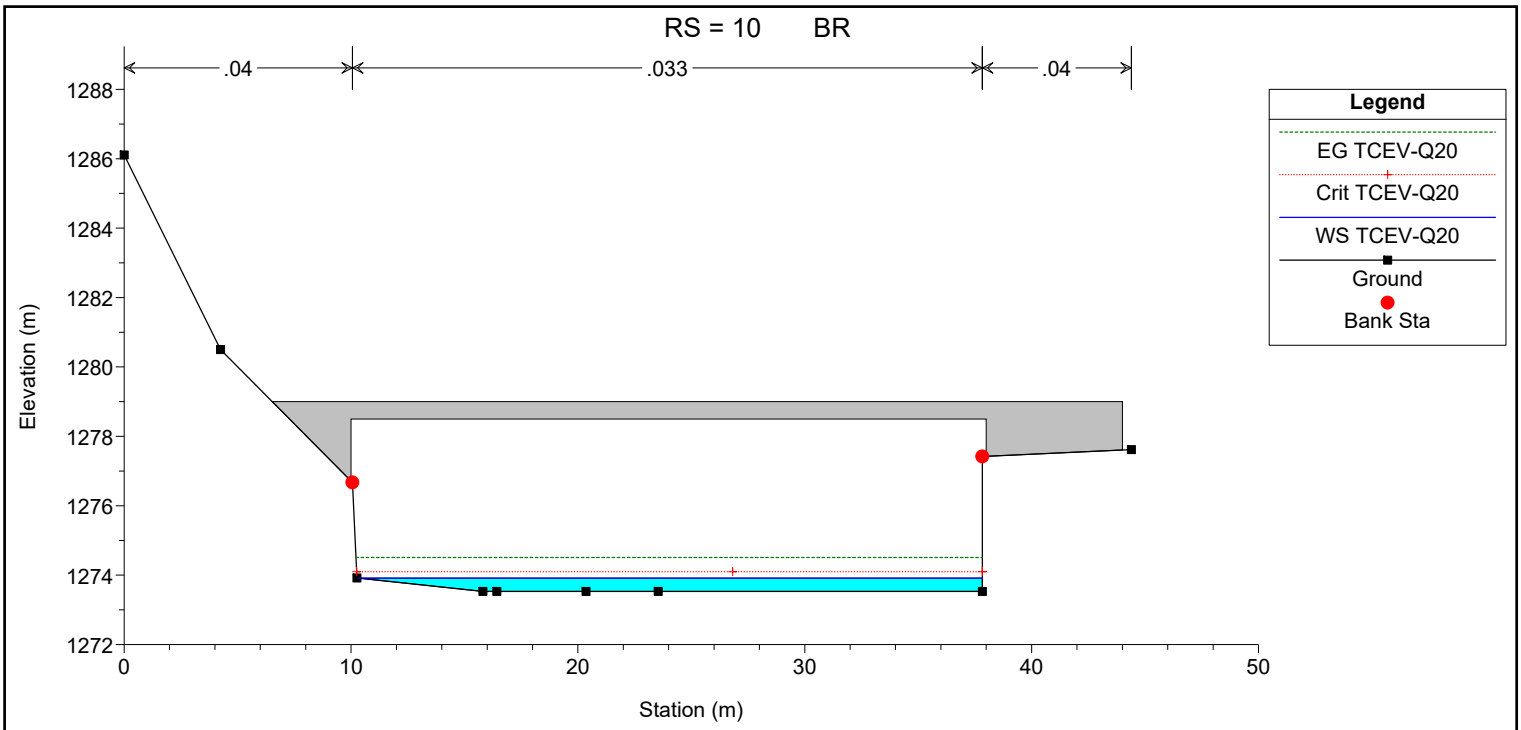

Bavera Monesi
Legend
EG TCEV-Q20
Crit TCEV-Q20
WS TCEV-Q20
Ground
Elevation (m)
1310
1300
1290
1280
1270
1260
1250
0
50
100
150
200
250
300
Main Channel Distance (m)

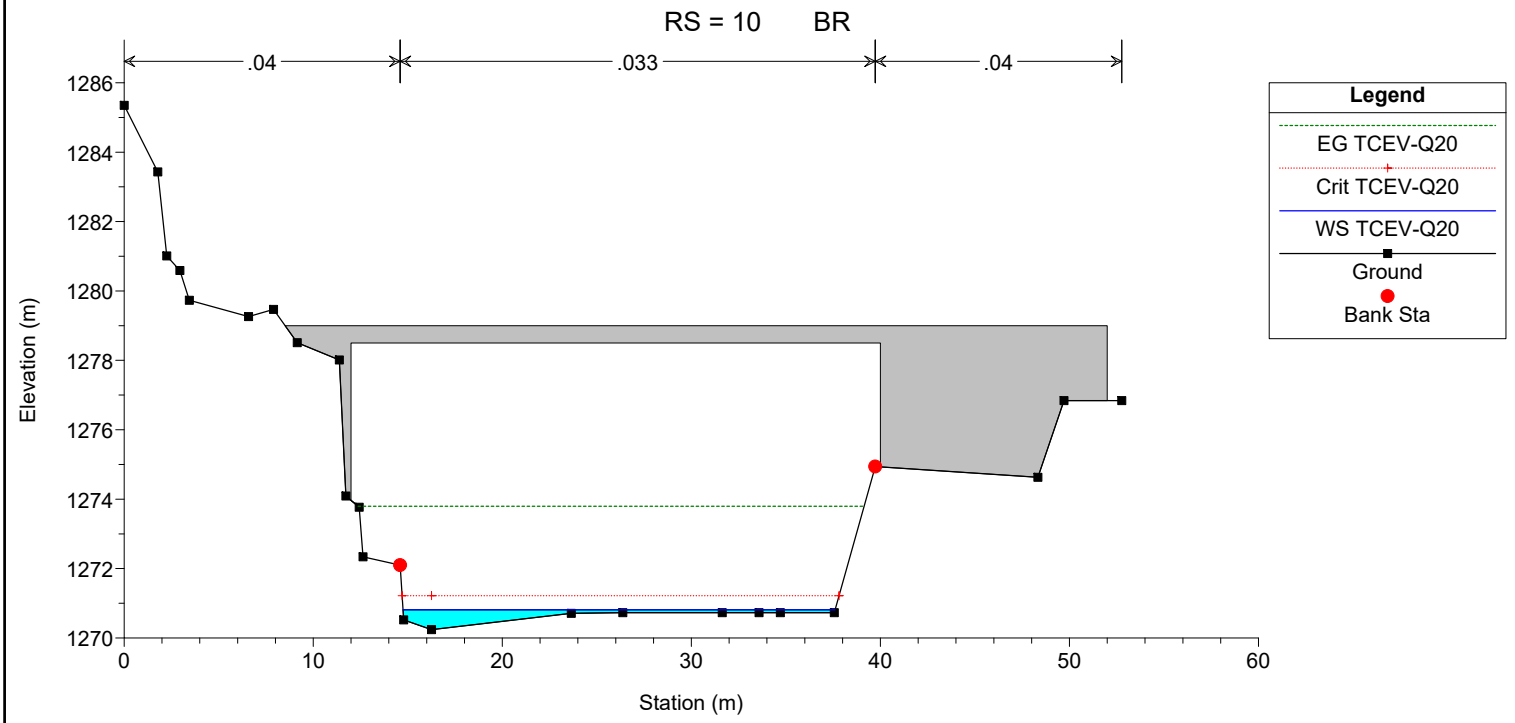

RS = 22 Sez.1
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG TCEV-Q20
Crit TCEV-Q20
WS TCEV-Q20
Ground
Levee
Bank Sta
RS = 21 Sez.2
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG TCEV-Q20
Crit TCEV-Q20
WS TCEV-Q20
Ground
Bank Sta
RS = 20 Sez.3
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG TCEV-Q20
Crit TCEV-Q20
WS TCEV-Q20
Ground
Bank Sta

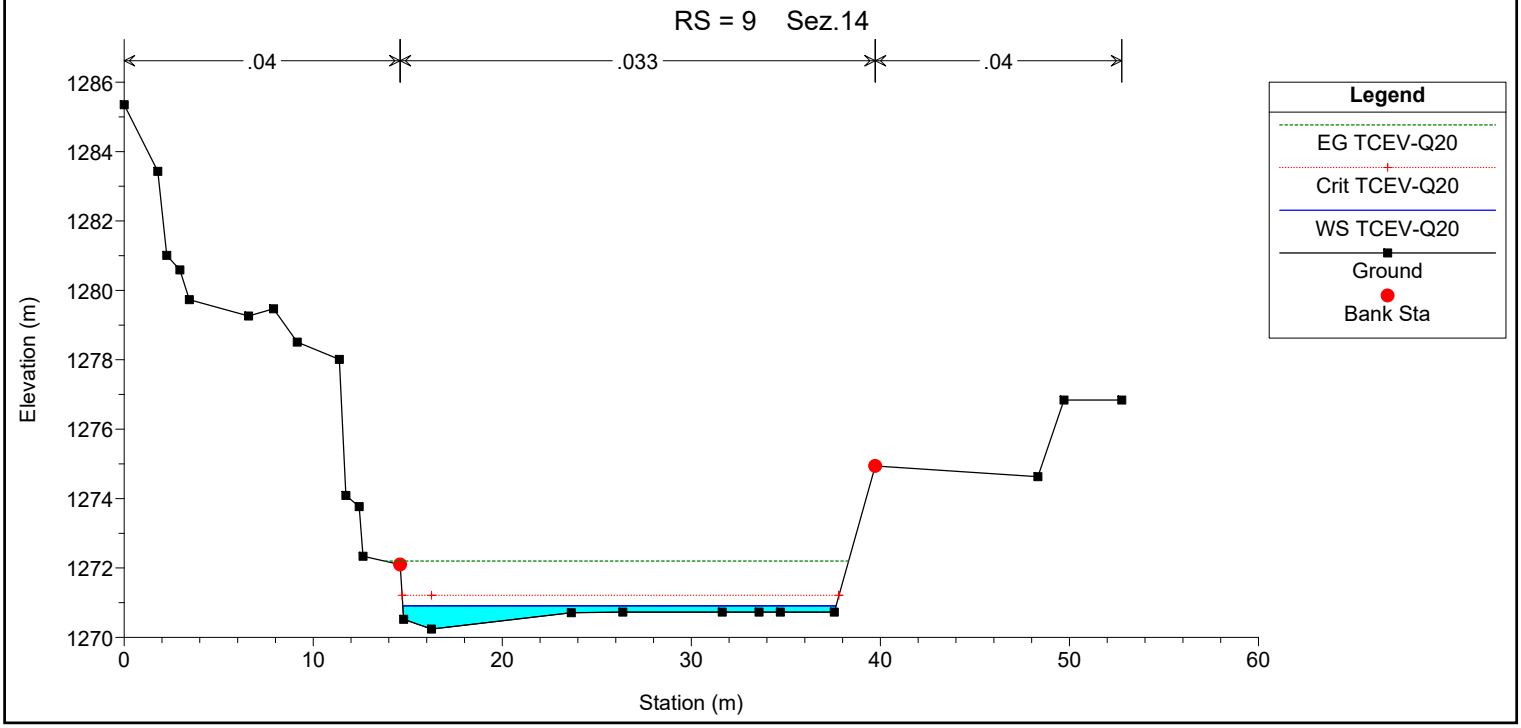

RS = 19 Sez.4
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG TCEV-Q20
Crit TCEV-Q20
WS TCEV-Q20
Ground
Bank Sta
RS = 18 Sez.5
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG TCEV-Q20
Crit TCEV-Q20
WS TCEV-Q20
Ground
Bank Sta
RS = 17 Sez.6
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG TCEV-Q20
Crit TCEV-Q20
WS TCEV-Q20
Ground
Bank Sta

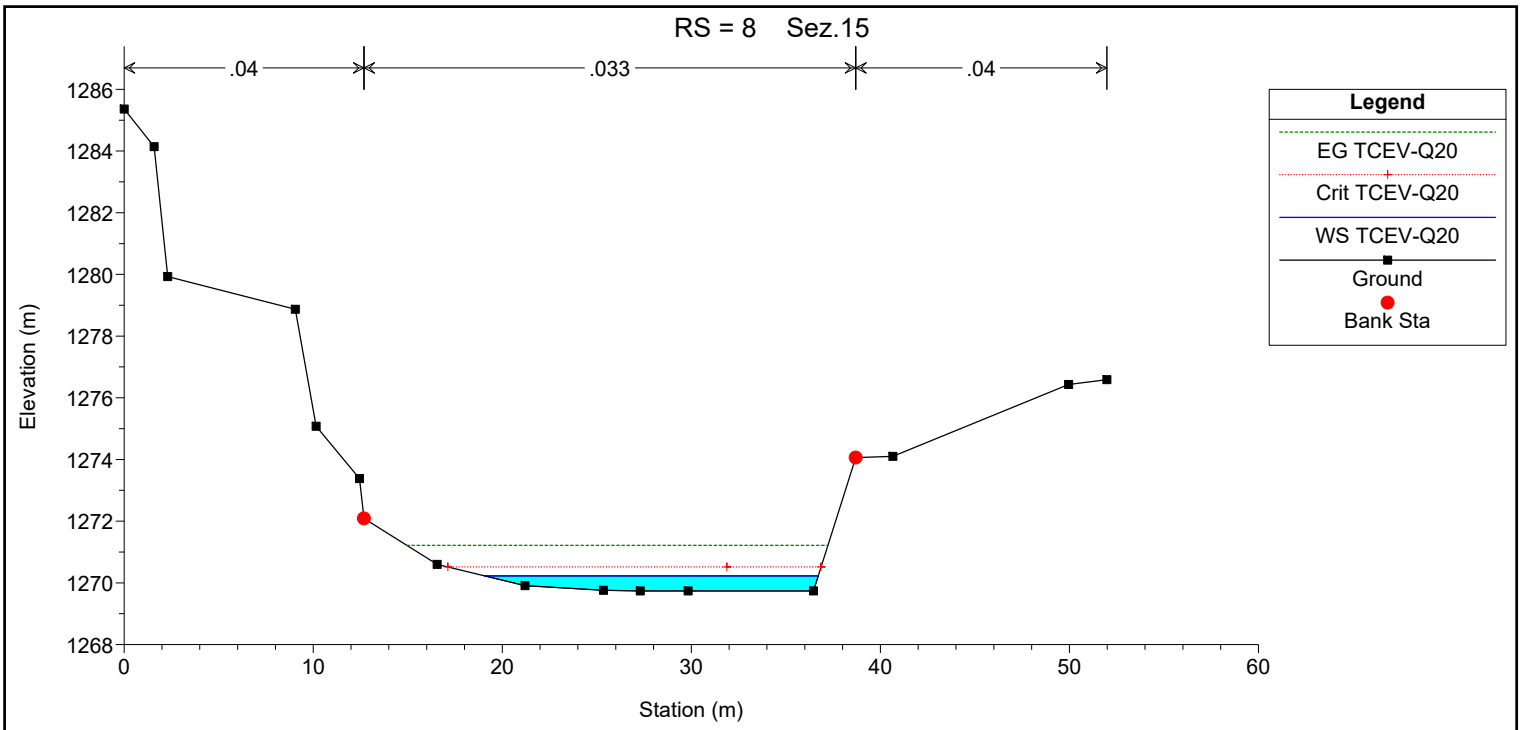

RS = 16 Sez.7
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG TCEV-Q20
Crit TCEV-Q20
WS TCEV-Q20
Ground
Levee
Bank Sta
RS = 15 Sez.8
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG TCEV-Q20
Crit TCEV-Q20
WS TCEV-Q20
Ground
Bank Sta
RS = 14 Sez.9
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG TCEV-Q20
Crit TCEV-Q20
WS TCEV-Q20
Ground
Bank Sta

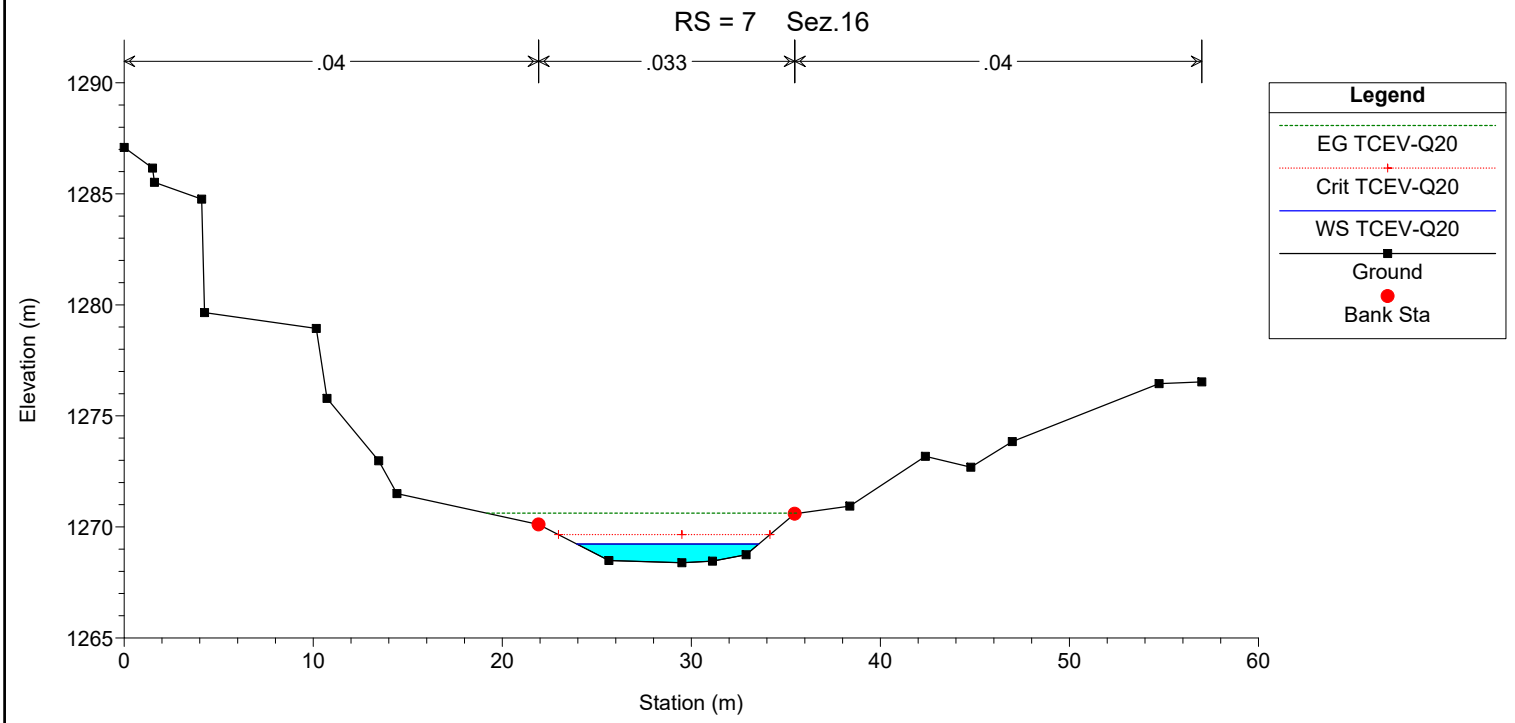

RS = 13 Sez.10
.04
.033
.04
Legend
EG TCEV-Q20
Crit TCEV-Q20
WS TCEV-Q20
Ground
Bank Sta
Elevation (m)
Station (m)
RS = 12 Sez.11
.04
.033
.04
Legend
EG TCEV-Q20
Crit TCEV-Q20
WS TCEV-Q20
Ground
Bank Sta
Elevation (m)
Station (m)
RS = 11 Sez.12
.04
.033
.04
Legend
EG TCEV-Q20
Crit TCEV-Q20
WS TCEV-Q20
Ground
Bank Sta
Elevation (m)
Station (m)

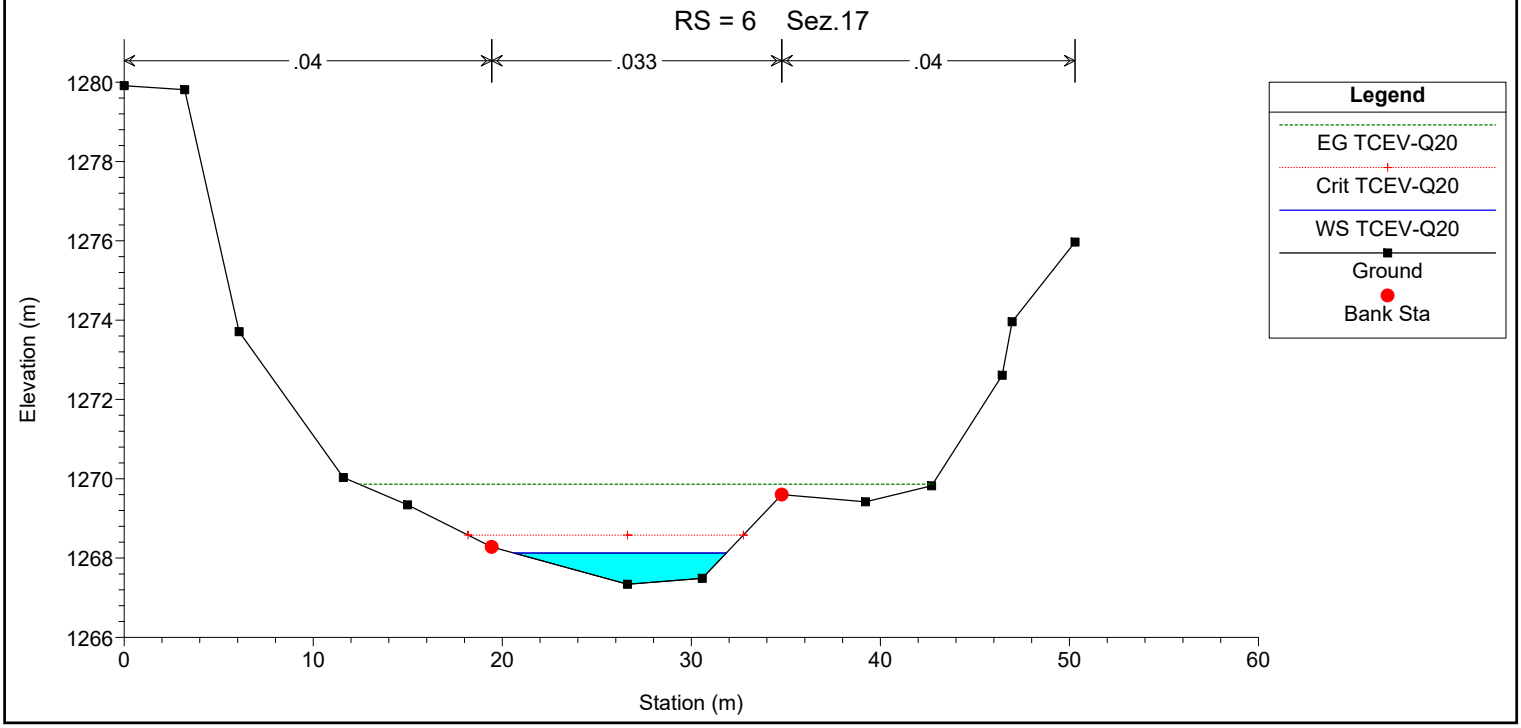

RS = 10 BR
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG TCEV-Q20
Crit TCEV-Q20
WS TCEV-Q20
Ground
Bank Sta

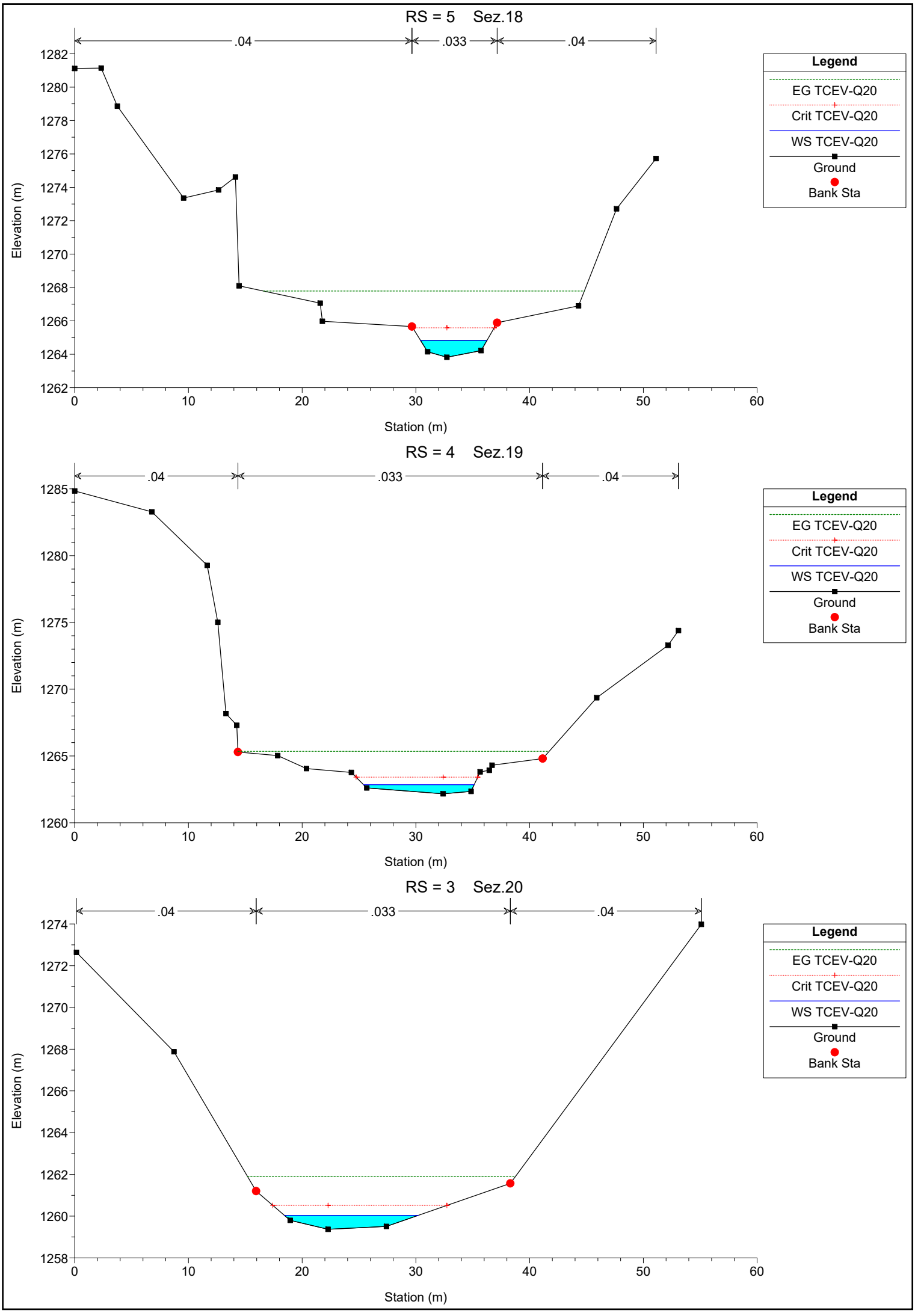

RS = 10 BR
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG TCEV-Q20
Crit TCEV-Q20
WS TCEV-Q20
Ground
Bank Sta

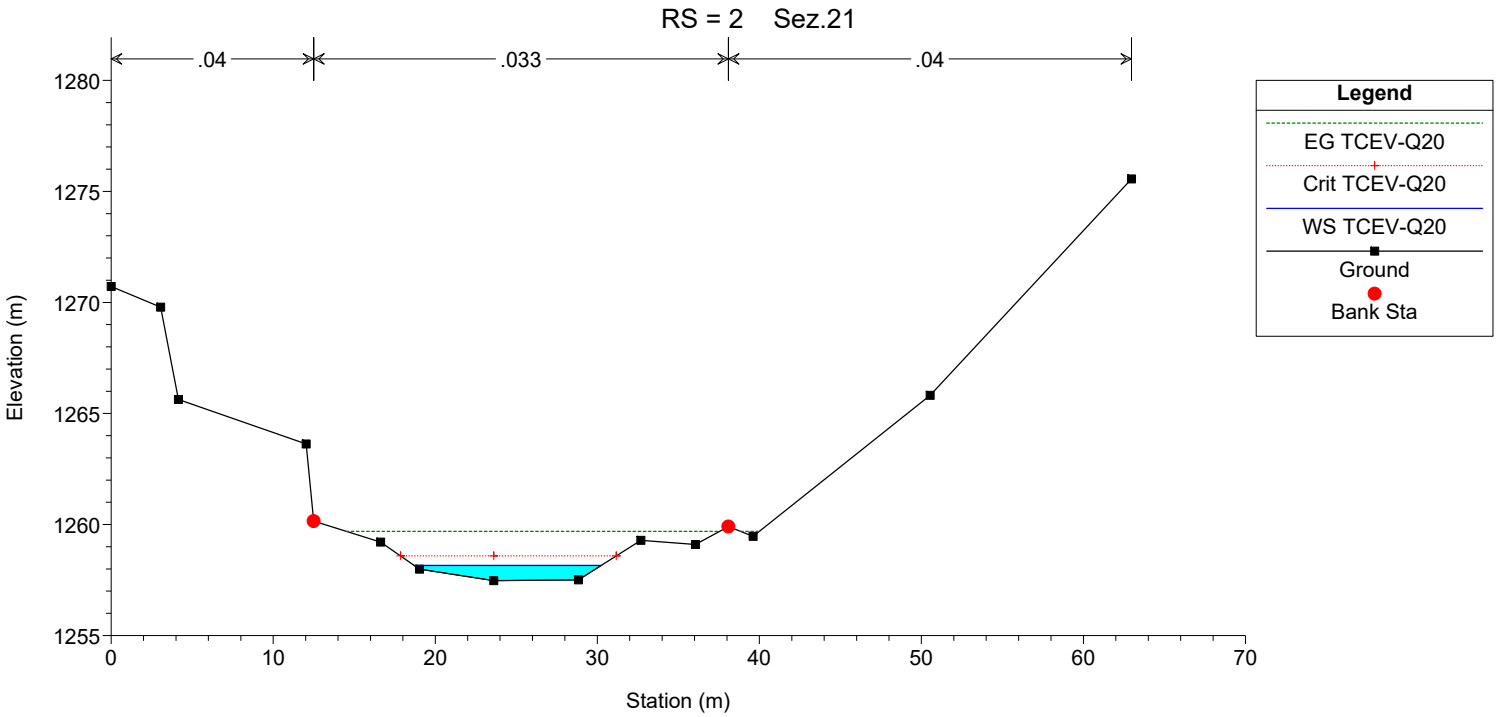

RS = 9 Sez.14
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG TCEV-Q20
Crit TCEV-Q20
WS TCEV-Q20
Ground
Bank Sta

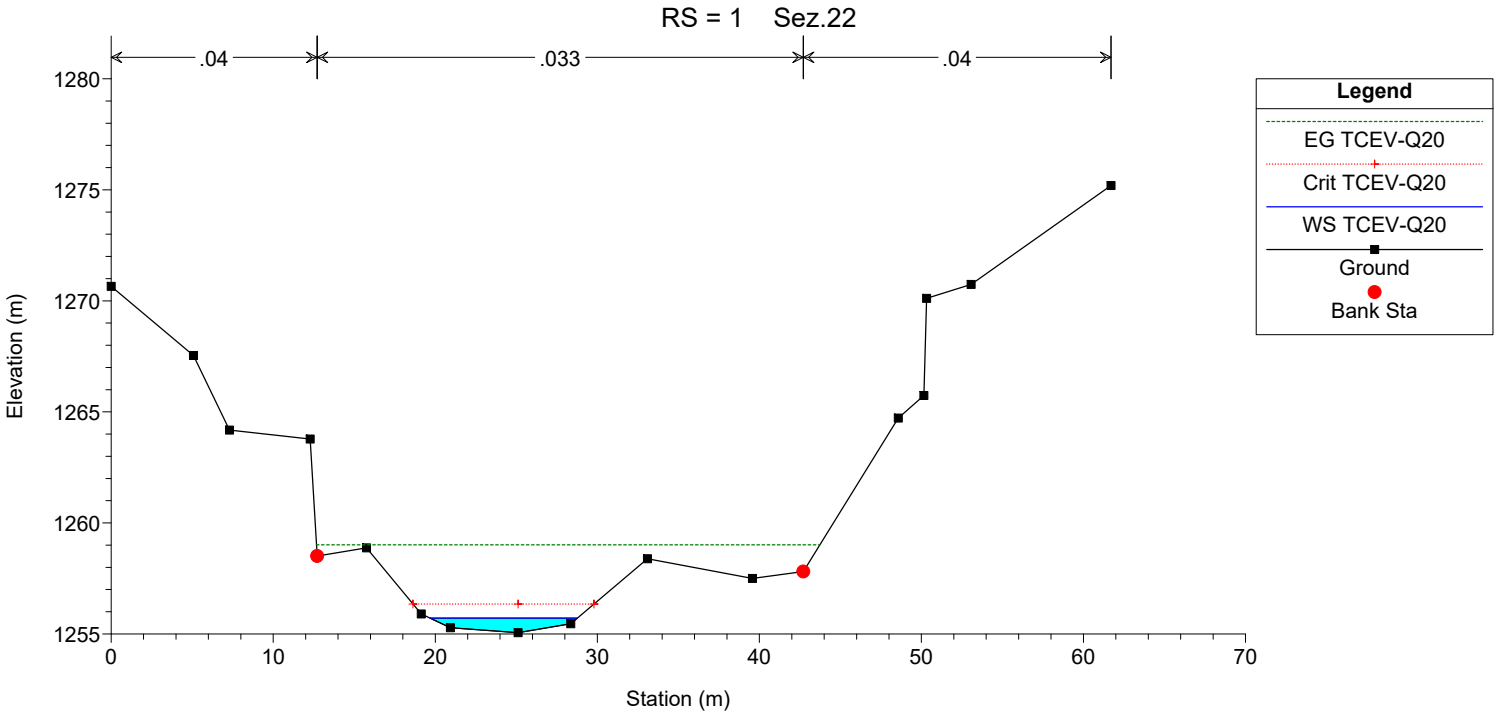

RS = 8 Sez.15
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG TCEV-Q20
Crit TCEV-Q20
WS TCEV-Q20
Ground
Bank Sta


RS = 7 Sez.16
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG TCEV-Q20
Crit TCEV-Q20
WS TCEV-Q20
Ground
Bank Sta

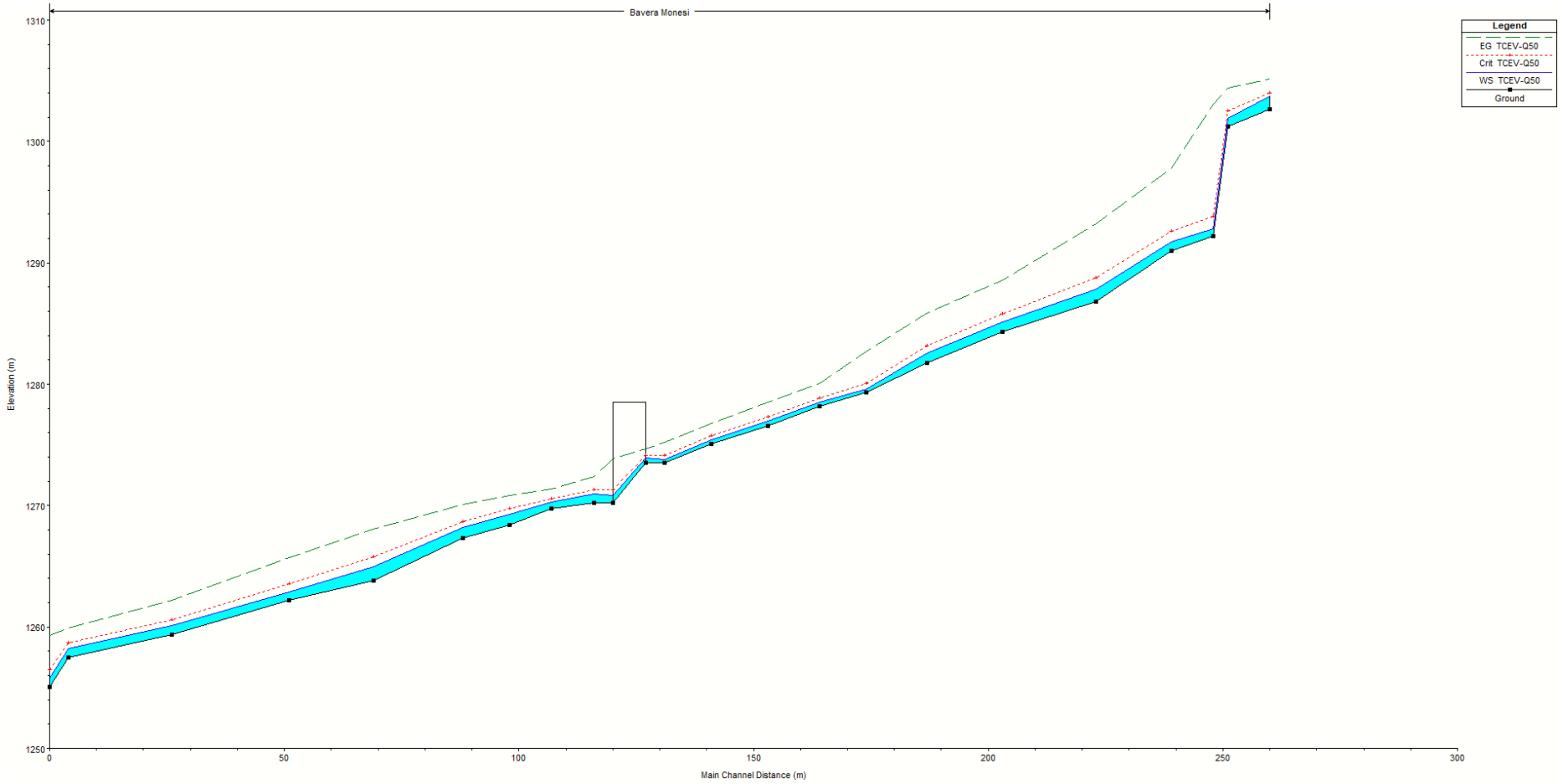

RS = 6 Sez.17
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG TCEV-Q20
Crit TCEV-Q20
WS TCEV-Q20
Ground
Bank Sta

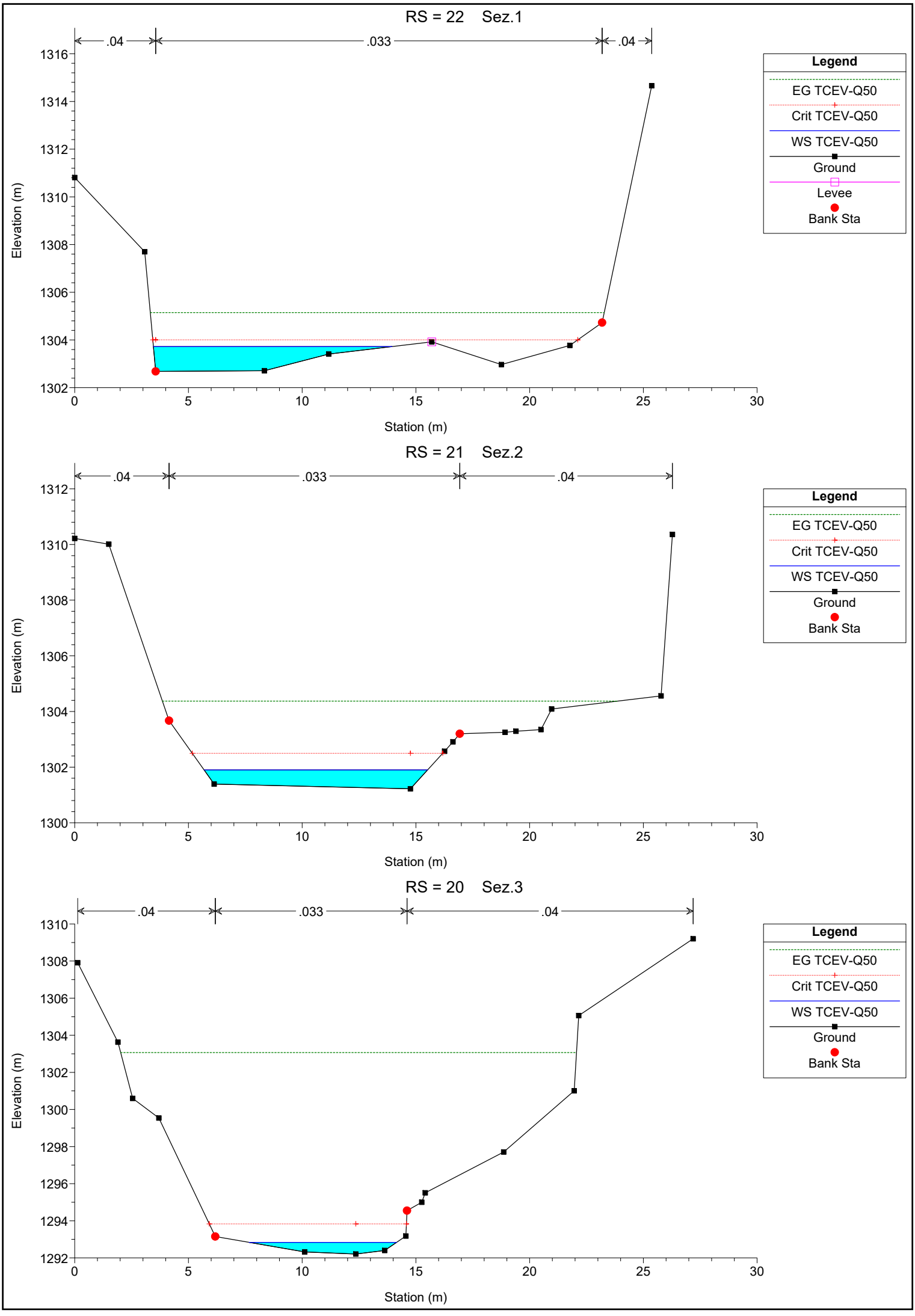

RS = 5 Sez.18
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG TCEV-Q20
Crit TCEV-Q20
WS TCEV-Q20
Ground
Bank Sta
RS = 4 Sez.19
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG TCEV-Q20
Crit TCEV-Q20
WS TCEV-Q20
Ground
Bank Sta
RS = 3 Sez.20
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG TCEV-Q20
Crit TCEV-Q20
WS TCEV-Q20
Ground
Bank Sta

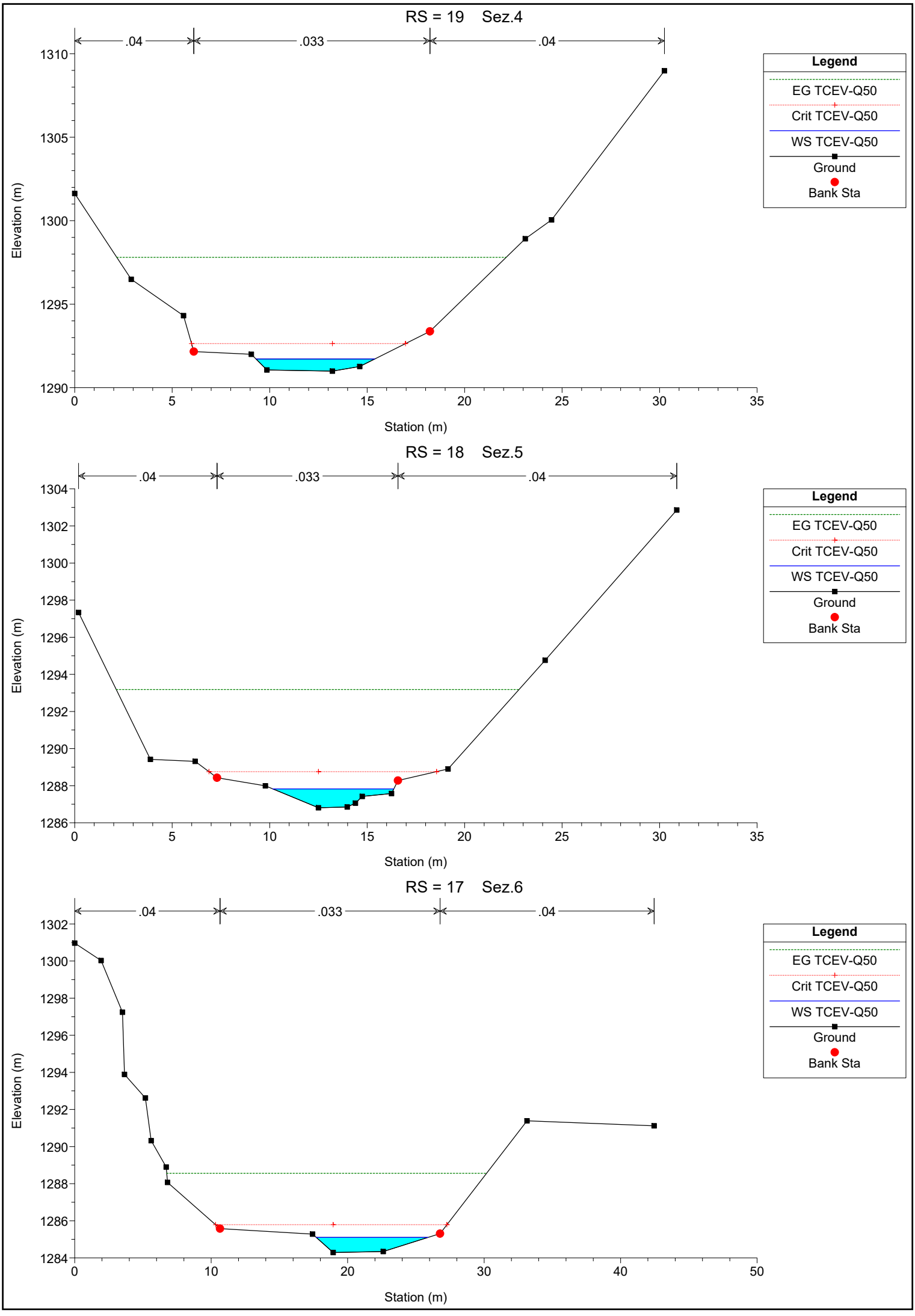

RS = 2 Sez.21
.04
.033
.04
Legend
EG TCEV-Q20
Crit TCEV-Q20
WS TCEV-Q20
Ground
Bank Sta
Elevation (m)
Station (m)
1280
1275
1270
1265
1260
1255
0
10
20
30
40
50
60
70

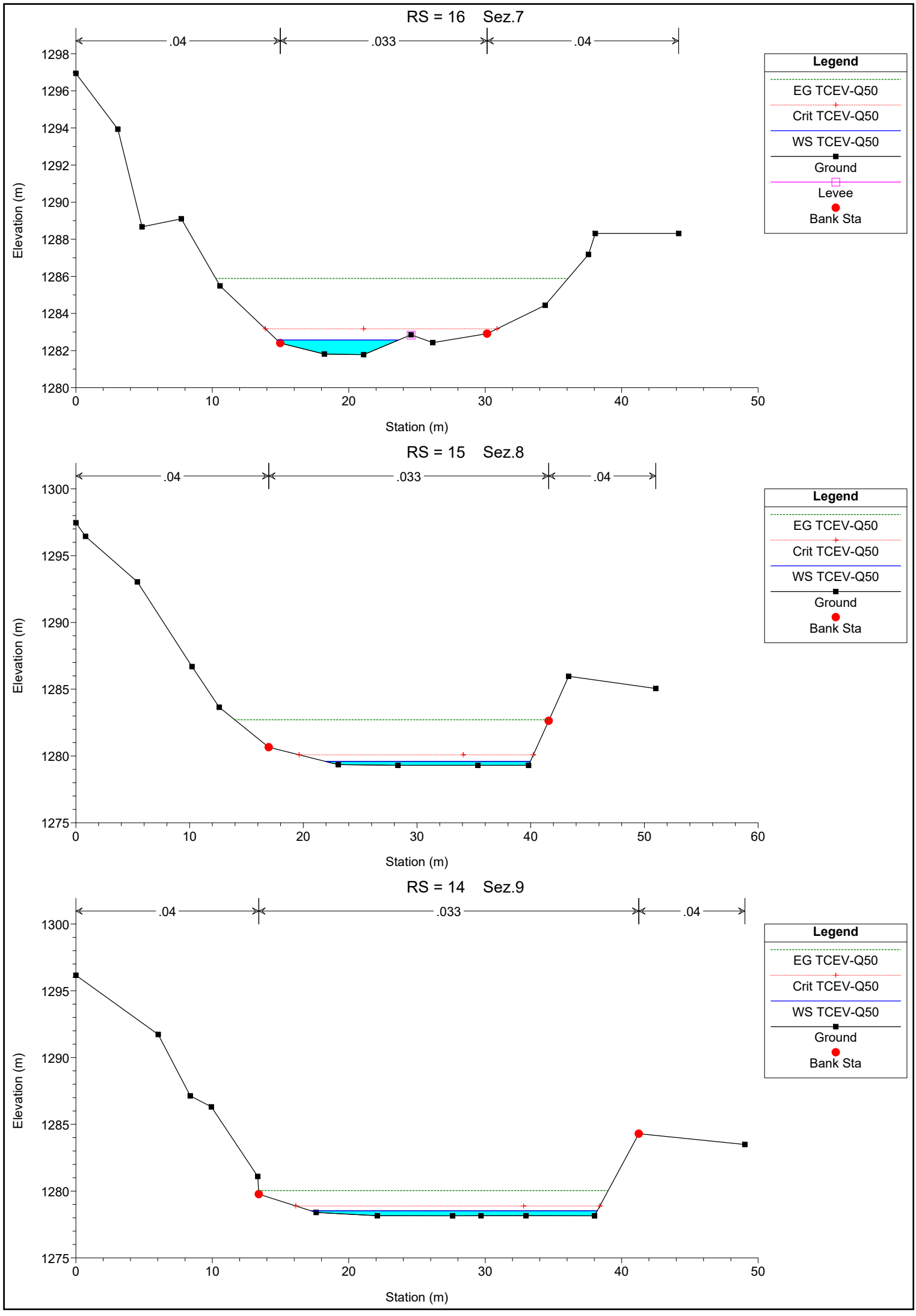

RS = 1 Sez.22
.04
.033
.04
Legend
EG TCEV-Q20
Crit TCEV-Q20
WS TCEV-Q20
Ground
Bank Sta
Elevation (m)
Station (m)
1280
1275
1270
1265
1260
1255
0
10
20
30
40
50
60
70

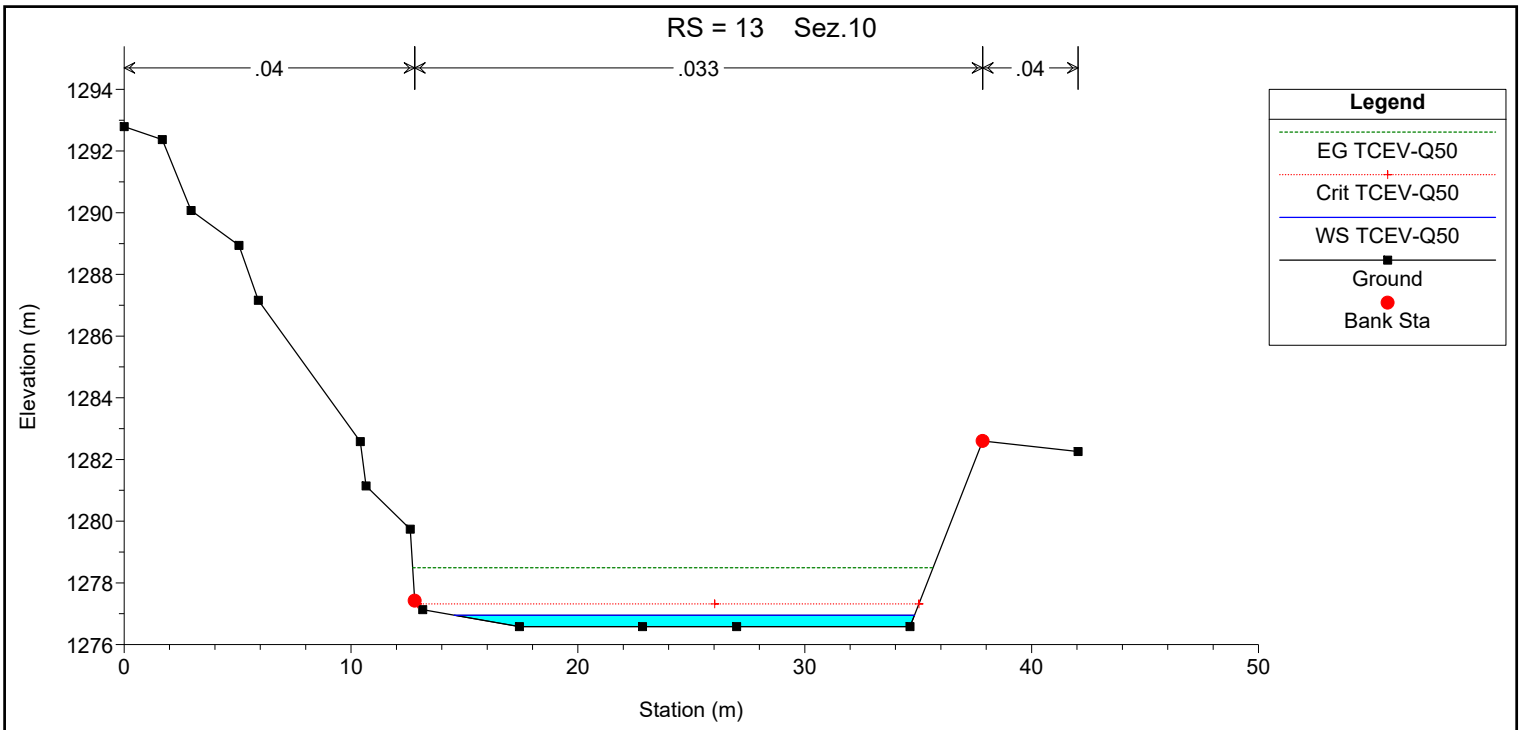
Q50 - Tcev

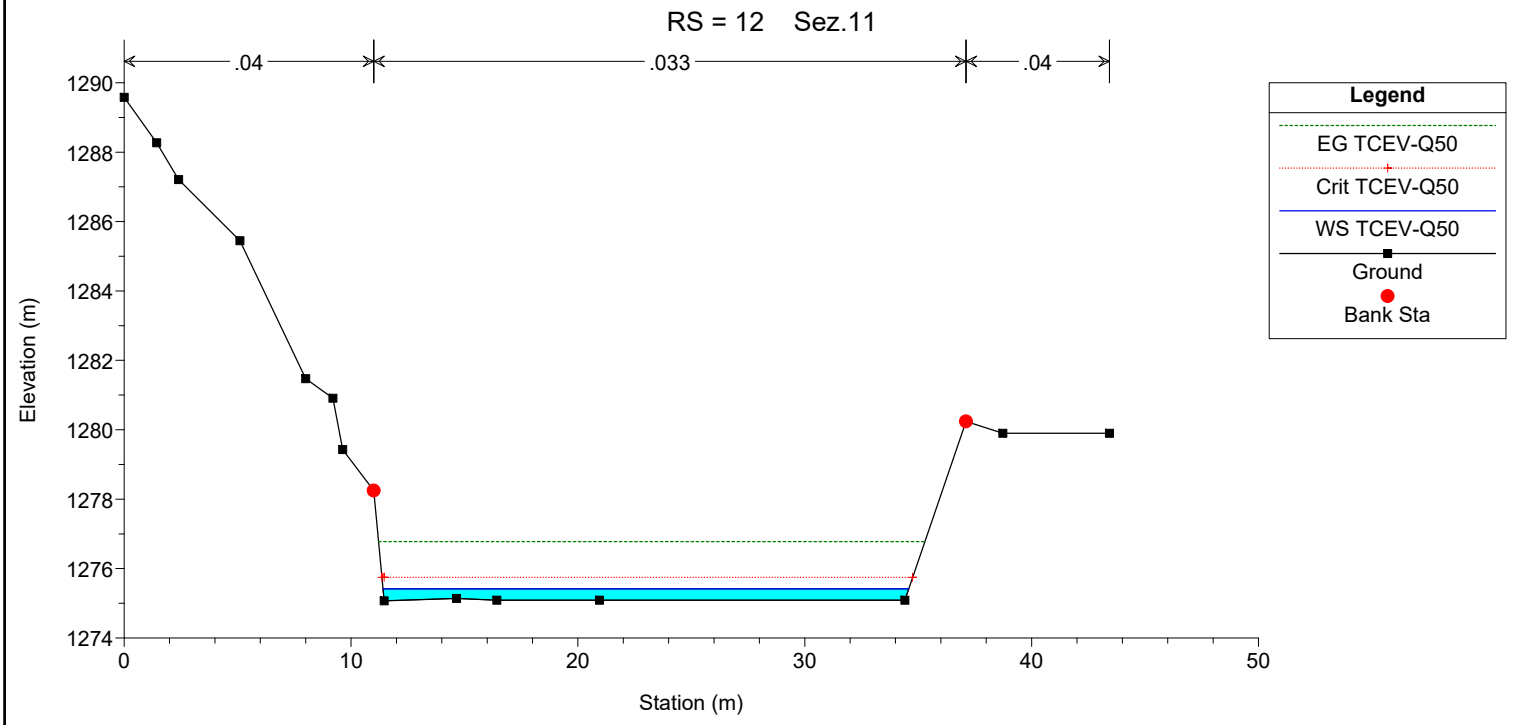

Bavera Monesi
Legend
EG TCEV-Q50
Crit TCEV-Q50
WS TCEV-Q50
Ground
Elevation (m)
1310
1300
1290
1280
1270
1260
1250
0
50
100
150
200
250
300
Main Channel Distance (m)

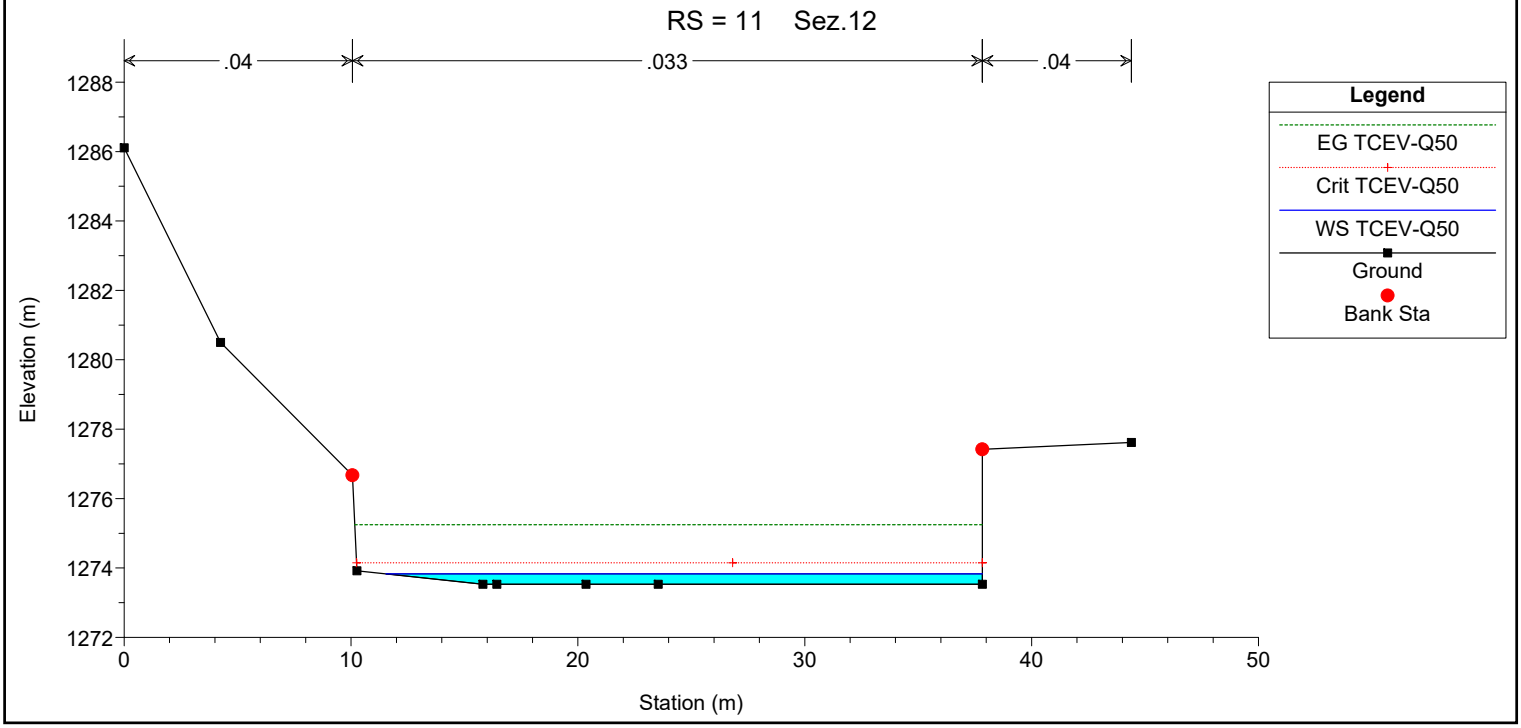

RS = 22 Sez.1
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG TCEV-Q50
Crit TCEV-Q50
WS TCEV-Q50
Ground
Levee
Bank Sta
RS = 21 Sez.2
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG TCEV-Q50
Crit TCEV-Q50
WS TCEV-Q50
Ground
Bank Sta
RS = 20 Sez.3
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG TCEV-Q50
Crit TCEV-Q50
WS TCEV-Q50
Ground
Bank Sta

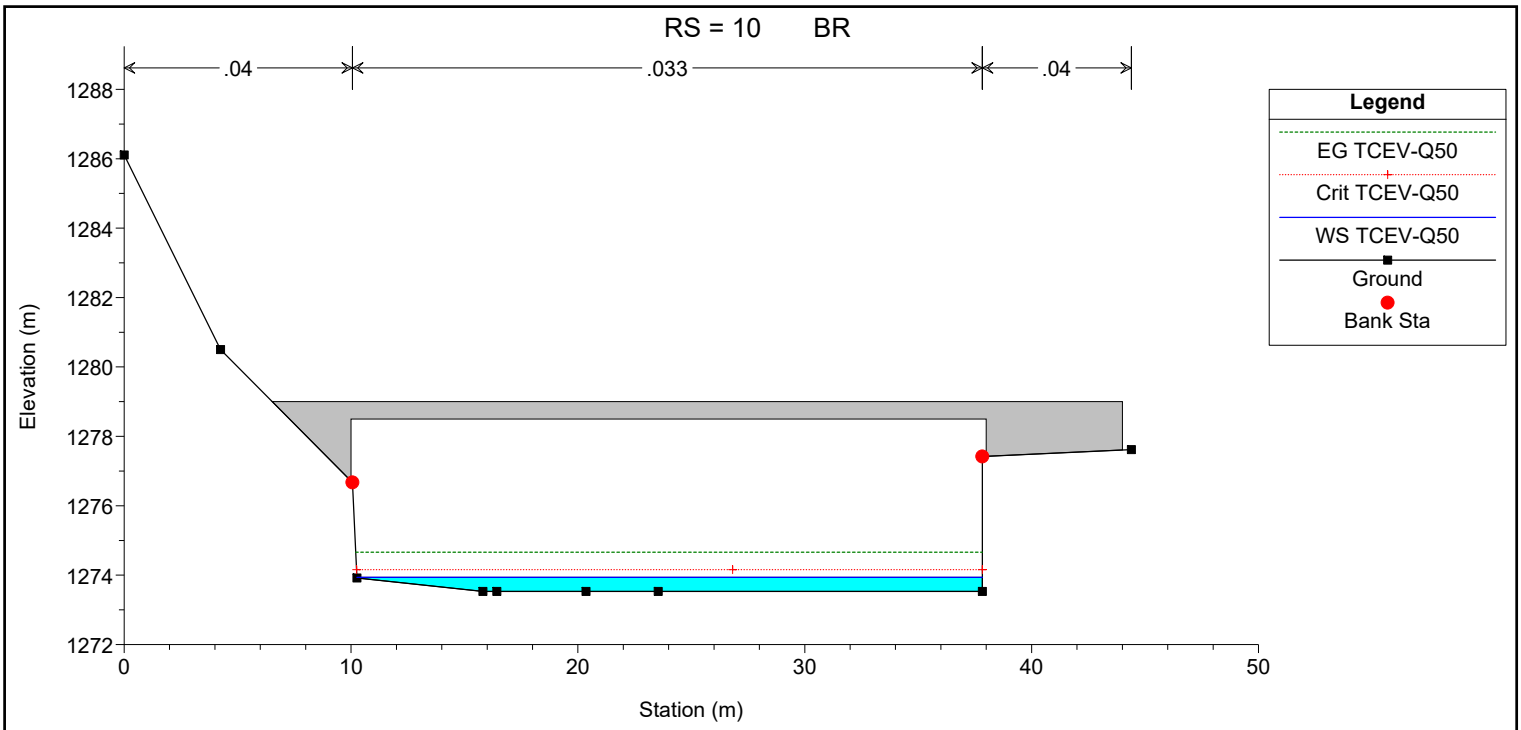

RS = 19 Sez.4
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG TCEV-Q50
Crit TCEV-Q50
WS TCEV-Q50
Ground
Bank Sta
RS = 18 Sez.5
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG TCEV-Q50
Crit TCEV-Q50
WS TCEV-Q50
Ground
Bank Sta
RS = 17 Sez.6
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG TCEV-Q50
Crit TCEV-Q50
WS TCEV-Q50
Ground
Bank Sta

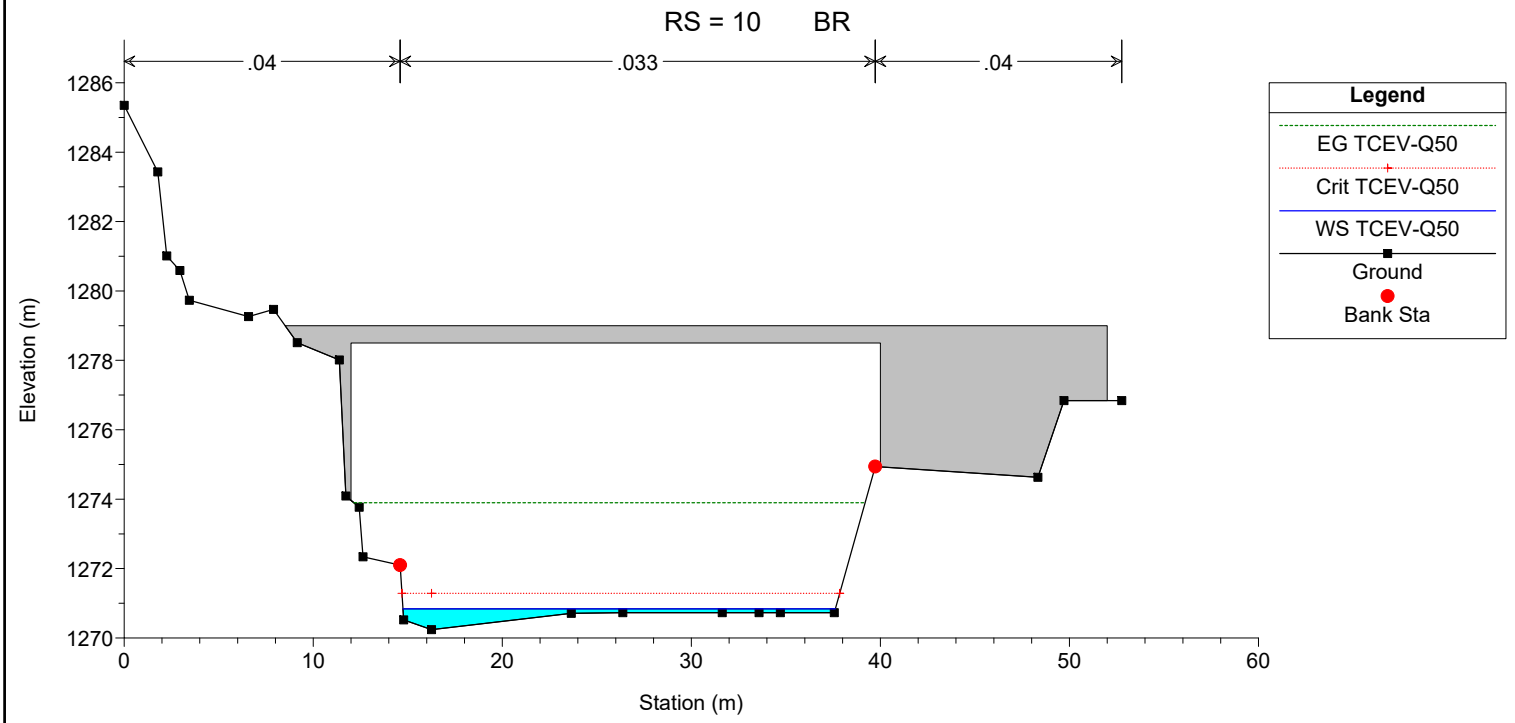

RS = 16 Sez.7
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG TCEV-Q50
Crit TCEV-Q50
WS TCEV-Q50
Ground
Levee
Bank Sta
RS = 15 Sez.8
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG TCEV-Q50
Crit TCEV-Q50
WS TCEV-Q50
Ground
Bank Sta
RS = 14 Sez.9
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG TCEV-Q50
Crit TCEV-Q50
WS TCEV-Q50
Ground
Bank Sta

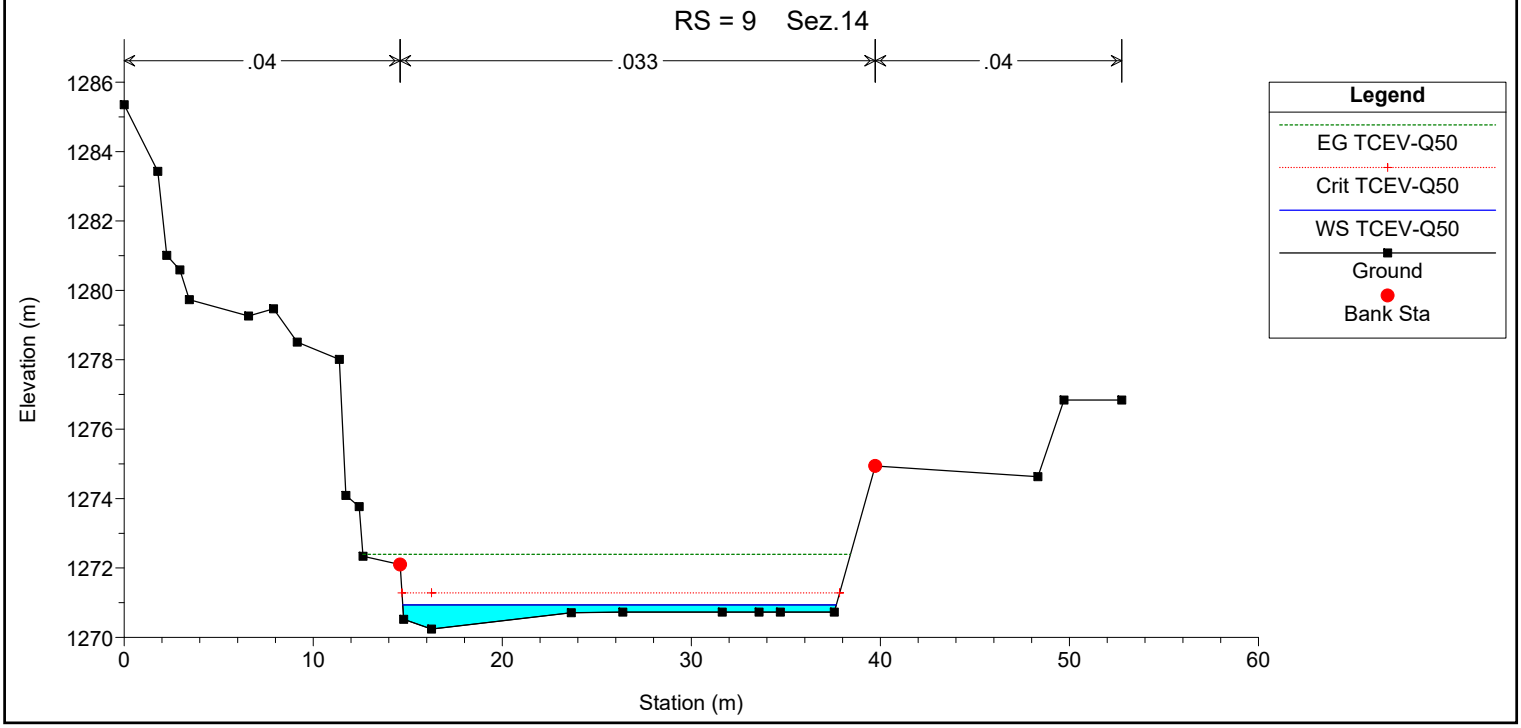

RS = 13 Sez.10
.04
.033
.04
Legend
EG TCEV-Q50
Crit TCEV-Q50
WS TCEV-Q50
Ground
Bank Sta
Elevation (m)
Station (m)

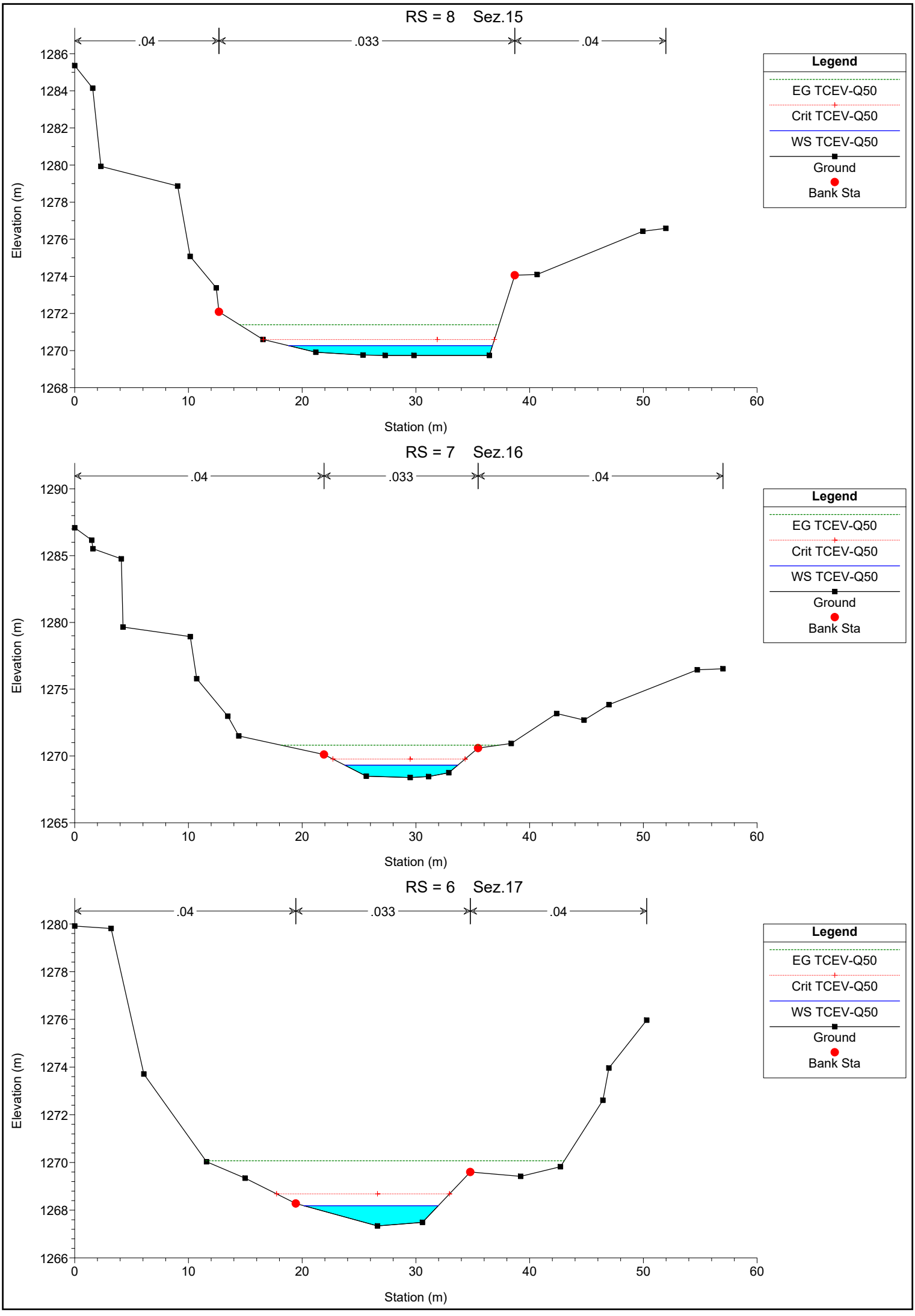

RS = 12 Sez.11
.04
.033
.04
Legend
EG TCEV-Q50
Crit TCEV-Q50
WS TCEV-Q50
Ground
Bank Sta
Elevation (m)
Station (m)

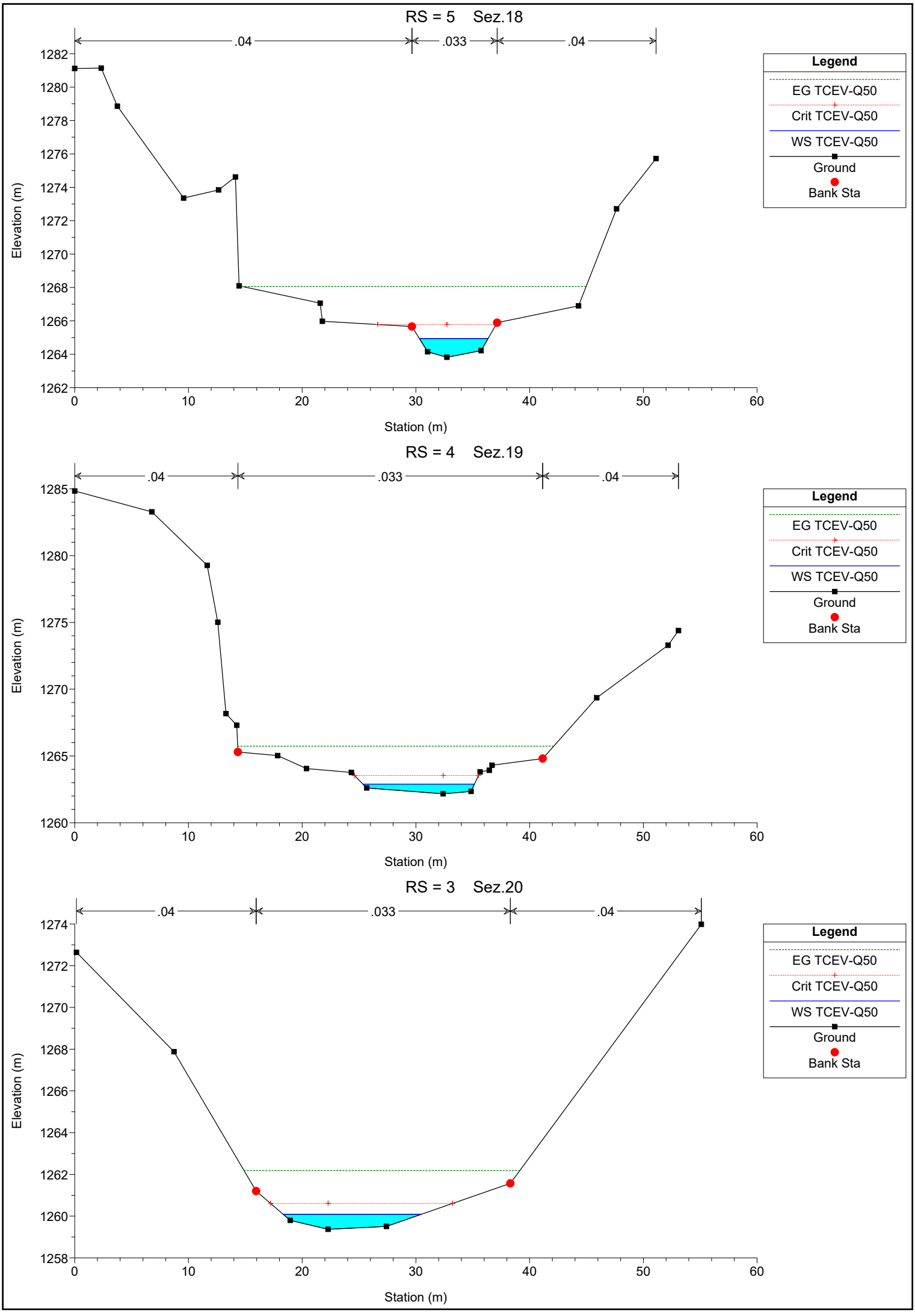

RS = 11 Sez.12
.04
.033
.04
Legend
EG TCEV-Q50
Crit TCEV-Q50
WS TCEV-Q50
Ground
Bank Sta
Elevation (m)
Station (m)

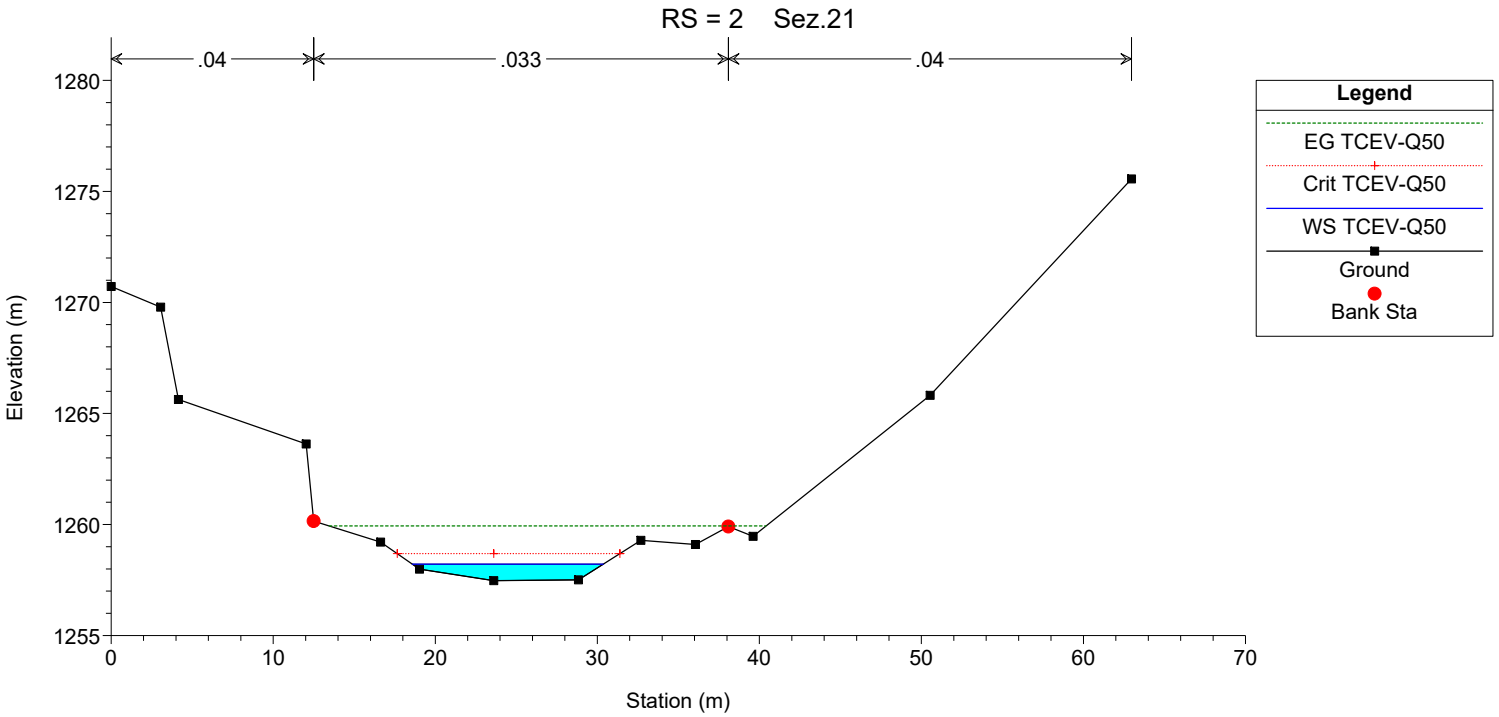

RS = 10 BR
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG TCEV-Q50
Crit TCEV-Q50
WS TCEV-Q50
Ground
Bank Sta

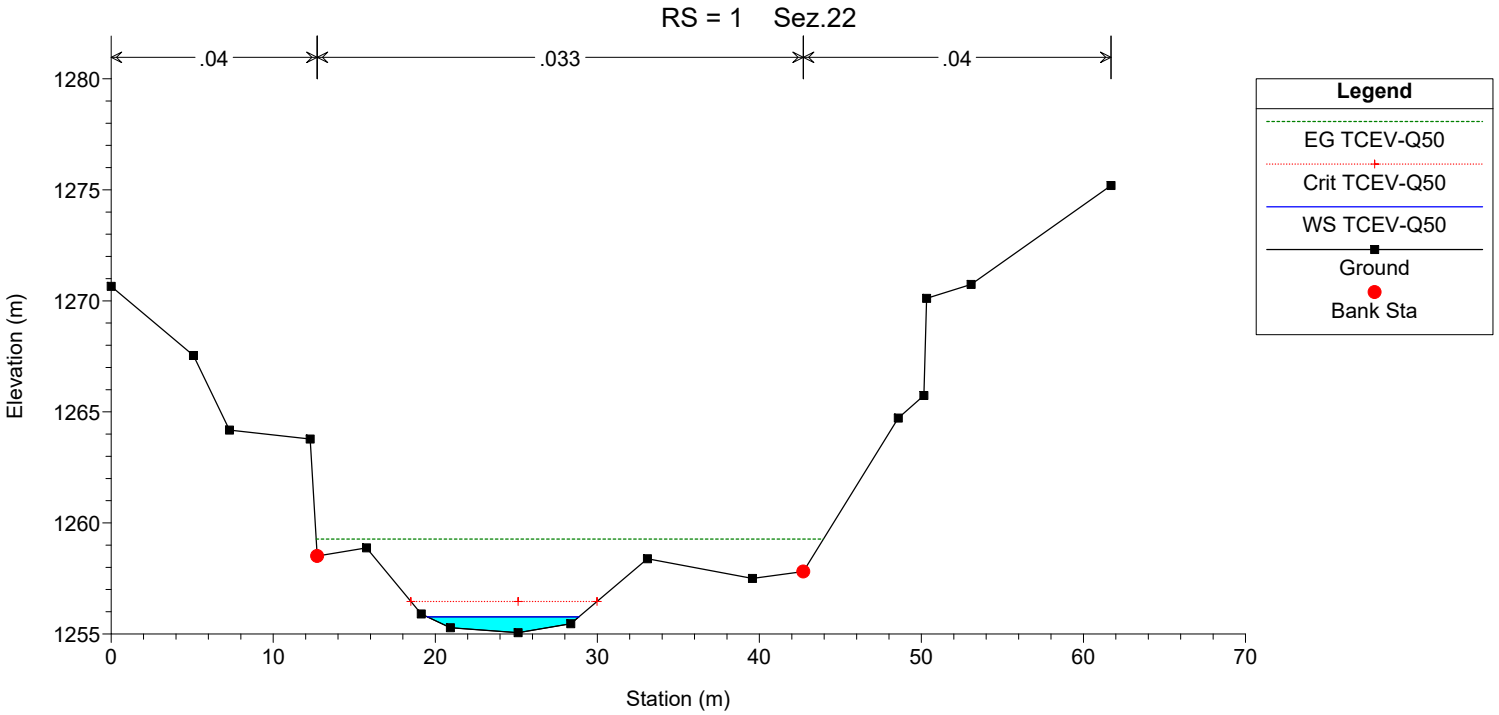

RS = 10 BR
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG TCEV-Q50
Crit TCEV-Q50
WS TCEV-Q50
Ground
Bank Sta


RS = 9 Sez.14
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG TCEV-Q50
Crit TCEV-Q50
WS TCEV-Q50
Ground
Bank Sta

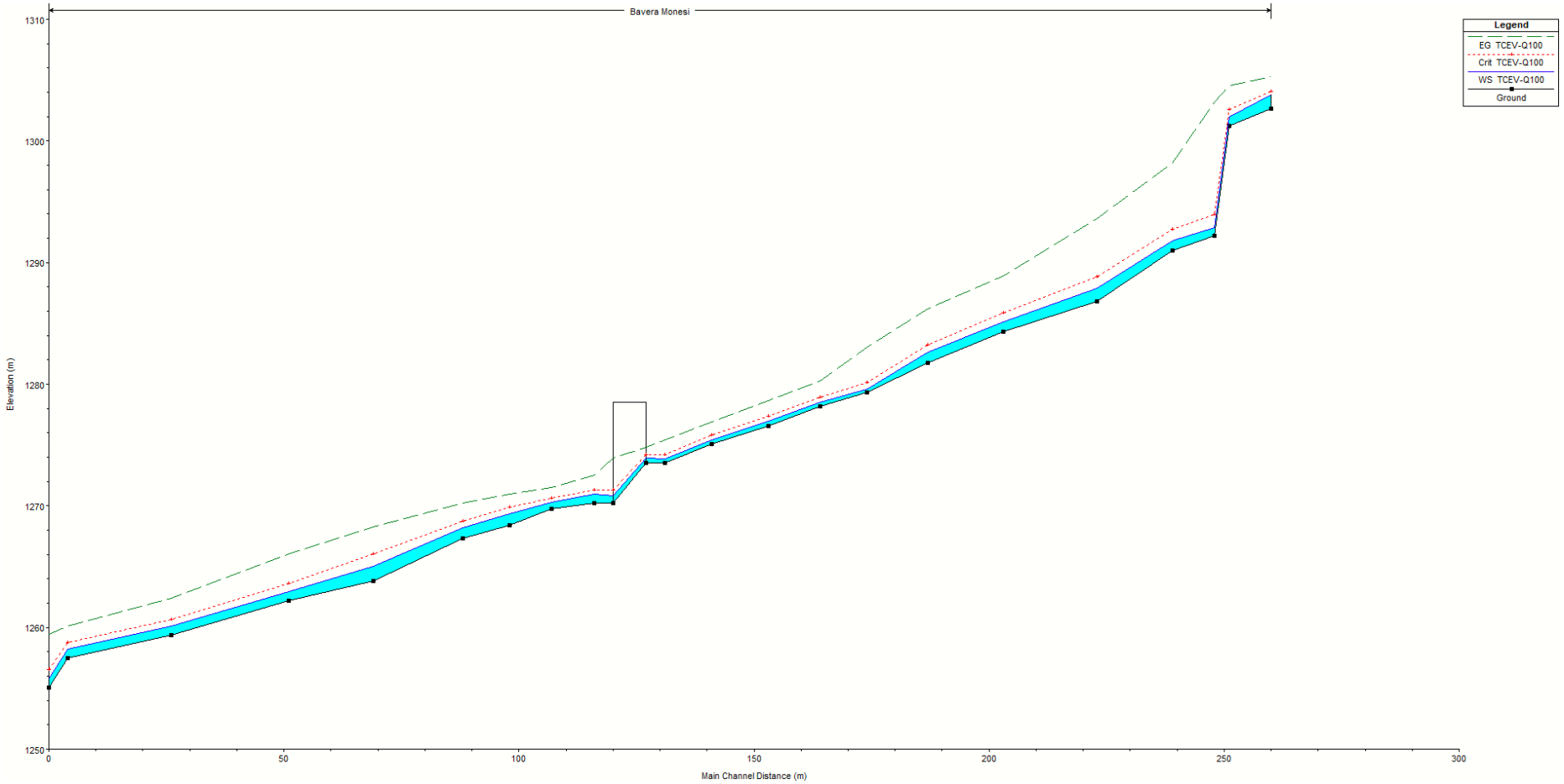

RS = 8 Sez.15
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG TCEV-Q50
Crit TCEV-Q50
WS TCEV-Q50
Ground
Bank Sta
RS = 7 Sez.16
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG TCEV-Q50
Crit TCEV-Q50
WS TCEV-Q50
Ground
Bank Sta
RS = 6 Sez.17
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG TCEV-Q50
Crit TCEV-Q50
WS TCEV-Q50
Ground
Bank Sta

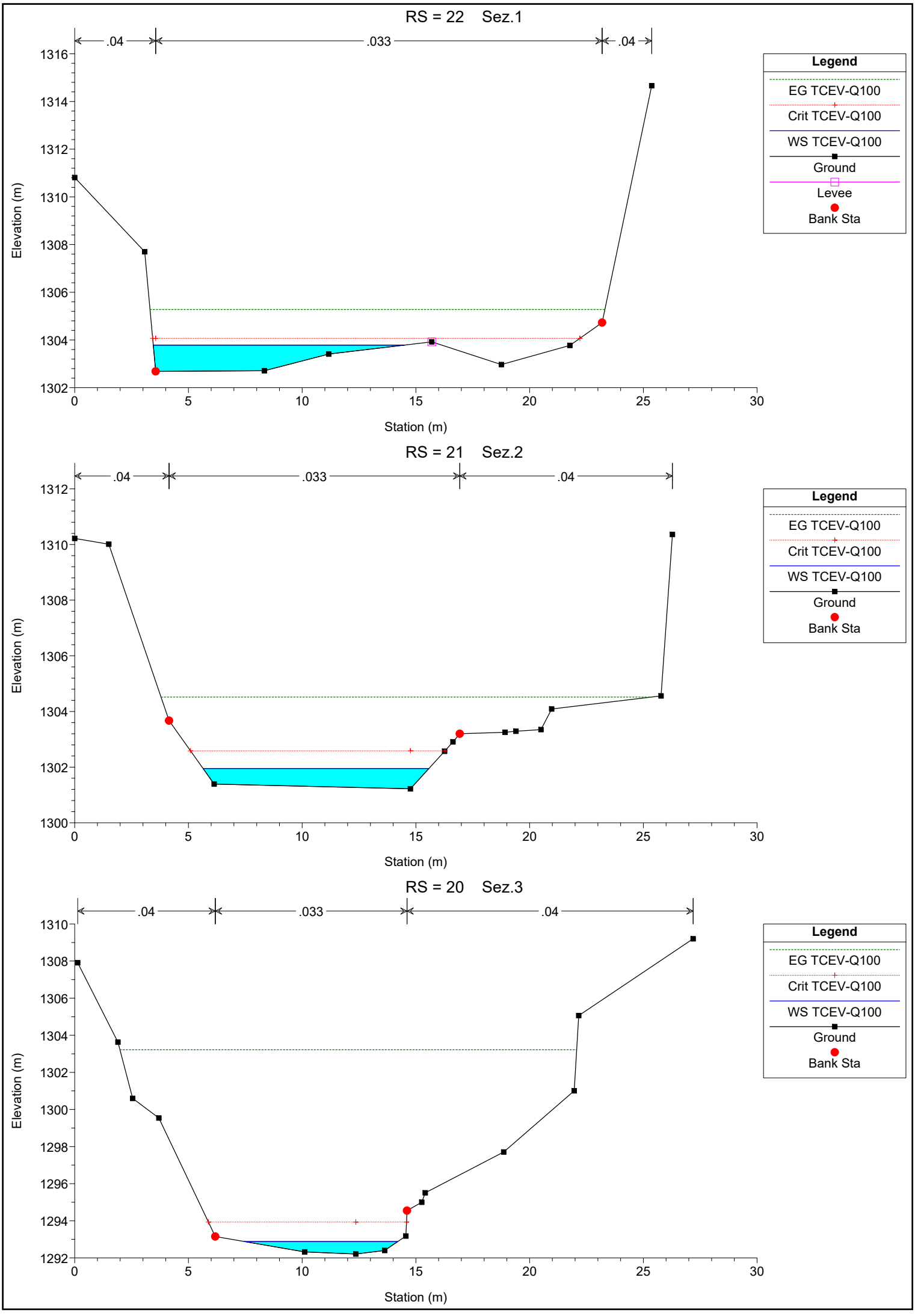

RS = 5 Sez.18
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG TCEV-Q50
Crit TCEV-Q50
WS TCEV-Q50
Ground
Bank Sta
RS = 4 Sez.19
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG TCEV-Q50
Crit TCEV-Q50
WS TCEV-Q50
Ground
Bank Sta
RS = 3 Sez.20
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG TCEV-Q50
Crit TCEV-Q50
WS TCEV-Q50
Ground
Bank Sta

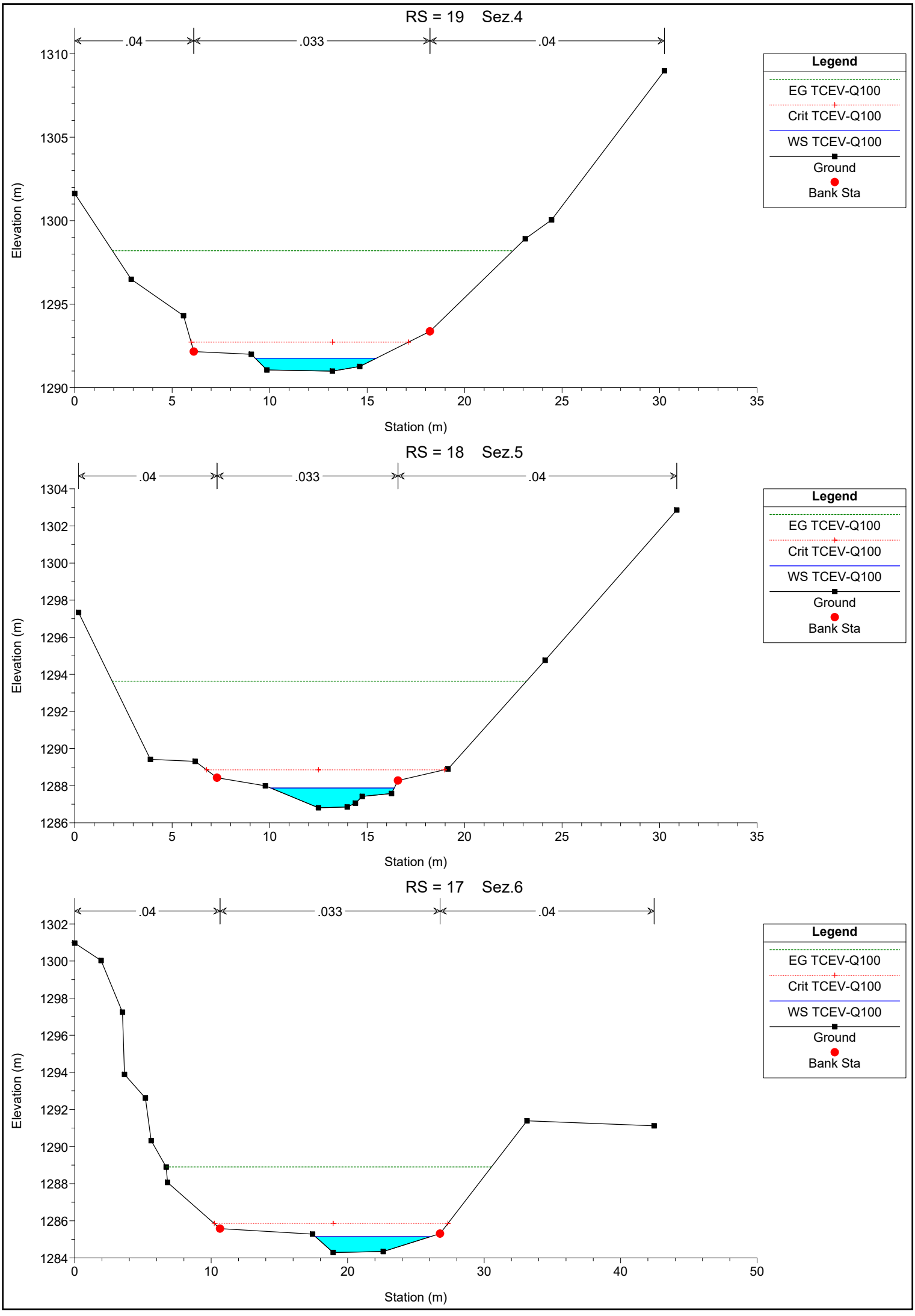

RS = 2 Sez.21
.04
.033
.04
Legend
EG TCEV-Q50
Crit TCEV-Q50
WS TCEV-Q50
Ground
Bank Sta
Elevation (m)
Station (m)
1280
1275
1270
1265
1260
1255
0
10
20
30
40
50
60
70

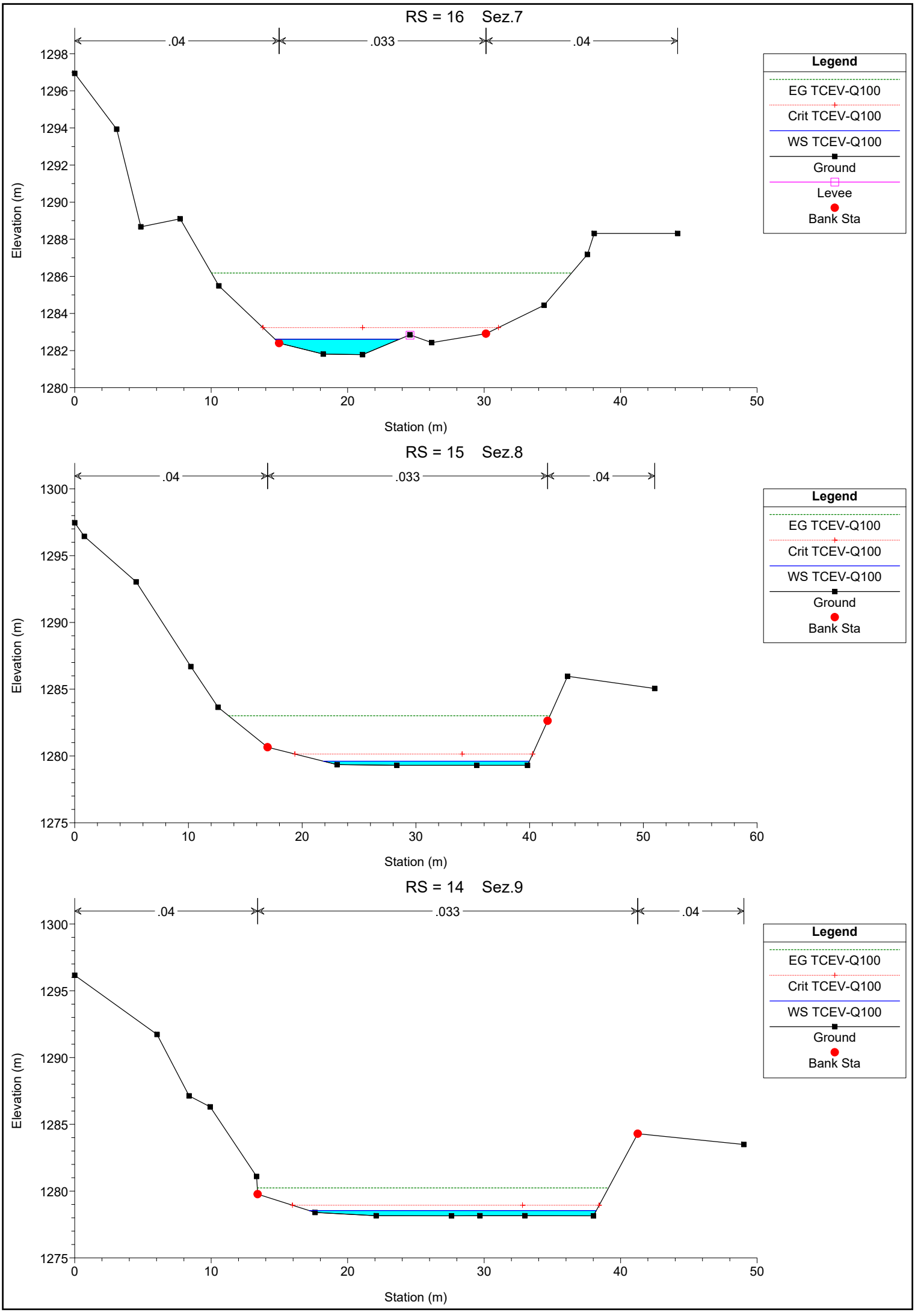

RS = 1 Sez.22
.04
.033
.04
Legend
EG TCEV-Q50
Crit TCEV-Q50
WS TCEV-Q50
Ground
Bank Sta
Elevation (m)
Station (m)
1280
1275
1270
1265
1260
1255
0
10
20
30
40
50
60
70

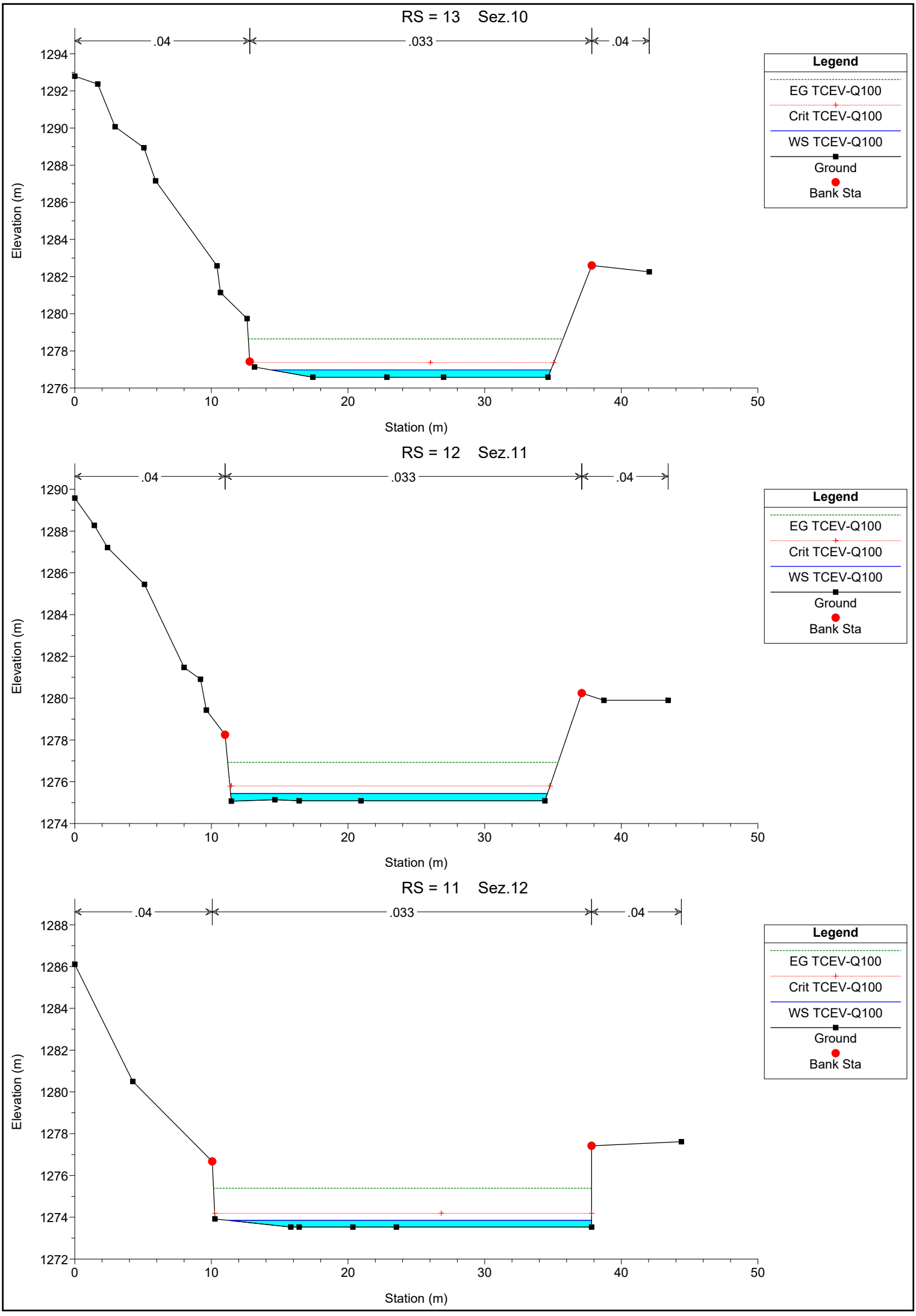
Q100 - Tcev

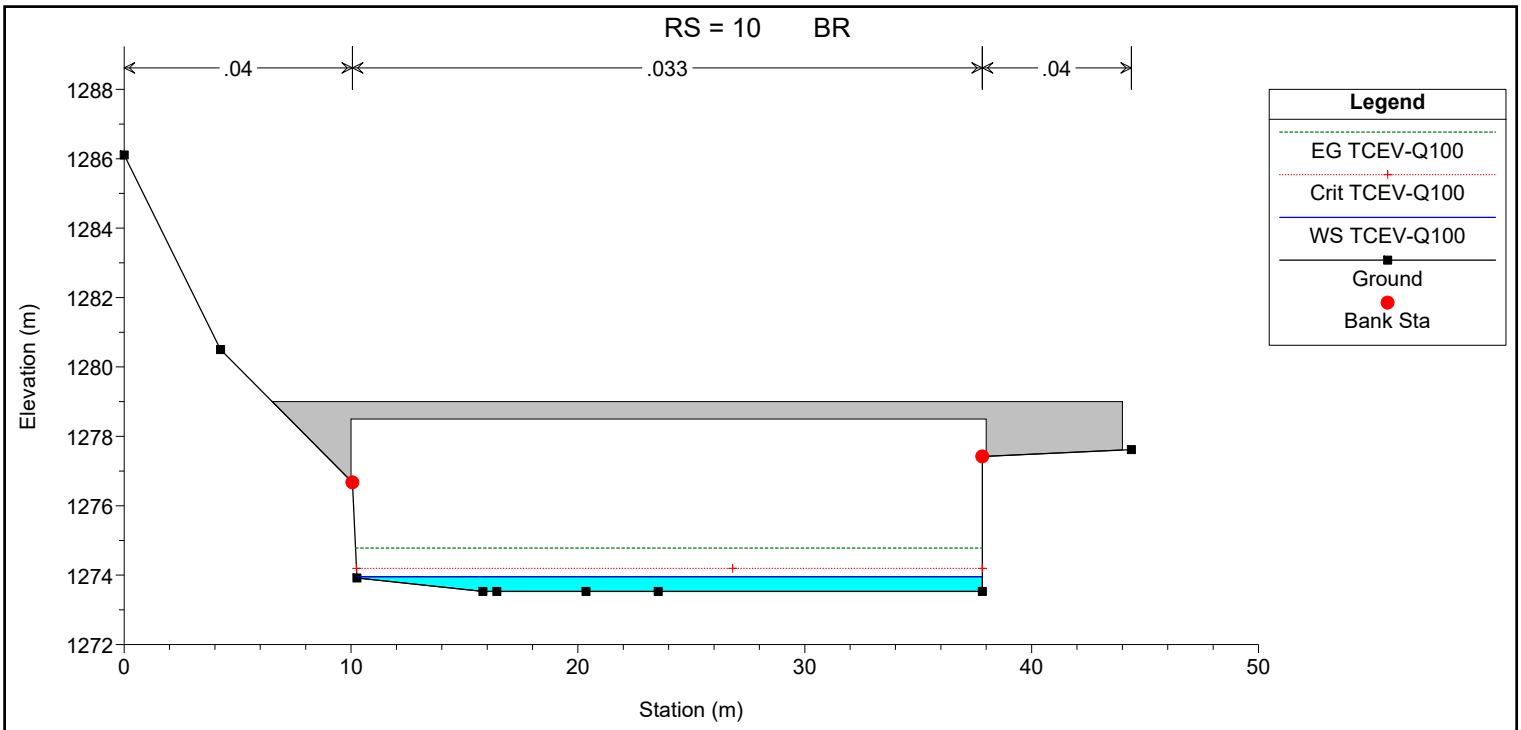

Bavera Monesi
Legend
EG TCEV-Q100
Crit TCEV-Q100
WS TCEV-Q100
Ground
Elevation (m)
1310
1300
1290
1280
1270
1260
1250
0
50
100
150
200
250
300
Main Channel Distance (m)

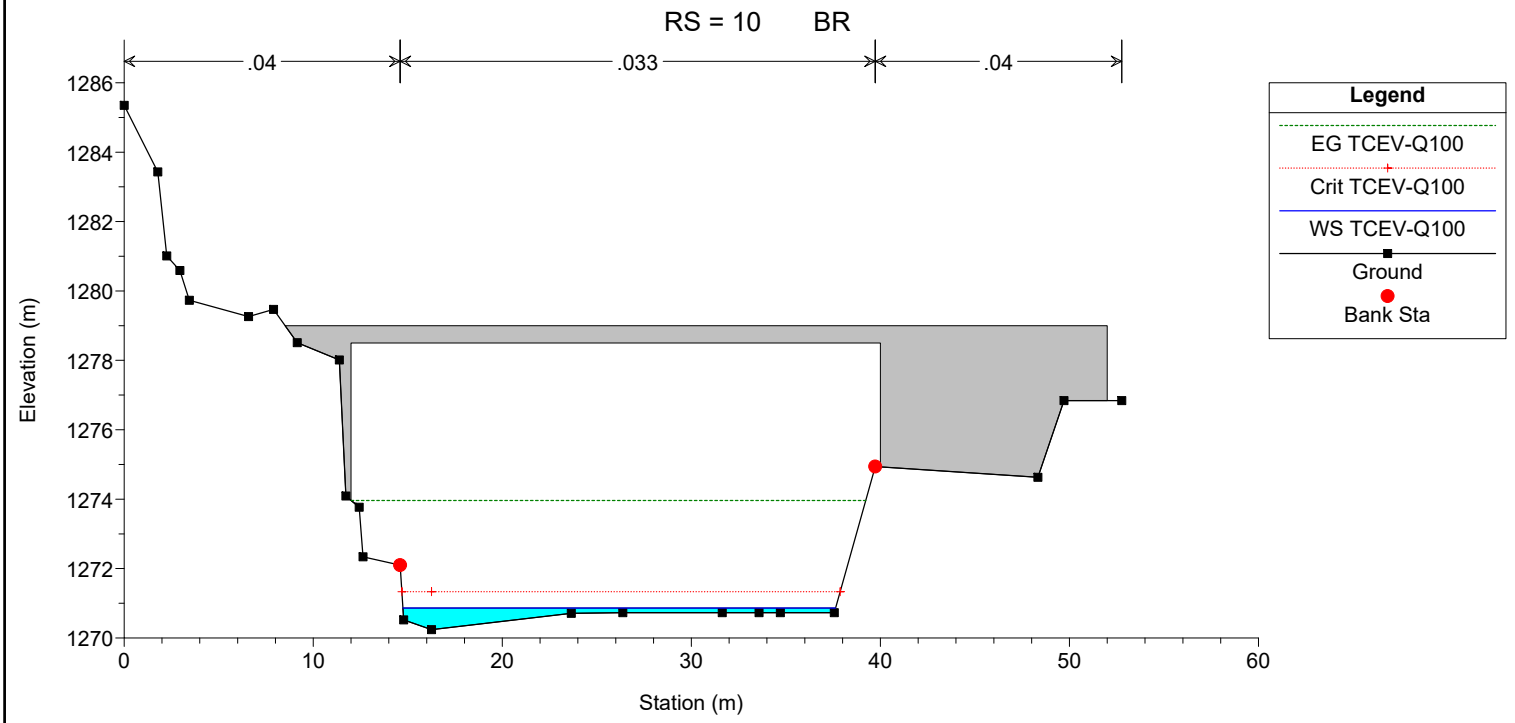

RS = 22 Sez.1
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG TCEV-Q100
Crit TCEV-Q100
WS TCEV-Q100
Ground
Levee
Bank Sta
RS = 21 Sez.2
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG TCEV-Q100
Crit TCEV-Q100
WS TCEV-Q100
Ground
Bank Sta
RS = 20 Sez.3
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG TCEV-Q100
Crit TCEV-Q100
WS TCEV-Q100
Ground
Bank Sta

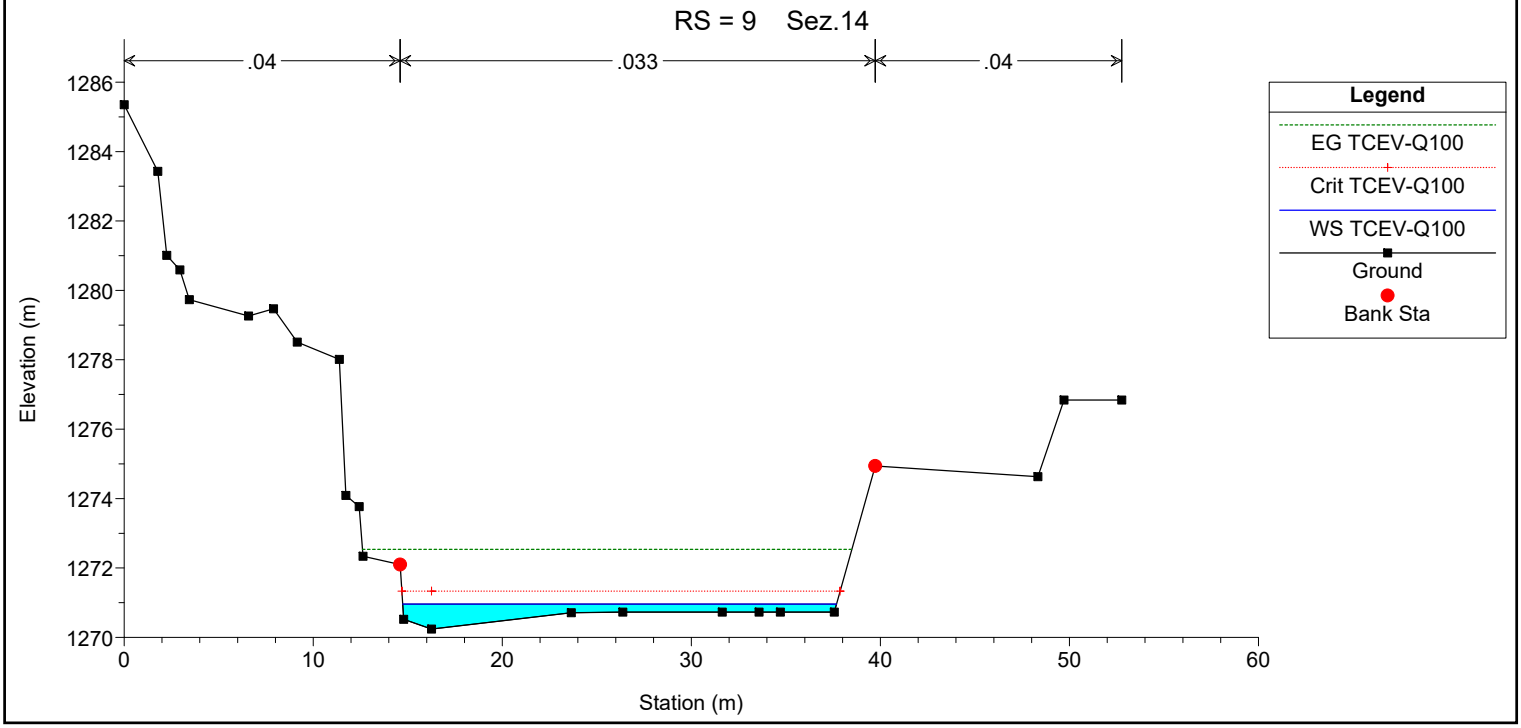

RS = 19 Sez.4
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG TCEV-Q100
Crit TCEV-Q100
WS TCEV-Q100
Ground
Bank Sta
RS = 18 Sez.5
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG TCEV-Q100
Crit TCEV-Q100
WS TCEV-Q100
Ground
Bank Sta
RS = 17 Sez.6
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG TCEV-Q100
Crit TCEV-Q100
WS TCEV-Q100
Ground
Bank Sta

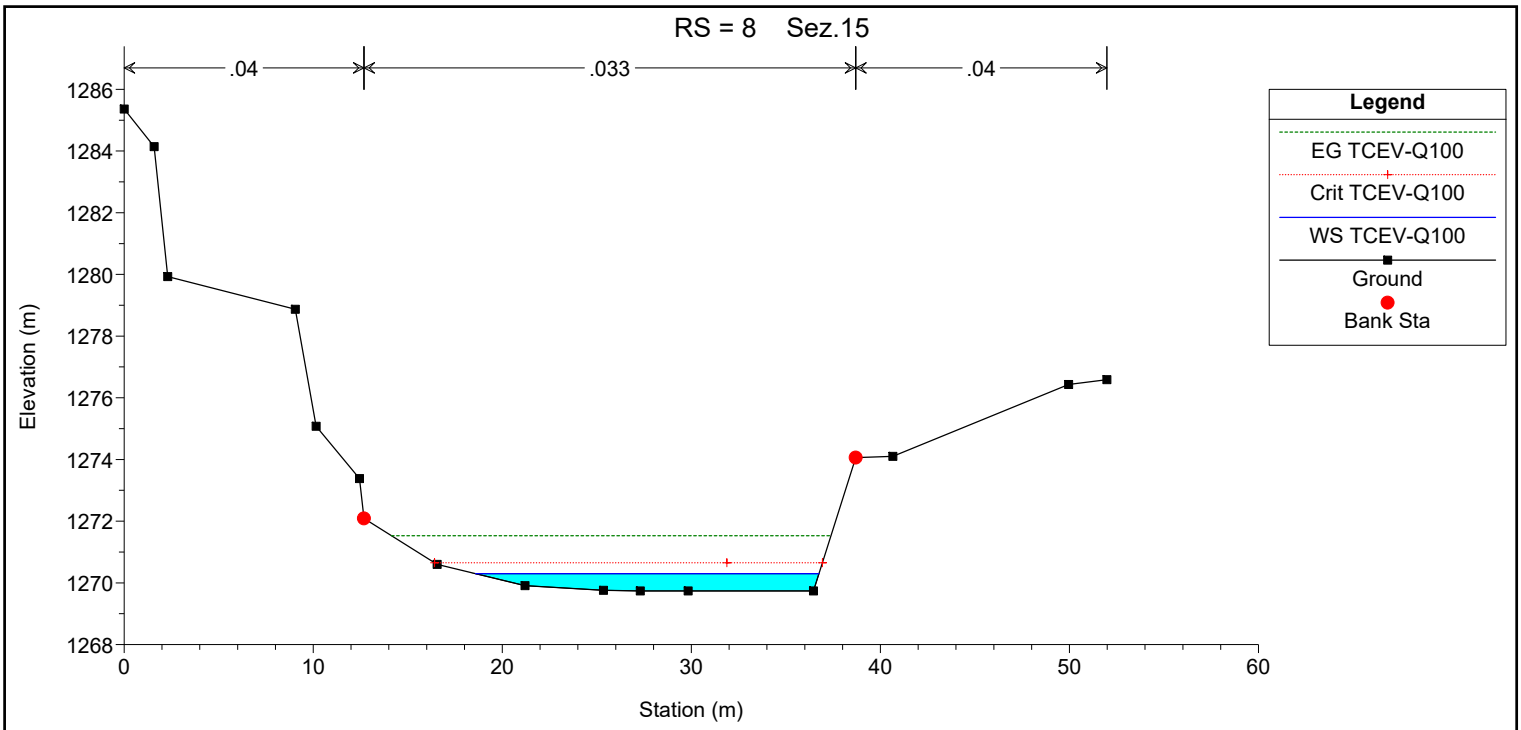

RS = 16 Sez.7
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG TCEV-Q100
Crit TCEV-Q100
WS TCEV-Q100
Ground
Levee
Bank Sta
RS = 15 Sez.8
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG TCEV-Q100
Crit TCEV-Q100
WS TCEV-Q100
Ground
Bank Sta
RS = 14 Sez.9
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG TCEV-Q100
Crit TCEV-Q100
WS TCEV-Q100
Ground
Bank Sta

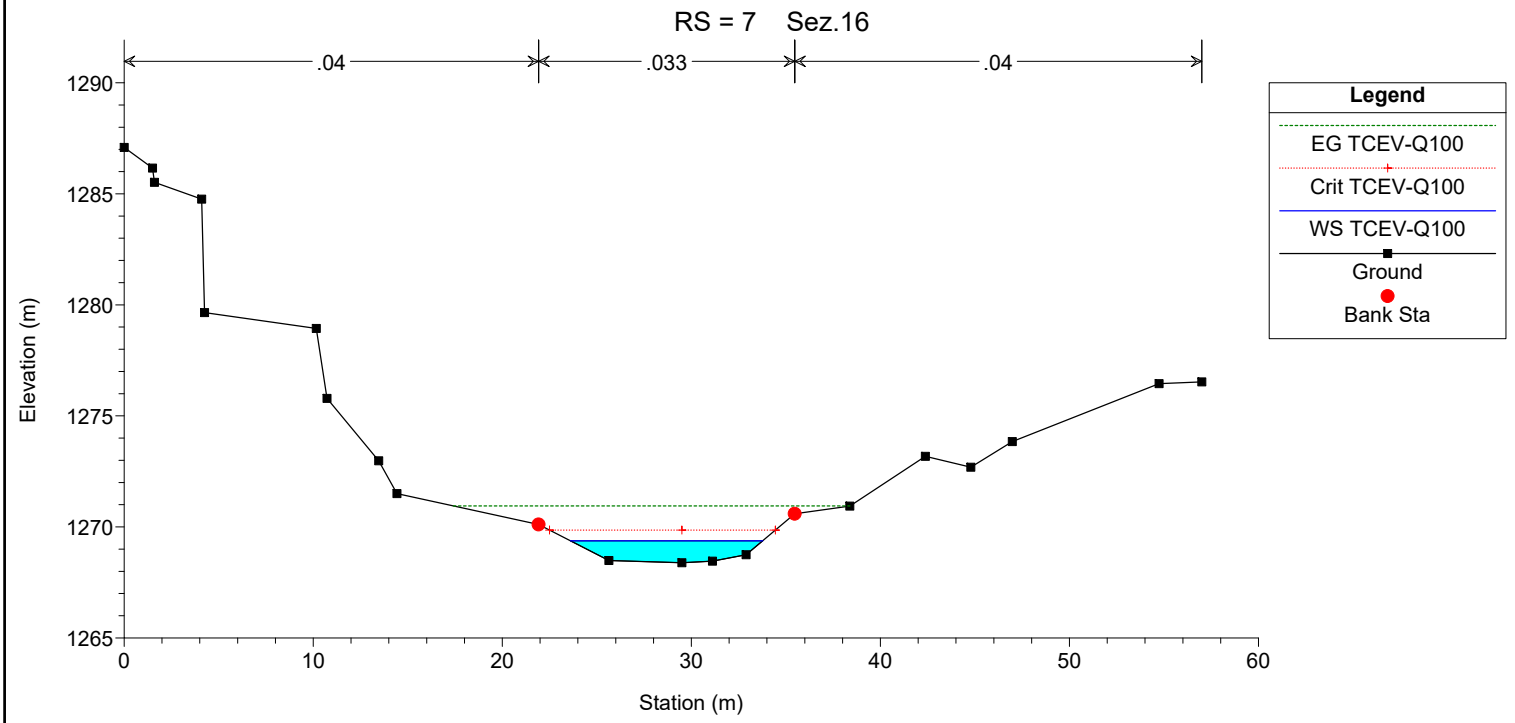

RS = 13 Sez.10
.04
.033
.04
Legend
EG TCEV-Q100
Crit TCEV-Q100
WS TCEV-Q100
Ground
Bank Sta
Elevation (m)
Station (m)
RS = 12 Sez.11
.04
.033
.04
Legend
EG TCEV-Q100
Crit TCEV-Q100
WS TCEV-Q100
Ground
Bank Sta
Elevation (m)
Station (m)
RS = 11 Sez.12
.04
.033
.04
Legend
EG TCEV-Q100
Crit TCEV-Q100
WS TCEV-Q100
Ground
Bank Sta
Elevation (m)
Station (m)

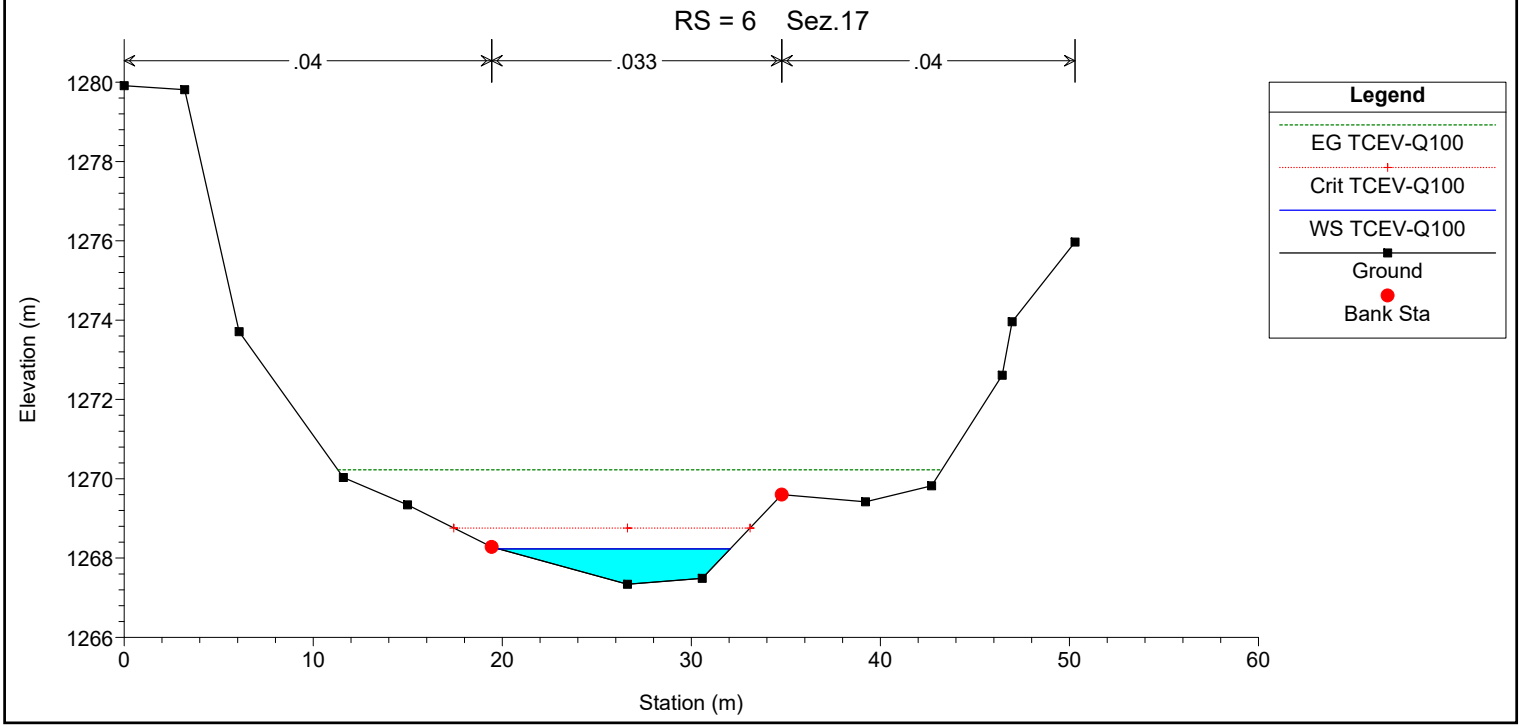

RS = 10 BR
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG TCEV-Q100
Crit TCEV-Q100
WS TCEV-Q100
Ground
Bank Sta

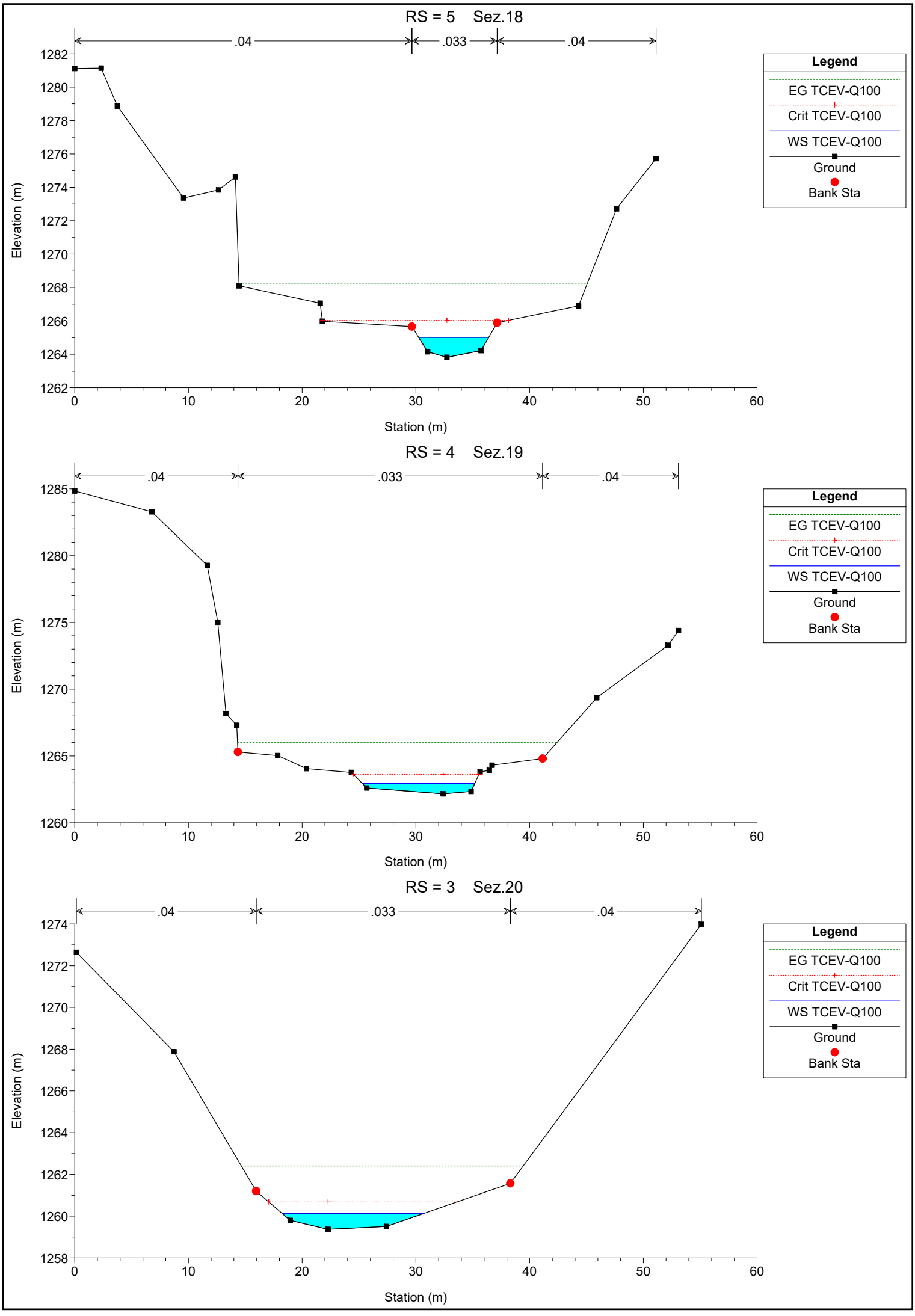

RS = 10 BR
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG TCEV-Q100
Crit TCEV-Q100
WS TCEV-Q100
Ground
Bank Sta

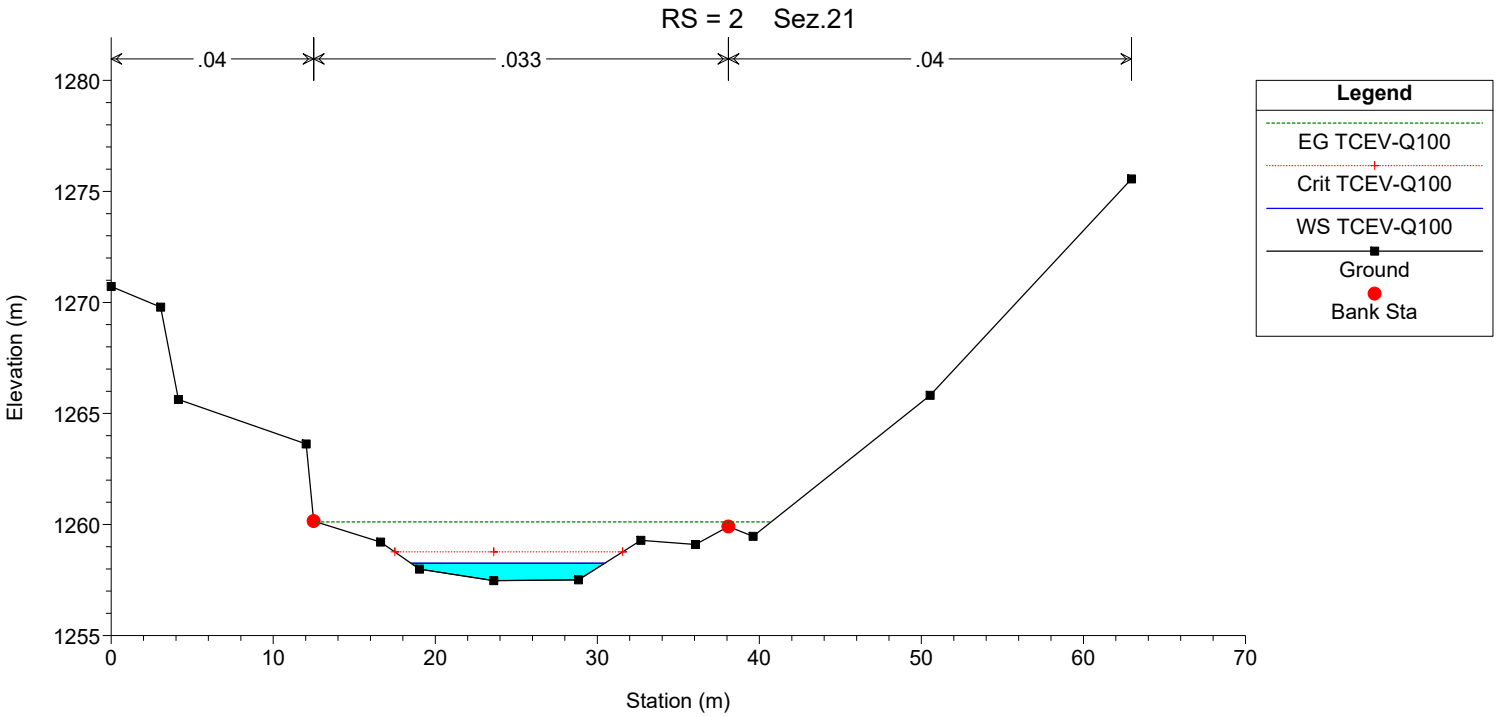

RS = 9 Sez.14
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG TCEV-Q100
Crit TCEV-Q100
WS TCEV-Q100
Ground
Bank Sta

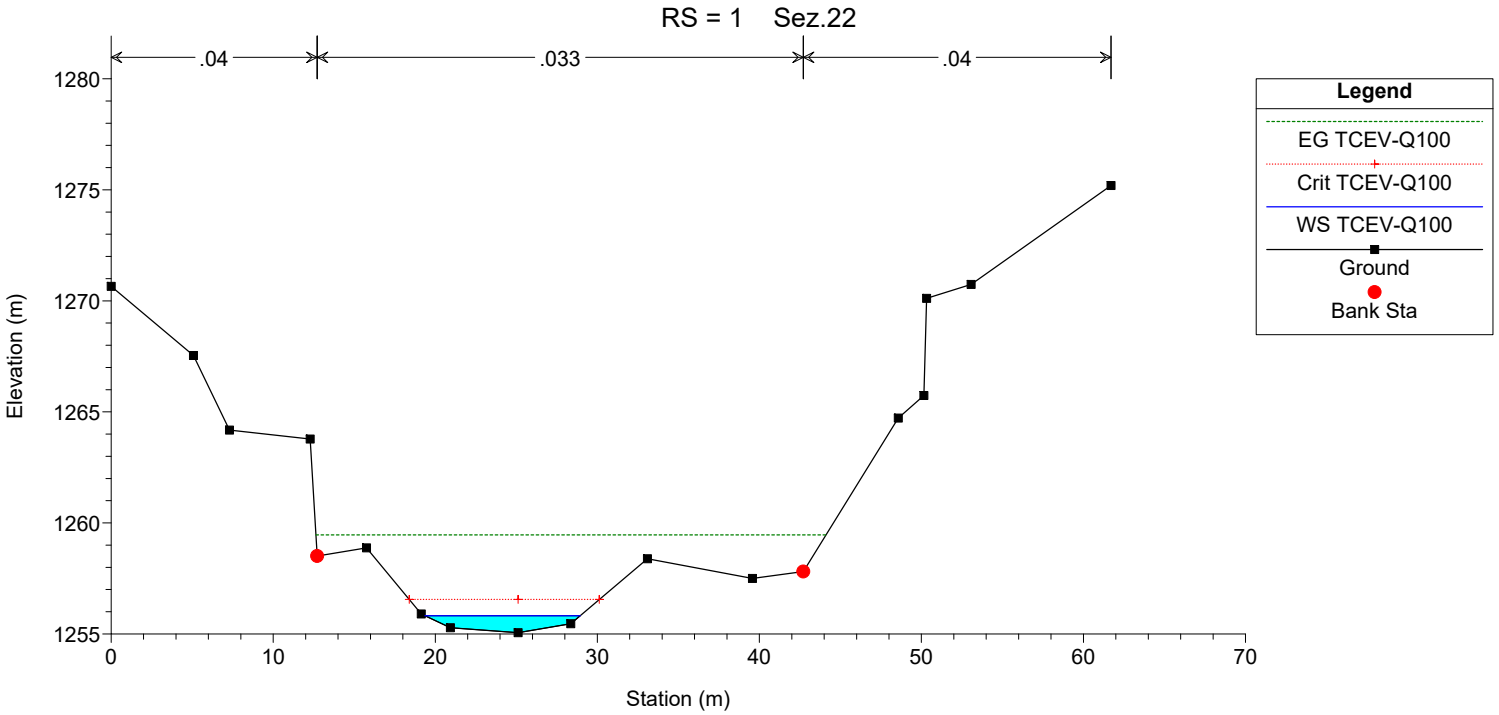

RS = 8 Sez.15
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG TCEV-Q100
Crit TCEV-Q100
WS TCEV-Q100
Ground
Bank Sta


RS = 7 Sez.16
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG TCEV-Q100
Crit TCEV-Q100
WS TCEV-Q100
Ground
Bank Sta

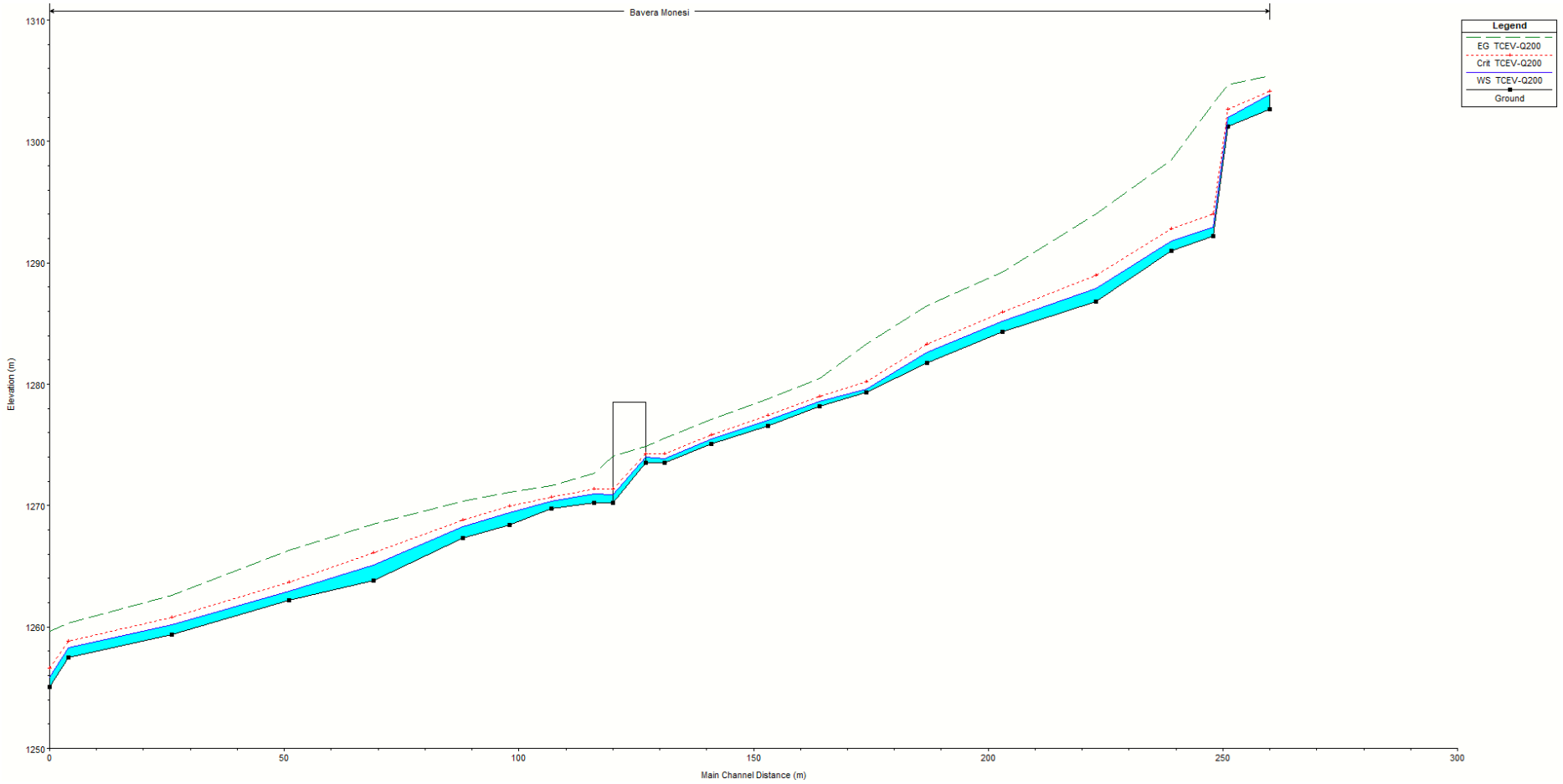

RS = 6 Sez.17
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG TCEV-Q100
Crit TCEV-Q100
WS TCEV-Q100
Ground
Bank Sta

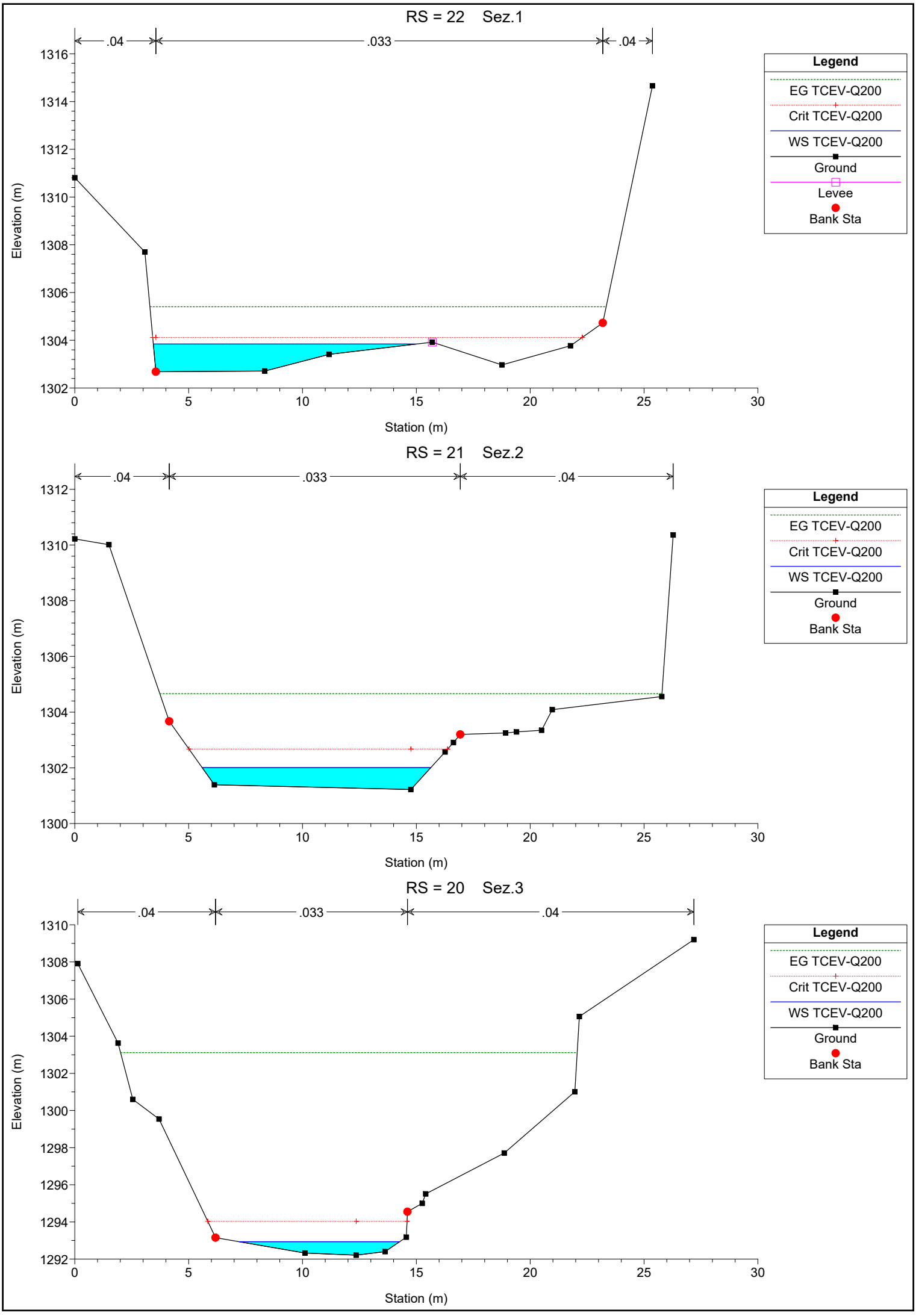

RS = 5 Sez.18
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG TCEV-Q100
Crit TCEV-Q100
WS TCEV-Q100
Ground
Bank Sta
RS = 4 Sez.19
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG TCEV-Q100
Crit TCEV-Q100
WS TCEV-Q100
Ground
Bank Sta
RS = 3 Sez.20
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG TCEV-Q100
Crit TCEV-Q100
WS TCEV-Q100
Ground
Bank Sta

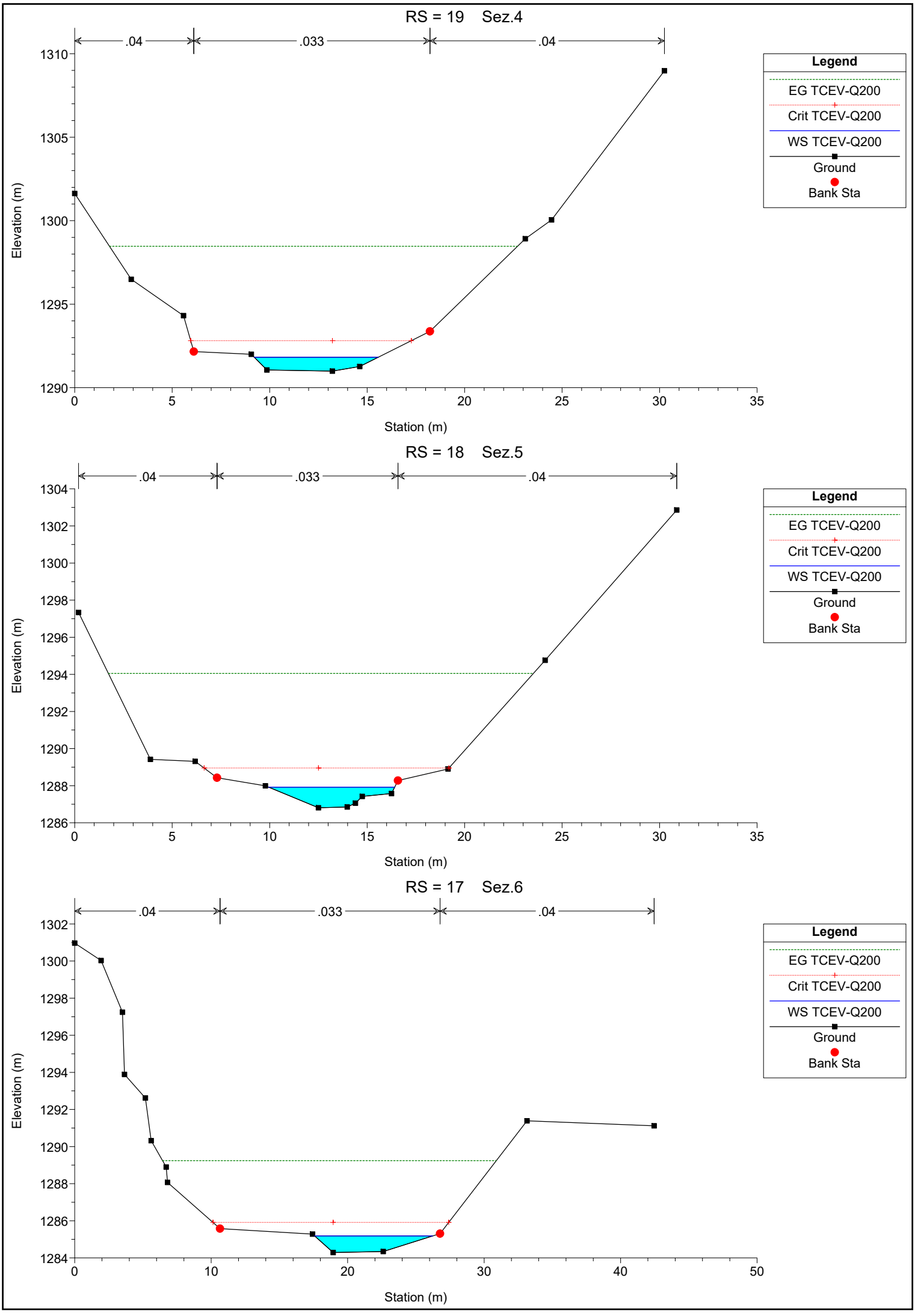

RS = 2 Sez.21
.04
.033
.04
Legend
EG TCEV-Q100
Crit TCEV-Q100
WS TCEV-Q100
Ground
Bank Sta
Elevation (m)
Station (m)
1280
1275
1270
1265
1260
1255
0
10
20
30
40
50
60
70

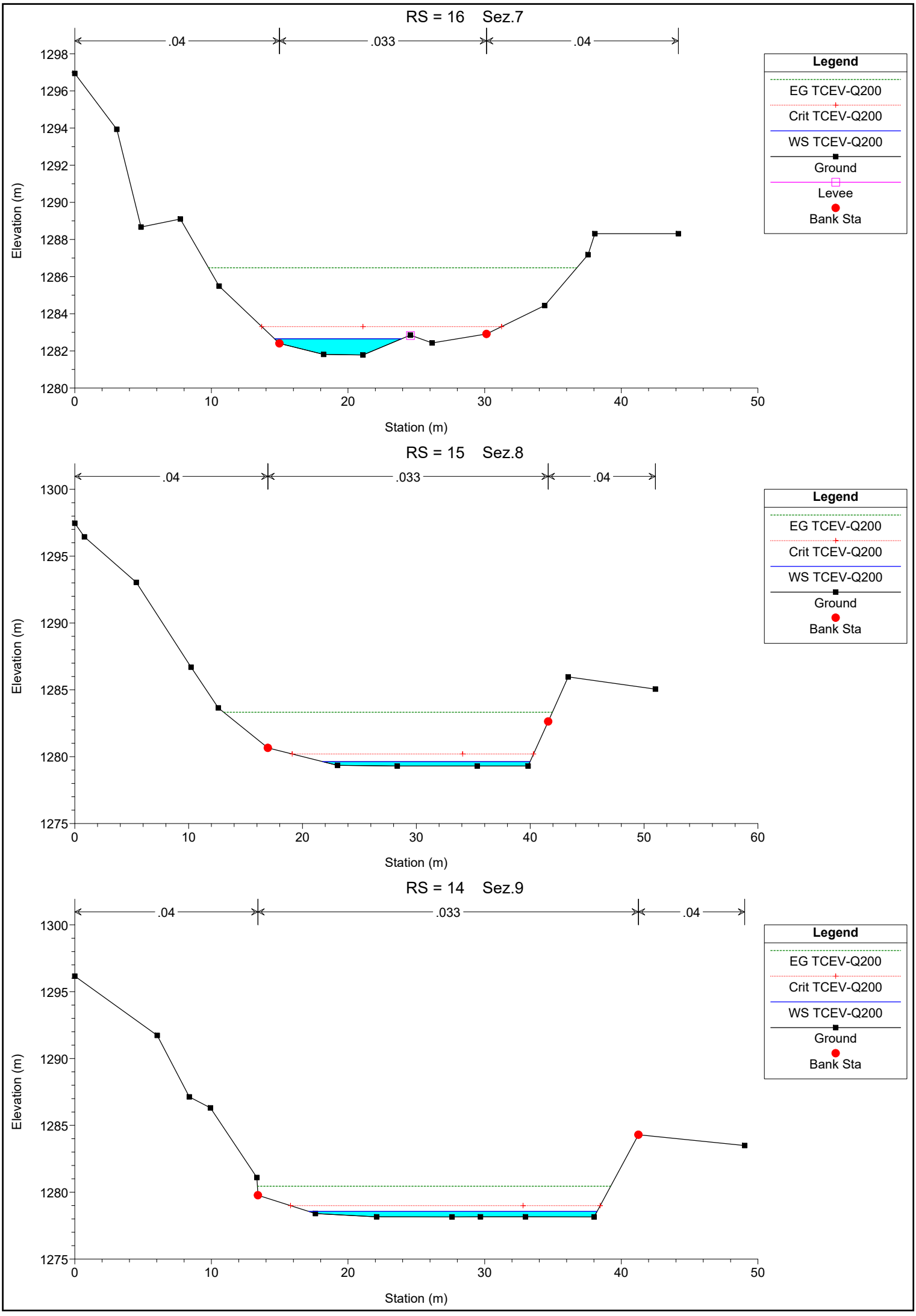

RS = 1 Sez.22
.04
.033
.04
Legend
EG TCEV-Q100
Crit TCEV-Q100
WS TCEV-Q100
Ground
Bank Sta
Elevation (m)
Station (m)
1280
1275
1270
1265
1260
1255
0
10
20
30
40
50
60
70

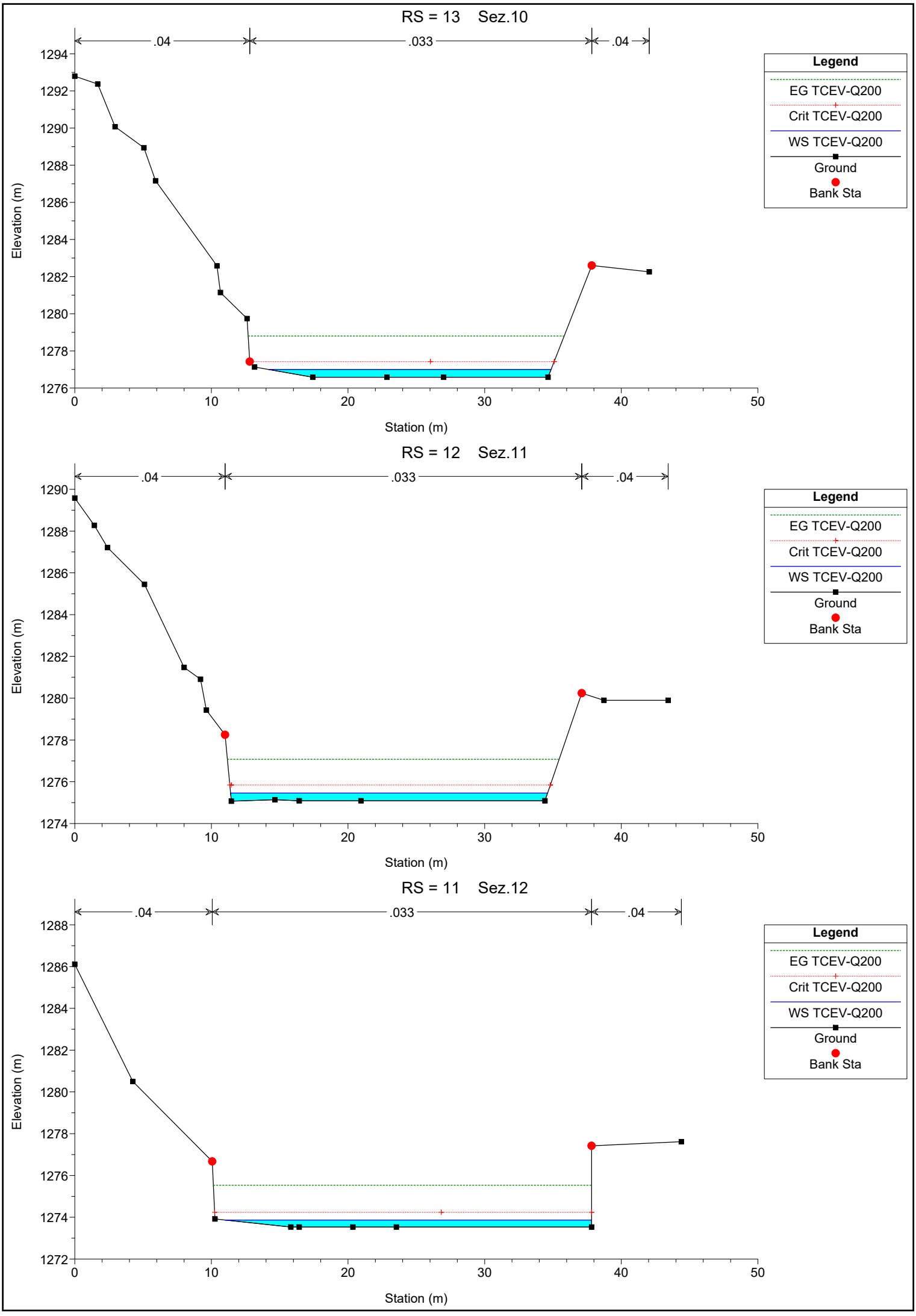
Q200 - Tcev

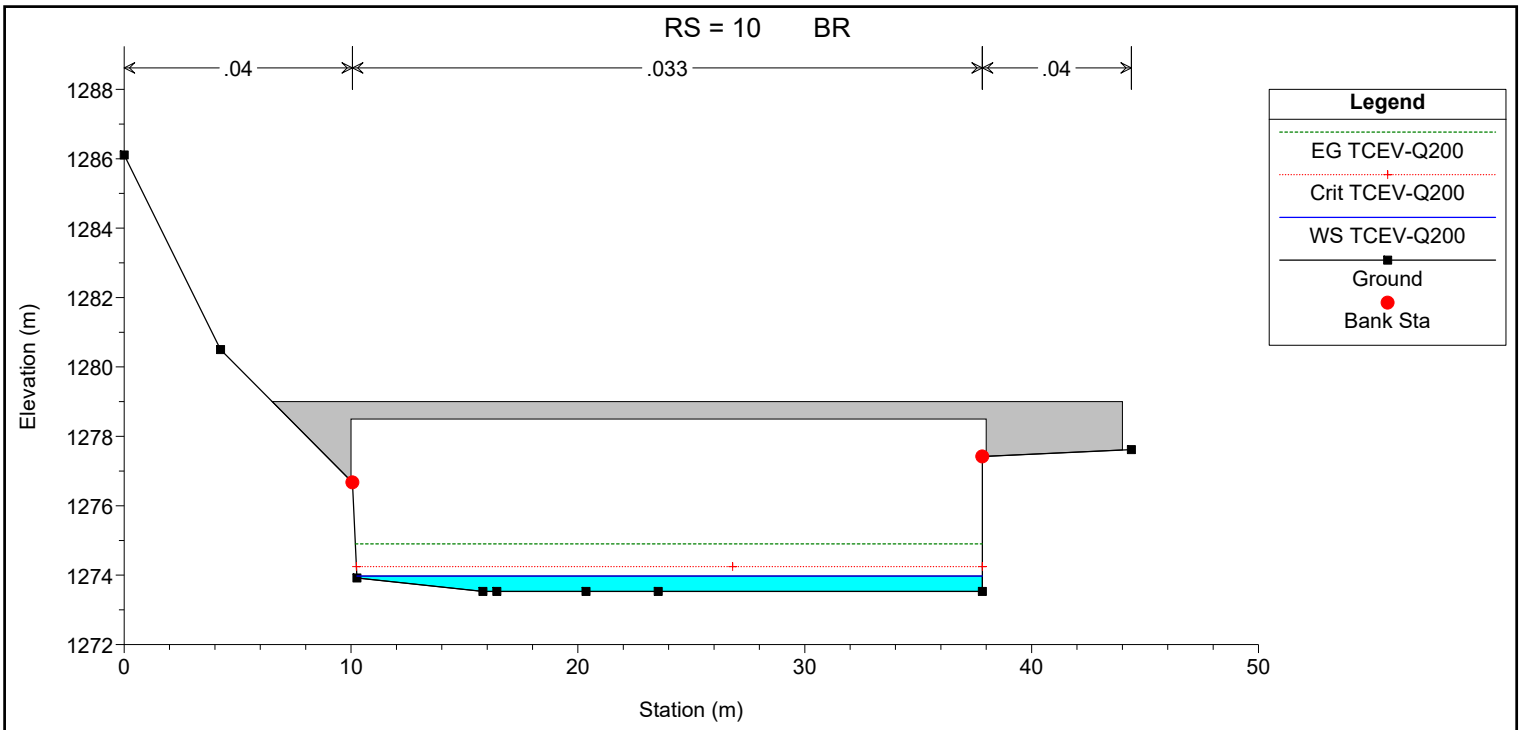

Bavera Monesi
Legend
EG TCEV-Q200
Crit TCEV-Q200
WS TCEV-Q200
Ground
Elevation (m)
1310
1300
1290
1280
1270
1260
1250
0
50
100
150
200
250
300
Main Channel Distance (m)

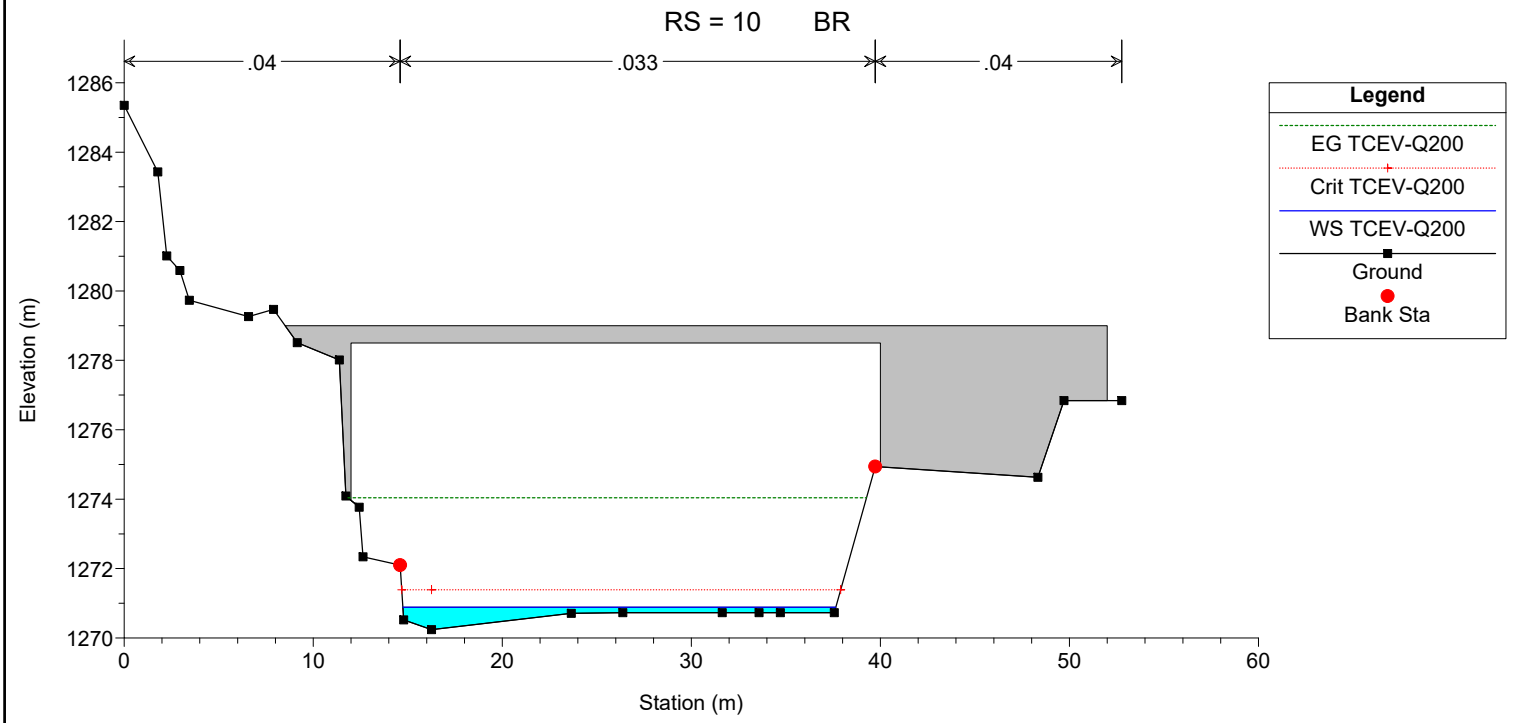

RS = 22 Sez.1
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG TCEV-Q200
Crit TCEV-Q200
WS TCEV-Q200
Ground
Levee
Bank Sta
RS = 21 Sez.2
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG TCEV-Q200
Crit TCEV-Q200
WS TCEV-Q200
Ground
Bank Sta
RS = 20 Sez.3
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG TCEV-Q200
Crit TCEV-Q200
WS TCEV-Q200
Ground
Bank Sta

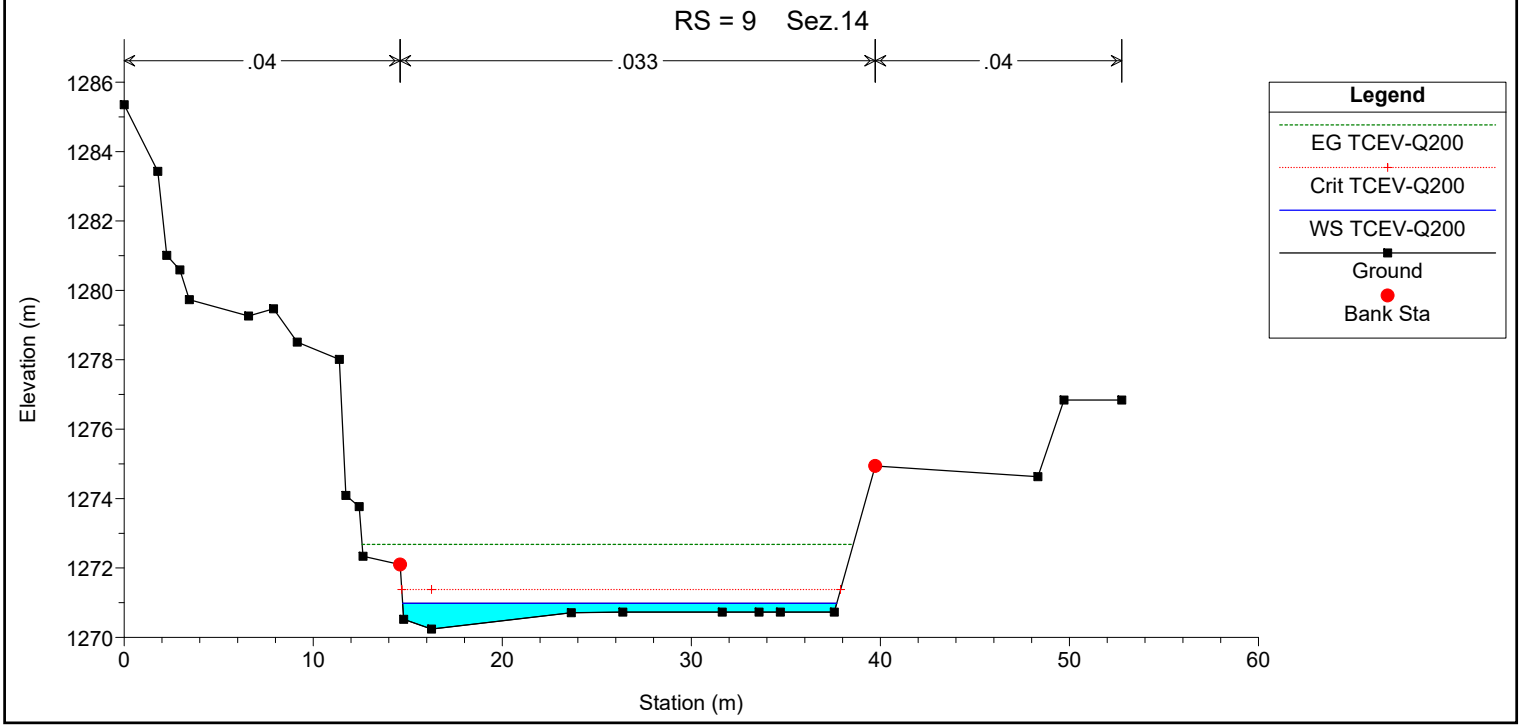

RS = 19 Sez.4
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG TCEV-Q200
Crit TCEV-Q200
WS TCEV-Q200
Ground
Bank Sta
RS = 18 Sez.5
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG TCEV-Q200
Crit TCEV-Q200
WS TCEV-Q200
Ground
Bank Sta
RS = 17 Sez.6
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG TCEV-Q200
Crit TCEV-Q200
WS TCEV-Q200
Ground
Bank Sta

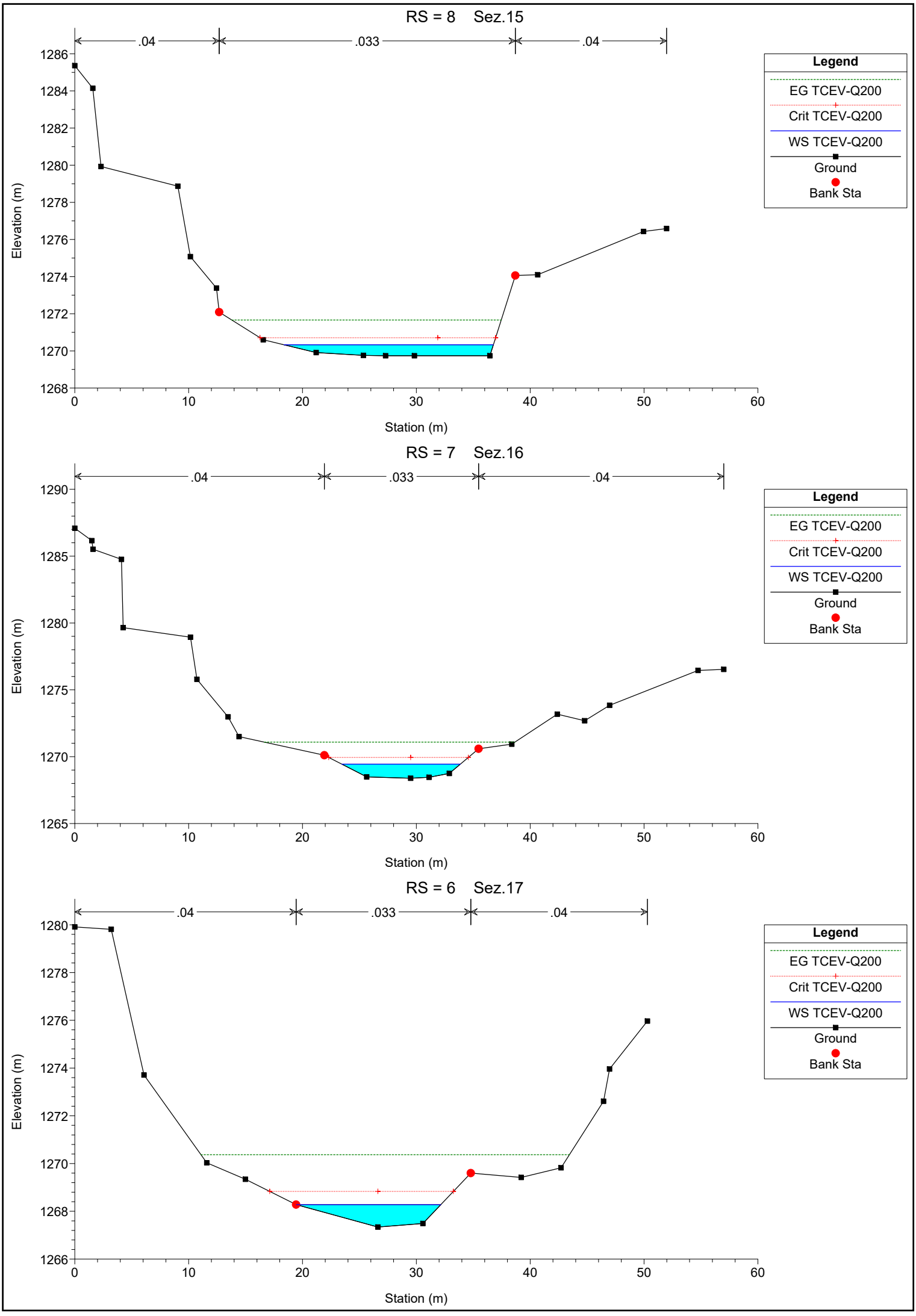

RS = 16 Sez.7
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG TCEV-Q200
Crit TCEV-Q200
WS TCEV-Q200
Ground
Levee
Bank Sta
RS = 15 Sez.8
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG TCEV-Q200
Crit TCEV-Q200
WS TCEV-Q200
Ground
Bank Sta
RS = 14 Sez.9
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG TCEV-Q200
Crit TCEV-Q200
WS TCEV-Q200
Ground
Bank Sta

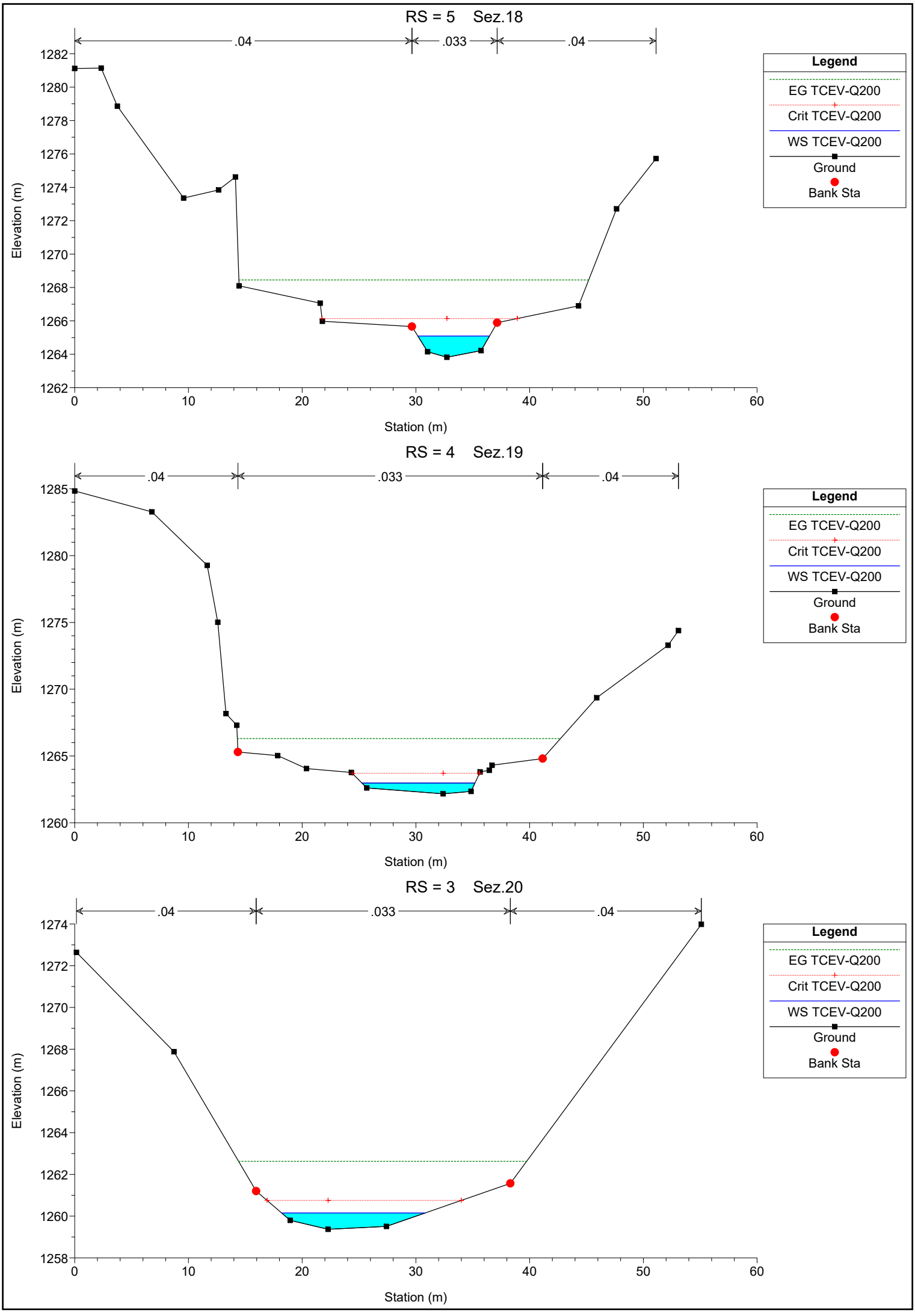

RS = 13 Sez.10
.04
.033
.04
Legend
EG TCEV-Q200
Crit TCEV-Q200
WS TCEV-Q200
Ground
Bank Sta
Elevation (m)
Station (m)
RS = 12 Sez.11
.04
.033
.04
Legend
EG TCEV-Q200
Crit TCEV-Q200
WS TCEV-Q200
Ground
Bank Sta
Elevation (m)
Station (m)
RS = 11 Sez.12
.04
.033
.04
Legend
EG TCEV-Q200
Crit TCEV-Q200
WS TCEV-Q200
Ground
Bank Sta
Elevation (m)
Station (m)

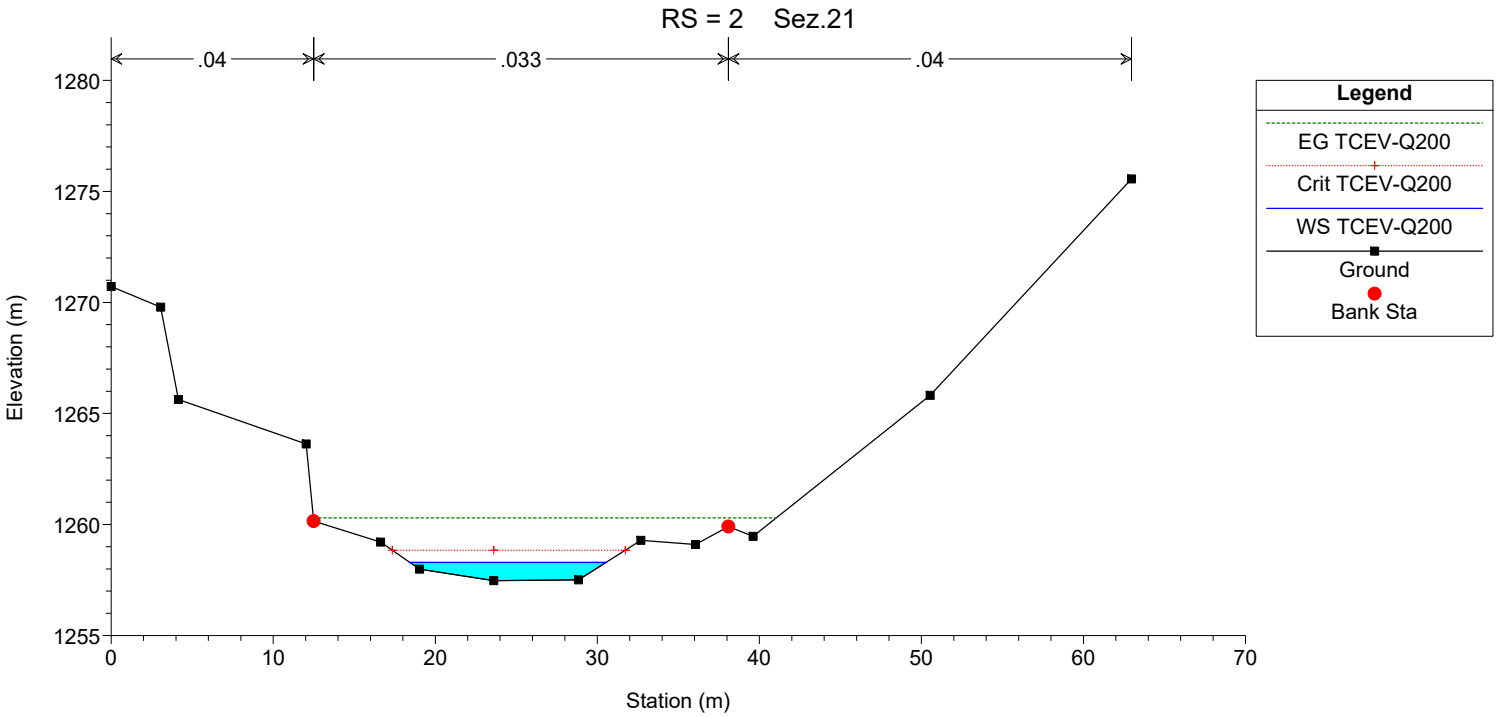

RS = 10 BR
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG TCEV-Q200
Crit TCEV-Q200
WS TCEV-Q200
Ground
Bank Sta

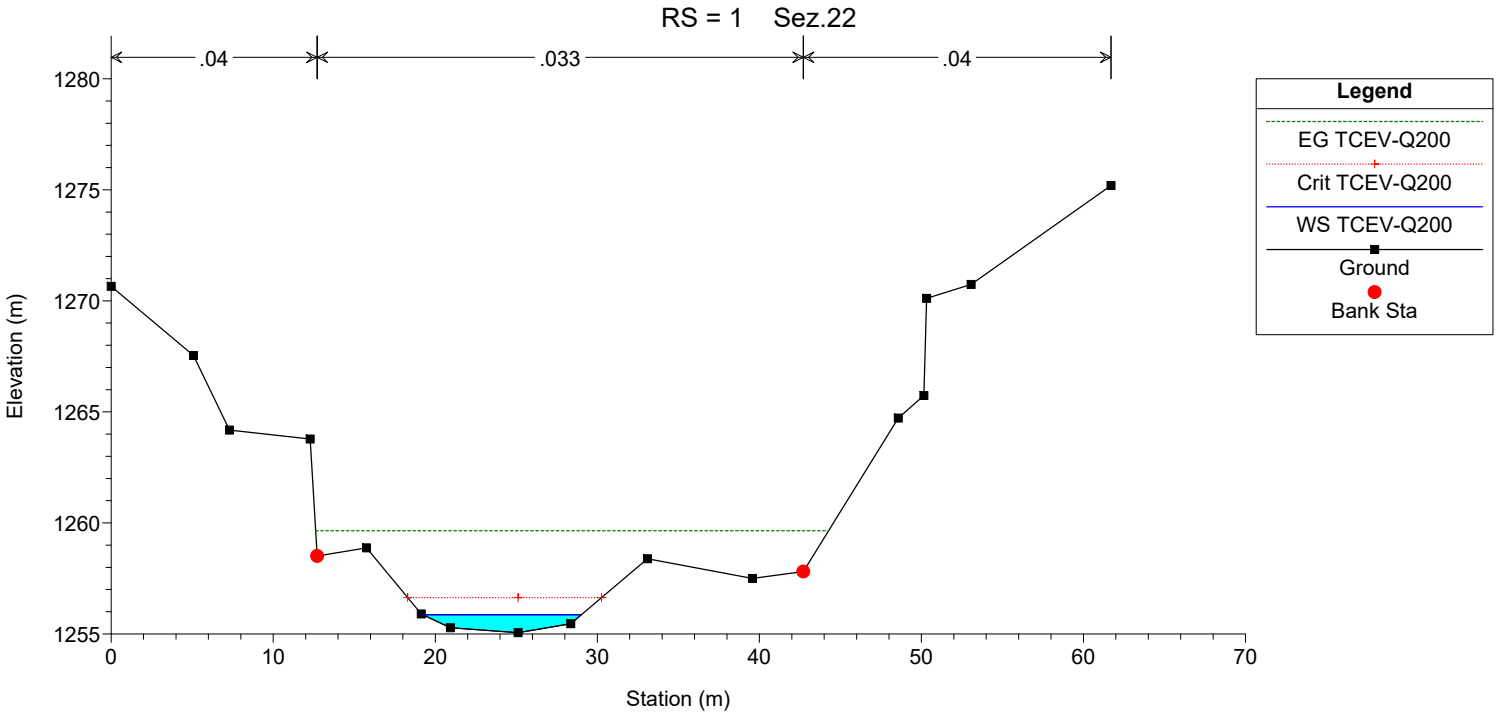

RS = 10 BR
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG TCEV-Q200
Crit TCEV-Q200
WS TCEV-Q200
Ground
Bank Sta


RS = 9 Sez.14
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG TCEV-Q200
Crit TCEV-Q200
WS TCEV-Q200
Ground
Bank Sta

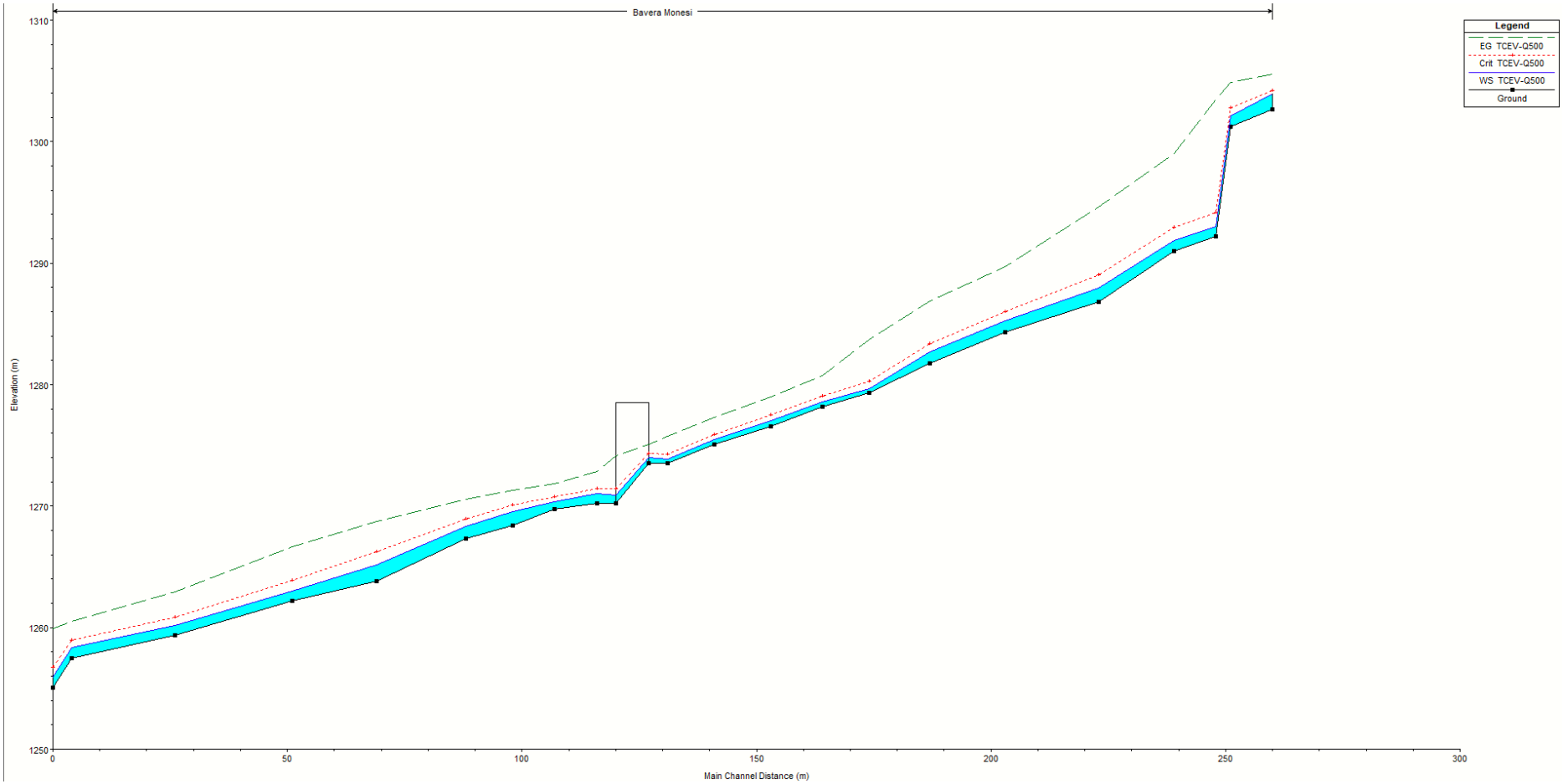

RS = 8 Sez.15
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG TCEV-Q200
Crit TCEV-Q200
WS TCEV-Q200
Ground
Bank Sta
RS = 7 Sez.16
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG TCEV-Q200
Crit TCEV-Q200
WS TCEV-Q200
Ground
Bank Sta
RS = 6 Sez.17
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG TCEV-Q200
Crit TCEV-Q200
WS TCEV-Q200
Ground
Bank Sta

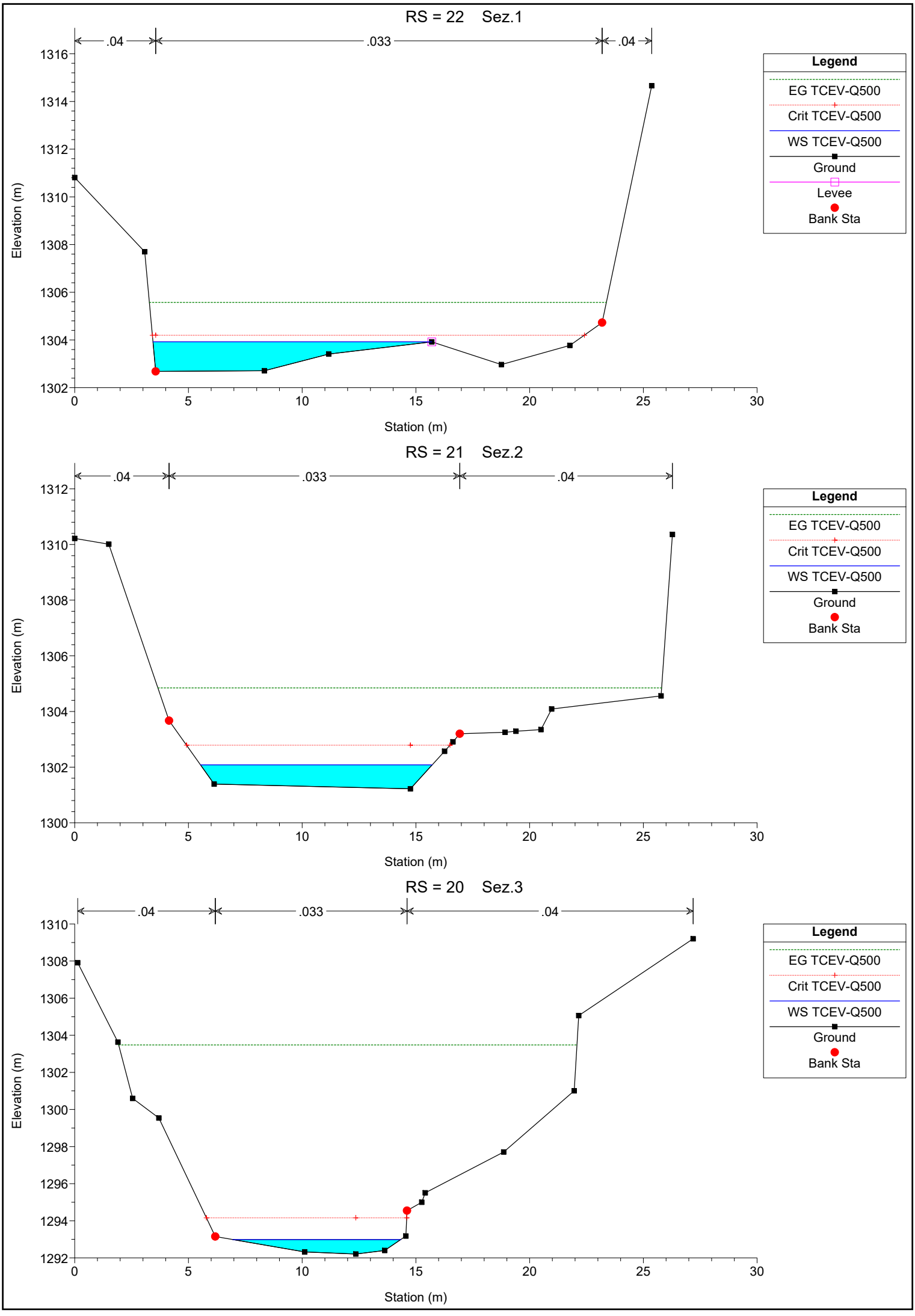

RS = 5 Sez.18
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG TCEV-Q200
Crit TCEV-Q200
WS TCEV-Q200
Ground
Bank Sta
RS = 4 Sez.19
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG TCEV-Q200
Crit TCEV-Q200
WS TCEV-Q200
Ground
Bank Sta
RS = 3 Sez.20
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG TCEV-Q200
Crit TCEV-Q200
WS TCEV-Q200
Ground
Bank Sta

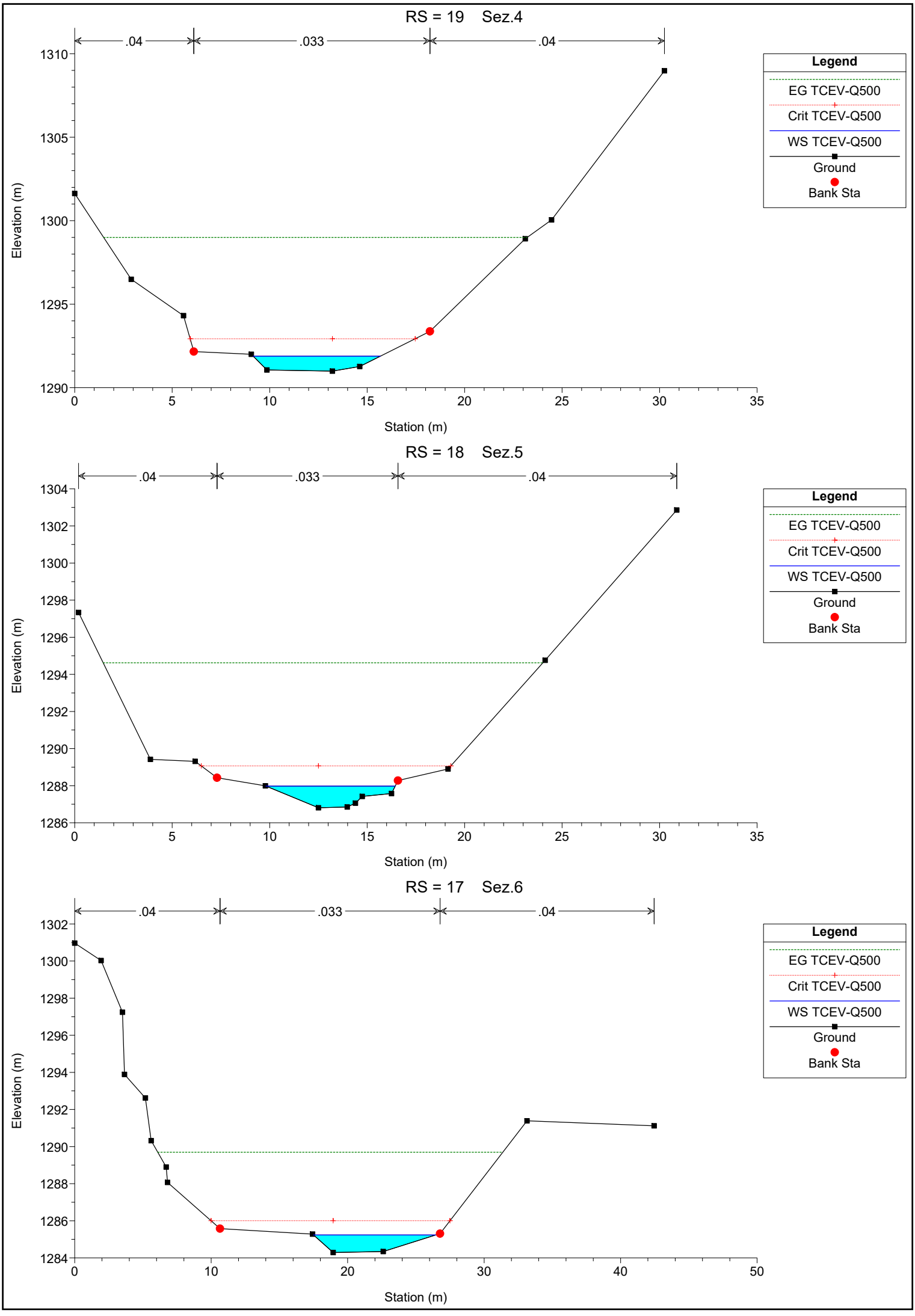

RS = 2 Sez.21
.04
.033
.04
Legend
EG TCEV-Q200
Crit TCEV-Q200
WS TCEV-Q200
Ground
Bank Sta
Elevation (m)
Station (m)
1280
1275
1270
1265
1260
1255
0
10
20
30
40
50
60
70

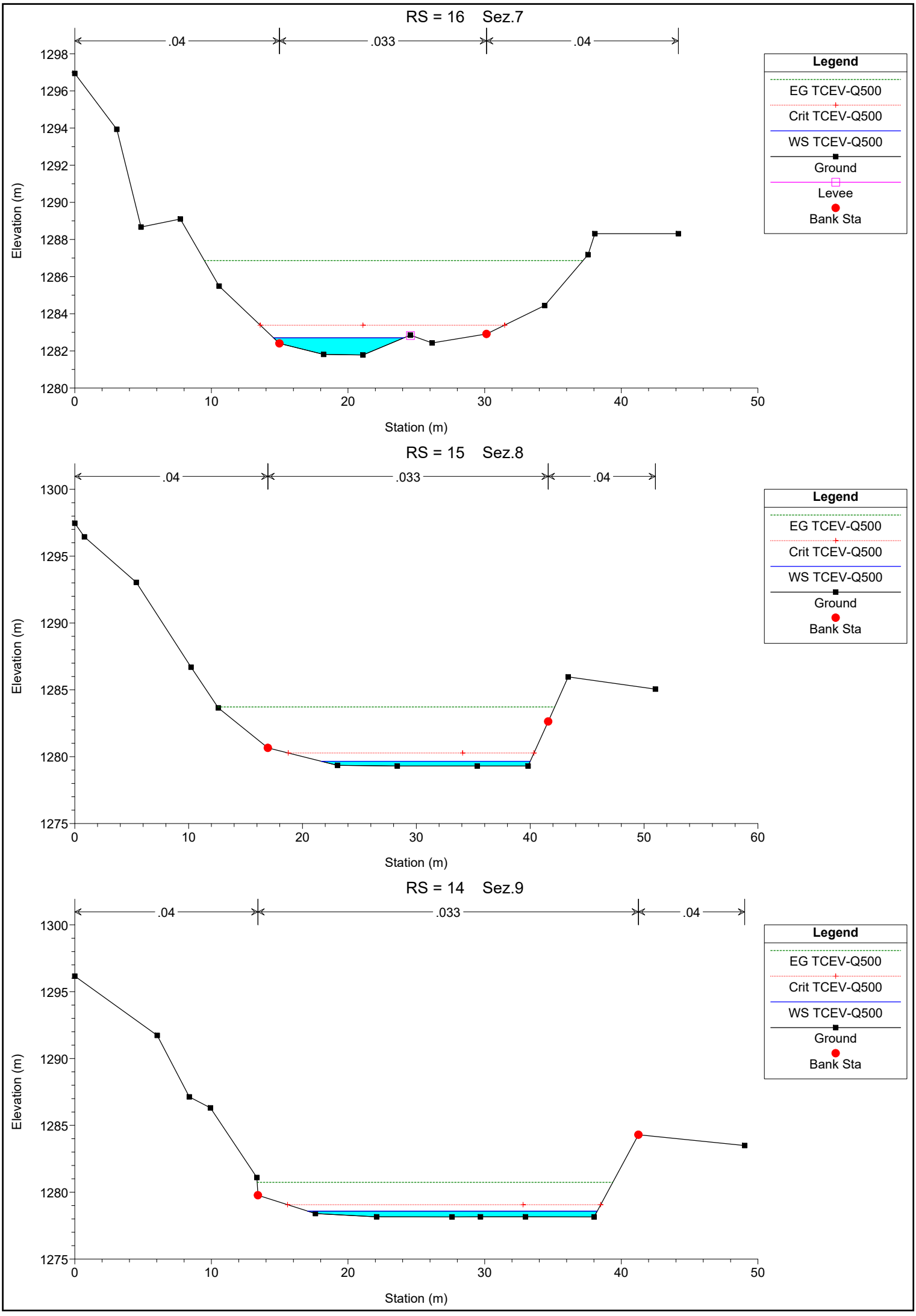

RS = 1 Sez.22
.04
.033
.04
Legend
EG TCEV-Q200
Crit TCEV-Q200
WS TCEV-Q200
Ground
Bank Sta
Elevation (m)
Station (m)
1280
1275
1270
1265
1260
1255
0
10
20
30
40
50
60
70

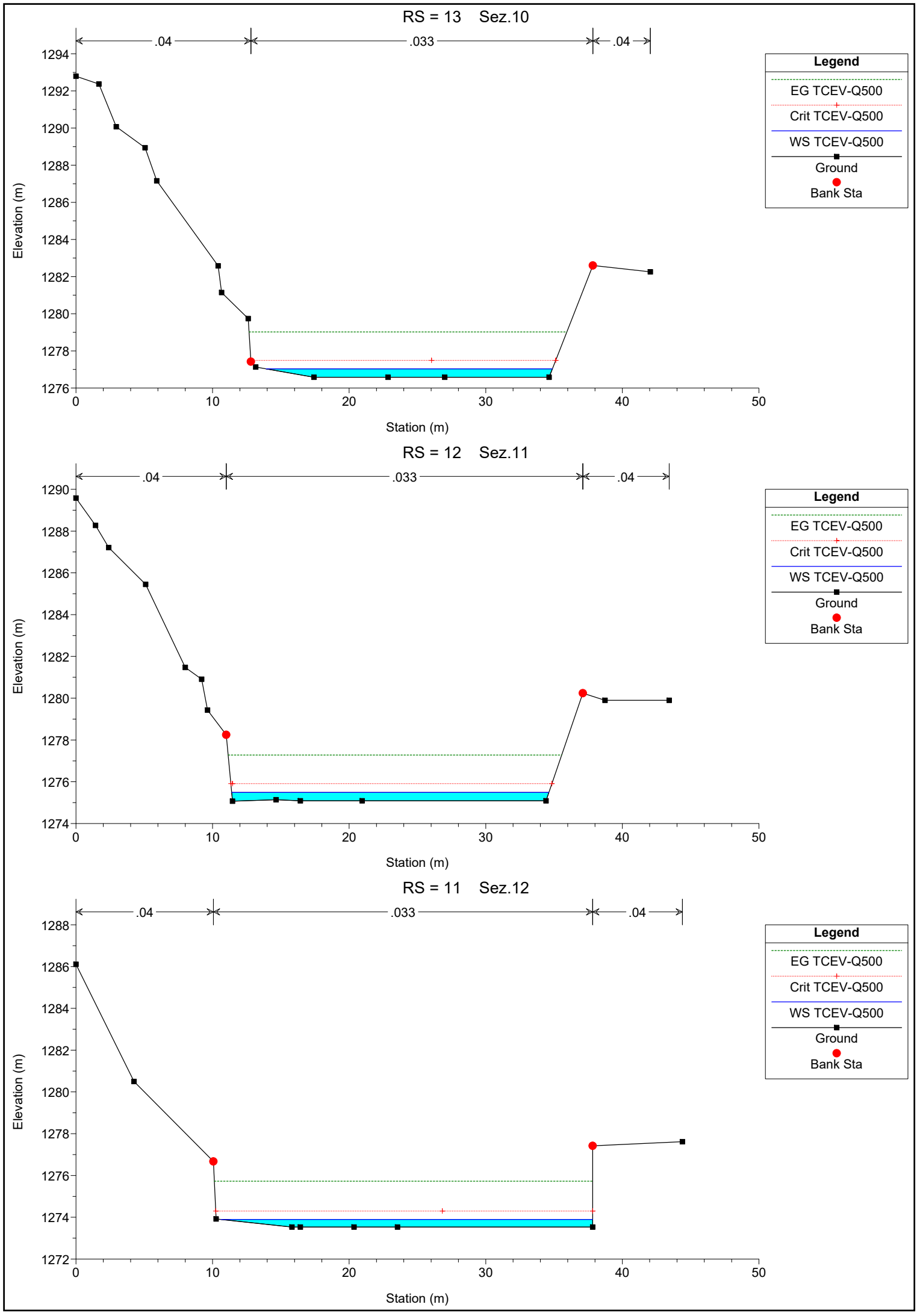
Q500 - Tcev

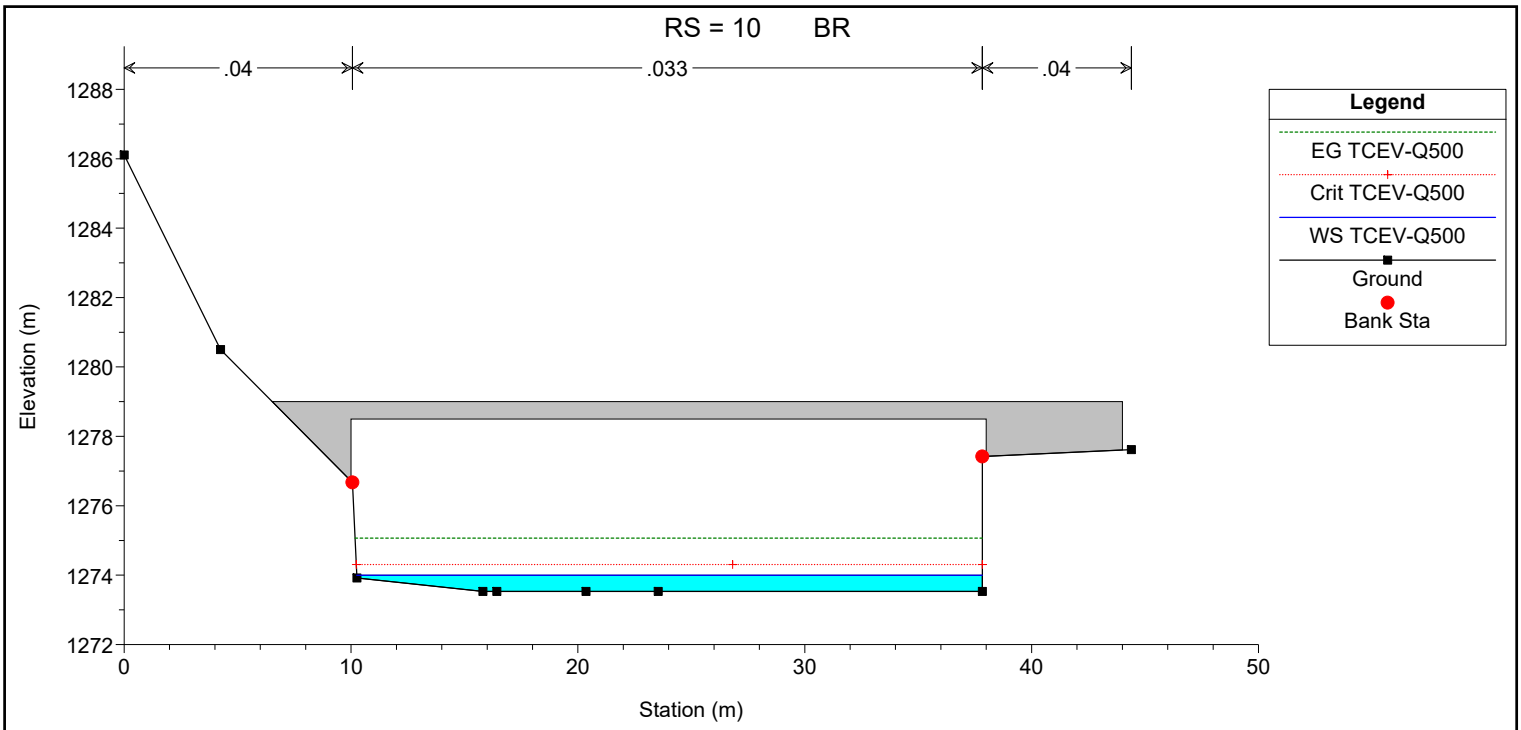

Bavera Monesi
Legend
EG TCEV-Q500
Crit TCEV-Q500
WS TCEV-Q500
Ground
Elevation (m)
1310
1300
1290
1280
1270
1260
1250
0
50
100
150
200
250
300
Main Channel Distance (m)

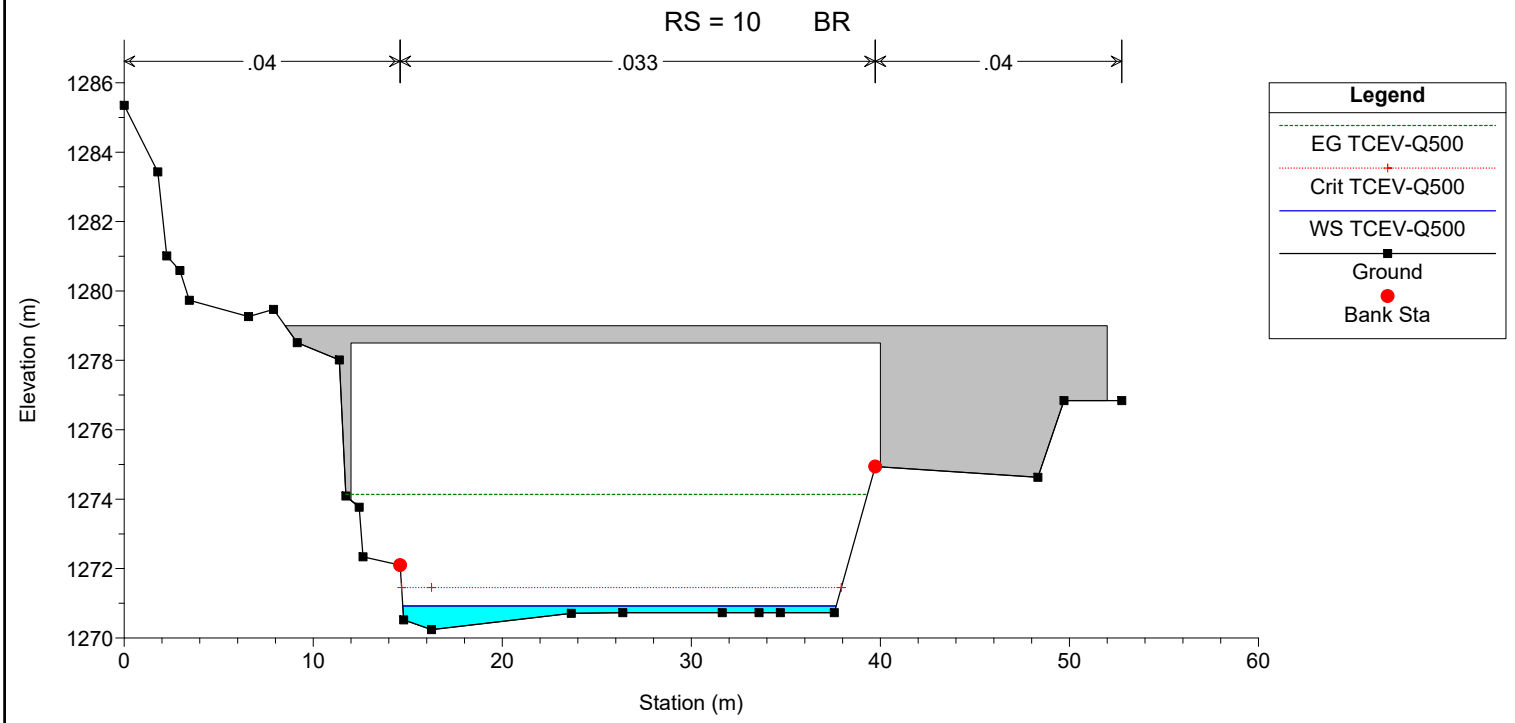

RS = 22 Sez.1
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG TCEV-Q500
Crit TCEV-Q500
WS TCEV-Q500
Ground
Levee
Bank Sta
RS = 21 Sez.2
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG TCEV-Q500
Crit TCEV-Q500
WS TCEV-Q500
Ground
Bank Sta
RS = 20 Sez.3
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG TCEV-Q500
Crit TCEV-Q500
WS TCEV-Q500
Ground
Bank Sta

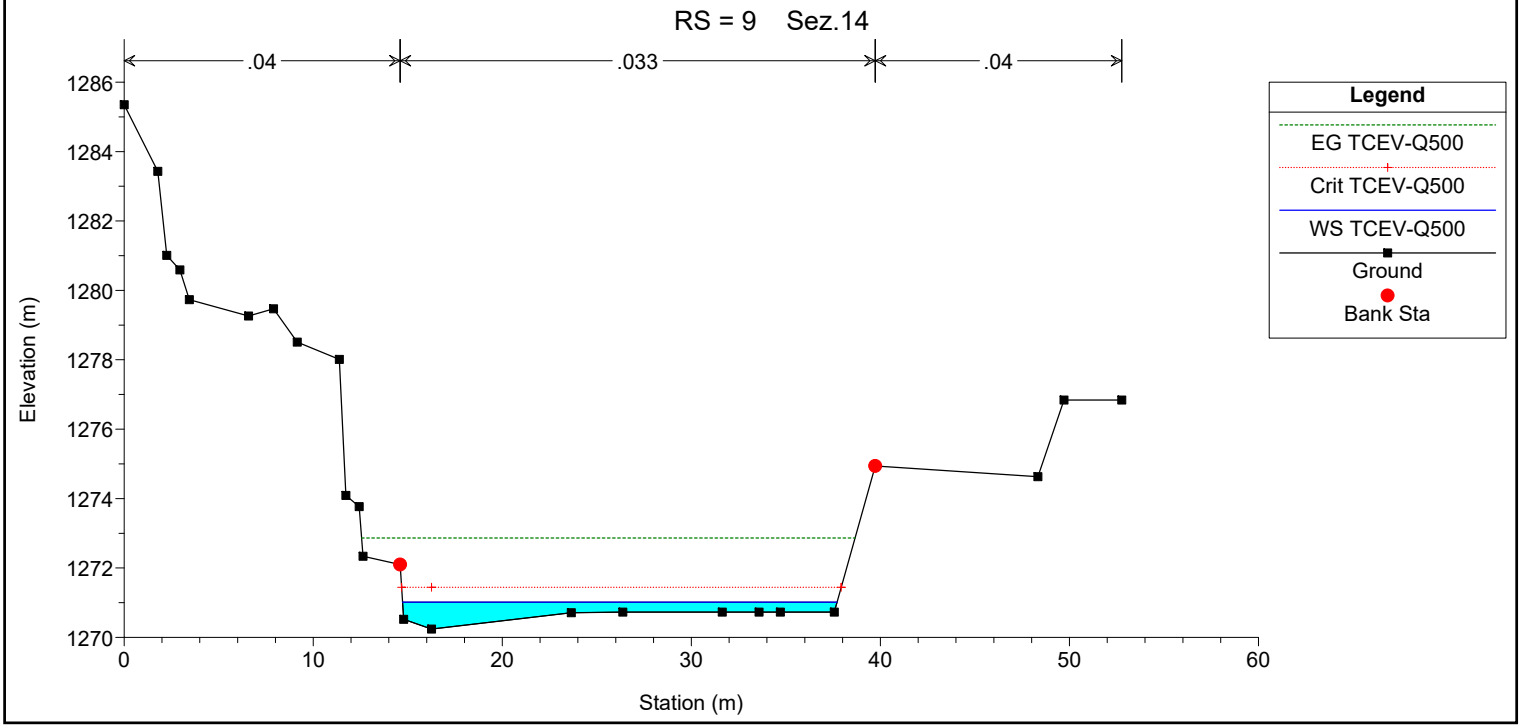

RS = 19 Sez.4
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG TCEV-Q500
Crit TCEV-Q500
WS TCEV-Q500
Ground
Bank Sta
RS = 18 Sez.5
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG TCEV-Q500
Crit TCEV-Q500
WS TCEV-Q500
Ground
Bank Sta
RS = 17 Sez.6
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG TCEV-Q500
Crit TCEV-Q500
WS TCEV-Q500
Ground
Bank Sta

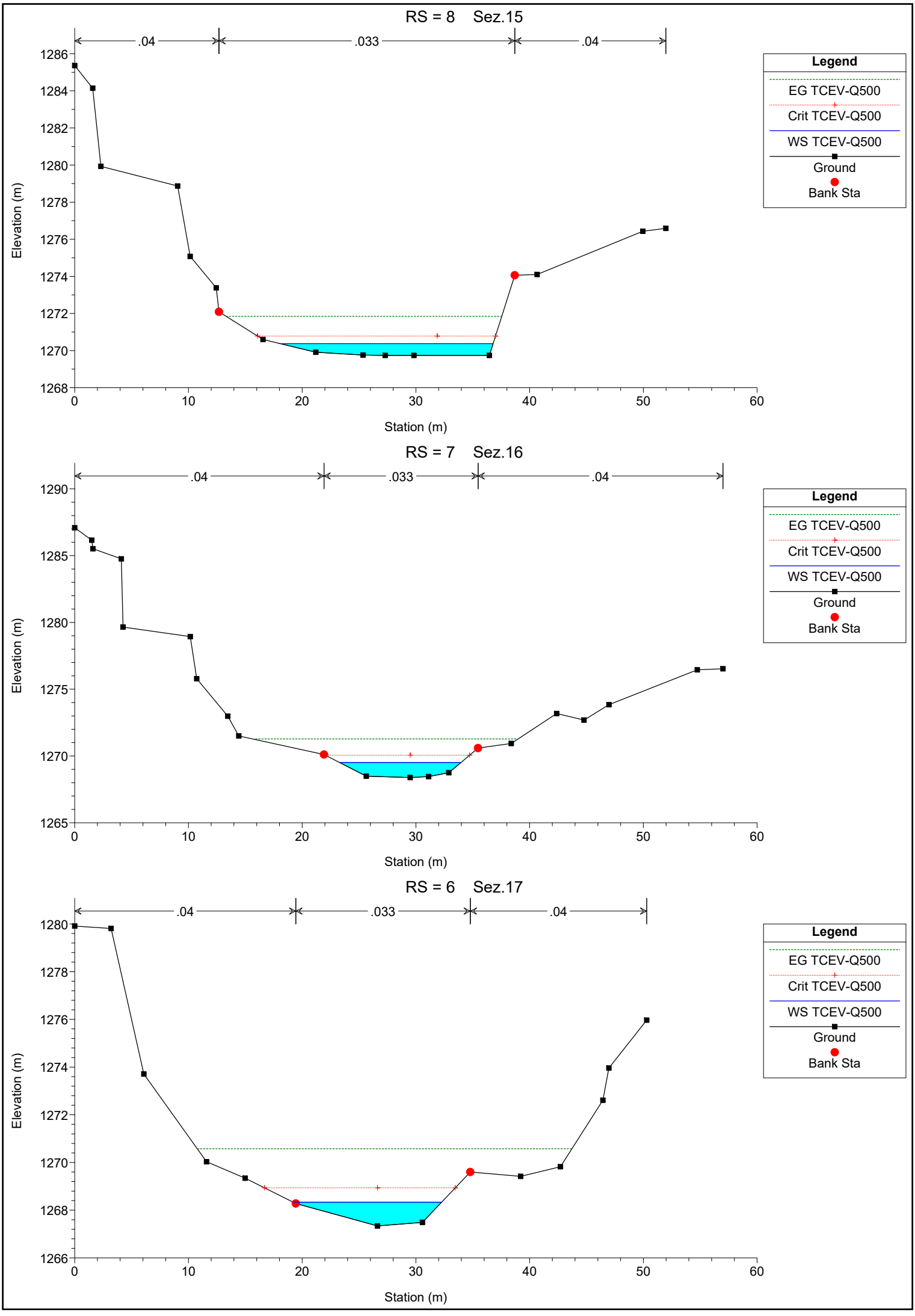

RS = 16 Sez.7
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG TCEV-Q500
Crit TCEV-Q500
WS TCEV-Q500
Ground
Levee
Bank Sta
RS = 15 Sez.8
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG TCEV-Q500
Crit TCEV-Q500
WS TCEV-Q500
Ground
Bank Sta
RS = 14 Sez.9
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG TCEV-Q500
Crit TCEV-Q500
WS TCEV-Q500
Ground
Bank Sta

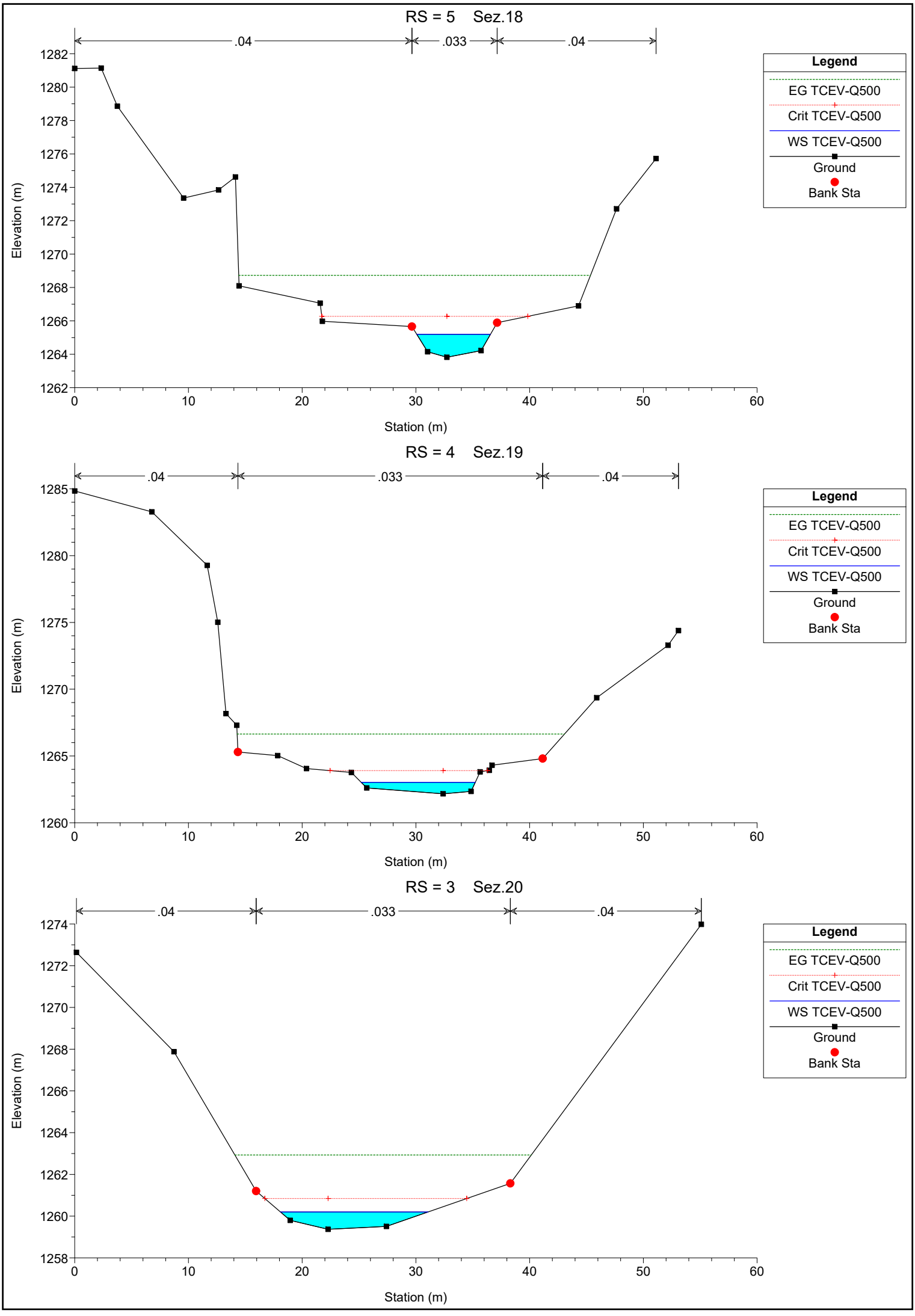

RS = 13 Sez.10
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG TCEV-Q500
Crit TCEV-Q500
WS TCEV-Q500
Ground
Bank Sta
RS = 12 Sez.11
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG TCEV-Q500
Crit TCEV-Q500
WS TCEV-Q500
Ground
Bank Sta
RS = 11 Sez.12
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG TCEV-Q500
Crit TCEV-Q500
WS TCEV-Q500
Ground
Bank Sta

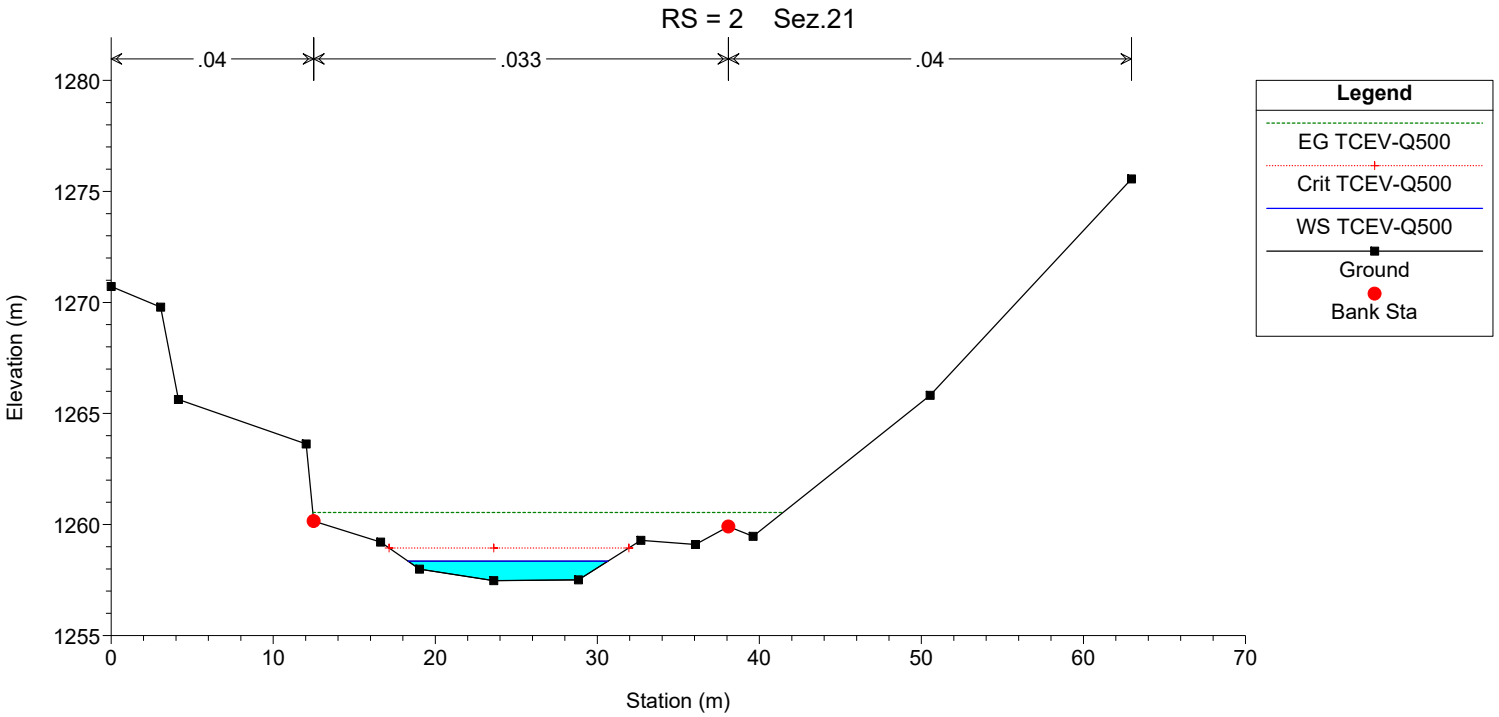

RS = 10 BR
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG TCEV-Q500
Crit TCEV-Q500
WS TCEV-Q500
Ground
Bank Sta

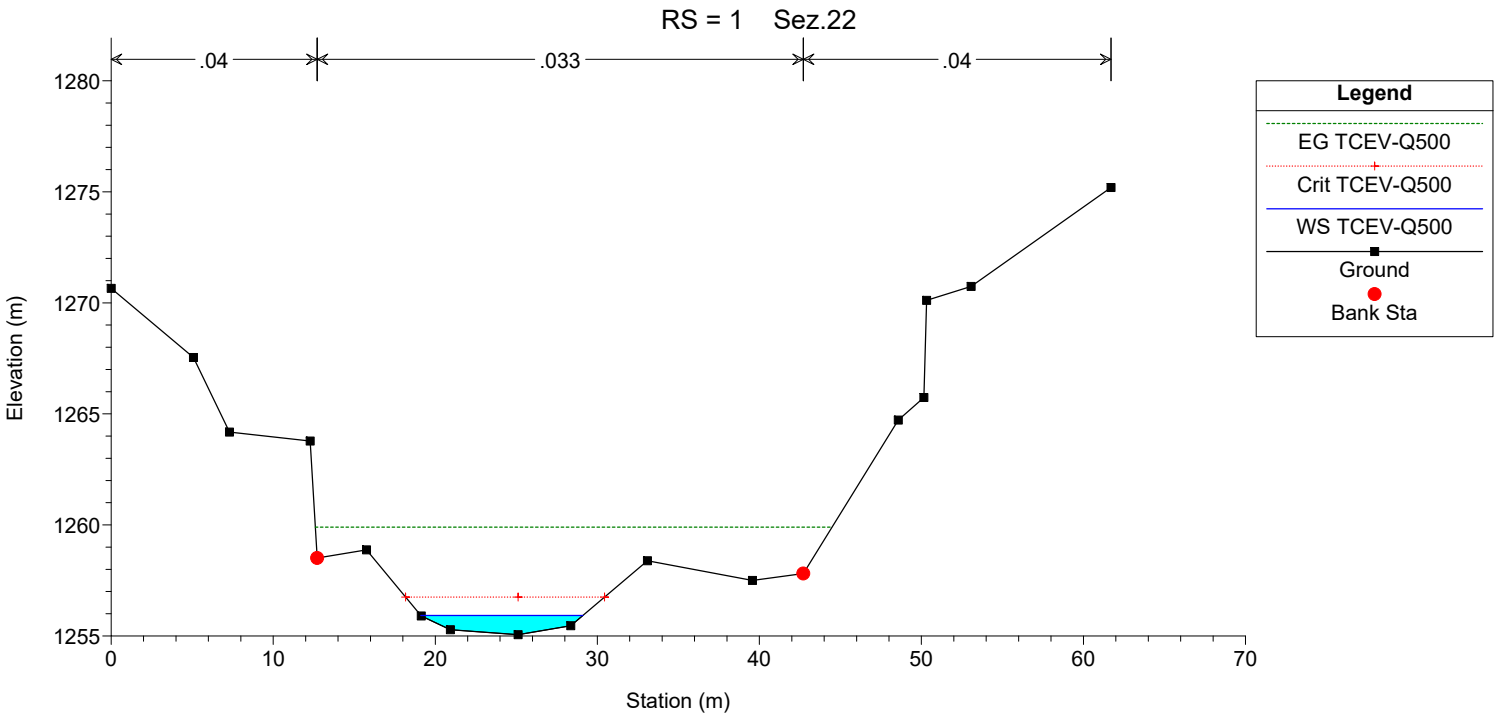

RS = 10 BR
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG TCEV-Q500
Crit TCEV-Q500
WS TCEV-Q500
Ground
Bank Sta


RS = 9 Sez.14
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG TCEV-Q500
Crit TCEV-Q500
WS TCEV-Q500
Ground
Bank Sta

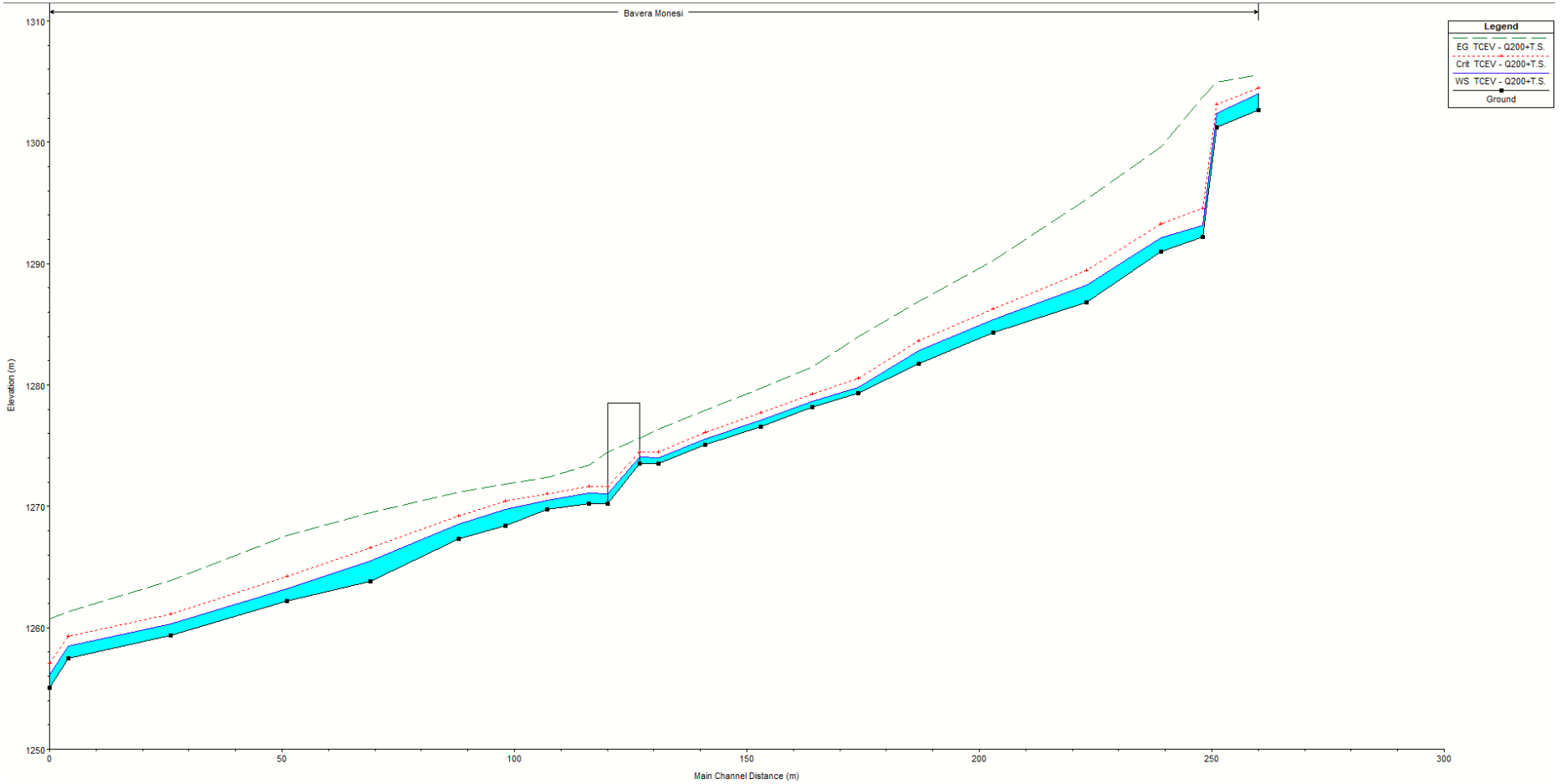

RS = 8 Sez.15
.04
.033
.04
Legend
EG TCEV-Q500
Crit TCEV-Q500
WS TCEV-Q500
Ground
Bank Sta
Elevation (m)
Station (m)
RS = 7 Sez.16
.04
.033
.04
Legend
EG TCEV-Q500
Crit TCEV-Q500
WS TCEV-Q500
Ground
Bank Sta
Elevation (m)
Station (m)
RS = 6 Sez.17
.04
.033
.04
Legend
EG TCEV-Q500
Crit TCEV-Q500
WS TCEV-Q500
Ground
Bank Sta
Elevation (m)
Station (m)

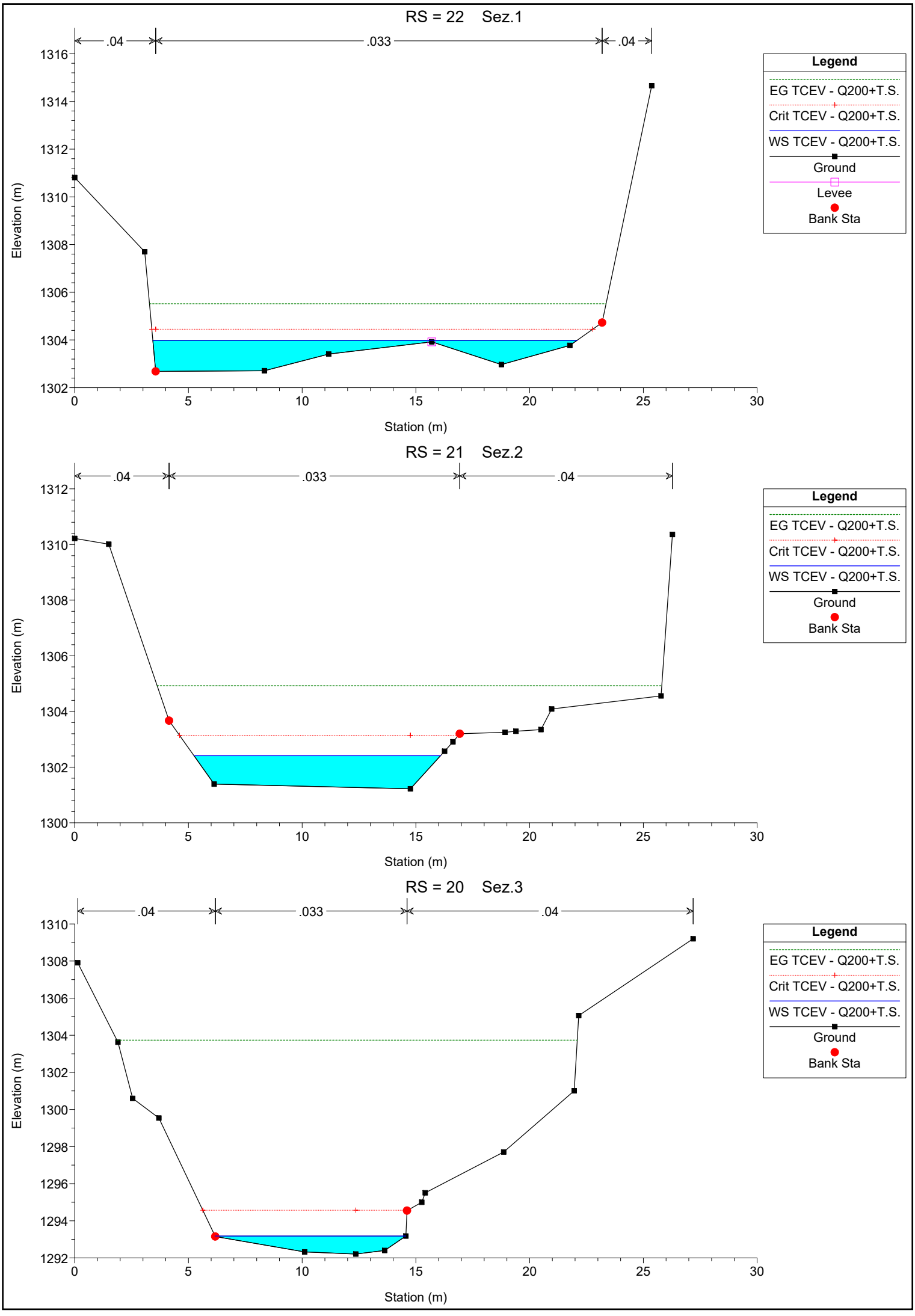

RS = 5 Sez.18
.04
.033
.04
Legend
EG TCEV-Q500
Crit TCEV-Q500
WS TCEV-Q500
Ground
Bank Sta
Elevation (m)
Station (m)
RS = 4 Sez.19
.04
.033
.04
Legend
EG TCEV-Q500
Crit TCEV-Q500
WS TCEV-Q500
Ground
Bank Sta
Elevation (m)
Station (m)
RS = 3 Sez.20
.04
.033
.04
Legend
EG TCEV-Q500
Crit TCEV-Q500
WS TCEV-Q500
Ground
Bank Sta
Elevation (m)
Station (m)

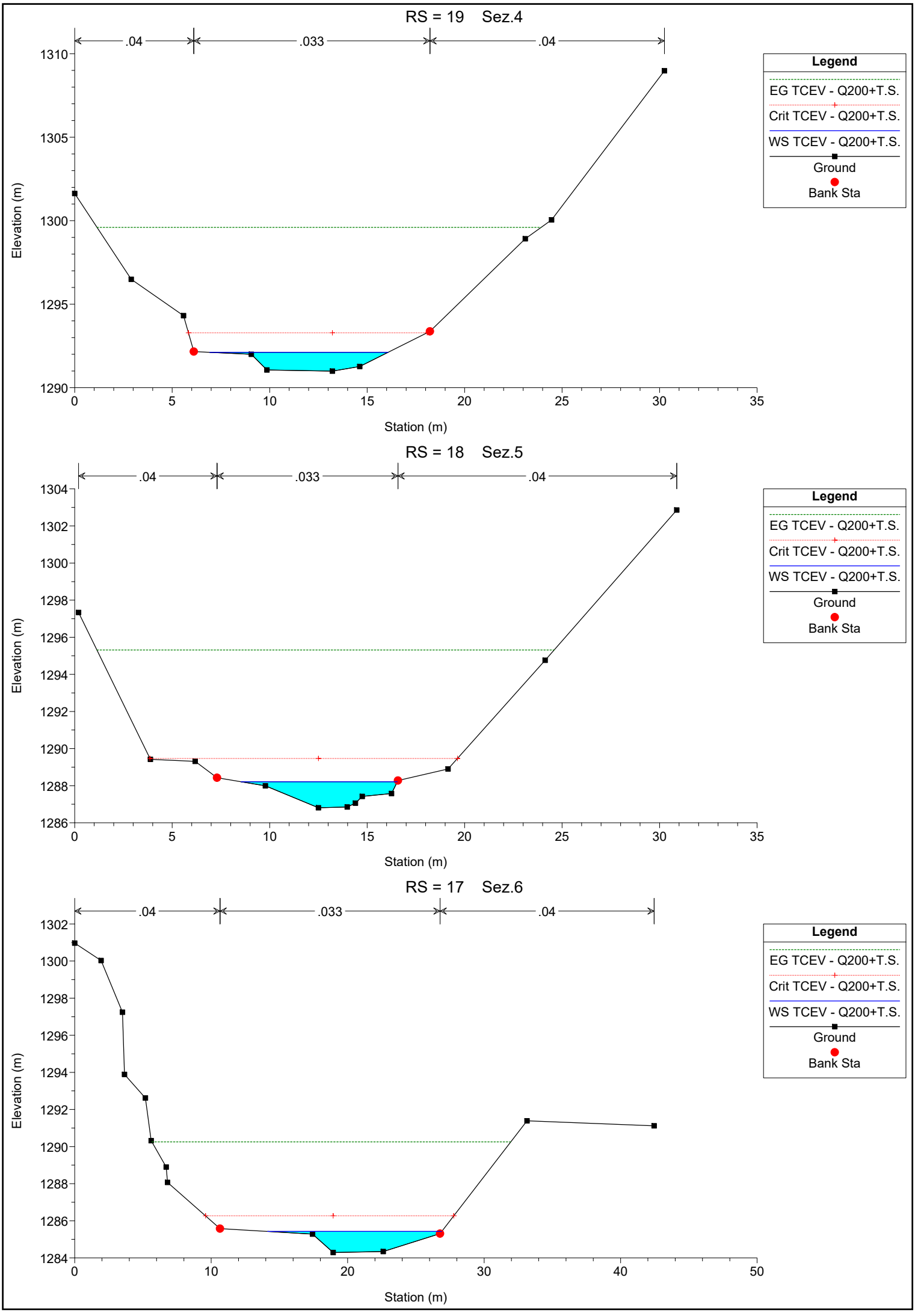

RS = 2 Sez.21
.04
.033
.04
Legend
EG TCEV-Q500
Crit TCEV-Q500
WS TCEV-Q500
Ground
Bank Sta
Elevation (m)
Station (m)
1280
1275
1270
1265
1260
1255
0
10
20
30
40
50
60
70

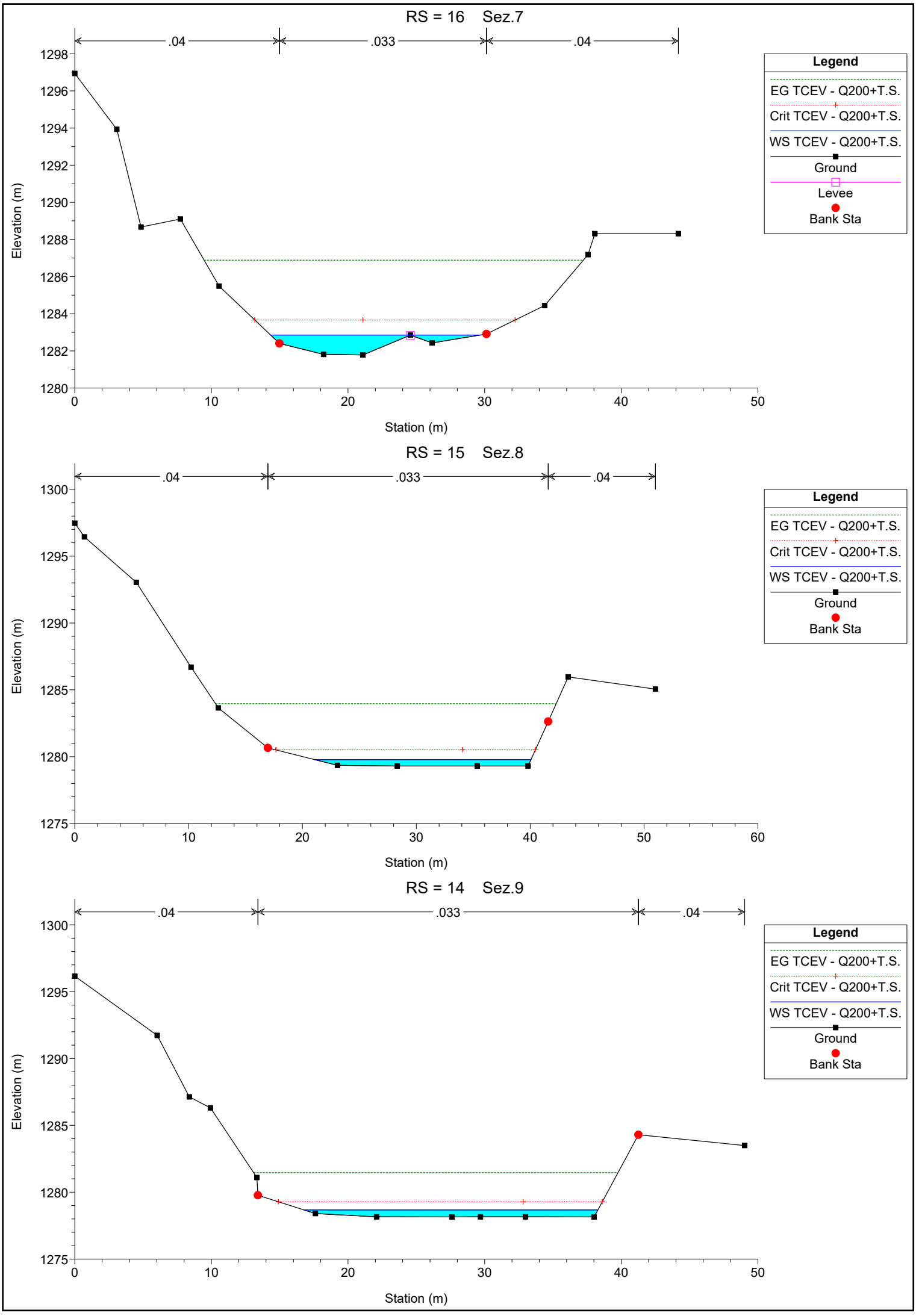

RS = 1 Sez.22
.04
.033
.04
Legend
EG TCEV-Q500
Crit TCEV-Q500
WS TCEV-Q500
Ground
Bank Sta
Elevation (m)
Station (m)
1280
1275
1270
1265
1260
1255
0
10
20
30
40
50
60
70

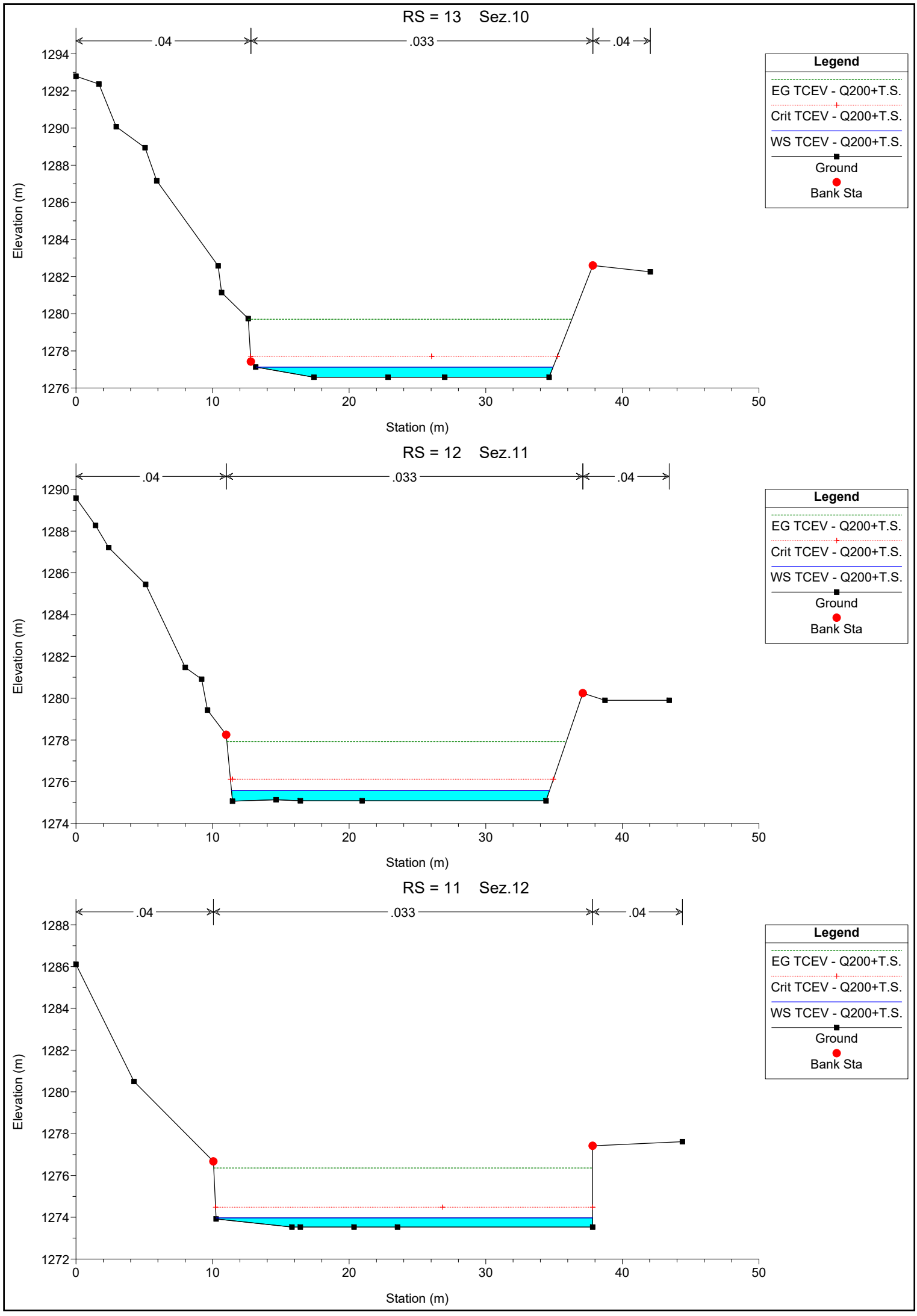
Q200 +TS - Tcev

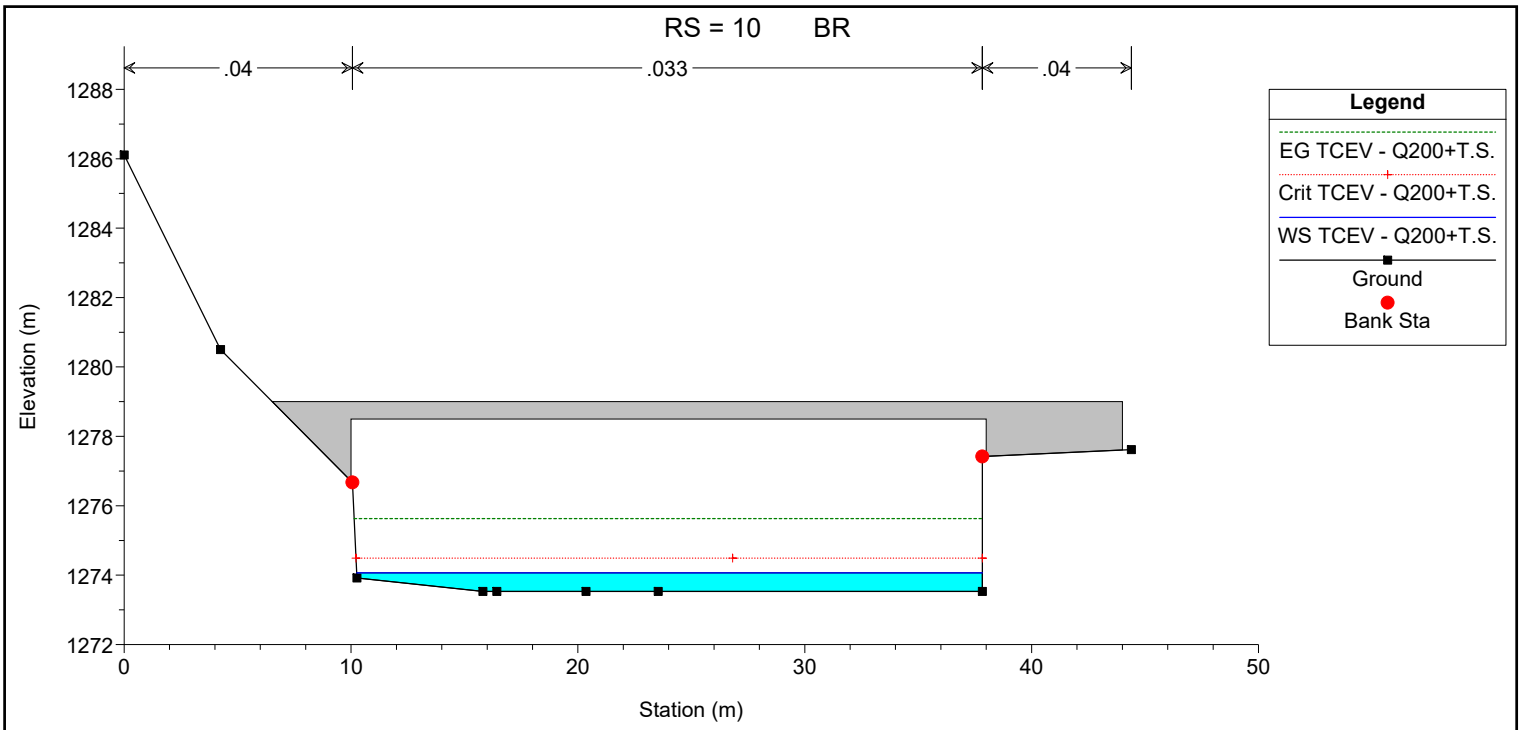

Bavera Monesi
Legend
EG TCEV - Q200+T.S.
Crit TCEV - Q200+T.S.
WS TCEV - Q200+T.S.
Ground
Elevation (m)
1310
1300
1290
1280
1270
1260
1250
0
50
100
150
200
250
300
Main Channel Distance (m)

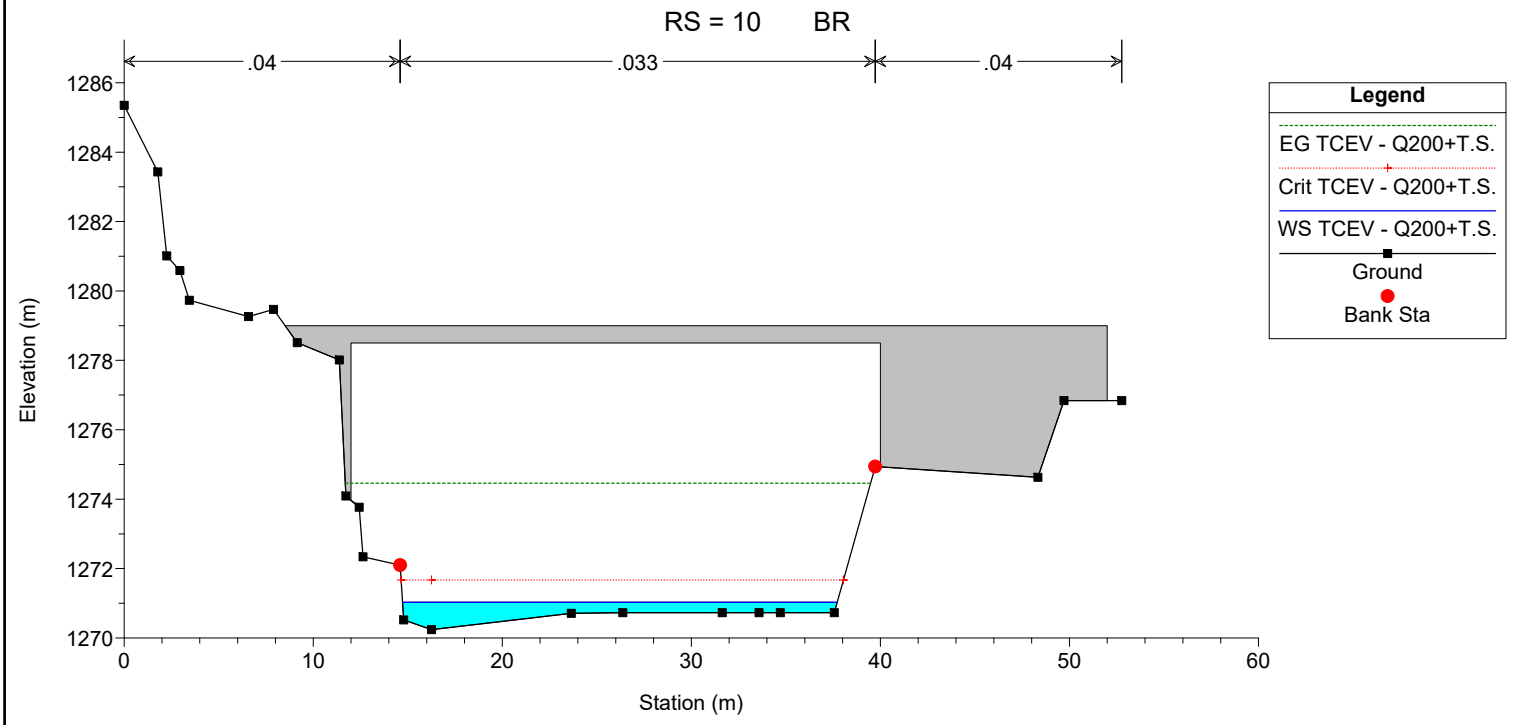

RS = 22 Sez.1
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG TCEV - Q200+T.S.
Crit TCEV - Q200+T.S.
WS TCEV - Q200+T.S.
Ground
Levee
Bank Sta
RS = 21 Sez.2
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG TCEV - Q200+T.S.
Crit TCEV - Q200+T.S.
WS TCEV - Q200+T.S.
Ground
Bank Sta
RS = 20 Sez.3
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG TCEV - Q200+T.S.
Crit TCEV - Q200+T.S.
WS TCEV - Q200+T.S.
Ground
Bank Sta

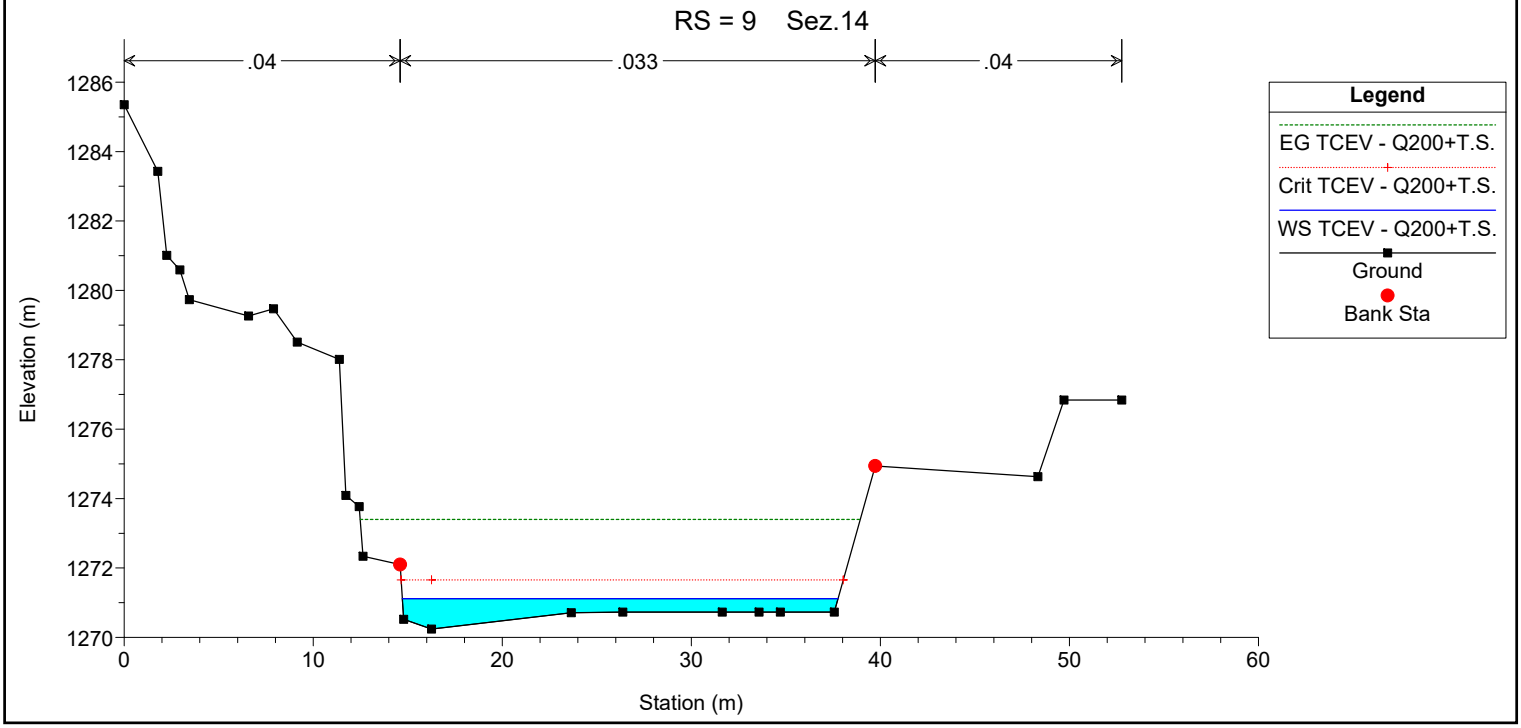

RS = 19 Sez.4
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG TCEV - Q200+T.S.
Crit TCEV - Q200+T.S.
WS TCEV - Q200+T.S.
Ground
Bank Sta
RS = 18 Sez.5
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG TCEV - Q200+T.S.
Crit TCEV - Q200+T.S.
WS TCEV - Q200+T.S.
Ground
Bank Sta
RS = 17 Sez.6
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG TCEV - Q200+T.S.
Crit TCEV - Q200+T.S.
WS TCEV - Q200+T.S.
Ground
Bank Sta

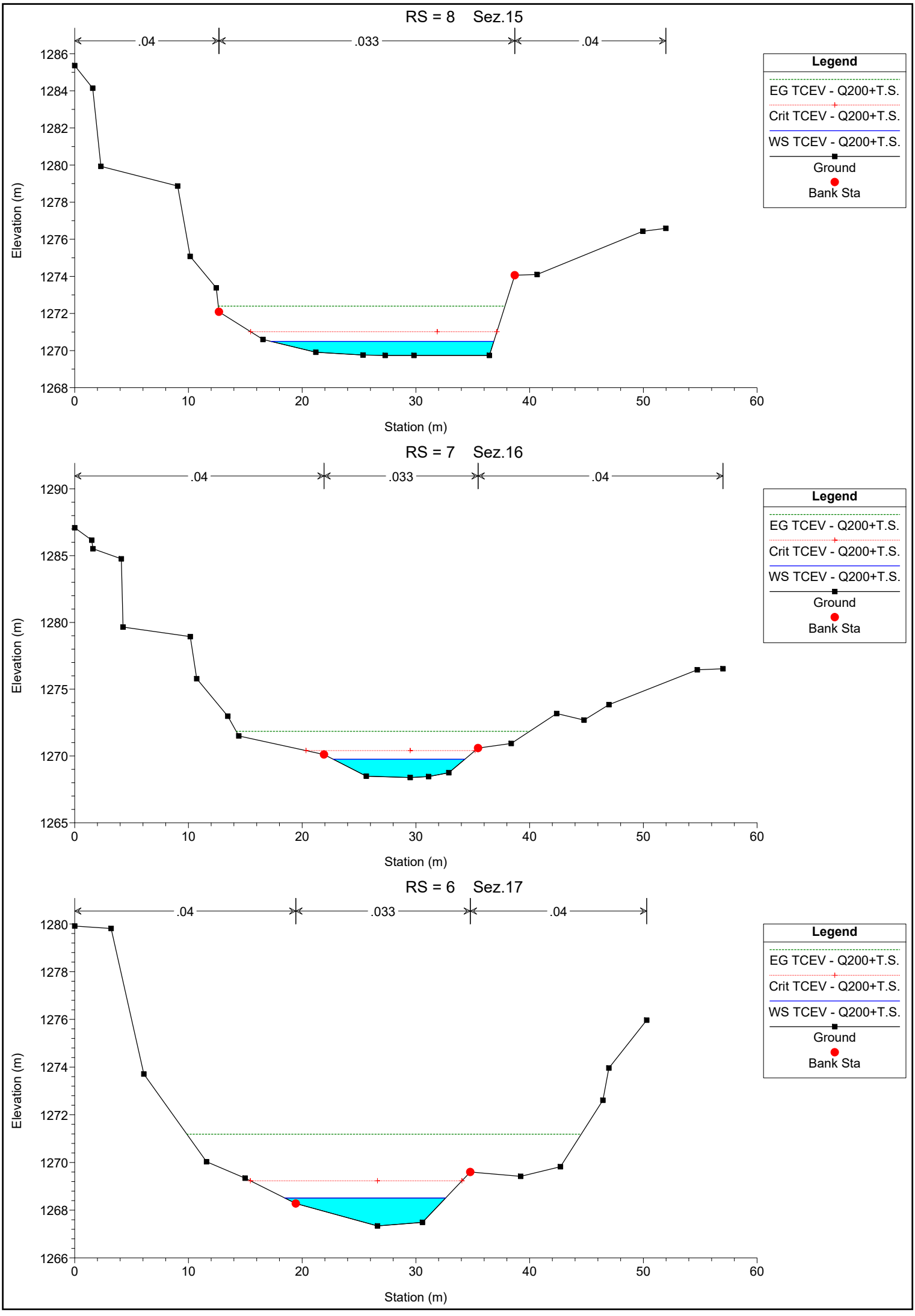

RS = 16 Sez.7
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG TCEV - Q200+T.S.
Crit TCEV - Q200+T.S.
WS TCEV - Q200+T.S.
Ground
Levee
Bank Sta
RS = 15 Sez.8
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG TCEV - Q200+T.S.
Crit TCEV - Q200+T.S.
WS TCEV - Q200+T.S.
Ground
Bank Sta
RS = 14 Sez.9
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG TCEV - Q200+T.S.
Crit TCEV - Q200+T.S.
WS TCEV - Q200+T.S.
Ground
Bank Sta

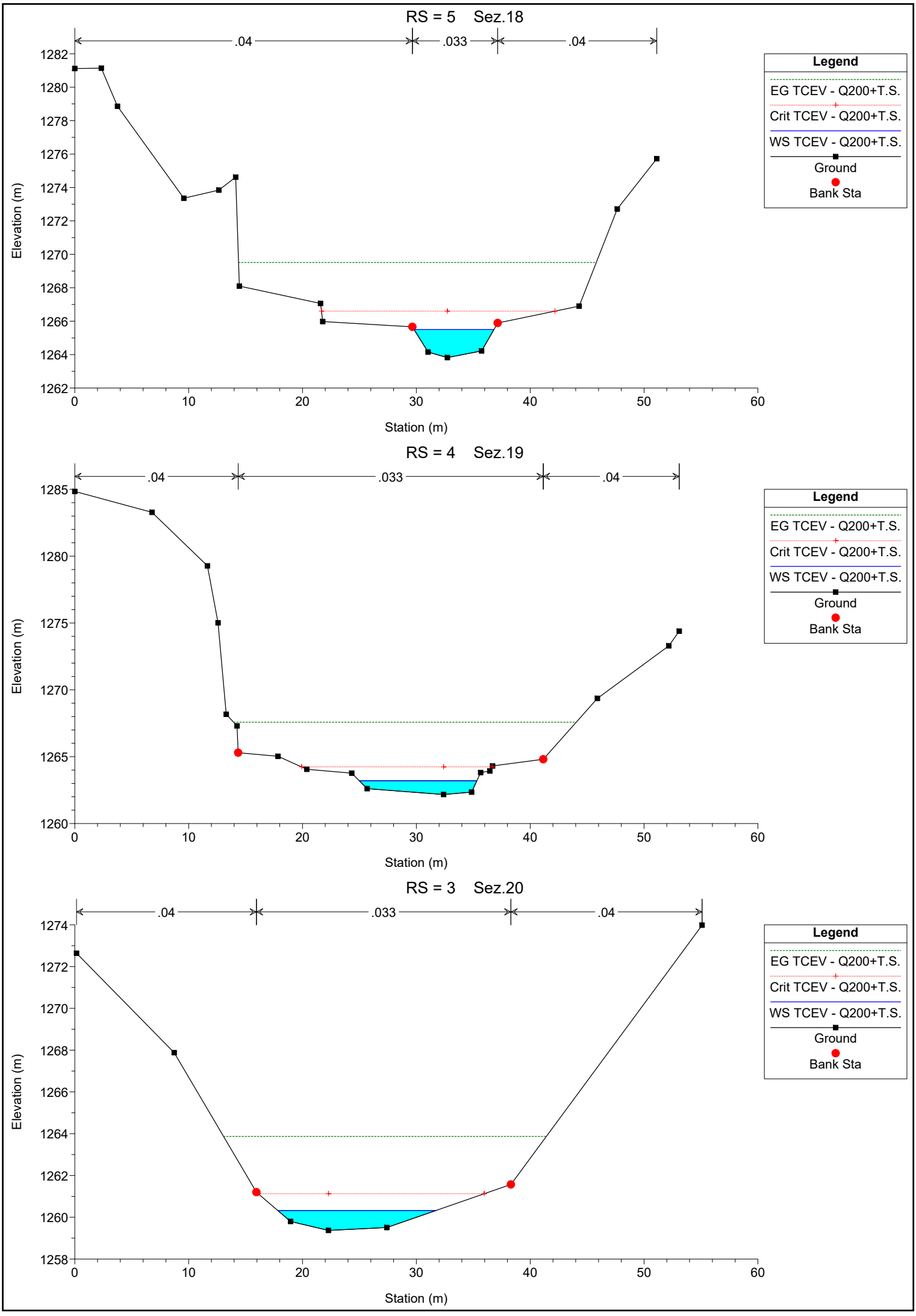

RS = 13 Sez.10
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG TCEV - Q200+T.S.
Crit TCEV - Q200+T.S.
WS TCEV - Q200+T.S.
Ground
Bank Sta
RS = 12 Sez.11
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG TCEV - Q200+T.S.
Crit TCEV - Q200+T.S.
WS TCEV - Q200+T.S.
Ground
Bank Sta
RS = 11 Sez.12
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG TCEV - Q200+T.S.
Crit TCEV - Q200+T.S.
WS TCEV - Q200+T.S.
Ground
Bank Sta

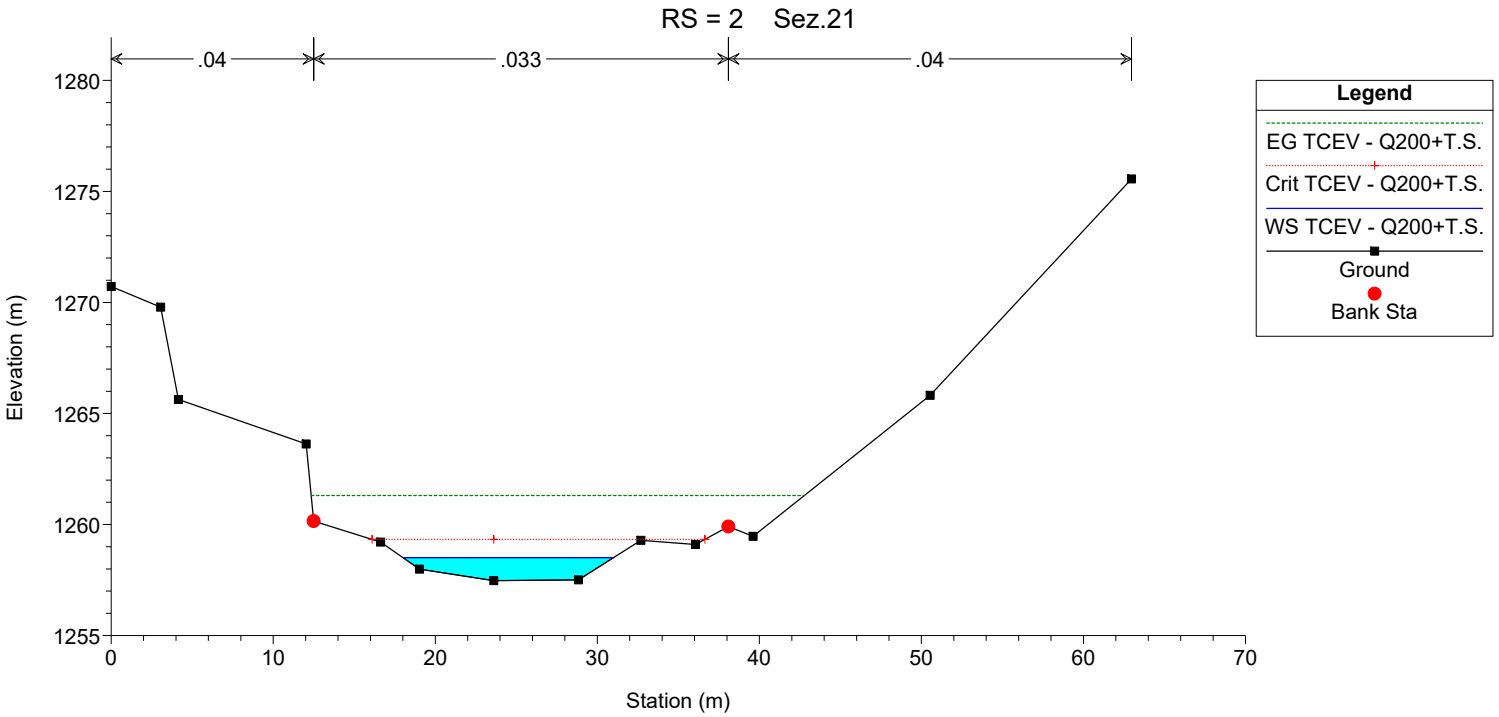

RS = 10 BR
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG TCEV - Q200+T.S.
Crit TCEV - Q200+T.S.
WS TCEV - Q200+T.S.
Ground
Bank Sta

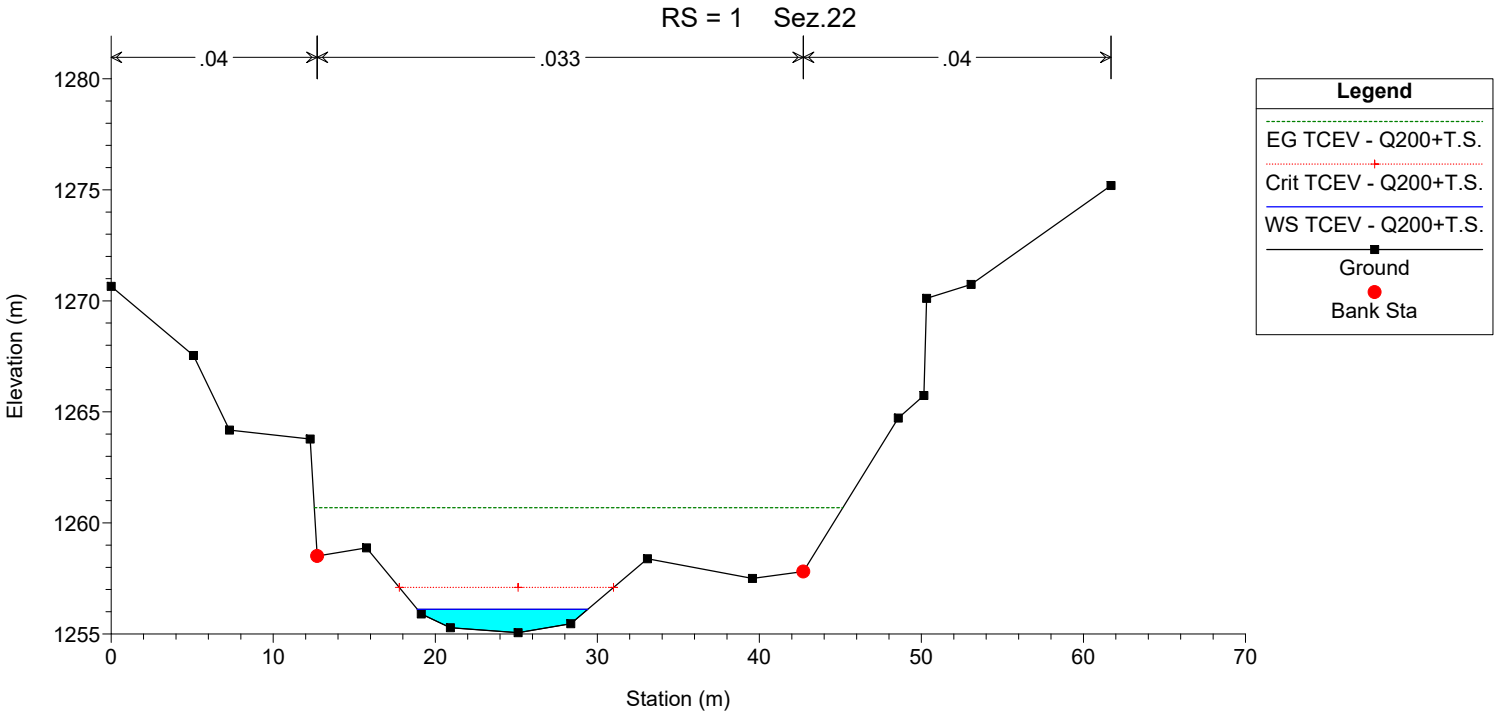

RS = 10 BR
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG TCEV - Q200+T.S.
Crit TCEV - Q200+T.S.
WS TCEV - Q200+T.S.
Ground
Bank Sta


RS = 9 Sez.14
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG TCEV - Q200+T.S.
Crit TCEV - Q200+T.S.
WS TCEV - Q200+T.S.
Ground
Bank Sta


RS = 8 Sez.15
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG TCEV - Q200+T.S.
Crit TCEV - Q200+T.S.
WS TCEV - Q200+T.S.
Ground
Bank Sta
RS = 7 Sez.16
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG TCEV - Q200+T.S.
Crit TCEV - Q200+T.S.
WS TCEV - Q200+T.S.
Ground
Bank Sta
RS = 6 Sez.17
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG TCEV - Q200+T.S.
Crit TCEV - Q200+T.S.
WS TCEV - Q200+T.S.
Ground
Bank Sta


RS = 5 Sez.18
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG TCEV - Q200+T.S.
Crit TCEV - Q200+T.S.
WS TCEV - Q200+T.S.
Ground
Bank Sta
RS = 4 Sez.19
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG TCEV - Q200+T.S.
Crit TCEV - Q200+T.S.
WS TCEV - Q200+T.S.
Ground
Bank Sta
RS = 3 Sez.20
.04
.033
.04
Elevation (m)
Station (m)
Legend
EG TCEV - Q200+T.S.
Crit TCEV - Q200+T.S.
WS TCEV - Q200+T.S.
Ground
Bank Sta


RS = 2 Sez.21
.04
.033
.04
1280
1275
1270
1265
1260
1255
Elevation (m)
0
10
20
30
40
50
60
70
Station (m)
Legend
EG TCEV - Q200+T.S.
Crit TCEV - Q200+T.S.
WS TCEV - Q200+T.S.
Ground
Bank Sta


RS = 1 Sez.22
.04
.033
.04
1280
1275
1270
1265
1260
1255
Elevation (m)
0
10
20
30
40
50
60
70
Station (m)
Legend
EG TCEV - Q200+T.S.
Crit TCEV - Q200+T.S.
WS TCEV - Q200+T.S.
Ground
Bank Sta

HEC-RAS Plan: Plan 01 River: Bavera Reach: Monesi

Reach	River Sta	Profile	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
			(m3/s)	(m)	(m)	(m)	(m)	(m/m)	(m/s)	(m2)	(m)	
Monesi	22	PAI-Q20	33.28	1302.68	1303.65	1303.94	1304.99	0.050094	5.14	6.52	9.82	2.01
Monesi	22	PAI-Q100	41.40	1302.68	1303.77	1304.05	1305.24	0.050057	5.38	7.75	10.88	2.03
Monesi	22	PAI-Q200	44.96	1302.68	1303.81	1304.09	1305.34	0.050093	5.48	8.26	11.30	2.04
Monesi	22	PAI-Q500	49.56	1302.68	1303.87	1304.15	1305.46	0.050087	5.60	8.92	11.81	2.05
Monesi	22	PAI-Q200+T.S.	73.30	1302.68	1303.97	1304.42	1305.47	0.050026	5.42	13.60	18.63	2.02
Monesi	22	TCEV-Q20	32.56	1302.68	1303.64	1303.93	1304.97	0.050088	5.11	6.41	9.72	2.01
Monesi	22	TCEV-Q50	38.24	1302.68	1303.72	1304.00	1305.15	0.050061	5.29	7.28	10.49	2.02
Monesi	22	TCEV-Q100	42.73	1302.68	1303.79	1304.07	1305.28	0.050090	5.42	7.94	11.04	2.04
Monesi	22	TCEV-Q200	47.40	1302.68	1303.84	1304.12	1305.41	0.050059	5.54	8.61	11.58	2.05
Monesi	22	TCEV-Q500	53.89	1302.68	1303.92	1304.20	1305.58	0.050074	5.70	9.52	12.26	2.06
Monesi	22	TCEV - Q200+T.S.	75.74	1302.68	1303.99	1304.45	1305.52	0.050032	5.48	13.88	18.66	2.03
Monesi	21	PAI-Q20	33.28	1301.22	1301.84	1302.40	1304.20	0.133244	6.80	4.89	9.70	3.06
Monesi	21	PAI-Q100	41.40	1301.22	1301.94	1302.57	1304.48	0.116710	7.06	5.87	9.90	2.93
Monesi	21	PAI-Q200	44.96	1301.22	1301.98	1302.63	1304.59	0.111131	7.15	6.28	9.98	2.88
Monesi	21	PAI-Q500	49.56	1301.22	1302.03	1302.71	1304.73	0.104812	7.27	6.82	10.09	2.82
Monesi	21	PAI-Q200+T.S.	73.30	1301.22	1302.39	1303.11	1304.87	0.061240	6.98	10.50	10.79	2.26
Monesi	21	TCEV-Q20	32.56	1301.22	1301.83	1302.39	1304.17	0.135041	6.78	4.80	9.69	3.07
Monesi	21	TCEV-Q50	38.24	1301.22	1301.90	1302.50	1304.37	0.122453	6.96	5.49	9.83	2.97
Monesi	21	TCEV-Q100	42.73	1301.22	1301.95	1302.59	1304.52	0.114537	7.09	6.02	9.93	2.91
Monesi	21	TCEV-Q200	47.40	1301.22	1302.01	1302.67	1304.66	0.107648	7.22	6.57	10.04	2.85
Monesi	21	TCEV-Q500	53.89	1301.22	1302.08	1302.79	1304.85	0.099677	7.36	7.32	10.19	2.77
Monesi	21	TCEV - Q200+T.S.	75.74	1301.22	1302.41	1303.14	1304.93	0.060365	7.03	10.78	10.84	2.25
Monesi	20	PAI-Q20	33.28	1292.21	1292.79	1293.72	1302.65	0.781802	13.91	2.39	6.19	7.14
Monesi	20	PAI-Q100	41.40	1292.21	1292.87	1293.90	1303.18	0.698142	14.22	2.91	6.67	6.87
Monesi	20	PAI-Q200	44.96	1292.21	1292.91	1293.98	1303.16	0.648806	14.18	3.17	6.90	6.68
Monesi	20	PAI-Q500	49.56	1292.21	1292.95	1294.07	1303.33	0.611517	14.27	3.47	7.15	6.54
Monesi	20	PAI-Q200+T.S.	73.30	1292.21	1293.16	1294.53	1303.67	0.459414	14.36	5.11	8.36	5.87
Monesi	20	TCEV-Q20	32.56	1292.21	1292.78	1293.70	1302.61	0.792106	13.88	2.35	6.15	7.18
Monesi	20	TCEV-Q50	38.24	1292.21	1292.84	1293.83	1303.07	0.735586	14.17	2.70	6.48	7.01
Monesi	20	TCEV-Q100	42.73	1292.21	1292.88	1293.93	1303.22	0.683149	14.24	3.00	6.75	6.82
Monesi	20	TCEV-Q200	47.40	1292.21	1292.93	1294.03	1303.11	0.616491	14.13	3.35	7.05	6.54
Monesi	20	TCEV-Q500	53.89	1292.21	1292.99	1294.16	1303.48	0.581724	14.34	3.76	7.38	6.42
Monesi	20	TCEV - Q200+T.S.	75.74	1292.21	1293.18	1294.57	1303.74	0.445075	14.39	5.26	8.39	5.80
Monesi	19	PAI-Q20	33.28	1290.99	1291.66	1292.54	1297.24	0.300236	10.46	3.18	5.95	4.57
Monesi	19	PAI-Q100	41.40	1290.99	1291.75	1292.70	1298.09	0.294614	11.15	3.71	6.17	4.59
Monesi	19	PAI-Q200	44.96	1290.99	1291.79	1292.77	1298.33	0.285460	11.32	3.97	6.28	4.55
Monesi	19	PAI-Q500	49.56	1290.99	1291.84	1292.86	1298.69	0.279355	11.59	4.28	6.40	4.53
Monesi	19	PAI-Q200+T.S.	73.30	1290.99	1292.10	1293.25	1299.53	0.285589	12.08	6.07	8.73	4.63
Monesi	19	TCEV-Q20	32.56	1290.99	1291.66	1292.53	1297.17	0.301060	10.40	3.13	5.93	4.57
Monesi	19	TCEV-Q50	38.24	1290.99	1291.72	1292.64	1297.81	0.299395	10.93	3.50	6.08	4.60
Monesi	19	TCEV-Q100	42.73	1290.99	1291.77	1292.73	1298.20	0.292481	11.24	3.80	6.21	4.59
Monesi	19	TCEV-Q200	47.40	1290.99	1291.82	1292.82	1298.47	0.278477	11.42	4.15	6.35	4.51
Monesi	19	TCEV-Q500	53.89	1290.99	1291.89	1292.93	1299.00	0.273583	11.81	4.56	6.52	4.51
Monesi	19	TCEV - Q200+T.S.	75.74	1290.99	1292.12	1293.29	1299.60	0.292698	12.12	6.25	9.14	4.68
Monesi	18	PAI-Q20	33.28	1286.81	1287.77	1288.64	1292.65	0.251195	9.78	3.40	6.06	4.17
Monesi	18	PAI-Q100	41.40	1286.81	1287.86	1288.82	1293.50	0.254913	10.52	3.93	6.30	4.25
Monesi	18	PAI-Q200	44.96	1286.81	1287.89	1288.91	1293.84	0.255188	10.80	4.16	6.40	4.27
Monesi	18	PAI-Q500	49.56	1286.81	1287.94	1288.99	1294.26	0.255687	11.13	4.45	6.52	4.30
Monesi	18	PAI-Q200+T.S.	73.30	1286.81	1288.19	1289.41	1295.27	0.237444	11.79	6.22	7.86	4.23
Monesi	18	TCEV-Q20	32.56	1286.81	1287.76	1288.62	1292.57	0.250764	9.71	3.35	6.03	4.16
Monesi	18	TCEV-Q50	38.24	1286.81	1287.83	1288.76	1293.18	0.253931	10.25	3.73	6.20	4.22
Monesi	18	TCEV-Q100	42.73	1286.81	1287.87	1288.85	1293.63	0.255343	10.63	4.02	6.33	4.26
Monesi	18	TCEV-Q200	47.40	1286.81	1287.92	1288.95	1294.05	0.254941	10.97	4.32	6.46	4.28
Monesi	18	TCEV-Q500	53.89	1286.81	1287.98	1289.07	1294.63	0.255750	11.42	4.72	6.63	4.32
Monesi	18	TCEV - Q200+T.S.	75.74	1286.81	1288.21	1289.47	1295.31	0.234180	11.80	6.42	8.02	4.21
Monesi	17	PAI-Q20	33.28	1284.29	1285.06	1285.72	1288.17	0.159482	7.81	4.26	7.91	3.40
Monesi	17	PAI-Q100	41.40	1284.29	1285.13	1285.84	1288.80	0.169085	8.48	4.88	8.35	3.54
Monesi	17	PAI-Q200	44.96	1284.29	1285.16	1285.88	1289.07	0.172932	8.75	5.14	8.53	3.60
Monesi	17	PAI-Q500	49.56	1284.29	1285.20	1285.94	1289.40	0.177317	9.07	5.46	8.75	3.66
Monesi	17	PAI-Q200+T.S.	73.30	1284.29	1285.41	1286.24	1290.20	0.202946	9.69	7.57	12.33	3.94
Monesi	17	TCEV-Q20	32.56	1284.29	1285.05	1285.70	1288.11	0.158552	7.75	4.20	7.86	3.38
Monesi	17	TCEV-Q50	38.24	1284.29	1285.10	1285.79	1288.56	0.165564	8.23	4.64	8.18	3.49
Monesi	17	TCEV-Q100	42.73	1284.29	1285.14	1285.86	1288.90	0.170645	8.59	4.98	8.42	3.56
Monesi	17	TCEV-Q200	47.40	1284.29	1285.18	1285.92	1289.24	0.175188	8.92	5.31	8.64	3.63
Monesi	17	TCEV-Q500	53.89	1284.29	1285.23	1286.01	1289.70	0.181216	9.36	5.76	8.94	3.72
Monesi	17	TCEV - Q200+T.S.	75.74	1284.29	1285.43	1286.27	1290.25	0.205164	9.73	7.79	12.76	3.96
Monesi	16	PAI-Q20	33.28	1281.78	1282.52	1283.10	1285.55	0.164605	7.72	4.32	8.68	3.46
Monesi	16	PAI-Q100	41.40	1281.78	1282.60	1283.22	1286.10	0.162785	8.29	5.02	9.05	3.51
Monesi	16	PAI-Q200	44.96	1281.78	1282.63	1283.27	1286.32	0.162517	8.52	5.31	9.19	3.53
Monesi	16	PAI-Q500	49.56	1281.78	1282.67	1283.34	1286.61	0.162208	8.80	5.67	9.38	3.55
Monesi	16	PAI-Q200+T.S.	73.30	1281.78	1282.84	1283.64	1286.83	0.188019	8.87	8.34	15.12	3.77
Monesi	16	TCEV-Q20	32.56	1281.78	1282.51	1283.08	1285.50	0.164739	7.66	4.26	8.65	3.46
Monesi	16	TCEV-Q50	38.24	1281.78	1282.57	1283.17	1285.89	0.163156	8.07	4.75	8.91	3.49
Monesi	16	TCEV-Q100	42.73	1281.78	1282.61	1283.24	1286.18	0.162621	8.37	5.13	9.10	3.51
Monesi	16	TCEV-Q200	47.40	1281.78	1282.65	1283.31	1286.48	0.162290	8.67	5.50	9.29	3.54
Monesi	16	TCEV-Q500	53.89	1281.78	1282.70	1283.39	1286.87	0.162203	9.05	6.00	9.54	3.58
Monesi	16	TCEV - Q200+T.S.	75.74	1281.78	1282.86	1283.66	1286.88	0.186415	8.92	8.58	15.35	3.76
Monesi	15	PAI-Q20	33.28	1279.30	1279.57	1280.02	1282.36	0.382014	7.40	4.50	17.90	4.72
Monesi	15	PAI-Q100	41.40	1279.30	1279.60	1280.13	1282.93	0.387137	8.07	5.13	18.09	4.84

HEC-RAS Plan: Plan 01 River: Bavera Reach: Monesi (Continued)

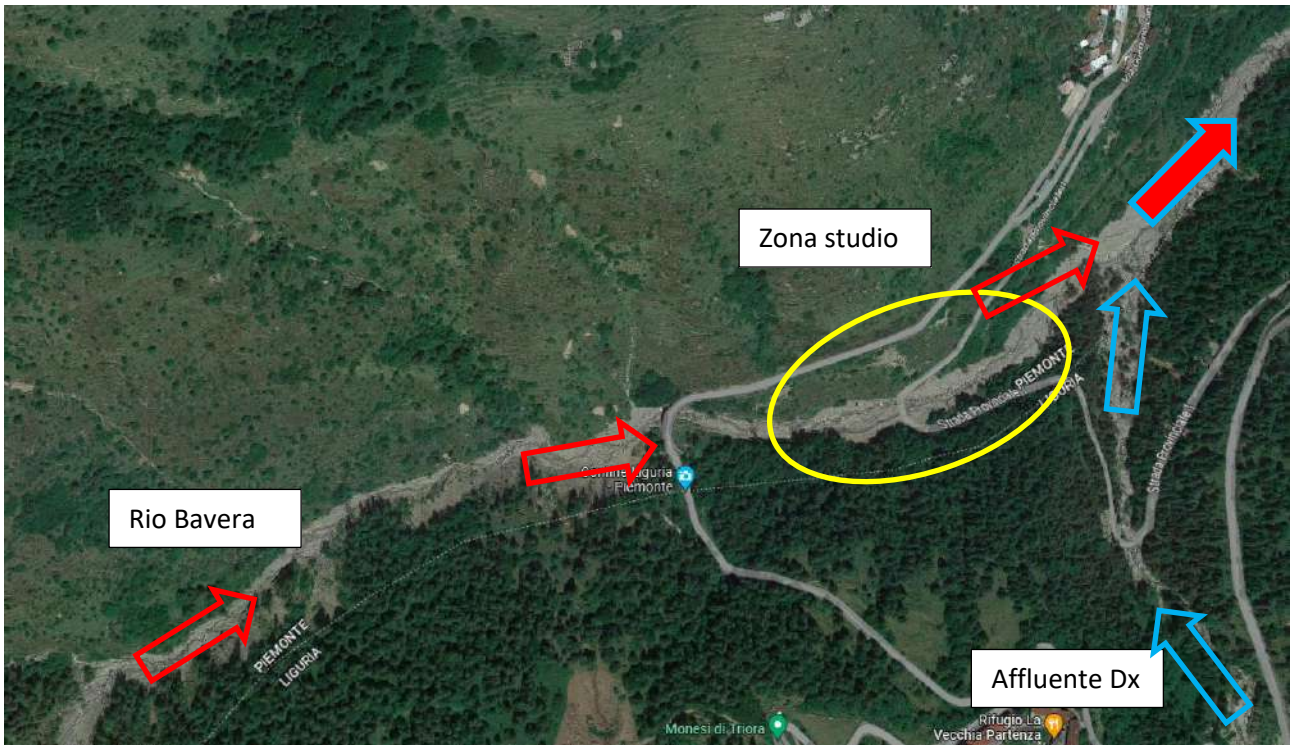
Reach	River Sta	Profile	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
			(m3/s)	(m)	(m)	(m)	(m)	(m/m)	(m/s)	(m2)	(m)	
Monesi	15	PAI-Q200	44.96	1279.30	1279.62	1280.17	1283.16	0.388563	8.34	5.39	18.16	4.89
Monesi	15	PAI-Q500	49.56	1279.30	1279.64	1280.23	1283.46	0.389603	8.66	5.72	18.26	4.94
Monesi	15	PAI-Q200+T.S.	73.30	1279.30	1279.77	1280.48	1283.88	0.276435	8.99	8.16	18.94	4.37
Monesi	15	TCEV-Q20	32.56	1279.30	1279.57	1280.01	1282.31	0.381466	7.34	4.44	17.89	4.71
Monesi	15	TCEV-Q50	38.24	1279.30	1279.59	1280.09	1282.71	0.385764	7.83	4.89	18.02	4.80
Monesi	15	TCEV-Q100	42.73	1279.30	1279.61	1280.15	1283.02	0.387692	8.17	5.23	18.11	4.86
Monesi	15	TCEV-Q200	47.40	1279.30	1279.63	1280.20	1283.32	0.389045	8.51	5.57	18.21	4.91
Monesi	15	TCEV-Q500	53.89	1279.30	1279.65	1280.28	1283.72	0.389646	8.93	6.03	18.34	4.97
Monesi	15	TCEV - Q200+T.S.	75.74	1279.30	1279.78	1280.51	1283.96	0.273095	9.06	8.36	18.99	4.36
Monesi	14	PAI-Q20	33.28	1278.15	1278.50	1278.83	1279.81	0.133037	5.07	6.56	20.90	2.89
Monesi	14	PAI-Q100	41.40	1278.15	1278.54	1278.93	1280.18	0.146455	5.68	7.29	21.03	3.08
Monesi	14	PAI-Q200	44.96	1278.15	1278.55	1278.97	1280.34	0.151745	5.92	7.59	21.08	3.15
Monesi	14	PAI-Q500	49.56	1278.15	1278.57	1279.02	1280.55	0.158039	6.23	7.96	21.14	3.24
Monesi	14	PAI-Q200+T.S.	73.30	1278.15	1278.67	1279.26	1281.38	0.162973	7.29	10.05	21.49	3.40
Monesi	14	TCEV-Q20	32.56	1278.15	1278.50	1278.82	1279.78	0.131750	5.01	6.50	20.89	2.87
Monesi	14	TCEV-Q50	38.24	1278.15	1278.52	1278.89	1280.04	0.141326	5.45	7.02	20.98	3.01
Monesi	14	TCEV-Q100	42.73	1278.15	1278.54	1278.94	1280.24	0.148457	5.77	7.40	21.04	3.11
Monesi	14	TCEV-Q200	47.40	1278.15	1278.56	1278.99	1280.45	0.155198	6.09	7.79	21.11	3.20
Monesi	14	TCEV-Q500	53.89	1278.15	1278.59	1279.06	1280.74	0.163838	6.50	8.29	21.20	3.32
Monesi	14	TCEV - Q200+T.S.	75.74	1278.15	1278.68	1279.28	1281.46	0.163755	7.39	10.25	21.52	3.42
Monesi	13	PAI-Q20	33.28	1276.58	1276.92	1277.26	1278.31	0.138749	5.22	6.38	20.05	2.96
Monesi	13	PAI-Q100	41.40	1276.58	1276.97	1277.35	1278.61	0.140212	5.67	7.30	20.43	3.03
Monesi	13	PAI-Q200	44.96	1276.58	1276.99	1277.39	1278.72	0.139827	5.83	7.71	20.59	3.05
Monesi	13	PAI-Q500	49.56	1276.58	1277.01	1277.45	1278.88	0.140242	6.05	8.20	20.79	3.07
Monesi	13	PAI-Q200+T.S.	73.30	1276.58	1277.12	1277.68	1279.63	0.144820	7.01	10.45	21.67	3.23
Monesi	13	TCEV-Q20	32.56	1276.58	1276.92	1277.25	1278.28	0.138642	5.18	6.29	20.02	2.95
Monesi	13	TCEV-Q50	38.24	1276.58	1276.95	1277.32	1278.49	0.139408	5.50	6.96	20.29	3.00
Monesi	13	TCEV-Q100	42.73	1276.58	1276.98	1277.37	1278.65	0.139679	5.73	7.46	20.49	3.03
Monesi	13	TCEV-Q200	47.40	1276.58	1277.00	1277.42	1278.80	0.140082	5.95	7.97	20.70	3.06
Monesi	13	TCEV-Q500	53.89	1276.58	1277.03	1277.49	1279.02	0.141056	6.24	8.63	20.96	3.11
Monesi	13	TCEV - Q200+T.S.	75.74	1276.58	1277.13	1277.71	1279.70	0.145593	7.11	10.66	21.75	3.24
Monesi	12	PAI-Q20	33.28	1275.07	1275.39	1275.69	1276.61	0.136614	4.89	6.81	23.15	2.88
Monesi	12	PAI-Q100	41.40	1275.07	1275.43	1275.78	1276.88	0.137568	5.34	7.76	23.18	2.95
Monesi	12	PAI-Q200	44.96	1275.07	1275.45	1275.82	1277.00	0.137858	5.52	8.15	23.19	2.97
Monesi	12	PAI-Q500	49.56	1275.07	1275.47	1275.87	1277.15	0.138221	5.74	8.64	23.21	3.00
Monesi	12	PAI-Q200+T.S.	73.30	1275.07	1275.57	1276.10	1277.86	0.139306	6.70	10.94	23.27	3.12
Monesi	12	TCEV-Q20	32.56	1275.07	1275.39	1275.68	1276.58	0.136376	4.84	6.72	23.15	2.87
Monesi	12	TCEV-Q50	38.24	1275.07	1275.42	1275.75	1276.78	0.137180	5.17	7.40	23.17	2.92
Monesi	12	TCEV-Q100	42.73	1275.07	1275.44	1275.80	1276.93	0.137685	5.41	7.90	23.19	2.96
Monesi	12	TCEV-Q200	47.40	1275.07	1275.46	1275.85	1277.08	0.138056	5.63	8.41	23.20	2.99
Monesi	12	TCEV-Q500	53.89	1275.07	1275.49	1275.91	1277.28	0.138522	5.93	9.09	23.22	3.03
Monesi	12	TCEV - Q200+T.S.	75.74	1275.07	1275.58	1276.12	1277.92	0.139129	6.78	11.17	23.28	3.13
Monesi	11	PAI-Q20	33.28	1273.53	1273.81	1274.10	1275.08	0.169968	5.00	6.65	25.96	3.16
Monesi	11	PAI-Q100	41.40	1273.53	1273.84	1274.18	1275.35	0.171483	5.43	7.63	26.49	3.23
Monesi	11	PAI-Q200	44.96	1273.53	1273.86	1274.21	1275.46	0.172257	5.60	8.03	26.71	3.26
Monesi	11	PAI-Q500	49.56	1273.53	1273.88	1274.26	1275.60	0.173587	5.81	8.53	26.98	3.30
Monesi	11	PAI-Q200+T.S.	73.30	1273.53	1273.96	1274.46	1276.29	0.176667	6.76	10.85	27.57	3.44
Monesi	11	TCEV-Q20	32.56	1273.53	1273.80	1274.09	1275.06	0.169695	4.96	6.56	25.92	3.15
Monesi	11	TCEV-Q50	38.24	1273.53	1273.83	1274.15	1275.25	0.170788	5.27	7.26	26.30	3.20
Monesi	11	TCEV-Q100	42.73	1273.53	1273.85	1274.19	1275.39	0.171928	5.49	7.78	26.57	3.24
Monesi	11	TCEV-Q200	47.40	1273.53	1273.87	1274.24	1275.53	0.172974	5.71	8.30	26.85	3.28
Monesi	11	TCEV-Q500	53.89	1273.53	1273.90	1274.30	1275.73	0.174726	6.00	8.99	27.21	3.33
Monesi	11	TCEV - Q200+T.S.	75.74	1273.53	1273.97	1274.48	1276.36	0.176462	6.84	11.07	27.57	3.45
Monesi	10		Bridge									
Monesi	9	PAI-Q20	33.28	1270.24	1270.91	1271.22	1272.22	0.153162	5.08	6.56	22.92	3.03
Monesi	9	PAI-Q100	41.40	1270.24	1270.95	1271.31	1272.50	0.150688	5.50	7.52	22.94	3.07
Monesi	9	PAI-Q200	44.96	1270.24	1270.97	1271.35	1272.61	0.149022	5.67	7.94	22.96	3.08
Monesi	9	PAI-Q500	49.56	1270.24	1270.99	1271.40	1272.74	0.146785	5.86	8.46	22.97	3.08
Monesi	9	PAI-Q200+T.S.	73.30	1270.24	1271.11	1271.64	1273.33	0.131641	6.60	11.10	23.04	3.04
Monesi	9	TCEV-Q20	32.56	1270.24	1270.91	1271.21	1272.20	0.153343	5.03	6.47	22.91	3.03
Monesi	9	TCEV-Q50	38.24	1270.24	1270.94	1271.28	1272.40	0.152191	5.35	7.15	22.93	3.06
Monesi	9	TCEV-Q100	42.73	1270.24	1270.96	1271.33	1272.54	0.149963	5.56	7.68	22.95	3.07
Monesi	9	TCEV-Q200	47.40	1270.24	1270.98	1271.38	1272.68	0.147762	5.77	8.22	22.96	3.08
Monesi	9	TCEV-Q500	53.89	1270.24	1271.02	1271.45	1272.86	0.144275	6.02	8.95	22.98	3.08
Monesi	9	TCEV - Q200+T.S.	75.74	1270.24	1271.12	1271.66	1273.40	0.131557	6.69	11.32	23.05	3.05
Monesi	8	PAI-Q20	33.28	1269.74	1270.23	1270.53	1271.24	0.069322	4.45	7.49	17.68	2.18
Monesi	8	PAI-Q100	41.40	1269.74	1270.29	1270.63	1271.49	0.071760	4.85	8.53	18.10	2.26
Monesi	8	PAI-Q200	44.96	1269.74	1270.31	1270.68	1271.59	0.072604	5.01	8.97	18.28	2.28
Monesi	8	PAI-Q500	49.56	1269.74	1270.34	1270.74	1271.72	0.073517	5.20	9.52	18.49	2.32
Monesi	8	PAI-Q200+T.S.	73.30	1269.74	1270.48	1270.99	1272.33	0.076611	6.02	12.17	19.51	2.43
Monesi	8	TCEV-Q20	32.56	1269.74	1270.23	1270.52	1271.22	0.069237	4.41	7.38	17.63	2.18
Monesi	8	TCEV-Q50	38.24	1269.74	1270.27	1270.60	1271.40	0.070998	4.70	8.13	17.94	2.23
Monesi	8	TCEV-Q100	42.73	1269.74	1270.30	1270.65	1271.53	0.072033	4.91	8.70	18.17	2.27
Monesi	8	TCEV-Q200	47.40	1269.74	1270.33	1270.71	1271.66	0.073118	5.12	9.27	18.39	2.30
Monesi	8	TCEV-Q500	53.89	1269.74	1270.37	1270.78	1271.84	0.074257	5.37	10.03	18.69	2.34
Monesi	8	TCEV - Q200+T.S.	75.74	1269.74	1270.50	1271.02	1272.39	0.077112	6.10	12.41	19.60	2.45
Monesi	7	PAI-Q20	33.28	1268.39	1269.24	1269.67	1270.64	0.055126	5.25	6.34	9.66	2.07
Monesi	7	PAI-Q100	41.40	1268.39	1269.36	1269.83	1270.91	0.051876	5.52	7.50	10.10	2.04

HEC-RAS Plan: Plan 01 River: Bavera Reach: Monesi (Continued)

Reach	River Sta	Profile	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
			(m3/s)	(m)	(m)	(m)	(m)	(m/m)	(m/s)	(m2)	(m)	
Monesi	7	PAI-Q200	44.96	1268.39	1269.40	1269.90	1271.02	0.050953	5.63	7.99	10.27	2.04
Monesi	7	PAI-Q500	49.56	1268.39	1269.46	1269.98	1271.16	0.049810	5.76	8.61	10.49	2.03
Monesi	7	PAI-Q200+T.S.	73.30	1268.39	1269.73	1270.37	1271.78	0.046493	6.34	11.56	11.48	2.02
Monesi	7	TCEV-Q20	32.56	1268.39	1269.23	1269.65	1270.62	0.055477	5.22	6.23	9.62	2.07
Monesi	7	TCEV-Q50	38.24	1268.39	1269.31	1269.77	1270.81	0.052924	5.42	7.06	9.93	2.05
Monesi	7	TCEV-Q100	42.73	1268.39	1269.38	1269.86	1270.95	0.051355	5.55	7.69	10.17	2.04
Monesi	7	TCEV-Q200	47.40	1268.39	1269.44	1269.94	1271.09	0.050143	5.69	8.33	10.39	2.03
Monesi	7	TCEV-Q500	53.89	1268.39	1269.52	1270.06	1271.28	0.048942	5.88	9.17	10.69	2.03
Monesi	7	TCEV - Q200+T.S.	75.74	1268.39	1269.76	1270.40	1271.85	0.046394	6.40	11.83	11.57	2.02
Monesi	6	PAI-Q20	33.28	1267.34	1268.13	1268.59	1269.89	0.096679	5.87	5.67	11.30	2.65
Monesi	6	PAI-Q100	41.40	1267.34	1268.22	1268.73	1270.18	0.095219	6.20	6.68	12.14	2.67
Monesi	6	PAI-Q200	44.96	1267.34	1268.26	1268.79	1270.30	0.094828	6.33	7.10	12.47	2.68
Monesi	6	PAI-Q500	49.56	1267.34	1268.30	1268.87	1270.44	0.093159	6.49	7.64	12.82	2.68
Monesi	6	PAI-Q200+T.S.	73.30	1267.34	1268.49	1269.20	1271.12	0.081551	7.19	10.27	14.03	2.61
Monesi	6	TCEV-Q20	32.56	1267.34	1268.13	1268.58	1269.86	0.096664	5.84	5.58	11.23	2.65
Monesi	6	TCEV-Q50	38.24	1267.34	1268.19	1268.68	1270.07	0.095708	6.08	6.29	11.82	2.66
Monesi	6	TCEV-Q100	42.73	1267.34	1268.23	1268.76	1270.22	0.094995	6.25	6.84	12.26	2.67
Monesi	6	TCEV-Q200	47.40	1267.34	1268.28	1268.83	1270.37	0.094320	6.41	7.40	12.69	2.68
Monesi	6	TCEV-Q500	53.89	1267.34	1268.34	1268.94	1270.58	0.090406	6.63	8.13	13.05	2.66
Monesi	6	TCEV - Q200+T.S.	75.74	1267.34	1268.51	1269.23	1271.19	0.080751	7.25	10.53	14.15	2.60
Monesi	5	PAI-Q20	33.28	1263.82	1264.85	1265.61	1267.82	0.108968	7.64	4.36	5.88	2.83
Monesi	5	PAI-Q100	41.40	1263.82	1264.99	1265.96	1268.20	0.099882	7.94	5.22	6.13	2.75
Monesi	5	PAI-Q200	44.96	1263.82	1265.05	1266.08	1268.36	0.096648	8.05	5.59	6.23	2.71
Monesi	5	PAI-Q500	49.56	1263.82	1265.13	1266.18	1268.55	0.093272	8.19	6.05	6.37	2.68
Monesi	5	PAI-Q200+T.S.	73.30	1263.82	1265.47	1266.57	1269.43	0.082835	8.82	8.31	6.96	2.58
Monesi	5	TCEV-Q20	32.56	1263.82	1264.84	1265.59	1267.79	0.109885	7.60	4.28	5.85	2.84
Monesi	5	TCEV-Q50	38.24	1263.82	1264.94	1265.78	1268.06	0.103029	7.83	4.89	6.03	2.78
Monesi	5	TCEV-Q100	42.73	1263.82	1265.02	1266.03	1268.26	0.098602	7.98	5.36	6.17	2.73
Monesi	5	TCEV-Q200	47.40	1263.82	1265.09	1266.14	1268.45	0.094568	8.12	5.84	6.31	2.69
Monesi	5	TCEV-Q500	53.89	1263.82	1265.19	1266.27	1268.73	0.090952	8.32	6.47	6.48	2.66
Monesi	5	TCEV - Q200+T.S.	75.74	1263.82	1265.50	1266.60	1269.51	0.081994	8.87	8.54	7.02	2.57
Monesi	4	PAI-Q20	33.28	1262.17	1262.86	1263.43	1265.40	0.151104	7.06	4.71	9.74	3.24
Monesi	4	PAI-Q100	41.40	1262.17	1262.93	1263.60	1265.94	0.153693	7.69	5.38	9.85	3.32
Monesi	4	PAI-Q200	44.96	1262.17	1262.96	1263.67	1266.16	0.153874	7.93	5.67	9.90	3.35
Monesi	4	PAI-Q500	49.56	1262.17	1262.99	1263.75	1266.43	0.153415	8.20	6.04	9.97	3.37
Monesi	4	PAI-Q200+T.S.	73.30	1262.17	1263.18	1264.21	1267.49	0.141282	9.18	7.98	10.29	3.33
Monesi	4	TCEV-Q20	32.56	1262.17	1262.85	1263.42	1265.35	0.150706	7.00	4.65	9.73	3.23
Monesi	4	TCEV-Q50	38.24	1262.17	1262.90	1263.54	1265.74	0.153009	7.46	5.13	9.81	3.30
Monesi	4	TCEV-Q100	42.73	1262.17	1262.94	1263.62	1266.02	0.153761	7.78	5.49	9.87	3.33
Monesi	4	TCEV-Q200	47.40	1262.17	1262.98	1263.71	1266.31	0.153962	8.08	5.86	9.94	3.36
Monesi	4	TCEV-Q500	53.89	1262.17	1263.03	1263.91	1266.64	0.151274	8.42	6.40	10.03	3.36
Monesi	4	TCEV - Q200+T.S.	75.74	1262.17	1263.20	1264.24	1267.58	0.140122	9.27	8.17	10.33	3.33
Monesi	3	PAI-Q20	33.28	1259.37	1260.05	1260.53	1261.93	0.114425	6.08	5.47	11.82	2.86
Monesi	3	PAI-Q100	41.40	1259.37	1260.11	1260.66	1262.34	0.119053	6.61	6.27	12.31	2.96
Monesi	3	PAI-Q200	44.96	1259.37	1260.14	1260.72	1262.51	0.121101	6.82	6.59	12.51	3.00
Monesi	3	PAI-Q500	49.56	1259.37	1260.17	1260.79	1262.73	0.123739	7.08	7.00	12.75	3.05
Monesi	3	PAI-Q200+T.S.	73.30	1259.37	1260.31	1261.10	1263.77	0.135572	8.24	8.90	13.81	3.28
Monesi	3	TCEV-Q20	32.56	1259.37	1260.04	1260.51	1261.90	0.113981	6.03	5.40	11.78	2.85
Monesi	3	TCEV-Q50	38.24	1259.37	1260.09	1260.61	1262.18	0.117204	6.41	5.96	12.13	2.92
Monesi	3	TCEV-Q100	42.73	1259.37	1260.12	1260.68	1262.40	0.119839	6.69	6.39	12.39	2.97
Monesi	3	TCEV-Q200	47.40	1259.37	1260.16	1260.75	1262.63	0.122526	6.96	6.81	12.64	3.03
Monesi	3	TCEV-Q500	53.89	1259.37	1260.20	1260.85	1262.93	0.126193	7.32	7.37	12.96	3.10
Monesi	3	TCEV - Q200+T.S.	75.74	1259.37	1260.33	1261.13	1263.87	0.136632	8.34	9.08	13.91	3.30
Monesi	2	PAI-Q20	33.28	1257.47	1258.17	1258.60	1259.73	0.081641	5.53	6.02	11.57	2.45
Monesi	2	PAI-Q100	41.40	1257.47	1258.24	1258.75	1260.06	0.082027	5.97	6.93	11.89	2.50
Monesi	2	PAI-Q200	44.96	1257.47	1258.28	1258.80	1260.20	0.082183	6.15	7.32	12.03	2.52
Monesi	2	PAI-Q500	49.56	1257.47	1258.31	1258.88	1260.38	0.082590	6.36	7.79	12.19	2.54
Monesi	2	PAI-Q200+T.S.	73.30	1257.47	1258.49	1259.30	1261.22	0.085004	7.32	10.02	12.92	2.65
Monesi	2	TCEV-Q20	32.56	1257.47	1258.16	1258.59	1259.69	0.081599	5.49	5.93	11.54	2.44
Monesi	2	TCEV-Q50	38.24	1257.47	1258.21	1258.69	1259.93	0.081821	5.81	6.59	11.77	2.48
Monesi	2	TCEV-Q100	42.73	1257.47	1258.26	1258.77	1260.12	0.082103	6.04	7.08	11.94	2.51
Monesi	2	TCEV-Q200	47.40	1257.47	1258.30	1258.85	1260.30	0.082401	6.26	7.57	12.11	2.53
Monesi	2	TCEV-Q500	53.89	1257.47	1258.35	1258.95	1260.54	0.082971	6.55	8.22	12.33	2.56
Monesi	2	TCEV - Q200+T.S.	75.74	1257.47	1258.51	1259.33	1261.31	0.085322	7.41	10.23	12.99	2.67
Monesi	1	PAI-Q20	33.28	1255.06	1255.72	1256.37	1259.05	0.210957	8.08	4.12	9.12	3.84
Monesi	1	PAI-Q100	41.40	1255.06	1255.81	1256.53	1259.41	0.190446	8.40	4.93	9.51	3.73
Monesi	1	PAI-Q200	44.96	1255.06	1255.84	1256.60	1259.55	0.183740	8.53	5.27	9.68	3.69
Monesi	1	PAI-Q500	49.56	1255.06	1255.89	1256.68	1259.74	0.176792	8.69	5.70	9.88	3.65
Monesi	1	PAI-Q200+T.S.	73.30	1255.06	1256.09	1257.06	1260.60	0.149849	9.41	7.79	10.46	3.48
Monesi	1	TCEV-Q20	32.56	1255.06	1255.71	1256.35	1259.02	0.213139	8.05	4.04	9.08	3.85
Monesi	1	TCEV-Q50	38.24	1255.06	1255.77	1256.47	1259.27	0.197338	8.28	4.62	9.37	3.77
Monesi	1	TCEV-Q100	42.73	1255.06	1255.82	1256.55	1259.46	0.187820	8.45	5.06	9.58	3.71
Monesi	1	TCEV-Q200	47.40	1255.06	1255.87	1256.64	1259.65	0.179911	8.62	5.50	9.78	3.67
Monesi	1	TCEV-Q500	53.89	1255.06	1255.93	1256.75	1259.90	0.170409	8.83	6.10	10.01	3.61
Monesi	1	TCEV - Q200+T.S.	75.74	1255.06	1256.11	1257.10	1260.69	0.148040	9.47	7.99	10.52	3.47

11 CONSIDERAZIONI FINALI

Lo studio idraulico riguarda esclusivamente il tratto del torrente Bavera in corrispondenza del ponte romanico.



In corrispondenza della zona in esame non sono presenti affluenti in sponda destra.

Il Tanarello (evidenziato con la freccia blu nell'immagine precedente) confluisce a valle della zona esaminata, pertanto non è stato valutato.

La zona in esame non ricada all'interno delle aree Pi3, Pi2 e Pi1 relative alla DGR 428/2021.

A seguito dei modelli riportati si riscontra che:

- Il franco idraulico del ponte in progetto rispetta il valore della normativa NTC 2018 e il R.R. 14/07/2011 della Regione Liguria
- La costruzione di un nuovo ponte con l'impalcato posto ad una quota maggiore senza la presenza di pile in alveo migliora considerevolmente l'ufficiosità idraulica attuale (ponte ammalorato e ostruito) e a quella precedente (ponte a due campate)