

COMMITTENTE:



DIREZIONE LAVORI:



APPALTATORE:



PROGETTAZIONE:

MANDATARIA:

MANDANTI:



IL DIRETTORE DELLA PROGETTAZIONE:

Ing. L. LACOPO

Responsabile integrazione fra le varie prestazioni specialistiche

PROGETTO ESECUTIVO

**ITINERARIO NAPOLI – BARI
RADDOPPIO TRATTA CANCELLO - BENEVENTO
II LOTTO FUNZIONALE FRASSO TELESINO – VITULANO
2° SUBLOTTO TELESE – SAN LORENZO**

INFRASTRUTTURA DI LINEA

TR16

Muri di Sostegno in SX e DX dal km 37+311 a pk 37+616

Allegato di calcolo Muro tipo 6

APPALTATORE		SCALA:
IL DIRETTORE TECNICO Ing. M. FERRONI		-

COMMESSA LOTTO FASE ENTE TIPO DOC. OPERA/DISCIPLINA PROGR. REV.

IF2R 22 E ZZ CL TR1605 008 A

Rev.	Descrizione	Redatto	Data	Verificato	Data	Approvato	Data	Autorizzato Data
A	EMISSIONE	C. Pinti	22/10/21	G. Coppa	22/10/21	L. Bruzzone	23/10/21	IL PROGETTISTA F. DI IULIO
								 31/10/21

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1 ALLEGATO DI CALCOLO – MURO TIPO 6 HPARAMENTO = 5,0 M: 2

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1 ALLEGATO DI CALCOLO – MURO TIPO 6 $H_{PARAMENTO} = 5,0 M$:

Dati

Materiali

Simbologia adottata

n°	Indice materiale
Descr	Descrizione del materiale
Calcestruzzo armato	
C	Classe di resistenza del cls
A	Classe di resistenza dell'acciaio
γ	Peso specifico, espresso in [kN/mc]
R_{ck}	Resistenza caratteristica a compressione, espressa in [kPa]
E	Modulo elastico, espresso in [kPa]
ν	Coeff. di Poisson
n	Coeff. di omogenizzazione acciaio/cls
ntc	Coeff. di omogenizzazione cls tesoro/compresso

Calcestruzzo armato

n°	Descr	C	A	γ [kN/mc]	R_{ck} [kPa]	E [kPa]	ν	n	ntc
1	C32/40	C32/40	B450C	24.5170	40000	33642648	0.30	15.00	0.50
2	Materiale tiranti	Rck 250	Precomp	24.5170	24517	30073438	0.30	15.00	0.50
4	C28/35	C28/35	Precomp	24.5170	35000	32587986	0.30	15.00	0.50
5	C25/30	C25/30	Precomp	24.5170	30000	31447048	0.30	15.00	0.50

Acciai

Descr	f_{yk} [kPa]	f_{uk} [kPa]
B450C	450000	540000
Precomp	1569089	1863293

Tipologie pali

Simbologia adottata

n°	Indice tipologia palo
Descr	Descrizione tipologia palo
P	Contributo portanza palo (laterale e/o punta)
T	Tecnologia costruttiva (trivellato, infisso o elica continua)
V	Vincolo palo-fondazione: Cerniera o Incastro (libero o impedito di ruotare in testa)
Imat	Indice materiale che lo costituisce
BD	usa metodo di Bustamante-Doix
PN	Portanza nota
Pp, PI	Portanza di punta e laterale caratteristica, espressa in [kN]

n°	Descr	P	T	V	Imat	BD	PN	Pp	PI
1	Tipologia palo	Laterale + Punta	Trivellato	Incastro	5	NO	NO	--	--

Geometria profilo terreno a monte del muro

Simbologia adottata

(Sistema di riferimento con origine in testa al muro, ascissa X positiva verso monte, ordinata Y positiva verso l'alto)

n°	numero ordine del punto
X	ascissa del punto espressa in [m]
Y	ordinata del punto espressa in [m]
A	inclinazione del tratto espressa in [°]

n°	X [m]	Y [m]	A [°]
1	0.00	-2.80	0.000
2	30.00	-2.80	0.000

Inclinazione terreno a valle del muro rispetto all'orizzontale 0.000 [°]

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Falda

Simbologia adottata

(Sistema di riferimento con origine in testa al muro, ascissa X positiva verso monte, ordinata Y positiva verso l'alto)

n°	numero ordine del punto
X	ascissa del punto espressa in [m]
Y	ordinata del punto espressa in [m]
A	inclinazione del tratto espressa in [°]

n°	X [m]	Y [m]	A [°]
1	-5.00	-19.00	0.000
2	-0.70	-19.00	0.000
3	10.00	-19.00	0.000
4	15.00	-19.00	0.000
5	30.00	-19.00	0.000

Geometria muro

Geometria paramento e fondazione

Lunghezza muro 12.00 [m]

Paramento

Materiale C32/40
Altezza paramento 5.00 [m]
Altezza paramento libero 5.00 [m]

Geometria gradoni

Simbologia adottata

n°	indice gradone (a partire dall'alto)
Bs, Bi	Base superiore ed inferiore del gradone, espressa in [m]
H	altezza del gradone, espressa in [m]
Ae, Ai	inclinazione esterna ed interna del gradone espressa in [°]

n°	X [m]	Bs [m]	Bi [m]	H [m]	Ae [°]	Ai [°]
1	0.00	0.70	0.70	3.00	0.00	0.00
2	0.31	1.01	1.01	2.00	0.00	0.00

Fondazione

Materiale C28/35
Lunghezza mensola di valle 1.39 [m]
Lunghezza mensola di monte 3.40 [m]
Lunghezza totale 5.80 [m]
Inclinazione piano di posa 0.00 [°]
Spessore 1.10 [m]
Spessore magrone 0.20 [m]

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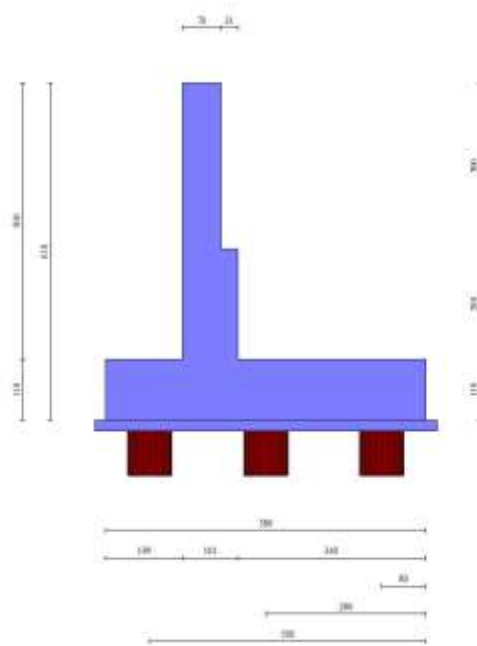


Fig. 1 - Sezione quotata del muro

Descrizione pali di fondazione

Simbologia adottata

n°	numero d'ordine della fila
X	ascissa della fila misurata dallo spigolo di monte della fondazione espressa in [m]
I	interasse tra i pali, espressa in [m]
f	franco laterale (distanza minima dal bordo laterale), espressa in [m]
Np	Numero di pali della fila
D	diametro dei pali della fila espresso in [cm]
L	lunghezza dei pali della fila espressa in [m]
α	inclinazione dei pali della fila rispetto alla verticale espressa in [°]
ALL	allineamento dei pali della fila rispetto al baricentro della fondazione (CENTRATI o SFALSATI)

n°	Tipologia	X [m]	I [m]	f [m]	Np	D [cm]	L [m]	α [°]	ALL
1	Tipologia palo	0.80	2.40	0.80	5	80.00	10.00	0.00	Centrati
2	Tipologia palo	2.90	2.40	0.80	4	80.00	10.00	0.00	Sfalsati
3	Tipologia palo	5.00	2.40	0.80	5	80.00	10.00	0.00	Centrati

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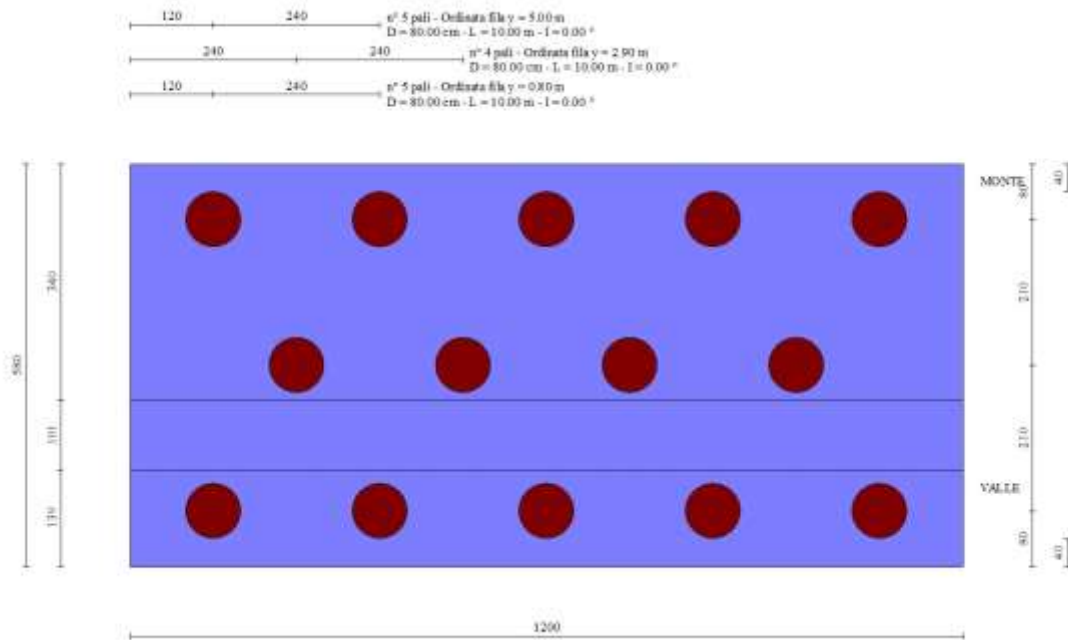


Fig. 2 - Pianta pali

Descrizione terreni

Parametri di resistenza

Simbologia adottata

n°	Indice del terreno
Descr	Descrizione terreno
γ	Peso di volume del terreno espresso in [kN/mc]
γ_s	Peso di volume saturo del terreno espresso in [kN/mc]
ϕ	Angolo d'attrito interno espresso in [°]
δ	Angolo d'attrito terra-muro espresso in [°]
c	Coesione espressa in [kPa]
c_a	Adesione terra-muro espressa in [kPa]
Per calcolo portanza con il metodo di Bustamante-Doix	
Cesp	Coeff. di espansione laterale (solo per il metodo di Bustamante-Doix)
τ_l	Tensione tangenziale limite, espressa in [kPa]

n°	Descr	γ [kN/mc]	γ_{sat} [kN/mc]	ϕ [°]	δ [°]	c [kPa]	c_a [kPa]	Cesp	τ_l [kPa]	
1	RILEVATO FERROVIARIO	20.0000	20.0000	38.000	0.000	0	0	1.000		0 (CAR)
				38.000	0.000	0	0			0 (MIN)
				38.000	0.000	0	0			0 (MED)
2	bc1	19.5000	19.5000	34.000	34.000	0	0	1.000		0 (CAR)
				34.000	34.000	0	0			0 (MIN)
				34.000	34.000	0	0			0 (MED)
3	bc3	19.5000	19.5000	0.000	0.000	100	100	1.000		0 (CAR)
				0.000	0.000	100	100			0 (MIN)
				0.000	0.000	100	100			0 (MED)
4	bn1	20.0000	20.0000	34.000	34.000	0	0	1.000		0 (CAR)
				34.000	34.000	0	0			0 (MIN)
				34.000	34.000	0	0			0 (MED)
5	MDL1	20.0000	20.0000	38.000	38.000	0	0	1.000		0 (CAR)
				38.000	38.000	0	0			0 (MIN)
				38.000	38.000	0	0			0 (MED)

Stratigrafia

Simbologia adottata

n°	Indice dello strato
----	---------------------

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H Spessore dello strato espresso in [m]
 α Inclinazione espressa in [°]
 Terreno Terreno dello strato
 Kwn, Kwt Costante di Winkler normale e tangenziale alla superficie espressa in Kg/cm²/cm
 Per calcolo pali (solo se presenti)
 Kw Costante di Winkler orizzontale espressa in Kg/cm²/cm
 Ks Coefficiente di spinta
 Cesp Coefficiente di espansione laterale (per tutti i metodi tranne il metodo di Bustamante-Doix)

Per calcolo della spinta con coeff. di spinta definiti (usati solo se attiva l'opzione 'Usa coeff. di spinta da strato')
 Kststa, Kstsis Coeff. di spinta statico e sismico

n°	H [m]	α [°]	Terreno	Kwn [Kg/cm ²]	Kwt [Kg/cm ²]	Kw [Kg/cm ²]	Ks	Cesp	Kststa	Kstsis
1	6.10	0.000	RILEVATO FERROVIARIO	0.000	0.000	1.000	0.000	1.000	---	---
2	4.00	0.000	bc1	0.000	0.000	10.000	0.400	1.000	---	---
3	23.00	0.000	bn1	0.000	0.000	8.000	0.400	1.000	---	---

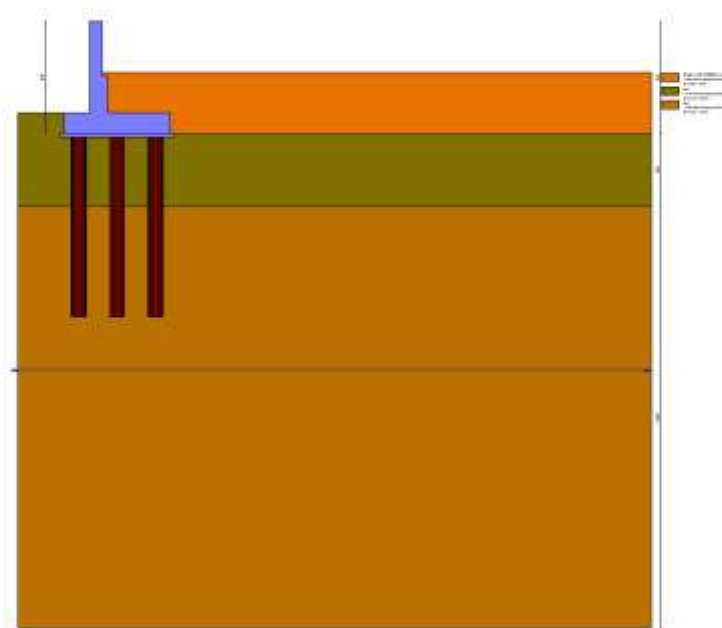


Fig. 3 - Stratigrafia

Condizioni di carico

Simbologia adottata

Carichi verticali positivi verso il basso.
 Carichi orizzontali positivi verso sinistra.
 Momento positivo senso antiorario.
 X Ascissa del punto di applicazione del carico concentrato espressa in [m]
 Fx Componente orizzontale del carico concentrato espressa in [kN]
 Fy Componente verticale del carico concentrato espressa in [kN]
 M Momento espresso in [kNm]
 Xi Ascissa del punto iniziale del carico ripartito espressa in [m]
 Xf Ascissa del punto finale del carico ripartito espressa in [m]
 Qi Intensità del carico per x=Xi espressa in [kN]
 Qf Intensità del carico per x=Xf espressa in [kN]

Condizione n° 1 (PESO BA) - PERMANENTE

Carichi sul muro

n°	Tipo	Dest	X; Y [m]	Fx [kN]	Fy [kN]	M [kNm]	Xi [m]	Xf [m]	Qi [kN]	Qf [kN]
1	Concentrato	Paramento	-0.35; 0.00	0.0000	5.0000	0.0000				

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Condizione n° 2 (BALLAST+ARMAMENTO+MARCIPIEDE) - PERMANENTE

Carichi sul terreno

n°	Tipo	X [m]	Fx [kN]	Fy [kN]	M [kNm]	Xi [m]	Xf [m]	Qi [kN]	Qf [kN]
1	Distribuito					0.00	3.35	5.6000	5.6000
2	Distribuito					3.35	8.00	14.4000	14.4000

Condizione n° 3 (LM71) - VARIABILE TF

Coeff. di combinazione $\Psi_0=1.00 - \Psi_1=0.75 - \Psi_2=0.20$

Carichi sul terreno

n°	Tipo	X [m]	Fx [kN]	Fy [kN]	M [kNm]	Xi [m]	Xf [m]	Qi [kN]	Qf [kN]
1	Distribuito					3.35	8.00	57.2900	57.2900

Condizione n° 4 (VENTO+PA) - VARIABILE TF

Coeff. di combinazione $\Psi_0=1.00 - \Psi_1=0.75 - \Psi_2=0.00$

Carichi sul muro

n°	Tipo	Dest	X; Y [m]	Fx [kN]	Fy [kN]	M [kNm]	Xi [m]	Xf [m]	Qi [kN]	Qf [kN]
1	Concentrato	Paramento	-0.35; 0.00	7.0000	0.0000	2.0000				

Condizione n° 5 (INERZIA BARRIERA) - VARIABILE

Coeff. di combinazione $\Psi_0=1.00 - \Psi_1=1.00 - \Psi_2=1.00$

Condizione n° 6 (Condizione 6) - VARIABILE

Coeff. di combinazione $\Psi_0=1.00 - \Psi_1=1.00 - \Psi_2=1.00$

Condizione n° 7 (Condizione 7) - VARIABILE

Coeff. di combinazione $\Psi_0=1.00 - \Psi_1=1.00 - \Psi_2=1.00$

Condizione n° 8 (Condizione 8) - VARIABILE

Coeff. di combinazione $\Psi_0=1.00 - \Psi_1=1.00 - \Psi_2=1.00$

Normativa

Normativa usata: **Norme Tecniche sulle Costruzioni 2008 (D.M. 14.01.2008) - Approccio 2 + Circolare C.S.LL.PP. 02/02/2009 n.617**

Coeff. parziali per le azioni o per l'effetto delle azioni

Carichi	Effetto		Combinazioni statiche				Combinazioni sismiche			
			HYD	UPL	EQU	A1	A2	EQU	A1	A2
Permanenti strutturali	Favorevoli	$\gamma_{G1,fav}$	1.00	0.90	1.00	1.00	1.00	1.00	1.00	1.00
Permanenti strutturali	Sfavorevoli	$\gamma_{G1,sfav}$	1.00	1.10	1.30	1.30	1.00	1.00	1.00	1.00
Permanenti non strutturali	Favorevoli	$\gamma_{G2,fav}$	0.00	0.80	0.80	0.80	0.80	0.00	0.00	0.00
Permanenti non strutturali	Sfavorevoli	$\gamma_{G2,sfav}$	1.00	1.50	1.50	1.50	1.30	1.00	1.00	1.00
Variabili	Favorevoli	$\gamma_{Q,fav}$	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Variabili	Sfavorevoli	$\gamma_{Q,sfav}$	1.00	1.50	1.50	1.50	1.30	1.00	1.00	1.00
Variabili da traffico	Favorevoli	$\gamma_{QT,fav}$	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Variabili da traffico	Sfavorevoli	$\gamma_{QT,sfav}$	1.00	1.50	1.45	1.45	1.15	1.00	1.00	1.00

Coeff. parziali per i parametri geotecnici del terreno

Parametro		Combinazioni statiche		Combinazioni sismiche	
		M1	M2	M1	M2
Tangente dell'angolo di attrito	$\gamma_{\tan(\phi)}$	1.00	1.25	1.00	1.00
Coesione efficace	γ_c	1.00	1.25	1.00	1.00
Resistenza non drenata	γ_{cu}	1.00	1.40	1.00	1.00
Peso nell'unità di volume	γ_γ	1.00	1.00	1.00	1.00

Coeff. parziali γ_R per le verifiche agli stati limite ultimi STR e GEO

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Verifica	Combinazioni statiche			Combinazioni sismiche		
	R1	R2	R3	R1	R2	R3
Capacità portante	--	--	1.40	--	--	1.20
Scorrimento	--	--	1.10	--	--	1.00
Resistenza terreno a valle	--	--	1.40	--	--	1.20
Ribaltamento	--	--	1.15	--	--	1.00
Stabilità fronte di scavo	--	1.10	--	--	1.20	--

Carichi verticali. Coeff. parziali γ_R da applicare alle resistenze caratteristiche

Resistenza		Pali infissi			Pali trivellati			Pali ad elica continua		
		R1	R2	R3	R1	R2	R3	R1	R2	R3
Punta	γ_b	--	--	1.15	--	--	1.35	--	--	1.30
Laterale compressione	γ_s	--	--	1.15	--	--	1.15	--	--	1.15
Totale compressione	γ_t	--	--	1.15	--	--	1.30	--	--	1.25
Laterale trazione	γ_{st}	--	--	1.25	--	--	1.25	--	--	1.25

Carichi trasversali. Coeff. parziali γ_R da applicare alle resistenze caratteristiche

		R1	R2	R3
Trasversale	γ_t	--	--	1.30

Coefficienti di riduzione ζ per la determinazione della resistenza caratteristica dei pali
 Numero di verticali indagate 1
 $\zeta_3=1.70$ $\zeta_4=1.70$

Descrizione combinazioni di carico

Con riferimento alle azioni elementari prima determinate, si sono considerate le seguenti combinazioni di carico:
 - Combinazione fondamentale, impiegata per gli stati limite ultimi (SLU):

$$\gamma_{G1} G_1 + \gamma_{G2} G_2 + \gamma_{Q1} Q_{k1} + \gamma_{Q2} Q_{k2} + \gamma_{Q3} Q_{k3} + \dots$$

- Combinazione caratteristica, cosiddetta rara, impiegata per gli stati limite di esercizio (SLE) irreversibili:

$$G_1 + G_2 + Q_{k1} + \Psi_{0,2} Q_{k2} + \Psi_{0,3} Q_{k3} + \dots$$

- Combinazione frequente, impiegata per gli stati limite di esercizio (SLE) reversibili:

$$G_1 + G_2 + \Psi_{1,1} Q_{k1} + \Psi_{2,2} Q_{k2} + \Psi_{2,3} Q_{k3} + \dots$$

- Combinazione quasi permanente, impiegata per gli effetti di lungo periodo:

$$G_1 + G_2 + \Psi_{2,1} Q_{k1} + \Psi_{2,2} Q_{k2} + \Psi_{2,3} Q_{k3} + \dots$$

- Combinazione sismica, impiegata per gli stati limite ultimi connessi all'azione sismica E:

$$E + G_1 + G_2 + \Psi_{2,1} Q_{k1} + \Psi_{2,2} Q_{k2} + \Psi_{2,3} Q_{k3} + \dots$$

I valori dei coeff. $\Psi_{0,j}$, $\Psi_{1,j}$, $\Psi_{2,j}$ sono definiti nelle singole condizioni variabili, per i valori dei coeff. γ_G e γ_Q , sono definiti nella tabella normativa.

In particolare si sono considerate le seguenti combinazioni:

Simbologia adottata

γ Coefficiente di partecipazione della condizione
 Ψ Coefficiente di combinazione della condizione

Combinazione n° 1 - STR (A1-M1-R3)

Condizione	γ	Ψ	Effetto
Peso muro	1.00	--	Favorevole
Peso terrapieno	1.00	--	Favorevole
Spinta terreno	1.30	--	Sfavorevole
PESO BA	1.30	--	Sfavorevole
BALLAST+ARMAMENTO+MARCIAPIEDE	1.30	--	Sfavorevole
LM71	1.45	1.00	Sfavorevole

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Condizione	γ	Ψ	Effetto
VENTO+PA	1.45	1.00	Sfavorevole

Combinazione n° 2 - STR (A1-M1-R3) H

Condizione	γ	Ψ	Effetto
Peso muro	1.00	--	Favorevole
Peso terrapieno	1.00	--	Favorevole
Spinta terreno	1.00	--	Favorevole
PESO BA	1.00	--	Favorevole
BALLAST+ARMAMENTO+MARCIPIEDE	1.00	--	Favorevole
LM71	1.00	0.20	Favorevole

Combinazione n° 3 - GEO (A2-M2-R2)

Condizione	γ	Ψ	Effetto
Peso muro	1.00	--	Sfavorevole
Peso terrapieno	1.00	--	Sfavorevole
Spinta terreno	1.00	--	Sfavorevole
PESO BA	1.00	--	Sfavorevole
BALLAST+ARMAMENTO+MARCIPIEDE	1.00	--	Sfavorevole
LM71	1.15	1.00	Sfavorevole
VENTO+PA	1.15	1.00	Sfavorevole

Combinazione n° 4 - GEO (A2-M2-R2) H

Condizione	γ	Ψ	Effetto
Peso muro	1.00	--	Sfavorevole
Peso terrapieno	1.00	--	Sfavorevole
Spinta terreno	1.00	--	Sfavorevole
PESO BA	1.00	--	Sfavorevole
BALLAST+ARMAMENTO+MARCIPIEDE	1.00	--	Sfavorevole
LM71	1.00	0.20	Sfavorevole

Combinazione n° 5 - SLER

Condizione	γ	Ψ	Effetto
Peso muro	1.00	--	Sfavorevole
Peso terrapieno	1.00	--	Sfavorevole
Spinta terreno	1.00	--	Sfavorevole
PESO BA	1.00	--	Sfavorevole
BALLAST+ARMAMENTO+MARCIPIEDE	1.00	--	Sfavorevole
LM71	1.00	1.00	Sfavorevole
VENTO+PA	1.00	1.00	Sfavorevole

Combinazione n° 6 - SLEF

Condizione	γ	Ψ	Effetto
Peso muro	1.00	--	Sfavorevole
Peso terrapieno	1.00	--	Sfavorevole
Spinta terreno	1.00	--	Sfavorevole
PESO BA	1.00	--	Sfavorevole
BALLAST+ARMAMENTO+MARCIPIEDE	1.00	--	Sfavorevole
LM71	1.00	0.75	Sfavorevole

Combinazione n° 7 - SLEQ

Condizione	γ	Ψ	Effetto
Peso muro	1.00	--	Sfavorevole
Peso terrapieno	1.00	--	Sfavorevole
Spinta terreno	1.00	--	Sfavorevole
PESO BA	1.00	--	Sfavorevole
BALLAST+ARMAMENTO+MARCIPIEDE	1.00	--	Sfavorevole

Combinazione n° 8 - SLEF

Condizione	γ	Ψ	Effetto
Peso muro	1.00	--	Sfavorevole
Peso terrapieno	1.00	--	Sfavorevole
Spinta terreno	1.00	--	Sfavorevole
PESO BA	1.00	--	Sfavorevole
BALLAST+ARMAMENTO+MARCIPIEDE	1.00	--	Sfavorevole
LM71	1.00	0.20	Sfavorevole
VENTO+PA	1.00	0.75	Sfavorevole

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Dati sismici

Comune	Ponte
Provincia	Benevento
Regione	Campania
Latitudine	41.213973
Longitudine	14.693540
Indice punti di interpolazione	31431 - 31653 - 31654 - 31432
Vita nominale	75 anni
Classe d'uso	III
Tipo costruzione	Normali affollamenti
Vita di riferimento	113 anni

	Simbolo	U.M.	SLU	SLE
Accelerazione al suolo	a _g	[m/s ²]	3.600	1.248
Accelerazione al suolo	a _g /g	[%]	0.367	0.127
Massimo fattore amplificazione spettro orizzontale	F0		2.347	2.332
Periodo inizio tratto spettro a velocità costante	Tc*		0.395	0.326
Tipo di sottosuolo - Coefficiente stratigrafico	Ss		B	1.055
Categoria topografica - Coefficiente amplificazione topografica	St		T1	1.000

Stato limite ...	Coeff. di riduzione β _m	kh	kv
Ultimo	0.620	24.005	12.002
Esercizio	1.000	15.261	7.630

Nel calcolo non è stato portato in conto il sisma verticale
Forma diagramma incremento sismico **Rettangolare**

Opzioni di calcolo

Spinta

Metodo di calcolo della spinta	Culmann
Tipo di spinta	Spinta a riposo
Terreno a bassa permeabilità	NO
Superficie di spinta limitata	NO

Stabilità globale

Metodo di calcolo della stabilità globale	Bishop
---	--------

Altro

Partecipazione spinta passiva terreno antistante	0.00
Partecipazione resistenza passiva dente di fondazione	50.00
Componente verticale della spinta nel calcolo delle sollecitazioni	NO
Considera terreno sulla fondazione di valle	NO
Considera spinta e peso acqua fondazione di valle	NO

Spostamenti

Modello a blocchi	
Non è stato richiesto il calcolo degli spostamenti	
Spostamento limite	5.00 [cm]

Opzioni calcolo pali

Portanza verticale

Metodo di calcolo della portanza alla punta	Berezantzev
Metodo di calcolo della portanza alla laterale	Integrazione delle tensioni tangenziali (k _s σ _v tan(δ)+c _a)
Correzione angolo di attrito in funzione del tipo di palo (infisso/trivellato)	Attiva
Andamento pressione verticale nel calcolo della portanza alla punta	σ _v con la profondità
Andamento pressione verticale nel calcolo della portanza laterale	Pressione geostatica

Portanza trasversale

Costante di Winkler: da strato	Criterio rottura palo-terreno
- Spostamento limite	Non attivo
- Pressione limite	Pressione passiva con moltiplicatore M=3.00
- Palo infinitamente elastico	Non attivo

Cedimenti

Metodo di calcolo	Metodo agli elementi finiti
-------------------	-----------------------------

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Spostamento limite alla punta 1.00 [cm]
Spostamento limite laterale 0.50 [cm]

Specifiche per le verifiche nelle combinazioni allo Stato Limite Ultimo (SLU)

	SLU	Eccezionale
Coefficiente di sicurezza calcestruzzo a compressione	1.50	1.00
Coefficiente di sicurezza acciaio	1.15	1.00
Fattore di riduzione da resistenza cubica a cilindrica	0.83	0.83
Fattore di riduzione per carichi di lungo periodo	0.85	0.85
Coefficiente di sicurezza per la sezione	1.00	1.00

Specifiche per le verifiche nelle combinazioni allo Stato Limite di Esercizio (SLE)

Paramento e fondazione muro

Verifiche strutturali nelle combinazioni SLD **non eseguite**. Struttura in classe d'uso III o IV

Condizioni ambientali Aggressive
Armatura ad aderenza migliorata SI

Verifica a fessurazione

Sensibilità armatura Poco sensibile
Metodo di calcolo aperture delle fessure Circ. Min. 252 (15/10/96) - NTC 2008 I Formulazione

Valori limite aperture delle fessure:

w₁=0.20
w₂=0.30
w₃=0.40

Verifica delle tensioni

Valori limite delle tensioni nei materiali:

Combinazione	Calcestruzzo	Acciaio
Rara	0.60 f _{ck}	0.80 f _{yk}
Frequente	1.00 f _{ck}	1.00 f _{yk}
Quasi permanente	0.45 f _{ck}	1.00 f _{yk}

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Risultati per inviluppo

Spinta e forze

Simbologia adottata

Ic	Indice della combinazione
A	Tipo azione
I	Inclinazione della spinta, espressa in [°]
V	Valore dell'azione, espressa in [kN]
Cx, Cy	Componente in direzione X ed Y dell'azione, espressa in [kN]
Px, Py	Coordinata X ed Y del punto di applicazione dell'azione, espressa in [m]

Ic	A	V [kN]	I [°]	Cx [kN]	Cy [kN]	Px [m]	Py [m]
1	Spinta statica	134.32	0.00	134.32	0.00	3.71	-4.59
	Peso/Inerzia muro			0.00	257.43/0.00	0.38	-4.44
	Peso/Inerzia terrapieno			0.00	211.87/0.00	1.98	-3.88
	Peso dell'acqua sulla fondazione di valle				0.00	0.00	0.00
	Risultante forze sul muro			10.15	6.50	--	--
	Resistenza pali			-684.84			

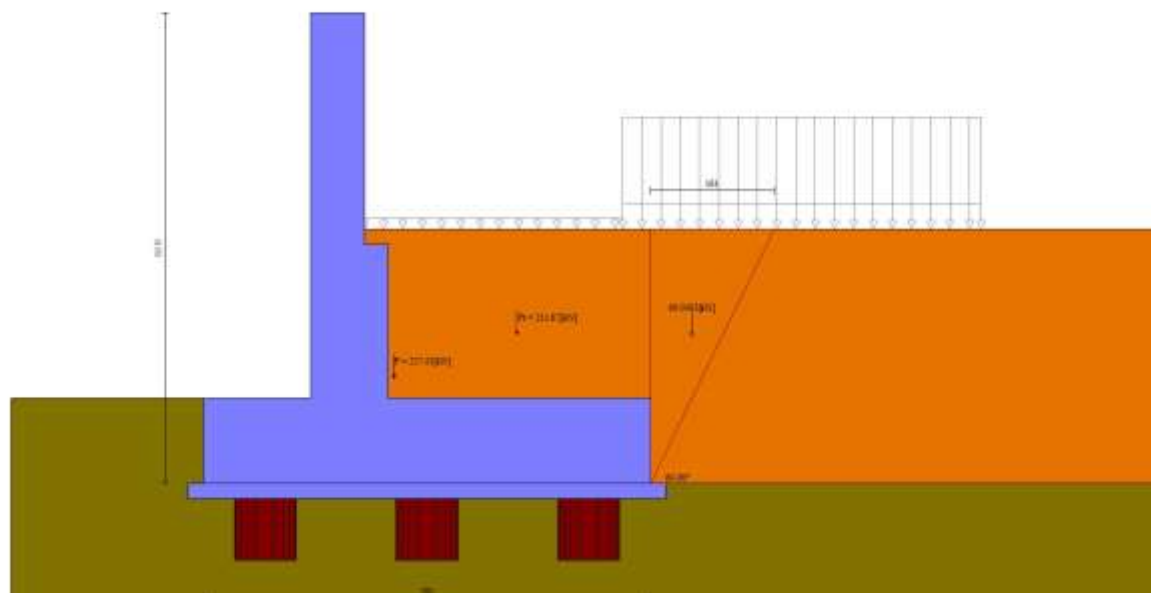


Fig. 4 - Cuneo di spinta (combinazione statica) (Combinazione n° 1)

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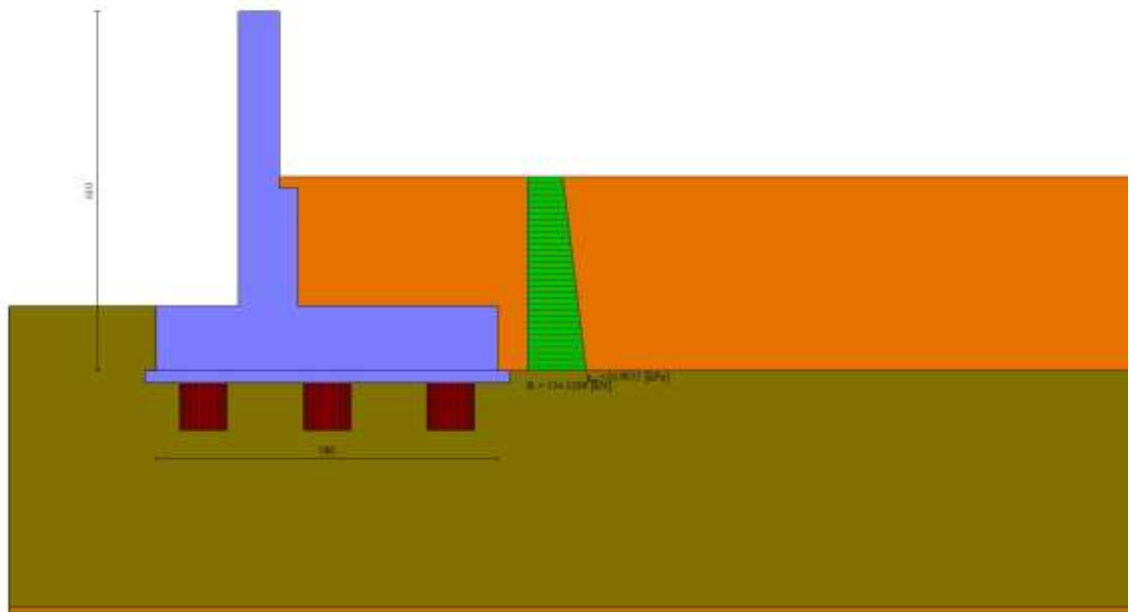


Fig. 5 - Diagramma delle pressioni (combinazione statica) (Combinazione n° 1)

Risultanti globali

Simbologia adottata

Cmb	Indice/Tipo combinazione
N	Componente normale al piano di posa, espressa in [kN]
T	Componente parallela al piano di posa, espressa in [kN]
M _r	Momento ribaltante, espresso in [kNm]
M _s	Momento stabilizzante, espresso in [kNm]
ecc	Eccentricità risultante, espressa in [m]

Ic	N [kN]	T [kN]	M _r [kNm]	M _s [kNm]	ecc [m]
1 - STR (A1-M1-R3)	475.80	144.47	267.93	1510.55	0.288
2 - STR (A1-M1-R3)	441.34	205.97	355.79	1373.75	0.593
3 - GEO (A2-M2-R2)	460.93	140.62	251.75	1454.09	0.291
4 - GEO (A2-M2-R2)	441.34	205.97	355.79	1373.75	0.593
5 - SLEP	457.84	105.13	192.38	1441.40	0.172
6 - SLEF	452.68	86.89	129.13	1420.26	0.048
7 - SLEQ	437.21	53.16	73.47	1356.84	-0.035
8 - SLEF	441.34	67.41	121.84	1373.75	0.063

Scarichi in testa ai pali

Simbologia adottata

Cmb	Indice/Tipo combinazione
Ip	Indice palo
N	Sforzo normale, espresso in [kN]
M	Momento, espresso in [kNm]
T	Taglio, espresso in [kN]

Cmb	Ip	N [kN]	M [kNm]	T [kN]
1 - STR (A1-M1-R3)	1	246.00	-125.15	-123.83
	2	407.83	-125.15	-123.83
	3	569.66	-125.15	-123.83

Verifiche geotecniche

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Quadro riassuntivo coeff. di sicurezza calcolati

Simbologia adottata

Cmb	Indice/Tipo combinazione
S	Sisma (H: componente orizzontale, V: componente verticale)
FS _{SCO}	Coeff. di sicurezza allo scorrimento
FS _{RIB}	Coeff. di sicurezza al ribaltamento
FS _{QLIM}	Coeff. di sicurezza a carico limite
FS _{STAB}	Coeff. di sicurezza a stabilità globale
FS _{HYD}	Coeff. di sicurezza a sifonamento
FS _{UPL}	Coeff. di sicurezza a sollevamento

Cmb	Sismica	FS _{SCO}	FS _{RIB}	FS _{QLIM}	FS _{STAB}	FS _{HYD}	FS _{UPL}
1 - STR (A1-M1-R3)		4.740					
2 - STR (A1-M1-R3)	H	3.370					
3 - GEO (A2-M2-R2)					5.105		
4 - GEO (A2-M2-R2)	H				3.557		

Verifiche portanza trasversale (scorrimento)

Simbologia adottata

Ic	Indice/Tipo combinazione
Ip	Indice palo
T	Carico orizzontale agente alla testa del palo, espresso in [kN]
Td	Portanza trasversale di progetto, espresso in [kN]
FS _O	Fattore di sicurezza (Td/T)

Ic	Ip	T [kN]	Td [kN]	FS _O
2 - STR (A1-M1-R3) H	1	-176.55	520.93	2.951
	2	-176.55	594.99	3.370
	3	-176.55	594.99	3.370

Verifiche portanza verticale

Simbologia adottata

Ic	Indice/Tipo combinazione
Ip	Indice palo
N	Carico verticale agente alla testa del palo, espresso in [kN]
Pd	Portanza di progetto, espresso in [kN]
FS _V	Fattore di sicurezza (Pd/N)

Ic	Ip	N [kN]	Pd [kN]	FS _V
1 - STR (A1-M1-R3)	1	246.00	1872.65	7.612
	2	407.83	1872.65	4.592
	3	569.66	1872.65	3.287
2 - STR (A1-M1-R3) H	1	105.11	1872.65	17.815
	2	378.29	1872.65	4.950
	3	651.46	1872.65	2.875

Verifica stabilità globale muro + terreno

Simbologia adottata

Ic	Indice/Tipo combinazione
C	Centro superficie di scorrimento, espresso in [m]
R	Raggio, espresso in [m]
FS	Fattore di sicurezza

Ic	C [m]	R [m]	FS
4 - GEO (A2-M2-R2) H	-0.50; 4.50	20.88	3.557

Dettagli strisce verifiche stabilità

Simbologia adottata

Le ascisse X sono considerate positive verso monte

APPALTATORE:

TELESE S.c.a r.l.
Consorzio Telese Società Consortile a Responsabilità Limitata

**ITINERARIO NAPOLI – BARI
RADDOPPIO TRATTA CANCELLO-BENEVENTO
II LOTTO FUNZIONALE FRASSO TELESINO – VITULANO
2° SUBLOTTO TELESE – SAN LORENZO**

PROGETTAZIONE:

Mandataria:

Mandante:

SYSTRA S.A. SWS Engineering S.p.A. SYSTRA-SOTECNI S.p.A.

PROGETTO ESECUTIVO

Relazione di calcolo

IF2R.2.2.E.ZZ.CL.TR.16.0.5.008.A.DOCX

COMMESSA	LOTTO	CODIFICA	DOCUMENTO	REV.	FOGLIO
IF2R	2.2.E.ZZ	CL	TR.16.0.5.008	A	15 di 118

Le ordinate Y sono considerate positive verso l'alto

Origine in testa al muro (spigolo contro terra)

W peso della striscia espresso in [kN]

Qy carico sulla striscia espresso in [kN]

Qf carico acqua sulla striscia espresso in [kN]

 α angolo fra la base della striscia e l'orizzontale espresso in [°] (positivo antiorario) ϕ angolo d'attrito del terreno lungo la base della striscia

c coesione del terreno lungo la base della striscia espressa in [kPa]

b larghezza della striscia espressa in [m]

u pressione neutra lungo la base della striscia espressa in [kPa]

Tx; Ty Resistenza al taglio fornita dai tiranti in direzione X ed Y espressa in [kPa]

n°	W [kN]	Qy [kN]	Qf [kN]	b [m]	α [°]	ϕ [°]	c [kPa]	u [kPa]	Tx; Ty [kN]
1	48.91	0.00	0.00	19.07 - 1.53	64.513	38.000	0	0.0	
2	131.65	0.00	0.00	1.53	56.047	34.000	0	0.0	
3	191.65	0.00	0.00	1.53	49.092	34.000	0	0.0	
4	239.60	0.00	0.00	1.53	43.024	34.000	0	0.0	
5	279.26	0.00	0.00	1.53	37.515	34.000	0	0.0	
6	311.95	0.00	0.00	1.53	32.392	34.000	0	0.0	
7	338.91	0.00	0.00	1.53	27.546	34.000	0	0.0	
8	360.92	29.54	0.00	1.53	22.908	34.000	0	0.0	
9	378.54	39.48	0.00	1.53	18.424	34.000	0	0.0	
10	392.14	39.48	0.00	1.53	14.055	34.000	0	0.0	
11	407.39	17.75	0.00	1.53	9.769	34.000	0	0.0	
12	415.86	8.55	0.00	1.53	5.537	34.000	0	0.0	
13	406.15	9.20	0.00	1.53	1.336	34.000	0	0.0	
14	349.79	0.00	0.00	1.53	-2.858	34.000	0	0.0	
15	339.21	0.00	0.00	1.53	-7.068	34.000	0	0.0	
16	331.66	0.00	0.00	1.53	-11.316	34.000	0	0.0	
17	320.47	0.00	0.00	1.53	-15.629	34.000	0	0.0	
18	305.44	0.00	0.00	1.53	-20.035	34.000	0	0.0	
19	286.28	0.00	0.00	1.53	-24.570	34.000	0	0.0	
20	262.55	0.00	0.00	1.53	-29.277	34.000	0	0.0	
21	233.62	0.00	0.00	1.53	-34.213	34.000	0	0.0	
22	198.58	0.00	0.00	1.53	-39.462	34.000	0	0.0	
23	156.05	0.00	0.00	1.53	-45.149	34.000	0	0.0	
24	104.45	0.00	0.00	1.53	-51.487	34.000	0	0.0	
25	37.99	0.00	0.00	-19.10 - 1.53	-58.790	34.000	0	0.0	

Resistenza al taglio pali 0.00 [kN]

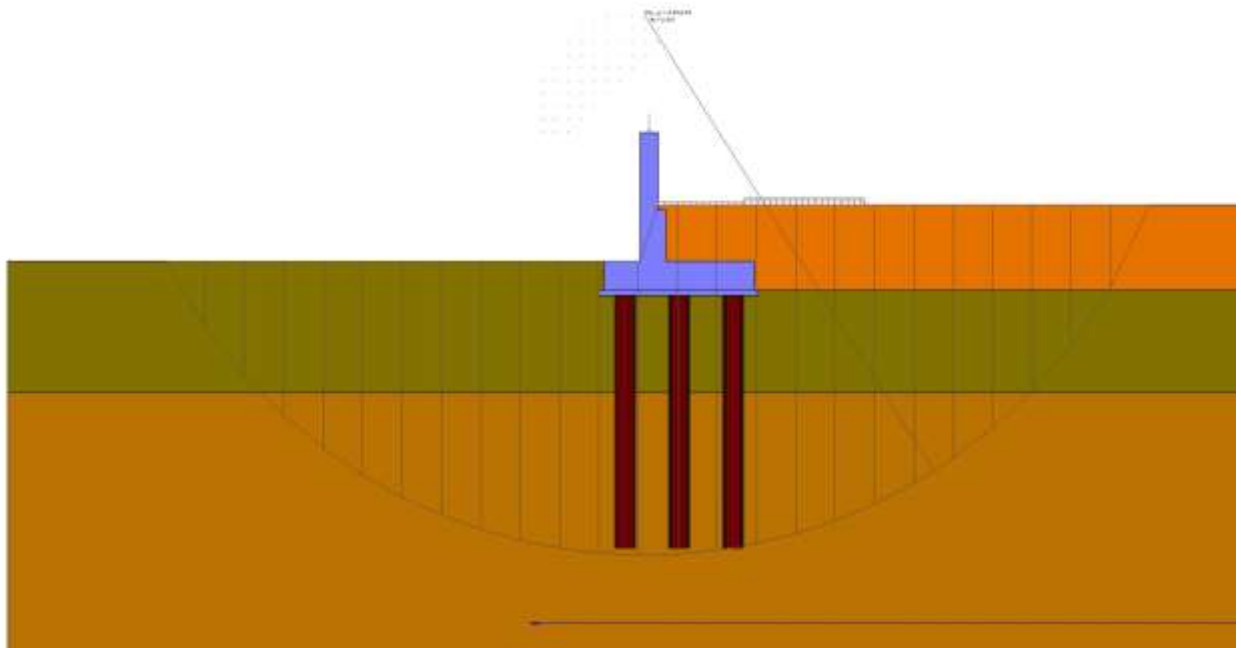


Fig. 6 - Stabilità fronte di scavo - Cerchio critico (Combinazione n° 4)

APPALTATORE: TELESE S.c.a r.l. Consorzio Telese Società Consortile a Responsabilità Limitata	ITINERARIO NAPOLI – BARI RADDOPPIO TRATTA CANCELLO-BENEVENTO II LOTTO FUNZIONALE FRASSO TELESINO – VITULANO 2° SUBLOTTO TELESE – SAN LORENZO PROGETTO ESECUTIVO					
PROGETTAZIONE: Mandatario: SYSTRA S.A. Mandante: SWS Engineering S.p.A. SYSTRA-SOTECNI S.p.A.						
Relazione di calcolo IF2R.2.2.E.ZZ.CL.TR.16.0.5.008.A.DOCX	COMMESSA IF2R	LOTTO 2.2.E.ZZ	CODIFICA CL	DOCUMENTO TR.16.0.5.008	REV. A	FOGLIO 16 di 118

Sollecitazioni

Elementi calcolati a trave

Simbologia adottata

N	Sforzo normale, espresso in [kN]. Positivo se di compressione.
T	Taglio, espresso in [kN]. Positivo se diretto da monte verso valle
M	Momento, espresso in [kNm]. Positivo se tende le fibre contro terra (a monte)

Elementi calcolati a piastra

Simbologia adottata

Mx, My	Momenti flettenti, espresso in [kNm]
Mxy	Momento torcente, espresso in [kNm]. Positivo se diretto da monte verso valle
Tx, Ty	Tagli, espresso in [kN]. Positivo se tende le fibre contro terra (a monte)

I momenti flettenti sono positivi se tendono le fibre inferiori (intradosso fondazione, paramento esterno)

Paramento

n°	X [m]	N _{min} [kN]	N _{max} [kN]	T _{min} [kN]	T _{max} [kN]	M _{min} [kNm]	M _{max} [kNm]
1	0.00	5.00	6.50	0.00	10.15	0.00	2.90
2	-0.10	6.72	8.22	0.00	10.15	0.00	3.91
3	-0.20	8.43	9.93	0.00	10.15	0.00	4.93
4	-0.30	10.15	11.65	0.00	10.15	0.00	5.94
5	-0.40	11.86	13.36	0.00	10.15	0.00	6.96
6	-0.50	13.58	15.08	0.00	10.15	0.00	7.97
7	-0.60	15.29	16.79	0.00	10.15	0.00	8.99
8	-0.70	17.01	18.51	0.00	10.15	0.00	10.00
9	-0.80	18.72	20.22	0.00	10.15	0.00	11.02
10	-0.90	20.44	21.94	0.00	10.15	0.00	12.03
11	-1.00	22.16	23.66	0.00	10.15	0.00	13.05
12	-1.10	23.87	25.37	0.00	10.15	0.00	14.06
13	-1.20	25.59	27.09	0.00	10.15	0.00	15.08
14	-1.30	27.30	28.80	0.00	10.15	0.00	16.09
15	-1.40	29.02	30.52	0.00	10.15	0.00	17.11
16	-1.50	30.73	32.23	0.00	10.15	0.00	18.12
17	-1.60	32.45	33.95	0.00	10.15	0.00	19.13
18	-1.70	34.17	35.67	0.00	10.15	0.00	20.15
19	-1.80	35.88	37.38	0.00	10.15	0.00	21.16
20	-1.90	37.60	39.10	0.00	10.15	0.00	22.18
21	-2.00	39.31	40.81	0.00	10.15	0.00	23.19
22	-2.10	41.03	42.53	0.00	10.15	0.00	24.21
23	-2.20	42.74	44.24	0.00	10.26	0.00	25.22
24	-2.30	44.46	45.96	0.00	10.67	0.00	26.24
25	-2.40	46.17	47.67	0.00	11.08	0.00	27.25
26	-2.50	47.89	49.39	0.00	11.50	0.00	28.27
27	-2.60	49.61	51.11	0.00	11.91	0.00	29.28
28	-2.70	51.32	52.82	0.00	12.32	0.00	30.30
29	-2.80	53.04	54.54	0.00	12.73	0.00	31.31
30	-2.90	54.75	56.25	0.47	14.23	0.02	32.36
31	-3.00	56.47	57.97	1.00	15.78	0.10	33.47
32	-3.00	59.49	61.51	1.04	16.56	7.81	41.25
33	-3.10	61.96	63.98	3.94	20.66	8.07	42.60
34	-3.20	64.44	66.46	6.09	24.02	8.57	44.27
35	-3.30	66.91	68.93	7.50	26.64	9.26	46.18
36	-3.40	69.39	71.41	8.18	28.53	10.05	48.22
37	-3.50	71.86	73.88	8.58	30.14	10.88	50.32
38	-3.60	74.34	76.36	9.15	31.92	11.77	52.48
39	-3.70	76.81	78.83	9.85	33.82	12.72	54.73
40	-3.80	79.29	81.31	10.64	35.82	13.74	57.08
41	-3.90	81.76	83.78	11.51	37.90	14.85	59.53
42	-4.00	84.24	86.26	12.44	40.04	16.04	62.10
43	-4.10	86.71	88.73	13.44	42.25	17.34	64.79
44	-4.20	89.19	91.21	14.49	44.51	18.73	68.39
45	-4.30	91.66	93.68	15.60	46.83	20.23	72.95
46	-4.40	94.14	96.16	16.76	49.20	21.85	77.75
47	-4.50	96.61	98.63	17.98	51.63	23.59	82.79
48	-4.60	99.09	101.11	19.24	54.10	25.45	88.07
49	-4.70	101.56	103.58	20.56	56.62	27.44	93.61
50	-4.80	104.04	106.06	21.92	59.20	29.56	99.39
51	-4.90	106.51	108.53	23.34	61.82	31.82	105.44
52	-5.00	108.99	111.01	24.81	64.50	34.23	111.76

APPALTATORE:



**ITINERARIO NAPOLI – BARI
RADDOPPIO TRATTA CANCELLO-BENEVENTO
II LOTTO FUNZIONALE FRASSO TELESINO – VITULANO
2° SUBLOTTO TELESE – SAN LORENZO**

PROGETTAZIONE:

Mandatario:

Mandante:

SYSTRA S.A. SWS Engineering S.p.A. SYSTRA-SOTECNI S.p.A.

PROGETTO ESECUTIVO

Relazione di calcolo

IF2R.2.2.E.ZZ.CL.TR.16.0.5.008.A.DOCX

COMMESSA	LOTTO	CODIFICA	DOCUMENTO	REV.	FOGLIO
IF2R	2.2.E.ZZ	CL	TR.16.0.5.008	A	17 di 118

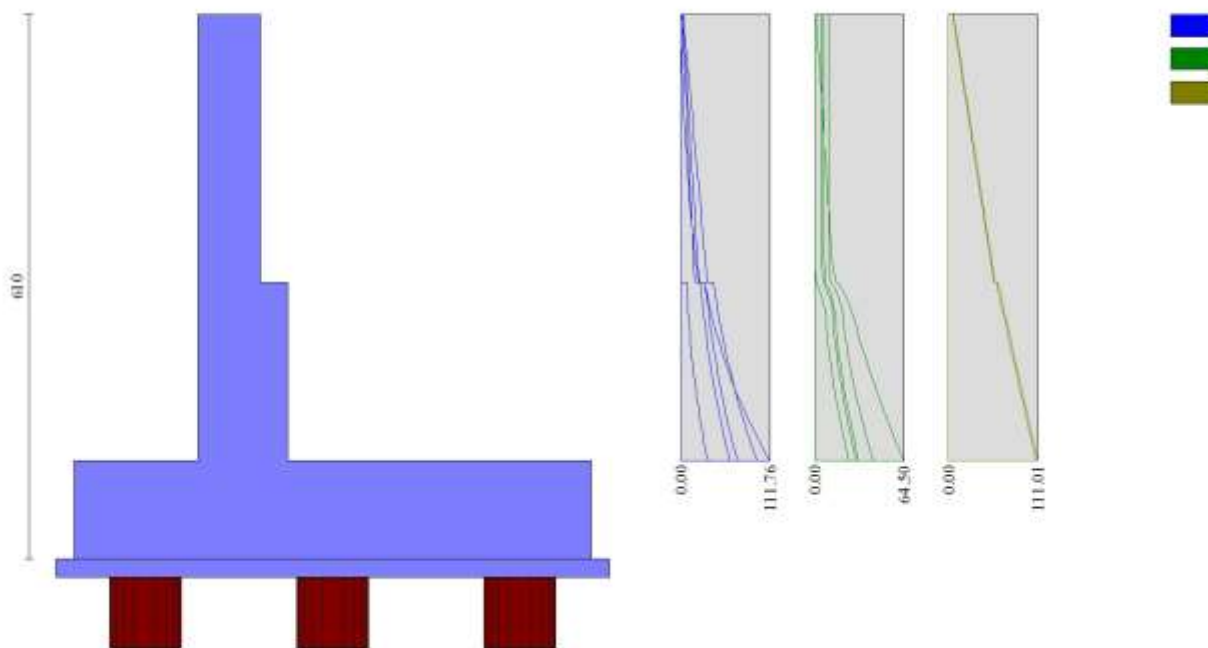


Fig. 7 - Paramento

Piastra fondazione

In	Mx [kNm]	My [kNm]	Mxy [kNm]	Tx [kN]	Ty [kN]	
1	-0.85	1.64	-1.23	1.73	15.84	MAX
	-1.19	0.55	-3.48	-14.64	3.42	MIN
2	-10.66	-6.56	-2.13	2.22	-2.31	MAX
	-18.28	-16.07	-5.86	-20.36	-5.82	MIN
3	2.55	-2.57	-2.52	41.61	-13.49	MAX
	-0.41	-10.60	-7.74	30.88	-16.60	MIN
4	2.27	0.29	0.12	17.12	9.50	MAX
	1.09	-3.17	-0.12	11.82	-0.91	MIN
5	-23.04	0.45	-5.98	1.52	23.94	MAX
	-38.81	-1.47	-16.03	-19.91	19.42	MIN
6	-31.19	-22.99	-8.00	31.88	-10.44	MAX
	-52.66	-51.26	-21.58	27.46	-18.94	MIN
7	5.84	5.00	6.02	57.25	-37.57	MAX
	4.04	-5.47	4.48	32.33	-56.86	MIN
8	7.07	8.12	3.09	25.76	-6.19	MAX
	3.96	3.94	2.68	13.52	-8.76	MIN
9	11.15	-6.94	-6.99	331.73	-55.73	MAX
	7.91	-27.31	-36.47	201.25	-88.58	MIN
10	-26.05	29.17	0.44	-8.54	9.01	MAX
	-40.87	10.39	0.23	-12.86	-13.83	MIN
11	-24.82	112.08	1.55	-7.40	149.63	MAX
	-29.37	36.07	0.95	-11.13	128.70	MIN
12	-135.10	-125.42	2.68	-6.05	-152.46	MAX
	-226.64	-234.60	1.74	-8.73	-350.02	MIN
13	7.15	20.63	13.06	63.27	-57.28	MAX
	3.86	15.78	10.62	31.22	-96.41	MIN
14	6.96	29.03	12.87	11.76	-7.27	MAX
	4.89	23.23	8.96	4.16	-20.22	MIN
15	-9.30	8.32	10.40	106.95	-124.48	MAX
	-17.48	-5.22	4.99	54.00	-214.65	MIN
16	-31.33	-19.06	3.30	-4.18	-412.70	MAX
	-75.71	-152.97	2.22	-5.95	-755.02	MIN
17	-14.46	0.59	17.01	-6.36	23.92	MAX
	-24.92	-0.92	6.45	-19.11	19.13	MIN
18	-23.34	-22.62	24.90	-41.43	-11.17	MAX
	-40.91	-50.60	9.97	-51.83	-19.50	MIN
19	20.54	-5.25	42.42	-213.08	-57.29	MAX
	14.69	-24.79	10.84	-348.37	-90.51	MIN
20	-4.86	11.87	2.91	-62.10	-126.52	MAX

APPALTATORE:	TELESE S.c.a r.l. <small>Consorzio Telese Società Consortile a Responsabilità Limitata</small>	
PROGETTAZIONE:		
Mandataria:	Mandante:	
SYSTRA S.A.	SWS Engineering S.p.A.	SYSTRA-SOTECNI S.p.A.
Relazione di calcolo		
IF2R.2.2.E.ZZ.CL.TR.16.0.5.008.A.DOCX		

ITINERARIO NAPOLI – BARI
RADDOPPIO TRATTA CANCELLO-BENEVENTO
II LOTTO FUNZIONALE FRASSO TELESINO – VITULANO
2° SUBLOTTO TELESE – SAN LORENZO
PROGETTO ESECUTIVO

COMMESSA	LOTTO	CODIFICA	DOCUMENTO	REV.	FOGLIO
IF2R	2.2.E.ZZ	CL	TR.16.0.5.008	A	18 di 118

In	Mx [kNm]	My [kNm]	Mxy [kNm]	Tx [kN]	Ty [kN]	
	-11.45	-0.36	-4.57	-118.17	-217.75	MIN
21	15.29	50.97	18.22	0.00	-61.11	MAX
	10.90	36.33	13.29	0.00	-106.81	MIN
22	14.57	48.57	19.96	0.00	-6.65	MAX
	10.86	36.19	14.77	0.00	-24.85	MIN
23	22.27	74.24	11.43	0.00	-177.79	MAX
	17.99	59.96	9.27	0.00	-313.96	MIN
24	19.92	66.39	3.11	0.00	-272.10	MAX
	6.73	22.43	2.12	0.00	-502.72	MIN
25	23.81	79.37	-1.89	0.00	-179.93	MAX
	19.10	63.68	-5.91	0.00	-317.41	MIN
26	10.22	-6.37	6.58	-3.59	-3.49	MAX
	5.98	-14.79	2.41	-16.89	-7.60	MIN
27	24.00	-2.53	10.48	-40.89	-17.43	MAX
	14.04	-10.46	4.03	-56.22	-21.42	MIN
28	24.26	7.22	-0.29	-41.79	-44.90	MAX
	17.63	-2.34	-0.80	-69.90	-67.29	MIN
29	20.72	29.51	-4.36	-38.16	-66.53	MAX
	18.01	25.34	-4.88	-72.37	-110.42	MIN
30	19.68	65.59	-5.50	0.00	-71.18	MAX
	13.88	46.25	-7.35	0.00	-122.28	MIN
31	19.68	65.59	-5.50	0.00	-71.18	MAX
	13.88	46.25	-7.35	0.00	-122.28	MIN
32	19.68	65.59	-5.50	0.00	-71.18	MAX
	13.88	46.25	-7.35	0.00	-122.28	MIN
33	19.68	65.59	-5.50	0.00	-71.18	MAX
	13.88	46.25	-7.35	0.00	-122.28	MIN
34	19.68	65.59	-5.50	0.00	-71.18	MAX
	13.88	46.25	-7.35	0.00	-122.28	MIN
35	19.68	65.59	-5.50	0.00	-71.18	MAX
	13.88	46.25	-7.35	0.00	-122.28	MIN
36	19.68	65.59	-5.50	0.00	-71.18	MAX
	13.88	46.25	-7.35	0.00	-122.28	MIN
37	36.33	0.57	-0.23	-3.74	-1.64	MAX
	20.47	0.14	-0.33	-5.52	-6.22	MIN
38	28.12	1.03	-0.22	-2.31	-16.25	MAX
	19.03	-3.55	-0.32	-3.44	-19.66	MIN
39	31.49	13.40	-0.24	-1.39	-35.01	MAX
	22.44	9.79	-0.34	-2.09	-50.95	MIN
40	26.95	33.87	-0.20	-0.67	-46.10	MAX
	20.32	27.06	-0.28	-1.01	-76.84	MIN
41	16.42	54.74	-0.14	0.00	-49.01	MAX
	12.15	40.50	-0.20	0.00	-85.54	MIN
42	16.42	54.74	-0.14	0.00	-49.01	MAX
	12.15	40.50	-0.20	0.00	-85.54	MIN
43	16.42	54.74	-0.14	0.00	-49.01	MAX
	12.15	40.50	-0.20	0.00	-85.54	MIN
44	16.42	54.74	-0.14	0.00	-49.01	MAX
	12.15	40.50	-0.20	0.00	-85.54	MIN
45	16.42	54.74	-0.14	0.00	-49.01	MAX
	12.15	40.50	-0.20	0.00	-85.54	MIN
46	16.42	54.74	-0.14	0.00	-49.01	MAX
	12.15	40.50	-0.20	0.00	-85.54	MIN
47	16.42	54.74	-0.14	0.00	-49.01	MAX
	12.15	40.50	-0.20	0.00	-85.54	MIN
48	16.42	54.74	-0.14	0.00	-49.01	MAX
	12.15	40.50	-0.20	0.00	-85.54	MIN
49	16.42	54.74	-0.14	0.00	-49.01	MAX
	12.15	40.50	-0.20	0.00	-85.54	MIN
50	13.21	-6.27	-2.81	8.55	-3.07	MAX
	7.99	-14.64	-7.16	-7.82	-7.29	MIN
51	26.82	-2.41	-4.35	48.72	-16.77	MAX
	15.94	-10.27	-10.92	35.85	-20.52	MIN
52	26.22	7.16	0.49	65.11	-43.49	MAX
	18.95	-2.41	-0.10	38.58	-65.22	MIN
53	21.67	29.17	4.65	69.87	-64.54	MAX
	18.71	25.07	4.13	36.50	-107.49	MIN
54	19.29	64.29	7.25	0.00	-68.98	MAX
	13.61	45.35	5.42	0.00	-119.03	MIN
55	19.29	64.29	7.25	0.00	-68.98	MAX
	13.61	45.35	5.42	0.00	-119.03	MIN
56	19.29	64.29	7.25	0.00	-68.98	MAX
	13.61	45.35	5.42	0.00	-119.03	MIN
57	-20.04	-66.79	7.03	0.00	-121.92	MAX
	-71.68	-238.93	-8.24	0.00	-205.38	MIN
58	-18.68	-62.27	32.80	0.00	-147.98	MAX
	-73.72	-245.74	-3.26	0.00	-176.76	MIN
59	-16.00	-53.32	-3.42	0.00	-98.82	MAX
	-71.03	-236.78	-10.96	0.00	-194.99	MIN
60	-11.35	-37.82	-9.66	0.00	-73.71	MAX
	-67.26	-224.19	-13.00	0.00	-172.52	MIN
61	-6.83	-22.76	-15.11	0.00	-35.46	MAX

APPALTATORE:

TELESE S.c.a r.l.
Consorzio Telese Società Consortile a Responsabilità Limitata

**ITINERARIO NAPOLI – BARI
RADDOPPIO TRATTA CANCELLO-BENEVENTO
II LOTTO FUNZIONALE FRASSO TELESINO – VITULANO
2° SUBLOTTO TELESE – SAN LORENZO**

PROGETTAZIONE:

Mandataria:

Mandante:

SYSTRA S.A. SWS Engineering S.p.A. SYSTRA-SOTECNI S.p.A.

PROGETTO ESECUTIVO

Relazione di calcolo

IF2R.2.2.E.ZZ.CL.TR.16.0.5.008.A.DOCX

COMMESSA LOTTO CODIFICA DOCUMENTO REV. FOGLIO
IF2R 2.2.E.ZZ CL TR.16.0.5.008 A 19 di 118

In	Mx [kNm]	My [kNm]	Mxy [kNm]	Tx [kN]	Ty [kN]	
	-63.99	-213.29	-16.31	0.00	-132.12	MIN
62	4.68	15.60	-20.64	0.00	71.57	MAX
	-46.26	-154.21	-32.03	0.00	-41.45	MIN
63	29.99	99.96	-4.19	0.00	168.72	MAX
	3.31	11.03	-4.67	0.00	6.15	MIN
64	7.78	25.92	22.51	0.00	79.53	MAX
	-42.66	-142.21	11.66	0.00	-28.90	MIN
65	-9.86	0.83	-6.66	9.89	24.69	MAX
	-18.04	-0.55	-17.29	-6.19	19.65	MIN
66	-19.04	-22.32	-9.89	42.59	-9.97	MAX
	-34.49	-50.12	-24.73	35.24	-17.71	MIN
67	25.06	-5.17	-10.51	341.86	-54.73	MAX
	17.75	-24.64	-41.88	208.68	-86.69	MIN
68	-3.14	11.69	5.17	114.31	-122.87	MAX
	-8.91	-0.55	-2.05	59.48	-212.34	MIN
69	23.27	77.58	6.55	0.00	-175.87	MAX
	18.70	62.33	2.78	0.00	-311.42	MIN
70	23.27	77.58	6.55	0.00	-175.87	MAX
	18.70	62.33	2.78	0.00	-311.42	MIN
71	23.27	77.58	6.55	0.00	-175.87	MAX
	18.70	62.33	2.78	0.00	-311.42	MIN
72	-0.21	-0.70	5.44	0.00	-15.76	MAX
	-56.57	-188.55	4.47	0.00	-103.48	MIN
73	-5.01	-35.42	2.89	14.09	-109.94	MAX
	-27.40	-187.02	-8.94	0.26	-192.71	MIN
74	0.13	-28.38	12.87	18.06	-141.72	MAX
	-9.38	-181.84	-5.85	3.04	-175.43	MIN
75	-5.20	-28.00	-4.57	6.48	-88.81	MAX
	-43.04	-186.46	-12.34	-3.82	-183.82	MIN
76	-1.90	-19.23	-9.75	1.74	-65.89	MAX
	-44.64	-181.62	-13.53	-3.72	-163.39	MIN
77	7.18	-9.46	-15.70	16.86	-28.20	MAX
	-31.13	-169.71	-17.54	9.43	-123.31	MIN
78	-12.79	-16.47	-21.56	41.11	32.54	MAX
	-61.93	-178.97	-35.66	22.85	-67.75	MIN
79	-13.78	86.85	-4.69	-4.36	283.43	MAX
	-37.14	30.05	-5.23	-5.48	93.69	MIN
80	-8.39	-8.14	25.04	-31.01	40.41	MAX
	-58.26	-170.13	11.57	-51.41	-55.55	MIN
81	16.40	7.83	6.03	-15.31	-8.92	MAX
	-23.77	-151.79	3.95	-25.89	-95.60	MIN
82	-17.74	29.83	-0.14	-1.10	9.66	MAX
	-28.25	10.77	-0.21	-1.63	-12.77	MIN
83	-17.11	112.98	-0.20	-0.34	151.63	MAX
	-18.86	36.62	-0.30	-0.51	130.12	MIN
84	-129.44	-124.88	-0.26	0.03	-149.45	MAX
	-218.40	-233.72	-0.39	0.02	-345.43	MIN
85	-27.95	-18.40	-0.27	0.21	-408.36	MAX
	-70.83	-151.90	-0.40	0.15	-748.62	MIN
86	19.68	65.61	-0.23	0.00	-267.25	MAX
	6.46	21.53	-0.34	0.00	-495.63	MIN
87	19.68	65.61	-0.23	0.00	-267.25	MAX
	6.46	21.53	-0.34	0.00	-495.63	MIN
88	19.68	65.61	-0.23	0.00	-267.25	MAX
	6.46	21.53	-0.34	0.00	-495.63	MIN
89	-0.10	-0.33	-1.28	0.00	-32.35	MAX
	-55.08	-183.61	-1.92	0.00	-119.55	MIN
90	12.59	7.75	-1.47	-2.21	-26.70	MAX
	-34.04	-155.08	-2.21	-2.60	-113.05	MIN
91	-0.58	-12.20	-3.55	14.65	-83.30	MAX
	-13.86	-148.84	-9.77	-0.95	-164.36	MIN
92	0.20	-11.12	-5.92	13.76	-122.84	MAX
	-2.63	-138.12	-9.27	0.27	-173.84	MIN
93	0.65	-8.02	-6.70	12.32	-66.01	MAX
	-24.22	-145.46	-12.01	-2.52	-158.28	MIN
94	3.57	-4.18	-8.45	12.57	-48.71	MAX
	-29.31	-144.58	-11.33	3.20	-143.48	MIN
95	4.83	-3.77	-7.46	29.96	-24.39	MAX
	-32.65	-142.99	-9.18	23.85	-116.44	MIN
96	10.34	-9.19	-17.84	202.91	-9.69	MAX
	-30.47	-149.86	-47.21	183.61	-97.72	MIN
97	-119.72	-101.71	-4.60	-4.70	16.25	MAX
	-157.60	-216.49	-5.12	-6.91	-201.71	MIN
98	15.26	-3.49	36.89	-196.25	-2.35	MAX
	-27.16	-144.28	8.18	-212.95	-86.86	MIN
99	14.85	7.53	-1.99	-32.38	-7.19	MAX
	-26.44	-132.13	-3.10	-35.68	-92.49	MIN
100	18.56	11.82	-1.58	-3.17	-16.14	MAX
	-22.04	-130.18	-2.35	-3.49	-101.76	MIN
101	-9.71	0.84	16.87	2.63	24.97	MAX
	-17.81	-0.54	6.38	-12.50	19.83	MIN
102	-18.94	-22.40	24.15	-36.09	-9.63	MAX

APPALTATORE:

TELESE S.c.a r.l.
Consorzio Telese Società Consortile a Responsabilità Limitata

**ITINERARIO NAPOLI – BARI
RADDOPPIO TRATTA CANCELLO-BENEVENTO
II LOTTO FUNZIONALE FRASSO TELESINO – VITULANO
2° SUBLOTTO TELESE – SAN LORENZO**

PROGETTAZIONE:

Mandataria:

Mandante:

SYSTRA S.A. SWS Engineering S.p.A. SYSTRA-SOTECNI S.p.A.

PROGETTO ESECUTIVO

Relazione di calcolo

IF2R.2.2.E.ZZ.CL.TR.16.0.5.008.A.DOCX

COMMESSA	LOTTO	CODIFICA	DOCUMENTO	REV.	FOGLIO
IF2R	2.2.E.ZZ	CL	TR.16.0.5.008	A	20 di 118

In	Mx [kNm]	My [kNm]	Mxy [kNm]	Tx [kN]	Ty [kN]	
	-34.33	-50.23	9.49	-43.86	-17.20	MIN
103	25.09	-5.44	41.12	-208.77	-54.11	MAX
	17.77	-25.04	10.00	-342.00	-85.78	MIN
104	-3.22	11.18	1.26	-59.27	-122.09	MAX
	-9.03	-1.23	-5.75	-114.01	-211.19	MIN
105	22.98	76.62	-3.44	0.00	-175.04	MAX
	18.49	61.62	-7.03	0.00	-310.19	MIN
106	22.98	76.62	-3.44	0.00	-175.04	MAX
	18.49	61.62	-7.03	0.00	-310.19	MIN
107	22.98	76.62	-3.44	0.00	-175.04	MAX
	18.49	61.62	-7.03	0.00	-310.19	MIN
108	0.70	2.34	-7.22	0.00	-15.43	MAX
	-55.10	-183.67	-9.44	0.00	-100.83	MIN
109	17.93	10.78	-7.11	21.29	-8.49	MAX
	-22.00	-147.58	-10.61	10.05	-92.93	MIN
110	16.74	10.03	-1.38	28.64	-6.50	MAX
	-24.56	-128.82	-1.74	25.51	-89.80	MIN
111	1.60	14.97	-8.17	9.04	-52.64	MAX
	-3.58	-85.77	-9.98	-1.07	-133.70	MIN
112	0.52	14.07	-7.98	5.99	-93.23	MAX
	0.12	-82.17	-9.40	-1.26	-169.97	MIN
113	3.26	15.90	-9.05	14.54	-38.42	MAX
	-8.84	-85.32	-11.62	1.18	-129.27	MIN
114	4.16	15.19	-6.58	24.49	-29.03	MAX
	-15.53	-87.17	-8.42	9.32	-123.93	MIN
115	0.98	10.06	-4.02	59.08	-24.61	MAX
	-29.12	-94.99	-7.15	35.57	-118.06	MIN
116	-20.09	-4.55	-1.91	58.72	-39.31	MAX
	-47.90	-107.51	-11.15	32.53	-140.01	MIN
117	-23.35	-8.24	-4.69	-2.27	-219.75	MAX
	-69.47	-196.61	-5.21	-5.82	-396.52	MIN
118	-15.07	-2.14	0.89	-42.81	-33.52	MAX
	-45.60	-106.10	-7.72	-61.25	-132.04	MIN
119	10.59	14.12	-2.93	-41.14	-12.08	MAX
	-25.93	-93.14	-5.88	-54.32	-101.53	MIN
120	16.50	19.02	-1.91	-3.20	-8.31	MAX
	-15.78	-86.98	-2.76	-3.81	-98.36	MIN
121	12.93	15.96	1.88	48.10	-11.16	MAX
	-24.01	-91.14	-2.69	33.86	-99.02	MIN
122	13.90	-6.26	6.74	3.40	-2.53	MAX
	8.44	-14.62	2.52	-11.73	-6.89	MIN
123	27.38	-2.53	10.38	-37.22	-16.06	MAX
	16.31	-10.45	3.98	-50.76	-19.56	MIN
124	26.45	6.61	-0.59	-39.09	-42.21	MAX
	19.09	-3.15	-1.00	-65.88	-63.32	MIN
125	21.55	27.96	-4.81	-36.55	-62.90	MAX
	18.62	23.85	-5.28	-69.96	-105.05	MIN
126	18.66	62.20	-5.81	0.00	-67.21	MAX
	13.18	43.94	-7.82	0.00	-116.42	MIN
127	18.66	62.20	-5.81	0.00	-67.21	MAX
	13.18	43.94	-7.82	0.00	-116.42	MIN
128	18.66	62.20	-5.81	0.00	-67.21	MAX
	13.18	43.94	-7.82	0.00	-116.42	MIN
129	9.75	32.51	-15.05	0.00	80.79	MAX
	-39.61	-132.03	-26.99	0.00	-22.88	MIN
130	-5.14	-1.90	-15.43	46.27	41.86	MAX
	-54.62	-161.47	-30.14	25.61	-49.50	MIN
131	19.23	1.69	-12.17	205.79	-0.44	MAX
	-23.34	-137.59	-42.16	189.13	-80.89	MIN
132	-10.23	1.52	3.21	55.73	-31.28	MAX
	-41.77	-102.23	-6.78	35.43	-126.64	MIN
133	0.59	27.44	-9.36	2.38	-21.89	MAX
	-0.47	-36.51	-10.66	-0.26	-104.13	MIN
134	-0.55	24.43	-6.98	0.28	-58.51	MAX
	-0.69	-38.71	-9.43	-1.20	-145.29	MIN
135	0.80	29.10	-10.13	8.81	-9.24	MAX
	-2.17	-33.85	-11.07	2.89	-103.76	MIN
136	-0.16	28.60	-5.40	22.30	-4.78	MAX
	-7.01	-34.46	-6.09	7.76	-108.11	MIN
137	-3.87	23.73	-0.51	32.74	-11.67	MAX
	-16.29	-41.78	-2.56	10.82	-113.85	MIN
138	-6.28	21.33	-0.09	25.90	-40.64	MAX
	-25.89	-55.22	-4.69	7.43	-148.36	MIN
139	-7.76	16.66	-4.31	0.17	-49.33	MAX
	-33.67	-73.04	-4.76	-4.11	-166.12	MIN
140	-1.81	21.61	-4.56	-14.46	-37.09	MAX
	-24.72	-56.24	-8.59	-23.68	-144.02	MIN
141	4.28	23.67	-6.22	-13.96	-4.87	MAX
	-15.46	-44.50	-7.87	-24.47	-106.01	MIN
142	9.27	27.06	-2.10	-2.33	3.72	MAX
	-10.29	-40.25	-2.97	-3.48	-99.78	MIN
143	6.86	24.80	3.51	20.10	-3.93	MAX

APPALTATORE:	TELESE S.c.a r.l. <small>Consorzio Telese Società Consortile a Responsabilità Limitata</small>	
PROGETTAZIONE:		
Mandataria:	Mandante:	
SYSTRA S.A.	SWS Engineering S.p.A.	SYSTRA-SOTECNI S.p.A.
Relazione di calcolo		
IF2R.2.2.E.ZZ.CL.TR.16.0.5.008.A.DOCX		

ITINERARIO NAPOLI – BARI
RADDOPPIO TRATTA CANCELLO-BENEVENTO
II LOTTO FUNZIONALE FRASSO TELESINO – VITULANO
2° SUBLOTTO TELESE – SAN LORENZO
PROGETTO ESECUTIVO

COMMESSA	LOTTO	CODIFICA	DOCUMENTO	REV.	FOGLIO
IF2R	2.2.E.ZZ	CL	TR.16.0.5.008	A	21 di 118

In	Mx [kNm]	My [kNm]	Mxy [kNm]	Tx [kN]	Ty [kN]	
	-13.67	-43.60	0.26	7.29	-103.99	MIN
144	3.42	23.75	3.95	20.34	-34.99	MAX
	-21.24	-54.64	-1.45	8.07	-139.82	MIN
145	38.00	0.64	-0.04	-0.20	-0.83	MAX
	21.59	0.19	-0.06	-0.30	-5.61	MIN
146	29.60	0.89	-0.07	0.03	-15.16	MAX
	20.00	-3.73	-0.10	0.02	-18.18	MIN
147	32.30	12.67	-0.09	0.17	-32.97	MAX
	22.98	8.82	-0.14	0.11	-47.94	MIN
148	27.06	32.22	-0.10	0.17	-43.44	MAX
	20.39	25.83	-0.15	0.11	-72.90	MIN
149	15.51	51.69	-0.09	0.00	-46.14	MAX
	11.53	38.43	-0.13	0.00	-81.28	MIN
150	15.51	51.69	-0.09	0.00	-46.14	MAX
	11.53	38.43	-0.13	0.00	-81.28	MIN
151	15.51	51.69	-0.09	0.00	-46.14	MAX
	11.53	38.43	-0.13	0.00	-81.28	MIN
152	33.74	112.45	-0.33	0.00	172.35	MAX
	7.81	26.05	-0.69	0.00	17.18	MIN
153	-8.02	98.17	-0.38	-0.72	287.29	MAX
	-31.31	42.88	-0.81	-1.07	104.67	MIN
154	-113.27	-93.49	-0.45	-1.13	20.60	MAX
	-151.25	-206.32	-0.90	-1.50	-191.15	MIN
155	-15.73	-2.85	-0.60	-1.42	-215.33	MAX
	-63.85	-191.19	-1.14	-1.60	-387.43	MIN
156	0.23	19.52	-0.74	-1.38	-45.65	MAX
	-28.79	-71.22	-1.33	-1.59	-159.51	MIN
157	0.42	26.51	-10.02	4.68	2.98	MAX
	-3.05	-4.55	-11.76	-7.65	-70.83	MIN
158	0.62	24.79	-6.49	3.05	-27.78	MAX
	-0.02	-7.67	-8.99	-6.81	-104.30	MIN
159	0.97	34.96	-12.15	6.62	26.76	MAX
	-6.98	8.53	-14.62	-1.84	-80.59	MIN
160	1.81	41.98	-4.11	11.89	25.62	MAX
	-8.97	23.27	-4.63	2.25	-103.61	MIN
161	-5.80	32.41	4.65	21.90	21.30	MAX
	-8.42	3.78	3.57	-3.69	-94.46	MIN
162	-2.17	21.94	2.17	18.30	-2.49	MAX
	-10.56	-14.47	1.32	-5.42	-91.83	MIN
163	3.61	21.83	-3.65	1.33	-10.79	MAX
	-10.02	-17.36	-4.04	-3.08	-95.58	MIN
164	1.66	21.22	-9.11	0.00	-0.89	MAX
	-10.19	-16.22	-9.92	-14.53	-90.45	MIN
165	0.56	30.71	-10.37	0.42	23.81	MAX
	-6.08	0.02	-12.05	-14.97	-92.99	MIN
166	1.50	39.05	-2.09	-1.52	27.30	MAX
	-3.18	18.04	-2.93	-3.03	-105.31	MIN
167	3.26	31.30	6.67	12.24	24.58	MAX
	-4.54	0.21	6.07	-6.27	-91.59	MIN
168	6.96	22.24	5.09	12.83	0.72	MAX
	-7.26	-16.05	3.42	-5.44	-87.69	MIN
169	11.52	22.96	-0.81	-1.11	-8.27	MAX
	-6.08	-17.59	-1.41	-1.52	-91.61	MIN
170	13.79	-6.27	-2.61	11.22	-2.44	MAX
	8.37	-14.63	-6.87	-4.12	-6.82	MIN
171	27.25	-2.58	-4.13	50.78	-15.96	MAX
	16.21	-10.52	-10.60	37.23	-19.43	MIN
172	26.32	6.49	0.79	66.19	-42.06	MAX
	19.01	-3.32	0.30	39.30	-63.09	MIN
173	21.43	27.72	5.00	70.29	-62.73	MAX
	18.54	23.59	4.51	36.77	-104.80	MIN
174	18.56	61.86	7.56	0.00	-67.04	MAX
	13.11	43.70	5.63	0.00	-116.16	MIN
175	18.56	61.86	7.56	0.00	-67.04	MAX
	13.11	43.70	5.63	0.00	-116.16	MIN
176	18.56	61.86	7.56	0.00	-67.04	MAX
	13.11	43.70	5.63	0.00	-116.16	MIN
177	9.98	33.25	25.55	0.00	80.36	MAX
	-39.09	-130.29	14.33	0.00	-22.40	MIN
178	-4.68	-1.05	28.47	-27.81	41.47	MAX
	-53.95	-159.85	14.59	-47.80	-48.99	MIN
179	19.84	2.51	40.31	-191.49	-0.69	MAX
	-22.61	-136.19	11.21	-208.70	-80.30	MIN
180	-9.40	2.28	4.45	-38.38	-31.34	MAX
	-40.95	-101.19	-4.49	-58.93	-126.00	MIN
181	4.42	24.37	-1.24	-11.12	-34.91	MAX
	-20.38	-53.96	-5.49	-23.07	-139.20	MIN
182	8.09	22.70	-6.26	2.49	0.86	MAX
	-6.41	-15.68	-7.03	-14.98	-87.17	MIN
183	8.24	18.54	-9.79	25.82	14.53	MAX
	0.43	10.51	-12.29	-12.03	-35.90	MIN
184	1.51	17.52	-4.43	9.91	-7.49	MAX

APPALTATORE:	TELESE S.c.a r.l. <small>Consorzio Telese Società Consortile a Responsabilità Limitata</small>	
PROGETTAZIONE:		
Mandataria:	Mandante:	
SYSTRA S.A.	SWS Engineering S.p.A.	SYSTRA-SOTECNI S.p.A.
Relazione di calcolo		
IF2R.2.2.E.ZZ.CL.TR.16.0.5.008.A.DOCX		

ITINERARIO NAPOLI – BARI
RADDOPPIO TRATTA CANCELLO-BENEVENTO
II LOTTO FUNZIONALE FRASSO TELESINO – VITULANO
2° SUBLOTTO TELESE – SAN LORENZO
PROGETTO ESECUTIVO

COMMESSA	LOTTO	CODIFICA	DOCUMENTO	REV.	FOGLIO
IF2R	2.2.E.ZZ	CL	TR.16.0.5.008	A	22 di 118

In	Mx [kNm]	My [kNm]	Mxy [kNm]	Tx [kN]	Ty [kN]	
	0.94	7.05	-5.85	-6.40	-57.31	MIN
185	-6.12	11.52	-15.13	22.85	37.85	MAX
	-26.39	-0.59	-20.82	-17.68	-47.45	MIN
186	15.07	135.17	-3.20	4.89	150.39	MAX
	-20.93	55.42	-3.60	-0.98	-113.59	MIN
187	-7.68	9.13	13.81	24.86	35.17	MAX
	-23.83	-1.56	8.40	-25.81	-55.23	MIN
188	7.37	16.28	5.51	14.32	13.36	MAX
	5.73	7.24	3.75	-30.15	-45.24	MIN
189	11.03	17.34	-2.94	1.49	6.98	MAX
	2.29	6.34	-3.27	-2.66	-46.59	MIN
190	10.59	15.50	-9.55	25.16	13.77	MAX
	7.08	6.04	-11.89	-10.94	-45.53	MIN
191	-8.12	6.22	-13.94	21.60	35.48	MAX
	-17.42	-3.00	-19.88	-20.72	-56.77	MIN
192	14.06	130.95	-1.90	-0.90	149.69	MAX
	-11.91	53.69	-2.71	-2.64	-118.18	MIN
193	-6.87	6.06	14.54	19.19	36.00	MAX
	-14.80	-2.83	10.13	-26.76	-55.98	MIN
194	15.80	15.81	6.80	10.22	14.79	MAX
	9.41	5.88	5.69	-29.92	-44.07	MIN
195	18.67	17.52	-0.79	-0.83	8.42	MAX
	5.31	5.38	-1.39	-1.41	-44.76	MIN
196	17.05	16.08	-7.40	27.16	14.94	MAX
	10.21	6.09	-9.57	-11.81	-43.70	MIN
197	-9.84	0.82	-6.49	11.73	25.16	MAX
	-18.00	-0.56	-17.04	-3.68	19.97	MIN
198	-19.10	-22.48	-9.66	43.69	-9.41	MAX
	-34.56	-50.35	-24.40	35.98	-16.87	MIN
199	24.86	-5.67	-10.22	342.23	-53.77	MAX
	17.61	-25.38	-41.45	208.92	-85.27	MIN
200	-3.39	10.78	5.49	114.30	-121.70	MAX
	-9.27	-1.78	-1.61	59.47	-210.62	MIN
201	22.78	75.95	6.81	0.00	-174.65	MAX
	18.34	61.13	3.14	0.00	-309.60	MIN
202	22.78	75.95	6.81	0.00	-174.65	MAX
	18.34	61.13	3.14	0.00	-309.60	MIN
203	22.78	75.95	6.81	0.00	-174.65	MAX
	18.34	61.13	3.14	0.00	-309.60	MIN
204	1.20	3.99	7.83	0.00	-16.18	MAX
	-54.01	-180.03	6.31	0.00	-99.71	MIN
205	18.91	12.60	8.74	-12.40	-9.16	MAX
	-20.62	-144.23	6.05	-23.07	-91.75	MIN
206	18.02	11.76	0.19	-28.73	-6.89	MAX
	-23.04	-125.97	-0.30	-31.77	-88.48	MIN
207	14.67	17.52	0.20	-37.07	-11.19	MAX
	-22.33	-89.05	-3.39	-51.33	-97.62	MIN
208	8.93	26.03	-3.06	-10.48	-3.70	MAX
	-11.94	-42.29	-5.27	-22.71	-102.66	MIN
209	5.65	32.18	-7.97	3.29	24.92	MAX
	-2.85	0.90	-9.23	-14.18	-90.50	MIN
210	-5.29	6.33	-11.86	24.03	36.34	MAX
	-12.34	-2.37	-17.30	-20.54	-55.22	MIN
211	1.29	15.46	-3.69	39.37	9.99	MAX
	-0.76	3.24	-6.14	8.06	-11.06	MIN
212	2.13	11.01	-2.26	17.37	2.92	MAX
	-0.01	4.91	-4.51	1.64	-16.38	MIN
213	0.86	16.70	-16.05	181.73	12.02	MAX
	-6.89	-9.22	-50.84	52.43	-22.00	MIN
214	-36.49	-12.94	-2.25	1.70	-38.77	MAX
	-129.78	-106.93	-2.58	-2.35	-201.63	MIN
215	1.56	15.59	46.32	-50.65	11.05	MAX
	-3.20	-9.75	11.36	-186.88	-25.15	MIN
216	6.88	13.31	2.05	-8.60	10.17	MAX
	3.80	2.18	-0.35	-44.63	-14.01	MIN
217	13.39	11.96	-2.24	1.47	9.23	MAX
	5.13	5.61	-2.61	-2.43	-13.02	MIN
218	10.05	12.45	-4.10	39.86	10.06	MAX
	3.62	1.72	-7.15	11.52	-14.85	MIN
219	3.19	13.97	-15.58	182.29	10.59	MAX
	1.22	-10.51	-51.17	53.28	-27.27	MIN
220	-36.59	-15.23	-1.56	-0.28	-39.79	MAX
	-120.55	-107.95	-2.33	-2.28	-205.46	MIN
221	5.73	13.76	46.60	-53.65	10.88	MAX
	2.20	-10.46	12.48	-186.74	-26.96	MIN
222	15.07	11.96	2.86	-11.35	10.58	MAX
	5.41	1.71	1.05	-44.01	-14.33	MIN
223	20.75	11.11	-0.68	-0.49	9.94	MAX
	7.42	5.47	-1.24	-1.24	-12.57	MIN
224	16.34	12.00	-2.44	41.55	10.71	MAX
	6.16	1.83	-5.33	10.44	-14.11	MIN
225	8.31	13.81	-13.94	184.34	11.14	MAX

APPALTATORE:	TELESE S.c.a r.l. <small>Consorzio Telese Società Consortile a Responsabilità Limitata</small>	
PROGETTAZIONE:		
Mandatario:	Mandante:	
SYSTRA S.A.	SWS Engineering S.p.A.	SYSTRA-SOTECNI S.p.A.
Relazione di calcolo		
IF2R.2.2.E.ZZ.CL.TR.16.0.5.008.A.DOCX		

ITINERARIO NAPOLI – BARI
RADDOPPIO TRATTA CANCELLO-BENEVENTO
II LOTTO FUNZIONALE FRASSO TELESINO – VITULANO
2° SUBLOTTO TELESE – SAN LORENZO
PROGETTO ESECUTIVO


COMMESSA	LOTTO	CODIFICA	DOCUMENTO	REV.	FOGLIO
IF2R	2.2.E.ZZ	CL	TR.16.0.5.008	A	23 di 118

In	Mx [kNm]	My [kNm]	Mxy [kNm]	Tx [kN]	Ty [kN]	
	3.64	-10.21	-49.03	52.97	-26.52	MIN
226	-17.86	29.81	0.00	0.00	9.87	MAX
	-28.42	10.76	0.00	0.00	-12.45	MIN
227	-17.28	112.79	0.00	0.00	152.13	MAX
	-19.08	36.50	0.00	0.00	130.49	MIN
228	-129.63	-125.24	0.00	0.00	-148.85	MAX
	-218.68	-234.25	0.00	0.00	-344.55	MIN
229	-28.17	-18.99	0.00	0.00	-407.66	MAX
	-71.16	-152.77	0.00	0.00	-747.58	MIN
230	19.42	64.73	0.00	0.00	-266.52	MAX
	6.10	20.32	0.00	0.00	-494.55	MIN
231	19.42	64.73	0.00	0.00	-266.52	MAX
	6.10	20.32	0.00	0.00	-494.55	MIN
232	19.42	64.73	0.00	0.00	-266.52	MAX
	6.10	20.32	0.00	0.00	-494.55	MIN
233	0.77	2.56	0.00	0.00	-33.18	MAX
	-53.33	-177.77	0.00	0.00	-117.43	MIN
234	14.22	10.82	0.00	0.00	-27.39	MAX
	-31.85	-149.79	0.00	0.00	-110.85	MIN
235	20.66	14.65	0.00	0.00	-16.41	MAX
	-19.65	-125.76	0.00	0.00	-99.39	MIN
236	19.29	21.46	0.00	0.00	-8.08	MAX
	-13.18	-83.87	0.00	0.00	-95.92	MIN
237	12.54	28.88	0.00	0.00	4.28	MAX
	-7.67	-38.40	0.00	0.00	-97.57	MIN
238	5.19	40.30	0.00	0.00	27.94	MAX
	-0.11	18.92	0.00	0.00	-103.57	MIN
239	16.34	131.22	0.00	0.00	150.26	MAX
	-8.15	54.36	0.00	0.00	-117.01	MIN
240	-34.56	-15.24	0.00	0.00	-39.38	MAX
	-116.73	-107.64	0.00	0.00	-204.83	MIN
241	-5.88	9.18	-0.52	42.35	3.93	MAX
	-6.70	-0.42	-7.60	29.36	-0.74	MIN
242	0.49	5.55	-0.14	17.81	5.82	MAX
	0.13	1.10	-1.66	10.08	0.45	MIN
243	-6.79	14.52	-0.28	46.85	-19.65	MAX
	-32.83	-12.11	-15.49	40.19	-25.77	MIN
244	-32.18	-20.55	-1.25	1.66	-175.96	MAX
	-43.48	-96.89	-1.45	-2.23	-199.76	MIN
245	-6.35	13.97	13.22	-37.48	-19.92	MAX
	-29.16	-12.43	-2.28	-50.20	-26.51	MIN
246	0.98	8.27	5.77	-28.02	4.64	MAX
	-4.58	-1.05	-1.57	-46.12	-0.24	MIN
247	10.47	7.62	-1.36	2.42	6.47	MAX
	3.82	1.46	-1.68	-1.73	1.52	MIN
248	4.06	7.95	-1.12	42.87	4.40	MAX
	-4.80	-1.22	-9.06	32.64	-0.78	MIN
249	-6.65	13.37	-0.26	47.45	-20.39	MAX
	-23.01	-12.74	-16.32	41.39	-27.70	MIN
250	-32.19	-20.99	-0.97	1.01	-178.14	MAX
	-35.20	-97.78	-1.53	-1.59	-201.60	MIN
251	-5.85	13.24	13.31	-39.28	-20.27	MAX
	-20.52	-12.74	-1.67	-50.12	-27.63	MIN
252	8.97	7.67	6.24	-30.28	4.60	MAX
	-3.34	-1.25	-0.76	-45.56	-0.70	MIN
253	17.66	7.18	-0.43	0.24	6.66	MAX
	5.67	1.38	-0.83	-0.92	1.48	MIN
254	10.26	7.67	-0.12	43.75	4.69	MAX
	-2.64	-1.20	-7.89	30.82	-0.61	MIN
255	-4.51	13.21	0.75	48.57	-20.12	MAX
	-17.95	-12.66	-14.93	40.00	-27.46	MIN
256	-28.97	-20.89	0.00	0.00	-177.92	MAX
	-32.43	-97.84	0.00	0.00	-201.38	MIN
257	-9.84	0.82	17.04	3.68	25.16	MAX
	-18.00	-0.56	6.49	-11.73	19.97	MIN
258	-19.10	-22.48	24.40	-35.98	-9.41	MAX
	-34.56	-50.35	9.66	-43.69	-16.87	MIN
259	24.86	-5.67	41.45	-208.92	-53.77	MAX
	17.61	-25.38	10.22	-342.23	-85.27	MIN
260	-3.39	10.78	1.61	-59.47	-121.70	MAX
	-9.27	-1.78	-5.49	-114.30	-210.62	MIN
261	22.78	75.95	-3.14	0.00	-174.65	MAX
	18.34	61.13	-6.81	0.00	-309.60	MIN
262	22.78	75.95	-3.14	0.00	-174.65	MAX
	18.34	61.13	-6.81	0.00	-309.60	MIN
263	22.78	75.95	-3.14	0.00	-174.65	MAX
	18.34	61.13	-6.81	0.00	-309.60	MIN
264	1.20	3.99	-6.31	0.00	-16.18	MAX
	-54.01	-180.03	-7.83	0.00	-99.71	MIN
265	18.91	12.60	-6.05	23.07	-9.16	MAX
	-20.62	-144.23	-8.74	12.40	-91.75	MIN
266	18.02	11.76	0.30	31.77	-6.89	MAX

APPALTATORE:	TELESE S.c.a r.l. <small>Consorzio Telese Società Consortile a Responsabilità Limitata</small>	
PROGETTAZIONE:		
Mandataria:	Mandante:	
SYSTRA S.A.	SWS Engineering S.p.A.	SYSTRA-SOTECNI S.p.A.
Relazione di calcolo		
IF2R.2.2.E.ZZ.CL.TR.16.0.5.008.A.DOCX		

ITINERARIO NAPOLI – BARI					
RADDOPPIO TRATTA CANCELLO-BENEVENTO					
II LOTTO FUNZIONALE FRASSO TELESINO – VITULANO					
2° SUBLOTTO TELESE – SAN LORENZO					
PROGETTO ESECUTIVO					
COMMESSA	LOTTO	CODIFICA	DOCUMENTO	REV.	FOGLIO
IF2R	2.2.E.ZZ	CL	TR.16.0.5.008	A	24 di 118

In	Mx [kNm]	My [kNm]	Mxy [kNm]	Tx [kN]	Ty [kN]	
	-23.04	-125.97	-0.19	28.73	-88.48	MIN
267	14.67	17.52	3.39	51.33	-11.19	MAX
	-22.33	-89.05	-0.20	37.07	-97.62	MIN
268	8.93	26.03	5.27	22.71	-3.70	MAX
	-11.94	-42.29	3.06	10.48	-102.66	MIN
269	5.65	32.18	9.23	14.18	24.92	MAX
	-2.85	0.90	7.97	-3.29	-90.50	MIN
270	-5.29	6.33	17.30	20.54	36.34	MAX
	-12.34	-2.37	11.86	-24.03	-55.22	MIN
271	8.31	13.81	49.03	-52.97	11.14	MAX
	3.64	-10.21	13.94	-184.34	-26.52	MIN
272	-4.51	13.21	14.93	-40.00	-20.12	MAX
	-17.95	-12.66	-0.75	-48.57	-27.46	MIN
273	-0.65	8.90	-0.31	52.21	4.78	MAX
	-10.22	-0.93	-4.81	31.24	0.58	MIN
274	0.08	-0.29	-0.40	36.93	10.69	MAX
	-0.91	-0.70	-3.15	22.15	1.10	MIN
275	-4.42	3.99	-0.63	52.29	-31.08	MAX
	-24.42	2.51	-11.43	31.64	-37.09	MIN
276	-12.09	-1.37	-0.66	4.65	-47.44	MAX
	-32.50	-20.79	-0.77	-0.07	-69.66	MIN
277	-5.07	3.50	10.19	-31.40	-31.31	MAX
	-20.87	2.33	-0.60	-42.37	-37.38	MIN
278	-3.71	7.12	3.77	-30.29	5.93	MAX
	-4.74	-1.48	-0.69	-40.76	1.10	MIN
279	7.16	-0.10	-0.73	7.15	6.31	MAX
	-6.08	-0.33	-1.07	1.14	1.52	MIN
280	-0.86	7.07	-0.74	54.55	5.50	MAX
	-4.40	-1.52	-5.87	32.71	0.92	MIN
281	-5.09	3.42	-0.74	54.64	-32.19	MAX
	-14.58	2.27	-12.13	33.13	-38.11	MIN
282	-11.84	-1.46	-0.52	5.31	-47.94	MAX
	-23.08	-20.97	-0.95	0.53	-70.92	MIN
283	-4.27	3.37	10.26	-31.81	-32.22	MAX
	-12.10	2.26	-0.29	-44.09	-38.11	MIN
284	4.04	6.97	4.11	-31.41	5.41	MAX
	-2.90	-1.54	-0.26	-44.27	0.96	MIN
285	14.35	-0.23	-0.23	2.57	6.08	MAX
	-4.15	-0.37	-0.51	0.04	1.53	MIN
286	5.32	6.97	-0.20	49.44	5.45	MAX
	-2.21	-1.53	-5.12	31.70	1.01	MIN
287	-2.93	3.35	-0.20	49.33	-32.16	MAX
	-9.54	2.28	-11.26	32.34	-38.04	MIN
288	-9.99	-1.44	0.00	0.00	-47.82	MAX
	-19.25	-21.01	0.00	0.00	-70.85	MIN
289	-2.93	3.35	11.26	-32.34	-32.16	MAX
	-9.54	2.28	0.20	-49.33	-38.04	MIN
290	13.79	-6.27	6.87	4.12	-2.44	MAX
	8.37	-14.63	2.61	-11.22	-6.82	MIN
291	27.25	-2.58	10.60	-37.23	-15.96	MAX
	16.21	-10.52	4.13	-50.78	-19.43	MIN
292	26.32	6.49	-0.30	-39.30	-42.06	MAX
	19.01	-3.32	-0.79	-66.19	-63.09	MIN
293	21.43	27.72	-4.51	-36.77	-62.73	MAX
	18.54	23.59	-5.00	-70.29	-104.80	MIN
294	18.56	61.86	-5.63	0.00	-67.04	MAX
	13.11	43.70	-7.56	0.00	-116.16	MIN
295	18.56	61.86	-5.63	0.00	-67.04	MAX
	13.11	43.70	-7.56	0.00	-116.16	MIN
296	18.56	61.86	-5.63	0.00	-67.04	MAX
	13.11	43.70	-7.56	0.00	-116.16	MIN
297	9.98	33.25	-14.33	0.00	80.36	MAX
	-39.09	-130.29	-25.55	0.00	-22.40	MIN
298	-4.68	-1.05	-14.59	47.80	41.47	MAX
	-53.95	-159.85	-28.47	27.81	-48.99	MIN
299	19.84	2.51	-11.21	208.70	-0.69	MAX
	-22.61	-136.19	-40.31	191.49	-80.30	MIN
300	-9.40	2.28	4.49	58.93	-31.34	MAX
	-40.95	-101.19	-4.45	38.38	-126.00	MIN
301	4.42	24.37	5.49	23.07	-34.91	MAX
	-20.38	-53.96	1.24	11.12	-139.20	MIN
302	8.09	22.70	7.03	14.98	0.86	MAX
	-6.41	-15.68	6.26	-2.49	-87.17	MIN
303	17.05	16.08	9.57	11.81	14.94	MAX
	10.21	6.09	7.40	-27.16	-43.70	MIN
304	16.34	12.00	5.33	-10.44	10.71	MAX
	6.16	1.83	2.44	-41.55	-14.11	MIN
305	10.26	7.67	7.89	-30.82	4.69	MAX
	-2.64	-1.20	0.12	-43.75	-0.61	MIN
306	5.32	6.97	5.12	-31.70	5.45	MAX
	-2.21	-1.53	0.20	-49.44	1.01	MIN
307	38.00	0.64	0.06	0.30	-0.83	MAX

APPALTATORE:	 Consorzio Telese Società Consortile a Responsabilità Limitata	
PROGETTAZIONE:		
Mandataria:	Mandante:	
SYSTRA S.A.	SWS Engineering S.p.A.	SYSTRA-SOTECNI S.p.A.
Relazione di calcolo		
IF2R.2.2.E.ZZ.CL.TR.16.0.5.008.A.DOCX		

ITINERARIO NAPOLI – BARI
RADDOPPIO TRATTA CANCELLO-BENEVENTO
II LOTTO FUNZIONALE FRASSO TELESINO – VITULANO
2° SUBLOTTO TELESE – SAN LORENZO
PROGETTO ESECUTIVO

COMMESSA	LOTTO	CODIFICA	DOCUMENTO	REV.	FOGLIO
IF2R	2.2.E.ZZ	CL	TR.16.0.5.008	A	25 di 118

In	Mx [kNm]	My [kNm]	Mxy [kNm]	Tx [kN]	Ty [kN]	
	21.59	0.19	0.04	0.20	-5.61	MIN
308	29.60	0.89	0.10	-0.02	-15.16	MAX
	20.00	-3.73	0.07	-0.03	-18.18	MIN
309	32.30	12.67	0.14	-0.11	-32.97	MAX
	22.98	8.82	0.09	-0.17	-47.94	MIN
310	27.06	32.22	0.15	-0.11	-43.44	MAX
	20.39	25.83	0.10	-0.17	-72.90	MIN
311	15.51	51.69	0.13	0.00	-46.14	MAX
	11.53	38.43	0.09	0.00	-81.28	MIN
312	15.51	51.69	0.13	0.00	-46.14	MAX
	11.53	38.43	0.09	0.00	-81.28	MIN
313	15.51	51.69	0.13	0.00	-46.14	MAX
	11.53	38.43	0.09	0.00	-81.28	MIN
314	33.74	112.45	0.69	0.00	172.35	MAX
	7.81	26.05	0.33	0.00	17.18	MIN
315	-8.02	98.17	0.81	1.07	287.29	MAX
	-31.31	42.88	0.38	0.72	104.67	MIN
316	-113.27	-93.49	0.90	1.50	20.60	MAX
	-151.25	-206.32	0.45	1.13	-191.15	MIN
317	-15.73	-2.85	1.14	1.60	-215.33	MAX
	-63.85	-191.19	0.60	1.42	-387.43	MIN
318	0.23	19.52	1.33	1.59	-45.65	MAX
	-28.79	-71.22	0.74	1.38	-159.51	MIN
319	11.52	22.96	1.41	1.52	-8.27	MAX
	-6.08	-17.59	0.81	1.11	-91.61	MIN
320	18.67	17.52	1.39	1.41	8.42	MAX
	5.31	5.38	0.79	0.83	-44.76	MIN
321	20.75	11.11	1.24	1.24	9.94	MAX
	7.42	5.47	0.68	0.49	-12.57	MIN
322	17.66	7.18	0.83	0.92	6.66	MAX
	5.67	1.38	0.43	-0.24	1.48	MIN
323	14.35	-0.23	0.51	-0.04	6.08	MAX
	-4.15	-0.37	0.23	-2.57	1.53	MIN
324	13.90	-6.26	-2.52	11.73	-2.53	MAX
	8.44	-14.62	-6.74	-3.40	-6.89	MIN
325	27.38	-2.53	-3.98	50.76	-16.06	MAX
	16.31	-10.45	-10.38	37.22	-19.56	MIN
326	26.45	6.61	1.00	65.88	-42.21	MAX
	19.09	-3.15	0.59	39.09	-63.32	MIN
327	21.55	27.96	5.28	69.96	-62.90	MAX
	18.62	23.85	4.81	36.55	-105.05	MIN
328	18.66	62.20	7.82	0.00	-67.21	MAX
	13.18	43.94	5.81	0.00	-116.42	MIN
329	18.66	62.20	7.82	0.00	-67.21	MAX
	13.18	43.94	5.81	0.00	-116.42	MIN
330	18.66	62.20	7.82	0.00	-67.21	MAX
	13.18	43.94	5.81	0.00	-116.42	MIN
331	9.75	32.51	26.99	0.00	80.79	MAX
	-39.61	-132.03	15.05	0.00	-22.88	MIN
332	-5.14	-1.90	30.14	-25.61	41.86	MAX
	-54.62	-161.47	15.43	-46.27	-49.50	MIN
333	19.23	1.69	42.16	-189.13	-0.44	MAX
	-23.34	-137.59	12.17	-205.79	-80.89	MIN
334	-10.23	1.52	6.78	-35.43	-31.28	MAX
	-41.77	-102.23	-3.21	-55.73	-126.64	MIN
335	3.42	23.75	1.45	-8.07	-34.99	MAX
	-21.24	-54.64	-3.95	-20.34	-139.82	MIN
336	6.96	22.24	-3.42	5.44	0.72	MAX
	-7.26	-16.05	-5.09	-12.83	-87.69	MIN
337	15.80	15.81	-5.69	29.92	14.79	MAX
	9.41	5.88	-6.80	-10.22	-44.07	MIN
338	15.07	11.96	-1.05	44.01	10.58	MAX
	5.41	1.71	-2.86	11.35	-14.33	MIN
339	8.97	7.67	0.76	45.56	4.60	MAX
	-3.34	-1.25	-6.24	30.28	-0.70	MIN
340	4.04	6.97	0.26	44.27	5.41	MAX
	-2.90	-1.54	-4.11	31.41	0.96	MIN
341	-9.71	0.84	-6.38	12.50	24.97	MAX
	-17.81	-0.54	-16.87	-2.63	19.83	MIN
342	-18.94	-22.40	-9.49	43.86	-9.63	MAX
	-34.33	-50.23	-24.15	36.09	-17.20	MIN
343	25.09	-5.44	-10.00	342.00	-54.11	MAX
	17.77	-25.04	-41.12	208.77	-85.78	MIN
344	-3.22	11.18	5.75	114.01	-122.09	MAX
	-9.03	-1.23	-1.26	59.27	-211.19	MIN
345	22.98	76.62	7.03	0.00	-175.04	MAX
	18.49	61.62	3.44	0.00	-310.19	MIN
346	22.98	76.62	7.03	0.00	-175.04	MAX
	18.49	61.62	3.44	0.00	-310.19	MIN
347	22.98	76.62	7.03	0.00	-175.04	MAX
	18.49	61.62	3.44	0.00	-310.19	MIN
348	0.70	2.34	9.44	0.00	-15.43	MAX

APPALTATORE:	TELESE S.c.a r.l. <small>Consorzio Telese Società Consortile a Responsabilità Limitata</small>	
PROGETTAZIONE:		
Mandataria:	Mandante:	
SYSTRA S.A.	SWS Engineering S.p.A.	SYSTRA-SOTECNI S.p.A.
Relazione di calcolo		
IF2R.2.2.E.ZZ.CL.TR.16.0.5.008.A.DOCX		

ITINERARIO NAPOLI – BARI
RADDOPPIO TRATTA CANCELLO-BENEVENTO
II LOTTO FUNZIONALE FRASSO TELESINO – VITULANO
2° SUBLOTTO TELESE – SAN LORENZO
PROGETTO ESECUTIVO

COMMESSA	LOTTO	CODIFICA	DOCUMENTO	REV.	FOGLIO
IF2R	2.2.E.ZZ	CL	TR.16.0.5.008	A	26 di 118

In	Mx [kNm]	My [kNm]	Mxy [kNm]	Tx [kN]	Ty [kN]	
	-55.10	-183.67	7.22	0.00	-100.83	MIN
349	17.93	10.78	10.61	-10.05	-8.49	MAX
	-22.00	-147.58	7.11	-21.29	-92.93	MIN
350	16.74	10.03	1.74	-25.51	-6.50	MAX
	-24.56	-128.82	1.38	-28.64	-89.80	MIN
351	12.93	15.96	2.69	-33.86	-11.16	MAX
	-24.01	-91.14	-1.88	-48.10	-99.02	MIN
352	6.86	24.80	-0.26	-7.29	-3.93	MAX
	-13.67	-43.60	-3.51	-20.10	-103.99	MIN
353	3.26	31.30	-6.07	6.27	24.58	MAX
	-4.54	0.21	-6.67	-12.24	-91.59	MIN
354	-6.87	6.06	-10.13	26.76	36.00	MAX
	-14.80	-2.83	-14.54	-19.19	-55.98	MIN
355	5.73	13.76	-12.48	186.74	10.88	MAX
	2.20	-10.46	-46.60	53.65	-26.96	MIN
356	-5.85	13.24	1.67	50.12	-20.27	MAX
	-20.52	-12.74	-13.31	39.28	-27.63	MIN
357	-4.27	3.37	0.29	44.09	-32.22	MAX
	-12.10	2.26	-10.26	31.81	-38.11	MIN
358	-17.74	29.83	0.21	1.63	9.66	MAX
	-28.25	10.77	0.14	1.10	-12.77	MIN
359	-17.11	112.98	0.30	0.51	151.63	MAX
	-18.86	36.62	0.20	0.34	130.12	MIN
360	-129.44	-124.88	0.39	-0.02	-149.45	MAX
	-218.40	-233.72	0.26	-0.03	-345.43	MIN
361	-27.95	-18.40	0.40	-0.15	-408.36	MAX
	-70.83	-151.90	0.27	-0.21	-748.62	MIN
362	19.68	65.61	0.34	0.00	-267.25	MAX
	6.46	21.53	0.23	0.00	-495.63	MIN
363	19.68	65.61	0.34	0.00	-267.25	MAX
	6.46	21.53	0.23	0.00	-495.63	MIN
364	19.68	65.61	0.34	0.00	-267.25	MAX
	6.46	21.53	0.23	0.00	-495.63	MIN
365	-0.10	-0.33	1.92	0.00	-32.35	MAX
	-55.08	-183.61	1.28	0.00	-119.55	MIN
366	12.59	7.75	2.21	2.60	-26.70	MAX
	-34.04	-155.08	1.47	2.21	-113.05	MIN
367	18.56	11.82	2.35	3.49	-16.14	MAX
	-22.04	-130.18	1.58	3.17	-101.76	MIN
368	16.50	19.02	2.76	3.81	-8.31	MAX
	-15.78	-86.98	1.91	3.20	-98.36	MIN
369	9.27	27.06	2.97	3.48	3.72	MAX
	-10.29	-40.25	2.10	2.33	-99.78	MIN
370	1.50	39.05	2.93	3.03	27.30	MAX
	-3.18	18.04	2.09	1.52	-105.31	MIN
371	14.06	130.95	2.71	2.64	149.69	MAX
	-11.91	53.69	1.90	0.90	-118.18	MIN
372	-36.59	-15.23	2.33	2.28	-39.79	MAX
	-120.55	-107.95	1.56	0.28	-205.46	MIN
373	-32.19	-20.99	1.53	1.59	-178.14	MAX
	-35.20	-97.78	0.97	-1.01	-201.60	MIN
374	-11.84	-1.46	0.95	-0.53	-47.94	MAX
	-23.08	-20.97	0.52	-5.31	-70.92	MIN
375	-9.86	0.83	17.29	6.19	24.69	MAX
	-18.04	-0.55	6.66	-9.89	19.65	MIN
376	-19.04	-22.32	24.73	-35.24	-9.97	MAX
	-34.49	-50.12	9.89	-42.59	-17.71	MIN
377	25.06	-5.17	41.88	-208.68	-54.73	MAX
	17.75	-24.64	10.51	-341.86	-86.69	MIN
378	-3.14	11.69	2.05	-59.48	-122.87	MAX
	-8.91	-0.55	-5.17	-114.31	-212.34	MIN
379	23.27	77.58	-2.78	0.00	-175.87	MAX
	18.70	62.33	-6.55	0.00	-311.42	MIN
380	23.27	77.58	-2.78	0.00	-175.87	MAX
	18.70	62.33	-6.55	0.00	-311.42	MIN
381	23.27	77.58	-2.78	0.00	-175.87	MAX
	18.70	62.33	-6.55	0.00	-311.42	MIN
382	-0.21	-0.70	-4.47	0.00	-15.76	MAX
	-56.57	-188.55	-5.44	0.00	-103.48	MIN
383	16.40	7.83	-3.95	25.89	-8.92	MAX
	-23.77	-151.79	-6.03	15.31	-95.60	MIN
384	14.85	7.53	3.10	35.68	-7.19	MAX
	-26.44	-132.13	1.99	32.38	-92.49	MIN
385	10.59	14.12	5.88	54.32	-12.08	MAX
	-25.93	-93.14	2.93	41.14	-101.53	MIN
386	4.28	23.67	7.87	24.47	-4.87	MAX
	-15.46	-44.50	6.22	13.96	-106.01	MIN
387	0.56	30.71	12.05	14.97	23.81	MAX
	-6.08	0.02	10.37	-0.42	-92.99	MIN
388	-8.12	6.22	19.88	20.72	35.48	MAX
	-17.42	-3.00	13.94	-21.60	-56.77	MIN
389	3.19	13.97	51.17	-53.28	10.59	MAX

APPALTATORE:

TELESE S.c.a r.l.
Consorzio Telese Società Consortile a Responsabilità Limitata

ITINERARIO NAPOLI – BARI
RADDOPPIO TRATTA CANCELLO-BENEVENTO
II LOTTO FUNZIONALE FRASSO TELESINO – VITULANO
2° SUBLOTTO TELESE – SAN LORENZO

PROGETTAZIONE:

Mandataria:

Mandante:

SYSTRA S.A. SWS Engineering S.p.A. SYSTRA-SOTECNI S.p.A.

PROGETTO ESECUTIVO

Relazione di calcolo

IF2R.2.2.E.ZZ.CL.TR.16.0.5.008.A.DOCX

COMMESSA LOTTO CODIFICA DOCUMENTO REV. FOGLIO
IF2R 2.2.E.ZZ CL TR.16.0.5.008 A 27 di 118


In	Mx [kNm]	My [kNm]	Mxy [kNm]	Tx [kN]	Ty [kN]	
	1.22	-10.51	15.58	-182.29	-27.27	MIN
390	-6.65	13.37	16.32	-41.39	-20.39	MAX
	-23.01	-12.74	0.26	-47.45	-27.70	MIN
391	-5.09	3.42	12.13	-33.13	-32.19	MAX
	-14.58	2.27	0.74	-54.64	-38.11	MIN
392	13.21	-6.27	7.16	7.82	-3.07	MAX
	7.99	-14.64	2.81	-8.55	-7.29	MIN
393	26.82	-2.41	10.92	-35.85	-16.77	MAX
	15.94	-10.27	4.35	-48.72	-20.52	MIN
394	26.22	7.16	0.10	-38.58	-43.49	MAX
	18.95	-2.41	-0.49	-65.11	-65.22	MIN
395	21.67	29.17	-4.13	-36.50	-64.54	MAX
	18.71	25.07	-4.65	-69.87	-107.49	MIN
396	19.29	64.29	-5.42	0.00	-68.98	MAX
	13.61	45.35	-7.25	0.00	-119.03	MIN
397	19.29	64.29	-5.42	0.00	-68.98	MAX
	13.61	45.35	-7.25	0.00	-119.03	MIN
398	19.29	64.29	-5.42	0.00	-68.98	MAX
	13.61	45.35	-7.25	0.00	-119.03	MIN
399	7.78	25.92	-11.66	0.00	79.53	MAX
	-42.66	-142.21	-22.51	0.00	-28.90	MIN
400	-8.39	-8.14	-11.57	51.41	40.41	MAX
	-58.26	-170.13	-25.04	31.01	-55.55	MIN
401	15.26	-3.49	-8.18	212.95	-2.35	MAX
	-27.16	-144.28	-36.89	196.25	-86.86	MIN
402	-15.07	-2.14	7.72	61.25	-33.52	MAX
	-45.60	-106.10	-0.89	42.81	-132.04	MIN
403	-1.81	21.61	8.59	23.68	-37.09	MAX
	-24.72	-56.24	4.56	14.46	-144.02	MIN
404	1.66	21.22	9.92	14.53	-0.89	MAX
	-10.19	-16.22	9.11	0.00	-90.45	MIN
405	10.59	15.50	11.89	10.94	13.77	MAX
	7.08	6.04	9.55	-25.16	-45.53	MIN
406	10.05	12.45	7.15	-11.52	10.06	MAX
	3.62	1.72	4.10	-39.86	-14.85	MIN
407	4.06	7.95	9.06	-32.64	4.40	MAX
	-4.80	-1.22	1.12	-42.87	-0.78	MIN
408	-0.86	7.07	5.87	-32.71	5.50	MAX
	-4.40	-1.52	0.74	-54.55	0.92	MIN
409	36.33	0.57	0.33	5.52	-1.64	MAX
	20.47	0.14	0.23	3.74	-6.22	MIN
410	28.12	1.03	0.32	3.44	-16.25	MAX
	19.03	-3.55	0.22	2.31	-19.66	MIN
411	31.49	13.40	0.34	2.09	-35.01	MAX
	22.44	9.79	0.24	1.39	-50.95	MIN
412	26.95	33.87	0.28	1.01	-46.10	MAX
	20.32	27.06	0.20	0.67	-76.84	MIN
413	16.42	54.74	0.20	0.00	-49.01	MAX
	12.15	40.50	0.14	0.00	-85.54	MIN
414	16.42	54.74	0.20	0.00	-49.01	MAX
	12.15	40.50	0.14	0.00	-85.54	MIN
415	16.42	54.74	0.20	0.00	-49.01	MAX
	12.15	40.50	0.14	0.00	-85.54	MIN
416	29.99	99.96	4.67	0.00	168.72	MAX
	3.31	11.03	4.19	0.00	6.15	MIN
417	-13.78	86.85	5.23	5.48	283.43	MAX
	-37.14	30.05	4.69	4.36	93.69	MIN
418	-119.72	-101.71	5.12	6.91	16.25	MAX
	-157.60	-216.49	4.60	4.70	-201.71	MIN
419	-23.35	-8.24	5.21	5.82	-219.75	MAX
	-69.47	-196.61	4.69	2.27	-396.52	MIN
420	-7.76	16.66	4.76	4.11	-49.33	MAX
	-33.67	-73.04	4.31	-0.17	-166.12	MIN
421	3.61	21.83	4.04	3.08	-10.79	MAX
	-10.02	-17.36	3.65	-1.33	-95.58	MIN
422	11.03	17.34	3.27	2.66	6.98	MAX
	2.29	6.34	2.94	-1.49	-46.59	MIN
423	13.39	11.96	2.61	2.43	9.23	MAX
	5.13	5.61	2.24	-1.47	-13.02	MIN
424	10.47	7.62	1.68	1.73	6.47	MAX
	3.82	1.46	1.36	-2.42	1.52	MIN
425	7.16	-0.10	1.07	-1.14	6.31	MAX
	-6.08	-0.33	0.73	-7.15	1.52	MIN
426	10.22	-6.37	-2.41	16.89	-3.49	MAX
	5.98	-14.79	-6.58	3.59	-7.60	MIN
427	24.00	-2.53	-4.03	56.22	-17.43	MAX
	14.04	-10.46	-10.48	40.89	-21.42	MIN
428	24.26	7.22	0.80	69.90	-44.90	MAX
	17.63	-2.34	0.29	41.79	-67.29	MIN
429	20.72	29.51	4.88	72.37	-66.53	MAX
	18.01	25.34	4.36	38.16	-110.42	MIN
430	19.68	65.59	7.35	0.00	-71.18	MAX

APPALTATORE:	TELESE S.c.a r.l. <small>Consorzio Telese Società Consortile a Responsabilità Limitata</small>	
PROGETTAZIONE:		
Mandataria:	Mandante:	
SYSTRA S.A.	SWS Engineering S.p.A.	SYSTRA-SOTECNI S.p.A.
Relazione di calcolo		
IF2R.2.2.E.ZZ.CL.TR.16.0.5.008.A.DOCX		

ITINERARIO NAPOLI – BARI
RADDOPPIO TRATTA CANCELLO-BENEVENTO
II LOTTO FUNZIONALE FRASSO TELESINO – VITULANO
2° SUBLOTTO TELESE – SAN LORENZO
PROGETTO ESECUTIVO

COMMESSA	LOTTO	CODIFICA	DOCUMENTO	REV.	FOGLIO
IF2R	2.2.E.ZZ	CL	TR.16.0.5.008	A	28 di 118

In	Mx [kNm]	My [kNm]	Mxy [kNm]	Tx [kN]	Ty [kN]	
	13.88	46.25	5.50	0.00	-122.28	MIN
431	19.68	65.59	7.35	0.00	-71.18	MAX
	13.88	46.25	5.50	0.00	-122.28	MIN
432	19.68	65.59	7.35	0.00	-71.18	MAX
	13.88	46.25	5.50	0.00	-122.28	MIN
433	4.68	15.60	32.03	0.00	71.57	MAX
	-46.26	-154.21	20.64	0.00	-41.45	MIN
434	-12.79	-16.47	35.66	-22.85	32.54	MAX
	-61.93	-178.97	21.56	-41.11	-67.75	MIN
435	10.34	-9.19	47.21	-183.61	-9.69	MAX
	-30.47	-149.86	17.84	-202.91	-97.72	MIN
436	-20.09	-4.55	11.15	-32.53	-39.31	MAX
	-47.90	-107.51	1.91	-58.72	-140.01	MIN
437	-6.28	21.33	4.69	-7.43	-40.64	MAX
	-25.89	-55.22	0.09	-25.90	-148.36	MIN
438	-2.17	21.94	-1.32	5.42	-2.49	MAX
	-10.56	-14.47	-2.17	-18.30	-91.83	MIN
439	7.37	16.28	-3.75	30.15	13.36	MAX
	5.73	7.24	-5.51	-14.32	-45.24	MIN
440	6.88	13.31	0.35	44.63	10.17	MAX
	3.80	2.18	-2.05	8.60	-14.01	MIN
441	0.98	8.27	1.57	46.12	4.64	MAX
	-4.58	-1.05	-5.77	28.02	-0.24	MIN
442	-3.71	7.12	0.69	40.76	5.93	MAX
	-4.74	-1.48	-3.77	30.29	1.10	MIN
443	-14.46	0.59	-6.45	19.11	23.92	MAX
	-24.92	-0.92	-17.01	6.36	19.13	MIN
444	-23.34	-22.62	-9.97	51.83	-11.17	MAX
	-40.91	-50.60	-24.90	41.43	-19.50	MIN
445	20.54	-5.25	-10.84	348.37	-57.29	MAX
	14.69	-24.79	-42.42	213.08	-90.51	MIN
446	-4.86	11.87	4.57	118.17	-126.52	MAX
	-11.45	-0.36	-2.91	62.10	-217.75	MIN
447	23.81	79.37	5.91	0.00	-179.93	MAX
	19.10	63.68	1.89	0.00	-317.41	MIN
448	23.81	79.37	5.91	0.00	-179.93	MAX
	19.10	63.68	1.89	0.00	-317.41	MIN
449	23.81	79.37	5.91	0.00	-179.93	MAX
	19.10	63.68	1.89	0.00	-317.41	MIN
450	-6.83	-22.76	16.31	0.00	-35.46	MAX
	-63.99	-213.29	15.11	0.00	-132.12	MIN
451	7.18	-9.46	17.54	-9.43	-28.20	MAX
	-31.13	-169.71	15.70	-16.86	-123.31	MIN
452	4.83	-3.77	9.18	-23.85	-24.39	MAX
	-32.65	-142.99	7.46	-29.96	-116.44	MIN
453	0.98	10.06	7.15	-35.57	-24.61	MAX
	-29.12	-94.99	4.02	-59.08	-118.06	MIN
454	-3.87	23.73	2.56	-10.82	-11.67	MAX
	-16.29	-41.78	0.51	-32.74	-113.85	MIN
455	-5.80	32.41	-3.57	3.69	21.30	MAX
	-8.42	3.78	-4.65	-21.90	-94.46	MIN
456	-7.68	9.13	-8.40	25.81	35.17	MAX
	-23.83	-1.56	-13.81	-24.86	-55.23	MIN
457	1.56	15.59	-11.36	186.88	11.05	MAX
	-3.20	-9.75	-46.32	50.65	-25.15	MIN
458	-6.35	13.97	2.28	50.20	-19.92	MAX
	-29.16	-12.43	-13.22	37.48	-26.51	MIN
459	-5.07	3.50	0.60	42.37	-31.31	MAX
	-20.87	2.33	-10.19	31.40	-37.38	MIN
460	-26.05	29.17	-0.23	12.86	9.01	MAX
	-40.87	10.39	-0.44	8.54	-13.83	MIN
461	-24.82	112.08	-0.95	11.13	149.63	MAX
	-29.37	36.07	-1.55	7.40	128.70	MIN
462	-135.10	-125.42	-1.74	8.73	-152.46	MAX
	-226.64	-234.60	-2.68	6.05	-350.02	MIN
463	-31.33	-19.06	-2.22	5.95	-412.70	MAX
	-75.71	-152.97	-3.30	4.18	-755.02	MIN
464	19.92	66.39	-2.12	0.00	-272.10	MAX
	6.73	22.43	-3.11	0.00	-502.72	MIN
465	19.92	66.39	-2.12	0.00	-272.10	MAX
	6.73	22.43	-3.11	0.00	-502.72	MIN
466	19.92	66.39	-2.12	0.00	-272.10	MAX
	6.73	22.43	-3.11	0.00	-502.72	MIN
467	-11.35	-37.82	13.00	0.00	-73.71	MAX
	-67.26	-224.19	9.66	0.00	-172.52	MIN
468	-1.90	-19.23	13.53	3.72	-65.89	MAX
	-44.64	-181.62	9.75	-1.74	-163.39	MIN
469	3.57	-4.18	11.33	-3.20	-48.71	MAX
	-29.31	-144.58	8.45	-12.57	-143.48	MIN
470	4.16	15.19	8.42	-9.32	-29.03	MAX
	-15.53	-87.17	6.58	-24.49	-123.93	MIN
471	-0.16	28.60	6.09	-7.76	-4.78	MAX

APPALTATORE:	 Consorzio Telese Società Consortile a Responsabilità Limitata		ITINERARIO NAPOLI – BARI RADDOPPIO TRATTA CANCELLO-BENEVENTO II LOTTO FUNZIONALE FRASSO TELESINO – VITULANO 2° SUBLOTTO TELESE – SAN LORENZO PROGETTO ESECUTIVO					
PROGETTAZIONE:	Mandataria: SYSTRA S.A. Mandante: SWS Engineering S.p.A. SYSTRA-SOTECNI S.p.A.		COMMESSA	LOTTO	CODIFICA	DOCUMENTO	REV.	FOGLIO
Relazione di calcolo	IF2R.2.2.E.ZZ.CL.TR.16.0.5.008.A.DOCX		IF2R	2.2.E.ZZ	CL	TR.16.0.5.008	A	29 di 118

In	Mx [kNm]	My [kNm]	Mxy [kNm]	Tx [kN]	Ty [kN]	
	-7.01	-34.46	5.40	-22.30	-108.11	MIN
472	1.81	41.98	4.63	-2.25	25.62	MAX
	-8.97	23.27	4.11	-11.89	-103.61	MIN
473	15.07	135.17	3.60	0.98	150.39	MAX
	-20.93	55.42	3.20	-4.89	-113.59	MIN
474	-36.49	-12.94	2.58	2.35	-38.77	MAX
	-129.78	-106.93	2.25	-1.70	-201.63	MIN
475	-32.18	-20.55	1.45	2.23	-175.96	MAX
	-43.48	-96.89	1.25	-1.66	-199.76	MIN
476	-12.09	-1.37	0.77	0.07	-47.44	MAX
	-32.50	-20.79	0.66	-4.65	-69.66	MIN
477	-23.04	0.45	16.03	19.91	23.94	MAX
	-38.81	-1.47	5.98	-1.52	19.42	MIN
478	-31.19	-22.99	21.58	-27.46	-10.44	MAX
	-52.66	-51.26	8.00	-31.88	-18.94	MIN
479	11.15	-6.94	36.47	-201.25	-55.73	MAX
	7.91	-27.31	6.99	-331.73	-88.58	MIN
480	-9.30	8.32	-4.99	-54.00	-124.48	MAX
	-17.48	-5.22	-10.40	-106.95	-214.65	MIN
481	22.27	74.24	-9.27	0.00	-177.79	MAX
	17.99	59.96	-11.43	0.00	-313.96	MIN
482	22.27	74.24	-9.27	0.00	-177.79	MAX
	17.99	59.96	-11.43	0.00	-313.96	MIN
483	22.27	74.24	-9.27	0.00	-177.79	MAX
	17.99	59.96	-11.43	0.00	-313.96	MIN
484	-16.00	-53.32	10.96	0.00	-98.82	MAX
	-71.03	-236.78	3.42	0.00	-194.99	MIN
485	-5.20	-28.00	12.34	3.82	-88.81	MAX
	-43.04	-186.46	4.57	-6.48	-183.82	MIN
486	0.65	-8.02	12.01	2.52	-66.01	MAX
	-24.22	-145.46	6.70	-12.32	-158.28	MIN
487	3.26	15.90	11.62	-1.18	-38.42	MAX
	-8.84	-85.32	9.05	-14.54	-129.27	MIN
488	0.80	29.10	11.07	-2.89	-9.24	MAX
	-2.17	-33.85	10.13	-8.81	-103.76	MIN
489	0.97	34.96	14.62	1.84	26.76	MAX
	-6.98	8.53	12.15	-6.62	-80.59	MIN
490	-6.12	11.52	20.82	17.68	37.85	MAX
	-26.39	-0.59	15.13	-22.85	-47.45	MIN
491	0.86	16.70	50.84	-52.43	12.02	MAX
	-6.89	-9.22	16.05	-181.73	-22.00	MIN
492	-6.79	14.52	15.49	-40.19	-19.65	MAX
	-32.83	-12.11	0.28	-46.85	-25.77	MIN
493	-4.42	3.99	11.43	-31.64	-31.08	MAX
	-24.42	2.51	0.63	-52.29	-37.09	MIN
494	-10.66	-6.56	5.86	20.36	-2.31	MAX
	-18.28	-16.07	2.13	-2.22	-5.82	MIN
495	2.55	-2.57	7.74	-30.88	-13.49	MAX
	-0.41	-10.60	2.52	-41.61	-16.60	MIN
496	5.84	5.00	-4.48	-32.33	-37.57	MAX
	4.04	-5.47	-6.02	-57.25	-56.86	MIN
497	7.15	20.63	-10.62	-31.22	-57.28	MAX
	3.86	15.78	-13.06	-63.27	-96.41	MIN
498	15.29	50.97	-13.29	0.00	-61.11	MAX
	10.90	36.33	-18.22	0.00	-106.81	MIN
499	15.29	50.97	-13.29	0.00	-61.11	MAX
	10.90	36.33	-18.22	0.00	-106.81	MIN
500	15.29	50.97	-13.29	0.00	-61.11	MAX
	10.90	36.33	-18.22	0.00	-106.81	MIN
501	-20.04	-66.79	8.24	0.00	-121.92	MAX
	-71.68	-238.93	-7.03	0.00	-205.38	MIN
502	-5.01	-35.42	8.94	-0.26	-109.94	MAX
	-27.40	-187.02	-2.89	-14.09	-192.71	MIN
503	-0.58	-12.20	9.77	0.95	-83.30	MAX
	-13.86	-148.84	3.55	-14.65	-164.36	MIN
504	1.60	14.97	9.98	1.07	-52.64	MAX
	-3.58	-85.77	8.17	-9.04	-133.70	MIN
505	0.59	27.44	10.66	0.26	-21.89	MAX
	-0.47	-36.51	9.36	-2.38	-104.13	MIN
506	0.42	26.51	11.76	7.65	2.98	MAX
	-3.05	-4.55	10.02	-4.68	-70.83	MIN
507	8.24	18.54	12.29	12.03	14.53	MAX
	0.43	10.51	9.79	-25.82	-35.90	MIN
508	1.29	15.46	6.14	-8.06	9.99	MAX
	-0.76	3.24	3.69	-39.37	-11.06	MIN
509	-5.88	9.18	7.60	-29.36	3.93	MAX
	-6.70	-0.42	0.52	-42.35	-0.74	MIN
510	-0.65	8.90	4.81	-31.24	4.78	MAX
	-10.22	-0.93	0.31	-52.21	0.58	MIN
511	-0.85	1.64	3.48	14.64	15.84	MAX
	-1.19	0.55	1.23	-1.73	3.42	MIN
512	2.27	0.29	0.12	-11.82	9.50	MAX

APPALTATORE: **TELESE S.c.a r.l.**
 Consorzio Telese Società Consortile a Responsabilità Limitata

PROGETTAZIONE:
 Mandataria: SYSTRA S.A. Mandante: SWS Engineering S.p.A. SYSTRA-SOTECNI S.p.A.

Relazione di calcolo
 IF2R.2.2.E.ZZ.CL.TR.16.0.5.008.A.DOCX

ITINERARIO NAPOLI – BARI
 RADDOPPIO TRATTA CANCELLO-BENEVENTO
 II LOTTO FUNZIONALE FRASSO TELESINO – VITULANO
 2° SUBLOTTO TELESE – SAN LORENZO

PROGETTO ESECUTIVO

COMMESSA	LOTTO	CODIFICA	DOCUMENTO	REV.	FOGLIO
IF2R	2.2.E.ZZ	CL	TR.16.0.5.008	A	30 di 118

In	Mx [kNm]	My [kNm]	Mxy [kNm]	Tx [kN]	Ty [kN]	
	1.09	-3.17	-0.12	-17.12	-0.91	MIN
513	7.07	8.12	-2.68	-13.52	-6.19	MAX
	3.96	3.94	-3.09	-25.76	-8.76	MIN
514	6.96	29.03	-8.96	-4.16	-7.27	MAX
	4.89	23.23	-12.87	-11.76	-20.22	MIN
515	14.57	48.57	-14.77	0.00	-6.65	MAX
	10.86	36.19	-19.96	0.00	-24.85	MIN
516	14.57	48.57	-14.77	0.00	-6.65	MAX
	10.86	36.19	-19.96	0.00	-24.85	MIN
517	14.57	48.57	-14.77	0.00	-6.65	MAX
	10.86	36.19	-19.96	0.00	-24.85	MIN
518	-18.68	-62.27	3.26	0.00	-147.98	MAX
	-73.72	-245.74	-32.80	0.00	-176.76	MIN
519	0.13	-28.38	5.85	-3.04	-141.72	MAX
	-9.38	-181.84	-12.87	-18.06	-175.43	MIN
520	0.20	-11.12	9.27	-0.27	-122.84	MAX
	-2.63	-138.12	5.92	-13.76	-173.84	MIN
521	0.52	14.07	9.40	1.26	-93.23	MAX
	0.12	-82.17	7.98	-5.99	-169.97	MIN
522	-0.55	24.43	9.43	1.20	-58.51	MAX
	-0.69	-38.71	6.98	-0.28	-145.29	MIN
523	0.62	24.79	8.99	6.81	-27.78	MAX
	-0.02	-7.67	6.49	-3.05	-104.30	MIN
524	1.51	17.52	5.85	6.40	-7.49	MAX
	0.94	7.05	4.43	-9.91	-57.31	MIN
525	2.13	11.01	4.51	-1.64	2.92	MAX
	-0.01	4.91	2.26	-17.37	-16.38	MIN
526	0.49	5.55	1.66	-10.08	5.82	MAX
	0.13	1.10	0.14	-17.81	0.45	MIN
527	0.08	-0.29	3.15	-22.15	10.69	MAX
	-0.91	-0.70	0.40	-36.93	1.10	MIN

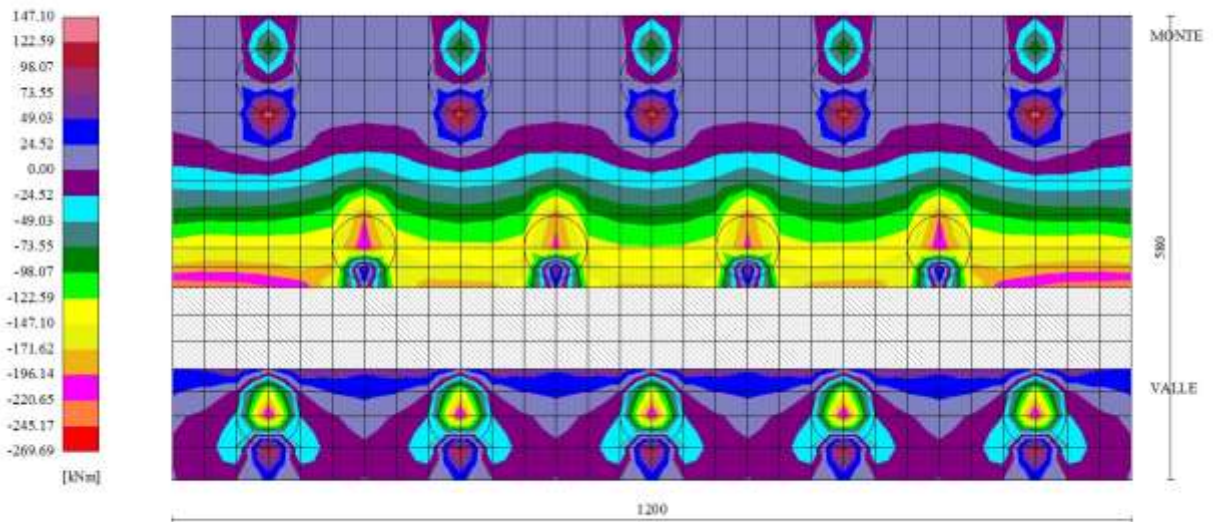


Fig. 8 - Piastra fondazione - Momento My (Combinazione n° 2)

APPALTATORE: TELESE S.c.a r.l. Consorzio Telese Società Consortile a Responsabilità Limitata	ITINERARIO NAPOLI – BARI RADDOPPIO TRATTA CANCELLO-BENEVENTO II LOTTO FUNZIONALE FRASSO TELESINO – VITULANO 2° SUBLOTTO TELESE – SAN LORENZO PROGETTO ESECUTIVO					
PROGETTAZIONE: Mandatario: SYSTRA S.A. Mandante: SWS Engineering S.p.A. SYSTRA-SOTECNI S.p.A.	COMMESSA	LOTTO	CODIFICA	DOCUMENTO	REV.	FOGLIO
Relazione di calcolo IF2R.2.2.E.ZZ.CL.TR.16.0.5.008.A.DOCX	IF2R	2.2.E.ZZ	CL	TR.16.0.5.008	A	31 di 118

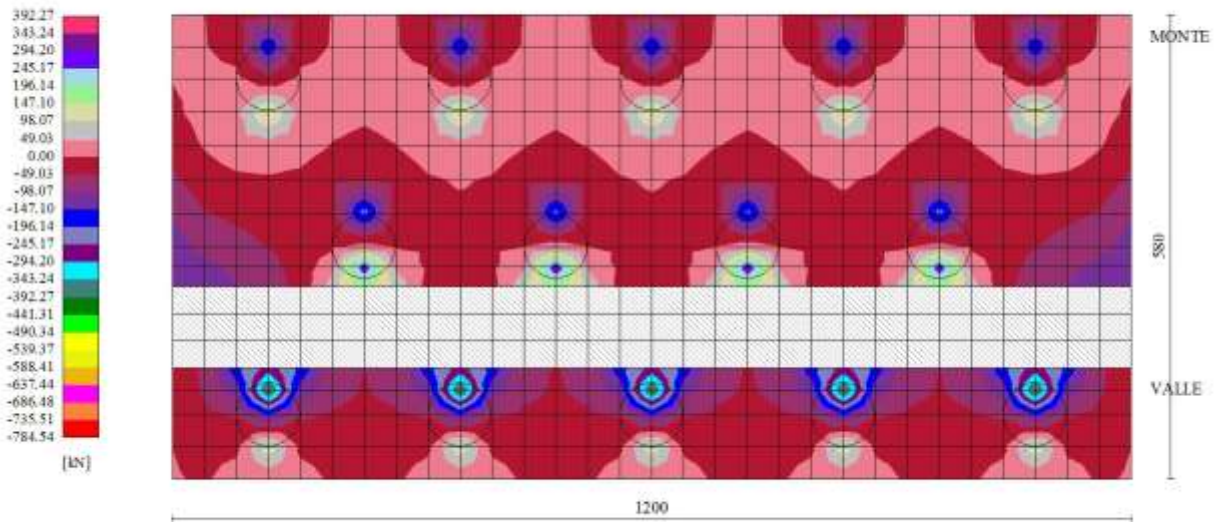


Fig. 9 - Piastra fondazione - Taglio T_{yMAX} (Combinazione n° 7)

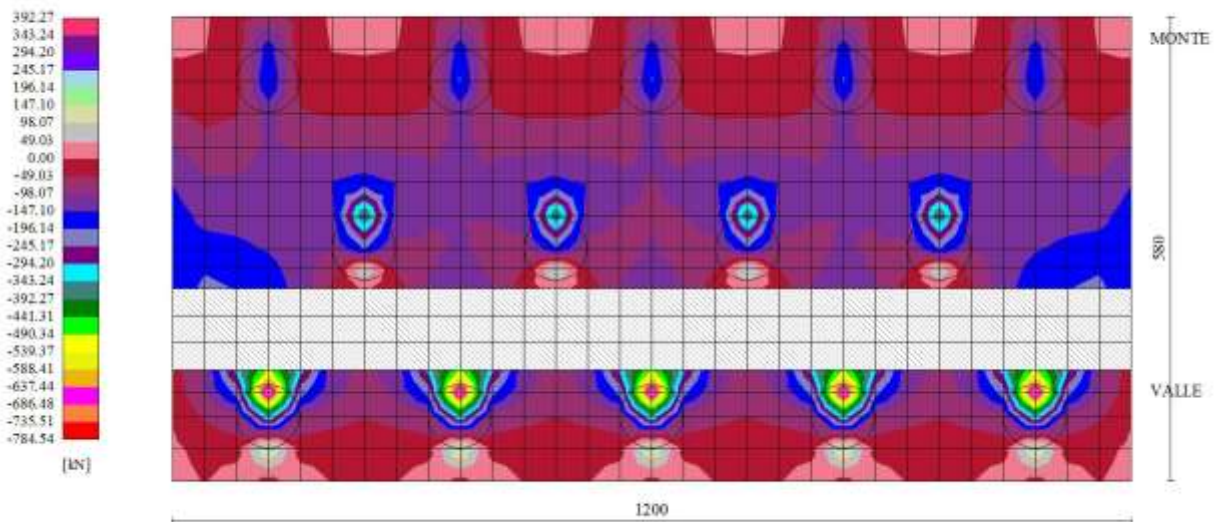


Fig. 10 - Piastra fondazione - Taglio T_{yMIN} (Combinazione n° 2)

Sollecitazioni pali

Simbologia adottata

APPALTATORE:

TELESE S.c.a r.l.
Consorzio Telese Società Consortile a Responsabilità Limitata

ITINERARIO NAPOLI – BARI
RADDOPPIO TRATTA CANCELLO-BENEVENTO
II LOTTO FUNZIONALE FRASSO TELESINO – VITULANO
2° SUBLOTTO TELESE – SAN LORENZO

PROGETTAZIONE:

Mandatario:

Mandante:

SYSTRA S.A.

SWS Engineering S.p.A.

SYSTRA-SOTECNI S.p.A.

PROGETTO ESECUTIVO

Relazione di calcolo

IF2R.2.2.E.ZZ.CL.TR.16.0.5.008.A.DOCX

COMMESSA

LOTTO

CODIFICA

DOCUMENTO

REV.

FOGLIO

IF2R

2.2.E.ZZ

CL

TR.16.0.5.008

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N Sforzo normale, espresso in [kN]. Positivo se di compressione.
T Taglio, espresso in [kN]. Positivo se diretto da monte verso valle
M Momento, espresso in [kNm]. Positivo se tende le fibre contro terra (a monte)

Palo n° 1

n°	Y [m]	Ne [kN]	Nr [kN]	Te [kN]	Tr [kN]	Me [kNm]	Mr [kNm]
1	0.00	246.00	4464.48	-123.83	-667.45	-125.15	-674.54
32	3.10	278.95	4398.89	1.12	-184.47	50.61	911.58
50	4.90	293.24	4302.34	13.18	234.55	33.58	799.22
101	10.00	314.05	0.00	0.07	2.94	0.00	0.00

Palo n° 2

n°	Y [m]	Ne [kN]	Nr [kN]	Te [kN]	Tr [kN]	Me [kNm]	Mr [kNm]
1	0.00	407.83	4464.46	-123.83	-763.11	-125.15	-771.21
32	3.10	438.48	4398.86	1.12	-276.18	50.61	1104.51
50	4.90	449.32	4302.30	13.17	264.16	33.57	1092.06
78	7.70	455.82	4064.93	5.35	221.48	5.48	261.90

Palo n° 3

n°	Y [m]	Ne [kN]	Nr [kN]	Te [kN]	Tr [kN]	Me [kNm]	Mr [kNm]
1	0.00	569.66	4464.72	-123.83	-763.11	-125.15	-771.21
32	3.10	598.00	4399.11	1.12	-276.18	50.61	1104.51
50	4.90	605.39	4302.52	13.17	264.16	33.57	1092.06
61	6.00	606.56	4221.92	11.13	328.40	19.83	753.80

Palo n° 1

n°	Y [m]	Ne [kN]	Nr [kN]	Te [kN]	Tr [kN]	Me [kNm]	Mr [kNm]
1	0.00	105.11	2627.85	-176.55	-677.21	-185.26	-710.65
32	3.10	140.07	2562.25	2.36	-194.23	81.96	905.72
49	4.80	156.47	2472.20	21.34	224.60	56.10	828.45
101	10.00	194.22	0.00	0.11	3.03	0.00	0.00

Palo n° 2

n°	Y [m]	Ne [kN]	Nr [kN]	Te [kN]	Tr [kN]	Me [kNm]	Mr [kNm]
1	0.00	378.29	4464.41	-176.55	-773.49	-185.26	-811.69
32	3.10	409.36	4398.82	2.35	-286.32	81.92	1095.79
49	4.80	420.32	4308.78	21.33	244.39	56.07	1123.19
83	8.20	429.07	4011.36	6.06	176.23	4.97	163.49

Palo n° 3

n°	Y [m]	Ne [kN]	Nr [kN]	Te [kN]	Tr [kN]	Me [kNm]	Mr [kNm]
1	0.00	651.46	4464.57	-176.55	-773.49	-185.26	-811.69
32	3.10	678.64	4398.97	2.35	-286.32	81.92	1095.79
49	4.80	684.17	4308.91	21.33	244.39	56.07	1123.19
54	5.30	684.50	4274.99	20.67	306.40	45.48	986.76

Palo n° 1

n°	Y [m]	Ne [kN]	Nr [kN]	Te [kN]	Tr [kN]	Me [kNm]	Mr [kNm]
1	0.00	288.10	4464.44	-90.11	-661.90	-89.04	-653.98
32	3.10	320.45	4398.85	0.43	-178.91	33.90	914.91
50	4.90	333.85	4302.30	8.83	235.70	22.73	795.36
101	10.00	349.86	0.00	0.05	2.89	0.00	0.00

Palo n° 2

n°	Y [m]	Ne [kN]	Nr [kN]	Te [kN]	Tr [kN]	Me [kNm]	Mr [kNm]
1	0.00	392.43	4464.52	-90.11	-756.96	-89.04	-747.91
32	3.10	423.30	4398.94	0.43	-270.07	33.90	1108.81
50	4.90	434.47	4302.39	8.83	266.14	22.73	1087.15
81	8.00	441.83	4033.32	3.01	191.21	2.73	196.05

APPALTATORE:

TELESE S.c.a r.l.
Consorzio Telese Società Consortile a Responsabilità Limitata

ITINERARIO NAPOLI – BARI
RADDOPPIO TRATTA CANCELLO-BENEVENTO
II LOTTO FUNZIONALE FRASSO TELESINO – VITULANO
2° SUBLOTTO TELESE – SAN LORENZO

PROGETTAZIONE:

Mandataria:

Mandante:

SYSTRA S.A. SWS Engineering S.p.A. SYSTRA-SOTECNI S.p.A.

PROGETTO ESECUTIVO

Relazione di calcolo

IF2R.2.2.E.ZZ.CL.TR.16.0.5.008.A.DOCX

COMMESSA LOTTO CODIFICA DOCUMENTO REV. FOGLIO
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Palo n° 3

n°	Y [m]	Ne [kN]	Nr [kN]	Te [kN]	Tr [kN]	Me [kNm]	Mr [kNm]
1	0.00	496.76	4464.66	-90.11	-756.96	-89.04	-747.91
32	3.10	526.14	4399.06	0.43	-270.07	33.90	1108.81
50	4.90	535.08	4302.49	8.83	266.14	22.73	1087.15
67	6.60	537.95	4171.05	6.20	305.80	9.29	555.92

Palo n° 1

n°	Y [m]	Ne [kN]	Nr [kN]	Te [kN]	Tr [kN]	Me [kNm]	Mr [kNm]
1	0.00	324.07	4464.49	-74.48	-674.49	-77.36	-700.60
33	3.20	356.73	4394.68	0.06	-160.35	25.07	926.51
51	5.00	369.11	4295.71	6.53	239.63	17.00	780.80
93	9.20	380.93	3894.14	0.76	47.15	0.31	19.85

Palo n° 2

n°	Y [m]	Ne [kN]	Nr [kN]	Te [kN]	Tr [kN]	Me [kNm]	Mr [kNm]
1	0.00	388.01	4464.57	-74.48	-770.85	-77.36	-800.68
33	3.20	419.70	4394.73	0.06	-252.42	25.07	1126.92
51	5.00	430.68	4295.74	6.53	275.64	17.00	1071.23
81	8.00	437.84	4033.24	2.44	195.15	2.26	200.85

Palo n° 3

n°	Y [m]	Ne [kN]	Nr [kN]	Te [kN]	Tr [kN]	Me [kNm]	Mr [kNm]
1	0.00	451.95	4464.43	-74.48	-770.85	-77.36	-800.68
33	3.20	482.66	4394.60	0.06	-252.42	25.07	1126.92
51	5.00	492.25	4295.62	6.53	275.64	17.00	1071.23
73	7.20	496.30	4115.08	3.79	267.52	4.82	390.35

Palo n° 1

n°	Y [m]	Ne [kN]	Nr [kN]	Te [kN]	Tr [kN]	Me [kNm]	Mr [kNm]
1	0.00	350.60	4464.41	-45.57	-686.56	-49.47	-745.44
35	3.40	384.39	4385.74	0.25	-107.18	13.42	951.54
53	5.20	395.68	4281.93	3.50	248.03	8.94	741.15
88	8.70	404.31	3954.41	0.86	83.03	0.55	55.06

Palo n° 2

n°	Y [m]	Ne [kN]	Nr [kN]	Te [kN]	Tr [kN]	Me [kNm]	Mr [kNm]
1	0.00	374.75	4464.54	-45.57	-782.60	-49.47	-849.72
35	3.40	408.13	4385.86	0.25	-198.56	13.42	1164.65
53	5.20	418.87	4282.06	3.50	295.17	8.94	1020.95
83	8.20	425.89	4011.50	1.27	178.15	1.10	165.62

Palo n° 3

n°	Y [m]	Ne [kN]	Nr [kN]	Te [kN]	Tr [kN]	Me [kNm]	Mr [kNm]
1	0.00	398.90	4464.46	-45.57	-782.60	-49.47	-849.72
35	3.40	431.87	4385.79	0.25	-198.56	13.42	1164.65
53	5.20	442.05	4281.98	3.50	295.17	8.94	1020.95
80	7.90	447.70	4043.97	1.54	207.45	1.54	224.94

Palo n° 1

n°	Y [m]	Ne [kN]	Nr [kN]	Te [kN]	Tr [kN]	Me [kNm]	Mr [kNm]
1	0.00	324.13	4464.42	-57.78	-662.66	-57.27	-656.82
33	3.20	356.78	4394.60	0.40	-148.52	19.58	932.42
51	5.00	369.17	4295.64	5.10	241.57	13.01	772.34
93	9.20	380.98	3894.04	0.56	45.73	0.23	19.22

Palo n° 2

n°	Y	Ne	Nr	Te	Tr	Me	Mr
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APPALTATORE:

TELESE S.c.a r.l.
 Consorzio Telese Società Consortile a Responsabilità Limitata

**ITINERARIO NAPOLI – BARI
 RADDOPPIO TRATTA CANCELLO-BENEVENTO
 II LOTTO FUNZIONALE FRASSO TELESINO – VITULANO
 2° SUBLOTTO TELESE – SAN LORENZO
 PROGETTO ESECUTIVO**

PROGETTAZIONE:

Mandataria:

Mandante:

SYSTRA S.A. SWS Engineering S.p.A. SYSTRA-SOTECNI S.p.A.

Relazione di calcolo

IF2R.2.2.E.ZZ.CL.TR.16.0.5.008.A.DOCX

COMMESSA	LOTTO	CODIFICA	DOCUMENTO	REV.	FOGLIO
IF2R	2.2.E.ZZ	CL	TR.16.0.5.008	A	34 di 118

	[m]	[kN]	[kN]	[kN]	[kN]	[kNm]	[kNm]
1	0.00	378.29	4464.40	-57.78	-758.31	-57.27	-751.63
33	3.20	410.12	4394.59	0.40	-240.12	19.58	1136.29
51	5.00	421.32	4295.62	5.10	279.34	13.01	1062.70
83	8.20	429.07	4011.36	1.59	172.39	1.33	159.33

Palo n° 3

n°	Y [m]	Ne [kN]	Nr [kN]	Te [kN]	Tr [kN]	Me [kNm]	Mr [kNm]
1	0.00	432.45	4464.49	-57.78	-758.31	-57.27	-751.63
33	3.20	463.45	4394.68	0.40	-240.12	19.58	1136.29
51	5.00	473.47	4295.72	5.10	279.34	13.01	1062.70
75	7.40	478.33	4095.54	2.61	247.24	3.06	331.48

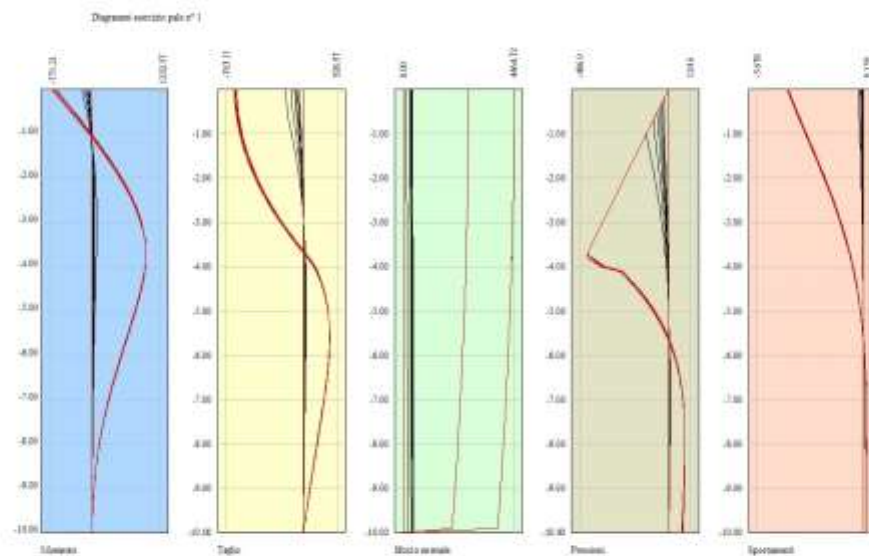


Fig. 11 - Sollecitazioni palo (Palo n° 1) (Inviluppo)

APPALTATORE:	TELESE S.c.a r.l. Consorzio Telese Società Consortile a Responsabilità Limitata	ITINERARIO NAPOLI – BARI RADDOPPIO TRATTA CANCELLO-BENEVENTO II LOTTO FUNZIONALE FRASSO TELESINO – VITULANO 2° SUBLOTTO TELESE – SAN LORENZO PROGETTO ESECUTIVO					
PROGETTAZIONE:	<u>Mandatario:</u> SYSTRA S.A. <u>Mandante:</u> SWS Engineering S.p.A. SYSTRA-SOTECNI S.p.A.	COMMESSA	LOTTO	CODIFICA	DOCUMENTO	REV.	FOGLIO
Relazione di calcolo IF2R.2.2.E.ZZ.CL.TR.16.0.5.008.A.DOCX		IF2R	2.2.E.ZZ	CL	TR.16.0.5.008	A	35 di 118

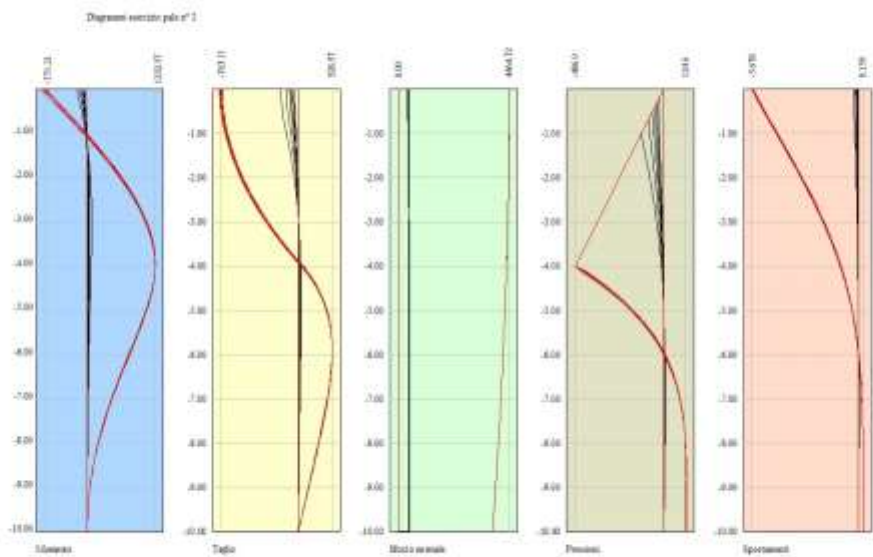


Fig. 12 - Sollecitazioni palo (Palo n° 2) (Inviluppo)

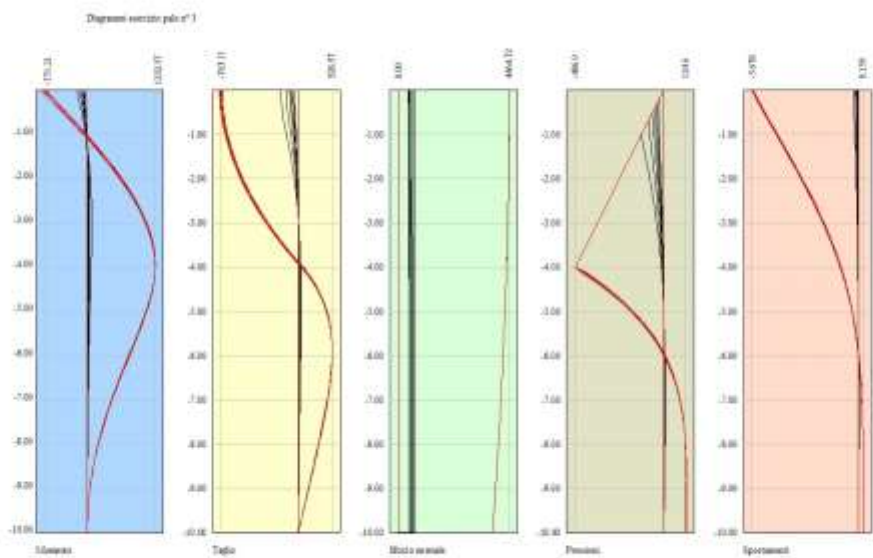


Fig. 13 - Sollecitazioni palo (Palo n° 3) (Inviluppo)

Verifiche strutturali

APPALTATORE: TELESE S.c.a r.l. Consorzio Telese Società Consortile a Responsabilità Limitata	ITINERARIO NAPOLI – BARI RADDOPPIO TRATTA CANCELLO-BENEVENTO II LOTTO FUNZIONALE FRASSO TELESINO – VITULANO 2° SUBLOTTO TELESE – SAN LORENZO					
PROGETTAZIONE: Mandataria: SYSTRA S.A. Mandante: SWS Engineering S.p.A. SYSTRA-SOTECNI S.p.A.	PROGETTO ESECUTIVO					
Relazione di calcolo IF2R.2.2.E.ZZ.CL.TR.16.0.5.008.A.DOCX	COMMESSA IF2R	LOTTO 2.2.E.ZZ	CODIFICA CL	DOCUMENTO TR.16.0.5.008	REV. A	FOGLIO 36 di 118

Verifiche a flessione

Elementi calcolati a trave

Simbologia adottata

n°	indice sezione
Y	ordinata sezione espressa in [m]
B	larghezza sezione espresso in [cm]
H	altezza sezione espressa in [cm]
Afi	area ferri inferiori espresso in [cmq]
Afs	area ferri superiori espressa in [cmq]
M	momento agente espressa in [kNm]
N	sforzo normale agente espressa in [kN]
Mu	momento ultimi espresso in [kNm]
Nu	sforzo normale ultimo espressa in [kN]
FS	fattore di sicurezza (rapporto tra sollecitazione ultima e sollecitazione agente)

Elementi calcolati a piastra

Simbologia adottata

n°	indice sezione
Y	ordinata sezione espressa in [m]
B	larghezza sezione espresso in [cm]
H	altezza sezione espressa in [cm]
Afi, Afs	area ferri inferiori e superiori, espresso in [cmq]
Mp, Mn	momento positivo e negativo agente espressa in [kNm]
Mu	momento ultimi espresso in [kNm]
FS	fattore di sicurezza (rapporto tra sollecitazione ultima e sollecitazione agente)

Paramento

n°	B [cm]	H [cm]	Afi [cmq]	Afs [cmq]	M [kNm]	N [kN]	Mu [kNm]	Nu [kN]	FS
1	100	70	10.05	12.72	2.90	6.50	864.60	1937.89	298.137
2	100	70	10.05	12.72	3.91	8.22	791.59	1661.30	202.212
3	100	70	10.05	12.72	4.93	9.93	750.48	1512.01	152.248
4	100	70	10.05	12.72	5.94	11.65	725.66	1421.88	122.083
5	100	70	10.05	12.72	6.96	13.36	709.05	1361.56	101.894
6	100	70	10.05	12.72	7.97	15.08	697.15	1318.36	87.435
7	100	70	10.05	12.72	8.99	16.79	688.21	1285.89	76.570
8	100	70	10.05	12.72	10.00	18.51	681.24	1260.61	68.107
9	100	70	10.05	12.72	11.02	20.22	675.67	1240.35	61.328
10	100	70	10.05	12.72	12.03	21.94	671.10	1223.77	55.776
11	100	70	10.05	12.72	13.05	23.66	667.29	1209.93	51.147
12	100	70	10.05	12.72	14.06	25.37	664.06	1198.22	47.226
13	100	70	10.05	12.72	15.08	27.09	661.30	1188.17	43.864
14	100	70	10.05	12.72	16.09	28.80	658.90	1179.46	40.949
15	100	70	10.05	12.72	17.11	30.52	656.80	1171.84	38.397
16	100	70	10.05	12.72	18.12	32.23	654.95	1165.11	36.145
17	100	70	10.05	12.72	19.13	33.95	653.30	1159.13	34.142
18	100	70	10.05	12.72	20.15	35.67	651.82	1153.77	32.350
19	100	70	10.05	12.72	21.16	37.38	650.49	1148.95	30.736
20	100	70	10.05	12.72	22.18	39.10	649.29	1144.58	29.276
21	100	70	10.05	12.72	23.19	40.81	648.20	1140.62	27.948
22	100	70	10.05	12.72	24.21	42.53	647.20	1136.99	26.735
23	100	70	10.05	12.72	25.22	44.24	646.29	1133.67	25.623
24	100	70	10.05	12.72	26.24	45.96	645.45	1130.62	24.600
25	100	70	10.05	12.72	27.25	47.67	644.67	1127.79	23.656
26	100	70	10.05	12.72	28.27	49.39	643.95	1125.18	22.781
27	100	70	10.05	12.72	29.28	51.11	643.28	1122.75	21.969
28	100	70	10.05	12.72	30.30	52.82	642.66	1120.49	21.213
29	100	70	10.05	12.72	31.31	54.54	642.08	1118.38	20.507
30	100	70	10.05	12.72	32.36	56.25	640.99	1114.42	19.811
31	100	70	10.05	12.72	33.47	57.97	638.82	1106.57	19.089
32	100	101	10.05	12.72	41.25	61.51	1291.04	1924.95	31.296
33	100	101	10.05	12.72	42.60	63.98	1305.10	1960.25	30.637
34	100	101	10.05	12.72	44.27	66.46	1303.95	1957.36	29.453
35	100	101	10.05	12.72	46.18	68.93	1293.28	1930.57	28.007
36	100	101	10.05	12.72	48.22	71.41	1278.40	1893.22	26.513
37	100	101	10.05	12.72	50.32	73.88	1262.89	1854.26	25.098
38	100	101	10.05	12.72	52.48	76.36	1246.88	1814.05	23.757
39	100	101	10.05	12.72	54.73	78.83	1229.96	1771.58	22.473
40	100	101	10.05	12.72	57.08	81.31	1212.08	1726.68	21.237
41	100	101	10.05	12.72	59.53	83.78	1193.29	1679.50	20.046
42	100	101	10.05	12.72	62.10	86.26	1173.74	1630.41	18.902
43	100	101	10.05	12.72	64.05	86.71	1137.90	1540.42	17.765
44	100	101	10.05	12.72	68.39	89.19	1091.11	1422.92	15.955
45	100	101	10.05	12.72	72.95	91.66	1049.65	1318.82	14.388
46	100	101	10.05	12.72	77.75	94.14	1012.75	1226.16	13.025
47	100	101	10.05	12.72	82.79	96.61	971.93	1134.18	11.740
48	100	101	10.05	12.72	88.07	99.09	935.35	1052.30	10.620
49	100	101	10.05	12.72	93.61	101.56	902.86	979.58	9.645

APPALTATORE:	 Consorzio Telese Società Consortile a Responsabilità Limitata		ITINERARIO NAPOLI – BARI RADDOPPIO TRATTA CANCELLO-BENEVENTO II LOTTO FUNZIONALE FRASSO TELESINO – VITULANO 2° SUBLOTTO TELESE – SAN LORENZO PROGETTO ESECUTIVO					
PROGETTAZIONE:	Mandataria: SYSTRA S.A. Mandante: SWS Engineering S.p.A. SYSTRA-SOTECNI S.p.A.		COMMESSA	LOTTO	CODIFICA	DOCUMENTO	REV.	FOGLIO
Relazione di calcolo	IF2R.2.2.E.ZZ.CL.TR.16.0.5.008.A.DOCX		IF2R	2.2.E.ZZ	CL	TR.16.0.5.008	A	37 di 118

n°	B	H	Afi	Afs	M	N	Mu	Nu	FS
	[cm]	[cm]	[cmq]	[cmq]	[kNm]	[kN]	[kNm]	[kN]	
50	100	101	10.05	12.72	99.39	104.04	873.85	914.66	8.792
51	100	101	10.05	12.72	105.44	106.51	847.84	856.43	8.041
52	100	101	10.05	12.72	111.76	108.99	824.40	803.97	7.377

Fondazione

Is	Afi	Afs	Mp	Mn	Mu	FS
	[cmq]	[cmq]	[kNm]	[kNm]	[kNm]	
1-1-P	12.57	12.57	1.38	-0.26	1715.46	100.000 (1)
1-2-P	12.57	12.57	1.06	-1.98	1715.46	100.000 (1)
1-3-P	12.57	12.57	0.13	-7.52	1715.46	100.000 (1)
1-4-P	12.57	12.57	0.38	-24.18	-1715.46	70.938 (2)
1-5-P	12.57	12.57	0.19	-35.60	-1715.46	48.183 (2)
1-6-P	12.57	12.57	0.04	-40.85	-1715.46	41.992 (2)
1-7-P	12.57	12.57	0.26	-25.18	-1715.46	68.141 (2)
1-8-P	12.57	12.57	1.88	-7.05	1715.46	100.000 (1)
1-9-P	12.57	12.57	12.54	-0.30	1715.46	100.000 (1)
1-10-P	12.57	12.57	18.73	-0.03	1715.46	91.597 (2)
1-11-P	12.57	12.57	20.14	-0.01	1715.46	85.178 (2)
1-12-P	12.57	12.57	14.83	-0.19	1715.46	100.000 (1)
1-13-P	12.57	12.57	4.58	-3.41	1715.46	100.000 (1)
1-14-P	12.57	12.57	0.54	-17.49	-1715.46	98.058 (2)
1-15-P	12.57	12.57	0.14	-30.78	-1715.46	55.741 (2)
1-16-P	12.57	12.57	0.27	-28.10	-1715.46	61.059 (2)
1-17-P	12.57	12.57	1.59	-13.13	1715.46	100.000 (1)
1-18-P	12.57	12.57	6.55	-1.93	1715.46	100.000 (1)
1-19-P	12.57	12.57	18.00	-0.18	1715.46	95.312 (2)
1-20-P	12.57	12.57	21.76	0.00	1715.46	78.852 (2)
1-21-P	12.57	12.57	19.41	-0.06	1715.46	88.381 (2)
1-22-P	12.57	12.57	11.57	-0.57	1715.46	100.000 (1)
1-23-P	12.57	12.57	2.20	-7.40	1715.46	100.000 (1)
1-24-P	12.57	12.57	0.60	-23.09	-1715.46	74.291 (2)
1-25-P	12.57	12.57	0.00	-36.27	-1715.46	47.293 (2)
1-26-P	12.57	12.57	0.60	-23.09	-1715.46	74.291 (2)
1-27-P	12.57	12.57	2.20	-7.40	1715.46	100.000 (1)
1-28-P	12.57	12.57	11.57	-0.57	1715.46	100.000 (1)
1-29-P	12.57	12.57	19.41	-0.06	1715.46	88.381 (2)
1-30-P	12.57	12.57	21.76	0.00	1715.46	78.852 (2)
1-31-P	12.57	12.57	18.00	-0.18	1715.46	95.312 (2)
1-32-P	12.57	12.57	6.55	-1.93	1715.46	100.000 (1)
1-33-P	12.57	12.57	1.59	-13.13	1715.46	100.000 (1)
1-34-P	12.57	12.57	0.27	-28.10	-1715.46	61.059 (2)
1-35-P	12.57	12.57	0.14	-30.78	-1715.46	55.741 (2)
1-36-P	12.57	12.57	0.54	-17.49	-1715.46	98.058 (2)
1-37-P	12.57	12.57	4.58	-3.41	1715.46	100.000 (1)
1-38-P	12.57	12.57	14.83	-0.19	1715.46	100.000 (1)
1-39-P	12.57	12.57	20.14	-0.01	1715.46	85.178 (2)
1-40-P	12.57	12.57	18.73	-0.03	1715.46	91.597 (2)
1-41-P	12.57	12.57	12.54	-0.30	1715.46	100.000 (1)
1-42-P	12.57	12.57	1.88	-7.05	1715.46	100.000 (1)
1-43-P	12.57	12.57	0.26	-25.18	-1715.46	68.141 (2)
1-44-P	12.57	12.57	0.04	-40.85	-1715.46	41.992 (2)
1-45-P	12.57	12.57	0.19	-35.60	-1715.46	48.183 (2)
1-46-P	12.57	12.57	0.38	-24.18	-1715.46	70.938 (2)
1-47-P	12.57	12.57	0.13	-7.52	1715.46	100.000 (1)
1-48-P	12.57	12.57	1.06	-1.98	1715.46	100.000 (1)
1-49-P	12.57	12.57	1.38	-0.26	1715.46	100.000 (1)
2-1-P	12.57	12.57	5.52	0.00	1715.46	100.000 (1)
2-2-P	12.57	12.57	5.43	-0.03	1715.46	100.000 (1)
2-3-P	12.57	12.57	4.70	-0.43	1715.46	100.000 (1)
2-4-P	12.57	12.57	4.85	-3.21	1715.46	100.000 (1)
2-5-P	12.57	12.57	0.82	-31.39	-1715.46	44.686 (1)
2-6-P	12.57	12.57	0.16	-65.99	-1715.46	24.757 (2)
2-7-P	12.57	12.57	1.12	-16.85	-1715.46	81.443 (2)
2-8-P	12.57	12.57	9.48	-0.64	1715.46	100.000 (1)
2-9-P	12.57	12.57	14.71	0.00	1715.46	100.000 (1)
2-10-P	12.57	12.57	16.51	0.00	1715.46	100.000 (1)
2-11-P	12.57	12.57	17.56	0.00	1715.46	97.678 (2)
2-12-P	12.57	12.57	15.68	0.00	1715.46	100.000 (1)
2-13-P	12.57	12.57	11.46	-0.26	1715.46	100.000 (1)
2-14-P	12.57	12.57	3.09	-4.34	1715.46	100.000 (1)
2-15-P	12.57	12.57	0.22	-52.92	-1715.46	30.870 (2)
2-16-P	12.57	12.57	0.75	-35.02	-1715.46	39.701 (1)
2-17-P	12.57	12.57	8.67	-1.74	1715.46	100.000 (1)
2-18-P	12.57	12.57	12.30	-0.11	1715.46	100.000 (1)
2-19-P	12.57	12.57	15.93	0.00	1715.46	100.000 (1)
2-20-P	12.57	12.57	18.02	0.00	1715.46	95.202 (2)
2-21-P	12.57	12.57	16.48	0.00	1715.46	100.000 (1)
2-22-P	12.57	12.57	14.21	0.00	1715.46	100.000 (1)

APPALTATORE:

TELESE S.c.a r.l.
Consorzio Telese Società Consortile a Responsabilità Limitata

**ITINERARIO NAPOLI – BARI
RADDOPPIO TRATTA CANCELLO-BENEVENTO
II LOTTO FUNZIONALE FRASSO TELESINO – VITULANO
2° SUBLOTTO TELESE – SAN LORENZO**

PROGETTAZIONE:

Mandatario:

Mandante:

SYSTRA S.A. SWS Engineering S.p.A. SYSTRA-SOTECNI S.p.A.

PROGETTO ESECUTIVO

Relazione di calcolo

IF2R.2.2.E.ZZ.CL.TR.16.0.5.008.A.DOCX

COMMESSA LOTTO CODIFICA DOCUMENTO REV. FOGLIO
IF2R 2.2.E.ZZ CL TR.16.0.5.008 A 38 di 118

Is	Afi [cmq]	Afs [cmq]	Mp [kNm]	Mn [kNm]	Mu [kNm]	FS
2-23-P	12.57	12.57	9.72	-0.81	1715.46	100.000 (1)
2-24-P	12.57	12.57	0.64	-24.24	-1715.46	56.610 (2)
2-25-P	12.57	12.57	0.06	-72.61	-1715.46	22.500 (2)
2-26-P	12.57	12.57	0.64	-24.24	-1715.46	56.610 (2)
2-27-P	12.57	12.57	9.72	-0.81	1715.46	100.000 (1)
2-28-P	12.57	12.57	14.21	0.00	1715.46	100.000 (1)
2-29-P	12.57	12.57	16.48	0.00	1715.46	100.000 (1)
2-30-P	12.57	12.57	18.02	0.00	1715.46	95.202 (2)
2-31-P	12.57	12.57	15.93	0.00	1715.46	100.000 (1)
2-32-P	12.57	12.57	12.30	-0.11	1715.46	100.000 (1)
2-33-P	12.57	12.57	8.67	-1.74	1715.46	100.000 (1)
2-34-P	12.57	12.57	0.75	-35.02	-1715.46	39.701 (1)
2-35-P	12.57	12.57	0.22	-52.92	-1715.46	30.870 (2)
2-36-P	12.57	12.57	3.09	-4.34	1715.46	100.000 (1)
2-37-P	12.57	12.57	11.46	-0.26	1715.46	100.000 (1)
2-38-P	12.57	12.57	15.68	0.00	1715.46	100.000 (1)
2-39-P	12.57	12.57	17.56	0.00	1715.46	97.678 (2)
2-40-P	12.57	12.57	16.51	0.00	1715.46	100.000 (1)
2-41-P	12.57	12.57	14.71	0.00	1715.46	100.000 (1)
2-42-P	12.57	12.57	9.48	-0.64	1715.46	100.000 (1)
2-43-P	12.57	12.57	1.12	-16.85	-1715.46	81.443 (2)
2-44-P	12.57	12.57	0.16	-65.99	-1715.46	24.757 (2)
2-45-P	12.57	12.57	0.82	-31.39	-1715.46	44.686 (1)
2-46-P	12.57	12.57	4.85	-3.21	1715.46	100.000 (1)
2-47-P	12.57	12.57	4.70	-0.43	1715.46	100.000 (1)
2-48-P	12.57	12.57	5.43	-0.03	1715.46	100.000 (1)
2-49-P	12.57	12.57	5.52	0.00	1715.46	100.000 (1)
5-1-P	15.71	15.71	0.08	-10.06	2143.15	100.000 (1)
5-2-P	15.71	15.71	0.00	-14.26	-2143.15	100.000 (1)
5-3-P	15.71	15.71	0.00	-22.89	-2143.15	93.630 (2)
5-4-P	15.71	15.71	0.00	-27.90	-2143.15	76.828 (2)
5-5-P	15.71	15.71	0.00	-30.19	-2143.15	70.999 (2)
5-6-P	15.71	15.71	0.00	-31.39	-2143.15	68.281 (2)
5-7-P	15.71	15.71	0.00	-30.95	-2143.15	69.248 (2)
5-8-P	15.71	15.71	0.00	-33.58	-2143.15	63.814 (2)
5-9-P	15.71	15.71	0.00	-38.27	-2143.15	56.002 (2)
5-10-P	15.71	15.71	0.00	-57.46	-2143.15	37.298 (2)
5-11-P	15.71	15.71	0.00	-60.60	-2143.15	35.365 (2)
5-12-P	15.71	15.71	0.00	-39.66	-2143.15	54.036 (2)
5-13-P	15.71	15.71	0.00	-30.48	-2143.15	70.303 (2)
5-14-P	15.71	15.71	0.00	-25.43	-2143.15	84.289 (2)
5-15-P	15.71	15.71	0.00	-25.08	-2143.15	85.441 (2)
5-16-P	15.71	15.71	0.00	-24.58	-2143.15	87.187 (2)
5-17-P	15.71	15.71	0.00	-23.97	-2143.15	89.401 (2)
5-18-P	15.71	15.71	0.00	-29.22	-2143.15	73.346 (2)
5-19-P	15.71	15.71	0.00	-40.32	-2143.15	53.148 (2)
5-20-P	15.71	15.71	0.11	-60.33	-2143.15	35.524 (2)
5-21-P	15.71	15.71	0.00	-47.98	-2143.15	44.664 (2)
5-22-P	15.71	15.71	0.00	-30.65	-2143.15	69.934 (2)
5-23-P	15.71	15.71	0.00	-25.00	-2143.15	85.714 (2)
5-24-P	15.71	15.71	0.00	-22.85	-2143.15	93.804 (2)
5-25-P	15.71	15.71	0.00	-23.01	-2143.15	93.123 (2)
5-26-P	15.71	15.71	0.00	-22.85	-2143.15	93.804 (2)
5-27-P	15.71	15.71	0.00	-25.00	-2143.15	85.714 (2)
5-28-P	15.71	15.71	0.00	-30.65	-2143.15	69.934 (2)
5-29-P	15.71	15.71	0.00	-47.98	-2143.15	44.664 (2)
5-30-P	15.71	15.71	0.11	-60.33	-2143.15	35.524 (2)
5-31-P	15.71	15.71	0.00	-40.32	-2143.15	53.148 (2)
5-32-P	15.71	15.71	0.00	-29.22	-2143.15	73.346 (2)
5-33-P	15.71	15.71	0.00	-23.97	-2143.15	89.401 (2)
5-34-P	15.71	15.71	0.00	-24.58	-2143.15	87.187 (2)
5-35-P	15.71	15.71	0.00	-25.08	-2143.15	85.441 (2)
5-36-P	15.71	15.71	0.00	-25.43	-2143.15	84.289 (2)
5-37-P	15.71	15.71	0.00	-30.48	-2143.15	70.303 (2)
5-38-P	15.71	15.71	0.00	-39.66	-2143.15	54.036 (2)
5-39-P	15.71	15.71	0.00	-60.60	-2143.15	35.365 (2)
5-40-P	15.71	15.71	0.00	-57.46	-2143.15	37.298 (2)
5-41-P	15.71	15.71	0.00	-38.27	-2143.15	56.002 (2)
5-42-P	15.71	15.71	0.00	-33.58	-2143.15	63.814 (2)
5-43-P	15.71	15.71	0.00	-30.95	-2143.15	69.248 (2)
5-44-P	15.71	15.71	0.00	-31.39	-2143.15	68.281 (2)
5-45-P	15.71	15.71	0.00	-30.19	-2143.15	70.999 (2)
5-46-P	15.71	15.71	0.00	-27.90	-2143.15	76.828 (2)
5-47-P	15.71	15.71	0.00	-22.89	-2143.15	93.630 (2)
5-48-P	15.71	15.71	0.00	-14.26	-2143.15	100.000 (1)
5-49-P	15.71	15.71	0.08	-10.06	2143.15	100.000 (1)
6-1-P	12.57	12.57	2.22	-2.38	1723.83	100.000 (1)
6-2-P	12.57	12.57	2.11	-2.84	1723.83	100.000 (1)
6-3-P	12.57	12.57	2.04	-3.60	1723.83	100.000 (1)
6-4-P	12.57	12.57	1.91	-4.75	1723.83	100.000 (1)
6-5-P	12.57	12.57	0.79	-5.44	1723.83	100.000 (1)

APPALTATORE:

TELESE S.c.a r.l.
Consorzio Telese Società Consortile a Responsabilità Limitata

**ITINERARIO NAPOLI – BARI
RADDOPPIO TRATTA CANCELLO-BENEVENTO
II LOTTO FUNZIONALE FRASSO TELESINO – VITULANO
2° SUBLOTTO TELESE – SAN LORENZO**

PROGETTAZIONE:

Mandataria:

Mandante:

SYSTRA S.A. SWS Engineering S.p.A. SYSTRA-SOTECNI S.p.A.

PROGETTO ESECUTIVO

Relazione di calcolo

IF2R.2.2.E.ZZ.CL.TR.16.0.5.008.A.DOCX

COMMESSA	LOTTO	CODIFICA	DOCUMENTO	REV.	FOGLIO
IF2R	2.2.E.ZZ	CL	TR.16.0.5.008	A	39 di 118

Is	Afi [cmq]	Afs [cmq]	Mp [kNm]	Mn [kNm]	Mu [kNm]	FS
6-6-P	12.57	12.57	0.11	-7.14	1723.83	100.000 (1)
6-7-P	12.57	12.57	0.00	-11.10	-1723.83	100.000 (1)
6-8-P	12.57	12.57	0.00	-19.66	-1723.83	87.692 (2)
6-9-P	12.57	12.57	0.00	-25.93	-1723.83	66.482 (2)
6-10-P	12.57	12.57	0.00	-31.82	-1723.83	54.173 (2)
6-11-P	12.57	12.57	0.00	-32.75	-1723.83	52.643 (2)
6-12-P	12.57	12.57	0.00	-26.04	-1723.83	66.189 (2)
6-13-P	12.57	12.57	0.00	-19.71	-1723.83	87.455 (2)
6-14-P	12.57	12.57	0.31	-8.88	-1723.83	100.000 (1)
6-15-P	12.57	12.57	0.16	-5.55	-1723.83	100.000 (1)
6-16-P	12.57	12.57	0.00	-5.34	-1723.83	100.000 (1)
6-17-P	12.57	12.57	0.02	-7.38	-1723.83	100.000 (1)
6-18-P	12.57	12.57	0.00	-18.54	-1723.83	92.989 (2)
6-19-P	12.57	12.57	0.00	-24.07	-1723.83	71.623 (2)
6-20-P	12.57	12.57	0.00	-30.06	-1723.83	57.341 (2)
6-21-P	12.57	12.57	0.00	-26.05	-1723.83	66.166 (2)
6-22-P	12.57	12.57	0.00	-19.88	-1723.83	86.718 (2)
6-23-P	12.57	12.57	0.22	-8.33	-1723.83	100.000 (1)
6-24-P	12.57	12.57	0.24	-4.43	-1723.83	100.000 (1)
6-25-P	12.57	12.57	0.00	-1.61	-1723.83	100.000 (1)
6-26-P	12.57	12.57	0.24	-4.43	-1723.83	100.000 (1)
6-27-P	12.57	12.57	0.22	-8.33	-1723.83	100.000 (1)
6-28-P	12.57	12.57	0.00	-19.88	-1723.83	86.718 (2)
6-29-P	12.57	12.57	0.00	-26.05	-1723.83	66.166 (2)
6-30-P	12.57	12.57	0.00	-30.06	-1723.83	57.341 (2)
6-31-P	12.57	12.57	0.00	-24.07	-1723.83	71.623 (2)
6-32-P	12.57	12.57	0.00	-18.54	-1723.83	92.989 (2)
6-33-P	12.57	12.57	0.02	-7.38	-1723.83	100.000 (1)
6-34-P	12.57	12.57	0.00	-5.34	-1723.83	100.000 (1)
6-35-P	12.57	12.57	0.16	-5.55	-1723.83	100.000 (1)
6-36-P	12.57	12.57	0.31	-8.88	-1723.83	100.000 (1)
6-37-P	12.57	12.57	0.00	-19.71	-1723.83	87.455 (2)
6-38-P	12.57	12.57	0.00	-26.04	-1723.83	66.189 (2)
6-39-P	12.57	12.57	0.00	-32.75	-1723.83	52.643 (2)
6-40-P	12.57	12.57	0.00	-31.82	-1723.83	54.173 (2)
6-41-P	12.57	12.57	0.00	-25.93	-1723.83	66.482 (2)
6-42-P	12.57	12.57	0.00	-19.66	-1723.83	87.692 (2)
6-43-P	12.57	12.57	0.00	-11.10	-1723.83	100.000 (1)
6-44-P	12.57	12.57	0.11	-7.14	1723.83	100.000 (1)
6-45-P	12.57	12.57	0.79	-5.44	1723.83	100.000 (1)
6-46-P	12.57	12.57	1.91	-4.75	1723.83	100.000 (1)
6-47-P	12.57	12.57	2.04	-3.60	1723.83	100.000 (1)
6-48-P	12.57	12.57	2.11	-2.84	1723.83	100.000 (1)
6-49-P	12.57	12.57	2.22	-2.38	1723.83	100.000 (1)
7-1-P	12.57	12.57	2.87	-2.02	1723.83	100.000 (1)
7-2-P	12.57	12.57	4.20	-2.87	1723.83	100.000 (1)
7-3-P	12.57	12.57	5.10	-6.06	1723.83	100.000 (1)
7-4-P	12.57	12.57	5.49	-12.93	1723.83	100.000 (1)
7-5-P	12.57	12.57	1.48	-14.46	1723.83	100.000 (1)
7-6-P	12.57	12.57	0.08	-16.44	1723.83	100.000 (1)
7-7-P	12.57	12.57	1.01	-12.51	1723.83	100.000 (1)
7-8-P	12.57	12.57	2.44	-7.95	1723.83	100.000 (1)
7-9-P	12.57	12.57	3.08	-1.79	1723.83	100.000 (1)
7-10-P	12.57	12.57	3.34	-1.17	1723.83	100.000 (1)
7-11-P	12.57	12.57	4.05	-1.39	1723.83	100.000 (1)
7-12-P	12.57	12.57	5.31	-2.75	1723.83	100.000 (1)
7-13-P	12.57	12.57	5.22	-7.71	1723.83	100.000 (1)
7-14-P	12.57	12.57	4.24	-12.67	1723.83	100.000 (1)
7-15-P	12.57	12.57	0.46	-13.53	1723.83	100.000 (1)
7-16-P	12.57	12.57	0.11	-11.59	1723.83	100.000 (1)
7-17-P	12.57	12.57	4.00	-9.90	1723.83	100.000 (1)
7-18-P	12.57	12.57	4.46	-3.13	1723.83	100.000 (1)
7-19-P	12.57	12.57	6.42	-0.40	1723.83	100.000 (1)
7-20-P	12.57	12.57	6.93	-0.01	1723.83	100.000 (1)
7-21-P	12.57	12.57	7.25	-0.43	1723.83	100.000 (1)
7-22-P	12.57	12.57	6.86	-1.67	1723.83	100.000 (1)
7-23-P	12.57	12.57	5.59	-7.10	1723.83	100.000 (1)
7-24-P	12.57	12.57	1.64	-8.86	1723.83	100.000 (1)
7-25-P	12.57	12.57	0.55	-12.91	1723.83	100.000 (1)
7-26-P	12.57	12.57	1.64	-8.86	1723.83	100.000 (1)
7-27-P	12.57	12.57	5.59	-7.10	1723.83	100.000 (1)
7-28-P	12.57	12.57	6.86	-1.67	1723.83	100.000 (1)
7-29-P	12.57	12.57	7.25	-0.43	1723.83	100.000 (1)
7-30-P	12.57	12.57	6.93	-0.01	1723.83	100.000 (1)
7-31-P	12.57	12.57	6.42	-0.40	1723.83	100.000 (1)
7-32-P	12.57	12.57	4.46	-3.13	1723.83	100.000 (1)
7-33-P	12.57	12.57	4.00	-9.90	1723.83	100.000 (1)
7-34-P	12.57	12.57	0.11	-11.59	1723.83	100.000 (1)
7-35-P	12.57	12.57	0.46	-13.53	1723.83	100.000 (1)
7-36-P	12.57	12.57	4.24	-12.67	1723.83	100.000 (1)
7-37-P	12.57	12.57	5.22	-7.71	1723.83	100.000 (1)

APPALTATORE:

TELESE S.c.a r.l.
Consorzio Telese Società Consortile a Responsabilità Limitata

**ITINERARIO NAPOLI – BARI
RADDOPPIO TRATTA CANCELLO-BENEVENTO
II LOTTO FUNZIONALE FRASSO TELESINO – VITULANO
2° SUBLOTTO TELESE – SAN LORENZO**

PROGETTAZIONE:

Mandatario:

Mandante:

SYSTRA S.A. SWS Engineering S.p.A. SYSTRA-SOTECNI S.p.A.

PROGETTO ESECUTIVO

Relazione di calcolo

IF2R.2.2.E.ZZ.CL.TR.16.0.5.008.A.DOCX

COMMESSA LOTTO CODIFICA DOCUMENTO REV. FOGLIO
IF2R 2.2.E.ZZ CL TR.16.0.5.008 A 40 di 118

Is	Afi [cmq]	Afs [cmq]	Mp [kNm]	Mn [kNm]	Mu [kNm]	FS
7-38-P	12.57	12.57	5.31	-2.75	1723.83	100.000 (1)
7-39-P	12.57	12.57	4.05	-1.39	1723.83	100.000 (1)
7-40-P	12.57	12.57	3.34	-1.17	1723.83	100.000 (1)
7-41-P	12.57	12.57	3.08	-1.79	1723.83	100.000 (1)
7-42-P	12.57	12.57	2.44	-7.95	1723.83	100.000 (1)
7-43-P	12.57	12.57	1.01	-12.51	1723.83	100.000 (1)
7-44-P	12.57	12.57	0.08	-16.44	1723.83	100.000 (1)
7-45-P	12.57	12.57	1.48	-14.46	1723.83	100.000 (1)
7-46-P	12.57	12.57	5.49	-12.93	1723.83	100.000 (1)
7-47-P	12.57	12.57	5.10	-6.06	1723.83	100.000 (1)
7-48-P	12.57	12.57	4.20	-2.87	1723.83	100.000 (1)
7-49-P	12.57	12.57	2.87	-2.02	1723.83	100.000 (1)
8-1-P	15.71	15.71	0.83	-0.43	2143.15	100.000 (1)
8-2-P	15.71	15.71	0.83	-2.88	2143.15	100.000 (1)
8-3-P	15.71	15.71	1.69	-7.36	2143.15	100.000 (1)
8-4-P	15.71	15.71	3.48	-14.50	2143.15	100.000 (1)
8-5-P	15.71	15.71	0.00	-27.43	2143.15	100.000 (1)
8-6-P	15.71	15.71	0.00	-38.70	-2143.15	98.173 (1)
8-7-P	15.71	15.71	0.12	-18.47	2143.15	100.000 (1)
8-8-P	15.71	15.71	2.41	-8.70	2143.15	100.000 (1)
8-9-P	15.71	15.71	1.50	-1.26	2143.15	100.000 (1)
8-10-P	15.71	15.71	3.86	0.00	2143.15	100.000 (1)
8-11-P	15.71	15.71	4.89	-0.03	2143.15	100.000 (1)
8-12-P	15.71	15.71	3.03	-1.13	2143.15	100.000 (1)
8-13-P	15.71	15.71	3.61	-6.94	2143.15	100.000 (1)
8-14-P	15.71	15.71	2.35	-14.21	2143.15	100.000 (1)
8-15-P	15.71	15.71	0.00	-31.34	-2143.15	100.000 (1)
8-16-P	15.71	15.71	0.00	-26.94	2143.15	100.000 (1)
8-17-P	15.71	15.71	4.08	-10.70	2143.15	100.000 (1)
8-18-P	15.71	15.71	3.10	-3.14	2143.15	100.000 (1)
8-19-P	15.71	15.71	5.36	0.00	2143.15	100.000 (1)
8-20-P	15.71	15.71	8.98	0.00	2143.15	100.000 (1)
8-21-P	15.71	15.71	7.23	0.00	2143.15	100.000 (1)
8-22-P	15.71	15.71	4.29	-0.76	2143.15	100.000 (1)
8-23-P	15.71	15.71	4.54	-7.08	2143.15	100.000 (1)
8-24-P	15.71	15.71	0.00	-16.89	2143.15	100.000 (1)
8-25-P	15.71	15.71	0.00	-36.76	-2143.15	93.730 (1)
8-26-P	15.71	15.71	0.00	-16.89	2143.15	100.000 (1)
8-27-P	15.71	15.71	4.54	-7.08	2143.15	100.000 (1)
8-28-P	15.71	15.71	4.29	-0.76	2143.15	100.000 (1)
8-29-P	15.71	15.71	7.23	0.00	2143.15	100.000 (1)
8-30-P	15.71	15.71	8.98	0.00	2143.15	100.000 (1)
8-31-P	15.71	15.71	5.36	0.00	2143.15	100.000 (1)
8-32-P	15.71	15.71	3.10	-3.14	2143.15	100.000 (1)
8-33-P	15.71	15.71	4.08	-10.70	2143.15	100.000 (1)
8-34-P	15.71	15.71	0.00	-26.94	2143.15	100.000 (1)
8-35-P	15.71	15.71	0.00	-31.34	-2143.15	100.000 (1)
8-36-P	15.71	15.71	2.35	-14.21	2143.15	100.000 (1)
8-37-P	15.71	15.71	3.61	-6.94	2143.15	100.000 (1)
8-38-P	15.71	15.71	3.03	-1.13	2143.15	100.000 (1)
8-39-P	15.71	15.71	4.89	-0.03	2143.15	100.000 (1)
8-40-P	15.71	15.71	3.86	0.00	2143.15	100.000 (1)
8-41-P	15.71	15.71	1.50	-1.26	2143.15	100.000 (1)
8-42-P	15.71	15.71	2.41	-8.70	2143.15	100.000 (1)
8-43-P	15.71	15.71	0.12	-18.47	2143.15	100.000 (1)
8-44-P	15.71	15.71	0.00	-38.70	-2143.15	98.173 (1)
8-45-P	15.71	15.71	0.00	-27.43	2143.15	100.000 (1)
8-46-P	15.71	15.71	3.48	-14.50	2143.15	100.000 (1)
8-47-P	15.71	15.71	1.69	-7.36	2143.15	100.000 (1)
8-48-P	15.71	15.71	0.83	-2.88	2143.15	100.000 (1)
8-49-P	15.71	15.71	0.83	-0.43	2143.15	100.000 (1)
9-1-S	15.71	15.71	1.30	-5.04	2151.71	100.000 (1)
9-2-S	15.71	15.71	0.03	-9.09	2151.71	100.000 (1)
9-3-S	15.71	15.71	0.08	-13.20	2151.71	100.000 (1)
9-4-S	15.71	15.71	0.94	-22.19	-2151.71	96.960 (2)
9-5-S	15.71	15.71	6.30	-9.82	2151.71	100.000 (1)
9-6-S	15.71	15.71	18.28	-4.46	2151.71	94.159 (2)
9-7-S	15.71	15.71	58.21	0.00	2151.71	38.368 (1)
9-8-S	15.71	15.71	0.00	-238.80	-2151.71	9.010 (2)
9-9-S	15.71	15.71	0.00	-187.05	-2151.71	11.504 (2)
9-10-S	15.71	15.71	0.00	-147.60	-2151.71	14.578 (2)
9-11-S	15.71	15.71	0.00	-112.46	-2151.71	19.133 (2)
9-12-S	15.71	15.71	0.00	-78.96	-2151.71	27.252 (2)
9-13-S	15.71	15.71	0.01	-50.61	-2151.71	42.518 (2)
9-14-S	15.71	15.71	0.35	-26.02	-2151.71	82.699 (2)
9-15-S	15.71	15.71	7.64	-5.06	2151.71	100.000 (1)
9-16-S	15.71	15.71	11.68	-3.44	2151.71	100.000 (1)
9-17-S	15.71	15.71	13.97	-3.10	2151.71	100.000 (1)
9-18-S	15.71	15.71	10.67	-5.09	2151.71	100.000 (1)
9-19-S	15.71	15.71	8.03	-6.63	2151.71	100.000 (1)
9-20-S	15.71	15.71	4.45	-4.57	2151.71	100.000 (1)

APPALTATORE:

TELESE S.c.a r.l.

Consorzio Telese Società Consortile a Responsabilità Limitata

PROGETTAZIONE:

Mandatario:

Mandante:

SYSTRA S.A. SWS Engineering S.p.A. SYSTRA-SOTECNI S.p.A.

ITINERARIO NAPOLI – BARI
RADDOPPIO TRATTA CANCELLO-BENEVENTO
II LOTTO FUNZIONALE FRASSO TELESINO – VITULANO
2° SUBLOTTO TELESE – SAN LORENZO
PROGETTO ESECUTIVO

Relazione di calcolo

IF2R.2.2.E.ZZ.CL.TR.16.0.5.008.A.DOCX

COMMESSA	LOTTO	CODIFICA	DOCUMENTO	REV.	FOGLIO
IF2R	2.2.E.ZZ	CL	TR.16.0.5.008	A	41 di 118

Is	Afi [cmq]	Afs [cmq]	Mp [kNm]	Mn [kNm]	Mu [kNm]	FS
9-21-S	15.71	15.71	3.12	-2.66	2151.71	100.000 (1)
9-22-S	15.71	15.71	3.09	-0.90	2151.71	100.000 (1)
10-1-S	15.71	15.71	8.56	-3.50	2151.71	100.000 (1)
10-2-S	15.71	15.71	21.25	-10.08	2151.71	81.019 (2)
10-3-S	15.71	15.71	13.01	-15.81	2151.71	99.217 (2)
10-4-S	15.71	15.71	1.73	-67.19	-2151.71	32.024 (2)
10-5-S	15.71	15.71	2.34	-76.83	-2151.71	24.004 (2)
10-6-S	15.71	15.71	10.07	-36.56	-2151.71	35.316 (2)
10-7-S	15.71	15.71	65.72	0.00	2151.71	38.907 (1)
10-8-S	15.71	15.71	0.00	-206.49	-2151.71	10.421 (2)
10-9-S	15.71	15.71	0.00	-177.41	-2151.71	12.128 (2)
10-10-S	15.71	15.71	0.00	-146.84	-2151.71	14.653 (2)
10-11-S	15.71	15.71	0.00	-117.41	-2151.71	18.326 (2)
10-12-S	15.71	15.71	0.00	-87.81	-2151.71	24.503 (2)
10-13-S	15.71	15.71	0.00	-57.30	-2151.71	37.550 (2)
10-14-S	15.71	15.71	0.00	-27.86	-2151.71	77.246 (2)
10-15-S	15.71	15.71	7.87	-1.48	2151.71	100.000 (1)
10-16-S	15.71	15.71	28.52	-1.01	2151.71	75.441 (2)
10-17-S	15.71	15.71	53.68	-0.84	2151.71	40.081 (2)
10-18-S	15.71	15.71	27.87	-2.94	2151.71	77.192 (2)
10-19-S	15.71	15.71	3.47	-25.09	2151.71	100.000 (1)
10-20-S	15.71	15.71	6.28	-25.55	-2151.71	84.224 (2)
10-21-S	15.71	15.71	4.21	-21.63	-2151.71	99.457 (2)
10-22-S	15.71	15.71	1.51	-3.64	2151.71	100.000 (1)
11-1-S	15.71	15.71	0.44	-6.49	2151.71	100.000 (1)
11-2-S	15.71	15.71	0.63	-6.65	2151.71	100.000 (1)
11-3-S	15.71	15.71	0.71	-4.76	2151.71	100.000 (1)
11-4-S	15.71	15.71	4.36	-1.29	2151.71	100.000 (1)
11-5-S	15.71	15.71	16.49	0.00	2151.71	100.000 (1)
11-6-S	15.71	15.71	36.49	0.00	2151.71	63.090 (1)
11-7-S	15.71	15.71	61.25	0.00	2151.71	35.128 (2)
11-8-S	15.71	15.71	0.55	-85.68	-2151.71	23.916 (2)
11-9-S	15.71	15.71	6.19	-84.93	-2151.71	25.335 (2)
11-10-S	15.71	15.71	0.00	-168.29	-2151.71	12.786 (2)
11-11-S	15.71	15.71	0.00	-156.47	-2151.71	13.752 (2)
11-12-S	15.71	15.71	0.00	-132.24	-2151.71	16.271 (2)
11-13-S	15.71	15.71	0.00	-86.05	-2151.71	25.007 (2)
11-14-S	15.71	15.71	0.00	-49.16	-2151.71	43.773 (2)
11-15-S	15.71	15.71	0.00	-22.18	-2151.71	97.007 (2)
11-16-S	15.71	15.71	2.61	-3.23	2151.71	100.000 (1)
11-17-S	15.71	15.71	7.20	-1.22	2151.71	100.000 (1)
11-18-S	15.71	15.71	7.08	-0.92	2151.71	100.000 (1)
11-19-S	15.71	15.71	6.62	-0.83	2151.71	100.000 (1)
11-20-S	15.71	15.71	4.73	-0.65	2151.71	100.000 (1)
11-21-S	15.71	15.71	3.29	-0.52	2151.71	100.000 (1)
11-22-S	15.71	15.71	2.18	-0.50	2151.71	100.000 (1)
12-1-S	15.71	15.71	10.52	-2.27	2151.71	100.000 (1)
12-2-S	15.71	15.71	22.30	-7.82	2151.71	77.175 (2)
12-3-S	15.71	15.71	13.03	-15.62	2151.71	99.084 (2)
12-4-S	15.71	15.71	1.30	-75.90	-2151.71	28.349 (2)
12-5-S	15.71	15.71	1.47	-88.55	-2151.71	24.300 (2)
12-6-S	15.71	15.71	4.03	-39.75	-2151.71	43.301 (2)
12-7-S	15.71	15.71	65.27	0.00	2151.71	40.746 (1)
12-8-S	15.71	15.71	0.00	-183.29	-2151.71	11.740 (2)
12-9-S	15.71	15.71	0.00	-154.04	-2151.71	13.968 (2)
12-10-S	15.71	15.71	0.00	-132.54	-2151.71	16.234 (2)
12-11-S	15.71	15.71	0.00	-109.32	-2151.71	19.682 (2)
12-12-S	15.71	15.71	0.00	-85.08	-2151.71	25.290 (2)
12-13-S	15.71	15.71	0.00	-57.49	-2151.71	37.427 (2)
12-14-S	15.71	15.71	0.00	-29.36	-2151.71	73.293 (2)
12-15-S	15.71	15.71	7.45	-2.01	2151.71	100.000 (1)
12-16-S	15.71	15.71	29.80	-1.70	2151.71	72.195 (2)
12-17-S	15.71	15.71	57.33	-1.78	2151.71	37.530 (2)
12-18-S	15.71	15.71	29.26	-5.03	2151.71	73.548 (2)
12-19-S	15.71	15.71	3.27	-30.35	2151.71	100.000 (1)
12-20-S	15.71	15.71	4.78	-28.97	-2151.71	74.268 (2)
12-21-S	15.71	15.71	2.59	-24.07	-2151.71	89.405 (2)
12-22-S	15.71	15.71	1.27	-4.22	2151.71	100.000 (1)
13-1-S	15.71	15.71	1.02	-5.88	2151.71	100.000 (1)
13-2-S	15.71	15.71	0.44	-8.99	2151.71	100.000 (1)
13-3-S	15.71	15.71	0.50	-9.58	2151.71	100.000 (1)
13-4-S	15.71	15.71	4.21	-5.42	2151.71	100.000 (1)
13-5-S	15.71	15.71	13.13	-0.98	2151.71	100.000 (1)
13-6-S	15.71	15.71	32.77	0.00	2151.71	72.722 (1)
13-7-S	15.71	15.71	60.85	0.00	2151.71	35.363 (2)
13-8-S	15.71	15.71	2.04	-88.22	-2151.71	22.067 (2)
13-9-S	15.71	15.71	9.11	-85.63	-2151.71	25.127 (2)
13-10-S	15.71	15.71	0.00	-155.03	-2151.71	13.879 (2)
13-11-S	15.71	15.71	0.00	-144.18	-2151.71	14.924 (2)
13-12-S	15.71	15.71	0.00	-122.16	-2151.71	17.614 (2)
13-13-S	15.71	15.71	0.00	-80.02	-2151.71	26.889 (2)

APPALTATORE:

TELESE S.c.a r.l.
Consorzio Telese Società Consortile a Responsabilità Limitata

**ITINERARIO NAPOLI – BARI
RADDOPPIO TRATTA CANCELLO-BENEVENTO
II LOTTO FUNZIONALE FRASSO TELESINO – VITULANO
2° SUBLOTTO TELESE – SAN LORENZO**

PROGETTAZIONE:

Mandatario:

Mandante:

SYSTRA S.A. SWS Engineering S.p.A. SYSTRA-SOTECNI S.p.A.

PROGETTO ESECUTIVO

Relazione di calcolo

IF2R.2.2.E.ZZ.CL.TR.16.0.5.008.A.DOCX

COMMESSA LOTTO CODIFICA DOCUMENTO REV. FOGLIO
IF2R 2.2.E.ZZ CL TR.16.0.5.008 A 42 di 118

Is	Afi [cmq]	Afs [cmq]	Mp [kNm]	Mn [kNm]	Mu [kNm]	FS
13-14-S	15.71	15.71	0.00	-45.68	-2151.71	47.100 (2)
13-15-S	15.71	15.71	0.39	-8.38	-2151.71	100.000 (1)
13-16-S	15.71	15.71	2.12	-2.39	2151.71	100.000 (1)
13-17-S	15.71	15.71	5.78	-1.59	2151.71	100.000 (1)
13-18-S	15.71	15.71	6.84	-2.29	2151.71	100.000 (1)
13-19-S	15.71	15.71	6.80	-2.38	2151.71	100.000 (1)
13-20-S	15.71	15.71	4.23	-1.12	2151.71	100.000 (1)
13-21-S	15.71	15.71	2.79	-0.48	2151.71	100.000 (1)
13-22-S	15.71	15.71	2.12	-0.34	2151.71	100.000 (1)
14-1-S	18.85	18.85	5.91	-5.41	2570.49	100.000 (1)
14-2-S	18.85	18.85	8.08	-9.03	2570.49	100.000 (1)
14-3-S	18.85	18.85	4.29	-12.87	2570.49	100.000 (1)
14-4-S	18.85	18.85	1.68	-44.63	-2570.49	57.593 (2)
14-5-S	18.85	18.85	4.13	-46.22	-2570.49	37.074 (2)
14-6-S	18.85	18.85	15.74	-20.26	-2570.49	50.751 (2)
14-7-S	18.85	18.85	63.61	0.00	2570.49	44.622 (1)
14-8-S	18.85	18.85	0.00	-151.79	-2570.49	16.935 (2)
14-9-S	18.85	18.85	0.00	-140.25	-2570.49	18.328 (2)
14-10-S	18.85	18.85	0.00	-133.88	-2570.49	19.200 (2)
14-11-S	18.85	18.85	0.00	-113.84	-2570.49	22.580 (2)
14-12-S	18.85	18.85	0.00	-91.21	-2570.49	28.182 (2)
14-13-S	18.85	18.85	0.00	-62.11	-2570.49	41.388 (2)
14-14-S	18.85	18.85	0.00	-34.54	-2570.49	74.415 (2)
14-15-S	18.85	18.85	4.56	-4.52	2570.49	100.000 (1)
14-16-S	18.85	18.85	13.98	-2.65	2570.49	100.000 (1)
14-17-S	18.85	18.85	33.20	-1.67	2570.49	77.426 (2)
14-18-S	18.85	18.85	6.49	-5.06	2570.49	100.000 (1)
14-19-S	18.85	18.85	5.21	-16.82	2570.49	100.000 (1)
14-20-S	18.85	18.85	2.79	-14.45	2570.49	100.000 (1)
14-21-S	18.85	18.85	2.03	-9.19	2570.49	100.000 (1)
14-22-S	18.85	18.85	2.27	-2.47	2570.49	100.000 (1)
15-1-S	15.71	15.71	5.91	-5.41	2151.71	100.000 (1)
15-2-S	15.71	15.71	8.08	-9.03	2151.71	100.000 (1)
15-3-S	15.71	15.71	4.29	-12.87	2151.71	100.000 (1)
15-4-S	15.71	15.71	1.68	-44.63	-2151.71	48.210 (2)
15-5-S	15.71	15.71	4.13	-46.22	-2151.71	31.033 (2)
15-6-S	15.71	15.71	15.74	-20.26	-2151.71	42.483 (2)
15-7-S	15.71	15.71	63.61	0.00	2151.71	37.352 (1)
15-8-S	15.71	15.71	0.00	-151.79	-2151.71	14.176 (2)
15-9-S	15.71	15.71	0.00	-140.25	-2151.71	15.342 (2)
15-10-S	15.71	15.71	0.00	-133.88	-2151.71	16.072 (2)
15-11-S	15.71	15.71	0.00	-113.84	-2151.71	18.902 (2)
15-12-S	15.71	15.71	0.00	-91.21	-2151.71	23.591 (2)
15-13-S	15.71	15.71	0.00	-62.11	-2151.71	34.645 (2)
15-14-S	15.71	15.71	0.00	-34.54	-2151.71	62.291 (2)
15-15-S	15.71	15.71	4.56	-4.52	2151.71	100.000 (1)
15-16-S	15.71	15.71	13.98	-2.65	2151.71	100.000 (1)
15-17-S	15.71	15.71	33.20	-1.67	2151.71	64.811 (2)
15-18-S	15.71	15.71	6.49	-5.06	2151.71	100.000 (1)
15-19-S	15.71	15.71	5.21	-16.82	2151.71	100.000 (1)
15-20-S	15.71	15.71	2.79	-14.45	2151.71	100.000 (1)
15-21-S	15.71	15.71	2.03	-9.19	2151.71	100.000 (1)
15-22-S	15.71	15.71	2.27	-2.47	2151.71	100.000 (1)
16-1-S	15.71	15.71	1.02	-5.88	2151.71	100.000 (1)
16-2-S	15.71	15.71	0.44	-8.99	2151.71	100.000 (1)
16-3-S	15.71	15.71	0.50	-9.58	2151.71	100.000 (1)
16-4-S	15.71	15.71	4.21	-5.42	2151.71	100.000 (1)
16-5-S	15.71	15.71	13.13	-0.98	2151.71	100.000 (1)
16-6-S	15.71	15.71	32.77	0.00	2151.71	72.722 (1)
16-7-S	15.71	15.71	60.85	0.00	2151.71	35.363 (2)
16-8-S	15.71	15.71	2.04	-88.22	-2151.71	22.067 (2)
16-9-S	15.71	15.71	9.11	-85.63	-2151.71	25.127 (2)
16-10-S	15.71	15.71	0.00	-155.03	-2151.71	13.879 (2)
16-11-S	15.71	15.71	0.00	-144.18	-2151.71	14.924 (2)
16-12-S	15.71	15.71	0.00	-122.16	-2151.71	17.614 (2)
16-13-S	15.71	15.71	0.00	-80.02	-2151.71	26.889 (2)
16-14-S	15.71	15.71	0.00	-45.68	-2151.71	47.100 (2)
16-15-S	15.71	15.71	0.39	-8.38	-2151.71	100.000 (1)
16-16-S	15.71	15.71	2.12	-2.39	2151.71	100.000 (1)
16-17-S	15.71	15.71	5.78	-1.59	2151.71	100.000 (1)
16-18-S	15.71	15.71	6.84	-2.29	2151.71	100.000 (1)
16-19-S	15.71	15.71	6.80	-2.38	2151.71	100.000 (1)
16-20-S	15.71	15.71	4.23	-1.12	2151.71	100.000 (1)
16-21-S	15.71	15.71	2.79	-0.48	2151.71	100.000 (1)
16-22-S	15.71	15.71	2.12	-0.34	2151.71	100.000 (1)
17-1-S	15.71	15.71	10.52	-2.27	2151.71	100.000 (1)
17-2-S	15.71	15.71	22.30	-7.82	2151.71	77.175 (2)
17-3-S	15.71	15.71	13.03	-15.62	2151.71	99.084 (2)
17-4-S	15.71	15.71	1.30	-75.90	-2151.71	28.349 (2)
17-5-S	15.71	15.71	1.47	-88.55	-2151.71	24.300 (2)
17-6-S	15.71	15.71	4.03	-39.75	-2151.71	43.301 (2)

APPALTATORE:

TELESE S.c.a r.l.
Consorzio Telese Società Consortile a Responsabilità Limitata

ITINERARIO NAPOLI – BARI
RADDOPPIO TRATTA CANCELLO-BENEVENTO
II LOTTO FUNZIONALE FRASSO TELESINO – VITULANO
2° SUBLOTTO TELESE – SAN LORENZO

PROGETTAZIONE:

Mandatario:

Mandante:

SYSTRA S.A. SWS Engineering S.p.A. SYSTRA-SOTECNI S.p.A.

PROGETTO ESECUTIVO

Relazione di calcolo

IF2R.2.2.E.ZZ.CL.TR.16.0.5.008.A.DOCX

COMMESSA	LOTTO	CODIFICA	DOCUMENTO	REV.	FOGLIO
IF2R	2.2.E.ZZ	CL	TR.16.0.5.008	A	43 di 118

Is	Afi [cmq]	Afs [cmq]	Mp [kNm]	Mn [kNm]	Mu [kNm]	FS
17-7-S	15.71	15.71	65.27	0.00	2151.71	40.746 (1)
17-8-S	15.71	15.71	0.00	-183.29	-2151.71	11.740 (2)
17-9-S	15.71	15.71	0.00	-154.04	-2151.71	13.968 (2)
17-10-S	15.71	15.71	0.00	-132.54	-2151.71	16.234 (2)
17-11-S	15.71	15.71	0.00	-109.32	-2151.71	19.682 (2)
17-12-S	15.71	15.71	0.00	-85.08	-2151.71	25.290 (2)
17-13-S	15.71	15.71	0.00	-57.49	-2151.71	37.427 (2)
17-14-S	15.71	15.71	0.00	-29.36	-2151.71	73.293 (2)
17-15-S	15.71	15.71	7.45	-2.01	2151.71	100.000 (1)
17-16-S	15.71	15.71	29.80	-1.70	2151.71	72.195 (2)
17-17-S	15.71	15.71	57.33	-1.78	2151.71	37.530 (2)
17-18-S	15.71	15.71	29.26	-5.03	2151.71	73.548 (2)
17-19-S	15.71	15.71	3.27	-30.35	2151.71	100.000 (1)
17-20-S	15.71	15.71	4.78	-28.97	-2151.71	74.268 (2)
17-21-S	15.71	15.71	2.59	-24.07	-2151.71	89.405 (2)
17-22-S	15.71	15.71	1.27	-4.22	2151.71	100.000 (1)
18-1-S	15.71	15.71	0.44	-6.49	2151.71	100.000 (1)
18-2-S	15.71	15.71	0.63	-6.65	2151.71	100.000 (1)
18-3-S	15.71	15.71	0.71	-4.76	2151.71	100.000 (1)
18-4-S	15.71	15.71	4.36	-1.29	2151.71	100.000 (1)
18-5-S	15.71	15.71	16.49	0.00	2151.71	100.000 (1)
18-6-S	15.71	15.71	36.49	0.00	2151.71	63.090 (1)
18-7-S	15.71	15.71	61.25	0.00	2151.71	35.128 (2)
18-8-S	15.71	15.71	0.55	-85.68	-2151.71	23.916 (2)
18-9-S	15.71	15.71	6.19	-84.93	-2151.71	25.335 (2)
18-10-S	15.71	15.71	0.00	-168.29	-2151.71	12.786 (2)
18-11-S	15.71	15.71	0.00	-156.47	-2151.71	13.752 (2)
18-12-S	15.71	15.71	0.00	-132.24	-2151.71	16.271 (2)
18-13-S	15.71	15.71	0.00	-86.05	-2151.71	25.007 (2)
18-14-S	15.71	15.71	0.00	-49.16	-2151.71	43.773 (2)
18-15-S	15.71	15.71	0.00	-22.18	-2151.71	97.007 (2)
18-16-S	15.71	15.71	2.61	-3.23	2151.71	100.000 (1)
18-17-S	15.71	15.71	7.20	-1.22	2151.71	100.000 (1)
18-18-S	15.71	15.71	7.08	-0.92	2151.71	100.000 (1)
18-19-S	15.71	15.71	6.62	-0.83	2151.71	100.000 (1)
18-20-S	15.71	15.71	4.73	-0.65	2151.71	100.000 (1)
18-21-S	15.71	15.71	3.29	-0.52	2151.71	100.000 (1)
18-22-S	15.71	15.71	2.18	-0.50	2151.71	100.000 (1)
19-1-S	15.71	15.71	8.56	-3.50	2151.71	100.000 (1)
19-2-S	15.71	15.71	21.25	-10.08	2151.71	81.019 (2)
19-3-S	15.71	15.71	13.01	-15.81	2151.71	99.217 (2)
19-4-S	15.71	15.71	1.73	-67.19	-2151.71	32.024 (2)
19-5-S	15.71	15.71	2.34	-76.83	-2151.71	24.004 (2)
19-6-S	15.71	15.71	10.07	-36.56	-2151.71	35.316 (2)
19-7-S	15.71	15.71	65.72	0.00	2151.71	38.907 (1)
19-8-S	15.71	15.71	0.00	-206.49	-2151.71	10.421 (2)
19-9-S	15.71	15.71	0.00	-177.41	-2151.71	12.128 (2)
19-10-S	15.71	15.71	0.00	-146.84	-2151.71	14.653 (2)
19-11-S	15.71	15.71	0.00	-117.41	-2151.71	18.326 (2)
19-12-S	15.71	15.71	0.00	-87.81	-2151.71	24.503 (2)
19-13-S	15.71	15.71	0.00	-57.30	-2151.71	37.550 (2)
19-14-S	15.71	15.71	0.00	-27.86	-2151.71	77.246 (2)
19-15-S	15.71	15.71	7.87	-1.48	2151.71	100.000 (1)
19-16-S	15.71	15.71	28.52	-1.01	2151.71	75.441 (2)
19-17-S	15.71	15.71	53.68	-0.84	2151.71	40.081 (2)
19-18-S	15.71	15.71	27.87	-2.94	2151.71	77.192 (2)
19-19-S	15.71	15.71	3.47	-25.09	2151.71	100.000 (1)
19-20-S	15.71	15.71	6.28	-25.55	-2151.71	84.224 (2)
19-21-S	15.71	15.71	4.21	-21.63	-2151.71	99.457 (2)
19-22-S	15.71	15.71	1.51	-3.64	2151.71	100.000 (1)
20-1-S	15.71	15.71	1.30	-5.04	2151.71	100.000 (1)
20-2-S	15.71	15.71	0.03	-9.09	2151.71	100.000 (1)
20-3-S	15.71	15.71	0.08	-13.20	2151.71	100.000 (1)
20-4-S	15.71	15.71	0.94	-22.19	-2151.71	96.960 (2)
20-5-S	15.71	15.71	6.30	-9.82	2151.71	100.000 (1)
20-6-S	15.71	15.71	18.28	-4.46	2151.71	94.159 (2)
20-7-S	15.71	15.71	58.21	0.00	2151.71	38.368 (1)
20-8-S	15.71	15.71	0.00	-238.80	-2151.71	9.010 (2)
20-9-S	15.71	15.71	0.00	-187.05	-2151.71	11.504 (2)
20-10-S	15.71	15.71	0.00	-147.60	-2151.71	14.578 (2)
20-11-S	15.71	15.71	0.00	-112.46	-2151.71	19.133 (2)
20-12-S	15.71	15.71	0.00	-78.96	-2151.71	27.252 (2)
20-13-S	15.71	15.71	0.01	-50.61	-2151.71	42.518 (2)
20-14-S	15.71	15.71	0.35	-26.02	-2151.71	82.699 (2)
20-15-S	15.71	15.71	7.64	-5.06	2151.71	100.000 (1)
20-16-S	15.71	15.71	11.68	-3.44	2151.71	100.000 (1)
20-17-S	15.71	15.71	13.97	-3.10	2151.71	100.000 (1)
20-18-S	15.71	15.71	10.67	-5.09	2151.71	100.000 (1)
20-19-S	15.71	15.71	8.03	-6.63	2151.71	100.000 (1)
20-20-S	15.71	15.71	4.45	-4.57	2151.71	100.000 (1)
20-21-S	15.71	15.71	3.12	-2.66	2151.71	100.000 (1)

APPALTATORE: TELESE S.c.a r.l. <i>Consorzio Telese Società Consortile a Responsabilità Limitata</i>	ITINERARIO NAPOLI – BARI RADDOPPIO TRATTA CANCELLO-BENEVENTO II LOTTO FUNZIONALE FRASSO TELESINO – VITULANO 2° SUBLOTTO TELESE – SAN LORENZO PROGETTO ESECUTIVO												
PROGETTAZIONE: <u>Mandatario:</u> SYSTRA S.A. <u>Mandante:</u> SWS Engineering S.p.A. SYSTRA-SOTECNI S.p.A.													
Relazione di calcolo IF2R.2.2.E.ZZ.CL.TR.16.0.5.008.A.DOCX	<table border="1"> <tr> <td>COMMESSA</td> <td>LOTTO</td> <td>CODIFICA</td> <td>DOCUMENTO</td> <td>REV.</td> <td>FOGLIO</td> </tr> <tr> <td>IF2R</td> <td>2.2.E.ZZ</td> <td>CL</td> <td>TR.16.0.5.008</td> <td>A</td> <td>44 di 118</td> </tr> </table>	COMMESSA	LOTTO	CODIFICA	DOCUMENTO	REV.	FOGLIO	IF2R	2.2.E.ZZ	CL	TR.16.0.5.008	A	44 di 118
COMMESSA	LOTTO	CODIFICA	DOCUMENTO	REV.	FOGLIO								
IF2R	2.2.E.ZZ	CL	TR.16.0.5.008	A	44 di 118								

Is	Afi [cmq]	Afs [cmq]	Mp [kNm]	Mn [kNm]	Mu [kNm]	FS
20-22-S	15.71	15.71	3.09	-0.90	2151.71	100.000 (1)

Pali in c.a.

Ip	Is	Ar [cmq]	M [kNm]	N [kN]	Mu [kNm]	Nu [kN]	FS
1	1	40.72	185.26	105.11	922.22	523.25	4.978
2	1	62.83	185.26	378.29	1094.52	2234.91	5.908
3	1	62.83	185.26	651.46	1039.09	3653.89	5.609

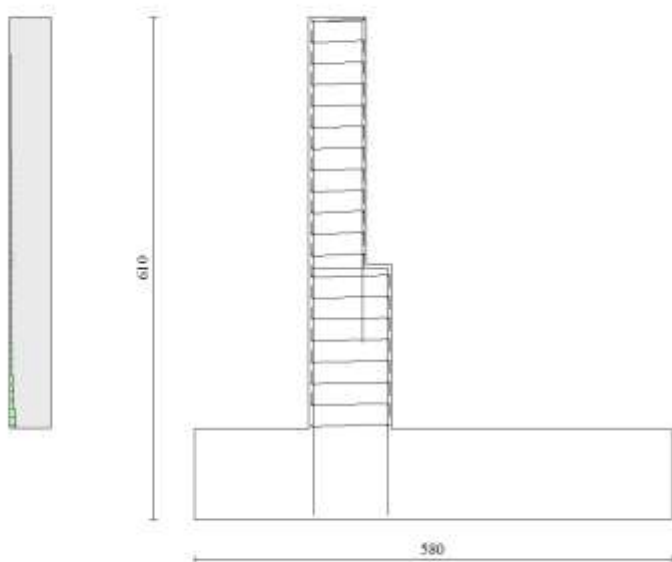


Fig. 14 - Paramento (Inviluppo)

APPALTATORE: TELESE S.c.a r.l. <i>Consorzio Telese Società Consortile a Responsabilità Limitata</i>	ITINERARIO NAPOLI – BARI RADDOPPIO TRATTA CANCELLO-BENEVENTO II LOTTO FUNZIONALE FRASSO TELESINO – VITULANO 2° SUBLOTTO TELESE – SAN LORENZO PROGETTO ESECUTIVO					
PROGETTAZIONE: <u>Mandatario:</u> SYSTRA S.A. <u>Mandante:</u> SWS Engineering S.p.A. SYSTRA-SOTECNI S.p.A.	COMMESSA	LOTTO	CODIFICA	DOCUMENTO	REV.	FOGLIO
Relazione di calcolo IF2R.2.2.E.ZZ.CL.TR.16.0.5.008.A.DOCX	IF2R	2.2.E.ZZ	CL	TR.16.0.5.008	A	45 di 118

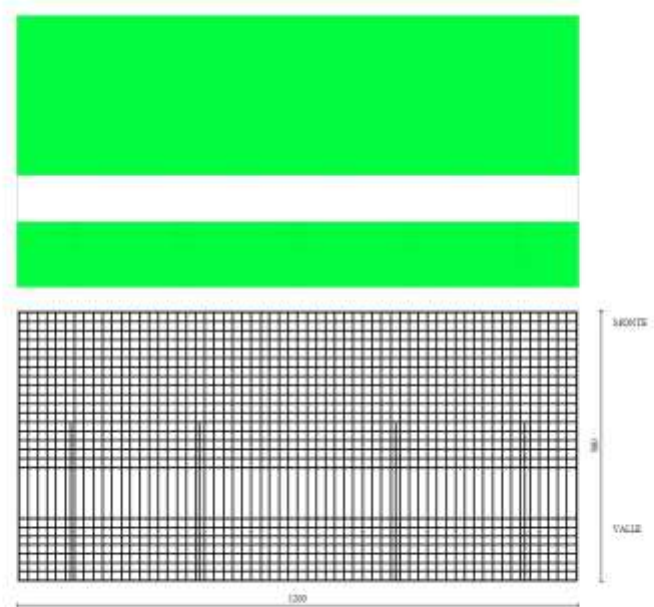


Fig. 15 - Piastra fondazione dir. X (Inviluppo)

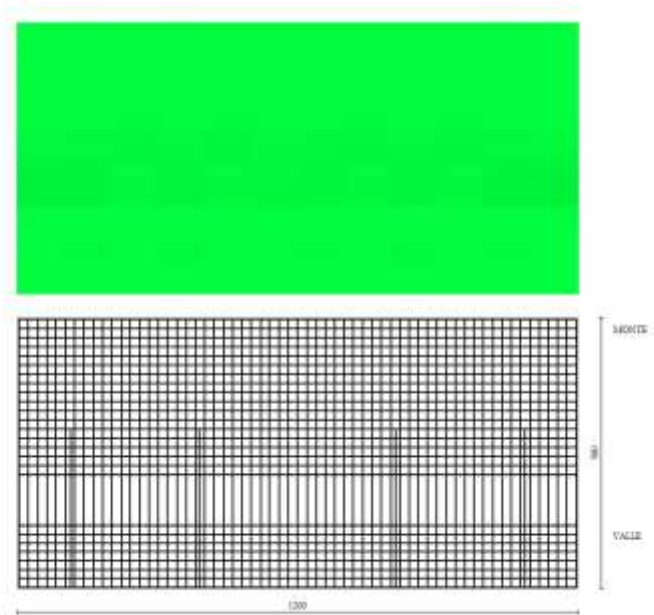


Fig. 16 - Piastra fondazione dir. Y (Inviluppo)

APPALTATORE:

TELESE S.c.a r.l.
Consorzio Telese Società Consortile a Responsabilità Limitata

**ITINERARIO NAPOLI – BARI
RADDOPPIO TRATTA CANCELLO-BENEVENTO
II LOTTO FUNZIONALE FRASSO TELESINO – VITULANO
2° SUBLOTTO TELESE – SAN LORENZO
PROGETTO ESECUTIVO**

PROGETTAZIONE:

Mandatario:

Mandante:

SYSTRA S.A. SWS Engineering S.p.A. SYSTRA-SOTECNI S.p.A.

Relazione di calcolo

IF2R.2.2.E.ZZ.CL.TR.16.0.5.008.A.DOCX

COMMESSA	LOTTO	CODIFICA	DOCUMENTO	REV.	FOGLIO
IF2R	2.2.E.ZZ	CL	TR.16.0.5.008	A	46 di 118

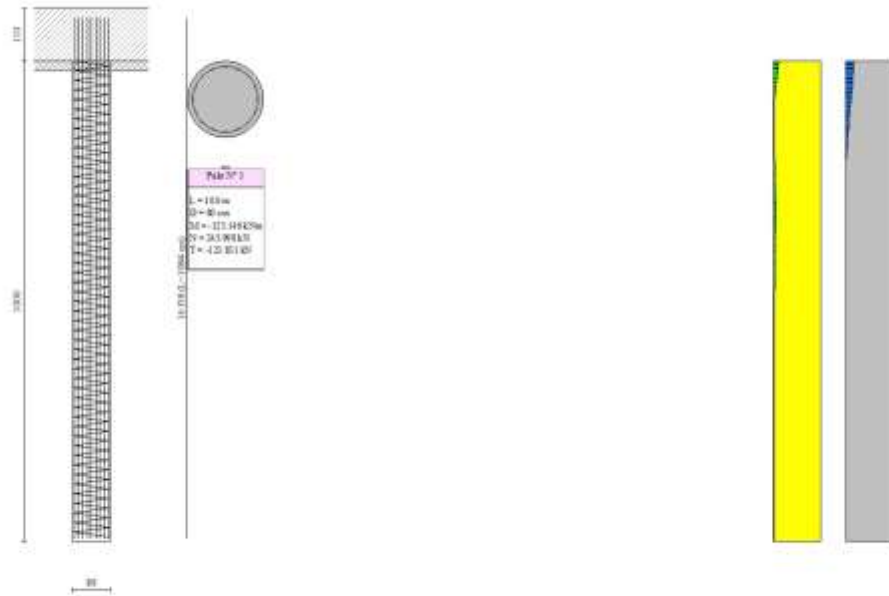


Fig. 17 - Pali (Palo n° 1) (Inviluppo)

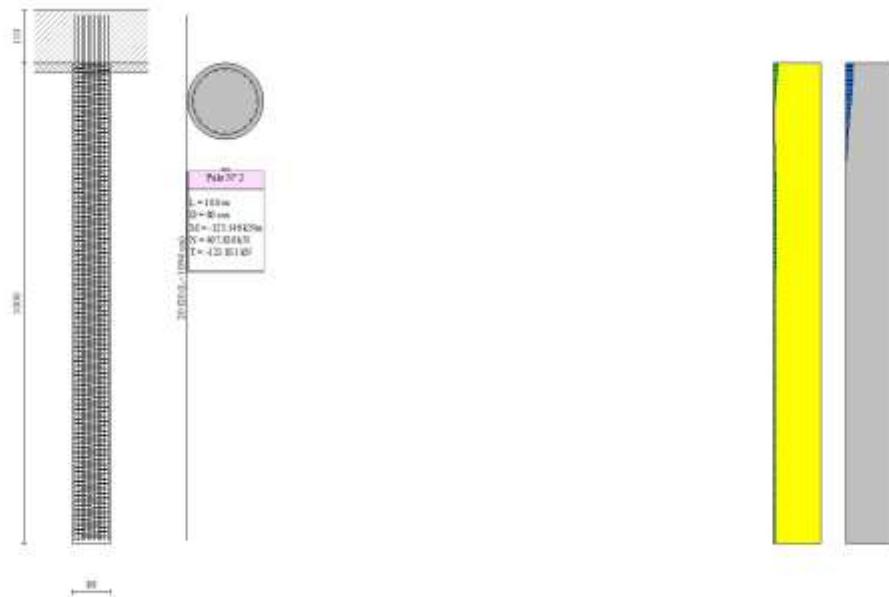


Fig. 18 - Pali (Palo n° 2) (Inviluppo)

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PROGETTAZIONE: Mandataria: SYSTRA S.A. Mandante: SWS Engineering S.p.A. SYSTRA-SOTECNI S.p.A.	COMMESSA	LOTTO	CODIFICA	DOCUMENTO	REV.	FOGLIO
Relazione di calcolo IF2R.2.2.E.ZZ.CL.TR.16.0.5.008.A.DOCX	IF2R	2.2.E.ZZ	CL	TR.16.0.5.008	A	47 di 118

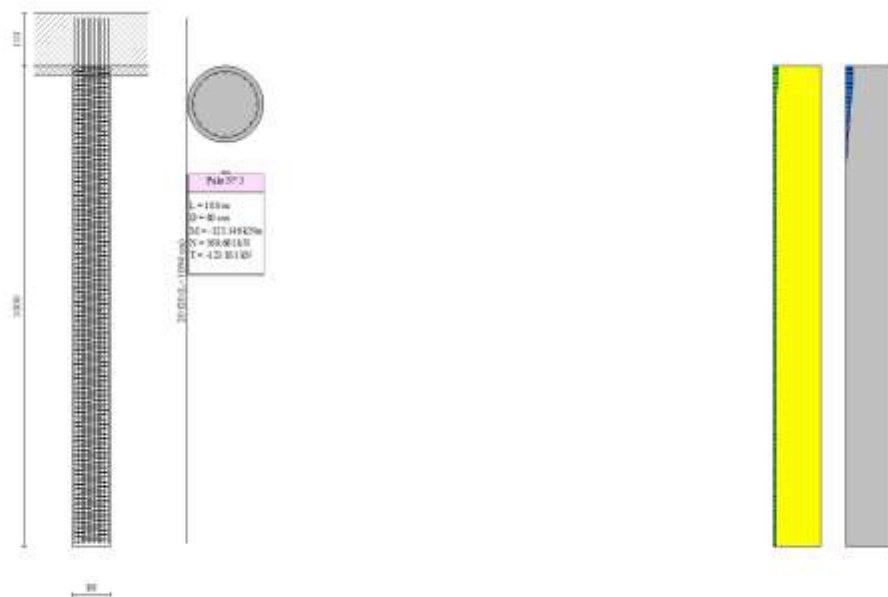


Fig. 19 - Pali (Palo n° 3) (Inviluppo)

Verifiche a taglio

Simbologia adottata

Is	indice sezione
Y	ordinata sezione espressa in [m]
B	larghezza sezione espressa in [cm]
H	altezza sezione espressa in [cm]
A _{sw}	area ferri a taglio espressa in [cm ²]
cotgθ	inclinazione delle bielle compresse, θ inclinazione dei puntoni di calcestruzzo
V _{Rcd}	resistenza di progetto a 'taglio compressione' espressa in [kN]
V _{Rsd}	resistenza di progetto a 'taglio trazione' espressa in [kN]
V _{Rd}	resistenza di progetto a taglio espressa in [kN]. Per elementi con armature trasversali resistenti al taglio (A _{sw} >0.0) V _{Rd} =min(V _{Rcd} , V _{Rsd}).
T	taglio agente espressa in [kN]
FS	fattore di sicurezza (rapporto tra sollecitazione resistente e sollecitazione agente)

Paramento

n°	B [cm]	H [cm]	A _{sw} [cm ²]	cotθ	V _{Rcd} [kN]	V _{Rsd} [kN]	V _{Rd} [kN]	T [kN]	FS
1	100	70	0.00	--	0.00	0.00	279.75	10.15	27.562
2	100	70	0.00	--	0.00	0.00	280.00	10.15	27.586
3	100	70	0.00	--	0.00	0.00	280.24	10.15	27.610
4	100	70	0.00	--	0.00	0.00	280.48	10.15	27.634
5	100	70	0.00	--	0.00	0.00	280.72	10.15	27.657
6	100	70	0.00	--	0.00	0.00	280.97	10.15	27.681
7	100	70	0.00	--	0.00	0.00	281.21	10.15	27.705
8	100	70	0.00	--	0.00	0.00	281.45	10.15	27.729
9	100	70	0.00	--	0.00	0.00	281.69	10.15	27.753
10	100	70	0.00	--	0.00	0.00	281.94	10.15	27.777
11	100	70	0.00	--	0.00	0.00	282.18	10.15	27.801
12	100	70	0.00	--	0.00	0.00	282.42	10.15	27.825
13	100	70	0.00	--	0.00	0.00	282.66	10.15	27.849
14	100	70	0.00	--	0.00	0.00	282.91	10.15	27.873
15	100	70	0.00	--	0.00	0.00	283.15	10.15	27.897
16	100	70	0.00	--	0.00	0.00	283.39	10.15	27.920
17	100	70	0.00	--	0.00	0.00	283.63	10.15	27.944
18	100	70	0.00	--	0.00	0.00	283.88	10.15	27.968
19	100	70	0.00	--	0.00	0.00	284.12	10.15	27.992
20	100	70	0.00	--	0.00	0.00	284.36	10.15	28.016
21	100	70	0.00	--	0.00	0.00	284.61	10.15	28.040

APPALTATORE:

TELESE S.c.a r.l.
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ITINERARIO NAPOLI – BARI
RADDOPPIO TRATTA CANCELLO-BENEVENTO
II LOTTO FUNZIONALE FRASSO TELESINO – VITULANO
2° SUBLOTTO TELESE – SAN LORENZO

PROGETTAZIONE:

Mandatario:

Mandante:

SYSTRA S.A. SWS Engineering S.p.A. SYSTRA-SOTECNI S.p.A.

PROGETTO ESECUTIVO

Relazione di calcolo

IF2R.2.2.E.ZZ.CL.TR.16.0.5.008.A.DOCX

COMMESSA LOTTO CODIFICA DOCUMENTO REV. FOGLIO
IF2R 2.2.E.ZZ CL TR.16.0.5.008 A 48 di 118

n°	B [cm]	H [cm]	A _{sw} [cmq]	cotθ	V _{Rcd} [kN]	V _{Rsd} [kN]	V _{Rd} [kN]	T [kN]	FS
22	100	70	0.00	--	0.00	0.00	284.85	10.15	28.064
23	100	70	0.00	--	0.00	0.00	284.88	10.26	27.765
24	100	70	0.00	--	0.00	0.00	285.12	10.67	26.716
25	100	70	0.00	--	0.00	0.00	285.36	11.08	25.745
26	100	70	0.00	--	0.00	0.00	285.61	11.50	24.844
27	100	70	0.00	--	0.00	0.00	285.85	11.91	24.005
28	100	70	0.00	--	0.00	0.00	286.09	12.32	23.223
29	100	70	0.00	--	0.00	0.00	286.33	12.73	22.490
30	100	70	0.00	--	0.00	0.00	286.58	14.23	20.143
31	100	70	0.00	--	0.00	0.00	286.82	15.78	18.176
32	100	101	0.00	--	0.00	0.00	355.17	16.56	21.454
33	100	101	0.00	--	0.00	0.00	355.53	20.66	17.206
34	100	101	0.00	--	0.00	0.00	355.88	24.02	14.815
35	100	101	0.00	--	0.00	0.00	356.24	26.64	13.372
36	100	101	0.00	--	0.00	0.00	356.59	28.53	12.500
37	100	101	0.00	--	0.00	0.00	356.95	30.14	11.844
38	100	101	0.00	--	0.00	0.00	357.31	31.92	11.195
39	100	101	0.00	--	0.00	0.00	357.66	33.82	10.574
40	100	101	0.00	--	0.00	0.00	358.02	35.82	9.994
41	100	101	0.00	--	0.00	0.00	358.38	37.90	9.456
42	100	101	0.00	--	0.00	0.00	358.73	40.04	8.958
43	100	101	0.00	--	0.00	0.00	359.09	42.25	8.499
44	100	101	0.00	--	0.00	0.00	359.45	44.51	8.075
45	100	101	0.00	--	0.00	0.00	359.80	46.83	7.683
46	100	101	0.00	--	0.00	0.00	360.16	49.20	7.320
47	100	101	0.00	--	0.00	0.00	360.52	51.63	6.983
48	100	101	0.00	--	0.00	0.00	360.87	54.10	6.670
49	100	101	0.00	--	0.00	0.00	361.23	56.62	6.379
50	100	101	0.00	--	0.00	0.00	361.59	59.20	6.108
51	100	101	0.00	--	0.00	0.00	361.94	61.82	5.854
52	100	101	0.00	--	0.00	0.00	362.30	64.50	5.617

Fondazione

Is	B [cm]	H [cm]	A _{sw} [cmq]	cotg (θ)	V _{Rcd} [kN]	V _{Rsd} [kN]	V _{Rd} [kN]	T [kN]	FS
1-1-P	69	110	0.00	2.500	0.00	0.00	241.25	0.00	100.000 (1)
1-2-P	69	110	0.00	2.500	0.00	0.00	241.25	0.00	100.000 (1)
1-3-P	69	110	0.00	2.500	0.00	0.00	241.25	0.00	100.000 (1)
1-4-P	69	110	0.00	2.500	0.00	0.00	241.25	0.00	100.000 (1)
1-5-P	69	110	0.00	2.500	0.00	0.00	241.25	0.00	100.000 (1)
1-6-P	69	110	0.00	2.500	0.00	0.00	241.25	14.24	16.942 (1)
1-7-P	69	110	0.00	2.500	0.00	0.00	241.25	14.24	16.942 (1)
1-8-P	69	110	0.00	2.500	0.00	0.00	241.25	14.24	16.942 (1)
1-9-P	69	110	0.00	2.500	0.00	0.00	241.25	14.24	16.942 (1)
1-10-P	69	110	0.00	2.500	0.00	0.00	241.25	14.24	16.942 (1)
1-11-P	69	110	0.00	2.500	0.00	0.00	241.25	2.34	100.000 (1)
1-12-P	69	110	0.00	2.500	0.00	0.00	241.25	2.34	100.000 (1)
1-13-P	69	110	0.00	2.500	0.00	0.00	241.25	2.34	100.000 (1)
1-14-P	69	110	0.00	2.500	0.00	0.00	241.25	2.34	100.000 (1)
1-15-P	69	110	0.00	2.500	0.00	0.00	241.25	2.34	100.000 (1)
1-16-P	69	110	0.00	2.500	0.00	0.00	241.25	20.40	11.827 (1)
1-17-P	69	110	0.00	2.500	0.00	0.00	241.25	20.40	11.827 (1)
1-18-P	69	110	0.00	2.500	0.00	0.00	241.25	20.40	11.827 (1)
1-19-P	69	110	0.00	2.500	0.00	0.00	241.25	20.40	11.827 (1)
1-20-P	69	110	0.00	2.500	0.00	0.00	241.25	20.40	11.827 (1)
1-21-P	69	110	0.00	2.500	0.00	0.00	241.25	12.99	18.577 (1)
1-22-P	69	110	0.00	2.500	0.00	0.00	241.25	12.99	18.577 (1)
1-23-P	69	110	0.00	2.500	0.00	0.00	241.25	12.99	18.577 (1)
1-24-P	69	110	0.00	2.500	0.00	0.00	241.25	12.99	18.577 (1)
1-25-P	69	110	0.00	2.500	0.00	0.00	241.25	12.99	18.577 (1)
1-26-P	69	110	0.00	2.500	0.00	0.00	241.25	33.30	7.245 (1)
1-27-P	69	110	0.00	2.500	0.00	0.00	241.25	33.30	7.245 (1)
1-28-P	69	110	0.00	2.500	0.00	0.00	241.25	33.30	7.245 (1)
1-29-P	69	110	0.00	2.500	0.00	0.00	241.25	20.40	11.827 (1)
1-30-P	69	110	0.00	2.500	0.00	0.00	241.25	20.40	11.827 (1)
1-31-P	69	110	0.00	2.500	0.00	0.00	241.25	0.00	100.000 (1)
1-32-P	69	110	0.00	2.500	0.00	0.00	241.25	0.00	100.000 (1)
1-33-P	69	110	0.00	2.500	0.00	0.00	241.25	0.00	100.000 (1)
1-34-P	69	110	0.00	2.500	0.00	0.00	241.25	2.34	100.000 (1)
1-35-P	69	110	0.00	2.500	0.00	0.00	241.25	2.34	100.000 (1)
1-36-P	69	110	0.00	2.500	0.00	0.00	241.25	45.70	5.279 (1)
1-37-P	69	110	0.00	2.500	0.00	0.00	241.25	45.70	5.279 (1)
1-38-P	69	110	0.00	2.500	0.00	0.00	241.25	45.70	5.279 (1)
1-39-P	69	110	0.00	2.500	0.00	0.00	241.25	14.24	16.942 (1)
1-40-P	69	110	0.00	2.500	0.00	0.00	241.25	14.24	16.942 (1)
1-41-P	69	110	0.00	2.500	0.00	0.00	241.25	0.00	100.000 (1)
1-42-P	69	110	0.00	2.500	0.00	0.00	241.25	0.00	100.000 (1)
1-43-P	69	110	0.00	2.500	0.00	0.00	241.25	0.00	100.000 (1)

APPALTATORE: **TELESE S.c.a r.l.**
 Consorzio Telese Società Consortile a Responsabilità Limitata

PROGETTAZIONE:
 Mandataria: SYSTRA S.A. Mandante: SWS Engineering S.p.A. SYSTRA-SOTECNI S.p.A.

Relazione di calcolo
 IF2R.2.2.E.ZZ.CL.TR.16.0.5.008.A.DOCX

ITINERARIO NAPOLI – BARI
RADDOPPIO TRATTA CANCELLO-BENEVENTO
II LOTTO FUNZIONALE FRASSO TELESINO – VITULANO
2° SUBLOTTO TELESE – SAN LORENZO
PROGETTO ESECUTIVO

COMMESSA	LOTTO	CODIFICA	DOCUMENTO	REV.	FOGLIO
IF2R	2.2.E.ZZ	CL	TR.16.0.5.008	A	49 di 118

Is	B [cm]	H [cm]	Asw [cmq]	cotg (θ)	V _{Rcd} [kN]	V _{Rsd} [kN]	V _{Rd} [kN]	T [kN]	FS
1-44-P	69	110	0.00	2.500	0.00	0.00	241.25	6.34	38.067 (1)
1-45-P	69	110	0.00	2.500	0.00	0.00	241.25	6.34	38.067 (1)
1-46-P	69	110	0.00	2.500	0.00	0.00	241.25	6.34	38.067 (1)
1-47-P	69	110	0.00	2.500	0.00	0.00	241.25	6.34	38.067 (1)
1-48-P	69	110	0.00	2.500	0.00	0.00	241.25	6.34	38.067 (1)
1-49-P	69	110	0.00	2.500	0.00	0.00	241.25	6.34	38.067 (1)
2-1-P	70	110	0.00	2.500	0.00	0.00	241.25	0.00	100.000 (1)
2-2-P	70	110	0.00	2.500	0.00	0.00	241.25	0.00	100.000 (1)
2-3-P	70	110	0.00	2.500	0.00	0.00	241.25	0.00	100.000 (1)
2-4-P	70	110	0.00	2.500	0.00	0.00	241.25	0.00	100.000 (1)
2-5-P	70	110	0.00	2.500	0.00	0.00	241.25	0.00	100.000 (1)
2-6-P	70	110	0.00	2.500	0.00	0.00	241.25	116.70	2.067 (1)
2-7-P	70	110	0.00	2.500	0.00	0.00	241.25	116.70	2.067 (1)
2-8-P	70	110	0.00	2.500	0.00	0.00	241.25	116.70	2.067 (1)
2-9-P	70	110	0.00	2.500	0.00	0.00	241.25	116.70	2.067 (1)
2-10-P	70	110	0.00	2.500	0.00	0.00	241.25	116.70	2.067 (1)
2-11-P	70	110	0.00	2.500	0.00	0.00	241.25	0.00	100.000 (1)
2-12-P	70	110	0.00	2.500	0.00	0.00	241.25	0.00	100.000 (1)
2-13-P	70	110	0.00	2.500	0.00	0.00	241.25	0.00	100.000 (1)
2-14-P	70	110	0.00	2.500	0.00	0.00	241.25	0.00	100.000 (1)
2-15-P	70	110	0.00	2.500	0.00	0.00	241.25	0.00	100.000 (1)
2-16-P	70	110	0.00	2.500	0.00	0.00	241.25	43.72	5.517 (1)
2-17-P	70	110	0.00	2.500	0.00	0.00	241.25	43.72	5.517 (1)
2-18-P	70	110	0.00	2.500	0.00	0.00	241.25	43.72	5.517 (1)
2-19-P	70	110	0.00	2.500	0.00	0.00	241.25	43.72	5.517 (1)
2-20-P	70	110	0.00	2.500	0.00	0.00	241.25	43.72	5.517 (1)
2-21-P	70	110	0.00	2.500	0.00	0.00	241.25	18.69	12.909 (1)
2-22-P	70	110	0.00	2.500	0.00	0.00	241.25	18.69	12.909 (1)
2-23-P	70	110	0.00	2.500	0.00	0.00	241.25	18.69	12.909 (1)
2-24-P	70	110	0.00	2.500	0.00	0.00	241.25	18.69	12.909 (1)
2-25-P	70	110	0.00	2.500	0.00	0.00	241.25	18.69	12.909 (1)
2-26-P	70	110	0.00	2.500	0.00	0.00	241.25	0.00	100.000 (1)
2-27-P	70	110	0.00	2.500	0.00	0.00	241.25	0.00	100.000 (1)
2-28-P	70	110	0.00	2.500	0.00	0.00	241.25	0.00	100.000 (1)
2-29-P	70	110	0.00	2.500	0.00	0.00	241.25	0.00	100.000 (1)
2-30-P	70	110	0.00	2.500	0.00	0.00	241.25	0.00	100.000 (1)
2-31-P	70	110	0.00	2.500	0.00	0.00	241.25	0.00	100.000 (1)
2-32-P	70	110	0.00	2.500	0.00	0.00	241.25	0.00	100.000 (1)
2-33-P	70	110	0.00	2.500	0.00	0.00	241.25	0.00	100.000 (1)
2-34-P	70	110	0.00	2.500	0.00	0.00	241.25	0.00	100.000 (1)
2-35-P	70	110	0.00	2.500	0.00	0.00	241.25	0.00	100.000 (1)
2-36-P	70	110	0.00	2.500	0.00	0.00	241.25	0.00	100.000 (1)
2-37-P	70	110	0.00	2.500	0.00	0.00	241.25	0.00	100.000 (1)
2-38-P	70	110	0.00	2.500	0.00	0.00	241.25	0.00	100.000 (1)
2-39-P	70	110	0.00	2.500	0.00	0.00	241.25	18.34	13.156 (1)
2-40-P	70	110	0.00	2.500	0.00	0.00	241.25	18.34	13.156 (1)
2-41-P	70	110	0.00	2.500	0.00	0.00	241.25	0.00	100.000 (1)
2-42-P	70	110	0.00	2.500	0.00	0.00	241.25	0.00	100.000 (1)
2-43-P	70	110	0.00	2.500	0.00	0.00	241.25	0.00	100.000 (1)
2-44-P	70	110	0.00	2.500	0.00	0.00	241.25	9.89	24.386 (1)
2-45-P	70	110	0.00	2.500	0.00	0.00	241.25	9.89	24.386 (1)
2-46-P	70	110	0.00	2.500	0.00	0.00	241.25	9.89	24.386 (1)
2-47-P	70	110	0.00	2.500	0.00	0.00	241.25	9.89	24.386 (1)
2-48-P	70	110	0.00	2.500	0.00	0.00	241.25	9.89	24.386 (1)
2-49-P	70	110	0.00	2.500	0.00	0.00	241.25	9.89	24.386 (1)
5-1-P	85	110	0.00	2.500	0.00	0.00	295.05	0.00	100.000 (1)
5-2-P	85	110	0.00	2.500	0.00	0.00	295.05	0.00	100.000 (1)
5-3-P	85	110	0.00	2.500	0.00	0.00	295.05	0.00	100.000 (1)
5-4-P	85	110	0.00	2.500	0.00	0.00	295.05	0.00	100.000 (1)
5-5-P	85	110	0.00	2.500	0.00	0.00	295.05	0.00	100.000 (1)
5-6-P	85	110	0.00	2.500	0.00	0.00	295.05	9.69	30.455 (1)
5-7-P	85	110	0.00	2.500	0.00	0.00	295.05	9.69	30.455 (1)
5-8-P	85	110	0.00	2.500	0.00	0.00	295.05	9.69	30.455 (1)
5-9-P	85	110	0.00	2.500	0.00	0.00	295.05	9.69	30.455 (1)
5-10-P	85	110	0.00	2.500	0.00	0.00	295.05	9.69	30.455 (1)
5-11-P	85	110	0.00	2.500	0.00	0.00	295.05	83.08	3.551 (1)
5-12-P	85	110	0.00	2.500	0.00	0.00	295.05	83.08	3.551 (1)
5-13-P	85	110	0.00	2.500	0.00	0.00	295.05	83.08	3.551 (1)
5-14-P	85	110	0.00	2.500	0.00	0.00	295.05	83.08	3.551 (1)
5-15-P	85	110	0.00	2.500	0.00	0.00	295.05	83.08	3.551 (1)
5-16-P	85	110	0.00	2.500	0.00	0.00	295.05	0.00	100.000 (1)
5-17-P	85	110	0.00	2.500	0.00	0.00	295.05	0.00	100.000 (1)
5-18-P	85	110	0.00	2.500	0.00	0.00	295.05	0.00	100.000 (1)
5-19-P	85	110	0.00	2.500	0.00	0.00	295.05	0.00	100.000 (1)
5-20-P	85	110	0.00	2.500	0.00	0.00	295.05	0.00	100.000 (1)
5-21-P	85	110	0.00	2.500	0.00	0.00	295.05	43.02	6.859 (1)
5-22-P	85	110	0.00	2.500	0.00	0.00	295.05	43.02	6.859 (1)
5-23-P	85	110	0.00	2.500	0.00	0.00	295.05	43.02	6.859 (1)
5-24-P	85	110	0.00	2.500	0.00	0.00	295.05	43.02	6.859 (1)
5-25-P	85	110	0.00	2.500	0.00	0.00	295.05	43.02	6.859 (1)
5-26-P	85	110	0.00	2.500	0.00	0.00	295.05	0.00	100.000 (1)

APPALTATORE:

TELESE S.c.a r.l.
Consorzio Telese Società Consortile a Responsabilità Limitata

PROGETTAZIONE:

Mandataria: Mandante:

SYSTRA S.A. **SWS Engineering S.p.A.** **SYSTRA-SOTECNI S.p.A.**

Relazione di calcolo
IF2R.2.2.E.ZZ.CL.TR.16.0.5.008.A.DOCX

ITINERARIO NAPOLI – BARI
RADDOPPIO TRATTA CANCELLO-BENEVENTO
II LOTTO FUNZIONALE FRASSO TELESINO – VITULANO
2° SUBLOTTO TELESE – SAN LORENZO

PROGETTO ESECUTIVO

COMMESSA	LOTTO	CODIFICA	DOCUMENTO	REV.	FOGLIO
IF2R	2.2.E.ZZ	CL	TR.16.0.5.008	A	50 di 118

Is	B [cm]	H [cm]	Asw [cmq]	cotg (θ)	V _{Rcd} [kN]	V _{Rsd} [kN]	V _{Rd} [kN]	T [kN]	FS
5-27-P	85	110	0.00	2.500	0.00	0.00	295.05	0.00	100.000 (1)
5-28-P	85	110	0.00	2.500	0.00	0.00	295.05	0.00	100.000 (1)
5-29-P	85	110	0.00	2.500	0.00	0.00	295.05	0.00	100.000 (1)
5-30-P	85	110	0.00	2.500	0.00	0.00	295.05	0.00	100.000 (1)
5-31-P	85	110	0.00	2.500	0.00	0.00	295.05	62.12	4.750 (1)
5-32-P	85	110	0.00	2.500	0.00	0.00	295.05	62.12	4.750 (1)
5-33-P	85	110	0.00	2.500	0.00	0.00	295.05	62.12	4.750 (1)
5-34-P	85	110	0.00	2.500	0.00	0.00	295.05	25.06	11.773 (1)
5-35-P	85	110	0.00	2.500	0.00	0.00	295.05	25.06	11.773 (1)
5-36-P	85	110	0.00	2.500	0.00	0.00	295.05	0.00	100.000 (1)
5-37-P	85	110	0.00	2.500	0.00	0.00	295.05	0.00	100.000 (1)
5-38-P	85	110	0.00	2.500	0.00	0.00	295.05	0.00	100.000 (1)
5-39-P	85	110	0.00	2.500	0.00	0.00	295.05	9.69	30.455 (1)
5-40-P	85	110	0.00	2.500	0.00	0.00	295.05	9.69	30.455 (1)
5-41-P	85	110	0.00	2.500	0.00	0.00	295.05	9.69	30.455 (1)
5-42-P	85	110	0.00	2.500	0.00	0.00	295.05	9.69	30.455 (1)
5-43-P	85	110	0.00	2.500	0.00	0.00	295.05	9.69	30.455 (1)
5-44-P	85	110	0.00	2.500	0.00	0.00	295.05	9.92	29.741 (1)
5-45-P	85	110	0.00	2.500	0.00	0.00	295.05	9.92	29.741 (1)
5-46-P	85	110	0.00	2.500	0.00	0.00	295.05	9.92	29.741 (1)
5-47-P	85	110	0.00	2.500	0.00	0.00	295.05	9.92	29.741 (1)
5-48-P	85	110	0.00	2.500	0.00	0.00	295.05	9.92	29.741 (1)
5-49-P	85	110	0.00	2.500	0.00	0.00	295.05	9.92	29.741 (1)
6-1-P	85	110	0.00	2.500	0.00	0.00	295.05	0.00	100.000 (1)
6-2-P	85	110	0.00	2.500	0.00	0.00	295.05	0.00	100.000 (1)
6-3-P	85	110	0.00	2.500	0.00	0.00	295.05	0.00	100.000 (1)
6-4-P	85	110	0.00	2.500	0.00	0.00	295.05	0.00	100.000 (1)
6-5-P	85	110	0.00	2.500	0.00	0.00	295.05	0.00	100.000 (1)
6-6-P	85	110	0.00	2.500	0.00	0.00	295.05	0.00	100.000 (1)
6-7-P	85	110	0.00	2.500	0.00	0.00	295.05	0.00	100.000 (1)
6-8-P	85	110	0.00	2.500	0.00	0.00	295.05	0.00	100.000 (1)
6-9-P	85	110	0.00	2.500	0.00	0.00	295.05	0.00	100.000 (1)
6-10-P	85	110	0.00	2.500	0.00	0.00	295.05	0.00	100.000 (1)
6-11-P	85	110	0.00	2.500	0.00	0.00	295.05	7.78	37.900 (1)
6-12-P	85	110	0.00	2.500	0.00	0.00	295.05	7.78	37.900 (1)
6-13-P	85	110	0.00	2.500	0.00	0.00	295.05	7.78	37.900 (1)
6-14-P	85	110	0.00	2.500	0.00	0.00	295.05	7.78	37.900 (1)
6-15-P	85	110	0.00	2.500	0.00	0.00	295.05	7.78	37.900 (1)
6-16-P	85	110	0.00	2.500	0.00	0.00	295.05	0.00	100.000 (1)
6-17-P	85	110	0.00	2.500	0.00	0.00	295.05	0.00	100.000 (1)
6-18-P	85	110	0.00	2.500	0.00	0.00	295.05	0.00	100.000 (1)
6-19-P	85	110	0.00	2.500	0.00	0.00	295.05	0.00	100.000 (1)
6-20-P	85	110	0.00	2.500	0.00	0.00	295.05	0.00	100.000 (1)
6-21-P	85	110	0.00	2.500	0.00	0.00	295.05	0.00	100.000 (1)
6-22-P	85	110	0.00	2.500	0.00	0.00	295.05	0.00	100.000 (1)
6-23-P	85	110	0.00	2.500	0.00	0.00	295.05	0.00	100.000 (1)
6-24-P	85	110	0.00	2.500	0.00	0.00	295.05	0.00	100.000 (1)
6-25-P	85	110	0.00	2.500	0.00	0.00	295.05	0.00	100.000 (1)
6-26-P	85	110	0.00	2.500	0.00	0.00	295.05	0.00	100.000 (1)
6-27-P	85	110	0.00	2.500	0.00	0.00	295.05	0.00	100.000 (1)
6-28-P	85	110	0.00	2.500	0.00	0.00	295.05	0.00	100.000 (1)
6-29-P	85	110	0.00	2.500	0.00	0.00	295.05	0.00	100.000 (1)
6-30-P	85	110	0.00	2.500	0.00	0.00	295.05	0.00	100.000 (1)
6-31-P	85	110	0.00	2.500	0.00	0.00	295.05	0.00	100.000 (1)
6-32-P	85	110	0.00	2.500	0.00	0.00	295.05	0.00	100.000 (1)
6-33-P	85	110	0.00	2.500	0.00	0.00	295.05	0.00	100.000 (1)
6-34-P	85	110	0.00	2.500	0.00	0.00	295.05	0.00	100.000 (1)
6-35-P	85	110	0.00	2.500	0.00	0.00	295.05	0.00	100.000 (1)
6-36-P	85	110	0.00	2.500	0.00	0.00	295.05	0.00	100.000 (1)
6-37-P	85	110	0.00	2.500	0.00	0.00	295.05	0.00	100.000 (1)
6-38-P	85	110	0.00	2.500	0.00	0.00	295.05	0.00	100.000 (1)
6-39-P	85	110	0.00	2.500	0.00	0.00	295.05	19.94	14.795 (1)
6-40-P	85	110	0.00	2.500	0.00	0.00	295.05	19.94	14.795 (1)
6-41-P	85	110	0.00	2.500	0.00	0.00	295.05	0.00	100.000 (1)
6-42-P	85	110	0.00	2.500	0.00	0.00	295.05	0.00	100.000 (1)
6-43-P	85	110	0.00	2.500	0.00	0.00	295.05	0.00	100.000 (1)
6-44-P	85	110	0.00	2.500	0.00	0.00	295.05	2.72	100.000 (1)
6-45-P	85	110	0.00	2.500	0.00	0.00	295.05	2.72	100.000 (1)
6-46-P	85	110	0.00	2.500	0.00	0.00	295.05	2.72	100.000 (1)
6-47-P	85	110	0.00	2.500	0.00	0.00	295.05	2.72	100.000 (1)
6-48-P	85	110	0.00	2.500	0.00	0.00	295.05	2.72	100.000 (1)
6-49-P	85	110	0.00	2.500	0.00	0.00	295.05	2.72	100.000 (1)
7-1-P	85	110	0.00	2.500	0.00	0.00	295.05	45.40	6.498 (1)
7-2-P	85	110	0.00	2.500	0.00	0.00	295.05	45.40	6.498 (1)
7-3-P	85	110	0.00	2.500	0.00	0.00	295.05	45.40	6.498 (1)
7-4-P	85	110	0.00	2.500	0.00	0.00	295.05	45.40	6.498 (1)
7-5-P	85	110	0.00	2.500	0.00	0.00	295.05	45.40	6.498 (1)
7-6-P	85	110	0.00	2.500	0.00	0.00	295.05	5.86	50.317 (1)
7-7-P	85	110	0.00	2.500	0.00	0.00	295.05	5.86	50.317 (1)
7-8-P	85	110	0.00	2.500	0.00	0.00	295.05	5.86	50.317 (1)
7-9-P	85	110	0.00	2.500	0.00	0.00	295.05	5.86	50.317 (1)

APPALTATORE:

TELESE S.c.a r.l.
Consorzio Telese Società Consortile a Responsabilità Limitata

PROGETTAZIONE:

Mandatario: Mandante:

SYSTRA S.A. **SWS Engineering S.p.A.** **SYSTRA-SOTECNI S.p.A.**

Relazione di calcolo
IF2R.2.2.E.ZZ.CL.TR.16.0.5.008.A.DOCX

ITINERARIO NAPOLI – BARI
RADDOPPIO TRATTA CANCELLO-BENEVENTO
II LOTTO FUNZIONALE FRASSO TELESINO – VITULANO
2° SUBLOTTO TELESE – SAN LORENZO

PROGETTO ESECUTIVO

COMMESSA	LOTTO	CODIFICA	DOCUMENTO	REV.	FOGLIO
IF2R	2.2.E.ZZ	CL	TR.16.0.5.008	A	51 di 118

Is	B [cm]	H [cm]	Asw [cmq]	cotg (θ)	V _{Rcd} [kN]	V _{Rsd} [kN]	V _{Rd} [kN]	T [kN]	FS
7-10-P	85	110	0.00	2.500	0.00	0.00	295.05	5.86	50.317 (1)
7-11-P	85	110	0.00	2.500	0.00	0.00	295.05	10.04	29.377 (1)
7-12-P	85	110	0.00	2.500	0.00	0.00	295.05	10.04	29.377 (1)
7-13-P	85	110	0.00	2.500	0.00	0.00	295.05	10.04	29.377 (1)
7-14-P	85	110	0.00	2.500	0.00	0.00	295.05	8.36	35.280 (1)
7-15-P	85	110	0.00	2.500	0.00	0.00	295.05	8.36	35.280 (1)
7-16-P	85	110	0.00	2.500	0.00	0.00	295.05	4.08	72.330 (1)
7-17-P	85	110	0.00	2.500	0.00	0.00	295.05	4.08	72.330 (1)
7-18-P	85	110	0.00	2.500	0.00	0.00	295.05	4.08	72.330 (1)
7-19-P	85	110	0.00	2.500	0.00	0.00	295.05	6.88	42.876 (1)
7-20-P	85	110	0.00	2.500	0.00	0.00	295.05	6.88	42.876 (1)
7-21-P	85	110	0.00	2.500	0.00	0.00	295.05	5.56	53.109 (1)
7-22-P	85	110	0.00	2.500	0.00	0.00	295.05	5.56	53.109 (1)
7-23-P	85	110	0.00	2.500	0.00	0.00	295.05	5.56	53.109 (1)
7-24-P	85	110	0.00	2.500	0.00	0.00	295.05	5.56	53.109 (1)
7-25-P	85	110	0.00	2.500	0.00	0.00	295.05	5.56	53.109 (1)
7-26-P	85	110	0.00	2.500	0.00	0.00	295.05	6.88	42.876 (1)
7-27-P	85	110	0.00	2.500	0.00	0.00	295.05	6.88	42.876 (1)
7-28-P	85	110	0.00	2.500	0.00	0.00	295.05	6.88	42.876 (1)
7-29-P	85	110	0.00	2.500	0.00	0.00	295.05	4.08	72.330 (1)
7-30-P	85	110	0.00	2.500	0.00	0.00	295.05	4.08	72.330 (1)
7-31-P	85	110	0.00	2.500	0.00	0.00	295.05	8.36	35.280 (1)
7-32-P	85	110	0.00	2.500	0.00	0.00	295.05	8.36	35.280 (1)
7-33-P	85	110	0.00	2.500	0.00	0.00	295.05	8.36	35.280 (1)
7-34-P	85	110	0.00	2.500	0.00	0.00	295.05	2.84	100.000 (1)
7-35-P	85	110	0.00	2.500	0.00	0.00	295.05	2.84	100.000 (1)
7-36-P	85	110	0.00	2.500	0.00	0.00	295.05	10.04	29.377 (1)
7-37-P	85	110	0.00	2.500	0.00	0.00	295.05	10.04	29.377 (1)
7-38-P	85	110	0.00	2.500	0.00	0.00	295.05	10.04	29.377 (1)
7-39-P	85	110	0.00	2.500	0.00	0.00	295.05	7.09	41.612 (1)
7-40-P	85	110	0.00	2.500	0.00	0.00	295.05	7.09	41.612 (1)
7-41-P	85	110	0.00	2.500	0.00	0.00	295.05	7.09	41.612 (1)
7-42-P	85	110	0.00	2.500	0.00	0.00	295.05	7.09	41.612 (1)
7-43-P	85	110	0.00	2.500	0.00	0.00	295.05	7.09	41.612 (1)
7-44-P	85	110	0.00	2.500	0.00	0.00	295.05	3.69	80.038 (1)
7-45-P	85	110	0.00	2.500	0.00	0.00	295.05	3.69	80.038 (1)
7-46-P	85	110	0.00	2.500	0.00	0.00	295.05	3.69	80.038 (1)
7-47-P	85	110	0.00	2.500	0.00	0.00	295.05	3.69	80.038 (1)
7-48-P	85	110	0.00	2.500	0.00	0.00	295.05	3.69	80.038 (1)
7-49-P	85	110	0.00	2.500	0.00	0.00	295.05	3.69	80.038 (1)
8-1-P	85	110	0.00	2.500	0.00	0.00	295.05	59.32	4.974 (1)
8-2-P	85	110	0.00	2.500	0.00	0.00	295.05	59.32	4.974 (1)
8-3-P	85	110	0.00	2.500	0.00	0.00	295.05	59.32	4.974 (1)
8-4-P	85	110	0.00	2.500	0.00	0.00	295.05	59.32	4.974 (1)
8-5-P	85	110	0.00	2.500	0.00	0.00	295.05	59.32	4.974 (1)
8-6-P	85	110	0.00	2.500	0.00	0.00	295.05	0.00	100.000 (1)
8-7-P	85	110	0.00	2.500	0.00	0.00	295.05	0.00	100.000 (1)
8-8-P	85	110	0.00	2.500	0.00	0.00	295.05	0.00	100.000 (1)
8-9-P	85	110	0.00	2.500	0.00	0.00	295.05	0.00	100.000 (1)
8-10-P	85	110	0.00	2.500	0.00	0.00	295.05	0.00	100.000 (1)
8-11-P	85	110	0.00	2.500	0.00	0.00	295.05	0.00	100.000 (1)
8-12-P	85	110	0.00	2.500	0.00	0.00	295.05	0.00	100.000 (1)
8-13-P	85	110	0.00	2.500	0.00	0.00	295.05	0.00	100.000 (1)
8-14-P	85	110	0.00	2.500	0.00	0.00	295.05	0.00	100.000 (1)
8-15-P	85	110	0.00	2.500	0.00	0.00	295.05	0.00	100.000 (1)
8-16-P	85	110	0.00	2.500	0.00	0.00	295.05	22.02	13.402 (1)
8-17-P	85	110	0.00	2.500	0.00	0.00	295.05	22.02	13.402 (1)
8-18-P	85	110	0.00	2.500	0.00	0.00	295.05	22.02	13.402 (1)
8-19-P	85	110	0.00	2.500	0.00	0.00	295.05	22.02	13.402 (1)
8-20-P	85	110	0.00	2.500	0.00	0.00	295.05	22.02	13.402 (1)
8-21-P	85	110	0.00	2.500	0.00	0.00	295.05	15.91	18.542 (1)
8-22-P	85	110	0.00	2.500	0.00	0.00	295.05	15.91	18.542 (1)
8-23-P	85	110	0.00	2.500	0.00	0.00	295.05	15.91	18.542 (1)
8-24-P	85	110	0.00	2.500	0.00	0.00	295.05	15.91	18.542 (1)
8-25-P	85	110	0.00	2.500	0.00	0.00	295.05	15.91	18.542 (1)
8-26-P	85	110	0.00	2.500	0.00	0.00	295.05	0.00	100.000 (1)
8-27-P	85	110	0.00	2.500	0.00	0.00	295.05	0.00	100.000 (1)
8-28-P	85	110	0.00	2.500	0.00	0.00	295.05	0.00	100.000 (1)
8-29-P	85	110	0.00	2.500	0.00	0.00	295.05	0.00	100.000 (1)
8-30-P	85	110	0.00	2.500	0.00	0.00	295.05	0.00	100.000 (1)
8-31-P	85	110	0.00	2.500	0.00	0.00	295.05	0.00	100.000 (1)
8-32-P	85	110	0.00	2.500	0.00	0.00	295.05	0.00	100.000 (1)
8-33-P	85	110	0.00	2.500	0.00	0.00	295.05	0.00	100.000 (1)
8-34-P	85	110	0.00	2.500	0.00	0.00	295.05	0.00	100.000 (1)
8-35-P	85	110	0.00	2.500	0.00	0.00	295.05	0.00	100.000 (1)
8-36-P	85	110	0.00	2.500	0.00	0.00	295.05	0.00	100.000 (1)
8-37-P	85	110	0.00	2.500	0.00	0.00	295.05	0.00	100.000 (1)
8-38-P	85	110	0.00	2.500	0.00	0.00	295.05	0.00	100.000 (1)
8-39-P	85	110	0.00	2.500	0.00	0.00	295.05	7.09	41.617 (1)
8-40-P	85	110	0.00	2.500	0.00	0.00	295.05	7.09	41.617 (1)
8-41-P	85	110	0.00	2.500	0.00	0.00	295.05	0.00	100.000 (1)

APPALTATORE:

TELESE S.c.a r.l.
Consorzio Telese Società Consortile a Responsabilità Limitata

PROGETTAZIONE:

Mandataria: Mandante:

SYSTRA S.A. **SWS Engineering S.p.A.** **SYSTRA-SOTECNI S.p.A.**

Relazione di calcolo
IF2R.2.2.E.ZZ.CL.TR.16.0.5.008.A.DOCX

ITINERARIO NAPOLI – BARI
RADDOPPIO TRATTA CANCELLO-BENEVENTO
II LOTTO FUNZIONALE FRASSO TELESINO – VITULANO
2° SUBLOTTO TELESE – SAN LORENZO

PROGETTO ESECUTIVO

COMMESSA	LOTTO	CODIFICA	DOCUMENTO	REV.	FOGLIO
IF2R	2.2.E.ZZ	CL	TR.16.0.5.008	A	52 di 118

Is	B [cm]	H [cm]	Asw [cmq]	cotg (θ)	V _{Rcd} [kN]	V _{Rsd} [kN]	V _{Rd} [kN]	T [kN]	FS
8-42-P	85	110	0.00	2.500	0.00	0.00	295.05	0.00	100.000 (1)
8-43-P	85	110	0.00	2.500	0.00	0.00	295.05	0.00	100.000 (1)
8-44-P	85	110	0.00	2.500	0.00	0.00	295.05	14.56	20.267 (1)
8-45-P	85	110	0.00	2.500	0.00	0.00	295.05	14.56	20.267 (1)
8-46-P	85	110	0.00	2.500	0.00	0.00	295.05	14.56	20.267 (1)
8-47-P	85	110	0.00	2.500	0.00	0.00	295.05	14.56	20.267 (1)
8-48-P	85	110	0.00	2.500	0.00	0.00	295.05	14.56	20.267 (1)
8-49-P	85	110	0.00	2.500	0.00	0.00	295.05	14.56	20.267 (1)
9-1-S	100	110	0.00	2.500	0.00	0.00	347.12	6.28	55.284 (1)
9-2-S	100	110	0.00	2.500	0.00	0.00	347.12	182.66	1.900 (1)
9-3-S	100	110	0.00	2.500	0.00	0.00	347.12	182.66	1.900 (1)
9-4-S	100	110	0.00	2.500	0.00	0.00	347.12	182.66	1.900 (1)
9-5-S	100	110	0.00	2.500	0.00	0.00	347.12	182.66	1.900 (1)
9-6-S	100	110	0.00	2.500	0.00	0.00	347.12	0.00	100.000 (1)
9-7-S	100	110	0.00	2.500	0.00	0.00	347.12	135.67	2.559 (1)
9-8-S	100	110	0.00	2.500	0.00	0.00	347.12	0.00	100.000 (1)
9-9-S	100	110	0.00	2.500	0.00	0.00	347.12	183.51	1.892 (1)
9-10-S	100	110	0.00	2.500	0.00	0.00	347.12	183.51	1.892 (1)
9-11-S	100	110	0.00	2.500	0.00	0.00	347.12	183.51	1.892 (1)
9-12-S	100	110	0.00	2.500	0.00	0.00	347.12	47.80	7.262 (1)
9-13-S	100	110	0.00	2.500	0.00	0.00	347.12	0.00	100.000 (1)
9-14-S	100	110	0.00	2.500	0.00	0.00	347.12	0.00	100.000 (1)
9-15-S	100	110	0.00	2.500	0.00	0.00	347.12	0.00	100.000 (1)
9-16-S	100	110	0.00	2.500	0.00	0.00	347.12	0.00	100.000 (1)
9-17-S	100	110	0.00	2.500	0.00	0.00	347.12	7.73	44.882 (1)
9-18-S	100	110	0.00	2.500	0.00	0.00	347.12	7.73	44.882 (1)
9-19-S	100	110	0.00	2.500	0.00	0.00	347.12	7.73	44.882 (1)
9-20-S	100	110	0.00	2.500	0.00	0.00	347.12	7.73	44.882 (1)
9-21-S	100	110	0.00	2.500	0.00	0.00	347.12	7.73	44.882 (1)
9-22-S	100	110	0.00	2.500	0.00	0.00	347.12	7.73	44.882 (1)
10-1-S	100	110	0.00	2.500	0.00	0.00	347.12	265.67	1.307 (1)
10-2-S	100	110	0.00	2.500	0.00	0.00	347.12	265.67	1.307 (1)
10-3-S	100	110	0.00	2.500	0.00	0.00	347.12	265.67	1.307 (1)
10-4-S	100	110	0.00	2.500	0.00	0.00	347.12	265.67	1.307 (1)
10-5-S	100	110	0.00	2.500	0.00	0.00	347.12	265.67	1.307 (1)
10-6-S	100	110	4.52	2.500	2707.88	1428.77	1428.77	375.35	3.807 (1)
10-7-S	100	110	4.52	2.500	2707.88	1428.77	1428.77	343.12	4.164 (1)
10-8-S	100	110	0.00	2.500	0.00	0.00	347.12	0.00	100.000 (1)
10-9-S	100	110	0.00	2.500	0.00	0.00	347.12	129.32	2.684 (1)
10-10-S	100	110	0.00	2.500	0.00	0.00	347.12	129.32	2.684 (1)
10-11-S	100	110	0.00	2.500	0.00	0.00	347.12	129.32	2.684 (1)
10-12-S	100	110	0.00	2.500	0.00	0.00	347.12	5.90	58.860 (1)
10-13-S	100	110	0.00	2.500	0.00	0.00	347.12	5.90	58.860 (1)
10-14-S	100	110	0.00	2.500	0.00	0.00	347.12	112.16	3.095 (1)
10-15-S	100	110	0.00	2.500	0.00	0.00	347.12	112.16	3.095 (1)
10-16-S	100	110	0.00	2.500	0.00	0.00	347.12	112.16	3.095 (1)
10-17-S	100	110	0.00	2.500	0.00	0.00	347.12	112.16	3.095 (1)
10-18-S	100	110	0.00	2.500	0.00	0.00	347.12	112.16	3.095 (1)
10-19-S	100	110	0.00	2.500	0.00	0.00	347.12	82.39	4.213 (1)
10-20-S	100	110	0.00	2.500	0.00	0.00	347.12	82.39	4.213 (1)
10-21-S	100	110	0.00	2.500	0.00	0.00	347.12	82.39	4.213 (1)
10-22-S	100	110	0.00	2.500	0.00	0.00	347.12	82.39	4.213 (1)
11-1-S	100	110	0.00	2.500	0.00	0.00	347.12	13.36	25.981 (1)
11-2-S	100	110	0.00	2.500	0.00	0.00	347.12	115.85	2.996 (1)
11-3-S	100	110	0.00	2.500	0.00	0.00	347.12	115.85	2.996 (1)
11-4-S	100	110	0.00	2.500	0.00	0.00	347.12	115.85	2.996 (1)
11-5-S	100	110	0.00	2.500	0.00	0.00	347.12	115.85	2.996 (1)
11-6-S	100	110	0.00	2.500	0.00	0.00	347.12	0.00	100.000 (1)
11-7-S	100	110	0.00	2.500	0.00	0.00	347.12	227.55	1.525 (1)
11-8-S	100	110	0.00	2.500	0.00	0.00	347.12	35.81	9.693 (1)
11-9-S	100	110	0.00	2.500	0.00	0.00	347.12	35.81	9.693 (1)
11-10-S	100	110	0.00	2.500	0.00	0.00	347.12	35.81	9.693 (1)
11-11-S	100	110	0.00	2.500	0.00	0.00	347.12	35.81	9.693 (1)
11-12-S	100	110	0.00	2.500	0.00	0.00	347.12	46.02	7.542 (1)
11-13-S	100	110	0.00	2.500	0.00	0.00	347.12	0.00	100.000 (1)
11-14-S	100	110	0.00	2.500	0.00	0.00	347.12	0.00	100.000 (1)
11-15-S	100	110	0.00	2.500	0.00	0.00	347.12	0.00	100.000 (1)
11-16-S	100	110	0.00	2.500	0.00	0.00	347.12	0.00	100.000 (1)
11-17-S	100	110	0.00	2.500	0.00	0.00	347.12	6.01	57.725 (1)
11-18-S	100	110	0.00	2.500	0.00	0.00	347.12	6.01	57.725 (1)
11-19-S	100	110	0.00	2.500	0.00	0.00	347.12	6.01	57.725 (1)
11-20-S	100	110	0.00	2.500	0.00	0.00	347.12	6.01	57.725 (1)
11-21-S	100	110	0.00	2.500	0.00	0.00	347.12	6.01	57.725 (1)
11-22-S	100	110	0.00	2.500	0.00	0.00	347.12	6.01	57.725 (1)
12-1-S	100	110	0.00	2.500	0.00	0.00	347.12	45.94	7.556 (1)
12-2-S	100	110	0.00	2.500	0.00	0.00	347.12	45.94	7.556 (1)
12-3-S	100	110	0.00	2.500	0.00	0.00	347.12	45.94	7.556 (1)
12-4-S	100	110	0.00	2.500	0.00	0.00	347.12	45.94	7.556 (1)
12-5-S	100	110	0.00	2.500	0.00	0.00	347.12	45.94	7.556 (1)
12-6-S	100	110	4.52	2.500	2707.88	1428.77	1428.77	411.47	3.472 (1)
12-7-S	100	110	4.52	2.500	2707.88	1428.77	1428.77	411.47	3.472 (1)

APPALTATORE: **TELESE S.c.a r.l.**
 Consorzio Telese Società Consortile a Responsabilità Limitata

PROGETTAZIONE:
 Mandataria: SYSTRA S.A. Mandante: SWS Engineering S.p.A. SYSTRA-SOTECNI S.p.A.

Relazione di calcolo
 IF2R.2.2.E.ZZ.CL.TR.16.0.5.008.A.DOCX

ITINERARIO NAPOLI – BARI
RADDOPPIO TRATTA CANCELLO-BENEVENTO
II LOTTO FUNZIONALE FRASSO TELESINO – VITULANO
2° SUBLOTTO TELESE – SAN LORENZO
PROGETTO ESECUTIVO

COMMESSA	LOTTO	CODIFICA	DOCUMENTO	REV.	FOGLIO
IF2R	2.2.E.ZZ	CL	TR.16.0.5.008	A	53 di 118

Is	B [cm]	H [cm]	Asw [cmq]	cotg (θ)	V _{Rcd} [kN]	V _{Rsd} [kN]	V _{Rd} [kN]	T [kN]	FS
12-8-S	100	110	0.00	2.500	0.00	0.00	347.12	0.00	100.000 (1)
12-9-S	100	110	0.00	2.500	0.00	0.00	347.12	0.00	100.000 (1)
12-10-S	100	110	0.00	2.500	0.00	0.00	347.12	0.00	100.000 (1)
12-11-S	100	110	0.00	2.500	0.00	0.00	347.12	0.00	100.000 (1)
12-12-S	100	110	0.00	2.500	0.00	0.00	347.12	3.93	88.266 (1)
12-13-S	100	110	0.00	2.500	0.00	0.00	347.12	103.90	3.341 (1)
12-14-S	100	110	0.00	2.500	0.00	0.00	347.12	103.90	3.341 (1)
12-15-S	100	110	0.00	2.500	0.00	0.00	347.12	103.90	3.341 (1)
12-16-S	100	110	0.00	2.500	0.00	0.00	347.12	103.90	3.341 (1)
12-17-S	100	110	0.00	2.500	0.00	0.00	347.12	103.90	3.341 (1)
12-18-S	100	110	0.00	2.500	0.00	0.00	347.12	90.82	3.822 (1)
12-19-S	100	110	0.00	2.500	0.00	0.00	347.12	90.82	3.822 (1)
12-20-S	100	110	0.00	2.500	0.00	0.00	347.12	90.82	3.822 (1)
12-21-S	100	110	0.00	2.500	0.00	0.00	347.12	90.82	3.822 (1)
12-22-S	100	110	0.00	2.500	0.00	0.00	347.12	90.82	3.822 (1)
13-1-S	100	110	0.00	2.500	0.00	0.00	347.12	10.18	34.098 (1)
13-2-S	100	110	0.00	2.500	0.00	0.00	347.12	142.78	2.431 (1)
13-3-S	100	110	0.00	2.500	0.00	0.00	347.12	142.78	2.431 (1)
13-4-S	100	110	0.00	2.500	0.00	0.00	347.12	142.78	2.431 (1)
13-5-S	100	110	0.00	2.500	0.00	0.00	347.12	142.78	2.431 (1)
13-6-S	100	110	0.00	2.500	0.00	0.00	347.12	0.00	100.000 (1)
13-7-S	100	110	0.00	2.500	0.00	0.00	347.12	203.40	1.707 (1)
13-8-S	100	110	0.00	2.500	0.00	0.00	347.12	51.26	6.772 (1)
13-9-S	100	110	0.00	2.500	0.00	0.00	347.12	51.26	6.772 (1)
13-10-S	100	110	0.00	2.500	0.00	0.00	347.12	51.26	6.772 (1)
13-11-S	100	110	0.00	2.500	0.00	0.00	347.12	51.26	6.772 (1)
13-12-S	100	110	0.00	2.500	0.00	0.00	347.12	46.26	7.503 (1)
13-13-S	100	110	0.00	2.500	0.00	0.00	347.12	0.00	100.000 (1)
13-14-S	100	110	0.00	2.500	0.00	0.00	347.12	0.00	100.000 (1)
13-15-S	100	110	0.00	2.500	0.00	0.00	347.12	0.00	100.000 (1)
13-16-S	100	110	0.00	2.500	0.00	0.00	347.12	0.00	100.000 (1)
13-17-S	100	110	0.00	2.500	0.00	0.00	347.12	5.81	59.770 (1)
13-18-S	100	110	0.00	2.500	0.00	0.00	347.12	5.81	59.770 (1)
13-19-S	100	110	0.00	2.500	0.00	0.00	347.12	5.81	59.770 (1)
13-20-S	100	110	0.00	2.500	0.00	0.00	347.12	5.81	59.770 (1)
13-21-S	100	110	0.00	2.500	0.00	0.00	347.12	5.81	59.770 (1)
13-22-S	100	110	0.00	2.500	0.00	0.00	347.12	5.81	59.770 (1)
14-1-S	100	110	0.00	2.500	0.00	0.00	347.12	8.47	40.985 (1)
14-2-S	100	110	0.00	2.500	0.00	0.00	347.12	267.46	1.298 (1)
14-3-S	100	110	0.00	2.500	0.00	0.00	347.12	267.46	1.298 (1)
14-4-S	100	110	0.00	2.500	0.00	0.00	347.12	267.46	1.298 (1)
14-5-S	100	110	0.00	2.500	0.00	0.00	347.12	267.46	1.298 (1)
14-6-S	100	110	0.00	2.500	0.00	0.00	347.12	0.00	100.000 (1)
14-7-S	100	110	0.00	2.500	0.00	0.00	347.12	121.16	2.865 (1)
14-8-S	100	110	0.00	2.500	0.00	0.00	347.12	27.30	12.713 (1)
14-9-S	100	110	0.00	2.500	0.00	0.00	347.12	79.20	4.383 (1)
14-10-S	100	110	0.00	2.500	0.00	0.00	347.12	79.20	4.383 (1)
14-11-S	100	110	0.00	2.500	0.00	0.00	347.12	79.20	4.383 (1)
14-12-S	100	110	0.00	2.500	0.00	0.00	347.12	62.92	5.517 (1)
14-13-S	100	110	0.00	2.500	0.00	0.00	347.12	62.92	5.517 (1)
14-14-S	100	110	0.00	2.500	0.00	0.00	347.12	62.92	5.517 (1)
14-15-S	100	110	0.00	2.500	0.00	0.00	347.12	62.92	5.517 (1)
14-16-S	100	110	0.00	2.500	0.00	0.00	347.12	62.92	5.517 (1)
14-17-S	100	110	0.00	2.500	0.00	0.00	347.12	5.61	61.890 (1)
14-18-S	100	110	0.00	2.500	0.00	0.00	347.12	5.61	61.890 (1)
14-19-S	100	110	0.00	2.500	0.00	0.00	347.12	5.61	61.890 (1)
14-20-S	100	110	0.00	2.500	0.00	0.00	347.12	5.61	61.890 (1)
14-21-S	100	110	0.00	2.500	0.00	0.00	347.12	5.61	61.890 (1)
14-22-S	100	110	0.00	2.500	0.00	0.00	347.12	5.61	61.890 (1)
15-1-S	100	110	0.00	2.500	0.00	0.00	347.12	8.47	40.985 (1)
15-2-S	100	110	0.00	2.500	0.00	0.00	347.12	267.46	1.298 (1)
15-3-S	100	110	0.00	2.500	0.00	0.00	347.12	267.46	1.298 (1)
15-4-S	100	110	0.00	2.500	0.00	0.00	347.12	267.46	1.298 (1)
15-5-S	100	110	0.00	2.500	0.00	0.00	347.12	267.46	1.298 (1)
15-6-S	100	110	0.00	2.500	0.00	0.00	347.12	0.00	100.000 (1)
15-7-S	100	110	0.00	2.500	0.00	0.00	347.12	121.16	2.865 (1)
15-8-S	100	110	0.00	2.500	0.00	0.00	347.12	27.30	12.713 (1)
15-9-S	100	110	0.00	2.500	0.00	0.00	347.12	79.20	4.383 (1)
15-10-S	100	110	0.00	2.500	0.00	0.00	347.12	79.20	4.383 (1)
15-11-S	100	110	0.00	2.500	0.00	0.00	347.12	79.20	4.383 (1)
15-12-S	100	110	0.00	2.500	0.00	0.00	347.12	62.92	5.517 (1)
15-13-S	100	110	0.00	2.500	0.00	0.00	347.12	62.92	5.517 (1)
15-14-S	100	110	0.00	2.500	0.00	0.00	347.12	62.92	5.517 (1)
15-15-S	100	110	0.00	2.500	0.00	0.00	347.12	62.92	5.517 (1)
15-16-S	100	110	0.00	2.500	0.00	0.00	347.12	62.92	5.517 (1)
15-17-S	100	110	0.00	2.500	0.00	0.00	347.12	5.61	61.890 (1)
15-18-S	100	110	0.00	2.500	0.00	0.00	347.12	5.61	61.890 (1)
15-19-S	100	110	0.00	2.500	0.00	0.00	347.12	5.61	61.890 (1)
15-20-S	100	110	0.00	2.500	0.00	0.00	347.12	5.61	61.890 (1)
15-21-S	100	110	0.00	2.500	0.00	0.00	347.12	5.61	61.890 (1)
15-22-S	100	110	0.00	2.500	0.00	0.00	347.12	5.61	61.890 (1)

APPALTATORE:

TELESE S.c.a r.l.
Consorzio Telese Società Consortile a Responsabilità Limitata

**ITINERARIO NAPOLI – BARI
RADDOPPIO TRATTA CANCELLO-BENEVENTO
II LOTTO FUNZIONALE FRASSO TELESINO – VITULANO
2° SUBLOTTO TELESE – SAN LORENZO**

PROGETTAZIONE:

Mandataria:

Mandante:

SYSTRA S.A. SWS Engineering S.p.A. SYSTRA-SOTECNI S.p.A.

PROGETTO ESECUTIVO

Relazione di calcolo

IF2R.2.2.E.ZZ.CL.TR.16.0.5.008.A.DOCX

COMMESSA LOTTO CODIFICA DOCUMENTO REV. FOGLIO
IF2R 2.2.E.ZZ CL TR.16.0.5.008 A 54 di 118

Is	B [cm]	H [cm]	Asw [cmq]	cotg (θ)	V _{Rcd} [kN]	V _{Rsd} [kN]	V _{Rd} [kN]	T [kN]	FS
16-1-S	100	110	0.00	2.500	0.00	0.00	347.12	10.18	34.098 (1)
16-2-S	100	110	0.00	2.500	0.00	0.00	347.12	142.78	2.431 (1)
16-3-S	100	110	0.00	2.500	0.00	0.00	347.12	142.78	2.431 (1)
16-4-S	100	110	0.00	2.500	0.00	0.00	347.12	142.78	2.431 (1)
16-5-S	100	110	0.00	2.500	0.00	0.00	347.12	142.78	2.431 (1)
16-6-S	100	110	0.00	2.500	0.00	0.00	347.12	0.00	100.000 (1)
16-7-S	100	110	0.00	2.500	0.00	0.00	347.12	203.40	1.707 (1)
16-8-S	100	110	0.00	2.500	0.00	0.00	347.12	51.26	6.772 (1)
16-9-S	100	110	0.00	2.500	0.00	0.00	347.12	51.26	6.772 (1)
16-10-S	100	110	0.00	2.500	0.00	0.00	347.12	51.26	6.772 (1)
16-11-S	100	110	0.00	2.500	0.00	0.00	347.12	51.26	6.772 (1)
16-12-S	100	110	0.00	2.500	0.00	0.00	347.12	46.26	7.503 (1)
16-13-S	100	110	0.00	2.500	0.00	0.00	347.12	0.00	100.000 (1)
16-14-S	100	110	0.00	2.500	0.00	0.00	347.12	0.00	100.000 (1)
16-15-S	100	110	0.00	2.500	0.00	0.00	347.12	0.00	100.000 (1)
16-16-S	100	110	0.00	2.500	0.00	0.00	347.12	0.00	100.000 (1)
16-17-S	100	110	0.00	2.500	0.00	0.00	347.12	5.81	59.770 (1)
16-18-S	100	110	0.00	2.500	0.00	0.00	347.12	5.81	59.770 (1)
16-19-S	100	110	0.00	2.500	0.00	0.00	347.12	5.81	59.770 (1)
16-20-S	100	110	0.00	2.500	0.00	0.00	347.12	5.81	59.770 (1)
16-21-S	100	110	0.00	2.500	0.00	0.00	347.12	5.81	59.770 (1)
16-22-S	100	110	0.00	2.500	0.00	0.00	347.12	5.81	59.770 (1)
17-1-S	100	110	0.00	2.500	0.00	0.00	347.12	45.94	7.556 (1)
17-2-S	100	110	0.00	2.500	0.00	0.00	347.12	45.94	7.556 (1)
17-3-S	100	110	0.00	2.500	0.00	0.00	347.12	45.94	7.556 (1)
17-4-S	100	110	0.00	2.500	0.00	0.00	347.12	45.94	7.556 (1)
17-5-S	100	110	0.00	2.500	0.00	0.00	347.12	45.94	7.556 (1)
17-6-S	100	110	4.52	2.500	2707.88	1428.77	1428.77	411.47	3.472 (1)
17-7-S	100	110	4.52	2.500	2707.88	1428.77	1428.77	411.47	3.472 (1)
17-8-S	100	110	0.00	2.500	0.00	0.00	347.12	0.00	100.000 (1)
17-9-S	100	110	0.00	2.500	0.00	0.00	347.12	0.00	100.000 (1)
17-10-S	100	110	0.00	2.500	0.00	0.00	347.12	0.00	100.000 (1)
17-11-S	100	110	0.00	2.500	0.00	0.00	347.12	0.00	100.000 (1)
17-12-S	100	110	0.00	2.500	0.00	0.00	347.12	3.93	88.266 (1)
17-13-S	100	110	0.00	2.500	0.00	0.00	347.12	103.90	3.341 (1)
17-14-S	100	110	0.00	2.500	0.00	0.00	347.12	103.90	3.341 (1)
17-15-S	100	110	0.00	2.500	0.00	0.00	347.12	103.90	3.341 (1)
17-16-S	100	110	0.00	2.500	0.00	0.00	347.12	103.90	3.341 (1)
17-17-S	100	110	0.00	2.500	0.00	0.00	347.12	103.90	3.341 (1)
17-18-S	100	110	0.00	2.500	0.00	0.00	347.12	90.82	3.822 (1)
17-19-S	100	110	0.00	2.500	0.00	0.00	347.12	90.82	3.822 (1)
17-20-S	100	110	0.00	2.500	0.00	0.00	347.12	90.82	3.822 (1)
17-21-S	100	110	0.00	2.500	0.00	0.00	347.12	90.82	3.822 (1)
17-22-S	100	110	0.00	2.500	0.00	0.00	347.12	90.82	3.822 (1)
18-1-S	100	110	0.00	2.500	0.00	0.00	347.12	13.36	25.981 (1)
18-2-S	100	110	0.00	2.500	0.00	0.00	347.12	115.85	2.996 (1)
18-3-S	100	110	0.00	2.500	0.00	0.00	347.12	115.85	2.996 (1)
18-4-S	100	110	0.00	2.500	0.00	0.00	347.12	115.85	2.996 (1)
18-5-S	100	110	0.00	2.500	0.00	0.00	347.12	115.85	2.996 (1)
18-6-S	100	110	0.00	2.500	0.00	0.00	347.12	0.00	100.000 (1)
18-7-S	100	110	0.00	2.500	0.00	0.00	347.12	227.55	1.525 (1)
18-8-S	100	110	0.00	2.500	0.00	0.00	347.12	35.81	9.693 (1)
18-9-S	100	110	0.00	2.500	0.00	0.00	347.12	35.81	9.693 (1)
18-10-S	100	110	0.00	2.500	0.00	0.00	347.12	35.81	9.693 (1)
18-11-S	100	110	0.00	2.500	0.00	0.00	347.12	35.81	9.693 (1)
18-12-S	100	110	0.00	2.500	0.00	0.00	347.12	46.02	7.542 (1)
18-13-S	100	110	0.00	2.500	0.00	0.00	347.12	0.00	100.000 (1)
18-14-S	100	110	0.00	2.500	0.00	0.00	347.12	0.00	100.000 (1)
18-15-S	100	110	0.00	2.500	0.00	0.00	347.12	0.00	100.000 (1)
18-16-S	100	110	0.00	2.500	0.00	0.00	347.12	0.00	100.000 (1)
18-17-S	100	110	0.00	2.500	0.00	0.00	347.12	6.01	57.725 (1)
18-18-S	100	110	0.00	2.500	0.00	0.00	347.12	6.01	57.725 (1)
18-19-S	100	110	0.00	2.500	0.00	0.00	347.12	6.01	57.725 (1)
18-20-S	100	110	0.00	2.500	0.00	0.00	347.12	6.01	57.725 (1)
18-21-S	100	110	0.00	2.500	0.00	0.00	347.12	6.01	57.725 (1)
18-22-S	100	110	0.00	2.500	0.00	0.00	347.12	6.01	57.725 (1)
19-1-S	100	110	0.00	2.500	0.00	0.00	347.12	265.67	1.307 (1)
19-2-S	100	110	0.00	2.500	0.00	0.00	347.12	265.67	1.307 (1)
19-3-S	100	110	0.00	2.500	0.00	0.00	347.12	265.67	1.307 (1)
19-4-S	100	110	0.00	2.500	0.00	0.00	347.12	265.67	1.307 (1)
19-5-S	100	110	0.00	2.500	0.00	0.00	347.12	265.67	1.307 (1)
19-6-S	100	110	4.52	2.500	2707.88	1428.77	1428.77	375.35	3.807 (1)
19-7-S	100	110	4.52	2.500	2707.88	1428.77	1428.77	343.12	4.164 (1)
19-8-S	100	110	0.00	2.500	0.00	0.00	347.12	0.00	100.000 (1)
19-9-S	100	110	0.00	2.500	0.00	0.00	347.12	129.32	2.684 (1)
19-10-S	100	110	0.00	2.500	0.00	0.00	347.12	129.32	2.684 (1)
19-11-S	100	110	0.00	2.500	0.00	0.00	347.12	129.32	2.684 (1)
19-12-S	100	110	0.00	2.500	0.00	0.00	347.12	5.90	58.860 (1)
19-13-S	100	110	0.00	2.500	0.00	0.00	347.12	5.90	58.860 (1)
19-14-S	100	110	0.00	2.500	0.00	0.00	347.12	112.16	3.095 (1)
19-15-S	100	110	0.00	2.500	0.00	0.00	347.12	112.16	3.095 (1)

APPALTATORE:

TELESE S.c.a r.l.
Consorzio Telese Società Consortile a Responsabilità Limitata

ITINERARIO NAPOLI – BARI
RADDOPPIO TRATTA CANCELLO-BENEVENTO
II LOTTO FUNZIONALE FRASSO TELESINO – VITULANO
2° SUBLOTTO TELESE – SAN LORENZO
PROGETTO ESECUTIVO

PROGETTAZIONE:

Mandataria:

Mandante:

SYSTRA S.A. SWS Engineering S.p.A. SYSTRA-SOTECNI S.p.A.

Relazione di calcolo

IF2R.2.2.E.ZZ.CL.TR.16.0.5.008.A.DOCX

COMMESSA	LOTTO	CODIFICA	DOCUMENTO	REV.	FOGLIO
IF2R	2.2.E.ZZ	CL	TR.16.0.5.008	A	55 di 118

Is	B [cm]	H [cm]	A _{sw} [cmq]	cotg(θ)	V _{Rcd} [kN]	V _{Rsd} [kN]	V _{Rd} [kN]	T [kN]	FS
19-16-S	100	110	0.00	2.500	0.00	0.00	347.12	112.16	3.095 (1)
19-17-S	100	110	0.00	2.500	0.00	0.00	347.12	112.16	3.095 (1)
19-18-S	100	110	0.00	2.500	0.00	0.00	347.12	112.16	3.095 (1)
19-19-S	100	110	0.00	2.500	0.00	0.00	347.12	82.39	4.213 (1)
19-20-S	100	110	0.00	2.500	0.00	0.00	347.12	82.39	4.213 (1)
19-21-S	100	110	0.00	2.500	0.00	0.00	347.12	82.39	4.213 (1)
19-22-S	100	110	0.00	2.500	0.00	0.00	347.12	82.39	4.213 (1)
20-1-S	100	110	0.00	2.500	0.00	0.00	347.12	6.28	55.284 (1)
20-2-S	100	110	0.00	2.500	0.00	0.00	347.12	182.66	1.900 (1)
20-3-S	100	110	0.00	2.500	0.00	0.00	347.12	182.66	1.900 (1)
20-4-S	100	110	0.00	2.500	0.00	0.00	347.12	182.66	1.900 (1)
20-5-S	100	110	0.00	2.500	0.00	0.00	347.12	182.66	1.900 (1)
20-6-S	100	110	0.00	2.500	0.00	0.00	347.12	0.00	100.000 (1)
20-7-S	100	110	0.00	2.500	0.00	0.00	347.12	135.67	2.559 (1)
20-8-S	100	110	0.00	2.500	0.00	0.00	347.12	0.00	100.000 (1)
20-9-S	100	110	0.00	2.500	0.00	0.00	347.12	183.51	1.892 (1)
20-10-S	100	110	0.00	2.500	0.00	0.00	347.12	183.51	1.892 (1)
20-11-S	100	110	0.00	2.500	0.00	0.00	347.12	183.51	1.892 (1)
20-12-S	100	110	0.00	2.500	0.00	0.00	347.12	47.80	7.262 (1)
20-13-S	100	110	0.00	2.500	0.00	0.00	347.12	0.00	100.000 (1)
20-14-S	100	110	0.00	2.500	0.00	0.00	347.12	0.00	100.000 (1)
20-15-S	100	110	0.00	2.500	0.00	0.00	347.12	0.00	100.000 (1)
20-16-S	100	110	0.00	2.500	0.00	0.00	347.12	0.00	100.000 (1)
20-17-S	100	110	0.00	2.500	0.00	0.00	347.12	7.73	44.882 (1)
20-18-S	100	110	0.00	2.500	0.00	0.00	347.12	7.73	44.882 (1)
20-19-S	100	110	0.00	2.500	0.00	0.00	347.12	7.73	44.882 (1)
20-20-S	100	110	0.00	2.500	0.00	0.00	347.12	7.73	44.882 (1)
20-21-S	100	110	0.00	2.500	0.00	0.00	347.12	7.73	44.882 (1)
20-22-S	100	110	0.00	2.500	0.00	0.00	347.12	7.73	44.882 (1)

Pali in c.a.

La verifica a taglio sui pali circolari in c.a. viene eseguita considerando una sezione quadrata inscritta nella circonferenza. Se D è il diametro del palo, il lato della sezione quadrata sulla quale si esegue la verifica è $L = 2^{0.5}/2 D$.

Ip	Is	L [cm]	A _{sw} [cmq]	s [cm]	cotgθ	V _{Rcd} [kN]	V _{Rsd} [kN]	V _{Rd} [kN]	T [kN]	FS
1	1	56.57	2.26	10	2.500	641.32	1755.74	641.32	176.55	3.633
2	1	56.57	2.26	10	2.500	679.22	3511.48	679.22	176.55	3.847
3	1	56.57	2.26	10	2.500	717.11	3511.48	717.11	176.55	4.062

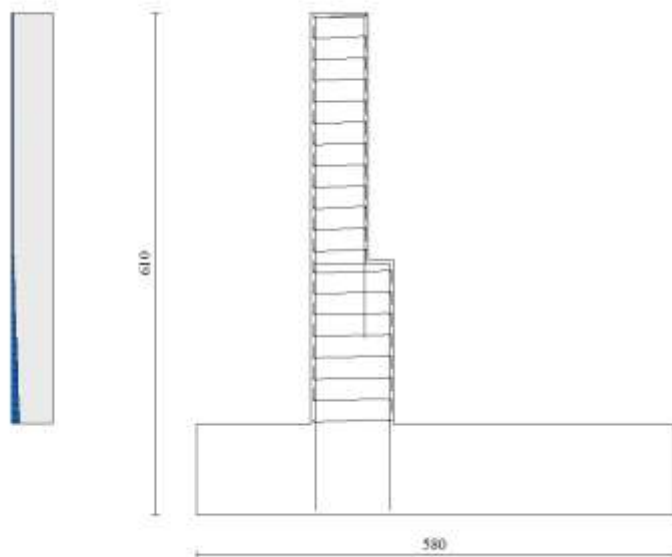


Fig. 20 - Paramento (Involuppo)

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PROGETTAZIONE: <u>Mandatario:</u> SYSTRA S.A. <u>Mandante:</u> SWS Engineering S.p.A. SYSTRA-SOTECNI S.p.A.	COMMESSA	LOTTO	CODIFICA	DOCUMENTO	REV.	FOGLIO
Relazione di calcolo IF2R.2.2.E.ZZ.CL.TR.16.0.5.008.A.DOCX	IF2R	2.2.E.ZZ	CL	TR.16.0.5.008	A	56 di 118

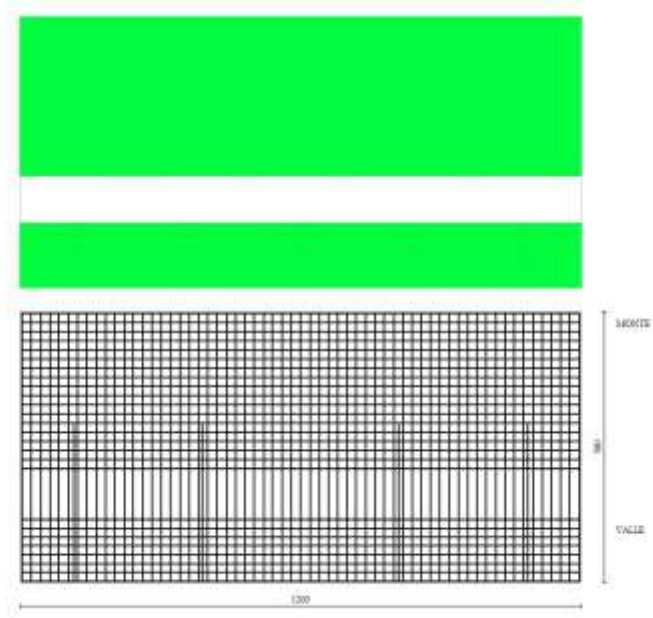


Fig. 21 - Piastra fondazione dir. X (Inviluppo)

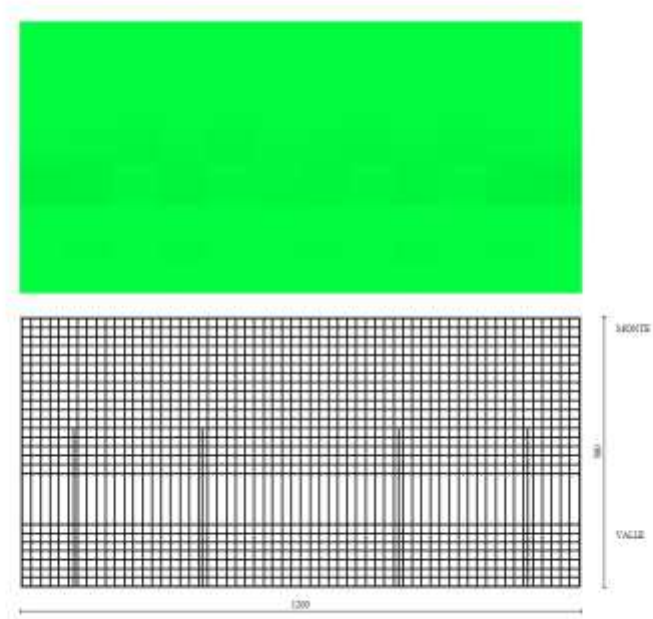


Fig. 22 - Piastra fondazione dir. Y (Inviluppo)

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Consorzio Telese Società Consortile a Responsabilità Limitata

**ITINERARIO NAPOLI – BARI
RADDOPPIO TRATTA CANCELLO-BENEVENTO
II LOTTO FUNZIONALE FRASSO TELESINO – VITULANO
2° SUBLOTTO TELESE – SAN LORENZO
PROGETTO ESECUTIVO**

PROGETTAZIONE:

Mandataria:

Mandante:

SYSTRA S.A. SWS Engineering S.p.A. SYSTRA-SOTECNI S.p.A.

Relazione di calcolo

IF2R.2.2.E.ZZ.CL.TR.16.0.5.008.A.DOCX

COMMESSA	LOTTO	CODIFICA	DOCUMENTO	REV.	FOGLIO
IF2R	2.2.E.ZZ	CL	TR.16.0.5.008	A	57 di 118

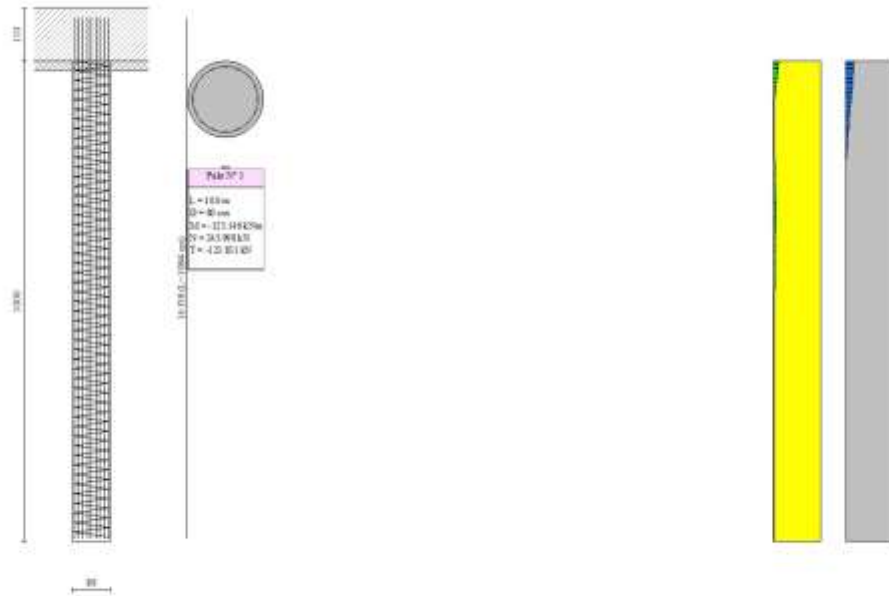


Fig. 23 - Pali (Palo n° 1) (Inviluppo)

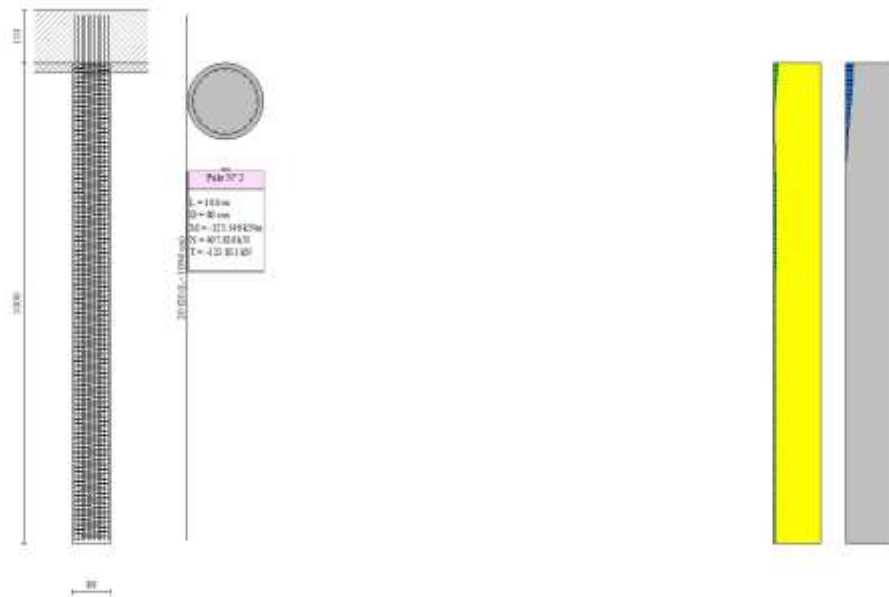


Fig. 24 - Pali (Palo n° 2) (Inviluppo)

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PROGETTAZIONE: Mandataria: SYSTRA S.A. Mandante: SWS Engineering S.p.A. SYSTRA-SOTECNI S.p.A.	COMMESSA	LOTTO	CODIFICA	DOCUMENTO	REV.	FOGLIO
Relazione di calcolo IF2R.2.2.E.ZZ.CL.TR.16.0.5.008.A.DOCX	IF2R	2.2.E.ZZ	CL	TR.16.0.5.008	A	58 di 118

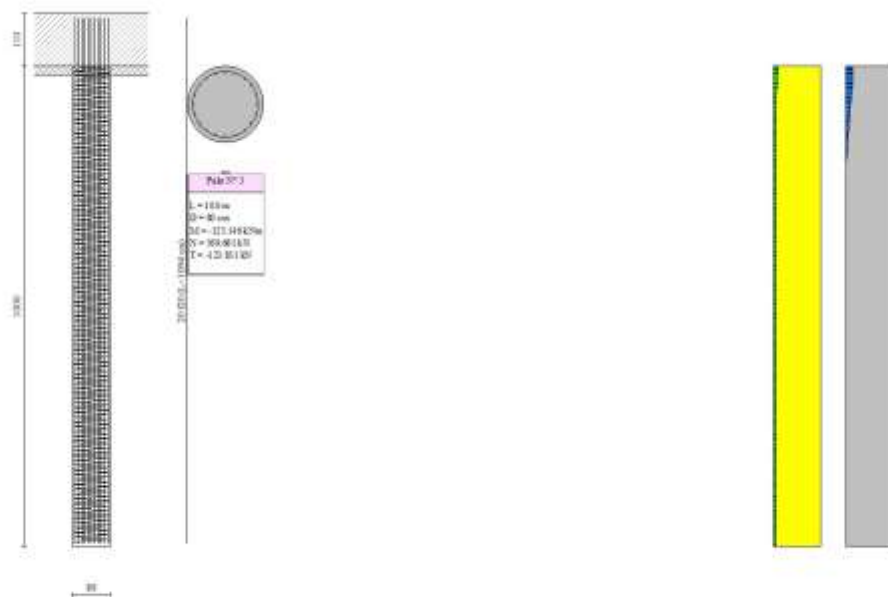


Fig. 25 - Pali (Palo n° 3) (Inviluppo)

Verifica delle tensioni

Simbologia adottata

n°	indice sezione
Y	ordinata sezione, espressa in [m]
B	larghezza sezione, espresso in [cm]
H	altezza sezione, espressa in [cm]
Afi	area ferri inferiori, espresso in [cmq]
Afs	area ferri superiori, espressa in [cmq]
M	momento agente, espressa in [kNm]
N	sforzo normale agente, espressa in [kN]
σ_c	tensione di compressione nel cls, espressa in [kPa]
σ_{fi}	tensione nei ferri inferiori, espressa in [kPa]
σ_{fs}	tensione nei ferri superiori, espressa in [kPa]

Combinazioni SLER

Paramento

Tensione massima di compressione nel calcestruzzo	19920	[kPa]
Tensione massima di trazione dell'acciaio	360000	[kPa]

n°	B [cm]	H [cm]	Afi [cmq]	Afs [cmq]	M [kNm]	N [kN]	σ_c [kPa]	σ_{fi} [kPa]	σ_{fs} [kPa]
1	100	70	10.05	12.72	2.00	5.00	43 (5)	937 (5)	523 (5)
2	100	70	10.05	12.72	2.70	6.72	58 (5)	1273 (5)	706 (5)
3	100	70	10.05	12.72	3.40	8.43	73 (5)	1610 (5)	889 (5)
4	100	70	10.05	12.72	4.10	10.15	88 (5)	1946 (5)	1072 (5)
5	100	70	10.05	12.72	4.80	11.86	103 (5)	2283 (5)	1255 (5)
6	100	70	10.05	12.72	5.50	13.58	118 (5)	2620 (5)	1438 (5)
7	100	70	10.05	12.72	6.20	15.29	133 (5)	2956 (5)	1621 (5)
8	100	70	10.05	12.72	6.90	17.01	148 (5)	3293 (5)	1804 (5)
9	100	70	10.05	12.72	7.60	18.72	163 (5)	3630 (5)	1987 (5)
10	100	70	10.05	12.72	8.30	20.44	178 (5)	3966 (5)	2170 (5)
11	100	70	10.05	12.72	9.00	22.16	193 (5)	4303 (5)	2353 (5)
12	100	70	10.05	12.72	9.70	23.87	208 (5)	4639 (5)	2536 (5)

APPALTATORE:

TELESE S.c.a r.l.

Consorzio Telese Società Consortile a Responsabilità Limitata

PROGETTAZIONE:

Mandataria:

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SYSTRA S.A.

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ITINERARIO NAPOLI – BARI

RADDOPPIO TRATTA CANCELLO-BENEVENTO

II LOTTO FUNZIONALE FRASSO TELESINO – VITULANO

2° SUBLOTTO TELESE – SAN LORENZO

PROGETTO ESECUTIVO

Relazione di calcolo

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n°	B [cm]	H [cm]	Afi [cmq]	Afs [cmq]	M [kNm]	N [kN]	σc [kPa]	σfi [kPa]	σfs [kPa]
13	100	70	10.05	12.72	10.40	25.59	223 (5)	4976 (5)	2719 (5)
14	100	70	10.05	12.72	11.10	27.30	238 (5)	5313 (5)	2902 (5)
15	100	70	10.05	12.72	11.80	29.02	253 (5)	5649 (5)	3085 (5)
16	100	70	10.05	12.72	12.50	30.73	268 (5)	5986 (5)	3268 (5)
17	100	70	10.05	12.72	13.20	32.45	283 (5)	6323 (5)	3451 (5)
18	100	70	10.05	12.72	13.90	34.17	298 (5)	6659 (5)	3634 (5)
19	100	70	10.05	12.72	14.60	35.88	313 (5)	6996 (5)	3817 (5)
20	100	70	10.05	12.72	15.30	37.60	328 (5)	7332 (5)	4000 (5)
21	100	70	10.05	12.72	16.00	39.31	343 (5)	7669 (5)	4183 (5)
22	100	70	10.05	12.72	16.70	41.03	358 (5)	8006 (5)	4366 (5)
23	100	70	10.05	12.72	17.39	42.74	373 (5)	8342 (5)	4549 (5)
24	100	70	10.05	12.72	18.09	44.46	388 (5)	8679 (5)	4732 (5)
25	100	70	10.05	12.72	18.79	46.17	403 (5)	9016 (5)	4915 (5)
26	100	70	10.05	12.72	19.49	47.89	418 (5)	9352 (5)	5098 (5)
27	100	70	10.05	12.72	20.19	49.61	433 (5)	9689 (5)	5281 (5)
28	100	70	10.05	12.72	20.89	51.32	448 (5)	10025 (5)	5464 (5)
29	100	70	10.05	12.72	21.59	53.04	463 (5)	10362 (5)	5647 (5)
30	100	70	10.05	12.72	22.32	54.75	479 (5)	10725 (5)	5836 (5)
31	100	70	10.05	12.72	23.09	56.47	496 (5)	11145 (5)	6038 (5)
32	100	101	10.05	12.72	30.82	59.49	337 (5)	7591 (5)	4409 (5)
33	100	101	10.05	12.72	31.77	61.96	346 (5)	7680 (5)	4539 (5)
34	100	101	10.05	12.72	32.98	64.44	359 (5)	7943 (5)	4711 (5)
35	100	101	10.05	12.72	34.37	66.91	375 (5)	8330 (5)	4911 (5)
36	100	101	10.05	12.72	35.85	69.39	392 (5)	8789 (5)	5128 (5)
37	100	101	10.05	12.72	37.39	71.86	409 (5)	9281 (5)	5353 (5)
38	100	101	10.05	12.72	38.97	74.34	427 (5)	9808 (5)	5585 (5)
39	100	101	10.05	12.72	40.62	76.81	447 (5)	10381 (5)	5828 (5)
40	100	101	10.05	12.72	42.35	79.29	467 (5)	11009 (5)	6083 (5)
41	100	101	10.05	12.72	44.15	81.76	488 (5)	11698 (5)	6351 (5)
42	100	101	10.05	12.72	46.05	84.24	511 (5)	12454 (5)	6633 (5)
43	100	101	10.05	12.72	48.04	86.71	534 (5)	13284 (5)	6930 (5)
44	100	101	10.05	12.72	50.13	89.19	560 (5)	14192 (5)	7244 (5)
45	100	101	10.05	12.72	52.34	91.66	586 (5)	15185 (5)	7574 (5)
46	100	101	10.05	12.72	54.65	94.14	615 (5)	16267 (5)	7922 (5)
47	100	101	10.05	12.72	57.09	96.61	645 (5)	17444 (5)	8288 (5)
48	100	101	10.05	12.72	59.65	99.09	676 (5)	18721 (5)	8672 (5)
49	100	101	10.05	12.72	62.34	101.56	710 (5)	20104 (5)	9075 (5)
50	100	101	10.05	12.72	65.16	104.04	745 (5)	21597 (5)	9499 (5)
51	100	101	10.05	12.72	68.12	106.51	782 (5)	23205 (5)	9942 (5)
52	100	101	10.05	12.72	71.23	108.99	820 (5)	24934 (5)	10406 (5)

Piastra fondazione

Tensione massima di compressione nel calcestruzzo

17430

[kPa]

Tensione massima di trazione dell'acciaio

1255271

[kPa]

Is	B [cm]	H [cm]	Afi [cmq]	Afs [cmq]	Mp [kNm]	Mn [kNm]	σc [kPa]	σfi [kPa]	σfs [kPa]
1-1-P	69	110	12.57	12.57	0.90	-0.15	11 (8)	714 (8)	305 (8)
1-2-P	69	110	12.57	12.57	0.79	-1.73	23 (5)	741 (5)	1509 (5)
1-3-P	69	110	12.57	12.57	0.04	-6.58	70 (5)	831 (5)	4601 (5)
1-4-P	69	110	12.57	12.57	0.00	-17.74	184 (5)	2197 (5)	12167 (5)
1-5-P	69	110	12.57	12.57	0.06	-27.83	295 (5)	3523 (5)	19516 (5)
1-6-P	69	110	12.57	12.57	0.02	-32.84	352 (5)	4206 (5)	23297 (5)
1-7-P	69	110	12.57	12.57	0.06	-18.91	197 (5)	2357 (5)	13055 (5)
1-8-P	69	110	12.57	12.57	1.11	-4.65	56 (8)	2212 (8)	3703 (8)
1-9-P	69	110	12.57	12.57	10.86	-0.19	113 (5)	7482 (5)	1351 (5)
1-10-P	69	110	12.57	12.57	14.65	-0.01	155 (5)	10261 (5)	1852 (5)
1-11-P	69	110	12.57	12.57	15.83	0.00	168 (5)	11108 (5)	2005 (5)
1-12-P	69	110	12.57	12.57	12.94	-0.12	136 (5)	8984 (5)	1622 (5)
1-13-P	69	110	12.57	12.57	3.80	-2.56	38 (5)	2485 (5)	1453 (5)
1-14-P	69	110	12.57	12.57	0.09	-12.27	125 (5)	1492 (5)	8266 (5)
1-15-P	69	110	12.57	12.57	0.06	-24.41	261 (5)	3111 (5)	17236 (5)
1-16-P	69	110	12.57	12.57	0.10	-21.96	233 (5)	2783 (5)	15415 (5)
1-17-P	69	110	12.57	12.57	1.21	-10.86	107 (5)	1742 (5)	7065 (5)
1-18-P	69	110	12.57	12.57	5.58	-1.37	57 (5)	3778 (5)	722 (5)
1-19-P	69	110	12.57	12.57	13.91	-0.06	147 (5)	9694 (5)	1750 (5)
1-20-P	69	110	12.57	12.57	17.17	0.00	182 (5)	12068 (5)	2179 (5)
1-21-P	69	110	12.57	12.57	15.16	-0.02	160 (5)	10610 (5)	1915 (5)
1-22-P	69	110	12.57	12.57	10.05	-0.37	105 (5)	6946 (5)	1254 (5)
1-23-P	69	110	12.57	12.57	1.72	-5.94	56 (5)	1735 (5)	3721 (5)
1-24-P	69	110	12.57	12.57	0.21	-17.32	181 (5)	2157 (5)	11947 (5)
1-25-P	69	110	12.57	12.57	0.00	-29.36	316 (5)	3772 (5)	20896 (5)
1-26-P	69	110	12.57	12.57	0.21	-17.32	181 (5)	2157 (5)	11947 (5)
1-27-P	69	110	12.57	12.57	1.72	-5.94	56 (5)	1735 (5)	3721 (5)
1-28-P	69	110	12.57	12.57	10.05	-0.37	105 (5)	6946 (5)	1254 (5)
1-29-P	69	110	12.57	12.57	15.16	-0.02	160 (5)	10610 (5)	1915 (5)

APPALTATORE:

TELESE S.c.a r.l.

Consorzio Telese Società Consortile a Responsabilità Limitata

PROGETTAZIONE:

Mandataria:

Mandante:

SYSTRA S.A.

SWS Engineering S.p.A.

SYSTRA-SOTECNI S.p.A.

Relazione di calcolo

IF2R.2.2.E.ZZ.CL.TR.16.0.5.008.A.DOCX

ITINERARIO NAPOLI – BARI

RADDOPPIO TRATTA CANCELLO-BENEVENTO

II LOTTO FUNZIONALE FRASSO TELESINO – VITULANO

2° SUBLOTTO TELESE – SAN LORENZO

PROGETTO ESECUTIVO

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Is	B [cm]	H [cm]	Afi [cmq]	Afs [cmq]	Mp [kNm]	Mn [kNm]	sc [kPa]	ofi [kPa]	ofs [kPa]
1-30-P	69	110	12.57	12.57	17.17	0.00	182 (5)	12068 (5)	2179 (5)
1-31-P	69	110	12.57	12.57	13.91	-0.06	147 (5)	9694 (5)	1750 (5)
1-32-P	69	110	12.57	12.57	5.58	-1.37	57 (5)	3778 (5)	722 (5)
1-33-P	69	110	12.57	12.57	1.21	-10.86	107 (5)	1742 (5)	7065 (5)
1-34-P	69	110	12.57	12.57	0.10	-21.96	233 (5)	2783 (5)	15415 (5)
1-35-P	69	110	12.57	12.57	0.06	-24.41	261 (5)	3111 (5)	17236 (5)
1-36-P	69	110	12.57	12.57	0.09	-12.27	125 (5)	1492 (5)	8266 (5)
1-37-P	69	110	12.57	12.57	3.80	-2.56	38 (5)	2485 (5)	1453 (5)
1-38-P	69	110	12.57	12.57	12.94	-0.12	136 (5)	8984 (5)	1622 (5)
1-39-P	69	110	12.57	12.57	15.83	0.00	168 (5)	11108 (5)	2005 (5)
1-40-P	69	110	12.57	12.57	14.65	-0.01	155 (5)	10261 (5)	1852 (5)
1-41-P	69	110	12.57	12.57	10.86	-0.19	113 (5)	7482 (5)	1351 (5)
1-42-P	69	110	12.57	12.57	1.11	-4.65	56 (8)	2212 (8)	3703 (8)
1-43-P	69	110	12.57	12.57	0.06	-18.91	197 (5)	2357 (5)	13055 (5)
1-44-P	69	110	12.57	12.57	0.02	-32.84	352 (5)	4206 (5)	23297 (5)
1-45-P	69	110	12.57	12.57	0.06	-27.83	295 (5)	3523 (5)	19516 (5)
1-46-P	69	110	12.57	12.57	0.00	-17.74	184 (5)	2197 (5)	12167 (5)
1-47-P	69	110	12.57	12.57	0.04	-6.58	70 (5)	831 (5)	4601 (5)
1-48-P	69	110	12.57	12.57	0.79	-1.73	23 (5)	741 (5)	1509 (5)
1-49-P	69	110	12.57	12.57	0.90	-0.15	11 (8)	714 (8)	305 (8)
2-1-P	70	110	12.57	12.57	4.93	0.00	53 (5)	3504 (5)	633 (5)
2-2-P	70	110	12.57	12.57	5.05	0.00	57 (5)	3780 (5)	682 (5)
2-3-P	70	110	12.57	12.57	3.98	-0.21	52 (7)	3452 (7)	833 (7)
2-4-P	70	110	12.57	12.57	4.22	-2.36	45 (5)	3001 (5)	1704 (5)
2-5-P	70	110	12.57	12.57	1.17	-26.48	334 (5)	3984 (5)	22070 (5)
2-6-P	70	110	12.57	12.57	0.84	-45.34	531 (5)	6339 (5)	35117 (5)
2-7-P	70	110	12.57	12.57	1.84	-8.74	132 (8)	3653 (8)	8697 (8)
2-8-P	70	110	12.57	12.57	8.66	-0.26	97 (5)	6444 (5)	1163 (5)
2-9-P	70	110	12.57	12.57	13.70	0.00	154 (5)	10191 (5)	1840 (5)
2-10-P	70	110	12.57	12.57	15.15	0.00	168 (5)	11099 (5)	2004 (5)
2-11-P	70	110	12.57	12.57	15.59	0.00	172 (5)	11390 (5)	2056 (5)
2-12-P	70	110	12.57	12.57	14.53	0.00	163 (5)	10755 (5)	1942 (5)
2-13-P	70	110	12.57	12.57	10.63	-0.11	120 (5)	7908 (5)	1428 (5)
2-14-P	70	110	12.57	12.57	2.68	-2.94	36 (5)	2397 (5)	2384 (5)
2-15-P	70	110	12.57	12.57	1.00	-35.85	442 (5)	5279 (5)	29240 (5)
2-16-P	70	110	12.57	12.57	1.12	-29.30	365 (5)	4361 (5)	24160 (5)
2-17-P	70	110	12.57	12.57	7.47	-0.81	81 (5)	5351 (5)	966 (5)
2-18-P	70	110	12.57	12.57	11.44	-0.04	129 (5)	8530 (5)	1540 (5)
2-19-P	70	110	12.57	12.57	14.72	0.00	164 (5)	10866 (5)	1962 (5)
2-20-P	70	110	12.57	12.57	15.87	0.00	175 (5)	11565 (5)	2088 (5)
2-21-P	70	110	12.57	12.57	15.14	0.00	168 (5)	11121 (5)	2008 (5)
2-22-P	70	110	12.57	12.57	13.23	0.00	149 (5)	9845 (5)	1777 (5)
2-23-P	70	110	12.57	12.57	8.82	-0.38	98 (5)	6486 (5)	1171 (5)
2-24-P	70	110	12.57	12.57	1.72	-12.98	195 (8)	3427 (8)	12920 (8)
2-25-P	70	110	12.57	12.57	0.72	-49.58	579 (5)	6915 (5)	38306 (5)
2-26-P	70	110	12.57	12.57	1.72	-12.98	195 (8)	3427 (8)	12920 (8)
2-27-P	70	110	12.57	12.57	8.82	-0.38	98 (5)	6486 (5)	1171 (5)
2-28-P	70	110	12.57	12.57	13.23	0.00	149 (5)	9845 (5)	1777 (5)
2-29-P	70	110	12.57	12.57	15.14	0.00	168 (5)	11121 (5)	2008 (5)
2-30-P	70	110	12.57	12.57	15.87	0.00	175 (5)	11565 (5)	2088 (5)
2-31-P	70	110	12.57	12.57	14.72	0.00	164 (5)	10866 (5)	1962 (5)
2-32-P	70	110	12.57	12.57	11.44	-0.04	129 (5)	8530 (5)	1540 (5)
2-33-P	70	110	12.57	12.57	7.47	-0.81	81 (5)	5351 (5)	966 (5)
2-34-P	70	110	12.57	12.57	1.12	-29.30	365 (5)	4361 (5)	24160 (5)
2-35-P	70	110	12.57	12.57	1.00	-35.85	442 (5)	5279 (5)	29240 (5)
2-36-P	70	110	12.57	12.57	2.68	-2.94	36 (5)	2397 (5)	2384 (5)
2-37-P	70	110	12.57	12.57	10.63	-0.11	120 (5)	7908 (5)	1428 (5)
2-38-P	70	110	12.57	12.57	14.53	0.00	163 (5)	10755 (5)	1942 (5)
2-39-P	70	110	12.57	12.57	15.59	0.00	172 (5)	11390 (5)	2056 (5)
2-40-P	70	110	12.57	12.57	15.15	0.00	168 (5)	11099 (5)	2004 (5)
2-41-P	70	110	12.57	12.57	13.70	0.00	154 (5)	10191 (5)	1840 (5)
2-42-P	70	110	12.57	12.57	8.66	-0.26	97 (5)	6444 (5)	1163 (5)
2-43-P	70	110	12.57	12.57	1.84	-8.74	132 (8)	3653 (8)	8697 (8)
2-44-P	70	110	12.57	12.57	0.84	-45.34	531 (5)	6339 (5)	35117 (5)
2-45-P	70	110	12.57	12.57	1.17	-26.48	334 (5)	3984 (5)	22070 (5)
2-46-P	70	110	12.57	12.57	4.22	-2.36	45 (5)	3001 (5)	1704 (5)
2-47-P	70	110	12.57	12.57	3.98	-0.21	52 (7)	3452 (7)	833 (7)
2-48-P	70	110	12.57	12.57	5.05	0.00	57 (5)	3780 (5)	682 (5)
2-49-P	70	110	12.57	12.57	4.93	0.00	53 (5)	3504 (5)	633 (5)
5-1-P	85	110	15.71	15.71	2.10	-4.26	45 (7)	1350 (7)	2973 (7)
5-2-P	85	110	15.71	15.71	1.93	-5.06	58 (7)	1282 (7)	3776 (7)
5-3-P	85	110	15.71	15.71	2.17	-5.61	67 (7)	1473 (7)	4391 (7)
5-4-P	85	110	15.71	15.71	2.36	-6.58	71 (6)	1746 (6)	4630 (6)
5-5-P	85	110	15.71	15.71	3.44	-4.80	63 (7)	1748 (7)	4144 (7)
5-6-P	85	110	15.71	15.71	4.16	-3.92	52 (7)	1535 (7)	3407 (7)
5-7-P	85	110	15.71	15.71	5.41	-3.43	40 (7)	1423 (7)	2640 (7)
5-8-P	85	110	15.71	15.71	6.03	-5.16	54 (7)	1490 (7)	3540 (7)
5-9-P	85	110	15.71	15.71	6.56	-10.67	96 (6)	3055 (6)	6281 (6)
5-10-P	85	110	15.71	15.71	1.07	-36.91	365 (5)	4368 (5)	23892 (5)
5-11-P	85	110	15.71	15.71	0.97	-40.95	433 (5)	5179 (5)	28328 (5)
5-12-P	85	110	15.71	15.71	0.47	-12.71	93 (5)	2019 (5)	6057 (5)

APPALTATORE:

TELESE S.c.a r.l.

Consorzio Telese Società Consortile a Responsabilità Limitata

PROGETTAZIONE:

Mandataria:

Mandante:

SYSTRA S.A.

SWS Engineering S.p.A.

SYSTRA-SOTECNI S.p.A.

ITINERARIO NAPOLI – BARI
RADDOPPIO TRATTA CANCELLO-BENEVENTO
II LOTTO FUNZIONALE FRASSO TELESINO – VITULANO
2° SUBLOTTO TELESE – SAN LORENZO
PROGETTO ESECUTIVO

Relazione di calcolo

IF2R.2.2.E.ZZ.CL.TR.16.0.5.008.A.DOCX

COMMESSA

LOTTO

CODIFICA

DOCUMENTO

REV.

FOGLIO

IF2R

2.2.E.ZZ

CL

TR.16.0.5.008

A

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Is	B [cm]	H [cm]	Afi [cmq]	Afs [cmq]	Mp [kNm]	Mn [kNm]	sc [kPa]	ofi [kPa]	ofs [kPa]
5-13-P	85	110	15.71	15.71	6.71	-0.60	30 (7)	1946 (7)	977 (7)
5-14-P	85	110	15.71	15.71	10.72	-0.07	69 (7)	4513 (7)	825 (7)
5-15-P	85	110	15.71	15.71	11.37	0.00	80 (7)	5203 (7)	951 (7)
5-16-P	85	110	15.71	15.71	11.82	-0.05	80 (7)	5232 (7)	956 (7)
5-17-P	85	110	15.71	15.71	12.13	-0.16	80 (7)	5244 (7)	959 (7)
5-18-P	85	110	15.71	15.71	8.55	-2.53	58 (6)	3808 (6)	1820 (6)
5-19-P	85	110	15.71	15.71	2.20	-9.78	125 (6)	2241 (6)	8198 (6)
5-20-P	85	110	15.71	15.71	1.89	-42.49	479 (5)	5726 (5)	31318 (5)
5-21-P	85	110	15.71	15.71	1.09	-25.51	259 (5)	3094 (5)	16922 (5)
5-22-P	85	110	15.71	15.71	8.27	-3.59	58 (6)	3827 (6)	2483 (6)
5-23-P	85	110	15.71	15.71	11.07	-0.05	70 (7)	4587 (7)	839 (7)
5-24-P	85	110	15.71	15.71	13.09	-0.02	93 (7)	6073 (7)	1110 (7)
5-25-P	85	110	15.71	15.71	13.27	0.00	100 (7)	6513 (7)	1191 (7)
5-26-P	85	110	15.71	15.71	13.09	-0.02	93 (7)	6073 (7)	1110 (7)
5-27-P	85	110	15.71	15.71	11.07	-0.05	70 (7)	4587 (7)	839 (7)
5-28-P	85	110	15.71	15.71	8.27	-3.59	58 (6)	3827 (6)	2483 (6)
5-29-P	85	110	15.71	15.71	1.09	-25.51	259 (5)	3094 (5)	16922 (5)
5-30-P	85	110	15.71	15.71	1.89	-42.49	479 (5)	5726 (5)	31318 (5)
5-31-P	85	110	15.71	15.71	2.20	-9.78	125 (6)	2241 (6)	8198 (6)
5-32-P	85	110	15.71	15.71	8.55	-2.53	58 (6)	3808 (6)	1820 (6)
5-33-P	85	110	15.71	15.71	12.13	-0.16	80 (7)	5244 (7)	959 (7)
5-34-P	85	110	15.71	15.71	11.82	-0.05	80 (7)	5232 (7)	956 (7)
5-35-P	85	110	15.71	15.71	11.37	0.00	80 (7)	5203 (7)	951 (7)
5-36-P	85	110	15.71	15.71	10.72	-0.07	69 (7)	4513 (7)	825 (7)
5-37-P	85	110	15.71	15.71	6.71	-0.60	30 (7)	1946 (7)	977 (7)
5-38-P	85	110	15.71	15.71	0.47	-12.71	93 (5)	2019 (5)	6057 (5)
5-39-P	85	110	15.71	15.71	0.97	-40.95	433 (5)	5179 (5)	28328 (5)
5-40-P	85	110	15.71	15.71	1.07	-36.91	365 (5)	4368 (5)	23892 (5)
5-41-P	85	110	15.71	15.71	6.56	-10.67	96 (6)	3055 (6)	6281 (6)
5-42-P	85	110	15.71	15.71	6.03	-5.16	54 (7)	1490 (7)	3540 (7)
5-43-P	85	110	15.71	15.71	5.41	-3.43	40 (7)	1423 (7)	2640 (7)
5-44-P	85	110	15.71	15.71	4.16	-3.92	52 (7)	1535 (7)	3407 (7)
5-45-P	85	110	15.71	15.71	3.44	-4.80	63 (7)	1748 (7)	4144 (7)
5-46-P	85	110	15.71	15.71	2.36	-6.58	71 (6)	1746 (6)	4630 (6)
5-47-P	85	110	15.71	15.71	2.17	-5.61	67 (7)	1473 (7)	4391 (7)
5-48-P	85	110	15.71	15.71	1.93	-5.06	58 (7)	1282 (7)	3776 (7)
5-49-P	85	110	15.71	15.71	2.10	-4.26	45 (7)	1350 (7)	2973 (7)
6-1-P	85	110	12.57	12.57	2.89	-2.97	28 (5)	1988 (5)	2058 (5)
6-2-P	85	110	12.57	12.57	3.40	-3.45	34 (5)	2411 (5)	2478 (5)
6-3-P	85	110	12.57	12.57	3.79	-3.93	40 (5)	2726 (5)	2899 (5)
6-4-P	85	110	12.57	12.57	3.99	-4.42	46 (5)	2888 (5)	3327 (5)
6-5-P	85	110	12.57	12.57	2.79	-3.85	40 (5)	2077 (5)	2919 (5)
6-6-P	85	110	12.57	12.57	1.52	-2.04	36 (6)	1161 (6)	2628 (6)
6-7-P	85	110	12.57	12.57	0.11	-4.70	44 (5)	512 (5)	3191 (5)
6-8-P	85	110	12.57	12.57	0.03	-8.44	75 (5)	876 (5)	5467 (5)
6-9-P	85	110	12.57	12.57	0.01	-13.16	121 (5)	1419 (5)	8850 (5)
6-10-P	85	110	12.57	12.57	0.06	-15.30	133 (5)	1558 (5)	9720 (5)
6-11-P	85	110	12.57	12.57	0.29	-15.16	130 (5)	1524 (5)	9505 (5)
6-12-P	85	110	12.57	12.57	1.10	-9.36	102 (8)	1454 (8)	7430 (8)
6-13-P	85	110	12.57	12.57	2.29	-2.31	50 (7)	1765 (7)	3642 (7)
6-14-P	85	110	12.57	12.57	5.39	-0.16	40 (7)	2897 (7)	894 (7)
6-15-P	85	110	12.57	12.57	7.55	0.00	54 (7)	3922 (7)	629 (7)
6-16-P	85	110	12.57	12.57	7.88	0.00	57 (7)	4141 (7)	664 (7)
6-17-P	85	110	12.57	12.57	6.89	0.00	44 (7)	3227 (7)	517 (7)
6-18-P	85	110	12.57	12.57	2.64	-0.33	31 (7)	1006 (7)	2255 (7)
6-19-P	85	110	12.57	12.57	1.86	-2.84	90 (7)	1054 (7)	6576 (7)
6-20-P	85	110	12.57	12.57	1.34	-6.35	108 (6)	1258 (6)	7849 (6)
6-21-P	85	110	12.57	12.57	2.17	-3.40	85 (7)	1302 (7)	6225 (7)
6-22-P	85	110	12.57	12.57	1.51	-3.20	58 (8)	1495 (8)	4229 (8)
6-23-P	85	110	12.57	12.57	6.54	0.00	40 (7)	2929 (7)	470 (7)
6-24-P	85	110	12.57	12.57	9.56	0.00	74 (7)	5362 (7)	860 (7)
6-25-P	85	110	12.57	12.57	11.17	0.00	93 (7)	6744 (7)	1081 (7)
6-26-P	85	110	12.57	12.57	9.56	0.00	74 (7)	5362 (7)	860 (7)
6-27-P	85	110	12.57	12.57	6.54	0.00	40 (7)	2929 (7)	470 (7)
6-28-P	85	110	12.57	12.57	1.51	-3.20	58 (8)	1495 (8)	4229 (8)
6-29-P	85	110	12.57	12.57	2.17	-3.40	85 (7)	1302 (7)	6225 (7)
6-30-P	85	110	12.57	12.57	1.34	-6.35	108 (6)	1258 (6)	7849 (6)
6-31-P	85	110	12.57	12.57	1.86	-2.84	90 (7)	1054 (7)	6576 (7)
6-32-P	85	110	12.57	12.57	2.64	-0.33	31 (7)	1006 (7)	2255 (7)
6-33-P	85	110	12.57	12.57	6.89	0.00	44 (7)	3227 (7)	517 (7)
6-34-P	85	110	12.57	12.57	7.88	0.00	57 (7)	4141 (7)	664 (7)
6-35-P	85	110	12.57	12.57	7.55	0.00	54 (7)	3922 (7)	629 (7)
6-36-P	85	110	12.57	12.57	5.39	-0.16	40 (7)	2897 (7)	894 (7)
6-37-P	85	110	12.57	12.57	2.29	-2.31	50 (7)	1765 (7)	3642 (7)
6-38-P	85	110	12.57	12.57	1.10	-9.36	102 (8)	1454 (8)	7430 (8)
6-39-P	85	110	12.57	12.57	0.29	-15.16	130 (5)	1524 (5)	9505 (5)
6-40-P	85	110	12.57	12.57	0.06	-15.30	133 (5)	1558 (5)	9720 (5)
6-41-P	85	110	12.57	12.57	0.01	-13.16	121 (5)	1419 (5)	8850 (5)
6-42-P	85	110	12.57	12.57	0.03	-8.44	75 (5)	876 (5)	5467 (5)
6-43-P	85	110	12.57	12.57	0.11	-4.70	44 (5)	512 (5)	3191 (5)
6-44-P	85	110	12.57	12.57	1.52	-2.04	36 (6)	1161 (6)	2628 (6)

APPALTATORE:

TELESE S.c.a r.l.

Consorzio Telese Società Consortile a Responsabilità Limitata

PROGETTAZIONE:

Mandataria:

Mandante:

SYSTRA S.A. SWS Engineering S.p.A. SYSTRA-SOTECNI S.p.A.

Relazione di calcolo

IF2R.2.2.E.ZZ.CL.TR.16.0.5.008.A.DOCX

ITINERARIO NAPOLI – BARI
RADDOPPIO TRATTA CANCELLO-BENEVENTO
II LOTTO FUNZIONALE FRASSO TELESINO – VITULANO
2° SUBLOTTO TELESE – SAN LORENZO
PROGETTO ESECUTIVO

COMMESSA	LOTTO	CODIFICA	DOCUMENTO	REV.	FOGLIO
IF2R	2.2.E.ZZ	CL	TR.16.0.5.008	A	62 di 118

Is	B [cm]	H [cm]	Afi [cmq]	Afs [cmq]	Mp [kNm]	Mn [kNm]	sc [kPa]	ofi [kPa]	ofs [kPa]
6-45-P	85	110	12.57	12.57	2.79	-3.85	40 (5)	2077 (5)	2919 (5)
6-46-P	85	110	12.57	12.57	3.99	-4.42	46 (5)	2888 (5)	3327 (5)
6-47-P	85	110	12.57	12.57	3.79	-3.93	40 (5)	2726 (5)	2899 (5)
6-48-P	85	110	12.57	12.57	3.40	-3.45	34 (5)	2411 (5)	2478 (5)
6-49-P	85	110	12.57	12.57	2.89	-2.97	28 (5)	1988 (5)	2058 (5)
7-1-P	85	110	12.57	12.57	1.54	-0.62	17 (8)	1220 (8)	612 (8)
7-2-P	85	110	12.57	12.57	2.42	-2.34	26 (8)	1916 (8)	1859 (8)
7-3-P	85	110	12.57	12.57	2.48	-6.55	68 (7)	2175 (7)	4976 (7)
7-4-P	85	110	12.57	12.57	1.97	-14.30	147 (7)	1796 (7)	10736 (7)
7-5-P	85	110	12.57	12.57	0.59	-23.71	236 (7)	2759 (7)	17209 (7)
7-6-P	85	110	12.57	12.57	0.05	-29.83	295 (7)	3452 (7)	21530 (7)
7-7-P	85	110	12.57	12.57	0.11	-17.40	177 (7)	2067 (7)	12892 (7)
7-8-P	85	110	12.57	12.57	0.87	-7.32	80 (8)	931 (8)	5805 (8)
7-9-P	85	110	12.57	12.57	3.82	-0.34	33 (6)	2369 (6)	2198 (6)
7-10-P	85	110	12.57	12.57	6.00	0.00	53 (7)	3895 (7)	624 (7)
7-11-P	85	110	12.57	12.57	7.32	0.00	66 (7)	4808 (7)	771 (7)
7-12-P	85	110	12.57	12.57	6.69	-0.25	64 (6)	4636 (6)	1337 (6)
7-13-P	85	110	12.57	12.57	4.90	-5.48	55 (5)	3214 (5)	4010 (5)
7-14-P	85	110	12.57	12.57	3.16	-10.71	116 (5)	1357 (5)	8467 (5)
7-15-P	85	110	12.57	12.57	0.23	-20.41	208 (7)	2435 (7)	15188 (7)
7-16-P	85	110	12.57	12.57	0.13	-17.24	185 (7)	2162 (7)	13487 (7)
7-17-P	85	110	12.57	12.57	3.20	-6.80	76 (6)	1638 (6)	5566 (6)
7-18-P	85	110	12.57	12.57	5.53	-0.16	49 (6)	3539 (6)	650 (6)
7-19-P	85	110	12.57	12.57	11.52	0.00	108 (6)	7839 (6)	1257 (6)
7-20-P	85	110	12.57	12.57	13.78	0.00	130 (7)	9471 (7)	1518 (7)
7-21-P	85	110	12.57	12.57	12.89	0.00	122 (7)	8875 (7)	1423 (7)
7-22-P	85	110	12.57	12.57	10.14	0.00	91 (6)	6661 (6)	1068 (6)
7-23-P	85	110	12.57	12.57	5.39	-3.55	52 (6)	3233 (6)	3788 (6)
7-24-P	85	110	12.57	12.57	1.02	-10.59	138 (7)	1611 (7)	10050 (7)
7-25-P	85	110	12.57	12.57	0.88	-15.81	271 (5)	3168 (5)	19757 (5)
7-26-P	85	110	12.57	12.57	1.02	-10.59	138 (7)	1611 (7)	10050 (7)
7-27-P	85	110	12.57	12.57	5.39	-3.55	52 (6)	3233 (6)	3788 (6)
7-28-P	85	110	12.57	12.57	10.14	0.00	91 (6)	6661 (6)	1068 (6)
7-29-P	85	110	12.57	12.57	12.89	0.00	122 (7)	8875 (7)	1423 (7)
7-30-P	85	110	12.57	12.57	13.78	0.00	130 (7)	9471 (7)	1518 (7)
7-31-P	85	110	12.57	12.57	11.52	0.00	108 (6)	7839 (6)	1257 (6)
7-32-P	85	110	12.57	12.57	5.53	-0.16	49 (6)	3539 (6)	650 (6)
7-33-P	85	110	12.57	12.57	3.20	-6.80	76 (6)	1638 (6)	5566 (6)
7-34-P	85	110	12.57	12.57	0.13	-17.24	185 (7)	2162 (7)	13487 (7)
7-35-P	85	110	12.57	12.57	0.23	-20.41	208 (7)	2435 (7)	15188 (7)
7-36-P	85	110	12.57	12.57	3.16	-10.71	116 (5)	1357 (5)	8467 (5)
7-37-P	85	110	12.57	12.57	4.90	-5.48	55 (5)	3214 (5)	4010 (5)
7-38-P	85	110	12.57	12.57	6.69	-0.25	64 (6)	4636 (6)	1337 (6)
7-39-P	85	110	12.57	12.57	7.32	0.00	66 (7)	4808 (7)	771 (7)
7-40-P	85	110	12.57	12.57	6.00	0.00	53 (7)	3895 (7)	624 (7)
7-41-P	85	110	12.57	12.57	3.82	-0.34	33 (6)	2369 (6)	2198 (6)
7-42-P	85	110	12.57	12.57	0.87	-7.32	80 (8)	931 (8)	5805 (8)
7-43-P	85	110	12.57	12.57	0.11	-17.40	177 (7)	2067 (7)	12892 (7)
7-44-P	85	110	12.57	12.57	0.05	-29.83	295 (7)	3452 (7)	21530 (7)
7-45-P	85	110	12.57	12.57	0.59	-23.71	236 (7)	2759 (7)	17209 (7)
7-46-P	85	110	12.57	12.57	1.97	-14.30	147 (7)	1796 (7)	10736 (7)
7-47-P	85	110	12.57	12.57	2.48	-6.55	68 (7)	2175 (7)	4976 (7)
7-48-P	85	110	12.57	12.57	2.42	-2.34	26 (8)	1916 (8)	1859 (8)
7-49-P	85	110	12.57	12.57	1.54	-0.62	17 (8)	1220 (8)	612 (8)
8-1-P	85	110	15.71	15.71	0.68	-0.12	6 (7)	419 (7)	211 (7)
8-2-P	85	110	15.71	15.71	0.31	-3.05	27 (6)	329 (6)	1799 (6)
8-3-P	85	110	15.71	15.71	0.31	-8.77	79 (7)	951 (7)	5200 (7)
8-4-P	85	110	15.71	15.71	0.44	-18.36	165 (7)	2107 (7)	10811 (7)
8-5-P	85	110	15.71	15.71	0.00	-37.87	341 (7)	4084 (7)	22341 (7)
8-6-P	85	110	15.71	15.71	0.00	-51.03	462 (7)	5533 (7)	30263 (7)
8-7-P	85	110	15.71	15.71	0.00	-26.51	238 (7)	2848 (7)	15575 (7)
8-8-P	85	110	15.71	15.71	0.53	-9.62	94 (8)	1683 (8)	6130 (8)
8-9-P	85	110	15.71	15.71	1.79	-0.67	29 (8)	1904 (8)	709 (8)
8-10-P	85	110	15.71	15.71	6.12	-0.01	54 (7)	3543 (7)	648 (7)
8-11-P	85	110	15.71	15.71	7.73	0.00	68 (7)	4471 (7)	817 (7)
8-12-P	85	110	15.71	15.71	4.64	-0.04	40 (7)	2617 (7)	478 (7)
8-13-P	85	110	15.71	15.71	1.64	-5.27	51 (8)	2610 (8)	3357 (8)
8-14-P	85	110	15.71	15.71	0.00	-16.02	146 (7)	1746 (7)	9551 (7)
8-15-P	85	110	15.71	15.71	0.00	-38.90	356 (7)	4263 (7)	23318 (7)
8-16-P	85	110	15.71	15.71	0.00	-33.53	307 (7)	3675 (7)	20103 (7)
8-17-P	85	110	15.71	15.71	1.34	-10.08	98 (8)	4285 (8)	6426 (8)
8-18-P	85	110	15.71	15.71	2.63	-1.02	59 (7)	3849 (7)	761 (7)
8-19-P	85	110	15.71	15.71	9.92	0.00	86 (7)	5630 (7)	1029 (7)
8-20-P	85	110	15.71	15.71	14.26	0.00	126 (7)	8235 (7)	1506 (7)
8-21-P	85	110	15.71	15.71	12.20	0.00	107 (7)	6995 (7)	1279 (7)
8-22-P	85	110	15.71	15.71	7.23	-0.01	62 (7)	4064 (7)	743 (7)
8-23-P	85	110	15.71	15.71	2.18	-5.16	53 (8)	3472 (8)	3291 (8)
8-24-P	85	110	15.71	15.71	0.00	-21.25	195 (7)	2334 (7)	12765 (7)
8-25-P	85	110	15.71	15.71	0.00	-44.80	411 (7)	4919 (7)	26907 (7)
8-26-P	85	110	15.71	15.71	0.00	-21.25	195 (7)	2334 (7)	12765 (7)
8-27-P	85	110	15.71	15.71	2.18	-5.16	53 (8)	3472 (8)	3291 (8)

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SWS Engineering S.p.A.

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2.2.E.ZZ

CL

TR.16.0.5.008

A

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Is	B [cm]	H [cm]	Afi [cmq]	Afs [cmq]	Mp [kNm]	Mn [kNm]	sc [kPa]	ofi [kPa]	ofs [kPa]
8-28-P	85	110	15.71	15.71	7.23	-0.01	62 (7)	4064 (7)	743 (7)
8-29-P	85	110	15.71	15.71	12.20	0.00	107 (7)	6995 (7)	1279 (7)
8-30-P	85	110	15.71	15.71	14.26	0.00	126 (7)	8235 (7)	1506 (7)
8-31-P	85	110	15.71	15.71	9.92	0.00	86 (7)	5630 (7)	1029 (7)
8-32-P	85	110	15.71	15.71	2.63	-1.02	59 (7)	3849 (7)	761 (7)
8-33-P	85	110	15.71	15.71	1.34	-10.08	98 (8)	4285 (8)	6426 (8)
8-34-P	85	110	15.71	15.71	0.00	-33.53	307 (7)	3675 (7)	20103 (7)
8-35-P	85	110	15.71	15.71	0.00	-38.90	356 (7)	4263 (7)	23318 (7)
8-36-P	85	110	15.71	15.71	0.00	-16.02	146 (7)	1746 (7)	9551 (7)
8-37-P	85	110	15.71	15.71	1.64	-5.27	51 (8)	2610 (8)	3357 (8)
8-38-P	85	110	15.71	15.71	4.64	-0.04	40 (7)	2617 (7)	478 (7)
8-39-P	85	110	15.71	15.71	7.73	0.00	68 (7)	4471 (7)	817 (7)
8-40-P	85	110	15.71	15.71	6.12	-0.01	54 (7)	3543 (7)	648 (7)
8-41-P	85	110	15.71	15.71	1.79	-0.67	29 (8)	1904 (8)	709 (8)
8-42-P	85	110	15.71	15.71	0.53	-9.62	94 (8)	1683 (8)	6130 (8)
8-43-P	85	110	15.71	15.71	0.00	-26.51	238 (7)	2848 (7)	15575 (7)
8-44-P	85	110	15.71	15.71	0.00	-51.03	462 (7)	5533 (7)	30263 (7)
8-45-P	85	110	15.71	15.71	0.00	-37.87	341 (7)	4084 (7)	22341 (7)
8-46-P	85	110	15.71	15.71	0.44	-18.36	165 (7)	2107 (7)	10811 (7)
8-47-P	85	110	15.71	15.71	0.31	-8.77	79 (7)	951 (7)	5200 (7)
8-48-P	85	110	15.71	15.71	0.31	-3.05	27 (6)	329 (6)	1799 (6)
8-49-P	85	110	15.71	15.71	0.68	-0.12	6 (7)	419 (7)	211 (7)
9-1-S	100	110	15.71	15.71	1.03	-3.88	35 (5)	2509 (5)	1814 (5)
9-2-S	100	110	15.71	15.71	0.02	-7.15	49 (5)	575 (5)	3460 (5)
9-3-S	100	110	15.71	15.71	0.07	-10.23	87 (5)	1025 (5)	6164 (5)
9-4-S	100	110	15.71	15.71	1.54	-11.40	124 (5)	1503 (5)	8759 (5)
9-5-S	100	110	15.71	15.71	7.67	-4.52	203 (8)	6096 (8)	14352 (8)
9-6-S	100	110	15.71	15.71	23.14	-0.39	208 (8)	14703 (8)	2444 (8)
9-7-S	100	110	15.71	15.71	54.22	0.00	455 (5)	32198 (5)	5352 (5)
9-8-S	100	110	15.71	15.71	0.00	-102.13	737 (5)	8669 (5)	52157 (5)
9-9-S	100	110	15.71	15.71	0.00	-68.01	460 (5)	5414 (5)	32572 (5)
9-10-S	100	110	15.71	15.71	0.00	-43.11	262 (5)	3079 (5)	18524 (5)
9-11-S	100	110	15.71	15.71	6.98	-3.36	118 (7)	1392 (7)	8376 (7)
9-12-S	100	110	15.71	15.71	17.21	-0.57	58 (7)	4105 (7)	2040 (7)
9-13-S	100	110	15.71	15.71	24.06	-0.29	123 (7)	8713 (7)	1448 (7)
9-14-S	100	110	15.71	15.71	27.90	-0.34	173 (6)	12273 (6)	2040 (6)
9-15-S	100	110	15.71	15.71	29.90	-0.47	194 (6)	13726 (6)	2282 (6)
9-16-S	100	110	15.71	15.71	25.11	-0.87	158 (6)	11170 (6)	1857 (6)
9-17-S	100	110	15.71	15.71	18.32	-1.67	106 (6)	7484 (6)	1404 (6)
9-18-S	100	110	15.71	15.71	5.89	-4.84	62 (7)	4377 (7)	3017 (7)
9-19-S	100	110	15.71	15.71	2.39	-8.36	72 (7)	2133 (7)	5074 (7)
9-20-S	100	110	15.71	15.71	0.54	-5.95	48 (7)	981 (7)	3428 (7)
9-21-S	100	110	15.71	15.71	0.06	-3.08	24 (7)	284 (7)	1712 (7)
9-22-S	100	110	15.71	15.71	1.70	-0.35	11 (5)	778 (5)	129 (5)
10-1-S	100	110	15.71	15.71	6.58	-2.65	44 (5)	3079 (5)	1218 (5)
10-2-S	100	110	15.71	15.71	9.35	-5.30	110 (6)	7808 (6)	2943 (6)
10-3-S	100	110	15.71	15.71	4.65	-9.63	67 (5)	2066 (5)	4774 (5)
10-4-S	100	110	15.71	15.71	0.94	-44.28	324 (5)	3810 (5)	22921 (5)
10-5-S	100	110	15.71	15.71	3.23	-41.76	444 (5)	5443 (5)	31393 (5)
10-6-S	100	110	15.71	15.71	13.75	-6.89	143 (5)	10136 (5)	1685 (5)
10-7-S	100	110	15.71	15.71	65.21	0.00	581 (5)	41117 (5)	6834 (5)
10-8-S	100	110	15.71	15.71	0.30	-64.20	415 (5)	4884 (5)	29380 (5)
10-9-S	100	110	15.71	15.71	0.06	-52.78	330 (5)	3885 (5)	23372 (5)
10-10-S	100	110	15.71	15.71	0.36	-38.85	227 (5)	2665 (5)	16032 (5)
10-11-S	100	110	15.71	15.71	5.57	-2.93	128 (7)	1508 (7)	9074 (7)
10-12-S	100	110	15.71	15.71	11.32	-0.14	46 (7)	2495 (7)	3244 (7)
10-13-S	100	110	15.71	15.71	20.47	-0.04	82 (7)	5826 (7)	968 (7)
10-14-S	100	110	15.71	15.71	26.65	-0.04	159 (6)	11275 (6)	1874 (6)
10-15-S	100	110	15.71	15.71	32.42	-0.05	209 (6)	14796 (6)	2459 (6)
10-16-S	100	110	15.71	15.71	33.31	-0.13	210 (6)	14890 (6)	2475 (6)
10-17-S	100	110	15.71	15.71	32.46	-0.73	193 (5)	13656 (5)	2270 (5)
10-18-S	100	110	15.71	15.71	1.16	-16.73	133 (7)	1929 (7)	9426 (7)
10-19-S	100	110	15.71	15.71	0.16	-36.42	305 (7)	3585 (7)	21570 (7)
10-20-S	100	110	15.71	15.71	0.27	-19.52	169 (5)	1994 (5)	11995 (5)
10-21-S	100	110	15.71	15.71	0.13	-10.70	75 (5)	881 (5)	5298 (5)
10-22-S	100	110	15.71	15.71	0.88	-1.87	12 (5)	834 (5)	359 (5)
11-1-S	100	110	15.71	15.71	0.33	-5.15	36 (5)	420 (5)	2529 (5)
11-2-S	100	110	15.71	15.71	0.49	-4.86	29 (5)	347 (5)	2087 (5)
11-3-S	100	110	15.71	15.71	1.17	-1.70	25 (8)	745 (8)	1801 (8)
11-4-S	100	110	15.71	15.71	6.05	0.00	54 (8)	3844 (8)	639 (8)
11-5-S	100	110	15.71	15.71	17.09	0.00	153 (8)	10863 (8)	1806 (8)
11-6-S	100	110	15.71	15.71	34.35	0.00	291 (5)	20622 (5)	3428 (5)
11-7-S	100	110	15.71	15.71	54.44	0.00	444 (5)	31395 (5)	5218 (5)
11-8-S	100	110	15.71	15.71	49.30	-0.61	254 (6)	17960 (6)	3533 (6)
11-9-S	100	110	15.71	15.71	18.10	-16.48	204 (5)	14403 (5)	6881 (5)
11-10-S	100	110	15.71	15.71	0.19	-70.76	527 (5)	6205 (5)	37329 (5)
11-11-S	100	110	15.71	15.71	0.00	-54.96	357 (5)	4196 (5)	25242 (5)
11-12-S	100	110	15.71	15.71	0.00	-33.49	155 (5)	1826 (5)	10985 (5)
11-13-S	100	110	15.71	15.71	13.04	-0.52	29 (7)	2087 (7)	1417 (7)
11-14-S	100	110	15.71	15.71	20.39	-0.20	99 (7)	7002 (7)	1164 (7)
11-15-S	100	110	15.71	15.71	21.35	-0.10	131 (7)	9265 (7)	1540 (7)

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Is	B [cm]	H [cm]	Afi [cmq]	Afs [cmq]	Mp [kNm]	Mn [kNm]	sc [kPa]	ofi [kPa]	ofs [kPa]
11-16-S	100	110	15.71	15.71	19.47	-0.12	118 (6)	8380 (6)	1393 (6)
11-17-S	100	110	15.71	15.71	10.35	-0.53	93 (8)	6579 (8)	1689 (8)
11-18-S	100	110	15.71	15.71	6.35	-0.63	57 (8)	4033 (8)	2010 (8)
11-19-S	100	110	15.71	15.71	3.05	-0.79	35 (8)	1936 (8)	2495 (8)
11-20-S	100	110	15.71	15.71	2.92	-0.47	15 (6)	681 (6)	1094 (6)
11-21-S	100	110	15.71	15.71	0.20	-0.95	10 (7)	246 (7)	712 (7)
11-22-S	100	110	15.71	15.71	0.05	-0.90	6 (7)	106 (7)	397 (7)
12-1-S	100	110	15.71	15.71	8.19	-1.69	55 (5)	3899 (5)	753 (5)
12-2-S	100	110	15.71	15.71	7.41	-3.58	166 (8)	11774 (8)	2272 (8)
12-3-S	100	110	15.71	15.71	4.66	-10.34	76 (5)	3149 (5)	5392 (5)
12-4-S	100	110	15.71	15.71	0.68	-50.87	375 (5)	4415 (5)	26564 (5)
12-5-S	100	110	15.71	15.71	0.99	-47.60	383 (5)	4503 (5)	27094 (5)
12-6-S	100	110	15.71	15.71	9.19	-6.72	118 (5)	8319 (5)	1383 (5)
12-7-S	100	110	15.71	15.71	66.16	0.00	594 (8)	42041 (8)	6988 (8)
12-8-S	100	110	15.71	15.71	0.00	-39.67	202 (5)	2379 (5)	14312 (5)
12-9-S	100	110	15.71	15.71	7.59	-0.18	128 (7)	1507 (7)	9066 (7)
12-10-S	100	110	15.71	15.71	9.10	0.00	91 (7)	1066 (7)	6412 (7)
12-11-S	100	110	15.71	15.71	12.70	0.00	39 (7)	458 (7)	2754 (7)
12-12-S	100	110	15.71	15.71	16.80	0.00	31 (7)	2208 (7)	1741 (7)
12-13-S	100	110	15.71	15.71	22.30	0.00	96 (7)	6774 (7)	1126 (7)
12-14-S	100	110	15.71	15.71	26.59	-0.03	156 (6)	11067 (6)	1839 (6)
12-15-S	100	110	15.71	15.71	32.35	-0.07	207 (6)	14622 (6)	2431 (6)
12-16-S	100	110	15.71	15.71	33.64	-0.47	211 (6)	14960 (6)	2487 (6)
12-17-S	100	110	15.71	15.71	33.84	-1.80	200 (5)	14162 (5)	2354 (5)
12-18-S	100	110	15.71	15.71	0.94	-21.20	170 (7)	3201 (7)	12062 (7)
12-19-S	100	110	15.71	15.71	0.49	-43.38	363 (7)	4272 (7)	25700 (7)
12-20-S	100	110	15.71	15.71	0.30	-23.58	202 (5)	2371 (5)	14264 (5)
12-21-S	100	110	15.71	15.71	0.00	-12.75	89 (5)	1042 (5)	6271 (5)
12-22-S	100	110	15.71	15.71	0.85	-2.17	11 (5)	798 (5)	407 (5)
13-1-S	100	110	15.71	15.71	0.79	-4.60	31 (5)	378 (5)	2209 (5)
13-2-S	100	110	15.71	15.71	0.34	-6.80	44 (5)	515 (5)	3097 (5)
13-3-S	100	110	15.71	15.71	0.60	-6.96	74 (5)	866 (5)	5213 (5)
13-4-S	100	110	15.71	15.71	4.90	-1.86	44 (8)	3111 (8)	2947 (8)
13-5-S	100	110	15.71	15.71	13.96	0.00	125 (8)	8868 (8)	1474 (8)
13-6-S	100	110	15.71	15.71	31.24	0.00	268 (5)	18986 (5)	3156 (5)
13-7-S	100	110	15.71	15.71	55.21	0.00	453 (5)	32092 (5)	5334 (5)
13-8-S	100	110	15.71	15.71	51.84	-1.21	304 (6)	21540 (6)	5673 (6)
13-9-S	100	110	15.71	15.71	35.24	-3.91	161 (6)	11402 (6)	5565 (6)
13-10-S	100	110	15.71	15.71	0.52	-57.31	412 (5)	4848 (5)	29169 (5)
13-11-S	100	110	15.71	15.71	0.01	-43.85	266 (5)	3129 (5)	18826 (5)
13-12-S	100	110	15.71	15.71	2.50	-6.85	101 (6)	1191 (6)	7168 (6)
13-13-S	100	110	15.71	15.71	16.66	-0.02	36 (7)	2563 (7)	426 (7)
13-14-S	100	110	15.71	15.71	22.78	0.00	116 (7)	8183 (7)	1360 (7)
13-15-S	100	110	15.71	15.71	23.52	0.00	145 (6)	10276 (6)	1708 (6)
13-16-S	100	110	15.71	15.71	19.88	-0.07	119 (6)	8402 (6)	1397 (6)
13-17-S	100	110	15.71	15.71	11.00	-0.71	78 (7)	5550 (7)	1350 (7)
13-18-S	100	110	15.71	15.71	6.17	-1.35	48 (7)	3385 (7)	2524 (7)
13-19-S	100	110	15.71	15.71	2.62	-2.32	51 (7)	1647 (7)	3632 (7)
13-20-S	100	110	15.71	15.71	0.70	-2.56	49 (7)	607 (7)	3454 (7)
13-21-S	100	110	15.71	15.71	0.08	-1.83	21 (7)	248 (7)	1490 (7)
13-22-S	100	110	15.71	15.71	0.27	-0.64	3 (7)	237 (7)	244 (7)
14-1-S	100	110	18.85	18.85	4.60	-4.19	28 (5)	1829 (5)	1655 (5)
14-2-S	100	110	18.85	18.85	5.85	-7.01	54 (5)	3485 (5)	2799 (5)
14-3-S	100	110	18.85	18.85	2.66	-10.07	62 (5)	1092 (5)	4047 (5)
14-4-S	100	110	18.85	18.85	1.64	-27.77	226 (5)	2711 (5)	14657 (5)
14-5-S	100	110	18.85	18.85	6.51	-17.38	332 (8)	5191 (8)	21551 (8)
14-6-S	100	110	18.85	18.85	19.45	-3.52	170 (5)	11027 (5)	2039 (5)
14-7-S	100	110	18.85	18.85	61.14	0.00	483 (5)	31303 (5)	5789 (5)
14-8-S	100	110	18.85	18.85	15.73	-3.22	118 (6)	7651 (6)	7366 (6)
14-9-S	100	110	18.85	18.85	12.09	-1.41	98 (7)	1174 (7)	6350 (7)
14-10-S	100	110	18.85	18.85	8.41	-4.18	124 (7)	1492 (7)	8071 (7)
14-11-S	100	110	18.85	18.85	10.16	-1.89	89 (7)	1065 (7)	5761 (7)
14-12-S	100	110	18.85	18.85	13.86	-0.22	52 (7)	2472 (7)	3356 (7)
14-13-S	100	110	18.85	18.85	21.60	-0.02	80 (7)	5160 (7)	954 (7)
14-14-S	100	110	18.85	18.85	26.22	0.00	137 (7)	8862 (7)	1639 (7)
14-15-S	100	110	18.85	18.85	29.11	0.00	168 (6)	10885 (6)	2013 (6)
14-16-S	100	110	18.85	18.85	27.16	-0.11	153 (6)	9907 (6)	1832 (6)
14-17-S	100	110	18.85	18.85	23.66	-1.07	127 (6)	8213 (6)	1519 (6)
14-18-S	100	110	18.85	18.85	2.94	-11.11	105 (7)	2450 (7)	6831 (7)
14-19-S	100	110	18.85	18.85	1.11	-23.01	221 (7)	2651 (7)	14333 (7)
14-20-S	100	110	18.85	18.85	0.06	-12.86	129 (7)	1543 (7)	8345 (7)
14-21-S	100	110	18.85	18.85	0.54	-6.70	48 (5)	577 (5)	3119 (5)
14-22-S	100	110	18.85	18.85	1.19	-1.26	6 (5)	381 (5)	288 (5)
15-1-S	100	110	15.71	15.71	4.60	-4.19	31 (5)	2187 (5)	1980 (5)
15-2-S	100	110	15.71	15.71	5.85	-7.01	59 (5)	4169 (5)	3348 (5)
15-3-S	100	110	15.71	15.71	2.66	-10.07	68 (5)	1306 (5)	4840 (5)
15-4-S	100	110	15.71	15.71	1.64	-27.77	248 (5)	2914 (5)	17530 (5)
15-5-S	100	110	15.71	15.71	6.51	-17.38	364 (8)	6209 (8)	25774 (8)
15-6-S	100	110	15.71	15.71	19.45	-3.52	186 (5)	13189 (5)	2192 (5)
15-7-S	100	110	15.71	15.71	61.14	0.00	529 (5)	37438 (5)	6223 (5)
15-8-S	100	110	15.71	15.71	15.73	-3.22	129 (6)	9151 (6)	8810 (6)

APPALTATORE:	TELESE S.c.a r.l. <small>Consorzio Telese Società Consortile a Responsabilità Limitata</small>	
PROGETTAZIONE:		
Mandataria:	Mandante:	
SYSTRA S.A.	SWS Engineering S.p.A.	SYSTRA-SOTECNI S.p.A.
Relazione di calcolo		
IF2R.2.2.E.ZZ.CL.TR.16.0.5.008.A.DOCX		

ITINERARIO NAPOLI – BARI
RADDOPPIO TRATTA CANCELLO-BENEVENTO
II LOTTO FUNZIONALE FRASSO TELESINO – VITULANO
2° SUBLOTTO TELESE – SAN LORENZO
PROGETTO ESECUTIVO

COMMESSA	LOTTO	CODIFICA	DOCUMENTO	REV.	FOGLIO
IF2R	2.2.E.ZZ	CL	TR.16.0.5.008	A	65 di 118

Is	B [cm]	H [cm]	Afi [cmq]	Afs [cmq]	Mp [kNm]	Mn [kNm]	sc [kPa]	ofi [kPa]	ofs [kPa]
15-9-S	100	110	15.71	15.71	12.09	-1.41	107 (7)	1262 (7)	7595 (7)
15-10-S	100	110	15.71	15.71	8.41	-4.18	136 (7)	1604 (7)	9652 (7)
15-11-S	100	110	15.71	15.71	10.16	-1.89	97 (7)	1145 (7)	6890 (7)
15-12-S	100	110	15.71	15.71	13.86	-0.22	57 (7)	2956 (7)	4014 (7)
15-13-S	100	110	15.71	15.71	21.60	-0.02	87 (7)	6171 (7)	1026 (7)
15-14-S	100	110	15.71	15.71	26.22	0.00	150 (7)	10599 (7)	1762 (7)
15-15-S	100	110	15.71	15.71	29.11	0.00	184 (6)	13019 (6)	2164 (6)
15-16-S	100	110	15.71	15.71	27.16	-0.11	167 (6)	11849 (6)	1969 (6)
15-17-S	100	110	15.71	15.71	23.66	-1.07	139 (6)	9823 (6)	1633 (6)
15-18-S	100	110	15.71	15.71	2.94	-11.11	115 (7)	2931 (7)	8170 (7)
15-19-S	100	110	15.71	15.71	1.11	-23.01	242 (7)	2849 (7)	17143 (7)
15-20-S	100	110	15.71	15.71	0.06	-12.86	141 (7)	1659 (7)	9981 (7)
15-21-S	100	110	15.71	15.71	0.54	-6.70	53 (5)	620 (5)	3730 (5)
15-22-S	100	110	15.71	15.71	1.19	-1.26	6 (5)	455 (5)	345 (5)
16-1-S	100	110	15.71	15.71	0.79	-4.60	31 (5)	378 (5)	2209 (5)
16-2-S	100	110	15.71	15.71	0.34	-6.80	44 (5)	515 (5)	3097 (5)
16-3-S	100	110	15.71	15.71	0.60	-6.96	74 (5)	866 (5)	5213 (5)
16-4-S	100	110	15.71	15.71	4.90	-1.86	44 (8)	3111 (8)	2947 (8)
16-5-S	100	110	15.71	15.71	13.96	0.00	125 (8)	8868 (8)	1474 (8)
16-6-S	100	110	15.71	15.71	31.24	0.00	268 (5)	18986 (5)	3156 (5)
16-7-S	100	110	15.71	15.71	55.21	0.00	453 (5)	32092 (5)	5334 (5)
16-8-S	100	110	15.71	15.71	51.84	-1.21	304 (6)	21540 (6)	5673 (6)
16-9-S	100	110	15.71	15.71	35.24	-3.91	161 (6)	11402 (6)	5565 (6)
16-10-S	100	110	15.71	15.71	0.52	-57.31	412 (5)	4848 (5)	29169 (5)
16-11-S	100	110	15.71	15.71	0.01	-43.85	266 (5)	3129 (5)	18826 (5)
16-12-S	100	110	15.71	15.71	2.50	-6.85	101 (6)	1191 (6)	7168 (6)
16-13-S	100	110	15.71	15.71	16.66	-0.02	36 (7)	2563 (7)	426 (7)
16-14-S	100	110	15.71	15.71	22.78	0.00	116 (7)	8183 (7)	1360 (7)
16-15-S	100	110	15.71	15.71	23.52	0.00	145 (6)	10276 (6)	1708 (6)
16-16-S	100	110	15.71	15.71	19.88	-0.07	119 (6)	8402 (6)	1397 (6)
16-17-S	100	110	15.71	15.71	11.00	-0.71	78 (7)	5550 (7)	1350 (7)
16-18-S	100	110	15.71	15.71	6.17	-1.35	48 (7)	3385 (7)	2524 (7)
16-19-S	100	110	15.71	15.71	2.62	-2.32	51 (7)	1647 (7)	3632 (7)
16-20-S	100	110	15.71	15.71	0.70	-2.56	49 (7)	607 (7)	3454 (7)
16-21-S	100	110	15.71	15.71	0.08	-1.83	21 (7)	248 (7)	1490 (7)
16-22-S	100	110	15.71	15.71	0.27	-0.64	3 (7)	237 (7)	244 (7)
17-1-S	100	110	15.71	15.71	8.19	-1.69	55 (5)	3899 (5)	753 (5)
17-2-S	100	110	15.71	15.71	7.41	-3.58	166 (8)	11774 (8)	2272 (8)
17-3-S	100	110	15.71	15.71	4.66	-10.34	76 (5)	3149 (5)	5392 (5)
17-4-S	100	110	15.71	15.71	0.68	-50.87	375 (5)	4415 (5)	26564 (5)
17-5-S	100	110	15.71	15.71	0.99	-47.60	383 (5)	4503 (5)	27094 (5)
17-6-S	100	110	15.71	15.71	9.19	-6.72	118 (5)	8319 (5)	1383 (5)
17-7-S	100	110	15.71	15.71	66.16	0.00	594 (8)	42041 (8)	6988 (8)
17-8-S	100	110	15.71	15.71	0.00	-39.67	202 (5)	2379 (5)	14312 (5)
17-9-S	100	110	15.71	15.71	7.59	-0.18	128 (7)	1507 (7)	9066 (7)
17-10-S	100	110	15.71	15.71	9.10	0.00	91 (7)	1066 (7)	6412 (7)
17-11-S	100	110	15.71	15.71	12.70	0.00	39 (7)	458 (7)	2754 (7)
17-12-S	100	110	15.71	15.71	16.80	0.00	31 (7)	2208 (7)	1741 (7)
17-13-S	100	110	15.71	15.71	22.30	0.00	96 (7)	6774 (7)	1126 (7)
17-14-S	100	110	15.71	15.71	26.59	-0.03	156 (6)	11067 (6)	1839 (6)
17-15-S	100	110	15.71	15.71	32.35	-0.07	207 (6)	14622 (6)	2431 (6)
17-16-S	100	110	15.71	15.71	33.64	-0.47	211 (6)	14960 (6)	2487 (6)
17-17-S	100	110	15.71	15.71	33.84	-1.80	200 (5)	14162 (5)	2354 (5)
17-18-S	100	110	15.71	15.71	0.94	-21.20	170 (7)	3201 (7)	12062 (7)
17-19-S	100	110	15.71	15.71	0.49	-43.38	363 (7)	4272 (7)	25700 (7)
17-20-S	100	110	15.71	15.71	0.30	-23.58	202 (5)	2371 (5)	14264 (5)
17-21-S	100	110	15.71	15.71	0.00	-12.75	89 (5)	1042 (5)	6271 (5)
17-22-S	100	110	15.71	15.71	0.85	-2.17	11 (5)	798 (5)	407 (5)
18-1-S	100	110	15.71	15.71	0.33	-5.15	36 (5)	420 (5)	2529 (5)
18-2-S	100	110	15.71	15.71	0.49	-4.86	29 (5)	347 (5)	2087 (5)
18-3-S	100	110	15.71	15.71	1.17	-1.70	25 (8)	745 (8)	1801 (8)
18-4-S	100	110	15.71	15.71	6.05	0.00	54 (8)	3844 (8)	639 (8)
18-5-S	100	110	15.71	15.71	17.09	0.00	153 (8)	10863 (8)	1806 (8)
18-6-S	100	110	15.71	15.71	34.35	0.00	291 (5)	20622 (5)	3428 (5)
18-7-S	100	110	15.71	15.71	54.44	0.00	444 (5)	31395 (5)	5218 (5)
18-8-S	100	110	15.71	15.71	49.30	-0.61	254 (6)	17960 (6)	3533 (6)
18-9-S	100	110	15.71	15.71	18.10	-16.48	204 (5)	14403 (5)	6881 (5)
18-10-S	100	110	15.71	15.71	0.19	-70.76	527 (5)	6205 (5)	37329 (5)
18-11-S	100	110	15.71	15.71	0.00	-54.96	357 (5)	4196 (5)	25242 (5)
18-12-S	100	110	15.71	15.71	0.00	-33.49	155 (5)	1826 (5)	10985 (5)
18-13-S	100	110	15.71	15.71	13.04	-0.52	29 (7)	2087 (7)	1417 (7)
18-14-S	100	110	15.71	15.71	20.39	-0.20	99 (7)	7002 (7)	1164 (7)
18-15-S	100	110	15.71	15.71	21.35	-0.10	131 (7)	9265 (7)	1540 (7)
18-16-S	100	110	15.71	15.71	19.47	-0.12	118 (6)	8380 (6)	1393 (6)
18-17-S	100	110	15.71	15.71	10.35	-0.53	93 (8)	6579 (8)	1689 (8)
18-18-S	100	110	15.71	15.71	6.35	-0.63	57 (8)	4033 (8)	2010 (8)
18-19-S	100	110	15.71	15.71	3.05	-0.79	35 (8)	1936 (8)	2495 (8)
18-20-S	100	110	15.71	15.71	2.92	-0.47	15 (6)	681 (6)	1094 (6)
18-21-S	100	110	15.71	15.71	0.20	-0.95	10 (7)	246 (7)	712 (7)
18-22-S	100	110	15.71	15.71	0.05	-0.90	6 (7)	106 (7)	397 (7)
19-1-S	100	110	15.71	15.71	6.58	-2.65	44 (5)	3079 (5)	1218 (5)

APPALTATORE:

TELESE S.c.a r.l.

Consorzio Telese Società Consortile a Responsabilità Limitata

PROGETTAZIONE:

Mandataria:

Mandante:

SYSTRA S.A. SWS Engineering S.p.A. SYSTRA-SOTECNI S.p.A.

Relazione di calcolo

IF2R.2.2.E.ZZ.CL.TR.16.0.5.008.A.DOCX

ITINERARIO NAPOLI – BARI
RADDOPPIO TRATTA CANCELLO-BENEVENTO
II LOTTO FUNZIONALE FRASSO TELESINO – VITULANO
2° SUBLOTTO TELESE – SAN LORENZO
PROGETTO ESECUTIVO

COMMESSA	LOTTO	CODIFICA	DOCUMENTO	REV.	FOGLIO
IF2R	2.2.E.ZZ	CL	TR.16.0.5.008	A	66 di 118

Is	B [cm]	H [cm]	Afi [cmq]	Afs [cmq]	Mp [kNm]	Mn [kNm]	σc [kPa]	σfi [kPa]	σfs [kPa]
19-2-S	100	110	15.71	15.71	9.35	-5.30	110 (6)	7808 (6)	2943 (6)
19-3-S	100	110	15.71	15.71	4.65	-9.63	67 (5)	2066 (5)	4774 (5)
19-4-S	100	110	15.71	15.71	0.94	-44.28	324 (5)	3810 (5)	22921 (5)
19-5-S	100	110	15.71	15.71	3.23	-41.76	444 (5)	5443 (5)	31393 (5)
19-6-S	100	110	15.71	15.71	13.75	-6.89	143 (5)	10136 (5)	1685 (5)
19-7-S	100	110	15.71	15.71	65.21	0.00	581 (5)	41117 (5)	6834 (5)
19-8-S	100	110	15.71	15.71	0.30	-64.20	415 (5)	4884 (5)	29380 (5)
19-9-S	100	110	15.71	15.71	0.06	-52.78	330 (5)	3885 (5)	23372 (5)
19-10-S	100	110	15.71	15.71	0.36	-38.85	227 (5)	2665 (5)	16032 (5)
19-11-S	100	110	15.71	15.71	5.57	-2.93	128 (7)	1508 (7)	9074 (7)
19-12-S	100	110	15.71	15.71	11.32	-0.14	46 (7)	2495 (7)	3244 (7)
19-13-S	100	110	15.71	15.71	20.47	-0.04	82 (7)	5826 (7)	968 (7)
19-14-S	100	110	15.71	15.71	26.65	-0.04	159 (6)	11275 (6)	1874 (6)
19-15-S	100	110	15.71	15.71	32.42	-0.05	209 (6)	14796 (6)	2459 (6)
19-16-S	100	110	15.71	15.71	33.31	-0.13	210 (6)	14890 (6)	2475 (6)
19-17-S	100	110	15.71	15.71	32.46	-0.73	193 (5)	13656 (5)	2270 (5)
19-18-S	100	110	15.71	15.71	1.16	-16.73	133 (7)	1929 (7)	9426 (7)
19-19-S	100	110	15.71	15.71	0.16	-36.42	305 (7)	3585 (7)	21570 (7)
19-20-S	100	110	15.71	15.71	0.27	-19.52	169 (5)	1994 (5)	11995 (5)
19-21-S	100	110	15.71	15.71	0.13	-10.70	75 (5)	881 (5)	5298 (5)
19-22-S	100	110	15.71	15.71	0.88	-1.87	12 (5)	834 (5)	359 (5)
20-1-S	100	110	15.71	15.71	1.03	-3.88	35 (5)	2509 (5)	1814 (5)
20-2-S	100	110	15.71	15.71	0.02	-7.15	49 (5)	575 (5)	3460 (5)
20-3-S	100	110	15.71	15.71	0.07	-10.23	87 (5)	1025 (5)	6164 (5)
20-4-S	100	110	15.71	15.71	1.54	-11.40	124 (5)	1503 (5)	8759 (5)
20-5-S	100	110	15.71	15.71	7.67	-4.52	203 (8)	6096 (8)	14352 (8)
20-6-S	100	110	15.71	15.71	23.14	-0.39	208 (8)	14703 (8)	2444 (8)
20-7-S	100	110	15.71	15.71	54.22	0.00	455 (5)	32198 (5)	5352 (5)
20-8-S	100	110	15.71	15.71	0.00	-102.13	737 (5)	8669 (5)	52157 (5)
20-9-S	100	110	15.71	15.71	0.00	-68.01	460 (5)	5414 (5)	32572 (5)
20-10-S	100	110	15.71	15.71	0.00	-43.11	262 (5)	3079 (5)	18524 (5)
20-11-S	100	110	15.71	15.71	6.98	-3.36	118 (7)	1392 (7)	8376 (7)
20-12-S	100	110	15.71	15.71	17.21	-0.57	58 (7)	4105 (7)	2040 (7)
20-13-S	100	110	15.71	15.71	24.06	-0.29	123 (7)	8713 (7)	1448 (7)
20-14-S	100	110	15.71	15.71	27.90	-0.34	173 (6)	12273 (6)	2040 (6)
20-15-S	100	110	15.71	15.71	29.90	-0.47	194 (6)	13726 (6)	2282 (6)
20-16-S	100	110	15.71	15.71	25.11	-0.87	158 (6)	11170 (6)	1857 (6)
20-17-S	100	110	15.71	15.71	18.32	-1.67	106 (6)	7484 (6)	1404 (6)
20-18-S	100	110	15.71	15.71	5.89	-4.84	62 (7)	4377 (7)	3017 (7)
20-19-S	100	110	15.71	15.71	2.39	-8.36	72 (7)	2133 (7)	5074 (7)
20-20-S	100	110	15.71	15.71	0.54	-5.95	48 (7)	981 (7)	3428 (7)
20-21-S	100	110	15.71	15.71	0.06	-3.08	24 (7)	284 (7)	1712 (7)
20-22-S	100	110	15.71	15.71	1.70	-0.35	11 (5)	778 (5)	129 (5)

Pali in c.a.

Ip	Is	Ar [cmq]	σc [kPa]	σf [kPa]	τc [kPa]	σsf [kPa]
1	1	40.72	2734	32796		
1	2	40.72	2409	29306		
1	3	40.72	2100	26020		
1	4	40.72	1817	22947		
1	5	40.72	1571	20210		
1	6	40.72	1367	17890		
1	7	40.72	1218	16366		
1	8	40.72	1120	15203		
1	9	40.72	1029	14117		
1	10	40.72	944	13104		
1	11	40.72	865	12266		
1	12	40.72	818	11750		
1	13	40.72	777	11271		
1	14	40.72	740	10828		
1	15	40.72	705	10419		
1	16	40.72	713	10187		
1	17	40.72	775	10929		
1	18	40.72	831	11602		
1	19	40.72	881	12212		
1	20	40.72	927	12760		
1	21	40.72	967	13250		
1	22	40.72	1003	13685		
1	23	40.72	1035	14068		
1	24	40.72	1062	14402		
1	25	40.72	1086	14690		
1	26	40.72	1106	14935		
1	27	40.72	1122	15139		
1	28	40.72	1136	15305		
1	29	40.72	1146	15437		
1	30	40.72	1154	15535		
1	31	40.72	1160	15603		

APPALTATORE:

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**ITINERARIO NAPOLI – BARI
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II LOTTO FUNZIONALE FRASSO TELESINO – VITULANO
2° SUBLOTTO TELESE – SAN LORENZO**

PROGETTAZIONE:

Mandatario:

Mandante:

SYSTRA S.A. SWS Engineering S.p.A. SYSTRA-SOTECNI S.p.A.

PROGETTO ESECUTIVO

Relazione di calcolo

IF2R.2.2.E.ZZ.CL.TR.16.0.5.008.A.DOCX

COMMESSA	LOTTO	CODIFICA	DOCUMENTO	REV.	FOGLIO
IF2R	2.2.E.ZZ	CL	TR.16.0.5.008	A	67 di 118

Ip	Is	Ar [cmq]	σ_c [kPa]	σ_f [kPa]	τ_c [kPa]	σ_{sf} [kPa]
1	32	40.72	1162	15642		
1	33	40.72	1163	15656		
1	34	40.72	1162	15646		
1	35	40.72	1159	15613		
1	36	40.72	1154	15562		
1	37	40.72	1148	15492		
1	38	40.72	1140	15406		
1	39	40.72	1132	15305		
1	40	40.72	1122	15191		
1	41	40.72	1111	15066		
1	42	40.72	1099	14931		
1	43	40.72	1087	14788		
1	44	40.72	1074	14640		
1	45	40.72	1061	14486		
1	46	40.72	1048	14329		
1	47	40.72	1034	14167		
1	48	40.72	1020	14004		
1	49	40.72	1006	13838		
1	50	40.72	992	13672		
1	51	40.72	977	13504		
1	52	40.72	963	13337		
1	53	40.72	949	13178		
1	54	40.72	935	13057		
1	55	40.72	921	12936		
1	56	40.72	907	12816		
1	57	40.72	893	12698		
1	58	40.72	883	12581		
1	59	40.72	873	12465		
1	60	40.72	863	12352		
1	61	40.72	854	12241		
1	62	40.72	844	12132		
1	63	40.72	835	12025		
1	64	40.72	827	11922		
1	65	40.72	818	11821		
1	66	40.72	810	11723		
1	67	40.72	802	11653		
1	68	40.72	794	11604		
1	69	40.72	786	11556		
1	70	40.72	780	11509		
1	71	40.72	776	11464		
1	72	40.72	772	11421		
1	73	40.72	769	11379		
1	74	40.72	765	11338		
1	75	40.72	762	11299		
1	76	40.72	759	11262		
1	77	40.72	756	11226		
1	78	40.72	753	11192		
1	79	40.72	750	11160		
1	80	40.72	747	11129		
1	81	40.72	745	11099		
1	82	40.72	742	11072		
1	83	40.72	740	11045		
1	84	40.72	738	11020		
1	85	40.72	736	10997		
1	86	40.72	734	10974		
1	87	40.72	733	10954		
1	88	40.72	731	10934		
1	89	40.72	729	10916		
1	90	40.72	728	10899		
1	91	40.72	727	10883		
1	92	40.72	725	10869		
1	93	40.72	724	10856		
1	94	40.72	723	10843		
1	95	40.72	723	10832		
1	96	40.72	722	10822		
1	97	40.72	721	10813		
1	98	40.72	720	10805		
1	99	40.72	720	10797		
1	100	40.72	719	10791		
1	101	40.72	719	10785		
2	1	62.83	2370	29811		
2	2	62.83	2136	27218		
2	3	62.83	1920	24789		
2	4	62.83	1727	22587		
2	5	62.83	1561	20649		
2	6	62.83	1419	18980		
2	7	62.83	1297	17532		
2	8	62.83	1184	16191		
2	9	62.83	1078	14941		
2	10	62.83	995	13926		
2	11	62.83	921	13050		

APPALTATORE:

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II LOTTO FUNZIONALE FRASSO TELESINO – VITULANO
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PROGETTAZIONE:

Mandataria:

Mandante:

SYSTRA S.A. SWS Engineering S.p.A. SYSTRA-SOTECNI S.p.A.

PROGETTO ESECUTIVO

Relazione di calcolo

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COMMESSA	LOTTO	CODIFICA	DOCUMENTO	REV.	FOGLIO
IF2R	2.2.E.ZZ	CL	TR.16.0.5.008	A	68 di 118

Ip	Is	Ar [cmq]	σ_c [kPa]	σ_f [kPa]	τ_c [kPa]	σ_{sf} [kPa]
2	12	62.83	852	12237		
2	13	62.83	789	11485		
2	14	62.83	738	10817		
2	15	62.83	784	11460		
2	16	62.83	847	12215		
2	17	62.83	904	12904		
2	18	62.83	956	13530		
2	19	62.83	1003	14096		
2	20	62.83	1045	14604		
2	21	62.83	1083	15059		
2	22	62.83	1116	15462		
2	23	62.83	1146	15817		
2	24	62.83	1171	16126		
2	25	62.83	1193	16392		
2	26	62.83	1212	16618		
2	27	62.83	1227	16806		
2	28	62.83	1240	16959		
2	29	62.83	1249	17079		
2	30	62.83	1257	17169		
2	31	62.83	1261	17230		
2	32	62.83	1264	17264		
2	33	62.83	1264	17275		
2	34	62.83	1263	17263		
2	35	62.83	1260	17231		
2	36	62.83	1256	17181		
2	37	62.83	1250	17113		
2	38	62.83	1242	17031		
2	39	62.83	1234	16934		
2	40	62.83	1225	16826		
2	41	62.83	1214	16707		
2	42	62.83	1203	16578		
2	43	62.83	1192	16443		
2	44	62.83	1180	16302		
2	45	62.83	1167	16156		
2	46	62.83	1154	16006		
2	47	62.83	1141	15853		
2	48	62.83	1128	15697		
2	49	62.83	1115	15540		
2	50	62.83	1101	15381		
2	51	62.83	1088	15222		
2	52	62.83	1074	15063		
2	53	62.83	1061	14904		
2	54	62.83	1047	14747		
2	55	62.83	1034	14590		
2	56	62.83	1021	14436		
2	57	62.83	1008	14283		
2	58	62.83	995	14133		
2	59	62.83	982	13985		
2	60	62.83	970	13841		
2	61	62.83	958	13699		
2	62	62.83	946	13561		
2	63	62.83	935	13427		
2	64	62.83	924	13296		
2	65	62.83	913	13169		
2	66	62.83	903	13046		
2	67	62.83	893	12927		
2	68	62.83	883	12812		
2	69	62.83	874	12701		
2	70	62.83	865	12594		
2	71	62.83	856	12492		
2	72	62.83	848	12394		
2	73	62.83	840	12300		
2	74	62.83	832	12210		
2	75	62.83	825	12124		
2	76	62.83	818	12042		
2	77	62.83	811	11964		
2	78	62.83	805	11890		
2	79	62.83	799	11821		
2	80	62.83	794	11755		
2	81	62.83	789	11692		
2	82	62.83	784	11634		
2	83	62.83	779	11579		
2	84	62.83	775	11527		
2	85	62.83	771	11479		
2	86	62.83	767	11434		
2	87	62.83	764	11393		
2	88	62.83	760	11354		
2	89	62.83	757	11318		
2	90	62.83	755	11286		
2	91	62.83	752	11256		
2	92	62.83	750	11228		

APPALTATORE:

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II LOTTO FUNZIONALE FRASSO TELESINO – VITULANO
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PROGETTAZIONE:

Mandataria:

Mandante:

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PROGETTO ESECUTIVO

Relazione di calcolo

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COMMESSA	LOTTO	CODIFICA	DOCUMENTO	REV.	FOGLIO
IF2R	2.2.E.ZZ	CL	TR.16.0.5.008	A	69 di 118

Ip	Is	Ar [cmq]	σ_c [kPa]	σ_f [kPa]	τ_c [kPa]	σ_{sf} [kPa]
2	93	62.83	748	11203		
2	94	62.83	746	11181		
2	95	62.83	745	11161		
2	96	62.83	743	11143		
2	97	62.83	742	11127		
2	98	62.83	741	11113		
2	99	62.83	740	11101		
2	100	62.83	739	11091		
2	101	62.83	739	11082		
3	1	62.83	2406	31074		
3	2	62.83	2206	28787		
3	3	62.83	2024	26690		
3	4	62.83	1863	24806		
3	5	62.83	1722	23131		
3	6	62.83	1593	21601		
3	7	62.83	1472	20167		
3	8	62.83	1359	18825		
3	9	62.83	1254	17575		
3	10	62.83	1156	16411		
3	11	62.83	1065	15332		
3	12	62.83	981	14334		
3	13	62.83	903	13414		
3	14	62.83	890	13265		
3	15	62.83	959	14089		
3	16	62.83	1022	14843		
3	17	62.83	1079	15530		
3	18	62.83	1131	16155		
3	19	62.83	1178	16719		
3	20	62.83	1220	17226		
3	21	62.83	1258	17679		
3	22	62.83	1291	18081		
3	23	62.83	1320	18434		
3	24	62.83	1346	18741		
3	25	62.83	1367	19006		
3	26	62.83	1386	19230		
3	27	62.83	1401	19416		
3	28	62.83	1414	19567		
3	29	62.83	1423	19685		
3	30	62.83	1430	19772		
3	31	62.83	1435	19830		
3	32	62.83	1437	19863		
3	33	62.83	1438	19871		
3	34	62.83	1436	19857		
3	35	62.83	1433	19822		
3	36	62.83	1428	19769		
3	37	62.83	1422	19699		
3	38	62.83	1415	19613		
3	39	62.83	1406	19514		
3	40	62.83	1396	19403		
3	41	62.83	1386	19280		
3	42	62.83	1375	19148		
3	43	62.83	1363	19010		
3	44	62.83	1351	18865		
3	45	62.83	1338	18716		
3	46	62.83	1325	18563		
3	47	62.83	1312	18406		
3	48	62.83	1298	18247		
3	49	62.83	1284	18086		
3	50	62.83	1271	17924		
3	51	62.83	1257	17761		
3	52	62.83	1243	17598		
3	53	62.83	1229	17435		
3	54	62.83	1216	17273		
3	55	62.83	1202	17112		
3	56	62.83	1189	16953		
3	57	62.83	1175	16796		
3	58	62.83	1162	16642		
3	59	62.83	1149	16490		
3	60	62.83	1137	16341		
3	61	62.83	1125	16194		
3	62	62.83	1113	16052		
3	63	62.83	1101	15912		
3	64	62.83	1089	15777		
3	65	62.83	1078	15645		
3	66	62.83	1068	15516		
3	67	62.83	1057	15392		
3	68	62.83	1047	15272		
3	69	62.83	1037	15156		
3	70	62.83	1028	15044		
3	71	62.83	1019	14936		
3	72	62.83	1010	14832		

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II LOTTO FUNZIONALE FRASSO TELESINO – VITULANO
2° SUBLOTTO TELESE – SAN LORENZO

PROGETTAZIONE:

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COMMESSA	LOTTO	CODIFICA	DOCUMENTO	REV.	FOGLIO
IF2R	2.2.E.ZZ	CL	TR.16.0.5.008	A	70 di 118

Ip	Is	Ar [cmq]	σ_c [kPa]	σ_{tf} [kPa]	τ_c [kPa]	σ_{stf} [kPa]
3	73	62.83	1002	14732		
3	74	62.83	994	14636		
3	75	62.83	986	14545		
3	76	62.83	979	14457		
3	77	62.83	972	14373		
3	78	62.83	965	14294		
3	79	62.83	959	14218		
3	80	62.83	953	14145		
3	81	62.83	948	14077		
3	82	62.83	942	14012		
3	83	62.83	937	13951		
3	84	62.83	932	13892		
3	85	62.83	928	13838		
3	86	62.83	924	13786		
3	87	62.83	920	13738		
3	88	62.83	916	13692		
3	89	62.83	913	13650		
3	90	62.83	910	13610		
3	91	62.83	907	13573		
3	92	62.83	904	13538		
3	93	62.83	902	13506		
3	94	62.83	899	13477		
3	95	62.83	897	13449		
3	96	62.83	895	13424		
3	97	62.83	894	13400		
3	98	62.83	892	13379		
3	99	62.83	891	13359		
3	100	62.83	889	13340		
3	101	62.83	888	13324		

Combinazioni SLEF

Paramento

Tensione massima di compressione nel calcestruzzo 33200 [kPa]
Tensione massima di trazione dell'acciaio 450000 [kPa]

n°	B [cm]	H [cm]	Afi [cmq]	Afs [cmq]	M [kNm]	N [kN]	σ_c [kPa]	σ_{fi} [kPa]	σ_{fs} [kPa]
1	100	70	10.05	12.72	1.50	5.00	30 (8)	422 (8)	390 (8)
2	100	70	10.05	12.72	2.02	6.72	41 (8)	575 (8)	527 (8)
3	100	70	10.05	12.72	2.55	8.43	52 (8)	729 (8)	663 (8)
4	100	70	10.05	12.72	3.07	10.15	62 (8)	883 (8)	800 (8)
5	100	70	10.05	12.72	3.60	11.86	73 (8)	1037 (8)	937 (8)
6	100	70	10.05	12.72	4.12	13.58	84 (8)	1191 (8)	1073 (8)
7	100	70	10.05	12.72	4.65	15.29	95 (8)	1345 (8)	1210 (8)
8	100	70	10.05	12.72	5.17	17.01	105 (8)	1499 (8)	1346 (8)
9	100	70	10.05	12.72	5.70	18.72	116 (8)	1653 (8)	1483 (8)
10	100	70	10.05	12.72	6.22	20.44	127 (8)	1807 (8)	1620 (8)
11	100	70	10.05	12.72	6.75	22.16	137 (8)	1960 (8)	1756 (8)
12	100	70	10.05	12.72	7.27	23.87	148 (8)	2114 (8)	1893 (8)
13	100	70	10.05	12.72	7.80	25.59	159 (8)	2268 (8)	2030 (8)
14	100	70	10.05	12.72	8.32	27.30	169 (8)	2422 (8)	2166 (8)
15	100	70	10.05	12.72	8.85	29.02	180 (8)	2576 (8)	2303 (8)
16	100	70	10.05	12.72	9.37	30.73	191 (8)	2730 (8)	2439 (8)
17	100	70	10.05	12.72	9.90	32.45	201 (8)	2884 (8)	2576 (8)
18	100	70	10.05	12.72	10.42	34.17	212 (8)	3038 (8)	2713 (8)
19	100	70	10.05	12.72	10.95	35.88	223 (8)	3192 (8)	2849 (8)
20	100	70	10.05	12.72	11.47	37.60	233 (8)	3346 (8)	2986 (8)
21	100	70	10.05	12.72	12.00	39.31	244 (8)	3499 (8)	3122 (8)
22	100	70	10.05	12.72	12.52	41.03	255 (8)	3653 (8)	3259 (8)
23	100	70	10.05	12.72	13.05	42.74	265 (8)	3807 (8)	3396 (8)
24	100	70	10.05	12.72	13.57	44.46	276 (8)	3961 (8)	3532 (8)
25	100	70	10.05	12.72	14.10	46.17	287 (8)	4115 (8)	3669 (8)
26	100	70	10.05	12.72	14.62	47.89	298 (8)	4269 (8)	3806 (8)
27	100	70	10.05	12.72	15.15	49.61	308 (8)	4423 (8)	3942 (8)
28	100	70	10.05	12.72	15.67	51.32	319 (8)	4577 (8)	4079 (8)
29	100	70	10.05	12.72	16.20	53.04	330 (8)	4731 (8)	4215 (8)
30	100	70	10.05	12.72	16.74	54.75	341 (8)	4906 (8)	4358 (8)
31	100	70	10.05	12.72	17.34	56.47	353 (8)	5127 (8)	4515 (8)
32	100	101	10.05	12.72	25.07	59.49	257 (8)	3965 (8)	3463 (8)
33	100	101	10.05	12.72	25.85	61.96	265 (8)	3986 (8)	3564 (8)
34	100	101	10.05	12.72	26.88	64.44	275 (8)	4145 (8)	3706 (8)
35	100	101	10.05	12.72	28.09	66.91	288 (8)	4401 (8)	3878 (8)
36	100	101	10.05	12.72	29.40	69.39	303 (8)	4715 (8)	4066 (8)

APPALTATORE:

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PROGETTAZIONE:

Mandataria:

Mandante:

SYSTRA S.A.

SWS Engineering S.p.A.

SYSTRA-SOTECNI S.p.A.

ITINERARIO NAPOLI – BARI

RADDOPPIO TRATTA CANCELLO-BENEVENTO

II LOTTO FUNZIONALE FRASSO TELESINO – VITULANO

2° SUBLOTTO TELESE – SAN LORENZO

PROGETTO ESECUTIVO

Relazione di calcolo

IF2R.2.2.E.ZZ.CL.TR.16.0.5.008.A.DOCX

COMMESSA

LOTTO

CODIFICA

DOCUMENTO

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n°	B [cm]	H [cm]	Afi [cmq]	Afs [cmq]	M [kNm]	N [kN]	σc [kPa]	σfi [kPa]	σfs [kPa]
37	100	101	10.05	12.72	30.76	71.86	318 (8)	5057 (8)	4263 (8)
38	100	101	10.05	12.72	32.17	74.34	333 (8)	5430 (8)	4467 (8)
39	100	101	10.05	12.72	33.65	76.81	350 (8)	5842 (8)	4682 (8)
40	100	101	10.05	12.72	35.19	79.29	367 (8)	6302 (8)	4909 (8)
41	100	101	10.05	12.72	36.82	81.76	386 (8)	6817 (8)	5150 (8)
42	100	101	10.05	12.72	38.55	84.24	406 (8)	7393 (8)	5406 (8)
43	100	101	10.05	12.72	40.36	86.71	428 (8)	8036 (8)	5679 (8)
44	100	101	10.05	12.72	42.28	89.19	451 (8)	8753 (8)	5967 (8)
45	100	101	10.05	12.72	44.31	91.66	475 (8)	9550 (8)	6274 (8)
46	100	101	10.05	12.72	46.45	94.14	501 (8)	10432 (8)	6599 (8)
47	100	101	10.05	12.72	48.71	96.61	529 (8)	11406 (8)	6943 (8)
48	100	101	10.05	12.72	51.10	99.09	558 (8)	12479 (8)	7306 (8)
49	100	101	10.05	12.72	53.61	101.56	589 (8)	13656 (8)	7690 (8)
50	100	101	10.05	12.72	56.26	104.04	622 (8)	14942 (8)	8094 (8)
51	100	101	10.05	12.72	59.05	106.51	657 (8)	16344 (8)	8519 (8)
52	100	101	10.05	12.72	61.98	108.99	694 (8)	17868 (8)	8966 (8)

Piastra fondazione

Tensione massima di compressione nel calcestruzzo

17430

[kPa]

Tensione massima di trazione dell'acciaio

1255271

[kPa]

Is	B [cm]	H [cm]	Afi [cmq]	Afs [cmq]	Mp [kNm]	Mn [kNm]	σc [kPa]	σfi [kPa]	σfs [kPa]
1-1-P	69	110	12.57	12.57	0.90	-0.15	11 (8)	714 (8)	305 (8)
1-2-P	69	110	12.57	12.57	0.79	-1.73	23 (5)	741 (5)	1509 (5)
1-3-P	69	110	12.57	12.57	0.04	-6.58	70 (5)	831 (5)	4601 (5)
1-4-P	69	110	12.57	12.57	0.00	-17.74	184 (5)	2197 (5)	12167 (5)
1-5-P	69	110	12.57	12.57	0.06	-27.83	295 (5)	3523 (5)	19516 (5)
1-6-P	69	110	12.57	12.57	0.02	-32.84	352 (5)	4206 (5)	23297 (5)
1-7-P	69	110	12.57	12.57	0.06	-18.91	197 (5)	2357 (5)	13055 (5)
1-8-P	69	110	12.57	12.57	1.11	-4.65	56 (8)	2212 (8)	3703 (8)
1-9-P	69	110	12.57	12.57	10.86	-0.19	113 (5)	7482 (5)	1351 (5)
1-10-P	69	110	12.57	12.57	14.65	-0.01	155 (5)	10261 (5)	1852 (5)
1-11-P	69	110	12.57	12.57	15.83	0.00	168 (5)	11108 (5)	2005 (5)
1-12-P	69	110	12.57	12.57	12.94	-0.12	136 (5)	8984 (5)	1622 (5)
1-13-P	69	110	12.57	12.57	3.80	-2.56	38 (5)	2485 (5)	1453 (5)
1-14-P	69	110	12.57	12.57	0.09	-12.27	125 (5)	1492 (5)	8266 (5)
1-15-P	69	110	12.57	12.57	0.06	-24.41	261 (5)	3111 (5)	17236 (5)
1-16-P	69	110	12.57	12.57	0.10	-21.96	233 (5)	2783 (5)	15415 (5)
1-17-P	69	110	12.57	12.57	1.21	-10.86	107 (5)	1742 (5)	7065 (5)
1-18-P	69	110	12.57	12.57	5.58	-1.37	57 (5)	3778 (5)	722 (5)
1-19-P	69	110	12.57	12.57	13.91	-0.06	147 (5)	9694 (5)	1750 (5)
1-20-P	69	110	12.57	12.57	17.17	0.00	182 (5)	12068 (5)	2179 (5)
1-21-P	69	110	12.57	12.57	15.16	-0.02	160 (5)	10610 (5)	1915 (5)
1-22-P	69	110	12.57	12.57	10.05	-0.37	105 (5)	6946 (5)	1254 (5)
1-23-P	69	110	12.57	12.57	1.72	-5.94	56 (5)	1735 (5)	3721 (5)
1-24-P	69	110	12.57	12.57	0.21	-17.32	181 (5)	2157 (5)	11947 (5)
1-25-P	69	110	12.57	12.57	0.00	-29.36	316 (5)	3772 (5)	20896 (5)
1-26-P	69	110	12.57	12.57	0.21	-17.32	181 (5)	2157 (5)	11947 (5)
1-27-P	69	110	12.57	12.57	1.72	-5.94	56 (5)	1735 (5)	3721 (5)
1-28-P	69	110	12.57	12.57	10.05	-0.37	105 (5)	6946 (5)	1254 (5)
1-29-P	69	110	12.57	12.57	15.16	-0.02	160 (5)	10610 (5)	1915 (5)
1-30-P	69	110	12.57	12.57	17.17	0.00	182 (5)	12068 (5)	2179 (5)
1-31-P	69	110	12.57	12.57	13.91	-0.06	147 (5)	9694 (5)	1750 (5)
1-32-P	69	110	12.57	12.57	5.58	-1.37	57 (5)	3778 (5)	722 (5)
1-33-P	69	110	12.57	12.57	1.21	-10.86	107 (5)	1742 (5)	7065 (5)
1-34-P	69	110	12.57	12.57	0.10	-21.96	233 (5)	2783 (5)	15415 (5)
1-35-P	69	110	12.57	12.57	0.06	-24.41	261 (5)	3111 (5)	17236 (5)
1-36-P	69	110	12.57	12.57	0.09	-12.27	125 (5)	1492 (5)	8266 (5)
1-37-P	69	110	12.57	12.57	3.80	-2.56	38 (5)	2485 (5)	1453 (5)
1-38-P	69	110	12.57	12.57	12.94	-0.12	136 (5)	8984 (5)	1622 (5)
1-39-P	69	110	12.57	12.57	15.83	0.00	168 (5)	11108 (5)	2005 (5)
1-40-P	69	110	12.57	12.57	14.65	-0.01	155 (5)	10261 (5)	1852 (5)
1-41-P	69	110	12.57	12.57	10.86	-0.19	113 (5)	7482 (5)	1351 (5)
1-42-P	69	110	12.57	12.57	1.11	-4.65	56 (8)	2212 (8)	3703 (8)
1-43-P	69	110	12.57	12.57	0.06	-18.91	197 (5)	2357 (5)	13055 (5)
1-44-P	69	110	12.57	12.57	0.02	-32.84	352 (5)	4206 (5)	23297 (5)
1-45-P	69	110	12.57	12.57	0.06	-27.83	295 (5)	3523 (5)	19516 (5)
1-46-P	69	110	12.57	12.57	0.00	-17.74	184 (5)	2197 (5)	12167 (5)
1-47-P	69	110	12.57	12.57	0.04	-6.58	70 (5)	831 (5)	4601 (5)
1-48-P	69	110	12.57	12.57	0.79	-1.73	23 (5)	741 (5)	1509 (5)
1-49-P	69	110	12.57	12.57	0.90	-0.15	11 (8)	714 (8)	305 (8)
2-1-P	70	110	12.57	12.57	4.93	0.00	53 (5)	3504 (5)	633 (5)
2-2-P	70	110	12.57	12.57	5.05	0.00	57 (5)	3780 (5)	682 (5)
2-3-P	70	110	12.57	12.57	3.98	-0.21	52 (7)	3452 (7)	833 (7)
2-4-P	70	110	12.57	12.57	4.22	-2.36	45 (5)	3001 (5)	1704 (5)

APPALTATORE:	TELESE S.c.a r.l. <small>Consorzio Telese Società Consortile a Responsabilità Limitata</small>	
PROGETTAZIONE:		
Mandataria:	Mandante:	
SYSTRA S.A.	SWS Engineering S.p.A.	SYSTRA-SOTECNI S.p.A.
Relazione di calcolo		
IF2R.2.2.E.ZZ.CL.TR.16.0.5.008.A.DOCX		

ITINERARIO NAPOLI – BARI
RADDOPPIO TRATTA CANCELLO-BENEVENTO
II LOTTO FUNZIONALE FRASSO TELESINO – VITULANO
2° SUBLOTTO TELESE – SAN LORENZO
PROGETTO ESECUTIVO

COMMESSA	LOTTO	CODIFICA	DOCUMENTO	REV.	FOGLIO
IF2R	2.2.E.ZZ	CL	TR.16.0.5.008	A	72 di 118

Is	B [cm]	H [cm]	Afi [cmq]	Afs [cmq]	Mp [kNm]	Mn [kNm]	sc [kPa]	ofi [kPa]	ofs [kPa]
2-5-P	70	110	12.57	12.57	1.17	-26.48	334 (5)	3984 (5)	22070 (5)
2-6-P	70	110	12.57	12.57	0.84	-45.34	531 (5)	6339 (5)	35117 (5)
2-7-P	70	110	12.57	12.57	1.84	-8.74	132 (8)	3653 (8)	8697 (8)
2-8-P	70	110	12.57	12.57	8.66	-0.26	97 (5)	6444 (5)	1163 (5)
2-9-P	70	110	12.57	12.57	13.70	0.00	154 (5)	10191 (5)	1840 (5)
2-10-P	70	110	12.57	12.57	15.15	0.00	168 (5)	11099 (5)	2004 (5)
2-11-P	70	110	12.57	12.57	15.59	0.00	172 (5)	11390 (5)	2056 (5)
2-12-P	70	110	12.57	12.57	14.53	0.00	163 (5)	10755 (5)	1942 (5)
2-13-P	70	110	12.57	12.57	10.63	-0.11	120 (5)	7908 (5)	1428 (5)
2-14-P	70	110	12.57	12.57	2.68	-2.94	36 (5)	2397 (5)	2384 (5)
2-15-P	70	110	12.57	12.57	1.00	-35.85	442 (5)	5279 (5)	29240 (5)
2-16-P	70	110	12.57	12.57	1.12	-29.30	365 (5)	4361 (5)	24160 (5)
2-17-P	70	110	12.57	12.57	7.47	-0.81	81 (5)	5351 (5)	966 (5)
2-18-P	70	110	12.57	12.57	11.44	-0.04	129 (5)	8530 (5)	1540 (5)
2-19-P	70	110	12.57	12.57	14.72	0.00	164 (5)	10866 (5)	1962 (5)
2-20-P	70	110	12.57	12.57	15.87	0.00	175 (5)	11565 (5)	2088 (5)
2-21-P	70	110	12.57	12.57	15.14	0.00	168 (5)	11121 (5)	2008 (5)
2-22-P	70	110	12.57	12.57	13.23	0.00	149 (5)	9845 (5)	1777 (5)
2-23-P	70	110	12.57	12.57	8.82	-0.38	98 (5)	6486 (5)	1171 (5)
2-24-P	70	110	12.57	12.57	1.72	-12.98	195 (8)	3427 (8)	12920 (8)
2-25-P	70	110	12.57	12.57	0.72	-49.58	579 (5)	6915 (5)	38306 (5)
2-26-P	70	110	12.57	12.57	1.72	-12.98	195 (8)	3427 (8)	12920 (8)
2-27-P	70	110	12.57	12.57	8.82	-0.38	98 (5)	6486 (5)	1171 (5)
2-28-P	70	110	12.57	12.57	13.23	0.00	149 (5)	9845 (5)	1777 (5)
2-29-P	70	110	12.57	12.57	15.14	0.00	168 (5)	11121 (5)	2008 (5)
2-30-P	70	110	12.57	12.57	15.87	0.00	175 (5)	11565 (5)	2088 (5)
2-31-P	70	110	12.57	12.57	14.72	0.00	164 (5)	10866 (5)	1962 (5)
2-32-P	70	110	12.57	12.57	11.44	-0.04	129 (5)	8530 (5)	1540 (5)
2-33-P	70	110	12.57	12.57	7.47	-0.81	81 (5)	5351 (5)	966 (5)
2-34-P	70	110	12.57	12.57	1.12	-29.30	365 (5)	4361 (5)	24160 (5)
2-35-P	70	110	12.57	12.57	1.00	-35.85	442 (5)	5279 (5)	29240 (5)
2-36-P	70	110	12.57	12.57	2.68	-2.94	36 (5)	2397 (5)	2384 (5)
2-37-P	70	110	12.57	12.57	10.63	-0.11	120 (5)	7908 (5)	1428 (5)
2-38-P	70	110	12.57	12.57	14.53	0.00	163 (5)	10755 (5)	1942 (5)
2-39-P	70	110	12.57	12.57	15.59	0.00	172 (5)	11390 (5)	2056 (5)
2-40-P	70	110	12.57	12.57	15.15	0.00	168 (5)	11099 (5)	2004 (5)
2-41-P	70	110	12.57	12.57	13.70	0.00	154 (5)	10191 (5)	1840 (5)
2-42-P	70	110	12.57	12.57	8.66	-0.26	97 (5)	6444 (5)	1163 (5)
2-43-P	70	110	12.57	12.57	1.84	-8.74	132 (8)	3653 (8)	8697 (8)
2-44-P	70	110	12.57	12.57	0.84	-45.34	531 (5)	6339 (5)	35117 (5)
2-45-P	70	110	12.57	12.57	1.17	-26.48	334 (5)	3984 (5)	22070 (5)
2-46-P	70	110	12.57	12.57	4.22	-2.36	45 (5)	3001 (5)	1704 (5)
2-47-P	70	110	12.57	12.57	3.98	-0.21	52 (7)	3452 (7)	833 (7)
2-48-P	70	110	12.57	12.57	5.05	0.00	57 (5)	3780 (5)	682 (5)
2-49-P	70	110	12.57	12.57	4.93	0.00	53 (5)	3504 (5)	633 (5)
5-1-P	85	110	15.71	15.71	2.10	-4.26	45 (7)	1350 (7)	2973 (7)
5-2-P	85	110	15.71	15.71	1.93	-5.06	58 (7)	1282 (7)	3776 (7)
5-3-P	85	110	15.71	15.71	2.17	-5.61	67 (7)	1473 (7)	4391 (7)
5-4-P	85	110	15.71	15.71	2.36	-6.58	71 (6)	1746 (6)	4630 (6)
5-5-P	85	110	15.71	15.71	3.44	-4.80	63 (7)	1748 (7)	4144 (7)
5-6-P	85	110	15.71	15.71	4.16	-3.92	52 (7)	1535 (7)	3407 (7)
5-7-P	85	110	15.71	15.71	5.41	-3.43	40 (7)	1423 (7)	2640 (7)
5-8-P	85	110	15.71	15.71	6.03	-5.16	54 (7)	1490 (7)	3540 (7)
5-9-P	85	110	15.71	15.71	6.56	-10.67	96 (6)	3055 (6)	6281 (6)
5-10-P	85	110	15.71	15.71	1.07	-36.91	365 (5)	4368 (5)	23892 (5)
5-11-P	85	110	15.71	15.71	0.97	-40.95	433 (5)	5179 (5)	28328 (5)
5-12-P	85	110	15.71	15.71	0.47	-12.71	93 (5)	2019 (5)	6057 (5)
5-13-P	85	110	15.71	15.71	6.71	-0.60	30 (7)	1946 (7)	977 (7)
5-14-P	85	110	15.71	15.71	10.72	-0.07	69 (7)	4513 (7)	825 (7)
5-15-P	85	110	15.71	15.71	11.37	0.00	80 (7)	5203 (7)	951 (7)
5-16-P	85	110	15.71	15.71	11.82	-0.05	80 (7)	5232 (7)	956 (7)
5-17-P	85	110	15.71	15.71	12.13	-0.16	80 (7)	5244 (7)	959 (7)
5-18-P	85	110	15.71	15.71	8.55	-2.53	58 (6)	3808 (6)	1820 (6)
5-19-P	85	110	15.71	15.71	2.20	-9.78	125 (6)	2241 (6)	8198 (6)
5-20-P	85	110	15.71	15.71	1.89	-42.49	479 (5)	5726 (5)	31318 (5)
5-21-P	85	110	15.71	15.71	1.09	-25.51	259 (5)	3094 (5)	16922 (5)
5-22-P	85	110	15.71	15.71	8.27	-3.59	58 (6)	3827 (6)	2483 (6)
5-23-P	85	110	15.71	15.71	11.07	-0.05	70 (7)	4587 (7)	839 (7)
5-24-P	85	110	15.71	15.71	13.09	-0.02	93 (7)	6073 (7)	1110 (7)
5-25-P	85	110	15.71	15.71	13.27	0.00	100 (7)	6513 (7)	1191 (7)
5-26-P	85	110	15.71	15.71	13.09	-0.02	93 (7)	6073 (7)	1110 (7)
5-27-P	85	110	15.71	15.71	11.07	-0.05	70 (7)	4587 (7)	839 (7)
5-28-P	85	110	15.71	15.71	8.27	-3.59	58 (6)	3827 (6)	2483 (6)
5-29-P	85	110	15.71	15.71	1.09	-25.51	259 (5)	3094 (5)	16922 (5)
5-30-P	85	110	15.71	15.71	1.89	-42.49	479 (5)	5726 (5)	31318 (5)
5-31-P	85	110	15.71	15.71	2.20	-9.78	125 (6)	2241 (6)	8198 (6)
5-32-P	85	110	15.71	15.71	8.55	-2.53	58 (6)	3808 (6)	1820 (6)
5-33-P	85	110	15.71	15.71	12.13	-0.16	80 (7)	5244 (7)	959 (7)
5-34-P	85	110	15.71	15.71	11.82	-0.05	80 (7)	5232 (7)	956 (7)
5-35-P	85	110	15.71	15.71	11.37	0.00	80 (7)	5203 (7)	951 (7)
5-36-P	85	110	15.71	15.71	10.72	-0.07	69 (7)	4513 (7)	825 (7)

APPALTATORE:

TELESE S.c.a r.l.
Consorzio Telese Società Consortile a Responsabilità Limitata

PROGETTAZIONE:

Mandataria: Mandante:

SYSTRA S.A. **SWS Engineering S.p.A.** **SYSTRA-SOTECNI S.p.A.**

Relazione di calcolo
IF2R.2.2.E.ZZ.CL.TR.16.0.5.008.A.DOCX

ITINERARIO NAPOLI – BARI
RADDOPPIO TRATTA CANCELLO-BENEVENTO
II LOTTO FUNZIONALE FRASSO TELESINO – VITULANO
2° SUBLOTTO TELESE – SAN LORENZO

PROGETTO ESECUTIVO

COMMESSA	LOTTO	CODIFICA	DOCUMENTO	REV.	FOGLIO
IF2R	2.2.E.ZZ	CL	TR.16.0.5.008	A	73 di 118

Is	B [cm]	H [cm]	Afi [cmq]	Afs [cmq]	Mp [kNm]	Mn [kNm]	sc [kPa]	ofi [kPa]	ofs [kPa]
5-37-P	85	110	15.71	15.71	6.71	-0.60	30 (7)	1946 (7)	977 (7)
5-38-P	85	110	15.71	15.71	0.47	-12.71	93 (5)	2019 (5)	6057 (5)
5-39-P	85	110	15.71	15.71	0.97	-40.95	433 (5)	5179 (5)	28328 (5)
5-40-P	85	110	15.71	15.71	1.07	-36.91	365 (5)	4368 (5)	23892 (5)
5-41-P	85	110	15.71	15.71	6.56	-10.67	96 (6)	3055 (6)	6281 (6)
5-42-P	85	110	15.71	15.71	6.03	-5.16	54 (7)	1490 (7)	3540 (7)
5-43-P	85	110	15.71	15.71	5.41	-3.43	40 (7)	1423 (7)	2640 (7)
5-44-P	85	110	15.71	15.71	4.16	-3.92	52 (7)	1535 (7)	3407 (7)
5-45-P	85	110	15.71	15.71	3.44	-4.80	63 (7)	1748 (7)	4144 (7)
5-46-P	85	110	15.71	15.71	2.36	-6.58	71 (6)	1746 (6)	4630 (6)
5-47-P	85	110	15.71	15.71	2.17	-5.61	67 (7)	1473 (7)	4391 (7)
5-48-P	85	110	15.71	15.71	1.93	-5.06	58 (7)	1282 (7)	3776 (7)
5-49-P	85	110	15.71	15.71	2.10	-4.26	45 (7)	1350 (7)	2973 (7)
6-1-P	85	110	12.57	12.57	2.89	-2.97	28 (5)	1988 (5)	2058 (5)
6-2-P	85	110	12.57	12.57	3.40	-3.45	34 (5)	2411 (5)	2478 (5)
6-3-P	85	110	12.57	12.57	3.79	-3.93	40 (5)	2726 (5)	2899 (5)
6-4-P	85	110	12.57	12.57	3.99	-4.42	46 (5)	2888 (5)	3327 (5)
6-5-P	85	110	12.57	12.57	2.79	-3.85	40 (5)	2077 (5)	2919 (5)
6-6-P	85	110	12.57	12.57	1.52	-2.04	36 (6)	1161 (6)	2628 (6)
6-7-P	85	110	12.57	12.57	0.11	-4.70	44 (5)	512 (5)	3191 (5)
6-8-P	85	110	12.57	12.57	0.03	-8.44	75 (5)	876 (5)	5467 (5)
6-9-P	85	110	12.57	12.57	0.01	-13.16	121 (5)	1419 (5)	8850 (5)
6-10-P	85	110	12.57	12.57	0.06	-15.30	133 (5)	1558 (5)	9720 (5)
6-11-P	85	110	12.57	12.57	0.29	-15.16	130 (5)	1524 (5)	9505 (5)
6-12-P	85	110	12.57	12.57	1.10	-9.36	102 (8)	1454 (8)	7430 (8)
6-13-P	85	110	12.57	12.57	2.29	-2.31	50 (7)	1765 (7)	3642 (7)
6-14-P	85	110	12.57	12.57	5.39	-0.16	40 (7)	2897 (7)	894 (7)
6-15-P	85	110	12.57	12.57	7.55	0.00	54 (7)	3922 (7)	629 (7)
6-16-P	85	110	12.57	12.57	7.88	0.00	57 (7)	4141 (7)	664 (7)
6-17-P	85	110	12.57	12.57	6.89	0.00	44 (7)	3227 (7)	517 (7)
6-18-P	85	110	12.57	12.57	2.64	-0.33	31 (7)	1006 (7)	2255 (7)
6-19-P	85	110	12.57	12.57	1.86	-2.84	90 (7)	1054 (7)	6576 (7)
6-20-P	85	110	12.57	12.57	1.34	-6.35	108 (6)	1258 (6)	7849 (6)
6-21-P	85	110	12.57	12.57	2.17	-3.40	85 (7)	1302 (7)	6225 (7)
6-22-P	85	110	12.57	12.57	1.51	-3.20	58 (8)	1495 (8)	4229 (8)
6-23-P	85	110	12.57	12.57	6.54	0.00	40 (7)	2929 (7)	470 (7)
6-24-P	85	110	12.57	12.57	9.56	0.00	74 (7)	5362 (7)	860 (7)
6-25-P	85	110	12.57	12.57	11.17	0.00	93 (7)	6744 (7)	1081 (7)
6-26-P	85	110	12.57	12.57	9.56	0.00	74 (7)	5362 (7)	860 (7)
6-27-P	85	110	12.57	12.57	6.54	0.00	40 (7)	2929 (7)	470 (7)
6-28-P	85	110	12.57	12.57	1.51	-3.20	58 (8)	1495 (8)	4229 (8)
6-29-P	85	110	12.57	12.57	2.17	-3.40	85 (7)	1302 (7)	6225 (7)
6-30-P	85	110	12.57	12.57	1.34	-6.35	108 (6)	1258 (6)	7849 (6)
6-31-P	85	110	12.57	12.57	1.86	-2.84	90 (7)	1054 (7)	6576 (7)
6-32-P	85	110	12.57	12.57	2.64	-0.33	31 (7)	1006 (7)	2255 (7)
6-33-P	85	110	12.57	12.57	6.89	0.00	44 (7)	3227 (7)	517 (7)
6-34-P	85	110	12.57	12.57	7.88	0.00	57 (7)	4141 (7)	664 (7)
6-35-P	85	110	12.57	12.57	7.55	0.00	54 (7)	3922 (7)	629 (7)
6-36-P	85	110	12.57	12.57	5.39	-0.16	40 (7)	2897 (7)	894 (7)
6-37-P	85	110	12.57	12.57	2.29	-2.31	50 (7)	1765 (7)	3642 (7)
6-38-P	85	110	12.57	12.57	1.10	-9.36	102 (8)	1454 (8)	7430 (8)
6-39-P	85	110	12.57	12.57	0.29	-15.16	130 (5)	1524 (5)	9505 (5)
6-40-P	85	110	12.57	12.57	0.06	-15.30	133 (5)	1558 (5)	9720 (5)
6-41-P	85	110	12.57	12.57	0.01	-13.16	121 (5)	1419 (5)	8850 (5)
6-42-P	85	110	12.57	12.57	0.03	-8.44	75 (5)	876 (5)	5467 (5)
6-43-P	85	110	12.57	12.57	0.11	-4.70	44 (5)	512 (5)	3191 (5)
6-44-P	85	110	12.57	12.57	1.52	-2.04	36 (6)	1161 (6)	2628 (6)
6-45-P	85	110	12.57	12.57	2.79	-3.85	40 (5)	2077 (5)	2919 (5)
6-46-P	85	110	12.57	12.57	3.99	-4.42	46 (5)	2888 (5)	3327 (5)
6-47-P	85	110	12.57	12.57	3.79	-3.93	40 (5)	2726 (5)	2899 (5)
6-48-P	85	110	12.57	12.57	3.40	-3.45	34 (5)	2411 (5)	2478 (5)
6-49-P	85	110	12.57	12.57	2.89	-2.97	28 (5)	1988 (5)	2058 (5)
7-1-P	85	110	12.57	12.57	1.54	-0.62	17 (8)	1220 (8)	612 (8)
7-2-P	85	110	12.57	12.57	2.42	-2.34	26 (8)	1916 (8)	1859 (8)
7-3-P	85	110	12.57	12.57	2.48	-6.55	68 (7)	2175 (7)	4976 (7)
7-4-P	85	110	12.57	12.57	1.97	-14.30	147 (7)	1796 (7)	10736 (7)
7-5-P	85	110	12.57	12.57	0.59	-23.71	236 (7)	2759 (7)	17209 (7)
7-6-P	85	110	12.57	12.57	0.05	-29.83	295 (7)	3452 (7)	21530 (7)
7-7-P	85	110	12.57	12.57	0.11	-17.40	177 (7)	2067 (7)	12892 (7)
7-8-P	85	110	12.57	12.57	0.87	-7.32	80 (8)	931 (8)	5805 (8)
7-9-P	85	110	12.57	12.57	3.82	-0.34	33 (6)	2369 (6)	2198 (6)
7-10-P	85	110	12.57	12.57	6.00	0.00	53 (7)	3895 (7)	624 (7)
7-11-P	85	110	12.57	12.57	7.32	0.00	66 (7)	4808 (7)	771 (7)
7-12-P	85	110	12.57	12.57	6.69	-0.25	64 (6)	4636 (6)	1337 (6)
7-13-P	85	110	12.57	12.57	4.90	-5.48	55 (5)	3214 (5)	4010 (5)
7-14-P	85	110	12.57	12.57	3.16	-10.71	116 (5)	1357 (5)	8467 (5)
7-15-P	85	110	12.57	12.57	0.23	-20.41	208 (7)	2435 (7)	15188 (7)
7-16-P	85	110	12.57	12.57	0.13	-17.24	185 (7)	2162 (7)	13487 (7)
7-17-P	85	110	12.57	12.57	3.20	-6.80	76 (6)	1638 (6)	5566 (6)
7-18-P	85	110	12.57	12.57	5.53	-0.16	49 (6)	3539 (6)	650 (6)
7-19-P	85	110	12.57	12.57	11.52	0.00	108 (6)	7839 (6)	1257 (6)

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SWS Engineering S.p.A.

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II LOTTO FUNZIONALE FRASSO TELESINO – VITULANO

2° SUBLOTTO TELESE – SAN LORENZO

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2.2.E.ZZ

CL

TR.16.0.5.008

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Is	B [cm]	H [cm]	Afi [cmq]	Afs [cmq]	Mp [kNm]	Mn [kNm]	sc [kPa]	ofi [kPa]	ofs [kPa]
7-20-P	85	110	12.57	12.57	13.78	0.00	130 (7)	9471 (7)	1518 (7)
7-21-P	85	110	12.57	12.57	12.89	0.00	122 (7)	8875 (7)	1423 (7)
7-22-P	85	110	12.57	12.57	10.14	0.00	91 (6)	6661 (6)	1068 (6)
7-23-P	85	110	12.57	12.57	5.39	-3.55	52 (6)	3233 (6)	3788 (6)
7-24-P	85	110	12.57	12.57	1.02	-10.59	138 (7)	1611 (7)	10050 (7)
7-25-P	85	110	12.57	12.57	0.88	-15.81	271 (5)	3168 (5)	19757 (5)
7-26-P	85	110	12.57	12.57	1.02	-10.59	138 (7)	1611 (7)	10050 (7)
7-27-P	85	110	12.57	12.57	5.39	-3.55	52 (6)	3233 (6)	3788 (6)
7-28-P	85	110	12.57	12.57	10.14	0.00	91 (6)	6661 (6)	1068 (6)
7-29-P	85	110	12.57	12.57	12.89	0.00	122 (7)	8875 (7)	1423 (7)
7-30-P	85	110	12.57	12.57	13.78	0.00	130 (7)	9471 (7)	1518 (7)
7-31-P	85	110	12.57	12.57	11.52	0.00	108 (6)	7839 (6)	1257 (6)
7-32-P	85	110	12.57	12.57	5.53	-0.16	49 (6)	3539 (6)	650 (6)
7-33-P	85	110	12.57	12.57	3.20	-6.80	76 (6)	1638 (6)	5566 (6)
7-34-P	85	110	12.57	12.57	0.13	-17.24	185 (7)	2162 (7)	13487 (7)
7-35-P	85	110	12.57	12.57	0.23	-20.41	208 (7)	2435 (7)	15188 (7)
7-36-P	85	110	12.57	12.57	3.16	-10.71	116 (5)	1357 (5)	8467 (5)
7-37-P	85	110	12.57	12.57	4.90	-5.48	55 (5)	3214 (5)	4010 (5)
7-38-P	85	110	12.57	12.57	6.69	-0.25	64 (6)	4636 (6)	1337 (6)
7-39-P	85	110	12.57	12.57	7.32	0.00	66 (7)	4808 (7)	771 (7)
7-40-P	85	110	12.57	12.57	6.00	0.00	53 (7)	3895 (7)	624 (7)
7-41-P	85	110	12.57	12.57	3.82	-0.34	33 (6)	2369 (6)	2198 (6)
7-42-P	85	110	12.57	12.57	0.87	-7.32	80 (8)	931 (8)	5805 (8)
7-43-P	85	110	12.57	12.57	0.11	-17.40	177 (7)	2067 (7)	12892 (7)
7-44-P	85	110	12.57	12.57	0.05	-29.83	295 (7)	3452 (7)	21530 (7)
7-45-P	85	110	12.57	12.57	0.59	-23.71	236 (7)	2759 (7)	17209 (7)
7-46-P	85	110	12.57	12.57	1.97	-14.30	147 (7)	1796 (7)	10736 (7)
7-47-P	85	110	12.57	12.57	2.48	-6.55	68 (7)	2175 (7)	4976 (7)
7-48-P	85	110	12.57	12.57	2.42	-2.34	26 (8)	1916 (8)	1859 (8)
7-49-P	85	110	12.57	12.57	1.54	-0.62	17 (8)	1220 (8)	612 (8)
8-1-P	85	110	15.71	15.71	0.68	-0.12	6 (7)	419 (7)	211 (7)
8-2-P	85	110	15.71	15.71	0.31	-3.05	27 (6)	329 (6)	1799 (6)
8-3-P	85	110	15.71	15.71	0.31	-8.77	79 (7)	951 (7)	5200 (7)
8-4-P	85	110	15.71	15.71	0.44	-18.36	165 (7)	2107 (7)	10811 (7)
8-5-P	85	110	15.71	15.71	0.00	-37.87	341 (7)	4084 (7)	22341 (7)
8-6-P	85	110	15.71	15.71	0.00	-51.03	462 (7)	5533 (7)	30263 (7)
8-7-P	85	110	15.71	15.71	0.00	-26.51	238 (7)	2848 (7)	15575 (7)
8-8-P	85	110	15.71	15.71	0.53	-9.62	94 (8)	1683 (8)	6130 (8)
8-9-P	85	110	15.71	15.71	1.79	-0.67	29 (8)	1904 (8)	709 (8)
8-10-P	85	110	15.71	15.71	6.12	-0.01	54 (7)	3543 (7)	648 (7)
8-11-P	85	110	15.71	15.71	7.73	0.00	68 (7)	4471 (7)	817 (7)
8-12-P	85	110	15.71	15.71	4.64	-0.04	40 (7)	2617 (7)	478 (7)
8-13-P	85	110	15.71	15.71	1.64	-5.27	51 (8)	2610 (8)	3357 (8)
8-14-P	85	110	15.71	15.71	0.00	-16.02	146 (7)	1746 (7)	9551 (7)
8-15-P	85	110	15.71	15.71	0.00	-38.90	356 (7)	4263 (7)	23318 (7)
8-16-P	85	110	15.71	15.71	0.00	-33.53	307 (7)	3675 (7)	20103 (7)
8-17-P	85	110	15.71	15.71	1.34	-10.08	98 (8)	4285 (8)	6426 (8)
8-18-P	85	110	15.71	15.71	2.63	-1.02	59 (7)	3849 (7)	761 (7)
8-19-P	85	110	15.71	15.71	9.92	0.00	86 (7)	5630 (7)	1029 (7)
8-20-P	85	110	15.71	15.71	14.26	0.00	126 (7)	8235 (7)	1506 (7)
8-21-P	85	110	15.71	15.71	12.20	0.00	107 (7)	6995 (7)	1279 (7)
8-22-P	85	110	15.71	15.71	7.23	-0.01	62 (7)	4064 (7)	743 (7)
8-23-P	85	110	15.71	15.71	2.18	-5.16	53 (8)	3472 (8)	3291 (8)
8-24-P	85	110	15.71	15.71	0.00	-21.25	195 (7)	2334 (7)	12765 (7)
8-25-P	85	110	15.71	15.71	0.00	-44.80	411 (7)	4919 (7)	26907 (7)
8-26-P	85	110	15.71	15.71	0.00	-21.25	195 (7)	2334 (7)	12765 (7)
8-27-P	85	110	15.71	15.71	2.18	-5.16	53 (8)	3472 (8)	3291 (8)
8-28-P	85	110	15.71	15.71	7.23	-0.01	62 (7)	4064 (7)	743 (7)
8-29-P	85	110	15.71	15.71	12.20	0.00	107 (7)	6995 (7)	1279 (7)
8-30-P	85	110	15.71	15.71	14.26	0.00	126 (7)	8235 (7)	1506 (7)
8-31-P	85	110	15.71	15.71	9.92	0.00	86 (7)	5630 (7)	1029 (7)
8-32-P	85	110	15.71	15.71	2.63	-1.02	59 (7)	3849 (7)	761 (7)
8-33-P	85	110	15.71	15.71	1.34	-10.08	98 (8)	4285 (8)	6426 (8)
8-34-P	85	110	15.71	15.71	0.00	-33.53	307 (7)	3675 (7)	20103 (7)
8-35-P	85	110	15.71	15.71	0.00	-38.90	356 (7)	4263 (7)	23318 (7)
8-36-P	85	110	15.71	15.71	0.00	-16.02	146 (7)	1746 (7)	9551 (7)
8-37-P	85	110	15.71	15.71	1.64	-5.27	51 (8)	2610 (8)	3357 (8)
8-38-P	85	110	15.71	15.71	4.64	-0.04	40 (7)	2617 (7)	478 (7)
8-39-P	85	110	15.71	15.71	7.73	0.00	68 (7)	4471 (7)	817 (7)
8-40-P	85	110	15.71	15.71	6.12	-0.01	54 (7)	3543 (7)	648 (7)
8-41-P	85	110	15.71	15.71	1.79	-0.67	29 (8)	1904 (8)	709 (8)
8-42-P	85	110	15.71	15.71	0.53	-9.62	94 (8)	1683 (8)	6130 (8)
8-43-P	85	110	15.71	15.71	0.00	-26.51	238 (7)	2848 (7)	15575 (7)
8-44-P	85	110	15.71	15.71	0.00	-51.03	462 (7)	5533 (7)	30263 (7)
8-45-P	85	110	15.71	15.71	0.00	-37.87	341 (7)	4084 (7)	22341 (7)
8-46-P	85	110	15.71	15.71	0.44	-18.36	165 (7)	2107 (7)	10811 (7)
8-47-P	85	110	15.71	15.71	0.31	-8.77	79 (7)	951 (7)	5200 (7)
8-48-P	85	110	15.71	15.71	0.31	-3.05	27 (6)	329 (6)	1799 (6)
8-49-P	85	110	15.71	15.71	0.68	-0.12	6 (7)	419 (7)	211 (7)
9-1-S	100	110	15.71	15.71	1.03	-3.88	35 (5)	2509 (5)	1814 (5)
9-2-S	100	110	15.71	15.71	0.02	-7.15	49 (5)	575 (5)	3460 (5)

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Is	B [cm]	H [cm]	Afi [cmq]	Afs [cmq]	Mp [kNm]	Mn [kNm]	sc [kPa]	ofi [kPa]	ofs [kPa]
9-3-S	100	110	15.71	15.71	0.07	-10.23	87 (5)	1025 (5)	6164 (5)
9-4-S	100	110	15.71	15.71	1.54	-11.40	124 (5)	1503 (5)	8759 (5)
9-5-S	100	110	15.71	15.71	7.67	-4.52	203 (8)	6096 (8)	14352 (8)
9-6-S	100	110	15.71	15.71	23.14	-0.39	208 (8)	14703 (8)	2444 (8)
9-7-S	100	110	15.71	15.71	54.22	0.00	455 (5)	32198 (5)	5352 (5)
9-8-S	100	110	15.71	15.71	0.00	-102.13	737 (5)	8669 (5)	52157 (5)
9-9-S	100	110	15.71	15.71	0.00	-68.01	460 (5)	5414 (5)	32572 (5)
9-10-S	100	110	15.71	15.71	0.00	-43.11	262 (5)	3079 (5)	18524 (5)
9-11-S	100	110	15.71	15.71	6.98	-3.36	118 (7)	1392 (7)	8376 (7)
9-12-S	100	110	15.71	15.71	17.21	-0.57	58 (7)	4105 (7)	2040 (7)
9-13-S	100	110	15.71	15.71	24.06	-0.29	123 (7)	8713 (7)	1448 (7)
9-14-S	100	110	15.71	15.71	27.90	-0.34	173 (6)	12273 (6)	2040 (6)
9-15-S	100	110	15.71	15.71	29.90	-0.47	194 (6)	13726 (6)	2282 (6)
9-16-S	100	110	15.71	15.71	25.11	-0.87	158 (6)	11170 (6)	1857 (6)
9-17-S	100	110	15.71	15.71	18.32	-1.67	106 (6)	7484 (6)	1404 (6)
9-18-S	100	110	15.71	15.71	5.89	-4.84	62 (7)	4377 (7)	3017 (7)
9-19-S	100	110	15.71	15.71	2.39	-8.36	72 (7)	2133 (7)	5074 (7)
9-20-S	100	110	15.71	15.71	0.54	-5.95	48 (7)	981 (7)	3428 (7)
9-21-S	100	110	15.71	15.71	0.06	-3.08	24 (7)	284 (7)	1712 (7)
9-22-S	100	110	15.71	15.71	1.70	-0.35	11 (5)	778 (5)	129 (5)
10-1-S	100	110	15.71	15.71	6.58	-2.65	44 (5)	3079 (5)	1218 (5)
10-2-S	100	110	15.71	15.71	9.35	-5.30	110 (6)	7808 (6)	2943 (6)
10-3-S	100	110	15.71	15.71	4.65	-9.63	67 (5)	2066 (5)	4774 (5)
10-4-S	100	110	15.71	15.71	0.94	-44.28	324 (5)	3810 (5)	22921 (5)
10-5-S	100	110	15.71	15.71	3.23	-41.76	444 (5)	5443 (5)	31393 (5)
10-6-S	100	110	15.71	15.71	13.75	-6.89	143 (5)	10136 (5)	1685 (5)
10-7-S	100	110	15.71	15.71	65.21	0.00	581 (5)	41117 (5)	6834 (5)
10-8-S	100	110	15.71	15.71	0.30	-64.20	415 (5)	4884 (5)	29380 (5)
10-9-S	100	110	15.71	15.71	0.06	-52.78	330 (5)	3885 (5)	23372 (5)
10-10-S	100	110	15.71	15.71	0.36	-38.85	227 (5)	2665 (5)	16032 (5)
10-11-S	100	110	15.71	15.71	5.57	-2.93	128 (7)	1508 (7)	9074 (7)
10-12-S	100	110	15.71	15.71	11.32	-0.14	46 (7)	2495 (7)	3244 (7)
10-13-S	100	110	15.71	15.71	20.47	-0.04	82 (7)	5826 (7)	968 (7)
10-14-S	100	110	15.71	15.71	26.65	-0.04	159 (6)	11275 (6)	1874 (6)
10-15-S	100	110	15.71	15.71	32.42	-0.05	209 (6)	14796 (6)	2459 (6)
10-16-S	100	110	15.71	15.71	33.31	-0.13	210 (6)	14890 (6)	2475 (6)
10-17-S	100	110	15.71	15.71	32.46	-0.73	193 (5)	13656 (5)	2270 (5)
10-18-S	100	110	15.71	15.71	1.16	-16.73	133 (7)	1929 (7)	9426 (7)
10-19-S	100	110	15.71	15.71	0.16	-36.42	305 (7)	3585 (7)	21570 (7)
10-20-S	100	110	15.71	15.71	0.27	-19.52	169 (5)	1994 (5)	11995 (5)
10-21-S	100	110	15.71	15.71	0.13	-10.70	75 (5)	881 (5)	5298 (5)
10-22-S	100	110	15.71	15.71	0.88	-1.87	12 (5)	834 (5)	359 (5)
11-1-S	100	110	15.71	15.71	0.33	-5.15	36 (5)	420 (5)	2529 (5)
11-2-S	100	110	15.71	15.71	0.49	-4.86	29 (5)	347 (5)	2087 (5)
11-3-S	100	110	15.71	15.71	1.17	-1.70	25 (8)	745 (8)	1801 (8)
11-4-S	100	110	15.71	15.71	6.05	0.00	54 (8)	3844 (8)	639 (8)
11-5-S	100	110	15.71	15.71	17.09	0.00	153 (8)	10863 (8)	1806 (8)
11-6-S	100	110	15.71	15.71	34.35	0.00	291 (5)	20622 (5)	3428 (5)
11-7-S	100	110	15.71	15.71	54.44	0.00	444 (5)	31395 (5)	5218 (5)
11-8-S	100	110	15.71	15.71	49.30	-0.61	254 (6)	17960 (6)	3533 (6)
11-9-S	100	110	15.71	15.71	18.10	-16.48	204 (5)	14403 (5)	6881 (5)
11-10-S	100	110	15.71	15.71	0.19	-70.76	527 (5)	6205 (5)	37329 (5)
11-11-S	100	110	15.71	15.71	0.00	-54.96	357 (5)	4196 (5)	25242 (5)
11-12-S	100	110	15.71	15.71	0.00	-33.49	155 (5)	1826 (5)	10985 (5)
11-13-S	100	110	15.71	15.71	13.04	-0.52	29 (7)	2087 (7)	1417 (7)
11-14-S	100	110	15.71	15.71	20.39	-0.20	99 (7)	7002 (7)	1164 (7)
11-15-S	100	110	15.71	15.71	21.35	-0.10	131 (7)	9265 (7)	1540 (7)
11-16-S	100	110	15.71	15.71	19.47	-0.12	118 (6)	8380 (6)	1393 (6)
11-17-S	100	110	15.71	15.71	10.35	-0.53	93 (8)	6579 (8)	1689 (8)
11-18-S	100	110	15.71	15.71	6.35	-0.63	57 (8)	4033 (8)	2010 (8)
11-19-S	100	110	15.71	15.71	3.05	-0.79	35 (8)	1936 (8)	2495 (8)
11-20-S	100	110	15.71	15.71	2.92	-0.47	15 (6)	681 (6)	1094 (6)
11-21-S	100	110	15.71	15.71	0.20	-0.95	10 (7)	246 (7)	712 (7)
11-22-S	100	110	15.71	15.71	0.05	-0.90	6 (7)	106 (7)	397 (7)
12-1-S	100	110	15.71	15.71	8.19	-1.69	55 (5)	3899 (5)	753 (5)
12-2-S	100	110	15.71	15.71	7.41	-3.58	166 (8)	11774 (8)	2272 (8)
12-3-S	100	110	15.71	15.71	4.66	-10.34	76 (5)	3149 (5)	5392 (5)
12-4-S	100	110	15.71	15.71	0.68	-50.87	375 (5)	4415 (5)	26564 (5)
12-5-S	100	110	15.71	15.71	0.99	-47.60	383 (5)	4503 (5)	27094 (5)
12-6-S	100	110	15.71	15.71	9.19	-6.72	118 (5)	8319 (5)	1383 (5)
12-7-S	100	110	15.71	15.71	66.16	0.00	594 (8)	42041 (8)	6988 (8)
12-8-S	100	110	15.71	15.71	0.00	-39.67	202 (5)	2379 (5)	14312 (5)
12-9-S	100	110	15.71	15.71	7.59	-0.18	128 (7)	1507 (7)	9066 (7)
12-10-S	100	110	15.71	15.71	9.10	0.00	91 (7)	1066 (7)	6412 (7)
12-11-S	100	110	15.71	15.71	12.70	0.00	39 (7)	458 (7)	2754 (7)
12-12-S	100	110	15.71	15.71	16.80	0.00	31 (7)	2208 (7)	1741 (7)
12-13-S	100	110	15.71	15.71	22.30	0.00	96 (7)	6774 (7)	1126 (7)
12-14-S	100	110	15.71	15.71	26.59	-0.03	156 (6)	11067 (6)	1839 (6)
12-15-S	100	110	15.71	15.71	32.35	-0.07	207 (6)	14622 (6)	2431 (6)
12-16-S	100	110	15.71	15.71	33.64	-0.47	211 (6)	14960 (6)	2487 (6)
12-17-S	100	110	15.71	15.71	33.84	-1.80	200 (5)	14162 (5)	2354 (5)

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Is	B [cm]	H [cm]	Afi [cmq]	Afs [cmq]	Mp [kNm]	Mn [kNm]	sc [kPa]	ofi [kPa]	ofs [kPa]
12-18-S	100	110	15.71	15.71	0.94	-21.20	170 (7)	3201 (7)	12062 (7)
12-19-S	100	110	15.71	15.71	0.49	-43.38	363 (7)	4272 (7)	25700 (7)
12-20-S	100	110	15.71	15.71	0.30	-23.58	202 (5)	2371 (5)	14264 (5)
12-21-S	100	110	15.71	15.71	0.00	-12.75	89 (5)	1042 (5)	6271 (5)
12-22-S	100	110	15.71	15.71	0.85	-2.17	11 (5)	798 (5)	407 (5)
13-1-S	100	110	15.71	15.71	0.79	-4.60	31 (5)	378 (5)	2209 (5)
13-2-S	100	110	15.71	15.71	0.34	-6.80	44 (5)	515 (5)	3097 (5)
13-3-S	100	110	15.71	15.71	0.60	-6.96	74 (5)	866 (5)	5213 (5)
13-4-S	100	110	15.71	15.71	4.90	-1.86	44 (8)	3111 (8)	2947 (8)
13-5-S	100	110	15.71	15.71	13.96	0.00	125 (8)	8868 (8)	1474 (8)
13-6-S	100	110	15.71	15.71	31.24	0.00	268 (5)	18986 (5)	3156 (5)
13-7-S	100	110	15.71	15.71	55.21	0.00	453 (5)	32092 (5)	5334 (5)
13-8-S	100	110	15.71	15.71	51.84	-1.21	304 (6)	21540 (6)	5673 (6)
13-9-S	100	110	15.71	15.71	35.24	-3.91	161 (6)	11402 (6)	5565 (6)
13-10-S	100	110	15.71	15.71	0.52	-57.31	412 (5)	4848 (5)	29169 (5)
13-11-S	100	110	15.71	15.71	0.01	-43.85	266 (5)	3129 (5)	18826 (5)
13-12-S	100	110	15.71	15.71	2.50	-6.85	101 (6)	1191 (6)	7168 (6)
13-13-S	100	110	15.71	15.71	16.66	-0.02	36 (7)	2563 (7)	426 (7)
13-14-S	100	110	15.71	15.71	22.78	0.00	116 (7)	8183 (7)	1360 (7)
13-15-S	100	110	15.71	15.71	23.52	0.00	145 (6)	10276 (6)	1708 (6)
13-16-S	100	110	15.71	15.71	19.88	-0.07	119 (6)	8402 (6)	1397 (6)
13-17-S	100	110	15.71	15.71	11.00	-0.71	78 (7)	5550 (7)	1350 (7)
13-18-S	100	110	15.71	15.71	6.17	-1.35	48 (7)	3385 (7)	2524 (7)
13-19-S	100	110	15.71	15.71	2.62	-2.32	51 (7)	1647 (7)	3632 (7)
13-20-S	100	110	15.71	15.71	0.70	-2.56	49 (7)	607 (7)	3454 (7)
13-21-S	100	110	15.71	15.71	0.08	-1.83	21 (7)	248 (7)	1490 (7)
13-22-S	100	110	15.71	15.71	0.27	-0.64	3 (7)	237 (7)	244 (7)
14-1-S	100	110	18.85	18.85	4.60	-4.19	28 (5)	1829 (5)	1655 (5)
14-2-S	100	110	18.85	18.85	5.85	-7.01	54 (5)	3485 (5)	2799 (5)
14-3-S	100	110	18.85	18.85	2.66	-10.07	62 (5)	1092 (5)	4047 (5)
14-4-S	100	110	18.85	18.85	1.64	-27.77	226 (5)	2711 (5)	14657 (5)
14-5-S	100	110	18.85	18.85	6.51	-17.38	332 (8)	5191 (8)	21551 (8)
14-6-S	100	110	18.85	18.85	19.45	-3.52	170 (5)	11027 (5)	2039 (5)
14-7-S	100	110	18.85	18.85	61.14	0.00	483 (5)	31303 (5)	5789 (5)
14-8-S	100	110	18.85	18.85	15.73	-3.22	118 (6)	7651 (6)	7366 (6)
14-9-S	100	110	18.85	18.85	12.09	-1.41	98 (7)	1174 (7)	6350 (7)
14-10-S	100	110	18.85	18.85	8.41	-4.18	124 (7)	1492 (7)	8071 (7)
14-11-S	100	110	18.85	18.85	10.16	-1.89	89 (7)	1065 (7)	5761 (7)
14-12-S	100	110	18.85	18.85	13.86	-0.22	52 (7)	2472 (7)	3356 (7)
14-13-S	100	110	18.85	18.85	21.60	-0.02	80 (7)	5160 (7)	954 (7)
14-14-S	100	110	18.85	18.85	26.22	0.00	137 (7)	8862 (7)	1639 (7)
14-15-S	100	110	18.85	18.85	29.11	0.00	168 (6)	10885 (6)	2013 (6)
14-16-S	100	110	18.85	18.85	27.16	-0.11	153 (6)	9907 (6)	1832 (6)
14-17-S	100	110	18.85	18.85	23.66	-1.07	127 (6)	8213 (6)	1519 (6)
14-18-S	100	110	18.85	18.85	2.94	-11.11	105 (7)	2450 (7)	6831 (7)
14-19-S	100	110	18.85	18.85	1.11	-23.01	221 (7)	2651 (7)	14333 (7)
14-20-S	100	110	18.85	18.85	0.06	-12.86	129 (7)	1543 (7)	8345 (7)
14-21-S	100	110	18.85	18.85	0.54	-6.70	48 (5)	577 (5)	3119 (5)
14-22-S	100	110	18.85	18.85	1.19	-1.26	6 (5)	381 (5)	288 (5)
15-1-S	100	110	15.71	15.71	4.60	-4.19	31 (5)	2187 (5)	1980 (5)
15-2-S	100	110	15.71	15.71	5.85	-7.01	59 (5)	4169 (5)	3348 (5)
15-3-S	100	110	15.71	15.71	2.66	-10.07	68 (5)	1306 (5)	4840 (5)
15-4-S	100	110	15.71	15.71	1.64	-27.77	248 (5)	2914 (5)	17530 (5)
15-5-S	100	110	15.71	15.71	6.51	-17.38	364 (8)	6209 (8)	25774 (8)
15-6-S	100	110	15.71	15.71	19.45	-3.52	186 (5)	13189 (5)	2192 (5)
15-7-S	100	110	15.71	15.71	61.14	0.00	529 (5)	37438 (5)	6223 (5)
15-8-S	100	110	15.71	15.71	15.73	-3.22	129 (6)	9151 (6)	8810 (6)
15-9-S	100	110	15.71	15.71	12.09	-1.41	107 (7)	1262 (7)	7595 (7)
15-10-S	100	110	15.71	15.71	8.41	-4.18	136 (7)	1604 (7)	9652 (7)
15-11-S	100	110	15.71	15.71	10.16	-1.89	97 (7)	1145 (7)	6890 (7)
15-12-S	100	110	15.71	15.71	13.86	-0.22	57 (7)	2956 (7)	4014 (7)
15-13-S	100	110	15.71	15.71	21.60	-0.02	87 (7)	6171 (7)	1026 (7)
15-14-S	100	110	15.71	15.71	26.22	0.00	150 (7)	10599 (7)	1762 (7)
15-15-S	100	110	15.71	15.71	29.11	0.00	184 (6)	13019 (6)	2164 (6)
15-16-S	100	110	15.71	15.71	27.16	-0.11	167 (6)	11849 (6)	1969 (6)
15-17-S	100	110	15.71	15.71	23.66	-1.07	139 (6)	9823 (6)	1633 (6)
15-18-S	100	110	15.71	15.71	2.94	-11.11	115 (7)	2931 (7)	8170 (7)
15-19-S	100	110	15.71	15.71	1.11	-23.01	242 (7)	2849 (7)	17143 (7)
15-20-S	100	110	15.71	15.71	0.06	-12.86	141 (7)	1659 (7)	9981 (7)
15-21-S	100	110	15.71	15.71	0.54	-6.70	53 (5)	620 (5)	3730 (5)
15-22-S	100	110	15.71	15.71	1.19	-1.26	6 (5)	455 (5)	345 (5)
16-1-S	100	110	15.71	15.71	0.79	-4.60	31 (5)	378 (5)	2209 (5)
16-2-S	100	110	15.71	15.71	0.34	-6.80	44 (5)	515 (5)	3097 (5)
16-3-S	100	110	15.71	15.71	0.60	-6.96	74 (5)	866 (5)	5213 (5)
16-4-S	100	110	15.71	15.71	4.90	-1.86	44 (8)	3111 (8)	2947 (8)
16-5-S	100	110	15.71	15.71	13.96	0.00	125 (8)	8868 (8)	1474 (8)
16-6-S	100	110	15.71	15.71	31.24	0.00	268 (5)	18986 (5)	3156 (5)
16-7-S	100	110	15.71	15.71	55.21	0.00	453 (5)	32092 (5)	5334 (5)
16-8-S	100	110	15.71	15.71	51.84	-1.21	304 (6)	21540 (6)	5673 (6)
16-9-S	100	110	15.71	15.71	35.24	-3.91	161 (6)	11402 (6)	5565 (6)
16-10-S	100	110	15.71	15.71	0.52	-57.31	412 (5)	4848 (5)	29169 (5)

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Is	B [cm]	H [cm]	Afi [cmq]	Afs [cmq]	Mp [kNm]	Mn [kNm]	sc [kPa]	ofi [kPa]	ofs [kPa]
16-11-S	100	110	15.71	15.71	0.01	-43.85	266 (5)	3129 (5)	18826 (5)
16-12-S	100	110	15.71	15.71	2.50	-6.85	101 (6)	1191 (6)	7168 (6)
16-13-S	100	110	15.71	15.71	16.66	-0.02	36 (7)	2563 (7)	426 (7)
16-14-S	100	110	15.71	15.71	22.78	0.00	116 (7)	8183 (7)	1360 (7)
16-15-S	100	110	15.71	15.71	23.52	0.00	145 (6)	10276 (6)	1708 (6)
16-16-S	100	110	15.71	15.71	19.88	-0.07	119 (6)	8402 (6)	1397 (6)
16-17-S	100	110	15.71	15.71	11.00	-0.71	78 (7)	5550 (7)	1350 (7)
16-18-S	100	110	15.71	15.71	6.17	-1.35	48 (7)	3385 (7)	2524 (7)
16-19-S	100	110	15.71	15.71	2.62	-2.32	51 (7)	1647 (7)	3632 (7)
16-20-S	100	110	15.71	15.71	0.70	-2.56	49 (7)	607 (7)	3454 (7)
16-21-S	100	110	15.71	15.71	0.08	-1.83	21 (7)	248 (7)	1490 (7)
16-22-S	100	110	15.71	15.71	0.27	-0.64	3 (7)	237 (7)	244 (7)
17-1-S	100	110	15.71	15.71	8.19	-1.69	55 (5)	3899 (5)	753 (5)
17-2-S	100	110	15.71	15.71	7.41	-3.58	166 (8)	11774 (8)	2272 (8)
17-3-S	100	110	15.71	15.71	4.66	-10.34	76 (5)	3149 (5)	5392 (5)
17-4-S	100	110	15.71	15.71	0.68	-50.87	375 (5)	4415 (5)	26564 (5)
17-5-S	100	110	15.71	15.71	0.99	-47.60	383 (5)	4503 (5)	27094 (5)
17-6-S	100	110	15.71	15.71	9.19	-6.72	118 (5)	8319 (5)	1383 (5)
17-7-S	100	110	15.71	15.71	66.16	0.00	594 (8)	42041 (8)	6988 (8)
17-8-S	100	110	15.71	15.71	0.00	-39.67	202 (5)	2379 (5)	14312 (5)
17-9-S	100	110	15.71	15.71	7.59	-0.18	128 (7)	1507 (7)	9066 (7)
17-10-S	100	110	15.71	15.71	9.10	0.00	91 (7)	1066 (7)	6412 (7)
17-11-S	100	110	15.71	15.71	12.70	0.00	39 (7)	458 (7)	2754 (7)
17-12-S	100	110	15.71	15.71	16.80	0.00	31 (7)	2208 (7)	1741 (7)
17-13-S	100	110	15.71	15.71	22.30	0.00	96 (7)	6774 (7)	1126 (7)
17-14-S	100	110	15.71	15.71	26.59	-0.03	156 (6)	11067 (6)	1839 (6)
17-15-S	100	110	15.71	15.71	32.35	-0.07	207 (6)	14622 (6)	2431 (6)
17-16-S	100	110	15.71	15.71	33.64	-0.47	211 (6)	14960 (6)	2487 (6)
17-17-S	100	110	15.71	15.71	33.84	-1.80	200 (5)	14162 (5)	2354 (5)
17-18-S	100	110	15.71	15.71	0.94	-21.20	170 (7)	3201 (7)	12062 (7)
17-19-S	100	110	15.71	15.71	0.49	-43.38	363 (7)	4272 (7)	25700 (7)
17-20-S	100	110	15.71	15.71	0.30	-23.58	202 (5)	2371 (5)	14264 (5)
17-21-S	100	110	15.71	15.71	0.00	-12.75	89 (5)	1042 (5)	6271 (5)
17-22-S	100	110	15.71	15.71	0.85	-2.17	11 (5)	798 (5)	407 (5)
18-1-S	100	110	15.71	15.71	0.33	-5.15	36 (5)	420 (5)	2529 (5)
18-2-S	100	110	15.71	15.71	0.49	-4.86	29 (5)	347 (5)	2087 (5)
18-3-S	100	110	15.71	15.71	1.17	-1.70	25 (8)	745 (8)	1801 (8)
18-4-S	100	110	15.71	15.71	6.05	0.00	54 (8)	3844 (8)	639 (8)
18-5-S	100	110	15.71	15.71	17.09	0.00	153 (8)	10863 (8)	1806 (8)
18-6-S	100	110	15.71	15.71	34.35	0.00	291 (5)	20622 (5)	3428 (5)
18-7-S	100	110	15.71	15.71	54.44	0.00	444 (5)	31395 (5)	5218 (5)
18-8-S	100	110	15.71	15.71	49.30	-0.61	254 (6)	17960 (6)	3533 (6)
18-9-S	100	110	15.71	15.71	18.10	-16.48	204 (5)	14403 (5)	6881 (5)
18-10-S	100	110	15.71	15.71	0.19	-70.76	527 (5)	6205 (5)	37329 (5)
18-11-S	100	110	15.71	15.71	0.00	-54.96	357 (5)	4196 (5)	25242 (5)
18-12-S	100	110	15.71	15.71	0.00	-33.49	155 (5)	1826 (5)	10985 (5)
18-13-S	100	110	15.71	15.71	13.04	-0.52	29 (7)	2087 (7)	1417 (7)
18-14-S	100	110	15.71	15.71	20.39	-0.20	99 (7)	7002 (7)	1164 (7)
18-15-S	100	110	15.71	15.71	21.35	-0.10	131 (7)	9265 (7)	1540 (7)
18-16-S	100	110	15.71	15.71	19.47	-0.12	118 (6)	8380 (6)	1393 (6)
18-17-S	100	110	15.71	15.71	10.35	-0.53	93 (8)	6579 (8)	1689 (8)
18-18-S	100	110	15.71	15.71	6.35	-0.63	57 (8)	4033 (8)	2010 (8)
18-19-S	100	110	15.71	15.71	3.05	-0.79	35 (8)	1936 (8)	2495 (8)
18-20-S	100	110	15.71	15.71	2.92	-0.47	15 (6)	681 (6)	1094 (6)
18-21-S	100	110	15.71	15.71	0.20	-0.95	10 (7)	246 (7)	712 (7)
18-22-S	100	110	15.71	15.71	0.05	-0.90	6 (7)	106 (7)	397 (7)
19-1-S	100	110	15.71	15.71	6.58	-2.65	44 (5)	3079 (5)	1218 (5)
19-2-S	100	110	15.71	15.71	9.35	-5.30	110 (6)	7808 (6)	2943 (6)
19-3-S	100	110	15.71	15.71	4.65	-9.63	67 (5)	2066 (5)	4774 (5)
19-4-S	100	110	15.71	15.71	0.94	-44.28	324 (5)	3810 (5)	22921 (5)
19-5-S	100	110	15.71	15.71	3.23	-41.76	444 (5)	5443 (5)	31393 (5)
19-6-S	100	110	15.71	15.71	13.75	-6.89	143 (5)	10136 (5)	1685 (5)
19-7-S	100	110	15.71	15.71	65.21	0.00	581 (5)	41117 (5)	6834 (5)
19-8-S	100	110	15.71	15.71	0.30	-64.20	415 (5)	4884 (5)	29380 (5)
19-9-S	100	110	15.71	15.71	0.06	-52.78	330 (5)	3885 (5)	23372 (5)
19-10-S	100	110	15.71	15.71	0.36	-38.85	227 (5)	2665 (5)	16032 (5)
19-11-S	100	110	15.71	15.71	5.57	-2.93	128 (7)	1508 (7)	9074 (7)
19-12-S	100	110	15.71	15.71	11.32	-0.14	46 (7)	2495 (7)	3244 (7)
19-13-S	100	110	15.71	15.71	20.47	-0.04	82 (7)	5826 (7)	968 (7)
19-14-S	100	110	15.71	15.71	26.65	-0.04	159 (6)	11275 (6)	1874 (6)
19-15-S	100	110	15.71	15.71	32.42	-0.05	209 (6)	14796 (6)	2459 (6)
19-16-S	100	110	15.71	15.71	33.31	-0.13	210 (6)	14890 (6)	2475 (6)
19-17-S	100	110	15.71	15.71	32.46	-0.73	193 (5)	13656 (5)	2270 (5)
19-18-S	100	110	15.71	15.71	1.16	-16.73	133 (7)	1929 (7)	9426 (7)
19-19-S	100	110	15.71	15.71	0.16	-36.42	305 (7)	3585 (7)	21570 (7)
19-20-S	100	110	15.71	15.71	0.27	-19.52	169 (5)	1994 (5)	11995 (5)
19-21-S	100	110	15.71	15.71	0.13	-10.70	75 (5)	881 (5)	5298 (5)
19-22-S	100	110	15.71	15.71	0.88	-1.87	12 (5)	834 (5)	359 (5)
20-1-S	100	110	15.71	15.71	1.03	-3.88	35 (5)	2509 (5)	1814 (5)
20-2-S	100	110	15.71	15.71	0.02	-7.15	49 (5)	575 (5)	3460 (5)
20-3-S	100	110	15.71	15.71	0.07	-10.23	87 (5)	1025 (5)	6164 (5)

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II LOTTO FUNZIONALE FRASSO TELESINO – VITULANO
2° SUBLOTTO TELESE – SAN LORENZO
PROGETTO ESECUTIVO**

PROGETTAZIONE:

Mandataria:

Mandante:

SYSTRA S.A. SWS Engineering S.p.A. SYSTRA-SOTECNI S.p.A.

Relazione di calcolo

IF2R.2.2.E.ZZ.CL.TR.16.0.5.008.A.DOCX

COMMESSA	LOTTO	CODIFICA	DOCUMENTO	REV.	FOGLIO
IF2R	2.2.E.ZZ	CL	TR.16.0.5.008	A	78 di 118

Is	B [cm]	H [cm]	Afi [cmq]	Afs [cmq]	Mp [kNm]	Mn [kNm]	σc [kPa]	σfi [kPa]	σfs [kPa]
20-4-S	100	110	15.71	15.71	1.54	-11.40	124 (5)	1503 (5)	8759 (5)
20-5-S	100	110	15.71	15.71	7.67	-4.52	203 (8)	6096 (8)	14352 (8)
20-6-S	100	110	15.71	15.71	23.14	-0.39	208 (8)	14703 (8)	2444 (8)
20-7-S	100	110	15.71	15.71	54.22	0.00	455 (5)	32198 (5)	5352 (5)
20-8-S	100	110	15.71	15.71	0.00	-102.13	737 (5)	8669 (5)	52157 (5)
20-9-S	100	110	15.71	15.71	0.00	-68.01	460 (5)	5414 (5)	32572 (5)
20-10-S	100	110	15.71	15.71	0.00	-43.11	262 (5)	3079 (5)	18524 (5)
20-11-S	100	110	15.71	15.71	6.98	-3.36	118 (7)	1392 (7)	8376 (7)
20-12-S	100	110	15.71	15.71	17.21	-0.57	58 (7)	4105 (7)	2040 (7)
20-13-S	100	110	15.71	15.71	24.06	-0.29	123 (7)	8713 (7)	1448 (7)
20-14-S	100	110	15.71	15.71	27.90	-0.34	173 (6)	12273 (6)	2040 (6)
20-15-S	100	110	15.71	15.71	29.90	-0.47	194 (6)	13726 (6)	2282 (6)
20-16-S	100	110	15.71	15.71	25.11	-0.87	158 (6)	11170 (6)	1857 (6)
20-17-S	100	110	15.71	15.71	18.32	-1.67	106 (6)	7484 (6)	1404 (6)
20-18-S	100	110	15.71	15.71	5.89	-4.84	62 (7)	4377 (7)	3017 (7)
20-19-S	100	110	15.71	15.71	2.39	-8.36	72 (7)	2133 (7)	5074 (7)
20-20-S	100	110	15.71	15.71	0.54	-5.95	48 (7)	981 (7)	3428 (7)
20-21-S	100	110	15.71	15.71	0.06	-3.08	24 (7)	284 (7)	1712 (7)
20-22-S	100	110	15.71	15.71	1.70	-0.35	11 (5)	778 (5)	129 (5)

Pali in c.a.

Ip	Is	Ar [cmq]	σc [kPa]	σf [kPa]	τc [kPa]	σsf [kPa]
1	1	40.72	2734	32796		
1	2	40.72	2409	29306		
1	3	40.72	2100	26020		
1	4	40.72	1817	22947		
1	5	40.72	1571	20210		
1	6	40.72	1367	17890		
1	7	40.72	1218	16366		
1	8	40.72	1120	15203		
1	9	40.72	1029	14117		
1	10	40.72	944	13104		
1	11	40.72	865	12266		
1	12	40.72	818	11750		
1	13	40.72	777	11271		
1	14	40.72	740	10828		
1	15	40.72	705	10419		
1	16	40.72	713	10187		
1	17	40.72	775	10929		
1	18	40.72	831	11602		
1	19	40.72	881	12212		
1	20	40.72	927	12760		
1	21	40.72	967	13250		
1	22	40.72	1003	13685		
1	23	40.72	1035	14068		
1	24	40.72	1062	14402		
1	25	40.72	1086	14690		
1	26	40.72	1106	14935		
1	27	40.72	1122	15139		
1	28	40.72	1136	15305		
1	29	40.72	1146	15437		
1	30	40.72	1154	15535		
1	31	40.72	1160	15603		
1	32	40.72	1162	15642		
1	33	40.72	1163	15656		
1	34	40.72	1162	15646		
1	35	40.72	1159	15613		
1	36	40.72	1154	15562		
1	37	40.72	1148	15492		
1	38	40.72	1140	15406		
1	39	40.72	1132	15305		
1	40	40.72	1122	15191		
1	41	40.72	1111	15066		
1	42	40.72	1099	14931		
1	43	40.72	1087	14788		
1	44	40.72	1074	14640		
1	45	40.72	1061	14486		
1	46	40.72	1048	14329		
1	47	40.72	1034	14167		
1	48	40.72	1020	14004		
1	49	40.72	1006	13838		
1	50	40.72	992	13672		
1	51	40.72	977	13504		
1	52	40.72	963	13337		
1	53	40.72	949	13178		
1	54	40.72	935	13057		
1	55	40.72	921	12936		

APPALTATORE:

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II LOTTO FUNZIONALE FRASSO TELESINO – VITULANO
2° SUBLOTTO TELESE – SAN LORENZO

PROGETTAZIONE:

Mandataria:

Mandante:

SYSTRA S.A. SWS Engineering S.p.A. SYSTRA-SOTECNI S.p.A.

PROGETTO ESECUTIVO

Relazione di calcolo

IF2R.2.2.E.ZZ.CL.TR.16.0.5.008.A.DOCX

COMMESSA	LOTTO	CODIFICA	DOCUMENTO	REV.	FOGLIO
IF2R	2.2.E.ZZ	CL	TR.16.0.5.008	A	79 di 118

Ip	Is	Ar [cmq]	σ_c [kPa]	σ_f [kPa]	τ_c [kPa]	σ_{sf} [kPa]
1	56	40.72	907	12816		
1	57	40.72	893	12698		
1	58	40.72	883	12581		
1	59	40.72	873	12465		
1	60	40.72	863	12352		
1	61	40.72	854	12241		
1	62	40.72	844	12132		
1	63	40.72	835	12025		
1	64	40.72	827	11922		
1	65	40.72	818	11821		
1	66	40.72	810	11723		
1	67	40.72	802	11653		
1	68	40.72	794	11604		
1	69	40.72	786	11556		
1	70	40.72	780	11509		
1	71	40.72	776	11464		
1	72	40.72	772	11421		
1	73	40.72	769	11379		
1	74	40.72	765	11338		
1	75	40.72	762	11299		
1	76	40.72	759	11262		
1	77	40.72	756	11226		
1	78	40.72	753	11192		
1	79	40.72	750	11160		
1	80	40.72	747	11129		
1	81	40.72	745	11099		
1	82	40.72	742	11072		
1	83	40.72	740	11045		
1	84	40.72	738	11020		
1	85	40.72	736	10997		
1	86	40.72	734	10974		
1	87	40.72	733	10954		
1	88	40.72	731	10934		
1	89	40.72	729	10916		
1	90	40.72	728	10899		
1	91	40.72	727	10883		
1	92	40.72	725	10869		
1	93	40.72	724	10856		
1	94	40.72	723	10843		
1	95	40.72	723	10832		
1	96	40.72	722	10822		
1	97	40.72	721	10813		
1	98	40.72	720	10805		
1	99	40.72	720	10797		
1	100	40.72	719	10791		
1	101	40.72	719	10785		
2	1	62.83	2370	29811		
2	2	62.83	2136	27218		
2	3	62.83	1920	24789		
2	4	62.83	1727	22587		
2	5	62.83	1561	20649		
2	6	62.83	1419	18980		
2	7	62.83	1297	17532		
2	8	62.83	1184	16191		
2	9	62.83	1078	14941		
2	10	62.83	995	13926		
2	11	62.83	921	13050		
2	12	62.83	852	12237		
2	13	62.83	789	11485		
2	14	62.83	738	10817		
2	15	62.83	784	11460		
2	16	62.83	847	12215		
2	17	62.83	904	12904		
2	18	62.83	956	13530		
2	19	62.83	1003	14096		
2	20	62.83	1045	14604		
2	21	62.83	1083	15059		
2	22	62.83	1116	15462		
2	23	62.83	1146	15817		
2	24	62.83	1171	16126		
2	25	62.83	1193	16392		
2	26	62.83	1212	16618		
2	27	62.83	1227	16806		
2	28	62.83	1240	16959		
2	29	62.83	1249	17079		
2	30	62.83	1257	17169		
2	31	62.83	1261	17230		
2	32	62.83	1264	17264		
2	33	62.83	1264	17275		
2	34	62.83	1263	17263		
2	35	62.83	1260	17231		

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II LOTTO FUNZIONALE FRASSO TELESINO – VITULANO
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PROGETTAZIONE:

Mandataria:

Mandante:

SYSTRA S.A. SWS Engineering S.p.A. SYSTRA-SOTECNI S.p.A.

PROGETTO ESECUTIVO

Relazione di calcolo

IF2R.2.2.E.ZZ.CL.TR.16.0.5.008.A.DOCX

COMMESSA	LOTTO	CODIFICA	DOCUMENTO	REV.	FOGLIO
IF2R	2.2.E.ZZ	CL	TR.16.0.5.008	A	80 di 118

Ip	Is	Ar [cmq]	σ_c [kPa]	σ_f [kPa]	τ_c [kPa]	σ_{sf} [kPa]
2	36	62.83	1256	17181		
2	37	62.83	1250	17113		
2	38	62.83	1242	17031		
2	39	62.83	1234	16934		
2	40	62.83	1225	16826		
2	41	62.83	1214	16707		
2	42	62.83	1203	16578		
2	43	62.83	1192	16443		
2	44	62.83	1180	16302		
2	45	62.83	1167	16156		
2	46	62.83	1154	16006		
2	47	62.83	1141	15853		
2	48	62.83	1128	15697		
2	49	62.83	1115	15540		
2	50	62.83	1101	15381		
2	51	62.83	1088	15222		
2	52	62.83	1074	15063		
2	53	62.83	1061	14904		
2	54	62.83	1047	14747		
2	55	62.83	1034	14590		
2	56	62.83	1021	14436		
2	57	62.83	1008	14283		
2	58	62.83	995	14133		
2	59	62.83	982	13985		
2	60	62.83	970	13841		
2	61	62.83	958	13699		
2	62	62.83	946	13561		
2	63	62.83	935	13427		
2	64	62.83	924	13296		
2	65	62.83	913	13169		
2	66	62.83	903	13046		
2	67	62.83	893	12927		
2	68	62.83	883	12812		
2	69	62.83	874	12701		
2	70	62.83	865	12594		
2	71	62.83	856	12492		
2	72	62.83	848	12394		
2	73	62.83	840	12300		
2	74	62.83	832	12210		
2	75	62.83	825	12124		
2	76	62.83	818	12042		
2	77	62.83	811	11964		
2	78	62.83	805	11890		
2	79	62.83	799	11821		
2	80	62.83	794	11755		
2	81	62.83	789	11692		
2	82	62.83	784	11634		
2	83	62.83	779	11579		
2	84	62.83	775	11527		
2	85	62.83	771	11479		
2	86	62.83	767	11434		
2	87	62.83	764	11393		
2	88	62.83	760	11354		
2	89	62.83	757	11318		
2	90	62.83	755	11286		
2	91	62.83	752	11256		
2	92	62.83	750	11228		
2	93	62.83	748	11203		
2	94	62.83	746	11181		
2	95	62.83	745	11161		
2	96	62.83	743	11143		
2	97	62.83	742	11127		
2	98	62.83	741	11113		
2	99	62.83	740	11101		
2	100	62.83	739	11091		
2	101	62.83	739	11082		
3	1	62.83	2406	31074		
3	2	62.83	2206	28787		
3	3	62.83	2024	26690		
3	4	62.83	1863	24806		
3	5	62.83	1722	23131		
3	6	62.83	1593	21601		
3	7	62.83	1472	20167		
3	8	62.83	1359	18825		
3	9	62.83	1254	17575		
3	10	62.83	1156	16411		
3	11	62.83	1065	15332		
3	12	62.83	981	14334		
3	13	62.83	903	13414		
3	14	62.83	890	13265		
3	15	62.83	959	14089		

APPALTATORE:

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PROGETTO ESECUTIVO

Relazione di calcolo

IF2R.2.2.E.ZZ.CL.TR.16.0.5.008.A.DOCX

COMMESSA	LOTTO	CODIFICA	DOCUMENTO	REV.	FOGLIO
IF2R	2.2.E.ZZ	CL	TR.16.0.5.008	A	81 di 118

Ip	Is	Ar [cmq]	σ_c [kPa]	σ_f [kPa]	τ_c [kPa]	σ_{sf} [kPa]
3	16	62.83	1022	14843		
3	17	62.83	1079	15530		
3	18	62.83	1131	16155		
3	19	62.83	1178	16719		
3	20	62.83	1220	17226		
3	21	62.83	1258	17679		
3	22	62.83	1291	18081		
3	23	62.83	1320	18434		
3	24	62.83	1346	18741		
3	25	62.83	1367	19006		
3	26	62.83	1386	19230		
3	27	62.83	1401	19416		
3	28	62.83	1414	19567		
3	29	62.83	1423	19685		
3	30	62.83	1430	19772		
3	31	62.83	1435	19830		
3	32	62.83	1437	19863		
3	33	62.83	1438	19871		
3	34	62.83	1436	19857		
3	35	62.83	1433	19822		
3	36	62.83	1428	19769		
3	37	62.83	1422	19699		
3	38	62.83	1415	19613		
3	39	62.83	1406	19514		
3	40	62.83	1396	19403		
3	41	62.83	1386	19280		
3	42	62.83	1375	19148		
3	43	62.83	1363	19010		
3	44	62.83	1351	18865		
3	45	62.83	1338	18716		
3	46	62.83	1325	18563		
3	47	62.83	1312	18406		
3	48	62.83	1298	18247		
3	49	62.83	1284	18086		
3	50	62.83	1271	17924		
3	51	62.83	1257	17761		
3	52	62.83	1243	17598		
3	53	62.83	1229	17435		
3	54	62.83	1216	17273		
3	55	62.83	1202	17112		
3	56	62.83	1189	16953		
3	57	62.83	1175	16796		
3	58	62.83	1162	16642		
3	59	62.83	1149	16490		
3	60	62.83	1137	16341		
3	61	62.83	1125	16194		
3	62	62.83	1113	16052		
3	63	62.83	1101	15912		
3	64	62.83	1089	15777		
3	65	62.83	1078	15645		
3	66	62.83	1068	15516		
3	67	62.83	1057	15392		
3	68	62.83	1047	15272		
3	69	62.83	1037	15156		
3	70	62.83	1028	15044		
3	71	62.83	1019	14936		
3	72	62.83	1010	14832		
3	73	62.83	1002	14732		
3	74	62.83	994	14636		
3	75	62.83	986	14545		
3	76	62.83	979	14457		
3	77	62.83	972	14373		
3	78	62.83	965	14294		
3	79	62.83	959	14218		
3	80	62.83	953	14145		
3	81	62.83	948	14077		
3	82	62.83	942	14012		
3	83	62.83	937	13951		
3	84	62.83	932	13892		
3	85	62.83	928	13838		
3	86	62.83	924	13786		
3	87	62.83	920	13738		
3	88	62.83	916	13692		
3	89	62.83	913	13650		
3	90	62.83	910	13610		
3	91	62.83	907	13573		
3	92	62.83	904	13538		
3	93	62.83	902	13506		
3	94	62.83	899	13477		
3	95	62.83	897	13449		
3	96	62.83	895	13424		

APPALTATORE:

TELESE S.c.a r.l.
Consorzio Telese Società Consortile a Responsabilità Limitata

ITINERARIO NAPOLI – BARI
RADDOPPIO TRATTA CANCELLO-BENEVENTO
II LOTTO FUNZIONALE FRASSO TELESINO – VITULANO
2° SUBLOTTO TELESE – SAN LORENZO

PROGETTAZIONE:

Mandataria:

Mandante:

SYSTRA S.A. SWS Engineering S.p.A. SYSTRA-SOTECNI S.p.A.

PROGETTO ESECUTIVO

Relazione di calcolo

IF2R.2.2.E.ZZ.CL.TR.16.0.5.008.A.DOCX

COMMESSA	LOTTO	CODIFICA	DOCUMENTO	REV.	FOGLIO
IF2R	2.2.E.ZZ	CL	TR.16.0.5.008	A	82 di 118

Ip	Is	Ar [cmq]	σ_c [kPa]	σ_f [kPa]	τ_c [kPa]	σ_{sf} [kPa]
3	97	62.83	894	13400		
3	98	62.83	892	13379		
3	99	62.83	891	13359		
3	100	62.83	889	13340		
3	101	62.83	888	13324		

Combinazioni SLEQ

Paramento

Tensione massima di compressione nel calcestruzzo 14940 [kPa]
Tensione massima di trazione dell'acciaio 450000 [kPa]

n°	B [cm]	H [cm]	Afi [cmq]	Afs [cmq]	M [kNm]	N [kN]	σ_c [kPa]	σ_{fi} [kPa]	σ_{fs} [kPa]
1	100	70	10.05	12.72	0.00	5.00	7 (7)	101 (7)	103 (7)
2	100	70	10.05	12.72	0.00	6.72	9 (7)	136 (7)	139 (7)
3	100	70	10.05	12.72	0.00	8.43	12 (7)	170 (7)	174 (7)
4	100	70	10.05	12.72	0.00	10.15	14 (7)	205 (7)	210 (7)
5	100	70	10.05	12.72	0.00	11.86	16 (7)	240 (7)	245 (7)
6	100	70	10.05	12.72	0.00	13.58	19 (7)	274 (7)	281 (7)
7	100	70	10.05	12.72	0.00	15.29	21 (7)	309 (7)	316 (7)
8	100	70	10.05	12.72	0.00	17.01	23 (7)	344 (7)	352 (7)
9	100	70	10.05	12.72	0.00	18.72	26 (7)	378 (7)	387 (7)
10	100	70	10.05	12.72	0.00	20.44	28 (7)	413 (7)	422 (7)
11	100	70	10.05	12.72	0.00	22.16	31 (7)	448 (7)	458 (7)
12	100	70	10.05	12.72	0.00	23.87	33 (7)	482 (7)	493 (7)
13	100	70	10.05	12.72	0.00	25.59	35 (7)	517 (7)	529 (7)
14	100	70	10.05	12.72	0.00	27.30	38 (7)	551 (7)	564 (7)
15	100	70	10.05	12.72	0.00	29.02	40 (7)	586 (7)	600 (7)
16	100	70	10.05	12.72	0.00	30.73	42 (7)	621 (7)	635 (7)
17	100	70	10.05	12.72	0.00	32.45	45 (7)	655 (7)	671 (7)
18	100	70	10.05	12.72	0.00	34.17	47 (7)	690 (7)	706 (7)
19	100	70	10.05	12.72	0.00	35.88	50 (7)	725 (7)	742 (7)
20	100	70	10.05	12.72	0.00	37.60	52 (7)	759 (7)	777 (7)
21	100	70	10.05	12.72	0.00	39.31	54 (7)	794 (7)	812 (7)
22	100	70	10.05	12.72	0.00	41.03	57 (7)	829 (7)	848 (7)
23	100	70	10.05	12.72	0.00	42.74	59 (7)	863 (7)	883 (7)
24	100	70	10.05	12.72	0.00	44.46	61 (7)	898 (7)	919 (7)
25	100	70	10.05	12.72	0.00	46.17	64 (7)	933 (7)	954 (7)
26	100	70	10.05	12.72	0.00	47.89	66 (7)	967 (7)	990 (7)
27	100	70	10.05	12.72	0.00	49.61	68 (7)	1002 (7)	1025 (7)
28	100	70	10.05	12.72	0.00	51.32	71 (7)	1037 (7)	1061 (7)
29	100	70	10.05	12.72	0.00	53.04	73 (7)	1071 (7)	1096 (7)
30	100	70	10.05	12.72	0.02	54.75	76 (7)	1103 (7)	1135 (7)
31	100	70	10.05	12.72	0.10	56.47	79 (7)	1127 (7)	1181 (7)
32	100	101	10.05	12.72	7.81	59.49	100 (7)	274 (7)	1439 (7)
33	100	101	10.05	12.72	8.07	61.96	104 (7)	291 (7)	1494 (7)
34	100	101	10.05	12.72	8.57	64.44	109 (7)	289 (7)	1567 (7)
35	100	101	10.05	12.72	9.26	66.91	115 (7)	274 (7)	1654 (7)
36	100	101	10.05	12.72	10.05	69.39	122 (7)	251 (7)	1748 (7)
37	100	101	10.05	12.72	10.88	71.86	129 (7)	225 (7)	1846 (7)
38	100	101	10.05	12.72	11.77	74.34	136 (7)	196 (7)	1947 (7)
39	100	101	10.05	12.72	12.72	76.81	144 (7)	161 (7)	2053 (7)
40	100	101	10.05	12.72	13.74	79.29	152 (7)	122 (7)	2164 (7)
41	100	101	10.05	12.72	14.85	81.76	160 (7)	74 (7)	2282 (7)
42	100	101	10.05	12.72	16.04	84.24	169 (7)	15 (7)	2410 (7)
43	100	101	10.05	12.72	17.34	86.71	179 (7)	59 (7)	2547 (7)
44	100	101	10.05	12.72	18.73	89.19	190 (7)	152 (7)	2696 (7)
45	100	101	10.05	12.72	20.23	91.66	202 (7)	267 (7)	2859 (7)
46	100	101	10.05	12.72	21.85	94.14	215 (7)	409 (7)	3037 (7)
47	100	101	10.05	12.72	23.59	96.61	229 (7)	586 (7)	3233 (7)
48	100	101	10.05	12.72	25.45	99.09	245 (7)	804 (7)	3448 (7)
49	100	101	10.05	12.72	27.44	101.56	263 (7)	1073 (7)	3685 (7)
50	100	101	10.05	12.72	29.56	104.04	282 (7)	1404 (7)	3947 (7)
51	100	101	10.05	12.72	31.82	106.51	304 (7)	1811 (7)	4235 (7)
52	100	101	10.05	12.72	34.23	108.99	328 (7)	2308 (7)	4554 (7)

Piastra fondazione

Tensione massima di compressione nel calcestruzzo 17430 [kPa]
Tensione massima di trazione dell'acciaio 1255271 [kPa]

APPALTATORE:	TELESE S.c.a r.l. <small>Consorzio Telese Società Consortile a Responsabilità Limitata</small>	
PROGETTAZIONE:		
Mandatario:	Mandante:	
SYSTRA S.A.	SWS Engineering S.p.A.	SYSTRA-SOTECNI S.p.A.
Relazione di calcolo		
IF2R.2.2.E.ZZ.CL.TR.16.0.5.008.A.DOCX		

ITINERARIO NAPOLI – BARI
RADDOPPIO TRATTA CANCELLO-BENEVENTO
II LOTTO FUNZIONALE FRASSO TELESINO – VITULANO
2° SUBLOTTO TELESE – SAN LORENZO
PROGETTO ESECUTIVO

COMMESSA	LOTTO	CODIFICA	DOCUMENTO	REV.	FOGLIO
IF2R	2.2.E.ZZ	CL	TR.16.0.5.008	A	83 di 118

Is	B [cm]	H [cm]	Afi [cmq]	Afs [cmq]	Mp [kNm]	Mn [kNm]	σc [kPa]	σfi [kPa]	σfs [kPa]
1-1-P	69	110	12.57	12.57	0.90	-0.15	11 (8)	714 (8)	305 (8)
1-2-P	69	110	12.57	12.57	0.79	-1.73	23 (5)	741 (5)	1509 (5)
1-3-P	69	110	12.57	12.57	0.04	-6.58	70 (5)	831 (5)	4601 (5)
1-4-P	69	110	12.57	12.57	0.00	-17.74	184 (5)	2197 (5)	12167 (5)
1-5-P	69	110	12.57	12.57	0.06	-27.83	295 (5)	3523 (5)	19516 (5)
1-6-P	69	110	12.57	12.57	0.02	-32.84	352 (5)	4206 (5)	23297 (5)
1-7-P	69	110	12.57	12.57	0.06	-18.91	197 (5)	2357 (5)	13055 (5)
1-8-P	69	110	12.57	12.57	1.11	-4.65	56 (8)	2212 (8)	3703 (8)
1-9-P	69	110	12.57	12.57	10.86	-0.19	113 (5)	7482 (5)	1351 (5)
1-10-P	69	110	12.57	12.57	14.65	-0.01	155 (5)	10261 (5)	1852 (5)
1-11-P	69	110	12.57	12.57	15.83	0.00	168 (5)	11108 (5)	2005 (5)
1-12-P	69	110	12.57	12.57	12.94	-0.12	136 (5)	8984 (5)	1622 (5)
1-13-P	69	110	12.57	12.57	3.80	-2.56	38 (5)	2485 (5)	1453 (5)
1-14-P	69	110	12.57	12.57	0.09	-12.27	125 (5)	1492 (5)	8266 (5)
1-15-P	69	110	12.57	12.57	0.06	-24.41	261 (5)	3111 (5)	17236 (5)
1-16-P	69	110	12.57	12.57	0.10	-21.96	233 (5)	2783 (5)	15415 (5)
1-17-P	69	110	12.57	12.57	1.21	-10.86	107 (5)	1742 (5)	7065 (5)
1-18-P	69	110	12.57	12.57	5.58	-1.37	57 (5)	3778 (5)	722 (5)
1-19-P	69	110	12.57	12.57	13.91	-0.06	147 (5)	9694 (5)	1750 (5)
1-20-P	69	110	12.57	12.57	17.17	0.00	182 (5)	12068 (5)	2179 (5)
1-21-P	69	110	12.57	12.57	15.16	-0.02	160 (5)	10610 (5)	1915 (5)
1-22-P	69	110	12.57	12.57	10.05	-0.37	105 (5)	6946 (5)	1254 (5)
1-23-P	69	110	12.57	12.57	1.72	-5.94	56 (5)	1735 (5)	3721 (5)
1-24-P	69	110	12.57	12.57	0.21	-17.32	181 (5)	2157 (5)	11947 (5)
1-25-P	69	110	12.57	12.57	0.00	-29.36	316 (5)	3772 (5)	20896 (5)
1-26-P	69	110	12.57	12.57	0.21	-17.32	181 (5)	2157 (5)	11947 (5)
1-27-P	69	110	12.57	12.57	1.72	-5.94	56 (5)	1735 (5)	3721 (5)
1-28-P	69	110	12.57	12.57	10.05	-0.37	105 (5)	6946 (5)	1254 (5)
1-29-P	69	110	12.57	12.57	15.16	-0.02	160 (5)	10610 (5)	1915 (5)
1-30-P	69	110	12.57	12.57	17.17	0.00	182 (5)	12068 (5)	2179 (5)
1-31-P	69	110	12.57	12.57	13.91	-0.06	147 (5)	9694 (5)	1750 (5)
1-32-P	69	110	12.57	12.57	5.58	-1.37	57 (5)	3778 (5)	722 (5)
1-33-P	69	110	12.57	12.57	1.21	-10.86	107 (5)	1742 (5)	7065 (5)
1-34-P	69	110	12.57	12.57	0.10	-21.96	233 (5)	2783 (5)	15415 (5)
1-35-P	69	110	12.57	12.57	0.06	-24.41	261 (5)	3111 (5)	17236 (5)
1-36-P	69	110	12.57	12.57	0.09	-12.27	125 (5)	1492 (5)	8266 (5)
1-37-P	69	110	12.57	12.57	3.80	-2.56	38 (5)	2485 (5)	1453 (5)
1-38-P	69	110	12.57	12.57	12.94	-0.12	136 (5)	8984 (5)	1622 (5)
1-39-P	69	110	12.57	12.57	15.83	0.00	168 (5)	11108 (5)	2005 (5)
1-40-P	69	110	12.57	12.57	14.65	-0.01	155 (5)	10261 (5)	1852 (5)
1-41-P	69	110	12.57	12.57	10.86	-0.19	113 (5)	7482 (5)	1351 (5)
1-42-P	69	110	12.57	12.57	1.11	-4.65	56 (8)	2212 (8)	3703 (8)
1-43-P	69	110	12.57	12.57	0.06	-18.91	197 (5)	2357 (5)	13055 (5)
1-44-P	69	110	12.57	12.57	0.02	-32.84	352 (5)	4206 (5)	23297 (5)
1-45-P	69	110	12.57	12.57	0.06	-27.83	295 (5)	3523 (5)	19516 (5)
1-46-P	69	110	12.57	12.57	0.00	-17.74	184 (5)	2197 (5)	12167 (5)
1-47-P	69	110	12.57	12.57	0.04	-6.58	70 (5)	831 (5)	4601 (5)
1-48-P	69	110	12.57	12.57	0.79	-1.73	23 (5)	741 (5)	1509 (5)
1-49-P	69	110	12.57	12.57	0.90	-0.15	11 (8)	714 (8)	305 (8)
2-1-P	70	110	12.57	12.57	4.93	0.00	53 (5)	3504 (5)	633 (5)
2-2-P	70	110	12.57	12.57	5.05	0.00	57 (5)	3780 (5)	682 (5)
2-3-P	70	110	12.57	12.57	3.98	-0.21	52 (7)	3452 (7)	833 (7)
2-4-P	70	110	12.57	12.57	4.22	-2.36	45 (5)	3001 (5)	1704 (5)
2-5-P	70	110	12.57	12.57	1.17	-26.48	334 (5)	3984 (5)	22070 (5)
2-6-P	70	110	12.57	12.57	0.84	-45.34	531 (5)	6339 (5)	35117 (5)
2-7-P	70	110	12.57	12.57	1.84	-8.74	132 (8)	3653 (8)	8697 (8)
2-8-P	70	110	12.57	12.57	8.66	-0.26	97 (5)	6444 (5)	1163 (5)
2-9-P	70	110	12.57	12.57	13.70	0.00	154 (5)	10191 (5)	1840 (5)
2-10-P	70	110	12.57	12.57	15.15	0.00	168 (5)	11099 (5)	2004 (5)
2-11-P	70	110	12.57	12.57	15.59	0.00	172 (5)	11390 (5)	2056 (5)
2-12-P	70	110	12.57	12.57	14.53	0.00	163 (5)	10755 (5)	1942 (5)
2-13-P	70	110	12.57	12.57	10.63	-0.11	120 (5)	7908 (5)	1428 (5)
2-14-P	70	110	12.57	12.57	2.68	-2.94	36 (5)	2397 (5)	2384 (5)
2-15-P	70	110	12.57	12.57	1.00	-35.85	442 (5)	5279 (5)	29240 (5)
2-16-P	70	110	12.57	12.57	1.12	-29.30	365 (5)	4361 (5)	24160 (5)
2-17-P	70	110	12.57	12.57	7.47	-0.81	81 (5)	5351 (5)	966 (5)
2-18-P	70	110	12.57	12.57	11.44	-0.04	129 (5)	8530 (5)	1540 (5)
2-19-P	70	110	12.57	12.57	14.72	0.00	164 (5)	10866 (5)	1962 (5)
2-20-P	70	110	12.57	12.57	15.87	0.00	175 (5)	11565 (5)	2088 (5)
2-21-P	70	110	12.57	12.57	15.14	0.00	168 (5)	11121 (5)	2008 (5)
2-22-P	70	110	12.57	12.57	13.23	0.00	149 (5)	9845 (5)	1777 (5)
2-23-P	70	110	12.57	12.57	8.82	-0.38	98 (5)	6486 (5)	1171 (5)
2-24-P	70	110	12.57	12.57	1.72	-12.98	195 (8)	3427 (8)	12920 (8)
2-25-P	70	110	12.57	12.57	0.72	-49.58	579 (5)	6915 (5)	38306 (5)
2-26-P	70	110	12.57	12.57	1.72	-12.98	195 (8)	3427 (8)	12920 (8)
2-27-P	70	110	12.57	12.57	8.82	-0.38	98 (5)	6486 (5)	1171 (5)
2-28-P	70	110	12.57	12.57	13.23	0.00	149 (5)	9845 (5)	1777 (5)
2-29-P	70	110	12.57	12.57	15.14	0.00	168 (5)	11121 (5)	2008 (5)
2-30-P	70	110	12.57	12.57	15.87	0.00	175 (5)	11565 (5)	2088 (5)

APPALTATORE:

TELESE S.c.a r.l.

Consorzio Telese Società Consortile a Responsabilità Limitata

PROGETTAZIONE:

Mandataria:

Mandante:

SYSTRA S.A.

SWS Engineering S.p.A.

SYSTRA-SOTECNI S.p.A.

**ITINERARIO NAPOLI – BARI
RADDOPPIO TRATTA CANCELLO-BENEVENTO
II LOTTO FUNZIONALE FRASSO TELESINO – VITULANO
2° SUBLOTTO TELESE – SAN LORENZO****PROGETTO ESECUTIVO**

Relazione di calcolo

IF2R.2.2.E.ZZ.CL.TR.16.0.5.008.A.DOCX

COMMESSA

LOTTO

CODIFICA

DOCUMENTO

REV.

FOGLIO

IF2R

2.2.E.ZZ

CL

TR.16.0.5.008

A

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Is	B [cm]	H [cm]	Afi [cmq]	Afs [cmq]	Mp [kNm]	Mn [kNm]	sc [kPa]	ofi [kPa]	ofs [kPa]
2-31-P	70	110	12.57	12.57	14.72	0.00	164 (5)	10866 (5)	1962 (5)
2-32-P	70	110	12.57	12.57	11.44	-0.04	129 (5)	8530 (5)	1540 (5)
2-33-P	70	110	12.57	12.57	7.47	-0.81	81 (5)	5351 (5)	966 (5)
2-34-P	70	110	12.57	12.57	1.12	-29.30	365 (5)	4361 (5)	24160 (5)
2-35-P	70	110	12.57	12.57	1.00	-35.85	442 (5)	5279 (5)	29240 (5)
2-36-P	70	110	12.57	12.57	2.68	-2.94	36 (5)	2397 (5)	2384 (5)
2-37-P	70	110	12.57	12.57	10.63	-0.11	120 (5)	7908 (5)	1428 (5)
2-38-P	70	110	12.57	12.57	14.53	0.00	163 (5)	10755 (5)	1942 (5)
2-39-P	70	110	12.57	12.57	15.59	0.00	172 (5)	11390 (5)	2056 (5)
2-40-P	70	110	12.57	12.57	15.15	0.00	168 (5)	11099 (5)	2004 (5)
2-41-P	70	110	12.57	12.57	13.70	0.00	154 (5)	10191 (5)	1840 (5)
2-42-P	70	110	12.57	12.57	8.66	-0.26	97 (5)	6444 (5)	1163 (5)
2-43-P	70	110	12.57	12.57	1.84	-8.74	132 (8)	3653 (8)	8697 (8)
2-44-P	70	110	12.57	12.57	0.84	-45.34	531 (5)	6339 (5)	35117 (5)
2-45-P	70	110	12.57	12.57	1.17	-26.48	334 (5)	3984 (5)	22070 (5)
2-46-P	70	110	12.57	12.57	4.22	-2.36	45 (5)	3001 (5)	1704 (5)
2-47-P	70	110	12.57	12.57	3.98	-0.21	52 (7)	3452 (7)	833 (7)
2-48-P	70	110	12.57	12.57	5.05	0.00	57 (5)	3780 (5)	682 (5)
2-49-P	70	110	12.57	12.57	4.93	0.00	53 (5)	3504 (5)	633 (5)
5-1-P	85	110	15.71	15.71	2.10	-4.26	45 (7)	1350 (7)	2973 (7)
5-2-P	85	110	15.71	15.71	1.93	-5.06	58 (7)	1282 (7)	3776 (7)
5-3-P	85	110	15.71	15.71	2.17	-5.61	67 (7)	1473 (7)	4391 (7)
5-4-P	85	110	15.71	15.71	2.36	-6.58	71 (6)	1746 (6)	4630 (6)
5-5-P	85	110	15.71	15.71	3.44	-4.80	63 (7)	1748 (7)	4144 (7)
5-6-P	85	110	15.71	15.71	4.16	-3.92	52 (7)	1535 (7)	3407 (7)
5-7-P	85	110	15.71	15.71	5.41	-3.43	40 (7)	1423 (7)	2640 (7)
5-8-P	85	110	15.71	15.71	6.03	-5.16	54 (7)	1490 (7)	3540 (7)
5-9-P	85	110	15.71	15.71	6.56	-10.67	96 (6)	3055 (6)	6281 (6)
5-10-P	85	110	15.71	15.71	1.07	-36.91	365 (5)	4368 (5)	23892 (5)
5-11-P	85	110	15.71	15.71	0.97	-40.95	433 (5)	5179 (5)	28328 (5)
5-12-P	85	110	15.71	15.71	0.47	-12.71	93 (5)	2019 (5)	6057 (5)
5-13-P	85	110	15.71	15.71	6.71	-0.60	30 (7)	1946 (7)	977 (7)
5-14-P	85	110	15.71	15.71	10.72	-0.07	69 (7)	4513 (7)	825 (7)
5-15-P	85	110	15.71	15.71	11.37	0.00	80 (7)	5203 (7)	951 (7)
5-16-P	85	110	15.71	15.71	11.82	-0.05	80 (7)	5232 (7)	956 (7)
5-17-P	85	110	15.71	15.71	12.13	-0.16	80 (7)	5244 (7)	959 (7)
5-18-P	85	110	15.71	15.71	8.55	-2.53	58 (6)	3808 (6)	1820 (6)
5-19-P	85	110	15.71	15.71	2.20	-9.78	125 (6)	2241 (6)	8198 (6)
5-20-P	85	110	15.71	15.71	1.89	-42.49	479 (5)	5726 (5)	31318 (5)
5-21-P	85	110	15.71	15.71	1.09	-25.51	259 (5)	3094 (5)	16922 (5)
5-22-P	85	110	15.71	15.71	8.27	-3.59	58 (6)	3827 (6)	2483 (6)
5-23-P	85	110	15.71	15.71	11.07	-0.05	70 (7)	4587 (7)	839 (7)
5-24-P	85	110	15.71	15.71	13.09	-0.02	93 (7)	6073 (7)	1110 (7)
5-25-P	85	110	15.71	15.71	13.27	0.00	100 (7)	6513 (7)	1191 (7)
5-26-P	85	110	15.71	15.71	13.09	-0.02	93 (7)	6073 (7)	1110 (7)
5-27-P	85	110	15.71	15.71	11.07	-0.05	70 (7)	4587 (7)	839 (7)
5-28-P	85	110	15.71	15.71	8.27	-3.59	58 (6)	3827 (6)	2483 (6)
5-29-P	85	110	15.71	15.71	1.09	-25.51	259 (5)	3094 (5)	16922 (5)
5-30-P	85	110	15.71	15.71	1.89	-42.49	479 (5)	5726 (5)	31318 (5)
5-31-P	85	110	15.71	15.71	2.20	-9.78	125 (6)	2241 (6)	8198 (6)
5-32-P	85	110	15.71	15.71	8.55	-2.53	58 (6)	3808 (6)	1820 (6)
5-33-P	85	110	15.71	15.71	12.13	-0.16	80 (7)	5244 (7)	959 (7)
5-34-P	85	110	15.71	15.71	11.82	-0.05	80 (7)	5232 (7)	956 (7)
5-35-P	85	110	15.71	15.71	11.37	0.00	80 (7)	5203 (7)	951 (7)
5-36-P	85	110	15.71	15.71	10.72	-0.07	69 (7)	4513 (7)	825 (7)
5-37-P	85	110	15.71	15.71	6.71	-0.60	30 (7)	1946 (7)	977 (7)
5-38-P	85	110	15.71	15.71	0.47	-12.71	93 (5)	2019 (5)	6057 (5)
5-39-P	85	110	15.71	15.71	0.97	-40.95	433 (5)	5179 (5)	28328 (5)
5-40-P	85	110	15.71	15.71	1.07	-36.91	365 (5)	4368 (5)	23892 (5)
5-41-P	85	110	15.71	15.71	6.56	-10.67	96 (6)	3055 (6)	6281 (6)
5-42-P	85	110	15.71	15.71	6.03	-5.16	54 (7)	1490 (7)	3540 (7)
5-43-P	85	110	15.71	15.71	5.41	-3.43	40 (7)	1423 (7)	2640 (7)
5-44-P	85	110	15.71	15.71	4.16	-3.92	52 (7)	1535 (7)	3407 (7)
5-45-P	85	110	15.71	15.71	3.44	-4.80	63 (7)	1748 (7)	4144 (7)
5-46-P	85	110	15.71	15.71	2.36	-6.58	71 (6)	1746 (6)	4630 (6)
5-47-P	85	110	15.71	15.71	2.17	-5.61	67 (7)	1473 (7)	4391 (7)
5-48-P	85	110	15.71	15.71	1.93	-5.06	58 (7)	1282 (7)	3776 (7)
5-49-P	85	110	15.71	15.71	2.10	-4.26	45 (7)	1350 (7)	2973 (7)
6-1-P	85	110	12.57	12.57	2.89	-2.97	28 (5)	1988 (5)	2058 (5)
6-2-P	85	110	12.57	12.57	3.40	-3.45	34 (5)	2411 (5)	2478 (5)
6-3-P	85	110	12.57	12.57	3.79	-3.93	40 (5)	2726 (5)	2899 (5)
6-4-P	85	110	12.57	12.57	3.99	-4.42	46 (5)	2888 (5)	3327 (5)
6-5-P	85	110	12.57	12.57	2.79	-3.85	40 (5)	2077 (5)	2919 (5)
6-6-P	85	110	12.57	12.57	1.52	-2.04	36 (6)	1161 (6)	2628 (6)
6-7-P	85	110	12.57	12.57	0.11	-4.70	44 (5)	512 (5)	3191 (5)
6-8-P	85	110	12.57	12.57	0.03	-8.44	75 (5)	876 (5)	5467 (5)
6-9-P	85	110	12.57	12.57	0.01	-13.16	121 (5)	1419 (5)	8850 (5)
6-10-P	85	110	12.57	12.57	0.06	-15.30	133 (5)	1558 (5)	9720 (5)
6-11-P	85	110	12.57	12.57	0.29	-15.16	130 (5)	1524 (5)	9505 (5)
6-12-P	85	110	12.57	12.57	1.10	-9.36	102 (8)	1454 (8)	7430 (8)
6-13-P	85	110	12.57	12.57	2.29	-2.31	50 (7)	1765 (7)	3642 (7)

APPALTATORE:

TELESE S.c.a r.l.

Consorzio Telese Società Consortile a Responsabilità Limitata

PROGETTAZIONE:

Mandataria:

Mandante:

SYSTRA S.A.

SWS Engineering S.p.A.

SYSTRA-SOTECNI S.p.A.

ITINERARIO NAPOLI – BARI
RADDOPPIO TRATTA CANCELLO-BENEVENTO
II LOTTO FUNZIONALE FRASSO TELESINO – VITULANO
2° SUBLOTTO TELESE – SAN LORENZO
PROGETTO ESECUTIVO

Relazione di calcolo

IF2R.2.2.E.ZZ.CL.TR.16.0.5.008.A.DOCX

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LOTTO

CODIFICA

DOCUMENTO

REV.

FOGLIO

IF2R

2.2.E.ZZ

CL

TR.16.0.5.008

A

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Is	B [cm]	H [cm]	Afi [cmq]	Afs [cmq]	Mp [kNm]	Mn [kNm]	sc [kPa]	ofi [kPa]	ofs [kPa]
6-14-P	85	110	12.57	12.57	5.39	-0.16	40 (7)	2897 (7)	894 (7)
6-15-P	85	110	12.57	12.57	7.55	0.00	54 (7)	3922 (7)	629 (7)
6-16-P	85	110	12.57	12.57	7.88	0.00	57 (7)	4141 (7)	664 (7)
6-17-P	85	110	12.57	12.57	6.89	0.00	44 (7)	3227 (7)	517 (7)
6-18-P	85	110	12.57	12.57	2.64	-0.33	31 (7)	1006 (7)	2255 (7)
6-19-P	85	110	12.57	12.57	1.86	-2.84	90 (7)	1054 (7)	6576 (7)
6-20-P	85	110	12.57	12.57	1.34	-6.35	108 (6)	1258 (6)	7849 (6)
6-21-P	85	110	12.57	12.57	2.17	-3.40	85 (7)	1302 (7)	6225 (7)
6-22-P	85	110	12.57	12.57	1.51	-3.20	58 (8)	1495 (8)	4229 (8)
6-23-P	85	110	12.57	12.57	6.54	0.00	40 (7)	2929 (7)	470 (7)
6-24-P	85	110	12.57	12.57	9.56	0.00	74 (7)	5362 (7)	860 (7)
6-25-P	85	110	12.57	12.57	11.17	0.00	93 (7)	6744 (7)	1081 (7)
6-26-P	85	110	12.57	12.57	9.56	0.00	74 (7)	5362 (7)	860 (7)
6-27-P	85	110	12.57	12.57	6.54	0.00	40 (7)	2929 (7)	470 (7)
6-28-P	85	110	12.57	12.57	1.51	-3.20	58 (8)	1495 (8)	4229 (8)
6-29-P	85	110	12.57	12.57	2.17	-3.40	85 (7)	1302 (7)	6225 (7)
6-30-P	85	110	12.57	12.57	1.34	-6.35	108 (6)	1258 (6)	7849 (6)
6-31-P	85	110	12.57	12.57	1.86	-2.84	90 (7)	1054 (7)	6576 (7)
6-32-P	85	110	12.57	12.57	2.64	-0.33	31 (7)	1006 (7)	2255 (7)
6-33-P	85	110	12.57	12.57	6.89	0.00	44 (7)	3227 (7)	517 (7)
6-34-P	85	110	12.57	12.57	7.88	0.00	57 (7)	4141 (7)	664 (7)
6-35-P	85	110	12.57	12.57	7.55	0.00	54 (7)	3922 (7)	629 (7)
6-36-P	85	110	12.57	12.57	5.39	-0.16	40 (7)	2897 (7)	894 (7)
6-37-P	85	110	12.57	12.57	2.29	-2.31	50 (7)	1765 (7)	3642 (7)
6-38-P	85	110	12.57	12.57	1.10	-9.36	102 (8)	1454 (8)	7430 (8)
6-39-P	85	110	12.57	12.57	0.29	-15.16	130 (5)	1524 (5)	9505 (5)
6-40-P	85	110	12.57	12.57	0.06	-15.30	133 (5)	1558 (5)	9720 (5)
6-41-P	85	110	12.57	12.57	0.01	-13.16	121 (5)	1419 (5)	8850 (5)
6-42-P	85	110	12.57	12.57	0.03	-8.44	75 (5)	876 (5)	5467 (5)
6-43-P	85	110	12.57	12.57	0.11	-4.70	44 (5)	512 (5)	3191 (5)
6-44-P	85	110	12.57	12.57	1.52	-2.04	36 (6)	1161 (6)	2628 (6)
6-45-P	85	110	12.57	12.57	2.79	-3.85	40 (5)	2077 (5)	2919 (5)
6-46-P	85	110	12.57	12.57	3.99	-4.42	46 (5)	2888 (5)	3327 (5)
6-47-P	85	110	12.57	12.57	3.79	-3.93	40 (5)	2726 (5)	2899 (5)
6-48-P	85	110	12.57	12.57	3.40	-3.45	34 (5)	2411 (5)	2478 (5)
6-49-P	85	110	12.57	12.57	2.89	-2.97	28 (5)	1988 (5)	2058 (5)
7-1-P	85	110	12.57	12.57	1.54	-0.62	17 (8)	1220 (8)	612 (8)
7-2-P	85	110	12.57	12.57	2.42	-2.34	26 (8)	1916 (8)	1859 (8)
7-3-P	85	110	12.57	12.57	2.48	-6.55	68 (7)	2175 (7)	4976 (7)
7-4-P	85	110	12.57	12.57	1.97	-14.30	147 (7)	1796 (7)	10736 (7)
7-5-P	85	110	12.57	12.57	0.59	-23.71	236 (7)	2759 (7)	17209 (7)
7-6-P	85	110	12.57	12.57	0.05	-29.83	295 (7)	3452 (7)	21530 (7)
7-7-P	85	110	12.57	12.57	0.11	-17.40	177 (7)	2067 (7)	12892 (7)
7-8-P	85	110	12.57	12.57	0.87	-7.32	80 (8)	931 (8)	5805 (8)
7-9-P	85	110	12.57	12.57	3.82	-0.34	33 (6)	2369 (6)	2198 (6)
7-10-P	85	110	12.57	12.57	6.00	0.00	53 (7)	3895 (7)	624 (7)
7-11-P	85	110	12.57	12.57	7.32	0.00	66 (7)	4808 (7)	771 (7)
7-12-P	85	110	12.57	12.57	6.69	-0.25	64 (6)	4636 (6)	1337 (6)
7-13-P	85	110	12.57	12.57	4.90	-5.48	55 (5)	3214 (5)	4010 (5)
7-14-P	85	110	12.57	12.57	3.16	-10.71	116 (5)	1357 (5)	8467 (5)
7-15-P	85	110	12.57	12.57	0.23	-20.41	208 (7)	2435 (7)	15188 (7)
7-16-P	85	110	12.57	12.57	0.13	-17.24	185 (7)	2162 (7)	13487 (7)
7-17-P	85	110	12.57	12.57	3.20	-6.80	76 (6)	1638 (6)	5566 (6)
7-18-P	85	110	12.57	12.57	5.53	-0.16	49 (6)	3539 (6)	650 (6)
7-19-P	85	110	12.57	12.57	11.52	0.00	108 (6)	7839 (6)	1257 (6)
7-20-P	85	110	12.57	12.57	13.78	0.00	130 (7)	9471 (7)	1518 (7)
7-21-P	85	110	12.57	12.57	12.89	0.00	122 (7)	8875 (7)	1423 (7)
7-22-P	85	110	12.57	12.57	10.14	0.00	91 (6)	6661 (6)	1068 (6)
7-23-P	85	110	12.57	12.57	5.39	-3.55	52 (6)	3233 (6)	3788 (6)
7-24-P	85	110	12.57	12.57	1.02	-10.59	138 (7)	1611 (7)	10050 (7)
7-25-P	85	110	12.57	12.57	0.88	-15.81	271 (5)	3168 (5)	19757 (5)
7-26-P	85	110	12.57	12.57	1.02	-10.59	138 (7)	1611 (7)	10050 (7)
7-27-P	85	110	12.57	12.57	5.39	-3.55	52 (6)	3233 (6)	3788 (6)
7-28-P	85	110	12.57	12.57	10.14	0.00	91 (6)	6661 (6)	1068 (6)
7-29-P	85	110	12.57	12.57	12.89	0.00	122 (7)	8875 (7)	1423 (7)
7-30-P	85	110	12.57	12.57	13.78	0.00	130 (7)	9471 (7)	1518 (7)
7-31-P	85	110	12.57	12.57	11.52	0.00	108 (6)	7839 (6)	1257 (6)
7-32-P	85	110	12.57	12.57	5.53	-0.16	49 (6)	3539 (6)	650 (6)
7-33-P	85	110	12.57	12.57	3.20	-6.80	76 (6)	1638 (6)	5566 (6)
7-34-P	85	110	12.57	12.57	0.13	-17.24	185 (7)	2162 (7)	13487 (7)
7-35-P	85	110	12.57	12.57	0.23	-20.41	208 (7)	2435 (7)	15188 (7)
7-36-P	85	110	12.57	12.57	3.16	-10.71	116 (5)	1357 (5)	8467 (5)
7-37-P	85	110	12.57	12.57	4.90	-5.48	55 (5)	3214 (5)	4010 (5)
7-38-P	85	110	12.57	12.57	6.69	-0.25	64 (6)	4636 (6)	1337 (6)
7-39-P	85	110	12.57	12.57	7.32	0.00	66 (7)	4808 (7)	771 (7)
7-40-P	85	110	12.57	12.57	6.00	0.00	53 (7)	3895 (7)	624 (7)
7-41-P	85	110	12.57	12.57	3.82	-0.34	33 (6)	2369 (6)	2198 (6)
7-42-P	85	110	12.57	12.57	0.87	-7.32	80 (8)	931 (8)	5805 (8)
7-43-P	85	110	12.57	12.57	0.11	-17.40	177 (7)	2067 (7)	12892 (7)
7-44-P	85	110	12.57	12.57	0.05	-29.83	295 (7)	3452 (7)	21530 (7)
7-45-P	85	110	12.57	12.57	0.59	-23.71	236 (7)	2759 (7)	17209 (7)

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II LOTTO FUNZIONALE FRASSO TELESINO – VITULANO
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Relazione di calcolo

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2.2.E.ZZ

CL

TR.16.0.5.008

A

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Is	B [cm]	H [cm]	Afi [cmq]	Afs [cmq]	Mp [kNm]	Mn [kNm]	sc [kPa]	ofi [kPa]	ofs [kPa]
7-46-P	85	110	12.57	12.57	1.97	-14.30	147 (7)	1796 (7)	10736 (7)
7-47-P	85	110	12.57	12.57	2.48	-6.55	68 (7)	2175 (7)	4976 (7)
7-48-P	85	110	12.57	12.57	2.42	-2.34	26 (8)	1916 (8)	1859 (8)
7-49-P	85	110	12.57	12.57	1.54	-0.62	17 (8)	1220 (8)	612 (8)
8-1-P	85	110	15.71	15.71	0.68	-0.12	6 (7)	419 (7)	211 (7)
8-2-P	85	110	15.71	15.71	0.31	-3.05	27 (6)	329 (6)	1799 (6)
8-3-P	85	110	15.71	15.71	0.31	-8.77	79 (7)	951 (7)	5200 (7)
8-4-P	85	110	15.71	15.71	0.44	-18.36	165 (7)	2107 (7)	10811 (7)
8-5-P	85	110	15.71	15.71	0.00	-37.87	341 (7)	4084 (7)	22341 (7)
8-6-P	85	110	15.71	15.71	0.00	-51.03	462 (7)	5533 (7)	30263 (7)
8-7-P	85	110	15.71	15.71	0.00	-26.51	238 (7)	2848 (7)	15575 (7)
8-8-P	85	110	15.71	15.71	0.53	-9.62	94 (8)	1683 (8)	6130 (8)
8-9-P	85	110	15.71	15.71	1.79	-0.67	29 (8)	1904 (8)	709 (8)
8-10-P	85	110	15.71	15.71	6.12	-0.01	54 (7)	3543 (7)	648 (7)
8-11-P	85	110	15.71	15.71	7.73	0.00	68 (7)	4471 (7)	817 (7)
8-12-P	85	110	15.71	15.71	4.64	-0.04	40 (7)	2617 (7)	478 (7)
8-13-P	85	110	15.71	15.71	1.64	-5.27	51 (8)	2610 (8)	3357 (8)
8-14-P	85	110	15.71	15.71	0.00	-16.02	146 (7)	1746 (7)	9551 (7)
8-15-P	85	110	15.71	15.71	0.00	-38.90	356 (7)	4263 (7)	23318 (7)
8-16-P	85	110	15.71	15.71	0.00	-33.53	307 (7)	3675 (7)	20103 (7)
8-17-P	85	110	15.71	15.71	1.34	-10.08	98 (8)	4285 (8)	6426 (8)
8-18-P	85	110	15.71	15.71	2.63	-1.02	59 (7)	3849 (7)	761 (7)
8-19-P	85	110	15.71	15.71	9.92	0.00	86 (7)	5630 (7)	1029 (7)
8-20-P	85	110	15.71	15.71	14.26	0.00	126 (7)	8235 (7)	1506 (7)
8-21-P	85	110	15.71	15.71	12.20	0.00	107 (7)	6995 (7)	1279 (7)
8-22-P	85	110	15.71	15.71	7.23	-0.01	62 (7)	4064 (7)	743 (7)
8-23-P	85	110	15.71	15.71	2.18	-5.16	53 (8)	3472 (8)	3291 (8)
8-24-P	85	110	15.71	15.71	0.00	-21.25	195 (7)	2334 (7)	12765 (7)
8-25-P	85	110	15.71	15.71	0.00	-44.80	411 (7)	4919 (7)	26907 (7)
8-26-P	85	110	15.71	15.71	0.00	-21.25	195 (7)	2334 (7)	12765 (7)
8-27-P	85	110	15.71	15.71	2.18	-5.16	53 (8)	3472 (8)	3291 (8)
8-28-P	85	110	15.71	15.71	7.23	-0.01	62 (7)	4064 (7)	743 (7)
8-29-P	85	110	15.71	15.71	12.20	0.00	107 (7)	6995 (7)	1279 (7)
8-30-P	85	110	15.71	15.71	14.26	0.00	126 (7)	8235 (7)	1506 (7)
8-31-P	85	110	15.71	15.71	9.92	0.00	86 (7)	5630 (7)	1029 (7)
8-32-P	85	110	15.71	15.71	2.63	-1.02	59 (7)	3849 (7)	761 (7)
8-33-P	85	110	15.71	15.71	1.34	-10.08	98 (8)	4285 (8)	6426 (8)
8-34-P	85	110	15.71	15.71	0.00	-33.53	307 (7)	3675 (7)	20103 (7)
8-35-P	85	110	15.71	15.71	0.00	-38.90	356 (7)	4263 (7)	23318 (7)
8-36-P	85	110	15.71	15.71	0.00	-16.02	146 (7)	1746 (7)	9551 (7)
8-37-P	85	110	15.71	15.71	1.64	-5.27	51 (8)	2610 (8)	3357 (8)
8-38-P	85	110	15.71	15.71	4.64	-0.04	40 (7)	2617 (7)	478 (7)
8-39-P	85	110	15.71	15.71	7.73	0.00	68 (7)	4471 (7)	817 (7)
8-40-P	85	110	15.71	15.71	6.12	-0.01	54 (7)	3543 (7)	648 (7)
8-41-P	85	110	15.71	15.71	1.79	-0.67	29 (8)	1904 (8)	709 (8)
8-42-P	85	110	15.71	15.71	0.53	-9.62	94 (8)	1683 (8)	6130 (8)
8-43-P	85	110	15.71	15.71	0.00	-26.51	238 (7)	2848 (7)	15575 (7)
8-44-P	85	110	15.71	15.71	0.00	-51.03	462 (7)	5533 (7)	30263 (7)
8-45-P	85	110	15.71	15.71	0.00	-37.87	341 (7)	4084 (7)	22341 (7)
8-46-P	85	110	15.71	15.71	0.44	-18.36	165 (7)	2107 (7)	10811 (7)
8-47-P	85	110	15.71	15.71	0.31	-8.77	79 (7)	951 (7)	5200 (7)
8-48-P	85	110	15.71	15.71	0.31	-3.05	27 (6)	329 (6)	1799 (6)
8-49-P	85	110	15.71	15.71	0.68	-0.12	6 (7)	419 (7)	211 (7)
9-1-S	100	110	15.71	15.71	1.03	-3.88	35 (5)	2509 (5)	1814 (5)
9-2-S	100	110	15.71	15.71	0.02	-7.15	49 (5)	575 (5)	3460 (5)
9-3-S	100	110	15.71	15.71	0.07	-10.23	87 (5)	1025 (5)	6164 (5)
9-4-S	100	110	15.71	15.71	1.54	-11.40	124 (5)	1503 (5)	8759 (5)
9-5-S	100	110	15.71	15.71	7.67	-4.52	203 (8)	6096 (8)	14352 (8)
9-6-S	100	110	15.71	15.71	23.14	-0.39	208 (8)	14703 (8)	2444 (8)
9-7-S	100	110	15.71	15.71	54.22	0.00	455 (5)	32198 (5)	5352 (5)
9-8-S	100	110	15.71	15.71	0.00	-102.13	737 (5)	8669 (5)	52157 (5)
9-9-S	100	110	15.71	15.71	0.00	-68.01	460 (5)	5414 (5)	32572 (5)
9-10-S	100	110	15.71	15.71	0.00	-43.11	262 (5)	3079 (5)	18524 (5)
9-11-S	100	110	15.71	15.71	6.98	-3.36	118 (7)	1392 (7)	8376 (7)
9-12-S	100	110	15.71	15.71	17.21	-0.57	58 (7)	4105 (7)	2040 (7)
9-13-S	100	110	15.71	15.71	24.06	-0.29	123 (7)	8713 (7)	1448 (7)
9-14-S	100	110	15.71	15.71	27.90	-0.34	173 (6)	12273 (6)	2040 (6)
9-15-S	100	110	15.71	15.71	29.90	-0.47	194 (6)	13726 (6)	2282 (6)
9-16-S	100	110	15.71	15.71	25.11	-0.87	158 (6)	11170 (6)	1857 (6)
9-17-S	100	110	15.71	15.71	18.32	-1.67	106 (6)	7484 (6)	1404 (6)
9-18-S	100	110	15.71	15.71	5.89	-4.84	62 (7)	4377 (7)	3017 (7)
9-19-S	100	110	15.71	15.71	2.39	-8.36	72 (7)	2133 (7)	5074 (7)
9-20-S	100	110	15.71	15.71	0.54	-5.95	48 (7)	981 (7)	3428 (7)
9-21-S	100	110	15.71	15.71	0.06	-3.08	24 (7)	284 (7)	1712 (7)
9-22-S	100	110	15.71	15.71	1.70	-0.35	11 (5)	778 (5)	129 (5)
10-1-S	100	110	15.71	15.71	6.58	-2.65	44 (5)	3079 (5)	1218 (5)
10-2-S	100	110	15.71	15.71	9.35	-5.30	110 (6)	7808 (6)	2943 (6)
10-3-S	100	110	15.71	15.71	4.65	-9.63	67 (5)	2066 (5)	4774 (5)
10-4-S	100	110	15.71	15.71	0.94	-44.28	324 (5)	3810 (5)	22921 (5)
10-5-S	100	110	15.71	15.71	3.23	-41.76	444 (5)	5443 (5)	31393 (5)
10-6-S	100	110	15.71	15.71	13.75	-6.89	143 (5)	10136 (5)	1685 (5)

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2.2.E.ZZ

CL

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Is	B [cm]	H [cm]	Afi [cmq]	Afs [cmq]	Mp [kNm]	Mn [kNm]	sc [kPa]	ofi [kPa]	ofs [kPa]
10-7-S	100	110	15.71	15.71	65.21	0.00	581 (5)	41117 (5)	6834 (5)
10-8-S	100	110	15.71	15.71	0.30	-64.20	415 (5)	4884 (5)	29380 (5)
10-9-S	100	110	15.71	15.71	0.06	-52.78	330 (5)	3885 (5)	23372 (5)
10-10-S	100	110	15.71	15.71	0.36	-38.85	227 (5)	2665 (5)	16032 (5)
10-11-S	100	110	15.71	15.71	5.57	-2.93	128 (7)	1508 (7)	9074 (7)
10-12-S	100	110	15.71	15.71	11.32	-0.14	46 (7)	2495 (7)	3244 (7)
10-13-S	100	110	15.71	15.71	20.47	-0.04	82 (7)	5826 (7)	968 (7)
10-14-S	100	110	15.71	15.71	26.65	-0.04	159 (6)	11275 (6)	1874 (6)
10-15-S	100	110	15.71	15.71	32.42	-0.05	209 (6)	14796 (6)	2459 (6)
10-16-S	100	110	15.71	15.71	33.31	-0.13	210 (6)	14890 (6)	2475 (6)
10-17-S	100	110	15.71	15.71	32.46	-0.73	193 (5)	13656 (5)	2270 (5)
10-18-S	100	110	15.71	15.71	1.16	-16.73	133 (7)	1929 (7)	9426 (7)
10-19-S	100	110	15.71	15.71	0.16	-36.42	305 (7)	3585 (7)	21570 (7)
10-20-S	100	110	15.71	15.71	0.27	-19.52	169 (5)	1994 (5)	11995 (5)
10-21-S	100	110	15.71	15.71	0.13	-10.70	75 (5)	881 (5)	5298 (5)
10-22-S	100	110	15.71	15.71	0.88	-1.87	12 (5)	834 (5)	359 (5)
11-1-S	100	110	15.71	15.71	0.33	-5.15	36 (5)	420 (5)	2529 (5)
11-2-S	100	110	15.71	15.71	0.49	-4.86	29 (5)	347 (5)	2087 (5)
11-3-S	100	110	15.71	15.71	1.17	-1.70	25 (8)	745 (8)	1801 (8)
11-4-S	100	110	15.71	15.71	6.05	0.00	54 (8)	3844 (8)	639 (8)
11-5-S	100	110	15.71	15.71	17.09	0.00	153 (8)	10863 (8)	1806 (8)
11-6-S	100	110	15.71	15.71	34.35	0.00	291 (5)	20622 (5)	3428 (5)
11-7-S	100	110	15.71	15.71	54.44	0.00	444 (5)	31395 (5)	5218 (5)
11-8-S	100	110	15.71	15.71	49.30	-0.61	254 (6)	17960 (6)	3533 (6)
11-9-S	100	110	15.71	15.71	18.10	-16.48	204 (5)	14403 (5)	6881 (5)
11-10-S	100	110	15.71	15.71	0.19	-70.76	527 (5)	6205 (5)	37329 (5)
11-11-S	100	110	15.71	15.71	0.00	-54.96	357 (5)	4196 (5)	25242 (5)
11-12-S	100	110	15.71	15.71	0.00	-33.49	155 (5)	1826 (5)	10985 (5)
11-13-S	100	110	15.71	15.71	13.04	-0.52	29 (7)	2087 (7)	1417 (7)
11-14-S	100	110	15.71	15.71	20.39	-0.20	99 (7)	7002 (7)	1164 (7)
11-15-S	100	110	15.71	15.71	21.35	-0.10	131 (7)	9265 (7)	1540 (7)
11-16-S	100	110	15.71	15.71	19.47	-0.12	118 (6)	8380 (6)	1393 (6)
11-17-S	100	110	15.71	15.71	10.35	-0.53	93 (8)	6579 (8)	1689 (8)
11-18-S	100	110	15.71	15.71	6.35	-0.63	57 (8)	4033 (8)	2010 (8)
11-19-S	100	110	15.71	15.71	3.05	-0.79	35 (8)	1936 (8)	2495 (8)
11-20-S	100	110	15.71	15.71	2.92	-0.47	15 (6)	681 (6)	1094 (6)
11-21-S	100	110	15.71	15.71	0.20	-0.95	10 (7)	246 (7)	712 (7)
11-22-S	100	110	15.71	15.71	0.05	-0.90	6 (7)	106 (7)	397 (7)
12-1-S	100	110	15.71	15.71	8.19	-1.69	55 (5)	3899 (5)	753 (5)
12-2-S	100	110	15.71	15.71	7.41	-3.58	166 (8)	11774 (8)	2272 (8)
12-3-S	100	110	15.71	15.71	4.66	-10.34	76 (5)	3149 (5)	5392 (5)
12-4-S	100	110	15.71	15.71	0.68	-50.87	375 (5)	4415 (5)	26564 (5)
12-5-S	100	110	15.71	15.71	0.99	-47.60	383 (5)	4503 (5)	27094 (5)
12-6-S	100	110	15.71	15.71	9.19	-6.72	118 (5)	8319 (5)	1383 (5)
12-7-S	100	110	15.71	15.71	66.16	0.00	594 (8)	42041 (8)	6988 (8)
12-8-S	100	110	15.71	15.71	0.00	-39.67	202 (5)	2379 (5)	14312 (5)
12-9-S	100	110	15.71	15.71	7.59	-0.18	128 (7)	1507 (7)	9066 (7)
12-10-S	100	110	15.71	15.71	9.10	0.00	91 (7)	1066 (7)	6412 (7)
12-11-S	100	110	15.71	15.71	12.70	0.00	39 (7)	458 (7)	2754 (7)
12-12-S	100	110	15.71	15.71	16.80	0.00	31 (7)	2208 (7)	1741 (7)
12-13-S	100	110	15.71	15.71	22.30	0.00	96 (7)	6774 (7)	1126 (7)
12-14-S	100	110	15.71	15.71	26.59	-0.03	156 (6)	11067 (6)	1839 (6)
12-15-S	100	110	15.71	15.71	32.35	-0.07	207 (6)	14622 (6)	2431 (6)
12-16-S	100	110	15.71	15.71	33.64	-0.47	211 (6)	14960 (6)	2487 (6)
12-17-S	100	110	15.71	15.71	33.84	-1.80	200 (5)	14162 (5)	2354 (5)
12-18-S	100	110	15.71	15.71	0.94	-21.20	170 (7)	3201 (7)	12062 (7)
12-19-S	100	110	15.71	15.71	0.49	-43.38	363 (7)	4272 (7)	25700 (7)
12-20-S	100	110	15.71	15.71	0.30	-23.58	202 (5)	2371 (5)	14264 (5)
12-21-S	100	110	15.71	15.71	0.00	-12.75	89 (5)	1042 (5)	6271 (5)
12-22-S	100	110	15.71	15.71	0.85	-2.17	11 (5)	798 (5)	407 (5)
13-1-S	100	110	15.71	15.71	0.79	-4.60	31 (5)	378 (5)	2209 (5)
13-2-S	100	110	15.71	15.71	0.34	-6.80	44 (5)	515 (5)	3097 (5)
13-3-S	100	110	15.71	15.71	0.60	-6.96	74 (5)	866 (5)	5213 (5)
13-4-S	100	110	15.71	15.71	4.90	-1.86	44 (8)	3111 (8)	2947 (8)
13-5-S	100	110	15.71	15.71	13.96	0.00	125 (8)	8868 (8)	1474 (8)
13-6-S	100	110	15.71	15.71	31.24	0.00	268 (5)	18986 (5)	3156 (5)
13-7-S	100	110	15.71	15.71	55.21	0.00	453 (5)	32092 (5)	5334 (5)
13-8-S	100	110	15.71	15.71	51.84	-1.21	304 (6)	21540 (6)	5673 (6)
13-9-S	100	110	15.71	15.71	35.24	-3.91	161 (6)	11402 (6)	5565 (6)
13-10-S	100	110	15.71	15.71	0.52	-57.31	412 (5)	4848 (5)	29169 (5)
13-11-S	100	110	15.71	15.71	0.01	-43.85	266 (5)	3129 (5)	18826 (5)
13-12-S	100	110	15.71	15.71	2.50	-6.85	101 (6)	1191 (6)	7168 (6)
13-13-S	100	110	15.71	15.71	16.66	-0.02	36 (7)	2563 (7)	426 (7)
13-14-S	100	110	15.71	15.71	22.78	0.00	116 (7)	8183 (7)	1360 (7)
13-15-S	100	110	15.71	15.71	23.52	0.00	145 (6)	10276 (6)	1708 (6)
13-16-S	100	110	15.71	15.71	19.88	-0.07	119 (6)	8402 (6)	1397 (6)
13-17-S	100	110	15.71	15.71	11.00	-0.71	78 (7)	5550 (7)	1350 (7)
13-18-S	100	110	15.71	15.71	6.17	-1.35	48 (7)	3385 (7)	2524 (7)
13-19-S	100	110	15.71	15.71	2.62	-2.32	51 (7)	1647 (7)	3632 (7)
13-20-S	100	110	15.71	15.71	0.70	-2.56	49 (7)	607 (7)	3454 (7)
13-21-S	100	110	15.71	15.71	0.08	-1.83	21 (7)	248 (7)	1490 (7)

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Is	B [cm]	H [cm]	Afi [cmq]	Afs [cmq]	Mp [kNm]	Mn [kNm]	sc [kPa]	ofi [kPa]	ofs [kPa]
13-22-S	100	110	15.71	15.71	0.27	-0.64	3 (7)	237 (7)	244 (7)
14-1-S	100	110	18.85	18.85	4.60	-4.19	28 (5)	1829 (5)	1655 (5)
14-2-S	100	110	18.85	18.85	5.85	-7.01	54 (5)	3485 (5)	2799 (5)
14-3-S	100	110	18.85	18.85	2.66	-10.07	62 (5)	1092 (5)	4047 (5)
14-4-S	100	110	18.85	18.85	1.64	-27.77	226 (5)	2711 (5)	14657 (5)
14-5-S	100	110	18.85	18.85	6.51	-17.38	332 (8)	5191 (8)	21551 (8)
14-6-S	100	110	18.85	18.85	19.45	-3.52	170 (5)	11027 (5)	2039 (5)
14-7-S	100	110	18.85	18.85	61.14	0.00	483 (5)	31303 (5)	5789 (5)
14-8-S	100	110	18.85	18.85	15.73	-3.22	118 (6)	7651 (6)	7366 (6)
14-9-S	100	110	18.85	18.85	12.09	-1.41	98 (7)	1174 (7)	6350 (7)
14-10-S	100	110	18.85	18.85	8.41	-4.18	124 (7)	1492 (7)	8071 (7)
14-11-S	100	110	18.85	18.85	10.16	-1.89	89 (7)	1065 (7)	5761 (7)
14-12-S	100	110	18.85	18.85	13.86	-0.22	52 (7)	2472 (7)	3356 (7)
14-13-S	100	110	18.85	18.85	21.60	-0.02	80 (7)	5160 (7)	954 (7)
14-14-S	100	110	18.85	18.85	26.22	0.00	137 (7)	8862 (7)	1639 (7)
14-15-S	100	110	18.85	18.85	29.11	0.00	168 (6)	10885 (6)	2013 (6)
14-16-S	100	110	18.85	18.85	27.16	-0.11	153 (6)	9907 (6)	1832 (6)
14-17-S	100	110	18.85	18.85	23.66	-1.07	127 (6)	8213 (6)	1519 (6)
14-18-S	100	110	18.85	18.85	2.94	-11.11	105 (7)	2450 (7)	6831 (7)
14-19-S	100	110	18.85	18.85	1.11	-23.01	221 (7)	2651 (7)	14333 (7)
14-20-S	100	110	18.85	18.85	0.06	-12.86	129 (7)	1543 (7)	8345 (7)
14-21-S	100	110	18.85	18.85	0.54	-6.70	48 (5)	577 (5)	3119 (5)
14-22-S	100	110	18.85	18.85	1.19	-1.26	6 (5)	381 (5)	288 (5)
15-1-S	100	110	15.71	15.71	4.60	-4.19	31 (5)	2187 (5)	1980 (5)
15-2-S	100	110	15.71	15.71	5.85	-7.01	59 (5)	4169 (5)	3348 (5)
15-3-S	100	110	15.71	15.71	2.66	-10.07	68 (5)	1306 (5)	4840 (5)
15-4-S	100	110	15.71	15.71	1.64	-27.77	248 (5)	2914 (5)	17530 (5)
15-5-S	100	110	15.71	15.71	6.51	-17.38	364 (8)	6209 (8)	25774 (8)
15-6-S	100	110	15.71	15.71	19.45	-3.52	186 (5)	13189 (5)	2192 (5)
15-7-S	100	110	15.71	15.71	61.14	0.00	529 (5)	37438 (5)	6223 (5)
15-8-S	100	110	15.71	15.71	15.73	-3.22	129 (6)	9151 (6)	8810 (6)
15-9-S	100	110	15.71	15.71	12.09	-1.41	107 (7)	1262 (7)	7595 (7)
15-10-S	100	110	15.71	15.71	8.41	-4.18	136 (7)	1604 (7)	9652 (7)
15-11-S	100	110	15.71	15.71	10.16	-1.89	97 (7)	1145 (7)	6890 (7)
15-12-S	100	110	15.71	15.71	13.86	-0.22	57 (7)	2956 (7)	4014 (7)
15-13-S	100	110	15.71	15.71	21.60	-0.02	87 (7)	6171 (7)	1026 (7)
15-14-S	100	110	15.71	15.71	26.22	0.00	150 (7)	10599 (7)	1762 (7)
15-15-S	100	110	15.71	15.71	29.11	0.00	184 (6)	13019 (6)	2164 (6)
15-16-S	100	110	15.71	15.71	27.16	-0.11	167 (6)	11849 (6)	1969 (6)
15-17-S	100	110	15.71	15.71	23.66	-1.07	139 (6)	9823 (6)	1633 (6)
15-18-S	100	110	15.71	15.71	2.94	-11.11	115 (7)	2931 (7)	8170 (7)
15-19-S	100	110	15.71	15.71	1.11	-23.01	242 (7)	2849 (7)	17143 (7)
15-20-S	100	110	15.71	15.71	0.06	-12.86	141 (7)	1659 (7)	9981 (7)
15-21-S	100	110	15.71	15.71	0.54	-6.70	53 (5)	620 (5)	3730 (5)
15-22-S	100	110	15.71	15.71	1.19	-1.26	6 (5)	455 (5)	345 (5)
16-1-S	100	110	15.71	15.71	0.79	-4.60	31 (5)	378 (5)	2209 (5)
16-2-S	100	110	15.71	15.71	0.34	-6.80	44 (5)	515 (5)	3097 (5)
16-3-S	100	110	15.71	15.71	0.60	-6.96	74 (5)	866 (5)	5213 (5)
16-4-S	100	110	15.71	15.71	4.90	-1.86	44 (8)	3111 (8)	2947 (8)
16-5-S	100	110	15.71	15.71	13.96	0.00	125 (8)	8868 (8)	1474 (8)
16-6-S	100	110	15.71	15.71	31.24	0.00	268 (5)	18986 (5)	3156 (5)
16-7-S	100	110	15.71	15.71	55.21	0.00	453 (5)	32092 (5)	5334 (5)
16-8-S	100	110	15.71	15.71	51.84	-1.21	304 (6)	21540 (6)	5673 (6)
16-9-S	100	110	15.71	15.71	35.24	-3.91	161 (6)	11402 (6)	5565 (6)
16-10-S	100	110	15.71	15.71	0.52	-57.31	412 (5)	4848 (5)	29169 (5)
16-11-S	100	110	15.71	15.71	0.01	-43.85	266 (5)	3129 (5)	18826 (5)
16-12-S	100	110	15.71	15.71	2.50	-6.85	101 (6)	1191 (6)	7168 (6)
16-13-S	100	110	15.71	15.71	16.66	-0.02	36 (7)	2563 (7)	426 (7)
16-14-S	100	110	15.71	15.71	22.78	0.00	116 (7)	8183 (7)	1360 (7)
16-15-S	100	110	15.71	15.71	23.52	0.00	145 (6)	10276 (6)	1708 (6)
16-16-S	100	110	15.71	15.71	19.88	-0.07	119 (6)	8402 (6)	1397 (6)
16-17-S	100	110	15.71	15.71	11.00	-0.71	78 (7)	5550 (7)	1350 (7)
16-18-S	100	110	15.71	15.71	6.17	-1.35	48 (7)	3385 (7)	2524 (7)
16-19-S	100	110	15.71	15.71	2.62	-2.32	51 (7)	1647 (7)	3632 (7)
16-20-S	100	110	15.71	15.71	0.70	-2.56	49 (7)	607 (7)	3454 (7)
16-21-S	100	110	15.71	15.71	0.08	-1.83	21 (7)	248 (7)	1490 (7)
16-22-S	100	110	15.71	15.71	0.27	-0.64	3 (7)	237 (7)	244 (7)
17-1-S	100	110	15.71	15.71	8.19	-1.69	55 (5)	3899 (5)	753 (5)
17-2-S	100	110	15.71	15.71	7.41	-3.58	166 (8)	11774 (8)	2272 (8)
17-3-S	100	110	15.71	15.71	4.66	-10.34	76 (5)	3149 (5)	5392 (5)
17-4-S	100	110	15.71	15.71	0.68	-50.87	375 (5)	4415 (5)	26564 (5)
17-5-S	100	110	15.71	15.71	0.99	-47.60	383 (5)	4503 (5)	27094 (5)
17-6-S	100	110	15.71	15.71	9.19	-6.72	118 (5)	8319 (5)	1383 (5)
17-7-S	100	110	15.71	15.71	66.16	0.00	594 (8)	42041 (8)	6988 (8)
17-8-S	100	110	15.71	15.71	0.00	-39.67	202 (5)	2379 (5)	14312 (5)
17-9-S	100	110	15.71	15.71	7.59	-0.18	128 (7)	1507 (7)	9066 (7)
17-10-S	100	110	15.71	15.71	9.10	0.00	91 (7)	1066 (7)	6412 (7)
17-11-S	100	110	15.71	15.71	12.70	0.00	39 (7)	458 (7)	2754 (7)
17-12-S	100	110	15.71	15.71	16.80	0.00	31 (7)	2208 (7)	1741 (7)
17-13-S	100	110	15.71	15.71	22.30	0.00	96 (7)	6774 (7)	1126 (7)
17-14-S	100	110	15.71	15.71	26.59	-0.03	156 (6)	11067 (6)	1839 (6)

APPALTATORE:

TELESE S.c.a r.l.

Consorzio Telese Società Consortile a Responsabilità Limitata

PROGETTAZIONE:

Mandataria:

Mandante:

SYSTRA S.A.

SWS Engineering S.p.A.

SYSTRA-SOTECNI S.p.A.

ITINERARIO NAPOLI – BARI
RADDOPPIO TRATTA CANCELLO-BENEVENTO
II LOTTO FUNZIONALE FRASSO TELESINO – VITULANO
2° SUBLOTTO TELESE – SAN LORENZO
PROGETTO ESECUTIVO

Relazione di calcolo

IF2R.2.2.E.ZZ.CL.TR.16.0.5.008.A.DOCX

COMMESSA

LOTTO

CODIFICA

DOCUMENTO

REV.

FOGLIO

IF2R

2.2.E.ZZ

CL

TR.16.0.5.008

A

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Is	B [cm]	H [cm]	Afi [cmq]	Afs [cmq]	Mp [kNm]	Mn [kNm]	σc [kPa]	σfi [kPa]	σfs [kPa]
17-15-S	100	110	15.71	15.71	32.35	-0.07	207 (6)	14622 (6)	2431 (6)
17-16-S	100	110	15.71	15.71	33.64	-0.47	211 (6)	14960 (6)	2487 (6)
17-17-S	100	110	15.71	15.71	33.84	-1.80	200 (5)	14162 (5)	2354 (5)
17-18-S	100	110	15.71	15.71	0.94	-21.20	170 (7)	3201 (7)	12062 (7)
17-19-S	100	110	15.71	15.71	0.49	-43.38	363 (7)	4272 (7)	25700 (7)
17-20-S	100	110	15.71	15.71	0.30	-23.58	202 (5)	2371 (5)	14264 (5)
17-21-S	100	110	15.71	15.71	0.00	-12.75	89 (5)	1042 (5)	6271 (5)
17-22-S	100	110	15.71	15.71	0.85	-2.17	11 (5)	798 (5)	407 (5)
18-1-S	100	110	15.71	15.71	0.33	-5.15	36 (5)	420 (5)	2529 (5)
18-2-S	100	110	15.71	15.71	0.49	-4.86	29 (5)	347 (5)	2087 (5)
18-3-S	100	110	15.71	15.71	1.17	-1.70	25 (8)	745 (8)	1801 (8)
18-4-S	100	110	15.71	15.71	6.05	0.00	54 (8)	3844 (8)	639 (8)
18-5-S	100	110	15.71	15.71	17.09	0.00	153 (8)	10863 (8)	1806 (8)
18-6-S	100	110	15.71	15.71	34.35	0.00	291 (5)	20622 (5)	3428 (5)
18-7-S	100	110	15.71	15.71	54.44	0.00	444 (5)	31395 (5)	5218 (5)
18-8-S	100	110	15.71	15.71	49.30	-0.61	254 (6)	17960 (6)	3533 (6)
18-9-S	100	110	15.71	15.71	18.10	-16.48	204 (5)	14403 (5)	6881 (5)
18-10-S	100	110	15.71	15.71	0.19	-70.76	527 (5)	6205 (5)	37329 (5)
18-11-S	100	110	15.71	15.71	0.00	-54.96	357 (5)	4196 (5)	25242 (5)
18-12-S	100	110	15.71	15.71	0.00	-33.49	155 (5)	1826 (5)	10985 (5)
18-13-S	100	110	15.71	15.71	13.04	-0.52	29 (7)	2087 (7)	1417 (7)
18-14-S	100	110	15.71	15.71	20.39	-0.20	99 (7)	7002 (7)	1164 (7)
18-15-S	100	110	15.71	15.71	21.35	-0.10	131 (7)	9265 (7)	1540 (7)
18-16-S	100	110	15.71	15.71	19.47	-0.12	118 (6)	8380 (6)	1393 (6)
18-17-S	100	110	15.71	15.71	10.35	-0.53	93 (8)	6579 (8)	1689 (8)
18-18-S	100	110	15.71	15.71	6.35	-0.63	57 (8)	4033 (8)	2010 (8)
18-19-S	100	110	15.71	15.71	3.05	-0.79	35 (8)	1936 (8)	2495 (8)
18-20-S	100	110	15.71	15.71	2.92	-0.47	15 (6)	681 (6)	1094 (6)
18-21-S	100	110	15.71	15.71	0.20	-0.95	10 (7)	246 (7)	712 (7)
18-22-S	100	110	15.71	15.71	0.05	-0.90	6 (7)	106 (7)	397 (7)
19-1-S	100	110	15.71	15.71	6.58	-2.65	44 (5)	3079 (5)	1218 (5)
19-2-S	100	110	15.71	15.71	9.35	-5.30	110 (6)	7808 (6)	2943 (6)
19-3-S	100	110	15.71	15.71	4.65	-9.63	67 (5)	2066 (5)	4774 (5)
19-4-S	100	110	15.71	15.71	0.94	-44.28	324 (5)	3810 (5)	22921 (5)
19-5-S	100	110	15.71	15.71	3.23	-41.76	444 (5)	5443 (5)	31393 (5)
19-6-S	100	110	15.71	15.71	13.75	-6.89	143 (5)	10136 (5)	1685 (5)
19-7-S	100	110	15.71	15.71	65.21	0.00	581 (5)	41117 (5)	6834 (5)
19-8-S	100	110	15.71	15.71	0.30	-64.20	415 (5)	4884 (5)	29380 (5)
19-9-S	100	110	15.71	15.71	0.06	-52.78	330 (5)	3885 (5)	23372 (5)
19-10-S	100	110	15.71	15.71	0.36	-38.85	227 (5)	2665 (5)	16032 (5)
19-11-S	100	110	15.71	15.71	5.57	-2.93	128 (7)	1508 (7)	9074 (7)
19-12-S	100	110	15.71	15.71	11.32	-0.14	46 (7)	2495 (7)	3244 (7)
19-13-S	100	110	15.71	15.71	20.47	-0.04	82 (7)	5826 (7)	968 (7)
19-14-S	100	110	15.71	15.71	26.65	-0.04	159 (6)	11275 (6)	1874 (6)
19-15-S	100	110	15.71	15.71	32.42	-0.05	209 (6)	14796 (6)	2459 (6)
19-16-S	100	110	15.71	15.71	33.31	-0.13	210 (6)	14890 (6)	2475 (6)
19-17-S	100	110	15.71	15.71	32.46	-0.73	193 (5)	13656 (5)	2270 (5)
19-18-S	100	110	15.71	15.71	1.16	-16.73	133 (7)	1929 (7)	9426 (7)
19-19-S	100	110	15.71	15.71	0.16	-36.42	305 (7)	3585 (7)	21570 (7)
19-20-S	100	110	15.71	15.71	0.27	-19.52	169 (5)	1994 (5)	11995 (5)
19-21-S	100	110	15.71	15.71	0.13	-10.70	75 (5)	881 (5)	5298 (5)
19-22-S	100	110	15.71	15.71	0.88	-1.87	12 (5)	834 (5)	359 (5)
20-1-S	100	110	15.71	15.71	1.03	-3.88	35 (5)	2509 (5)	1814 (5)
20-2-S	100	110	15.71	15.71	0.02	-7.15	49 (5)	575 (5)	3460 (5)
20-3-S	100	110	15.71	15.71	0.07	-10.23	87 (5)	1025 (5)	6164 (5)
20-4-S	100	110	15.71	15.71	1.54	-11.40	124 (5)	1503 (5)	8759 (5)
20-5-S	100	110	15.71	15.71	7.67	-4.52	203 (8)	6096 (8)	14352 (8)
20-6-S	100	110	15.71	15.71	23.14	-0.39	208 (8)	14703 (8)	2444 (8)
20-7-S	100	110	15.71	15.71	54.22	0.00	455 (5)	32198 (5)	5352 (5)
20-8-S	100	110	15.71	15.71	0.00	-102.13	737 (5)	8669 (5)	52157 (5)
20-9-S	100	110	15.71	15.71	0.00	-68.01	460 (5)	5414 (5)	32572 (5)
20-10-S	100	110	15.71	15.71	0.00	-43.11	262 (5)	3079 (5)	18524 (5)
20-11-S	100	110	15.71	15.71	6.98	-3.36	118 (7)	1392 (7)	8376 (7)
20-12-S	100	110	15.71	15.71	17.21	-0.57	58 (7)	4105 (7)	2040 (7)
20-13-S	100	110	15.71	15.71	24.06	-0.29	123 (7)	8713 (7)	1448 (7)
20-14-S	100	110	15.71	15.71	27.90	-0.34	173 (6)	12273 (6)	2040 (6)
20-15-S	100	110	15.71	15.71	29.90	-0.47	194 (6)	13726 (6)	2282 (6)
20-16-S	100	110	15.71	15.71	25.11	-0.87	158 (6)	11170 (6)	1857 (6)
20-17-S	100	110	15.71	15.71	18.32	-1.67	106 (6)	7484 (6)	1404 (6)
20-18-S	100	110	15.71	15.71	5.89	-4.84	62 (7)	4377 (7)	3017 (7)
20-19-S	100	110	15.71	15.71	2.39	-8.36	72 (7)	2133 (7)	5074 (7)
20-20-S	100	110	15.71	15.71	0.54	-5.95	48 (7)	981 (7)	3428 (7)
20-21-S	100	110	15.71	15.71	0.06	-3.08	24 (7)	284 (7)	1712 (7)
20-22-S	100	110	15.71	15.71	1.70	-0.35	11 (5)	778 (5)	129 (5)

Pali in c.a.

Ip	Is	Ar [cmq]	σc [kPa]	σf [kPa]	τc [kPa]	σsf [kPa]
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APPALTATORE:	 Consorzio Telese Società Consortile a Responsabilità Limitata		ITINERARIO NAPOLI – BARI RADDOPPIO TRATTA CANCELLO-BENEVENTO II LOTTO FUNZIONALE FRASSO TELESINO – VITULANO 2° SUBLOTTO TELESE – SAN LORENZO PROGETTO ESECUTIVO					
PROGETTAZIONE:	Mandataria: SYSTRA S.A. Mandante: SWS Engineering S.p.A. SYSTRA-SOTECNI S.p.A.							
Relazione di calcolo	IF2R.2.2.E.ZZ.CL.TR.16.0.5.008.A.DOCX		COMMESSA	LOTTO	CODIFICA	DOCUMENTO	REV.	FOGLIO
			IF2R	2.2.E.ZZ	CL	TR.16.0.5.008	A	90 di 118

Ip	Is	Ar [cmq]	σ_c [kPa]	σ_f [kPa]	τ_c [kPa]	σ_{sf} [kPa]
1	1	40.72	2734	32796		
1	2	40.72	2409	29306		
1	3	40.72	2100	26020		
1	4	40.72	1817	22947		
1	5	40.72	1571	20210		
1	6	40.72	1367	17890		
1	7	40.72	1218	16366		
1	8	40.72	1120	15203		
1	9	40.72	1029	14117		
1	10	40.72	944	13104		
1	11	40.72	865	12266		
1	12	40.72	818	11750		
1	13	40.72	777	11271		
1	14	40.72	740	10828		
1	15	40.72	705	10419		
1	16	40.72	713	10187		
1	17	40.72	775	10929		
1	18	40.72	831	11602		
1	19	40.72	881	12212		
1	20	40.72	927	12760		
1	21	40.72	967	13250		
1	22	40.72	1003	13685		
1	23	40.72	1035	14068		
1	24	40.72	1062	14402		
1	25	40.72	1086	14690		
1	26	40.72	1106	14935		
1	27	40.72	1122	15139		
1	28	40.72	1136	15305		
1	29	40.72	1146	15437		
1	30	40.72	1154	15535		
1	31	40.72	1160	15603		
1	32	40.72	1162	15642		
1	33	40.72	1163	15656		
1	34	40.72	1162	15646		
1	35	40.72	1159	15613		
1	36	40.72	1154	15562		
1	37	40.72	1148	15492		
1	38	40.72	1140	15406		
1	39	40.72	1132	15305		
1	40	40.72	1122	15191		
1	41	40.72	1111	15066		
1	42	40.72	1099	14931		
1	43	40.72	1087	14788		
1	44	40.72	1074	14640		
1	45	40.72	1061	14486		
1	46	40.72	1048	14329		
1	47	40.72	1034	14167		
1	48	40.72	1020	14004		
1	49	40.72	1006	13838		
1	50	40.72	992	13672		
1	51	40.72	977	13504		
1	52	40.72	963	13337		
1	53	40.72	949	13178		
1	54	40.72	935	13057		
1	55	40.72	921	12936		
1	56	40.72	907	12816		
1	57	40.72	893	12698		
1	58	40.72	883	12581		
1	59	40.72	873	12465		
1	60	40.72	863	12352		
1	61	40.72	854	12241		
1	62	40.72	844	12132		
1	63	40.72	835	12025		
1	64	40.72	827	11922		
1	65	40.72	818	11821		
1	66	40.72	810	11723		
1	67	40.72	802	11653		
1	68	40.72	794	11604		
1	69	40.72	786	11556		
1	70	40.72	780	11509		
1	71	40.72	776	11464		
1	72	40.72	772	11421		
1	73	40.72	769	11379		
1	74	40.72	765	11338		
1	75	40.72	762	11299		
1	76	40.72	759	11262		
1	77	40.72	756	11226		
1	78	40.72	753	11192		
1	79	40.72	750	11160		
1	80	40.72	747	11129		
1	81	40.72	745	11099		

APPALTATORE:

TELESE S.c.a r.l.
Consorzio Telese Società Consortile a Responsabilità Limitata

**ITINERARIO NAPOLI – BARI
RADDOPPIO TRATTA CANCELLO-BENEVENTO
II LOTTO FUNZIONALE FRASSO TELESINO – VITULANO
2° SUBLOTTO TELESE – SAN LORENZO**

PROGETTAZIONE:

Mandataria:

Mandante:

SYSTRA S.A. SWS Engineering S.p.A. SYSTRA-SOTECNI S.p.A.

PROGETTO ESECUTIVO

Relazione di calcolo

IF2R.2.2.E.ZZ.CL.TR.16.0.5.008.A.DOCX

COMMESSA	LOTTO	CODIFICA	DOCUMENTO	REV.	FOGLIO
IF2R	2.2.E.ZZ	CL	TR.16.0.5.008	A	91 di 118

Ip	Is	Ar [cmq]	σ_c [kPa]	σ_f [kPa]	τ_c [kPa]	σ_{sf} [kPa]
1	82	40.72	742	11072		
1	83	40.72	740	11045		
1	84	40.72	738	11020		
1	85	40.72	736	10997		
1	86	40.72	734	10974		
1	87	40.72	733	10954		
1	88	40.72	731	10934		
1	89	40.72	729	10916		
1	90	40.72	728	10899		
1	91	40.72	727	10883		
1	92	40.72	725	10869		
1	93	40.72	724	10856		
1	94	40.72	723	10843		
1	95	40.72	723	10832		
1	96	40.72	722	10822		
1	97	40.72	721	10813		
1	98	40.72	720	10805		
1	99	40.72	720	10797		
1	100	40.72	719	10791		
1	101	40.72	719	10785		
2	1	62.83	2370	29811		
2	2	62.83	2136	27218		
2	3	62.83	1920	24789		
2	4	62.83	1727	22587		
2	5	62.83	1561	20649		
2	6	62.83	1419	18980		
2	7	62.83	1297	17532		
2	8	62.83	1184	16191		
2	9	62.83	1078	14941		
2	10	62.83	995	13926		
2	11	62.83	921	13050		
2	12	62.83	852	12237		
2	13	62.83	789	11485		
2	14	62.83	738	10817		
2	15	62.83	784	11460		
2	16	62.83	847	12215		
2	17	62.83	904	12904		
2	18	62.83	956	13530		
2	19	62.83	1003	14096		
2	20	62.83	1045	14604		
2	21	62.83	1083	15059		
2	22	62.83	1116	15462		
2	23	62.83	1146	15817		
2	24	62.83	1171	16126		
2	25	62.83	1193	16392		
2	26	62.83	1212	16618		
2	27	62.83	1227	16806		
2	28	62.83	1240	16959		
2	29	62.83	1249	17079		
2	30	62.83	1257	17169		
2	31	62.83	1261	17230		
2	32	62.83	1264	17264		
2	33	62.83	1264	17275		
2	34	62.83	1263	17263		
2	35	62.83	1260	17231		
2	36	62.83	1256	17181		
2	37	62.83	1250	17113		
2	38	62.83	1242	17031		
2	39	62.83	1234	16934		
2	40	62.83	1225	16826		
2	41	62.83	1214	16707		
2	42	62.83	1203	16578		
2	43	62.83	1192	16443		
2	44	62.83	1180	16302		
2	45	62.83	1167	16156		
2	46	62.83	1154	16006		
2	47	62.83	1141	15853		
2	48	62.83	1128	15697		
2	49	62.83	1115	15540		
2	50	62.83	1101	15381		
2	51	62.83	1088	15222		
2	52	62.83	1074	15063		
2	53	62.83	1061	14904		
2	54	62.83	1047	14747		
2	55	62.83	1034	14590		
2	56	62.83	1021	14436		
2	57	62.83	1008	14283		
2	58	62.83	995	14133		
2	59	62.83	982	13985		
2	60	62.83	970	13841		
2	61	62.83	958	13699		

APPALTATORE:	 Consorzio Telese Società Consortile a Responsabilità Limitata		ITINERARIO NAPOLI – BARI RADDOPPIO TRATTA CANCELLO-BENEVENTO II LOTTO FUNZIONALE FRASSO TELESINO – VITULANO 2° SUBLOTTO TELESE – SAN LORENZO PROGETTO ESECUTIVO					
PROGETTAZIONE:	Mandataria: SYSTRA S.A. Mandante: SWS Engineering S.p.A. SYSTRA-SOTECNI S.p.A.							
Relazione di calcolo	IF2R.2.2.E.ZZ.CL.TR.16.0.5.008.A.DOCX		COMMESSA	LOTTO	CODIFICA	DOCUMENTO	REV.	FOGLIO
			IF2R	2.2.E.ZZ	CL	TR.16.0.5.008	A	92 di 118

Ip	Is	Ar [cmq]	σ_c [kPa]	σ_f [kPa]	τ_c [kPa]	σ_{sf} [kPa]
2	62	62.83	946	13561		
2	63	62.83	935	13427		
2	64	62.83	924	13296		
2	65	62.83	913	13169		
2	66	62.83	903	13046		
2	67	62.83	893	12927		
2	68	62.83	883	12812		
2	69	62.83	874	12701		
2	70	62.83	865	12594		
2	71	62.83	856	12492		
2	72	62.83	848	12394		
2	73	62.83	840	12300		
2	74	62.83	832	12210		
2	75	62.83	825	12124		
2	76	62.83	818	12042		
2	77	62.83	811	11964		
2	78	62.83	805	11890		
2	79	62.83	799	11821		
2	80	62.83	794	11755		
2	81	62.83	789	11692		
2	82	62.83	784	11634		
2	83	62.83	779	11579		
2	84	62.83	775	11527		
2	85	62.83	771	11479		
2	86	62.83	767	11434		
2	87	62.83	764	11393		
2	88	62.83	760	11354		
2	89	62.83	757	11318		
2	90	62.83	755	11286		
2	91	62.83	752	11256		
2	92	62.83	750	11228		
2	93	62.83	748	11203		
2	94	62.83	746	11181		
2	95	62.83	745	11161		
2	96	62.83	743	11143		
2	97	62.83	742	11127		
2	98	62.83	741	11113		
2	99	62.83	740	11101		
2	100	62.83	739	11091		
2	101	62.83	739	11082		
3	1	62.83	2406	31074		
3	2	62.83	2206	28787		
3	3	62.83	2024	26690		
3	4	62.83	1863	24806		
3	5	62.83	1722	23131		
3	6	62.83	1593	21601		
3	7	62.83	1472	20167		
3	8	62.83	1359	18825		
3	9	62.83	1254	17575		
3	10	62.83	1156	16411		
3	11	62.83	1065	15332		
3	12	62.83	981	14334		
3	13	62.83	903	13414		
3	14	62.83	890	13265		
3	15	62.83	959	14089		
3	16	62.83	1022	14843		
3	17	62.83	1079	15530		
3	18	62.83	1131	16155		
3	19	62.83	1178	16719		
3	20	62.83	1220	17226		
3	21	62.83	1258	17679		
3	22	62.83	1291	18081		
3	23	62.83	1320	18434		
3	24	62.83	1346	18741		
3	25	62.83	1367	19006		
3	26	62.83	1386	19230		
3	27	62.83	1401	19416		
3	28	62.83	1414	19567		
3	29	62.83	1423	19685		
3	30	62.83	1430	19772		
3	31	62.83	1435	19830		
3	32	62.83	1437	19863		
3	33	62.83	1438	19871		
3	34	62.83	1436	19857		
3	35	62.83	1433	19822		
3	36	62.83	1428	19769		
3	37	62.83	1422	19699		
3	38	62.83	1415	19613		
3	39	62.83	1406	19514		
3	40	62.83	1396	19403		
3	41	62.83	1386	19280		

APPALTATORE: TELESE S.c.a r.l. Consorzio Telese Società Consortile a Responsabilità Limitata	ITINERARIO NAPOLI – BARI RADDOPPIO TRATTA CANCELLO-BENEVENTO II LOTTO FUNZIONALE FRASSO TELESINO – VITULANO 2° SUBLOTTO TELESE – SAN LORENZO PROGETTO ESECUTIVO												
PROGETTAZIONE: Mandataria: SYSTRA S.A. Mandante: SWS Engineering S.p.A. SYSTRA-SOTECNI S.p.A.													
Relazione di calcolo IF2R.2.2.E.ZZ.CL.TR.16.0.5.008.A.DOCX	<table border="1"> <tr> <td>COMMESSA</td> <td>LOTTO</td> <td>CODIFICA</td> <td>DOCUMENTO</td> <td>REV.</td> <td>FOGLIO</td> </tr> <tr> <td>IF2R</td> <td>2.2.E.ZZ</td> <td>CL</td> <td>TR.16.0.5.008</td> <td>A</td> <td>93 di 118</td> </tr> </table>	COMMESSA	LOTTO	CODIFICA	DOCUMENTO	REV.	FOGLIO	IF2R	2.2.E.ZZ	CL	TR.16.0.5.008	A	93 di 118
COMMESSA	LOTTO	CODIFICA	DOCUMENTO	REV.	FOGLIO								
IF2R	2.2.E.ZZ	CL	TR.16.0.5.008	A	93 di 118								

Ip	Is	Ar [cmq]	σ_c [kPa]	σ_f [kPa]	τ_c [kPa]	σ_{sf} [kPa]
3	42	62.83	1375	19148		
3	43	62.83	1363	19010		
3	44	62.83	1351	18865		
3	45	62.83	1338	18716		
3	46	62.83	1325	18563		
3	47	62.83	1312	18406		
3	48	62.83	1298	18247		
3	49	62.83	1284	18086		
3	50	62.83	1271	17924		
3	51	62.83	1257	17761		
3	52	62.83	1243	17598		
3	53	62.83	1229	17435		
3	54	62.83	1216	17273		
3	55	62.83	1202	17112		
3	56	62.83	1189	16953		
3	57	62.83	1175	16796		
3	58	62.83	1162	16642		
3	59	62.83	1149	16490		
3	60	62.83	1137	16341		
3	61	62.83	1125	16194		
3	62	62.83	1113	16052		
3	63	62.83	1101	15912		
3	64	62.83	1089	15777		
3	65	62.83	1078	15645		
3	66	62.83	1068	15516		
3	67	62.83	1057	15392		
3	68	62.83	1047	15272		
3	69	62.83	1037	15156		
3	70	62.83	1028	15044		
3	71	62.83	1019	14936		
3	72	62.83	1010	14832		
3	73	62.83	1002	14732		
3	74	62.83	994	14636		
3	75	62.83	986	14545		
3	76	62.83	979	14457		
3	77	62.83	972	14373		
3	78	62.83	965	14294		
3	79	62.83	959	14218		
3	80	62.83	953	14145		
3	81	62.83	948	14077		
3	82	62.83	942	14012		
3	83	62.83	937	13951		
3	84	62.83	932	13892		
3	85	62.83	928	13838		
3	86	62.83	924	13786		
3	87	62.83	920	13738		
3	88	62.83	916	13692		
3	89	62.83	913	13650		
3	90	62.83	910	13610		
3	91	62.83	907	13573		
3	92	62.83	904	13538		
3	93	62.83	902	13506		
3	94	62.83	899	13477		
3	95	62.83	897	13449		
3	96	62.83	895	13424		
3	97	62.83	894	13400		
3	98	62.83	892	13379		
3	99	62.83	891	13359		
3	100	62.83	889	13340		
3	101	62.83	888	13324		

Verifica a fessurazione

Simbologia adottata

n°	indice sezione
Y	ordinata sezione espressa in [m]
B	larghezza sezione espressa in [cm]
H	altezza sezione espressa in [cm]
Af	area ferri zona tesa espresso in [cmq]
Aeff	area efficace espressa in [cmq]
M	momento agente espressa in [kNm]
Mpf	momento di prima fessurazione espressa in [kNm]
ϵ	deformazione espresso in %
Sm	spaziatura tra le fessure espressa in [mm]
w	apertura delle fessure espressa in [mm]

Combinazioni SLER

APPALTATORE: TELESE S.c.a r.l. Consorzio Telese Società Consortile a Responsabilità Limitata	ITINERARIO NAPOLI – BARI RADDOPPIO TRATTA CANCELLO-BENEVENTO II LOTTO FUNZIONALE FRASSO TELESINO – VITULANO 2° SUBLOTTO TELESE – SAN LORENZO												
PROGETTAZIONE: Mandatario: SYSTRA S.A. Mandante: SWS Engineering S.p.A. SYSTRA-SOTECNI S.p.A.													
Relazione di calcolo IF2R.2.2.E.ZZ.CL.TR.16.0.5.008.A.DOCX	<table border="1"> <tr> <td>COMMESSA</td> <td>LOTTO</td> <td>CODIFICA</td> <td>DOCUMENTO</td> <td>REV.</td> <td>FOGLIO</td> </tr> <tr> <td>IF2R</td> <td>2.2.E.ZZ</td> <td>CL</td> <td>TR.16.0.5.008</td> <td>A</td> <td>94 di 118</td> </tr> </table>	COMMESSA	LOTTO	CODIFICA	DOCUMENTO	REV.	FOGLIO	IF2R	2.2.E.ZZ	CL	TR.16.0.5.008	A	94 di 118
COMMESSA	LOTTO	CODIFICA	DOCUMENTO	REV.	FOGLIO								
IF2R	2.2.E.ZZ	CL	TR.16.0.5.008	A	94 di 118								

Paramento

Apertura limite fessure $w_{lim}=0.20$

n°	B [cm]	H [cm]	Af [cmq]	Aeff [cmq]	M [kNm]	Mpf [kNm]	ϵ [%]	Sm [mm]	w [mm]
1	100	70	12.72	1840.00	2.00	338.84	0.000000	0.00	0.000 (5)
2	100	70	12.72	1840.00	2.70	339.04	0.000000	0.00	0.000 (5)
3	100	70	12.72	1840.00	3.40	339.26	0.000000	0.00	0.000 (5)
4	100	70	12.72	1840.00	4.10	339.47	0.000000	0.00	0.000 (5)
5	100	70	12.72	1840.00	4.80	339.67	0.000000	0.00	0.000 (5)
6	100	70	12.72	1840.00	5.50	339.89	0.000000	0.00	0.000 (5)
7	100	70	12.72	1840.00	6.20	340.09	0.000000	0.00	0.000 (5)
8	100	70	12.72	1840.00	6.90	340.31	0.000000	0.00	0.000 (5)
9	100	70	12.72	1840.00	7.60	340.51	0.000000	0.00	0.000 (5)
10	100	70	12.72	1840.00	8.30	340.72	0.000000	0.00	0.000 (5)
11	100	70	12.72	1840.00	9.00	340.94	0.000000	0.00	0.000 (5)
12	100	70	12.72	1840.00	9.70	341.14	0.000000	0.00	0.000 (5)
13	100	70	12.72	1840.00	10.40	341.36	0.000000	0.00	0.000 (5)
14	100	70	12.72	1840.00	11.10	341.56	0.000000	0.00	0.000 (5)
15	100	70	12.72	1840.00	11.80	341.78	0.000000	0.00	0.000 (5)
16	100	70	12.72	1840.00	12.50	341.98	0.000000	0.00	0.000 (5)
17	100	70	12.72	1840.00	13.20	342.18	0.000000	0.00	0.000 (5)
18	100	70	12.72	1840.00	13.90	342.40	0.000000	0.00	0.000 (5)
19	100	70	12.72	1840.00	14.60	342.61	0.000000	0.00	0.000 (5)
20	100	70	12.72	1840.00	15.30	342.83	0.000000	0.00	0.000 (5)
21	100	70	12.72	1840.00	16.00	343.03	0.000000	0.00	0.000 (5)
22	100	70	12.72	1840.00	16.70	343.24	0.000000	0.00	0.000 (5)
23	100	70	12.72	1840.00	17.39	343.45	0.000000	0.00	0.000 (5)
24	100	70	12.72	1840.00	18.09	343.65	0.000000	0.00	0.000 (5)
25	100	70	12.72	1840.00	18.79	343.87	0.000000	0.00	0.000 (5)
26	100	70	12.72	1840.00	19.49	344.08	0.000000	0.00	0.000 (5)
27	100	70	12.72	1840.00	20.19	344.30	0.000000	0.00	0.000 (5)
28	100	70	12.72	1840.00	20.89	344.50	0.000000	0.00	0.000 (5)
29	100	70	12.72	1840.00	21.59	344.70	0.000000	0.00	0.000 (5)
30	100	70	12.72	1840.00	22.32	344.93	0.000000	0.00	0.000 (5)
31	100	70	12.72	1840.00	23.09	345.12	0.000000	0.00	0.000 (5)
32	100	101	12.72	1840.00	30.82	697.41	0.000000	0.00	0.000 (5)
33	100	101	12.72	1840.00	31.77	697.83	0.000000	0.00	0.000 (5)
34	100	101	12.72	1840.00	32.98	698.27	0.000000	0.00	0.000 (5)
35	100	101	12.72	1840.00	34.37	698.70	0.000000	0.00	0.000 (5)
36	100	101	12.72	1840.00	35.85	699.15	0.000000	0.00	0.000 (5)
37	100	101	12.72	1840.00	37.39	699.58	0.000000	0.00	0.000 (5)
38	100	101	12.72	1840.00	38.97	700.01	0.000000	0.00	0.000 (5)
39	100	101	12.72	1840.00	40.62	700.44	0.000000	0.00	0.000 (5)
40	100	101	12.72	1840.00	42.35	700.90	0.000000	0.00	0.000 (5)
41	100	101	12.72	1840.00	44.15	701.32	0.000000	0.00	0.000 (5)
42	100	101	12.72	1840.00	46.05	701.76	0.000000	0.00	0.000 (5)
43	100	101	12.72	1840.00	48.04	702.18	0.000000	0.00	0.000 (5)
44	100	101	12.72	1840.00	50.13	702.63	0.000000	0.00	0.000 (5)
45	100	101	12.72	1840.00	52.34	703.03	0.000000	0.00	0.000 (5)
46	100	101	12.72	1840.00	54.65	703.47	0.000000	0.00	0.000 (5)
47	100	101	12.72	1840.00	57.09	703.92	0.000000	0.00	0.000 (5)
48	100	101	12.72	1840.00	59.65	704.35	0.000000	0.00	0.000 (5)
49	100	101	12.72	1840.00	62.34	704.80	0.000000	0.00	0.000 (5)
50	100	101	12.72	1840.00	65.16	705.21	0.000000	0.00	0.000 (5)
51	100	101	12.72	1840.00	68.12	705.64	0.000000	0.00	0.000 (5)
52	100	101	12.72	1840.00	71.23	706.10	0.000000	0.00	0.000 (5)

Piastra fondazione

Apertura limite fessure $w_{lim}=0.20$

Is	B [cm]	H [cm]	Af [cmq]	Aeff [cmq]	M [kNm]	Mpf [kNm]	ϵ [%]	Sm [mm]	w [mm]
1-1-P	69	110	12.57	3141.48	1.12	-535.11	0.000000	0.00	0.000
1-2-P	69	110	12.57	3141.48	-1.73	-535.11	0.000000	0.00	0.000
1-3-P	69	110	12.57	3141.48	-6.58	-535.11	0.000000	0.00	0.000
1-4-P	69	110	12.57	3141.48	-17.74	-535.11	0.000000	0.00	0.000
1-5-P	69	110	12.57	3141.48	-27.83	-535.11	0.000000	0.00	0.000
1-6-P	69	110	12.57	3141.48	-32.84	-535.11	0.000000	0.00	0.000
1-7-P	69	110	12.57	3141.48	-18.91	-535.11	0.000000	0.00	0.000
1-8-P	69	110	12.57	3141.48	-5.76	-535.11	0.000000	0.00	0.000
1-9-P	69	110	12.57	3141.48	10.86	-535.11	0.000000	0.00	0.000
1-10-P	69	110	12.57	3141.48	14.65	-535.11	0.000000	0.00	0.000
1-11-P	69	110	12.57	3141.48	15.83	-535.11	0.000000	0.00	0.000

APPALTATORE:

TELESE S.c.a r.l.

Consorzio Telese Società Consortile a Responsabilità Limitata

ITINERARIO NAPOLI – BARI
RADDOPPIO TRATTA CANCELLO-BENEVENTO
II LOTTO FUNZIONALE FRASSO TELESINO – VITULANO
2° SUBLOTTO TELESE – SAN LORENZO

PROGETTAZIONE:

Mandataria:

Mandante:

SYSTRA S.A. SWS Engineering S.p.A. SYSTRA-SOTECNI S.p.A.

PROGETTO ESECUTIVO

Relazione di calcolo

IF2R.2.2.E.ZZ.CL.TR.16.0.5.008.A.DOCX

COMMESSA	LOTTO	CODIFICA	DOCUMENTO	REV.	FOGLIO
IF2R	2.2.E.ZZ	CL	TR.16.0.5.008	A	95 di 118

Is	B [cm]	H [cm]	Af [cmq]	Aeff [cmq]	M [kNm]	Mpf [kNm]	ε [%]	Sm [mm]	w [mm]
1-12-P	69	110	12.57	3141.48	12.94	-535.11	0.000000	0.00	0.000
1-13-P	69	110	12.57	3141.48	3.80	-535.11	0.000000	0.00	0.000
1-14-P	69	110	12.57	3141.48	-12.27	-535.11	0.000000	0.00	0.000
1-15-P	69	110	12.57	3141.48	-24.41	-535.11	0.000000	0.00	0.000
1-16-P	69	110	12.57	3141.48	-21.96	-535.11	0.000000	0.00	0.000
1-17-P	69	110	12.57	3141.48	-10.86	-535.11	0.000000	0.00	0.000
1-18-P	69	110	12.57	3141.48	5.58	-535.11	0.000000	0.00	0.000
1-19-P	69	110	12.57	3141.48	13.91	-535.11	0.000000	0.00	0.000
1-20-P	69	110	12.57	1390.00	17.17	535.11	0.000000	0.00	0.000
1-21-P	69	110	12.57	3141.48	15.16	-535.11	0.000000	0.00	0.000
1-22-P	69	110	12.57	3141.48	10.05	-535.11	0.000000	0.00	0.000
1-23-P	69	110	12.57	3141.48	-5.94	-535.11	0.000000	0.00	0.000
1-24-P	69	110	12.57	3141.48	-17.32	-535.11	0.000000	0.00	0.000
1-25-P	69	110	12.57	3141.48	-29.36	-535.11	0.000000	0.00	0.000
1-26-P	69	110	12.57	3141.48	-17.32	-535.11	0.000000	0.00	0.000
1-27-P	69	110	12.57	3141.48	-5.94	-535.11	0.000000	0.00	0.000
1-28-P	69	110	12.57	3141.48	10.05	-535.11	0.000000	0.00	0.000
1-29-P	69	110	12.57	3141.48	15.16	-535.11	0.000000	0.00	0.000
1-30-P	69	110	12.57	1390.00	17.17	535.11	0.000000	0.00	0.000
1-31-P	69	110	12.57	3141.48	13.91	-535.11	0.000000	0.00	0.000
1-32-P	69	110	12.57	3141.48	5.58	-535.11	0.000000	0.00	0.000
1-33-P	69	110	12.57	3141.48	-10.86	-535.11	0.000000	0.00	0.000
1-34-P	69	110	12.57	3141.48	-21.96	-535.11	0.000000	0.00	0.000
1-35-P	69	110	12.57	3141.48	-24.41	-535.11	0.000000	0.00	0.000
1-36-P	69	110	12.57	3141.48	-12.27	-535.11	0.000000	0.00	0.000
1-37-P	69	110	12.57	3141.48	3.80	-535.11	0.000000	0.00	0.000
1-38-P	69	110	12.57	3141.48	12.94	-535.11	0.000000	0.00	0.000
1-39-P	69	110	12.57	3141.48	15.83	-535.11	0.000000	0.00	0.000
1-40-P	69	110	12.57	3141.48	14.65	-535.11	0.000000	0.00	0.000
1-41-P	69	110	12.57	3141.48	10.86	-535.11	0.000000	0.00	0.000
1-42-P	69	110	12.57	3141.48	-5.76	-535.11	0.000000	0.00	0.000
1-43-P	69	110	12.57	3141.48	-18.91	-535.11	0.000000	0.00	0.000
1-44-P	69	110	12.57	3141.48	-32.84	-535.11	0.000000	0.00	0.000
1-45-P	69	110	12.57	3141.48	-27.83	-535.11	0.000000	0.00	0.000
1-46-P	69	110	12.57	3141.48	-17.74	-535.11	0.000000	0.00	0.000
1-47-P	69	110	12.57	3141.48	-6.58	-535.11	0.000000	0.00	0.000
1-48-P	69	110	12.57	3141.48	-1.73	-535.11	0.000000	0.00	0.000
1-49-P	69	110	12.57	3141.48	1.12	-535.11	0.000000	0.00	0.000
2-1-P	70	110	12.57	1390.00	4.93	535.11	0.000000	0.00	0.000
2-2-P	70	110	12.57	1390.00	5.05	535.11	0.000000	0.00	0.000
2-3-P	70	110	12.57	3141.48	4.48	-535.11	0.000000	0.00	0.000
2-4-P	70	110	12.57	3141.48	4.22	-535.11	0.000000	0.00	0.000
2-5-P	70	110	12.57	3141.48	-26.48	-535.11	0.000000	0.00	0.000
2-6-P	70	110	12.57	3141.48	-45.34	-535.11	0.000000	0.00	0.000
2-7-P	70	110	12.57	3141.48	-10.82	-535.11	0.000000	0.00	0.000
2-8-P	70	110	12.57	3141.48	8.66	-535.11	0.000000	0.00	0.000
2-9-P	70	110	12.57	1390.00	13.70	535.11	0.000000	0.00	0.000
2-10-P	70	110	12.57	1390.00	15.15	535.11	0.000000	0.00	0.000
2-11-P	70	110	12.57	1390.00	15.59	535.11	0.000000	0.00	0.000
2-12-P	70	110	12.57	1390.00	14.53	535.11	0.000000	0.00	0.000
2-13-P	70	110	12.57	3141.48	10.63	-535.11	0.000000	0.00	0.000
2-14-P	70	110	12.57	3141.48	-2.94	-535.11	0.000000	0.00	0.000
2-15-P	70	110	12.57	3141.48	-35.85	-535.11	0.000000	0.00	0.000
2-16-P	70	110	12.57	3141.48	-29.30	-535.11	0.000000	0.00	0.000
2-17-P	70	110	12.57	3141.48	7.47	-535.11	0.000000	0.00	0.000
2-18-P	70	110	12.57	3141.48	11.44	-535.11	0.000000	0.00	0.000
2-19-P	70	110	12.57	1390.00	14.72	535.11	0.000000	0.00	0.000
2-20-P	70	110	12.57	1390.00	15.87	535.11	0.000000	0.00	0.000
2-21-P	70	110	12.57	1390.00	15.14	535.11	0.000000	0.00	0.000
2-22-P	70	110	12.57	1390.00	13.23	535.11	0.000000	0.00	0.000
2-23-P	70	110	12.57	3141.48	8.82	-535.11	0.000000	0.00	0.000
2-24-P	70	110	12.57	3141.48	-15.93	-535.11	0.000000	0.00	0.000
2-25-P	70	110	12.57	3141.48	-49.58	-535.11	0.000000	0.00	0.000
2-26-P	70	110	12.57	3141.48	-15.93	-535.11	0.000000	0.00	0.000
2-27-P	70	110	12.57	3141.48	8.82	-535.11	0.000000	0.00	0.000
2-28-P	70	110	12.57	1390.00	13.23	535.11	0.000000	0.00	0.000
2-29-P	70	110	12.57	1390.00	15.14	535.11	0.000000	0.00	0.000
2-30-P	70	110	12.57	1390.00	15.87	535.11	0.000000	0.00	0.000
2-31-P	70	110	12.57	1390.00	14.72	535.11	0.000000	0.00	0.000
2-32-P	70	110	12.57	3141.48	11.44	-535.11	0.000000	0.00	0.000
2-33-P	70	110	12.57	3141.48	7.47	-535.11	0.000000	0.00	0.000
2-34-P	70	110	12.57	3141.48	-29.30	-535.11	0.000000	0.00	0.000
2-35-P	70	110	12.57	3141.48	-35.85	-535.11	0.000000	0.00	0.000
2-36-P	70	110	12.57	3141.48	-2.94	-535.11	0.000000	0.00	0.000
2-37-P	70	110	12.57	3141.48	10.63	-535.11	0.000000	0.00	0.000
2-38-P	70	110	12.57	1390.00	14.53	535.11	0.000000	0.00	0.000
2-39-P	70	110	12.57	1390.00	15.59	535.11	0.000000	0.00	0.000
2-40-P	70	110	12.57	1390.00	15.15	535.11	0.000000	0.00	0.000
2-41-P	70	110	12.57	1390.00	13.70	535.11	0.000000	0.00	0.000
2-42-P	70	110	12.57	3141.48	8.66	-535.11	0.000000	0.00	0.000
2-43-P	70	110	12.57	3141.48	-10.82	-535.11	0.000000	0.00	0.000

APPALTATORE:

TELESE S.c.a r.l.
Consorzio Telese Società Consortile a Responsabilità Limitata

ITINERARIO NAPOLI – BARI
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II LOTTO FUNZIONALE FRASSO TELESINO – VITULANO
2° SUBLOTTO TELESE – SAN LORENZO

PROGETTAZIONE:

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PROGETTO ESECUTIVO

Relazione di calcolo

IF2R.2.2.E.ZZ.CL.TR.16.0.5.008.A.DOCX

COMMESSA	LOTTO	CODIFICA	DOCUMENTO	REV.	FOGLIO
IF2R	2.2.E.ZZ	CL	TR.16.0.5.008	A	96 di 118

Is	B [cm]	H [cm]	Af [cmq]	Aeff [cmq]	M [kNm]	Mpf [kNm]	ε [%]	Sm [mm]	w [mm]
2-44-P	70	110	12.57	3141.48	-45.34	-535.11	0.000000	0.00	0.000
2-45-P	70	110	12.57	3141.48	-26.48	-535.11	0.000000	0.00	0.000
2-46-P	70	110	12.57	3141.48	4.22	-535.11	0.000000	0.00	0.000
2-47-P	70	110	12.57	3141.48	4.48	-535.11	0.000000	0.00	0.000
2-48-P	70	110	12.57	1390.00	5.05	535.11	0.000000	0.00	0.000
2-49-P	70	110	12.57	1390.00	4.93	535.11	0.000000	0.00	0.000
5-1-P	85	110	15.71	3834.96	-5.39	-656.02	0.000000	0.00	0.000
5-2-P	85	110	15.71	3834.96	-7.02	-656.02	0.000000	0.00	0.000
5-3-P	85	110	15.71	3834.96	-8.38	-656.02	0.000000	0.00	0.000
5-4-P	85	110	15.71	3834.96	-9.07	-656.02	0.000000	0.00	0.000
5-5-P	85	110	15.71	3834.96	-8.39	-656.02	0.000000	0.00	0.000
5-6-P	85	110	15.71	3834.96	-7.14	-656.02	0.000000	0.00	0.000
5-7-P	85	110	15.71	3834.96	-5.45	-656.02	0.000000	0.00	0.000
5-8-P	85	110	15.71	3834.96	-7.42	-656.02	0.000000	0.00	0.000
5-9-P	85	110	15.71	3834.96	-12.75	-656.02	0.000000	0.00	0.000
5-10-P	85	110	15.71	3834.96	-36.91	-656.02	0.000000	0.00	0.000
5-11-P	85	110	15.71	3834.96	-40.95	-656.02	0.000000	0.00	0.000
5-12-P	85	110	15.71	3834.96	-12.71	-656.02	0.000000	0.00	0.000
5-13-P	85	110	15.71	3834.96	-3.14	-656.02	0.000000	0.00	0.000
5-14-P	85	110	15.71	3834.96	4.15	-656.02	0.000000	0.00	0.000
5-15-P	85	110	15.71	3834.96	4.83	-656.02	0.000000	0.00	0.000
5-16-P	85	110	15.71	3834.96	5.22	-656.02	0.000000	0.00	0.000
5-17-P	85	110	15.71	3834.96	5.52	-656.02	0.000000	0.00	0.000
5-18-P	85	110	15.71	3834.96	-4.21	-656.02	0.000000	0.00	0.000
5-19-P	85	110	15.71	3834.96	-15.41	-656.02	0.000000	0.00	0.000
5-20-P	85	110	15.71	3834.96	-42.49	-656.02	0.000000	0.00	0.000
5-21-P	85	110	15.71	3834.96	-25.51	-656.02	0.000000	0.00	0.000
5-22-P	85	110	15.71	3834.96	-5.90	-656.02	0.000000	0.00	0.000
5-23-P	85	110	15.71	3834.96	4.77	-656.02	0.000000	0.00	0.000
5-24-P	85	110	15.71	3834.96	6.40	-656.02	0.000000	0.00	0.000
5-25-P	85	110	15.71	3834.96	6.62	-656.02	0.000000	0.00	0.000
5-26-P	85	110	15.71	3834.96	6.40	-656.02	0.000000	0.00	0.000
5-27-P	85	110	15.71	3834.96	4.77	-656.02	0.000000	0.00	0.000
5-28-P	85	110	15.71	3834.96	-5.90	-656.02	0.000000	0.00	0.000
5-29-P	85	110	15.71	3834.96	-25.51	-656.02	0.000000	0.00	0.000
5-30-P	85	110	15.71	3834.96	-42.49	-656.02	0.000000	0.00	0.000
5-31-P	85	110	15.71	3834.96	-15.41	-656.02	0.000000	0.00	0.000
5-32-P	85	110	15.71	3834.96	-4.21	-656.02	0.000000	0.00	0.000
5-33-P	85	110	15.71	3834.96	5.52	-656.02	0.000000	0.00	0.000
5-34-P	85	110	15.71	3834.96	5.22	-656.02	0.000000	0.00	0.000
5-35-P	85	110	15.71	3834.96	4.83	-656.02	0.000000	0.00	0.000
5-36-P	85	110	15.71	3834.96	4.15	-656.02	0.000000	0.00	0.000
5-37-P	85	110	15.71	3834.96	-3.14	-656.02	0.000000	0.00	0.000
5-38-P	85	110	15.71	3834.96	-12.71	-656.02	0.000000	0.00	0.000
5-39-P	85	110	15.71	3834.96	-40.95	-656.02	0.000000	0.00	0.000
5-40-P	85	110	15.71	3834.96	-36.91	-656.02	0.000000	0.00	0.000
5-41-P	85	110	15.71	3834.96	-12.75	-656.02	0.000000	0.00	0.000
5-42-P	85	110	15.71	3834.96	-7.42	-656.02	0.000000	0.00	0.000
5-43-P	85	110	15.71	3834.96	-5.45	-656.02	0.000000	0.00	0.000
5-44-P	85	110	15.71	3834.96	-7.14	-656.02	0.000000	0.00	0.000
5-45-P	85	110	15.71	3834.96	-8.39	-656.02	0.000000	0.00	0.000
5-46-P	85	110	15.71	3834.96	-9.07	-656.02	0.000000	0.00	0.000
5-47-P	85	110	15.71	3834.96	-8.38	-656.02	0.000000	0.00	0.000
5-48-P	85	110	15.71	3834.96	-7.02	-656.02	0.000000	0.00	0.000
5-49-P	85	110	15.71	3834.96	-5.39	-656.02	0.000000	0.00	0.000
6-1-P	85	110	12.57	3906.02	-2.97	-641.45	0.000000	0.00	0.000
6-2-P	85	110	12.57	3906.02	-3.45	-641.45	0.000000	0.00	0.000
6-3-P	85	110	12.57	3906.02	-3.93	-641.45	0.000000	0.00	0.000
6-4-P	85	110	12.57	3906.02	-4.42	-641.45	0.000000	0.00	0.000
6-5-P	85	110	12.57	3906.02	-3.85	-641.45	0.000000	0.00	0.000
6-6-P	85	110	12.57	3906.02	-3.50	-641.45	0.000000	0.00	0.000
6-7-P	85	110	12.57	3906.02	-4.70	-641.45	0.000000	0.00	0.000
6-8-P	85	110	12.57	3906.02	-8.44	-641.45	0.000000	0.00	0.000
6-9-P	85	110	12.57	3906.02	-13.16	-641.45	0.000000	0.00	0.000
6-10-P	85	110	12.57	3906.02	-15.30	-641.45	0.000000	0.00	0.000
6-11-P	85	110	12.57	3906.02	-15.16	-641.45	0.000000	0.00	0.000
6-12-P	85	110	12.57	3906.02	-11.43	-641.45	0.000000	0.00	0.000
6-13-P	85	110	12.57	3906.02	-6.06	-641.45	0.000000	0.00	0.000
6-14-P	85	110	12.57	3906.02	3.04	-641.45	0.000000	0.00	0.000
6-15-P	85	110	12.57	3906.02	3.84	-641.45	0.000000	0.00	0.000
6-16-P	85	110	12.57	3906.02	3.99	-641.45	0.000000	0.00	0.000
6-17-P	85	110	12.57	3906.02	2.48	-641.45	0.000000	0.00	0.000
6-18-P	85	110	12.57	3906.02	-3.12	-641.45	0.000000	0.00	0.000
6-19-P	85	110	12.57	3906.02	-7.07	-641.45	0.000000	0.00	0.000
6-20-P	85	110	12.57	3906.02	-10.11	-641.45	0.000000	0.00	0.000
6-21-P	85	110	12.57	3906.02	-8.03	-641.45	0.000000	0.00	0.000
6-22-P	85	110	12.57	3906.02	-4.73	-641.45	0.000000	0.00	0.000
6-23-P	85	110	12.57	3906.02	2.24	-641.45	0.000000	0.00	0.000
6-24-P	85	110	12.57	3906.02	5.46	-641.45	0.000000	0.00	0.000
6-25-P	85	110	12.57	1700.00	7.58	641.45	0.000000	0.00	0.000
6-26-P	85	110	12.57	3906.02	5.46	-641.45	0.000000	0.00	0.000

APPALTATORE:

TELESE S.c.a r.l.
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ITINERARIO NAPOLI – BARI
RADDOPPIO TRATTA CANCELLO-BENEVENTO
II LOTTO FUNZIONALE FRASSO TELESINO – VITULANO
2° SUBLOTTO TELESE – SAN LORENZO

PROGETTAZIONE:

Mandataria:

Mandante:

SYSTRA S.A. SWS Engineering S.p.A. SYSTRA-SOTECNI S.p.A.

PROGETTO ESECUTIVO

Relazione di calcolo

IF2R.2.2.E.ZZ.CL.TR.16.0.5.008.A.DOCX

COMMESSA	LOTTO	CODIFICA	DOCUMENTO	REV.	FOGLIO
IF2R	2.2.E.ZZ	CL	TR.16.0.5.008	A	97 di 118

Is	B [cm]	H [cm]	Af [cmq]	Aeff [cmq]	M [kNm]	Mpf [kNm]	ε [%]	Sm [mm]	w [mm]
6-27-P	85	110	12.57	3906.02	2.24	-641.45	0.000000	0.00	0.000
6-28-P	85	110	12.57	3906.02	-4.73	-641.45	0.000000	0.00	0.000
6-29-P	85	110	12.57	3906.02	-8.03	-641.45	0.000000	0.00	0.000
6-30-P	85	110	12.57	3906.02	-10.11	-641.45	0.000000	0.00	0.000
6-31-P	85	110	12.57	3906.02	-7.07	-641.45	0.000000	0.00	0.000
6-32-P	85	110	12.57	3906.02	-3.12	-641.45	0.000000	0.00	0.000
6-33-P	85	110	12.57	3906.02	2.48	-641.45	0.000000	0.00	0.000
6-34-P	85	110	12.57	3906.02	3.99	-641.45	0.000000	0.00	0.000
6-35-P	85	110	12.57	3906.02	3.84	-641.45	0.000000	0.00	0.000
6-36-P	85	110	12.57	3906.02	3.04	-641.45	0.000000	0.00	0.000
6-37-P	85	110	12.57	3906.02	-6.06	-641.45	0.000000	0.00	0.000
6-38-P	85	110	12.57	3906.02	-11.43	-641.45	0.000000	0.00	0.000
6-39-P	85	110	12.57	3906.02	-15.16	-641.45	0.000000	0.00	0.000
6-40-P	85	110	12.57	3906.02	-15.30	-641.45	0.000000	0.00	0.000
6-41-P	85	110	12.57	3906.02	-13.16	-641.45	0.000000	0.00	0.000
6-42-P	85	110	12.57	3906.02	-8.44	-641.45	0.000000	0.00	0.000
6-43-P	85	110	12.57	3906.02	-4.70	-641.45	0.000000	0.00	0.000
6-44-P	85	110	12.57	3906.02	-3.50	-641.45	0.000000	0.00	0.000
6-45-P	85	110	12.57	3906.02	-3.85	-641.45	0.000000	0.00	0.000
6-46-P	85	110	12.57	3906.02	-4.42	-641.45	0.000000	0.00	0.000
6-47-P	85	110	12.57	3906.02	-3.93	-641.45	0.000000	0.00	0.000
6-48-P	85	110	12.57	3906.02	-3.45	-641.45	0.000000	0.00	0.000
6-49-P	85	110	12.57	3906.02	-2.97	-641.45	0.000000	0.00	0.000
7-1-P	85	110	12.57	3906.02	1.50	-641.45	0.000000	0.00	0.000
7-2-P	85	110	12.57	3906.02	2.59	-641.45	0.000000	0.00	0.000
7-3-P	85	110	12.57	3906.02	-5.77	-641.45	0.000000	0.00	0.000
7-4-P	85	110	12.57	3906.02	-13.07	-641.45	0.000000	0.00	0.000
7-5-P	85	110	12.57	3906.02	-18.09	-641.45	0.000000	0.00	0.000
7-6-P	85	110	12.57	3906.02	-21.91	-641.45	0.000000	0.00	0.000
7-7-P	85	110	12.57	3906.02	-13.89	-641.45	0.000000	0.00	0.000
7-8-P	85	110	12.57	3906.02	-7.09	-641.45	0.000000	0.00	0.000
7-9-P	85	110	12.57	3906.02	3.25	-641.45	0.000000	0.00	0.000
7-10-P	85	110	12.57	3906.02	4.64	-641.45	0.000000	0.00	0.000
7-11-P	85	110	12.57	3906.02	5.63	-641.45	0.000000	0.00	0.000
7-12-P	85	110	12.57	3906.02	5.90	-641.45	0.000000	0.00	0.000
7-13-P	85	110	12.57	3906.02	-5.48	-641.45	0.000000	0.00	0.000
7-14-P	85	110	12.57	3906.02	-10.71	-641.45	0.000000	0.00	0.000
7-15-P	85	110	12.57	3906.02	-15.28	-641.45	0.000000	0.00	0.000
7-16-P	85	110	12.57	3906.02	-12.85	-641.45	0.000000	0.00	0.000
7-17-P	85	110	12.57	3906.02	-7.38	-641.45	0.000000	0.00	0.000
7-18-P	85	110	12.57	3906.02	4.62	-641.45	0.000000	0.00	0.000
7-19-P	85	110	12.57	1700.00	9.49	641.45	0.000000	0.00	0.000
7-20-P	85	110	12.57	1700.00	11.03	641.45	0.000000	0.00	0.000
7-21-P	85	110	12.57	1700.00	10.60	641.45	0.000000	0.00	0.000
7-22-P	85	110	12.57	1700.00	8.36	641.45	0.000000	0.00	0.000
7-23-P	85	110	12.57	3906.02	5.10	-641.45	0.000000	0.00	0.000
7-24-P	85	110	12.57	3906.02	-8.16	-641.45	0.000000	0.00	0.000
7-25-P	85	110	12.57	3906.02	-15.81	-641.45	0.000000	0.00	0.000
7-26-P	85	110	12.57	3906.02	-8.16	-641.45	0.000000	0.00	0.000
7-27-P	85	110	12.57	3906.02	5.10	-641.45	0.000000	0.00	0.000
7-28-P	85	110	12.57	1700.00	8.36	641.45	0.000000	0.00	0.000
7-29-P	85	110	12.57	1700.00	10.60	641.45	0.000000	0.00	0.000
7-30-P	85	110	12.57	1700.00	11.03	641.45	0.000000	0.00	0.000
7-31-P	85	110	12.57	1700.00	9.49	641.45	0.000000	0.00	0.000
7-32-P	85	110	12.57	3906.02	4.62	-641.45	0.000000	0.00	0.000
7-33-P	85	110	12.57	3906.02	-7.38	-641.45	0.000000	0.00	0.000
7-34-P	85	110	12.57	3906.02	-12.85	-641.45	0.000000	0.00	0.000
7-35-P	85	110	12.57	3906.02	-15.28	-641.45	0.000000	0.00	0.000
7-36-P	85	110	12.57	3906.02	-10.71	-641.45	0.000000	0.00	0.000
7-37-P	85	110	12.57	3906.02	-5.48	-641.45	0.000000	0.00	0.000
7-38-P	85	110	12.57	3906.02	5.90	-641.45	0.000000	0.00	0.000
7-39-P	85	110	12.57	3906.02	5.63	-641.45	0.000000	0.00	0.000
7-40-P	85	110	12.57	3906.02	4.64	-641.45	0.000000	0.00	0.000
7-41-P	85	110	12.57	3906.02	3.25	-641.45	0.000000	0.00	0.000
7-42-P	85	110	12.57	3906.02	-7.09	-641.45	0.000000	0.00	0.000
7-43-P	85	110	12.57	3906.02	-13.89	-641.45	0.000000	0.00	0.000
7-44-P	85	110	12.57	3906.02	-21.91	-641.45	0.000000	0.00	0.000
7-45-P	85	110	12.57	3906.02	-18.09	-641.45	0.000000	0.00	0.000
7-46-P	85	110	12.57	3906.02	-13.07	-641.45	0.000000	0.00	0.000
7-47-P	85	110	12.57	3906.02	-5.77	-641.45	0.000000	0.00	0.000
7-48-P	85	110	12.57	3906.02	2.59	-641.45	0.000000	0.00	0.000
7-49-P	85	110	12.57	3906.02	1.50	-641.45	0.000000	0.00	0.000
8-1-P	85	110	15.71	3834.96	0.59	-656.02	0.000000	0.00	0.000
8-2-P	85	110	15.71	3834.96	-2.87	-656.02	0.000000	0.00	0.000
8-3-P	85	110	15.71	3834.96	-7.92	-656.02	0.000000	0.00	0.000
8-4-P	85	110	15.71	3834.96	-15.99	-656.02	0.000000	0.00	0.000
8-5-P	85	110	15.71	3834.96	-32.01	-656.02	0.000000	0.00	0.000
8-6-P	85	110	15.71	3834.96	-43.97	-656.02	0.000000	0.00	0.000
8-7-P	85	110	15.71	3834.96	-22.14	-656.02	0.000000	0.00	0.000
8-8-P	85	110	15.71	3834.96	-9.50	-656.02	0.000000	0.00	0.000
8-9-P	85	110	15.71	3834.96	1.37	-656.02	0.000000	0.00	0.000

APPALTATORE:

TELESE S.c.a r.l.

Consorzio Telese Società Consortile a Responsabilità Limitata

ITINERARIO NAPOLI – BARI
RADDOPPIO TRATTA CANCELLO-BENEVENTO
II LOTTO FUNZIONALE FRASSO TELESINO – VITULANO
2° SUBLOTTO TELESE – SAN LORENZO

PROGETTAZIONE:

Mandataria:

Mandante:

SYSTRA S.A. SWS Engineering S.p.A. SYSTRA-SOTECNI S.p.A.

PROGETTO ESECUTIVO

Relazione di calcolo

IF2R.2.2.E.ZZ.CL.TR.16.0.5.008.A.DOCX

COMMESSA	LOTTO	CODIFICA	DOCUMENTO	REV.	FOGLIO
IF2R	2.2.E.ZZ	CL	TR.16.0.5.008	A	98 di 118

Is	B [cm]	H [cm]	Af [cmq]	Aeff [cmq]	M [kNm]	Mpf [kNm]	ε [%]	Sm [mm]	w [mm]
8-10-P	85	110	15.71	1700.00	4.44	656.02	0.000000	0.00	0.000
8-11-P	85	110	15.71	1700.00	5.77	656.02	0.000000	0.00	0.000
8-12-P	85	110	15.71	3834.96	3.32	-656.02	0.000000	0.00	0.000
8-13-P	85	110	15.71	3834.96	-6.00	-656.02	0.000000	0.00	0.000
8-14-P	85	110	15.71	3834.96	-14.41	-656.02	0.000000	0.00	0.000
8-15-P	85	110	15.71	3834.96	-34.15	-656.02	0.000000	0.00	0.000
8-16-P	85	110	15.71	3834.96	-29.35	-656.02	0.000000	0.00	0.000
8-17-P	85	110	15.71	3834.96	-10.20	-656.02	0.000000	0.00	0.000
8-18-P	85	110	15.71	3834.96	2.61	-656.02	0.000000	0.00	0.000
8-19-P	85	110	15.71	1700.00	7.43	656.02	0.000000	0.00	0.000
8-20-P	85	110	15.71	1700.00	11.34	656.02	0.000000	0.00	0.000
8-21-P	85	110	15.71	1700.00	9.50	656.02	0.000000	0.00	0.000
8-22-P	85	110	15.71	3834.96	5.38	-656.02	0.000000	0.00	0.000
8-23-P	85	110	15.71	3834.96	-5.66	-656.02	0.000000	0.00	0.000
8-24-P	85	110	15.71	3834.96	-18.30	-656.02	0.000000	0.00	0.000
8-25-P	85	110	15.71	3834.96	-39.43	-656.02	0.000000	0.00	0.000
8-26-P	85	110	15.71	3834.96	-18.30	-656.02	0.000000	0.00	0.000
8-27-P	85	110	15.71	3834.96	-5.66	-656.02	0.000000	0.00	0.000
8-28-P	85	110	15.71	3834.96	5.38	-656.02	0.000000	0.00	0.000
8-29-P	85	110	15.71	1700.00	9.50	656.02	0.000000	0.00	0.000
8-30-P	85	110	15.71	1700.00	11.34	656.02	0.000000	0.00	0.000
8-31-P	85	110	15.71	1700.00	7.43	656.02	0.000000	0.00	0.000
8-32-P	85	110	15.71	3834.96	2.61	-656.02	0.000000	0.00	0.000
8-33-P	85	110	15.71	3834.96	-10.20	-656.02	0.000000	0.00	0.000
8-34-P	85	110	15.71	3834.96	-29.35	-656.02	0.000000	0.00	0.000
8-35-P	85	110	15.71	3834.96	-34.15	-656.02	0.000000	0.00	0.000
8-36-P	85	110	15.71	3834.96	-14.41	-656.02	0.000000	0.00	0.000
8-37-P	85	110	15.71	3834.96	-6.00	-656.02	0.000000	0.00	0.000
8-38-P	85	110	15.71	3834.96	3.32	-656.02	0.000000	0.00	0.000
8-39-P	85	110	15.71	1700.00	5.77	656.02	0.000000	0.00	0.000
8-40-P	85	110	15.71	1700.00	4.44	656.02	0.000000	0.00	0.000
8-41-P	85	110	15.71	3834.96	1.37	-656.02	0.000000	0.00	0.000
8-42-P	85	110	15.71	3834.96	-9.50	-656.02	0.000000	0.00	0.000
8-43-P	85	110	15.71	3834.96	-22.14	-656.02	0.000000	0.00	0.000
8-44-P	85	110	15.71	3834.96	-43.97	-656.02	0.000000	0.00	0.000
8-45-P	85	110	15.71	3834.96	-32.01	-656.02	0.000000	0.00	0.000
8-46-P	85	110	15.71	3834.96	-15.99	-656.02	0.000000	0.00	0.000
8-47-P	85	110	15.71	3834.96	-7.92	-656.02	0.000000	0.00	0.000
8-48-P	85	110	15.71	3834.96	-2.87	-656.02	0.000000	0.00	0.000
8-49-P	85	110	15.71	3834.96	0.59	-656.02	0.000000	0.00	0.000
9-1-S	100	110	15.71	4573.11	-3.88	-758.93	0.000000	0.00	0.000
9-2-S	100	110	15.71	4573.11	-7.15	-758.93	0.000000	0.00	0.000
9-3-S	100	110	15.71	4573.11	-10.23	-758.93	0.000000	0.00	0.000
9-4-S	100	110	15.71	4573.11	-11.40	-758.93	0.000000	0.00	0.000
9-5-S	100	110	15.71	4573.11	6.76	-758.93	0.000000	0.00	0.000
9-6-S	100	110	15.71	4573.11	22.41	-758.93	0.000000	0.00	0.000
9-7-S	100	110	15.71	2000.00	54.22	758.93	0.000000	0.00	0.000
9-8-S	100	110	15.71	4573.11	-102.13	-758.93	0.000000	0.00	0.000
9-9-S	100	110	15.71	4573.11	-68.01	-758.93	0.000000	0.00	0.000
9-10-S	100	110	15.71	4573.11	-43.11	-758.93	0.000000	0.00	0.000
9-11-S	100	110	15.71	4573.11	-23.49	-758.93	0.000000	0.00	0.000
9-12-S	100	110	15.71	4573.11	-7.93	-758.93	0.000000	0.00	0.000
9-13-S	100	110	15.71	4573.11	9.42	-758.93	0.000000	0.00	0.000
9-14-S	100	110	15.71	4573.11	17.11	-758.93	0.000000	0.00	0.000
9-15-S	100	110	15.71	4573.11	22.11	-758.93	0.000000	0.00	0.000
9-16-S	100	110	15.71	4573.11	20.42	-758.93	0.000000	0.00	0.000
9-17-S	100	110	15.71	4573.11	16.64	-758.93	0.000000	0.00	0.000
9-18-S	100	110	15.71	4573.11	9.79	-758.93	0.000000	0.00	0.000
9-19-S	100	110	15.71	4573.11	-6.38	-758.93	0.000000	0.00	0.000
9-20-S	100	110	15.71	4573.11	-4.08	-758.93	0.000000	0.00	0.000
9-21-S	100	110	15.71	4573.11	-2.00	-758.93	0.000000	0.00	0.000
9-22-S	100	110	15.71	4573.11	1.70	-758.93	0.000000	0.00	0.000
10-1-S	100	110	15.71	4573.11	6.58	-758.93	0.000000	0.00	0.000
10-2-S	100	110	15.71	4573.11	10.73	-758.93	0.000000	0.00	0.000
10-3-S	100	110	15.71	4573.11	-9.63	-758.93	0.000000	0.00	0.000
10-4-S	100	110	15.71	4573.11	-44.28	-758.93	0.000000	0.00	0.000
10-5-S	100	110	15.71	4573.11	-41.76	-758.93	0.000000	0.00	0.000
10-6-S	100	110	15.71	4573.11	13.75	-758.93	0.000000	0.00	0.000
10-7-S	100	110	15.71	2000.00	65.21	758.93	0.000000	0.00	0.000
10-8-S	100	110	15.71	4573.11	-64.20	-758.93	0.000000	0.00	0.000
10-9-S	100	110	15.71	4573.11	-52.78	-758.93	0.000000	0.00	0.000
10-10-S	100	110	15.71	4573.11	-38.85	-758.93	0.000000	0.00	0.000
10-11-S	100	110	15.71	4573.11	-25.29	-758.93	0.000000	0.00	0.000
10-12-S	100	110	15.71	4573.11	-12.35	-758.93	0.000000	0.00	0.000
10-13-S	100	110	15.71	4573.11	4.34	-758.93	0.000000	0.00	0.000
10-14-S	100	110	15.71	4573.11	15.05	-758.93	0.000000	0.00	0.000
10-15-S	100	110	15.71	4573.11	24.44	-758.93	0.000000	0.00	0.000
10-16-S	100	110	15.71	4573.11	29.44	-758.93	0.000000	0.00	0.000
10-17-S	100	110	15.71	4573.11	32.46	-758.93	0.000000	0.00	0.000
10-18-S	100	110	15.71	4573.11	-6.82	-758.93	0.000000	0.00	0.000
10-19-S	100	110	15.71	4573.11	-28.41	-758.93	0.000000	0.00	0.000

APPALTATORE:

TELESE S.c.a r.l.

Consorzio Telese Società Consortile a Responsabilità Limitata

ITINERARIO NAPOLI – BARI
RADDOPPIO TRATTA CANCELLO-BENEVENTO
II LOTTO FUNZIONALE FRASSO TELESINO – VITULANO
2° SUBLOTTO TELESE – SAN LORENZO

PROGETTAZIONE:

Mandataria:

Mandante:

SYSTRA S.A. SWS Engineering S.p.A. SYSTRA-SOTECNI S.p.A.

PROGETTO ESECUTIVO

Relazione di calcolo

IF2R.2.2.E.ZZ.CL.TR.16.0.5.008.A.DOCX

COMMESSA	LOTTO	CODIFICA	DOCUMENTO	REV.	FOGLIO
IF2R	2.2.E.ZZ	CL	TR.16.0.5.008	A	99 di 118

Is	B [cm]	H [cm]	Af [cmq]	Aeff [cmq]	M [kNm]	Mpf [kNm]	ε [%]	Sm [mm]	w [mm]
10-20-S	100	110	15.71	4573.11	-19.52	-758.93	0.000000	0.00	0.000
10-21-S	100	110	15.71	4573.11	-10.70	-758.93	0.000000	0.00	0.000
10-22-S	100	110	15.71	4573.11	-1.87	-758.93	0.000000	0.00	0.000
11-1-S	100	110	15.71	4573.11	-5.15	-758.93	0.000000	0.00	0.000
11-2-S	100	110	15.71	4573.11	-4.86	-758.93	0.000000	0.00	0.000
11-3-S	100	110	15.71	4573.11	-3.04	-758.93	0.000000	0.00	0.000
11-4-S	100	110	15.71	4573.11	5.27	-758.93	0.000000	0.00	0.000
11-5-S	100	110	15.71	2000.00	16.82	758.93	0.000000	0.00	0.000
11-6-S	100	110	15.71	2000.00	34.35	758.93	0.000000	0.00	0.000
11-7-S	100	110	15.71	2000.00	54.44	758.93	0.000000	0.00	0.000
11-8-S	100	110	15.71	4573.11	28.08	-758.93	0.000000	0.00	0.000
11-9-S	100	110	15.71	4573.11	18.10	-758.93	0.000000	0.00	0.000
11-10-S	100	110	15.71	4573.11	-70.76	-758.93	0.000000	0.00	0.000
11-11-S	100	110	15.71	4573.11	-54.96	-758.93	0.000000	0.00	0.000
11-12-S	100	110	15.71	4573.11	-33.49	-758.93	0.000000	0.00	0.000
11-13-S	100	110	15.71	4573.11	-11.25	-758.93	0.000000	0.00	0.000
11-14-S	100	110	15.71	4573.11	5.51	-758.93	0.000000	0.00	0.000
11-15-S	100	110	15.71	4573.11	12.50	-758.93	0.000000	0.00	0.000
11-16-S	100	110	15.71	4573.11	13.71	-758.93	0.000000	0.00	0.000
11-17-S	100	110	15.71	4573.11	13.06	-758.93	0.000000	0.00	0.000
11-18-S	100	110	15.71	4573.11	9.51	-758.93	0.000000	0.00	0.000
11-19-S	100	110	15.71	4573.11	6.23	-758.93	0.000000	0.00	0.000
11-20-S	100	110	15.71	4573.11	3.39	-758.93	0.000000	0.00	0.000
11-21-S	100	110	15.71	4573.11	1.76	-758.93	0.000000	0.00	0.000
11-22-S	100	110	15.71	4573.11	0.92	-758.93	0.000000	0.00	0.000
12-1-S	100	110	15.71	4573.11	8.19	-758.93	0.000000	0.00	0.000
12-2-S	100	110	15.71	4573.11	11.11	-758.93	0.000000	0.00	0.000
12-3-S	100	110	15.71	4573.11	-10.34	-758.93	0.000000	0.00	0.000
12-4-S	100	110	15.71	4573.11	-50.87	-758.93	0.000000	0.00	0.000
12-5-S	100	110	15.71	4573.11	-47.60	-758.93	0.000000	0.00	0.000
12-6-S	100	110	15.71	4573.11	9.19	-758.93	0.000000	0.00	0.000
12-7-S	100	110	15.71	2000.00	65.77	758.93	0.000000	0.00	0.000
12-8-S	100	110	15.71	4573.11	-39.67	-758.93	0.000000	0.00	0.000
12-9-S	100	110	15.71	4573.11	-28.85	-758.93	0.000000	0.00	0.000
12-10-S	100	110	15.71	4573.11	-23.12	-758.93	0.000000	0.00	0.000
12-11-S	100	110	15.71	4573.11	-15.29	-758.93	0.000000	0.00	0.000
12-12-S	100	110	15.71	4573.11	-6.86	-758.93	0.000000	0.00	0.000
12-13-S	100	110	15.71	4573.11	5.16	-758.93	0.000000	0.00	0.000
12-14-S	100	110	15.71	4573.11	14.81	-758.93	0.000000	0.00	0.000
12-15-S	100	110	15.71	4573.11	24.19	-758.93	0.000000	0.00	0.000
12-16-S	100	110	15.71	4573.11	29.85	-758.93	0.000000	0.00	0.000
12-17-S	100	110	15.71	4573.11	33.84	-758.93	0.000000	0.00	0.000
12-18-S	100	110	15.71	4573.11	-10.43	-758.93	0.000000	0.00	0.000
12-19-S	100	110	15.71	4573.11	-33.81	-758.93	0.000000	0.00	0.000
12-20-S	100	110	15.71	4573.11	-23.58	-758.93	0.000000	0.00	0.000
12-21-S	100	110	15.71	4573.11	-12.75	-758.93	0.000000	0.00	0.000
12-22-S	100	110	15.71	4573.11	-2.17	-758.93	0.000000	0.00	0.000
13-1-S	100	110	15.71	4573.11	-4.60	-758.93	0.000000	0.00	0.000
13-2-S	100	110	15.71	4573.11	-6.80	-758.93	0.000000	0.00	0.000
13-3-S	100	110	15.71	4573.11	-6.96	-758.93	0.000000	0.00	0.000
13-4-S	100	110	15.71	4573.11	4.59	-758.93	0.000000	0.00	0.000
13-5-S	100	110	15.71	4573.11	13.21	-758.93	0.000000	0.00	0.000
13-6-S	100	110	15.71	2000.00	31.24	758.93	0.000000	0.00	0.000
13-7-S	100	110	15.71	2000.00	55.21	758.93	0.000000	0.00	0.000
13-8-S	100	110	15.71	4573.11	32.89	-758.93	0.000000	0.00	0.000
13-9-S	100	110	15.71	4573.11	23.10	-758.93	0.000000	0.00	0.000
13-10-S	100	110	15.71	4573.11	-57.31	-758.93	0.000000	0.00	0.000
13-11-S	100	110	15.71	4573.11	-43.85	-758.93	0.000000	0.00	0.000
13-12-S	100	110	15.71	4573.11	-25.62	-758.93	0.000000	0.00	0.000
13-13-S	100	110	15.71	4573.11	-6.73	-758.93	0.000000	0.00	0.000
13-14-S	100	110	15.71	4573.11	7.29	-758.93	0.000000	0.00	0.000
13-15-S	100	110	15.71	2000.00	14.20	758.93	0.000000	0.00	0.000
13-16-S	100	110	15.71	4573.11	13.91	-758.93	0.000000	0.00	0.000
13-17-S	100	110	15.71	4573.11	11.55	-758.93	0.000000	0.00	0.000
13-18-S	100	110	15.71	4573.11	8.58	-758.93	0.000000	0.00	0.000
13-19-S	100	110	15.71	4573.11	5.74	-758.93	0.000000	0.00	0.000
13-20-S	100	110	15.71	4573.11	2.44	-758.93	0.000000	0.00	0.000
13-21-S	100	110	15.71	4573.11	1.12	-758.93	0.000000	0.00	0.000
13-22-S	100	110	15.71	4573.11	0.95	-758.93	0.000000	0.00	0.000
14-1-S	100	110	18.85	4504.06	4.60	-773.50	0.000000	0.00	0.000
14-2-S	100	110	18.85	4504.06	-7.01	-773.50	0.000000	0.00	0.000
14-3-S	100	110	18.85	4504.06	-10.07	-773.50	0.000000	0.00	0.000
14-4-S	100	110	18.85	4504.06	-27.77	-773.50	0.000000	0.00	0.000
14-5-S	100	110	18.85	4504.06	-24.12	-773.50	0.000000	0.00	0.000
14-6-S	100	110	18.85	4504.06	19.45	-773.50	0.000000	0.00	0.000
14-7-S	100	110	18.85	2000.00	61.14	773.50	0.000000	0.00	0.000
14-8-S	100	110	18.85	4504.06	-23.50	-773.50	0.000000	0.00	0.000
14-9-S	100	110	18.85	4504.06	-23.91	-773.50	0.000000	0.00	0.000
14-10-S	100	110	18.85	4504.06	-27.68	-773.50	0.000000	0.00	0.000
14-11-S	100	110	18.85	4504.06	-19.89	-773.50	0.000000	0.00	0.000
14-12-S	100	110	18.85	4504.06	-10.80	-773.50	0.000000	0.00	0.000

APPALTATORE:

TELESE S.c.a r.l.

Consorzio Telese Società Consortile a Responsabilità Limitata

PROGETTAZIONE:

Mandataria:

Mandante:

SYSTRA S.A.

SWS Engineering S.p.A.

SYSTRA-SOTECNI S.p.A.

ITINERARIO NAPOLI – BARI
RADDOPPIO TRATTA CANCELLO-BENEVENTO
II LOTTO FUNZIONALE FRASSO TELESINO – VITULANO
2° SUBLOTTO TELESE – SAN LORENZO
PROGETTO ESECUTIVO

Relazione di calcolo

IF2R.2.2.E.ZZ.CL.TR.16.0.5.008.A.DOCX

COMMESSA	LOTTO	CODIFICA	DOCUMENTO	REV.	FOGLIO
IF2R	2.2.E.ZZ	CL	TR.16.0.5.008	A	100 di 118

Is	B [cm]	H [cm]	Af [cmq]	Aeff [cmq]	M [kNm]	Mpf [kNm]	ε [%]	Sm [mm]	w [mm]
14-13-S	100	110	18.85	4504.06	4.09	-773.50	0.000000	0.00	0.000
14-14-S	100	110	18.85	4504.06	13.00	-773.50	0.000000	0.00	0.000
14-15-S	100	110	18.85	2000.00	20.28	773.50	0.000000	0.00	0.000
14-16-S	100	110	18.85	4504.06	22.29	-773.50	0.000000	0.00	0.000
14-17-S	100	110	18.85	4504.06	22.69	-773.50	0.000000	0.00	0.000
14-18-S	100	110	18.85	4504.06	-5.90	-773.50	0.000000	0.00	0.000
14-19-S	100	110	18.85	4504.06	-17.87	-773.50	0.000000	0.00	0.000
14-20-S	100	110	18.85	4504.06	-12.50	-773.50	0.000000	0.00	0.000
14-21-S	100	110	18.85	4504.06	-6.70	-773.50	0.000000	0.00	0.000
14-22-S	100	110	18.85	4504.06	-1.26	-773.50	0.000000	0.00	0.000
15-1-S	100	110	15.71	4573.11	4.60	-758.93	0.000000	0.00	0.000
15-2-S	100	110	15.71	4573.11	-7.01	-758.93	0.000000	0.00	0.000
15-3-S	100	110	15.71	4573.11	-10.07	-758.93	0.000000	0.00	0.000
15-4-S	100	110	15.71	4573.11	-27.77	-758.93	0.000000	0.00	0.000
15-5-S	100	110	15.71	4573.11	-24.12	-758.93	0.000000	0.00	0.000
15-6-S	100	110	15.71	4573.11	19.45	-758.93	0.000000	0.00	0.000
15-7-S	100	110	15.71	2000.00	61.14	758.93	0.000000	0.00	0.000
15-8-S	100	110	15.71	4573.11	-23.50	-758.93	0.000000	0.00	0.000
15-9-S	100	110	15.71	4573.11	-23.91	-758.93	0.000000	0.00	0.000
15-10-S	100	110	15.71	4573.11	-27.68	-758.93	0.000000	0.00	0.000
15-11-S	100	110	15.71	4573.11	-19.89	-758.93	0.000000	0.00	0.000
15-12-S	100	110	15.71	4573.11	-10.80	-758.93	0.000000	0.00	0.000
15-13-S	100	110	15.71	4573.11	4.09	-758.93	0.000000	0.00	0.000
15-14-S	100	110	15.71	4573.11	13.00	-758.93	0.000000	0.00	0.000
15-15-S	100	110	15.71	2000.00	20.28	758.93	0.000000	0.00	0.000
15-16-S	100	110	15.71	4573.11	22.29	-758.93	0.000000	0.00	0.000
15-17-S	100	110	15.71	4573.11	22.69	-758.93	0.000000	0.00	0.000
15-18-S	100	110	15.71	4573.11	-5.90	-758.93	0.000000	0.00	0.000
15-19-S	100	110	15.71	4573.11	-17.87	-758.93	0.000000	0.00	0.000
15-20-S	100	110	15.71	4573.11	-12.50	-758.93	0.000000	0.00	0.000
15-21-S	100	110	15.71	4573.11	-6.70	-758.93	0.000000	0.00	0.000
15-22-S	100	110	15.71	4573.11	-1.26	-758.93	0.000000	0.00	0.000
16-1-S	100	110	15.71	4573.11	-4.60	-758.93	0.000000	0.00	0.000
16-2-S	100	110	15.71	4573.11	-6.80	-758.93	0.000000	0.00	0.000
16-3-S	100	110	15.71	4573.11	-6.96	-758.93	0.000000	0.00	0.000
16-4-S	100	110	15.71	4573.11	4.59	-758.93	0.000000	0.00	0.000
16-5-S	100	110	15.71	4573.11	13.21	-758.93	0.000000	0.00	0.000
16-6-S	100	110	15.71	2000.00	31.24	758.93	0.000000	0.00	0.000
16-7-S	100	110	15.71	2000.00	55.21	758.93	0.000000	0.00	0.000
16-8-S	100	110	15.71	4573.11	32.89	-758.93	0.000000	0.00	0.000
16-9-S	100	110	15.71	4573.11	23.10	-758.93	0.000000	0.00	0.000
16-10-S	100	110	15.71	4573.11	-57.31	-758.93	0.000000	0.00	0.000
16-11-S	100	110	15.71	4573.11	-43.85	-758.93	0.000000	0.00	0.000
16-12-S	100	110	15.71	4573.11	-25.62	-758.93	0.000000	0.00	0.000
16-13-S	100	110	15.71	4573.11	-6.73	-758.93	0.000000	0.00	0.000
16-14-S	100	110	15.71	4573.11	7.29	-758.93	0.000000	0.00	0.000
16-15-S	100	110	15.71	2000.00	14.20	758.93	0.000000	0.00	0.000
16-16-S	100	110	15.71	4573.11	13.91	-758.93	0.000000	0.00	0.000
16-17-S	100	110	15.71	4573.11	11.55	-758.93	0.000000	0.00	0.000
16-18-S	100	110	15.71	4573.11	8.58	-758.93	0.000000	0.00	0.000
16-19-S	100	110	15.71	4573.11	5.74	-758.93	0.000000	0.00	0.000
16-20-S	100	110	15.71	4573.11	2.44	-758.93	0.000000	0.00	0.000
16-21-S	100	110	15.71	4573.11	1.12	-758.93	0.000000	0.00	0.000
16-22-S	100	110	15.71	4573.11	0.95	-758.93	0.000000	0.00	0.000
17-1-S	100	110	15.71	4573.11	8.19	-758.93	0.000000	0.00	0.000
17-2-S	100	110	15.71	4573.11	11.11	-758.93	0.000000	0.00	0.000
17-3-S	100	110	15.71	4573.11	-10.34	-758.93	0.000000	0.00	0.000
17-4-S	100	110	15.71	4573.11	-50.87	-758.93	0.000000	0.00	0.000
17-5-S	100	110	15.71	4573.11	-47.60	-758.93	0.000000	0.00	0.000
17-6-S	100	110	15.71	4573.11	9.19	-758.93	0.000000	0.00	0.000
17-7-S	100	110	15.71	2000.00	65.77	758.93	0.000000	0.00	0.000
17-8-S	100	110	15.71	4573.11	-39.67	-758.93	0.000000	0.00	0.000
17-9-S	100	110	15.71	4573.11	-28.85	-758.93	0.000000	0.00	0.000
17-10-S	100	110	15.71	4573.11	-23.12	-758.93	0.000000	0.00	0.000
17-11-S	100	110	15.71	4573.11	-15.29	-758.93	0.000000	0.00	0.000
17-12-S	100	110	15.71	4573.11	-6.86	-758.93	0.000000	0.00	0.000
17-13-S	100	110	15.71	4573.11	5.16	-758.93	0.000000	0.00	0.000
17-14-S	100	110	15.71	4573.11	14.81	-758.93	0.000000	0.00	0.000
17-15-S	100	110	15.71	4573.11	24.19	-758.93	0.000000	0.00	0.000
17-16-S	100	110	15.71	4573.11	29.85	-758.93	0.000000	0.00	0.000
17-17-S	100	110	15.71	4573.11	33.84	-758.93	0.000000	0.00	0.000
17-18-S	100	110	15.71	4573.11	-10.43	-758.93	0.000000	0.00	0.000
17-19-S	100	110	15.71	4573.11	-33.81	-758.93	0.000000	0.00	0.000
17-20-S	100	110	15.71	4573.11	-23.58	-758.93	0.000000	0.00	0.000
17-21-S	100	110	15.71	4573.11	-12.75	-758.93	0.000000	0.00	0.000
17-22-S	100	110	15.71	4573.11	-2.17	-758.93	0.000000	0.00	0.000
18-1-S	100	110	15.71	4573.11	-5.15	-758.93	0.000000	0.00	0.000
18-2-S	100	110	15.71	4573.11	-4.86	-758.93	0.000000	0.00	0.000
18-3-S	100	110	15.71	4573.11	-3.04	-758.93	0.000000	0.00	0.000
18-4-S	100	110	15.71	4573.11	5.27	-758.93	0.000000	0.00	0.000
18-5-S	100	110	15.71	2000.00	16.82	758.93	0.000000	0.00	0.000

APPALTATORE:

TELESE S.c.a r.l.

Consorzio Telese Società Consortile a Responsabilità Limitata

ITINERARIO NAPOLI – BARI
RADDOPPIO TRATTA CANCELLO-BENEVENTO
II LOTTO FUNZIONALE FRASSO TELESINO – VITULANO
2° SUBLOTTO TELESE – SAN LORENZO

PROGETTAZIONE:

Mandataria:

Mandante:

SYSTRA S.A. SWS Engineering S.p.A. SYSTRA-SOTECNI S.p.A.

PROGETTO ESECUTIVO

Relazione di calcolo

IF2R.2.2.E.ZZ.CL.TR.16.0.5.008.A.DOCX

COMMESSA	LOTTO	CODIFICA	DOCUMENTO	REV.	FOGLIO
IF2R	2.2.E.ZZ	CL	TR.16.0.5.008	A	101 di 118

Is	B [cm]	H [cm]	Af [cmq]	Aeff [cmq]	M [kNm]	Mpf [kNm]	ε [%]	Sm [mm]	w [mm]
18-6-S	100	110	15.71	2000.00	34.35	758.93	0.000000	0.00	0.000
18-7-S	100	110	15.71	2000.00	54.44	758.93	0.000000	0.00	0.000
18-8-S	100	110	15.71	4573.11	28.08	-758.93	0.000000	0.00	0.000
18-9-S	100	110	15.71	4573.11	18.10	-758.93	0.000000	0.00	0.000
18-10-S	100	110	15.71	4573.11	-70.76	-758.93	0.000000	0.00	0.000
18-11-S	100	110	15.71	4573.11	-54.96	-758.93	0.000000	0.00	0.000
18-12-S	100	110	15.71	4573.11	-33.49	-758.93	0.000000	0.00	0.000
18-13-S	100	110	15.71	4573.11	-11.25	-758.93	0.000000	0.00	0.000
18-14-S	100	110	15.71	4573.11	5.51	-758.93	0.000000	0.00	0.000
18-15-S	100	110	15.71	4573.11	12.50	-758.93	0.000000	0.00	0.000
18-16-S	100	110	15.71	4573.11	13.71	-758.93	0.000000	0.00	0.000
18-17-S	100	110	15.71	4573.11	13.06	-758.93	0.000000	0.00	0.000
18-18-S	100	110	15.71	4573.11	9.51	-758.93	0.000000	0.00	0.000
18-19-S	100	110	15.71	4573.11	6.23	-758.93	0.000000	0.00	0.000
18-20-S	100	110	15.71	4573.11	3.39	-758.93	0.000000	0.00	0.000
18-21-S	100	110	15.71	4573.11	1.76	-758.93	0.000000	0.00	0.000
18-22-S	100	110	15.71	4573.11	0.92	-758.93	0.000000	0.00	0.000
19-1-S	100	110	15.71	4573.11	6.58	-758.93	0.000000	0.00	0.000
19-2-S	100	110	15.71	4573.11	10.73	-758.93	0.000000	0.00	0.000
19-3-S	100	110	15.71	4573.11	-9.63	-758.93	0.000000	0.00	0.000
19-4-S	100	110	15.71	4573.11	-44.28	-758.93	0.000000	0.00	0.000
19-5-S	100	110	15.71	4573.11	-41.76	-758.93	0.000000	0.00	0.000
19-6-S	100	110	15.71	4573.11	13.75	-758.93	0.000000	0.00	0.000
19-7-S	100	110	15.71	2000.00	65.21	758.93	0.000000	0.00	0.000
19-8-S	100	110	15.71	4573.11	-64.20	-758.93	0.000000	0.00	0.000
19-9-S	100	110	15.71	4573.11	-52.78	-758.93	0.000000	0.00	0.000
19-10-S	100	110	15.71	4573.11	-38.85	-758.93	0.000000	0.00	0.000
19-11-S	100	110	15.71	4573.11	-25.29	-758.93	0.000000	0.00	0.000
19-12-S	100	110	15.71	4573.11	-12.35	-758.93	0.000000	0.00	0.000
19-13-S	100	110	15.71	4573.11	4.34	-758.93	0.000000	0.00	0.000
19-14-S	100	110	15.71	4573.11	15.05	-758.93	0.000000	0.00	0.000
19-15-S	100	110	15.71	4573.11	24.44	-758.93	0.000000	0.00	0.000
19-16-S	100	110	15.71	4573.11	29.44	-758.93	0.000000	0.00	0.000
19-17-S	100	110	15.71	4573.11	32.46	-758.93	0.000000	0.00	0.000
19-18-S	100	110	15.71	4573.11	-6.82	-758.93	0.000000	0.00	0.000
19-19-S	100	110	15.71	4573.11	-28.41	-758.93	0.000000	0.00	0.000
19-20-S	100	110	15.71	4573.11	-19.52	-758.93	0.000000	0.00	0.000
19-21-S	100	110	15.71	4573.11	-10.70	-758.93	0.000000	0.00	0.000
19-22-S	100	110	15.71	4573.11	-1.87	-758.93	0.000000	0.00	0.000
20-1-S	100	110	15.71	4573.11	-3.88	-758.93	0.000000	0.00	0.000
20-2-S	100	110	15.71	4573.11	-7.15	-758.93	0.000000	0.00	0.000
20-3-S	100	110	15.71	4573.11	-10.23	-758.93	0.000000	0.00	0.000
20-4-S	100	110	15.71	4573.11	-11.40	-758.93	0.000000	0.00	0.000
20-5-S	100	110	15.71	4573.11	6.76	-758.93	0.000000	0.00	0.000
20-6-S	100	110	15.71	4573.11	22.41	-758.93	0.000000	0.00	0.000
20-7-S	100	110	15.71	2000.00	54.22	758.93	0.000000	0.00	0.000
20-8-S	100	110	15.71	4573.11	-102.13	-758.93	0.000000	0.00	0.000
20-9-S	100	110	15.71	4573.11	-68.01	-758.93	0.000000	0.00	0.000
20-10-S	100	110	15.71	4573.11	-43.11	-758.93	0.000000	0.00	0.000
20-11-S	100	110	15.71	4573.11	-23.49	-758.93	0.000000	0.00	0.000
20-12-S	100	110	15.71	4573.11	-7.93	-758.93	0.000000	0.00	0.000
20-13-S	100	110	15.71	4573.11	9.42	-758.93	0.000000	0.00	0.000
20-14-S	100	110	15.71	4573.11	17.11	-758.93	0.000000	0.00	0.000
20-15-S	100	110	15.71	4573.11	22.11	-758.93	0.000000	0.00	0.000
20-16-S	100	110	15.71	4573.11	20.42	-758.93	0.000000	0.00	0.000
20-17-S	100	110	15.71	4573.11	16.64	-758.93	0.000000	0.00	0.000
20-18-S	100	110	15.71	4573.11	9.79	-758.93	0.000000	0.00	0.000
20-19-S	100	110	15.71	4573.11	-6.38	-758.93	0.000000	0.00	0.000
20-20-S	100	110	15.71	4573.11	-4.08	-758.93	0.000000	0.00	0.000
20-21-S	100	110	15.71	4573.11	-2.00	-758.93	0.000000	0.00	0.000
20-22-S	100	110	15.71	4573.11	1.70	-758.93	0.000000	0.00	0.000

Pali in c.a.

Apertura limite fessure $w_{lim}=0.200$ mm

Ip	Is	Af [cmq]	Aeff [cmq]	Mpf [kNm]	M [kNm]	N [kN]	ε [%]	Sm [mm]	wm [mm]
1	1	22.90	3697.83	205.67	-125.15	246.00	0.000000	0.00	0.00
2	1	34.56	3617.50	229.58	-125.15	407.83	0.000000	0.00	0.00
3	1	34.56	3617.50	240.39	-125.15	569.66	0.000000	0.00	0.00

Combinazioni SLEF

APPALTATORE: TELESE S.c.a r.l. Consorzio Telese Società Consortile a Responsabilità Limitata	ITINERARIO NAPOLI – BARI RADDOPPIO TRATTA CANCELLO-BENEVENTO II LOTTO FUNZIONALE FRASSO TELESINO – VITULANO 2° SUBLOTTO TELESE – SAN LORENZO												
PROGETTAZIONE: Mandataria: SYSTRA S.A. Mandante: SWS Engineering S.p.A. SYSTRA-SOTECNI S.p.A.	PROGETTO ESECUTIVO												
Relazione di calcolo IF2R.2.2.E.ZZ.CL.TR.16.0.5.008.A.DOCX	<table border="1"> <tr> <td>COMMESSA</td> <td>LOTTO</td> <td>CODIFICA</td> <td>DOCUMENTO</td> <td>REV.</td> <td>FOGLIO</td> </tr> <tr> <td>IF2R</td> <td>2.2.E.ZZ</td> <td>CL</td> <td>TR.16.0.5.008</td> <td>A</td> <td>102 di 118</td> </tr> </table>	COMMESSA	LOTTO	CODIFICA	DOCUMENTO	REV.	FOGLIO	IF2R	2.2.E.ZZ	CL	TR.16.0.5.008	A	102 di 118
COMMESSA	LOTTO	CODIFICA	DOCUMENTO	REV.	FOGLIO								
IF2R	2.2.E.ZZ	CL	TR.16.0.5.008	A	102 di 118								

Paramento

Apertura limite fessure $w_{lim}=0.30$

n°	B [cm]	H [cm]	Af [cmq]	Aeff [cmq]	M [kNm]	Mpf [kNm]	ε [%]	Sm [mm]	w [mm]
1	100	70	0.00	0.00	0.00	0.00	0.000000	0.00	0.000 (6)
2	100	70	0.00	0.00	0.00	0.00	0.000000	0.00	0.000 (6)
3	100	70	0.00	0.00	0.00	0.00	0.000000	0.00	0.000 (6)
4	100	70	0.00	0.00	0.00	0.00	0.000000	0.00	0.000 (6)
5	100	70	0.00	0.00	0.00	0.00	0.000000	0.00	0.000 (6)
6	100	70	0.00	0.00	0.00	0.00	0.000000	0.00	0.000 (6)
7	100	70	0.00	0.00	0.00	0.00	0.000000	0.00	0.000 (6)
8	100	70	0.00	0.00	0.00	0.00	0.000000	0.00	0.000 (6)
9	100	70	0.00	0.00	0.00	0.00	0.000000	0.00	0.000 (6)
10	100	70	0.00	0.00	0.00	0.00	0.000000	0.00	0.000 (6)
11	100	70	0.00	0.00	0.00	0.00	0.000000	0.00	0.000 (6)
12	100	70	0.00	0.00	0.00	0.00	0.000000	0.00	0.000 (6)
13	100	70	0.00	0.00	0.00	0.00	0.000000	0.00	0.000 (6)
14	100	70	0.00	0.00	0.00	0.00	0.000000	0.00	0.000 (6)
15	100	70	0.00	0.00	0.00	0.00	0.000000	0.00	0.000 (6)
16	100	70	0.00	0.00	0.00	0.00	0.000000	0.00	0.000 (6)
17	100	70	0.00	0.00	0.00	0.00	0.000000	0.00	0.000 (6)
18	100	70	0.00	0.00	0.00	0.00	0.000000	0.00	0.000 (6)
19	100	70	0.00	0.00	0.00	0.00	0.000000	0.00	0.000 (6)
20	100	70	0.00	0.00	0.00	0.00	0.000000	0.00	0.000 (6)
21	100	70	0.00	0.00	0.00	0.00	0.000000	0.00	0.000 (6)
22	100	70	0.00	0.00	0.00	0.00	0.000000	0.00	0.000 (6)
23	100	70	0.00	0.00	0.00	0.00	0.000000	0.00	0.000 (6)
24	100	70	0.00	0.00	0.00	0.00	0.000000	0.00	0.000 (6)
25	100	70	0.00	0.00	0.00	0.00	0.000000	0.00	0.000 (6)
26	100	70	0.00	0.00	0.00	0.00	0.000000	0.00	0.000 (6)
27	100	70	0.00	0.00	0.00	0.00	0.000000	0.00	0.000 (6)
28	100	70	0.00	0.00	0.00	0.00	0.000000	0.00	0.000 (6)
29	100	70	0.00	0.00	0.00	0.00	0.000000	0.00	0.000 (6)
30	100	70	12.72	1840.00	0.02	344.92	0.000000	0.00	0.000 (6)
31	100	70	12.72	1840.00	0.10	345.14	0.000000	0.00	0.000 (6)
32	100	101	12.72	1840.00	7.81	697.41	0.000000	0.00	0.000 (6)
33	100	101	12.72	1840.00	8.07	697.84	0.000000	0.00	0.000 (6)
34	100	101	12.72	1840.00	8.57	698.27	0.000000	0.00	0.000 (6)
35	100	101	12.72	1840.00	9.26	698.72	0.000000	0.00	0.000 (6)
36	100	101	12.72	1840.00	10.05	699.13	0.000000	0.00	0.000 (6)
37	100	101	12.72	1840.00	10.88	699.58	0.000000	0.00	0.000 (6)
38	100	101	12.72	1840.00	11.77	700.01	0.000000	0.00	0.000 (6)
39	100	101	12.72	1840.00	12.72	700.46	0.000000	0.00	0.000 (6)
40	100	101	12.72	1840.00	13.74	700.87	0.000000	0.00	0.000 (6)
41	100	101	12.72	1840.00	14.85	701.32	0.000000	0.00	0.000 (6)
42	100	101	12.72	1840.00	16.04	701.75	0.000000	0.00	0.000 (6)
43	100	101	12.72	1840.00	17.34	702.16	0.000000	0.00	0.000 (6)
44	100	101	12.72	1840.00	18.73	702.60	0.000000	0.00	0.000 (6)
45	100	101	12.72	1840.00	20.23	703.03	0.000000	0.00	0.000 (6)
46	100	101	12.72	1840.00	21.85	703.48	0.000000	0.00	0.000 (6)
47	100	101	12.72	1840.00	23.59	703.92	0.000000	0.00	0.000 (6)
48	100	101	12.72	1840.00	25.45	704.34	0.000000	0.00	0.000 (6)
49	100	101	12.72	1840.00	27.44	704.79	0.000000	0.00	0.000 (6)
50	100	101	12.72	1840.00	29.56	705.23	0.000000	0.00	0.000 (6)
51	100	101	12.72	1840.00	31.82	705.65	0.000000	0.00	0.000 (6)
52	100	101	12.72	1840.00	34.23	706.07	0.000000	0.00	0.000 (6)

Piastra fondazione

Apertura limite fessure $w_{lim}=0.30$

Is	B [cm]	H [cm]	Af [cmq]	Aeff [cmq]	M [kNm]	Mpf [kNm]	ε [%]	Sm [mm]	w [mm]
1-1-P	69	110	12.57	3141.48	1.01	-535.11	0.000000	0.00	0.000
1-2-P	69	110	12.57	3141.48	-1.56	-535.11	0.000000	0.00	0.000
1-3-P	69	110	12.57	3141.48	-5.97	-535.11	0.000000	0.00	0.000
1-4-P	69	110	12.57	3141.48	-16.11	-535.11	0.000000	0.00	0.000
1-5-P	69	110	12.57	3141.48	-25.38	-535.11	0.000000	0.00	0.000
1-6-P	69	110	12.57	3141.48	-30.01	-535.11	0.000000	0.00	0.000
1-7-P	69	110	12.57	3141.48	-17.21	-535.11	0.000000	0.00	0.000
1-8-P	69	110	12.57	3141.48	-5.18	-535.11	0.000000	0.00	0.000
1-9-P	69	110	12.57	3141.48	9.84	-535.11	0.000000	0.00	0.000
1-10-P	69	110	12.57	3141.48	13.32	-535.11	0.000000	0.00	0.000
1-11-P	69	110	12.57	3141.48	14.40	-535.11	0.000000	0.00	0.000
1-12-P	69	110	12.57	3141.48	11.74	-535.11	0.000000	0.00	0.000
1-13-P	69	110	12.57	3141.48	3.39	-535.11	0.000000	0.00	0.000
1-14-P	69	110	12.57	3141.48	-11.14	-535.11	0.000000	0.00	0.000

APPALTATORE:

TELESE S.c.a r.l.
Consorzio Telese Società Consortile a Responsabilità Limitata

ITINERARIO NAPOLI – BARI
RADDOPPIO TRATTA CANCELLO-BENEVENTO
II LOTTO FUNZIONALE FRASSO TELESINO – VITULANO
2° SUBLOTTO TELESE – SAN LORENZO

PROGETTAZIONE:

Mandatario:

Mandante:

SYSTRA S.A. SWS Engineering S.p.A. SYSTRA-SOTECNI S.p.A.

PROGETTO ESECUTIVO

Relazione di calcolo

IF2R.2.2.E.ZZ.CL.TR.16.0.5.008.A.DOCX

COMMESSA	LOTTO	CODIFICA	DOCUMENTO	REV.	FOGLIO
IF2R	2.2.E.ZZ	CL	TR.16.0.5.008	A	103 di 118

Is	B [cm]	H [cm]	Af [cmq]	Aeff [cmq]	M [kNm]	Mpf [kNm]	ε [%]	Sm [mm]	w [mm]
1-15-P	69	110	12.57	3141.48	-22.32	-535.11	0.000000	0.00	0.000
1-16-P	69	110	12.57	3141.48	-20.06	-535.11	0.000000	0.00	0.000
1-17-P	69	110	12.57	3141.48	-9.80	-535.11	0.000000	0.00	0.000
1-18-P	69	110	12.57	3141.48	5.02	-535.11	0.000000	0.00	0.000
1-19-P	69	110	12.57	3141.48	12.63	-535.11	0.000000	0.00	0.000
1-20-P	69	110	12.57	1390.00	15.62	535.11	0.000000	0.00	0.000
1-21-P	69	110	12.57	3141.48	13.78	-535.11	0.000000	0.00	0.000
1-22-P	69	110	12.57	3141.48	9.10	-535.11	0.000000	0.00	0.000
1-23-P	69	110	12.57	3141.48	-5.32	-535.11	0.000000	0.00	0.000
1-24-P	69	110	12.57	3141.48	-15.78	-535.11	0.000000	0.00	0.000
1-25-P	69	110	12.57	3141.48	-26.87	-535.11	0.000000	0.00	0.000
1-26-P	69	110	12.57	3141.48	-15.78	-535.11	0.000000	0.00	0.000
1-27-P	69	110	12.57	3141.48	-5.32	-535.11	0.000000	0.00	0.000
1-28-P	69	110	12.57	3141.48	9.10	-535.11	0.000000	0.00	0.000
1-29-P	69	110	12.57	3141.48	13.78	-535.11	0.000000	0.00	0.000
1-30-P	69	110	12.57	1390.00	15.62	535.11	0.000000	0.00	0.000
1-31-P	69	110	12.57	3141.48	12.63	-535.11	0.000000	0.00	0.000
1-32-P	69	110	12.57	3141.48	5.02	-535.11	0.000000	0.00	0.000
1-33-P	69	110	12.57	3141.48	-9.80	-535.11	0.000000	0.00	0.000
1-34-P	69	110	12.57	3141.48	-20.06	-535.11	0.000000	0.00	0.000
1-35-P	69	110	12.57	3141.48	-22.32	-535.11	0.000000	0.00	0.000
1-36-P	69	110	12.57	3141.48	-11.14	-535.11	0.000000	0.00	0.000
1-37-P	69	110	12.57	3141.48	3.39	-535.11	0.000000	0.00	0.000
1-38-P	69	110	12.57	3141.48	11.74	-535.11	0.000000	0.00	0.000
1-39-P	69	110	12.57	3141.48	14.40	-535.11	0.000000	0.00	0.000
1-40-P	69	110	12.57	3141.48	13.32	-535.11	0.000000	0.00	0.000
1-41-P	69	110	12.57	3141.48	9.84	-535.11	0.000000	0.00	0.000
1-42-P	69	110	12.57	3141.48	-5.18	-535.11	0.000000	0.00	0.000
1-43-P	69	110	12.57	3141.48	-17.21	-535.11	0.000000	0.00	0.000
1-44-P	69	110	12.57	3141.48	-30.01	-535.11	0.000000	0.00	0.000
1-45-P	69	110	12.57	3141.48	-25.38	-535.11	0.000000	0.00	0.000
1-46-P	69	110	12.57	3141.48	-16.11	-535.11	0.000000	0.00	0.000
1-47-P	69	110	12.57	3141.48	-5.97	-535.11	0.000000	0.00	0.000
1-48-P	69	110	12.57	3141.48	-1.56	-535.11	0.000000	0.00	0.000
1-49-P	69	110	12.57	3141.48	1.01	-535.11	0.000000	0.00	0.000
2-1-P	70	110	12.57	1390.00	4.41	535.11	0.000000	0.00	0.000
2-2-P	70	110	12.57	1390.00	4.55	535.11	0.000000	0.00	0.000
2-3-P	70	110	12.57	3141.48	4.06	-535.11	0.000000	0.00	0.000
2-4-P	70	110	12.57	3141.48	3.75	-535.11	0.000000	0.00	0.000
2-5-P	70	110	12.57	3141.48	-24.05	-535.11	0.000000	0.00	0.000
2-6-P	70	110	12.57	3141.48	-41.10	-535.11	0.000000	0.00	0.000
2-7-P	70	110	12.57	3141.48	-9.86	-535.11	0.000000	0.00	0.000
2-8-P	70	110	12.57	3141.48	7.77	-535.11	0.000000	0.00	0.000
2-9-P	70	110	12.57	1390.00	12.41	535.11	0.000000	0.00	0.000
2-10-P	70	110	12.57	1390.00	13.70	535.11	0.000000	0.00	0.000
2-11-P	70	110	12.57	1390.00	14.10	535.11	0.000000	0.00	0.000
2-12-P	70	110	12.57	1390.00	13.16	535.11	0.000000	0.00	0.000
2-13-P	70	110	12.57	3141.48	9.58	-535.11	0.000000	0.00	0.000
2-14-P	70	110	12.57	3141.48	-2.61	-535.11	0.000000	0.00	0.000
2-15-P	70	110	12.57	3141.48	-32.50	-535.11	0.000000	0.00	0.000
2-16-P	70	110	12.57	3141.48	-26.58	-535.11	0.000000	0.00	0.000
2-17-P	70	110	12.57	3141.48	6.66	-535.11	0.000000	0.00	0.000
2-18-P	70	110	12.57	3141.48	10.33	-535.11	0.000000	0.00	0.000
2-19-P	70	110	12.57	1390.00	13.32	535.11	0.000000	0.00	0.000
2-20-P	70	110	12.57	1390.00	14.35	535.11	0.000000	0.00	0.000
2-21-P	70	110	12.57	1390.00	13.70	535.11	0.000000	0.00	0.000
2-22-P	70	110	12.57	1390.00	11.97	535.11	0.000000	0.00	0.000
2-23-P	70	110	12.57	3141.48	7.90	-535.11	0.000000	0.00	0.000
2-24-P	70	110	12.57	3141.48	-14.48	-535.11	0.000000	0.00	0.000
2-25-P	70	110	12.57	3141.48	-44.93	-535.11	0.000000	0.00	0.000
2-26-P	70	110	12.57	3141.48	-14.48	-535.11	0.000000	0.00	0.000
2-27-P	70	110	12.57	3141.48	7.90	-535.11	0.000000	0.00	0.000
2-28-P	70	110	12.57	1390.00	11.97	535.11	0.000000	0.00	0.000
2-29-P	70	110	12.57	1390.00	13.70	535.11	0.000000	0.00	0.000
2-30-P	70	110	12.57	1390.00	14.35	535.11	0.000000	0.00	0.000
2-31-P	70	110	12.57	1390.00	13.32	535.11	0.000000	0.00	0.000
2-32-P	70	110	12.57	3141.48	10.33	-535.11	0.000000	0.00	0.000
2-33-P	70	110	12.57	3141.48	6.66	-535.11	0.000000	0.00	0.000
2-34-P	70	110	12.57	3141.48	-26.58	-535.11	0.000000	0.00	0.000
2-35-P	70	110	12.57	3141.48	-32.50	-535.11	0.000000	0.00	0.000
2-36-P	70	110	12.57	3141.48	-2.61	-535.11	0.000000	0.00	0.000
2-37-P	70	110	12.57	3141.48	9.58	-535.11	0.000000	0.00	0.000
2-38-P	70	110	12.57	1390.00	13.16	535.11	0.000000	0.00	0.000
2-39-P	70	110	12.57	1390.00	14.10	535.11	0.000000	0.00	0.000
2-40-P	70	110	12.57	1390.00	13.70	535.11	0.000000	0.00	0.000
2-41-P	70	110	12.57	1390.00	12.41	535.11	0.000000	0.00	0.000
2-42-P	70	110	12.57	3141.48	7.77	-535.11	0.000000	0.00	0.000
2-43-P	70	110	12.57	3141.48	-9.86	-535.11	0.000000	0.00	0.000
2-44-P	70	110	12.57	3141.48	-41.10	-535.11	0.000000	0.00	0.000
2-45-P	70	110	12.57	3141.48	-24.05	-535.11	0.000000	0.00	0.000
2-46-P	70	110	12.57	3141.48	3.75	-535.11	0.000000	0.00	0.000

APPALTATORE:

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II LOTTO FUNZIONALE FRASSO TELESINO – VITULANO
2° SUBLOTTO TELESE – SAN LORENZO

PROGETTAZIONE:

Mandataria:

Mandante:

SYSTRA S.A. SWS Engineering S.p.A. SYSTRA-SOTECNI S.p.A.

PROGETTO ESECUTIVO

Relazione di calcolo

IF2R.2.2.E.ZZ.CL.TR.16.0.5.008.A.DOCX

COMMESSA LOTTO CODIFICA DOCUMENTO REV. FOLGIO
IF2R 2.2.E.ZZ CL TR.16.0.5.008 A 104 di 118

Is	B [cm]	H [cm]	Af [cmq]	Aeff [cmq]	M [kNm]	Mpf [kNm]	ε [%]	Sm [mm]	w [mm]
2-47-P	70	110	12.57	3141.48	4.06	-535.11	0.000000	0.00	0.000
2-48-P	70	110	12.57	1390.00	4.55	535.11	0.000000	0.00	0.000
2-49-P	70	110	12.57	1390.00	4.41	535.11	0.000000	0.00	0.000
5-1-P	85	110	15.71	3834.96	-4.67	-656.02	0.000000	0.00	0.000
5-2-P	85	110	15.71	3834.96	-5.70	-656.02	0.000000	0.00	0.000
5-3-P	85	110	15.71	3834.96	-6.45	-656.02	0.000000	0.00	0.000
5-4-P	85	110	15.71	3834.96	-6.58	-656.02	0.000000	0.00	0.000
5-5-P	85	110	15.71	3834.96	-5.74	-656.02	0.000000	0.00	0.000
5-6-P	85	110	15.71	3834.96	-4.77	-656.02	0.000000	0.00	0.000
5-7-P	85	110	15.71	3834.96	4.49	-656.02	0.000000	0.00	0.000
5-8-P	85	110	15.71	3834.96	-6.36	-656.02	0.000000	0.00	0.000
5-9-P	85	110	15.71	3834.96	-10.67	-656.02	0.000000	0.00	0.000
5-10-P	85	110	15.71	3834.96	-31.52	-656.02	0.000000	0.00	0.000
5-11-P	85	110	15.71	3834.96	-35.77	-656.02	0.000000	0.00	0.000
5-12-P	85	110	15.71	3834.96	-7.25	-656.02	0.000000	0.00	0.000
5-13-P	85	110	15.71	3834.96	6.09	-656.02	0.000000	0.00	0.000
5-14-P	85	110	15.71	3834.96	9.54	-656.02	0.000000	0.00	0.000
5-15-P	85	110	15.71	3834.96	10.12	-656.02	0.000000	0.00	0.000
5-16-P	85	110	15.71	3834.96	10.68	-656.02	0.000000	0.00	0.000
5-17-P	85	110	15.71	3834.96	11.23	-656.02	0.000000	0.00	0.000
5-18-P	85	110	15.71	3834.96	8.55	-656.02	0.000000	0.00	0.000
5-19-P	85	110	15.71	3834.96	-9.78	-656.02	0.000000	0.00	0.000
5-20-P	85	110	15.71	3834.96	-37.44	-656.02	0.000000	0.00	0.000
5-21-P	85	110	15.71	3834.96	-20.19	-656.02	0.000000	0.00	0.000
5-22-P	85	110	15.71	3834.96	8.27	-656.02	0.000000	0.00	0.000
5-23-P	85	110	15.71	3834.96	10.40	-656.02	0.000000	0.00	0.000
5-24-P	85	110	15.71	3834.96	12.10	-656.02	0.000000	0.00	0.000
5-25-P	85	110	15.71	3834.96	12.10	-656.02	0.000000	0.00	0.000
5-26-P	85	110	15.71	3834.96	12.10	-656.02	0.000000	0.00	0.000
5-27-P	85	110	15.71	3834.96	10.40	-656.02	0.000000	0.00	0.000
5-28-P	85	110	15.71	3834.96	8.27	-656.02	0.000000	0.00	0.000
5-29-P	85	110	15.71	3834.96	-20.19	-656.02	0.000000	0.00	0.000
5-30-P	85	110	15.71	3834.96	-37.44	-656.02	0.000000	0.00	0.000
5-31-P	85	110	15.71	3834.96	-9.78	-656.02	0.000000	0.00	0.000
5-32-P	85	110	15.71	3834.96	8.55	-656.02	0.000000	0.00	0.000
5-33-P	85	110	15.71	3834.96	11.23	-656.02	0.000000	0.00	0.000
5-34-P	85	110	15.71	3834.96	10.68	-656.02	0.000000	0.00	0.000
5-35-P	85	110	15.71	3834.96	10.12	-656.02	0.000000	0.00	0.000
5-36-P	85	110	15.71	3834.96	9.54	-656.02	0.000000	0.00	0.000
5-37-P	85	110	15.71	3834.96	6.09	-656.02	0.000000	0.00	0.000
5-38-P	85	110	15.71	3834.96	-7.25	-656.02	0.000000	0.00	0.000
5-39-P	85	110	15.71	3834.96	-35.77	-656.02	0.000000	0.00	0.000
5-40-P	85	110	15.71	3834.96	-31.52	-656.02	0.000000	0.00	0.000
5-41-P	85	110	15.71	3834.96	-10.67	-656.02	0.000000	0.00	0.000
5-42-P	85	110	15.71	3834.96	-6.36	-656.02	0.000000	0.00	0.000
5-43-P	85	110	15.71	3834.96	4.49	-656.02	0.000000	0.00	0.000
5-44-P	85	110	15.71	3834.96	-4.77	-656.02	0.000000	0.00	0.000
5-45-P	85	110	15.71	3834.96	-5.74	-656.02	0.000000	0.00	0.000
5-46-P	85	110	15.71	3834.96	-6.58	-656.02	0.000000	0.00	0.000
5-47-P	85	110	15.71	3834.96	-6.45	-656.02	0.000000	0.00	0.000
5-48-P	85	110	15.71	3834.96	-5.70	-656.02	0.000000	0.00	0.000
5-49-P	85	110	15.71	3834.96	-4.67	-656.02	0.000000	0.00	0.000
6-1-P	85	110	12.57	3906.02	-2.21	-641.45	0.000000	0.00	0.000
6-2-P	85	110	12.57	3906.02	2.73	-641.45	0.000000	0.00	0.000
6-3-P	85	110	12.57	3906.02	3.25	-641.45	0.000000	0.00	0.000
6-4-P	85	110	12.57	3906.02	3.60	-641.45	0.000000	0.00	0.000
6-5-P	85	110	12.57	3906.02	2.63	-641.45	0.000000	0.00	0.000
6-6-P	85	110	12.57	3906.02	-2.04	-641.45	0.000000	0.00	0.000
6-7-P	85	110	12.57	3906.02	-2.98	-641.45	0.000000	0.00	0.000
6-8-P	85	110	12.57	3906.02	-5.75	-641.45	0.000000	0.00	0.000
6-9-P	85	110	12.57	3906.02	-9.88	-641.45	0.000000	0.00	0.000
6-10-P	85	110	12.57	3906.02	-11.46	-641.45	0.000000	0.00	0.000
6-11-P	85	110	12.57	3906.02	-11.21	-641.45	0.000000	0.00	0.000
6-12-P	85	110	12.57	3906.02	-8.00	-641.45	0.000000	0.00	0.000
6-13-P	85	110	12.57	3906.02	-3.09	-641.45	0.000000	0.00	0.000
6-14-P	85	110	12.57	3906.02	4.66	-641.45	0.000000	0.00	0.000
6-15-P	85	110	12.57	1700.00	7.21	641.45	0.000000	0.00	0.000
6-16-P	85	110	12.57	1700.00	7.50	641.45	0.000000	0.00	0.000
6-17-P	85	110	12.57	1700.00	6.19	641.45	0.000000	0.00	0.000
6-18-P	85	110	12.57	3906.02	2.05	-641.45	0.000000	0.00	0.000
6-19-P	85	110	12.57	3906.02	-3.87	-641.45	0.000000	0.00	0.000
6-20-P	85	110	12.57	3906.02	-6.35	-641.45	0.000000	0.00	0.000
6-21-P	85	110	12.57	3906.02	-4.63	-641.45	0.000000	0.00	0.000
6-22-P	85	110	12.57	3906.02	2.37	-641.45	0.000000	0.00	0.000
6-23-P	85	110	12.57	3906.02	5.81	-641.45	0.000000	0.00	0.000
6-24-P	85	110	12.57	1700.00	9.14	641.45	0.000000	0.00	0.000
6-25-P	85	110	12.57	1700.00	11.09	641.45	0.000000	0.00	0.000
6-26-P	85	110	12.57	1700.00	9.14	641.45	0.000000	0.00	0.000
6-27-P	85	110	12.57	3906.02	5.81	-641.45	0.000000	0.00	0.000
6-28-P	85	110	12.57	3906.02	2.37	-641.45	0.000000	0.00	0.000
6-29-P	85	110	12.57	3906.02	-4.63	-641.45	0.000000	0.00	0.000

APPALTATORE:

TELESE S.c.a r.l.
Consorzio Telese Società Consortile a Responsabilità Limitata

ITINERARIO NAPOLI – BARI
RADDOPPIO TRATTA CANCELLO-BENEVENTO
II LOTTO FUNZIONALE FRASSO TELESINO – VITULANO
2° SUBLOTTO TELESE – SAN LORENZO

PROGETTAZIONE:

Mandataria:

Mandante:

SYSTRA S.A. SWS Engineering S.p.A. SYSTRA-SOTECNI S.p.A.

PROGETTO ESECUTIVO

Relazione di calcolo

IF2R.2.2.E.ZZ.CL.TR.16.0.5.008.A.DOCX

COMMESSA LOTTO CODIFICA DOCUMENTO REV. FOGLIO
IF2R 2.2.E.ZZ CL TR.16.0.5.008 A 105 di 118

Is	B [cm]	H [cm]	Af [cmq]	Aeff [cmq]	M [kNm]	Mpf [kNm]	ε [%]	Sm [mm]	w [mm]
6-30-P	85	110	12.57	3906.02	-6.35	-641.45	0.000000	0.00	0.000
6-31-P	85	110	12.57	3906.02	-3.87	-641.45	0.000000	0.00	0.000
6-32-P	85	110	12.57	3906.02	2.05	-641.45	0.000000	0.00	0.000
6-33-P	85	110	12.57	1700.00	6.19	641.45	0.000000	0.00	0.000
6-34-P	85	110	12.57	1700.00	7.50	641.45	0.000000	0.00	0.000
6-35-P	85	110	12.57	1700.00	7.21	641.45	0.000000	0.00	0.000
6-36-P	85	110	12.57	3906.02	4.66	-641.45	0.000000	0.00	0.000
6-37-P	85	110	12.57	3906.02	-3.09	-641.45	0.000000	0.00	0.000
6-38-P	85	110	12.57	3906.02	-8.00	-641.45	0.000000	0.00	0.000
6-39-P	85	110	12.57	3906.02	-11.21	-641.45	0.000000	0.00	0.000
6-40-P	85	110	12.57	3906.02	-11.46	-641.45	0.000000	0.00	0.000
6-41-P	85	110	12.57	3906.02	-9.88	-641.45	0.000000	0.00	0.000
6-42-P	85	110	12.57	3906.02	-5.75	-641.45	0.000000	0.00	0.000
6-43-P	85	110	12.57	3906.02	-2.98	-641.45	0.000000	0.00	0.000
6-44-P	85	110	12.57	3906.02	-2.04	-641.45	0.000000	0.00	0.000
6-45-P	85	110	12.57	3906.02	2.63	-641.45	0.000000	0.00	0.000
6-46-P	85	110	12.57	3906.02	3.60	-641.45	0.000000	0.00	0.000
6-47-P	85	110	12.57	3906.02	3.25	-641.45	0.000000	0.00	0.000
6-48-P	85	110	12.57	3906.02	2.73	-641.45	0.000000	0.00	0.000
6-49-P	85	110	12.57	3906.02	-2.21	-641.45	0.000000	0.00	0.000
7-1-P	85	110	12.57	3906.02	1.32	-641.45	0.000000	0.00	0.000
7-2-P	85	110	12.57	3906.02	2.19	-641.45	0.000000	0.00	0.000
7-3-P	85	110	12.57	3906.02	-6.10	-641.45	0.000000	0.00	0.000
7-4-P	85	110	12.57	3906.02	-13.99	-641.45	0.000000	0.00	0.000
7-5-P	85	110	12.57	3906.02	-20.84	-641.45	0.000000	0.00	0.000
7-6-P	85	110	12.57	3906.02	-25.65	-641.45	0.000000	0.00	0.000
7-7-P	85	110	12.57	3906.02	-15.47	-641.45	0.000000	0.00	0.000
7-8-P	85	110	12.57	3906.02	-7.01	-641.45	0.000000	0.00	0.000
7-9-P	85	110	12.57	3906.02	3.82	-641.45	0.000000	0.00	0.000
7-10-P	85	110	12.57	3906.02	5.88	-641.45	0.000000	0.00	0.000
7-11-P	85	110	12.57	3906.02	7.07	-641.45	0.000000	0.00	0.000
7-12-P	85	110	12.57	3906.02	6.69	-641.45	0.000000	0.00	0.000
7-13-P	85	110	12.57	3906.02	4.81	-641.45	0.000000	0.00	0.000
7-14-P	85	110	12.57	3906.02	-10.40	-641.45	0.000000	0.00	0.000
7-15-P	85	110	12.57	3906.02	-17.18	-641.45	0.000000	0.00	0.000
7-16-P	85	110	12.57	3906.02	-14.44	-641.45	0.000000	0.00	0.000
7-17-P	85	110	12.57	3906.02	-6.80	-641.45	0.000000	0.00	0.000
7-18-P	85	110	12.57	3906.02	5.53	-641.45	0.000000	0.00	0.000
7-19-P	85	110	12.57	1700.00	11.52	641.45	0.000000	0.00	0.000
7-20-P	85	110	12.57	1700.00	13.45	641.45	0.000000	0.00	0.000
7-21-P	85	110	12.57	1700.00	12.82	641.45	0.000000	0.00	0.000
7-22-P	85	110	12.57	1700.00	10.14	641.45	0.000000	0.00	0.000
7-23-P	85	110	12.57	3906.02	5.39	-641.45	0.000000	0.00	0.000
7-24-P	85	110	12.57	3906.02	-8.83	-641.45	0.000000	0.00	0.000
7-25-P	85	110	12.57	3906.02	-18.28	-641.45	0.000000	0.00	0.000
7-26-P	85	110	12.57	3906.02	-8.83	-641.45	0.000000	0.00	0.000
7-27-P	85	110	12.57	3906.02	5.39	-641.45	0.000000	0.00	0.000
7-28-P	85	110	12.57	1700.00	10.14	641.45	0.000000	0.00	0.000
7-29-P	85	110	12.57	1700.00	12.82	641.45	0.000000	0.00	0.000
7-30-P	85	110	12.57	1700.00	13.45	641.45	0.000000	0.00	0.000
7-31-P	85	110	12.57	1700.00	11.52	641.45	0.000000	0.00	0.000
7-32-P	85	110	12.57	3906.02	5.53	-641.45	0.000000	0.00	0.000
7-33-P	85	110	12.57	3906.02	-6.80	-641.45	0.000000	0.00	0.000
7-34-P	85	110	12.57	3906.02	-14.44	-641.45	0.000000	0.00	0.000
7-35-P	85	110	12.57	3906.02	-17.18	-641.45	0.000000	0.00	0.000
7-36-P	85	110	12.57	3906.02	-10.40	-641.45	0.000000	0.00	0.000
7-37-P	85	110	12.57	3906.02	4.81	-641.45	0.000000	0.00	0.000
7-38-P	85	110	12.57	3906.02	6.69	-641.45	0.000000	0.00	0.000
7-39-P	85	110	12.57	3906.02	7.07	-641.45	0.000000	0.00	0.000
7-40-P	85	110	12.57	3906.02	5.88	-641.45	0.000000	0.00	0.000
7-41-P	85	110	12.57	3906.02	3.82	-641.45	0.000000	0.00	0.000
7-42-P	85	110	12.57	3906.02	-7.01	-641.45	0.000000	0.00	0.000
7-43-P	85	110	12.57	3906.02	-15.47	-641.45	0.000000	0.00	0.000
7-44-P	85	110	12.57	3906.02	-25.65	-641.45	0.000000	0.00	0.000
7-45-P	85	110	12.57	3906.02	-20.84	-641.45	0.000000	0.00	0.000
7-46-P	85	110	12.57	3906.02	-13.99	-641.45	0.000000	0.00	0.000
7-47-P	85	110	12.57	3906.02	-6.10	-641.45	0.000000	0.00	0.000
7-48-P	85	110	12.57	3906.02	2.19	-641.45	0.000000	0.00	0.000
7-49-P	85	110	12.57	3906.02	1.32	-641.45	0.000000	0.00	0.000
8-1-P	85	110	15.71	3834.96	0.61	-656.02	0.000000	0.00	0.000
8-2-P	85	110	15.71	3834.96	-3.05	-656.02	0.000000	0.00	0.000
8-3-P	85	110	15.71	3834.96	-8.67	-656.02	0.000000	0.00	0.000
8-4-P	85	110	15.71	3834.96	-17.66	-656.02	0.000000	0.00	0.000
8-5-P	85	110	15.71	3834.96	-35.81	-656.02	0.000000	0.00	0.000
8-6-P	85	110	15.71	3834.96	-48.72	-656.02	0.000000	0.00	0.000
8-7-P	85	110	15.71	3834.96	-24.94	-656.02	0.000000	0.00	0.000
8-8-P	85	110	15.71	3834.96	-10.30	-656.02	0.000000	0.00	0.000
8-9-P	85	110	15.71	3834.96	1.57	-656.02	0.000000	0.00	0.000
8-10-P	85	110	15.71	3834.96	5.20	-656.02	0.000000	0.00	0.000
8-11-P	85	110	15.71	3834.96	6.74	-656.02	0.000000	0.00	0.000
8-12-P	85	110	15.71	3834.96	3.91	-656.02	0.000000	0.00	0.000

APPALTATORE:

TELESE S.c.a r.l.

Consorzio Telese Società Consortile a Responsabilità Limitata

PROGETTAZIONE:

Mandataria:

Mandante:

SYSTRA S.A.

SWS Engineering S.p.A.

SYSTRA-SOTECNI S.p.A.

ITINERARIO NAPOLI – BARI
RADDOPPIO TRATTA CANCELLO-BENEVENTO
II LOTTO FUNZIONALE FRASSO TELESINO – VITULANO
2° SUBLOTTO TELESE – SAN LORENZO
PROGETTO ESECUTIVO

Relazione di calcolo

IF2R.2.2.E.ZZ.CL.TR.16.0.5.008.A.DOCX

COMMESSA	LOTTO	CODIFICA	DOCUMENTO	REV.	FOGLIO
IF2R	2.2.E.ZZ	CL	TR.16.0.5.008	A	106 di 118

Is	B [cm]	H [cm]	Af [cmq]	Aeff [cmq]	M [kNm]	Mpf [kNm]	ε [%]	Sm [mm]	w [mm]
8-13-P	85	110	15.71	3834.96	-5.90	-656.02	0.000000	0.00	0.000
8-14-P	85	110	15.71	3834.96	-15.45	-656.02	0.000000	0.00	0.000
8-15-P	85	110	15.71	3834.96	-37.27	-656.02	0.000000	0.00	0.000
8-16-P	85	110	15.71	3834.96	-32.02	-656.02	0.000000	0.00	0.000
8-17-P	85	110	15.71	3834.96	-10.55	-656.02	0.000000	0.00	0.000
8-18-P	85	110	15.71	3834.96	2.71	-656.02	0.000000	0.00	0.000
8-19-P	85	110	15.71	1700.00	8.90	656.02	0.000000	0.00	0.000
8-20-P	85	110	15.71	1700.00	13.14	656.02	0.000000	0.00	0.000
8-21-P	85	110	15.71	1700.00	11.15	656.02	0.000000	0.00	0.000
8-22-P	85	110	15.71	3834.96	6.51	-656.02	0.000000	0.00	0.000
8-23-P	85	110	15.71	3834.96	-5.53	-656.02	0.000000	0.00	0.000
8-24-P	85	110	15.71	3834.96	-19.97	-656.02	0.000000	0.00	0.000
8-25-P	85	110	15.71	3834.96	-42.90	-656.02	0.000000	0.00	0.000
8-26-P	85	110	15.71	3834.96	-19.97	-656.02	0.000000	0.00	0.000
8-27-P	85	110	15.71	3834.96	-5.53	-656.02	0.000000	0.00	0.000
8-28-P	85	110	15.71	3834.96	6.51	-656.02	0.000000	0.00	0.000
8-29-P	85	110	15.71	1700.00	11.15	656.02	0.000000	0.00	0.000
8-30-P	85	110	15.71	1700.00	13.14	656.02	0.000000	0.00	0.000
8-31-P	85	110	15.71	1700.00	8.90	656.02	0.000000	0.00	0.000
8-32-P	85	110	15.71	3834.96	2.71	-656.02	0.000000	0.00	0.000
8-33-P	85	110	15.71	3834.96	-10.55	-656.02	0.000000	0.00	0.000
8-34-P	85	110	15.71	3834.96	-32.02	-656.02	0.000000	0.00	0.000
8-35-P	85	110	15.71	3834.96	-37.27	-656.02	0.000000	0.00	0.000
8-36-P	85	110	15.71	3834.96	-15.45	-656.02	0.000000	0.00	0.000
8-37-P	85	110	15.71	3834.96	-5.90	-656.02	0.000000	0.00	0.000
8-38-P	85	110	15.71	3834.96	3.91	-656.02	0.000000	0.00	0.000
8-39-P	85	110	15.71	3834.96	6.74	-656.02	0.000000	0.00	0.000
8-40-P	85	110	15.71	3834.96	5.20	-656.02	0.000000	0.00	0.000
8-41-P	85	110	15.71	3834.96	1.57	-656.02	0.000000	0.00	0.000
8-42-P	85	110	15.71	3834.96	-10.30	-656.02	0.000000	0.00	0.000
8-43-P	85	110	15.71	3834.96	-24.94	-656.02	0.000000	0.00	0.000
8-44-P	85	110	15.71	3834.96	-48.72	-656.02	0.000000	0.00	0.000
8-45-P	85	110	15.71	3834.96	-35.81	-656.02	0.000000	0.00	0.000
8-46-P	85	110	15.71	3834.96	-17.66	-656.02	0.000000	0.00	0.000
8-47-P	85	110	15.71	3834.96	-8.67	-656.02	0.000000	0.00	0.000
8-48-P	85	110	15.71	3834.96	-3.05	-656.02	0.000000	0.00	0.000
8-49-P	85	110	15.71	3834.96	0.61	-656.02	0.000000	0.00	0.000
9-1-S	100	110	15.71	4573.11	-3.44	-758.93	0.000000	0.00	0.000
9-2-S	100	110	15.71	4573.11	-6.44	-758.93	0.000000	0.00	0.000
9-3-S	100	110	15.71	4573.11	-9.27	-758.93	0.000000	0.00	0.000
9-4-S	100	110	15.71	4573.11	-10.33	-758.93	0.000000	0.00	0.000
9-5-S	100	110	15.71	4573.11	-6.06	-758.93	0.000000	0.00	0.000
9-6-S	100	110	15.71	4573.11	19.91	-758.93	0.000000	0.00	0.000
9-7-S	100	110	15.71	2000.00	48.22	758.93	0.000000	0.00	0.000
9-8-S	100	110	15.71	4573.11	-72.25	-758.93	0.000000	0.00	0.000
9-9-S	100	110	15.71	4573.11	-41.56	-758.93	0.000000	0.00	0.000
9-10-S	100	110	15.71	4573.11	-20.14	-758.93	0.000000	0.00	0.000
9-11-S	100	110	15.71	4573.11	-6.56	-758.93	0.000000	0.00	0.000
9-12-S	100	110	15.71	4573.11	13.75	-758.93	0.000000	0.00	0.000
9-13-S	100	110	15.71	4573.11	22.27	-758.93	0.000000	0.00	0.000
9-14-S	100	110	15.71	4573.11	27.90	-758.93	0.000000	0.00	0.000
9-15-S	100	110	15.71	4573.11	29.90	-758.93	0.000000	0.00	0.000
9-16-S	100	110	15.71	4573.11	25.11	-758.93	0.000000	0.00	0.000
9-17-S	100	110	15.71	4573.11	18.32	-758.93	0.000000	0.00	0.000
9-18-S	100	110	15.71	4573.11	9.60	-758.93	0.000000	0.00	0.000
9-19-S	100	110	15.71	4573.11	-6.96	-758.93	0.000000	0.00	0.000
9-20-S	100	110	15.71	4573.11	-4.46	-758.93	0.000000	0.00	0.000
9-21-S	100	110	15.71	4573.11	-2.21	-758.93	0.000000	0.00	0.000
9-22-S	100	110	15.71	4573.11	1.23	-758.93	0.000000	0.00	0.000
10-1-S	100	110	15.71	4573.11	5.83	-758.93	0.000000	0.00	0.000
10-2-S	100	110	15.71	4573.11	9.35	-758.93	0.000000	0.00	0.000
10-3-S	100	110	15.71	4573.11	-8.73	-758.93	0.000000	0.00	0.000
10-4-S	100	110	15.71	4573.11	-40.28	-758.93	0.000000	0.00	0.000
10-5-S	100	110	15.71	4573.11	-37.46	-758.93	0.000000	0.00	0.000
10-6-S	100	110	15.71	4573.11	12.30	-758.93	0.000000	0.00	0.000
10-7-S	100	110	15.71	2000.00	58.99	758.93	0.000000	0.00	0.000
10-8-S	100	110	15.71	4573.11	-34.87	-758.93	0.000000	0.00	0.000
10-9-S	100	110	15.71	4573.11	-26.42	-758.93	0.000000	0.00	0.000
10-10-S	100	110	15.71	4573.11	-16.09	-758.93	0.000000	0.00	0.000
10-11-S	100	110	15.71	4573.11	-6.75	-758.93	0.000000	0.00	0.000
10-12-S	100	110	15.71	4573.11	7.82	-758.93	0.000000	0.00	0.000
10-13-S	100	110	15.71	4573.11	18.08	-758.93	0.000000	0.00	0.000
10-14-S	100	110	15.71	4573.11	26.65	-758.93	0.000000	0.00	0.000
10-15-S	100	110	15.71	4573.11	32.42	-758.93	0.000000	0.00	0.000
10-16-S	100	110	15.71	4573.11	33.31	-758.93	0.000000	0.00	0.000
10-17-S	100	110	15.71	4573.11	32.08	-758.93	0.000000	0.00	0.000
10-18-S	100	110	15.71	4573.11	-9.46	-758.93	0.000000	0.00	0.000
10-19-S	100	110	15.71	4573.11	-31.75	-758.93	0.000000	0.00	0.000
10-20-S	100	110	15.71	4573.11	-19.46	-758.93	0.000000	0.00	0.000
10-21-S	100	110	15.71	4573.11	-9.72	-758.93	0.000000	0.00	0.000
10-22-S	100	110	15.71	4573.11	-1.25	-758.93	0.000000	0.00	0.000

APPALTATORE:

TELESE S.c.a r.l.

Consorzio Telese Società Consortile a Responsabilità Limitata

PROGETTAZIONE:

Mandatario:

Mandante:

SYSTRA S.A.

SWS Engineering S.p.A.

SYSTRA-SOTECNI S.p.A.

ITINERARIO NAPOLI – BARI
RADDOPPIO TRATTA CANCELLO-BENEVENTO
II LOTTO FUNZIONALE FRASSO TELESINO – VITULANO
2° SUBLOTTO TELESE – SAN LORENZO
PROGETTO ESECUTIVO

Relazione di calcolo

IF2R.2.2.E.ZZ.CL.TR.16.0.5.008.A.DOCX

COMMESSA	LOTTO	CODIFICA	DOCUMENTO	REV.	FOGLIO
IF2R	2.2.E.ZZ	CL	TR.16.0.5.008	A	107 di 118

Is	B [cm]	H [cm]	Af [cmq]	Aeff [cmq]	M [kNm]	Mpf [kNm]	ε [%]	Sm [mm]	w [mm]
11-1-S	100	110	15.71	4573.11	-4.60	-758.93	0.000000	0.00	0.000
11-2-S	100	110	15.71	4573.11	-4.33	-758.93	0.000000	0.00	0.000
11-3-S	100	110	15.71	4573.11	-2.72	-758.93	0.000000	0.00	0.000
11-4-S	100	110	15.71	4573.11	4.68	-758.93	0.000000	0.00	0.000
11-5-S	100	110	15.71	2000.00	14.94	758.93	0.000000	0.00	0.000
11-6-S	100	110	15.71	2000.00	30.48	758.93	0.000000	0.00	0.000
11-7-S	100	110	15.71	2000.00	48.14	758.93	0.000000	0.00	0.000
11-8-S	100	110	15.71	4573.11	49.30	-758.93	0.000000	0.00	0.000
11-9-S	100	110	15.71	4573.11	30.20	-758.93	0.000000	0.00	0.000
11-10-S	100	110	15.71	4573.11	-46.66	-758.93	0.000000	0.00	0.000
11-11-S	100	110	15.71	4573.11	-31.52	-758.93	0.000000	0.00	0.000
11-12-S	100	110	15.71	4573.11	-12.56	-758.93	0.000000	0.00	0.000
11-13-S	100	110	15.71	4573.11	6.95	-758.93	0.000000	0.00	0.000
11-14-S	100	110	15.71	4573.11	17.53	-758.93	0.000000	0.00	0.000
11-15-S	100	110	15.71	4573.11	21.26	-758.93	0.000000	0.00	0.000
11-16-S	100	110	15.71	4573.11	19.47	-758.93	0.000000	0.00	0.000
11-17-S	100	110	15.71	4573.11	15.95	-758.93	0.000000	0.00	0.000
11-18-S	100	110	15.71	4573.11	10.71	-758.93	0.000000	0.00	0.000
11-19-S	100	110	15.71	4573.11	6.18	-758.93	0.000000	0.00	0.000
11-20-S	100	110	15.71	4573.11	2.92	-758.93	0.000000	0.00	0.000
11-21-S	100	110	15.71	4573.11	1.11	-758.93	0.000000	0.00	0.000
11-22-S	100	110	15.71	4573.11	0.45	-758.93	0.000000	0.00	0.000
12-1-S	100	110	15.71	4573.11	7.27	-758.93	0.000000	0.00	0.000
12-2-S	100	110	15.71	4573.11	9.63	-758.93	0.000000	0.00	0.000
12-3-S	100	110	15.71	4573.11	-9.44	-758.93	0.000000	0.00	0.000
12-4-S	100	110	15.71	4573.11	-46.29	-758.93	0.000000	0.00	0.000
12-5-S	100	110	15.71	4573.11	-42.71	-758.93	0.000000	0.00	0.000
12-6-S	100	110	15.71	4573.11	8.35	-758.93	0.000000	0.00	0.000
12-7-S	100	110	15.71	2000.00	59.69	758.93	0.000000	0.00	0.000
12-8-S	100	110	15.71	4573.11	-8.52	-758.93	0.000000	0.00	0.000
12-9-S	100	110	15.71	4573.11	-1.48	-758.93	0.000000	0.00	0.000
12-10-S	100	110	15.71	4573.11	2.77	-758.93	0.000000	0.00	0.000
12-11-S	100	110	15.71	4573.11	7.02	-758.93	0.000000	0.00	0.000
12-12-S	100	110	15.71	4573.11	12.57	-758.93	0.000000	0.00	0.000
12-13-S	100	110	15.71	4573.11	19.96	-758.93	0.000000	0.00	0.000
12-14-S	100	110	15.71	4573.11	26.59	-758.93	0.000000	0.00	0.000
12-15-S	100	110	15.71	4573.11	32.35	-758.93	0.000000	0.00	0.000
12-16-S	100	110	15.71	4573.11	33.64	-758.93	0.000000	0.00	0.000
12-17-S	100	110	15.71	4573.11	33.18	-758.93	0.000000	0.00	0.000
12-18-S	100	110	15.71	4573.11	-12.85	-758.93	0.000000	0.00	0.000
12-19-S	100	110	15.71	4573.11	-37.86	-758.93	0.000000	0.00	0.000
12-20-S	100	110	15.71	4573.11	-23.46	-758.93	0.000000	0.00	0.000
12-21-S	100	110	15.71	4573.11	-11.69	-758.93	0.000000	0.00	0.000
12-22-S	100	110	15.71	4573.11	-1.45	-758.93	0.000000	0.00	0.000
13-1-S	100	110	15.71	4573.11	-4.09	-758.93	0.000000	0.00	0.000
13-2-S	100	110	15.71	4573.11	-6.08	-758.93	0.000000	0.00	0.000
13-3-S	100	110	15.71	4573.11	-6.25	-758.93	0.000000	0.00	0.000
13-4-S	100	110	15.71	4573.11	4.04	-758.93	0.000000	0.00	0.000
13-5-S	100	110	15.71	2000.00	11.66	758.93	0.000000	0.00	0.000
13-6-S	100	110	15.71	2000.00	27.68	758.93	0.000000	0.00	0.000
13-7-S	100	110	15.71	2000.00	48.93	758.93	0.000000	0.00	0.000
13-8-S	100	110	15.71	4573.11	51.84	-758.93	0.000000	0.00	0.000
13-9-S	100	110	15.71	4573.11	35.24	-758.93	0.000000	0.00	0.000
13-10-S	100	110	15.71	4573.11	-34.02	-758.93	0.000000	0.00	0.000
13-11-S	100	110	15.71	4573.11	-21.95	-758.93	0.000000	0.00	0.000
13-12-S	100	110	15.71	4573.11	-6.85	-758.93	0.000000	0.00	0.000
13-13-S	100	110	15.71	4573.11	10.87	-758.93	0.000000	0.00	0.000
13-14-S	100	110	15.71	2000.00	20.26	758.93	0.000000	0.00	0.000
13-15-S	100	110	15.71	2000.00	23.52	758.93	0.000000	0.00	0.000
13-16-S	100	110	15.71	4573.11	19.88	-758.93	0.000000	0.00	0.000
13-17-S	100	110	15.71	4573.11	14.41	-758.93	0.000000	0.00	0.000
13-18-S	100	110	15.71	4573.11	9.64	-758.93	0.000000	0.00	0.000
13-19-S	100	110	15.71	4573.11	5.42	-758.93	0.000000	0.00	0.000
13-20-S	100	110	15.71	4573.11	2.05	-758.93	0.000000	0.00	0.000
13-21-S	100	110	15.71	4573.11	-0.73	-758.93	0.000000	0.00	0.000
13-22-S	100	110	15.71	4573.11	0.59	-758.93	0.000000	0.00	0.000
14-1-S	100	110	18.85	4504.06	4.08	-773.50	0.000000	0.00	0.000
14-2-S	100	110	18.85	4504.06	-6.27	-773.50	0.000000	0.00	0.000
14-3-S	100	110	18.85	4504.06	-9.12	-773.50	0.000000	0.00	0.000
14-4-S	100	110	18.85	4504.06	-25.24	-773.50	0.000000	0.00	0.000
14-5-S	100	110	18.85	4504.06	-21.64	-773.50	0.000000	0.00	0.000
14-6-S	100	110	18.85	4504.06	17.34	-773.50	0.000000	0.00	0.000
14-7-S	100	110	18.85	2000.00	54.90	773.50	0.000000	0.00	0.000
14-8-S	100	110	18.85	4504.06	15.73	-773.50	0.000000	0.00	0.000
14-9-S	100	110	18.85	4504.06	8.23	-773.50	0.000000	0.00	0.000
14-10-S	100	110	18.85	4504.06	-6.71	-773.50	0.000000	0.00	0.000
14-11-S	100	110	18.85	4504.06	6.22	-773.50	0.000000	0.00	0.000
14-12-S	100	110	18.85	4504.06	9.65	-773.50	0.000000	0.00	0.000
14-13-S	100	110	18.85	4504.06	18.52	-773.50	0.000000	0.00	0.000
14-14-S	100	110	18.85	2000.00	25.37	773.50	0.000000	0.00	0.000
14-15-S	100	110	18.85	2000.00	29.11	773.50	0.000000	0.00	0.000

APPALTATORE:

TELESE S.c.a r.l.

Consorzio Telese Società Consortile a Responsabilità Limitata

ITINERARIO NAPOLI – BARI
RADDOPPIO TRATTA CANCELLO-BENEVENTO
II LOTTO FUNZIONALE FRASSO TELESINO – VITULANO
2° SUBLOTTO TELESE – SAN LORENZO

PROGETTAZIONE:

Mandataria:

Mandante:

SYSTRA S.A. SWS Engineering S.p.A. SYSTRA-SOTECNI S.p.A.

PROGETTO ESECUTIVO

Relazione di calcolo

IF2R.2.2.E.ZZ.CL.TR.16.0.5.008.A.DOCX

COMMESSA	LOTTO	CODIFICA	DOCUMENTO	REV.	FOGLIO
IF2R	2.2.E.ZZ	CL	TR.16.0.5.008	A	108 di 118

Is	B [cm]	H [cm]	Af [cmq]	Aeff [cmq]	M [kNm]	Mpf [kNm]	ε [%]	Sm [mm]	w [mm]
14-16-S	100	110	18.85	4504.06	27.16	-773.50	0.000000	0.00	0.000
14-17-S	100	110	18.85	4504.06	23.66	-773.50	0.000000	0.00	0.000
14-18-S	100	110	18.85	4504.06	-6.93	-773.50	0.000000	0.00	0.000
14-19-S	100	110	18.85	4504.06	-19.74	-773.50	0.000000	0.00	0.000
14-20-S	100	110	18.85	4504.06	-12.47	-773.50	0.000000	0.00	0.000
14-21-S	100	110	18.85	4504.06	-6.32	-773.50	0.000000	0.00	0.000
14-22-S	100	110	18.85	4504.06	-0.87	-773.50	0.000000	0.00	0.000
15-1-S	100	110	15.71	4573.11	4.08	-758.93	0.000000	0.00	0.000
15-2-S	100	110	15.71	4573.11	-6.27	-758.93	0.000000	0.00	0.000
15-3-S	100	110	15.71	4573.11	-9.12	-758.93	0.000000	0.00	0.000
15-4-S	100	110	15.71	4573.11	-25.24	-758.93	0.000000	0.00	0.000
15-5-S	100	110	15.71	4573.11	-21.64	-758.93	0.000000	0.00	0.000
15-6-S	100	110	15.71	4573.11	17.34	-758.93	0.000000	0.00	0.000
15-7-S	100	110	15.71	2000.00	54.90	758.93	0.000000	0.00	0.000
15-8-S	100	110	15.71	4573.11	15.73	-758.93	0.000000	0.00	0.000
15-9-S	100	110	15.71	4573.11	8.23	-758.93	0.000000	0.00	0.000
15-10-S	100	110	15.71	4573.11	-6.71	-758.93	0.000000	0.00	0.000
15-11-S	100	110	15.71	4573.11	6.22	-758.93	0.000000	0.00	0.000
15-12-S	100	110	15.71	4573.11	9.65	-758.93	0.000000	0.00	0.000
15-13-S	100	110	15.71	4573.11	18.52	-758.93	0.000000	0.00	0.000
15-14-S	100	110	15.71	2000.00	25.37	758.93	0.000000	0.00	0.000
15-15-S	100	110	15.71	2000.00	29.11	758.93	0.000000	0.00	0.000
15-16-S	100	110	15.71	4573.11	27.16	-758.93	0.000000	0.00	0.000
15-17-S	100	110	15.71	4573.11	23.66	-758.93	0.000000	0.00	0.000
15-18-S	100	110	15.71	4573.11	-6.93	-758.93	0.000000	0.00	0.000
15-19-S	100	110	15.71	4573.11	-19.74	-758.93	0.000000	0.00	0.000
15-20-S	100	110	15.71	4573.11	-12.47	-758.93	0.000000	0.00	0.000
15-21-S	100	110	15.71	4573.11	-6.32	-758.93	0.000000	0.00	0.000
15-22-S	100	110	15.71	4573.11	-0.87	-758.93	0.000000	0.00	0.000
16-1-S	100	110	15.71	4573.11	-4.09	-758.93	0.000000	0.00	0.000
16-2-S	100	110	15.71	4573.11	-6.08	-758.93	0.000000	0.00	0.000
16-3-S	100	110	15.71	4573.11	-6.25	-758.93	0.000000	0.00	0.000
16-4-S	100	110	15.71	4573.11	4.04	-758.93	0.000000	0.00	0.000
16-5-S	100	110	15.71	2000.00	11.66	758.93	0.000000	0.00	0.000
16-6-S	100	110	15.71	2000.00	27.68	758.93	0.000000	0.00	0.000
16-7-S	100	110	15.71	2000.00	48.93	758.93	0.000000	0.00	0.000
16-8-S	100	110	15.71	4573.11	51.84	-758.93	0.000000	0.00	0.000
16-9-S	100	110	15.71	4573.11	35.24	-758.93	0.000000	0.00	0.000
16-10-S	100	110	15.71	4573.11	-34.02	-758.93	0.000000	0.00	0.000
16-11-S	100	110	15.71	4573.11	-21.95	-758.93	0.000000	0.00	0.000
16-12-S	100	110	15.71	4573.11	-6.85	-758.93	0.000000	0.00	0.000
16-13-S	100	110	15.71	4573.11	10.87	-758.93	0.000000	0.00	0.000
16-14-S	100	110	15.71	2000.00	20.26	758.93	0.000000	0.00	0.000
16-15-S	100	110	15.71	2000.00	23.52	758.93	0.000000	0.00	0.000
16-16-S	100	110	15.71	4573.11	19.88	-758.93	0.000000	0.00	0.000
16-17-S	100	110	15.71	4573.11	14.41	-758.93	0.000000	0.00	0.000
16-18-S	100	110	15.71	4573.11	9.64	-758.93	0.000000	0.00	0.000
16-19-S	100	110	15.71	4573.11	5.42	-758.93	0.000000	0.00	0.000
16-20-S	100	110	15.71	4573.11	2.05	-758.93	0.000000	0.00	0.000
16-21-S	100	110	15.71	4573.11	-0.73	-758.93	0.000000	0.00	0.000
16-22-S	100	110	15.71	4573.11	0.59	-758.93	0.000000	0.00	0.000
17-1-S	100	110	15.71	4573.11	7.27	-758.93	0.000000	0.00	0.000
17-2-S	100	110	15.71	4573.11	9.63	-758.93	0.000000	0.00	0.000
17-3-S	100	110	15.71	4573.11	-9.44	-758.93	0.000000	0.00	0.000
17-4-S	100	110	15.71	4573.11	-46.29	-758.93	0.000000	0.00	0.000
17-5-S	100	110	15.71	4573.11	-42.71	-758.93	0.000000	0.00	0.000
17-6-S	100	110	15.71	4573.11	8.35	-758.93	0.000000	0.00	0.000
17-7-S	100	110	15.71	2000.00	59.69	758.93	0.000000	0.00	0.000
17-8-S	100	110	15.71	4573.11	-8.52	-758.93	0.000000	0.00	0.000
17-9-S	100	110	15.71	4573.11	-1.48	-758.93	0.000000	0.00	0.000
17-10-S	100	110	15.71	4573.11	2.77	-758.93	0.000000	0.00	0.000
17-11-S	100	110	15.71	4573.11	7.02	-758.93	0.000000	0.00	0.000
17-12-S	100	110	15.71	4573.11	12.57	-758.93	0.000000	0.00	0.000
17-13-S	100	110	15.71	4573.11	19.96	-758.93	0.000000	0.00	0.000
17-14-S	100	110	15.71	4573.11	26.59	-758.93	0.000000	0.00	0.000
17-15-S	100	110	15.71	4573.11	32.35	-758.93	0.000000	0.00	0.000
17-16-S	100	110	15.71	4573.11	33.64	-758.93	0.000000	0.00	0.000
17-17-S	100	110	15.71	4573.11	33.18	-758.93	0.000000	0.00	0.000
17-18-S	100	110	15.71	4573.11	-12.85	-758.93	0.000000	0.00	0.000
17-19-S	100	110	15.71	4573.11	-37.86	-758.93	0.000000	0.00	0.000
17-20-S	100	110	15.71	4573.11	-23.46	-758.93	0.000000	0.00	0.000
17-21-S	100	110	15.71	4573.11	-11.69	-758.93	0.000000	0.00	0.000
17-22-S	100	110	15.71	4573.11	-1.45	-758.93	0.000000	0.00	0.000
18-1-S	100	110	15.71	4573.11	-4.60	-758.93	0.000000	0.00	0.000
18-2-S	100	110	15.71	4573.11	-4.33	-758.93	0.000000	0.00	0.000
18-3-S	100	110	15.71	4573.11	-2.72	-758.93	0.000000	0.00	0.000
18-4-S	100	110	15.71	4573.11	4.68	-758.93	0.000000	0.00	0.000
18-5-S	100	110	15.71	2000.00	14.94	758.93	0.000000	0.00	0.000
18-6-S	100	110	15.71	2000.00	30.48	758.93	0.000000	0.00	0.000
18-7-S	100	110	15.71	2000.00	48.14	758.93	0.000000	0.00	0.000
18-8-S	100	110	15.71	4573.11	49.30	-758.93	0.000000	0.00	0.000

APPALTATORE:

TELESE S.c.a r.l.

Consorzio Telese Società Consortile a Responsabilità Limitata

ITINERARIO NAPOLI – BARI
RADDOPPIO TRATTA CANCELLO-BENEVENTO
II LOTTO FUNZIONALE FRASSO TELESINO – VITULANO
2° SUBLOTTO TELESE – SAN LORENZO

PROGETTAZIONE:

Mandataria:

Mandante:

SYSTRA S.A. SWS Engineering S.p.A. SYSTRA-SOTECNI S.p.A.

PROGETTO ESECUTIVO

Relazione di calcolo

IF2R.2.2.E.ZZ.CL.TR.16.0.5.008.A.DOCX

COMMESSA	LOTTO	CODIFICA	DOCUMENTO	REV.	FOGLIO
IF2R	2.2.E.ZZ	CL	TR.16.0.5.008	A	109 di 118

Is	B [cm]	H [cm]	Af [cmq]	Aeff [cmq]	M [kNm]	Mpf [kNm]	ε [%]	Sm [mm]	w [mm]
18-9-S	100	110	15.71	4573.11	30.20	-758.93	0.000000	0.00	0.000
18-10-S	100	110	15.71	4573.11	-46.66	-758.93	0.000000	0.00	0.000
18-11-S	100	110	15.71	4573.11	-31.52	-758.93	0.000000	0.00	0.000
18-12-S	100	110	15.71	4573.11	-12.56	-758.93	0.000000	0.00	0.000
18-13-S	100	110	15.71	4573.11	6.95	-758.93	0.000000	0.00	0.000
18-14-S	100	110	15.71	4573.11	17.53	-758.93	0.000000	0.00	0.000
18-15-S	100	110	15.71	4573.11	21.26	-758.93	0.000000	0.00	0.000
18-16-S	100	110	15.71	4573.11	19.47	-758.93	0.000000	0.00	0.000
18-17-S	100	110	15.71	4573.11	15.95	-758.93	0.000000	0.00	0.000
18-18-S	100	110	15.71	4573.11	10.71	-758.93	0.000000	0.00	0.000
18-19-S	100	110	15.71	4573.11	6.18	-758.93	0.000000	0.00	0.000
18-20-S	100	110	15.71	4573.11	2.92	-758.93	0.000000	0.00	0.000
18-21-S	100	110	15.71	4573.11	1.11	-758.93	0.000000	0.00	0.000
18-22-S	100	110	15.71	4573.11	0.45	-758.93	0.000000	0.00	0.000
19-1-S	100	110	15.71	4573.11	5.83	-758.93	0.000000	0.00	0.000
19-2-S	100	110	15.71	4573.11	9.35	-758.93	0.000000	0.00	0.000
19-3-S	100	110	15.71	4573.11	-8.73	-758.93	0.000000	0.00	0.000
19-4-S	100	110	15.71	4573.11	-40.28	-758.93	0.000000	0.00	0.000
19-5-S	100	110	15.71	4573.11	-37.46	-758.93	0.000000	0.00	0.000
19-6-S	100	110	15.71	4573.11	12.30	-758.93	0.000000	0.00	0.000
19-7-S	100	110	15.71	2000.00	58.99	758.93	0.000000	0.00	0.000
19-8-S	100	110	15.71	4573.11	-34.87	-758.93	0.000000	0.00	0.000
19-9-S	100	110	15.71	4573.11	-26.42	-758.93	0.000000	0.00	0.000
19-10-S	100	110	15.71	4573.11	-16.09	-758.93	0.000000	0.00	0.000
19-11-S	100	110	15.71	4573.11	-6.75	-758.93	0.000000	0.00	0.000
19-12-S	100	110	15.71	4573.11	7.82	-758.93	0.000000	0.00	0.000
19-13-S	100	110	15.71	4573.11	18.08	-758.93	0.000000	0.00	0.000
19-14-S	100	110	15.71	4573.11	26.65	-758.93	0.000000	0.00	0.000
19-15-S	100	110	15.71	4573.11	32.42	-758.93	0.000000	0.00	0.000
19-16-S	100	110	15.71	4573.11	33.31	-758.93	0.000000	0.00	0.000
19-17-S	100	110	15.71	4573.11	32.08	-758.93	0.000000	0.00	0.000
19-18-S	100	110	15.71	4573.11	-9.46	-758.93	0.000000	0.00	0.000
19-19-S	100	110	15.71	4573.11	-31.75	-758.93	0.000000	0.00	0.000
19-20-S	100	110	15.71	4573.11	-19.46	-758.93	0.000000	0.00	0.000
19-21-S	100	110	15.71	4573.11	-9.72	-758.93	0.000000	0.00	0.000
19-22-S	100	110	15.71	4573.11	-1.25	-758.93	0.000000	0.00	0.000
20-1-S	100	110	15.71	4573.11	-3.44	-758.93	0.000000	0.00	0.000
20-2-S	100	110	15.71	4573.11	-6.44	-758.93	0.000000	0.00	0.000
20-3-S	100	110	15.71	4573.11	-9.27	-758.93	0.000000	0.00	0.000
20-4-S	100	110	15.71	4573.11	-10.33	-758.93	0.000000	0.00	0.000
20-5-S	100	110	15.71	4573.11	-6.06	-758.93	0.000000	0.00	0.000
20-6-S	100	110	15.71	4573.11	19.91	-758.93	0.000000	0.00	0.000
20-7-S	100	110	15.71	2000.00	48.22	758.93	0.000000	0.00	0.000
20-8-S	100	110	15.71	4573.11	-72.25	-758.93	0.000000	0.00	0.000
20-9-S	100	110	15.71	4573.11	-41.56	-758.93	0.000000	0.00	0.000
20-10-S	100	110	15.71	4573.11	-20.14	-758.93	0.000000	0.00	0.000
20-11-S	100	110	15.71	4573.11	-6.56	-758.93	0.000000	0.00	0.000
20-12-S	100	110	15.71	4573.11	13.75	-758.93	0.000000	0.00	0.000
20-13-S	100	110	15.71	4573.11	22.27	-758.93	0.000000	0.00	0.000
20-14-S	100	110	15.71	4573.11	27.90	-758.93	0.000000	0.00	0.000
20-15-S	100	110	15.71	4573.11	29.90	-758.93	0.000000	0.00	0.000
20-16-S	100	110	15.71	4573.11	25.11	-758.93	0.000000	0.00	0.000
20-17-S	100	110	15.71	4573.11	18.32	-758.93	0.000000	0.00	0.000
20-18-S	100	110	15.71	4573.11	9.60	-758.93	0.000000	0.00	0.000
20-19-S	100	110	15.71	4573.11	-6.96	-758.93	0.000000	0.00	0.000
20-20-S	100	110	15.71	4573.11	-4.46	-758.93	0.000000	0.00	0.000
20-21-S	100	110	15.71	4573.11	-2.21	-758.93	0.000000	0.00	0.000
20-22-S	100	110	15.71	4573.11	1.23	-758.93	0.000000	0.00	0.000

Pali in c.a.Apertura limite fessure $w_{lim}=0.400$ mm

Ip	Is	Af [cmq]	Aeff [cmq]	Mpf [kNm]	M [kNm]	N [kN]	ε [%]	Sm [mm]	wm [mm]
1	1	22.90	3697.83	205.67	-125.15	246.00	0.000000	0.00	0.00
2	1	34.56	3617.50	229.58	-125.15	407.83	0.000000	0.00	0.00
3	1	34.56	3617.50	240.39	-125.15	569.66	0.000000	0.00	0.00

Combinazioni SLEQParamentoApertura limite fessure $w_{lim}=0.20$

APPALTATORE:

TELESE S.c.a r.l.
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ITINERARIO NAPOLI – BARI
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II LOTTO FUNZIONALE FRASSO TELESINO – VITULANO
2° SUBLOTTO TELESE – SAN LORENZO

PROGETTAZIONE:

Mandatario:

Mandante:

SYSTRA S.A. SWS Engineering S.p.A. SYSTRA-SOTECNI S.p.A.

PROGETTO ESECUTIVO

Relazione di calcolo

IF2R.2.2.E.ZZ.CL.TR.16.0.5.008.A.DOCX

COMMESSA	LOTTO	CODIFICA	DOCUMENTO	REV.	FOGLIO
IF2R	2.2.E.ZZ	CL	TR.16.0.5.008	A	110 di 118

n°	B [cm]	H [cm]	Af [cmq]	Aeff [cmq]	M [kNm]	Mpf [kNm]	ε [%]	Sm [mm]	w [mm]
1	100	70	0.00	0.00	0.00	0.00	0.000000	0.00	0.000 (7)
2	100	70	0.00	0.00	0.00	0.00	0.000000	0.00	0.000 (7)
3	100	70	0.00	0.00	0.00	0.00	0.000000	0.00	0.000 (7)
4	100	70	0.00	0.00	0.00	0.00	0.000000	0.00	0.000 (7)
5	100	70	0.00	0.00	0.00	0.00	0.000000	0.00	0.000 (7)
6	100	70	0.00	0.00	0.00	0.00	0.000000	0.00	0.000 (7)
7	100	70	0.00	0.00	0.00	0.00	0.000000	0.00	0.000 (7)
8	100	70	0.00	0.00	0.00	0.00	0.000000	0.00	0.000 (7)
9	100	70	0.00	0.00	0.00	0.00	0.000000	0.00	0.000 (7)
10	100	70	0.00	0.00	0.00	0.00	0.000000	0.00	0.000 (7)
11	100	70	0.00	0.00	0.00	0.00	0.000000	0.00	0.000 (7)
12	100	70	0.00	0.00	0.00	0.00	0.000000	0.00	0.000 (7)
13	100	70	0.00	0.00	0.00	0.00	0.000000	0.00	0.000 (7)
14	100	70	0.00	0.00	0.00	0.00	0.000000	0.00	0.000 (7)
15	100	70	0.00	0.00	0.00	0.00	0.000000	0.00	0.000 (7)
16	100	70	0.00	0.00	0.00	0.00	0.000000	0.00	0.000 (7)
17	100	70	0.00	0.00	0.00	0.00	0.000000	0.00	0.000 (7)
18	100	70	0.00	0.00	0.00	0.00	0.000000	0.00	0.000 (7)
19	100	70	0.00	0.00	0.00	0.00	0.000000	0.00	0.000 (7)
20	100	70	0.00	0.00	0.00	0.00	0.000000	0.00	0.000 (7)
21	100	70	0.00	0.00	0.00	0.00	0.000000	0.00	0.000 (7)
22	100	70	0.00	0.00	0.00	0.00	0.000000	0.00	0.000 (7)
23	100	70	0.00	0.00	0.00	0.00	0.000000	0.00	0.000 (7)
24	100	70	0.00	0.00	0.00	0.00	0.000000	0.00	0.000 (7)
25	100	70	0.00	0.00	0.00	0.00	0.000000	0.00	0.000 (7)
26	100	70	0.00	0.00	0.00	0.00	0.000000	0.00	0.000 (7)
27	100	70	0.00	0.00	0.00	0.00	0.000000	0.00	0.000 (7)
28	100	70	0.00	0.00	0.00	0.00	0.000000	0.00	0.000 (7)
29	100	70	0.00	0.00	0.00	0.00	0.000000	0.00	0.000 (7)
30	100	70	12.72	1840.00	0.02	344.92	0.000000	0.00	0.000 (7)
31	100	70	12.72	1840.00	0.10	345.14	0.000000	0.00	0.000 (7)
32	100	101	12.72	1840.00	7.81	697.41	0.000000	0.00	0.000 (7)
33	100	101	12.72	1840.00	8.07	697.84	0.000000	0.00	0.000 (7)
34	100	101	12.72	1840.00	8.57	698.27	0.000000	0.00	0.000 (7)
35	100	101	12.72	1840.00	9.26	698.72	0.000000	0.00	0.000 (7)
36	100	101	12.72	1840.00	10.05	699.13	0.000000	0.00	0.000 (7)
37	100	101	12.72	1840.00	10.88	699.58	0.000000	0.00	0.000 (7)
38	100	101	12.72	1840.00	11.77	700.01	0.000000	0.00	0.000 (7)
39	100	101	12.72	1840.00	12.72	700.46	0.000000	0.00	0.000 (7)
40	100	101	12.72	1840.00	13.74	700.87	0.000000	0.00	0.000 (7)
41	100	101	12.72	1840.00	14.85	701.32	0.000000	0.00	0.000 (7)
42	100	101	12.72	1840.00	16.04	701.75	0.000000	0.00	0.000 (7)
43	100	101	12.72	1840.00	17.34	702.16	0.000000	0.00	0.000 (7)
44	100	101	12.72	1840.00	18.73	702.60	0.000000	0.00	0.000 (7)
45	100	101	12.72	1840.00	20.23	703.03	0.000000	0.00	0.000 (7)
46	100	101	12.72	1840.00	21.85	703.48	0.000000	0.00	0.000 (7)
47	100	101	12.72	1840.00	23.59	703.92	0.000000	0.00	0.000 (7)
48	100	101	12.72	1840.00	25.45	704.34	0.000000	0.00	0.000 (7)
49	100	101	12.72	1840.00	27.44	704.79	0.000000	0.00	0.000 (7)
50	100	101	12.72	1840.00	29.56	705.23	0.000000	0.00	0.000 (7)
51	100	101	12.72	1840.00	31.82	705.65	0.000000	0.00	0.000 (7)
52	100	101	12.72	1840.00	34.23	706.07	0.000000	0.00	0.000 (7)

Piastra fondazione

Apertura limite fessure $w_{lim}=0.20$

Is	B [cm]	H [cm]	Af [cmq]	Aeff [cmq]	M [kNm]	Mpf [kNm]	ε [%]	Sm [mm]	w [mm]
1-1-P	69	110	12.57	3141.48	0.82	-535.11	0.000000	0.00	0.000
1-2-P	69	110	12.57	3141.48	-1.39	-535.11	0.000000	0.00	0.000
1-3-P	69	110	12.57	3141.48	-5.34	-535.11	0.000000	0.00	0.000
1-4-P	69	110	12.57	3141.48	-14.07	-535.11	0.000000	0.00	0.000
1-5-P	69	110	12.57	3141.48	-22.66	-535.11	0.000000	0.00	0.000
1-6-P	69	110	12.57	3141.48	-27.10	-535.11	0.000000	0.00	0.000
1-7-P	69	110	12.57	3141.48	-15.13	-535.11	0.000000	0.00	0.000
1-8-P	69	110	12.57	3141.48	-4.23	-535.11	0.000000	0.00	0.000
1-9-P	69	110	12.57	3141.48	8.63	-535.11	0.000000	0.00	0.000
1-10-P	69	110	12.57	3141.48	11.88	-535.11	0.000000	0.00	0.000
1-11-P	69	110	12.57	3141.48	12.87	-535.11	0.000000	0.00	0.000
1-12-P	69	110	12.57	3141.48	10.38	-535.11	0.000000	0.00	0.000
1-13-P	69	110	12.57	3141.48	2.82	-535.11	0.000000	0.00	0.000
1-14-P	69	110	12.57	3141.48	-9.56	-535.11	0.000000	0.00	0.000
1-15-P	69	110	12.57	3141.48	-20.06	-535.11	0.000000	0.00	0.000
1-16-P	69	110	12.57	3141.48	-17.93	-535.11	0.000000	0.00	0.000
1-17-P	69	110	12.57	3141.48	-8.10	-535.11	0.000000	0.00	0.000
1-18-P	69	110	12.57	3141.48	4.33	-535.11	0.000000	0.00	0.000

APPALTATORE:

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II LOTTO FUNZIONALE FRASSO TELESINO – VITULANO
2° SUBLOTTO TELESE – SAN LORENZO

PROGETTAZIONE:

Mandatario:

Mandante:

SYSTRA S.A. SWS Engineering S.p.A. SYSTRA-SOTECNI S.p.A.

PROGETTO ESECUTIVO

Relazione di calcolo

IF2R.2.2.E.ZZ.CL.TR.16.0.5.008.A.DOCX

COMMESSA LOTTO CODIFICA DOCUMENTO REV. FOGLIO
IF2R 2.2.E.ZZ CL TR.16.0.5.008 A 111 di 118

Is	B [cm]	H [cm]	Af [cmq]	Aeff [cmq]	M [kNm]	Mpf [kNm]	ε [%]	Sm [mm]	w [mm]
1-19-P	69	110	12.57	3141.48	11.21	-535.11	0.000000	0.00	0.000
1-20-P	69	110	12.57	3141.48	13.98	535.11	0.000000	0.00	0.000
1-21-P	69	110	12.57	3141.48	12.28	-535.11	0.000000	0.00	0.000
1-22-P	69	110	12.57	3141.48	8.02	-535.11	0.000000	0.00	0.000
1-23-P	69	110	12.57	3141.48	-4.24	-535.11	0.000000	0.00	0.000
1-24-P	69	110	12.57	3141.48	-13.86	-535.11	0.000000	0.00	0.000
1-25-P	69	110	12.57	3141.48	-24.35	-535.11	0.000000	0.00	0.000
1-26-P	69	110	12.57	3141.48	-13.86	-535.11	0.000000	0.00	0.000
1-27-P	69	110	12.57	3141.48	-4.24	-535.11	0.000000	0.00	0.000
1-28-P	69	110	12.57	3141.48	8.02	-535.11	0.000000	0.00	0.000
1-29-P	69	110	12.57	3141.48	12.28	-535.11	0.000000	0.00	0.000
1-30-P	69	110	12.57	3141.48	13.98	535.11	0.000000	0.00	0.000
1-31-P	69	110	12.57	3141.48	11.21	-535.11	0.000000	0.00	0.000
1-32-P	69	110	12.57	3141.48	4.33	-535.11	0.000000	0.00	0.000
1-33-P	69	110	12.57	3141.48	-8.10	-535.11	0.000000	0.00	0.000
1-34-P	69	110	12.57	3141.48	-17.93	-535.11	0.000000	0.00	0.000
1-35-P	69	110	12.57	3141.48	-20.06	-535.11	0.000000	0.00	0.000
1-36-P	69	110	12.57	3141.48	-9.56	-535.11	0.000000	0.00	0.000
1-37-P	69	110	12.57	3141.48	2.82	-535.11	0.000000	0.00	0.000
1-38-P	69	110	12.57	3141.48	10.38	-535.11	0.000000	0.00	0.000
1-39-P	69	110	12.57	3141.48	12.87	-535.11	0.000000	0.00	0.000
1-40-P	69	110	12.57	3141.48	11.88	-535.11	0.000000	0.00	0.000
1-41-P	69	110	12.57	3141.48	8.63	-535.11	0.000000	0.00	0.000
1-42-P	69	110	12.57	3141.48	-4.23	-535.11	0.000000	0.00	0.000
1-43-P	69	110	12.57	3141.48	-15.13	-535.11	0.000000	0.00	0.000
1-44-P	69	110	12.57	3141.48	-27.10	-535.11	0.000000	0.00	0.000
1-45-P	69	110	12.57	3141.48	-22.66	-535.11	0.000000	0.00	0.000
1-46-P	69	110	12.57	3141.48	-14.07	-535.11	0.000000	0.00	0.000
1-47-P	69	110	12.57	3141.48	-5.34	-535.11	0.000000	0.00	0.000
1-48-P	69	110	12.57	3141.48	-1.39	-535.11	0.000000	0.00	0.000
1-49-P	69	110	12.57	3141.48	0.82	-535.11	0.000000	0.00	0.000
2-1-P	70	110	12.57	3141.48	4.01	535.11	0.000000	0.00	0.000
2-2-P	70	110	12.57	3141.48	4.34	535.11	0.000000	0.00	0.000
2-3-P	70	110	12.57	3141.48	3.98	-535.11	0.000000	0.00	0.000
2-4-P	70	110	12.57	3141.48	3.44	-535.11	0.000000	0.00	0.000
2-5-P	70	110	12.57	3141.48	-20.40	-535.11	0.000000	0.00	0.000
2-6-P	70	110	12.57	3141.48	-34.73	-535.11	0.000000	0.00	0.000
2-7-P	70	110	12.57	3141.48	-8.07	-535.11	0.000000	0.00	0.000
2-8-P	70	110	12.57	3141.48	7.39	-535.11	0.000000	0.00	0.000
2-9-P	70	110	12.57	3141.48	11.77	535.11	0.000000	0.00	0.000
2-10-P	70	110	12.57	3141.48	12.80	535.11	0.000000	0.00	0.000
2-11-P	70	110	12.57	3141.48	13.13	535.11	0.000000	0.00	0.000
2-12-P	70	110	12.57	3141.48	12.42	535.11	0.000000	0.00	0.000
2-13-P	70	110	12.57	3141.48	9.10	-535.11	0.000000	0.00	0.000
2-14-P	70	110	12.57	3141.48	2.15	-535.11	0.000000	0.00	0.000
2-15-P	70	110	12.57	3141.48	-27.31	-535.11	0.000000	0.00	0.000
2-16-P	70	110	12.57	3141.48	-22.31	-535.11	0.000000	0.00	0.000
2-17-P	70	110	12.57	3141.48	6.13	-535.11	0.000000	0.00	0.000
2-18-P	70	110	12.57	3141.48	9.83	535.11	0.000000	0.00	0.000
2-19-P	70	110	12.57	3141.48	12.54	535.11	0.000000	0.00	0.000
2-20-P	70	110	12.57	3141.48	13.33	535.11	0.000000	0.00	0.000
2-21-P	70	110	12.57	3141.48	12.83	535.11	0.000000	0.00	0.000
2-22-P	70	110	12.57	3141.48	11.36	535.11	0.000000	0.00	0.000
2-23-P	70	110	12.57	3141.48	7.43	-535.11	0.000000	0.00	0.000
2-24-P	70	110	12.57	3141.48	-11.95	-535.11	0.000000	0.00	0.000
2-25-P	70	110	12.57	3141.48	-37.85	-535.11	0.000000	0.00	0.000
2-26-P	70	110	12.57	3141.48	-11.95	-535.11	0.000000	0.00	0.000
2-27-P	70	110	12.57	3141.48	7.43	-535.11	0.000000	0.00	0.000
2-28-P	70	110	12.57	3141.48	11.36	535.11	0.000000	0.00	0.000
2-29-P	70	110	12.57	3141.48	12.83	535.11	0.000000	0.00	0.000
2-30-P	70	110	12.57	3141.48	13.33	535.11	0.000000	0.00	0.000
2-31-P	70	110	12.57	3141.48	12.54	535.11	0.000000	0.00	0.000
2-32-P	70	110	12.57	3141.48	9.83	535.11	0.000000	0.00	0.000
2-33-P	70	110	12.57	3141.48	6.13	-535.11	0.000000	0.00	0.000
2-34-P	70	110	12.57	3141.48	-22.31	-535.11	0.000000	0.00	0.000
2-35-P	70	110	12.57	3141.48	-27.31	-535.11	0.000000	0.00	0.000
2-36-P	70	110	12.57	3141.48	2.15	-535.11	0.000000	0.00	0.000
2-37-P	70	110	12.57	3141.48	9.10	-535.11	0.000000	0.00	0.000
2-38-P	70	110	12.57	3141.48	12.42	535.11	0.000000	0.00	0.000
2-39-P	70	110	12.57	3141.48	13.13	535.11	0.000000	0.00	0.000
2-40-P	70	110	12.57	3141.48	12.80	535.11	0.000000	0.00	0.000
2-41-P	70	110	12.57	3141.48	11.77	535.11	0.000000	0.00	0.000
2-42-P	70	110	12.57	3141.48	7.39	-535.11	0.000000	0.00	0.000
2-43-P	70	110	12.57	3141.48	-8.07	-535.11	0.000000	0.00	0.000
2-44-P	70	110	12.57	3141.48	-34.73	-535.11	0.000000	0.00	0.000
2-45-P	70	110	12.57	3141.48	-20.40	-535.11	0.000000	0.00	0.000
2-46-P	70	110	12.57	3141.48	3.44	-535.11	0.000000	0.00	0.000
2-47-P	70	110	12.57	3141.48	3.98	-535.11	0.000000	0.00	0.000
2-48-P	70	110	12.57	3141.48	4.34	535.11	0.000000	0.00	0.000
2-49-P	70	110	12.57	3141.48	4.01	535.11	0.000000	0.00	0.000
5-1-P	85	110	15.71	3834.96	-4.26	-656.02	0.000000	0.00	0.000

APPALTATORE:

TELESE S.c.a r.l.

Consorzio Telese Società Consortile a Responsabilità Limitata

ITINERARIO NAPOLI – BARI
RADDOPPIO TRATTA CANCELLO-BENEVENTO
II LOTTO FUNZIONALE FRASSO TELESINO – VITULANO
2° SUBLOTTO TELESE – SAN LORENZO

PROGETTAZIONE:

Mandataria:

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SYSTRA S.A. SWS Engineering S.p.A. SYSTRA-SOTECNI S.p.A.

PROGETTO ESECUTIVO

Relazione di calcolo

IF2R.2.2.E.ZZ.CL.TR.16.0.5.008.A.DOCX

COMMESSA	LOTTO	CODIFICA	DOCUMENTO	REV.	FOGLIO
IF2R	2.2.E.ZZ	CL	TR.16.0.5.008	A	112 di 118

Is	B [cm]	H [cm]	Af [cmq]	Aeff [cmq]	M [kNm]	Mpf [kNm]	ε [%]	Sm [mm]	w [mm]
5-2-P	85	110	15.71	3834.96	-5.06	-656.02	0.000000	0.00	0.000
5-3-P	85	110	15.71	3834.96	-5.61	-656.02	0.000000	0.00	0.000
5-4-P	85	110	15.71	3834.96	-5.61	-656.02	0.000000	0.00	0.000
5-5-P	85	110	15.71	3834.96	-4.80	-656.02	0.000000	0.00	0.000
5-6-P	85	110	15.71	3834.96	4.16	-656.02	0.000000	0.00	0.000
5-7-P	85	110	15.71	3834.96	5.41	-656.02	0.000000	0.00	0.000
5-8-P	85	110	15.71	3834.96	6.03	-656.02	0.000000	0.00	0.000
5-9-P	85	110	15.71	3834.96	-8.32	-656.02	0.000000	0.00	0.000
5-10-P	85	110	15.71	3834.96	-29.79	-656.02	0.000000	0.00	0.000
5-11-P	85	110	15.71	3834.96	-34.07	-656.02	0.000000	0.00	0.000
5-12-P	85	110	15.71	3834.96	-5.34	-656.02	0.000000	0.00	0.000
5-13-P	85	110	15.71	3834.96	6.71	-656.02	0.000000	0.00	0.000
5-14-P	85	110	15.71	3834.96	10.72	-656.02	0.000000	0.00	0.000
5-15-P	85	110	15.71	1700.00	11.37	656.02	0.000000	0.00	0.000
5-16-P	85	110	15.71	3834.96	11.82	-656.02	0.000000	0.00	0.000
5-17-P	85	110	15.71	3834.96	12.13	-656.02	0.000000	0.00	0.000
5-18-P	85	110	15.71	3834.96	8.50	-656.02	0.000000	0.00	0.000
5-19-P	85	110	15.71	3834.96	-8.11	-656.02	0.000000	0.00	0.000
5-20-P	85	110	15.71	3834.96	-35.84	-656.02	0.000000	0.00	0.000
5-21-P	85	110	15.71	3834.96	-18.71	-656.02	0.000000	0.00	0.000
5-22-P	85	110	15.71	3834.96	7.88	-656.02	0.000000	0.00	0.000
5-23-P	85	110	15.71	3834.96	11.07	-656.02	0.000000	0.00	0.000
5-24-P	85	110	15.71	3834.96	13.09	-656.02	0.000000	0.00	0.000
5-25-P	85	110	15.71	1700.00	13.27	656.02	0.000000	0.00	0.000
5-26-P	85	110	15.71	3834.96	13.09	-656.02	0.000000	0.00	0.000
5-27-P	85	110	15.71	3834.96	11.07	-656.02	0.000000	0.00	0.000
5-28-P	85	110	15.71	3834.96	7.88	-656.02	0.000000	0.00	0.000
5-29-P	85	110	15.71	3834.96	-18.71	-656.02	0.000000	0.00	0.000
5-30-P	85	110	15.71	3834.96	-35.84	-656.02	0.000000	0.00	0.000
5-31-P	85	110	15.71	3834.96	-8.11	-656.02	0.000000	0.00	0.000
5-32-P	85	110	15.71	3834.96	8.50	-656.02	0.000000	0.00	0.000
5-33-P	85	110	15.71	3834.96	12.13	-656.02	0.000000	0.00	0.000
5-34-P	85	110	15.71	3834.96	11.82	-656.02	0.000000	0.00	0.000
5-35-P	85	110	15.71	1700.00	11.37	656.02	0.000000	0.00	0.000
5-36-P	85	110	15.71	3834.96	10.72	-656.02	0.000000	0.00	0.000
5-37-P	85	110	15.71	3834.96	6.71	-656.02	0.000000	0.00	0.000
5-38-P	85	110	15.71	3834.96	-5.34	-656.02	0.000000	0.00	0.000
5-39-P	85	110	15.71	3834.96	-34.07	-656.02	0.000000	0.00	0.000
5-40-P	85	110	15.71	3834.96	-29.79	-656.02	0.000000	0.00	0.000
5-41-P	85	110	15.71	3834.96	-8.32	-656.02	0.000000	0.00	0.000
5-42-P	85	110	15.71	3834.96	6.03	-656.02	0.000000	0.00	0.000
5-43-P	85	110	15.71	3834.96	5.41	-656.02	0.000000	0.00	0.000
5-44-P	85	110	15.71	3834.96	4.16	-656.02	0.000000	0.00	0.000
5-45-P	85	110	15.71	3834.96	-4.80	-656.02	0.000000	0.00	0.000
5-46-P	85	110	15.71	3834.96	-5.61	-656.02	0.000000	0.00	0.000
5-47-P	85	110	15.71	3834.96	-5.61	-656.02	0.000000	0.00	0.000
5-48-P	85	110	15.71	3834.96	-5.06	-656.02	0.000000	0.00	0.000
5-49-P	85	110	15.71	3834.96	-4.26	-656.02	0.000000	0.00	0.000
6-1-P	85	110	12.57	3906.02	-1.88	-641.45	0.000000	0.00	0.000
6-2-P	85	110	12.57	3906.02	2.38	-641.45	0.000000	0.00	0.000
6-3-P	85	110	12.57	3906.02	2.86	-641.45	0.000000	0.00	0.000
6-4-P	85	110	12.57	3906.02	3.18	-641.45	0.000000	0.00	0.000
6-5-P	85	110	12.57	3906.02	-2.47	-641.45	0.000000	0.00	0.000
6-6-P	85	110	12.57	3906.02	-1.89	-641.45	0.000000	0.00	0.000
6-7-P	85	110	12.57	3906.02	-2.37	-641.45	0.000000	0.00	0.000
6-8-P	85	110	12.57	3906.02	-4.85	-641.45	0.000000	0.00	0.000
6-9-P	85	110	12.57	3906.02	-8.66	-641.45	0.000000	0.00	0.000
6-10-P	85	110	12.57	3906.02	-9.36	-641.45	0.000000	0.00	0.000
6-11-P	85	110	12.57	3906.02	-9.01	-641.45	0.000000	0.00	0.000
6-12-P	85	110	12.57	3906.02	-6.79	-641.45	0.000000	0.00	0.000
6-13-P	85	110	12.57	3906.02	-2.31	-641.45	0.000000	0.00	0.000
6-14-P	85	110	12.57	3906.02	5.39	-641.45	0.000000	0.00	0.000
6-15-P	85	110	12.57	1700.00	7.55	641.45	0.000000	0.00	0.000
6-16-P	85	110	12.57	1700.00	7.88	641.45	0.000000	0.00	0.000
6-17-P	85	110	12.57	1700.00	6.89	641.45	0.000000	0.00	0.000
6-18-P	85	110	12.57	3906.02	2.64	-641.45	0.000000	0.00	0.000
6-19-P	85	110	12.57	3906.02	-2.84	-641.45	0.000000	0.00	0.000
6-20-P	85	110	12.57	3906.02	-4.55	-641.45	0.000000	0.00	0.000
6-21-P	85	110	12.57	3906.02	-3.40	-641.45	0.000000	0.00	0.000
6-22-P	85	110	12.57	3906.02	2.99	-641.45	0.000000	0.00	0.000
6-23-P	85	110	12.57	1700.00	6.54	641.45	0.000000	0.00	0.000
6-24-P	85	110	12.57	1700.00	9.56	641.45	0.000000	0.00	0.000
6-25-P	85	110	12.57	1700.00	11.17	641.45	0.000000	0.00	0.000
6-26-P	85	110	12.57	1700.00	9.56	641.45	0.000000	0.00	0.000
6-27-P	85	110	12.57	1700.00	6.54	641.45	0.000000	0.00	0.000
6-28-P	85	110	12.57	3906.02	2.99	-641.45	0.000000	0.00	0.000
6-29-P	85	110	12.57	3906.02	-3.40	-641.45	0.000000	0.00	0.000
6-30-P	85	110	12.57	3906.02	-4.55	-641.45	0.000000	0.00	0.000
6-31-P	85	110	12.57	3906.02	-2.84	-641.45	0.000000	0.00	0.000
6-32-P	85	110	12.57	3906.02	2.64	-641.45	0.000000	0.00	0.000
6-33-P	85	110	12.57	1700.00	6.89	641.45	0.000000	0.00	0.000

APPALTATORE:

TELESE S.c.a r.l.
Consorzio Telese Società Consortile a Responsabilità Limitata

ITINERARIO NAPOLI – BARI
RADDOPPIO TRATTA CANCELLO-BENEVENTO
II LOTTO FUNZIONALE FRASSO TELESINO – VITULANO
2° SUBLOTTO TELESE – SAN LORENZO

PROGETTAZIONE:

Mandataria:

Mandante:

SYSTRA S.A. SWS Engineering S.p.A. SYSTRA-SOTECNI S.p.A.

PROGETTO ESECUTIVO

Relazione di calcolo

IF2R.2.2.E.ZZ.CL.TR.16.0.5.008.A.DOCX

COMMESSA LOTTO CODIFICA DOCUMENTO REV. FOGLIO
IF2R 2.2.E.ZZ CL TR.16.0.5.008 A 113 di 118

Is	B [cm]	H [cm]	Af [cmq]	Aeff [cmq]	M [kNm]	Mpf [kNm]	ε [%]	Sm [mm]	w [mm]
6-34-P	85	110	12.57	1700.00	7.88	641.45	0.000000	0.00	0.000
6-35-P	85	110	12.57	1700.00	7.55	641.45	0.000000	0.00	0.000
6-36-P	85	110	12.57	3906.02	5.39	-641.45	0.000000	0.00	0.000
6-37-P	85	110	12.57	3906.02	-2.31	-641.45	0.000000	0.00	0.000
6-38-P	85	110	12.57	3906.02	-6.79	-641.45	0.000000	0.00	0.000
6-39-P	85	110	12.57	3906.02	-9.01	-641.45	0.000000	0.00	0.000
6-40-P	85	110	12.57	3906.02	-9.36	-641.45	0.000000	0.00	0.000
6-41-P	85	110	12.57	3906.02	-8.66	-641.45	0.000000	0.00	0.000
6-42-P	85	110	12.57	3906.02	-4.85	-641.45	0.000000	0.00	0.000
6-43-P	85	110	12.57	3906.02	-2.37	-641.45	0.000000	0.00	0.000
6-44-P	85	110	12.57	3906.02	-1.89	-641.45	0.000000	0.00	0.000
6-45-P	85	110	12.57	3906.02	-2.47	-641.45	0.000000	0.00	0.000
6-46-P	85	110	12.57	3906.02	3.18	-641.45	0.000000	0.00	0.000
6-47-P	85	110	12.57	3906.02	2.86	-641.45	0.000000	0.00	0.000
6-48-P	85	110	12.57	3906.02	2.38	-641.45	0.000000	0.00	0.000
6-49-P	85	110	12.57	3906.02	-1.88	-641.45	0.000000	0.00	0.000
7-1-P	85	110	12.57	3906.02	1.38	-641.45	0.000000	0.00	0.000
7-2-P	85	110	12.57	3906.02	-2.24	-641.45	0.000000	0.00	0.000
7-3-P	85	110	12.57	3906.02	-6.55	-641.45	0.000000	0.00	0.000
7-4-P	85	110	12.57	3906.02	-14.30	-641.45	0.000000	0.00	0.000
7-5-P	85	110	12.57	3906.02	-23.71	-641.45	0.000000	0.00	0.000
7-6-P	85	110	12.57	3906.02	-29.83	-641.45	0.000000	0.00	0.000
7-7-P	85	110	12.57	3906.02	-17.40	-641.45	0.000000	0.00	0.000
7-8-P	85	110	12.57	3906.02	-7.28	-641.45	0.000000	0.00	0.000
7-9-P	85	110	12.57	3906.02	3.45	-641.45	0.000000	0.00	0.000
7-10-P	85	110	12.57	1700.00	6.00	641.45	0.000000	0.00	0.000
7-11-P	85	110	12.57	1700.00	7.32	641.45	0.000000	0.00	0.000
7-12-P	85	110	12.57	3906.02	6.47	-641.45	0.000000	0.00	0.000
7-13-P	85	110	12.57	3906.02	-4.40	-641.45	0.000000	0.00	0.000
7-14-P	85	110	12.57	3906.02	-10.47	-641.45	0.000000	0.00	0.000
7-15-P	85	110	12.57	3906.02	-20.41	-641.45	0.000000	0.00	0.000
7-16-P	85	110	12.57	3906.02	-17.24	-641.45	0.000000	0.00	0.000
7-17-P	85	110	12.57	3906.02	-6.52	-641.45	0.000000	0.00	0.000
7-18-P	85	110	12.57	3906.02	5.20	-641.45	0.000000	0.00	0.000
7-19-P	85	110	12.57	1700.00	11.44	641.45	0.000000	0.00	0.000
7-20-P	85	110	12.57	1700.00	13.78	641.45	0.000000	0.00	0.000
7-21-P	85	110	12.57	1700.00	12.89	641.45	0.000000	0.00	0.000
7-22-P	85	110	12.57	1700.00	9.78	641.45	0.000000	0.00	0.000
7-23-P	85	110	12.57	3906.02	4.39	-641.45	0.000000	0.00	0.000
7-24-P	85	110	12.57	3906.02	-10.59	-641.45	0.000000	0.00	0.000
7-25-P	85	110	12.57	3906.02	-21.92	-641.45	0.000000	0.00	0.000
7-26-P	85	110	12.57	3906.02	-10.59	-641.45	0.000000	0.00	0.000
7-27-P	85	110	12.57	3906.02	4.39	-641.45	0.000000	0.00	0.000
7-28-P	85	110	12.57	1700.00	9.78	641.45	0.000000	0.00	0.000
7-29-P	85	110	12.57	1700.00	12.89	641.45	0.000000	0.00	0.000
7-30-P	85	110	12.57	1700.00	13.78	641.45	0.000000	0.00	0.000
7-31-P	85	110	12.57	1700.00	11.44	641.45	0.000000	0.00	0.000
7-32-P	85	110	12.57	3906.02	5.20	-641.45	0.000000	0.00	0.000
7-33-P	85	110	12.57	3906.02	-6.52	-641.45	0.000000	0.00	0.000
7-34-P	85	110	12.57	3906.02	-17.24	-641.45	0.000000	0.00	0.000
7-35-P	85	110	12.57	3906.02	-20.41	-641.45	0.000000	0.00	0.000
7-36-P	85	110	12.57	3906.02	-10.47	-641.45	0.000000	0.00	0.000
7-37-P	85	110	12.57	3906.02	-4.40	-641.45	0.000000	0.00	0.000
7-38-P	85	110	12.57	3906.02	6.47	-641.45	0.000000	0.00	0.000
7-39-P	85	110	12.57	1700.00	7.32	641.45	0.000000	0.00	0.000
7-40-P	85	110	12.57	1700.00	6.00	641.45	0.000000	0.00	0.000
7-41-P	85	110	12.57	3906.02	3.45	-641.45	0.000000	0.00	0.000
7-42-P	85	110	12.57	3906.02	-7.28	-641.45	0.000000	0.00	0.000
7-43-P	85	110	12.57	3906.02	-17.40	-641.45	0.000000	0.00	0.000
7-44-P	85	110	12.57	3906.02	-29.83	-641.45	0.000000	0.00	0.000
7-45-P	85	110	12.57	3906.02	-23.71	-641.45	0.000000	0.00	0.000
7-46-P	85	110	12.57	3906.02	-14.30	-641.45	0.000000	0.00	0.000
7-47-P	85	110	12.57	3906.02	-6.55	-641.45	0.000000	0.00	0.000
7-48-P	85	110	12.57	3906.02	-2.24	-641.45	0.000000	0.00	0.000
7-49-P	85	110	12.57	3906.02	1.38	-641.45	0.000000	0.00	0.000
8-1-P	85	110	15.71	3834.96	0.68	-656.02	0.000000	0.00	0.000
8-2-P	85	110	15.71	3834.96	-2.99	-656.02	0.000000	0.00	0.000
8-3-P	85	110	15.71	3834.96	-8.77	-656.02	0.000000	0.00	0.000
8-4-P	85	110	15.71	3834.96	-18.36	-656.02	0.000000	0.00	0.000
8-5-P	85	110	15.71	3834.96	-37.87	-656.02	0.000000	0.00	0.000
8-6-P	85	110	15.71	3834.96	-51.03	-656.02	0.000000	0.00	0.000
8-7-P	85	110	15.71	3834.96	-26.51	-656.02	0.000000	0.00	0.000
8-8-P	85	110	15.71	3834.96	-10.32	-656.02	0.000000	0.00	0.000
8-9-P	85	110	15.71	3834.96	2.05	-656.02	0.000000	0.00	0.000
8-10-P	85	110	15.71	3834.96	6.12	-656.02	0.000000	0.00	0.000
8-11-P	85	110	15.71	3834.96	7.73	-656.02	0.000000	0.00	0.000
8-12-P	85	110	15.71	3834.96	4.64	-656.02	0.000000	0.00	0.000
8-13-P	85	110	15.71	3834.96	-5.27	-656.02	0.000000	0.00	0.000
8-14-P	85	110	15.71	3834.96	-16.02	-656.02	0.000000	0.00	0.000
8-15-P	85	110	15.71	3834.96	-38.90	-656.02	0.000000	0.00	0.000
8-16-P	85	110	15.71	3834.96	-33.53	-656.02	0.000000	0.00	0.000

APPALTATORE:

TELESE S.c.a r.l.

Consorzio Telese Società Consortile a Responsabilità Limitata

ITINERARIO NAPOLI – BARI
RADDOPPIO TRATTA CANCELLO-BENEVENTO
II LOTTO FUNZIONALE FRASSO TELESINO – VITULANO
2° SUBLOTTO TELESE – SAN LORENZO

PROGETTAZIONE:

Mandataria:

Mandante:

SYSTRA S.A. SWS Engineering S.p.A. SYSTRA-SOTECNI S.p.A.

PROGETTO ESECUTIVO

Relazione di calcolo

IF2R.2.2.E.ZZ.CL.TR.16.0.5.008.A.DOCX

COMMESSA	LOTTO	CODIFICA	DOCUMENTO	REV.	FOGLIO
IF2R	2.2.E.ZZ	CL	TR.16.0.5.008	A	114 di 118

Is	B [cm]	H [cm]	Af [cmq]	Aeff [cmq]	M [kNm]	Mpf [kNm]	ε [%]	Sm [mm]	w [mm]
8-17-P	85	110	15.71	3834.96	-10.55	-656.02	0.000000	0.00	0.000
8-18-P	85	110	15.71	3834.96	2.63	-656.02	0.000000	0.00	0.000
8-19-P	85	110	15.71	3834.96	9.92	-656.02	0.000000	0.00	0.000
8-20-P	85	110	15.71	1700.00	14.26	656.02	0.000000	0.00	0.000
8-21-P	85	110	15.71	1700.00	12.20	656.02	0.000000	0.00	0.000
8-22-P	85	110	15.71	3834.96	7.23	-656.02	0.000000	0.00	0.000
8-23-P	85	110	15.71	3834.96	-5.11	-656.02	0.000000	0.00	0.000
8-24-P	85	110	15.71	3834.96	-21.25	-656.02	0.000000	0.00	0.000
8-25-P	85	110	15.71	3834.96	-44.80	-656.02	0.000000	0.00	0.000
8-26-P	85	110	15.71	3834.96	-21.25	-656.02	0.000000	0.00	0.000
8-27-P	85	110	15.71	3834.96	-5.11	-656.02	0.000000	0.00	0.000
8-28-P	85	110	15.71	3834.96	7.23	-656.02	0.000000	0.00	0.000
8-29-P	85	110	15.71	1700.00	12.20	656.02	0.000000	0.00	0.000
8-30-P	85	110	15.71	1700.00	14.26	656.02	0.000000	0.00	0.000
8-31-P	85	110	15.71	3834.96	9.92	-656.02	0.000000	0.00	0.000
8-32-P	85	110	15.71	3834.96	2.63	-656.02	0.000000	0.00	0.000
8-33-P	85	110	15.71	3834.96	-10.55	-656.02	0.000000	0.00	0.000
8-34-P	85	110	15.71	3834.96	-33.53	-656.02	0.000000	0.00	0.000
8-35-P	85	110	15.71	3834.96	-38.90	-656.02	0.000000	0.00	0.000
8-36-P	85	110	15.71	3834.96	-16.02	-656.02	0.000000	0.00	0.000
8-37-P	85	110	15.71	3834.96	-5.27	-656.02	0.000000	0.00	0.000
8-38-P	85	110	15.71	3834.96	4.64	-656.02	0.000000	0.00	0.000
8-39-P	85	110	15.71	3834.96	7.73	-656.02	0.000000	0.00	0.000
8-40-P	85	110	15.71	3834.96	6.12	-656.02	0.000000	0.00	0.000
8-41-P	85	110	15.71	3834.96	2.05	-656.02	0.000000	0.00	0.000
8-42-P	85	110	15.71	3834.96	-10.32	-656.02	0.000000	0.00	0.000
8-43-P	85	110	15.71	3834.96	-26.51	-656.02	0.000000	0.00	0.000
8-44-P	85	110	15.71	3834.96	-51.03	-656.02	0.000000	0.00	0.000
8-45-P	85	110	15.71	3834.96	-37.87	-656.02	0.000000	0.00	0.000
8-46-P	85	110	15.71	3834.96	-18.36	-656.02	0.000000	0.00	0.000
8-47-P	85	110	15.71	3834.96	-8.77	-656.02	0.000000	0.00	0.000
8-48-P	85	110	15.71	3834.96	-2.99	-656.02	0.000000	0.00	0.000
8-49-P	85	110	15.71	3834.96	0.68	-656.02	0.000000	0.00	0.000
9-1-S	100	110	15.71	4573.11	-2.55	-758.93	0.000000	0.00	0.000
9-2-S	100	110	15.71	4573.11	-4.96	-758.93	0.000000	0.00	0.000
9-3-S	100	110	15.71	4573.11	-7.11	-758.93	0.000000	0.00	0.000
9-4-S	100	110	15.71	4573.11	-7.59	-758.93	0.000000	0.00	0.000
9-5-S	100	110	15.71	4573.11	6.91	-758.93	0.000000	0.00	0.000
9-6-S	100	110	15.71	4573.11	20.99	-758.93	0.000000	0.00	0.000
9-7-S	100	110	15.71	2000.00	45.86	758.93	0.000000	0.00	0.000
9-8-S	100	110	15.71	4573.11	-59.73	-758.93	0.000000	0.00	0.000
9-9-S	100	110	15.71	4573.11	-31.47	-758.93	0.000000	0.00	0.000
9-10-S	100	110	15.71	4573.11	-12.93	-758.93	0.000000	0.00	0.000
9-11-S	100	110	15.71	4573.11	6.98	-758.93	0.000000	0.00	0.000
9-12-S	100	110	15.71	4573.11	17.21	-758.93	0.000000	0.00	0.000
9-13-S	100	110	15.71	4573.11	24.06	-758.93	0.000000	0.00	0.000
9-14-S	100	110	15.71	4573.11	27.69	-758.93	0.000000	0.00	0.000
9-15-S	100	110	15.71	4573.11	27.66	-758.93	0.000000	0.00	0.000
9-16-S	100	110	15.71	4573.11	21.28	-758.93	0.000000	0.00	0.000
9-17-S	100	110	15.71	4573.11	13.20	-758.93	0.000000	0.00	0.000
9-18-S	100	110	15.71	4573.11	5.89	-758.93	0.000000	0.00	0.000
9-19-S	100	110	15.71	4573.11	-8.36	-758.93	0.000000	0.00	0.000
9-20-S	100	110	15.71	4573.11	-5.95	-758.93	0.000000	0.00	0.000
9-21-S	100	110	15.71	4573.11	-3.08	-758.93	0.000000	0.00	0.000
9-22-S	100	110	15.71	4573.11	0.64	-758.93	0.000000	0.00	0.000
10-1-S	100	110	15.71	4573.11	4.32	-758.93	0.000000	0.00	0.000
10-2-S	100	110	15.71	4573.11	6.45	-758.93	0.000000	0.00	0.000
10-3-S	100	110	15.71	4573.11	-6.89	-758.93	0.000000	0.00	0.000
10-4-S	100	110	15.71	4573.11	-33.23	-758.93	0.000000	0.00	0.000
10-5-S	100	110	15.71	4573.11	-27.69	-758.93	0.000000	0.00	0.000
10-6-S	100	110	15.71	4573.11	15.29	-758.93	0.000000	0.00	0.000
10-7-S	100	110	15.71	2000.00	59.53	758.93	0.000000	0.00	0.000
10-8-S	100	110	15.71	4573.11	-25.23	-758.93	0.000000	0.00	0.000
10-9-S	100	110	15.71	4573.11	-18.24	-758.93	0.000000	0.00	0.000
10-10-S	100	110	15.71	4573.11	-9.41	-758.93	0.000000	0.00	0.000
10-11-S	100	110	15.71	4573.11	5.57	-758.93	0.000000	0.00	0.000
10-12-S	100	110	15.71	4573.11	11.32	-758.93	0.000000	0.00	0.000
10-13-S	100	110	15.71	4573.11	20.47	-758.93	0.000000	0.00	0.000
10-14-S	100	110	15.71	4573.11	26.64	-758.93	0.000000	0.00	0.000
10-15-S	100	110	15.71	4573.11	29.52	-758.93	0.000000	0.00	0.000
10-16-S	100	110	15.71	4573.11	26.66	-758.93	0.000000	0.00	0.000
10-17-S	100	110	15.71	4573.11	21.59	-758.93	0.000000	0.00	0.000
10-18-S	100	110	15.71	4573.11	-16.73	-758.93	0.000000	0.00	0.000
10-19-S	100	110	15.71	4573.11	-36.42	-758.93	0.000000	0.00	0.000
10-20-S	100	110	15.71	4573.11	-19.05	-758.93	0.000000	0.00	0.000
10-21-S	100	110	15.71	4573.11	-7.77	-758.93	0.000000	0.00	0.000
10-22-S	100	110	15.71	4573.11	0.56	-758.93	0.000000	0.00	0.000
11-1-S	100	110	15.71	4573.11	-3.59	-758.93	0.000000	0.00	0.000
11-2-S	100	110	15.71	4573.11	-2.94	-758.93	0.000000	0.00	0.000
11-3-S	100	110	15.71	4573.11	-1.51	-758.93	0.000000	0.00	0.000
11-4-S	100	110	15.71	2000.00	5.52	758.93	0.000000	0.00	0.000

APPALTATORE: **TELESE S.c.a r.l.**
 Consorzio Telese Società Consortile a Responsabilità Limitata

PROGETTAZIONE:
 Mandataria: SYSTRA S.A. Mandante: SWS Engineering S.p.A. SYSTRA-SOTECNI S.p.A.

Relazione di calcolo
 IF2R.2.2.E.ZZ.CL.TR.16.0.5.008.A.DOCX

ITINERARIO NAPOLI – BARI
RADDOPPIO TRATTA CANCELLO-BENEVENTO
II LOTTO FUNZIONALE FRASSO TELESINO – VITULANO
2° SUBLOTTO TELESE – SAN LORENZO

PROGETTO ESECUTIVO

COMMESSA LOTTO CODIFICA DOCUMENTO REV. FOGLIO
 IF2R 2.2.E.ZZ CL TR.16.0.5.008 A 115 di 118

Is	B [cm]	H [cm]	Af [cmq]	Aeff [cmq]	M [kNm]	Mpf [kNm]	ε [%]	Sm [mm]	w [mm]
11-5-S	100	110	15.71	2000.00	15.50	758.93	0.000000	0.00	0.000
11-6-S	100	110	15.71	2000.00	29.32	758.93	0.000000	0.00	0.000
11-7-S	100	110	15.71	2000.00	44.43	758.93	0.000000	0.00	0.000
11-8-S	100	110	15.71	4573.11	46.30	-758.93	0.000000	0.00	0.000
11-9-S	100	110	15.71	4573.11	23.37	-758.93	0.000000	0.00	0.000
11-10-S	100	110	15.71	4573.11	-40.44	-758.93	0.000000	0.00	0.000
11-11-S	100	110	15.71	4573.11	-22.38	-758.93	0.000000	0.00	0.000
11-12-S	100	110	15.71	4573.11	-2.97	-758.93	0.000000	0.00	0.000
11-13-S	100	110	15.71	4573.11	13.04	-758.93	0.000000	0.00	0.000
11-14-S	100	110	15.71	4573.11	20.39	-758.93	0.000000	0.00	0.000
11-15-S	100	110	15.71	4573.11	21.35	-758.93	0.000000	0.00	0.000
11-16-S	100	110	15.71	4573.11	17.69	-758.93	0.000000	0.00	0.000
11-17-S	100	110	15.71	4573.11	12.68	-758.93	0.000000	0.00	0.000
11-18-S	100	110	15.71	4573.11	7.39	-758.93	0.000000	0.00	0.000
11-19-S	100	110	15.71	4573.11	3.16	-758.93	0.000000	0.00	0.000
11-20-S	100	110	15.71	4573.11	0.90	-758.93	0.000000	0.00	0.000
11-21-S	100	110	15.71	4573.11	-0.95	-758.93	0.000000	0.00	0.000
11-22-S	100	110	15.71	4573.11	-0.90	-758.93	0.000000	0.00	0.000
12-1-S	100	110	15.71	4573.11	5.50	-758.93	0.000000	0.00	0.000
12-2-S	100	110	15.71	4573.11	6.49	-758.93	0.000000	0.00	0.000
12-3-S	100	110	15.71	4573.11	-7.85	-758.93	0.000000	0.00	0.000
12-4-S	100	110	15.71	4573.11	-38.53	-758.93	0.000000	0.00	0.000
12-5-S	100	110	15.71	4573.11	-31.26	-758.93	0.000000	0.00	0.000
12-6-S	100	110	15.71	4573.11	12.84	-758.93	0.000000	0.00	0.000
12-7-S	100	110	15.71	2000.00	61.03	758.93	0.000000	0.00	0.000
12-8-S	100	110	15.71	4573.11	2.76	-758.93	0.000000	0.00	0.000
12-9-S	100	110	15.71	4573.11	7.59	-758.93	0.000000	0.00	0.000
12-10-S	100	110	15.71	2000.00	9.10	758.93	0.000000	0.00	0.000
12-11-S	100	110	15.71	2000.00	12.70	758.93	0.000000	0.00	0.000
12-12-S	100	110	15.71	2000.00	16.80	758.93	0.000000	0.00	0.000
12-13-S	100	110	15.71	2000.00	22.30	758.93	0.000000	0.00	0.000
12-14-S	100	110	15.71	4573.11	26.53	-758.93	0.000000	0.00	0.000
12-15-S	100	110	15.71	4573.11	29.39	-758.93	0.000000	0.00	0.000
12-16-S	100	110	15.71	4573.11	26.72	-758.93	0.000000	0.00	0.000
12-17-S	100	110	15.71	4573.11	22.20	-758.93	0.000000	0.00	0.000
12-18-S	100	110	15.71	4573.11	-21.20	-758.93	0.000000	0.00	0.000
12-19-S	100	110	15.71	4573.11	-43.38	-758.93	0.000000	0.00	0.000
12-20-S	100	110	15.71	4573.11	-22.62	-758.93	0.000000	0.00	0.000
12-21-S	100	110	15.71	4573.11	-9.16	-758.93	0.000000	0.00	0.000
12-22-S	100	110	15.71	4573.11	0.81	-758.93	0.000000	0.00	0.000
13-1-S	100	110	15.71	4573.11	-3.12	-758.93	0.000000	0.00	0.000
13-2-S	100	110	15.71	4573.11	-4.39	-758.93	0.000000	0.00	0.000
13-3-S	100	110	15.71	4573.11	-4.45	-758.93	0.000000	0.00	0.000
13-4-S	100	110	15.71	4573.11	4.41	-758.93	0.000000	0.00	0.000
13-5-S	100	110	15.71	2000.00	12.63	758.93	0.000000	0.00	0.000
13-6-S	100	110	15.71	2000.00	26.98	758.93	0.000000	0.00	0.000
13-7-S	100	110	15.71	2000.00	45.53	758.93	0.000000	0.00	0.000
13-8-S	100	110	15.71	4573.11	49.00	-758.93	0.000000	0.00	0.000
13-9-S	100	110	15.71	4573.11	29.07	-758.93	0.000000	0.00	0.000
13-10-S	100	110	15.71	4573.11	-29.49	-758.93	0.000000	0.00	0.000
13-11-S	100	110	15.71	4573.11	-15.09	-758.93	0.000000	0.00	0.000
13-12-S	100	110	15.71	4573.11	5.46	-758.93	0.000000	0.00	0.000
13-13-S	100	110	15.71	4573.11	16.66	-758.93	0.000000	0.00	0.000
13-14-S	100	110	15.71	2000.00	22.78	758.93	0.000000	0.00	0.000
13-15-S	100	110	15.71	2000.00	23.32	758.93	0.000000	0.00	0.000
13-16-S	100	110	15.71	4573.11	17.87	-758.93	0.000000	0.00	0.000
13-17-S	100	110	15.71	4573.11	11.00	-758.93	0.000000	0.00	0.000
13-18-S	100	110	15.71	4573.11	6.17	-758.93	0.000000	0.00	0.000
13-19-S	100	110	15.71	4573.11	2.62	-758.93	0.000000	0.00	0.000
13-20-S	100	110	15.71	4573.11	-2.56	-758.93	0.000000	0.00	0.000
13-21-S	100	110	15.71	4573.11	-1.83	-758.93	0.000000	0.00	0.000
13-22-S	100	110	15.71	4573.11	-0.64	-758.93	0.000000	0.00	0.000
14-1-S	100	110	18.85	4504.06	3.08	-773.50	0.000000	0.00	0.000
14-2-S	100	110	18.85	4504.06	-4.80	-773.50	0.000000	0.00	0.000
14-3-S	100	110	18.85	4504.06	-6.97	-773.50	0.000000	0.00	0.000
14-4-S	100	110	18.85	4504.06	-20.30	-773.50	0.000000	0.00	0.000
14-5-S	100	110	18.85	4504.06	-15.74	-773.50	0.000000	0.00	0.000
14-6-S	100	110	18.85	4504.06	19.25	-773.50	0.000000	0.00	0.000
14-7-S	100	110	18.85	2000.00	53.83	773.50	0.000000	0.00	0.000
14-8-S	100	110	18.85	4504.06	18.86	-773.50	0.000000	0.00	0.000
14-9-S	100	110	18.85	4504.06	12.09	-773.50	0.000000	0.00	0.000
14-10-S	100	110	18.85	4504.06	8.41	-773.50	0.000000	0.00	0.000
14-11-S	100	110	18.85	4504.06	10.16	-773.50	0.000000	0.00	0.000
14-12-S	100	110	18.85	4504.06	13.86	-773.50	0.000000	0.00	0.000
14-13-S	100	110	18.85	4504.06	21.60	-773.50	0.000000	0.00	0.000
14-14-S	100	110	18.85	2000.00	26.22	773.50	0.000000	0.00	0.000
14-15-S	100	110	18.85	2000.00	27.32	773.50	0.000000	0.00	0.000
14-16-S	100	110	18.85	4504.06	22.55	-773.50	0.000000	0.00	0.000
14-17-S	100	110	18.85	4504.06	16.42	-773.50	0.000000	0.00	0.000
14-18-S	100	110	18.85	4504.06	-11.11	-773.50	0.000000	0.00	0.000
14-19-S	100	110	18.85	4504.06	-23.01	-773.50	0.000000	0.00	0.000

APPALTATORE:

TELESE S.c.a r.l.

Consorzio Telese Società Consortile a Responsabilità Limitata

ITINERARIO NAPOLI – BARI
RADDOPPIO TRATTA CANCELLO-BENEVENTO
II LOTTO FUNZIONALE FRASSO TELESINO – VITULANO
2° SUBLOTTO TELESE – SAN LORENZO

PROGETTAZIONE:

Mandataria:

Mandante:

SYSTRA S.A. SWS Engineering S.p.A. SYSTRA-SOTECNI S.p.A.

PROGETTO ESECUTIVO

Relazione di calcolo

IF2R.2.2.E.ZZ.CL.TR.16.0.5.008.A.DOCX

COMMESSA	LOTTO	CODIFICA	DOCUMENTO	REV.	FOGLIO
IF2R	2.2.E.ZZ	CL	TR.16.0.5.008	A	116 di 118

Is	B [cm]	H [cm]	Af [cmq]	Aeff [cmq]	M [kNm]	Mpf [kNm]	ε [%]	Sm [mm]	w [mm]
14-20-S	100	110	18.85	4504.06	-12.86	-773.50	0.000000	0.00	0.000
14-21-S	100	110	18.85	4504.06	-5.80	-773.50	0.000000	0.00	0.000
14-22-S	100	110	18.85	4504.06	0.54	-773.50	0.000000	0.00	0.000
15-1-S	100	110	15.71	4573.11	3.08	-758.93	0.000000	0.00	0.000
15-2-S	100	110	15.71	4573.11	-4.80	-758.93	0.000000	0.00	0.000
15-3-S	100	110	15.71	4573.11	-6.97	-758.93	0.000000	0.00	0.000
15-4-S	100	110	15.71	4573.11	-20.30	-758.93	0.000000	0.00	0.000
15-5-S	100	110	15.71	4573.11	-15.74	-758.93	0.000000	0.00	0.000
15-6-S	100	110	15.71	4573.11	19.25	-758.93	0.000000	0.00	0.000
15-7-S	100	110	15.71	2000.00	53.83	758.93	0.000000	0.00	0.000
15-8-S	100	110	15.71	4573.11	18.86	-758.93	0.000000	0.00	0.000
15-9-S	100	110	15.71	4573.11	12.09	-758.93	0.000000	0.00	0.000
15-10-S	100	110	15.71	4573.11	8.41	-758.93	0.000000	0.00	0.000
15-11-S	100	110	15.71	4573.11	10.16	-758.93	0.000000	0.00	0.000
15-12-S	100	110	15.71	4573.11	13.86	-758.93	0.000000	0.00	0.000
15-13-S	100	110	15.71	4573.11	21.60	-758.93	0.000000	0.00	0.000
15-14-S	100	110	15.71	2000.00	26.22	758.93	0.000000	0.00	0.000
15-15-S	100	110	15.71	2000.00	27.32	758.93	0.000000	0.00	0.000
15-16-S	100	110	15.71	4573.11	22.55	-758.93	0.000000	0.00	0.000
15-17-S	100	110	15.71	4573.11	16.42	-758.93	0.000000	0.00	0.000
15-18-S	100	110	15.71	4573.11	-11.11	-758.93	0.000000	0.00	0.000
15-19-S	100	110	15.71	4573.11	-23.01	-758.93	0.000000	0.00	0.000
15-20-S	100	110	15.71	4573.11	-12.86	-758.93	0.000000	0.00	0.000
15-21-S	100	110	15.71	4573.11	-5.80	-758.93	0.000000	0.00	0.000
15-22-S	100	110	15.71	4573.11	0.54	-758.93	0.000000	0.00	0.000
16-1-S	100	110	15.71	4573.11	-3.12	-758.93	0.000000	0.00	0.000
16-2-S	100	110	15.71	4573.11	-4.39	-758.93	0.000000	0.00	0.000
16-3-S	100	110	15.71	4573.11	-4.45	-758.93	0.000000	0.00	0.000
16-4-S	100	110	15.71	4573.11	4.41	-758.93	0.000000	0.00	0.000
16-5-S	100	110	15.71	2000.00	12.63	758.93	0.000000	0.00	0.000
16-6-S	100	110	15.71	2000.00	26.98	758.93	0.000000	0.00	0.000
16-7-S	100	110	15.71	2000.00	45.53	758.93	0.000000	0.00	0.000
16-8-S	100	110	15.71	4573.11	49.00	-758.93	0.000000	0.00	0.000
16-9-S	100	110	15.71	4573.11	29.07	-758.93	0.000000	0.00	0.000
16-10-S	100	110	15.71	4573.11	-29.49	-758.93	0.000000	0.00	0.000
16-11-S	100	110	15.71	4573.11	-15.09	-758.93	0.000000	0.00	0.000
16-12-S	100	110	15.71	4573.11	5.46	-758.93	0.000000	0.00	0.000
16-13-S	100	110	15.71	4573.11	16.66	-758.93	0.000000	0.00	0.000
16-14-S	100	110	15.71	2000.00	22.78	758.93	0.000000	0.00	0.000
16-15-S	100	110	15.71	2000.00	23.32	758.93	0.000000	0.00	0.000
16-16-S	100	110	15.71	4573.11	17.87	-758.93	0.000000	0.00	0.000
16-17-S	100	110	15.71	4573.11	11.00	-758.93	0.000000	0.00	0.000
16-18-S	100	110	15.71	4573.11	6.17	-758.93	0.000000	0.00	0.000
16-19-S	100	110	15.71	4573.11	2.62	-758.93	0.000000	0.00	0.000
16-20-S	100	110	15.71	4573.11	-2.56	-758.93	0.000000	0.00	0.000
16-21-S	100	110	15.71	4573.11	-1.83	-758.93	0.000000	0.00	0.000
16-22-S	100	110	15.71	4573.11	-0.64	-758.93	0.000000	0.00	0.000
17-1-S	100	110	15.71	4573.11	5.50	-758.93	0.000000	0.00	0.000
17-2-S	100	110	15.71	4573.11	6.49	-758.93	0.000000	0.00	0.000
17-3-S	100	110	15.71	4573.11	-7.85	-758.93	0.000000	0.00	0.000
17-4-S	100	110	15.71	4573.11	-38.53	-758.93	0.000000	0.00	0.000
17-5-S	100	110	15.71	4573.11	-31.26	-758.93	0.000000	0.00	0.000
17-6-S	100	110	15.71	4573.11	12.84	-758.93	0.000000	0.00	0.000
17-7-S	100	110	15.71	2000.00	61.03	758.93	0.000000	0.00	0.000
17-8-S	100	110	15.71	4573.11	2.76	-758.93	0.000000	0.00	0.000
17-9-S	100	110	15.71	4573.11	7.59	-758.93	0.000000	0.00	0.000
17-10-S	100	110	15.71	2000.00	9.10	758.93	0.000000	0.00	0.000
17-11-S	100	110	15.71	2000.00	12.70	758.93	0.000000	0.00	0.000
17-12-S	100	110	15.71	2000.00	16.80	758.93	0.000000	0.00	0.000
17-13-S	100	110	15.71	2000.00	22.30	758.93	0.000000	0.00	0.000
17-14-S	100	110	15.71	4573.11	26.53	-758.93	0.000000	0.00	0.000
17-15-S	100	110	15.71	4573.11	29.39	-758.93	0.000000	0.00	0.000
17-16-S	100	110	15.71	4573.11	26.72	-758.93	0.000000	0.00	0.000
17-17-S	100	110	15.71	4573.11	22.20	-758.93	0.000000	0.00	0.000
17-18-S	100	110	15.71	4573.11	-21.20	-758.93	0.000000	0.00	0.000
17-19-S	100	110	15.71	4573.11	-43.38	-758.93	0.000000	0.00	0.000
17-20-S	100	110	15.71	4573.11	-22.62	-758.93	0.000000	0.00	0.000
17-21-S	100	110	15.71	4573.11	-9.16	-758.93	0.000000	0.00	0.000
17-22-S	100	110	15.71	4573.11	0.81	-758.93	0.000000	0.00	0.000
18-1-S	100	110	15.71	4573.11	-3.59	-758.93	0.000000	0.00	0.000
18-2-S	100	110	15.71	4573.11	-2.94	-758.93	0.000000	0.00	0.000
18-3-S	100	110	15.71	4573.11	-1.51	-758.93	0.000000	0.00	0.000
18-4-S	100	110	15.71	2000.00	5.52	758.93	0.000000	0.00	0.000
18-5-S	100	110	15.71	2000.00	15.50	758.93	0.000000	0.00	0.000
18-6-S	100	110	15.71	2000.00	29.32	758.93	0.000000	0.00	0.000
18-7-S	100	110	15.71	2000.00	44.43	758.93	0.000000	0.00	0.000
18-8-S	100	110	15.71	4573.11	46.30	-758.93	0.000000	0.00	0.000
18-9-S	100	110	15.71	4573.11	23.37	-758.93	0.000000	0.00	0.000
18-10-S	100	110	15.71	4573.11	-40.44	-758.93	0.000000	0.00	0.000
18-11-S	100	110	15.71	4573.11	-22.38	-758.93	0.000000	0.00	0.000
18-12-S	100	110	15.71	4573.11	-2.97	-758.93	0.000000	0.00	0.000

APPALTATORE:

TELESE S.c.a r.l.

Consorzio Telese Società Consortile a Responsabilità Limitata

ITINERARIO NAPOLI – BARI
RADDOPPIO TRATTA CANCELLO-BENEVENTO
II LOTTO FUNZIONALE FRASSO TELESINO – VITULANO
2° SUBLOTTO TELESE – SAN LORENZO

PROGETTAZIONE:

Mandataria:

Mandante:

SYSTRA S.A. SWS Engineering S.p.A. SYSTRA-SOTECNI S.p.A.

PROGETTO ESECUTIVO

Relazione di calcolo

IF2R.2.2.E.ZZ.CL.TR.16.0.5.008.A.DOCX

COMMESSA	LOTTO	CODIFICA	DOCUMENTO	REV.	FOGLIO
IF2R	2.2.E.ZZ	CL	TR.16.0.5.008	A	117 di 118

Is	B [cm]	H [cm]	Af [cmq]	Aeff [cmq]	M [kNm]	Mpf [kNm]	ε [%]	Sm [mm]	w [mm]
18-13-S	100	110	15.71	4573.11	13.04	-758.93	0.000000	0.00	0.000
18-14-S	100	110	15.71	4573.11	20.39	-758.93	0.000000	0.00	0.000
18-15-S	100	110	15.71	4573.11	21.35	-758.93	0.000000	0.00	0.000
18-16-S	100	110	15.71	4573.11	17.69	-758.93	0.000000	0.00	0.000
18-17-S	100	110	15.71	4573.11	12.68	-758.93	0.000000	0.00	0.000
18-18-S	100	110	15.71	4573.11	7.39	-758.93	0.000000	0.00	0.000
18-19-S	100	110	15.71	4573.11	3.16	-758.93	0.000000	0.00	0.000
18-20-S	100	110	15.71	4573.11	0.90	-758.93	0.000000	0.00	0.000
18-21-S	100	110	15.71	4573.11	-0.95	-758.93	0.000000	0.00	0.000
18-22-S	100	110	15.71	4573.11	-0.90	-758.93	0.000000	0.00	0.000
19-1-S	100	110	15.71	4573.11	4.32	-758.93	0.000000	0.00	0.000
19-2-S	100	110	15.71	4573.11	6.45	-758.93	0.000000	0.00	0.000
19-3-S	100	110	15.71	4573.11	-6.89	-758.93	0.000000	0.00	0.000
19-4-S	100	110	15.71	4573.11	-33.23	-758.93	0.000000	0.00	0.000
19-5-S	100	110	15.71	4573.11	-27.69	-758.93	0.000000	0.00	0.000
19-6-S	100	110	15.71	4573.11	15.29	-758.93	0.000000	0.00	0.000
19-7-S	100	110	15.71	2000.00	59.53	758.93	0.000000	0.00	0.000
19-8-S	100	110	15.71	4573.11	-25.23	-758.93	0.000000	0.00	0.000
19-9-S	100	110	15.71	4573.11	-18.24	-758.93	0.000000	0.00	0.000
19-10-S	100	110	15.71	4573.11	-9.41	-758.93	0.000000	0.00	0.000
19-11-S	100	110	15.71	4573.11	5.57	-758.93	0.000000	0.00	0.000
19-12-S	100	110	15.71	4573.11	11.32	-758.93	0.000000	0.00	0.000
19-13-S	100	110	15.71	4573.11	20.47	-758.93	0.000000	0.00	0.000
19-14-S	100	110	15.71	4573.11	26.64	-758.93	0.000000	0.00	0.000
19-15-S	100	110	15.71	4573.11	29.52	-758.93	0.000000	0.00	0.000
19-16-S	100	110	15.71	4573.11	26.66	-758.93	0.000000	0.00	0.000
19-17-S	100	110	15.71	4573.11	21.59	-758.93	0.000000	0.00	0.000
19-18-S	100	110	15.71	4573.11	-16.73	-758.93	0.000000	0.00	0.000
19-19-S	100	110	15.71	4573.11	-36.42	-758.93	0.000000	0.00	0.000
19-20-S	100	110	15.71	4573.11	-19.05	-758.93	0.000000	0.00	0.000
19-21-S	100	110	15.71	4573.11	-7.77	-758.93	0.000000	0.00	0.000
19-22-S	100	110	15.71	4573.11	0.56	-758.93	0.000000	0.00	0.000
20-1-S	100	110	15.71	4573.11	-2.55	-758.93	0.000000	0.00	0.000
20-2-S	100	110	15.71	4573.11	-4.96	-758.93	0.000000	0.00	0.000
20-3-S	100	110	15.71	4573.11	-7.11	-758.93	0.000000	0.00	0.000
20-4-S	100	110	15.71	4573.11	-7.59	-758.93	0.000000	0.00	0.000
20-5-S	100	110	15.71	4573.11	6.91	-758.93	0.000000	0.00	0.000
20-6-S	100	110	15.71	4573.11	20.99	-758.93	0.000000	0.00	0.000
20-7-S	100	110	15.71	2000.00	45.86	758.93	0.000000	0.00	0.000
20-8-S	100	110	15.71	4573.11	-59.73	-758.93	0.000000	0.00	0.000
20-9-S	100	110	15.71	4573.11	-31.47	-758.93	0.000000	0.00	0.000
20-10-S	100	110	15.71	4573.11	-12.93	-758.93	0.000000	0.00	0.000
20-11-S	100	110	15.71	4573.11	6.98	-758.93	0.000000	0.00	0.000
20-12-S	100	110	15.71	4573.11	17.21	-758.93	0.000000	0.00	0.000
20-13-S	100	110	15.71	4573.11	24.06	-758.93	0.000000	0.00	0.000
20-14-S	100	110	15.71	4573.11	27.69	-758.93	0.000000	0.00	0.000
20-15-S	100	110	15.71	4573.11	27.66	-758.93	0.000000	0.00	0.000
20-16-S	100	110	15.71	4573.11	21.28	-758.93	0.000000	0.00	0.000
20-17-S	100	110	15.71	4573.11	13.20	-758.93	0.000000	0.00	0.000
20-18-S	100	110	15.71	4573.11	5.89	-758.93	0.000000	0.00	0.000
20-19-S	100	110	15.71	4573.11	-8.36	-758.93	0.000000	0.00	0.000
20-20-S	100	110	15.71	4573.11	-5.95	-758.93	0.000000	0.00	0.000
20-21-S	100	110	15.71	4573.11	-3.08	-758.93	0.000000	0.00	0.000
20-22-S	100	110	15.71	4573.11	0.64	-758.93	0.000000	0.00	0.000

Pali in c.a.Apertura limite fessure $w_{lim}=0.300$ mm

Ip	Is	Af [cmq]	Aeff [cmq]	Mpf [kNm]	M [kNm]	N [kN]	ε [%]	Sm [mm]	wm [mm]
1	1	22.90	3697.83	205.67	-125.15	246.00	0.000000	0.00	0.00
2	1	34.56	3617.50	229.58	-125.15	407.83	0.000000	0.00	0.00
3	1	34.56	3617.50	240.39	-125.15	569.66	0.000000	0.00	0.00