

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 3

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

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

I F 2 R 2 2 E Z Z C L T R 1 6 0 5 0 0 5 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 3 HPARAMENTO = 6,80 M: 2

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1 ALLEGATO DI CALCOLO – MURO TIPO 3 $H_{PARAMENTO} = 6,80 M$:

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	-3.00	0.000
2	30.00	-3.00	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 6.80 [m]
Altezza paramento libero 6.35 [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	4.00	0.00	0.00
2	0.50	1.20	1.20	2.80	0.00	0.00

Fondazione

Materiale C28/35
Lunghezza mensola di valle 1.20 [m]
Lunghezza mensola di monte 3.40 [m]
Lunghezza totale 5.80 [m]
Inclinazione piano di posa 0.00 [°]
Spessore 1.20 [m]
Spessore magrone 0.20 [m]

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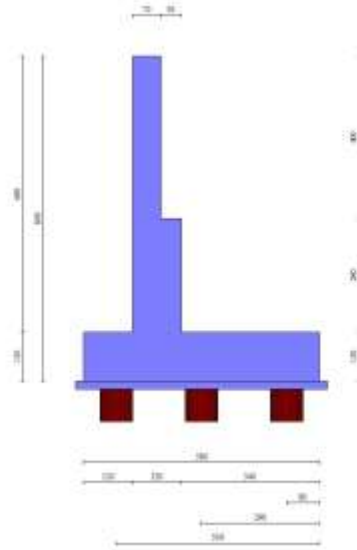


Fig. 1 - Sezione quotata del muro

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	13.00	0.00	Centrati
2	Tipologia palo	2.90	2.40	0.80	4	80.00	13.00	0.00	Sfalsati
3	Tipologia palo	5.00	2.40	0.80	5	80.00	13.00	0.00	Centrati

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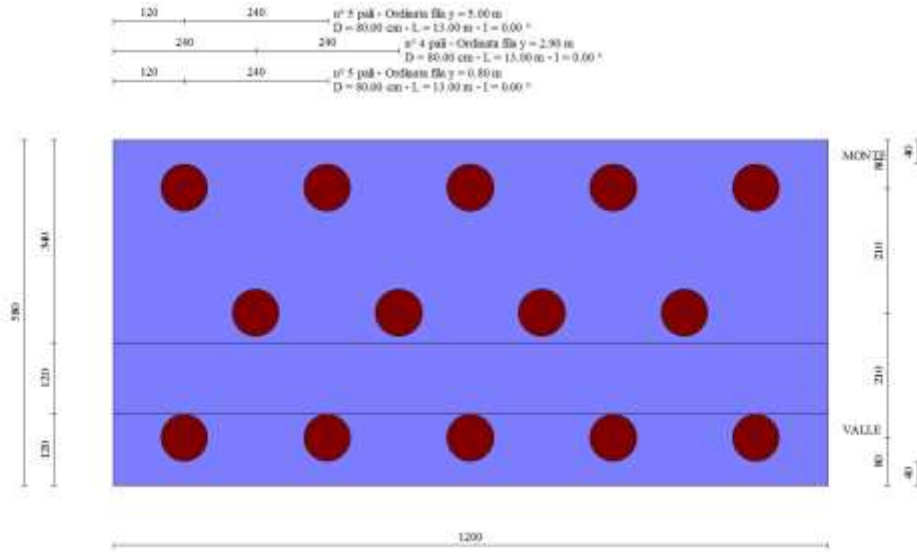


Fig. 2 - Pianta pali

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_{sat}	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)
				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)
				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)
				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)
				38.000	38.000	0	0		0	(MED)

Stratigrafia

Simbologia adottata

n°	Indice dello strato
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/cm ² /cm
Per calcolo pali (solo se presenti)	
Kw	Costante di Winkler orizzontale espressa in Kg/cm ² /cm

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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	8.00	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	---	---

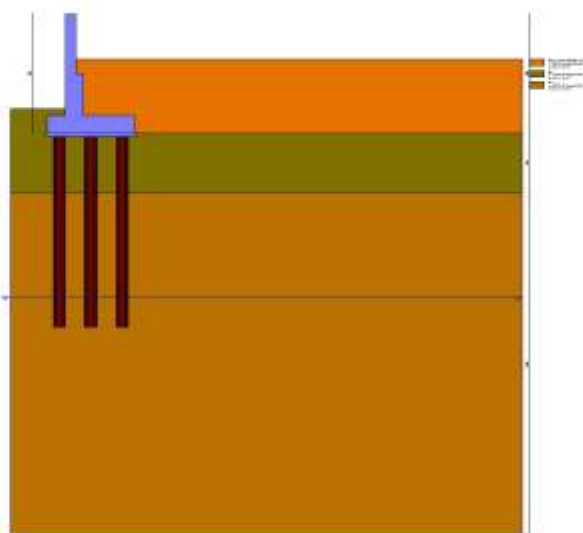


Fig. 3 - Stratigrafia

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				

Condizione n° 2 (BALLAST+ARMAMENTO+MARCIAPIEDE) - 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

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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 $\Psi_0=1.00 - \Psi_1=1.00 - \Psi_2=1.00$

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

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
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		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+MARCIPIEDE	1.30	--	Sfavorevole
LM71	1.45	1.00	Sfavorevole
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	--	Sfavorevole
PESO BA	1.00	--	Sfavorevole
BALLAST+ARMAMENTO+MARCIPIEDE	1.00	--	Sfavorevole
LM71	1.00	0.20	Sfavorevole

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

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Condizione	γ	Ψ	Effetto
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

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

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	Simbolo	U.M.		SLU	SLE
Periodo inizio tratto spettro a velocità costante	Tc*			0.395	0.326
Tipo di sottosuolo - Coefficiente stratigrafico	Ss		B	1.055	1.200
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 ($k_s \sigma_v \tan(\delta) + c_a$)
Correzione angolo di attrito in funzione del tipo di palo (infilso/trivellato)	Attiva
Andamento pressione verticale nel calcolo della portanza alla punta σ_v con la profondità	Pressione geostatica
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
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

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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:

$$w_1=0.20$$

$$w_2=0.30$$

$$w_3=0.40$$

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	245.98	0.00	245.98	0.00	3.90	-5.76
	Peso/Inerzia muro			0.00	321.66/0.00	0.43	-5.74
	Peso/Inerzia terrapieno			0.00	348.77/0.00	2.12	-4.85
	Peso dell'acqua sulla fondazione di valle				0.00	0.00	0.00
	Risultante forze sul muro			10.15	6.50	--	--
	Resistenza pali			-709.28			

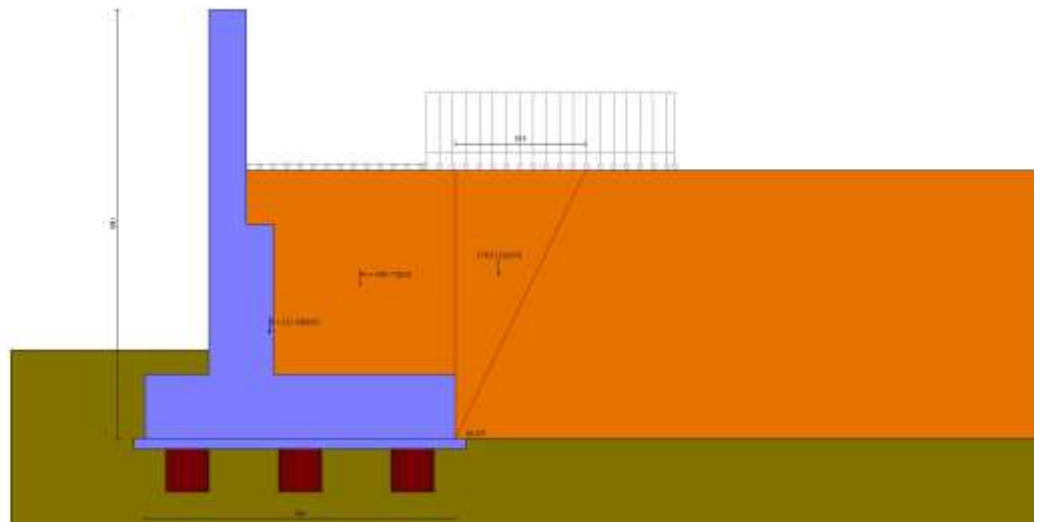


Fig. 4 - Cuneo di spinta (combinazione statica) (Combinazione n° 1)

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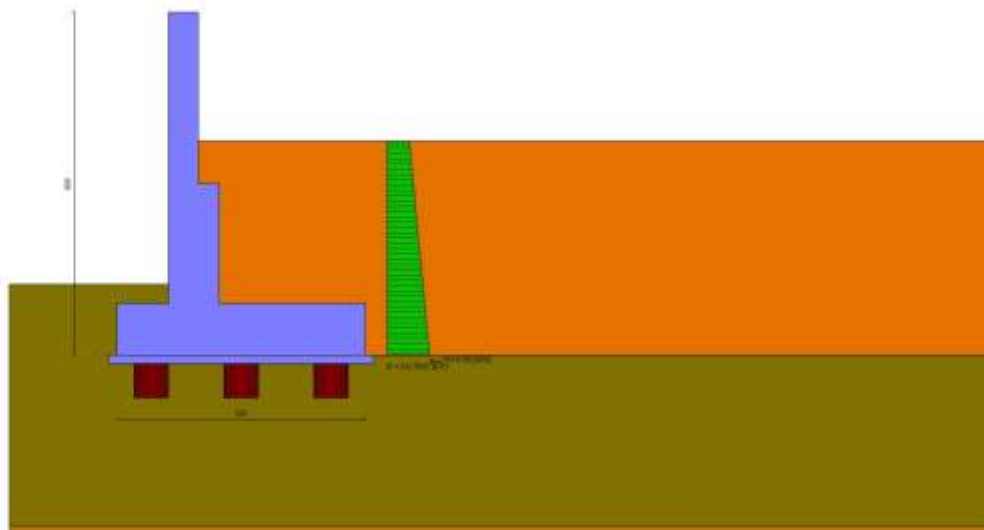


Fig. 5 - Diagramma delle pressioni (combinazione statica) (Combinazione n° 1)

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)	676.94	256.13	634.64	2162.98	0.642
2 - STR (A1-M1-R3)	628.05	354.89	873.82	1967.99	1.158
3 - GEO (A2-M2-R2)	657.98	248.85	604.72	2090.72	0.642
4 - GEO (A2-M2-R2)	628.05	354.89	873.82	1967.99	1.158
5 - SLEF	653.25	188.36	461.84	2071.34	0.436
6 - SLEF	645.38	164.32	361.25	2039.04	0.300
7 - SLEQ	621.74	113.21	233.48	1942.15	0.152
8 - SLEF	628.05	132.09	311.05	1967.99	0.262

Scarichi in testa ai pali

Simbologia adottata

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

Cmb	I _p	N [kN]	M [kNm]	T [kN]
1 - STR (A1-M1-R3)	1	168.94	-244.28	-219.54
	2	580.23	-244.28	-219.54
	3	991.53	-244.28	-219.54

Verifiche geotecniche

Quadro riassuntivo coeff. di sicurezza calcolati

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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)		2.769					
2 - STR (A1-M1-R3)	H	2.062					
3 - GEO (A2-M2-R2)					4.028		
4 - GEO (A2-M2-R2)	H				3.359		

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	Td	FS _o
		[kN]	[kN]	
2 - STR (A1-M1-R3) H	1	-304.19	661.05	2.173
	2	-304.19	627.39	2.062
	3	-304.19	627.39	2.062

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	Pd	FS _v
		[kN]	[kN]	
1 - STR (A1-M1-R3)	1	168.94	2403.62	14.228
	2	580.23	2403.62	4.143
	3	991.53	2403.62	2.424
2 - STR (A1-M1-R3) H	1	-121.29	2357.88	19.440
	2	538.32	2403.62	4.465
	3	1197.94	2403.62	2.006

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	R	FS
	[m]	[m]	
4 - GEO (A2-M2-R2) H		-4.00; 4.50	14.80
			3.359

Dettagli strisce verifiche stabilità

Simbologia adottata

Le ascisse X sono considerate positive verso monte	
Le ordinate Y sono considerate positive verso l'alto	
Origine in testa al muro (spigolo contro terra)	
W	peso della striscia espresso in [kN]
Q _y	carico sulla striscia espresso in [kN]
Q _f	carico acqua sulla striscia espresso in [kN]
α	angolo fra la base della striscia e l'orizzontale espresso in [°] (positivo antiorario)

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Relazione di calcolo IF2R.2.2.E.ZZ.CL.TR.16.0.5.005.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.16.0.5.005</td> <td>A</td> <td>15 di 118</td> </tr> </table>	COMMESSA	LOTTO	CODIFICA	DOCUMENTO	REV.	FOGLIO	IF2R	2.2.E.ZZ	CL	TR.16.0.5.005	A	15 di 118
COMMESSA	LOTTO	CODIFICA	DOCUMENTO	REV.	FOGLIO								
IF2R	2.2.E.ZZ	CL	TR.16.0.5.005	A	15 di 118								

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	12.40	3.78	0.00	8.77 - 0.91	56.051	38.000	0	0.0	
2	34.90	23.62	0.00	0.91	50.454	38.000	0	0.0	
3	53.41	23.62	0.00	0.91	45.165	38.000	0	0.0	
4	68.89	23.62	0.00	0.91	40.335	38.000	0	0.0	
5	82.00	23.62	0.00	0.91	35.832	38.000	0	0.0	
6	94.53	22.32	0.00	0.91	31.573	34.000	0	0.0	
7	107.30	5.12	0.00	0.91	27.502	34.000	0	0.0	
8	115.09	5.12	0.00	0.91	23.578	34.000	0	0.0	
9	121.57	5.12	0.00	0.91	19.768	34.000	0	0.0	
10	166.59	8.05	0.00	0.91	16.047	34.000	0	0.0	
11	122.03	0.00	0.00	0.91	12.395	34.000	0	0.0	
12	71.19	0.00	0.00	0.91	8.794	34.000	0	0.0	
13	69.85	0.00	0.00	0.91	5.227	34.000	0	0.0	
14	70.83	0.00	0.00	0.91	1.681	34.000	0	0.0	
15	70.81	0.00	0.00	0.91	-1.858	34.000	0	0.0	
16	69.77	0.00	0.00	0.91	-5.405	34.000	0	0.0	
17	67.72	0.00	0.00	0.91	-8.973	34.000	0	0.0	
18	64.62	0.00	0.00	0.91	-12.576	34.000	0	0.0	
19	60.43	0.00	0.00	0.91	-16.231	34.000	0	0.0	
20	55.11	0.00	0.00	0.91	-19.956	34.000	0	0.0	
21	48.57	0.00	0.00	0.91	-23.771	34.000	0	0.0	
22	40.71	0.00	0.00	0.91	-27.702	34.000	0	0.0	
23	31.38	0.00	0.00	0.91	-31.781	34.000	0	0.0	
24	20.18	0.00	0.00	0.91	-36.051	34.000	0	0.0	
25	6.96	0.00	0.00	-14.07 - 0.91	-40.207	34.000	0	0.0	

Resistenza al taglio pali 1061.32 [kN]

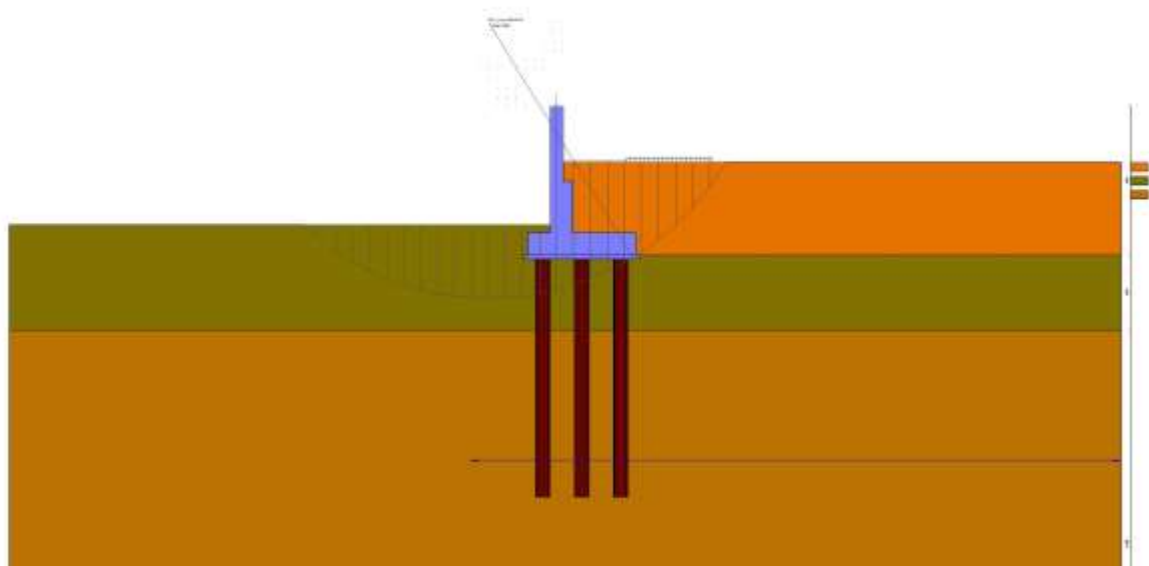


Fig. 6 - Stabilità fronte di scavo - Cerchio critico (Combinazione n° 4)

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)

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.16.0.5.005.A.DOCX	COMMESSA IF2R	LOTTO 2.2.E.ZZ	CODIFICA CL	DOCUMENTO TR.16.0.5.005	REV. A	FOGLIO 16 di 118

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]	Nmin [kN]	Nmax [kN]	Tmin [kN]	Tmax [kN]	Mmin [kNm]	Mmax [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	18.73	20.23	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	30.74	32.24	0.00	10.15	0.00	18.12
17	-1.60	32.45	33.95	0.00	10.15	0.00	19.14
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	21.17
20	-1.90	37.60	39.10	0.00	10.15	0.00	22.18
21	-2.00	39.32	40.82	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	42.75	44.25	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	46.18	47.68	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	51.33	52.83	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	54.76	56.26	0.00	13.14	0.00	32.33
31	-3.00	56.47	57.97	0.00	13.56	0.00	33.34
32	-3.10	58.19	59.69	0.71	15.76	0.03	34.40
33	-3.20	59.90	61.40	1.47	18.03	0.14	35.56
34	-3.30	61.62	63.12	2.28	20.34	0.33	36.82
35	-3.40	63.34	64.84	3.13	22.70	0.60	38.18
36	-3.50	65.05	66.55	4.04	25.11	0.96	39.66
37	-3.60	66.77	68.27	4.99	27.56	1.41	41.26
38	-3.70	68.48	69.98	5.99	30.07	1.96	42.99
39	-3.80	70.20	71.70	7.03	32.62	2.61	44.85
40	-3.90	71.91	73.41	8.13	35.22	3.37	46.85
41	-4.00	73.63	75.13	9.27	37.86	4.23	48.99
42	-4.00	86.48	88.82	9.34	41.04	18.18	63.05
43	-4.10	89.36	91.70	14.71	48.17	19.37	67.35
44	-4.20	92.23	94.57	18.88	54.10	21.02	72.36
45	-4.29	95.11	97.45	21.86	58.84	23.03	77.90
46	-4.39	97.99	100.33	23.67	62.41	25.26	83.84
47	-4.49	100.87	103.21	24.83	65.34	27.63	90.09
48	-4.59	103.75	106.09	26.07	68.33	30.12	96.62
49	-4.69	106.63	108.97	27.38	71.40	32.74	103.46
50	-4.78	109.50	111.84	28.75	74.54	35.48	110.60
51	-4.88	112.38	114.72	30.18	77.73	38.37	118.05
52	-4.98	115.26	117.60	31.67	80.98	41.39	125.81
53	-5.08	118.14	120.48	33.22	84.29	44.57	133.89
54	-5.17	121.02	123.36	34.82	87.65	47.89	142.30
55	-5.27	123.89	126.23	36.47	91.06	51.38	151.04
56	-5.37	126.77	129.11	38.18	94.52	55.03	160.12
57	-5.47	129.65	131.99	39.93	98.04	58.85	169.54
58	-5.57	132.53	134.87	41.74	101.60	62.85	179.31
59	-5.66	135.41	137.75	43.59	105.22	67.02	189.42
60	-5.76	138.29	140.63	45.49	108.88	71.38	199.90
61	-5.86	141.16	143.50	47.44	112.59	75.92	210.73
62	-5.96	144.04	146.38	49.44	116.35	80.66	221.93
63	-6.06	146.92	149.26	51.49	120.16	85.60	233.50
64	-6.15	149.80	152.14	53.59	124.02	90.74	245.44
65	-6.25	152.68	155.02	55.73	127.92	96.09	257.76
66	-6.35	155.56	157.90	57.92	131.87	101.64	270.47
67	-6.35	155.62	157.96	57.97	131.95	101.76	270.74
68	-6.44	158.26	160.60	60.02	135.62	107.06	282.75
69	-6.53	160.90	163.24	62.11	139.33	112.54	295.09

APPALTATORE:



**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.16.0.5.005.A.DOCX

COMMESSA	LOTTO	CODIFICA	DOCUMENTO	REV.	FOGLIO
IF2R	2.2.E.ZZ	CL	TR.16.0.5.005	A	17 di 118

n°	X [m]	Nmin [kN]	Nmax [kN]	Tmin [kN]	Tmax [kN]	Mmin [kNm]	Mmax [kNm]
70	-6.62	163.54	165.88	64.24	143.08	118.21	307.77
71	-6.71	166.18	168.52	66.41	146.86	124.08	320.79
72	-6.80	168.82	171.16	68.62	150.69	130.14	334.15

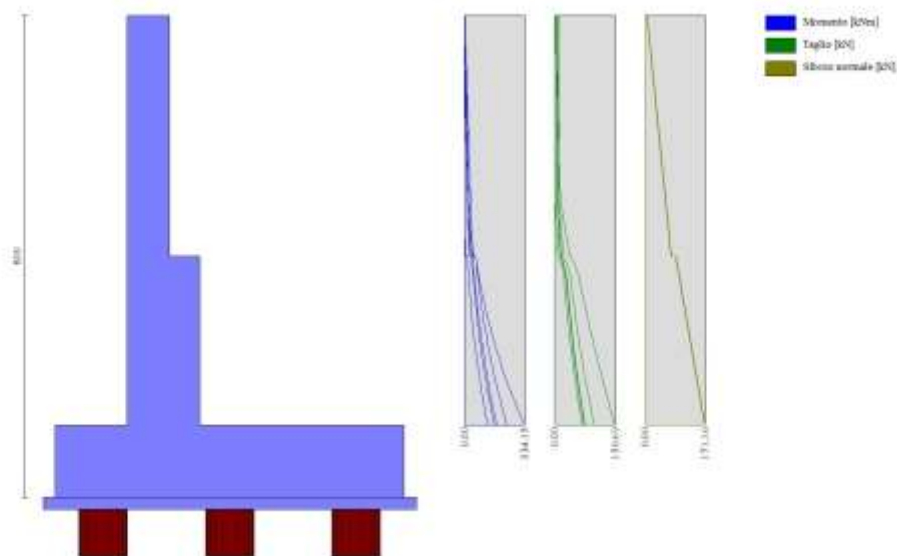


Fig. 7 - Paramento

Piastra fondazione

In	Mx [kNm]	My [kNm]	Mxy [kNm]	Tx [kN]	Ty [kN]	
1	0.12	5.88	-1.75	-2.37	28.25	MAX
	-0.94	1.69	-5.59	-29.75	7.96	MIN
2	-15.87	-11.61	-3.28	-2.64	-9.41	MAX
	-30.75	-30.59	-9.35	-39.68	-11.40	MIN
3	10.58	-4.06	-3.13	72.81	-26.05	MAX
	2.69	-16.54	-11.24	45.59	-38.66	MIN
4	7.09	2.75	1.92	29.78	19.62	MAX
	3.50	1.24	1.15	17.02	3.70	MIN
5	-34.68	-0.56	-10.27	-2.25	37.09	MAX
	-68.17	-5.67	-29.22	-36.78	25.88	MIN
6	-45.17	-39.38	-13.14	55.10	-23.94	MAX
	-87.65	-98.29	-37.05	40.39	-45.60	MIN
7	16.35	10.75	16.66	95.42	-58.19	MAX
	11.37	1.85	10.15	47.14	-103.19	MIN
8	12.12	23.76	10.56	30.29	-4.56	MAX
	7.16	19.01	7.43	13.58	-7.48	MIN
9	29.55	-15.73	-14.32	588.68	-138.01	MAX
	19.74	-65.55	-72.73	315.17	-251.07	MIN
10	-38.60	55.44	0.89	-11.90	7.36	MAX
	-71.21	18.68	0.43	-20.68	-27.72	MIN
11	-32.23	212.09	2.79	-9.46	255.79	MAX
	-42.40	67.96	1.50	-16.49	187.58	MIN
12	-202.15	-201.22	4.64	-6.11	-242.27	MAX
	-379.40	-430.10	2.62	-10.32	-580.02	MIN
13	13.55	45.15	26.59	0.00	-74.42	MAX
	10.31	34.38	16.62	0.00	-138.49	MIN
14	15.94	53.14	26.73	0.00	-8.61	MAX
	10.82	36.06	17.01	0.00	-21.71	MIN
15	28.30	94.33	29.76	0.00	-202.24	MAX
	18.31	61.03	18.78	0.00	-373.86	MIN
16	11.64	38.79	4.51	0.00	-852.35	MAX
	-59.48	-198.25	2.61	0.00	-1699.35	MIN
17	-21.57	0.07	31.46	-7.03	38.19	MAX
	-43.74	-3.96	11.31	-23.10	26.23	MIN
18	-34.46	-38.40	43.39	-58.45	-24.07	MAX
	-69.29	-96.39	16.49	-86.35	-45.19	MIN
19	40.18	-12.92	83.75	-326.56	-139.23	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.16.0.5.005.A.DOCX

COMMESSA LOTTO CODIFICA DOCUMENTO REV. FOGLIO
IF2R 2.2.E.ZZ CL TR.16.0.5.005 A 18 di 118

In	Mx [kNm]	My [kNm]	Mxy [kNm]	Tx [kN]	Ty [kN]	
	26.49	-60.66	20.64	-607.20	-252.87	MIN
20	30.17	100.57	-12.48	0.00	-204.11	MAX
	19.32	64.41	-19.03	0.00	-377.16	MIN
21	30.17	100.57	-12.48	0.00	-204.11	MAX
	19.32	64.41	-19.03	0.00	-377.16	MIN
22	30.17	100.57	-12.48	0.00	-204.11	MAX
	19.32	64.41	-19.03	0.00	-377.16	MIN
23	30.17	100.57	-12.48	0.00	-204.11	MAX
	19.32	64.41	-19.03	0.00	-377.16	MIN
24	30.17	100.57	-12.48	0.00	-204.11	MAX
	19.32	64.41	-19.03	0.00	-377.16	MIN
25	30.17	100.57	-12.48	0.00	-204.11	MAX
	19.32	64.41	-19.03	0.00	-377.16	MIN
26	20.85	-10.84	11.16	-2.24	-9.71	MAX
	10.41	-27.38	4.04	-19.79	-12.63	MIN
27	44.28	-4.17	17.29	-58.64	-29.97	MAX
	22.62	-16.48	6.26	-94.56	-43.94	MIN
28	40.04	16.31	-3.62	-55.99	-67.00	MAX
	26.97	10.39	-5.49	-108.59	-118.17	MIN
29	18.23	60.77	-6.97	0.00	-85.48	MAX
	12.98	43.25	-10.82	0.00	-158.16	MIN
30	18.23	60.77	-6.97	0.00	-85.48	MAX
	12.98	43.25	-10.82	0.00	-158.16	MIN
31	18.23	60.77	-6.97	0.00	-85.48	MAX
	12.98	43.25	-10.82	0.00	-158.16	MIN
32	18.23	60.77	-6.97	0.00	-85.48	MAX
	12.98	43.25	-10.82	0.00	-158.16	MIN
33	18.23	60.77	-6.97	0.00	-85.48	MAX
	12.98	43.25	-10.82	0.00	-158.16	MIN
34	18.23	60.77	-6.97	0.00	-85.48	MAX
	12.98	43.25	-10.82	0.00	-158.16	MIN
35	18.23	60.77	-6.97	0.00	-85.48	MAX
	12.98	43.25	-10.82	0.00	-158.16	MIN
36	18.23	60.77	-6.97	0.00	-85.48	MAX
	12.98	43.25	-10.82	0.00	-158.16	MIN
37	68.82	4.12	-0.22	-3.99	-6.33	MAX
	33.38	1.16	-0.38	-6.86	-9.63	MIN
38	47.15	3.02	-0.20	-2.48	-22.71	MAX
	28.13	-1.19	-0.33	-4.30	-30.84	MIN
39	41.89	24.19	-0.21	-1.22	-45.43	MAX
	27.68	20.05	-0.35	-2.14	-77.16	MIN
40	17.33	57.77	-0.13	0.00	-54.26	MAX
	11.71	39.02	-0.20	0.00	-98.95	MIN
41	17.33	57.77	-0.13	0.00	-54.26	MAX
	11.71	39.02	-0.20	0.00	-98.95	MIN
42	17.33	57.77	-0.13	0.00	-54.26	MAX
	11.71	39.02	-0.20	0.00	-98.95	MIN
43	-51.90	-173.00	32.75	0.00	-206.46	MAX
	-168.43	-561.45	-4.38	0.00	-386.60	MIN
44	-51.31	-171.02	96.88	0.00	-212.76	MAX
	-177.87	-592.91	12.30	0.00	-270.79	MIN
45	-48.26	-160.87	7.24	0.00	-181.77	MAX
	-172.38	-574.59	-11.90	0.00	-391.03	MIN
46	-42.60	-141.99	-8.12	0.00	-149.00	MAX
	-169.10	-563.67	-16.60	0.00	-366.37	MIN
47	-37.03	-123.42	-21.67	0.00	-96.27	MAX
	-166.49	-554.95	-23.23	0.00	-312.19	MIN
48	-19.42	-64.72	-32.56	0.00	51.56	MAX
	-135.97	-453.25	-54.55	0.00	-193.85	MIN
49	17.30	57.67	-6.44	0.00	182.67	MAX
	-40.89	-136.31	-6.87	0.00	-146.63	MIN
50	24.83	-10.70	-4.42	10.61	-8.83	MAX
	12.71	-27.15	-11.80	-12.35	-11.98	MIN
51	47.90	-4.09	-6.50	84.90	-28.90	MAX
	24.71	-16.32	-17.67	53.06	-42.10	MIN
52	42.18	16.10	5.24	103.47	-64.95	MAX
	28.20	10.09	3.45	53.06	-114.64	MIN
53	17.62	58.74	10.84	0.00	-83.02	MAX
	12.62	42.05	6.96	0.00	-153.92	MIN
54	17.62	58.74	10.84	0.00	-83.02	MAX
	12.62	42.05	6.96	0.00	-153.92	MIN
55	17.62	58.74	10.84	0.00	-83.02	MAX
	12.62	42.05	6.96	0.00	-153.92	MIN
56	-15.00	-49.99	41.53	0.00	64.78	MAX
	-131.07	-436.91	18.88	0.00	-172.46	MIN
57	-17.06	-120.29	21.82	33.90	-189.61	MAX
	-67.45	-464.37	-6.84	6.56	-368.80	MIN
58	-4.15	-110.24	44.63	39.21	-206.24	MAX
	-27.02	-461.22	0.76	10.01	-274.22	MIN
59	-24.71	-114.13	5.92	22.21	-167.01	MAX
	-109.97	-473.38	-13.44	0.99	-374.10	MIN
60	-22.85	-104.60	-7.52	12.17	-137.26	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.16.0.5.005.A.DOCX

COMMESSA LOTTO CODIFICA DOCUMENTO REV. FOGLIO
IF2R 2.2.E.ZZ CL TR.16.0.5.005 A 19 di 118

In	Mx [kNm]	My [kNm]	Mxy [kNm]	Tx [kN]	Ty [kN]	
	-119.14	-473.22	-16.98	0.45	-352.10	MIN
61	-9.95	-91.63	-22.64	27.44	-85.20	MAX
	-97.92	-456.99	-24.67	16.48	-298.02	MIN
62	-42.07	-102.61	-34.22	59.42	-2.22	MAX
	-152.82	-471.54	-61.55	29.62	-226.37	MIN
63	-41.56	65.76	-7.07	-3.15	344.05	MAX
	-88.43	-45.98	-7.54	-6.01	-31.06	MIN
64	-36.42	-91.17	47.25	-34.58	10.70	MAX
	-149.58	-460.58	19.29	-70.88	-205.76	MIN
65	-16.06	0.41	-11.44	12.20	39.89	MAX
	-34.17	-3.34	-31.64	-10.23	27.21	MIN
66	-29.56	-38.10	-16.19	73.64	-22.03	MAX
	-60.75	-95.81	-42.81	51.13	-41.67	MIN
67	45.28	-12.97	-19.94	599.77	-135.36	MAX
	29.45	-60.67	-82.47	322.27	-246.18	MIN
68	29.19	97.31	20.46	0.00	-199.46	MAX
	18.74	62.46	13.29	0.00	-369.12	MIN
69	29.19	97.31	20.46	0.00	-199.46	MAX
	18.74	62.46	13.29	0.00	-369.12	MIN
70	29.19	97.31	20.46	0.00	-199.46	MAX
	18.74	62.46	13.29	0.00	-369.12	MIN
71	-27.73	-92.43	8.98	0.00	-64.90	MAX
	-156.68	-522.25	6.39	0.00	-265.37	MIN
72	1.67	-68.20	10.65	-16.67	-54.77	MAX
	-91.95	-435.37	5.83	-36.09	-253.10	MIN
73	-6.69	-81.73	4.59	38.11	-151.91	MAX
	-36.63	-393.61	-10.40	6.14	-328.55	MIN
74	-0.72	-74.54	-3.02	33.61	-188.66	MAX
	-7.37	-363.21	-10.79	6.30	-300.35	MIN
75	-10.43	-76.92	-0.93	36.00	-133.35	MAX
	-66.18	-390.40	-13.92	4.90	-335.30	MIN
76	-10.49	-73.39	-6.66	32.21	-111.30	MAX
	-84.50	-393.60	-13.93	11.73	-320.70	MIN
77	-11.34	-73.37	-7.67	51.47	-77.99	MAX
	-95.80	-391.79	-12.01	39.51	-284.63	MIN
78	-5.31	-81.52	-31.84	295.77	-59.02	MAX
	-97.46	-402.41	-88.95	265.74	-262.21	MIN
79	-189.75	-207.19	-6.75	-1.97	-37.20	MAX
	-271.90	-475.44	-7.22	-7.38	-459.48	MIN
80	0.67	-73.97	75.38	-279.01	-47.38	MAX
	-95.89	-396.15	17.74	-301.78	-244.45	MIN
81	0.49	-58.59	-3.32	-43.92	-51.52	MAX
	-94.08	-379.99	-4.91	-49.51	-246.82	MIN
82	-27.86	56.91	-0.11	-0.86	8.74	MAX
	-52.28	19.44	-0.19	-1.49	-25.25	MIN
83	-23.04	213.51	-0.16	-0.28	260.55	MAX
	-26.86	68.71	-0.28	-0.48	190.26	MIN
84	-196.52	-200.46	-0.24	0.06	-237.39	MAX
	-369.88	-428.65	-0.42	0.04	-571.51	MIN
85	11.16	37.21	-0.21	0.00	-846.57	MAX
	-60.22	-200.73	-0.35	0.00	-1689.37	MIN
86	11.16	37.21	-0.21	0.00	-846.57	MAX
	-60.22	-200.73	-0.35	0.00	-1689.37	MIN
87	11.16	37.21	-0.21	0.00	-846.57	MAX
	-60.22	-200.73	-0.35	0.00	-1689.37	MIN
88	-27.13	-90.42	-2.31	0.00	-86.76	MAX
	-153.53	-511.77	-3.50	0.00	-285.39	MIN
89	-5.22	-68.92	-2.59	-3.00	-78.55	MAX
	-112.18	-443.07	-3.93	-3.28	-275.48	MIN
90	6.10	-53.05	-2.68	-4.02	-63.24	MAX
	-87.35	-379.52	-4.03	-4.53	-258.42	MIN
91	-0.22	-28.41	-8.63	25.68	-108.80	MAX
	-12.17	-261.16	-12.53	3.90	-286.28	MIN
92	0.65	-27.24	-11.19	17.57	-157.65	MAX
	-0.12	-247.98	-13.47	2.02	-322.30	MIN
93	-1.41	-27.54	-8.60	37.55	-93.02	MAX
	-29.03	-261.47	-14.35	8.86	-292.22	MIN
94	-3.90	-29.08	-5.75	52.23	-81.97	MAX
	-48.78	-265.17	-10.24	20.56	-291.13	MIN
95	-12.40	-37.15	-5.90	103.65	-76.73	MAX
	-79.53	-278.54	-11.02	58.31	-285.10	MIN
96	-42.46	-57.59	-4.68	101.47	-99.94	MAX
	-104.21	-294.74	-22.58	52.77	-322.90	MIN
97	-51.29	-82.82	-6.64	2.84	-365.88	MAX
	-149.21	-492.43	-7.13	-5.78	-717.67	MIN
98	-36.85	-54.88	9.45	-62.25	-91.18	MAX
	-105.56	-294.61	-8.90	-92.19	-310.56	MIN
99	-2.26	-32.85	-1.11	-60.08	-58.19	MAX
	-85.41	-279.72	-7.75	-81.75	-260.36	MIN
100	7.05	-25.85	-3.07	-2.98	-52.35	MAX
	-68.19	-270.59	-4.52	-4.74	-255.13	MIN
101	-15.94	0.41	31.24	6.82	40.28	MAX

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II LOTTO FUNZIONALE FRASSO TELESINO – VITULANO
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PROGETTAZIONE:

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PROGETTO ESECUTIVO

Relazione di calcolo

IF2R.2.2.E.ZZ.CL.TR.16.0.5.005.A.DOCX

COMMESSA LOTTO CODIFICA DOCUMENTO REV. FOGLIO
IF2R 2.2.E.ZZ CL TR.16.0.5.005 A 20 di 118

In	Mx [kNm]	My [kNm]	Mxy [kNm]	Tx [kN]	Ty [kN]	
	-33.95	-3.34	11.21	-14.34	27.44	MIN
102	-29.50	-38.20	42.24	-51.87	-21.62	MAX
	-60.64	-95.98	15.86	-74.93	-40.97	MIN
103	45.22	-13.30	81.65	-322.30	-134.67	MAX
	29.41	-61.24	19.46	-599.84	-244.99	MIN
104	28.86	96.19	-13.69	0.00	-198.67	MAX
	18.54	61.80	-21.15	0.00	-367.76	MIN
105	28.86	96.19	-13.69	0.00	-198.67	MAX
	18.54	61.80	-21.15	0.00	-367.76	MIN
106	28.86	96.19	-13.69	0.00	-198.67	MAX
	18.54	61.80	-21.15	0.00	-367.76	MIN
107	-26.20	-87.34	-11.28	0.00	-63.19	MAX
	-154.17	-513.91	-16.10	0.00	-258.90	MIN
108	3.94	-63.55	-11.30	29.90	-52.98	MAX
	-89.52	-428.64	-18.64	10.28	-246.71	MIN
109	3.17	-54.82	-2.30	41.08	-49.54	MAX
	-91.88	-374.98	-3.24	36.19	-240.78	MIN
110	0.87	-30.31	1.41	76.39	-56.16	MAX
	-83.74	-277.17	-7.94	50.80	-255.19	MIN
111	-0.34	4.38	-12.99	7.39	-65.66	MAX
	-2.76	-147.59	-15.08	2.43	-246.27	MIN
112	-0.91	0.37	-10.46	2.80	-114.33	MAX
	-1.21	-148.95	-15.73	0.01	-301.49	MIN
113	-1.98	7.14	-13.39	21.51	-51.51	MAX
	-8.52	-142.57	-14.90	8.00	-257.82	MIN
114	-5.35	6.54	-6.89	46.81	-48.01	MAX
	-21.96	-142.88	-7.81	16.81	-273.11	MIN
115	-12.67	-0.98	-0.77	65.98	-58.13	MAX
	-41.37	-155.44	-4.23	22.27	-281.65	MIN
116	-18.31	-7.34	-0.96	53.21	-100.15	MAX
	-61.17	-185.45	-9.76	16.21	-332.52	MIN
117	-22.38	-17.69	-5.94	6.59	-113.34	MAX
	-78.14	-223.62	-6.41	-3.50	-360.73	MIN
118	-13.70	-7.58	-1.92	-21.31	-95.12	MAX
	-64.70	-188.50	-11.01	-36.84	-326.53	MIN
119	-4.86	-2.27	-6.70	-21.20	-48.75	MAX
	-51.35	-162.43	-10.64	-39.45	-271.55	MIN
120	2.02	2.67	-3.26	-1.19	-37.03	MAX
	-45.23	-155.58	-4.72	-4.13	-264.82	MIN
121	-1.59	-0.87	4.02	37.78	-46.98	MAX
	-50.34	-161.71	-2.63	13.14	-267.68	MIN
122	25.58	-10.69	11.37	7.61	-8.01	MAX
	13.14	-27.14	4.17	-13.56	-11.38	MIN
123	48.43	-4.27	17.13	-54.40	-28.03	MAX
	25.00	-16.64	6.18	-87.22	-40.61	MIN
124	42.25	15.40	-3.89	-53.47	-63.47	MAX
	28.24	8.98	-5.99	-104.19	-112.09	MIN
125	16.92	56.42	-7.32	0.00	-81.30	MAX
	12.21	40.70	-11.44	0.00	-150.96	MIN
126	16.92	56.42	-7.32	0.00	-81.30	MAX
	12.21	40.70	-11.44	0.00	-150.96	MIN
127	16.92	56.42	-7.32	0.00	-81.30	MAX
	12.21	40.70	-11.44	0.00	-150.96	MIN
128	-11.75	-39.18	-24.61	0.00	69.10	MAX
	-125.96	-419.87	-49.01	0.00	-158.50	MIN
129	-31.66	-81.47	-25.66	64.28	15.14	MAX
	-144.74	-447.02	-55.60	28.66	-192.01	MIN
130	6.21	-66.24	-24.14	293.97	-42.69	MAX
	-91.61	-386.23	-83.76	270.19	-231.61	MIN
131	-30.48	-49.88	1.97	88.84	-86.60	MAX
	-102.48	-289.83	-18.47	53.30	-299.77	MIN
132	-7.13	-4.98	4.08	37.50	-91.33	MAX
	-63.08	-187.44	-7.09	14.01	-318.72	MIN
133	3.12	14.68	-14.20	4.60	-28.20	MAX
	-3.70	-60.17	-17.28	-19.04	-192.90	MIN
134	1.27	11.71	-9.88	2.59	-69.72	MAX
	0.01	-67.31	-15.38	-16.57	-237.81	MIN
135	6.19	26.35	-17.43	8.62	-2.99	MAX
	-8.79	-35.51	-22.32	-7.07	-235.73	MIN
136	8.66	38.77	-5.49	27.18	-9.07	MAX
	-11.58	-3.12	-6.21	6.99	-283.19	MIN
137	-10.98	23.06	8.19	54.17	-13.24	MAX
	-15.13	-44.64	5.58	2.44	-263.37	MIN
138	-7.80	8.74	3.09	47.31	-40.33	MAX
	-26.16	-80.51	1.89	-0.72	-236.78	MIN
139	-1.40	8.30	-4.96	7.92	-50.71	MAX
	-30.74	-88.31	-5.39	-2.24	-237.17	MIN
140	-4.09	7.47	-11.71	-2.62	-38.36	MAX
	-30.74	-84.17	-13.44	-29.70	-235.71	MIN
141	-5.52	20.24	-14.89	-2.54	-10.48	MAX
	-21.77	-52.26	-17.74	-31.58	-263.65	MIN
142	-3.50	33.08	-3.18	0.33	-8.37	MAX

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:

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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.16.0.5.005.A.DOCX

COMMESSA LOTTO CODIFICA DOCUMENTO REV. FOGLIO
IF2R 2.2.E.ZZ CL TR.16.0.5.005 A 21 di 118

In	Mx [kNm]	My [kNm]	Mxy [kNm]	Tx [kN]	Ty [kN]	
	-13.09	-14.88	-4.60	-3.46	-290.71	MIN
143	-2.29	20.83	9.31	32.90	-9.17	MAX
	-21.50	-52.60	8.40	-4.12	-261.17	MIN
144	2.30	8.44	6.60	33.10	-35.70	MAX
	-30.61	-85.16	3.25	-3.19	-230.95	MIN
145	70.82	4.19	-0.03	-0.09	-5.04	MAX
	34.53	1.20	-0.05	-0.15	-8.81	MIN
146	48.78	2.78	-0.05	0.07	-21.30	MAX
	29.06	-1.55	-0.08	0.04	-28.43	MIN
147	42.56	22.89	-0.07	0.14	-42.96	MAX
	28.05	19.16	-0.12	0.08	-72.90	MIN
148	16.26	54.21	-0.06	0.00	-51.38	MAX
	11.08	36.95	-0.11	0.00	-93.99	MIN
149	16.26	54.21	-0.06	0.00	-51.38	MAX
	11.08	36.95	-0.11	0.00	-93.99	MIN
150	16.26	54.21	-0.06	0.00	-51.38	MAX
	11.08	36.95	-0.11	0.00	-93.99	MIN
151	23.26	77.54	-0.71	0.00	191.61	MAX
	-32.97	-109.90	-1.48	0.00	-122.96	MIN
152	-33.90	82.84	-0.80	-1.12	353.09	MAX
	-80.76	-26.73	-1.68	-1.63	-7.86	MIN
153	-180.97	-195.16	-0.88	-1.69	-28.13	MAX
	-265.88	-460.85	-1.79	-2.18	-438.18	MIN
154	-41.51	-75.59	-1.10	-2.01	-357.67	MAX
	-145.49	-486.14	-2.14	-2.16	-700.42	MIN
155	-12.59	-14.37	-1.28	-1.43	-107.07	MAX
	-76.87	-223.01	-2.40	-2.07	-348.97	MIN
156	7.89	9.22	-1.35	-0.78	-46.73	MAX
	-31.74	-90.53	-2.50	-1.88	-230.65	MIN
157	18.69	16.51	-14.18	27.13	-4.91	MAX
	2.60	-0.24	-19.42	-49.32	-122.74	MIN
158	1.87	11.67	-6.65	9.90	-33.91	MAX
	0.66	-12.90	-9.49	-23.52	-147.96	MIN
159	11.07	12.25	-22.26	23.27	18.58	MAX
	-31.51	-4.55	-33.72	-55.83	-171.59	MIN
160	51.84	240.34	-4.20	13.50	134.72	MAX
	-20.72	90.27	-4.80	1.00	-408.51	MIN
161	4.33	7.40	24.40	77.67	13.43	MAX
	-29.63	-7.94	13.23	-23.16	-187.25	MIN
162	9.18	12.65	10.00	60.90	-8.70	MAX
	7.04	-6.45	5.92	-30.10	-143.44	MIN
163	11.55	11.93	-3.97	7.61	-15.89	MAX
	-6.97	-15.94	-4.33	-1.88	-139.07	MIN
164	11.36	11.19	-13.83	26.79	-8.50	MAX
	4.36	-8.69	-18.17	-45.18	-144.96	MIN
165	-5.62	1.81	-20.78	20.83	12.99	MAX
	-23.67	-12.32	-32.39	-61.29	-191.98	MIN
166	37.11	232.06	-2.86	1.45	132.20	MAX
	-12.44	87.07	-4.26	-2.88	-419.64	MIN
167	-6.04	1.10	24.09	64.69	13.79	MAX
	-20.60	-12.72	15.08	-26.36	-190.72	MIN
168	16.97	11.12	10.52	50.11	-6.96	MAX
	3.11	-9.68	8.19	-31.60	-142.72	MIN
169	20.21	11.48	-1.31	-0.18	-13.84	MAX
	-9.85	-18.75	-2.44	-1.67	-136.54	MIN
170	25.45	-10.70	-4.23	13.30	-7.92	MAX
	13.06	-27.15	-11.47	-8.02	-11.31	MIN
171	48.27	-4.31	-6.28	87.30	-27.95	MAX
	24.91	-16.70	-17.30	54.44	-40.46	MIN
172	42.11	15.28	5.71	104.46	-63.34	MAX
	28.15	8.80	3.73	53.62	-111.87	MIN
173	16.84	56.14	11.20	0.00	-81.17	MAX
	12.16	40.54	7.18	0.00	-150.73	MIN
174	16.84	56.14	11.20	0.00	-81.17	MAX
	12.16	40.54	7.18	0.00	-150.73	MIN
175	16.84	56.14	11.20	0.00	-81.17	MAX
	12.16	40.54	7.18	0.00	-150.73	MIN
176	-11.29	-37.65	45.99	0.00	68.99	MAX
	-124.91	-416.37	23.11	0.00	-156.59	MIN
177	-30.90	-79.92	52.18	-31.92	15.08	MAX
	-143.64	-444.00	23.95	-66.60	-190.10	MIN
178	7.16	-64.85	80.13	-273.68	-42.60	MAX
	-90.53	-383.77	22.28	-298.12	-229.72	MIN
179	-29.27	-48.71	14.16	-57.47	-86.35	MAX
	-101.50	-288.22	-4.27	-92.82	-298.00	MIN
180	-5.75	-4.13	2.30	-18.10	-90.97	MAX
	-62.25	-186.56	-6.71	-40.19	-317.22	MIN
181	3.79	8.99	-8.22	-0.55	-35.34	MAX
	-30.00	-84.81	-9.57	-34.47	-229.80	MIN
182	18.52	11.41	-10.93	28.29	-6.66	MAX
	3.49	-9.64	-15.35	-50.29	-141.96	MIN
183	4.26	25.85	-5.82	45.54	-0.47	MAX

APPALTATORE:

TELESE S.c.a r.l.
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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.16.0.5.005.A.DOCX

COMMESSA LOTTO CODIFICA DOCUMENTO REV. FOGLIO
IF2R 2.2.E.ZZ CL TR.16.0.5.005 A 22 di 118

In	Mx [kNm]	My [kNm]	Mxy [kNm]	Tx [kN]	Ty [kN]	
	-0.34	5.57	-11.33	-22.23	-55.66	MIN
184	2.29	10.72	-3.81	19.64	-10.68	MAX
	-2.41	4.39	-8.62	-14.36	-56.77	MIN
185	9.84	42.83	-30.48	214.15	-1.24	MAX
	-7.03	-7.46	-100.00	-67.23	-86.32	MIN
186	51.30	76.31	-2.56	7.18	-87.94	MAX
	-152.17	-122.70	-3.24	-1.66	-391.18	MIN
187	7.52	40.59	94.78	78.18	-3.10	MAX
	-3.01	-8.32	24.44	-218.43	-92.59	MIN
188	8.29	21.86	6.47	27.72	-0.41	MAX
	1.94	3.96	0.57	-50.67	-62.99	MIN
189	15.58	14.24	-3.03	7.18	-1.16	MAX
	-2.19	7.01	-3.44	-1.72	-58.10	MIN
190	11.31	20.29	-6.61	47.29	-0.89	MAX
	-2.80	3.19	-13.23	-13.60	-65.10	MIN
191	2.95	37.57	-30.19	215.04	-4.42	MAX
	-1.63	-9.64	-101.28	-65.20	-97.55	MIN
192	39.01	71.90	-2.35	2.58	-90.40	MAX
	-143.10	-124.52	-3.71	-2.27	-399.65	MIN
193	5.84	36.96	94.08	70.68	-4.04	MAX
	-2.63	-9.69	25.54	-219.41	-97.15	MIN
194	16.95	19.01	6.65	20.00	-0.21	MAX
	-5.13	2.92	2.13	-51.16	-64.55	MIN
195	23.70	12.18	-1.12	0.53	-0.41	MAX
	-6.46	6.26	-2.18	-1.38	-57.93	MIN
196	18.51	18.93	-4.39	48.44	0.01	MAX
	-4.97	3.03	-10.95	-18.76	-64.15	MIN
197	-16.07	0.40	-11.29	13.85	40.49	MAX
	-34.17	-3.36	-31.38	-7.61	27.57	MIN
198	-29.67	-38.28	-15.99	74.83	-21.42	MAX
	-60.93	-96.13	-42.46	51.82	-40.63	MIN
199	44.95	-13.53	-19.65	600.05	-134.38	MAX
	29.25	-61.63	-81.98	322.43	-244.47	MIN
200	28.67	95.56	20.86	0.00	-198.35	MAX
	18.43	61.44	13.52	0.00	-367.20	MIN
201	28.67	95.56	20.86	0.00	-198.35	MAX
	18.43	61.44	13.52	0.00	-367.20	MIN
202	28.67	95.56	20.86	0.00	-198.35	MAX
	18.43	61.44	13.52	0.00	-367.20	MIN
203	-25.22	-84.07	12.90	0.00	-63.22	MAX
	-152.03	-506.77	9.48	0.00	-254.82	MIN
204	5.54	-60.29	15.03	-13.55	-52.91	MAX
	-87.29	-422.52	9.27	-32.48	-242.63	MIN
205	5.14	-51.92	0.14	-40.44	-49.20	MAX
	-89.72	-370.05	-0.54	-45.30	-236.77	MIN
206	3.36	-27.95	3.54	-55.18	-55.50	MAX
	-81.79	-274.01	-3.99	-80.05	-251.48	MIN
207	1.24	0.81	-2.15	-17.28	-46.15	MAX
	-48.75	-160.05	-6.89	-39.96	-264.57	MIN
208	0.73	21.88	-11.45	0.46	-8.37	MAX
	-20.36	-52.01	-13.57	-33.67	-258.85	MIN
209	-5.40	1.09	-17.82	23.19	14.43	MAX
	-17.50	-12.51	-28.72	-64.27	-189.23	MIN
210	8.94	36.75	-27.85	216.85	-3.61	MAX
	-2.45	-9.45	-98.17	-68.94	-96.40	MIN
211	-6.76	20.57	-2.56	52.77	-0.22	MAX
	-8.45	1.79	-17.36	19.34	-11.18	MIN
212	0.53	8.72	-0.64	21.83	4.19	MAX
	-0.25	1.90	-3.99	3.72	-5.79	MIN
213	22.26	45.68	-4.36	57.85	-30.91	MAX
	-36.90	-9.58	-35.94	38.40	-45.73	MIN
214	-23.69	-47.02	-1.25	6.88	-183.18	MAX
	-53.44	-201.20	-1.71	-1.73	-250.76	MIN
215	18.92	44.57	33.89	-26.08	-31.32	MAX
	-32.97	-10.09	1.25	-61.46	-47.16	MIN
216	-0.23	19.12	15.82	-10.80	0.72	MAX
	-11.54	0.95	0.05	-56.12	-10.97	MIN
217	11.95	14.53	-1.84	8.52	3.64	MAX
	-3.20	3.43	-2.30	-0.78	-7.60	MIN
218	2.74	18.56	-3.70	54.42	0.15	MAX
	-16.17	0.68	-20.33	27.29	-12.41	MIN
219	10.10	43.50	-4.70	59.32	-32.33	MAX
	-26.97	-10.60	-38.13	40.82	-50.21	MIN
220	-35.71	-47.76	-1.46	4.88	-187.70	MAX
	-44.86	-202.88	-2.47	-1.15	-252.28	MIN
221	8.75	43.18	33.32	-30.92	-32.21	MAX
	-24.20	-10.66	1.81	-61.52	-50.24	MIN
222	8.15	17.92	15.93	-17.08	0.32	MAX
	-19.13	0.53	0.93	-56.35	-12.59	MIN
223	19.76	13.56	-0.72	1.95	3.70	MAX
	-8.24	3.18	-1.46	-0.80	-8.21	MIN
224	9.71	17.84	-2.37	54.80	0.44	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.16.0.5.005.A.DOCX

COMMESSA LOTTO CODIFICA DOCUMENTO REV. FOGLIO
IF2R 2.2.E.ZZ CL TR.16.0.5.005 A 23 di 118

In	Mx [kNm]	My [kNm]	Mxy [kNm]	Tx [kN]	Ty [kN]	
	-19.11	0.58	-18.81	21.09	-12.46	MIN
225	8.64	43.01	-3.27	60.12	-32.00	MAX
	-21.12	-10.59	-36.06	35.28	-50.00	MIN
226	-27.99	56.88	0.00	0.00	8.96	MAX
	-52.49	19.43	0.00	0.00	-24.88	MIN
227	-23.23	213.28	0.00	0.00	261.17	MAX
	-27.14	68.57	0.00	0.00	190.63	MIN
228	-196.73	-200.84	0.00	0.00	-236.83	MAX
	-370.24	-429.30	0.00	0.00	-570.53	MIN
229	10.97	36.58	0.00	0.00	-845.95	MAX
	-60.55	-201.83	0.00	0.00	-1688.28	MIN
230	10.97	36.58	0.00	0.00	-845.95	MAX
	-60.55	-201.83	0.00	0.00	-1688.28	MIN
231	10.97	36.58	0.00	0.00	-845.95	MAX
	-60.55	-201.83	0.00	0.00	-1688.28	MIN
232	-25.49	-84.97	0.00	0.00	-86.31	MAX
	-150.21	-500.69	0.00	0.00	-278.57	MIN
233	-2.61	-63.60	0.00	0.00	-77.96	MAX
	-108.77	-433.70	0.00	0.00	-268.67	MIN
234	9.28	-48.42	0.00	0.00	-62.25	MAX
	-84.09	-372.08	0.00	0.00	-251.80	MIN
235	10.98	-22.24	0.00	0.00	-50.95	MAX
	-65.34	-266.02	0.00	0.00	-249.12	MIN
236	6.40	5.12	0.00	0.00	-35.50	MAX
	-43.00	-153.38	0.00	0.00	-259.90	MIN
237	0.97	34.52	0.00	0.00	-7.00	MAX
	-10.20	-14.28	0.00	0.00	-287.15	MIN
238	37.75	231.84	0.00	0.00	133.22	MAX
	-7.79	87.78	0.00	0.00	-417.45	MIN
239	38.91	71.46	0.00	0.00	-89.76	MAX
	-138.51	-124.25	0.00	0.00	-398.61	MIN
240	-36.27	-47.70	0.00	0.00	-187.43	MAX
	-41.46	-203.18	0.00	0.00	-251.99	MIN
241	11.00	22.31	-1.56	81.06	3.65	MAX
	-11.08	1.40	-10.81	45.78	-0.02	MIN
242	0.63	-0.74	-1.24	57.67	18.77	MAX
	-1.18	-2.07	-6.90	32.68	3.21	MIN
243	21.99	7.21	-3.59	80.62	-35.18	MAX
	-26.40	3.98	-25.73	45.99	-47.64	MIN
244	15.05	-7.16	-0.81	10.76	-67.20	MAX
	-36.68	-47.47	-0.94	0.71	-102.14	MIN
245	15.46	6.00	24.52	-43.65	-35.40	MAX
	-23.03	3.60	2.12	-57.53	-47.75	MIN
246	-5.58	18.32	9.82	-41.93	5.96	MAX
	-7.14	0.26	0.38	-54.78	1.58	MIN
247	4.90	-0.32	-1.03	15.54	7.59	MAX
	-26.29	-0.47	-1.62	3.05	2.44	MIN
248	-2.97	18.27	-2.39	84.85	5.09	MAX
	-11.44	0.22	-12.99	48.27	1.04	MIN
249	7.26	5.89	-4.00	84.61	-37.18	MAX
	-16.72	3.53	-27.44	48.72	-48.88	MIN
250	3.42	-7.30	-0.81	11.96	-68.13	MAX
	-27.09	-47.84	-1.62	2.05	-104.62	MIN
251	5.99	5.79	24.28	-44.21	-37.30	MAX
	-13.93	3.50	2.40	-60.90	-48.95	MIN
252	2.47	18.07	10.06	-43.94	4.79	MAX
	-14.23	0.16	0.85	-61.86	0.85	MIN
253	12.79	-0.54	-0.39	6.04	6.97	MAX
	-31.01	-0.61	-0.93	0.79	2.33	MIN
254	4.02	18.04	-1.64	73.95	4.82	MAX
	-14.19	0.17	-11.90	45.87	0.89	MIN
255	5.92	5.72	-3.20	72.97	-37.25	MAX
	-10.87	3.51	-26.04	46.44	-48.88	MIN
256	2.94	-7.30	0.00	0.00	-67.99	MAX
	-22.57	-47.95	0.00	0.00	-104.60	MIN
257	-16.07	0.40	31.38	7.61	40.49	MAX
	-34.17	-3.36	11.29	-13.85	27.57	MIN
258	-29.67	-38.28	42.46	-51.82	-21.42	MAX
	-60.93	-96.13	15.99	-74.83	-40.63	MIN
259	44.95	-13.53	81.98	-322.43	-134.38	MAX
	29.25	-61.63	19.65	-600.05	-244.47	MIN
260	28.67	95.56	-13.52	0.00	-198.35	MAX
	18.43	61.44	-20.86	0.00	-367.20	MIN
261	28.67	95.56	-13.52	0.00	-198.35	MAX
	18.43	61.44	-20.86	0.00	-367.20	MIN
262	28.67	95.56	-13.52	0.00	-198.35	MAX
	18.43	61.44	-20.86	0.00	-367.20	MIN
263	-25.22	-84.07	-9.48	0.00	-63.22	MAX
	-152.03	-506.77	-12.90	0.00	-254.82	MIN
264	5.54	-60.29	-9.27	32.48	-52.91	MAX
	-87.29	-422.52	-15.03	13.55	-242.63	MIN
265	5.14	-51.92	0.54	45.30	-49.20	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:

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.16.0.5.005.A.DOCX

COMMESSA	LOTTO	CODIFICA	DOCUMENTO	REV.	FOGLIO
IF2R	2.2.E.ZZ	CL	TR.16.0.5.005	A	24 di 118

In	Mx [kNm]	My [kNm]	Mxy [kNm]	Tx [kN]	Ty [kN]	
	-89.72	-370.05	-0.14	40.44	-236.77	MIN
266	3.36	-27.95	3.99	80.05	-55.50	MAX
	-81.79	-274.01	-3.54	55.18	-251.48	MIN
267	1.24	0.81	6.89	39.96	-46.15	MAX
	-48.75	-160.05	2.15	17.28	-264.57	MIN
268	0.73	21.88	13.57	33.67	-8.37	MAX
	-20.36	-52.01	11.45	-0.46	-258.85	MIN
269	-5.40	1.09	28.72	64.27	14.43	MAX
	-17.50	-12.51	17.82	-23.19	-189.23	MIN
270	8.94	36.75	98.17	68.94	-3.61	MAX
	-2.45	-9.45	27.85	-216.85	-96.40	MIN
271	8.64	43.01	36.06	-35.28	-32.00	MAX
	-21.12	-10.59	3.27	-60.12	-50.00	MIN
272	5.92	5.72	26.04	-46.44	-37.25	MAX
	-10.87	3.51	3.20	-72.97	-48.88	MIN
273	25.45	-10.70	11.47	8.02	-7.92	MAX
	13.06	-27.15	4.23	-13.30	-11.31	MIN
274	48.27	-4.31	17.30	-54.44	-27.95	MAX
	24.91	-16.70	6.28	-87.30	-40.46	MIN
275	42.11	15.28	-3.73	-53.62	-63.34	MAX
	28.15	8.80	-5.71	-104.46	-111.87	MIN
276	16.84	56.14	-7.18	0.00	-81.17	MAX
	12.16	40.54	-11.20	0.00	-150.73	MIN
277	16.84	56.14	-7.18	0.00	-81.17	MAX
	12.16	40.54	-11.20	0.00	-150.73	MIN
278	16.84	56.14	-7.18	0.00	-81.17	MAX
	12.16	40.54	-11.20	0.00	-150.73	MIN
279	-11.29	-37.65	-23.11	0.00	68.99	MAX
	-124.91	-416.37	-45.99	0.00	-156.59	MIN
280	-30.90	-79.92	-23.95	66.60	15.08	MAX
	-143.64	-444.00	-52.18	31.92	-190.10	MIN
281	7.16	-64.85	-22.28	298.12	-42.60	MAX
	-90.53	-383.77	-80.13	273.68	-229.72	MIN
282	-29.27	-48.71	4.27	92.82	-86.35	MAX
	-101.50	-288.22	-14.16	57.47	-298.00	MIN
283	-5.75	-4.13	6.71	40.19	-90.97	MAX
	-62.25	-186.56	-2.30	18.10	-317.22	MIN
284	3.79	8.99	9.57	34.47	-35.34	MAX
	-30.00	-84.81	8.22	0.55	-229.80	MIN
285	18.52	11.41	15.35	50.29	-6.66	MAX
	3.49	-9.64	10.93	-28.29	-141.96	MIN
286	18.51	18.93	10.95	18.76	0.01	MAX
	-4.97	3.03	4.39	-48.44	-64.15	MIN
287	9.71	17.84	18.81	-21.09	0.44	MAX
	-19.11	0.58	2.37	-54.80	-12.46	MIN
288	4.02	18.04	11.90	-45.87	4.82	MAX
	-14.19	0.17	1.64	-73.95	0.89	MIN
289	70.82	4.19	0.05	0.15	-5.04	MAX
	34.53	1.20	0.03	0.09	-8.81	MIN
290	48.78	2.78	0.08	-0.04	-21.30	MAX
	29.06	-1.55	0.05	-0.07	-28.43	MIN
291	42.56	22.89	0.12	-0.08	-42.96	MAX
	28.05	19.16	0.07	-0.14	-72.90	MIN
292	16.26	54.21	0.11	0.00	-51.38	MAX
	11.08	36.95	0.06	0.00	-93.99	MIN
293	16.26	54.21	0.11	0.00	-51.38	MAX
	11.08	36.95	0.06	0.00	-93.99	MIN
294	16.26	54.21	0.11	0.00	-51.38	MAX
	11.08	36.95	0.06	0.00	-93.99	MIN
295	23.26	77.54	1.48	0.00	191.61	MAX
	-32.97	-109.90	0.71	0.00	-122.96	MIN
296	-33.90	82.84	1.68	1.63	353.09	MAX
	-80.76	-26.73	0.80	1.12	-7.86	MIN
297	-180.97	-195.16	1.79	2.18	-28.13	MAX
	-265.88	-460.85	0.88	1.69	-438.18	MIN
298	-41.51	-75.59	2.14	2.16	-357.67	MAX
	-145.49	-486.14	1.10	2.01	-700.42	MIN
299	-12.59	-14.37	2.40	2.07	-107.07	MAX
	-76.87	-223.01	1.28	1.43	-348.97	MIN
300	7.89	9.22	2.50	1.88	-46.73	MAX
	-31.74	-90.53	1.35	0.78	-230.65	MIN
301	20.21	11.48	2.44	1.67	-13.84	MAX
	-9.85	-18.75	1.31	0.18	-136.54	MIN
302	23.70	12.18	2.18	1.38	-0.41	MAX
	-6.46	6.26	1.12	-0.53	-57.93	MIN
303	19.76	13.56	1.46	0.80	3.70	MAX
	-8.24	3.18	0.72	-1.95	-8.21	MIN
304	12.79	-0.54	0.93	-0.79	6.97	MAX
	-31.01	-0.61	0.39	-6.04	2.33	MIN
305	25.58	-10.69	-4.17	13.56	-8.01	MAX
	13.14	-27.14	-11.37	-7.61	-11.38	MIN
306	48.43	-4.27	-6.18	87.22	-28.03	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.16.0.5.005.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.16.0.5.005	A	25 di 118

In	Mx [kNm]	My [kNm]	Mxy [kNm]	Tx [kN]	Ty [kN]	
	25.00	-16.64	-17.13	54.40	-40.61	MIN
307	42.25	15.40	5.99	104.19	-63.47	MAX
	28.24	8.98	3.89	53.47	-112.09	MIN
308	16.92	56.42	11.44	0.00	-81.30	MAX
	12.21	40.70	7.32	0.00	-150.96	MIN
309	16.92	56.42	11.44	0.00	-81.30	MAX
	12.21	40.70	7.32	0.00	-150.96	MIN
310	16.92	56.42	11.44	0.00	-81.30	MAX
	12.21	40.70	7.32	0.00	-150.96	MIN
311	-11.75	-39.18	49.01	0.00	69.10	MAX
	-125.96	-419.87	24.61	0.00	-158.50	MIN
312	-31.66	-81.47	55.60	-28.66	15.14	MAX
	-144.74	-447.02	25.66	-64.28	-192.01	MIN
313	6.21	-66.24	83.76	-270.19	-42.69	MAX
	-91.61	-386.23	24.14	-293.97	-231.61	MIN
314	-30.48	-49.88	18.47	-53.30	-86.60	MAX
	-102.48	-289.83	-1.97	-88.84	-299.77	MIN
315	-7.13	-4.98	7.09	-14.01	-91.33	MAX
	-63.08	-187.44	-4.08	-37.50	-318.72	MIN
316	2.30	8.44	-3.25	3.19	-35.70	MAX
	-30.61	-85.16	-6.60	-33.10	-230.95	MIN
317	16.97	11.12	-8.19	31.60	-6.96	MAX
	3.11	-9.68	-10.52	-50.11	-142.72	MIN
318	16.95	19.01	-2.13	51.16	-0.21	MAX
	-5.13	2.92	-6.65	-20.00	-64.55	MIN
319	8.15	17.92	-0.93	56.35	0.32	MAX
	-19.13	0.53	-15.93	17.08	-12.59	MIN
320	2.47	18.07	-0.85	61.86	4.79	MAX
	-14.23	0.16	-10.06	43.94	0.85	MIN
321	-15.94	0.41	-11.21	14.34	40.28	MAX
	-33.95	-3.34	-31.24	-6.82	27.44	MIN
322	-29.50	-38.20	-15.86	74.93	-21.62	MAX
	-60.64	-95.98	-42.24	51.87	-40.97	MIN
323	45.22	-13.30	-19.46	599.84	-134.67	MAX
	29.41	-61.24	-81.65	322.30	-244.99	MIN
324	28.86	96.19	21.15	0.00	-198.67	MAX
	18.54	61.80	13.69	0.00	-367.76	MIN
325	28.86	96.19	21.15	0.00	-198.67	MAX
	18.54	61.80	13.69	0.00	-367.76	MIN
326	28.86	96.19	21.15	0.00	-198.67	MAX
	18.54	61.80	13.69	0.00	-367.76	MIN
327	-26.20	-87.34	16.10	0.00	-63.19	MAX
	-154.17	-513.91	11.28	0.00	-258.90	MIN
328	3.94	-63.55	18.64	-10.28	-52.98	MAX
	-89.52	-428.64	11.30	-29.90	-246.71	MIN
329	3.17	-54.82	3.24	-36.19	-49.54	MAX
	-91.88	-374.98	2.30	-41.08	-240.78	MIN
330	0.87	-30.31	7.94	-50.80	-56.16	MAX
	-83.74	-277.17	-1.41	-76.39	-255.19	MIN
331	-1.59	-0.87	2.63	-13.14	-46.98	MAX
	-50.34	-161.71	-4.02	-37.78	-267.68	MIN
332	-2.29	20.83	-8.40	4.12	-9.17	MAX
	-21.50	-52.60	-9.31	-32.90	-261.17	MIN
333	-6.04	1.10	-15.08	26.36	13.79	MAX
	-20.60	-12.72	-24.09	-64.69	-190.72	MIN
334	5.84	36.96	-25.54	219.41	-4.04	MAX
	-2.63	-9.69	-94.08	-70.68	-97.15	MIN
335	8.75	43.18	-1.81	61.52	-32.21	MAX
	-24.20	-10.66	-33.32	30.92	-50.24	MIN
336	5.99	5.79	-2.40	60.90	-37.30	MAX
	-13.93	3.50	-24.28	44.21	-48.95	MIN
337	-27.86	56.91	0.19	1.49	8.74	MAX
	-52.28	19.44	0.11	0.86	-25.25	MIN
338	-23.04	213.51	0.28	0.48	260.55	MAX
	-26.86	68.71	0.16	0.28	190.26	MIN
339	-196.52	-200.46	0.42	-0.04	-237.39	MAX
	-369.88	-428.65	0.24	-0.06	-571.51	MIN
340	11.16	37.21	0.35	0.00	-846.57	MAX
	-60.22	-200.73	0.21	0.00	-1689.37	MIN
341	11.16	37.21	0.35	0.00	-846.57	MAX
	-60.22	-200.73	0.21	0.00	-1689.37	MIN
342	11.16	37.21	0.35	0.00	-846.57	MAX
	-60.22	-200.73	0.21	0.00	-1689.37	MIN
343	-27.13	-90.42	3.50	0.00	-86.76	MAX
	-153.53	-511.77	2.31	0.00	-285.39	MIN
344	-5.22	-68.92	3.93	3.28	-78.55	MAX
	-112.18	-443.07	2.59	3.00	-275.48	MIN
345	6.10	-53.05	4.03	4.53	-63.24	MAX
	-87.35	-379.52	2.68	4.02	-258.42	MIN
346	7.05	-25.85	4.52	4.74	-52.35	MAX
	-68.19	-270.59	3.07	2.98	-255.13	MIN
347	2.02	2.67	4.72	4.13	-37.03	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.16.0.5.005.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.16.0.5.005	A	26 di 118

In	Mx [kNm]	My [kNm]	Mxy [kNm]	Tx [kN]	Ty [kN]	
	-45.23	-155.58	3.26	1.19	-264.82	MIN
348	-3.50	33.08	4.60	3.46	-8.37	MAX
	-13.09	-14.88	3.18	-0.33	-290.71	MIN
349	37.11	232.06	4.26	2.88	132.20	MAX
	-12.44	87.07	2.86	-1.45	-419.64	MIN
350	39.01	71.90	3.71	2.27	-90.40	MAX
	-143.10	-124.52	2.35	-2.58	-399.65	MIN
351	-35.71	-47.76	2.47	1.15	-187.70	MAX
	-44.86	-202.88	1.46	-4.88	-252.28	MIN
352	3.42	-7.30	1.62	-2.05	-68.13	MAX
	-27.09	-47.84	0.81	-11.96	-104.62	MIN
353	-16.06	0.41	31.64	10.23	39.89	MAX
	-34.17	-3.34	11.44	-12.20	27.21	MIN
354	-29.56	-38.10	42.81	-51.13	-22.03	MAX
	-60.75	-95.81	16.19	-73.64	-41.67	MIN
355	45.28	-12.97	82.47	-322.27	-135.36	MAX
	29.45	-60.67	19.94	-599.77	-246.18	MIN
356	29.19	97.31	-13.29	0.00	-199.46	MAX
	18.74	62.46	-20.46	0.00	-369.12	MIN
357	29.19	97.31	-13.29	0.00	-199.46	MAX
	18.74	62.46	-20.46	0.00	-369.12	MIN
358	29.19	97.31	-13.29	0.00	-199.46	MAX
	18.74	62.46	-20.46	0.00	-369.12	MIN
359	-27.73	-92.43	-6.39	0.00	-64.90	MAX
	-156.68	-522.25	-8.98	0.00	-265.37	MIN
360	1.67	-68.20	-5.83	36.09	-54.77	MAX
	-91.95	-435.37	-10.65	16.67	-253.10	MIN
361	0.49	-58.59	4.91	49.51	-51.52	MAX
	-94.08	-379.99	3.32	43.92	-246.82	MIN
362	-2.26	-32.85	7.75	81.75	-58.19	MAX
	-85.41	-279.72	1.11	60.08	-260.36	MIN
363	-4.86	-2.27	10.64	39.45	-48.75	MAX
	-51.35	-162.43	6.70	21.20	-271.55	MIN
364	-5.52	20.24	17.74	31.58	-10.48	MAX
	-21.77	-52.26	14.89	2.54	-263.65	MIN
365	-5.62	1.81	32.39	61.29	12.99	MAX
	-23.67	-12.32	20.78	-20.83	-191.98	MIN
366	2.95	37.57	101.28	65.20	-4.42	MAX
	-1.63	-9.64	30.19	-215.04	-97.55	MIN
367	10.10	43.50	38.13	-40.82	-32.33	MAX
	-26.97	-10.60	4.70	-59.32	-50.21	MIN
368	7.26	5.89	27.44	-48.72	-37.18	MAX
	-16.72	3.53	4.00	-84.61	-48.88	MIN
369	24.83	-10.70	11.80	12.35	-8.83	MAX
	12.71	-27.15	4.42	-10.61	-11.98	MIN
370	47.90	-4.09	17.67	-53.06	-28.90	MAX
	24.71	-16.32	6.50	-84.90	-42.10	MIN
371	42.18	16.10	-3.45	-53.06	-64.95	MAX
	28.20	10.09	-5.24	-103.47	-114.64	MIN
372	17.62	58.74	-6.96	0.00	-83.02	MAX
	12.62	42.05	-10.84	0.00	-153.92	MIN
373	17.62	58.74	-6.96	0.00	-83.02	MAX
	12.62	42.05	-10.84	0.00	-153.92	MIN
374	17.62	58.74	-6.96	0.00	-83.02	MAX
	12.62	42.05	-10.84	0.00	-153.92	MIN
375	-15.00	-49.99	-18.88	0.00	64.78	MAX
	-131.07	-436.91	-41.53	0.00	-172.46	MIN
376	-36.42	-91.17	-19.29	70.88	10.70	MAX
	-149.58	-460.58	-47.25	34.58	-205.76	MIN
377	0.67	-73.97	-17.74	301.78	-47.38	MAX
	-95.89	-396.15	-75.38	279.01	-244.45	MIN
378	-36.85	-54.88	8.90	92.19	-91.18	MAX
	-105.56	-294.61	-9.45	62.25	-310.56	MIN
379	-13.70	-7.58	11.01	36.84	-95.12	MAX
	-64.70	-188.50	1.92	21.31	-326.53	MIN
380	-4.09	7.47	13.44	29.70	-38.36	MAX
	-30.74	-84.17	11.71	2.62	-235.71	MIN
381	11.36	11.19	18.17	45.18	-8.50	MAX
	4.36	-8.69	13.83	-26.79	-144.96	MIN
382	11.31	20.29	13.23	13.60	-0.89	MAX
	-2.80	3.19	6.61	-47.29	-65.10	MIN
383	2.74	18.56	20.33	-27.29	0.15	MAX
	-16.17	0.68	3.70	-54.42	-12.41	MIN
384	-2.97	18.27	12.99	-48.27	5.09	MAX
	-11.44	0.22	2.39	-84.85	1.04	MIN
385	68.82	4.12	0.38	6.86	-6.33	MAX
	33.38	1.16	0.22	3.99	-9.63	MIN
386	47.15	3.02	0.33	4.30	-22.71	MAX
	28.13	-1.19	0.20	2.48	-30.84	MIN
387	41.89	24.19	0.35	2.14	-45.43	MAX
	27.68	20.05	0.21	1.22	-77.16	MIN
388	17.33	57.77	0.20	0.00	-54.26	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.16.0.5.005.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.16.0.5.005	A	27 di 118

In	Mx [kNm]	My [kNm]	Mxy [kNm]	Tx [kN]	Ty [kN]	
	11.71	39.02	0.13	0.00	-98.95	MIN
389	17.33	57.77	0.20	0.00	-54.26	MAX
	11.71	39.02	0.13	0.00	-98.95	MIN
390	17.33	57.77	0.20	0.00	-54.26	MAX
	11.71	39.02	0.13	0.00	-98.95	MIN
391	17.30	57.67	6.87	0.00	182.67	MAX
	-40.89	-136.31	6.44	0.00	-146.63	MIN
392	-41.56	65.76	7.54	6.01	344.05	MAX
	-88.43	-45.98	7.07	3.15	-31.06	MIN
393	-189.75	-207.19	7.22	7.38	-37.20	MAX
	-271.90	-475.44	6.75	1.97	-459.48	MIN
394	-51.29	-82.82	7.13	5.78	-365.88	MAX
	-149.21	-492.43	6.64	-2.84	-717.67	MIN
395	-22.38	-17.69	6.41	3.50	-113.34	MAX
	-78.14	-223.62	5.94	-6.59	-360.73	MIN
396	-1.40	8.30	5.39	2.24	-50.71	MAX
	-30.74	-88.31	4.96	-7.92	-237.17	MIN
397	11.55	11.93	4.33	1.88	-15.89	MAX
	-6.97	-15.94	3.97	-7.61	-139.07	MIN
398	15.58	14.24	3.44	1.72	-1.16	MAX
	-2.19	7.01	3.03	-7.18	-58.10	MIN
399	11.95	14.53	2.30	0.78	3.64	MAX
	-3.20	3.43	1.84	-8.52	-7.60	MIN
400	4.90	-0.32	1.62	-3.05	7.59	MAX
	-26.29	-0.47	1.03	-15.54	2.44	MIN
401	20.85	-10.84	-4.04	19.79	-9.71	MAX
	10.41	-27.38	-11.16	2.24	-12.63	MIN
402	44.28	-4.17	-6.26	94.56	-29.97	MAX
	22.62	-16.48	-17.29	58.64	-43.94	MIN
403	40.04	16.31	5.49	108.59	-67.00	MAX
	26.97	10.39	3.62	55.99	-118.17	MIN
404	18.23	60.77	10.82	0.00	-85.48	MAX
	12.98	43.25	6.97	0.00	-158.16	MIN
405	18.23	60.77	10.82	0.00	-85.48	MAX
	12.98	43.25	6.97	0.00	-158.16	MIN
406	18.23	60.77	10.82	0.00	-85.48	MAX
	12.98	43.25	6.97	0.00	-158.16	MIN
407	-19.42	-64.72	54.55	0.00	51.56	MAX
	-135.97	-453.25	32.56	0.00	-193.85	MIN
408	-42.07	-102.61	61.55	-29.62	-2.22	MAX
	-152.82	-471.54	34.22	-59.42	-226.37	MIN
409	-5.31	-81.52	88.95	-265.74	-59.02	MAX
	-97.46	-402.41	31.84	-295.77	-262.21	MIN
410	-42.46	-57.59	22.58	-52.77	-99.94	MAX
	-104.21	-294.74	4.68	-101.47	-322.90	MIN
411	-18.31	-7.34	9.76	-16.21	-100.15	MAX
	-61.17	-185.45	0.96	-53.21	-332.52	MIN
412	-7.80	8.74	-1.89	0.72	-40.33	MAX
	-26.16	-80.51	-3.09	-47.31	-236.78	MIN
413	9.18	12.65	-5.92	30.10	-8.70	MAX
	7.04	-6.45	-10.00	-60.90	-143.44	MIN
414	8.29	21.86	-0.57	50.67	-0.41	MAX
	1.94	3.96	-6.47	-27.72	-62.99	MIN
415	-0.23	19.12	-0.05	56.12	0.72	MAX
	-11.54	0.95	-15.82	10.80	-10.97	MIN
416	-5.58	18.32	-0.38	54.78	5.96	MAX
	-7.14	0.26	-9.82	41.93	1.58	MIN
417	-21.57	0.07	-11.31	23.10	38.19	MAX
	-43.74	-3.96	-31.46	7.03	26.23	MIN
418	-34.46	-38.40	-16.49	86.35	-24.07	MAX
	-69.29	-96.39	-43.39	58.45	-45.19	MIN
419	40.18	-12.92	-20.64	607.20	-139.23	MAX
	26.49	-60.66	-83.75	326.56	-252.87	MIN
420	30.17	100.57	19.03	0.00	-204.11	MAX
	19.32	64.41	12.48	0.00	-377.16	MIN
421	30.17	100.57	19.03	0.00	-204.11	MAX
	19.32	64.41	12.48	0.00	-377.16	MIN
422	30.17	100.57	19.03	0.00	-204.11	MAX
	19.32	64.41	12.48	0.00	-377.16	MIN
423	-37.03	-123.42	23.23	0.00	-96.27	MAX
	-166.49	-554.95	21.67	0.00	-312.19	MIN
424	-9.95	-91.63	24.67	-16.48	-85.20	MAX
	-97.92	-456.99	22.64	-27.44	-298.02	MIN
425	-11.34	-73.37	12.01	-39.51	-77.99	MAX
	-95.80	-391.79	7.67	-51.47	-284.63	MIN
426	-12.40	-37.15	11.02	-58.31	-76.73	MAX
	-79.53	-278.54	5.90	-103.65	-285.10	MIN
427	-12.67	-0.98	4.23	-22.27	-58.13	MAX
	-41.37	-155.44	0.77	-65.98	-281.65	MIN
428	-10.98	23.06	-5.58	-2.44	-13.24	MAX
	-15.13	-44.64	-8.19	-54.17	-263.37	MIN
429	4.33	7.40	-13.23	23.16	13.43	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.16.0.5.005.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.16.0.5.005	A	28 di 118

In	Mx [kNm]	My [kNm]	Mxy [kNm]	Tx [kN]	Ty [kN]	
	-29.63	-7.94	-24.40	-77.67	-187.25	MIN
430	7.52	40.59	-24.44	218.43	-3.10	MAX
	-3.01	-8.32	-94.78		-92.59	MIN
431	18.92	44.57	-1.25	61.46	-31.32	MAX
	-32.97	-10.09	-33.89	26.08	-47.16	MIN
432	15.46	6.00	-2.12	57.53	-35.40	MAX
	-23.03	3.60	-24.52	43.65	-47.75	MIN
433	-38.60	55.44	-0.43	20.68	7.36	MAX
	-71.21	18.68	-0.89	11.90	-27.72	MIN
434	-32.23	212.09	-1.50	16.49	255.79	MAX
	-42.40	67.96	-2.79	9.46	187.58	MIN
435	-202.15	-201.22	-2.62	10.32	-242.27	MAX
	-379.40	-430.10	-4.64	6.11	-580.02	MIN
436	11.64	38.79	-2.61	0.00	-852.35	MAX
	-59.48	-198.25	-4.51	0.00	-1699.35	MIN
437	11.64	38.79	-2.61	0.00	-852.35	MAX
	-59.48	-198.25	-4.51	0.00	-1699.35	MIN
438	11.64	38.79	-2.61	0.00	-852.35	MAX
	-59.48	-198.25	-4.51	0.00	-1699.35	MIN
439	-42.60	-141.99	16.60	0.00	-149.00	MAX
	-169.10	-563.67	8.12	0.00	-366.37	MIN
440	-22.85	-104.60	16.98	-0.45	-137.26	MAX
	-119.14	-473.22	7.52	-12.17	-352.10	MIN
441	-10.49	-73.39	13.93	-11.73	-111.30	MAX
	-84.50	-393.60	6.66	-32.21	-320.70	MIN
442	-3.90	-29.08	10.24	-20.56	-81.97	MAX
	-48.78	-265.17	5.75	-52.23	-291.13	MIN
443	-5.35	6.54	7.81	-16.81	-48.01	MAX
	-21.96	-142.88	6.89	-46.81	-273.11	MIN
444	8.66	38.77	6.21	-6.99	-9.07	MAX
	-11.58	-3.12	5.49	-27.18	-283.19	MIN
445	51.84	240.34	4.80	-1.00	134.72	MAX
	-20.72	90.27	4.20	-13.50	-408.51	MIN
446	51.30	76.31	3.24	1.66	-87.94	MAX
	-152.17	-122.70	2.56	-7.18	-391.18	MIN
447	-23.69	-47.02	1.71	1.73	-183.18	MAX
	-53.44	-201.20	1.25	-6.88	-250.76	MIN
448	15.05	-7.16	0.94	-0.71	-67.20	MAX
	-36.68	-47.47	0.81	-10.76	-102.14	MIN
449	-34.68	-0.56	29.22	36.78	37.09	MAX
	-68.17	-5.67	10.27	2.25	25.88	MIN
450	-45.17	-39.38	37.05	-40.39	-23.94	MAX
	-87.65	-98.29	13.14	-55.10	-45.60	MIN
451	29.55	-15.73	72.73	-315.17	-138.01	MAX
	19.74	-65.55	14.32	-588.68	-251.07	MIN
452	28.30	94.33	-18.78	0.00	-202.24	MAX
	18.31	61.03	-29.76	0.00	-373.86	MIN
453	28.30	94.33	-18.78	0.00	-202.24	MAX
	18.31	61.03	-29.76	0.00	-373.86	MIN
454	28.30	94.33	-18.78	0.00	-202.24	MAX
	18.31	61.03	-29.76	0.00	-373.86	MIN
455	-48.26	-160.87	11.90	0.00	-181.77	MAX
	-172.38	-574.59	-7.24	0.00	-391.03	MIN
456	-24.71	-114.13	13.44	-0.99	-167.01	MAX
	-109.97	-473.38	-5.92	-22.21	-374.10	MIN
457	-10.43	-76.92	13.92	-4.90	-133.35	MAX
	-66.18	-390.40	0.93	-36.00	-335.30	MIN
458	-1.41	-27.54	14.35	-8.86	-93.02	MAX
	-29.03	-261.47	8.60	-37.55	-292.22	MIN
459	-1.98	7.14	14.90	-8.00	-51.51	MAX
	-8.52	-142.57	13.39	-21.51	-257.82	MIN
460	6.19	26.35	22.32	7.07	-2.99	MAX
	-8.79	-35.51	17.43	-8.62	-235.73	MIN
461	11.07	12.25	33.72	55.83	18.58	MAX
	-31.51	-4.55	22.26	-23.27	-171.59	MIN
462	9.84	42.83	100.00	67.23	-1.24	MAX
	-7.03	-7.46	30.48	-214.15	-86.32	MIN
463	22.26	45.68	35.94	-38.40	-30.91	MAX
	-36.90	-9.58	4.36	-57.85	-45.73	MIN
464	21.99	7.21	25.73	-45.99	-35.18	MAX
	-26.40	3.98	3.59	-80.62	-47.64	MIN
465	-15.87	-11.61	9.35	39.68	-9.41	MAX
	-30.75	-30.59	3.28	2.64	-11.40	MIN
466	10.58	-4.06	11.24	-45.59	-26.05	MAX
	2.69	-16.54	3.13	-72.81	-38.66	MIN
467	16.35	10.75	-10.15	-47.14	-58.19	MAX
	11.37	1.85	-16.66	-95.42	-103.19	MIN
468	13.55	45.15	-16.62	0.00	-74.42	MAX
	10.31	34.38	-26.59	0.00	-138.49	MIN
469	13.55	45.15	-16.62	0.00	-74.42	MAX
	10.31	34.38	-26.59	0.00	-138.49	MIN
470	13.55	45.15	-16.62	0.00	-74.42	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.16.0.5.005.A.DOCX

COMMESSA LOTTO CODIFICA DOCUMENTO REV. FOGLIO
IF2R 2.2.E.ZZ CL TR.16.0.5.005 A 29 di 118

In	Mx [kNm]	My [kNm]	Mxy [kNm]	Tx [kN]	Ty [kN]	
	10.31	34.38	-26.59	0.00	-138.49	MIN
471	-51.90	-173.00	4.38	0.00	-206.46	MAX
	-168.43	-561.45	-32.75	0.00	-386.60	MIN
472	-17.06	-120.29	6.84	-6.56	-189.61	MAX
	-67.45	-464.37	-21.82	-33.90	-368.80	MIN
473	-6.69	-81.73	10.40	-6.14	-151.91	MAX
	-36.63	-393.61	-4.59	-38.11	-328.55	MIN
474	-0.22	-28.41	12.53	-3.90	-108.80	MAX
	-12.17	-261.16	8.63	-25.68	-286.28	MIN
475	-0.34	4.38	15.08	-2.43	-65.66	MAX
	-2.76	-147.59	12.99	-7.39	-246.27	MIN
476	3.12	14.68	17.28	19.04	-28.20	MAX
	-3.70	-60.17	14.20	-4.60	-192.90	MIN
477	18.69	16.51	19.42	49.32	-4.91	MAX
	2.60	-0.24	14.18	-27.13	-122.74	MIN
478	4.26	25.85	11.33	22.23	-0.47	MAX
	-0.34	5.57	5.82	-45.54	-55.66	MIN
479	-6.76	20.57	17.36	-19.34	-0.22	MAX
	-8.45	1.79	2.56	-52.77	-11.18	MIN
480	11.00	22.31	10.81	-45.78	3.65	MAX
	-11.08	1.40	1.56	-81.06	-0.02	MIN
481	0.12	5.88	5.59	29.75	28.25	MAX
	-0.94	1.69	1.75	2.37	7.96	MIN
482	7.09	2.75	-1.15	-17.02	19.62	MAX
	3.50	1.24	-1.92	-29.78	3.70	MIN
483	12.12	23.76	-7.43	-13.58	-4.56	MAX
	7.16	19.01	-10.56	-30.29	-7.48	MIN
484	15.94	53.14	-17.01	0.00	-8.61	MAX
	10.82	36.06	-26.73	0.00	-21.71	MIN
485	15.94	53.14	-17.01	0.00	-8.61	MAX
	10.82	36.06	-26.73	0.00	-21.71	MIN
486	15.94	53.14	-17.01	0.00	-8.61	MAX
	10.82	36.06	-26.73	0.00	-21.71	MIN
487	-51.31	-171.02	-12.30	0.00	-212.76	MAX
	-177.87	-592.91	-96.88	0.00	-270.79	MIN
488	-4.15	-110.24	-0.76	-10.01	-206.24	MAX
	-27.02	-461.22	-44.63	-39.21	-274.22	MIN
489	-0.72	-74.54	10.79	-6.30	-188.66	MAX
	-7.37	-363.21	3.02	-33.61	-300.35	MIN
490	0.65	-27.24	13.47	-2.02	-157.65	MAX
	-0.12	-247.98	11.19	-17.57	-322.30	MIN
491	-0.91	0.37	15.73	-0.01	-114.33	MAX
	-1.21	-148.95	10.46	-2.80	-301.49	MIN
492	1.27	11.71	15.38	16.57	-69.72	MAX
	0.01	-67.31	9.88	-2.59	-237.81	MIN
493	1.87	11.67	9.49	23.52	-33.91	MAX
	0.66	-12.90	6.65	-9.90	-147.96	MIN
494	2.29	10.72	8.62	14.36	-10.68	MAX
	-2.41	4.39	3.81	-19.64	-56.77	MIN
495	0.53	8.72	3.99	-3.72	4.19	MAX
	-0.25	1.90	0.64	-21.83	-5.79	MIN
496	0.63	-0.74	6.90	-32.68	18.77	MAX
	-1.18	-2.07	1.24	-57.67	3.21	MIN

APPALTATORE:	 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.16.0.5.005.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.16.0.5.005	A	30 di 118

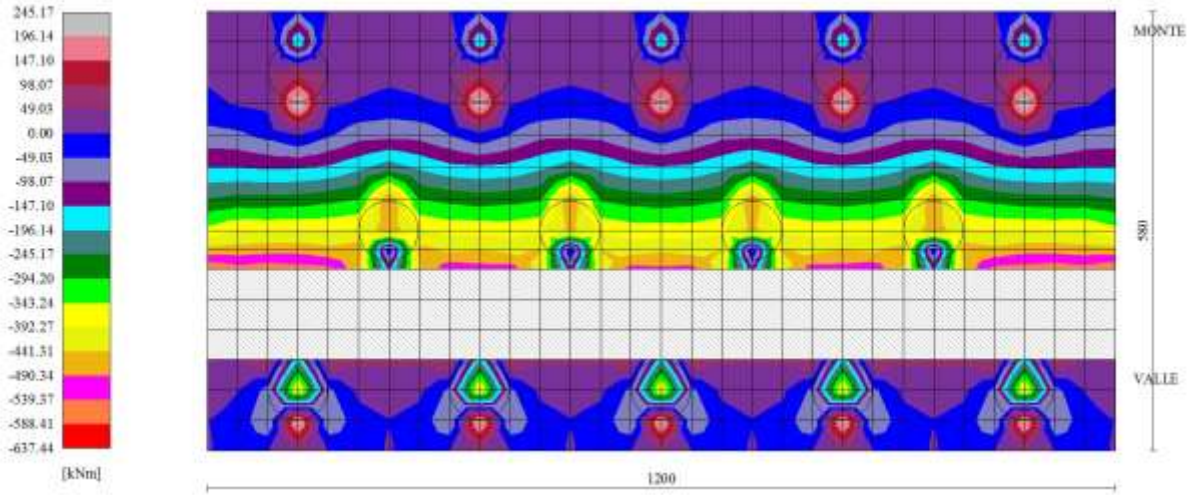


Fig. 8 - Piastra fondazione - Momento My (Combinazione n° 2)

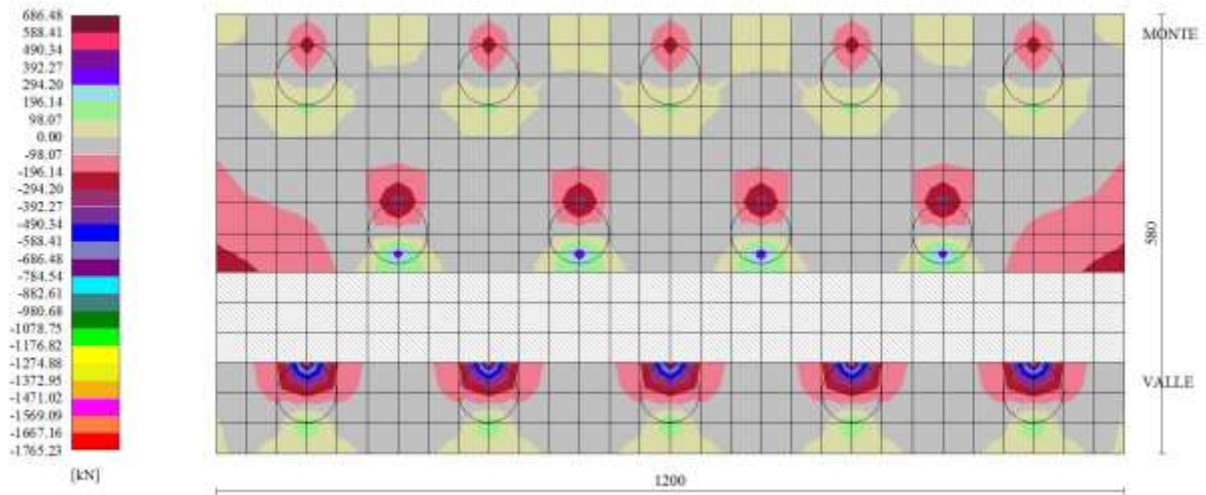


Fig. 9 - Piastra fondazione - Taglio TyMAX (Combinazione n° 7)

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.16.0.5.005.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.16.0.5.005</td> <td>A</td> <td>31 di 118</td> </tr> </table>	COMMESSA	LOTTO	CODIFICA	DOCUMENTO	REV.	FOGLIO	IF2R	2.2.E.ZZ	CL	TR.16.0.5.005	A	31 di 118
COMMESSA	LOTTO	CODIFICA	DOCUMENTO	REV.	FOGLIO								
IF2R	2.2.E.ZZ	CL	TR.16.0.5.005	A	31 di 118								

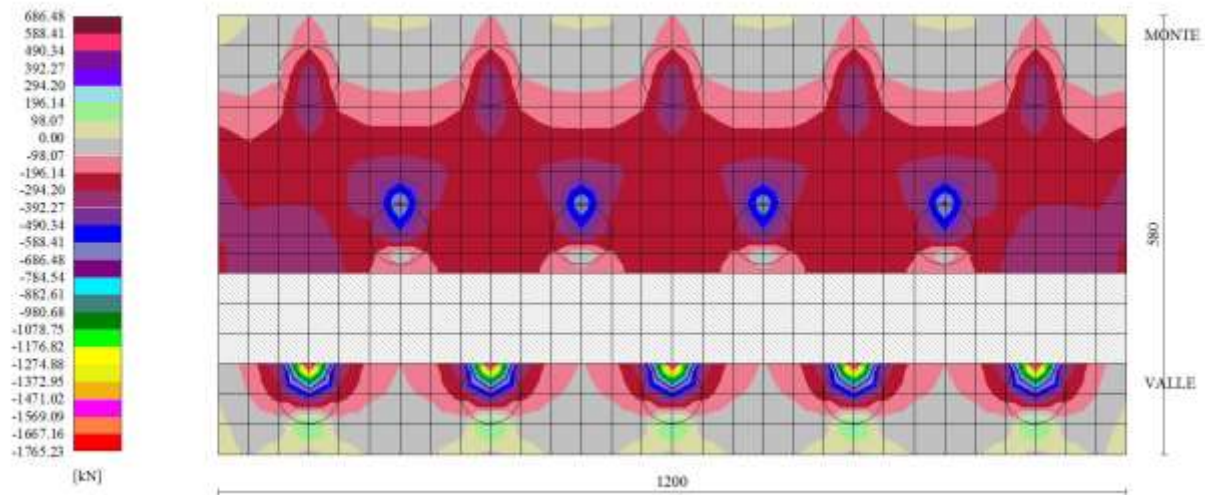


Fig. 10 - Piastra fondazione - Taglio T_{yMIN} (Combinazione n° 2)

Sollecitazioni pali

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)

Palo n° 1

n°	Y [m]	Ne [kN]	Nr [kN]	Te [kN]	Tr [kN]	Me [kNm]	Mr [kNm]
1	0.00	168.94	4223.38	-219.54	-833.71	-244.28	-927.65
25	3.12	203.66	4156.31	2.71	-340.01	108.45	1181.46
39	4.94	220.47	4057.56	28.10	259.45	71.68	1262.15
101	13.00	264.48	0.00	-0.12	-1.12	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	580.23	5689.44	-219.54	-790.34	-244.28	-879.40
25	3.12	610.31	5622.39	2.69	-292.54	108.30	1087.13
39	4.94	620.09	5523.67	28.06	252.01	71.59	1104.56
55	7.02	624.14	5355.97	16.75	267.02	21.95	491.67

Palo n° 3

n°	Y [m]	Ne [kN]	Nr [kN]	Te [kN]	Tr [kN]	Me [kNm]	Mr [kNm]
1	0.00	991.53	5689.27	-219.54	-790.34	-244.28	-879.40
25	3.12	1016.95	5622.23	2.69	-292.54	108.30	1087.13
36	4.55	1019.88	5548.42	27.55	181.32	82.45	1185.41
39	4.94	1019.71	5523.51	28.06	252.01	71.59	1104.56
101	13.00	925.47	4582.01	-0.12	-1.09	0.00	0.00

Palo n° 1

n°	Y [m]	Ne [kN]	Nr [kN]	Te [kN]	Tr [kN]	Me [kNm]	Mr [kNm]
1	0.00	-121.29	-3032.23	-304.19	-859.36	-366.13	-1034.37
26	3.25	-78.81	-2959.58	7.68	-324.53	174.07	1202.32
39	4.94	-54.79	-2866.42	45.06	247.63	118.48	1277.34
101	13.00	77.83	0.00	-0.19	-1.08	0.00	0.00

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.16.0.5.005.A.DOCX

COMMESSA LOTTO CODIFICA DOCUMENTO REV. FOGLIO
IF2R 2.2.E.ZZ CL TR.16.0.5.005 A 32 di 118

Palo n° 2

n°	Y [m]	Ne [kN]	Nr [kN]	Te [kN]	Tr [kN]	Me [kNm]	Mr [kNm]
1	0.00	538.32	5689.42	-304.19	-815.61	-366.14	-981.71
26	3.25	569.80	5616.78	7.64	-276.13	173.51	1104.16
39	4.94	579.38	5523.63	44.91	242.44	118.11	1118.52
59	7.54	584.84	5304.81	21.68	231.90	24.16	375.11

Palo n° 3

n°	Y [m]	Ne [kN]	Nr [kN]	Te [kN]	Tr [kN]	Me [kNm]	Mr [kNm]
1	0.00	1197.94	5689.27	-304.19	-815.61	-366.14	-981.71
26	3.25	1221.32	5616.64	7.64	-276.13	173.51	1104.16
31	3.90	1222.00	5585.36	34.42	-45.32	160.64	1225.77
39	4.94	1220.27	5523.51	44.91	242.44	118.11	1118.52
101	13.00	1091.33	4581.99	-0.19	-1.05	0.00	0.00

Palo n° 1

n°	Y [m]	Ne [kN]	Nr [kN]	Te [kN]	Tr [kN]	Me [kNm]	Mr [kNm]
1	0.00	284.88	5689.50	-161.45	-814.97	-168.36	-849.86
25	3.12	318.29	5622.46	2.67	-321.27	71.92	1200.79
38	4.81	332.18	5532.27	18.67	243.53	49.28	1282.56
96	12.35	357.74	4665.12	-0.56	-6.14	-0.22	-2.65

Palo n° 2

n°	Y [m]	Ne [kN]	Nr [kN]	Te [kN]	Tr [kN]	Me [kNm]	Mr [kNm]
1	0.00	559.93	5689.42	-161.45	-770.90	-168.36	-803.91
25	3.12	590.23	5622.38	2.66	-273.44	71.89	1102.57
38	4.81	599.83	5532.19	18.66	239.58	49.26	1122.81
57	7.28	605.07	5330.86	9.69	243.96	11.36	410.86

Palo n° 3

n°	Y [m]	Ne [kN]	Nr [kN]	Te [kN]	Tr [kN]	Me [kNm]	Mr [kNm]
1	0.00	834.99	5689.65	-161.45	-770.90	-168.36	-803.91
25	3.12	862.18	5622.60	2.66	-273.44	71.89	1102.57
38	4.81	867.49	5532.41	18.66	239.58	49.26	1122.81
42	5.33	867.77	5496.90	18.03	296.31	39.62	985.25
101	13.00	799.68	4582.34	-0.08	-1.12	0.00	0.00

Palo n° 1

n°	Y [m]	Ne [kN]	Nr [kN]	Te [kN]	Tr [kN]	Me [kNm]	Mr [kNm]
1	0.00	343.92	5689.65	-140.84	-816.72	-147.79	-856.98
25	3.12	376.66	5622.60	1.29	-323.03	58.11	1199.13
39	4.94	390.49	5523.88	15.05	267.27	38.53	1252.09
81	10.40	408.11	4958.47	0.02	37.48	-1.07	14.74

Palo n° 2

n°	Y [m]	Ne [kN]	Nr [kN]	Te [kN]	Tr [kN]	Me [kNm]	Mr [kNm]
1	0.00	553.18	5689.53	-140.84	-772.88	-147.79	-810.98
25	3.12	583.56	5622.49	1.29	-275.53	58.09	1101.88
39	4.94	593.81	5523.77	15.05	257.81	38.52	1093.98
58	7.41	598.73	5318.09	7.50	234.32	8.54	380.79

Palo n° 3

n°	Y [m]	Ne [kN]	Nr [kN]	Te [kN]	Tr [kN]	Me [kNm]	Mr [kNm]
1	0.00	762.44	5689.73	-140.84	-772.88	-147.79	-810.98
25	3.12	790.46	5622.66	1.29	-275.53	58.09	1101.88
39	4.94	797.13	5523.90	15.05	257.81	38.52	1093.98
45	5.72	797.77	5467.87	13.73	311.93	27.09	869.56
101	13.00	741.39	4582.08	-0.06	-1.11	0.00	0.00

Palo n° 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.16.0.5.005.A.DOCX

COMMESSA LOTTO CODIFICA DOCUMENTO REV. FOGLIO
IF2R 2.2.E.ZZ CL TR.16.0.5.005 A 33 di 118

n°	Y [m]	Ne [kN]	Nr [kN]	Te [kN]	Tr [kN]	Me [kNm]	Mr [kNm]
1	0.00	412.64	5689.50	-97.04	-810.28	-99.52	-830.96
25	3.12	444.61	5622.46	0.25	-316.58	35.73	1205.06
39	4.94	457.26	5523.74	9.25	270.10	24.12	1247.55
71	9.10	469.22	5129.66	1.42	119.92	0.30	116.60

Palo n° 2

n°	Y [m]	Ne [kN]	Nr [kN]	Te [kN]	Tr [kN]	Me [kNm]	Mr [kNm]
1	0.00	532.92	5689.57	-97.04	-766.61	-99.52	-786.18
25	3.12	563.53	5622.53	0.25	-269.36	35.73	1107.29
39	4.94	574.13	5523.81	9.25	259.94	24.12	1090.19
59	7.54	579.79	5305.02	4.42	222.59	4.87	346.70

Palo n° 3

n°	Y [m]	Ne [kN]	Nr [kN]	Te [kN]	Tr [kN]	Me [kNm]	Mr [kNm]
1	0.00	653.20	5689.48	-97.04	-766.61	-99.52	-786.18
25	3.12	682.45	5622.44	0.25	-269.36	35.73	1107.29
39	4.94	690.99	5523.72	9.25	259.94	24.12	1090.19
51	6.50	693.22	5403.44	6.90	295.38	10.91	623.54

Palo n° 1

n°	Y [m]	Ne [kN]	Nr [kN]	Te [kN]	Tr [kN]	Me [kNm]	Mr [kNm]
1	0.00	369.02	5689.46	-113.22	-803.03	-113.04	-801.77
25	3.12	401.49	5622.42	1.56	-309.34	45.35	1211.65
38	4.81	414.06	5532.24	11.77	249.35	31.17	1275.18
77	9.88	430.21	5029.61	0.50	63.94	-0.71	40.42

Palo n° 2

n°	Y [m]	Ne [kN]	Nr [kN]	Te [kN]	Tr [kN]	Me [kNm]	Mr [kNm]
1	0.00	538.32	5689.41	-113.22	-759.28	-113.04	-758.09
25	3.12	568.87	5622.36	1.56	-262.31	45.35	1113.00
38	4.81	578.81	5532.16	11.77	244.25	31.17	1117.20
59	7.54	584.84	5304.81	5.37	221.12	5.68	342.43

Palo n° 3

n°	Y [m]	Ne [kN]	Nr [kN]	Te [kN]	Tr [kN]	Me [kNm]	Mr [kNm]
1	0.00	707.62	5689.46	-113.22	-759.28	-113.04	-758.09
25	3.12	736.26	5622.42	1.56	-262.31	45.35	1113.00
38	4.81	743.55	5532.23	11.77	244.25	31.17	1117.20
48	6.11	745.16	5436.59	9.65	309.60	16.71	737.05
101	13.00	697.34	4582.21	-0.05	-1.13	0.00	0.00

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.													
Relazione di calcolo IF2R.2.2.E.ZZ.CL.TR.16.0.5.005.A.DOCX	<table border="1"> <thead> <tr> <th>COMMESSA</th> <th>LOTTO</th> <th>CODIFICA</th> <th>DOCUMENTO</th> <th>REV.</th> <th>FOGLIO</th> </tr> </thead> <tbody> <tr> <td>IF2R</td> <td>2.2.E.ZZ</td> <td>CL</td> <td>TR.16.0.5.005</td> <td>A</td> <td>34 di 118</td> </tr> </tbody> </table>	COMMESSA	LOTTO	CODIFICA	DOCUMENTO	REV.	FOGLIO	IF2R	2.2.E.ZZ	CL	TR.16.0.5.005	A	34 di 118
COMMESSA	LOTTO	CODIFICA	DOCUMENTO	REV.	FOGLIO								
IF2R	2.2.E.ZZ	CL	TR.16.0.5.005	A	34 di 118								

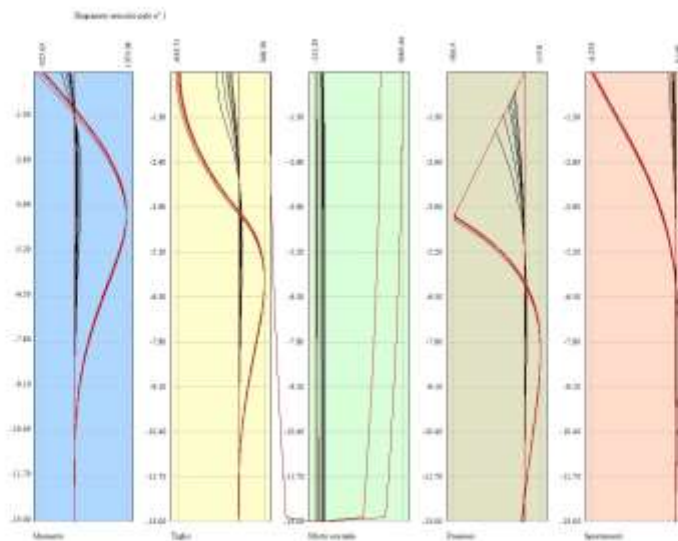


Fig. 11 - Sollecitazioni palo (Palo n° 1) (Inviluppo)

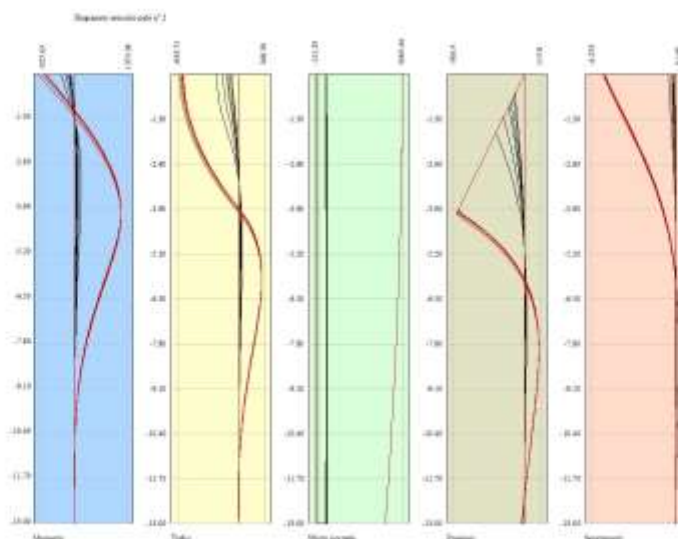


Fig. 12 - Sollecitazioni palo (Palo n° 2) (Inviluppo)

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: 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.16.0.5.005.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.16.0.5.005</td> <td>A</td> <td>35 di 118</td> </tr> </table>	COMMESSA	LOTTO	CODIFICA	DOCUMENTO	REV.	FOGLIO	IF2R	2.2.E.ZZ	CL	TR.16.0.5.005	A	35 di 118
COMMESSA	LOTTO	CODIFICA	DOCUMENTO	REV.	FOGLIO								
IF2R	2.2.E.ZZ	CL	TR.16.0.5.005	A	35 di 118								

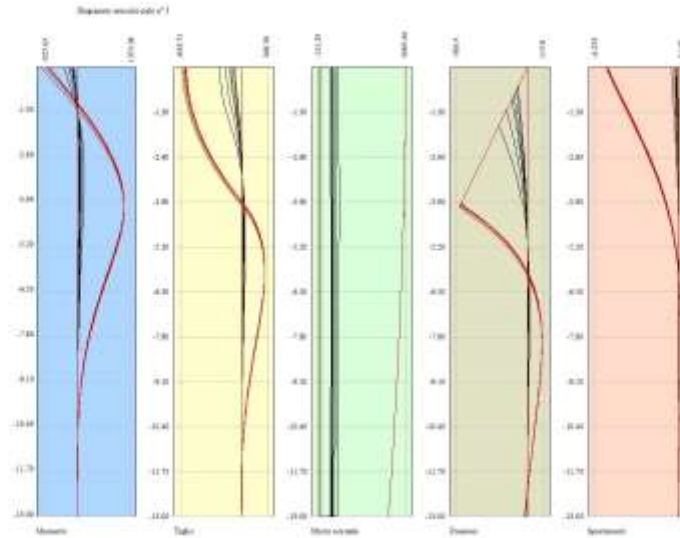


Fig. 13 - Sollecitazioni palo (Palo n° 3) (Inviluppo)

Verifiche strutturali

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	sfuerzo normale agente espressa in [kN]
Mu	momento ultimi espresso in [kNm]
Nu	sfuerzo 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	0.00	31.42	2.90	6.50	1363.83	3056.86	470.286
2	100	70	0.00	31.42	3.91	8.22	1335.08	2801.90	341.040
3	100	70	12.72	31.42	4.93	9.93	1419.43	2859.75	287.947
4	100	70	12.72	31.42	5.94	11.65	1402.51	2748.12	235.945
5	100	70	12.72	31.42	6.96	13.36	1390.77	2670.63	199.852
6	100	70	12.72	31.42	7.97	15.08	1382.14	2613.71	173.337
7	100	70	12.72	31.42	8.99	16.79	1375.53	2570.12	153.033
8	100	70	12.72	31.42	10.00	18.51	1369.71	2534.56	136.927
9	100	70	12.72	31.42	11.02	20.23	1363.81	2503.60	123.781
10	100	70	12.72	31.42	12.03	21.94	1358.95	2478.07	112.938
11	100	70	12.72	31.42	13.05	23.66	1354.87	2456.66	103.842

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.16.0.5.005.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.16.0.5.005	A	36 di 118

n°	B [cm]	H [cm]	Afi [cmq]	Afs [cmq]	M [kNm]	N [kN]	Mu [kNm]	Nu [kN]	FS
12	100	70	12.72	31.42	14.06	25.37	1351.41	2438.43	96.102
13	100	70	12.72	31.42	15.08	27.09	1348.42	2422.73	89.436
14	100	70	12.72	31.42	16.09	28.80	1345.82	2409.07	83.634
15	100	70	12.72	31.42	17.11	30.52	1343.53	2397.08	78.540
16	100	70	12.72	31.42	18.12	32.24	1341.51	2386.46	74.030
17	100	70	12.72	31.42	19.14	33.95	1339.71	2376.99	70.010
18	100	70	12.72	31.42	20.15	35.67	1338.09	2368.50	66.404
19	100	70	12.72	31.42	21.17	37.38	1336.63	2360.85	63.152
20	100	70	12.72	31.42	22.18	39.10	1335.31	2353.90	60.203
21	100	70	12.72	31.42	23.19	40.82	1334.11	2347.58	57.517
22	100	70	12.72	31.42	24.21	42.53	1333.01	2341.80	55.061
23	100	70	12.72	31.42	25.22	44.25	1332.00	2336.49	52.806
24	100	70	12.72	31.42	26.24	45.96	1331.06	2331.59	50.728
25	100	70	12.72	31.42	27.25	47.68	1330.20	2327.07	48.808
26	100	70	12.72	31.42	28.27	49.39	1329.41	2322.88	47.028
27	100	70	12.72	31.42	29.28	51.11	1328.66	2318.98	45.373
28	100	70	12.72	31.42	30.30	52.83	1327.97	2315.35	43.830
29	100	70	12.72	31.42	31.31	54.54	1327.33	2311.96	42.389
30	100	70	12.72	31.42	32.33	56.26	1326.72	2308.78	41.040
31	100	70	12.72	31.42	33.34	57.97	1326.15	2305.80	39.774
32	100	70	12.72	31.42	34.40	59.69	1324.76	2298.48	38.508
33	100	70	12.72	31.42	35.56	61.40	1321.70	2282.42	37.170
34	100	70	12.72	31.42	36.82	63.12	1317.07	2258.10	35.775
35	100	70	12.72	31.42	38.18	64.84	1310.99	2226.18	34.336
36	100	70	12.72	31.42	39.66	66.55	1303.61	2187.42	32.868
37	100	70	12.72	31.42	41.26	68.27	1295.09	2142.67	31.386
38	100	70	12.72	31.42	42.99	69.98	1285.60	2092.81	29.904
39	100	70	12.72	31.42	44.85	71.70	1275.30	2038.72	28.434
40	100	70	12.72	31.42	46.85	73.41	1264.37	1981.29	26.988
41	100	70	12.72	31.42	48.99	75.13	1252.96	1921.35	25.573
42	100	120	12.72	31.42	62.98	86.48	3373.60	4632.49	53.569
43	100	120	12.72	31.42	67.35	89.36	3287.10	4361.07	48.806
44	100	120	12.72	31.42	72.36	92.23	3195.15	4072.52	44.154
45	100	120	12.72	31.42	77.90	95.11	3103.41	3789.23	39.840
46	100	120	12.72	31.42	83.84	97.99	2986.51	3490.65	35.622
47	100	120	12.72	31.42	90.09	100.87	2884.26	3229.46	32.017
48	100	120	12.72	31.42	96.62	103.75	2794.70	3000.70	28.923
49	100	120	12.72	31.42	103.46	106.63	2715.63	2798.71	26.248
50	100	120	12.72	31.42	110.60	109.50	2641.70	2615.55	23.886
51	100	120	12.72	31.42	118.05	112.38	2554.68	2432.10	21.641
52	100	120	12.72	31.42	125.81	115.26	2477.83	2270.06	19.695
53	100	120	12.72	31.42	133.89	118.14	2409.48	2125.97	17.996
54	100	120	12.72	31.42	142.30	121.02	2348.34	1997.07	16.502
55	100	120	12.72	31.42	151.04	123.89	2293.35	1881.14	15.183
56	100	120	12.72	31.42	160.12	126.77	2243.66	1776.38	14.012
57	100	120	12.72	31.42	169.54	129.65	2198.56	1681.29	12.968
58	100	120	12.72	31.42	179.31	132.53	2157.46	1594.63	12.032
59	100	120	12.72	31.42	189.42	135.41	2119.86	1515.38	11.191
60	100	120	12.72	31.42	199.90	138.29	2085.36	1442.64	10.432
61	100	120	12.72	31.42	210.73	141.16	2053.60	1375.69	9.745
62	100	120	0.00	31.42	221.93	144.04	1981.99	1286.42	8.931
63	100	120	0.00	31.42	233.50	146.92	1956.19	1230.88	8.378
64	100	120	12.72	31.42	245.44	149.80	1971.95	1203.54	8.034
65	100	120	12.72	31.42	257.76	152.68	1948.52	1154.14	7.559
66	100	120	12.72	31.42	270.47	155.56	1926.68	1108.09	7.123
67	100	120	12.72	31.42	270.74	155.62	1926.25	1107.18	7.115
68	100	120	12.72	31.42	282.75	158.26	1907.49	1067.63	6.746
69	100	120	12.72	31.42	295.09	160.90	1889.84	1030.43	6.404
70	100	120	12.72	31.42	307.77	163.54	1873.21	995.36	6.086
71	100	120	12.72	31.42	320.79	166.18	1857.51	962.26	5.790
72	100	120	12.72	31.42	334.15	168.82	1842.67	930.98	5.514

Fondazione

Is	Afi [cmq]	Afs [cmq]	Mp [kNm]	Mn [kNm]	Mu [kNm]	FS
1-1-P	21.99	21.99	2.52	-0.12	3241.19	100.000 (1)
1-2-P	21.99	21.99	2.21	-2.41	3241.19	100.000 (1)
1-3-P	21.99	21.99	0.15	-10.16	3241.19	100.000 (1)
1-4-P	21.99	21.99	0.00	-37.91	-3241.19	85.489 (2)
1-5-P	21.99	21.99	0.42	-45.64	-3241.19	71.023 (2)
1-6-P	21.99	21.99	0.08	-46.00	-3241.19	70.454 (2)
1-7-P	21.99	21.99	0.48	-35.76	-3241.19	90.642 (2)
1-8-P	21.99	21.99	1.41	-10.24	3241.19	100.000 (1)
1-9-P	21.99	21.99	18.15	-0.41	3241.19	100.000 (1)
1-10-P	21.99	21.99	23.51	-0.01	3241.19	100.000 (1)
1-11-P	21.99	21.99	25.11	0.00	3241.19	100.000 (1)
1-12-P	21.99	21.99	20.76	-0.26	3241.19	100.000 (1)
1-13-P	21.99	21.99	4.76	-5.17	3241.19	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.16.0.5.005.A.DOCX

COMMESSA	LOTTO	CODIFICA	DOCUMENTO	REV.	FOGLIO
IF2R	2.2.E.ZZ	CL	TR.16.0.5.005	A	37 di 118

Is	Afi [cmq]	Afs [cmq]	Mp [kNm]	Mn [kNm]	Mu [kNm]	FS
1-14-P	21.99	21.99	0.21	-22.12	3241.19	100.000 (1)
1-15-P	21.99	21.99	0.24	-35.34	-3241.19	91.708 (2)
1-16-P	21.99	21.99	0.51	-34.04	-3241.19	95.217 (2)
1-17-P	21.99	21.99	0.68	-21.01	3241.19	100.000 (1)
1-18-P	21.99	21.99	7.84	-3.05	3241.19	100.000 (1)
1-19-P	21.99	21.99	21.99	-0.14	3241.19	100.000 (1)
1-20-P	21.99	21.99	26.81	0.00	3241.19	100.000 (1)
1-21-P	21.99	21.99	23.83	-0.04	3241.19	100.000 (1)
1-22-P	21.99	21.99	15.61	-0.86	3241.19	100.000 (1)
1-23-P	21.99	21.99	1.49	-11.89	3241.19	100.000 (1)
1-24-P	21.99	21.99	0.70	-25.75	3241.19	100.000 (1)
1-25-P	21.99	21.99	0.00	-38.37	-3241.19	84.471 (2)
1-26-P	21.99	21.99	0.70	-25.75	3241.19	100.000 (1)
1-27-P	21.99	21.99	1.49	-11.89	3241.19	100.000 (1)
1-28-P	21.99	21.99	15.61	-0.86	3241.19	100.000 (1)
1-29-P	21.99	21.99	23.83	-0.04	3241.19	100.000 (1)
1-30-P	21.99	21.99	26.81	0.00	3241.19	100.000 (1)
1-31-P	21.99	21.99	21.99	-0.14	3241.19	100.000 (1)
1-32-P	21.99	21.99	7.84	-3.05	3241.19	100.000 (1)
1-33-P	21.99	21.99	0.68	-21.01	3241.19	100.000 (1)
1-34-P	21.99	21.99	0.51	-34.04	-3241.19	95.217 (2)
1-35-P	21.99	21.99	0.24	-35.34	-3241.19	91.708 (2)
1-36-P	21.99	21.99	0.21	-22.12	3241.19	100.000 (1)
1-37-P	21.99	21.99	4.76	-5.17	3241.19	100.000 (1)
1-38-P	21.99	21.99	20.76	-0.26	3241.19	100.000 (1)
1-39-P	21.99	21.99	25.11	0.00	3241.19	100.000 (1)
1-40-P	21.99	21.99	23.51	-0.01	3241.19	100.000 (1)
1-41-P	21.99	21.99	18.15	-0.41	3241.19	100.000 (1)
1-42-P	21.99	21.99	1.41	-10.24	3241.19	100.000 (1)
1-43-P	21.99	21.99	0.48	-35.76	-3241.19	90.642 (2)
1-44-P	21.99	21.99	0.08	-46.00	-3241.19	70.454 (2)
1-45-P	21.99	21.99	0.42	-45.64	-3241.19	71.023 (2)
1-46-P	21.99	21.99	0.00	-37.91	-3241.19	85.489 (2)
1-47-P	21.99	21.99	0.15	-10.16	3241.19	100.000 (1)
1-48-P	21.99	21.99	2.21	-2.41	3241.19	100.000 (1)
1-49-P	21.99	21.99	2.52	-0.12	3241.19	100.000 (1)
2-1-P	18.85	18.85	6.90	0.00	2787.51	100.000 (1)
2-2-P	18.85	18.85	7.80	0.00	2787.51	100.000 (1)
2-3-P	18.85	18.85	9.13	-0.08	2787.51	100.000 (1)
2-4-P	18.85	18.85	14.36	-3.54	2787.51	100.000 (1)
2-5-P	18.85	18.85	0.00	-68.13	-2787.51	40.915 (2)
2-6-P	18.85	18.85	0.00	-127.49	-2787.51	21.864 (2)
2-7-P	18.85	18.85	0.59	-18.06	-2787.51	100.000 (1)
2-8-P	18.85	18.85	18.41	-1.91	2787.51	100.000 (1)
2-9-P	18.85	18.85	18.07	0.00	2787.51	100.000 (1)
2-10-P	18.85	18.85	18.37	0.00	2787.51	100.000 (1)
2-11-P	18.85	18.85	18.60	0.00	2787.51	100.000 (1)
2-12-P	18.85	18.85	18.73	0.00	2787.51	100.000 (1)
2-13-P	18.85	18.85	18.98	-0.96	2787.51	100.000 (1)
2-14-P	18.85	18.85	7.63	-6.66	2787.51	100.000 (1)
2-15-P	18.85	18.85	0.00	-103.37	-2787.51	26.966 (2)
2-16-P	18.85	18.85	0.00	-83.03	-2787.51	33.574 (2)
2-17-P	18.85	18.85	21.57	-4.37	2787.51	100.000 (1)
2-18-P	18.85	18.85	18.57	-0.44	2787.51	100.000 (1)
2-19-P	18.85	18.85	18.67	0.00	2787.51	100.000 (1)
2-20-P	18.85	18.85	18.63	0.00	2787.51	100.000 (1)
2-21-P	18.85	18.85	18.62	0.00	2787.51	100.000 (1)
2-22-P	18.85	18.85	18.44	-0.01	2787.51	100.000 (1)
2-23-P	18.85	18.85	19.98	-2.52	2787.51	100.000 (1)
2-24-P	18.85	18.85	0.00	-42.46	-2787.51	65.648 (2)
2-25-P	18.85	18.85	0.00	-143.03	-2787.51	19.489 (2)
2-26-P	18.85	18.85	0.00	-42.46	-2787.51	65.648 (2)
2-27-P	18.85	18.85	19.98	-2.52	2787.51	100.000 (1)
2-28-P	18.85	18.85	18.44	-0.01	2787.51	100.000 (1)
2-29-P	18.85	18.85	18.62	0.00	2787.51	100.000 (1)
2-30-P	18.85	18.85	18.63	0.00	2787.51	100.000 (1)
2-31-P	18.85	18.85	18.67	0.00	2787.51	100.000 (1)
2-32-P	18.85	18.85	18.57	-0.44	2787.51	100.000 (1)
2-33-P	18.85	18.85	21.57	-4.37	2787.51	100.000 (1)
2-34-P	18.85	18.85	0.00	-83.03	-2787.51	33.574 (2)
2-35-P	18.85	18.85	0.00	-103.37	-2787.51	26.966 (2)
2-36-P	18.85	18.85	7.63	-6.66	2787.51	100.000 (1)
2-37-P	18.85	18.85	18.98	-0.96	2787.51	100.000 (1)
2-38-P	18.85	18.85	18.73	0.00	2787.51	100.000 (1)
2-39-P	18.85	18.85	18.60	0.00	2787.51	100.000 (1)
2-40-P	18.85	18.85	18.37	0.00	2787.51	100.000 (1)
2-41-P	18.85	18.85	18.07	0.00	2787.51	100.000 (1)
2-42-P	18.85	18.85	18.41	-1.91	2787.51	100.000 (1)
2-43-P	18.85	18.85	0.59	-18.06	-2787.51	100.000 (1)
2-44-P	18.85	18.85	0.00	-127.49	-2787.51	21.864 (2)
2-45-P	18.85	18.85	0.00	-68.13	-2787.51	40.915 (2)

APPALTATORE:	TELESE S.c.a r.l. <small>Consorzio Telese Società Consortile a Responsabilità Limitata</small>	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.16.0.5.005.A.DOCX	COMMESSA	LOTTO	CODIFICA	DOCUMENTO	REV.	FOGLIO
	IF2R	2.2.E.ZZ	CL	TR.16.0.5.005	A	38 di 118

Is	Afi [cmq]	Afs [cmq]	Mp [kNm]	Mn [kNm]	Mu [kNm]	FS
2-46-P	18.85	18.85	14.36	-3.54	2787.51	100.000 (1)
2-47-P	18.85	18.85	9.13	-0.08	2787.51	100.000 (1)
2-48-P	18.85	18.85	7.80	0.00	2787.51	100.000 (1)
2-49-P	18.85	18.85	6.90	0.00	2787.51	100.000 (1)
5-1-P	28.27	28.27	0.00	-24.81	-4175.85	100.000 (1)
5-2-P	28.27	28.27	0.00	-44.11	-4175.85	94.661 (2)
5-3-P	28.27	28.27	0.00	-57.56	-4175.85	72.544 (2)
5-4-P	28.27	28.27	0.00	-72.13	-4175.85	57.891 (2)
5-5-P	28.27	28.27	0.00	-80.45	-4175.85	51.909 (2)
5-6-P	28.27	28.27	0.00	-86.17	-4175.85	48.463 (2)
5-7-P	28.27	28.27	0.00	-87.78	-4175.85	47.574 (2)
5-8-P	28.27	28.27	0.00	-93.69	-4175.85	44.573 (2)
5-9-P	28.27	28.27	0.00	-102.46	-4175.85	40.755 (2)
5-10-P	28.27	28.27	0.00	-124.69	-4175.85	33.489 (2)
5-11-P	28.27	28.27	0.00	-128.71	-4175.85	32.445 (2)
5-12-P	28.27	28.27	0.00	-105.38	-4175.85	39.625 (2)
5-13-P	28.27	28.27	0.00	-93.36	-4175.85	44.731 (2)
5-14-P	28.27	28.27	0.00	-85.98	-4175.85	48.566 (2)
5-15-P	28.27	28.27	0.00	-85.94	-4175.85	48.588 (2)
5-16-P	28.27	28.27	0.00	-85.24	-4175.85	48.988 (2)
5-17-P	28.27	28.27	0.00	-84.10	-4175.85	49.652 (2)
5-18-P	28.27	28.27	0.00	-92.17	-4175.85	45.306 (2)
5-19-P	28.27	28.27	0.00	-105.94	-4175.85	39.418 (2)
5-20-P	28.27	28.27	0.00	-128.26	-4175.85	32.558 (2)
5-21-P	28.27	28.27	0.00	-114.41	-4175.85	36.497 (2)
5-22-P	28.27	28.27	0.00	-94.38	-4175.85	44.245 (2)
5-23-P	28.27	28.27	0.00	-85.74	-4175.85	48.704 (2)
5-24-P	28.27	28.27	0.00	-82.61	-4175.85	50.546 (2)
5-25-P	28.27	28.27	0.00	-83.17	-4175.85	50.210 (2)
5-26-P	28.27	28.27	0.00	-82.61	-4175.85	50.546 (2)
5-27-P	28.27	28.27	0.00	-85.74	-4175.85	48.704 (2)
5-28-P	28.27	28.27	0.00	-94.38	-4175.85	44.245 (2)
5-29-P	28.27	28.27	0.00	-114.41	-4175.85	36.497 (2)
5-30-P	28.27	28.27	0.00	-128.26	-4175.85	32.558 (2)
5-31-P	28.27	28.27	0.00	-105.94	-4175.85	39.418 (2)
5-32-P	28.27	28.27	0.00	-92.17	-4175.85	45.306 (2)
5-33-P	28.27	28.27	0.00	-84.10	-4175.85	49.652 (2)
5-34-P	28.27	28.27	0.00	-85.24	-4175.85	48.988 (2)
5-35-P	28.27	28.27	0.00	-85.94	-4175.85	48.588 (2)
5-36-P	28.27	28.27	0.00	-85.98	-4175.85	48.566 (2)
5-37-P	28.27	28.27	0.00	-93.36	-4175.85	44.731 (2)
5-38-P	28.27	28.27	0.00	-105.38	-4175.85	39.625 (2)
5-39-P	28.27	28.27	0.00	-128.71	-4175.85	32.445 (2)
5-40-P	28.27	28.27	0.00	-124.69	-4175.85	33.489 (2)
5-41-P	28.27	28.27	0.00	-102.46	-4175.85	40.755 (2)
5-42-P	28.27	28.27	0.00	-93.69	-4175.85	44.573 (2)
5-43-P	28.27	28.27	0.00	-87.78	-4175.85	47.574 (2)
5-44-P	28.27	28.27	0.00	-86.17	-4175.85	48.463 (2)
5-45-P	28.27	28.27	0.00	-80.45	-4175.85	51.909 (2)
5-46-P	28.27	28.27	0.00	-72.13	-4175.85	57.891 (2)
5-47-P	28.27	28.27	0.00	-57.56	-4175.85	72.544 (2)
5-48-P	28.27	28.27	0.00	-44.11	-4175.85	94.661 (2)
5-49-P	28.27	28.27	0.00	-24.81	-4175.85	100.000 (1)
6-1-P	28.27	28.27	1.32	-1.64	4175.85	100.000 (1)
6-2-P	28.27	28.27	0.67	-3.03	4175.85	100.000 (1)
6-3-P	28.27	28.27	0.44	-5.55	4175.85	100.000 (1)
6-4-P	28.27	28.27	0.43	-9.34	4175.85	100.000 (1)
6-5-P	28.27	28.27	0.00	-13.99	4175.85	100.000 (1)
6-6-P	28.27	28.27	0.00	-20.13	-4175.85	100.000 (1)
6-7-P	28.27	28.27	0.00	-29.24	-4175.85	100.000 (1)
6-8-P	28.27	28.27	0.00	-47.95	-4175.85	87.093 (2)
6-9-P	28.27	28.27	0.00	-58.89	-4175.85	70.910 (2)
6-10-P	28.27	28.27	0.00	-71.80	-4175.85	58.159 (2)
6-11-P	28.27	28.27	0.00	-75.07	-4175.85	55.624 (2)
6-12-P	28.27	28.27	0.00	-63.68	-4175.85	65.580 (2)
6-13-P	28.27	28.27	0.00	-55.12	-4175.85	75.756 (2)
6-14-P	28.27	28.27	0.00	-47.67	-4175.85	87.598 (2)
6-15-P	28.27	28.27	0.00	-41.94	-4175.85	99.573 (2)
6-16-P	28.27	28.27	0.00	-42.73	-4175.85	97.718 (2)
6-17-P	28.27	28.27	0.00	-47.88	-4175.85	87.209 (2)
6-18-P	28.27	28.27	0.00	-55.37	-4175.85	75.413 (2)
6-19-P	28.27	28.27	0.00	-64.39	-4175.85	64.848 (2)
6-20-P	28.27	28.27	0.00	-75.95	-4175.85	54.984 (2)
6-21-P	28.27	28.27	0.00	-68.58	-4175.85	60.892 (2)
6-22-P	28.27	28.27	0.00	-57.57	-4175.85	72.533 (2)
6-23-P	28.27	28.27	0.00	-49.66	-4175.85	84.084 (2)
6-24-P	28.27	28.27	0.00	-43.20	-4175.85	96.673 (2)
6-25-P	28.27	28.27	0.00	-24.27	-4175.85	100.000 (1)
6-26-P	28.27	28.27	0.00	-43.20	-4175.85	96.673 (2)
6-27-P	28.27	28.27	0.00	-49.66	-4175.85	84.084 (2)
6-28-P	28.27	28.27	0.00	-57.57	-4175.85	72.533 (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.16.0.5.005.A.DOCX

COMMESSA	LOTTO	CODIFICA	DOCUMENTO	REV.	FOGLIO
IF2R	2.2.E.ZZ	CL	TR.16.0.5.005	A	39 di 118

Is	Afi [cmq]	Afs [cmq]	Mp [kNm]	Mn [kNm]	Mu [kNm]	FS
6-29-P	28.27	28.27	0.00	-68.58	-4175.85	60.892 (2)
6-30-P	28.27	28.27	0.00	-75.95	-4175.85	54.984 (2)
6-31-P	28.27	28.27	0.00	-64.39	-4175.85	64.848 (2)
6-32-P	28.27	28.27	0.00	-55.37	-4175.85	75.413 (2)
6-33-P	28.27	28.27	0.00	-47.88	-4175.85	87.209 (2)
6-34-P	28.27	28.27	0.00	-42.73	-4175.85	97.718 (2)
6-35-P	28.27	28.27	0.00	-41.94	-4175.85	99.573 (2)
6-36-P	28.27	28.27	0.00	-47.67	-4175.85	87.598 (2)
6-37-P	28.27	28.27	0.00	-55.12	-4175.85	75.756 (2)
6-38-P	28.27	28.27	0.00	-63.68	-4175.85	65.580 (2)
6-39-P	28.27	28.27	0.00	-75.07	-4175.85	55.624 (2)
6-40-P	28.27	28.27	0.00	-71.80	-4175.85	58.159 (2)
6-41-P	28.27	28.27	0.00	-58.89	-4175.85	70.910 (2)
6-42-P	28.27	28.27	0.00	-47.95	-4175.85	87.093 (2)
6-43-P	28.27	28.27	0.00	-29.24	-4175.85	100.000 (1)
6-44-P	28.27	28.27	0.00	-20.13	-4175.85	100.000 (1)
6-45-P	28.27	28.27	0.00	-13.99	4175.85	100.000 (1)
6-46-P	28.27	28.27	0.43	-9.34	4175.85	100.000 (1)
6-47-P	28.27	28.27	0.44	-5.55	4175.85	100.000 (1)
6-48-P	28.27	28.27	0.67	-3.03	4175.85	100.000 (1)
6-49-P	28.27	28.27	1.32	-1.64	4175.85	100.000 (1)
7-1-P	25.13	25.13	3.98	-3.18	3721.96	100.000 (1)
7-2-P	25.13	25.13	7.30	-3.93	3721.96	100.000 (1)
7-3-P	25.13	25.13	9.61	-7.25	3721.96	100.000 (1)
7-4-P	25.13	25.13	11.55	-15.57	3721.96	100.000 (1)
7-5-P	25.13	25.13	4.97	-9.76	3721.96	100.000 (1)
7-6-P	25.13	25.13	2.10	-7.15	3721.96	100.000 (1)
7-7-P	25.13	25.13	4.23	-12.74	3721.96	100.000 (1)
7-8-P	25.13	25.13	4.90	-11.71	3721.96	100.000 (1)
7-9-P	25.13	25.13	3.66	-5.29	3721.96	100.000 (1)
7-10-P	25.13	25.13	1.87	-4.96	3721.96	100.000 (1)
7-11-P	25.13	25.13	2.37	-6.07	3721.96	100.000 (1)
7-12-P	25.13	25.13	4.53	-7.55	3721.96	100.000 (1)
7-13-P	25.13	25.13	5.89	-13.80	3721.96	100.000 (1)
7-14-P	25.13	25.13	6.99	-19.50	3721.96	100.000 (1)
7-15-P	25.13	25.13	1.03	-11.48	3721.96	100.000 (1)
7-16-P	25.13	25.13	0.61	-11.12	3721.96	100.000 (1)
7-17-P	25.13	25.13	5.78	-17.74	3721.96	100.000 (1)
7-18-P	25.13	25.13	4.11	-9.33	3721.96	100.000 (1)
7-19-P	25.13	25.13	3.33	-4.73	3721.96	100.000 (1)
7-20-P	25.13	25.13	2.18	-4.14	3721.96	100.000 (1)
7-21-P	25.13	25.13	3.55	-4.77	3721.96	100.000 (1)
7-22-P	25.13	25.13	5.19	-6.83	3721.96	100.000 (1)
7-23-P	25.13	25.13	6.34	-14.28	3721.96	100.000 (1)
7-24-P	25.13	25.13	3.91	-13.23	3721.96	100.000 (1)
7-25-P	25.13	25.13	1.74	-9.24	3721.96	100.000 (1)
7-26-P	25.13	25.13	3.91	-13.23	3721.96	100.000 (1)
7-27-P	25.13	25.13	6.34	-14.28	3721.96	100.000 (1)
7-28-P	25.13	25.13	5.19	-6.83	3721.96	100.000 (1)
7-29-P	25.13	25.13	3.55	-4.77	3721.96	100.000 (1)
7-30-P	25.13	25.13	2.18	-4.14	3721.96	100.000 (1)
7-31-P	25.13	25.13	3.33	-4.73	3721.96	100.000 (1)
7-32-P	25.13	25.13	4.11	-9.33	3721.96	100.000 (1)
7-33-P	25.13	25.13	5.78	-17.74	3721.96	100.000 (1)
7-34-P	25.13	25.13	0.61	-11.12	3721.96	100.000 (1)
7-35-P	25.13	25.13	1.03	-11.48	3721.96	100.000 (1)
7-36-P	25.13	25.13	6.99	-19.50	3721.96	100.000 (1)
7-37-P	25.13	25.13	5.89	-13.80	3721.96	100.000 (1)
7-38-P	25.13	25.13	4.53	-7.55	3721.96	100.000 (1)
7-39-P	25.13	25.13	2.37	-6.07	3721.96	100.000 (1)
7-40-P	25.13	25.13	1.87	-4.96	3721.96	100.000 (1)
7-41-P	25.13	25.13	3.66	-5.29	3721.96	100.000 (1)
7-42-P	25.13	25.13	4.90	-11.71	3721.96	100.000 (1)
7-43-P	25.13	25.13	4.23	-12.74	3721.96	100.000 (1)
7-44-P	25.13	25.13	2.10	-7.15	3721.96	100.000 (1)
7-45-P	25.13	25.13	4.97	-9.76	3721.96	100.000 (1)
7-46-P	25.13	25.13	11.55	-15.57	3721.96	100.000 (1)
7-47-P	25.13	25.13	9.61	-7.25	3721.96	100.000 (1)
7-48-P	25.13	25.13	7.30	-3.93	3721.96	100.000 (1)
7-49-P	25.13	25.13	3.98	-3.18	3721.96	100.000 (1)
8-1-P	28.27	28.27	1.80	-1.68	4175.85	100.000 (1)
8-2-P	28.27	28.27	2.39	-3.84	4175.85	100.000 (1)
8-3-P	28.27	28.27	5.32	-7.93	4175.85	100.000 (1)
8-4-P	28.27	28.27	11.58	-14.75	4175.85	100.000 (1)
8-5-P	28.27	28.27	0.94	-19.16	4175.85	100.000 (1)
8-6-P	28.27	28.27	0.00	-29.38	4175.85	100.000 (1)
8-7-P	28.27	28.27	4.36	-14.82	4175.85	100.000 (1)
8-8-P	28.27	28.27	7.91	-10.30	4175.85	100.000 (1)
8-9-P	28.27	28.27	2.19	-3.75	4175.85	100.000 (1)
8-10-P	28.27	28.27	2.30	-1.34	4175.85	100.000 (1)
8-11-P	28.27	28.27	2.77	-1.59	4175.85	100.000 (1)

APPALTATORE:	TELESE S.c.a r.l. <small>Consorzio Telese Società Consortile a Responsabilità Limitata</small>		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.	COMMESSA	LOTTO	CODIFICA	DOCUMENTO	REV.	FOGLIO
Relazione di calcolo IF2R.2.2.E.ZZ.CL.TR.16.0.5.005.A.DOCX			IF2R	2.2.E.ZZ	CL	TR.16.0.5.005	A	40 di 118

Is	Afi [cmq]	Afs [cmq]	Mp [kNm]	Mn [kNm]	Mu [kNm]	FS
8-12-P	28.27	28.27	3.35	-5.37	4175.85	100.000 (1)
8-13-P	28.27	28.27	8.10	-11.84	4175.85	100.000 (1)
8-14-P	28.27	28.27	9.32	-17.94	4175.85	100.000 (1)
8-15-P	28.27	28.27	0.00	-27.62	4175.85	100.000 (1)
8-16-P	28.27	28.27	0.00	-23.67	4175.85	100.000 (1)
8-17-P	28.27	28.27	10.96	-15.37	4175.85	100.000 (1)
8-18-P	28.27	28.27	5.47	-8.38	4175.85	100.000 (1)
8-19-P	28.27	28.27	2.04	-2.79	4175.85	100.000 (1)
8-20-P	28.27	28.27	3.35	-0.96	4175.85	100.000 (1)
8-21-P	28.27	28.27	2.79	-1.98	4175.85	100.000 (1)
8-22-P	28.27	28.27	4.51	-6.14	4175.85	100.000 (1)
8-23-P	28.27	28.27	10.13	-12.93	4175.85	100.000 (1)
8-24-P	28.27	28.27	2.12	-16.82	4175.85	100.000 (1)
8-25-P	28.27	28.27	0.00	-33.74	4175.85	100.000 (1)
8-26-P	28.27	28.27	2.12	-16.82	4175.85	100.000 (1)
8-27-P	28.27	28.27	10.13	-12.93	4175.85	100.000 (1)
8-28-P	28.27	28.27	4.51	-6.14	4175.85	100.000 (1)
8-29-P	28.27	28.27	2.79	-1.98	4175.85	100.000 (1)
8-30-P	28.27	28.27	3.35	-0.96	4175.85	100.000 (1)
8-31-P	28.27	28.27	2.04	-2.79	4175.85	100.000 (1)
8-32-P	28.27	28.27	5.47	-8.38	4175.85	100.000 (1)
8-33-P	28.27	28.27	10.96	-15.37	4175.85	100.000 (1)
8-34-P	28.27	28.27	0.00	-23.67	4175.85	100.000 (1)
8-35-P	28.27	28.27	0.00	-27.62	4175.85	100.000 (1)
8-36-P	28.27	28.27	9.32	-17.94	4175.85	100.000 (1)
8-37-P	28.27	28.27	8.10	-11.84	4175.85	100.000 (1)
8-38-P	28.27	28.27	3.35	-5.37	4175.85	100.000 (1)
8-39-P	28.27	28.27	2.77	-1.59	4175.85	100.000 (1)
8-40-P	28.27	28.27	2.30	-1.34	4175.85	100.000 (1)
8-41-P	28.27	28.27	2.19	-3.75	4175.85	100.000 (1)
8-42-P	28.27	28.27	7.91	-10.30	4175.85	100.000 (1)
8-43-P	28.27	28.27	4.36	-14.82	4175.85	100.000 (1)
8-44-P	28.27	28.27	0.00	-29.38	4175.85	100.000 (1)
8-45-P	28.27	28.27	0.94	-19.16	4175.85	100.000 (1)
8-46-P	28.27	28.27	11.58	-14.75	4175.85	100.000 (1)
8-47-P	28.27	28.27	5.32	-7.93	4175.85	100.000 (1)
8-48-P	28.27	28.27	2.39	-3.84	4175.85	100.000 (1)
8-49-P	28.27	28.27	1.80	-1.68	4175.85	100.000 (1)
9-1-S	31.42	31.42	2.13	-9.44	4645.84	100.000 (1)
9-2-S	31.42	31.42	0.11	-16.15	4645.84	100.000 (1)
9-3-S	31.42	31.42	0.67	-22.86	4645.84	100.000 (1)
9-4-S	31.42	31.42	5.45	-42.74	-4645.84	86.965 (2)
9-5-S	31.42	31.42	17.76	-10.19	4645.84	100.000 (1)
9-6-S	31.42	31.42	54.06	-2.26	4645.84	81.845 (2)
9-7-S	31.42	31.42	0.00	-572.43	-4645.84	8.116 (2)
9-8-S	31.42	31.42	0.00	-470.34	-4645.84	9.878 (2)
9-9-S	31.42	31.42	0.00	-391.04	-4645.84	11.881 (2)
9-10-S	31.42	31.42	0.00	-316.98	-4645.84	14.657 (2)
9-11-S	31.42	31.42	0.00	-245.00	-4645.84	18.963 (2)
9-12-S	31.42	31.42	0.00	-179.68	-4645.84	25.856 (2)
9-13-S	31.42	31.42	0.01	-119.17	-4645.84	38.986 (2)
9-14-S	31.42	31.42	0.49	-64.28	-4645.84	72.278 (2)
9-15-S	31.42	31.42	5.28	-21.77	4645.84	100.000 (1)
9-16-S	31.42	31.42	14.47	-9.98	4645.84	100.000 (1)
9-17-S	31.42	31.42	16.86	-9.73	4645.84	100.000 (1)
9-18-S	31.42	31.42	18.27	-10.06	4645.84	100.000 (1)
9-19-S	31.42	31.42	12.17	-6.65	4645.84	100.000 (1)
9-20-S	31.42	31.42	9.37	-4.54	4645.84	100.000 (1)
9-21-S	31.42	31.42	8.10	-2.86	4645.84	100.000 (1)
10-1-S	31.42	31.42	15.25	-6.56	4645.84	100.000 (1)
10-2-S	31.42	31.42	42.02	-20.78	4645.84	84.233 (2)
10-3-S	31.42	31.42	9.55	-21.88	4645.84	100.000 (1)
10-4-S	31.42	31.42	3.31	-138.62	-4645.84	33.515 (2)
10-5-S	31.42	31.42	8.21	-118.73	-4645.84	31.304 (2)
10-6-S	31.42	31.42	39.22	-51.43	-4645.84	43.020 (2)
10-7-S	31.42	31.42	0.00	-538.68	-4645.84	8.624 (2)
10-8-S	31.42	31.42	0.00	-468.46	-4645.84	9.917 (2)
10-9-S	31.42	31.42	0.00	-398.58	-4645.84	11.656 (2)
10-10-S	31.42	31.42	0.00	-330.13	-4645.84	14.073 (2)
10-11-S	31.42	31.42	0.00	-261.57	-4645.84	17.761 (2)
10-12-S	31.42	31.42	0.00	-192.27	-4645.84	24.163 (2)
10-13-S	31.42	31.42	0.00	-123.05	-4645.84	37.755 (2)
10-14-S	31.42	31.42	0.09	-54.00	-4645.84	86.040 (2)
10-15-S	31.42	31.42	31.18	-14.25	4645.84	89.413 (2)
10-16-S	31.42	31.42	89.52	-3.43	4645.84	51.895 (2)
10-17-S	31.42	31.42	70.18	-5.57	4645.84	66.196 (2)
10-18-S	31.42	31.42	12.07	-22.17	4645.84	100.000 (1)
10-19-S	31.42	31.42	7.16	-36.86	4645.84	100.000 (1)
10-20-S	31.42	31.42	5.28	-29.77	4645.84	100.000 (1)
10-21-S	31.42	31.42	4.53	-10.29	4645.84	100.000 (1)
11-1-S	31.42	31.42	0.67	-10.71	4645.84	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.16.0.5.005.A.DOCX

COMMESSA LOTTO CODIFICA DOCUMENTO REV. FOGLIO
IF2R 2.2.E.ZZ CL TR.16.0.5.005 A 41 di 118

Is	Afi [cmq]	Afs [cmq]	Mp [kNm]	Mn [kNm]	Mu [kNm]	FS
11-2-S	31.42	31.42	0.98	-10.28	4645.84	100.000 (1)
11-3-S	31.42	31.42	2.18	-6.03	4645.84	100.000 (1)
11-4-S	31.42	31.42	12.28	-1.29	4645.84	100.000 (1)
11-5-S	31.42	31.42	32.57	0.00	4645.84	100.000 (1)
11-6-S	31.42	31.42	60.69	0.00	4645.84	76.555 (2)
11-7-S	31.42	31.42	0.00	-323.95	-4645.84	14.341 (2)
11-8-S	31.42	31.42	0.00	-279.95	-4645.84	16.595 (2)
11-9-S	31.42	31.42	0.00	-419.82	-4645.84	11.066 (2)
11-10-S	31.42	31.42	0.00	-398.33	-4645.84	11.663 (2)
11-11-S	31.42	31.42	0.00	-352.05	-4645.84	13.196 (2)
11-12-S	31.42	31.42	0.00	-252.23	-4645.84	18.419 (2)
11-13-S	31.42	31.42	0.00	-167.96	-4645.84	27.660 (2)
11-14-S	31.42	31.42	0.00	-100.23	-4645.84	46.350 (2)
11-15-S	31.42	31.42	0.00	-51.57	-4645.84	90.086 (2)
11-16-S	31.42	31.42	2.32	-11.57	4645.84	100.000 (1)
11-17-S	31.42	31.42	4.71	-3.64	4645.84	100.000 (1)
11-18-S	31.42	31.42	10.26	-1.78	4645.84	100.000 (1)
11-19-S	31.42	31.42	10.38	-1.42	4645.84	100.000 (1)
11-20-S	31.42	31.42	8.87	-1.24	4645.84	100.000 (1)
11-21-S	31.42	31.42	6.26	-0.93	4645.84	100.000 (1)
12-1-S	31.42	31.42	18.54	-4.22	4645.84	100.000 (1)
12-2-S	31.42	31.42	44.98	-17.88	4645.84	68.854 (2)
12-3-S	31.42	31.42	9.65	-24.33	4645.84	100.000 (1)
12-4-S	31.42	31.42	2.45	-159.63	-4645.84	29.104 (2)
12-5-S	31.42	31.42	3.15	-135.43	-4645.84	34.303 (2)
12-6-S	31.42	31.42	30.39	-54.68	-4645.84	52.599 (2)
12-7-S	31.42	31.42	0.00	-512.13	-4645.84	9.072 (2)
12-8-S	31.42	31.42	0.00	-440.48	-4645.84	10.547 (2)
12-9-S	31.42	31.42	0.00	-382.97	-4645.84	12.131 (2)
12-10-S	31.42	31.42	0.00	-323.39	-4645.84	14.366 (2)
12-11-S	31.42	31.42	0.00	-262.16	-4645.84	17.721 (2)
12-12-S	31.42	31.42	0.00	-195.41	-4645.84	23.775 (2)
12-13-S	31.42	31.42	0.00	-126.86	-4645.84	36.622 (2)
12-14-S	31.42	31.42	0.00	-56.39	-4645.84	82.395 (2)
12-15-S	31.42	31.42	18.75	-8.25	4645.84	100.000 (1)
12-16-S	31.42	31.42	96.77	-3.89	4645.84	48.010 (2)
12-17-S	31.42	31.42	75.98	-8.04	4645.84	61.145 (2)
12-18-S	31.42	31.42	13.29	-28.60	4645.84	100.000 (1)
12-19-S	31.42	31.42	15.51	-49.02	-4645.84	94.783 (2)
12-20-S	31.42	31.42	8.94	-49.05	-4645.84	94.713 (2)
12-21-S	31.42	31.42	3.62	-11.88	4645.84	100.000 (1)
13-1-S	31.42	31.42	1.62	-9.95	4645.84	100.000 (1)
13-2-S	31.42	31.42	0.71	-15.25	4645.84	100.000 (1)
13-3-S	31.42	31.42	1.83	-15.46	4645.84	100.000 (1)
13-4-S	31.42	31.42	10.78	-9.24	4645.84	100.000 (1)
13-5-S	31.42	31.42	27.90	0.00	4645.84	100.000 (1)
13-6-S	31.42	31.42	63.57	0.00	4645.84	73.086 (2)
13-7-S	31.42	31.42	0.00	-330.04	-4645.84	14.077 (2)
13-8-S	31.42	31.42	0.00	-282.58	-4645.84	16.441 (2)
13-9-S	31.42	31.42	0.00	-402.60	-4645.84	11.540 (2)
13-10-S	31.42	31.42	0.00	-380.53	-4645.84	12.209 (2)
13-11-S	31.42	31.42	0.00	-336.15	-4645.84	13.821 (2)
13-12-S	31.42	31.42	0.00	-242.96	-4645.84	19.122 (2)
13-13-S	31.42	31.42	0.00	-162.85	-4645.84	28.528 (2)
13-14-S	31.42	31.42	0.00	-96.82	-4645.84	47.983 (2)
13-15-S	31.42	31.42	0.00	-50.11	-4645.84	92.705 (2)
13-16-S	31.42	31.42	1.59	-12.82	4645.84	100.000 (1)
13-17-S	31.42	31.42	5.94	-6.26	4645.84	100.000 (1)
13-18-S	31.42	31.42	12.17	-4.40	4645.84	100.000 (1)
13-19-S	31.42	31.42	11.16	-2.07	4645.84	100.000 (1)
13-20-S	31.42	31.42	9.11	-1.34	4645.84	100.000 (1)
13-21-S	31.42	31.42	6.22	-1.22	4645.84	100.000 (1)
14-1-S	34.56	34.56	10.30	-9.71	5099.57	100.000 (1)
14-2-S	34.56	34.56	15.00	-16.20	5099.57	100.000 (1)
14-3-S	34.56	34.56	5.53	-22.74	5099.57	100.000 (1)
14-4-S	34.56	34.56	4.51	-89.96	-5099.57	45.351 (2)
14-5-S	34.56	34.56	13.09	-68.83	-5099.57	44.454 (2)
14-6-S	34.56	34.56	47.87	-27.51	-5099.57	61.797 (2)
14-7-S	34.56	34.56	0.00	-454.14	-5099.57	11.229 (2)
14-8-S	34.56	34.56	0.00	-411.63	-5099.57	12.389 (2)
14-9-S	34.56	34.56	0.00	-381.53	-5099.57	13.366 (2)
14-10-S	34.56	34.56	0.00	-329.84	-5099.57	15.461 (2)
14-11-S	34.56	34.56	0.00	-273.68	-5099.57	18.633 (2)
14-12-S	34.56	34.56	0.00	-206.12	-5099.57	24.741 (2)
14-13-S	34.56	34.56	0.00	-139.55	-5099.57	36.543 (2)
14-14-S	34.56	34.56	0.00	-74.05	-5099.57	68.865 (2)
14-15-S	34.56	34.56	9.60	-20.89	5099.57	100.000 (1)
14-16-S	34.56	34.56	32.17	-9.85	5099.57	100.000 (1)
14-17-S	34.56	34.56	18.44	-9.64	5099.57	100.000 (1)
14-18-S	34.56	34.56	13.83	-17.53	5099.57	100.000 (1)
14-19-S	34.56	34.56	9.26	-22.86	5099.57	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.16.0.5.005.A.DOCX

COMMESSA	LOTTO	CODIFICA	DOCUMENTO	REV.	FOGLIO
IF2R	2.2.E.ZZ	CL	TR.16.0.5.005	A	42 di 118

Is	Afi [cmq]	Afs [cmq]	Mp [kNm]	Mn [kNm]	Mu [kNm]	FS
14-20-S	34.56	34.56	7.28	-17.86	5099.57	100.000 (1)
14-21-S	34.56	34.56	6.42	-6.96	5099.57	100.000 (1)
15-1-S	31.42	31.42	10.30	-9.71	4645.84	100.000 (1)
15-2-S	31.42	31.42	15.00	-16.20	4645.84	100.000 (1)
15-3-S	31.42	31.42	5.53	-22.74	4645.84	100.000 (1)
15-4-S	31.42	31.42	4.51	-89.96	-4645.84	41.316 (2)
15-5-S	31.42	31.42	13.09	-68.83	-4645.84	40.498 (2)
15-6-S	31.42	31.42	47.87	-27.51	-4645.84	56.299 (2)
15-7-S	31.42	31.42	0.00	-454.14	-4645.84	10.230 (2)
15-8-S	31.42	31.42	0.00	-411.63	-4645.84	11.286 (2)
15-9-S	31.42	31.42	0.00	-381.53	-4645.84	12.177 (2)
15-10-S	31.42	31.42	0.00	-329.84	-4645.84	14.085 (2)
15-11-S	31.42	31.42	0.00	-273.68	-4645.84	16.975 (2)
15-12-S	31.42	31.42	0.00	-206.12	-4645.84	22.540 (2)
15-13-S	31.42	31.42	0.00	-139.55	-4645.84	33.291 (2)
15-14-S	31.42	31.42	0.00	-74.05	-4645.84	62.738 (2)
15-15-S	31.42	31.42	9.60	-20.89	4645.84	100.000 (1)
15-16-S	31.42	31.42	50.94	-8.63	4645.84	91.196 (2)
15-17-S	31.42	31.42	47.09	-8.35	4645.84	98.668 (2)
15-18-S	31.42	31.42	13.83	-17.53	4645.84	100.000 (1)
15-19-S	31.42	31.42	9.26	-22.86	4645.84	100.000 (1)
15-20-S	31.42	31.42	7.28	-17.86	4645.84	100.000 (1)
15-21-S	31.42	31.42	6.42	-6.96	4645.84	100.000 (1)
16-1-S	31.42	31.42	1.62	-9.95	4645.84	100.000 (1)
16-2-S	31.42	31.42	0.71	-15.25	4645.84	100.000 (1)
16-3-S	31.42	31.42	1.83	-15.46	4645.84	100.000 (1)
16-4-S	31.42	31.42	10.78	-9.24	4645.84	100.000 (1)
16-5-S	31.42	31.42	27.90	0.00	4645.84	100.000 (1)
16-6-S	31.42	31.42	63.57	0.00	4645.84	73.086 (2)
16-7-S	31.42	31.42	0.00	-330.04	-4645.84	14.077 (2)
16-8-S	31.42	31.42	0.00	-282.58	-4645.84	16.441 (2)
16-9-S	31.42	31.42	0.00	-402.60	-4645.84	11.540 (2)
16-10-S	31.42	31.42	0.00	-380.53	-4645.84	12.209 (2)
16-11-S	31.42	31.42	0.00	-336.15	-4645.84	13.821 (2)
16-12-S	31.42	31.42	0.00	-242.96	-4645.84	19.122 (2)
16-13-S	31.42	31.42	0.00	-162.85	-4645.84	28.528 (2)
16-14-S	31.42	31.42	0.00	-96.82	-4645.84	47.983 (2)
16-15-S	31.42	31.42	0.00	-50.11	-4645.84	92.705 (2)
16-16-S	31.42	31.42	1.59	-12.82	4645.84	100.000 (1)
16-17-S	31.42	31.42	5.94	-6.26	4645.84	100.000 (1)
16-18-S	31.42	31.42	12.17	-4.40	4645.84	100.000 (1)
16-19-S	31.42	31.42	11.16	-2.07	4645.84	100.000 (1)
16-20-S	31.42	31.42	9.11	-1.34	4645.84	100.000 (1)
16-21-S	31.42	31.42	6.22	-1.22	4645.84	100.000 (1)
17-1-S	31.42	31.42	18.54	-4.22	4645.84	100.000 (1)
17-2-S	31.42	31.42	44.98	-17.88	4645.84	68.854 (2)
17-3-S	31.42	31.42	9.65	-24.33	4645.84	100.000 (1)
17-4-S	31.42	31.42	2.45	-159.63	-4645.84	29.104 (2)
17-5-S	31.42	31.42	3.15	-135.43	-4645.84	34.303 (2)
17-6-S	31.42	31.42	30.39	-54.68	-4645.84	52.599 (2)
17-7-S	31.42	31.42	0.00	-512.13	-4645.84	9.072 (2)
17-8-S	31.42	31.42	0.00	-440.48	-4645.84	10.547 (2)
17-9-S	31.42	31.42	0.00	-382.97	-4645.84	12.131 (2)
17-10-S	31.42	31.42	0.00	-323.39	-4645.84	14.366 (2)
17-11-S	31.42	31.42	0.00	-262.16	-4645.84	17.721 (2)
17-12-S	31.42	31.42	0.00	-195.41	-4645.84	23.775 (2)
17-13-S	31.42	31.42	0.00	-126.86	-4645.84	36.622 (2)
17-14-S	31.42	31.42	0.00	-56.39	-4645.84	82.395 (2)
17-15-S	31.42	31.42	18.75	-8.25	4645.84	100.000 (1)
17-16-S	31.42	31.42	96.77	-3.89	4645.84	48.010 (2)
17-17-S	31.42	31.42	75.98	-8.04	4645.84	61.145 (2)
17-18-S	31.42	31.42	13.29	-28.60	4645.84	100.000 (1)
17-19-S	31.42	31.42	15.51	-49.02	-4645.84	94.783 (2)
17-20-S	31.42	31.42	8.94	-49.05	-4645.84	94.713 (2)
17-21-S	31.42	31.42	3.62	-11.88	4645.84	100.000 (1)
18-1-S	31.42	31.42	0.67	-10.71	4645.84	100.000 (1)
18-2-S	31.42	31.42	0.98	-10.28	4645.84	100.000 (1)
18-3-S	31.42	31.42	2.18	-6.03	4645.84	100.000 (1)
18-4-S	31.42	31.42	12.28	-1.29	4645.84	100.000 (1)
18-5-S	31.42	31.42	32.57	0.00	4645.84	100.000 (1)
18-6-S	31.42	31.42	60.69	0.00	4645.84	76.555 (2)
18-7-S	31.42	31.42	0.00	-323.95	-4645.84	14.341 (2)
18-8-S	31.42	31.42	0.00	-279.95	-4645.84	16.595 (2)
18-9-S	31.42	31.42	0.00	-419.82	-4645.84	11.066 (2)
18-10-S	31.42	31.42	0.00	-398.33	-4645.84	11.663 (2)
18-11-S	31.42	31.42	0.00	-352.05	-4645.84	13.196 (2)
18-12-S	31.42	31.42	0.00	-252.23	-4645.84	18.419 (2)
18-13-S	31.42	31.42	0.00	-167.96	-4645.84	27.660 (2)
18-14-S	31.42	31.42	0.00	-100.23	-4645.84	46.350 (2)
18-15-S	31.42	31.42	0.00	-51.57	-4645.84	90.086 (2)
18-16-S	31.42	31.42	2.32	-11.57	4645.84	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.16.0.5.005.A.DOCX

COMMESSA	LOTTO	CODIFICA	DOCUMENTO	REV.	FOGLIO
IF2R	2.2.E.ZZ	CL	TR.16.0.5.005	A	43 di 118

Is	Afi [cmq]	Afs [cmq]	Mp [kNm]	Mn [kNm]	Mu [kNm]	FS
18-17-S	31.42	31.42	4.71	-3.64	4645.84	100.000 (1)
18-18-S	31.42	31.42	10.26	-1.78	4645.84	100.000 (1)
18-19-S	31.42	31.42	10.38	-1.42	4645.84	100.000 (1)
18-20-S	31.42	31.42	8.87	-1.24	4645.84	100.000 (1)
18-21-S	31.42	31.42	6.26	-0.93	4645.84	100.000 (1)
19-1-S	31.42	31.42	15.25	-6.56	4645.84	100.000 (1)
19-2-S	31.42	31.42	42.02	-20.78	4645.84	84.233 (2)
19-3-S	31.42	31.42	9.55	-21.88	4645.84	100.000 (1)
19-4-S	31.42	31.42	3.31	-138.62	-4645.84	33.515 (2)
19-5-S	31.42	31.42	8.21	-118.73	-4645.84	31.304 (2)
19-6-S	31.42	31.42	39.22	-51.43	-4645.84	43.020 (2)
19-7-S	31.42	31.42	0.00	-538.68	-4645.84	8.624 (2)
19-8-S	31.42	31.42	0.00	-468.46	-4645.84	9.917 (2)
19-9-S	31.42	31.42	0.00	-398.58	-4645.84	11.656 (2)
19-10-S	31.42	31.42	0.00	-330.13	-4645.84	14.073 (2)
19-11-S	31.42	31.42	0.00	-261.57	-4645.84	17.761 (2)
19-12-S	31.42	31.42	0.00	-192.27	-4645.84	24.163 (2)
19-13-S	31.42	31.42	0.00	-123.05	-4645.84	37.755 (2)
19-14-S	31.42	31.42	0.09	-54.00	-4645.84	86.040 (2)
19-15-S	31.42	31.42	31.18	-14.25	4645.84	89.413 (2)
19-16-S	31.42	31.42	89.52	-3.43	4645.84	51.895 (2)
19-17-S	31.42	31.42	70.18	-5.57	4645.84	66.196 (2)
19-18-S	31.42	31.42	12.07	-22.17	4645.84	100.000 (1)
19-19-S	31.42	31.42	7.16	-36.86	4645.84	100.000 (1)
19-20-S	31.42	31.42	5.28	-29.77	4645.84	100.000 (1)
19-21-S	31.42	31.42	4.53	-10.29	4645.84	100.000 (1)
20-1-S	31.42	31.42	2.13	-9.44	4645.84	100.000 (1)
20-2-S	31.42	31.42	0.11	-16.15	4645.84	100.000 (1)
20-3-S	31.42	31.42	0.67	-22.86	4645.84	100.000 (1)
20-4-S	31.42	31.42	5.45	-42.74	-4645.84	86.965 (2)
20-5-S	31.42	31.42	17.76	-10.19	4645.84	100.000 (1)
20-6-S	31.42	31.42	54.06	-2.26	4645.84	81.845 (2)
20-7-S	31.42	31.42	0.00	-572.43	-4645.84	8.116 (2)
20-8-S	31.42	31.42	0.00	-470.34	-4645.84	9.878 (2)
20-9-S	31.42	31.42	0.00	-391.04	-4645.84	11.881 (2)
20-10-S	31.42	31.42	0.00	-316.98	-4645.84	14.657 (2)
20-11-S	31.42	31.42	0.00	-245.00	-4645.84	18.963 (2)
20-12-S	31.42	31.42	0.00	-179.68	-4645.84	25.856 (2)
20-13-S	31.42	31.42	0.01	-119.17	-4645.84	38.986 (2)
20-14-S	31.42	31.42	0.49	-64.28	-4645.84	72.278 (2)
20-15-S	31.42	31.42	5.28	-21.77	4645.84	100.000 (1)
20-16-S	31.42	31.42	14.47	-9.98	4645.84	100.000 (1)
20-17-S	31.42	31.42	16.86	-9.73	4645.84	100.000 (1)
20-18-S	31.42	31.42	18.27	-10.06	4645.84	100.000 (1)
20-19-S	31.42	31.42	12.17	-6.65	4645.84	100.000 (1)
20-20-S	31.42	31.42	9.37	-4.54	4645.84	100.000 (1)
20-21-S	31.42	31.42	8.10	-2.86	4645.84	100.000 (1)

Pali in c.a.

Ip	Is	Ar [cmq]	M [kNm]	N [kN]	Mu [kNm]	Nu [kN]	FS
1	1	76.03	366.13	-121.29	1327.17	-439.65	3.625
2	1	62.83	366.14	538.32	1115.07	1639.45	3.045
3	1	62.83	366.14	1197.94	1048.47	3430.39	2.864

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> <u>Mandante:</u> SYSTRA S.A. SWS Engineering S.p.A. SYSTRA-SOTECNI S.p.A.													
Relazione di calcolo IF2R.2.2.E.ZZ.CL.TR.16.0.5.005.A.DOCX	<table border="1"> <thead> <tr> <th>COMMESSA</th> <th>LOTTO</th> <th>CODIFICA</th> <th>DOCUMENTO</th> <th>REV.</th> <th>FOGLIO</th> </tr> </thead> <tbody> <tr> <td>IF2R</td> <td>2.2.E.ZZ</td> <td>CL</td> <td>TR.16.0.5.005</td> <td>A</td> <td>44 di 118</td> </tr> </tbody> </table>	COMMESSA	LOTTO	CODIFICA	DOCUMENTO	REV.	FOGLIO	IF2R	2.2.E.ZZ	CL	TR.16.0.5.005	A	44 di 118
COMMESSA	LOTTO	CODIFICA	DOCUMENTO	REV.	FOGLIO								
IF2R	2.2.E.ZZ	CL	TR.16.0.5.005	A	44 di 118								

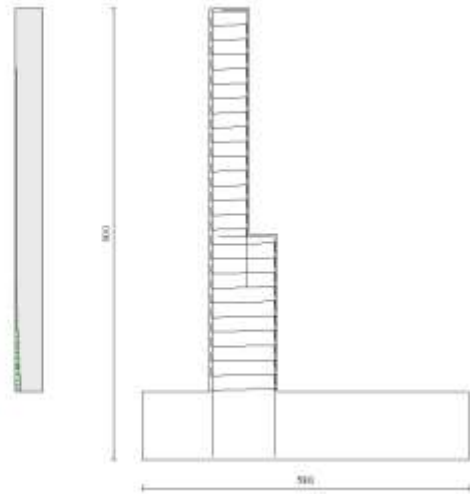


Fig. 14 - Paramento (Inviluppo)

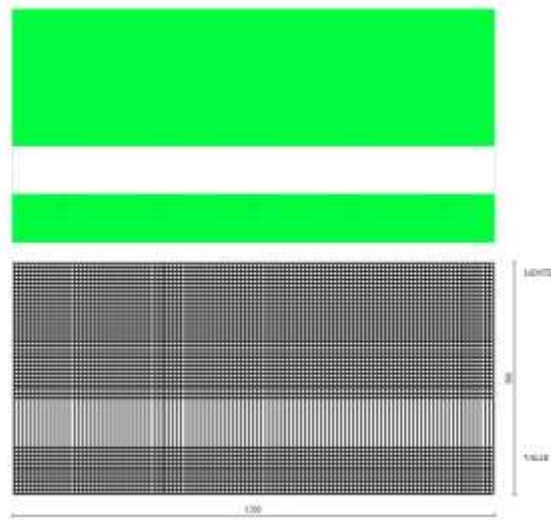


Fig. 15 - Piastra fondazione dir. X (Inviluppo)

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.16.0.5.005.A.DOCX	IF2R	2.2.E.ZZ	CL	TR.16.0.5.005	A	45 di 118

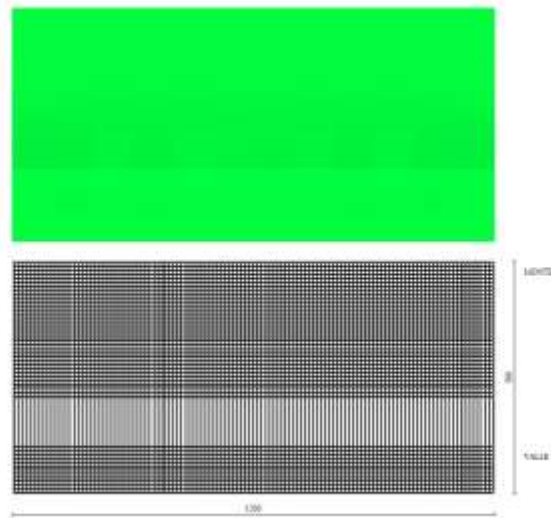


Fig. 16 - Piastra fondazione dir. Y (Inviluppo)

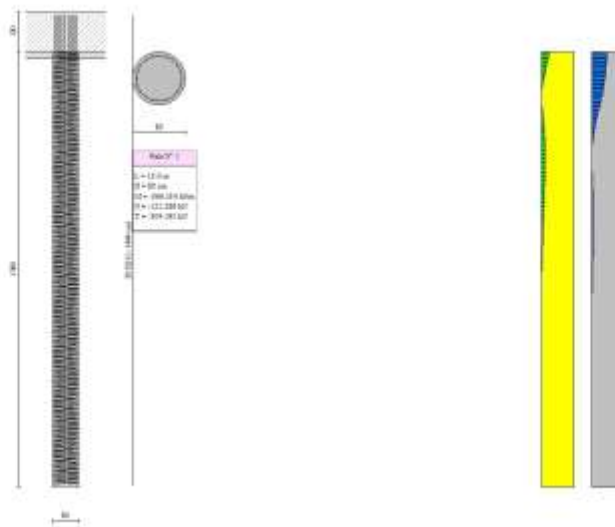


Fig. 17 - Pali (Palo n° 1) (Inviluppo)

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.16.0.5.005.A.DOCX	IF2R	2.2.E.ZZ	CL	TR.16.0.5.005	A	46 di 118

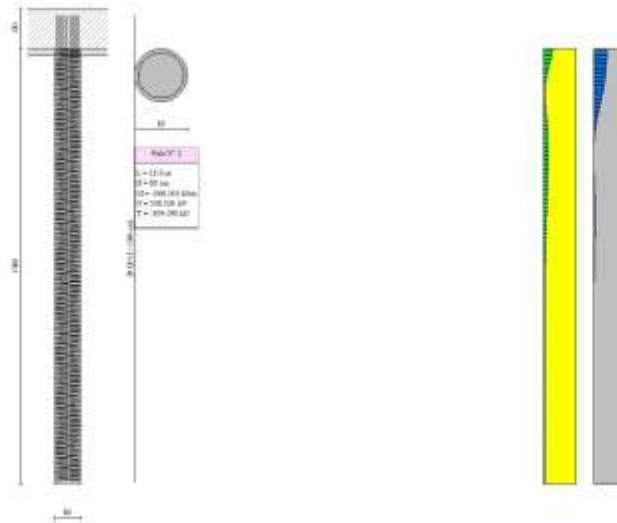


Fig. 18 - Pali (Palo n° 2) (Inviluppo)

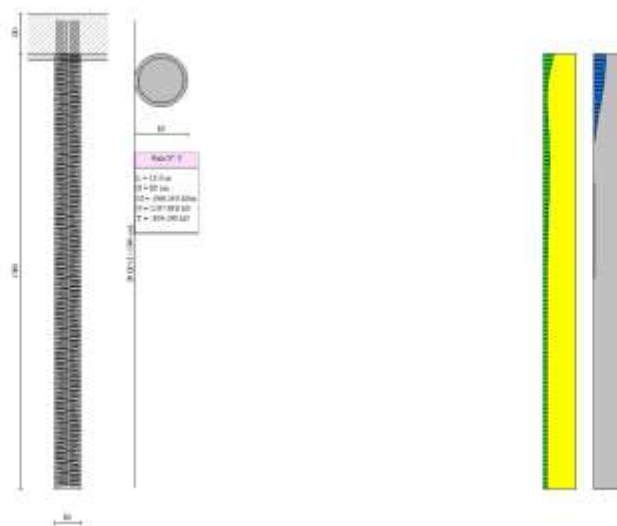


Fig. 19 - Pali (Palo n° 3) (Inviluppo)

Verifiche a taglio

Simbologia adottata

I_s	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]
$\cotg\theta$	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]

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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.16.0.5.005.A.DOCX

COMMESSA	LOTTO	CODIFICA	DOCUMENTO	REV.	FOGLIO
IF2R	2.2.E.ZZ	CL	TR.16.0.5.005	A	47 di 118

FS fattore di sicurezza (rapporto tra sollecitazione resistente e sollecitazione agente)

Paramento

n°	B [cm]	H [cm]	A _{sw} [cmq]	cotθ	V _{Rcd} [kN]	V _{Rsd} [kN]	V _{Rd} [kN]	T [kN]	FS
1	100	70	0.00	--	0.00	0.00	311.30	10.15	30.670
2	100	70	0.00	--	0.00	0.00	311.55	10.15	30.694
3	100	70	0.00	--	0.00	0.00	349.04	10.15	34.388
4	100	70	0.00	--	0.00	0.00	349.28	10.15	34.412
5	100	70	0.00	--	0.00	0.00	349.53	10.15	34.436
6	100	70	0.00	--	0.00	0.00	349.77	10.15	34.460
7	100	70	0.00	--	0.00	0.00	350.01	10.15	34.484
8	100	70	0.00	--	0.00	0.00	350.25	10.15	34.508
9	100	70	0.00	--	0.00	0.00	350.50	10.15	34.532
10	100	70	0.00	--	0.00	0.00	350.74	10.15	34.556
11	100	70	0.00	--	0.00	0.00	350.98	10.15	34.579
12	100	70	0.00	--	0.00	0.00	351.22	10.15	34.603
13	100	70	0.00	--	0.00	0.00	351.47	10.15	34.627
14	100	70	0.00	--	0.00	0.00	351.71	10.15	34.651
15	100	70	0.00	--	0.00	0.00	351.95	10.15	34.675
16	100	70	0.00	--	0.00	0.00	352.19	10.15	34.699
17	100	70	0.00	--	0.00	0.00	352.44	10.15	34.723
18	100	70	0.00	--	0.00	0.00	352.68	10.15	34.747
19	100	70	0.00	--	0.00	0.00	352.92	10.15	34.771
20	100	70	0.00	--	0.00	0.00	353.17	10.15	34.795
21	100	70	0.00	--	0.00	0.00	353.41	10.15	34.819
22	100	70	0.00	--	0.00	0.00	353.65	10.15	34.842
23	100	70	0.00	--	0.00	0.00	353.68	10.26	34.468
24	100	70	0.00	--	0.00	0.00	353.92	10.67	33.161
25	100	70	0.00	--	0.00	0.00	354.17	11.08	31.950
26	100	70	0.00	--	0.00	0.00	354.41	11.50	30.827
27	100	70	0.00	--	0.00	0.00	354.65	11.91	29.781
28	100	70	0.00	--	0.00	0.00	354.89	12.32	28.805
29	100	70	0.00	--	0.00	0.00	355.14	12.73	27.893
30	100	70	0.00	--	0.00	0.00	355.38	13.14	27.037
31	100	70	0.00	--	0.00	0.00	355.62	13.56	26.233
32	100	70	0.00	--	0.00	0.00	355.87	15.76	22.579
33	100	70	0.00	--	0.00	0.00	356.11	18.03	19.754
34	100	70	0.00	--	0.00	0.00	356.35	20.34	17.519
35	100	70	0.00	--	0.00	0.00	356.59	22.70	15.708
36	100	70	0.00	--	0.00	0.00	356.84	25.11	14.211
37	100	70	0.00	--	0.00	0.00	357.08	27.56	12.954
38	100	70	0.00	--	0.00	0.00	357.32	30.07	11.884
39	100	70	0.00	--	0.00	0.00	357.56	32.62	10.962
40	100	70	0.00	--	0.00	0.00	357.81	35.22	10.160
41	100	70	0.00	--	0.00	0.00	358.05	37.86	9.457
42	100	120	0.00	--	0.00	0.00	474.66	41.04	11.566
43	100	120	0.00	--	0.00	0.00	475.08	48.17	9.862
44	100	120	0.00	--	0.00	0.00	475.50	54.10	8.789
45	100	120	0.00	--	0.00	0.00	475.92	58.84	8.088
46	100	120	0.00	--	0.00	0.00	476.33	62.41	7.632
47	100	120	0.00	--	0.00	0.00	476.75	65.34	7.297
48	100	120	0.00	--	0.00	0.00	477.17	68.33	6.983
49	100	120	0.00	--	0.00	0.00	477.59	71.40	6.689
50	100	120	0.00	--	0.00	0.00	478.00	74.54	6.413
51	100	120	0.00	--	0.00	0.00	478.42	77.73	6.155
52	100	120	0.00	--	0.00	0.00	478.84	80.98	5.913
53	100	120	0.00	--	0.00	0.00	479.26	84.29	5.686
54	100	120	0.00	--	0.00	0.00	479.67	87.65	5.473
55	100	120	0.00	--	0.00	0.00	480.09	91.06	5.272
56	100	120	0.00	--	0.00	0.00	480.51	94.52	5.083
57	100	120	0.00	--	0.00	0.00	480.92	98.04	4.905
58	100	120	0.00	--	0.00	0.00	481.34	101.60	4.737
59	100	120	0.00	--	0.00	0.00	481.76	105.22	4.579
60	100	120	0.00	--	0.00	0.00	482.18	108.88	4.428
61	100	120	0.00	--	0.00	0.00	482.59	112.59	4.286
62	100	120	0.00	--	0.00	0.00	433.49	116.35	3.726
63	100	120	0.00	--	0.00	0.00	433.91	120.16	3.611
64	100	120	0.00	--	0.00	0.00	483.85	124.02	3.901
65	100	120	0.00	--	0.00	0.00	484.26	127.92	3.786
66	100	120	0.00	--	0.00	0.00	484.68	131.87	3.675
67	100	120	0.00	--	0.00	0.00	484.69	131.95	3.673
68	100	120	0.00	--	0.00	0.00	485.07	135.62	3.577
69	100	120	0.00	--	0.00	0.00	485.46	139.33	3.484
70	100	120	0.00	--	0.00	0.00	485.84	143.08	3.396
71	100	120	0.00	--	0.00	0.00	486.22	146.86	3.311
72	100	120	0.00	--	0.00	0.00	486.61	150.69	3.229

APPALTATORE:

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PROGETTO ESECUTIVO

Relazione di calcolo

IF2R.2.2.E.ZZ.CL.TR.16.0.5.005.A.DOCX

COMMESSA	LOTTO	CODIFICA	DOCUMENTO	REV.	FOGLIO
IF2R	2.2.E.ZZ	CL	TR.16.0.5.005	A	48 di 118

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	60	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
1-2-P	60	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
1-3-P	60	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
1-4-P	60	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
1-5-P	60	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
1-6-P	60	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
1-7-P	60	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
1-8-P	60	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
1-9-P	60	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
1-10-P	60	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
1-11-P	60	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
1-12-P	60	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
1-13-P	60	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
1-14-P	60	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
1-15-P	60	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
1-16-P	60	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
1-17-P	60	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
1-18-P	60	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
1-19-P	60	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
1-20-P	60	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
1-21-P	60	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
1-22-P	60	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
1-23-P	60	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
1-24-P	60	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
1-25-P	60	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
1-26-P	60	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
1-27-P	60	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
1-28-P	60	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
1-29-P	60	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
1-30-P	60	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
1-31-P	60	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
1-32-P	60	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
1-33-P	60	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
1-34-P	60	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
1-35-P	60	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
1-36-P	60	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
1-37-P	60	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
1-38-P	60	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
1-39-P	60	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
1-40-P	60	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
1-41-P	60	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
1-42-P	60	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
1-43-P	60	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
1-44-P	60	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
1-45-P	60	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
1-46-P	60	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
1-47-P	60	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
1-48-P	60	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
1-49-P	60	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
2-1-P	60	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
2-2-P	60	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
2-3-P	60	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
2-4-P	60	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
2-5-P	60	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
2-6-P	60	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
2-7-P	60	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
2-8-P	60	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
2-9-P	60	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
2-10-P	60	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
2-11-P	60	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
2-12-P	60	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
2-13-P	60	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
2-14-P	60	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
2-15-P	60	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
2-16-P	60	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
2-17-P	60	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
2-18-P	60	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
2-19-P	60	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
2-20-P	60	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
2-21-P	60	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
2-22-P	60	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
2-23-P	60	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
2-24-P	60	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
2-25-P	60	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
2-26-P	60	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
2-27-P	60	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
2-28-P	60	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
2-29-P	60	120	0.00	0.000	0.00	0.00	0.00	0.00	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
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.16.0.5.005.A.DOCX

COMMESSA	LOTTO	CODIFICA	DOCUMENTO	REV.	FOGLIO
IF2R	2.2.E.ZZ	CL	TR.16.0.5.005	A	49 di 118

Is	B [cm]	H [cm]	A _{sw} [cmq]	cotg (θ)	V _{Rcd} [kN]	V _{Rsd} [kN]	V _{Rd} [kN]	T [kN]	FS
2-30-P	60	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
2-31-P	60	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
2-32-P	60	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
2-33-P	60	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
2-34-P	60	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
2-35-P	60	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
2-36-P	60	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
2-37-P	60	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
2-38-P	60	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
2-39-P	60	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
2-40-P	60	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
2-41-P	60	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
2-42-P	60	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
2-43-P	60	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
2-44-P	60	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
2-45-P	60	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
2-46-P	60	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
2-47-P	60	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
2-48-P	60	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
2-49-P	60	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
5-1-P	85	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
5-2-P	85	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
5-3-P	85	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
5-4-P	85	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
5-5-P	85	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
5-6-P	85	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
5-7-P	85	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
5-8-P	85	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
5-9-P	85	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
5-10-P	85	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
5-11-P	85	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
5-12-P	85	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
5-13-P	85	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
5-14-P	85	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
5-15-P	85	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
5-16-P	85	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
5-17-P	85	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
5-18-P	85	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
5-19-P	85	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
5-20-P	85	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
5-21-P	85	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
5-22-P	85	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
5-23-P	85	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
5-24-P	85	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
5-25-P	85	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
5-26-P	85	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
5-27-P	85	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
5-28-P	85	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
5-29-P	85	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
5-30-P	85	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
5-31-P	85	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
5-32-P	85	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
5-33-P	85	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
5-34-P	85	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
5-35-P	85	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
5-36-P	85	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
5-37-P	85	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
5-38-P	85	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
5-39-P	85	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
5-40-P	85	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
5-41-P	85	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
5-42-P	85	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
5-43-P	85	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
5-44-P	85	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
5-45-P	85	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
5-46-P	85	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
5-47-P	85	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
5-48-P	85	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
5-49-P	85	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
6-1-P	85	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
6-2-P	85	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
6-3-P	85	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
6-4-P	85	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
6-5-P	85	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
6-6-P	85	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
6-7-P	85	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
6-8-P	85	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
6-9-P	85	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
6-10-P	85	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
6-11-P	85	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
6-12-P	85	120	0.00	0.000	0.00	0.00	0.00	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.16.0.5.005.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.16.0.5.005	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
6-13-P	85	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
6-14-P	85	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
6-15-P	85	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
6-16-P	85	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
6-17-P	85	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
6-18-P	85	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
6-19-P	85	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
6-20-P	85	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
6-21-P	85	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
6-22-P	85	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
6-23-P	85	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
6-24-P	85	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
6-25-P	85	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
6-26-P	85	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
6-27-P	85	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
6-28-P	85	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
6-29-P	85	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
6-30-P	85	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
6-31-P	85	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
6-32-P	85	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
6-33-P	85	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
6-34-P	85	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
6-35-P	85	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
6-36-P	85	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
6-37-P	85	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
6-38-P	85	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
6-39-P	85	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
6-40-P	85	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
6-41-P	85	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
6-42-P	85	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
6-43-P	85	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
6-44-P	85	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
6-45-P	85	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
6-46-P	85	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
6-47-P	85	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
6-48-P	85	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
6-49-P	85	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
7-1-P	85	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
7-2-P	85	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
7-3-P	85	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
7-4-P	85	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
7-5-P	85	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
7-6-P	85	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
7-7-P	85	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
7-8-P	85	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
7-9-P	85	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
7-10-P	85	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
7-11-P	85	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
7-12-P	85	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
7-13-P	85	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
7-14-P	85	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
7-15-P	85	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
7-16-P	85	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
7-17-P	85	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
7-18-P	85	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
7-19-P	85	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
7-20-P	85	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
7-21-P	85	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
7-22-P	85	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
7-23-P	85	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
7-24-P	85	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
7-25-P	85	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
7-26-P	85	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
7-27-P	85	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
7-28-P	85	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
7-29-P	85	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
7-30-P	85	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
7-31-P	85	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
7-32-P	85	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
7-33-P	85	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
7-34-P	85	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
7-35-P	85	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
7-36-P	85	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
7-37-P	85	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
7-38-P	85	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
7-39-P	85	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
7-40-P	85	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
7-41-P	85	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
7-42-P	85	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
7-43-P	85	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
7-44-P	85	120	0.00	0.000	0.00	0.00	0.00	0.00	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.16.0.5.005.A.DOCX

COMMESSA	LOTTO	CODIFICA	DOCUMENTO	REV.	FOGLIO
IF2R	2.2.E.ZZ	CL	TR.16.0.5.005	A	51 di 118

Is	B [cm]	H [cm]	A _{sw} [cmq]	cotg (θ)	V _{Rcd} [kN]	V _{Rsd} [kN]	V _{Rd} [kN]	T [kN]	FS
7-45-P	85	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
7-46-P	85	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
7-47-P	85	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
7-48-P	85	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
7-49-P	85	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
8-1-P	85	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
8-2-P	85	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
8-3-P	85	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
8-4-P	85	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
8-5-P	85	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
8-6-P	85	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
8-7-P	85	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
8-8-P	85	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
8-9-P	85	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
8-10-P	85	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
8-11-P	85	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
8-12-P	85	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
8-13-P	85	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
8-14-P	85	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
8-15-P	85	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
8-16-P	85	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
8-17-P	85	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
8-18-P	85	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
8-19-P	85	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
8-20-P	85	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
8-21-P	85	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
8-22-P	85	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
8-23-P	85	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
8-24-P	85	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
8-25-P	85	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
8-26-P	85	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
8-27-P	85	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
8-28-P	85	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
8-29-P	85	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
8-30-P	85	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
8-31-P	85	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
8-32-P	85	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
8-33-P	85	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
8-34-P	85	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
8-35-P	85	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
8-36-P	85	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
8-37-P	85	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
8-38-P	85	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
8-39-P	85	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
8-40-P	85	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
8-41-P	85	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
8-42-P	85	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
8-43-P	85	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
8-44-P	85	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
8-45-P	85	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
8-46-P	85	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
8-47-P	85	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
8-48-P	85	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
8-49-P	85	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
9-1-S	100	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
9-2-S	100	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
9-3-S	100	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
9-4-S	100	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
9-5-S	100	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
9-6-S	100	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
9-7-S	100	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
9-8-S	100	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
9-9-S	100	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
9-10-S	100	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
9-11-S	100	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
9-12-S	100	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
9-13-S	100	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
9-14-S	100	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
9-15-S	100	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
9-16-S	100	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
9-17-S	100	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
9-18-S	100	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
9-19-S	100	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
9-20-S	100	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
9-21-S	100	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
10-1-S	100	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
10-2-S	100	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
10-3-S	100	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
10-4-S	100	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
10-5-S	100	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
10-6-S	100	120	0.00	0.000	0.00	0.00	0.00	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.16.0.5.005.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.16.0.5.005	A	52 di 118

Is	B [cm]	H [cm]	A _{sw} [cmq]	cotg (θ)	V _{Rcd} [kN]	V _{Rsd} [kN]	V _{Rd} [kN]	T [kN]	FS
10-7-S	100	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
10-8-S	100	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
10-9-S	100	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
10-10-S	100	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
10-11-S	100	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
10-12-S	100	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
10-13-S	100	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
10-14-S	100	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
10-15-S	100	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
10-16-S	100	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
10-17-S	100	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
10-18-S	100	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
10-19-S	100	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
10-20-S	100	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
10-21-S	100	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
11-1-S	100	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
11-2-S	100	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
11-3-S	100	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
11-4-S	100	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
11-5-S	100	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
11-6-S	100	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
11-7-S	100	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
11-8-S	100	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
11-9-S	100	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
11-10-S	100	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
11-11-S	100	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
11-12-S	100	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
11-13-S	100	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
11-14-S	100	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
11-15-S	100	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
11-16-S	100	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
11-17-S	100	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
11-18-S	100	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
11-19-S	100	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
11-20-S	100	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
11-21-S	100	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
12-1-S	100	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
12-2-S	100	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
12-3-S	100	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
12-4-S	100	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
12-5-S	100	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
12-6-S	100	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
12-7-S	100	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
12-8-S	100	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
12-9-S	100	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
12-10-S	100	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
12-11-S	100	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
12-12-S	100	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
12-13-S	100	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
12-14-S	100	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
12-15-S	100	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
12-16-S	100	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
12-17-S	100	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
12-18-S	100	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
12-19-S	100	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
12-20-S	100	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
12-21-S	100	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
13-1-S	100	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
13-2-S	100	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
13-3-S	100	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
13-4-S	100	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
13-5-S	100	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
13-6-S	100	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
13-7-S	100	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
13-8-S	100	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
13-9-S	100	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
13-10-S	100	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
13-11-S	100	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
13-12-S	100	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
13-13-S	100	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
13-14-S	100	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
13-15-S	100	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
13-16-S	100	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
13-17-S	100	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
13-18-S	100	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
13-19-S	100	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
13-20-S	100	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
13-21-S	100	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
14-1-S	100	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
14-2-S	100	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
14-3-S	100	120	0.00	0.000	0.00	0.00	0.00	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.16.0.5.005.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.16.0.5.005	A	53 di 118

Is	B [cm]	H [cm]	A _{sw} [cmq]	cotg (θ)	V _{Rcd} [kN]	V _{Rsd} [kN]	V _{Rd} [kN]	T [kN]	FS
14-4-S	100	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
14-5-S	100	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
14-6-S	100	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
14-7-S	100	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
14-8-S	100	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
14-9-S	100	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
14-10-S	100	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
14-11-S	100	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
14-12-S	100	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
14-13-S	100	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
14-14-S	100	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
14-15-S	100	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
14-16-S	100	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
14-17-S	100	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
14-18-S	100	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
14-19-S	100	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
14-20-S	100	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
14-21-S	100	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
15-1-S	100	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
15-2-S	100	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
15-3-S	100	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
15-4-S	100	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
15-5-S	100	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
15-6-S	100	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
15-7-S	100	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
15-8-S	100	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
15-9-S	100	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
15-10-S	100	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
15-11-S	100	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
15-12-S	100	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
15-13-S	100	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
15-14-S	100	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
15-15-S	100	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
15-16-S	100	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
15-17-S	100	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
15-18-S	100	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
15-19-S	100	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
15-20-S	100	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
15-21-S	100	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
16-1-S	100	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
16-2-S	100	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
16-3-S	100	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
16-4-S	100	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
16-5-S	100	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
16-6-S	100	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
16-7-S	100	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
16-8-S	100	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
16-9-S	100	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
16-10-S	100	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
16-11-S	100	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
16-12-S	100	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
16-13-S	100	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
16-14-S	100	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
16-15-S	100	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
16-16-S	100	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
16-17-S	100	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
16-18-S	100	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
16-19-S	100	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
16-20-S	100	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
16-21-S	100	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
17-1-S	100	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
17-2-S	100	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
17-3-S	100	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
17-4-S	100	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
17-5-S	100	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
17-6-S	100	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
17-7-S	100	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
17-8-S	100	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
17-9-S	100	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
17-10-S	100	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
17-11-S	100	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
17-12-S	100	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
17-13-S	100	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
17-14-S	100	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
17-15-S	100	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
17-16-S	100	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
17-17-S	100	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
17-18-S	100	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
17-19-S	100	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
17-20-S	100	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
17-21-S	100	120	0.00	0.000	0.00	0.00	0.00	0.00	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.16.0.5.005.A.DOCX

COMMESSA	LOTTO	CODIFICA	DOCUMENTO	REV.	FOGLIO
IF2R	2.2.E.ZZ	CL	TR.16.0.5.005	A	54 di 118

Is	B [cm]	H [cm]	A _{sw} [cmq]	cotg(θ)	V _{Rcd} [kN]	V _{Rsd} [kN]	V _{Rd} [kN]	T [kN]	FS
18-1-S	100	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
18-2-S	100	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
18-3-S	100	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
18-4-S	100	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
18-5-S	100	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
18-6-S	100	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
18-7-S	100	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
18-8-S	100	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
18-9-S	100	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
18-10-S	100	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
18-11-S	100	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
18-12-S	100	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
18-13-S	100	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
18-14-S	100	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
18-15-S	100	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
18-16-S	100	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
18-17-S	100	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
18-18-S	100	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
18-19-S	100	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
18-20-S	100	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
18-21-S	100	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
19-1-S	100	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
19-2-S	100	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
19-3-S	100	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
19-4-S	100	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
19-5-S	100	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
19-6-S	100	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
19-7-S	100	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
19-8-S	100	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
19-9-S	100	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
19-10-S	100	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
19-11-S	100	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
19-12-S	100	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
19-13-S	100	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
19-14-S	100	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
19-15-S	100	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
19-16-S	100	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
19-17-S	100	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
19-18-S	100	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
19-19-S	100	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
19-20-S	100	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
19-21-S	100	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
20-1-S	100	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
20-2-S	100	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
20-3-S	100	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
20-4-S	100	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
20-5-S	100	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
20-6-S	100	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
20-7-S	100	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
20-8-S	100	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
20-9-S	100	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
20-10-S	100	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
20-11-S	100	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
20-12-S	100	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
20-13-S	100	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
20-14-S	100	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
20-15-S	100	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
20-16-S	100	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
20-17-S	100	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
20-18-S	100	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
20-19-S	100	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
20-20-S	100	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (1)
20-21-S	100	120	0.00	0.000	0.00	0.00	0.00	0.00	100.000 (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	626.74	3511.48	626.74	304.19	2.060
2	1	56.57	2.26	10	2.500	701.42	3511.48	701.42	304.19	2.306
3	1	56.57	2.26	10	2.500	783.43	3511.48	783.43	304.19	2.575

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.													
Relazione di calcolo IF2R.2.2.E.ZZ.CL.TR.16.0.5.005.A.DOCX	<table border="1"> <thead> <tr> <th>COMMESSA</th> <th>LOTTO</th> <th>CODIFICA</th> <th>DOCUMENTO</th> <th>REV.</th> <th>FOGLIO</th> </tr> </thead> <tbody> <tr> <td>IF2R</td> <td>2.2.E.ZZ</td> <td>CL</td> <td>TR.16.0.5.005</td> <td>A</td> <td>55 di 118</td> </tr> </tbody> </table>	COMMESSA	LOTTO	CODIFICA	DOCUMENTO	REV.	FOGLIO	IF2R	2.2.E.ZZ	CL	TR.16.0.5.005	A	55 di 118
COMMESSA	LOTTO	CODIFICA	DOCUMENTO	REV.	FOGLIO								
IF2R	2.2.E.ZZ	CL	TR.16.0.5.005	A	55 di 118								

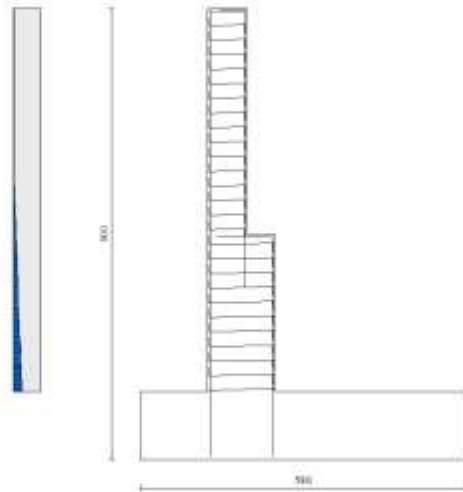


Fig. 20 - Paramento (Inviluppo)

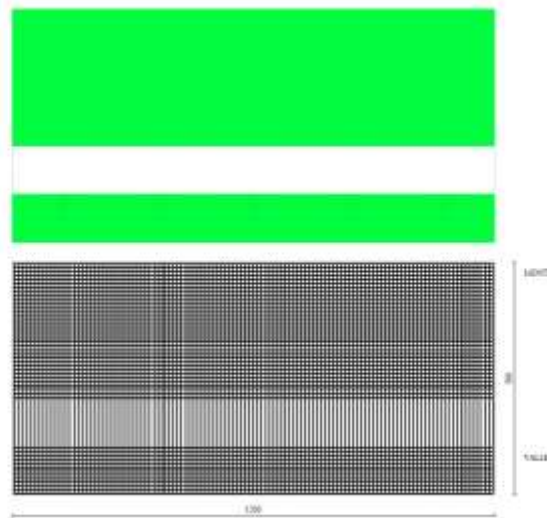


Fig. 21 - Piastra fondazione dir. X (Inviluppo)

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: 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.16.0.5.005.A.DOCX	IF2R	2.2.E.ZZ	CL	TR.16.0.5.005	A	56 di 118

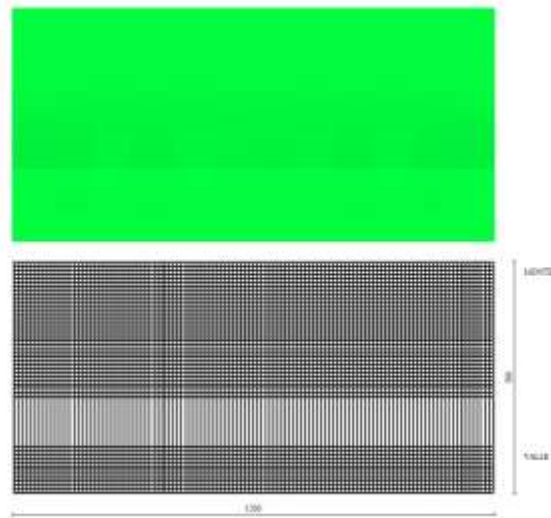


Fig. 22 - Piastra fondazione dir. Y (Inviluppo)

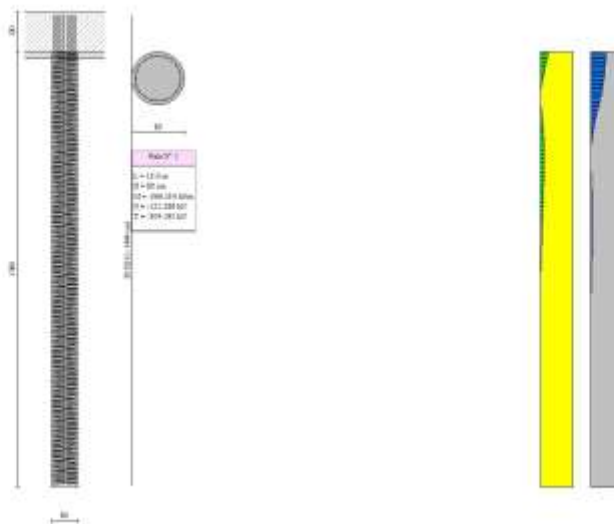


Fig. 23 - Pali (Palo n° 1) (Inviluppo)

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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.16.0.5.005.A.DOCX	IF2R	2.2.E.ZZ	CL	TR.16.0.5.005	A	57 di 118

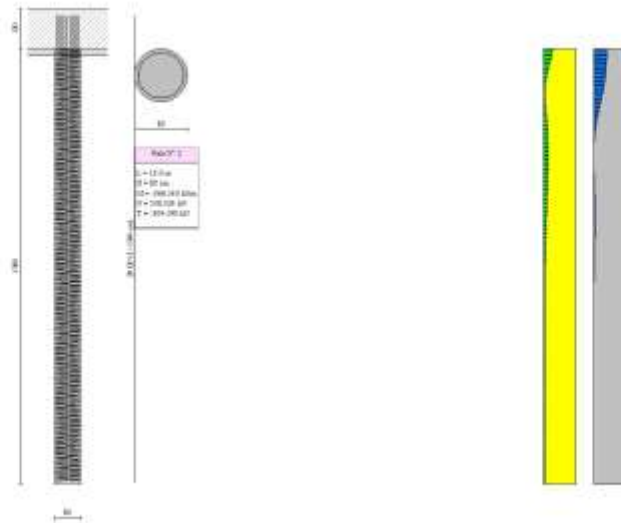


Fig. 24 - Pali (Palo n° 2) (Inviluppo)

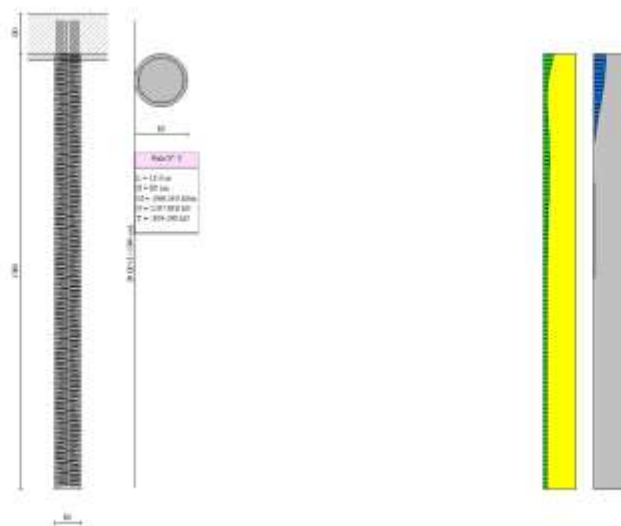


Fig. 25 - Pali (Palo n° 3) (Inviluppo)

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]
A_{fi}	area ferri inferiori, espresso in [cm ²]
A_{fs}	area ferri superiori, espressa in [cm ²]
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]

APPALTATORE:

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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.16.0.5.005.A.DOCX

COMMESSA	LOTTO	CODIFICA	DOCUMENTO	REV.	FOGLIO
IF2R	2.2.E.ZZ	CL	TR.16.0.5.005	A	58 di 118

σfs tensione nei ferri superiori, espressa in [kPa]

Combinazioni SLERParamento

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]	σc [kPa]	σfi [kPa]	σfs [kPa]
1	100	70	0.00	31.42	2.00	5.00	38 (5)	494 (5)	0 (5)
2	100	70	0.00	31.42	2.70	6.72	51 (5)	670 (5)	0 (5)
3	100	70	12.72	31.42	3.40	8.43	59 (5)	798 (5)	750 (5)
4	100	70	12.72	31.42	4.10	10.15	71 (5)	965 (5)	904 (5)
5	100	70	12.72	31.42	4.80	11.86	83 (5)	1131 (5)	1059 (5)
6	100	70	12.72	31.42	5.50	13.58	95 (5)	1297 (5)	1213 (5)
7	100	70	12.72	31.42	6.20	15.29	107 (5)	1464 (5)	1367 (5)
8	100	70	12.72	31.42	6.90	17.01	119 (5)	1630 (5)	1521 (5)
9	100	70	12.72	31.42	7.60	18.73	131 (5)	1796 (5)	1675 (5)
10	100	70	12.72	31.42	8.30	20.44	143 (5)	1963 (5)	1830 (5)
11	100	70	12.72	31.42	9.00	22.16	155 (5)	2129 (5)	1984 (5)
12	100	70	12.72	31.42	9.70	23.87	167 (5)	2295 (5)	2138 (5)
13	100	70	12.72	31.42	10.40	25.59	179 (5)	2462 (5)	2292 (5)
14	100	70	12.72	31.42	11.10	27.30	191 (5)	2628 (5)	2446 (5)
15	100	70	12.72	31.42	11.80	29.02	203 (5)	2794 (5)	2601 (5)
16	100	70	12.72	31.42	12.50	30.74	215 (5)	2960 (5)	2755 (5)
17	100	70	12.72	31.42	13.20	32.45	227 (5)	3127 (5)	2909 (5)
18	100	70	12.72	31.42	13.90	34.17	240 (5)	3293 (5)	3063 (5)
19	100	70	12.72	31.42	14.60	35.88	252 (5)	3459 (5)	3217 (5)
20	100	70	12.72	31.42	15.30	37.60	264 (5)	3626 (5)	3372 (5)
21	100	70	12.72	31.42	16.00	39.32	276 (5)	3792 (5)	3526 (5)
22	100	70	12.72	31.42	16.70	41.03	288 (5)	3958 (5)	3680 (5)
23	100	70	12.72	31.42	17.40	42.75	300 (5)	4125 (5)	3834 (5)
24	100	70	12.72	31.42	18.10	44.46	312 (5)	4291 (5)	3988 (5)
25	100	70	12.72	31.42	18.80	46.18	324 (5)	4457 (5)	4143 (5)
26	100	70	12.72	31.42	19.50	47.89	336 (5)	4624 (5)	4297 (5)
27	100	70	12.72	31.42	20.20	49.61	348 (5)	4790 (5)	4451 (5)
28	100	70	12.72	31.42	20.90	51.33	360 (5)	4956 (5)	4605 (5)
29	100	70	12.72	31.42	21.60	53.04	372 (5)	5123 (5)	4759 (5)
30	100	70	12.72	31.42	22.29	54.76	384 (5)	5289 (5)	4913 (5)
31	100	70	12.72	31.42	22.99	56.47	396 (5)	5455 (5)	5068 (5)
32	100	70	12.72	31.42	23.73	58.19	409 (5)	5638 (5)	5228 (5)
33	100	70	12.72	31.42	24.54	59.90	423 (5)	5857 (5)	5403 (5)
34	100	70	12.72	31.42	25.42	61.62	438 (5)	6114 (5)	5593 (5)
35	100	70	12.72	31.42	26.39	63.34	454 (5)	6411 (5)	5799 (5)
36	100	70	12.72	31.42	27.45	65.05	472 (5)	6752 (5)	6021 (5)
37	100	70	12.72	31.42	28.60	66.77	492 (5)	7138 (5)	6260 (5)
38	100	70	12.72	31.42	29.85	68.48	513 (5)	7574 (5)	6518 (5)
39	100	70	12.72	31.42	31.20	70.20	536 (5)	8060 (5)	6795 (5)
40	100	70	12.72	31.42	32.66	71.91	560 (5)	8601 (5)	7092 (5)
41	100	70	12.72	31.42	34.23	73.63	586 (5)	9200 (5)	7409 (5)
42	100	120	12.72	31.42	48.19	86.48	314 (5)	4297 (5)	4320 (5)
43	100	120	12.72	31.42	50.06	89.36	326 (5)	4502 (5)	4488 (5)
44	100	120	12.72	31.42	52.40	92.23	342 (5)	4816 (5)	4697 (5)
45	100	120	12.72	31.42	55.09	95.11	360 (5)	5216 (5)	4936 (5)
46	100	120	12.72	31.42	58.01	97.99	379 (5)	5675 (5)	5196 (5)
47	100	120	12.72	31.42	61.07	100.87	400 (5)	6171 (5)	5468 (5)
48	100	120	12.72	31.42	64.24	103.75	421 (5)	6700 (5)	5750 (5)
49	100	120	12.72	31.42	67.54	106.63	443 (5)	7265 (5)	6043 (5)
50	100	120	12.72	31.42	70.97	109.50	466 (5)	7867 (5)	6347 (5)
51	100	120	12.72	31.42	74.54	112.38	490 (5)	8509 (5)	6663 (5)
52	100	120	12.72	31.42	78.25	115.26	515 (5)	9192 (5)	6990 (5)
53	100	120	12.72	31.42	82.11	118.14	541 (5)	9918 (5)	7330 (5)
54	100	120	12.72	31.42	86.12	121.02	568 (5)	10689 (5)	7683 (5)
55	100	120	12.72	31.42	90.29	123.89	596 (5)	11506 (5)	8050 (5)
56	100	120	12.72	31.42	94.63	126.77	625 (5)	12372 (5)	8429 (5)
57	100	120	12.72	31.42	99.13	129.65	655 (5)	13287 (5)	8823 (5)
58	100	120	12.72	31.42	103.81	132.53	687 (5)	14255 (5)	9230 (5)
59	100	120	12.72	31.42	108.67	135.41	719 (5)	15275 (5)	9653 (5)
60	100	120	12.72	31.42	113.71	138.29	753 (5)	16349 (5)	10090 (5)
61	100	120	12.72	31.42	118.94	141.16	788 (5)	17480 (5)	10542 (5)
62	100	120	0.00	31.42	124.37	144.04	878 (5)	19308 (5)	0 (5)
63	100	120	0.00	31.42	129.99	146.92	918 (5)	20578 (5)	0 (5)
64	100	120	12.72	31.42	135.81	149.80	900 (5)	21226 (5)	11992 (5)
65	100	120	12.72	31.42	141.84	152.68	940 (5)	22596 (5)	12507 (5)
66	100	120	12.72	31.42	148.09	155.56	982 (5)	24030 (5)	13040 (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.16.0.5.005.A.DOCX

COMMESSA	LOTTO	CODIFICA	DOCUMENTO	REV.	FOGLIO
IF2R	2.2.E.ZZ	CL	TR.16.0.5.005	A	59 di 118

n°	B [cm]	H [cm]	Afi [cmq]	Afs [cmq]	M [kNm]	N [kN]	σc [kPa]	σfi [kPa]	σfs [kPa]
67	100	120	12.72	31.42	148.22	155.62	983 (5)	24060 (5)	13051 (5)
68	100	120	12.72	31.42	154.14	158.26	1022 (5)	25435 (5)	13555 (5)
69	100	120	12.72	31.42	160.25	160.90	1062 (5)	26866 (5)	14073 (5)
70	100	120	12.72	31.42	166.56	163.54	1104 (5)	28354 (5)	14606 (5)
71	100	120	12.72	31.42	173.05	166.18	1147 (5)	29899 (5)	15154 (5)
72	100	120	12.72	31.42	179.74	168.82	1191 (5)	31504 (5)	15718 (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	60	120	21.99	21.99	2.01	-0.11	14 (5)	681 (5)	198 (5)
1-2-P	60	120	21.99	21.99	1.65	-2.05	19 (5)	862 (5)	918 (5)
1-3-P	60	120	21.99	21.99	0.04	-8.54	62 (5)	786 (5)	3050 (5)
1-4-P	60	120	21.99	21.99	0.00	-25.30	178 (5)	2280 (5)	8842 (5)
1-5-P	60	120	21.99	21.99	0.14	-32.23	233 (5)	2975 (5)	11538 (5)
1-6-P	60	120	21.99	21.99	0.04	-34.04	250 (5)	3196 (5)	12398 (5)
1-7-P	60	120	21.99	21.99	0.13	-24.13	171 (5)	2189 (5)	8492 (5)
1-8-P	60	120	21.99	21.99	1.05	-8.12	55 (5)	828 (5)	2728 (5)
1-9-P	60	120	21.99	21.99	15.02	-0.26	106 (5)	5259 (5)	1356 (5)
1-10-P	60	120	21.99	21.99	19.79	-0.01	142 (5)	7037 (5)	1814 (5)
1-11-P	60	120	21.99	21.99	21.19	0.00	152 (5)	7548 (5)	1946 (5)
1-12-P	60	120	21.99	21.99	17.31	-0.16	123 (5)	6099 (5)	1572 (5)
1-13-P	60	120	21.99	21.99	3.75	-3.80	25 (5)	1248 (5)	1168 (5)
1-14-P	60	120	21.99	21.99	0.14	-18.06	126 (5)	1609 (5)	6240 (5)
1-15-P	60	120	21.99	21.99	0.10	-25.81	189 (5)	2414 (5)	9364 (5)
1-16-P	60	120	21.99	21.99	0.21	-24.32	177 (5)	2256 (5)	8749 (5)
1-17-P	60	120	21.99	21.99	0.39	-16.75	114 (5)	1457 (5)	5652 (5)
1-18-P	60	120	21.99	21.99	6.37	-2.14	44 (5)	2189 (5)	628 (5)
1-19-P	60	120	21.99	21.99	18.40	-0.09	131 (5)	6506 (5)	1677 (5)
1-20-P	60	120	21.99	21.99	22.66	0.00	163 (5)	8085 (5)	2085 (5)
1-21-P	60	120	21.99	21.99	20.04	-0.02	144 (5)	7118 (5)	1835 (5)
1-22-P	60	120	21.99	21.99	12.95	-0.56	92 (5)	4542 (5)	1171 (5)
1-23-P	60	120	21.99	21.99	1.10	-9.34	63 (5)	855 (5)	3101 (5)
1-24-P	60	120	21.99	21.99	0.42	-21.42	152 (5)	1944 (5)	7541 (5)
1-25-P	60	120	21.99	21.99	0.00	-29.00	215 (5)	2746 (5)	10651 (5)
1-26-P	60	120	21.99	21.99	0.42	-21.42	152 (5)	1944 (5)	7541 (5)
1-27-P	60	120	21.99	21.99	1.10	-9.34	63 (5)	855 (5)	3101 (5)
1-28-P	60	120	21.99	21.99	12.95	-0.56	92 (5)	4542 (5)	1171 (5)
1-29-P	60	120	21.99	21.99	20.04	-0.02	144 (5)	7118 (5)	1835 (5)
1-30-P	60	120	21.99	21.99	22.66	0.00	163 (5)	8085 (5)	2085 (5)
1-31-P	60	120	21.99	21.99	18.40	-0.09	131 (5)	6506 (5)	1677 (5)
1-32-P	60	120	21.99	21.99	6.37	-2.14	44 (5)	2189 (5)	628 (5)
1-33-P	60	120	21.99	21.99	0.39	-16.75	114 (5)	1457 (5)	5652 (5)
1-34-P	60	120	21.99	21.99	0.21	-24.32	177 (5)	2256 (5)	8749 (5)
1-35-P	60	120	21.99	21.99	0.10	-25.81	189 (5)	2414 (5)	9364 (5)
1-36-P	60	120	21.99	21.99	0.14	-18.06	126 (5)	1609 (5)	6240 (5)
1-37-P	60	120	21.99	21.99	3.75	-3.80	25 (5)	1248 (5)	1168 (5)
1-38-P	60	120	21.99	21.99	17.31	-0.16	123 (5)	6099 (5)	1572 (5)
1-39-P	60	120	21.99	21.99	21.19	0.00	152 (5)	7548 (5)	1946 (5)
1-40-P	60	120	21.99	21.99	19.79	-0.01	142 (5)	7037 (5)	1814 (5)
1-41-P	60	120	21.99	21.99	15.02	-0.26	106 (5)	5259 (5)	1356 (5)
1-42-P	60	120	21.99	21.99	1.05	-8.12	55 (5)	828 (5)	2728 (5)
1-43-P	60	120	21.99	21.99	0.13	-24.13	171 (5)	2189 (5)	8492 (5)
1-44-P	60	120	21.99	21.99	0.04	-34.04	250 (5)	3196 (5)	12398 (5)
1-45-P	60	120	21.99	21.99	0.14	-32.23	233 (5)	2975 (5)	11538 (5)
1-46-P	60	120	21.99	21.99	0.00	-25.30	178 (5)	2280 (5)	8842 (5)
1-47-P	60	120	21.99	21.99	0.04	-8.54	62 (5)	786 (5)	3050 (5)
1-48-P	60	120	21.99	21.99	1.65	-2.05	19 (5)	862 (5)	918 (5)
1-49-P	60	120	21.99	21.99	2.01	-0.11	14 (5)	681 (5)	198 (5)
2-1-P	60	120	18.85	18.85	6.05	0.00	49 (5)	2583 (5)	614 (5)
2-2-P	60	120	18.85	18.85	6.97	0.00	57 (5)	3026 (5)	719 (5)
2-3-P	60	120	18.85	18.85	8.20	-0.01	67 (5)	3589 (5)	853 (5)
2-4-P	60	120	18.85	18.85	11.74	-1.90	90 (5)	4793 (5)	1156 (5)
2-5-P	60	120	18.85	18.85	0.23	-42.35	314 (5)	3974 (5)	16726 (5)
2-6-P	60	120	18.85	18.85	0.00	-80.85	605 (5)	7650 (5)	32199 (5)
2-7-P	60	120	18.85	18.85	1.04	-14.14	129 (5)	1648 (5)	6860 (5)
2-8-P	60	120	18.85	18.85	15.77	-0.97	125 (5)	6676 (5)	1586 (5)
2-9-P	60	120	18.85	18.85	16.12	0.00	131 (5)	6995 (5)	1662 (5)
2-10-P	60	120	18.85	18.85	16.35	0.00	133 (5)	7084 (5)	1683 (5)
2-11-P	60	120	18.85	18.85	16.54	0.00	135 (5)	7164 (5)	1702 (5)
2-12-P	60	120	18.85	18.85	16.68	0.00	136 (5)	7229 (5)	1717 (5)
2-13-P	60	120	18.85	18.85	16.55	-0.46	133 (5)	7077 (5)	1681 (5)
2-14-P	60	120	18.85	18.85	5.24	-2.50	60 (8)	3203 (8)	2036 (8)

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.16.0.5.005.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.16.0.5.005	A	60 di 118

Is	B [cm]	H [cm]	Afi [cmq]	Afs [cmq]	Mp [kNm]	Mn [kNm]	sc [kPa]	ofi [kPa]	ofs [kPa]
2-15-P	60	120	18.85	18.85	0.00	-64.73	482 (5)	6093 (5)	25645 (5)
2-16-P	60	120	18.85	18.85	0.00	-51.39	381 (5)	4817 (5)	20276 (5)
2-17-P	60	120	18.85	18.85	17.84	-2.43	137 (5)	7295 (5)	1733 (5)
2-18-P	60	120	18.85	18.85	16.35	-0.17	132 (5)	7049 (5)	1675 (5)
2-19-P	60	120	18.85	18.85	16.62	0.00	135 (5)	7201 (5)	1711 (5)
2-20-P	60	120	18.85	18.85	16.57	0.00	135 (5)	7171 (5)	1704 (5)
2-21-P	60	120	18.85	18.85	16.57	0.00	135 (5)	7178 (5)	1705 (5)
2-22-P	60	120	18.85	18.85	16.43	0.00	134 (5)	7124 (5)	1693 (5)
2-23-P	60	120	18.85	18.85	16.88	-1.26	133 (5)	7099 (5)	1687 (5)
2-24-P	60	120	18.85	18.85	0.59	-20.07	230 (8)	2912 (8)	12259 (8)
2-25-P	60	120	18.85	18.85	0.00	-90.67	713 (5)	9011 (5)	37929 (5)
2-26-P	60	120	18.85	18.85	0.59	-20.07	230 (8)	2912 (8)	12259 (8)
2-27-P	60	120	18.85	18.85	16.88	-1.26	133 (5)	7099 (5)	1687 (5)
2-28-P	60	120	18.85	18.85	16.43	0.00	134 (5)	7124 (5)	1693 (5)
2-29-P	60	120	18.85	18.85	16.57	0.00	135 (5)	7178 (5)	1705 (5)
2-30-P	60	120	18.85	18.85	16.57	0.00	135 (5)	7171 (5)	1704 (5)
2-31-P	60	120	18.85	18.85	16.62	0.00	135 (5)	7201 (5)	1711 (5)
2-32-P	60	120	18.85	18.85	16.35	-0.17	132 (5)	7049 (5)	1675 (5)
2-33-P	60	120	18.85	18.85	17.84	-2.43	137 (5)	7295 (5)	1733 (5)
2-34-P	60	120	18.85	18.85	0.00	-51.39	381 (5)	4817 (5)	20276 (5)
2-35-P	60	120	18.85	18.85	0.00	-64.73	482 (5)	6093 (5)	25645 (5)
2-36-P	60	120	18.85	18.85	5.24	-2.50	60 (8)	3203 (8)	2036 (8)
2-37-P	60	120	18.85	18.85	16.55	-0.46	133 (5)	7077 (5)	1681 (5)
2-38-P	60	120	18.85	18.85	16.68	0.00	136 (5)	7229 (5)	1717 (5)
2-39-P	60	120	18.85	18.85	16.54	0.00	135 (5)	7164 (5)	1702 (5)
2-40-P	60	120	18.85	18.85	16.35	0.00	133 (5)	7084 (5)	1683 (5)
2-41-P	60	120	18.85	18.85	16.12	0.00	131 (5)	6995 (5)	1662 (5)
2-42-P	60	120	18.85	18.85	15.77	-0.97	125 (5)	6676 (5)	1586 (5)
2-43-P	60	120	18.85	18.85	1.04	-14.14	129 (5)	1648 (5)	6860 (5)
2-44-P	60	120	18.85	18.85	0.00	-80.85	605 (5)	7650 (5)	32199 (5)
2-45-P	60	120	18.85	18.85	0.23	-42.35	314 (5)	3974 (5)	16726 (5)
2-46-P	60	120	18.85	18.85	11.74	-1.90	90 (5)	4793 (5)	1156 (5)
2-47-P	60	120	18.85	18.85	8.20	-0.01	67 (5)	3589 (5)	853 (5)
2-48-P	60	120	18.85	18.85	6.97	0.00	57 (5)	3026 (5)	719 (5)
2-49-P	60	120	18.85	18.85	6.05	0.00	49 (5)	2583 (5)	614 (5)
5-1-P	85	120	28.27	28.27	0.12	-13.14	63 (5)	805 (5)	3285 (5)
5-2-P	85	120	28.27	28.27	0.00	-18.51	88 (5)	1117 (5)	4560 (5)
5-3-P	85	120	28.27	28.27	0.00	-23.65	111 (5)	1414 (5)	5772 (5)
5-4-P	85	120	28.27	28.27	0.00	-28.26	130 (5)	1652 (5)	6745 (5)
5-5-P	85	120	28.27	28.27	0.00	-30.02	135 (5)	1712 (5)	6991 (5)
5-6-P	85	120	28.27	28.27	0.00	-30.68	134 (5)	1707 (5)	6968 (5)
5-7-P	85	120	28.27	28.27	0.00	-29.79	127 (5)	1615 (5)	6594 (5)
5-8-P	85	120	28.27	28.27	0.00	-33.17	145 (5)	1842 (5)	7520 (5)
5-9-P	85	120	28.27	28.27	0.00	-39.40	180 (5)	2281 (5)	9313 (5)
5-10-P	85	120	28.27	28.27	0.00	-73.75	405 (5)	5137 (5)	20974 (5)
5-11-P	85	120	28.27	28.27	0.00	-79.55	442 (5)	5614 (5)	22918 (5)
5-12-P	85	120	28.27	28.27	0.00	-42.53	200 (5)	2541 (5)	10376 (5)
5-13-P	85	120	28.27	28.27	0.00	-28.14	111 (5)	1405 (5)	5735 (5)
5-14-P	85	120	28.27	28.27	0.00	-20.99	68 (5)	868 (5)	3543 (5)
5-15-P	85	120	28.27	28.27	0.00	-20.19	63 (5)	794 (5)	3242 (5)
5-16-P	85	120	28.27	28.27	0.00	-19.55	59 (5)	747 (5)	3051 (5)
5-17-P	85	120	28.27	28.27	0.00	-19.01	57 (5)	719 (5)	2934 (5)
5-18-P	85	120	28.27	28.27	0.00	-26.34	99 (5)	1262 (5)	5152 (5)
5-19-P	85	120	28.27	28.27	0.00	-44.93	218 (5)	2768 (5)	11301 (5)
5-20-P	85	120	28.27	28.27	0.20	-80.61	475 (5)	6028 (5)	24608 (5)
5-21-P	85	120	28.27	28.27	0.00	-58.72	309 (5)	3922 (5)	16012 (5)
5-22-P	85	120	28.27	28.27	0.00	-28.36	112 (5)	1419 (5)	5795 (5)
5-23-P	85	120	28.27	28.27	0.00	-20.49	65 (5)	829 (5)	3384 (5)
5-24-P	85	120	28.27	28.27	3.50	-2.93	46 (7)	585 (7)	2388 (7)
5-25-P	85	120	28.27	28.27	4.40	-3.57	49 (7)	619 (7)	2526 (7)
5-26-P	85	120	28.27	28.27	3.50	-2.93	46 (7)	585 (7)	2388 (7)
5-27-P	85	120	28.27	28.27	0.00	-20.49	65 (5)	829 (5)	3384 (5)
5-28-P	85	120	28.27	28.27	0.00	-28.36	112 (5)	1419 (5)	5795 (5)
5-29-P	85	120	28.27	28.27	0.00	-58.72	309 (5)	3922 (5)	16012 (5)
5-30-P	85	120	28.27	28.27	0.20	-80.61	475 (5)	6028 (5)	24608 (5)
5-31-P	85	120	28.27	28.27	0.00	-44.93	218 (5)	2768 (5)	11301 (5)
5-32-P	85	120	28.27	28.27	0.00	-26.34	99 (5)	1262 (5)	5152 (5)
5-33-P	85	120	28.27	28.27	0.00	-19.01	57 (5)	719 (5)	2934 (5)
5-34-P	85	120	28.27	28.27	0.00	-19.55	59 (5)	747 (5)	3051 (5)
5-35-P	85	120	28.27	28.27	0.00	-20.19	63 (5)	794 (5)	3242 (5)
5-36-P	85	120	28.27	28.27	0.00	-20.99	68 (5)	868 (5)	3543 (5)
5-37-P	85	120	28.27	28.27	0.00	-28.14	111 (5)	1405 (5)	5735 (5)
5-38-P	85	120	28.27	28.27	0.00	-42.53	200 (5)	2541 (5)	10376 (5)
5-39-P	85	120	28.27	28.27	0.00	-79.55	442 (5)	5614 (5)	22918 (5)
5-40-P	85	120	28.27	28.27	0.00	-73.75	405 (5)	5137 (5)	20974 (5)
5-41-P	85	120	28.27	28.27	0.00	-39.40	180 (5)	2281 (5)	9313 (5)
5-42-P	85	120	28.27	28.27	0.00	-33.17	145 (5)	1842 (5)	7520 (5)
5-43-P	85	120	28.27	28.27	0.00	-29.79	127 (5)	1615 (5)	6594 (5)
5-44-P	85	120	28.27	28.27	0.00	-30.68	134 (5)	1707 (5)	6968 (5)
5-45-P	85	120	28.27	28.27	0.00	-30.02	135 (5)	1712 (5)	6991 (5)
5-46-P	85	120	28.27	28.27	0.00	-28.26	130 (5)	1652 (5)	6745 (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.16.0.5.005.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.16.0.5.005

A

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Is	B [cm]	H [cm]	Afi [cmq]	Afs [cmq]	Mp [kNm]	Mn [kNm]	σc [kPa]	σfi [kPa]	σfs [kPa]
5-47-P	85	120	28.27	28.27	0.00	-23.65	111 (5)	1414 (5)	5772 (5)
5-48-P	85	120	28.27	28.27	0.00	-18.51	88 (5)	1117 (5)	4560 (5)
5-49-P	85	120	28.27	28.27	0.12	-13.14	63 (5)	805 (5)	3285 (5)
6-1-P	85	120	28.27	28.27	3.87	-4.06	21 (7)	1028 (7)	1090 (7)
6-2-P	85	120	28.27	28.27	4.35	-4.90	26 (7)	1091 (7)	1348 (7)
6-3-P	85	120	28.27	28.27	4.60	-5.82	32 (7)	1071 (7)	1638 (7)
6-4-P	85	120	28.27	28.27	4.55	-6.89	38 (7)	1179 (7)	1995 (7)
6-5-P	85	120	28.27	28.27	1.59	-6.20	40 (6)	617 (6)	2070 (6)
6-6-P	85	120	28.27	28.27	0.12	-9.85	50 (5)	631 (5)	2575 (5)
6-7-P	85	120	28.27	28.27	0.00	-15.45	75 (5)	953 (5)	3889 (5)
6-8-P	85	120	28.27	28.27	0.00	-22.45	112 (5)	1421 (5)	5800 (5)
6-9-P	85	120	28.27	28.27	0.00	-30.32	156 (5)	1978 (5)	8075 (5)
6-10-P	85	120	28.27	28.27	0.00	-35.28	175 (5)	2216 (5)	9048 (5)
6-11-P	85	120	28.27	28.27	0.00	-35.67	173 (5)	2201 (5)	8986 (5)
6-12-P	85	120	28.27	28.27	0.00	-28.90	140 (5)	1782 (5)	7275 (5)
6-13-P	85	120	28.27	28.27	0.00	-20.67	94 (5)	1198 (5)	4892 (5)
6-14-P	85	120	28.27	28.27	0.25	-13.12	49 (5)	622 (5)	2540 (5)
6-15-P	85	120	28.27	28.27	2.50	-1.77	23 (7)	328 (7)	1214 (7)
6-16-P	85	120	28.27	28.27	0.00	-8.55	21 (5)	264 (5)	1077 (5)
6-17-P	85	120	28.27	28.27	0.00	-11.30	35 (5)	449 (5)	1835 (5)
6-18-P	85	120	28.27	28.27	0.00	-18.50	77 (5)	976 (5)	3983 (5)
6-19-P	85	120	28.27	28.27	0.00	-24.84	111 (5)	1405 (5)	5735 (5)
6-20-P	85	120	28.27	28.27	0.00	-30.37	135 (5)	1711 (5)	6985 (5)
6-21-P	85	120	28.27	28.27	0.00	-26.45	117 (5)	1483 (5)	6055 (5)
6-22-P	85	120	28.27	28.27	0.00	-20.15	88 (5)	1116 (5)	4557 (5)
6-23-P	85	120	28.27	28.27	0.06	-12.32	43 (5)	540 (5)	2206 (5)
6-24-P	85	120	28.27	28.27	3.55	-0.40	12 (7)	406 (7)	635 (7)
6-25-P	85	120	28.27	28.27	5.77	0.00	9 (7)	490 (7)	120 (7)
6-26-P	85	120	28.27	28.27	3.55	-0.40	12 (7)	406 (7)	635 (7)
6-27-P	85	120	28.27	28.27	0.06	-12.32	43 (5)	540 (5)	2206 (5)
6-28-P	85	120	28.27	28.27	0.00	-20.15	88 (5)	1116 (5)	4557 (5)
6-29-P	85	120	28.27	28.27	0.00	-26.45	117 (5)	1483 (5)	6055 (5)
6-30-P	85	120	28.27	28.27	0.00	-30.37	135 (5)	1711 (5)	6985 (5)
6-31-P	85	120	28.27	28.27	0.00	-24.84	111 (5)	1405 (5)	5735 (5)
6-32-P	85	120	28.27	28.27	0.00	-18.50	77 (5)	976 (5)	3983 (5)
6-33-P	85	120	28.27	28.27	0.00	-11.30	35 (5)	449 (5)	1835 (5)
6-34-P	85	120	28.27	28.27	0.00	-8.55	21 (5)	264 (5)	1077 (5)
6-35-P	85	120	28.27	28.27	2.50	-1.77	23 (7)	328 (7)	1214 (7)
6-36-P	85	120	28.27	28.27	0.25	-13.12	49 (5)	622 (5)	2540 (5)
6-37-P	85	120	28.27	28.27	0.00	-20.67	94 (5)	1198 (5)	4892 (5)
6-38-P	85	120	28.27	28.27	0.00	-28.90	140 (5)	1782 (5)	7275 (5)
6-39-P	85	120	28.27	28.27	0.00	-35.67	173 (5)	2201 (5)	8986 (5)
6-40-P	85	120	28.27	28.27	0.00	-35.28	175 (5)	2216 (5)	9048 (5)
6-41-P	85	120	28.27	28.27	0.00	-30.32	156 (5)	1978 (5)	8075 (5)
6-42-P	85	120	28.27	28.27	0.00	-22.45	112 (5)	1421 (5)	5800 (5)
6-43-P	85	120	28.27	28.27	0.00	-15.45	75 (5)	953 (5)	3889 (5)
6-44-P	85	120	28.27	28.27	0.12	-9.85	50 (5)	631 (5)	2575 (5)
6-45-P	85	120	28.27	28.27	1.59	-6.20	40 (6)	617 (6)	2070 (6)
6-46-P	85	120	28.27	28.27	4.55	-6.89	38 (7)	1179 (7)	1995 (7)
6-47-P	85	120	28.27	28.27	4.60	-5.82	32 (7)	1071 (7)	1638 (7)
6-48-P	85	120	28.27	28.27	4.35	-4.90	26 (7)	1091 (7)	1348 (7)
6-49-P	85	120	28.27	28.27	3.87	-4.06	21 (7)	1028 (7)	1090 (7)
7-1-P	85	120	25.13	25.13	3.67	-2.73	23 (5)	1260 (5)	868 (5)
7-2-P	85	120	25.13	25.13	4.69	-3.91	31 (8)	1716 (8)	1432 (8)
7-3-P	85	120	25.13	25.13	4.54	-8.68	55 (7)	1853 (7)	3036 (7)
7-4-P	85	120	25.13	25.13	3.98	-18.51	116 (7)	1683 (7)	6370 (7)
7-5-P	85	120	25.13	25.13	1.08	-27.65	163 (7)	2054 (7)	8933 (7)
7-6-P	85	120	25.13	25.13	0.08	-34.05	198 (7)	2491 (7)	10831 (7)
7-7-P	85	120	25.13	25.13	0.30	-21.42	131 (7)	1645 (7)	7151 (7)
7-8-P	85	120	25.13	25.13	1.68	-10.80	72 (7)	907 (7)	3944 (7)
7-9-P	85	120	25.13	25.13	4.24	-1.91	24 (6)	1310 (6)	1319 (6)
7-10-P	85	120	25.13	25.13	4.99	-0.94	38 (6)	2092 (6)	907 (6)
7-11-P	85	120	25.13	25.13	7.23	-0.72	40 (7)	2197 (7)	883 (7)
7-12-P	85	120	25.13	25.13	7.85	-2.38	48 (7)	2610 (7)	1235 (7)
7-13-P	85	120	25.13	25.13	7.01	-9.70	63 (6)	2051 (6)	3440 (6)
7-14-P	85	120	25.13	25.13	5.84	-16.93	111 (5)	1392 (5)	6052 (5)
7-15-P	85	120	25.13	25.13	0.40	-25.40	156 (7)	1960 (7)	8522 (7)
7-16-P	85	120	25.13	25.13	0.07	-21.73	134 (7)	1692 (7)	7358 (7)
7-17-P	85	120	25.13	25.13	5.35	-13.49	82 (5)	1228 (5)	4467 (5)
7-18-P	85	120	25.13	25.13	6.22	-3.27	36 (6)	1959 (6)	1310 (6)
7-19-P	85	120	25.13	25.13	11.40	0.00	62 (7)	3413 (7)	785 (7)
7-20-P	85	120	25.13	25.13	13.88	0.00	73 (7)	4015 (7)	923 (7)
7-21-P	85	120	25.13	25.13	13.05	0.00	71 (7)	3911 (7)	899 (7)
7-22-P	85	120	25.13	25.13	10.22	-0.67	62 (7)	3383 (7)	778 (7)
7-23-P	85	120	25.13	25.13	7.41	-8.51	55 (6)	2118 (6)	3033 (6)
7-24-P	85	120	25.13	25.13	1.15	-14.27	93 (7)	1173 (7)	5100 (7)
7-25-P	85	120	25.13	25.13	0.42	-18.60	155 (6)	1946 (6)	8463 (6)
7-26-P	85	120	25.13	25.13	1.15	-14.27	93 (7)	1173 (7)	5100 (7)
7-27-P	85	120	25.13	25.13	7.41	-8.51	55 (6)	2118 (6)	3033 (6)
7-28-P	85	120	25.13	25.13	10.22	-0.67	62 (7)	3383 (7)	778 (7)
7-29-P	85	120	25.13	25.13	13.05	0.00	71 (7)	3911 (7)	899 (7)

APPALTATORE:

TELESE S.c.a r.l.

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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.16.0.5.005.A.DOCX

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2.2.E.ZZ

CL

TR.16.0.5.005

A

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Is	B [cm]	H [cm]	Afi [cmq]	Afs [cmq]	Mp [kNm]	Mn [kNm]	sc [kPa]	ofi [kPa]	ofs [kPa]
7-30-P	85	120	25.13	25.13	13.88	0.00	73 (7)	4015 (7)	923 (7)
7-31-P	85	120	25.13	25.13	11.40	0.00	62 (7)	3413 (7)	785 (7)
7-32-P	85	120	25.13	25.13	6.22	-3.27	36 (6)	1959 (6)	1310 (6)
7-33-P	85	120	25.13	25.13	5.35	-13.49	82 (5)	1228 (5)	4467 (5)
7-34-P	85	120	25.13	25.13	0.07	-21.73	134 (7)	1692 (7)	7358 (7)
7-35-P	85	120	25.13	25.13	0.40	-25.40	156 (7)	1960 (7)	8522 (7)
7-36-P	85	120	25.13	25.13	5.84	-16.93	111 (5)	1392 (5)	6052 (5)
7-37-P	85	120	25.13	25.13	7.01	-9.70	63 (6)	2051 (6)	3440 (6)
7-38-P	85	120	25.13	25.13	7.85	-2.38	48 (7)	2610 (7)	1235 (7)
7-39-P	85	120	25.13	25.13	7.23	-0.72	40 (7)	2197 (7)	883 (7)
7-40-P	85	120	25.13	25.13	4.99	-0.94	38 (6)	2092 (6)	907 (6)
7-41-P	85	120	25.13	25.13	4.24	-1.91	24 (6)	1310 (6)	1319 (6)
7-42-P	85	120	25.13	25.13	1.68	-10.80	72 (7)	907 (7)	3944 (7)
7-43-P	85	120	25.13	25.13	0.30	-21.42	131 (7)	1645 (7)	7151 (7)
7-44-P	85	120	25.13	25.13	0.08	-34.05	198 (7)	2491 (7)	10831 (7)
7-45-P	85	120	25.13	25.13	1.08	-27.65	163 (7)	2054 (7)	8933 (7)
7-46-P	85	120	25.13	25.13	3.98	-18.51	116 (7)	1683 (7)	6370 (7)
7-47-P	85	120	25.13	25.13	4.54	-8.68	55 (7)	1853 (7)	3036 (7)
7-48-P	85	120	25.13	25.13	4.69	-3.91	31 (8)	1716 (8)	1432 (8)
7-49-P	85	120	25.13	25.13	3.67	-2.73	23 (5)	1260 (5)	868 (5)
8-1-P	85	120	28.27	28.27	0.99	-0.73	6 (5)	304 (5)	178 (5)
8-2-P	85	120	28.27	28.27	0.85	-3.82	23 (6)	288 (6)	1177 (6)
8-3-P	85	120	28.27	28.27	0.91	-10.52	60 (7)	767 (7)	3131 (7)
8-4-P	85	120	28.27	28.27	1.63	-21.47	122 (7)	1549 (7)	6325 (7)
8-5-P	85	120	28.27	28.27	0.00	-44.29	249 (7)	3159 (7)	12898 (7)
8-6-P	85	120	28.27	28.27	0.00	-60.69	344 (7)	4373 (7)	17854 (7)
8-7-P	85	120	28.27	28.27	0.00	-30.65	171 (7)	2168 (7)	8849 (7)
8-8-P	85	120	28.27	28.27	1.19	-12.54	73 (7)	923 (7)	3768 (7)
8-9-P	85	120	28.27	28.27	2.00	-1.22	14 (7)	584 (7)	740 (7)
8-10-P	85	120	28.27	28.27	6.34	0.00	34 (7)	1761 (7)	431 (7)
8-11-P	85	120	28.27	28.27	8.10	0.00	43 (7)	2249 (7)	551 (7)
8-12-P	85	120	28.27	28.27	4.62	-0.49	25 (7)	1310 (7)	321 (7)
8-13-P	85	120	28.27	28.27	5.05	-9.65	50 (5)	986 (5)	2571 (5)
8-14-P	85	120	28.27	28.27	0.49	-19.64	115 (7)	1462 (7)	5970 (7)
8-15-P	85	120	28.27	28.27	0.00	-47.49	274 (7)	3481 (7)	14212 (7)
8-16-P	85	120	28.27	28.27	0.00	-40.93	236 (7)	3001 (7)	12251 (7)
8-17-P	85	120	28.27	28.27	4.77	-13.74	83 (6)	1704 (6)	4305 (6)
8-18-P	85	120	28.27	28.27	3.19	-2.35	19 (7)	1006 (7)	939 (7)
8-19-P	85	120	28.27	28.27	10.11	0.00	52 (7)	2704 (7)	662 (7)
8-20-P	85	120	28.27	28.27	15.36	0.00	82 (7)	4274 (7)	1047 (7)
8-21-P	85	120	28.27	28.27	12.87	0.00	68 (7)	3526 (7)	864 (7)
8-22-P	85	120	28.27	28.27	7.24	-0.14	38 (7)	1969 (7)	482 (7)
8-23-P	85	120	28.27	28.27	6.50	-9.52	49 (5)	2091 (5)	2525 (5)
8-24-P	85	120	28.27	28.27	0.00	-25.91	150 (7)	1901 (7)	7763 (7)
8-25-P	85	120	28.27	28.27	0.00	-54.96	319 (7)	4044 (7)	16510 (7)
8-26-P	85	120	28.27	28.27	0.00	-25.91	150 (7)	1901 (7)	7763 (7)
8-27-P	85	120	28.27	28.27	6.50	-9.52	49 (5)	2091 (5)	2525 (5)
8-28-P	85	120	28.27	28.27	7.24	-0.14	38 (7)	1969 (7)	482 (7)
8-29-P	85	120	28.27	28.27	12.87	0.00	68 (7)	3526 (7)	864 (7)
8-30-P	85	120	28.27	28.27	15.36	0.00	82 (7)	4274 (7)	1047 (7)
8-31-P	85	120	28.27	28.27	10.11	0.00	52 (7)	2704 (7)	662 (7)
8-32-P	85	120	28.27	28.27	3.19	-2.35	19 (7)	1006 (7)	939 (7)
8-33-P	85	120	28.27	28.27	4.77	-13.74	83 (6)	1704 (6)	4305 (6)
8-34-P	85	120	28.27	28.27	0.00	-40.93	236 (7)	3001 (7)	12251 (7)
8-35-P	85	120	28.27	28.27	0.00	-47.49	274 (7)	3481 (7)	14212 (7)
8-36-P	85	120	28.27	28.27	0.49	-19.64	115 (7)	1462 (7)	5970 (7)
8-37-P	85	120	28.27	28.27	5.05	-9.65	50 (5)	986 (5)	2571 (5)
8-38-P	85	120	28.27	28.27	4.62	-0.49	25 (7)	1310 (7)	321 (7)
8-39-P	85	120	28.27	28.27	8.10	0.00	43 (7)	2249 (7)	551 (7)
8-40-P	85	120	28.27	28.27	6.34	0.00	34 (7)	1761 (7)	431 (7)
8-41-P	85	120	28.27	28.27	2.00	-1.22	14 (7)	584 (7)	740 (7)
8-42-P	85	120	28.27	28.27	1.19	-12.54	73 (7)	923 (7)	3768 (7)
8-43-P	85	120	28.27	28.27	0.00	-30.65	171 (7)	2168 (7)	8849 (7)
8-44-P	85	120	28.27	28.27	0.00	-60.69	344 (7)	4373 (7)	17854 (7)
8-45-P	85	120	28.27	28.27	0.00	-44.29	249 (7)	3159 (7)	12898 (7)
8-46-P	85	120	28.27	28.27	1.63	-21.47	122 (7)	1549 (7)	6325 (7)
8-47-P	85	120	28.27	28.27	0.91	-10.52	60 (7)	767 (7)	3131 (7)
8-48-P	85	120	28.27	28.27	0.85	-3.82	23 (6)	288 (6)	1177 (6)
8-49-P	85	120	28.27	28.27	0.99	-0.73	6 (5)	304 (5)	178 (5)
9-1-S	100	120	31.42	31.42	1.58	-6.97	33 (5)	1768 (5)	1518 (5)
9-2-S	100	120	31.42	31.42	0.09	-12.17	51 (5)	642 (5)	2703 (5)
9-3-S	100	120	31.42	31.42	0.98	-12.78	117 (8)	1483 (8)	6243 (8)
9-4-S	100	120	31.42	31.42	5.55	-20.62	136 (5)	1961 (5)	7222 (5)
9-5-S	100	120	31.42	31.42	18.14	-6.19	121 (5)	6448 (5)	5025 (5)
9-6-S	100	120	31.42	31.42	51.93	0.00	266 (5)	14181 (5)	3369 (5)
9-7-S	100	120	31.42	31.42	0.00	-260.13	1121 (5)	14179 (5)	59680 (5)
9-8-S	100	120	31.42	31.42	0.00	-197.90	822 (5)	10400 (5)	43774 (5)
9-9-S	100	120	31.42	31.42	0.00	-151.44	602 (5)	7618 (5)	32065 (5)
9-10-S	100	120	31.42	31.42	0.00	-111.51	420 (5)	5311 (5)	22355 (5)
9-11-S	100	120	31.42	31.42	0.01	-74.05	252 (5)	3186 (5)	13411 (5)
9-12-S	100	120	31.42	31.42	0.10	-44.38	130 (5)	1650 (5)	6944 (5)

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II LOTTO FUNZIONALE FRASSO TELESINO – VITULANO
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PROGETTO ESECUTIVO

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2.2.E.ZZ

CL

TR.16.0.5.005

A

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Is	B [cm]	H [cm]	Afi [cmq]	Afs [cmq]	Mp [kNm]	Mn [kNm]	sc [kPa]	ofi [kPa]	ofs [kPa]
9-13-S	100	120	31.42	31.42	12.16	-3.44	53 (7)	1250 (7)	2805 (7)
9-14-S	100	120	31.42	31.42	19.41	-2.26	64 (7)	3407 (7)	1333 (7)
9-15-S	100	120	31.42	31.42	19.43	-3.03	74 (6)	3965 (6)	1191 (6)
9-16-S	100	120	31.42	31.42	19.81	-3.39	71 (6)	3787 (6)	1318 (6)
9-17-S	100	120	31.42	31.42	7.79	-6.70	43 (8)	2285 (8)	1964 (8)
9-18-S	100	120	31.42	31.42	4.99	-10.20	53 (7)	2043 (7)	2800 (7)
9-19-S	100	120	31.42	31.42	1.49	-6.25	32 (7)	778 (7)	1689 (7)
9-20-S	100	120	31.42	31.42	5.05	-3.35	15 (5)	481 (5)	799 (5)
9-21-S	100	120	31.42	31.42	4.69	-1.40	13 (5)	683 (5)	162 (5)
10-1-S	100	120	31.42	31.42	11.30	-4.80	46 (5)	2450 (5)	1029 (5)
10-2-S	100	120	31.42	31.42	20.70	-11.39	121 (5)	6426 (5)	2540 (5)
10-3-S	100	120	31.42	31.42	5.05	-16.50	69 (5)	908 (5)	3665 (5)
10-4-S	100	120	31.42	31.42	1.59	-81.12	443 (5)	5606 (5)	23598 (5)
10-5-S	100	120	31.42	31.42	9.75	-53.69	333 (5)	7089 (5)	17748 (5)
10-6-S	100	120	31.42	31.42	53.57	0.00	295 (8)	15705 (8)	3731 (8)
10-7-S	100	120	31.42	31.42	0.00	-214.19	873 (5)	11043 (5)	46479 (5)
10-8-S	100	120	31.42	31.42	0.00	-183.69	740 (5)	9363 (5)	39408 (5)
10-9-S	100	120	31.42	31.42	0.00	-150.10	590 (5)	7458 (5)	31393 (5)
10-10-S	100	120	31.42	31.42	0.00	-117.93	449 (5)	5676 (5)	23889 (5)
10-11-S	100	120	31.42	31.42	0.00	-85.53	307 (5)	3887 (5)	16361 (5)
10-12-S	100	120	31.42	31.42	0.00	-51.98	162 (5)	2048 (5)	8621 (5)
10-13-S	100	120	31.42	31.42	8.00	-0.48	43 (7)	700 (7)	2296 (7)
10-14-S	100	120	31.42	31.42	21.67	-0.22	83 (7)	4414 (7)	1049 (7)
10-15-S	100	120	31.42	31.42	34.19	-0.61	131 (6)	6994 (6)	1662 (6)
10-16-S	100	120	31.42	31.42	48.82	-1.89	182 (5)	9672 (5)	2298 (5)
10-17-S	100	120	31.42	31.42	2.44	-16.48	77 (7)	1686 (7)	4089 (7)
10-18-S	100	120	31.42	31.42	1.56	-42.92	214 (7)	2708 (7)	11398 (7)
10-19-S	100	120	31.42	31.42	3.31	-29.54	144 (5)	1818 (5)	7652 (5)
10-20-S	100	120	31.42	31.42	2.42	-20.32	78 (5)	981 (5)	4130 (5)
10-21-S	100	120	31.42	31.42	2.39	-5.57	14 (5)	596 (5)	760 (5)
11-1-S	100	120	31.42	31.42	0.50	-8.23	35 (5)	442 (5)	1862 (5)
11-2-S	100	120	31.42	31.42	0.73	-7.20	27 (5)	347 (5)	1460 (5)
11-3-S	100	120	31.42	31.42	2.86	-2.20	60 (8)	839 (8)	3219 (8)
11-4-S	100	120	31.42	31.42	12.86	0.00	71 (8)	3770 (8)	896 (8)
11-5-S	100	120	31.42	31.42	31.00	0.00	158 (5)	8419 (5)	2000 (5)
11-6-S	100	120	31.42	31.42	52.06	0.00	256 (5)	13605 (5)	3232 (5)
11-7-S	100	120	31.42	31.42	9.62	-43.02	296 (6)	3747 (6)	15772 (6)
11-8-S	100	120	31.42	31.42	8.98	-60.45	372 (6)	4702 (6)	19791 (6)
11-9-S	100	120	31.42	31.42	0.00	-192.69	844 (5)	10670 (5)	44912 (5)
11-10-S	100	120	31.42	31.42	0.00	-165.91	676 (5)	8548 (5)	35981 (5)
11-11-S	100	120	31.42	31.42	0.00	-127.96	468 (5)	5924 (5)	24933 (5)
11-12-S	100	120	31.42	31.42	0.00	-79.79	267 (5)	3374 (5)	14202 (5)
11-13-S	100	120	31.42	31.42	0.00	-42.81	120 (5)	1513 (5)	6370 (5)
11-14-S	100	120	31.42	31.42	7.73	-1.89	38 (7)	920 (7)	2009 (7)
11-15-S	100	120	31.42	31.42	10.42	-1.28	25 (7)	1343 (7)	880 (7)
11-16-S	100	120	31.42	31.42	12.29	-1.14	41 (6)	2198 (6)	1317 (6)
11-17-S	100	120	31.42	31.42	7.83	-1.10	35 (7)	1856 (7)	1050 (7)
11-18-S	100	120	31.42	31.42	5.06	-1.15	32 (8)	1484 (8)	1681 (8)
11-19-S	100	120	31.42	31.42	7.38	-0.91	18 (5)	974 (5)	601 (5)
11-20-S	100	120	31.42	31.42	5.32	-0.77	11 (5)	602 (5)	268 (5)
11-21-S	100	120	31.42	31.42	3.35	-0.67	7 (5)	378 (5)	162 (5)
12-1-S	100	120	31.42	31.42	13.89	-3.03	57 (5)	3052 (5)	725 (5)
12-2-S	100	120	31.42	31.42	22.17	-10.05	129 (5)	6866 (5)	2263 (5)
12-3-S	100	120	31.42	31.42	5.13	-18.90	82 (5)	1032 (5)	4342 (5)
12-4-S	100	120	31.42	31.42	1.18	-94.69	413 (5)	5220 (5)	21973 (5)
12-5-S	100	120	31.42	31.42	4.21	-39.61	273 (8)	6166 (8)	14518 (8)
12-6-S	100	120	31.42	31.42	53.35	0.00	294 (8)	15642 (8)	3716 (8)
12-7-S	100	120	31.42	31.42	0.00	-182.47	703 (5)	8889 (5)	37415 (5)
12-8-S	100	120	31.42	31.42	0.00	-152.19	574 (5)	7260 (5)	30560 (5)
12-9-S	100	120	31.42	31.42	0.00	-130.69	486 (5)	6148 (5)	25878 (5)
12-10-S	100	120	31.42	31.42	0.00	-106.23	384 (5)	4854 (5)	20433 (5)
12-11-S	100	120	31.42	31.42	0.00	-80.65	277 (5)	3504 (5)	14751 (5)
12-12-S	100	120	31.42	31.42	0.00	-51.61	157 (5)	1991 (5)	8381 (5)
12-13-S	100	120	31.42	31.42	8.23	-1.68	46 (7)	587 (7)	2470 (7)
12-14-S	100	120	31.42	31.42	21.58	-0.87	67 (7)	3587 (7)	852 (7)
12-15-S	100	120	31.42	31.42	35.35	-1.70	136 (6)	7229 (6)	1717 (6)
12-16-S	100	120	31.42	31.42	51.90	-3.41	192 (5)	10223 (5)	2429 (5)
12-17-S	100	120	31.42	31.42	2.47	-21.98	101 (7)	2054 (7)	5403 (7)
12-18-S	100	120	31.42	31.42	1.49	-51.08	254 (7)	3218 (7)	13546 (7)
12-19-S	100	120	31.42	31.42	2.15	-34.28	173 (5)	2188 (5)	9211 (5)
12-20-S	100	120	31.42	31.42	1.47	-23.34	92 (5)	1169 (5)	4919 (5)
12-21-S	100	120	31.42	31.42	1.99	-6.52	16 (5)	575 (5)	873 (5)
13-1-S	100	120	31.42	31.42	1.23	-7.52	31 (5)	397 (5)	1672 (5)
13-2-S	100	120	31.42	31.42	0.53	-11.09	44 (5)	560 (5)	2357 (5)
13-3-S	100	120	31.42	31.42	2.37	-7.76	107 (8)	1352 (8)	5690 (8)
13-4-S	100	120	31.42	31.42	10.31	-3.20	88 (8)	3021 (8)	4698 (8)
13-5-S	100	120	31.42	31.42	27.42	0.00	143 (5)	7614 (5)	1809 (5)
13-6-S	100	120	31.42	31.42	53.99	0.00	264 (5)	14078 (5)	3345 (5)
13-7-S	100	120	31.42	31.42	16.67	-48.18	343 (6)	4851 (6)	18277 (6)
13-8-S	100	120	31.42	31.42	13.95	-57.57	338 (6)	5666 (6)	17969 (6)
13-9-S	100	120	31.42	31.42	0.00	-173.60	742 (5)	9382 (5)	39491 (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.16.0.5.005.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.16.0.5.005	A	64 di 118

Is	B [cm]	H [cm]	Afi [cmq]	Afs [cmq]	Mp [kNm]	Mn [kNm]	σc [kPa]	σfi [kPa]	σfs [kPa]
13-10-S	100	120	31.42	31.42	0.00	-149.97	596 (5)	7534 (5)	31712 (5)
13-11-S	100	120	31.42	31.42	0.00	-116.27	414 (5)	5232 (5)	22022 (5)
13-12-S	100	120	31.42	31.42	0.00	-72.83	234 (5)	2965 (5)	12478 (5)
13-13-S	100	120	31.42	31.42	0.00	-38.78	101 (5)	1277 (5)	5375 (5)
13-14-S	100	120	31.42	31.42	8.85	-0.30	26 (7)	626 (7)	1391 (7)
13-15-S	100	120	31.42	31.42	10.04	-0.63	19 (7)	1026 (7)	829 (7)
13-16-S	100	120	31.42	31.42	5.58	-2.42	33 (8)	1637 (8)	1770 (8)
13-17-S	100	120	31.42	31.42	5.62	-3.12	43 (8)	1648 (8)	2287 (8)
13-18-S	100	120	31.42	31.42	4.84	-3.12	43 (8)	1419 (8)	2286 (8)
13-19-S	100	120	31.42	31.42	1.85	-2.00	20 (7)	632 (7)	1086 (7)
13-20-S	100	120	31.42	31.42	0.73	-0.98	8 (7)	440 (7)	432 (7)
13-21-S	100	120	31.42	31.42	2.38	-0.38	7 (6)	390 (6)	93 (6)
14-1-S	100	120	34.56	34.56	7.72	-7.24	30 (5)	1546 (5)	1441 (5)
14-2-S	100	120	34.56	34.56	11.44	-12.96	59 (5)	3023 (5)	2606 (5)
14-3-S	100	120	34.56	34.56	3.07	-16.76	82 (5)	1042 (5)	4168 (5)
14-4-S	100	120	34.56	34.56	3.95	-39.28	343 (8)	4368 (8)	17477 (8)
14-5-S	100	120	34.56	34.56	14.86	-30.10	262 (5)	6440 (5)	13363 (5)
14-6-S	100	120	34.56	34.56	51.27	0.00	269 (8)	13688 (8)	3421 (8)
14-7-S	100	120	34.56	34.56	0.00	-145.65	511 (5)	6506 (5)	26030 (5)
14-8-S	100	120	34.56	34.56	0.00	-139.21	501 (5)	6379 (5)	25521 (5)
14-9-S	100	120	34.56	34.56	0.00	-135.00	491 (5)	6254 (5)	25021 (5)
14-10-S	100	120	34.56	34.56	0.00	-112.74	398 (5)	5066 (5)	20269 (5)
14-11-S	100	120	34.56	34.56	0.00	-87.58	293 (5)	3728 (5)	14915 (5)
14-12-S	100	120	34.56	34.56	0.00	-55.86	163 (5)	2079 (5)	8320 (5)
14-13-S	100	120	34.56	34.56	0.00	-27.70	57 (5)	728 (5)	2911 (5)
14-14-S	100	120	34.56	34.56	16.77	-0.66	44 (7)	2238 (7)	860 (7)
14-15-S	100	120	34.56	34.56	22.53	-1.65	81 (6)	4147 (6)	1036 (6)
14-16-S	100	120	34.56	34.56	30.48	-2.67	108 (6)	5518 (6)	1379 (6)
14-17-S	100	120	34.56	34.56	4.51	-12.63	73 (7)	1651 (7)	3708 (7)
14-18-S	100	120	34.56	34.56	2.77	-27.42	165 (7)	2096 (7)	8384 (7)
14-19-S	100	120	34.56	34.56	4.72	-18.25	111 (5)	1413 (5)	5655 (5)
14-20-S	100	120	34.56	34.56	2.36	-10.96	58 (6)	743 (6)	2971 (6)
14-21-S	100	120	34.56	34.56	3.64	-3.92	11 (5)	553 (5)	582 (5)
15-1-S	100	120	31.42	31.42	7.72	-7.24	32 (5)	1698 (5)	1583 (5)
15-2-S	100	120	31.42	31.42	11.44	-12.96	62 (5)	3320 (5)	2862 (5)
15-3-S	100	120	31.42	31.42	3.07	-16.76	86 (5)	1088 (5)	4578 (5)
15-4-S	100	120	31.42	31.42	3.95	-39.28	361 (8)	4560 (8)	19195 (8)
15-5-S	100	120	31.42	31.42	14.86	-30.10	276 (5)	7073 (5)	14677 (5)
15-6-S	100	120	31.42	31.42	51.27	0.00	282 (8)	15033 (8)	3572 (8)
15-7-S	100	120	31.42	31.42	0.00	-145.65	537 (5)	6792 (5)	28589 (5)
15-8-S	100	120	31.42	31.42	0.00	-139.21	527 (5)	6659 (5)	28030 (5)
15-9-S	100	120	31.42	31.42	0.00	-135.00	516 (5)	6529 (5)	27481 (5)
15-10-S	100	120	31.42	31.42	0.00	-112.74	418 (5)	5289 (5)	22261 (5)
15-11-S	100	120	31.42	31.42	0.00	-87.58	308 (5)	3892 (5)	16381 (5)
15-12-S	100	120	31.42	31.42	0.00	-55.86	172 (5)	2171 (5)	9138 (5)
15-13-S	100	120	31.42	31.42	6.63	-1.94	60 (7)	760 (7)	3197 (7)
15-14-S	100	120	31.42	31.42	16.77	-0.66	46 (7)	2458 (7)	945 (7)
15-15-S	100	120	31.42	31.42	22.53	-1.65	86 (6)	4554 (6)	1082 (6)
15-16-S	100	120	31.42	31.42	30.48	-2.67	114 (6)	6060 (6)	1440 (6)
15-17-S	100	120	31.42	31.42	4.51	-12.63	77 (7)	1813 (7)	4073 (7)
15-18-S	100	120	31.42	31.42	2.77	-27.42	173 (7)	2188 (7)	9208 (7)
15-19-S	100	120	31.42	31.42	4.72	-18.25	117 (5)	1475 (5)	6210 (5)
15-20-S	100	120	31.42	31.42	2.36	-10.96	61 (6)	775 (6)	3263 (6)
15-21-S	100	120	31.42	31.42	3.64	-3.92	12 (5)	607 (5)	640 (5)
16-1-S	100	120	31.42	31.42	1.23	-7.52	31 (5)	397 (5)	1672 (5)
16-2-S	100	120	31.42	31.42	0.53	-11.09	44 (5)	560 (5)	2357 (5)
16-3-S	100	120	31.42	31.42	2.37	-7.76	107 (8)	1352 (8)	5690 (8)
16-4-S	100	120	31.42	31.42	10.31	-3.20	88 (8)	3021 (8)	4698 (8)
16-5-S	100	120	31.42	31.42	27.42	0.00	143 (5)	7614 (5)	1809 (5)
16-6-S	100	120	31.42	31.42	53.99	0.00	264 (5)	14078 (5)	3345 (5)
16-7-S	100	120	31.42	31.42	16.67	-48.18	343 (6)	4851 (6)	18277 (6)
16-8-S	100	120	31.42	31.42	13.95	-57.57	338 (6)	5666 (6)	17969 (6)
16-9-S	100	120	31.42	31.42	0.00	-173.60	742 (5)	9382 (5)	39491 (5)
16-10-S	100	120	31.42	31.42	0.00	-149.97	596 (5)	7534 (5)	31712 (5)
16-11-S	100	120	31.42	31.42	0.00	-116.27	414 (5)	5232 (5)	22022 (5)
16-12-S	100	120	31.42	31.42	0.00	-72.83	234 (5)	2965 (5)	12478 (5)
16-13-S	100	120	31.42	31.42	0.00	-38.78	101 (5)	1277 (5)	5375 (5)
16-14-S	100	120	31.42	31.42	8.85	-0.30	26 (7)	626 (7)	1391 (7)
16-15-S	100	120	31.42	31.42	10.04	-0.63	19 (7)	1026 (7)	829 (7)
16-16-S	100	120	31.42	31.42	5.58	-2.42	33 (8)	1637 (8)	1770 (8)
16-17-S	100	120	31.42	31.42	5.62	-3.12	43 (8)	1648 (8)	2287 (8)
16-18-S	100	120	31.42	31.42	4.84	-3.12	43 (8)	1419 (8)	2286 (8)
16-19-S	100	120	31.42	31.42	1.85	-2.00	20 (7)	632 (7)	1086 (7)
16-20-S	100	120	31.42	31.42	0.73	-0.98	8 (7)	440 (7)	432 (7)
16-21-S	100	120	31.42	31.42	2.38	-0.38	7 (6)	390 (6)	93 (6)
17-1-S	100	120	31.42	31.42	13.89	-3.03	57 (5)	3052 (5)	725 (5)
17-2-S	100	120	31.42	31.42	22.17	-10.05	129 (5)	6866 (5)	2263 (5)
17-3-S	100	120	31.42	31.42	5.13	-18.90	82 (5)	1032 (5)	4342 (5)
17-4-S	100	120	31.42	31.42	1.18	-94.69	413 (5)	5220 (5)	21973 (5)
17-5-S	100	120	31.42	31.42	4.21	-39.61	273 (8)	6166 (8)	14518 (8)
17-6-S	100	120	31.42	31.42	53.35	0.00	294 (8)	15642 (8)	3716 (8)

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.16.0.5.005.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.16.0.5.005	A	65 di 118

Is	B [cm]	H [cm]	Afi [cmq]	Afs [cmq]	Mp [kNm]	Mn [kNm]	sc [kPa]	ofi [kPa]	ofs [kPa]
17-7-S	100	120	31.42	31.42	0.00	-182.47	703 (5)	8889 (5)	37415 (5)
17-8-S	100	120	31.42	31.42	0.00	-152.19	574 (5)	7260 (5)	30560 (5)
17-9-S	100	120	31.42	31.42	0.00	-130.69	486 (5)	6148 (5)	25878 (5)
17-10-S	100	120	31.42	31.42	0.00	-106.23	384 (5)	4854 (5)	20433 (5)
17-11-S	100	120	31.42	31.42	0.00	-80.65	277 (5)	3504 (5)	14751 (5)
17-12-S	100	120	31.42	31.42	0.00	-51.61	157 (5)	1991 (5)	8381 (5)
17-13-S	100	120	31.42	31.42	8.23	-1.68	46 (7)	587 (7)	2470 (7)
17-14-S	100	120	31.42	31.42	21.58	-0.87	67 (7)	3587 (7)	852 (7)
17-15-S	100	120	31.42	31.42	35.35	-1.70	136 (6)	7229 (6)	1717 (6)
17-16-S	100	120	31.42	31.42	51.90	-3.41	192 (5)	10223 (5)	2429 (5)
17-17-S	100	120	31.42	31.42	2.47	-21.98	101 (7)	2054 (7)	5403 (7)
17-18-S	100	120	31.42	31.42	1.49	-51.08	254 (7)	3218 (7)	13546 (7)
17-19-S	100	120	31.42	31.42	2.15	-34.28	173 (5)	2188 (5)	9211 (5)
17-20-S	100	120	31.42	31.42	1.47	-23.34	92 (5)	1169 (5)	4919 (5)
17-21-S	100	120	31.42	31.42	1.99	-6.52	16 (5)	575 (5)	873 (5)
18-1-S	100	120	31.42	31.42	0.50	-8.23	35 (5)	442 (5)	1862 (5)
18-2-S	100	120	31.42	31.42	0.73	-7.20	27 (5)	347 (5)	1460 (5)
18-3-S	100	120	31.42	31.42	2.86	-2.20	60 (8)	839 (8)	3219 (8)
18-4-S	100	120	31.42	31.42	12.86	0.00	71 (8)	3770 (8)	896 (8)
18-5-S	100	120	31.42	31.42	31.00	0.00	158 (5)	8419 (5)	2000 (5)
18-6-S	100	120	31.42	31.42	52.06	0.00	256 (5)	13605 (5)	3232 (5)
18-7-S	100	120	31.42	31.42	9.62	-43.02	296 (6)	3747 (6)	15772 (6)
18-8-S	100	120	31.42	31.42	8.98	-60.45	372 (6)	4702 (6)	19791 (6)
18-9-S	100	120	31.42	31.42	0.00	-192.69	844 (5)	10670 (5)	44912 (5)
18-10-S	100	120	31.42	31.42	0.00	-165.91	676 (5)	8548 (5)	35981 (5)
18-11-S	100	120	31.42	31.42	0.00	-127.96	468 (5)	5924 (5)	24933 (5)
18-12-S	100	120	31.42	31.42	0.00	-79.79	267 (5)	3374 (5)	14202 (5)
18-13-S	100	120	31.42	31.42	0.00	-42.81	120 (5)	1513 (5)	6370 (5)
18-14-S	100	120	31.42	31.42	7.73	-1.89	38 (7)	920 (7)	2009 (7)
18-15-S	100	120	31.42	31.42	10.42	-1.28	25 (7)	1343 (7)	880 (7)
18-16-S	100	120	31.42	31.42	12.29	-1.14	41 (6)	2198 (6)	1317 (6)
18-17-S	100	120	31.42	31.42	7.83	-1.10	35 (7)	1856 (7)	1050 (7)
18-18-S	100	120	31.42	31.42	5.06	-1.15	32 (8)	1484 (8)	1681 (8)
18-19-S	100	120	31.42	31.42	7.38	-0.91	18 (5)	974 (5)	601 (5)
18-20-S	100	120	31.42	31.42	5.32	-0.77	11 (5)	602 (5)	268 (5)
18-21-S	100	120	31.42	31.42	3.35	-0.67	7 (5)	378 (5)	162 (5)
19-1-S	100	120	31.42	31.42	11.30	-4.80	46 (5)	2450 (5)	1029 (5)
19-2-S	100	120	31.42	31.42	20.70	-11.39	121 (5)	6426 (5)	2540 (5)
19-3-S	100	120	31.42	31.42	5.05	-16.50	69 (5)	908 (5)	3665 (5)
19-4-S	100	120	31.42	31.42	1.59	-81.12	443 (5)	5606 (5)	23598 (5)
19-5-S	100	120	31.42	31.42	9.75	-53.69	333 (5)	7089 (5)	17748 (5)
19-6-S	100	120	31.42	31.42	53.57	0.00	295 (8)	15705 (8)	3731 (8)
19-7-S	100	120	31.42	31.42	0.00	-214.19	873 (5)	11043 (5)	46479 (5)
19-8-S	100	120	31.42	31.42	0.00	-183.69	740 (5)	9363 (5)	39408 (5)
19-9-S	100	120	31.42	31.42	0.00	-150.10	590 (5)	7458 (5)	31393 (5)
19-10-S	100	120	31.42	31.42	0.00	-117.93	449 (5)	5676 (5)	23889 (5)
19-11-S	100	120	31.42	31.42	0.00	-85.53	307 (5)	3887 (5)	16361 (5)
19-12-S	100	120	31.42	31.42	0.00	-51.98	162 (5)	2048 (5)	8621 (5)
19-13-S	100	120	31.42	31.42	8.00	-0.48	43 (7)	700 (7)	2296 (7)
19-14-S	100	120	31.42	31.42	21.67	-0.22	83 (7)	4414 (7)	1049 (7)
19-15-S	100	120	31.42	31.42	34.19	-0.61	131 (6)	6994 (6)	1662 (6)
19-16-S	100	120	31.42	31.42	48.82	-1.89	182 (5)	9672 (5)	2298 (5)
19-17-S	100	120	31.42	31.42	2.44	-16.48	77 (7)	1686 (7)	4089 (7)
19-18-S	100	120	31.42	31.42	1.56	-42.92	214 (7)	2708 (7)	11398 (7)
19-19-S	100	120	31.42	31.42	3.31	-29.54	144 (5)	1818 (5)	7652 (5)
19-20-S	100	120	31.42	31.42	2.42	-20.32	78 (5)	981 (5)	4130 (5)
19-21-S	100	120	31.42	31.42	2.39	-5.57	14 (5)	596 (5)	760 (5)
20-1-S	100	120	31.42	31.42	1.58	-6.97	33 (5)	1768 (5)	1518 (5)
20-2-S	100	120	31.42	31.42	0.09	-12.17	51 (5)	642 (5)	2703 (5)
20-3-S	100	120	31.42	31.42	0.98	-12.78	117 (8)	1483 (8)	6243 (8)
20-4-S	100	120	31.42	31.42	5.55	-20.62	136 (5)	1961 (5)	7222 (5)
20-5-S	100	120	31.42	31.42	18.14	-6.19	121 (5)	6448 (5)	5025 (5)
20-6-S	100	120	31.42	31.42	51.93	0.00	266 (5)	14181 (5)	3369 (5)
20-7-S	100	120	31.42	31.42	0.00	-260.13	1121 (5)	14179 (5)	59680 (5)
20-8-S	100	120	31.42	31.42	0.00	-197.90	822 (5)	10400 (5)	43774 (5)
20-9-S	100	120	31.42	31.42	0.00	-151.44	602 (5)	7618 (5)	32065 (5)
20-10-S	100	120	31.42	31.42	0.00	-111.51	420 (5)	5311 (5)	22355 (5)
20-11-S	100	120	31.42	31.42	0.01	-74.05	252 (5)	3186 (5)	13411 (5)
20-12-S	100	120	31.42	31.42	0.10	-44.38	130 (5)	1650 (5)	6944 (5)
20-13-S	100	120	31.42	31.42	12.16	-3.44	53 (7)	1250 (7)	2805 (7)
20-14-S	100	120	31.42	31.42	19.41	-2.26	64 (7)	3407 (7)	1333 (7)
20-15-S	100	120	31.42	31.42	19.43	-3.03	74 (6)	3965 (6)	1191 (6)
20-16-S	100	120	31.42	31.42	19.81	-3.39	71 (6)	3787 (6)	1318 (6)
20-17-S	100	120	31.42	31.42	7.79	-6.70	43 (8)	2285 (8)	1964 (8)
20-18-S	100	120	31.42	31.42	4.99	-10.20	53 (7)	2043 (7)	2800 (7)
20-19-S	100	120	31.42	31.42	1.49	-6.25	32 (7)	778 (7)	1689 (7)
20-20-S	100	120	31.42	31.42	5.05	-3.35	15 (5)	481 (5)	799 (5)
20-21-S	100	120	31.42	31.42	4.69	-1.40	13 (5)	683 (5)	162 (5)

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.16.0.5.005.A.DOCX

COMMESSA	LOTTO	CODIFICA	DOCUMENTO	REV.	FOGLIO
IF2R	2.2.E.ZZ	CL	TR.16.0.5.005	A	66 di 118

Pali in c.a.

Ip	Is	Ar [cmq]	σ_c [kPa]	σ_f [kPa]	τ_c [kPa]	σ_{stf} [kPa]
1	1	76.03	4353	71771		
1	2	76.03	3800	58049		
1	3	76.03	3252	44682		
1	4	76.03	2714	32297		
1	5	76.03	2196	26770		
1	6	76.03	1715	21541		
1	7	76.03	1307	17143		
1	8	76.03	1072	14546		
1	9	76.03	916	13049		
1	10	76.03	806	11738		
1	11	76.03	706	10560		
1	12	76.03	800	11467		
1	13	76.03	927	12634		
1	14	76.03	1062	14172		
1	15	76.03	1193	15711		
1	16	76.03	1317	17163		
1	17	76.03	1432	18480		
1	18	76.03	1532	19633		
1	19	76.03	1618	20607		
1	20	76.03	1688	21400		
1	21	76.03	1742	22019		
1	22	76.03	1782	22472		
1	23	76.03	1808	22771		
1	24	76.03	1822	22931		
1	25	76.03	1824	22963		
1	26	76.03	1815	22883		
1	27	76.03	1798	22701		
1	28	76.03	1773	22432		
1	29	76.03	1742	22088		
1	30	76.03	1704	21681		
1	31	76.03	1663	21222		
1	32	76.03	1618	20723		
1	33	76.03	1571	20201		
1	34	76.03	1523	19665		
1	35	76.03	1475	19123		
1	36	76.03	1427	18580		
1	37	76.03	1380	18044		
1	38	76.03	1334	17519		
1	39	76.03	1290	17009		
1	40	76.03	1248	16517		
1	41	76.03	1207	16046		
1	42	76.03	1169	15686		
1	43	76.03	1132	15351		
1	44	76.03	1097	15022		
1	45	76.03	1068	14700		
1	46	76.03	1041	14385		
1	47	76.03	1015	14080		
1	48	76.03	990	13893		
1	49	76.03	966	13718		
1	50	76.03	942	13549		
1	51	76.03	928	13387		
1	52	76.03	915	13231		
1	53	76.03	902	13082		
1	54	76.03	890	12940		
1	55	76.03	878	12806		
1	56	76.03	867	12678		
1	57	76.03	857	12557		
1	58	76.03	847	12443		
1	59	76.03	838	12337		
1	60	76.03	830	12236		
1	61	76.03	822	12143		
1	62	76.03	814	12056		
1	63	76.03	807	11975		
1	64	76.03	801	11900		
1	65	76.03	795	11831		
1	66	76.03	790	11768		
1	67	76.03	785	11710		
1	68	76.03	780	11658		
1	69	76.03	776	11610		
1	70	76.03	773	11567		
1	71	76.03	770	11528		
1	72	76.03	767	11494		
1	73	76.03	766	11481		
1	74	76.03	768	11505		
1	75	76.03	769	11525		
1	76	76.03	771	11541		
1	77	76.03	772	11552		
1	78	76.03	772	11560		

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.16.0.5.005.A.DOCX		IF2R	2.2.E.ZZ	CL	TR.16.0.5.005	A	67 di 118

Ip	Is	Ar [cmq]	σ_c [kPa]	σ_f [kPa]	τ_c [kPa]	σ_{sf} [kPa]
1	79	76.03	773	11564		
1	80	76.03	773	11565		
1	81	76.03	773	11563		
1	82	76.03	773	11558		
1	83	76.03	772	11551		
1	84	76.03	771	11541		
1	85	76.03	771	11529		
1	86	76.03	770	11515		
1	87	76.03	768	11500		
1	88	76.03	767	11484		
1	89	76.03	766	11466		
1	90	76.03	764	11448		
1	91	76.03	763	11429		
1	92	76.03	762	11410		
1	93	76.03	760	11391		
1	94	76.03	759	11372		
1	95	76.03	757	11353		
1	96	76.03	756	11334		
1	97	76.03	755	11316		
1	98	76.03	753	11299		
1	99	76.03	752	11283		
1	100	76.03	751	11268		
1	101	76.03	750	11255		
2	1	62.83	4537	55092		
2	2	62.83	3938	48657		
2	3	62.83	3369	42433		
2	4	62.83	2854	36673		
2	5	62.83	2414	31648		
2	6	62.83	2060	27501		
2	7	62.83	1770	24052		
2	8	62.83	1504	20892		
2	9	62.83	1263	18022		
2	10	62.83	1079	15806		
2	11	62.83	1085	15919		
2	12	62.83	1264	18051		
2	13	62.83	1422	19943		
2	14	62.83	1561	21609		
2	15	62.83	1682	23064		
2	16	62.83	1787	24322		
2	17	62.83	1877	25395		
2	18	62.83	1952	26297		
2	19	62.83	2014	27044		
2	20	62.83	2065	27653		
2	21	62.83	2105	28133		
2	22	62.83	2134	28490		
2	23	62.83	2154	28732		
2	24	62.83	2165	28866		
2	25	62.83	2168	28904		
2	26	62.83	2163	28854		
2	27	62.83	2152	28727		
2	28	62.83	2135	28533		
2	29	62.83	2114	28282		
2	30	62.83	2088	27983		
2	31	62.83	2060	27645		
2	32	62.83	2028	27274		
2	33	62.83	1995	26882		
2	34	62.83	1960	26471		
2	35	62.83	1924	26043		
2	36	62.83	1887	25603		
2	37	62.83	1849	25155		
2	38	62.83	1811	24701		
2	39	62.83	1772	24245		
2	40	62.83	1734	23788		
2	41	62.83	1696	23334		
2	42	62.83	1658	22884		
2	43	62.83	1620	22440		
2	44	62.83	1583	22005		
2	45	62.83	1548	21578		
2	46	62.83	1513	21162		
2	47	62.83	1479	20758		
2	48	62.83	1446	20366		
2	49	62.83	1414	19988		
2	50	62.83	1383	19624		
2	51	62.83	1354	19274		
2	52	62.83	1325	18939		
2	53	62.83	1299	18618		
2	54	62.83	1273	18313		
2	55	62.83	1249	18024		
2	56	62.83	1226	17749		
2	57	62.83	1204	17490		
2	58	62.83	1183	17245		

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.16.0.5.005.A.DOCX		COMMESSA	LOTTO	CODIFICA	DOCUMENTO	REV.	FOGLIO
			IF2R	2.2.E.ZZ	CL	TR.16.0.5.005	A	68 di 118

Ip	Is	Ar [cmq]	σ_c [kPa]	σ_f [kPa]	τ_c [kPa]	σ_{sf} [kPa]
2	59	62.83	1164	17015		
2	60	62.83	1146	16800		
2	61	62.83	1129	16599		
2	62	62.83	1114	16411		
2	63	62.83	1099	16237		
2	64	62.83	1086	16075		
2	65	62.83	1073	15926		
2	66	62.83	1062	15789		
2	67	62.83	1051	15663		
2	68	62.83	1042	15549		
2	69	62.83	1033	15444		
2	70	62.83	1025	15350		
2	71	62.83	1018	15265		
2	72	62.83	1015	15222		
2	73	62.83	1019	15267		
2	74	62.83	1022	15304		
2	75	62.83	1025	15331		
2	76	62.83	1027	15350		
2	77	62.83	1028	15362		
2	78	62.83	1029	15367		
2	79	62.83	1029	15365		
2	80	62.83	1028	15357		
2	81	62.83	1027	15343		
2	82	62.83	1026	15324		
2	83	62.83	1025	15301		
2	84	62.83	1023	15273		
2	85	62.83	1020	15242		
2	86	62.83	1018	15207		
2	87	62.83	1015	15170		
2	88	62.83	1012	15130		
2	89	62.83	1009	15089		
2	90	62.83	1006	15047		
2	91	62.83	1003	15004		
2	92	62.83	999	14961		
2	93	62.83	996	14917		
2	94	62.83	993	14875		
2	95	62.83	990	14833		
2	96	62.83	987	14792		
2	97	62.83	984	14753		
2	98	62.83	981	14716		
2	99	62.83	979	14681		
2	100	62.83	977	14649		
2	101	62.83	975	14621		
3	1	62.83	4496	57343		
3	2	62.83	3992	51653		
3	3	62.83	3543	46488		
3	4	62.83	3155	41952		
3	5	62.83	2823	38023		
3	6	62.83	2519	34407		
3	7	62.83	2233	30997		
3	8	62.83	1967	27835		
3	9	62.83	1726	24962		
3	10	62.83	1508	22372		
3	11	62.83	1548	22855		
3	12	62.83	1726	24984		
3	13	62.83	1884	26873		
3	14	62.83	2023	28536		
3	15	62.83	2144	29987		
3	16	62.83	2249	31241		
3	17	62.83	2338	32310		
3	18	62.83	2413	33207		
3	19	62.83	2474	33947		
3	20	62.83	2524	34540		
3	21	62.83	2562	34999		
3	22	62.83	2590	35336		
3	23	62.83	2608	35560		
3	24	62.83	2618	35683		
3	25	62.83	2620	35715		
3	26	62.83	2616	35664		
3	27	62.83	2605	35540		
3	28	62.83	2589	35350		
3	29	62.83	2568	35104		
3	30	62.83	2543	34808		
3	31	62.83	2515	34468		
3	32	62.83	2483	34093		
3	33	62.83	2449	33692		
3	34	62.83	2414	33272		
3	35	62.83	2377	32835		
3	36	62.83	2339	32386		
3	37	62.83	2301	31928		
3	38	62.83	2262	31464		

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.16.0.5.005.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.16.0.5.005</td> <td>A</td> <td>69 di 118</td> </tr> </table>	COMMESSA	LOTTO	CODIFICA	DOCUMENTO	REV.	FOGLIO	IF2R	2.2.E.ZZ	CL	TR.16.0.5.005	A	69 di 118
COMMESSA	LOTTO	CODIFICA	DOCUMENTO	REV.	FOGLIO								
IF2R	2.2.E.ZZ	CL	TR.16.0.5.005	A	69 di 118								

Ip	Is	Ar [cmq]	σ_c [kPa]	σ_f [kPa]	τ_c [kPa]	σ_{sf} [kPa]
3	39	62.83	2222	30997		
3	40	62.83	2183	30530		
3	41	62.83	2144	30065		
3	42	62.83	2106	29604		
3	43	62.83	2067	29149		
3	44	62.83	2030	28701		
3	45	62.83	1993	28263		
3	46	62.83	1957	27835		
3	47	62.83	1923	27418		
3	48	62.83	1889	27014		
3	49	62.83	1856	26622		
3	50	62.83	1824	26244		
3	51	62.83	1794	25881		
3	52	62.83	1765	25532		
3	53	62.83	1737	25197		
3	54	62.83	1711	24878		
3	55	62.83	1685	24573		
3	56	62.83	1661	24284		
3	57	62.83	1638	24009		
3	58	62.83	1617	23749		
3	59	62.83	1597	23503		
3	60	62.83	1578	23272		
3	61	62.83	1560	23054		
3	62	62.83	1543	22850		
3	63	62.83	1527	22658		
3	64	62.83	1512	22480		
3	65	62.83	1499	22313		
3	66	62.83	1486	22158		
3	67	62.83	1475	22014		
3	68	62.83	1464	21881		
3	69	62.83	1454	21758		
3	70	62.83	1445	21645		
3	71	62.83	1437	21540		
3	72	62.83	1432	21478		
3	73	62.83	1435	21504		
3	74	62.83	1437	21520		
3	75	62.83	1438	21527		
3	76	62.83	1438	21526		
3	77	62.83	1438	21516		
3	78	62.83	1437	21500		
3	79	62.83	1436	21476		
3	80	62.83	1434	21447		
3	81	62.83	1432	21411		
3	82	62.83	1429	21370		
3	83	62.83	1426	21323		
3	84	62.83	1423	21273		
3	85	62.83	1419	21218		
3	86	62.83	1415	21160		
3	87	62.83	1410	21099		
3	88	62.83	1406	21036		
3	89	62.83	1401	20971		
3	90	62.83	1396	20905		
3	91	62.83	1392	20838		
3	92	62.83	1387	20770		
3	93	62.83	1382	20703		
3	94	62.83	1377	20635		
3	95	62.83	1372	20568		
3	96	62.83	1368	20503		
3	97	62.83	1363	20438		
3	98	62.83	1359	20376		
3	99	62.83	1355	20316		
3	100	62.83	1351	20259		
3	101	62.83	1347	20205		

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	0.00	31.42	1.50	5.00	29 (8)	262 (8)	0 (6)
2	100	70	0.00	31.42	2.02	6.72	39 (8)	356 (8)	0 (6)

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.16.0.5.005.A.DOCX

COMMESSA LOTTO CODIFICA DOCUMENTO REV. FOGLIO
IF2R 2.2.E.ZZ CL TR.16.0.5.005 A 70 di 118

n°	B [cm]	H [cm]	Afi [cmq]	Afs [cmq]	M [kNm]	N [kN]	σc [kPa]	σfi [kPa]	σfs [kPa]
3	100	70	12.72	31.42	2.55	8.43	45 (8)	412 (8)	586 (8)
4	100	70	12.72	31.42	3.07	10.15	54 (8)	498 (8)	707 (8)
5	100	70	12.72	31.42	3.60	11.86	63 (8)	584 (8)	827 (8)
6	100	70	12.72	31.42	4.12	13.58	72 (8)	671 (8)	947 (8)
7	100	70	12.72	31.42	4.65	15.29	81 (8)	757 (8)	1068 (8)
8	100	70	12.72	31.42	5.17	17.01	91 (8)	843 (8)	1188 (8)
9	100	70	12.72	31.42	5.70	18.73	100 (8)	929 (8)	1309 (8)
10	100	70	12.72	31.42	6.22	20.44	109 (8)	1016 (8)	1429 (8)
11	100	70	12.72	31.42	6.75	22.16	118 (8)	1102 (8)	1550 (8)
12	100	70	12.72	31.42	7.27	23.87	127 (8)	1188 (8)	1670 (8)
13	100	70	12.72	31.42	7.80	25.59	136 (8)	1275 (8)	1791 (8)
14	100	70	12.72	31.42	8.32	27.30	146 (8)	1361 (8)	1911 (8)
15	100	70	12.72	31.42	8.85	29.02	155 (8)	1447 (8)	2032 (8)
16	100	70	12.72	31.42	9.37	30.74	164 (8)	1533 (8)	2152 (8)
17	100	70	12.72	31.42	9.90	32.45	173 (8)	1620 (8)	2272 (8)
18	100	70	12.72	31.42	10.42	34.17	182 (8)	1706 (8)	2393 (8)
19	100	70	12.72	31.42	10.95	35.88	191 (8)	1792 (8)	2513 (8)
20	100	70	12.72	31.42	11.47	37.60	201 (8)	1879 (8)	2634 (8)
21	100	70	12.72	31.42	12.00	39.32	210 (8)	1965 (8)	2754 (8)
22	100	70	12.72	31.42	12.52	41.03	219 (8)	2051 (8)	2875 (8)
23	100	70	12.72	31.42	13.05	42.75	228 (8)	2138 (8)	2995 (8)
24	100	70	12.72	31.42	13.57	44.46	237 (8)	2224 (8)	3116 (8)
25	100	70	12.72	31.42	14.10	46.18	247 (8)	2310 (8)	3236 (8)
26	100	70	12.72	31.42	14.62	47.89	256 (8)	2396 (8)	3356 (8)
27	100	70	12.72	31.42	15.15	49.61	265 (8)	2483 (8)	3477 (8)
28	100	70	12.72	31.42	15.67	51.33	274 (8)	2569 (8)	3597 (8)
29	100	70	12.72	31.42	16.20	53.04	283 (8)	2655 (8)	3718 (8)
30	100	70	12.72	31.42	16.72	54.76	292 (8)	2742 (8)	3838 (8)
31	100	70	12.72	31.42	17.25	56.47	302 (8)	2828 (8)	3959 (8)
32	100	70	12.72	31.42	17.81	58.19	311 (8)	2929 (8)	4086 (8)
33	100	70	12.72	31.42	18.44	59.90	322 (8)	3061 (8)	4227 (8)
34	100	70	12.72	31.42	19.15	61.62	335 (8)	3227 (8)	4384 (8)
35	100	70	12.72	31.42	19.95	63.34	348 (8)	3429 (8)	4557 (8)
36	100	70	12.72	31.42	20.83	65.05	363 (8)	3670 (8)	4747 (8)
37	100	70	12.72	31.42	21.80	66.77	380 (8)	3954 (8)	4956 (8)
38	100	70	12.72	31.42	22.88	68.48	398 (8)	4282 (8)	5182 (8)
39	100	70	12.72	31.42	24.05	70.20	418 (8)	4659 (8)	5429 (8)
40	100	70	12.72	31.42	25.34	71.91	440 (8)	5089 (8)	5696 (8)
41	100	70	12.72	31.42	26.73	73.63	463 (8)	5573 (8)	5984 (8)
42	100	120	12.72	31.42	40.69	86.48	263 (8)	2673 (8)	3659 (8)
43	100	120	12.72	31.42	42.39	89.36	274 (8)	2831 (8)	3811 (8)
44	100	120	12.72	31.42	44.56	92.23	288 (8)	3084 (8)	4004 (8)
45	100	120	12.72	31.42	47.07	95.11	305 (8)	3413 (8)	4228 (8)
46	100	120	12.72	31.42	49.82	97.99	323 (8)	3797 (8)	4473 (8)
47	100	120	12.72	31.42	52.71	100.87	342 (8)	4218 (8)	4730 (8)
48	100	120	12.72	31.42	55.71	103.75	362 (8)	4673 (8)	4997 (8)
49	100	120	12.72	31.42	58.84	106.63	383 (8)	5163 (8)	5276 (8)
50	100	120	12.72	31.42	62.10	109.50	405 (8)	5691 (8)	5566 (8)
51	100	120	12.72	31.42	65.49	112.38	428 (8)	6259 (8)	5868 (8)
52	100	120	12.72	31.42	69.03	115.26	452 (8)	6869 (8)	6183 (8)
53	100	120	12.72	31.42	72.72	118.14	477 (8)	7523 (8)	6510 (8)
54	100	120	12.72	31.42	76.56	121.02	502 (8)	8222 (8)	6851 (8)
55	100	120	12.72	31.42	80.56	123.89	529 (8)	8969 (8)	7205 (8)
56	100	120	12.72	31.42	84.73	126.77	557 (8)	9765 (8)	7572 (8)
57	100	120	12.72	31.42	89.06	129.65	587 (8)	10612 (8)	7954 (8)
58	100	120	12.72	31.42	93.57	132.53	617 (8)	11510 (8)	8350 (8)
59	100	120	12.72	31.42	98.26	135.41	648 (8)	12463 (8)	8761 (8)
60	100	120	12.72	31.42	103.13	138.29	681 (8)	13471 (8)	9187 (8)
61	100	120	12.72	31.42	108.19	141.16	715 (8)	14536 (8)	9628 (8)
62	100	120	0.00	31.42	113.44	144.04	800 (8)	16265 (8)	0 (6)
63	100	120	0.00	31.42	118.89	146.92	838 (8)	17470 (8)	0 (6)
64	100	120	12.72	31.42	124.54	149.80	825 (8)	18087 (8)	11045 (8)
65	100	120	12.72	31.42	130.40	152.68	864 (8)	19395 (8)	11550 (8)
66	100	120	12.72	31.42	136.48	155.56	904 (8)	20766 (8)	12071 (8)
67	100	120	12.72	31.42	136.60	155.62	905 (8)	20795 (8)	12082 (8)
68	100	120	12.72	31.42	142.37	158.26	944 (8)	22113 (8)	12576 (8)
69	100	120	12.72	31.42	148.33	160.90	983 (8)	23488 (8)	13085 (8)
70	100	120	12.72	31.42	154.47	163.54	1024 (8)	24919 (8)	13608 (8)
71	100	120	12.72	31.42	160.81	166.18	1066 (8)	26410 (8)	14146 (8)
72	100	120	12.72	31.42	167.34	168.82	1109 (8)	27960 (8)	14700 (8)

Piastra fondazione

Tensione massima di compressione nel calcestruzzo
Tensione massima di trazione dell'acciaio

17430
1255271

[kPa]
[kPa]

Is	B	H	Afi	Afs	Mp	Mn	σc	σfi	σfs
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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.16.0.5.005.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.16.0.5.005	A	71 di 118

	[cm]	[cm]	[cmq]	[cmq]	[kNm]	[kNm]	[kPa]	[kPa]	[kPa]
1-1-P	60	120	21.99	21.99	2.01	-0.11	14 (5)	681 (5)	198 (5)
1-2-P	60	120	21.99	21.99	1.65	-2.05	19 (5)	862 (5)	918 (5)
1-3-P	60	120	21.99	21.99	0.04	-8.54	62 (5)	786 (5)	3050 (5)
1-4-P	60	120	21.99	21.99	0.00	-25.30	178 (5)	2280 (5)	8842 (5)
1-5-P	60	120	21.99	21.99	0.14	-32.23	233 (5)	2975 (5)	11538 (5)
1-6-P	60	120	21.99	21.99	0.04	-34.04	250 (5)	3196 (5)	12398 (5)
1-7-P	60	120	21.99	21.99	0.13	-24.13	171 (5)	2189 (5)	8492 (5)
1-8-P	60	120	21.99	21.99	1.05	-8.12	55 (5)	828 (5)	2728 (5)
1-9-P	60	120	21.99	21.99	15.02	-0.26	106 (5)	5259 (5)	1356 (5)
1-10-P	60	120	21.99	21.99	19.79	-0.01	142 (5)	7037 (5)	1814 (5)
1-11-P	60	120	21.99	21.99	21.19	0.00	152 (5)	7548 (5)	1946 (5)
1-12-P	60	120	21.99	21.99	17.31	-0.16	123 (5)	6099 (5)	1572 (5)
1-13-P	60	120	21.99	21.99	3.75	-3.80	25 (5)	1248 (5)	1168 (5)
1-14-P	60	120	21.99	21.99	0.14	-18.06	126 (5)	1609 (5)	6240 (5)
1-15-P	60	120	21.99	21.99	0.10	-25.81	189 (5)	2414 (5)	9364 (5)
1-16-P	60	120	21.99	21.99	0.21	-24.32	177 (5)	2256 (5)	8749 (5)
1-17-P	60	120	21.99	21.99	0.39	-16.75	114 (5)	1457 (5)	5652 (5)
1-18-P	60	120	21.99	21.99	6.37	-2.14	44 (5)	2189 (5)	628 (5)
1-19-P	60	120	21.99	21.99	18.40	-0.09	131 (5)	6506 (5)	1677 (5)
1-20-P	60	120	21.99	21.99	22.66	0.00	163 (5)	8085 (5)	2085 (5)
1-21-P	60	120	21.99	21.99	20.04	-0.02	144 (5)	7118 (5)	1835 (5)
1-22-P	60	120	21.99	21.99	12.95	-0.56	92 (5)	4542 (5)	1171 (5)
1-23-P	60	120	21.99	21.99	1.10	-9.34	63 (5)	855 (5)	3101 (5)
1-24-P	60	120	21.99	21.99	0.42	-21.42	152 (5)	1944 (5)	7541 (5)
1-25-P	60	120	21.99	21.99	0.00	-29.00	215 (5)	2746 (5)	10651 (5)
1-26-P	60	120	21.99	21.99	0.42	-21.42	152 (5)	1944 (5)	7541 (5)
1-27-P	60	120	21.99	21.99	1.10	-9.34	63 (5)	855 (5)	3101 (5)
1-28-P	60	120	21.99	21.99	12.95	-0.56	92 (5)	4542 (5)	1171 (5)
1-29-P	60	120	21.99	21.99	20.04	-0.02	144 (5)	7118 (5)	1835 (5)
1-30-P	60	120	21.99	21.99	22.66	0.00	163 (5)	8085 (5)	2085 (5)
1-31-P	60	120	21.99	21.99	18.40	-0.09	131 (5)	6506 (5)	1677 (5)
1-32-P	60	120	21.99	21.99	6.37	-2.14	44 (5)	2189 (5)	628 (5)
1-33-P	60	120	21.99	21.99	0.39	-16.75	114 (5)	1457 (5)	5652 (5)
1-34-P	60	120	21.99	21.99	0.21	-24.32	177 (5)	2256 (5)	8749 (5)
1-35-P	60	120	21.99	21.99	0.10	-25.81	189 (5)	2414 (5)	9364 (5)
1-36-P	60	120	21.99	21.99	0.14	-18.06	126 (5)	1609 (5)	6240 (5)
1-37-P	60	120	21.99	21.99	3.75	-3.80	25 (5)	1248 (5)	1168 (5)
1-38-P	60	120	21.99	21.99	17.31	-0.16	123 (5)	6099 (5)	1572 (5)
1-39-P	60	120	21.99	21.99	21.19	0.00	152 (5)	7548 (5)	1946 (5)
1-40-P	60	120	21.99	21.99	19.79	-0.01	142 (5)	7037 (5)	1814 (5)
1-41-P	60	120	21.99	21.99	15.02	-0.26	106 (5)	5259 (5)	1356 (5)
1-42-P	60	120	21.99	21.99	1.05	-8.12	55 (5)	828 (5)	2728 (5)
1-43-P	60	120	21.99	21.99	0.13	-24.13	171 (5)	2189 (5)	8492 (5)
1-44-P	60	120	21.99	21.99	0.04	-34.04	250 (5)	3196 (5)	12398 (5)
1-45-P	60	120	21.99	21.99	0.14	-32.23	233 (5)	2975 (5)	11538 (5)
1-46-P	60	120	21.99	21.99	0.00	-25.30	178 (5)	2280 (5)	8842 (5)
1-47-P	60	120	21.99	21.99	0.04	-8.54	62 (5)	786 (5)	3050 (5)
1-48-P	60	120	21.99	21.99	1.65	-2.05	19 (5)	862 (5)	918 (5)
1-49-P	60	120	21.99	21.99	2.01	-0.11	14 (5)	681 (5)	198 (5)
2-1-P	60	120	18.85	18.85	6.05	0.00	49 (5)	2583 (5)	614 (5)
2-2-P	60	120	18.85	18.85	6.97	0.00	57 (5)	3026 (5)	719 (5)
2-3-P	60	120	18.85	18.85	8.20	-0.01	67 (5)	3589 (5)	853 (5)
2-4-P	60	120	18.85	18.85	11.74	-1.90	90 (5)	4793 (5)	1156 (5)
2-5-P	60	120	18.85	18.85	0.23	-42.35	314 (5)	3974 (5)	16726 (5)
2-6-P	60	120	18.85	18.85	0.00	-80.85	605 (5)	7650 (5)	32199 (5)
2-7-P	60	120	18.85	18.85	1.04	-14.14	129 (5)	1648 (5)	6860 (5)
2-8-P	60	120	18.85	18.85	15.77	-0.97	125 (5)	6676 (5)	1586 (5)
2-9-P	60	120	18.85	18.85	16.12	0.00	131 (5)	6995 (5)	1662 (5)
2-10-P	60	120	18.85	18.85	16.35	0.00	133 (5)	7084 (5)	1683 (5)
2-11-P	60	120	18.85	18.85	16.54	0.00	135 (5)	7164 (5)	1702 (5)
2-12-P	60	120	18.85	18.85	16.68	0.00	136 (5)	7229 (5)	1717 (5)
2-13-P	60	120	18.85	18.85	16.55	-0.46	133 (5)	7077 (5)	1681 (5)
2-14-P	60	120	18.85	18.85	5.24	-2.50	60 (8)	3203 (8)	2036 (8)
2-15-P	60	120	18.85	18.85	0.00	-64.73	482 (5)	6093 (5)	25645 (5)
2-16-P	60	120	18.85	18.85	0.00	-51.39	381 (5)	4817 (5)	20276 (5)
2-17-P	60	120	18.85	18.85	17.84	-2.43	137 (5)	7295 (5)	1733 (5)
2-18-P	60	120	18.85	18.85	16.35	-0.17	132 (5)	7049 (5)	1675 (5)
2-19-P	60	120	18.85	18.85	16.62	0.00	135 (5)	7201 (5)	1711 (5)
2-20-P	60	120	18.85	18.85	16.57	0.00	135 (5)	7171 (5)	1704 (5)
2-21-P	60	120	18.85	18.85	16.57	0.00	135 (5)	7178 (5)	1705 (5)
2-22-P	60	120	18.85	18.85	16.43	0.00	134 (5)	7124 (5)	1693 (5)
2-23-P	60	120	18.85	18.85	16.88	-1.26	133 (5)	7099 (5)	1687 (5)
2-24-P	60	120	18.85	18.85	0.59	-20.07	230 (8)	2912 (8)	12259 (8)
2-25-P	60	120	18.85	18.85	0.00	-90.67	713 (5)	9011 (5)	37929 (5)
2-26-P	60	120	18.85	18.85	0.59	-20.07	230 (8)	2912 (8)	12259 (8)
2-27-P	60	120	18.85	18.85	16.88	-1.26	133 (5)	7099 (5)	1687 (5)
2-28-P	60	120	18.85	18.85	16.43	0.00	134 (5)	7124 (5)	1693 (5)
2-29-P	60	120	18.85	18.85	16.57	0.00	135 (5)	7178 (5)	1705 (5)
2-30-P	60	120	18.85	18.85	16.57	0.00	135 (5)	7171 (5)	1704 (5)
2-31-P	60	120	18.85	18.85	16.62	0.00	135 (5)	7201 (5)	1711 (5)
2-32-P	60	120	18.85	18.85	16.35	-0.17	132 (5)	7049 (5)	1675 (5)
2-33-P	60	120	18.85	18.85	17.84	-2.43	137 (5)	7295 (5)	1733 (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.16.0.5.005.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.16.0.5.005

A

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Is	B [cm]	H [cm]	Afi [cmq]	Afs [cmq]	Mp [kNm]	Mn [kNm]	σc [kPa]	σfi [kPa]	σfs [kPa]
2-34-P	60	120	18.85	18.85	0.00	-51.39	381 (5)	4817 (5)	20276 (5)
2-35-P	60	120	18.85	18.85	0.00	-64.73	482 (5)	6093 (5)	25645 (5)
2-36-P	60	120	18.85	18.85	5.24	-2.50	60 (8)	3203 (8)	2036 (8)
2-37-P	60	120	18.85	18.85	16.55	-0.46	133 (5)	7077 (5)	1681 (5)
2-38-P	60	120	18.85	18.85	16.68	0.00	136 (5)	7229 (5)	1717 (5)
2-39-P	60	120	18.85	18.85	16.54	0.00	135 (5)	7164 (5)	1702 (5)
2-40-P	60	120	18.85	18.85	16.35	0.00	133 (5)	7084 (5)	1683 (5)
2-41-P	60	120	18.85	18.85	16.12	0.00	131 (5)	6995 (5)	1662 (5)
2-42-P	60	120	18.85	18.85	15.77	-0.97	125 (5)	6676 (5)	1586 (5)
2-43-P	60	120	18.85	18.85	1.04	-14.14	129 (5)	1648 (5)	6860 (5)
2-44-P	60	120	18.85	18.85	0.00	-80.85	605 (5)	7650 (5)	32199 (5)
2-45-P	60	120	18.85	18.85	0.23	-42.35	314 (5)	3974 (5)	16726 (5)
2-46-P	60	120	18.85	18.85	11.74	-1.90	90 (5)	4793 (5)	1156 (5)
2-47-P	60	120	18.85	18.85	8.20	-0.01	67 (5)	3589 (5)	853 (5)
2-48-P	60	120	18.85	18.85	6.97	0.00	57 (5)	3026 (5)	719 (5)
2-49-P	60	120	18.85	18.85	6.05	0.00	49 (5)	2583 (5)	614 (5)
5-1-P	85	120	28.27	28.27	0.12	-13.14	63 (5)	805 (5)	3285 (5)
5-2-P	85	120	28.27	28.27	0.00	-18.51	88 (5)	1117 (5)	4560 (5)
5-3-P	85	120	28.27	28.27	0.00	-23.65	111 (5)	1414 (5)	5772 (5)
5-4-P	85	120	28.27	28.27	0.00	-28.26	130 (5)	1652 (5)	6745 (5)
5-5-P	85	120	28.27	28.27	0.00	-30.02	135 (5)	1712 (5)	6991 (5)
5-6-P	85	120	28.27	28.27	0.00	-30.68	134 (5)	1707 (5)	6968 (5)
5-7-P	85	120	28.27	28.27	0.00	-29.79	127 (5)	1615 (5)	6594 (5)
5-8-P	85	120	28.27	28.27	0.00	-33.17	145 (5)	1842 (5)	7520 (5)
5-9-P	85	120	28.27	28.27	0.00	-39.40	180 (5)	2281 (5)	9313 (5)
5-10-P	85	120	28.27	28.27	0.00	-73.75	405 (5)	5137 (5)	20974 (5)
5-11-P	85	120	28.27	28.27	0.00	-79.55	442 (5)	5614 (5)	22918 (5)
5-12-P	85	120	28.27	28.27	0.00	-42.53	200 (5)	2541 (5)	10376 (5)
5-13-P	85	120	28.27	28.27	0.00	-28.14	111 (5)	1405 (5)	5735 (5)
5-14-P	85	120	28.27	28.27	0.00	-20.99	68 (5)	868 (5)	3543 (5)
5-15-P	85	120	28.27	28.27	0.00	-20.19	63 (5)	794 (5)	3242 (5)
5-16-P	85	120	28.27	28.27	0.00	-19.55	59 (5)	747 (5)	3051 (5)
5-17-P	85	120	28.27	28.27	0.00	-19.01	57 (5)	719 (5)	2934 (5)
5-18-P	85	120	28.27	28.27	0.00	-26.34	99 (5)	1262 (5)	5152 (5)
5-19-P	85	120	28.27	28.27	0.00	-44.93	218 (5)	2768 (5)	11301 (5)
5-20-P	85	120	28.27	28.27	0.20	-80.61	475 (5)	6028 (5)	24608 (5)
5-21-P	85	120	28.27	28.27	0.00	-58.72	309 (5)	3922 (5)	16012 (5)
5-22-P	85	120	28.27	28.27	0.00	-28.36	112 (5)	1419 (5)	5795 (5)
5-23-P	85	120	28.27	28.27	0.00	-20.49	65 (5)	829 (5)	3384 (5)
5-24-P	85	120	28.27	28.27	3.50	-2.93	46 (7)	585 (7)	2388 (7)
5-25-P	85	120	28.27	28.27	4.40	-3.57	49 (7)	619 (7)	2526 (7)
5-26-P	85	120	28.27	28.27	3.50	-2.93	46 (7)	585 (7)	2388 (7)
5-27-P	85	120	28.27	28.27	0.00	-20.49	65 (5)	829 (5)	3384 (5)
5-28-P	85	120	28.27	28.27	0.00	-28.36	112 (5)	1419 (5)	5795 (5)
5-29-P	85	120	28.27	28.27	0.00	-58.72	309 (5)	3922 (5)	16012 (5)
5-30-P	85	120	28.27	28.27	0.20	-80.61	475 (5)	6028 (5)	24608 (5)
5-31-P	85	120	28.27	28.27	0.00	-44.93	218 (5)	2768 (5)	11301 (5)
5-32-P	85	120	28.27	28.27	0.00	-26.34	99 (5)	1262 (5)	5152 (5)
5-33-P	85	120	28.27	28.27	0.00	-19.01	57 (5)	719 (5)	2934 (5)
5-34-P	85	120	28.27	28.27	0.00	-19.55	59 (5)	747 (5)	3051 (5)
5-35-P	85	120	28.27	28.27	0.00	-20.19	63 (5)	794 (5)	3242 (5)
5-36-P	85	120	28.27	28.27	0.00	-20.99	68 (5)	868 (5)	3543 (5)
5-37-P	85	120	28.27	28.27	0.00	-28.14	111 (5)	1405 (5)	5735 (5)
5-38-P	85	120	28.27	28.27	0.00	-42.53	200 (5)	2541 (5)	10376 (5)
5-39-P	85	120	28.27	28.27	0.00	-79.55	442 (5)	5614 (5)	22918 (5)
5-40-P	85	120	28.27	28.27	0.00	-73.75	405 (5)	5137 (5)	20974 (5)
5-41-P	85	120	28.27	28.27	0.00	-39.40	180 (5)	2281 (5)	9313 (5)
5-42-P	85	120	28.27	28.27	0.00	-33.17	145 (5)	1842 (5)	7520 (5)
5-43-P	85	120	28.27	28.27	0.00	-29.79	127 (5)	1615 (5)	6594 (5)
5-44-P	85	120	28.27	28.27	0.00	-30.68	134 (5)	1707 (5)	6968 (5)
5-45-P	85	120	28.27	28.27	0.00	-30.02	135 (5)	1712 (5)	6991 (5)
5-46-P	85	120	28.27	28.27	0.00	-28.26	130 (5)	1652 (5)	6745 (5)
5-47-P	85	120	28.27	28.27	0.00	-23.65	111 (5)	1414 (5)	5772 (5)
5-48-P	85	120	28.27	28.27	0.00	-18.51	88 (5)	1117 (5)	4560 (5)
5-49-P	85	120	28.27	28.27	0.12	-13.14	63 (5)	805 (5)	3285 (5)
6-1-P	85	120	28.27	28.27	3.87	-4.06	21 (7)	1028 (7)	1090 (7)
6-2-P	85	120	28.27	28.27	4.35	-4.90	26 (7)	1091 (7)	1348 (7)
6-3-P	85	120	28.27	28.27	4.60	-5.82	32 (7)	1071 (7)	1638 (7)
6-4-P	85	120	28.27	28.27	4.55	-6.89	38 (7)	1179 (7)	1995 (7)
6-5-P	85	120	28.27	28.27	1.59	-6.20	40 (6)	617 (6)	2070 (6)
6-6-P	85	120	28.27	28.27	0.12	-9.85	50 (5)	631 (5)	2575 (5)
6-7-P	85	120	28.27	28.27	0.00	-15.45	75 (5)	953 (5)	3889 (5)
6-8-P	85	120	28.27	28.27	0.00	-22.45	112 (5)	1421 (5)	5800 (5)
6-9-P	85	120	28.27	28.27	0.00	-30.32	156 (5)	1978 (5)	8075 (5)
6-10-P	85	120	28.27	28.27	0.00	-35.28	175 (5)	2216 (5)	9048 (5)
6-11-P	85	120	28.27	28.27	0.00	-35.67	173 (5)	2201 (5)	8986 (5)
6-12-P	85	120	28.27	28.27	0.00	-28.90	140 (5)	1782 (5)	7275 (5)
6-13-P	85	120	28.27	28.27	0.00	-20.67	94 (5)	1198 (5)	4892 (5)
6-14-P	85	120	28.27	28.27	0.25	-13.12	49 (5)	622 (5)	2540 (5)
6-15-P	85	120	28.27	28.27	2.50	-1.77	23 (7)	328 (7)	1214 (7)
6-16-P	85	120	28.27	28.27	0.00	-8.55	21 (5)	264 (5)	1077 (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.16.0.5.005.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.16.0.5.005	A	73 di 118

Is	B [cm]	H [cm]	Afi [cmq]	Afs [cmq]	Mp [kNm]	Mn [kNm]	sc [kPa]	ofi [kPa]	ofs [kPa]
6-17-P	85	120	28.27	28.27	0.00	-11.30	35 (5)	449 (5)	1835 (5)
6-18-P	85	120	28.27	28.27	0.00	-18.50	77 (5)	976 (5)	3983 (5)
6-19-P	85	120	28.27	28.27	0.00	-24.84	111 (5)	1405 (5)	5735 (5)
6-20-P	85	120	28.27	28.27	0.00	-30.37	135 (5)	1711 (5)	6985 (5)
6-21-P	85	120	28.27	28.27	0.00	-26.45	117 (5)	1483 (5)	6055 (5)
6-22-P	85	120	28.27	28.27	0.00	-20.15	88 (5)	1116 (5)	4557 (5)
6-23-P	85	120	28.27	28.27	0.06	-12.32	43 (5)	540 (5)	2206 (5)
6-24-P	85	120	28.27	28.27	3.55	-0.40	12 (7)	406 (7)	635 (7)
6-25-P	85	120	28.27	28.27	5.77	0.00	9 (7)	490 (7)	120 (7)
6-26-P	85	120	28.27	28.27	3.55	-0.40	12 (7)	406 (7)	635 (7)
6-27-P	85	120	28.27	28.27	0.06	-12.32	43 (5)	540 (5)	2206 (5)
6-28-P	85	120	28.27	28.27	0.00	-20.15	88 (5)	1116 (5)	4557 (5)
6-29-P	85	120	28.27	28.27	0.00	-26.45	117 (5)	1483 (5)	6055 (5)
6-30-P	85	120	28.27	28.27	0.00	-30.37	135 (5)	1711 (5)	6985 (5)
6-31-P	85	120	28.27	28.27	0.00	-24.84	111 (5)	1405 (5)	5735 (5)
6-32-P	85	120	28.27	28.27	0.00	-18.50	77 (5)	976 (5)	3983 (5)
6-33-P	85	120	28.27	28.27	0.00	-11.30	35 (5)	449 (5)	1835 (5)
6-34-P	85	120	28.27	28.27	0.00	-8.55	21 (5)	264 (5)	1077 (5)
6-35-P	85	120	28.27	28.27	2.50	-1.77	23 (7)	328 (7)	1214 (7)
6-36-P	85	120	28.27	28.27	0.25	-13.12	49 (5)	622 (5)	2540 (5)
6-37-P	85	120	28.27	28.27	0.00	-20.67	94 (5)	1198 (5)	4892 (5)
6-38-P	85	120	28.27	28.27	0.00	-28.90	140 (5)	1782 (5)	7275 (5)
6-39-P	85	120	28.27	28.27	0.00	-35.67	173 (5)	2201 (5)	8986 (5)
6-40-P	85	120	28.27	28.27	0.00	-35.28	175 (5)	2216 (5)	9048 (5)
6-41-P	85	120	28.27	28.27	0.00	-30.32	156 (5)	1978 (5)	8075 (5)
6-42-P	85	120	28.27	28.27	0.00	-22.45	112 (5)	1421 (5)	5800 (5)
6-43-P	85	120	28.27	28.27	0.00	-15.45	75 (5)	953 (5)	3889 (5)
6-44-P	85	120	28.27	28.27	0.12	-9.85	50 (5)	631 (5)	2575 (5)
6-45-P	85	120	28.27	28.27	1.59	-6.20	40 (6)	617 (6)	2070 (6)
6-46-P	85	120	28.27	28.27	4.55	-6.89	38 (7)	1179 (7)	1995 (7)
6-47-P	85	120	28.27	28.27	4.60	-5.82	32 (7)	1071 (7)	1638 (7)
6-48-P	85	120	28.27	28.27	4.35	-4.90	26 (7)	1091 (7)	1348 (7)
6-49-P	85	120	28.27	28.27	3.87	-4.06	21 (7)	1028 (7)	1090 (7)
7-1-P	85	120	25.13	25.13	3.67	-2.73	23 (5)	1260 (5)	868 (5)
7-2-P	85	120	25.13	25.13	4.69	-3.91	31 (8)	1716 (8)	1432 (8)
7-3-P	85	120	25.13	25.13	4.54	-8.68	55 (7)	1853 (7)	3036 (7)
7-4-P	85	120	25.13	25.13	3.98	-18.51	116 (7)	1683 (7)	6370 (7)
7-5-P	85	120	25.13	25.13	1.08	-27.65	163 (7)	2054 (7)	8933 (7)
7-6-P	85	120	25.13	25.13	0.08	-34.05	198 (7)	2491 (7)	10831 (7)
7-7-P	85	120	25.13	25.13	0.30	-21.42	131 (7)	1645 (7)	7151 (7)
7-8-P	85	120	25.13	25.13	1.68	-10.80	72 (7)	907 (7)	3944 (7)
7-9-P	85	120	25.13	25.13	4.24	-1.91	24 (6)	1310 (6)	1319 (6)
7-10-P	85	120	25.13	25.13	4.99	-0.94	38 (6)	2092 (6)	907 (6)
7-11-P	85	120	25.13	25.13	7.23	-0.72	40 (7)	2197 (7)	883 (7)
7-12-P	85	120	25.13	25.13	7.85	-2.38	48 (7)	2610 (7)	1235 (7)
7-13-P	85	120	25.13	25.13	7.01	-9.70	63 (6)	2051 (6)	3440 (6)
7-14-P	85	120	25.13	25.13	5.84	-16.93	111 (5)	1392 (5)	6052 (5)
7-15-P	85	120	25.13	25.13	0.40	-25.40	156 (7)	1960 (7)	8522 (7)
7-16-P	85	120	25.13	25.13	0.07	-21.73	134 (7)	1692 (7)	7358 (7)
7-17-P	85	120	25.13	25.13	5.35	-13.49	82 (5)	1228 (5)	4467 (5)
7-18-P	85	120	25.13	25.13	6.22	-3.27	36 (6)	1959 (6)	1310 (6)
7-19-P	85	120	25.13	25.13	11.40	0.00	62 (7)	3413 (7)	785 (7)
7-20-P	85	120	25.13	25.13	13.88	0.00	73 (7)	4015 (7)	923 (7)
7-21-P	85	120	25.13	25.13	13.05	0.00	71 (7)	3911 (7)	899 (7)
7-22-P	85	120	25.13	25.13	10.22	-0.67	62 (7)	3383 (7)	778 (7)
7-23-P	85	120	25.13	25.13	7.41	-8.51	55 (6)	2118 (6)	3033 (6)
7-24-P	85	120	25.13	25.13	1.15	-14.27	93 (7)	1173 (7)	5100 (7)
7-25-P	85	120	25.13	25.13	0.42	-18.60	155 (6)	1946 (6)	8463 (6)
7-26-P	85	120	25.13	25.13	1.15	-14.27	93 (7)	1173 (7)	5100 (7)
7-27-P	85	120	25.13	25.13	7.41	-8.51	55 (6)	2118 (6)	3033 (6)
7-28-P	85	120	25.13	25.13	10.22	-0.67	62 (7)	3383 (7)	778 (7)
7-29-P	85	120	25.13	25.13	13.05	0.00	71 (7)	3911 (7)	899 (7)
7-30-P	85	120	25.13	25.13	13.88	0.00	73 (7)	4015 (7)	923 (7)
7-31-P	85	120	25.13	25.13	11.40	0.00	62 (7)	3413 (7)	785 (7)
7-32-P	85	120	25.13	25.13	6.22	-3.27	36 (6)	1959 (6)	1310 (6)
7-33-P	85	120	25.13	25.13	5.35	-13.49	82 (5)	1228 (5)	4467 (5)
7-34-P	85	120	25.13	25.13	0.07	-21.73	134 (7)	1692 (7)	7358 (7)
7-35-P	85	120	25.13	25.13	0.40	-25.40	156 (7)	1960 (7)	8522 (7)
7-36-P	85	120	25.13	25.13	5.84	-16.93	111 (5)	1392 (5)	6052 (5)
7-37-P	85	120	25.13	25.13	7.01	-9.70	63 (6)	2051 (6)	3440 (6)
7-38-P	85	120	25.13	25.13	7.85	-2.38	48 (7)	2610 (7)	1235 (7)
7-39-P	85	120	25.13	25.13	7.23	-0.72	40 (7)	2197 (7)	883 (7)
7-40-P	85	120	25.13	25.13	4.99	-0.94	38 (6)	2092 (6)	907 (6)
7-41-P	85	120	25.13	25.13	4.24	-1.91	24 (6)	1310 (6)	1319 (6)
7-42-P	85	120	25.13	25.13	1.68	-10.80	72 (7)	907 (7)	3944 (7)
7-43-P	85	120	25.13	25.13	0.30	-21.42	131 (7)	1645 (7)	7151 (7)
7-44-P	85	120	25.13	25.13	0.08	-34.05	198 (7)	2491 (7)	10831 (7)
7-45-P	85	120	25.13	25.13	1.08	-27.65	163 (7)	2054 (7)	8933 (7)
7-46-P	85	120	25.13	25.13	3.98	-18.51	116 (7)	1683 (7)	6370 (7)
7-47-P	85	120	25.13	25.13	4.54	-8.68	55 (7)	1853 (7)	3036 (7)
7-48-P	85	120	25.13	25.13	4.69	-3.91	31 (8)	1716 (8)	1432 (8)

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.16.0.5.005.A.DOCX

COMMESSA

LOTTO

CODIFICA

DOCUMENTO

REV.

FOGLIO

IF2R

2.2.E.ZZ

CL

TR.16.0.5.005

A

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Is	B [cm]	H [cm]	Afi [cmq]	Afs [cmq]	Mp [kNm]	Mn [kNm]	sc [kPa]	ofi [kPa]	ofs [kPa]
7-49-P	85	120	25.13	25.13	3.67	-2.73	23 (5)	1260 (5)	868 (5)
8-1-P	85	120	28.27	28.27	0.99	-0.73	6 (5)	304 (5)	178 (5)
8-2-P	85	120	28.27	28.27	0.85	-3.82	23 (6)	288 (6)	1177 (6)
8-3-P	85	120	28.27	28.27	0.91	-10.52	60 (7)	767 (7)	3131 (7)
8-4-P	85	120	28.27	28.27	1.63	-21.47	122 (7)	1549 (7)	6325 (7)
8-5-P	85	120	28.27	28.27	0.00	-44.29	249 (7)	3159 (7)	12898 (7)
8-6-P	85	120	28.27	28.27	0.00	-60.69	344 (7)	4373 (7)	17854 (7)
8-7-P	85	120	28.27	28.27	0.00	-30.65	171 (7)	2168 (7)	8849 (7)
8-8-P	85	120	28.27	28.27	1.19	-12.54	73 (7)	923 (7)	3768 (7)
8-9-P	85	120	28.27	28.27	2.00	-1.22	14 (7)	584 (7)	740 (7)
8-10-P	85	120	28.27	28.27	6.34	0.00	34 (7)	1761 (7)	431 (7)
8-11-P	85	120	28.27	28.27	8.10	0.00	43 (7)	2249 (7)	551 (7)
8-12-P	85	120	28.27	28.27	4.62	-0.49	25 (7)	1310 (7)	321 (7)
8-13-P	85	120	28.27	28.27	5.05	-9.65	50 (5)	986 (5)	2571 (5)
8-14-P	85	120	28.27	28.27	0.49	-19.64	115 (7)	1462 (7)	5970 (7)
8-15-P	85	120	28.27	28.27	0.00	-47.49	274 (7)	3481 (7)	14212 (7)
8-16-P	85	120	28.27	28.27	0.00	-40.93	236 (7)	3001 (7)	12251 (7)
8-17-P	85	120	28.27	28.27	4.77	-13.74	83 (6)	1704 (6)	4305 (6)
8-18-P	85	120	28.27	28.27	3.19	-2.35	19 (7)	1006 (7)	939 (7)
8-19-P	85	120	28.27	28.27	10.11	0.00	52 (7)	2704 (7)	662 (7)
8-20-P	85	120	28.27	28.27	15.36	0.00	82 (7)	4274 (7)	1047 (7)
8-21-P	85	120	28.27	28.27	12.87	0.00	68 (7)	3526 (7)	864 (7)
8-22-P	85	120	28.27	28.27	7.24	-0.14	38 (7)	1969 (7)	482 (7)
8-23-P	85	120	28.27	28.27	6.50	-9.52	49 (5)	2091 (5)	2525 (5)
8-24-P	85	120	28.27	28.27	0.00	-25.91	150 (7)	1901 (7)	7763 (7)
8-25-P	85	120	28.27	28.27	0.00	-54.96	319 (7)	4044 (7)	16510 (7)
8-26-P	85	120	28.27	28.27	0.00	-25.91	150 (7)	1901 (7)	7763 (7)
8-27-P	85	120	28.27	28.27	6.50	-9.52	49 (5)	2091 (5)	2525 (5)
8-28-P	85	120	28.27	28.27	7.24	-0.14	38 (7)	1969 (7)	482 (7)
8-29-P	85	120	28.27	28.27	12.87	0.00	68 (7)	3526 (7)	864 (7)
8-30-P	85	120	28.27	28.27	15.36	0.00	82 (7)	4274 (7)	1047 (7)
8-31-P	85	120	28.27	28.27	10.11	0.00	52 (7)	2704 (7)	662 (7)
8-32-P	85	120	28.27	28.27	3.19	-2.35	19 (7)	1006 (7)	939 (7)
8-33-P	85	120	28.27	28.27	4.77	-13.74	83 (6)	1704 (6)	4305 (6)
8-34-P	85	120	28.27	28.27	0.00	-40.93	236 (7)	3001 (7)	12251 (7)
8-35-P	85	120	28.27	28.27	0.00	-47.49	274 (7)	3481 (7)	14212 (7)
8-36-P	85	120	28.27	28.27	0.49	-19.64	115 (7)	1462 (7)	5970 (7)
8-37-P	85	120	28.27	28.27	5.05	-9.65	50 (5)	986 (5)	2571 (5)
8-38-P	85	120	28.27	28.27	4.62	-0.49	25 (7)	1310 (7)	321 (7)
8-39-P	85	120	28.27	28.27	8.10	0.00	43 (7)	2249 (7)	551 (7)
8-40-P	85	120	28.27	28.27	6.34	0.00	34 (7)	1761 (7)	431 (7)
8-41-P	85	120	28.27	28.27	2.00	-1.22	14 (7)	584 (7)	740 (7)
8-42-P	85	120	28.27	28.27	1.19	-12.54	73 (7)	923 (7)	3768 (7)
8-43-P	85	120	28.27	28.27	0.00	-30.65	171 (7)	2168 (7)	8849 (7)
8-44-P	85	120	28.27	28.27	0.00	-60.69	344 (7)	4373 (7)	17854 (7)
8-45-P	85	120	28.27	28.27	0.00	-44.29	249 (7)	3159 (7)	12898 (7)
8-46-P	85	120	28.27	28.27	1.63	-21.47	122 (7)	1549 (7)	6325 (7)
8-47-P	85	120	28.27	28.27	0.91	-10.52	60 (7)	767 (7)	3131 (7)
8-48-P	85	120	28.27	28.27	0.85	-3.82	23 (6)	288 (6)	1177 (6)
8-49-P	85	120	28.27	28.27	0.99	-0.73	6 (5)	304 (5)	178 (5)
9-1-S	100	120	31.42	31.42	1.58	-6.97	33 (5)	1768 (5)	1518 (5)
9-2-S	100	120	31.42	31.42	0.09	-12.17	51 (5)	642 (5)	2703 (5)
9-3-S	100	120	31.42	31.42	0.98	-12.78	117 (8)	1483 (8)	6243 (8)
9-4-S	100	120	31.42	31.42	5.55	-20.62	136 (5)	1961 (5)	7222 (5)
9-5-S	100	120	31.42	31.42	18.14	-6.19	121 (5)	6448 (5)	5025 (5)
9-6-S	100	120	31.42	31.42	51.93	0.00	266 (5)	14181 (5)	3369 (5)
9-7-S	100	120	31.42	31.42	0.00	-260.13	1121 (5)	14179 (5)	59680 (5)
9-8-S	100	120	31.42	31.42	0.00	-197.90	822 (5)	10400 (5)	43774 (5)
9-9-S	100	120	31.42	31.42	0.00	-151.44	602 (5)	7618 (5)	32065 (5)
9-10-S	100	120	31.42	31.42	0.00	-111.51	420 (5)	5311 (5)	22355 (5)
9-11-S	100	120	31.42	31.42	0.01	-74.05	252 (5)	3186 (5)	13411 (5)
9-12-S	100	120	31.42	31.42	0.10	-44.38	130 (5)	1650 (5)	6944 (5)
9-13-S	100	120	31.42	31.42	12.16	-3.44	53 (7)	1250 (7)	2805 (7)
9-14-S	100	120	31.42	31.42	19.41	-2.26	64 (7)	3407 (7)	1333 (7)
9-15-S	100	120	31.42	31.42	19.43	-3.03	74 (6)	3965 (6)	1191 (6)
9-16-S	100	120	31.42	31.42	19.81	-3.39	71 (6)	3787 (6)	1318 (6)
9-17-S	100	120	31.42	31.42	7.79	-6.70	43 (8)	2285 (8)	1964 (8)
9-18-S	100	120	31.42	31.42	4.99	-10.20	53 (7)	2043 (7)	2800 (7)
9-19-S	100	120	31.42	31.42	1.49	-6.25	32 (7)	778 (7)	1689 (7)
9-20-S	100	120	31.42	31.42	5.05	-3.35	15 (5)	481 (5)	799 (5)
9-21-S	100	120	31.42	31.42	4.69	-1.40	13 (5)	683 (5)	162 (5)
10-1-S	100	120	31.42	31.42	11.30	-4.80	46 (5)	2450 (5)	1029 (5)
10-2-S	100	120	31.42	31.42	20.70	-11.39	121 (5)	6426 (5)	2540 (5)
10-3-S	100	120	31.42	31.42	5.05	-16.50	69 (5)	908 (5)	3665 (5)
10-4-S	100	120	31.42	31.42	1.59	-81.12	443 (5)	5606 (5)	23598 (5)
10-5-S	100	120	31.42	31.42	9.75	-53.69	333 (5)	7089 (5)	17748 (5)
10-6-S	100	120	31.42	31.42	53.57	0.00	295 (8)	15705 (8)	3731 (8)
10-7-S	100	120	31.42	31.42	0.00	-214.19	873 (5)	11043 (5)	46479 (5)
10-8-S	100	120	31.42	31.42	0.00	-183.69	740 (5)	9363 (5)	39408 (5)
10-9-S	100	120	31.42	31.42	0.00	-150.10	590 (5)	7458 (5)	31393 (5)
10-10-S	100	120	31.42	31.42	0.00	-117.93	449 (5)	5676 (5)	23889 (5)

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.16.0.5.005.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.16.0.5.005	A	75 di 118

Is	B [cm]	H [cm]	Afi [cmq]	Afs [cmq]	Mp [kNm]	Mn [kNm]	sc [kPa]	ofi [kPa]	ofs [kPa]
10-11-S	100	120	31.42	31.42	0.00	-85.53	307 (5)	3887 (5)	16361 (5)
10-12-S	100	120	31.42	31.42	0.00	-51.98	162 (5)	2048 (5)	8621 (5)
10-13-S	100	120	31.42	31.42	8.00	-0.48	43 (7)	700 (7)	2296 (7)
10-14-S	100	120	31.42	31.42	21.67	-0.22	83 (7)	4414 (7)	1049 (7)
10-15-S	100	120	31.42	31.42	34.19	-0.61	131 (6)	6994 (6)	1662 (6)
10-16-S	100	120	31.42	31.42	48.82	-1.89	182 (5)	9672 (5)	2298 (5)
10-17-S	100	120	31.42	31.42	2.44	-16.48	77 (7)	1686 (7)	4089 (7)
10-18-S	100	120	31.42	31.42	1.56	-42.92	214 (7)	2708 (7)	11398 (7)
10-19-S	100	120	31.42	31.42	3.31	-29.54	144 (5)	1818 (5)	7652 (5)
10-20-S	100	120	31.42	31.42	2.42	-20.32	78 (5)	981 (5)	4130 (5)
10-21-S	100	120	31.42	31.42	2.39	-5.57	14 (5)	596 (5)	760 (5)
11-1-S	100	120	31.42	31.42	0.50	-8.23	35 (5)	442 (5)	1862 (5)
11-2-S	100	120	31.42	31.42	0.73	-7.20	27 (5)	347 (5)	1460 (5)
11-3-S	100	120	31.42	31.42	2.86	-2.20	60 (8)	839 (8)	3219 (8)
11-4-S	100	120	31.42	31.42	12.86	0.00	71 (8)	3770 (8)	896 (8)
11-5-S	100	120	31.42	31.42	31.00	0.00	158 (5)	8419 (5)	2000 (5)
11-6-S	100	120	31.42	31.42	52.06	0.00	256 (5)	13605 (5)	3232 (5)
11-7-S	100	120	31.42	31.42	9.62	-43.02	296 (6)	3747 (6)	15772 (6)
11-8-S	100	120	31.42	31.42	8.98	-60.45	372 (6)	4702 (6)	19791 (6)
11-9-S	100	120	31.42	31.42	0.00	-192.69	844 (5)	10670 (5)	44912 (5)
11-10-S	100	120	31.42	31.42	0.00	-165.91	676 (5)	8548 (5)	35981 (5)
11-11-S	100	120	31.42	31.42	0.00	-127.96	468 (5)	5924 (5)	24933 (5)
11-12-S	100	120	31.42	31.42	0.00	-79.79	267 (5)	3374 (5)	14202 (5)
11-13-S	100	120	31.42	31.42	0.00	-42.81	120 (5)	1513 (5)	6370 (5)
11-14-S	100	120	31.42	31.42	7.73	-1.89	38 (7)	920 (7)	2009 (7)
11-15-S	100	120	31.42	31.42	10.42	-1.28	25 (7)	1343 (7)	880 (7)
11-16-S	100	120	31.42	31.42	12.29	-1.14	41 (6)	2198 (6)	1317 (6)
11-17-S	100	120	31.42	31.42	7.83	-1.10	35 (7)	1856 (7)	1050 (7)
11-18-S	100	120	31.42	31.42	5.06	-1.15	32 (8)	1484 (8)	1681 (8)
11-19-S	100	120	31.42	31.42	7.38	-0.91	18 (5)	974 (5)	601 (5)
11-20-S	100	120	31.42	31.42	5.32	-0.77	11 (5)	602 (5)	268 (5)
11-21-S	100	120	31.42	31.42	3.35	-0.67	7 (5)	378 (5)	162 (5)
12-1-S	100	120	31.42	31.42	13.89	-3.03	57 (5)	3052 (5)	725 (5)
12-2-S	100	120	31.42	31.42	22.17	-10.05	129 (5)	6866 (5)	2263 (5)
12-3-S	100	120	31.42	31.42	5.13	-18.90	82 (5)	1032 (5)	4342 (5)
12-4-S	100	120	31.42	31.42	1.18	-94.69	413 (5)	5220 (5)	21973 (5)
12-5-S	100	120	31.42	31.42	4.21	-39.61	273 (8)	6166 (8)	14518 (8)
12-6-S	100	120	31.42	31.42	53.35	0.00	294 (8)	15642 (8)	3716 (8)
12-7-S	100	120	31.42	31.42	0.00	-182.47	703 (5)	8889 (5)	37415 (5)
12-8-S	100	120	31.42	31.42	0.00	-152.19	574 (5)	7260 (5)	30560 (5)
12-9-S	100	120	31.42	31.42	0.00	-130.69	486 (5)	6148 (5)	25878 (5)
12-10-S	100	120	31.42	31.42	0.00	-106.23	384 (5)	4854 (5)	20433 (5)
12-11-S	100	120	31.42	31.42	0.00	-80.65	277 (5)	3504 (5)	14751 (5)
12-12-S	100	120	31.42	31.42	0.00	-51.61	157 (5)	1991 (5)	8381 (5)
12-13-S	100	120	31.42	31.42	8.23	-1.68	46 (7)	587 (7)	2470 (7)
12-14-S	100	120	31.42	31.42	21.58	-0.87	67 (7)	3587 (7)	852 (7)
12-15-S	100	120	31.42	31.42	35.35	-1.70	136 (6)	7229 (6)	1717 (6)
12-16-S	100	120	31.42	31.42	51.90	-3.41	192 (5)	10223 (5)	2429 (5)
12-17-S	100	120	31.42	31.42	2.47	-21.98	101 (7)	2054 (7)	5403 (7)
12-18-S	100	120	31.42	31.42	1.49	-51.08	254 (7)	3218 (7)	13546 (7)
12-19-S	100	120	31.42	31.42	2.15	-34.28	173 (5)	2188 (5)	9211 (5)
12-20-S	100	120	31.42	31.42	1.47	-23.34	92 (5)	1169 (5)	4919 (5)
12-21-S	100	120	31.42	31.42	1.99	-6.52	16 (5)	575 (5)	873 (5)
13-1-S	100	120	31.42	31.42	1.23	-7.52	31 (5)	397 (5)	1672 (5)
13-2-S	100	120	31.42	31.42	0.53	-11.09	44 (5)	560 (5)	2357 (5)
13-3-S	100	120	31.42	31.42	2.37	-7.76	107 (8)	1352 (8)	5690 (8)
13-4-S	100	120	31.42	31.42	10.31	-3.20	88 (8)	3021 (8)	4698 (8)
13-5-S	100	120	31.42	31.42	27.42	0.00	143 (5)	7614 (5)	1809 (5)
13-6-S	100	120	31.42	31.42	53.99	0.00	264 (5)	14078 (5)	3345 (5)
13-7-S	100	120	31.42	31.42	16.67	-48.18	343 (6)	4851 (6)	18277 (6)
13-8-S	100	120	31.42	31.42	13.95	-57.57	338 (6)	5666 (6)	17969 (6)
13-9-S	100	120	31.42	31.42	0.00	-173.60	742 (5)	9382 (5)	39491 (5)
13-10-S	100	120	31.42	31.42	0.00	-149.97	596 (5)	7534 (5)	31712 (5)
13-11-S	100	120	31.42	31.42	0.00	-116.27	414 (5)	5232 (5)	22022 (5)
13-12-S	100	120	31.42	31.42	0.00	-72.83	234 (5)	2965 (5)	12478 (5)
13-13-S	100	120	31.42	31.42	0.00	-38.78	101 (5)	1277 (5)	5375 (5)
13-14-S	100	120	31.42	31.42	8.85	-0.30	26 (7)	626 (7)	1391 (7)
13-15-S	100	120	31.42	31.42	10.04	-0.63	19 (7)	1026 (7)	829 (7)
13-16-S	100	120	31.42	31.42	5.58	-2.42	33 (8)	1637 (8)	1770 (8)
13-17-S	100	120	31.42	31.42	5.62	-3.12	43 (8)	1648 (8)	2287 (8)
13-18-S	100	120	31.42	31.42	4.84	-3.12	43 (8)	1419 (8)	2286 (8)
13-19-S	100	120	31.42	31.42	1.85	-2.00	20 (7)	632 (7)	1086 (7)
13-20-S	100	120	31.42	31.42	0.73	-0.98	8 (7)	440 (7)	432 (7)
13-21-S	100	120	31.42	31.42	2.38	-0.38	7 (6)	390 (6)	93 (6)
14-1-S	100	120	34.56	34.56	7.72	-7.24	30 (5)	1546 (5)	1441 (5)
14-2-S	100	120	34.56	34.56	11.44	-12.96	59 (5)	3023 (5)	2606 (5)
14-3-S	100	120	34.56	34.56	3.07	-16.76	82 (5)	1042 (5)	4168 (5)
14-4-S	100	120	34.56	34.56	3.95	-39.28	343 (8)	4368 (8)	17477 (8)
14-5-S	100	120	34.56	34.56	14.86	-30.10	262 (5)	6440 (5)	13363 (5)
14-6-S	100	120	34.56	34.56	51.27	0.00	269 (8)	13688 (8)	3421 (8)
14-7-S	100	120	34.56	34.56	0.00	-145.65	511 (5)	6506 (5)	26030 (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.16.0.5.005.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.16.0.5.005	A	76 di 118

Is	B [cm]	H [cm]	Afi [cmq]	Afs [cmq]	Mp [kNm]	Mn [kNm]	sc [kPa]	ofi [kPa]	ofs [kPa]
14-8-S	100	120	34.56	34.56	0.00	-139.21	501 (5)	6379 (5)	25521 (5)
14-9-S	100	120	34.56	34.56	0.00	-135.00	491 (5)	6254 (5)	25021 (5)
14-10-S	100	120	34.56	34.56	0.00	-112.74	398 (5)	5066 (5)	20269 (5)
14-11-S	100	120	34.56	34.56	0.00	-87.58	293 (5)	3728 (5)	14915 (5)
14-12-S	100	120	34.56	34.56	0.00	-55.86	163 (5)	2079 (5)	8320 (5)
14-13-S	100	120	34.56	34.56	0.00	-27.70	57 (5)	728 (5)	2911 (5)
14-14-S	100	120	34.56	34.56	16.77	-0.66	44 (7)	2238 (7)	860 (7)
14-15-S	100	120	34.56	34.56	22.53	-1.65	81 (6)	4147 (6)	1036 (6)
14-16-S	100	120	34.56	34.56	30.48	-2.67	108 (6)	5518 (6)	1379 (6)
14-17-S	100	120	34.56	34.56	4.51	-12.63	73 (7)	1651 (7)	3708 (7)
14-18-S	100	120	34.56	34.56	2.77	-27.42	165 (7)	2096 (7)	8384 (7)
14-19-S	100	120	34.56	34.56	4.72	-18.25	111 (5)	1413 (5)	5655 (5)
14-20-S	100	120	34.56	34.56	2.36	-10.96	58 (6)	743 (6)	2971 (6)
14-21-S	100	120	34.56	34.56	3.64	-3.92	11 (5)	553 (5)	582 (5)
15-1-S	100	120	31.42	31.42	7.72	-7.24	32 (5)	1698 (5)	1583 (5)
15-2-S	100	120	31.42	31.42	11.44	-12.96	62 (5)	3320 (5)	2862 (5)
15-3-S	100	120	31.42	31.42	3.07	-16.76	86 (5)	1088 (5)	4578 (5)
15-4-S	100	120	31.42	31.42	3.95	-39.28	361 (8)	4560 (8)	19195 (8)
15-5-S	100	120	31.42	31.42	14.86	-30.10	276 (5)	7073 (5)	14677 (5)
15-6-S	100	120	31.42	31.42	51.27	0.00	282 (8)	15033 (8)	3572 (8)
15-7-S	100	120	31.42	31.42	0.00	-145.65	537 (5)	6792 (5)	28589 (5)
15-8-S	100	120	31.42	31.42	0.00	-139.21	527 (5)	6659 (5)	28030 (5)
15-9-S	100	120	31.42	31.42	0.00	-135.00	516 (5)	6529 (5)	27481 (5)
15-10-S	100	120	31.42	31.42	0.00	-112.74	418 (5)	5289 (5)	22261 (5)
15-11-S	100	120	31.42	31.42	0.00	-87.58	308 (5)	3892 (5)	16381 (5)
15-12-S	100	120	31.42	31.42	0.00	-55.86	172 (5)	2171 (5)	9138 (5)
15-13-S	100	120	31.42	31.42	6.63	-1.94	60 (7)	760 (7)	3197 (7)
15-14-S	100	120	31.42	31.42	16.77	-0.66	46 (7)	2458 (7)	945 (7)
15-15-S	100	120	31.42	31.42	22.53	-1.65	86 (6)	4554 (6)	1082 (6)
15-16-S	100	120	31.42	31.42	30.48	-2.67	114 (6)	6060 (6)	1440 (6)
15-17-S	100	120	31.42	31.42	4.51	-12.63	77 (7)	1813 (7)	4073 (7)
15-18-S	100	120	31.42	31.42	2.77	-27.42	173 (7)	2188 (7)	9208 (7)
15-19-S	100	120	31.42	31.42	4.72	-18.25	117 (5)	1475 (5)	6210 (5)
15-20-S	100	120	31.42	31.42	2.36	-10.96	61 (6)	775 (6)	3263 (6)
15-21-S	100	120	31.42	31.42	3.64	-3.92	12 (5)	607 (5)	640 (5)
16-1-S	100	120	31.42	31.42	1.23	-7.52	31 (5)	397 (5)	1672 (5)
16-2-S	100	120	31.42	31.42	0.53	-11.09	44 (5)	560 (5)	2357 (5)
16-3-S	100	120	31.42	31.42	2.37	-7.76	107 (8)	1352 (8)	5690 (8)
16-4-S	100	120	31.42	31.42	10.31	-3.20	88 (8)	3021 (8)	4698 (8)
16-5-S	100	120	31.42	31.42	27.42	0.00	143 (5)	7614 (5)	1809 (5)
16-6-S	100	120	31.42	31.42	53.99	0.00	264 (5)	14078 (5)	3345 (5)
16-7-S	100	120	31.42	31.42	16.67	-48.18	343 (6)	4851 (6)	18277 (6)
16-8-S	100	120	31.42	31.42	13.95	-57.57	338 (6)	5666 (6)	17969 (6)
16-9-S	100	120	31.42	31.42	0.00	-173.60	742 (5)	9382 (5)	39491 (5)
16-10-S	100	120	31.42	31.42	0.00	-149.97	596 (5)	7534 (5)	31712 (5)
16-11-S	100	120	31.42	31.42	0.00	-116.27	414 (5)	5232 (5)	22022 (5)
16-12-S	100	120	31.42	31.42	0.00	-72.83	234 (5)	2965 (5)	12478 (5)
16-13-S	100	120	31.42	31.42	0.00	-38.78	101 (5)	1277 (5)	5375 (5)
16-14-S	100	120	31.42	31.42	8.85	-0.30	26 (7)	626 (7)	1391 (7)
16-15-S	100	120	31.42	31.42	10.04	-0.63	19 (7)	1026 (7)	829 (7)
16-16-S	100	120	31.42	31.42	5.58	-2.42	33 (8)	1637 (8)	1770 (8)
16-17-S	100	120	31.42	31.42	5.62	-3.12	43 (8)	1648 (8)	2287 (8)
16-18-S	100	120	31.42	31.42	4.84	-3.12	43 (8)	1419 (8)	2286 (8)
16-19-S	100	120	31.42	31.42	1.85	-2.00	20 (7)	632 (7)	1086 (7)
16-20-S	100	120	31.42	31.42	0.73	-0.98	8 (7)	440 (7)	432 (7)
16-21-S	100	120	31.42	31.42	2.38	-0.38	7 (6)	390 (6)	93 (6)
17-1-S	100	120	31.42	31.42	13.89	-3.03	57 (5)	3052 (5)	725 (5)
17-2-S	100	120	31.42	31.42	22.17	-10.05	129 (5)	6866 (5)	2263 (5)
17-3-S	100	120	31.42	31.42	5.13	-18.90	82 (5)	1032 (5)	4342 (5)
17-4-S	100	120	31.42	31.42	1.18	-94.69	413 (5)	5220 (5)	21973 (5)
17-5-S	100	120	31.42	31.42	4.21	-39.61	273 (8)	6166 (8)	14518 (8)
17-6-S	100	120	31.42	31.42	53.35	0.00	294 (8)	15642 (8)	3716 (8)
17-7-S	100	120	31.42	31.42	0.00	-182.47	703 (5)	8889 (5)	37415 (5)
17-8-S	100	120	31.42	31.42	0.00	-152.19	574 (5)	7260 (5)	30560 (5)
17-9-S	100	120	31.42	31.42	0.00	-130.69	486 (5)	6148 (5)	25878 (5)
17-10-S	100	120	31.42	31.42	0.00	-106.23	384 (5)	4854 (5)	20433 (5)
17-11-S	100	120	31.42	31.42	0.00	-80.65	277 (5)	3504 (5)	14751 (5)
17-12-S	100	120	31.42	31.42	0.00	-51.61	157 (5)	1991 (5)	8381 (5)
17-13-S	100	120	31.42	31.42	8.23	-1.68	46 (7)	587 (7)	2470 (7)
17-14-S	100	120	31.42	31.42	21.58	-0.87	67 (7)	3587 (7)	852 (7)
17-15-S	100	120	31.42	31.42	35.35	-1.70	136 (6)	7229 (6)	1717 (6)
17-16-S	100	120	31.42	31.42	51.90	-3.41	192 (5)	10223 (5)	2429 (5)
17-17-S	100	120	31.42	31.42	2.47	-21.98	101 (7)	2054 (7)	5403 (7)
17-18-S	100	120	31.42	31.42	1.49	-51.08	254 (7)	3218 (7)	13546 (7)
17-19-S	100	120	31.42	31.42	2.15	-34.28	173 (5)	2188 (5)	9211 (5)
17-20-S	100	120	31.42	31.42	1.47	-23.34	92 (5)	1169 (5)	4919 (5)
17-21-S	100	120	31.42	31.42	1.99	-6.52	16 (5)	575 (5)	873 (5)
18-1-S	100	120	31.42	31.42	0.50	-8.23	35 (5)	442 (5)	1862 (5)
18-2-S	100	120	31.42	31.42	0.73	-7.20	27 (5)	347 (5)	1460 (5)
18-3-S	100	120	31.42	31.42	2.86	-2.20	60 (8)	839 (8)	3219 (8)
18-4-S	100	120	31.42	31.42	12.86	0.00	71 (8)	3770 (8)	896 (8)

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.16.0.5.005.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.16.0.5.005 A 77 di 118

Is	B [cm]	H [cm]	Afi [cmq]	Afs [cmq]	Mp [kNm]	Mn [kNm]	σc [kPa]	σfi [kPa]	σfs [kPa]
18-5-S	100	120	31.42	31.42	31.00	0.00	158 (5)	8419 (5)	2000 (5)
18-6-S	100	120	31.42	31.42	52.06	0.00	256 (5)	13605 (5)	3232 (5)
18-7-S	100	120	31.42	31.42	9.62	-43.02	296 (6)	3747 (6)	15772 (6)
18-8-S	100	120	31.42	31.42	8.98	-60.45	372 (6)	4702 (6)	19791 (6)
18-9-S	100	120	31.42	31.42	0.00	-192.69	844 (5)	10670 (5)	44912 (5)
18-10-S	100	120	31.42	31.42	0.00	-165.91	676 (5)	8548 (5)	35981 (5)
18-11-S	100	120	31.42	31.42	0.00	-127.96	468 (5)	5924 (5)	24933 (5)
18-12-S	100	120	31.42	31.42	0.00	-79.79	267 (5)	3374 (5)	14202 (5)
18-13-S	100	120	31.42	31.42	0.00	-42.81	120 (5)	1513 (5)	6370 (5)
18-14-S	100	120	31.42	31.42	7.73	-1.89	38 (7)	920 (7)	2009 (7)
18-15-S	100	120	31.42	31.42	10.42	-1.28	25 (7)	1343 (7)	880 (7)
18-16-S	100	120	31.42	31.42	12.29	-1.14	41 (6)	2198 (6)	1317 (6)
18-17-S	100	120	31.42	31.42	7.83	-1.10	35 (7)	1856 (7)	1050 (7)
18-18-S	100	120	31.42	31.42	5.06	-1.15	32 (8)	1484 (8)	1681 (8)
18-19-S	100	120	31.42	31.42	7.38	-0.91	18 (5)	974 (5)	601 (5)
18-20-S	100	120	31.42	31.42	5.32	-0.77	11 (5)	602 (5)	268 (5)
18-21-S	100	120	31.42	31.42	3.35	-0.67	7 (5)	378 (5)	162 (5)
19-1-S	100	120	31.42	31.42	11.30	-4.80	46 (5)	2450 (5)	1029 (5)
19-2-S	100	120	31.42	31.42	20.70	-11.39	121 (5)	6426 (5)	2540 (5)
19-3-S	100	120	31.42	31.42	5.05	-16.50	69 (5)	908 (5)	3665 (5)
19-4-S	100	120	31.42	31.42	1.59	-81.12	443 (5)	5606 (5)	23598 (5)
19-5-S	100	120	31.42	31.42	9.75	-53.69	333 (5)	7089 (5)	17748 (5)
19-6-S	100	120	31.42	31.42	53.57	0.00	295 (8)	15705 (8)	3731 (8)
19-7-S	100	120	31.42	31.42	0.00	-214.19	873 (5)	11043 (5)	46479 (5)
19-8-S	100	120	31.42	31.42	0.00	-183.69	740 (5)	9363 (5)	39408 (5)
19-9-S	100	120	31.42	31.42	0.00	-150.10	590 (5)	7458 (5)	31393 (5)
19-10-S	100	120	31.42	31.42	0.00	-117.93	449 (5)	5676 (5)	23889 (5)
19-11-S	100	120	31.42	31.42	0.00	-85.53	307 (5)	3887 (5)	16361 (5)
19-12-S	100	120	31.42	31.42	0.00	-51.98	162 (5)	2048 (5)	8621 (5)
19-13-S	100	120	31.42	31.42	8.00	-0.48	43 (7)	700 (7)	2296 (7)
19-14-S	100	120	31.42	31.42	21.67	-0.22	83 (7)	4414 (7)	1049 (7)
19-15-S	100	120	31.42	31.42	34.19	-0.61	131 (6)	6994 (6)	1662 (6)
19-16-S	100	120	31.42	31.42	48.82	-1.89	182 (5)	9672 (5)	2298 (5)
19-17-S	100	120	31.42	31.42	2.44	-16.48	77 (7)	1686 (7)	4089 (7)
19-18-S	100	120	31.42	31.42	1.56	-42.92	214 (7)	2708 (7)	11398 (7)
19-19-S	100	120	31.42	31.42	3.31	-29.54	144 (5)	1818 (5)	7652 (5)
19-20-S	100	120	31.42	31.42	2.42	-20.32	78 (5)	981 (5)	4130 (5)
19-21-S	100	120	31.42	31.42	2.39	-5.57	14 (5)	596 (5)	760 (5)
20-1-S	100	120	31.42	31.42	1.58	-6.97	33 (5)	1768 (5)	1518 (5)
20-2-S	100	120	31.42	31.42	0.09	-12.17	51 (5)	642 (5)	2703 (5)
20-3-S	100	120	31.42	31.42	0.98	-12.78	117 (8)	1483 (8)	6243 (8)
20-4-S	100	120	31.42	31.42	5.55	-20.62	136 (5)	1961 (5)	7222 (5)
20-5-S	100	120	31.42	31.42	18.14	-6.19	121 (5)	6448 (5)	5025 (5)
20-6-S	100	120	31.42	31.42	51.93	0.00	266 (5)	14181 (5)	3369 (5)
20-7-S	100	120	31.42	31.42	0.00	-260.13	1121 (5)	14179 (5)	59680 (5)
20-8-S	100	120	31.42	31.42	0.00	-197.90	822 (5)	10400 (5)	43774 (5)
20-9-S	100	120	31.42	31.42	0.00	-151.44	602 (5)	7618 (5)	32065 (5)
20-10-S	100	120	31.42	31.42	0.00	-111.51	420 (5)	5311 (5)	22355 (5)
20-11-S	100	120	31.42	31.42	0.01	-74.05	252 (5)	3186 (5)	13411 (5)
20-12-S	100	120	31.42	31.42	0.10	-44.38	130 (5)	1650 (5)	6944 (5)
20-13-S	100	120	31.42	31.42	12.16	-3.44	53 (7)	1250 (7)	2805 (7)
20-14-S	100	120	31.42	31.42	19.41	-2.26	64 (7)	3407 (7)	1333 (7)
20-15-S	100	120	31.42	31.42	19.43	-3.03	74 (6)	3965 (6)	1191 (6)
20-16-S	100	120	31.42	31.42	19.81	-3.39	71 (6)	3787 (6)	1318 (6)
20-17-S	100	120	31.42	31.42	7.79	-6.70	43 (8)	2285 (8)	1964 (8)
20-18-S	100	120	31.42	31.42	4.99	-10.20	53 (7)	2043 (7)	2800 (7)
20-19-S	100	120	31.42	31.42	1.49	-6.25	32 (7)	778 (7)	1689 (7)
20-20-S	100	120	31.42	31.42	5.05	-3.35	15 (5)	481 (5)	799 (5)
20-21-S	100	120	31.42	31.42	4.69	-1.40	13 (5)	683 (5)	162 (5)

Pali in c.a.

Ip	Is	Ar [cmq]	σc [kPa]	σf [kPa]	τc [kPa]	σstf [kPa]
1	1	76.03	4353	71771		
1	2	76.03	3800	58049		
1	3	76.03	3252	44682		
1	4	76.03	2714	32297		
1	5	76.03	2196	26770		
1	6	76.03	1715	21541		
1	7	76.03	1307	17143		
1	8	76.03	1072	14546		
1	9	76.03	916	13049		
1	10	76.03	806	11738		
1	11	76.03	706	10560		
1	12	76.03	800	11467		
1	13	76.03	927	12634		
1	14	76.03	1062	14172		
1	15	76.03	1193	15711		

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.16.0.5.005.A.DOCX		COMMESSA	LOTTO	CODIFICA	DOCUMENTO	REV.	FOGLIO
			IF2R	2.2.E.ZZ	CL	TR.16.0.5.005	A	78 di 118

Ip	Is	Ar [cmq]	σc [kPa]	σf [kPa]	τc [kPa]	σsf [kPa]
1	16	76.03	1317	17163		
1	17	76.03	1432	18480		
1	18	76.03	1532	19633		
1	19	76.03	1618	20607		
1	20	76.03	1688	21400		
1	21	76.03	1742	22019		
1	22	76.03	1782	22472		
1	23	76.03	1808	22771		
1	24	76.03	1822	22931		
1	25	76.03	1824	22963		
1	26	76.03	1815	22883		
1	27	76.03	1798	22701		
1	28	76.03	1773	22432		
1	29	76.03	1742	22088		
1	30	76.03	1704	21681		
1	31	76.03	1663	21222		
1	32	76.03	1618	20723		
1	33	76.03	1571	20201		
1	34	76.03	1523	19665		
1	35	76.03	1475	19123		
1	36	76.03	1427	18580		
1	37	76.03	1380	18044		
1	38	76.03	1334	17519		
1	39	76.03	1290	17009		
1	40	76.03	1248	16517		
1	41	76.03	1207	16046		
1	42	76.03	1169	15686		
1	43	76.03	1132	15351		
1	44	76.03	1097	15022		
1	45	76.03	1068	14700		
1	46	76.03	1041	14385		
1	47	76.03	1015	14080		
1	48	76.03	990	13893		
1	49	76.03	966	13718		
1	50	76.03	942	13549		
1	51	76.03	928	13387		
1	52	76.03	915	13231		
1	53	76.03	902	13082		
1	54	76.03	890	12940		
1	55	76.03	878	12806		
1	56	76.03	867	12678		
1	57	76.03	857	12557		
1	58	76.03	847	12443		
1	59	76.03	838	12337		
1	60	76.03	830	12236		
1	61	76.03	822	12143		
1	62	76.03	814	12056		
1	63	76.03	807	11975		
1	64	76.03	801	11900		
1	65	76.03	795	11831		
1	66	76.03	790	11768		
1	67	76.03	785	11710		
1	68	76.03	780	11658		
1	69	76.03	776	11610		
1	70	76.03	773	11567		
1	71	76.03	770	11528		
1	72	76.03	767	11494		
1	73	76.03	766	11481		
1	74	76.03	768	11505		
1	75	76.03	769	11525		
1	76	76.03	771	11541		
1	77	76.03	772	11552		
1	78	76.03	772	11560		
1	79	76.03	773	11564		
1	80	76.03	773	11565		
1	81	76.03	773	11563		
1	82	76.03	773	11558		
1	83	76.03	772	11551		
1	84	76.03	771	11541		
1	85	76.03	771	11529		
1	86	76.03	770	11515		
1	87	76.03	768	11500		
1	88	76.03	767	11484		
1	89	76.03	766	11466		
1	90	76.03	764	11448		
1	91	76.03	763	11429		
1	92	76.03	762	11410		
1	93	76.03	760	11391		
1	94	76.03	759	11372		
1	95	76.03	757	11353		
1	96	76.03	756	11334		

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.16.0.5.005.A.DOCX

COMMESSA	LOTTO	CODIFICA	DOCUMENTO	REV.	FOGLIO
IF2R	2.2.E.ZZ	CL	TR.16.0.5.005	A	79 di 118

Ip	Is	Ar [cmq]	σ_c [kPa]	σ_f [kPa]	τ_c [kPa]	σ_{sf} [kPa]
1	97	76.03	755	11316		
1	98	76.03	753	11299		
1	99	76.03	752	11283		
1	100	76.03	751	11268		
1	101	76.03	750	11255		
2	1	62.83	4537	55092		
2	2	62.83	3938	48657		
2	3	62.83	3369	42433		
2	4	62.83	2854	36673		
2	5	62.83	2414	31648		
2	6	62.83	2060	27501		
2	7	62.83	1770	24052		
2	8	62.83	1504	20892		
2	9	62.83	1263	18022		
2	10	62.83	1079	15806		
2	11	62.83	1085	15919		
2	12	62.83	1264	18051		
2	13	62.83	1422	19943		
2	14	62.83	1561	21609		
2	15	62.83	1682	23064		
2	16	62.83	1787	24322		
2	17	62.83	1877	25395		
2	18	62.83	1952	26297		
2	19	62.83	2014	27044		
2	20	62.83	2065	27653		
2	21	62.83	2105	28133		
2	22	62.83	2134	28490		
2	23	62.83	2154	28732		
2	24	62.83	2165	28866		
2	25	62.83	2168	28904		
2	26	62.83	2163	28854		
2	27	62.83	2152	28727		
2	28	62.83	2135	28533		
2	29	62.83	2114	28282		
2	30	62.83	2088	27983		
2	31	62.83	2060	27645		
2	32	62.83	2028	27274		
2	33	62.83	1995	26882		
2	34	62.83	1960	26471		
2	35	62.83	1924	26043		
2	36	62.83	1887	25603		
2	37	62.83	1849	25155		
2	38	62.83	1811	24701		
2	39	62.83	1772	24245		
2	40	62.83	1734	23788		
2	41	62.83	1696	23334		
2	42	62.83	1658	22884		
2	43	62.83	1620	22440		
2	44	62.83	1583	22005		
2	45	62.83	1548	21578		
2	46	62.83	1513	21162		
2	47	62.83	1479	20758		
2	48	62.83	1446	20366		
2	49	62.83	1414	19988		
2	50	62.83	1383	19624		
2	51	62.83	1354	19274		
2	52	62.83	1325	18939		
2	53	62.83	1299	18618		
2	54	62.83	1273	18313		
2	55	62.83	1249	18024		
2	56	62.83	1226	17749		
2	57	62.83	1204	17490		
2	58	62.83	1183	17245		
2	59	62.83	1164	17015		
2	60	62.83	1146	16800		
2	61	62.83	1129	16599		
2	62	62.83	1114	16411		
2	63	62.83	1099	16237		
2	64	62.83	1086	16075		
2	65	62.83	1073	15926		
2	66	62.83	1062	15789		
2	67	62.83	1051	15663		
2	68	62.83	1042	15549		
2	69	62.83	1033	15444		
2	70	62.83	1025	15350		
2	71	62.83	1018	15265		
2	72	62.83	1015	15222		
2	73	62.83	1019	15267		
2	74	62.83	1022	15304		
2	75	62.83	1025	15331		
2	76	62.83	1027	15350		

APPALTATORE:	 <small>Consorzio Telese Società Consortile a Responsabilità Limitata</small>		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.		COMMESSA	LOTTO	CODIFICA	DOCUMENTO	REV.	FOGLIO
Relazione di calcolo	IF2R.2.2.E.ZZ.CL.TR.16.0.5.005.A.DOCX		IF2R	2.2.E.ZZ	CL	TR.16.0.5.005	A	80 di 118

Ip	Is	Ar [cmq]	σc [kPa]	σf [kPa]	τc [kPa]	σstf [kPa]
2	77	62.83	1028	15362		
2	78	62.83	1029	15367		
2	79	62.83	1029	15365		
2	80	62.83	1028	15357		
2	81	62.83	1027	15343		
2	82	62.83	1026	15324		
2	83	62.83	1025	15301		
2	84	62.83	1023	15273		
2	85	62.83	1020	15242		
2	86	62.83	1018	15207		
2	87	62.83	1015	15170		
2	88	62.83	1012	15130		
2	89	62.83	1009	15089		
2	90	62.83	1006	15047		
2	91	62.83	1003	15004		
2	92	62.83	999	14961		
2	93	62.83	996	14917		
2	94	62.83	993	14875		
2	95	62.83	990	14833		
2	96	62.83	987	14792		
2	97	62.83	984	14753		
2	98	62.83	981	14716		
2	99	62.83	979	14681		
2	100	62.83	977	14649		
2	101	62.83	975	14621		
3	1	62.83	4496	57343		
3	2	62.83	3992	51653		
3	3	62.83	3543	46488		
3	4	62.83	3155	41952		
3	5	62.83	2823	38023		
3	6	62.83	2519	34407		
3	7	62.83	2233	30997		
3	8	62.83	1967	27835		
3	9	62.83	1726	24962		
3	10	62.83	1508	22372		
3	11	62.83	1548	22855		
3	12	62.83	1726	24984		
3	13	62.83	1884	26873		
3	14	62.83	2023	28536		
3	15	62.83	2144	29987		
3	16	62.83	2249	31241		
3	17	62.83	2338	32310		
3	18	62.83	2413	33207		
3	19	62.83	2474	33947		
3	20	62.83	2524	34540		
3	21	62.83	2562	34999		
3	22	62.83	2590	35336		
3	23	62.83	2608	35560		
3	24	62.83	2618	35683		
3	25	62.83	2620	35715		
3	26	62.83	2616	35664		
3	27	62.83	2605	35540		
3	28	62.83	2589	35350		
3	29	62.83	2568	35104		
3	30	62.83	2543	34808		
3	31	62.83	2515	34468		
3	32	62.83	2483	34093		
3	33	62.83	2449	33692		
3	34	62.83	2414	33272		
3	35	62.83	2377	32835		
3	36	62.83	2339	32386		
3	37	62.83	2301	31928		
3	38	62.83	2262	31464		
3	39	62.83	2222	30997		
3	40	62.83	2183	30530		
3	41	62.83	2144	30065		
3	42	62.83	2106	29604		
3	43	62.83	2067	29149		
3	44	62.83	2030	28701		
3	45	62.83	1993	28263		
3	46	62.83	1957	27835		
3	47	62.83	1923	27418		
3	48	62.83	1889	27014		
3	49	62.83	1856	26622		
3	50	62.83	1824	26244		
3	51	62.83	1794	25881		
3	52	62.83	1765	25532		
3	53	62.83	1737	25197		
3	54	62.83	1711	24878		
3	55	62.83	1685	24573		
3	56	62.83	1661	24284		

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.16.0.5.005.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.16.0.5.005</td> <td>A</td> <td>81 di 118</td> </tr> </table>	COMMESSA	LOTTO	CODIFICA	DOCUMENTO	REV.	FOGLIO	IF2R	2.2.E.ZZ	CL	TR.16.0.5.005	A	81 di 118
COMMESSA	LOTTO	CODIFICA	DOCUMENTO	REV.	FOGLIO								
IF2R	2.2.E.ZZ	CL	TR.16.0.5.005	A	81 di 118								

Ip	Is	Ar [cmq]	σ_c [kPa]	σ_{tf} [kPa]	τ_c [kPa]	σ_{sf} [kPa]
3	57	62.83	1638	24009		
3	58	62.83	1617	23749		
3	59	62.83	1597	23503		
3	60	62.83	1578	23272		
3	61	62.83	1560	23054		
3	62	62.83	1543	22850		
3	63	62.83	1527	22658		
3	64	62.83	1512	22480		
3	65	62.83	1499	22313		
3	66	62.83	1486	22158		
3	67	62.83	1475	22014		
3	68	62.83	1464	21881		
3	69	62.83	1454	21758		
3	70	62.83	1445	21645		
3	71	62.83	1437	21540		
3	72	62.83	1432	21478		
3	73	62.83	1435	21504		
3	74	62.83	1437	21520		
3	75	62.83	1438	21527		
3	76	62.83	1438	21526		
3	77	62.83	1438	21516		
3	78	62.83	1437	21500		
3	79	62.83	1436	21476		
3	80	62.83	1434	21447		
3	81	62.83	1432	21411		
3	82	62.83	1429	21370		
3	83	62.83	1426	21323		
3	84	62.83	1423	21273		
3	85	62.83	1419	21218		
3	86	62.83	1415	21160		
3	87	62.83	1410	21099		
3	88	62.83	1406	21036		
3	89	62.83	1401	20971		
3	90	62.83	1396	20905		
3	91	62.83	1392	20838		
3	92	62.83	1387	20770		
3	93	62.83	1382	20703		
3	94	62.83	1377	20635		
3	95	62.83	1372	20568		
3	96	62.83	1368	20503		
3	97	62.83	1363	20438		
3	98	62.83	1359	20376		
3	99	62.83	1355	20316		
3	100	62.83	1351	20259		
3	101	62.83	1347	20205		

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	0.00	31.42	0.00	5.00	8 (7)	88 (7)	0 (7)
2	100	70	0.00	31.42	0.00	6.72	10 (7)	118 (7)	0 (7)
3	100	70	12.72	31.42	0.00	8.43	12 (7)	153 (7)	178 (7)
4	100	70	12.72	31.42	0.00	10.15	14 (7)	185 (7)	214 (7)
5	100	70	12.72	31.42	0.00	11.86	17 (7)	216 (7)	250 (7)
6	100	70	12.72	31.42	0.00	13.58	19 (7)	247 (7)	286 (7)
7	100	70	12.72	31.42	0.00	15.29	22 (7)	278 (7)	322 (7)
8	100	70	12.72	31.42	0.00	17.01	24 (7)	310 (7)	358 (7)
9	100	70	12.72	31.42	0.00	18.73	27 (7)	341 (7)	394 (7)
10	100	70	12.72	31.42	0.00	20.44	29 (7)	372 (7)	431 (7)
11	100	70	12.72	31.42	0.00	22.16	31 (7)	403 (7)	467 (7)
12	100	70	12.72	31.42	0.00	23.87	34 (7)	434 (7)	503 (7)
13	100	70	12.72	31.42	0.00	25.59	36 (7)	466 (7)	539 (7)
14	100	70	12.72	31.42	0.00	27.30	39 (7)	497 (7)	575 (7)
15	100	70	12.72	31.42	0.00	29.02	41 (7)	528 (7)	611 (7)
16	100	70	12.72	31.42	0.00	30.74	44 (7)	559 (7)	647 (7)
17	100	70	12.72	31.42	0.00	32.45	46 (7)	590 (7)	684 (7)
18	100	70	12.72	31.42	0.00	34.17	49 (7)	622 (7)	720 (7)
19	100	70	12.72	31.42	0.00	35.88	51 (7)	653 (7)	756 (7)
20	100	70	12.72	31.42	0.00	37.60	53 (7)	684 (7)	792 (7)

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.16.0.5.005.A.DOCX

COMMESSA LOTTO CODIFICA DOCUMENTO REV. FOGLIO
IF2R 2.2.E.ZZ CL TR.16.0.5.005 A 82 di 118

n°	B [cm]	H [cm]	Afi [cmq]	Afs [cmq]	M [kNm]	N [kN]	σc [kPa]	σfi [kPa]	σfs [kPa]
21	100	70	12.72	31.42	0.00	39.32	56 (7)	715 (7)	828 (7)
22	100	70	12.72	31.42	0.00	41.03	58 (7)	747 (7)	864 (7)
23	100	70	12.72	31.42	0.00	42.75	61 (7)	778 (7)	900 (7)
24	100	70	12.72	31.42	0.00	44.46	63 (7)	809 (7)	937 (7)
25	100	70	12.72	31.42	0.00	46.18	66 (7)	840 (7)	973 (7)
26	100	70	12.72	31.42	0.00	47.89	68 (7)	871 (7)	1009 (7)
27	100	70	12.72	31.42	0.00	49.61	70 (7)	903 (7)	1045 (7)
28	100	70	12.72	31.42	0.00	51.33	73 (7)	934 (7)	1081 (7)
29	100	70	12.72	31.42	0.00	53.04	75 (7)	965 (7)	1117 (7)
30	100	70	12.72	31.42	0.00	54.76	78 (7)	996 (7)	1153 (7)
31	100	70	12.72	31.42	0.00	56.47	80 (7)	1028 (7)	1190 (7)
32	100	70	12.72	31.42	0.03	58.19	83 (7)	1054 (7)	1230 (7)
33	100	70	12.72	31.42	0.14	59.90	87 (7)	1072 (7)	1281 (7)
34	100	70	12.72	31.42	0.33	61.62	91 (7)	1080 (7)	1343 (7)
35	100	70	12.72	31.42	0.60	63.34	96 (7)	1077 (7)	1415 (7)
36	100	70	12.72	31.42	0.96	65.05	102 (7)	1063 (7)	1500 (7)
37	100	70	12.72	31.42	1.41	66.77	110 (7)	1038 (7)	1597 (7)
38	100	70	12.72	31.42	1.96	68.48	118 (7)	1000 (7)	1708 (7)
39	100	70	12.72	31.42	2.61	70.20	127 (7)	949 (7)	1832 (7)
40	100	70	12.72	31.42	3.37	71.91	137 (7)	885 (7)	1970 (7)
41	100	70	12.72	31.42	4.23	73.63	149 (7)	807 (7)	2124 (7)
42	100	120	12.72	31.42	18.18	86.48	140 (7)	77 (7)	2015 (7)
43	100	120	12.72	31.42	19.37	89.36	147 (7)	50 (7)	2112 (7)
44	100	120	12.72	31.42	21.02	92.23	156 (7)	5 (7)	2236 (7)
45	100	120	12.72	31.42	23.03	95.11	166 (7)	87 (7)	2381 (7)
46	100	120	12.72	31.42	25.26	97.99	178 (7)	195 (7)	2545 (7)
47	100	120	12.72	31.42	27.63	100.87	191 (7)	324 (7)	2721 (7)
48	100	120	12.72	31.42	30.12	103.75	204 (7)	478 (7)	2909 (7)
49	100	120	12.72	31.42	32.74	106.63	219 (7)	660 (7)	3111 (7)
50	100	120	12.72	31.42	35.48	109.50	235 (7)	874 (7)	3327 (7)
51	100	120	12.72	31.42	38.37	112.38	251 (7)	1124 (7)	3559 (7)
52	100	120	12.72	31.42	41.39	115.26	270 (7)	1413 (7)	3806 (7)
53	100	120	12.72	31.42	44.57	118.14	289 (7)	1746 (7)	4070 (7)
54	100	120	12.72	31.42	47.89	121.02	310 (7)	2127 (7)	4351 (7)
55	100	120	12.72	31.42	51.38	123.89	332 (7)	2559 (7)	4650 (7)
56	100	120	12.72	31.42	55.03	126.77	355 (7)	3045 (7)	4966 (7)
57	100	120	12.72	31.42	58.85	129.65	380 (7)	3589 (7)	5299 (7)
58	100	120	12.72	31.42	62.85	132.53	407 (7)	4193 (7)	5651 (7)
59	100	120	12.72	31.42	67.02	135.41	434 (7)	4859 (7)	6020 (7)
60	100	120	12.72	31.42	71.38	138.29	463 (7)	5589 (7)	6406 (7)
61	100	120	12.72	31.42	75.92	141.16	494 (7)	6385 (7)	6810 (7)
62	100	120	0.00	31.42	80.66	144.04	561 (7)	7718 (7)	0 (7)
63	100	120	0.00	31.42	85.60	146.92	597 (7)	8676 (7)	0 (7)
64	100	120	12.72	31.42	90.74	149.80	594 (7)	9177 (7)	8125 (7)
65	100	120	12.72	31.42	96.09	152.68	630 (7)	10246 (7)	8598 (7)
66	100	120	12.72	31.42	101.64	155.56	668 (7)	11387 (7)	9089 (7)
67	100	120	12.72	31.42	107.76	158.44	669 (7)	11411 (7)	9099 (7)
68	100	120	12.72	31.42	107.06	158.26	705 (7)	12523 (7)	9565 (7)
69	100	120	12.72	31.42	112.54	160.90	742 (7)	13696 (7)	10046 (7)
70	100	120	12.72	31.42	118.21	163.54	780 (7)	14931 (7)	10542 (7)
71	100	120	12.72	31.42	124.08	166.18	820 (7)	16228 (7)	11053 (7)
72	100	120	12.72	31.42	130.14	168.82	860 (7)	17589 (7)	11579 (7)

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	60	120	21.99	21.99	2.01	-0.11	14 (5)	681 (5)	198 (5)
1-2-P	60	120	21.99	21.99	1.65	-2.05	19 (5)	862 (5)	918 (5)
1-3-P	60	120	21.99	21.99	0.04	-8.54	62 (5)	786 (5)	3050 (5)
1-4-P	60	120	21.99	21.99	0.00	-25.30	178 (5)	2280 (5)	8842 (5)
1-5-P	60	120	21.99	21.99	0.14	-32.23	233 (5)	2975 (5)	11538 (5)
1-6-P	60	120	21.99	21.99	0.04	-34.04	250 (5)	3196 (5)	12398 (5)
1-7-P	60	120	21.99	21.99	0.13	-24.13	171 (5)	2189 (5)	8492 (5)
1-8-P	60	120	21.99	21.99	1.05	-8.12	55 (5)	828 (5)	2728 (5)
1-9-P	60	120	21.99	21.99	15.02	-0.26	106 (5)	5259 (5)	1356 (5)
1-10-P	60	120	21.99	21.99	19.79	-0.01	142 (5)	7037 (5)	1814 (5)
1-11-P	60	120	21.99	21.99	21.19	0.00	152 (5)	7548 (5)	1946 (5)
1-12-P	60	120	21.99	21.99	17.31	-0.16	123 (5)	6099 (5)	1572 (5)
1-13-P	60	120	21.99	21.99	3.75	-3.80	25 (5)	1248 (5)	1168 (5)
1-14-P	60	120	21.99	21.99	0.14	-18.06	126 (5)	1609 (5)	6240 (5)
1-15-P	60	120	21.99	21.99	0.10	-25.81	189 (5)	2414 (5)	9364 (5)
1-16-P	60	120	21.99	21.99	0.21	-24.32	177 (5)	2256 (5)	8749 (5)
1-17-P	60	120	21.99	21.99	0.39	-16.75	114 (5)	1457 (5)	5652 (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.16.0.5.005.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.16.0.5.005	A	83 di 118

Is	B [cm]	H [cm]	Afi [cmq]	Afs [cmq]	Mp [kNm]	Mn [kNm]	sc [kPa]	ofi [kPa]	ofs [kPa]
1-18-P	60	120	21.99	21.99	6.37	-2.14	44 (5)	2189 (5)	628 (5)
1-19-P	60	120	21.99	21.99	18.40	-0.09	131 (5)	6506 (5)	1677 (5)
1-20-P	60	120	21.99	21.99	22.66	0.00	163 (5)	8085 (5)	2085 (5)
1-21-P	60	120	21.99	21.99	20.04	-0.02	144 (5)	7118 (5)	1835 (5)
1-22-P	60	120	21.99	21.99	12.95	-0.56	92 (5)	4542 (5)	1171 (5)
1-23-P	60	120	21.99	21.99	1.10	-9.34	63 (5)	855 (5)	3101 (5)
1-24-P	60	120	21.99	21.99	0.42	-21.42	152 (5)	1944 (5)	7541 (5)
1-25-P	60	120	21.99	21.99	0.00	-29.00	215 (5)	2746 (5)	10651 (5)
1-26-P	60	120	21.99	21.99	0.42	-21.42	152 (5)	1944 (5)	7541 (5)
1-27-P	60	120	21.99	21.99	1.10	-9.34	63 (5)	855 (5)	3101 (5)
1-28-P	60	120	21.99	21.99	12.95	-0.56	92 (5)	4542 (5)	1171 (5)
1-29-P	60	120	21.99	21.99	20.04	-0.02	144 (5)	7118 (5)	1835 (5)
1-30-P	60	120	21.99	21.99	22.66	0.00	163 (5)	8085 (5)	2085 (5)
1-31-P	60	120	21.99	21.99	18.40	-0.09	131 (5)	6506 (5)	1677 (5)
1-32-P	60	120	21.99	21.99	6.37	-2.14	44 (5)	2189 (5)	628 (5)
1-33-P	60	120	21.99	21.99	0.39	-16.75	114 (5)	1457 (5)	5652 (5)
1-34-P	60	120	21.99	21.99	0.21	-24.32	177 (5)	2256 (5)	8749 (5)
1-35-P	60	120	21.99	21.99	0.10	-25.81	189 (5)	2414 (5)	9364 (5)
1-36-P	60	120	21.99	21.99	0.14	-18.06	126 (5)	1609 (5)	6240 (5)
1-37-P	60	120	21.99	21.99	3.75	-3.80	25 (5)	1248 (5)	1168 (5)
1-38-P	60	120	21.99	21.99	17.31	-0.16	123 (5)	6099 (5)	1572 (5)
1-39-P	60	120	21.99	21.99	21.19	0.00	152 (5)	7548 (5)	1946 (5)
1-40-P	60	120	21.99	21.99	19.79	-0.01	142 (5)	7037 (5)	1814 (5)
1-41-P	60	120	21.99	21.99	15.02	-0.26	106 (5)	5259 (5)	1356 (5)
1-42-P	60	120	21.99	21.99	1.05	-8.12	55 (5)	828 (5)	2728 (5)
1-43-P	60	120	21.99	21.99	0.13	-24.13	171 (5)	2189 (5)	8492 (5)
1-44-P	60	120	21.99	21.99	0.04	-34.04	250 (5)	3196 (5)	12398 (5)
1-45-P	60	120	21.99	21.99	0.14	-32.23	233 (5)	2975 (5)	11538 (5)
1-46-P	60	120	21.99	21.99	0.00	-25.30	178 (5)	2280 (5)	8842 (5)
1-47-P	60	120	21.99	21.99	0.04	-8.54	62 (5)	786 (5)	3050 (5)
1-48-P	60	120	21.99	21.99	1.65	-2.05	19 (5)	862 (5)	918 (5)
1-49-P	60	120	21.99	21.99	2.01	-0.11	14 (5)	681 (5)	198 (5)
2-1-P	60	120	18.85	18.85	6.05	0.00	49 (5)	2583 (5)	614 (5)
2-2-P	60	120	18.85	18.85	6.97	0.00	57 (5)	3026 (5)	719 (5)
2-3-P	60	120	18.85	18.85	8.20	-0.01	67 (5)	3589 (5)	853 (5)
2-4-P	60	120	18.85	18.85	11.74	-1.90	90 (5)	4793 (5)	1156 (5)
2-5-P	60	120	18.85	18.85	0.23	-42.35	314 (5)	3974 (5)	16726 (5)
2-6-P	60	120	18.85	18.85	0.00	-80.85	605 (5)	7650 (5)	32199 (5)
2-7-P	60	120	18.85	18.85	1.04	-14.14	129 (5)	1648 (5)	6860 (5)
2-8-P	60	120	18.85	18.85	15.77	-0.97	125 (5)	6676 (5)	1586 (5)
2-9-P	60	120	18.85	18.85	16.12	0.00	131 (5)	6995 (5)	1662 (5)
2-10-P	60	120	18.85	18.85	16.35	0.00	133 (5)	7084 (5)	1683 (5)
2-11-P	60	120	18.85	18.85	16.54	0.00	135 (5)	7164 (5)	1702 (5)
2-12-P	60	120	18.85	18.85	16.68	0.00	136 (5)	7229 (5)	1717 (5)
2-13-P	60	120	18.85	18.85	16.55	-0.46	133 (5)	7077 (5)	1681 (5)
2-14-P	60	120	18.85	18.85	5.24	-2.50	60 (8)	3203 (8)	2036 (8)
2-15-P	60	120	18.85	18.85	0.00	-64.73	482 (5)	6093 (5)	25645 (5)
2-16-P	60	120	18.85	18.85	0.00	-51.39	381 (5)	4817 (5)	20276 (5)
2-17-P	60	120	18.85	18.85	17.84	-2.43	137 (5)	7295 (5)	1733 (5)
2-18-P	60	120	18.85	18.85	16.35	-0.17	132 (5)	7049 (5)	1675 (5)
2-19-P	60	120	18.85	18.85	16.62	0.00	135 (5)	7201 (5)	1711 (5)
2-20-P	60	120	18.85	18.85	16.57	0.00	135 (5)	7171 (5)	1704 (5)
2-21-P	60	120	18.85	18.85	16.57	0.00	135 (5)	7178 (5)	1705 (5)
2-22-P	60	120	18.85	18.85	16.43	0.00	134 (5)	7124 (5)	1693 (5)
2-23-P	60	120	18.85	18.85	16.88	-1.26	133 (5)	7099 (5)	1687 (5)
2-24-P	60	120	18.85	18.85	0.59	-20.07	230 (8)	2912 (8)	12259 (8)
2-25-P	60	120	18.85	18.85	0.00	-90.67	713 (5)	9011 (5)	37929 (5)
2-26-P	60	120	18.85	18.85	0.59	-20.07	230 (8)	2912 (8)	12259 (8)
2-27-P	60	120	18.85	18.85	16.88	-1.26	133 (5)	7099 (5)	1687 (5)
2-28-P	60	120	18.85	18.85	16.43	0.00	134 (5)	7124 (5)	1693 (5)
2-29-P	60	120	18.85	18.85	16.57	0.00	135 (5)	7178 (5)	1705 (5)
2-30-P	60	120	18.85	18.85	16.57	0.00	135 (5)	7171 (5)	1704 (5)
2-31-P	60	120	18.85	18.85	16.62	0.00	135 (5)	7201 (5)	1711 (5)
2-32-P	60	120	18.85	18.85	16.35	-0.17	132 (5)	7049 (5)	1675 (5)
2-33-P	60	120	18.85	18.85	17.84	-2.43	137 (5)	7295 (5)	1733 (5)
2-34-P	60	120	18.85	18.85	0.00	-51.39	381 (5)	4817 (5)	20276 (5)
2-35-P	60	120	18.85	18.85	0.00	-64.73	482 (5)	6093 (5)	25645 (5)
2-36-P	60	120	18.85	18.85	5.24	-2.50	60 (8)	3203 (8)	2036 (8)
2-37-P	60	120	18.85	18.85	16.55	-0.46	133 (5)	7077 (5)	1681 (5)
2-38-P	60	120	18.85	18.85	16.68	0.00	136 (5)	7229 (5)	1717 (5)
2-39-P	60	120	18.85	18.85	16.54	0.00	135 (5)	7164 (5)	1702 (5)
2-40-P	60	120	18.85	18.85	16.35	0.00	133 (5)	7084 (5)	1683 (5)
2-41-P	60	120	18.85	18.85	16.12	0.00	131 (5)	6995 (5)	1662 (5)
2-42-P	60	120	18.85	18.85	15.77	-0.97	125 (5)	6676 (5)	1586 (5)
2-43-P	60	120	18.85	18.85	1.04	-14.14	129 (5)	1648 (5)	6860 (5)
2-44-P	60	120	18.85	18.85	0.00	-80.85	605 (5)	7650 (5)	32199 (5)
2-45-P	60	120	18.85	18.85	0.23	-42.35	314 (5)	3974 (5)	16726 (5)
2-46-P	60	120	18.85	18.85	11.74	-1.90	90 (5)	4793 (5)	1156 (5)
2-47-P	60	120	18.85	18.85	8.20	-0.01	67 (5)	3589 (5)	853 (5)
2-48-P	60	120	18.85	18.85	6.97	0.00	57 (5)	3026 (5)	719 (5)
2-49-P	60	120	18.85	18.85	6.05	0.00	49 (5)	2583 (5)	614 (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.16.0.5.005.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.16.0.5.005	A	84 di 118

Is	B [cm]	H [cm]	Afi [cmq]	Afs [cmq]	Mp [kNm]	Mn [kNm]	sc [kPa]	ofi [kPa]	ofs [kPa]
5-1-P	85	120	28.27	28.27	0.12	-13.14	63 (5)	805 (5)	3285 (5)
5-2-P	85	120	28.27	28.27	0.00	-18.51	88 (5)	1117 (5)	4560 (5)
5-3-P	85	120	28.27	28.27	0.00	-23.65	111 (5)	1414 (5)	5772 (5)
5-4-P	85	120	28.27	28.27	0.00	-28.26	130 (5)	1652 (5)	6745 (5)
5-5-P	85	120	28.27	28.27	0.00	-30.02	135 (5)	1712 (5)	6991 (5)
5-6-P	85	120	28.27	28.27	0.00	-30.68	134 (5)	1707 (5)	6968 (5)
5-7-P	85	120	28.27	28.27	0.00	-29.79	127 (5)	1615 (5)	6594 (5)
5-8-P	85	120	28.27	28.27	0.00	-33.17	145 (5)	1842 (5)	7520 (5)
5-9-P	85	120	28.27	28.27	0.00	-39.40	180 (5)	2281 (5)	9313 (5)
5-10-P	85	120	28.27	28.27	0.00	-73.75	405 (5)	5137 (5)	20974 (5)
5-11-P	85	120	28.27	28.27	0.00	-79.55	442 (5)	5614 (5)	22918 (5)
5-12-P	85	120	28.27	28.27	0.00	-42.53	200 (5)	2541 (5)	10376 (5)
5-13-P	85	120	28.27	28.27	0.00	-28.14	111 (5)	1405 (5)	5735 (5)
5-14-P	85	120	28.27	28.27	0.00	-20.99	68 (5)	868 (5)	3543 (5)
5-15-P	85	120	28.27	28.27	0.00	-20.19	63 (5)	794 (5)	3242 (5)
5-16-P	85	120	28.27	28.27	0.00	-19.55	59 (5)	747 (5)	3051 (5)
5-17-P	85	120	28.27	28.27	0.00	-19.01	57 (5)	719 (5)	2934 (5)
5-18-P	85	120	28.27	28.27	0.00	-26.34	99 (5)	1262 (5)	5152 (5)
5-19-P	85	120	28.27	28.27	0.00	-44.93	218 (5)	2768 (5)	11301 (5)
5-20-P	85	120	28.27	28.27	0.20	-80.61	475 (5)	6028 (5)	24608 (5)
5-21-P	85	120	28.27	28.27	0.00	-58.72	309 (5)	3922 (5)	16012 (5)
5-22-P	85	120	28.27	28.27	0.00	-28.36	112 (5)	1419 (5)	5795 (5)
5-23-P	85	120	28.27	28.27	0.00	-20.49	65 (5)	829 (5)	3384 (5)
5-24-P	85	120	28.27	28.27	3.50	-2.93	46 (7)	585 (7)	2388 (7)
5-25-P	85	120	28.27	28.27	4.40	-3.57	49 (7)	619 (7)	2526 (7)
5-26-P	85	120	28.27	28.27	3.50	-2.93	46 (7)	585 (7)	2388 (7)
5-27-P	85	120	28.27	28.27	0.00	-20.49	65 (5)	829 (5)	3384 (5)
5-28-P	85	120	28.27	28.27	0.00	-28.36	112 (5)	1419 (5)	5795 (5)
5-29-P	85	120	28.27	28.27	0.00	-58.72	309 (5)	3922 (5)	16012 (5)
5-30-P	85	120	28.27	28.27	0.20	-80.61	475 (5)	6028 (5)	24608 (5)
5-31-P	85	120	28.27	28.27	0.00	-44.93	218 (5)	2768 (5)	11301 (5)
5-32-P	85	120	28.27	28.27	0.00	-26.34	99 (5)	1262 (5)	5152 (5)
5-33-P	85	120	28.27	28.27	0.00	-19.01	57 (5)	719 (5)	2934 (5)
5-34-P	85	120	28.27	28.27	0.00	-19.55	59 (5)	747 (5)	3051 (5)
5-35-P	85	120	28.27	28.27	0.00	-20.19	63 (5)	794 (5)	3242 (5)
5-36-P	85	120	28.27	28.27	0.00	-20.99	68 (5)	868 (5)	3543 (5)
5-37-P	85	120	28.27	28.27	0.00	-28.14	111 (5)	1405 (5)	5735 (5)
5-38-P	85	120	28.27	28.27	0.00	-42.53	200 (5)	2541 (5)	10376 (5)
5-39-P	85	120	28.27	28.27	0.00	-79.55	442 (5)	5614 (5)	22918 (5)
5-40-P	85	120	28.27	28.27	0.00	-73.75	405 (5)	5137 (5)	20974 (5)
5-41-P	85	120	28.27	28.27	0.00	-39.40	180 (5)	2281 (5)	9313 (5)
5-42-P	85	120	28.27	28.27	0.00	-33.17	145 (5)	1842 (5)	7520 (5)
5-43-P	85	120	28.27	28.27	0.00	-29.79	127 (5)	1615 (5)	6594 (5)
5-44-P	85	120	28.27	28.27	0.00	-30.68	134 (5)	1707 (5)	6968 (5)
5-45-P	85	120	28.27	28.27	0.00	-30.02	135 (5)	1712 (5)	6991 (5)
5-46-P	85	120	28.27	28.27	0.00	-28.26	130 (5)	1652 (5)	6745 (5)
5-47-P	85	120	28.27	28.27	0.00	-23.65	111 (5)	1414 (5)	5772 (5)
5-48-P	85	120	28.27	28.27	0.00	-18.51	88 (5)	1117 (5)	4560 (5)
5-49-P	85	120	28.27	28.27	0.12	-13.14	63 (5)	805 (5)	3285 (5)
6-1-P	85	120	28.27	28.27	3.87	-4.06	21 (7)	1028 (7)	1090 (7)
6-2-P	85	120	28.27	28.27	4.35	-4.90	26 (7)	1091 (7)	1348 (7)
6-3-P	85	120	28.27	28.27	4.60	-5.82	32 (7)	1071 (7)	1638 (7)
6-4-P	85	120	28.27	28.27	4.55	-6.89	38 (7)	1179 (7)	1995 (7)
6-5-P	85	120	28.27	28.27	1.59	-6.20	40 (6)	617 (6)	2070 (6)
6-6-P	85	120	28.27	28.27	0.12	-9.85	50 (5)	631 (5)	2575 (5)
6-7-P	85	120	28.27	28.27	0.00	-15.45	75 (5)	953 (5)	3889 (5)
6-8-P	85	120	28.27	28.27	0.00	-22.45	112 (5)	1421 (5)	5800 (5)
6-9-P	85	120	28.27	28.27	0.00	-30.32	156 (5)	1978 (5)	8075 (5)
6-10-P	85	120	28.27	28.27	0.00	-35.28	175 (5)	2216 (5)	9048 (5)
6-11-P	85	120	28.27	28.27	0.00	-35.67	173 (5)	2201 (5)	8986 (5)
6-12-P	85	120	28.27	28.27	0.00	-28.90	140 (5)	1782 (5)	7275 (5)
6-13-P	85	120	28.27	28.27	0.00	-20.67	94 (5)	1198 (5)	4892 (5)
6-14-P	85	120	28.27	28.27	0.25	-13.12	49 (5)	622 (5)	2540 (5)
6-15-P	85	120	28.27	28.27	2.50	-1.77	23 (7)	328 (7)	1214 (7)
6-16-P	85	120	28.27	28.27	0.00	-8.55	21 (5)	264 (5)	1077 (5)
6-17-P	85	120	28.27	28.27	0.00	-11.30	35 (5)	449 (5)	1835 (5)
6-18-P	85	120	28.27	28.27	0.00	-18.50	77 (5)	976 (5)	3983 (5)
6-19-P	85	120	28.27	28.27	0.00	-24.84	111 (5)	1405 (5)	5735 (5)
6-20-P	85	120	28.27	28.27	0.00	-30.37	135 (5)	1711 (5)	6985 (5)
6-21-P	85	120	28.27	28.27	0.00	-26.45	117 (5)	1483 (5)	6055 (5)
6-22-P	85	120	28.27	28.27	0.00	-20.15	88 (5)	1116 (5)	4557 (5)
6-23-P	85	120	28.27	28.27	0.06	-12.32	43 (5)	540 (5)	2206 (5)
6-24-P	85	120	28.27	28.27	3.55	-0.40	12 (7)	406 (7)	635 (7)
6-25-P	85	120	28.27	28.27	5.77	0.00	9 (7)	490 (7)	120 (7)
6-26-P	85	120	28.27	28.27	3.55	-0.40	12 (7)	406 (7)	635 (7)
6-27-P	85	120	28.27	28.27	0.06	-12.32	43 (5)	540 (5)	2206 (5)
6-28-P	85	120	28.27	28.27	0.00	-20.15	88 (5)	1116 (5)	4557 (5)
6-29-P	85	120	28.27	28.27	0.00	-26.45	117 (5)	1483 (5)	6055 (5)
6-30-P	85	120	28.27	28.27	0.00	-30.37	135 (5)	1711 (5)	6985 (5)
6-31-P	85	120	28.27	28.27	0.00	-24.84	111 (5)	1405 (5)	5735 (5)
6-32-P	85	120	28.27	28.27	0.00	-18.50	77 (5)	976 (5)	3983 (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.16.0.5.005.A.DOCX

COMMESSA

LOTTO

CODIFICA

DOCUMENTO

REV.

FOGLIO

IF2R

2.2.E.ZZ

CL

TR.16.0.5.005

A

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Is	B [cm]	H [cm]	Afi [cmq]	Afs [cmq]	Mp [kNm]	Mn [kNm]	sc [kPa]	ofi [kPa]	ofs [kPa]
6-33-P	85	120	28.27	28.27	0.00	-11.30	35 (5)	449 (5)	1835 (5)
6-34-P	85	120	28.27	28.27	0.00	-8.55	21 (5)	264 (5)	1077 (5)
6-35-P	85	120	28.27	28.27	2.50	-1.77	23 (7)	328 (7)	1214 (7)
6-36-P	85	120	28.27	28.27	0.25	-13.12	49 (5)	622 (5)	2540 (5)
6-37-P	85	120	28.27	28.27	0.00	-20.67	94 (5)	1198 (5)	4892 (5)
6-38-P	85	120	28.27	28.27	0.00	-28.90	140 (5)	1782 (5)	7275 (5)
6-39-P	85	120	28.27	28.27	0.00	-35.67	173 (5)	2201 (5)	8986 (5)
6-40-P	85	120	28.27	28.27	0.00	-35.28	175 (5)	2216 (5)	9048 (5)
6-41-P	85	120	28.27	28.27	0.00	-30.32	156 (5)	1978 (5)	8075 (5)
6-42-P	85	120	28.27	28.27	0.00	-22.45	112 (5)	1421 (5)	5800 (5)
6-43-P	85	120	28.27	28.27	0.00	-15.45	75 (5)	953 (5)	3889 (5)
6-44-P	85	120	28.27	28.27	0.12	-9.85	50 (5)	631 (5)	2575 (5)
6-45-P	85	120	28.27	28.27	1.59	-6.20	40 (6)	617 (6)	2070 (6)
6-46-P	85	120	28.27	28.27	4.55	-6.89	38 (7)	1179 (7)	1995 (7)
6-47-P	85	120	28.27	28.27	4.60	-5.82	32 (7)	1071 (7)	1638 (7)
6-48-P	85	120	28.27	28.27	4.35	-4.90	26 (7)	1091 (7)	1348 (7)
6-49-P	85	120	28.27	28.27	3.87	-4.06	21 (7)	1028 (7)	1090 (7)
7-1-P	85	120	25.13	25.13	3.67	-2.73	23 (5)	1260 (5)	868 (5)
7-2-P	85	120	25.13	25.13	4.69	-3.91	31 (8)	1716 (8)	1432 (8)
7-3-P	85	120	25.13	25.13	4.54	-8.68	55 (7)	1853 (7)	3036 (7)
7-4-P	85	120	25.13	25.13	3.98	-18.51	116 (7)	1683 (7)	6370 (7)
7-5-P	85	120	25.13	25.13	1.08	-27.65	163 (7)	2054 (7)	8933 (7)
7-6-P	85	120	25.13	25.13	0.08	-34.05	198 (7)	2491 (7)	10831 (7)
7-7-P	85	120	25.13	25.13	0.30	-21.42	131 (7)	1645 (7)	7151 (7)
7-8-P	85	120	25.13	25.13	1.68	-10.80	72 (7)	907 (7)	3944 (7)
7-9-P	85	120	25.13	25.13	4.24	-1.91	24 (6)	1310 (6)	1319 (6)
7-10-P	85	120	25.13	25.13	4.99	-0.94	38 (6)	2092 (6)	907 (6)
7-11-P	85	120	25.13	25.13	7.23	-0.72	40 (7)	2197 (7)	883 (7)
7-12-P	85	120	25.13	25.13	7.85	-2.38	48 (7)	2610 (7)	1235 (7)
7-13-P	85	120	25.13	25.13	7.01	-9.70	63 (6)	2051 (6)	3440 (6)
7-14-P	85	120	25.13	25.13	5.84	-16.93	111 (5)	1392 (5)	6052 (5)
7-15-P	85	120	25.13	25.13	0.40	-25.40	156 (7)	1960 (7)	8522 (7)
7-16-P	85	120	25.13	25.13	0.07	-21.73	134 (7)	1692 (7)	7358 (7)
7-17-P	85	120	25.13	25.13	5.35	-13.49	82 (5)	1228 (5)	4467 (5)
7-18-P	85	120	25.13	25.13	6.22	-3.27	36 (6)	1959 (6)	1310 (6)
7-19-P	85	120	25.13	25.13	11.40	0.00	62 (7)	3413 (7)	785 (7)
7-20-P	85	120	25.13	25.13	13.88	0.00	73 (7)	4015 (7)	923 (7)
7-21-P	85	120	25.13	25.13	13.05	0.00	71 (7)	3911 (7)	899 (7)
7-22-P	85	120	25.13	25.13	10.22	-0.67	62 (7)	3383 (7)	778 (7)
7-23-P	85	120	25.13	25.13	7.41	-8.51	55 (6)	2118 (6)	3033 (6)
7-24-P	85	120	25.13	25.13	1.15	-14.27	93 (7)	1173 (7)	5100 (7)
7-25-P	85	120	25.13	25.13	0.42	-18.60	155 (6)	1946 (6)	8463 (6)
7-26-P	85	120	25.13	25.13	1.15	-14.27	93 (7)	1173 (7)	5100 (7)
7-27-P	85	120	25.13	25.13	7.41	-8.51	55 (6)	2118 (6)	3033 (6)
7-28-P	85	120	25.13	25.13	10.22	-0.67	62 (7)	3383 (7)	778 (7)
7-29-P	85	120	25.13	25.13	13.05	0.00	71 (7)	3911 (7)	899 (7)
7-30-P	85	120	25.13	25.13	13.88	0.00	73 (7)	4015 (7)	923 (7)
7-31-P	85	120	25.13	25.13	11.40	0.00	62 (7)	3413 (7)	785 (7)
7-32-P	85	120	25.13	25.13	6.22	-3.27	36 (6)	1959 (6)	1310 (6)
7-33-P	85	120	25.13	25.13	5.35	-13.49	82 (5)	1228 (5)	4467 (5)
7-34-P	85	120	25.13	25.13	0.07	-21.73	134 (7)	1692 (7)	7358 (7)
7-35-P	85	120	25.13	25.13	0.40	-25.40	156 (7)	1960 (7)	8522 (7)
7-36-P	85	120	25.13	25.13	5.84	-16.93	111 (5)	1392 (5)	6052 (5)
7-37-P	85	120	25.13	25.13	7.01	-9.70	63 (6)	2051 (6)	3440 (6)
7-38-P	85	120	25.13	25.13	7.85	-2.38	48 (7)	2610 (7)	1235 (7)
7-39-P	85	120	25.13	25.13	7.23	-0.72	40 (7)	2197 (7)	883 (7)
7-40-P	85	120	25.13	25.13	4.99	-0.94	38 (6)	2092 (6)	907 (6)
7-41-P	85	120	25.13	25.13	4.24	-1.91	24 (6)	1310 (6)	1319 (6)
7-42-P	85	120	25.13	25.13	1.68	-10.80	72 (7)	907 (7)	3944 (7)
7-43-P	85	120	25.13	25.13	0.30	-21.42	131 (7)	1645 (7)	7151 (7)
7-44-P	85	120	25.13	25.13	0.08	-34.05	198 (7)	2491 (7)	10831 (7)
7-45-P	85	120	25.13	25.13	1.08	-27.65	163 (7)	2054 (7)	8933 (7)
7-46-P	85	120	25.13	25.13	3.98	-18.51	116 (7)	1683 (7)	6370 (7)
7-47-P	85	120	25.13	25.13	4.54	-8.68	55 (7)	1853 (7)	3036 (7)
7-48-P	85	120	25.13	25.13	4.69	-3.91	31 (8)	1716 (8)	1432 (8)
7-49-P	85	120	25.13	25.13	3.67	-2.73	23 (5)	1260 (5)	868 (5)
8-1-P	85	120	28.27	28.27	0.99	-0.73	6 (5)	304 (5)	178 (5)
8-2-P	85	120	28.27	28.27	0.85	-3.82	23 (6)	288 (6)	1177 (6)
8-3-P	85	120	28.27	28.27	0.91	-10.52	60 (7)	767 (7)	3131 (7)
8-4-P	85	120	28.27	28.27	1.63	-21.47	122 (7)	1549 (7)	6325 (7)
8-5-P	85	120	28.27	28.27	0.00	-44.29	249 (7)	3159 (7)	12898 (7)
8-6-P	85	120	28.27	28.27	0.00	-60.69	344 (7)	4373 (7)	17854 (7)
8-7-P	85	120	28.27	28.27	0.00	-30.65	171 (7)	2168 (7)	8849 (7)
8-8-P	85	120	28.27	28.27	1.19	-12.54	73 (7)	923 (7)	3768 (7)
8-9-P	85	120	28.27	28.27	2.00	-1.22	14 (7)	584 (7)	740 (7)
8-10-P	85	120	28.27	28.27	6.34	0.00	34 (7)	1761 (7)	431 (7)
8-11-P	85	120	28.27	28.27	8.10	0.00	43 (7)	2249 (7)	551 (7)
8-12-P	85	120	28.27	28.27	4.62	-0.49	25 (7)	1310 (7)	321 (7)
8-13-P	85	120	28.27	28.27	5.05	-9.65	50 (5)	986 (5)	2571 (5)
8-14-P	85	120	28.27	28.27	0.49	-19.64	115 (7)	1462 (7)	5970 (7)
8-15-P	85	120	28.27	28.27	0.00	-47.49	274 (7)	3481 (7)	14212 (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.16.0.5.005.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.16.0.5.005	A	86 di 118

Is	B [cm]	H [cm]	Afi [cmq]	Afs [cmq]	Mp [kNm]	Mn [kNm]	sc [kPa]	ofi [kPa]	ofs [kPa]
8-16-P	85	120	28.27	28.27	0.00	-40.93	236 (7)	3001 (7)	12251 (7)
8-17-P	85	120	28.27	28.27	4.77	-13.74	83 (6)	1704 (6)	4305 (6)
8-18-P	85	120	28.27	28.27	3.19	-2.35	19 (7)	1006 (7)	939 (7)
8-19-P	85	120	28.27	28.27	10.11	0.00	52 (7)	2704 (7)	662 (7)
8-20-P	85	120	28.27	28.27	15.36	0.00	82 (7)	4274 (7)	1047 (7)
8-21-P	85	120	28.27	28.27	12.87	0.00	68 (7)	3526 (7)	864 (7)
8-22-P	85	120	28.27	28.27	7.24	-0.14	38 (7)	1969 (7)	482 (7)
8-23-P	85	120	28.27	28.27	6.50	-9.52	49 (5)	2091 (5)	2525 (5)
8-24-P	85	120	28.27	28.27	0.00	-25.91	150 (7)	1901 (7)	7763 (7)
8-25-P	85	120	28.27	28.27	0.00	-54.96	319 (7)	4044 (7)	16510 (7)
8-26-P	85	120	28.27	28.27	0.00	-25.91	150 (7)	1901 (7)	7763 (7)
8-27-P	85	120	28.27	28.27	6.50	-9.52	49 (5)	2091 (5)	2525 (5)
8-28-P	85	120	28.27	28.27	7.24	-0.14	38 (7)	1969 (7)	482 (7)
8-29-P	85	120	28.27	28.27	12.87	0.00	68 (7)	3526 (7)	864 (7)
8-30-P	85	120	28.27	28.27	15.36	0.00	82 (7)	4274 (7)	1047 (7)
8-31-P	85	120	28.27	28.27	10.11	0.00	52 (7)	2704 (7)	662 (7)
8-32-P	85	120	28.27	28.27	3.19	-2.35	19 (7)	1006 (7)	939 (7)
8-33-P	85	120	28.27	28.27	4.77	-13.74	83 (6)	1704 (6)	4305 (6)
8-34-P	85	120	28.27	28.27	0.00	-40.93	236 (7)	3001 (7)	12251 (7)
8-35-P	85	120	28.27	28.27	0.00	-47.49	274 (7)	3481 (7)	14212 (7)
8-36-P	85	120	28.27	28.27	0.49	-19.64	115 (7)	1462 (7)	5970 (7)
8-37-P	85	120	28.27	28.27	5.05	-9.65	50 (5)	986 (5)	2571 (5)
8-38-P	85	120	28.27	28.27	4.62	-0.49	25 (7)	1310 (7)	321 (7)
8-39-P	85	120	28.27	28.27	8.10	0.00	43 (7)	2249 (7)	551 (7)
8-40-P	85	120	28.27	28.27	6.34	0.00	34 (7)	1761 (7)	431 (7)
8-41-P	85	120	28.27	28.27	2.00	-1.22	14 (7)	584 (7)	740 (7)
8-42-P	85	120	28.27	28.27	1.19	-12.54	73 (7)	923 (7)	3768 (7)
8-43-P	85	120	28.27	28.27	0.00	-30.65	171 (7)	2168 (7)	8849 (7)
8-44-P	85	120	28.27	28.27	0.00	-60.69	344 (7)	4373 (7)	17854 (7)
8-45-P	85	120	28.27	28.27	0.00	-44.29	249 (7)	3159 (7)	12898 (7)
8-46-P	85	120	28.27	28.27	1.63	-21.47	122 (7)	1549 (7)	6325 (7)
8-47-P	85	120	28.27	28.27	0.91	-10.52	60 (7)	767 (7)	3131 (7)
8-48-P	85	120	28.27	28.27	0.85	-3.82	23 (6)	288 (6)	1177 (6)
8-49-P	85	120	28.27	28.27	0.99	-0.73	6 (5)	304 (5)	178 (5)
9-1-S	100	120	31.42	31.42	1.58	-6.97	33 (5)	1768 (5)	1518 (5)
9-2-S	100	120	31.42	31.42	0.09	-12.17	51 (5)	642 (5)	2703 (5)
9-3-S	100	120	31.42	31.42	0.98	-12.78	117 (8)	1483 (8)	6243 (8)
9-4-S	100	120	31.42	31.42	5.55	-20.62	136 (5)	1961 (5)	7222 (5)
9-5-S	100	120	31.42	31.42	18.14	-6.19	121 (5)	6448 (5)	5025 (5)
9-6-S	100	120	31.42	31.42	51.93	0.00	266 (5)	14181 (5)	3369 (5)
9-7-S	100	120	31.42	31.42	0.00	-260.13	1121 (5)	14179 (5)	59680 (5)
9-8-S	100	120	31.42	31.42	0.00	-197.90	822 (5)	10400 (5)	43774 (5)
9-9-S	100	120	31.42	31.42	0.00	-151.44	602 (5)	7618 (5)	32065 (5)
9-10-S	100	120	31.42	31.42	0.00	-111.51	420 (5)	5311 (5)	22355 (5)
9-11-S	100	120	31.42	31.42	0.01	-74.05	252 (5)	3186 (5)	13411 (5)
9-12-S	100	120	31.42	31.42	0.10	-44.38	130 (5)	1650 (5)	6944 (5)
9-13-S	100	120	31.42	31.42	12.16	-3.44	53 (7)	1250 (7)	2805 (7)
9-14-S	100	120	31.42	31.42	19.41	-2.26	64 (7)	3407 (7)	1333 (7)
9-15-S	100	120	31.42	31.42	19.43	-3.03	74 (6)	3965 (6)	1191 (6)
9-16-S	100	120	31.42	31.42	19.81	-3.39	71 (6)	3787 (6)	1318 (6)
9-17-S	100	120	31.42	31.42	7.79	-6.70	43 (8)	2285 (8)	1964 (8)
9-18-S	100	120	31.42	31.42	4.99	-10.20	53 (7)	2043 (7)	2800 (7)
9-19-S	100	120	31.42	31.42	1.49	-6.25	32 (7)	778 (7)	1689 (7)
9-20-S	100	120	31.42	31.42	5.05	-3.35	15 (5)	481 (5)	799 (5)
9-21-S	100	120	31.42	31.42	4.69	-1.40	13 (5)	683 (5)	162 (5)
10-1-S	100	120	31.42	31.42	11.30	-4.80	46 (5)	2450 (5)	1029 (5)
10-2-S	100	120	31.42	31.42	20.70	-11.39	121 (5)	6426 (5)	2540 (5)
10-3-S	100	120	31.42	31.42	5.05	-16.50	69 (5)	908 (5)	3665 (5)
10-4-S	100	120	31.42	31.42	1.59	-81.12	443 (5)	5606 (5)	23598 (5)
10-5-S	100	120	31.42	31.42	9.75	-53.69	333 (5)	7089 (5)	17748 (5)
10-6-S	100	120	31.42	31.42	53.57	0.00	295 (8)	15705 (8)	3731 (8)
10-7-S	100	120	31.42	31.42	0.00	-214.19	873 (5)	11043 (5)	46479 (5)
10-8-S	100	120	31.42	31.42	0.00	-183.69	740 (5)	9363 (5)	39408 (5)
10-9-S	100	120	31.42	31.42	0.00	-150.10	590 (5)	7458 (5)	31393 (5)
10-10-S	100	120	31.42	31.42	0.00	-117.93	449 (5)	5676 (5)	23889 (5)
10-11-S	100	120	31.42	31.42	0.00	-85.53	307 (5)	3887 (5)	16361 (5)
10-12-S	100	120	31.42	31.42	0.00	-51.98	162 (5)	2048 (5)	8621 (5)
10-13-S	100	120	31.42	31.42	8.00	-0.48	43 (7)	700 (7)	2296 (7)
10-14-S	100	120	31.42	31.42	21.67	-0.22	83 (7)	4414 (7)	1049 (7)
10-15-S	100	120	31.42	31.42	34.19	-0.61	131 (6)	6994 (6)	1662 (6)
10-16-S	100	120	31.42	31.42	48.82	-1.89	182 (5)	9672 (5)	2298 (5)
10-17-S	100	120	31.42	31.42	2.44	-16.48	77 (7)	1686 (7)	4089 (7)
10-18-S	100	120	31.42	31.42	1.56	-42.92	214 (7)	2708 (7)	11398 (7)
10-19-S	100	120	31.42	31.42	3.31	-29.54	144 (5)	1818 (5)	7652 (5)
10-20-S	100	120	31.42	31.42	2.42	-20.32	78 (5)	981 (5)	4130 (5)
10-21-S	100	120	31.42	31.42	2.39	-5.57	14 (5)	596 (5)	760 (5)
11-1-S	100	120	31.42	31.42	0.50	-8.23	35 (5)	442 (5)	1862 (5)
11-2-S	100	120	31.42	31.42	0.73	-7.20	27 (5)	347 (5)	1460 (5)
11-3-S	100	120	31.42	31.42	2.86	-2.20	60 (8)	839 (8)	3219 (8)
11-4-S	100	120	31.42	31.42	12.86	0.00	71 (8)	3770 (8)	896 (8)
11-5-S	100	120	31.42	31.42	31.00	0.00	158 (5)	8419 (5)	2000 (5)

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.16.0.5.005.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.16.0.5.005	A	87 di 118

Is	B [cm]	H [cm]	Afi [cmq]	Afs [cmq]	Mp [kNm]	Mn [kNm]	sc [kPa]	ofi [kPa]	ofs [kPa]
11-6-S	100	120	31.42	31.42	52.06	0.00	256 (5)	13605 (5)	3232 (5)
11-7-S	100	120	31.42	31.42	9.62	-43.02	296 (6)	3747 (6)	15772 (6)
11-8-S	100	120	31.42	31.42	8.98	-60.45	372 (6)	4702 (6)	19791 (6)
11-9-S	100	120	31.42	31.42	0.00	-192.69	844 (5)	10670 (5)	44912 (5)
11-10-S	100	120	31.42	31.42	0.00	-165.91	676 (5)	8548 (5)	35981 (5)
11-11-S	100	120	31.42	31.42	0.00	-127.96	468 (5)	5924 (5)	24933 (5)
11-12-S	100	120	31.42	31.42	0.00	-79.79	267 (5)	3374 (5)	14202 (5)
11-13-S	100	120	31.42	31.42	0.00	-42.81	120 (5)	1513 (5)	6370 (5)
11-14-S	100	120	31.42	31.42	7.73	-1.89	38 (7)	920 (7)	2009 (7)
11-15-S	100	120	31.42	31.42	10.42	-1.28	25 (7)	1343 (7)	880 (7)
11-16-S	100	120	31.42	31.42	12.29	-1.14	41 (6)	2198 (6)	1317 (6)
11-17-S	100	120	31.42	31.42	7.83	-1.10	35 (7)	1856 (7)	1050 (7)
11-18-S	100	120	31.42	31.42	5.06	-1.15	32 (8)	1484 (8)	1681 (8)
11-19-S	100	120	31.42	31.42	7.38	-0.91	18 (5)	974 (5)	601 (5)
11-20-S	100	120	31.42	31.42	5.32	-0.77	11 (5)	602 (5)	268 (5)
11-21-S	100	120	31.42	31.42	3.35	-0.67	7 (5)	378 (5)	162 (5)
12-1-S	100	120	31.42	31.42	13.89	-3.03	57 (5)	3052 (5)	725 (5)
12-2-S	100	120	31.42	31.42	22.17	-10.05	129 (5)	6866 (5)	2263 (5)
12-3-S	100	120	31.42	31.42	5.13	-18.90	82 (5)	1032 (5)	4342 (5)
12-4-S	100	120	31.42	31.42	1.18	-94.69	413 (5)	5220 (5)	21973 (5)
12-5-S	100	120	31.42	31.42	4.21	-39.61	273 (8)	6166 (8)	14518 (8)
12-6-S	100	120	31.42	31.42	53.35	0.00	294 (8)	15642 (8)	3716 (8)
12-7-S	100	120	31.42	31.42	0.00	-182.47	703 (5)	8889 (5)	37415 (5)
12-8-S	100	120	31.42	31.42	0.00	-152.19	574 (5)	7260 (5)	30560 (5)
12-9-S	100	120	31.42	31.42	0.00	-130.69	486 (5)	6148 (5)	25878 (5)
12-10-S	100	120	31.42	31.42	0.00	-106.23	384 (5)	4854 (5)	20433 (5)
12-11-S	100	120	31.42	31.42	0.00	-80.65	277 (5)	3504 (5)	14751 (5)
12-12-S	100	120	31.42	31.42	0.00	-51.61	157 (5)	1991 (5)	8381 (5)
12-13-S	100	120	31.42	31.42	8.23	-1.68	46 (7)	587 (7)	2470 (7)
12-14-S	100	120	31.42	31.42	21.58	-0.87	67 (7)	3587 (7)	852 (7)
12-15-S	100	120	31.42	31.42	35.35	-1.70	136 (6)	7229 (6)	1717 (6)
12-16-S	100	120	31.42	31.42	51.90	-3.41	192 (5)	10223 (5)	2429 (5)
12-17-S	100	120	31.42	31.42	2.47	-21.98	101 (7)	2054 (7)	5403 (7)
12-18-S	100	120	31.42	31.42	1.49	-51.08	254 (7)	3218 (7)	13546 (7)
12-19-S	100	120	31.42	31.42	2.15	-34.28	173 (5)	2188 (5)	9211 (5)
12-20-S	100	120	31.42	31.42	1.47	-23.34	92 (5)	1169 (5)	4919 (5)
12-21-S	100	120	31.42	31.42	1.99	-6.52	16 (5)	575 (5)	873 (5)
13-1-S	100	120	31.42	31.42	1.23	-7.52	31 (5)	397 (5)	1672 (5)
13-2-S	100	120	31.42	31.42	0.53	-11.09	44 (5)	560 (5)	2357 (5)
13-3-S	100	120	31.42	31.42	2.37	-7.76	107 (8)	1352 (8)	5690 (8)
13-4-S	100	120	31.42	31.42	10.31	-3.20	88 (8)	3021 (8)	4698 (8)
13-5-S	100	120	31.42	31.42	27.42	0.00	143 (5)	7614 (5)	1809 (5)
13-6-S	100	120	31.42	31.42	53.99	0.00	264 (5)	14078 (5)	3345 (5)
13-7-S	100	120	31.42	31.42	16.67	-48.18	343 (6)	4851 (6)	18277 (6)
13-8-S	100	120	31.42	31.42	13.95	-57.57	338 (6)	5666 (6)	17969 (6)
13-9-S	100	120	31.42	31.42	0.00	-173.60	742 (5)	9382 (5)	39491 (5)
13-10-S	100	120	31.42	31.42	0.00	-149.97	596 (5)	7534 (5)	31712 (5)
13-11-S	100	120	31.42	31.42	0.00	-116.27	414 (5)	5232 (5)	22022 (5)
13-12-S	100	120	31.42	31.42	0.00	-72.83	234 (5)	2965 (5)	12478 (5)
13-13-S	100	120	31.42	31.42	0.00	-38.78	101 (5)	1277 (5)	5375 (5)
13-14-S	100	120	31.42	31.42	8.85	-0.30	26 (7)	626 (7)	1391 (7)
13-15-S	100	120	31.42	31.42	10.04	-0.63	19 (7)	1026 (7)	829 (7)
13-16-S	100	120	31.42	31.42	5.58	-2.42	33 (8)	1637 (8)	1770 (8)
13-17-S	100	120	31.42	31.42	5.62	-3.12	43 (8)	1648 (8)	2287 (8)
13-18-S	100	120	31.42	31.42	4.84	-3.12	43 (8)	1419 (8)	2286 (8)
13-19-S	100	120	31.42	31.42	1.85	-2.00	20 (7)	632 (7)	1086 (7)
13-20-S	100	120	31.42	31.42	0.73	-0.98	8 (7)	440 (7)	432 (7)
13-21-S	100	120	31.42	31.42	2.38	-0.38	7 (6)	390 (6)	93 (6)
14-1-S	100	120	34.56	34.56	7.72	-7.24	30 (5)	1546 (5)	1441 (5)
14-2-S	100	120	34.56	34.56	11.44	-12.96	59 (5)	3023 (5)	2606 (5)
14-3-S	100	120	34.56	34.56	3.07	-16.76	82 (5)	1042 (5)	4168 (5)
14-4-S	100	120	34.56	34.56	3.95	-39.28	343 (8)	4368 (8)	17477 (8)
14-5-S	100	120	34.56	34.56	14.86	-30.10	262 (5)	6440 (5)	13363 (5)
14-6-S	100	120	34.56	34.56	51.27	0.00	269 (8)	13688 (8)	3421 (8)
14-7-S	100	120	34.56	34.56	0.00	-145.65	511 (5)	6506 (5)	26030 (5)
14-8-S	100	120	34.56	34.56	0.00	-139.21	501 (5)	6379 (5)	25521 (5)
14-9-S	100	120	34.56	34.56	0.00	-135.00	491 (5)	6254 (5)	25021 (5)
14-10-S	100	120	34.56	34.56	0.00	-112.74	398 (5)	5066 (5)	20269 (5)
14-11-S	100	120	34.56	34.56	0.00	-87.58	293 (5)	3728 (5)	14915 (5)
14-12-S	100	120	34.56	34.56	0.00	-55.86	163 (5)	2079 (5)	8320 (5)
14-13-S	100	120	34.56	34.56	0.00	-27.70	57 (5)	728 (5)	2911 (5)
14-14-S	100	120	34.56	34.56	16.77	-0.66	44 (7)	2238 (7)	860 (7)
14-15-S	100	120	34.56	34.56	22.53	-1.65	81 (6)	4147 (6)	1036 (6)
14-16-S	100	120	34.56	34.56	30.48	-2.67	108 (6)	5518 (6)	1379 (6)
14-17-S	100	120	34.56	34.56	4.51	-12.63	73 (7)	1651 (7)	3708 (7)
14-18-S	100	120	34.56	34.56	2.77	-27.42	165 (7)	2096 (7)	8384 (7)
14-19-S	100	120	34.56	34.56	4.72	-18.25	111 (5)	1413 (5)	5655 (5)
14-20-S	100	120	34.56	34.56	2.36	-10.96	58 (6)	743 (6)	2971 (6)
14-21-S	100	120	34.56	34.56	3.64	-3.92	11 (5)	553 (5)	582 (5)
15-1-S	100	120	31.42	31.42	7.72	-7.24	32 (5)	1698 (5)	1583 (5)
15-2-S	100	120	31.42	31.42	11.44	-12.96	62 (5)	3320 (5)	2862 (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.16.0.5.005.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.16.0.5.005	A	88 di 118

Is	B [cm]	H [cm]	Afi [cmq]	Afs [cmq]	Mp [kNm]	Mn [kNm]	sc [kPa]	ofi [kPa]	ofs [kPa]
15-3-S	100	120	31.42	31.42	3.07	-16.76	86 (5)	1088 (5)	4578 (5)
15-4-S	100	120	31.42	31.42	3.95	-39.28	361 (8)	4560 (8)	19195 (8)
15-5-S	100	120	31.42	31.42	14.86	-30.10	276 (5)	7073 (5)	14677 (5)
15-6-S	100	120	31.42	31.42	51.27	0.00	282 (8)	15033 (8)	3572 (8)
15-7-S	100	120	31.42	31.42	0.00	-145.65	537 (5)	6792 (5)	28589 (5)
15-8-S	100	120	31.42	31.42	0.00	-139.21	527 (5)	6659 (5)	28030 (5)
15-9-S	100	120	31.42	31.42	0.00	-135.00	516 (5)	6529 (5)	27481 (5)
15-10-S	100	120	31.42	31.42	0.00	-112.74	418 (5)	5289 (5)	22261 (5)
15-11-S	100	120	31.42	31.42	0.00	-87.58	308 (5)	3892 (5)	16381 (5)
15-12-S	100	120	31.42	31.42	0.00	-55.86	172 (5)	2171 (5)	9138 (5)
15-13-S	100	120	31.42	31.42	6.63	-1.94	60 (7)	760 (7)	3197 (7)
15-14-S	100	120	31.42	31.42	16.77	-0.66	46 (7)	2458 (7)	945 (7)
15-15-S	100	120	31.42	31.42	22.53	-1.65	86 (6)	4554 (6)	1082 (6)
15-16-S	100	120	31.42	31.42	30.48	-2.67	114 (6)	6060 (6)	1440 (6)
15-17-S	100	120	31.42	31.42	4.51	-12.63	77 (7)	1813 (7)	4073 (7)
15-18-S	100	120	31.42	31.42	2.77	-27.42	173 (7)	2188 (7)	9208 (7)
15-19-S	100	120	31.42	31.42	4.72	-18.25	117 (5)	1475 (5)	6210 (5)
15-20-S	100	120	31.42	31.42	2.36	-10.96	61 (6)	775 (6)	3263 (6)
15-21-S	100	120	31.42	31.42	3.64	-3.92	12 (5)	607 (5)	640 (5)
16-1-S	100	120	31.42	31.42	1.23	-7.52	31 (5)	397 (5)	1672 (5)
16-2-S	100	120	31.42	31.42	0.53	-11.09	44 (5)	560 (5)	2357 (5)
16-3-S	100	120	31.42	31.42	2.37	-7.76	107 (8)	1352 (8)	5690 (8)
16-4-S	100	120	31.42	31.42	10.31	-3.20	88 (8)	3021 (8)	4698 (8)
16-5-S	100	120	31.42	31.42	27.42	0.00	143 (5)	7614 (5)	1809 (5)
16-6-S	100	120	31.42	31.42	53.99	0.00	264 (5)	14078 (5)	3345 (5)
16-7-S	100	120	31.42	31.42	16.67	-48.18	343 (6)	4851 (6)	18277 (6)
16-8-S	100	120	31.42	31.42	13.95	-57.57	338 (6)	5666 (6)	17969 (6)
16-9-S	100	120	31.42	31.42	0.00	-173.60	742 (5)	9382 (5)	39491 (5)
16-10-S	100	120	31.42	31.42	0.00	-149.97	596 (5)	7534 (5)	31712 (5)
16-11-S	100	120	31.42	31.42	0.00	-116.27	414 (5)	5232 (5)	22022 (5)
16-12-S	100	120	31.42	31.42	0.00	-72.83	234 (5)	2965 (5)	12478 (5)
16-13-S	100	120	31.42	31.42	0.00	-38.78	101 (5)	1277 (5)	5375 (5)
16-14-S	100	120	31.42	31.42	8.85	-0.30	26 (7)	626 (7)	1391 (7)
16-15-S	100	120	31.42	31.42	10.04	-0.63	19 (7)	1026 (7)	829 (7)
16-16-S	100	120	31.42	31.42	5.58	-2.42	33 (8)	1637 (8)	1770 (8)
16-17-S	100	120	31.42	31.42	5.62	-3.12	43 (8)	1648 (8)	2287 (8)
16-18-S	100	120	31.42	31.42	4.84	-3.12	43 (8)	1419 (8)	2286 (8)
16-19-S	100	120	31.42	31.42	1.85	-2.00	20 (7)	632 (7)	1086 (7)
16-20-S	100	120	31.42	31.42	0.73	-0.98	8 (7)	440 (7)	432 (7)
16-21-S	100	120	31.42	31.42	2.38	-0.38	7 (6)	390 (6)	93 (6)
17-1-S	100	120	31.42	31.42	13.89	-3.03	57 (5)	3052 (5)	725 (5)
17-2-S	100	120	31.42	31.42	22.17	-10.05	129 (5)	6866 (5)	2263 (5)
17-3-S	100	120	31.42	31.42	5.13	-18.90	82 (5)	1032 (5)	4342 (5)
17-4-S	100	120	31.42	31.42	1.18	-94.69	413 (5)	5220 (5)	21973 (5)
17-5-S	100	120	31.42	31.42	4.21	-39.61	273 (8)	6166 (8)	14518 (8)
17-6-S	100	120	31.42	31.42	53.35	0.00	294 (8)	15642 (8)	3716 (8)
17-7-S	100	120	31.42	31.42	0.00	-182.47	703 (5)	8889 (5)	37415 (5)
17-8-S	100	120	31.42	31.42	0.00	-152.19	574 (5)	7260 (5)	30560 (5)
17-9-S	100	120	31.42	31.42	0.00	-130.69	486 (5)	6148 (5)	25878 (5)
17-10-S	100	120	31.42	31.42	0.00	-106.23	384 (5)	4854 (5)	20433 (5)
17-11-S	100	120	31.42	31.42	0.00	-80.65	277 (5)	3504 (5)	14751 (5)
17-12-S	100	120	31.42	31.42	0.00	-51.61	157 (5)	1991 (5)	8381 (5)
17-13-S	100	120	31.42	31.42	8.23	-1.68	46 (7)	587 (7)	2470 (7)
17-14-S	100	120	31.42	31.42	21.58	-0.87	67 (7)	3587 (7)	852 (7)
17-15-S	100	120	31.42	31.42	35.35	-1.70	136 (6)	7229 (6)	1717 (6)
17-16-S	100	120	31.42	31.42	51.90	-3.41	192 (5)	10223 (5)	2429 (5)
17-17-S	100	120	31.42	31.42	2.47	-21.98	101 (7)	2054 (7)	5403 (7)
17-18-S	100	120	31.42	31.42	1.49	-51.08	254 (7)	3218 (7)	13546 (7)
17-19-S	100	120	31.42	31.42	2.15	-34.28	173 (5)	2188 (5)	9211 (5)
17-20-S	100	120	31.42	31.42	1.47	-23.34	92 (5)	1169 (5)	4919 (5)
17-21-S	100	120	31.42	31.42	1.99	-6.52	16 (5)	575 (5)	873 (5)
18-1-S	100	120	31.42	31.42	0.50	-8.23	35 (5)	442 (5)	1862 (5)
18-2-S	100	120	31.42	31.42	0.73	-7.20	27 (5)	347 (5)	1460 (5)
18-3-S	100	120	31.42	31.42	2.86	-2.20	60 (8)	839 (8)	3219 (8)
18-4-S	100	120	31.42	31.42	12.86	0.00	71 (8)	3770 (8)	896 (8)
18-5-S	100	120	31.42	31.42	31.00	0.00	158 (5)	8419 (5)	2000 (5)
18-6-S	100	120	31.42	31.42	52.06	0.00	256 (5)	13605 (5)	3232 (5)
18-7-S	100	120	31.42	31.42	9.62	-43.02	296 (6)	3747 (6)	15772 (6)
18-8-S	100	120	31.42	31.42	8.98	-60.45	372 (6)	4702 (6)	19791 (6)
18-9-S	100	120	31.42	31.42	0.00	-192.69	844 (5)	10670 (5)	44912 (5)
18-10-S	100	120	31.42	31.42	0.00	-165.91	676 (5)	8548 (5)	35981 (5)
18-11-S	100	120	31.42	31.42	0.00	-127.96	468 (5)	5924 (5)	24933 (5)
18-12-S	100	120	31.42	31.42	0.00	-79.79	267 (5)	3374 (5)	14202 (5)
18-13-S	100	120	31.42	31.42	0.00	-42.81	120 (5)	1513 (5)	6370 (5)
18-14-S	100	120	31.42	31.42	7.73	-1.89	38 (7)	920 (7)	2009 (7)
18-15-S	100	120	31.42	31.42	10.42	-1.28	25 (7)	1343 (7)	880 (7)
18-16-S	100	120	31.42	31.42	12.29	-1.14	41 (6)	2198 (6)	1317 (6)
18-17-S	100	120	31.42	31.42	7.83	-1.10	35 (7)	1856 (7)	1050 (7)
18-18-S	100	120	31.42	31.42	5.06	-1.15	32 (8)	1484 (8)	1681 (8)
18-19-S	100	120	31.42	31.42	7.38	-0.91	18 (5)	974 (5)	601 (5)
18-20-S	100	120	31.42	31.42	5.32	-0.77	11 (5)	602 (5)	268 (5)

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.16.0.5.005.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.16.0.5.005	A	89 di 118

Is	B [cm]	H [cm]	Afi [cmq]	Afs [cmq]	Mp [kNm]	Mn [kNm]	σc [kPa]	σfi [kPa]	σfs [kPa]
18-21-S	100	120	31.42	31.42	3.35	-0.67	7 (5)	378 (5)	162 (5)
19-1-S	100	120	31.42	31.42	11.30	-4.80	46 (5)	2450 (5)	1029 (5)
19-2-S	100	120	31.42	31.42	20.70	-11.39	121 (5)	6426 (5)	2540 (5)
19-3-S	100	120	31.42	31.42	5.05	-16.50	69 (5)	908 (5)	3665 (5)
19-4-S	100	120	31.42	31.42	1.59	-81.12	443 (5)	5606 (5)	23598 (5)
19-5-S	100	120	31.42	31.42	9.75	-53.69	333 (5)	7089 (5)	17748 (5)
19-6-S	100	120	31.42	31.42	53.57	0.00	295 (8)	15705 (8)	3731 (8)
19-7-S	100	120	31.42	31.42	0.00	-214.19	873 (5)	11043 (5)	46479 (5)
19-8-S	100	120	31.42	31.42	0.00	-183.69	740 (5)	9363 (5)	39408 (5)
19-9-S	100	120	31.42	31.42	0.00	-150.10	590 (5)	7458 (5)	31393 (5)
19-10-S	100	120	31.42	31.42	0.00	-117.93	449 (5)	5676 (5)	23889 (5)
19-11-S	100	120	31.42	31.42	0.00	-85.53	307 (5)	3887 (5)	16361 (5)
19-12-S	100	120	31.42	31.42	0.00	-51.98	162 (5)	2048 (5)	8621 (5)
19-13-S	100	120	31.42	31.42	8.00	-0.48	43 (7)	700 (7)	2296 (7)
19-14-S	100	120	31.42	31.42	21.67	-0.22	83 (7)	4414 (7)	1049 (7)
19-15-S	100	120	31.42	31.42	34.19	-0.61	131 (6)	6994 (6)	1662 (6)
19-16-S	100	120	31.42	31.42	48.82	-1.89	182 (5)	9672 (5)	2298 (5)
19-17-S	100	120	31.42	31.42	2.44	-16.48	77 (7)	1686 (7)	4089 (7)
19-18-S	100	120	31.42	31.42	1.56	-42.92	214 (7)	2708 (7)	11398 (7)
19-19-S	100	120	31.42	31.42	3.31	-29.54	144 (5)	1818 (5)	7652 (5)
19-20-S	100	120	31.42	31.42	2.42	-20.32	78 (5)	981 (5)	4130 (5)
19-21-S	100	120	31.42	31.42	2.39	-5.57	14 (5)	596 (5)	760 (5)
20-1-S	100	120	31.42	31.42	1.58	-6.97	33 (5)	1768 (5)	1518 (5)
20-2-S	100	120	31.42	31.42	0.09	-12.17	51 (5)	642 (5)	2703 (5)
20-3-S	100	120	31.42	31.42	0.98	-12.78	117 (8)	1483 (8)	6243 (8)
20-4-S	100	120	31.42	31.42	5.55	-20.62	136 (5)	1961 (5)	7222 (5)
20-5-S	100	120	31.42	31.42	18.14	-6.19	121 (5)	6448 (5)	5025 (5)
20-6-S	100	120	31.42	31.42	51.93	0.00	266 (5)	14181 (5)	3369 (5)
20-7-S	100	120	31.42	31.42	0.00	-260.13	1121 (5)	14179 (5)	59680 (5)
20-8-S	100	120	31.42	31.42	0.00	-197.90	822 (5)	10400 (5)	43774 (5)
20-9-S	100	120	31.42	31.42	0.00	-151.44	602 (5)	7618 (5)	32065 (5)
20-10-S	100	120	31.42	31.42	0.00	-111.51	420 (5)	5311 (5)	22355 (5)
20-11-S	100	120	31.42	31.42	0.01	-74.05	252 (5)	3186 (5)	13411 (5)
20-12-S	100	120	31.42	31.42	0.10	-44.38	130 (5)	1650 (5)	6944 (5)
20-13-S	100	120	31.42	31.42	12.16	-3.44	53 (7)	1250 (7)	2805 (7)
20-14-S	100	120	31.42	31.42	19.41	-2.26	64 (7)	3407 (7)	1333 (7)
20-15-S	100	120	31.42	31.42	19.43	-3.03	74 (6)	3965 (6)	1191 (6)
20-16-S	100	120	31.42	31.42	19.81	-3.39	71 (6)	3787 (6)	1318 (6)
20-17-S	100	120	31.42	31.42	7.79	-6.70	43 (8)	2285 (8)	1964 (8)
20-18-S	100	120	31.42	31.42	4.99	-10.20	53 (7)	2043 (7)	2800 (7)
20-19-S	100	120	31.42	31.42	1.49	-6.25	32 (7)	778 (7)	1689 (7)
20-20-S	100	120	31.42	31.42	5.05	-3.35	15 (5)	481 (5)	799 (5)
20-21-S	100	120	31.42	31.42	4.69	-1.40	13 (5)	683 (5)	162 (5)

Pali in c.a.

Ip	Is	Ar [cmq]	σc [kPa]	σf [kPa]	τc [kPa]	σstf [kPa]
1	1	76.03	4353	71771		
1	2	76.03	3800	58049		
1	3	76.03	3252	44682		
1	4	76.03	2714	32297		
1	5	76.03	2196	26770		
1	6	76.03	1715	21541		
1	7	76.03	1307	17143		
1	8	76.03	1072	14546		
1	9	76.03	916	13049		
1	10	76.03	806	11738		
1	11	76.03	706	10560		
1	12	76.03	800	11467		
1	13	76.03	927	12634		
1	14	76.03	1062	14172		
1	15	76.03	1193	15711		
1	16	76.03	1317	17163		
1	17	76.03	1432	18480		
1	18	76.03	1532	19633		
1	19	76.03	1618	20607		
1	20	76.03	1688	21400		
1	21	76.03	1742	22019		
1	22	76.03	1782	22472		
1	23	76.03	1808	22771		
1	24	76.03	1822	22931		
1	25	76.03	1824	22963		
1	26	76.03	1815	22883		
1	27	76.03	1798	22701		
1	28	76.03	1773	22432		
1	29	76.03	1742	22088		
1	30	76.03	1704	21681		
1	31	76.03	1663	21222		

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.16.0.5.005.A.DOCX

COMMESSA	LOTTO	CODIFICA	DOCUMENTO	REV.	FOGLIO
IF2R	2.2.E.ZZ	CL	TR.16.0.5.005	A	90 di 118

Ip	Is	Ar [cmq]	σ_c [kPa]	σ_f [kPa]	τ_c [kPa]	σ_{sf} [kPa]
1	32	76.03	1618	20723		
1	33	76.03	1571	20201		
1	34	76.03	1523	19665		
1	35	76.03	1475	19123		
1	36	76.03	1427	18580		
1	37	76.03	1380	18044		
1	38	76.03	1334	17519		
1	39	76.03	1290	17009		
1	40	76.03	1248	16517		
1	41	76.03	1207	16046		
1	42	76.03	1169	15686		
1	43	76.03	1132	15351		
1	44	76.03	1097	15022		
1	45	76.03	1068	14700		
1	46	76.03	1041	14385		
1	47	76.03	1015	14080		
1	48	76.03	990	13893		
1	49	76.03	966	13718		
1	50	76.03	942	13549		
1	51	76.03	928	13387		
1	52	76.03	915	13231		
1	53	76.03	902	13082		
1	54	76.03	890	12940		
1	55	76.03	878	12806		
1	56	76.03	867	12678		
1	57	76.03	857	12557		
1	58	76.03	847	12443		
1	59	76.03	838	12337		
1	60	76.03	830	12236		
1	61	76.03	822	12143		
1	62	76.03	814	12056		
1	63	76.03	807	11975		
1	64	76.03	801	11900		
1	65	76.03	795	11831		
1	66	76.03	790	11768		
1	67	76.03	785	11710		
1	68	76.03	780	11658		
1	69	76.03	776	11610		
1	70	76.03	773	11567		
1	71	76.03	770	11528		
1	72	76.03	767	11494		
1	73	76.03	766	11481		
1	74	76.03	768	11505		
1	75	76.03	769	11525		
1	76	76.03	771	11541		
1	77	76.03	772	11552		
1	78	76.03	772	11560		
1	79	76.03	773	11564		
1	80	76.03	773	11565		
1	81	76.03	773	11563		
1	82	76.03	773	11558		
1	83	76.03	772	11551		
1	84	76.03	771	11541		
1	85	76.03	771	11529		
1	86	76.03	770	11515		
1	87	76.03	768	11500		
1	88	76.03	767	11484		
1	89	76.03	766	11466		
1	90	76.03	764	11448		
1	91	76.03	763	11429		
1	92	76.03	762	11410		
1	93	76.03	760	11391		
1	94	76.03	759	11372		
1	95	76.03	757	11353		
1	96	76.03	756	11334		
1	97	76.03	755	11316		
1	98	76.03	753	11299		
1	99	76.03	752	11283		
1	100	76.03	751	11268		
1	101	76.03	750	11255		
2	1	62.83	4537	55092		
2	2	62.83	3938	48657		
2	3	62.83	3369	42433		
2	4	62.83	2854	36673		
2	5	62.83	2414	31648		
2	6	62.83	2060	27501		
2	7	62.83	1770	24052		
2	8	62.83	1504	20892		
2	9	62.83	1263	18022		
2	10	62.83	1079	15806		
2	11	62.83	1085	15919		

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.16.0.5.005.A.DOCX

COMMESSA	LOTTO	CODIFICA	DOCUMENTO	REV.	FOGLIO
IF2R	2.2.E.ZZ	CL	TR.16.0.5.005	A	91 di 118

Ip	Is	Ar [cmq]	σ_c [kPa]	σ_f [kPa]	τ_c [kPa]	σ_{sf} [kPa]
2	12	62.83	1264	18051		
2	13	62.83	1422	19943		
2	14	62.83	1561	21609		
2	15	62.83	1682	23064		
2	16	62.83	1787	24322		
2	17	62.83	1877	25395		
2	18	62.83	1952	26297		
2	19	62.83	2014	27044		
2	20	62.83	2065	27653		
2	21	62.83	2105	28133		
2	22	62.83	2134	28490		
2	23	62.83	2154	28732		
2	24	62.83	2165	28866		
2	25	62.83	2168	28904		
2	26	62.83	2163	28854		
2	27	62.83	2152	28727		
2	28	62.83	2135	28533		
2	29	62.83	2114	28282		
2	30	62.83	2088	27983		
2	31	62.83	2060	27645		
2	32	62.83	2028	27274		
2	33	62.83	1995	26882		
2	34	62.83	1960	26471		
2	35	62.83	1924	26043		
2	36	62.83	1887	25603		
2	37	62.83	1849	25155		
2	38	62.83	1811	24701		
2	39	62.83	1772	24245		
2	40	62.83	1734	23788		
2	41	62.83	1696	23334		
2	42	62.83	1658	22884		
2	43	62.83	1620	22440		
2	44	62.83	1583	22005		
2	45	62.83	1548	21578		
2	46	62.83	1513	21162		
2	47	62.83	1479	20758		
2	48	62.83	1446	20366		
2	49	62.83	1414	19988		
2	50	62.83	1383	19624		
2	51	62.83	1354	19274		
2	52	62.83	1325	18939		
2	53	62.83	1299	18618		
2	54	62.83	1273	18313		
2	55	62.83	1249	18024		
2	56	62.83	1226	17749		
2	57	62.83	1204	17490		
2	58	62.83	1183	17245		
2	59	62.83	1164	17015		
2	60	62.83	1146	16800		
2	61	62.83	1129	16599		
2	62	62.83	1114	16411		
2	63	62.83	1099	16237		
2	64	62.83	1086	16075		
2	65	62.83	1073	15926		
2	66	62.83	1062	15789		
2	67	62.83	1051	15663		
2	68	62.83	1042	15549		
2	69	62.83	1033	15444		
2	70	62.83	1025	15350		
2	71	62.83	1018	15265		
2	72	62.83	1015	15222		
2	73	62.83	1019	15267		
2	74	62.83	1022	15304		
2	75	62.83	1025	15331		
2	76	62.83	1027	15350		
2	77	62.83	1028	15362		
2	78	62.83	1029	15367		
2	79	62.83	1029	15365		
2	80	62.83	1028	15357		
2	81	62.83	1027	15343		
2	82	62.83	1026	15324		
2	83	62.83	1025	15301		
2	84	62.83	1023	15273		
2	85	62.83	1020	15242		
2	86	62.83	1018	15207		
2	87	62.83	1015	15170		
2	88	62.83	1012	15130		
2	89	62.83	1009	15089		
2	90	62.83	1006	15047		
2	91	62.83	1003	15004		
2	92	62.83	999	14961		

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.16.0.5.005.A.DOCX

COMMESSA	LOTTO	CODIFICA	DOCUMENTO	REV.	FOGLIO
IF2R	2.2.E.ZZ	CL	TR.16.0.5.005	A	92 di 118

Ip	Is	Ar [cmq]	σ_c [kPa]	σ_f [kPa]	τ_c [kPa]	σ_{sf} [kPa]
2	93	62.83	996	14917		
2	94	62.83	993	14875		
2	95	62.83	990	14833		
2	96	62.83	987	14792		
2	97	62.83	984	14753		
2	98	62.83	981	14716		
2	99	62.83	979	14681		
2	100	62.83	977	14649		
2	101	62.83	975	14621		
3	1	62.83	4496	57343		
3	2	62.83	3992	51653		
3	3	62.83	3543	46488		
3	4	62.83	3155	41952		
3	5	62.83	2823	38023		
3	6	62.83	2519	34407		
3	7	62.83	2233	30997		
3	8	62.83	1967	27835		
3	9	62.83	1726	24962		
3	10	62.83	1508	22372		
3	11	62.83	1548	22855		
3	12	62.83	1726	24984		
3	13	62.83	1884	26873		
3	14	62.83	2023	28536		
3	15	62.83	2144	29987		
3	16	62.83	2249	31241		
3	17	62.83	2338	32310		
3	18	62.83	2413	33207		
3	19	62.83	2474	33947		
3	20	62.83	2524	34540		
3	21	62.83	2562	34999		
3	22	62.83	2590	35336		
3	23	62.83	2608	35560		
3	24	62.83	2618	35683		
3	25	62.83	2620	35715		
3	26	62.83	2616	35664		
3	27	62.83	2605	35540		
3	28	62.83	2589	35350		
3	29	62.83	2568	35104		
3	30	62.83	2543	34808		
3	31	62.83	2515	34468		
3	32	62.83	2483	34093		
3	33	62.83	2449	33692		
3	34	62.83	2414	33272		
3	35	62.83	2377	32835		
3	36	62.83	2339	32386		
3	37	62.83	2301	31928		
3	38	62.83	2262	31464		
3	39	62.83	2222	30997		
3	40	62.83	2183	30530		
3	41	62.83	2144	30065		
3	42	62.83	2106	29604		
3	43	62.83	2067	29149		
3	44	62.83	2030	28701		
3	45	62.83	1993	28263		
3	46	62.83	1957	27835		
3	47	62.83	1923	27418		
3	48	62.83	1889	27014		
3	49	62.83	1856	26622		
3	50	62.83	1824	26244		
3	51	62.83	1794	25881		
3	52	62.83	1765	25532		
3	53	62.83	1737	25197		
3	54	62.83	1711	24878		
3	55	62.83	1685	24573		
3	56	62.83	1661	24284		
3	57	62.83	1638	24009		
3	58	62.83	1617	23749		
3	59	62.83	1597	23503		
3	60	62.83	1578	23272		
3	61	62.83	1560	23054		
3	62	62.83	1543	22850		
3	63	62.83	1527	22658		
3	64	62.83	1512	22480		
3	65	62.83	1499	22313		
3	66	62.83	1486	22158		
3	67	62.83	1475	22014		
3	68	62.83	1464	21881		
3	69	62.83	1454	21758		
3	70	62.83	1445	21645		
3	71	62.83	1437	21540		
3	72	62.83	1432	21478		

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.	PROGETTO ESECUTIVO												
Relazione di calcolo IF2R.2.2.E.ZZ.CL.TR.16.0.5.005.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.16.0.5.005</td> <td>A</td> <td>93 di 118</td> </tr> </table>	COMMESSA	LOTTO	CODIFICA	DOCUMENTO	REV.	FOGLIO	IF2R	2.2.E.ZZ	CL	TR.16.0.5.005	A	93 di 118
COMMESSA	LOTTO	CODIFICA	DOCUMENTO	REV.	FOGLIO								
IF2R	2.2.E.ZZ	CL	TR.16.0.5.005	A	93 di 118								

Ip	Is	Ar [cmq]	σ_c [kPa]	σ_f [kPa]	τ_c [kPa]	σ_{sf} [kPa]
3	73	62.83	1435	21504		
3	74	62.83	1437	21520		
3	75	62.83	1438	21527		
3	76	62.83	1438	21526		
3	77	62.83	1438	21516		
3	78	62.83	1437	21500		
3	79	62.83	1436	21476		
3	80	62.83	1434	21447		
3	81	62.83	1432	21411		
3	82	62.83	1429	21370		
3	83	62.83	1426	21323		
3	84	62.83	1423	21273		
3	85	62.83	1419	21218		
3	86	62.83	1415	21160		
3	87	62.83	1410	21099		
3	88	62.83	1406	21036		
3	89	62.83	1401	20971		
3	90	62.83	1396	20905		
3	91	62.83	1392	20838		
3	92	62.83	1387	20770		
3	93	62.83	1382	20703		
3	94	62.83	1377	20635		
3	95	62.83	1372	20568		
3	96	62.83	1368	20503		
3	97	62.83	1363	20438		
3	98	62.83	1359	20376		
3	99	62.83	1355	20316		
3	100	62.83	1351	20259		
3	101	62.83	1347	20205		

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 espressa in %
Sm	spaziatura tra le fessure espressa in [mm]
w	apertura delle fessure espressa in [mm]

Combinazioni SLER

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	31.42	2000.00	2.00	366.25	0.000000	0.00	0.000 (5)
2	100	70	31.42	2000.00	2.70	366.43	0.000000	0.00	0.000 (5)
3	100	70	31.42	2000.00	3.40	379.01	0.000000	0.00	0.000 (5)
4	100	70	31.42	2000.00	4.10	379.21	0.000000	0.00	0.000 (5)
5	100	70	31.42	2000.00	4.80	379.43	0.000000	0.00	0.000 (5)
6	100	70	31.42	2000.00	5.50	379.63	0.000000	0.00	0.000 (5)
7	100	70	31.42	2000.00	6.20	379.83	0.000000	0.00	0.000 (5)
8	100	70	31.42	2000.00	6.90	380.06	0.000000	0.00	0.000 (5)
9	100	70	31.42	2000.00	7.60	380.26	0.000000	0.00	0.000 (5)
10	100	70	31.42	2000.00	8.30	380.46	0.000000	0.00	0.000 (5)
11	100	70	31.42	2000.00	9.00	380.68	0.000000	0.00	0.000 (5)
12	100	70	31.42	2000.00	9.70	380.88	0.000000	0.00	0.000 (5)
13	100	70	31.42	2000.00	10.40	381.08	0.000000	0.00	0.000 (5)
14	100	70	31.42	2000.00	11.10	381.30	0.000000	0.00	0.000 (5)
15	100	70	31.42	2000.00	11.80	381.51	0.000000	0.00	0.000 (5)
16	100	70	31.42	2000.00	12.50	381.73	0.000000	0.00	0.000 (5)
17	100	70	31.42	2000.00	13.20	381.93	0.000000	0.00	0.000 (5)
18	100	70	31.42	2000.00	13.90	382.13	0.000000	0.00	0.000 (5)
19	100	70	31.42	2000.00	14.60	382.35	0.000000	0.00	0.000 (5)
20	100	70	31.42	2000.00	15.30	382.55	0.000000	0.00	0.000 (5)
21	100	70	31.42	2000.00	16.00	382.76	0.000000	0.00	0.000 (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.16.0.5.005.A.DOCX

COMMESSA

LOTTO

CODIFICA

DOCUMENTO

REV.

FOGLIO

IF2R

2.2.E.ZZ

CL

TR.16.0.5.005

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n°	B [cm]	H [cm]	Af [cmq]	Aeff [cmq]	M [kNm]	Mpf [kNm]	ε [%]	Sm [mm]	w [mm]
22	100	70	31.42	2000.00	16.70	382.98	0.000000	0.00	0.000 (5)
23	100	70	31.42	2000.00	17.40	383.18	0.000000	0.00	0.000 (5)
24	100	70	31.42	2000.00	18.10	383.40	0.000000	0.00	0.000 (5)
25	100	70	31.42	2000.00	18.80	383.60	0.000000	0.00	0.000 (5)
26	100	70	31.42	2000.00	19.50	383.80	0.000000	0.00	0.000 (5)
27	100	70	31.42	2000.00	20.20	384.02	0.000000	0.00	0.000 (5)
28	100	70	31.42	2000.00	20.90	384.23	0.000000	0.00	0.000 (5)
29	100	70	31.42	2000.00	21.60	384.43	0.000000	0.00	0.000 (5)
30	100	70	31.42	2000.00	22.29	384.65	0.000000	0.00	0.000 (5)
31	100	70	31.42	2000.00	22.99	384.85	0.000000	0.00	0.000 (5)
32	100	70	31.42	2000.00	23.73	385.07	0.000000	0.00	0.000 (5)
33	100	70	31.42	2000.00	24.54	385.26	0.000000	0.00	0.000 (5)
34	100	70	31.42	2000.00	25.42	385.48	0.000000	0.00	0.000 (5)
35	100	70	31.42	2000.00	26.39	385.68	0.000000	0.00	0.000 (5)
36	100	70	31.42	2000.00	27.45	385.90	0.000000	0.00	0.000 (5)
37	100	70	31.42	2000.00	28.60	386.11	0.000000	0.00	0.000 (5)
38	100	70	31.42	2000.00	29.85	386.31	0.000000	0.00	0.000 (5)
39	100	70	31.42	2000.00	31.20	386.53	0.000000	0.00	0.000 (5)
40	100	70	31.42	2000.00	32.66	386.74	0.000000	0.00	0.000 (5)
41	100	70	31.42	2000.00	34.23	386.95	0.000000	0.00	0.000 (5)
42	100	120	31.42	2000.00	48.19	1054.58	0.000000	0.00	0.000 (5)
43	100	120	31.42	2000.00	50.06	1055.18	0.000000	0.00	0.000 (5)
44	100	120	31.42	2000.00	52.40	1055.76	0.000000	0.00	0.000 (5)
45	100	120	31.42	2000.00	55.09	1056.38	0.000000	0.00	0.000 (5)
46	100	120	31.42	2000.00	58.01	1057.00	0.000000	0.00	0.000 (5)
47	100	120	31.42	2000.00	61.07	1057.61	0.000000	0.00	0.000 (5)
48	100	120	31.42	2000.00	64.24	1058.18	0.000000	0.00	0.000 (5)
49	100	120	31.42	2000.00	67.54	1058.79	0.000000	0.00	0.000 (5)
50	100	120	31.42	2000.00	70.97	1059.39	0.000000	0.00	0.000 (5)
51	100	120	31.42	2000.00	74.54	1059.97	0.000000	0.00	0.000 (5)
52	100	120	31.42	2000.00	78.25	1060.57	0.000000	0.00	0.000 (5)
53	100	120	31.42	2000.00	82.11	1061.18	0.000000	0.00	0.000 (5)
54	100	120	31.42	2000.00	86.12	1061.78	0.000000	0.00	0.000 (5)
55	100	120	31.42	2000.00	90.29	1062.39	0.000000	0.00	0.000 (5)
56	100	120	31.42	2000.00	94.63	1062.97	0.000000	0.00	0.000 (5)
57	100	120	31.42	2000.00	99.13	1063.57	0.000000	0.00	0.000 (5)
58	100	120	31.42	2000.00	103.81	1064.19	0.000000	0.00	0.000 (5)
59	100	120	31.42	2000.00	108.67	1064.76	0.000000	0.00	0.000 (5)
60	100	120	31.42	2000.00	113.71	1065.35	0.000000	0.00	0.000 (5)
61	100	120	31.42	2000.00	118.94	1065.99	0.000000	0.00	0.000 (5)
62	100	120	31.42	2000.00	124.37	1041.03	0.000000	0.00	0.000 (5)
63	100	120	31.42	2000.00	129.99	1041.60	0.000000	0.00	0.000 (5)
64	100	120	31.42	2000.00	135.81	1067.76	0.000000	0.00	0.000 (5)
65	100	120	31.42	2000.00	141.84	1068.36	0.000000	0.00	0.000 (5)
66	100	120	31.42	2000.00	148.09	1068.93	0.000000	0.00	0.000 (5)
67	100	120	31.42	2000.00	148.22	1068.98	0.000000	0.00	0.000 (5)
68	100	120	31.42	2000.00	154.14	1069.51	0.000000	0.00	0.000 (5)
69	100	120	31.42	2000.00	160.25	1070.07	0.000000	0.00	0.000 (5)
70	100	120	31.42	2000.00	166.56	1070.62	0.000000	0.00	0.000 (5)
71	100	120	31.42	2000.00	173.05	1071.14	0.000000	0.00	0.000 (5)
72	100	120	31.42	2000.00	179.74	1071.70	0.000000	0.00	0.000 (5)

Piastra fondazioneApertura 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	60	120	21.99	2791.30	2.01	-603.04	0.000000	0.00	0.000
1-2-P	60	120	21.99	2791.30	-2.05	-603.04	0.000000	0.00	0.000
1-3-P	60	120	21.99	2791.30	-8.54	-603.04	0.000000	0.00	0.000
1-4-P	60	120	21.99	2791.30	-25.30	-603.04	0.000000	0.00	0.000
1-5-P	60	120	21.99	2791.30	-32.23	-603.04	0.000000	0.00	0.000
1-6-P	60	120	21.99	2791.30	-34.04	-603.04	0.000000	0.00	0.000
1-7-P	60	120	21.99	2791.30	-24.13	-603.04	0.000000	0.00	0.000
1-8-P	60	120	21.99	2791.30	-8.12	-603.04	0.000000	0.00	0.000
1-9-P	60	120	21.99	2791.30	15.02	-603.04	0.000000	0.00	0.000
1-10-P	60	120	21.99	2791.30	19.79	-603.04	0.000000	0.00	0.000
1-11-P	60	120	21.99	2791.30	21.19	-603.04	0.000000	0.00	0.000
1-12-P	60	120	21.99	2791.30	17.31	-603.04	0.000000	0.00	0.000
1-13-P	60	120	21.99	2791.30	-3.80	-603.04	0.000000	0.00	0.000
1-14-P	60	120	21.99	2791.30	-18.06	-603.04	0.000000	0.00	0.000
1-15-P	60	120	21.99	2791.30	-25.81	-603.04	0.000000	0.00	0.000
1-16-P	60	120	21.99	2791.30	-24.32	-603.04	0.000000	0.00	0.000
1-17-P	60	120	21.99	2791.30	-16.75	-603.04	0.000000	0.00	0.000
1-18-P	60	120	21.99	2791.30	6.37	-603.04	0.000000	0.00	0.000
1-19-P	60	120	21.99	2791.30	18.40	-603.04	0.000000	0.00	0.000
1-20-P	60	120	21.99	1200.00	22.66	603.04	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.16.0.5.005.A.DOCX

COMMESSA	LOTTO	CODIFICA	DOCUMENTO	REV.	FOGLIO
IF2R	2.2.E.ZZ	CL	TR.16.0.5.005	A	95 di 118

Is	B [cm]	H [cm]	Af [cmq]	Aeff [cmq]	M [kNm]	Mpf [kNm]	ε [%]	Sm [mm]	w [mm]
1-21-P	60	120	21.99	2791.30	20.04	-603.04	0.000000	0.00	0.000
1-22-P	60	120	21.99	2791.30	12.95	-603.04	0.000000	0.00	0.000
1-23-P	60	120	21.99	2791.30	-9.34	-603.04	0.000000	0.00	0.000
1-24-P	60	120	21.99	2791.30	-21.42	-603.04	0.000000	0.00	0.000
1-25-P	60	120	21.99	2791.30	-29.00	-603.04	0.000000	0.00	0.000
1-26-P	60	120	21.99	2791.30	-21.42	-603.04	0.000000	0.00	0.000
1-27-P	60	120	21.99	2791.30	-9.34	-603.04	0.000000	0.00	0.000
1-28-P	60	120	21.99	2791.30	12.95	-603.04	0.000000	0.00	0.000
1-29-P	60	120	21.99	2791.30	20.04	-603.04	0.000000	0.00	0.000
1-30-P	60	120	21.99	1200.00	22.66	603.04	0.000000	0.00	0.000
1-31-P	60	120	21.99	2791.30	18.40	-603.04	0.000000	0.00	0.000
1-32-P	60	120	21.99	2791.30	6.37	-603.04	0.000000	0.00	0.000
1-33-P	60	120	21.99	2791.30	-16.75	-603.04	0.000000	0.00	0.000
1-34-P	60	120	21.99	2791.30	-24.32	-603.04	0.000000	0.00	0.000
1-35-P	60	120	21.99	2791.30	-25.81	-603.04	0.000000	0.00	0.000
1-36-P	60	120	21.99	2791.30	-18.06	-603.04	0.000000	0.00	0.000
1-37-P	60	120	21.99	2791.30	-3.80	-603.04	0.000000	0.00	0.000
1-38-P	60	120	21.99	2791.30	17.31	-603.04	0.000000	0.00	0.000
1-39-P	60	120	21.99	2791.30	21.19	-603.04	0.000000	0.00	0.000
1-40-P	60	120	21.99	2791.30	19.79	-603.04	0.000000	0.00	0.000
1-41-P	60	120	21.99	2791.30	15.02	-603.04	0.000000	0.00	0.000
1-42-P	60	120	21.99	2791.30	-8.12	-603.04	0.000000	0.00	0.000
1-43-P	60	120	21.99	2791.30	-24.13	-603.04	0.000000	0.00	0.000
1-44-P	60	120	21.99	2791.30	-34.04	-603.04	0.000000	0.00	0.000
1-45-P	60	120	21.99	2791.30	-32.23	-603.04	0.000000	0.00	0.000
1-46-P	60	120	21.99	2791.30	-25.30	-603.04	0.000000	0.00	0.000
1-47-P	60	120	21.99	2791.30	-8.54	-603.04	0.000000	0.00	0.000
1-48-P	60	120	21.99	2791.30	-2.05	-603.04	0.000000	0.00	0.000
1-49-P	60	120	21.99	2791.30	2.01	-603.04	0.000000	0.00	0.000
2-1-P	60	120	18.85	1200.00	6.05	586.87	0.000000	0.00	0.000
2-2-P	60	120	18.85	1200.00	6.97	586.87	0.000000	0.00	0.000
2-3-P	60	120	18.85	2834.97	8.20	-586.87	0.000000	0.00	0.000
2-4-P	60	120	18.85	2834.97	11.74	-586.87	0.000000	0.00	0.000
2-5-P	60	120	18.85	2834.97	-42.35	-586.87	0.000000	0.00	0.000
2-6-P	60	120	18.85	2834.97	-80.85	-586.87	0.000000	0.00	0.000
2-7-P	60	120	18.85	2834.97	-14.14	-586.87	0.000000	0.00	0.000
2-8-P	60	120	18.85	2834.97	15.77	-586.87	0.000000	0.00	0.000
2-9-P	60	120	18.85	1200.00	16.12	586.87	0.000000	0.00	0.000
2-10-P	60	120	18.85	1200.00	16.35	586.87	0.000000	0.00	0.000
2-11-P	60	120	18.85	1200.00	16.54	586.87	0.000000	0.00	0.000
2-12-P	60	120	18.85	1200.00	16.68	586.87	0.000000	0.00	0.000
2-13-P	60	120	18.85	2834.97	16.55	-586.87	0.000000	0.00	0.000
2-14-P	60	120	18.85	2834.97	6.20	-586.87	0.000000	0.00	0.000
2-15-P	60	120	18.85	2834.97	-64.73	-586.87	0.000000	0.00	0.000
2-16-P	60	120	18.85	2834.97	-51.39	-586.87	0.000000	0.00	0.000
2-17-P	60	120	18.85	2834.97	17.84	-586.87	0.000000	0.00	0.000
2-18-P	60	120	18.85	2834.97	16.35	-586.87	0.000000	0.00	0.000
2-19-P	60	120	18.85	1200.00	16.62	586.87	0.000000	0.00	0.000
2-20-P	60	120	18.85	1200.00	16.57	586.87	0.000000	0.00	0.000
2-21-P	60	120	18.85	1200.00	16.57	586.87	0.000000	0.00	0.000
2-22-P	60	120	18.85	1200.00	16.43	586.87	0.000000	0.00	0.000
2-23-P	60	120	18.85	2834.97	16.88	-586.87	0.000000	0.00	0.000
2-24-P	60	120	18.85	2834.97	-24.95	-586.87	0.000000	0.00	0.000
2-25-P	60	120	18.85	2834.97	-90.67	-586.87	0.000000	0.00	0.000
2-26-P	60	120	18.85	2834.97	-24.95	-586.87	0.000000	0.00	0.000
2-27-P	60	120	18.85	2834.97	16.88	-586.87	0.000000	0.00	0.000
2-28-P	60	120	18.85	1200.00	16.43	586.87	0.000000	0.00	0.000
2-29-P	60	120	18.85	1200.00	16.57	586.87	0.000000	0.00	0.000
2-30-P	60	120	18.85	1200.00	16.57	586.87	0.000000	0.00	0.000
2-31-P	60	120	18.85	1200.00	16.62	586.87	0.000000	0.00	0.000
2-32-P	60	120	18.85	2834.97	16.35	-586.87	0.000000	0.00	0.000
2-33-P	60	120	18.85	2834.97	17.84	-586.87	0.000000	0.00	0.000
2-34-P	60	120	18.85	2834.97	-51.39	-586.87	0.000000	0.00	0.000
2-35-P	60	120	18.85	2834.97	-64.73	-586.87	0.000000	0.00	0.000
2-36-P	60	120	18.85	2834.97	6.20	-586.87	0.000000	0.00	0.000
2-37-P	60	120	18.85	2834.97	16.55	-586.87	0.000000	0.00	0.000
2-38-P	60	120	18.85	1200.00	16.68	586.87	0.000000	0.00	0.000
2-39-P	60	120	18.85	1200.00	16.54	586.87	0.000000	0.00	0.000
2-40-P	60	120	18.85	1200.00	16.35	586.87	0.000000	0.00	0.000
2-41-P	60	120	18.85	1200.00	16.12	586.87	0.000000	0.00	0.000
2-42-P	60	120	18.85	2834.97	15.77	-586.87	0.000000	0.00	0.000
2-43-P	60	120	18.85	2834.97	-14.14	-586.87	0.000000	0.00	0.000
2-44-P	60	120	18.85	2834.97	-80.85	-586.87	0.000000	0.00	0.000
2-45-P	60	120	18.85	2834.97	-42.35	-586.87	0.000000	0.00	0.000
2-46-P	60	120	18.85	2834.97	11.74	-586.87	0.000000	0.00	0.000
2-47-P	60	120	18.85	2834.97	8.20	-586.87	0.000000	0.00	0.000
2-48-P	60	120	18.85	1200.00	6.97	586.87	0.000000	0.00	0.000
2-49-P	60	120	18.85	1200.00	6.05	586.87	0.000000	0.00	0.000
5-1-P	85	120	28.27	3993.47	-13.14	-839.48	0.000000	0.00	0.000
5-2-P	85	120	28.27	3993.47	-18.51	-839.48	0.000000	0.00	0.000
5-3-P	85	120	28.27	3993.47	-23.65	-839.48	0.000000	0.00	0.000

APPALTATORE:

TELESE S.c.a r.l.

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ITINERARIO NAPOLI – BARI
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II LOTTO FUNZIONALE FRASSO TELESINO – VITULANO
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PROGETTO ESECUTIVO

Relazione di calcolo

IF2R.2.2.E.ZZ.CL.TR.16.0.5.005.A.DOCX

COMMESSA

LOTTO

CODIFICA

DOCUMENTO

REV.

FOGLIO

IF2R

2.2.E.ZZ

CL

TR.16.0.5.005

A

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Is	B [cm]	H [cm]	Af [cmq]	Aeff [cmq]	M [kNm]	Mpf [kNm]	ε [%]	Sm [mm]	w [mm]
5-4-P	85	120	28.27	3993.47	-28.26	-839.48	0.000000	0.00	0.000
5-5-P	85	120	28.27	3993.47	-30.02	-839.48	0.000000	0.00	0.000
5-6-P	85	120	28.27	3993.47	-30.68	-839.48	0.000000	0.00	0.000
5-7-P	85	120	28.27	3993.47	-29.79	-839.48	0.000000	0.00	0.000
5-8-P	85	120	28.27	3993.47	-33.17	-839.48	0.000000	0.00	0.000
5-9-P	85	120	28.27	3993.47	-39.40	-839.48	0.000000	0.00	0.000
5-10-P	85	120	28.27	3993.47	-73.75	-839.48	0.000000	0.00	0.000
5-11-P	85	120	28.27	3993.47	-79.55	-839.48	0.000000	0.00	0.000
5-12-P	85	120	28.27	3993.47	-42.53	-839.48	0.000000	0.00	0.000
5-13-P	85	120	28.27	3993.47	-28.14	-839.48	0.000000	0.00	0.000
5-14-P	85	120	28.27	3993.47	-20.99	-839.48	0.000000	0.00	0.000
5-15-P	85	120	28.27	3993.47	-20.19	-839.48	0.000000	0.00	0.000
5-16-P	85	120	28.27	3993.47	-19.55	-839.48	0.000000	0.00	0.000
5-17-P	85	120	28.27	3993.47	-19.01	-839.48	0.000000	0.00	0.000
5-18-P	85	120	28.27	3993.47	-26.34	-839.48	0.000000	0.00	0.000
5-19-P	85	120	28.27	3993.47	-44.93	-839.48	0.000000	0.00	0.000
5-20-P	85	120	28.27	3993.47	-80.61	-839.48	0.000000	0.00	0.000
5-21-P	85	120	28.27	3993.47	-58.72	-839.48	0.000000	0.00	0.000
5-22-P	85	120	28.27	3993.47	-28.36	-839.48	0.000000	0.00	0.000
5-23-P	85	120	28.27	3993.47	-20.49	-839.48	0.000000	0.00	0.000
5-24-P	85	120	28.27	3993.47	-17.30	-839.48	0.000000	0.00	0.000
5-25-P	85	120	28.27	3993.47	-17.22	-839.48	0.000000	0.00	0.000
5-26-P	85	120	28.27	3993.47	-17.30	-839.48	0.000000	0.00	0.000
5-27-P	85	120	28.27	3993.47	-20.49	-839.48	0.000000	0.00	0.000
5-28-P	85	120	28.27	3993.47	-28.36	-839.48	0.000000	0.00	0.000
5-29-P	85	120	28.27	3993.47	-58.72	-839.48	0.000000	0.00	0.000
5-30-P	85	120	28.27	3993.47	-80.61	-839.48	0.000000	0.00	0.000
5-31-P	85	120	28.27	3993.47	-44.93	-839.48	0.000000	0.00	0.000
5-32-P	85	120	28.27	3993.47	-26.34	-839.48	0.000000	0.00	0.000
5-33-P	85	120	28.27	3993.47	-19.01	-839.48	0.000000	0.00	0.000
5-34-P	85	120	28.27	3993.47	-19.55	-839.48	0.000000	0.00	0.000
5-35-P	85	120	28.27	3993.47	-20.19	-839.48	0.000000	0.00	0.000
5-36-P	85	120	28.27	3993.47	-20.99	-839.48	0.000000	0.00	0.000
5-37-P	85	120	28.27	3993.47	-28.14	-839.48	0.000000	0.00	0.000
5-38-P	85	120	28.27	3993.47	-42.53	-839.48	0.000000	0.00	0.000
5-39-P	85	120	28.27	3993.47	-79.55	-839.48	0.000000	0.00	0.000
5-40-P	85	120	28.27	3993.47	-73.75	-839.48	0.000000	0.00	0.000
5-41-P	85	120	28.27	3993.47	-39.40	-839.48	0.000000	0.00	0.000
5-42-P	85	120	28.27	3993.47	-33.17	-839.48	0.000000	0.00	0.000
5-43-P	85	120	28.27	3993.47	-29.79	-839.48	0.000000	0.00	0.000
5-44-P	85	120	28.27	3993.47	-30.68	-839.48	0.000000	0.00	0.000
5-45-P	85	120	28.27	3993.47	-30.02	-839.48	0.000000	0.00	0.000
5-46-P	85	120	28.27	3993.47	-28.26	-839.48	0.000000	0.00	0.000
5-47-P	85	120	28.27	3993.47	-23.65	-839.48	0.000000	0.00	0.000
5-48-P	85	120	28.27	3993.47	-18.51	-839.48	0.000000	0.00	0.000
5-49-P	85	120	28.27	3993.47	-13.14	-839.48	0.000000	0.00	0.000
6-1-P	85	120	28.27	3993.47	-2.73	-839.48	0.000000	0.00	0.000
6-2-P	85	120	28.27	3993.47	-3.32	-839.48	0.000000	0.00	0.000
6-3-P	85	120	28.27	3993.47	-4.38	-839.48	0.000000	0.00	0.000
6-4-P	85	120	28.27	3993.47	-6.02	-839.48	0.000000	0.00	0.000
6-5-P	85	120	28.27	3993.47	-7.21	-839.48	0.000000	0.00	0.000
6-6-P	85	120	28.27	3993.47	-9.85	-839.48	0.000000	0.00	0.000
6-7-P	85	120	28.27	3993.47	-15.45	-839.48	0.000000	0.00	0.000
6-8-P	85	120	28.27	3993.47	-22.45	-839.48	0.000000	0.00	0.000
6-9-P	85	120	28.27	3993.47	-30.32	-839.48	0.000000	0.00	0.000
6-10-P	85	120	28.27	3993.47	-35.28	-839.48	0.000000	0.00	0.000
6-11-P	85	120	28.27	3993.47	-35.67	-839.48	0.000000	0.00	0.000
6-12-P	85	120	28.27	3993.47	-28.90	-839.48	0.000000	0.00	0.000
6-13-P	85	120	28.27	3993.47	-20.67	-839.48	0.000000	0.00	0.000
6-14-P	85	120	28.27	3993.47	-13.12	-839.48	0.000000	0.00	0.000
6-15-P	85	120	28.27	3993.47	-8.75	-839.48	0.000000	0.00	0.000
6-16-P	85	120	28.27	3993.47	-8.55	-839.48	0.000000	0.00	0.000
6-17-P	85	120	28.27	3993.47	-11.30	-839.48	0.000000	0.00	0.000
6-18-P	85	120	28.27	3993.47	-18.50	-839.48	0.000000	0.00	0.000
6-19-P	85	120	28.27	3993.47	-24.84	-839.48	0.000000	0.00	0.000
6-20-P	85	120	28.27	3993.47	-30.37	-839.48	0.000000	0.00	0.000
6-21-P	85	120	28.27	3993.47	-26.45	-839.48	0.000000	0.00	0.000
6-22-P	85	120	28.27	3993.47	-20.15	-839.48	0.000000	0.00	0.000
6-23-P	85	120	28.27	3993.47	-12.32	-839.48	0.000000	0.00	0.000
6-24-P	85	120	28.27	3993.47	-7.20	-839.48	0.000000	0.00	0.000
6-25-P	85	120	28.27	3993.47	-3.52	-839.48	0.000000	0.00	0.000
6-26-P	85	120	28.27	3993.47	-7.20	-839.48	0.000000	0.00	0.000
6-27-P	85	120	28.27	3993.47	-12.32	-839.48	0.000000	0.00	0.000
6-28-P	85	120	28.27	3993.47	-20.15	-839.48	0.000000	0.00	0.000
6-29-P	85	120	28.27	3993.47	-26.45	-839.48	0.000000	0.00	0.000
6-30-P	85	120	28.27	3993.47	-30.37	-839.48	0.000000	0.00	0.000
6-31-P	85	120	28.27	3993.47	-24.84	-839.48	0.000000	0.00	0.000
6-32-P	85	120	28.27	3993.47	-18.50	-839.48	0.000000	0.00	0.000
6-33-P	85	120	28.27	3993.47	-11.30	-839.48	0.000000	0.00	0.000
6-34-P	85	120	28.27	3993.47	-8.55	-839.48	0.000000	0.00	0.000
6-35-P	85	120	28.27	3993.47	-8.75	-839.48	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.16.0.5.005.A.DOCX

COMMESSA	LOTTO	CODIFICA	DOCUMENTO	REV.	FOGLIO
IF2R	2.2.E.ZZ	CL	TR.16.0.5.005	A	97 di 118

Is	B [cm]	H [cm]	Af [cmq]	Aeff [cmq]	M [kNm]	Mpf [kNm]	ε [%]	Sm [mm]	w [mm]
6-36-P	85	120	28.27	3993.47	-13.12	-839.48	0.000000	0.00	0.000
6-37-P	85	120	28.27	3993.47	-20.67	-839.48	0.000000	0.00	0.000
6-38-P	85	120	28.27	3993.47	-28.90	-839.48	0.000000	0.00	0.000
6-39-P	85	120	28.27	3993.47	-35.67	-839.48	0.000000	0.00	0.000
6-40-P	85	120	28.27	3993.47	-35.28	-839.48	0.000000	0.00	0.000
6-41-P	85	120	28.27	3993.47	-30.32	-839.48	0.000000	0.00	0.000
6-42-P	85	120	28.27	3993.47	-22.45	-839.48	0.000000	0.00	0.000
6-43-P	85	120	28.27	3993.47	-15.45	-839.48	0.000000	0.00	0.000
6-44-P	85	120	28.27	3993.47	-9.85	-839.48	0.000000	0.00	0.000
6-45-P	85	120	28.27	3993.47	-7.21	-839.48	0.000000	0.00	0.000
6-46-P	85	120	28.27	3993.47	-6.02	-839.48	0.000000	0.00	0.000
6-47-P	85	120	28.27	3993.47	-4.38	-839.48	0.000000	0.00	0.000
6-48-P	85	120	28.27	3993.47	-3.32	-839.48	0.000000	0.00	0.000
6-49-P	85	120	28.27	3993.47	-2.73	-839.48	0.000000	0.00	0.000
7-1-P	85	120	25.13	4040.06	3.67	-823.32	0.000000	0.00	0.000
7-2-P	85	120	25.13	4040.06	5.50	-823.32	0.000000	0.00	0.000
7-3-P	85	120	25.13	4040.06	-7.67	-823.32	0.000000	0.00	0.000
7-4-P	85	120	25.13	4040.06	-16.52	-823.32	0.000000	0.00	0.000
7-5-P	85	120	25.13	4040.06	-17.37	-823.32	0.000000	0.00	0.000
7-6-P	85	120	25.13	4040.06	-18.94	-823.32	0.000000	0.00	0.000
7-7-P	85	120	25.13	4040.06	-15.81	-823.32	0.000000	0.00	0.000
7-8-P	85	120	25.13	4040.06	-10.65	-823.32	0.000000	0.00	0.000
7-9-P	85	120	25.13	4040.06	3.73	-823.32	0.000000	0.00	0.000
7-10-P	85	120	25.13	4040.06	3.76	-823.32	0.000000	0.00	0.000
7-11-P	85	120	25.13	4040.06	4.64	-823.32	0.000000	0.00	0.000
7-12-P	85	120	25.13	4040.06	6.40	-823.32	0.000000	0.00	0.000
7-13-P	85	120	25.13	4040.06	-10.62	-823.32	0.000000	0.00	0.000
7-14-P	85	120	25.13	4040.06	-16.93	-823.32	0.000000	0.00	0.000
7-15-P	85	120	25.13	4040.06	-16.40	-823.32	0.000000	0.00	0.000
7-16-P	85	120	25.13	4040.06	-14.24	-823.32	0.000000	0.00	0.000
7-17-P	85	120	25.13	4040.06	-13.49	-823.32	0.000000	0.00	0.000
7-18-P	85	120	25.13	4040.06	5.45	-823.32	0.000000	0.00	0.000
7-19-P	85	120	25.13	4040.06	7.45	-823.32	0.000000	0.00	0.000
7-20-P	85	120	25.13	4040.06	7.82	-823.32	0.000000	0.00	0.000
7-21-P	85	120	25.13	4040.06	8.30	-823.32	0.000000	0.00	0.000
7-22-P	85	120	25.13	4040.06	8.38	-823.32	0.000000	0.00	0.000
7-23-P	85	120	25.13	4040.06	-9.88	-823.32	0.000000	0.00	0.000
7-24-P	85	120	25.13	4040.06	-11.50	-823.32	0.000000	0.00	0.000
7-25-P	85	120	25.13	4040.06	-14.97	-823.32	0.000000	0.00	0.000
7-26-P	85	120	25.13	4040.06	-11.50	-823.32	0.000000	0.00	0.000
7-27-P	85	120	25.13	4040.06	-9.88	-823.32	0.000000	0.00	0.000
7-28-P	85	120	25.13	4040.06	8.38	-823.32	0.000000	0.00	0.000
7-29-P	85	120	25.13	4040.06	8.30	-823.32	0.000000	0.00	0.000
7-30-P	85	120	25.13	4040.06	7.82	-823.32	0.000000	0.00	0.000
7-31-P	85	120	25.13	4040.06	7.45	-823.32	0.000000	0.00	0.000
7-32-P	85	120	25.13	4040.06	5.45	-823.32	0.000000	0.00	0.000
7-33-P	85	120	25.13	4040.06	-13.49	-823.32	0.000000	0.00	0.000
7-34-P	85	120	25.13	4040.06	-14.24	-823.32	0.000000	0.00	0.000
7-35-P	85	120	25.13	4040.06	-16.40	-823.32	0.000000	0.00	0.000
7-36-P	85	120	25.13	4040.06	-16.93	-823.32	0.000000	0.00	0.000
7-37-P	85	120	25.13	4040.06	-10.62	-823.32	0.000000	0.00	0.000
7-38-P	85	120	25.13	4040.06	6.40	-823.32	0.000000	0.00	0.000
7-39-P	85	120	25.13	4040.06	4.64	-823.32	0.000000	0.00	0.000
7-40-P	85	120	25.13	4040.06	3.76	-823.32	0.000000	0.00	0.000
7-41-P	85	120	25.13	4040.06	3.73	-823.32	0.000000	0.00	0.000
7-42-P	85	120	25.13	4040.06	-10.65	-823.32	0.000000	0.00	0.000
7-43-P	85	120	25.13	4040.06	-15.81	-823.32	0.000000	0.00	0.000
7-44-P	85	120	25.13	4040.06	-18.94	-823.32	0.000000	0.00	0.000
7-45-P	85	120	25.13	4040.06	-17.37	-823.32	0.000000	0.00	0.000
7-46-P	85	120	25.13	4040.06	-16.52	-823.32	0.000000	0.00	0.000
7-47-P	85	120	25.13	4040.06	-7.67	-823.32	0.000000	0.00	0.000
7-48-P	85	120	25.13	4040.06	5.50	-823.32	0.000000	0.00	0.000
7-49-P	85	120	25.13	4040.06	3.67	-823.32	0.000000	0.00	0.000
8-1-P	85	120	28.27	3993.47	0.99	-839.48	0.000000	0.00	0.000
8-2-P	85	120	28.27	3993.47	-3.65	-839.48	0.000000	0.00	0.000
8-3-P	85	120	28.27	3993.47	-8.85	-839.48	0.000000	0.00	0.000
8-4-P	85	120	28.27	3993.47	-17.10	-839.48	0.000000	0.00	0.000
8-5-P	85	120	28.27	3993.47	-31.31	-839.48	0.000000	0.00	0.000
8-6-P	85	120	28.27	3993.47	-44.90	-839.48	0.000000	0.00	0.000
8-7-P	85	120	28.27	3993.47	-21.53	-839.48	0.000000	0.00	0.000
8-8-P	85	120	28.27	3993.47	-11.17	-839.48	0.000000	0.00	0.000
8-9-P	85	120	28.27	3993.47	-2.63	-839.48	0.000000	0.00	0.000
8-10-P	85	120	28.27	3993.47	3.45	-839.48	0.000000	0.00	0.000
8-11-P	85	120	28.27	3993.47	4.46	-839.48	0.000000	0.00	0.000
8-12-P	85	120	28.27	3993.47	3.23	-839.48	0.000000	0.00	0.000
8-13-P	85	120	28.27	3993.47	-9.65	-839.48	0.000000	0.00	0.000
8-14-P	85	120	28.27	3993.47	-17.58	-839.48	0.000000	0.00	0.000
8-15-P	85	120	28.27	3993.47	-36.87	-839.48	0.000000	0.00	0.000
8-16-P	85	120	28.27	3993.47	-31.64	-839.48	0.000000	0.00	0.000
8-17-P	85	120	28.27	3993.47	-13.55	-839.48	0.000000	0.00	0.000
8-18-P	85	120	28.27	3993.47	-4.95	-839.48	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.16.0.5.005.A.DOCX

COMMESSA	LOTTO	CODIFICA	DOCUMENTO	REV.	FOGLIO
IF2R	2.2.E.ZZ	CL	TR.16.0.5.005	A	98 di 118

Is	B [cm]	H [cm]	Af [cmq]	Aeff [cmq]	M [kNm]	Mpf [kNm]	ε [%]	Sm [mm]	w [mm]
8-19-P	85	120	28.27	3993.47	4.92	-839.48	0.000000	0.00	0.000
8-20-P	85	120	28.27	1700.00	8.93	839.48	0.000000	0.00	0.000
8-21-P	85	120	28.27	3993.47	6.99	-839.48	0.000000	0.00	0.000
8-22-P	85	120	28.27	3993.47	4.88	-839.48	0.000000	0.00	0.000
8-23-P	85	120	28.27	3993.47	-9.52	-839.48	0.000000	0.00	0.000
8-24-P	85	120	28.27	3993.47	-19.55	-839.48	0.000000	0.00	0.000
8-25-P	85	120	28.27	3993.47	-43.10	-839.48	0.000000	0.00	0.000
8-26-P	85	120	28.27	3993.47	-19.55	-839.48	0.000000	0.00	0.000
8-27-P	85	120	28.27	3993.47	-9.52	-839.48	0.000000	0.00	0.000
8-28-P	85	120	28.27	3993.47	4.88	-839.48	0.000000	0.00	0.000
8-29-P	85	120	28.27	3993.47	6.99	-839.48	0.000000	0.00	0.000
8-30-P	85	120	28.27	1700.00	8.93	839.48	0.000000	0.00	0.000
8-31-P	85	120	28.27	3993.47	4.92	-839.48	0.000000	0.00	0.000
8-32-P	85	120	28.27	3993.47	-4.95	-839.48	0.000000	0.00	0.000
8-33-P	85	120	28.27	3993.47	-13.55	-839.48	0.000000	0.00	0.000
8-34-P	85	120	28.27	3993.47	-31.64	-839.48	0.000000	0.00	0.000
8-35-P	85	120	28.27	3993.47	-36.87	-839.48	0.000000	0.00	0.000
8-36-P	85	120	28.27	3993.47	-17.58	-839.48	0.000000	0.00	0.000
8-37-P	85	120	28.27	3993.47	-9.65	-839.48	0.000000	0.00	0.000
8-38-P	85	120	28.27	3993.47	3.23	-839.48	0.000000	0.00	0.000
8-39-P	85	120	28.27	3993.47	4.46	-839.48	0.000000	0.00	0.000
8-40-P	85	120	28.27	3993.47	3.45	-839.48	0.000000	0.00	0.000
8-41-P	85	120	28.27	3993.47	-2.63	-839.48	0.000000	0.00	0.000
8-42-P	85	120	28.27	3993.47	-11.17	-839.48	0.000000	0.00	0.000
8-43-P	85	120	28.27	3993.47	-21.53	-839.48	0.000000	0.00	0.000
8-44-P	85	120	28.27	3993.47	-44.90	-839.48	0.000000	0.00	0.000
8-45-P	85	120	28.27	3993.47	-31.31	-839.48	0.000000	0.00	0.000
8-46-P	85	120	28.27	3993.47	-17.10	-839.48	0.000000	0.00	0.000
8-47-P	85	120	28.27	3993.47	-8.85	-839.48	0.000000	0.00	0.000
8-48-P	85	120	28.27	3993.47	-3.65	-839.48	0.000000	0.00	0.000
8-49-P	85	120	28.27	3993.47	0.99	-839.48	0.000000	0.00	0.000
9-1-S	100	120	31.42	4724.96	-6.97	-978.12	0.000000	0.00	0.000
9-2-S	100	120	31.42	4724.96	-12.17	-978.12	0.000000	0.00	0.000
9-3-S	100	120	31.42	4724.96	-16.98	-978.12	0.000000	0.00	0.000
9-4-S	100	120	31.42	4724.96	-20.62	-978.12	0.000000	0.00	0.000
9-5-S	100	120	31.42	4724.96	18.14	-978.12	0.000000	0.00	0.000
9-6-S	100	120	31.42	2000.00	51.93	978.12	0.000000	0.00	0.000
9-7-S	100	120	31.42	4724.96	-260.13	-978.12	0.000000	0.00	0.000
9-8-S	100	120	31.42	4724.96	-197.90	-978.12	0.000000	0.00	0.000
9-9-S	100	120	31.42	4724.96	-151.44	-978.12	0.000000	0.00	0.000
9-10-S	100	120	31.42	4724.96	-111.51	-978.12	0.000000	0.00	0.000
9-11-S	100	120	31.42	4724.96	-74.05	-978.12	0.000000	0.00	0.000
9-12-S	100	120	31.42	4724.96	-44.38	-978.12	0.000000	0.00	0.000
9-13-S	100	120	31.42	4724.96	-20.82	-978.12	0.000000	0.00	0.000
9-14-S	100	120	31.42	4724.96	8.17	-978.12	0.000000	0.00	0.000
9-15-S	100	120	31.42	4724.96	13.90	-978.12	0.000000	0.00	0.000
9-16-S	100	120	31.42	4724.96	17.88	-978.12	0.000000	0.00	0.000
9-17-S	100	120	31.42	4724.96	14.69	-978.12	0.000000	0.00	0.000
9-18-S	100	120	31.42	4724.96	11.94	-978.12	0.000000	0.00	0.000
9-19-S	100	120	31.42	4724.96	6.89	-978.12	0.000000	0.00	0.000
9-20-S	100	120	31.42	4724.96	5.05	-978.12	0.000000	0.00	0.000
9-21-S	100	120	31.42	4724.96	4.69	-978.12	0.000000	0.00	0.000
10-1-S	100	120	31.42	4724.96	11.30	-978.12	0.000000	0.00	0.000
10-2-S	100	120	31.42	4724.96	20.70	-978.12	0.000000	0.00	0.000
10-3-S	100	120	31.42	4724.96	-16.50	-978.12	0.000000	0.00	0.000
10-4-S	100	120	31.42	4724.96	-81.12	-978.12	0.000000	0.00	0.000
10-5-S	100	120	31.42	4724.96	-53.69	-978.12	0.000000	0.00	0.000
10-6-S	100	120	31.42	4724.96	43.97	-978.12	0.000000	0.00	0.000
10-7-S	100	120	31.42	4724.96	-214.19	-978.12	0.000000	0.00	0.000
10-8-S	100	120	31.42	4724.96	-183.69	-978.12	0.000000	0.00	0.000
10-9-S	100	120	31.42	4724.96	-150.10	-978.12	0.000000	0.00	0.000
10-10-S	100	120	31.42	4724.96	-117.93	-978.12	0.000000	0.00	0.000
10-11-S	100	120	31.42	4724.96	-85.53	-978.12	0.000000	0.00	0.000
10-12-S	100	120	31.42	4724.96	-51.98	-978.12	0.000000	0.00	0.000
10-13-S	100	120	31.42	4724.96	-21.47	-978.12	0.000000	0.00	0.000
10-14-S	100	120	31.42	4724.96	8.70	-978.12	0.000000	0.00	0.000
10-15-S	100	120	31.42	4724.96	29.20	-978.12	0.000000	0.00	0.000
10-16-S	100	120	31.42	4724.96	48.82	-978.12	0.000000	0.00	0.000
10-17-S	100	120	31.42	4724.96	11.65	-978.12	0.000000	0.00	0.000
10-18-S	100	120	31.42	4724.96	-29.02	-978.12	0.000000	0.00	0.000
10-19-S	100	120	31.42	4724.96	-29.54	-978.12	0.000000	0.00	0.000
10-20-S	100	120	31.42	4724.96	-20.32	-978.12	0.000000	0.00	0.000
10-21-S	100	120	31.42	4724.96	-5.57	-978.12	0.000000	0.00	0.000
11-1-S	100	120	31.42	4724.96	-8.23	-978.12	0.000000	0.00	0.000
11-2-S	100	120	31.42	4724.96	-7.20	-978.12	0.000000	0.00	0.000
11-3-S	100	120	31.42	4724.96	-3.55	-978.12	0.000000	0.00	0.000
11-4-S	100	120	31.42	4724.96	12.57	-978.12	0.000000	0.00	0.000
11-5-S	100	120	31.42	2000.00	31.00	978.12	0.000000	0.00	0.000
11-6-S	100	120	31.42	2000.00	52.06	978.12	0.000000	0.00	0.000
11-7-S	100	120	31.42	4724.96	-77.57	-978.12	0.000000	0.00	0.000
11-8-S	100	120	31.42	4724.96	-91.27	-978.12	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.16.0.5.005.A.DOCX

COMMESSA

LOTTO

CODIFICA

DOCUMENTO

REV.

FOGLIO

IF2R

2.2.E.ZZ

CL

TR.16.0.5.005

A

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Is	B [cm]	H [cm]	Af [cmq]	Aeff [cmq]	M [kNm]	Mpf [kNm]	ε [%]	Sm [mm]	w [mm]
11-9-S	100	120	31.42	4724.96	-192.69	-978.12	0.000000	0.00	0.000
11-10-S	100	120	31.42	4724.96	-165.91	-978.12	0.000000	0.00	0.000
11-11-S	100	120	31.42	4724.96	-127.96	-978.12	0.000000	0.00	0.000
11-12-S	100	120	31.42	4724.96	-79.79	-978.12	0.000000	0.00	0.000
11-13-S	100	120	31.42	4724.96	-42.81	-978.12	0.000000	0.00	0.000
11-14-S	100	120	31.42	4724.96	-17.82	-978.12	0.000000	0.00	0.000
11-15-S	100	120	31.42	4724.96	-6.11	-978.12	0.000000	0.00	0.000
11-16-S	100	120	31.42	4724.96	8.33	-978.12	0.000000	0.00	0.000
11-17-S	100	120	31.42	4724.96	9.34	-978.12	0.000000	0.00	0.000
11-18-S	100	120	31.42	4724.96	9.56	-978.12	0.000000	0.00	0.000
11-19-S	100	120	31.42	4724.96	7.38	-978.12	0.000000	0.00	0.000
11-20-S	100	120	31.42	4724.96	5.32	-978.12	0.000000	0.00	0.000
11-21-S	100	120	31.42	4724.96	3.35	-978.12	0.000000	0.00	0.000
12-1-S	100	120	31.42	4724.96	13.89	-978.12	0.000000	0.00	0.000
12-2-S	100	120	31.42	4724.96	22.17	-978.12	0.000000	0.00	0.000
12-3-S	100	120	31.42	4724.96	-18.90	-978.12	0.000000	0.00	0.000
12-4-S	100	120	31.42	4724.96	-94.69	-978.12	0.000000	0.00	0.000
12-5-S	100	120	31.42	4724.96	-59.70	-978.12	0.000000	0.00	0.000
12-6-S	100	120	31.42	4724.96	41.47	-978.12	0.000000	0.00	0.000
12-7-S	100	120	31.42	4724.96	-182.47	-978.12	0.000000	0.00	0.000
12-8-S	100	120	31.42	4724.96	-152.19	-978.12	0.000000	0.00	0.000
12-9-S	100	120	31.42	4724.96	-130.69	-978.12	0.000000	0.00	0.000
12-10-S	100	120	31.42	4724.96	-106.23	-978.12	0.000000	0.00	0.000
12-11-S	100	120	31.42	4724.96	-80.65	-978.12	0.000000	0.00	0.000
12-12-S	100	120	31.42	4724.96	-51.61	-978.12	0.000000	0.00	0.000
12-13-S	100	120	31.42	4724.96	-23.20	-978.12	0.000000	0.00	0.000
12-14-S	100	120	31.42	4724.96	7.79	-978.12	0.000000	0.00	0.000
12-15-S	100	120	31.42	4724.96	30.44	-978.12	0.000000	0.00	0.000
12-16-S	100	120	31.42	4724.96	51.90	-978.12	0.000000	0.00	0.000
12-17-S	100	120	31.42	4724.96	11.69	-978.12	0.000000	0.00	0.000
12-18-S	100	120	31.42	4724.96	-35.38	-978.12	0.000000	0.00	0.000
12-19-S	100	120	31.42	4724.96	-34.28	-978.12	0.000000	0.00	0.000
12-20-S	100	120	31.42	4724.96	-23.34	-978.12	0.000000	0.00	0.000
12-21-S	100	120	31.42	4724.96	-6.52	-978.12	0.000000	0.00	0.000
13-1-S	100	120	31.42	4724.96	-7.52	-978.12	0.000000	0.00	0.000
13-2-S	100	120	31.42	4724.96	-11.09	-978.12	0.000000	0.00	0.000
13-3-S	100	120	31.42	4724.96	-10.92	-978.12	0.000000	0.00	0.000
13-4-S	100	120	31.42	4724.96	10.44	-978.12	0.000000	0.00	0.000
13-5-S	100	120	31.42	2000.00	27.42	978.12	0.000000	0.00	0.000
13-6-S	100	120	31.42	2000.00	53.99	978.12	0.000000	0.00	0.000
13-7-S	100	120	31.42	4724.96	-79.86	-978.12	0.000000	0.00	0.000
13-8-S	100	120	31.42	4724.96	-87.48	-978.12	0.000000	0.00	0.000
13-9-S	100	120	31.42	4724.96	-173.60	-978.12	0.000000	0.00	0.000
13-10-S	100	120	31.42	4724.96	-149.97	-978.12	0.000000	0.00	0.000
13-11-S	100	120	31.42	4724.96	-116.27	-978.12	0.000000	0.00	0.000
13-12-S	100	120	31.42	4724.96	-72.83	-978.12	0.000000	0.00	0.000
13-13-S	100	120	31.42	4724.96	-38.78	-978.12	0.000000	0.00	0.000
13-14-S	100	120	31.42	4724.96	-14.96	-978.12	0.000000	0.00	0.000
13-15-S	100	120	31.42	4724.96	-5.26	-978.12	0.000000	0.00	0.000
13-16-S	100	120	31.42	4724.96	6.54	-978.12	0.000000	0.00	0.000
13-17-S	100	120	31.42	4724.96	9.15	-978.12	0.000000	0.00	0.000
13-18-S	100	120	31.42	4724.96	10.03	-978.12	0.000000	0.00	0.000
13-19-S	100	120	31.42	4724.96	6.94	-978.12	0.000000	0.00	0.000
13-20-S	100	120	31.42	4724.96	4.80	-978.12	0.000000	0.00	0.000
13-21-S	100	120	31.42	4724.96	3.39	-978.12	0.000000	0.00	0.000
14-1-S	100	120	34.56	4680.19	7.72	-994.28	0.000000	0.00	0.000
14-2-S	100	120	34.56	4680.19	-12.96	-994.28	0.000000	0.00	0.000
14-3-S	100	120	34.56	4680.19	-16.76	-994.28	0.000000	0.00	0.000
14-4-S	100	120	34.56	4680.19	-50.40	-994.28	0.000000	0.00	0.000
14-5-S	100	120	34.56	4680.19	-30.10	-994.28	0.000000	0.00	0.000
14-6-S	100	120	34.56	4680.19	48.39	-994.28	0.000000	0.00	0.000
14-7-S	100	120	34.56	4680.19	-145.65	-994.28	0.000000	0.00	0.000
14-8-S	100	120	34.56	4680.19	-139.21	-994.28	0.000000	0.00	0.000
14-9-S	100	120	34.56	4680.19	-135.00	-994.28	0.000000	0.00	0.000
14-10-S	100	120	34.56	4680.19	-112.74	-994.28	0.000000	0.00	0.000
14-11-S	100	120	34.56	4680.19	-87.58	-994.28	0.000000	0.00	0.000
14-12-S	100	120	34.56	4680.19	-55.86	-994.28	0.000000	0.00	0.000
14-13-S	100	120	34.56	4680.19	-27.70	-994.28	0.000000	0.00	0.000
14-14-S	100	120	34.56	4680.19	-7.98	-994.28	0.000000	0.00	0.000
14-15-S	100	120	34.56	4680.19	17.71	-994.28	0.000000	0.00	0.000
14-16-S	100	120	34.56	4680.19	29.96	-994.28	0.000000	0.00	0.000
14-17-S	100	120	34.56	4680.19	10.90	-994.28	0.000000	0.00	0.000
14-18-S	100	120	34.56	4680.19	-19.81	-994.28	0.000000	0.00	0.000
14-19-S	100	120	34.56	4680.19	-18.25	-994.28	0.000000	0.00	0.000
14-20-S	100	120	34.56	4680.19	-12.37	-994.28	0.000000	0.00	0.000
14-21-S	100	120	34.56	4680.19	-3.92	-994.28	0.000000	0.00	0.000
15-1-S	100	120	31.42	4724.96	7.72	-978.12	0.000000	0.00	0.000
15-2-S	100	120	31.42	4724.96	-12.96	-978.12	0.000000	0.00	0.000
15-3-S	100	120	31.42	4724.96	-16.76	-978.12	0.000000	0.00	0.000
15-4-S	100	120	31.42	4724.96	-50.40	-978.12	0.000000	0.00	0.000
15-5-S	100	120	31.42	4724.96	-30.10	-978.12	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.16.0.5.005.A.DOCX

COMMESSA	LOTTO	CODIFICA	DOCUMENTO	REV.	FOGLIO
IF2R	2.2.E.ZZ	CL	TR.16.0.5.005	A	100 di 118

Is	B [cm]	H [cm]	Af [cmq]	Aeff [cmq]	M [kNm]	Mpf [kNm]	ε [%]	Sm [mm]	w [mm]
15-6-S	100	120	31.42	4724.96	48.39	-978.12	0.000000	0.00	0.000
15-7-S	100	120	31.42	4724.96	-145.65	-978.12	0.000000	0.00	0.000
15-8-S	100	120	31.42	4724.96	-139.21	-978.12	0.000000	0.00	0.000
15-9-S	100	120	31.42	4724.96	-135.00	-978.12	0.000000	0.00	0.000
15-10-S	100	120	31.42	4724.96	-112.74	-978.12	0.000000	0.00	0.000
15-11-S	100	120	31.42	4724.96	-87.58	-978.12	0.000000	0.00	0.000
15-12-S	100	120	31.42	4724.96	-55.86	-978.12	0.000000	0.00	0.000
15-13-S	100	120	31.42	4724.96	-27.70	-978.12	0.000000	0.00	0.000
15-14-S	100	120	31.42	4724.96	-7.98	-978.12	0.000000	0.00	0.000
15-15-S	100	120	31.42	4724.96	17.71	-978.12	0.000000	0.00	0.000
15-16-S	100	120	31.42	4724.96	29.96	-978.12	0.000000	0.00	0.000
15-17-S	100	120	31.42	4724.96	10.90	-978.12	0.000000	0.00	0.000
15-18-S	100	120	31.42	4724.96	-19.81	-978.12	0.000000	0.00	0.000
15-19-S	100	120	31.42	4724.96	-18.25	-978.12	0.000000	0.00	0.000
15-20-S	100	120	31.42	4724.96	-12.37	-978.12	0.000000	0.00	0.000
15-21-S	100	120	31.42	4724.96	-3.92	-978.12	0.000000	0.00	0.000
16-1-S	100	120	31.42	4724.96	-7.52	-978.12	0.000000	0.00	0.000
16-2-S	100	120	31.42	4724.96	-11.09	-978.12	0.000000	0.00	0.000
16-3-S	100	120	31.42	4724.96	-10.92	-978.12	0.000000	0.00	0.000
16-4-S	100	120	31.42	4724.96	10.44	-978.12	0.000000	0.00	0.000
16-5-S	100	120	31.42	2000.00	27.42	978.12	0.000000	0.00	0.000
16-6-S	100	120	31.42	2000.00	53.99	978.12	0.000000	0.00	0.000
16-7-S	100	120	31.42	4724.96	-79.86	-978.12	0.000000	0.00	0.000
16-8-S	100	120	31.42	4724.96	-87.48	-978.12	0.000000	0.00	0.000
16-9-S	100	120	31.42	4724.96	-173.60	-978.12	0.000000	0.00	0.000
16-10-S	100	120	31.42	4724.96	-149.97	-978.12	0.000000	0.00	0.000
16-11-S	100	120	31.42	4724.96	-116.27	-978.12	0.000000	0.00	0.000
16-12-S	100	120	31.42	4724.96	-72.83	-978.12	0.000000	0.00	0.000
16-13-S	100	120	31.42	4724.96	-38.78	-978.12	0.000000	0.00	0.000
16-14-S	100	120	31.42	4724.96	-14.96	-978.12	0.000000	0.00	0.000
16-15-S	100	120	31.42	4724.96	-5.26	-978.12	0.000000	0.00	0.000
16-16-S	100	120	31.42	4724.96	6.54	-978.12	0.000000	0.00	0.000
16-17-S	100	120	31.42	4724.96	9.15	-978.12	0.000000	0.00	0.000
16-18-S	100	120	31.42	4724.96	10.03	-978.12	0.000000	0.00	0.000
16-19-S	100	120	31.42	4724.96	6.94	-978.12	0.000000	0.00	0.000
16-20-S	100	120	31.42	4724.96	4.80	-978.12	0.000000	0.00	0.000
16-21-S	100	120	31.42	4724.96	3.39	-978.12	0.000000	0.00	0.000
17-1-S	100	120	31.42	4724.96	13.89	-978.12	0.000000	0.00	0.000
17-2-S	100	120	31.42	4724.96	22.17	-978.12	0.000000	0.00	0.000
17-3-S	100	120	31.42	4724.96	-18.90	-978.12	0.000000	0.00	0.000
17-4-S	100	120	31.42	4724.96	-94.69	-978.12	0.000000	0.00	0.000
17-5-S	100	120	31.42	4724.96	-59.70	-978.12	0.000000	0.00	0.000
17-6-S	100	120	31.42	4724.96	41.47	-978.12	0.000000	0.00	0.000
17-7-S	100	120	31.42	4724.96	-182.47	-978.12	0.000000	0.00	0.000
17-8-S	100	120	31.42	4724.96	-152.19	-978.12	0.000000	0.00	0.000
17-9-S	100	120	31.42	4724.96	-130.69	-978.12	0.000000	0.00	0.000
17-10-S	100	120	31.42	4724.96	-106.23	-978.12	0.000000	0.00	0.000
17-11-S	100	120	31.42	4724.96	-80.65	-978.12	0.000000	0.00	0.000
17-12-S	100	120	31.42	4724.96	-51.61	-978.12	0.000000	0.00	0.000
17-13-S	100	120	31.42	4724.96	-23.20	-978.12	0.000000	0.00	0.000
17-14-S	100	120	31.42	4724.96	7.79	-978.12	0.000000	0.00	0.000
17-15-S	100	120	31.42	4724.96	30.44	-978.12	0.000000	0.00	0.000
17-16-S	100	120	31.42	4724.96	51.90	-978.12	0.000000	0.00	0.000
17-17-S	100	120	31.42	4724.96	11.69	-978.12	0.000000	0.00	0.000
17-18-S	100	120	31.42	4724.96	-35.38	-978.12	0.000000	0.00	0.000
17-19-S	100	120	31.42	4724.96	-34.28	-978.12	0.000000	0.00	0.000
17-20-S	100	120	31.42	4724.96	-23.34	-978.12	0.000000	0.00	0.000
17-21-S	100	120	31.42	4724.96	-6.52	-978.12	0.000000	0.00	0.000
18-1-S	100	120	31.42	4724.96	-8.23	-978.12	0.000000	0.00	0.000
18-2-S	100	120	31.42	4724.96	-7.20	-978.12	0.000000	0.00	0.000
18-3-S	100	120	31.42	4724.96	-3.55	-978.12	0.000000	0.00	0.000
18-4-S	100	120	31.42	4724.96	12.57	-978.12	0.000000	0.00	0.000
18-5-S	100	120	31.42	2000.00	31.00	978.12	0.000000	0.00	0.000
18-6-S	100	120	31.42	2000.00	52.06	978.12	0.000000	0.00	0.000
18-7-S	100	120	31.42	4724.96	-77.57	-978.12	0.000000	0.00	0.000
18-8-S	100	120	31.42	4724.96	-91.27	-978.12	0.000000	0.00	0.000
18-9-S	100	120	31.42	4724.96	-192.69	-978.12	0.000000	0.00	0.000
18-10-S	100	120	31.42	4724.96	-165.91	-978.12	0.000000	0.00	0.000
18-11-S	100	120	31.42	4724.96	-127.96	-978.12	0.000000	0.00	0.000
18-12-S	100	120	31.42	4724.96	-79.79	-978.12	0.000000	0.00	0.000
18-13-S	100	120	31.42	4724.96	-42.81	-978.12	0.000000	0.00	0.000
18-14-S	100	120	31.42	4724.96	-17.82	-978.12	0.000000	0.00	0.000
18-15-S	100	120	31.42	4724.96	-6.11	-978.12	0.000000	0.00	0.000
18-16-S	100	120	31.42	4724.96	8.33	-978.12	0.000000	0.00	0.000
18-17-S	100	120	31.42	4724.96	9.34	-978.12	0.000000	0.00	0.000
18-18-S	100	120	31.42	4724.96	9.56	-978.12	0.000000	0.00	0.000
18-19-S	100	120	31.42	4724.96	7.38	-978.12	0.000000	0.00	0.000
18-20-S	100	120	31.42	4724.96	5.32	-978.12	0.000000	0.00	0.000
18-21-S	100	120	31.42	4724.96	3.35	-978.12	0.000000	0.00	0.000
19-1-S	100	120	31.42	4724.96	11.30	-978.12	0.000000	0.00	0.000
19-2-S	100	120	31.42	4724.96	20.70	-978.12	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.16.0.5.005.A.DOCX

COMMESSA	LOTTO	CODIFICA	DOCUMENTO	REV.	FOGLIO
IF2R	2.2.E.ZZ	CL	TR.16.0.5.005	A	101 di 118

Is	B [cm]	H [cm]	Af [cmq]	Aeff [cmq]	M [kNm]	Mpf [kNm]	ε [%]	Sm [mm]	w [mm]
19-3-S	100	120	31.42	4724.96	-16.50	-978.12	0.000000	0.00	0.000
19-4-S	100	120	31.42	4724.96	-81.12	-978.12	0.000000	0.00	0.000
19-5-S	100	120	31.42	4724.96	-53.69	-978.12	0.000000	0.00	0.000
19-6-S	100	120	31.42	4724.96	43.97	-978.12	0.000000	0.00	0.000
19-7-S	100	120	31.42	4724.96	-214.19	-978.12	0.000000	0.00	0.000
19-8-S	100	120	31.42	4724.96	-183.69	-978.12	0.000000	0.00	0.000
19-9-S	100	120	31.42	4724.96	-150.10	-978.12	0.000000	0.00	0.000
19-10-S	100	120	31.42	4724.96	-117.93	-978.12	0.000000	0.00	0.000
19-11-S	100	120	31.42	4724.96	-85.53	-978.12	0.000000	0.00	0.000
19-12-S	100	120	31.42	4724.96	-51.98	-978.12	0.000000	0.00	0.000
19-13-S	100	120	31.42	4724.96	-21.47	-978.12	0.000000	0.00	0.000
19-14-S	100	120	31.42	4724.96	8.70	-978.12	0.000000	0.00	0.000
19-15-S	100	120	31.42	4724.96	29.20	-978.12	0.000000	0.00	0.000
19-16-S	100	120	31.42	4724.96	48.82	-978.12	0.000000	0.00	0.000
19-17-S	100	120	31.42	4724.96	11.65	-978.12	0.000000	0.00	0.000
19-18-S	100	120	31.42	4724.96	-29.02	-978.12	0.000000	0.00	0.000
19-19-S	100	120	31.42	4724.96	-29.54	-978.12	0.000000	0.00	0.000
19-20-S	100	120	31.42	4724.96	-20.32	-978.12	0.000000	0.00	0.000
19-21-S	100	120	31.42	4724.96	-5.57	-978.12	0.000000	0.00	0.000
20-1-S	100	120	31.42	4724.96	-6.97	-978.12	0.000000	0.00	0.000
20-2-S	100	120	31.42	4724.96	-12.17	-978.12	0.000000	0.00	0.000
20-3-S	100	120	31.42	4724.96	-16.98	-978.12	0.000000	0.00	0.000
20-4-S	100	120	31.42	4724.96	-20.62	-978.12	0.000000	0.00	0.000
20-5-S	100	120	31.42	4724.96	18.14	-978.12	0.000000	0.00	0.000
20-6-S	100	120	31.42	2000.00	51.93	978.12	0.000000	0.00	0.000
20-7-S	100	120	31.42	4724.96	-260.13	-978.12	0.000000	0.00	0.000
20-8-S	100	120	31.42	4724.96	-197.90	-978.12	0.000000	0.00	0.000
20-9-S	100	120	31.42	4724.96	-151.44	-978.12	0.000000	0.00	0.000
20-10-S	100	120	31.42	4724.96	-111.51	-978.12	0.000000	0.00	0.000
20-11-S	100	120	31.42	4724.96	-74.05	-978.12	0.000000	0.00	0.000
20-12-S	100	120	31.42	4724.96	-44.38	-978.12	0.000000	0.00	0.000
20-13-S	100	120	31.42	4724.96	-20.82	-978.12	0.000000	0.00	0.000
20-14-S	100	120	31.42	4724.96	8.17	-978.12	0.000000	0.00	0.000
20-15-S	100	120	31.42	4724.96	13.90	-978.12	0.000000	0.00	0.000
20-16-S	100	120	31.42	4724.96	17.88	-978.12	0.000000	0.00	0.000
20-17-S	100	120	31.42	4724.96	14.69	-978.12	0.000000	0.00	0.000
20-18-S	100	120	31.42	4724.96	11.94	-978.12	0.000000	0.00	0.000
20-19-S	100	120	31.42	4724.96	6.89	-978.12	0.000000	0.00	0.000
20-20-S	100	120	31.42	4724.96	5.05	-978.12	0.000000	0.00	0.000
20-21-S	100	120	31.42	4724.96	4.69	-978.12	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	41.81	3628.18	225.99	-244.28	168.94	0.000000	0.00	0.00
2	1	34.56	3617.50	246.94	-244.28	580.23	0.000000	0.00	0.00
3	1	28.27	2833.68	275.45	-244.28	991.53	0.000000	0.00	0.00

Combinazioni SLEF

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	---	---	0.000 (6)
2	100	70	0.00	0.00	0.00	0.00	---	---	0.000 (6)
3	100	70	0.00	0.00	0.00	0.00	0.000037	---	0.000 (6)
4	100	70	0.00	0.00	0.00	0.00	0.000045	---	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	0.000060	---	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	0.000083	---	0.000 (6)
10	100	70	0.00	0.00	0.00	0.00	0.000090	---	0.000 (6)
11	100	70	0.00	0.00	0.00	0.00	0.000098	---	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	0.000121	---	0.000 (6)

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PROGETTAZIONE:

Mandataria:

Mandante:

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PROGETTO ESECUTIVO

Relazione di calcolo

IF2R.2.2.E.ZZ.CL.TR.16.0.5.005.A.DOCX

COMMESSA	LOTTO	CODIFICA	DOCUMENTO	REV.	FOGLIO
IF2R	2.2.E.ZZ	CL	TR.16.0.5.005	A	102 di 118

n°	B [cm]	H [cm]	Af [cmq]	Aeff [cmq]	M [kNm]	Mpf [kNm]	ε [%]	Sm [mm]	w [mm]
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	0.000151	---	0.000 (6)
19	100	70	0.00	0.00	0.00	0.00	0.000158	---	0.000 (6)
20	100	70	0.00	0.00	0.00	0.00	0.000166	---	0.000 (6)
21	100	70	0.00	0.00	0.00	0.00	0.000174	---	0.000 (6)
22	100	70	0.00	0.00	0.00	0.00	0.000181	---	0.000 (6)
23	100	70	0.00	0.00	0.00	0.00	0.000189	---	0.000 (6)
24	100	70	0.00	0.00	0.00	0.00	0.000196	---	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	0.000211	---	0.000 (6)
27	100	70	0.00	0.00	0.00	0.00	0.000219	---	0.000 (6)
28	100	70	0.00	0.00	0.00	0.00	0.000227	---	0.000 (6)
29	100	70	0.00	0.00	0.00	0.00	0.000234	---	0.000 (6)
30	100	70	0.00	0.00	0.00	0.00	0.000000	0.00	0.000 (6)
31	100	70	0.00	0.00	0.00	0.00	0.000000	0.00	0.000 (6)
32	100	70	31.42	2000.00	0.03	385.07	0.000000	0.00	0.000 (6)
33	100	70	31.42	2000.00	0.14	385.27	0.000000	0.00	0.000 (6)
34	100	70	31.42	2000.00	0.33	385.48	0.000000	0.00	0.000 (6)
35	100	70	31.42	2000.00	0.60	385.69	0.000000	0.00	0.000 (6)
36	100	70	31.42	2000.00	0.96	385.89	0.000000	0.00	0.000 (6)
37	100	70	31.42	2000.00	1.41	386.10	0.000000	0.00	0.000 (6)
38	100	70	31.42	2000.00	1.96	386.32	0.000000	0.00	0.000 (6)
39	100	70	31.42	2000.00	2.61	386.53	0.000000	0.00	0.000 (6)
40	100	70	31.42	2000.00	3.37	386.73	0.000000	0.00	0.000 (6)
41	100	70	31.42	2000.00	4.23	386.95	0.000000	0.00	0.000 (6)
42	100	120	31.42	2000.00	18.18	1054.56	0.000000	0.00	0.000 (6)
43	100	120	31.42	2000.00	19.37	1055.18	0.000000	0.00	0.000 (6)
44	100	120	31.42	2000.00	21.02	1055.80	0.000000	0.00	0.000 (6)
45	100	120	31.42	2000.00	23.03	1056.38	0.000000	0.00	0.000 (6)
46	100	120	31.42	2000.00	25.26	1056.97	0.000000	0.00	0.000 (6)
47	100	120	31.42	2000.00	27.63	1057.58	0.000000	0.00	0.000 (6)
48	100	120	31.42	2000.00	30.12	1058.15	0.000000	0.00	0.000 (6)
49	100	120	31.42	2000.00	32.74	1058.78	0.000000	0.00	0.000 (6)
50	100	120	31.42	2000.00	35.48	1059.38	0.000000	0.00	0.000 (6)
51	100	120	31.42	2000.00	38.37	1059.96	0.000000	0.00	0.000 (6)
52	100	120	31.42	2000.00	41.39	1060.57	0.000000	0.00	0.000 (6)
53	100	120	31.42	2000.00	44.57	1061.18	0.000000	0.00	0.000 (6)
54	100	120	31.42	2000.00	47.89	1061.75	0.000000	0.00	0.000 (6)
55	100	120	31.42	2000.00	51.38	1062.36	0.000000	0.00	0.000 (6)
56	100	120	31.42	2000.00	55.03	1062.99	0.000000	0.00	0.000 (6)
57	100	120	31.42	2000.00	58.85	1063.59	0.000000	0.00	0.000 (6)
58	100	120	31.42	2000.00	62.85	1064.17	0.000000	0.00	0.000 (6)
59	100	120	31.42	2000.00	67.02	1064.79	0.000000	0.00	0.000 (6)
60	100	120	31.42	2000.00	71.38	1065.39	0.000000	0.00	0.000 (6)
61	100	120	31.42	2000.00	75.92	1065.95	0.000000	0.00	0.000 (6)
62	100	120	31.42	2000.00	80.66	1041.04	0.000000	0.00	0.000 (6)
63	100	120	31.42	2000.00	85.60	1041.61	0.000000	0.00	0.000 (6)
64	100	120	31.42	2000.00	90.74	1067.74	0.000000	0.00	0.000 (6)
65	100	120	31.42	2000.00	96.09	1068.34	0.000000	0.00	0.000 (6)
66	100	120	31.42	2000.00	101.64	1068.96	0.000000	0.00	0.000 (6)
67	100	120	31.42	2000.00	101.76	1068.96	0.000000	0.00	0.000 (6)
68	100	120	31.42	2000.00	107.06	1069.50	0.000000	0.00	0.000 (6)
69	100	120	31.42	2000.00	112.54	1070.08	0.000000	0.00	0.000 (6)
70	100	120	31.42	2000.00	118.21	1070.62	0.000000	0.00	0.000 (6)
71	100	120	31.42	2000.00	124.08	1071.16	0.000000	0.00	0.000 (6)
72	100	120	31.42	2000.00	130.14	1071.71	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	60	120	21.99	2791.30	1.82	-603.04	0.000000	0.00	0.000
1-2-P	60	120	21.99	2791.30	-1.87	-603.04	0.000000	0.00	0.000
1-3-P	60	120	21.99	2791.30	-7.78	-603.04	0.000000	0.00	0.000
1-4-P	60	120	21.99	2791.30	-23.03	-603.04	0.000000	0.00	0.000
1-5-P	60	120	21.99	2791.30	-29.47	-603.04	0.000000	0.00	0.000
1-6-P	60	120	21.99	2791.30	-31.23	-603.04	0.000000	0.00	0.000
1-7-P	60	120	21.99	2791.30	-22.00	-603.04	0.000000	0.00	0.000
1-8-P	60	120	21.99	2791.30	-7.35	-603.04	0.000000	0.00	0.000
1-9-P	60	120	21.99	2791.30	13.66	-603.04	0.000000	0.00	0.000
1-10-P	60	120	21.99	2791.30	18.05	-603.04	0.000000	0.00	0.000
1-11-P	60	120	21.99	2791.30	19.33	-603.04	0.000000	0.00	0.000
1-12-P	60	120	21.99	2791.30	15.75	-603.04	0.000000	0.00	0.000
1-13-P	60	120	21.99	2791.30	-3.38	-603.04	0.000000	0.00	0.000

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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.16.0.5.005.A.DOCX

COMMESSA	LOTTO	CODIFICA	DOCUMENTO	REV.	FOGLIO
IF2R	2.2.E.ZZ	CL	TR.16.0.5.005	A	103 di 118

Is	B [cm]	H [cm]	Af [cmq]	Aeff [cmq]	M [kNm]	Mpf [kNm]	ε [%]	Sm [mm]	w [mm]
1-14-P	60	120	21.99	2791.30	-16.42	-603.04	0.000000	0.00	0.000
1-15-P	60	120	21.99	2791.30	-23.68	-603.04	0.000000	0.00	0.000
1-16-P	60	120	21.99	2791.30	-22.27	-603.04	0.000000	0.00	0.000
1-17-P	60	120	21.99	2791.30	-15.16	-603.04	0.000000	0.00	0.000
1-18-P	60	120	21.99	2791.30	5.76	-603.04	0.000000	0.00	0.000
1-19-P	60	120	21.99	2791.30	16.76	-603.04	0.000000	0.00	0.000
1-20-P	60	120	21.99	1200.00	20.68	603.04	0.000000	0.00	0.000
1-21-P	60	120	21.99	2791.30	18.27	-603.04	0.000000	0.00	0.000
1-22-P	60	120	21.99	2791.30	11.77	-603.04	0.000000	0.00	0.000
1-23-P	60	120	21.99	2791.30	-8.43	-603.04	0.000000	0.00	0.000
1-24-P	60	120	21.99	2791.30	-19.53	-603.04	0.000000	0.00	0.000
1-25-P	60	120	21.99	2791.30	-26.66	-603.04	0.000000	0.00	0.000
1-26-P	60	120	21.99	2791.30	-19.53	-603.04	0.000000	0.00	0.000
1-27-P	60	120	21.99	2791.30	-8.43	-603.04	0.000000	0.00	0.000
1-28-P	60	120	21.99	2791.30	11.77	-603.04	0.000000	0.00	0.000
1-29-P	60	120	21.99	2791.30	18.27	-603.04	0.000000	0.00	0.000
1-30-P	60	120	21.99	1200.00	20.68	603.04	0.000000	0.00	0.000
1-31-P	60	120	21.99	2791.30	16.76	-603.04	0.000000	0.00	0.000
1-32-P	60	120	21.99	2791.30	5.76	-603.04	0.000000	0.00	0.000
1-33-P	60	120	21.99	2791.30	-15.16	-603.04	0.000000	0.00	0.000
1-34-P	60	120	21.99	2791.30	-22.27	-603.04	0.000000	0.00	0.000
1-35-P	60	120	21.99	2791.30	-23.68	-603.04	0.000000	0.00	0.000
1-36-P	60	120	21.99	2791.30	-16.42	-603.04	0.000000	0.00	0.000
1-37-P	60	120	21.99	2791.30	-3.38	-603.04	0.000000	0.00	0.000
1-38-P	60	120	21.99	2791.30	15.75	-603.04	0.000000	0.00	0.000
1-39-P	60	120	21.99	2791.30	19.33	-603.04	0.000000	0.00	0.000
1-40-P	60	120	21.99	2791.30	18.05	-603.04	0.000000	0.00	0.000
1-41-P	60	120	21.99	2791.30	13.66	-603.04	0.000000	0.00	0.000
1-42-P	60	120	21.99	2791.30	-7.35	-603.04	0.000000	0.00	0.000
1-43-P	60	120	21.99	2791.30	-22.00	-603.04	0.000000	0.00	0.000
1-44-P	60	120	21.99	2791.30	-31.23	-603.04	0.000000	0.00	0.000
1-45-P	60	120	21.99	2791.30	-29.47	-603.04	0.000000	0.00	0.000
1-46-P	60	120	21.99	2791.30	-23.03	-603.04	0.000000	0.00	0.000
1-47-P	60	120	21.99	2791.30	-7.78	-603.04	0.000000	0.00	0.000
1-48-P	60	120	21.99	2791.30	-1.87	-603.04	0.000000	0.00	0.000
1-49-P	60	120	21.99	2791.30	1.82	-603.04	0.000000	0.00	0.000
2-1-P	60	120	18.85	1200.00	5.49	586.87	0.000000	0.00	0.000
2-2-P	60	120	18.85	1200.00	6.35	586.87	0.000000	0.00	0.000
2-3-P	60	120	18.85	2834.97	7.47	-586.87	0.000000	0.00	0.000
2-4-P	60	120	18.85	2834.97	10.57	-586.87	0.000000	0.00	0.000
2-5-P	60	120	18.85	2834.97	-38.47	-586.87	0.000000	0.00	0.000
2-6-P	60	120	18.85	2834.97	-73.42	-586.87	0.000000	0.00	0.000
2-7-P	60	120	18.85	2834.97	-12.83	-586.87	0.000000	0.00	0.000
2-8-P	60	120	18.85	2834.97	14.34	-586.87	0.000000	0.00	0.000
2-9-P	60	120	18.85	1200.00	14.72	586.87	0.000000	0.00	0.000
2-10-P	60	120	18.85	1200.00	14.93	586.87	0.000000	0.00	0.000
2-11-P	60	120	18.85	1200.00	15.11	586.87	0.000000	0.00	0.000
2-12-P	60	120	18.85	1200.00	15.23	586.87	0.000000	0.00	0.000
2-13-P	60	120	18.85	2834.97	15.08	-586.87	0.000000	0.00	0.000
2-14-P	60	120	18.85	2834.97	5.52	-586.87	0.000000	0.00	0.000
2-15-P	60	120	18.85	2834.97	-58.76	-586.87	0.000000	0.00	0.000
2-16-P	60	120	18.85	2834.97	-46.63	-586.87	0.000000	0.00	0.000
2-17-P	60	120	18.85	2834.97	16.13	-586.87	0.000000	0.00	0.000
2-18-P	60	120	18.85	2834.97	14.91	-586.87	0.000000	0.00	0.000
2-19-P	60	120	18.85	1200.00	15.18	586.87	0.000000	0.00	0.000
2-20-P	60	120	18.85	1200.00	15.13	586.87	0.000000	0.00	0.000
2-21-P	60	120	18.85	1200.00	15.13	586.87	0.000000	0.00	0.000
2-22-P	60	120	18.85	1200.00	15.00	586.87	0.000000	0.00	0.000
2-23-P	60	120	18.85	2834.97	15.32	-586.87	0.000000	0.00	0.000
2-24-P	60	120	18.85	2834.97	-22.61	-586.87	0.000000	0.00	0.000
2-25-P	60	120	18.85	2834.97	-82.32	-586.87	0.000000	0.00	0.000
2-26-P	60	120	18.85	2834.97	-22.61	-586.87	0.000000	0.00	0.000
2-27-P	60	120	18.85	2834.97	15.32	-586.87	0.000000	0.00	0.000
2-28-P	60	120	18.85	1200.00	15.00	586.87	0.000000	0.00	0.000
2-29-P	60	120	18.85	1200.00	15.13	586.87	0.000000	0.00	0.000
2-30-P	60	120	18.85	1200.00	15.13	586.87	0.000000	0.00	0.000
2-31-P	60	120	18.85	1200.00	15.18	586.87	0.000000	0.00	0.000
2-32-P	60	120	18.85	2834.97	14.91	-586.87	0.000000	0.00	0.000
2-33-P	60	120	18.85	2834.97	16.13	-586.87	0.000000	0.00	0.000
2-34-P	60	120	18.85	2834.97	-46.63	-586.87	0.000000	0.00	0.000
2-35-P	60	120	18.85	2834.97	-58.76	-586.87	0.000000	0.00	0.000
2-36-P	60	120	18.85	2834.97	5.52	-586.87	0.000000	0.00	0.000
2-37-P	60	120	18.85	2834.97	15.08	-586.87	0.000000	0.00	0.000
2-38-P	60	120	18.85	1200.00	15.23	586.87	0.000000	0.00	0.000
2-39-P	60	120	18.85	1200.00	15.11	586.87	0.000000	0.00	0.000
2-40-P	60	120	18.85	1200.00	14.93	586.87	0.000000	0.00	0.000
2-41-P	60	120	18.85	1200.00	14.72	586.87	0.000000	0.00	0.000
2-42-P	60	120	18.85	2834.97	14.34	-586.87	0.000000	0.00	0.000
2-43-P	60	120	18.85	2834.97	-12.83	-586.87	0.000000	0.00	0.000
2-44-P	60	120	18.85	2834.97	-73.42	-586.87	0.000000	0.00	0.000
2-45-P	60	120	18.85	2834.97	-38.47	-586.87	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.16.0.5.005.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.16.0.5.005 A 104 di 118

Is	B [cm]	H [cm]	Af [cmq]	Aeff [cmq]	M [kNm]	Mpf [kNm]	ε [%]	Sm [mm]	w [mm]
2-46-P	60	120	18.85	2834.97	10.57	-586.87	0.000000	0.00	0.000
2-47-P	60	120	18.85	2834.97	7.47	-586.87	0.000000	0.00	0.000
2-48-P	60	120	18.85	1200.00	6.35	586.87	0.000000	0.00	0.000
2-49-P	60	120	18.85	1200.00	5.49	586.87	0.000000	0.00	0.000
5-1-P	85	120	28.27	3993.47	-10.47	-839.48	0.000000	0.00	0.000
5-2-P	85	120	28.27	3993.47	-14.52	-839.48	0.000000	0.00	0.000
5-3-P	85	120	28.27	3993.47	-18.35	-839.48	0.000000	0.00	0.000
5-4-P	85	120	28.27	3993.47	-21.39	-839.48	0.000000	0.00	0.000
5-5-P	85	120	28.27	3993.47	-22.12	-839.48	0.000000	0.00	0.000
5-6-P	85	120	28.27	3993.47	-21.96	-839.48	0.000000	0.00	0.000
5-7-P	85	120	28.27	3993.47	-20.62	-839.48	0.000000	0.00	0.000
5-8-P	85	120	28.27	3993.47	-23.53	-839.48	0.000000	0.00	0.000
5-9-P	85	120	28.27	3993.47	-29.31	-839.48	0.000000	0.00	0.000
5-10-P	85	120	28.27	3993.47	-64.73	-839.48	0.000000	0.00	0.000
5-11-P	85	120	28.27	3993.47	-69.99	-839.48	0.000000	0.00	0.000
5-12-P	85	120	28.27	3993.47	-32.15	-839.48	0.000000	0.00	0.000
5-13-P	85	120	28.27	3993.47	-17.73	-839.48	0.000000	0.00	0.000
5-14-P	85	120	28.27	3993.47	-10.70	-839.48	0.000000	0.00	0.000
5-15-P	85	120	28.27	3993.47	-9.82	-839.48	0.000000	0.00	0.000
5-16-P	85	120	28.27	3993.47	-9.18	-839.48	0.000000	0.00	0.000
5-17-P	85	120	28.27	3993.47	-8.68	-839.48	0.000000	0.00	0.000
5-18-P	85	120	28.27	3993.47	-15.85	-839.48	0.000000	0.00	0.000
5-19-P	85	120	28.27	3993.47	-34.54	-839.48	0.000000	0.00	0.000
5-20-P	85	120	28.27	3993.47	-71.43	-839.48	0.000000	0.00	0.000
5-21-P	85	120	28.27	3993.47	-49.03	-839.48	0.000000	0.00	0.000
5-22-P	85	120	28.27	3993.47	-18.06	-839.48	0.000000	0.00	0.000
5-23-P	85	120	28.27	3993.47	-10.09	-839.48	0.000000	0.00	0.000
5-24-P	85	120	28.27	3993.47	-6.95	-839.48	0.000000	0.00	0.000
5-25-P	85	120	28.27	3993.47	-7.65	-839.48	0.000000	0.00	0.000
5-26-P	85	120	28.27	3993.47	-6.95	-839.48	0.000000	0.00	0.000
5-27-P	85	120	28.27	3993.47	-10.09	-839.48	0.000000	0.00	0.000
5-28-P	85	120	28.27	3993.47	-18.06	-839.48	0.000000	0.00	0.000
5-29-P	85	120	28.27	3993.47	-49.03	-839.48	0.000000	0.00	0.000
5-30-P	85	120	28.27	3993.47	-71.43	-839.48	0.000000	0.00	0.000
5-31-P	85	120	28.27	3993.47	-34.54	-839.48	0.000000	0.00	0.000
5-32-P	85	120	28.27	3993.47	-15.85	-839.48	0.000000	0.00	0.000
5-33-P	85	120	28.27	3993.47	-8.68	-839.48	0.000000	0.00	0.000
5-34-P	85	120	28.27	3993.47	-9.18	-839.48	0.000000	0.00	0.000
5-35-P	85	120	28.27	3993.47	-9.82	-839.48	0.000000	0.00	0.000
5-36-P	85	120	28.27	3993.47	-10.70	-839.48	0.000000	0.00	0.000
5-37-P	85	120	28.27	3993.47	-17.73	-839.48	0.000000	0.00	0.000
5-38-P	85	120	28.27	3993.47	-32.15	-839.48	0.000000	0.00	0.000
5-39-P	85	120	28.27	3993.47	-69.99	-839.48	0.000000	0.00	0.000
5-40-P	85	120	28.27	3993.47	-64.73	-839.48	0.000000	0.00	0.000
5-41-P	85	120	28.27	3993.47	-29.31	-839.48	0.000000	0.00	0.000
5-42-P	85	120	28.27	3993.47	-23.53	-839.48	0.000000	0.00	0.000
5-43-P	85	120	28.27	3993.47	-20.62	-839.48	0.000000	0.00	0.000
5-44-P	85	120	28.27	3993.47	-21.96	-839.48	0.000000	0.00	0.000
5-45-P	85	120	28.27	3993.47	-22.12	-839.48	0.000000	0.00	0.000
5-46-P	85	120	28.27	3993.47	-21.39	-839.48	0.000000	0.00	0.000
5-47-P	85	120	28.27	3993.47	-18.35	-839.48	0.000000	0.00	0.000
5-48-P	85	120	28.27	3993.47	-14.52	-839.48	0.000000	0.00	0.000
5-49-P	85	120	28.27	3993.47	-10.47	-839.48	0.000000	0.00	0.000
6-1-P	85	120	28.27	3993.47	-3.71	-839.48	0.000000	0.00	0.000
6-2-P	85	120	28.27	3993.47	-4.47	-839.48	0.000000	0.00	0.000
6-3-P	85	120	28.27	3993.47	-5.31	-839.48	0.000000	0.00	0.000
6-4-P	85	120	28.27	3993.47	-6.32	-839.48	0.000000	0.00	0.000
6-5-P	85	120	28.27	3993.47	-6.20	-839.48	0.000000	0.00	0.000
6-6-P	85	120	28.27	3993.47	-7.51	-839.48	0.000000	0.00	0.000
6-7-P	85	120	28.27	3993.47	-11.90	-839.48	0.000000	0.00	0.000
6-8-P	85	120	28.27	3993.47	-18.07	-839.48	0.000000	0.00	0.000
6-9-P	85	120	28.27	3993.47	-25.20	-839.48	0.000000	0.00	0.000
6-10-P	85	120	28.27	3993.47	-29.16	-839.48	0.000000	0.00	0.000
6-11-P	85	120	28.27	3993.47	-29.13	-839.48	0.000000	0.00	0.000
6-12-P	85	120	28.27	3993.47	-22.95	-839.48	0.000000	0.00	0.000
6-13-P	85	120	28.27	3993.47	-15.31	-839.48	0.000000	0.00	0.000
6-14-P	85	120	28.27	3993.47	-8.06	-839.48	0.000000	0.00	0.000
6-15-P	85	120	28.27	3993.47	-3.49	-839.48	0.000000	0.00	0.000
6-16-P	85	120	28.27	3993.47	-2.88	-839.48	0.000000	0.00	0.000
6-17-P	85	120	28.27	3993.47	-5.60	-839.48	0.000000	0.00	0.000
6-18-P	85	120	28.27	3993.47	-12.35	-839.48	0.000000	0.00	0.000
6-19-P	85	120	28.27	3993.47	-18.07	-839.48	0.000000	0.00	0.000
6-20-P	85	120	28.27	3993.47	-22.88	-839.48	0.000000	0.00	0.000
6-21-P	85	120	28.27	3993.47	-19.44	-839.48	0.000000	0.00	0.000
6-22-P	85	120	28.27	3993.47	-14.07	-839.48	0.000000	0.00	0.000
6-23-P	85	120	28.27	3993.47	-6.86	-839.48	0.000000	0.00	0.000
6-24-P	85	120	28.27	3993.47	-1.72	-839.48	0.000000	0.00	0.000
6-25-P	85	120	28.27	3993.47	2.17	-839.48	0.000000	0.00	0.000
6-26-P	85	120	28.27	3993.47	-1.72	-839.48	0.000000	0.00	0.000
6-27-P	85	120	28.27	3993.47	-6.86	-839.48	0.000000	0.00	0.000
6-28-P	85	120	28.27	3993.47	-14.07	-839.48	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.16.0.5.005.A.DOCX

COMMESSA	LOTTO	CODIFICA	DOCUMENTO	REV.	FOGLIO
IF2R	2.2.E.ZZ	CL	TR.16.0.5.005	A	105 di 118

Is	B [cm]	H [cm]	Af [cmq]	Aeff [cmq]	M [kNm]	Mpf [kNm]	ε [%]	Sm [mm]	w [mm]
6-29-P	85	120	28.27	3993.47	-19.44	-839.48	0.000000	0.00	0.000
6-30-P	85	120	28.27	3993.47	-22.88	-839.48	0.000000	0.00	0.000
6-31-P	85	120	28.27	3993.47	-18.07	-839.48	0.000000	0.00	0.000
6-32-P	85	120	28.27	3993.47	-12.35	-839.48	0.000000	0.00	0.000
6-33-P	85	120	28.27	3993.47	-5.60	-839.48	0.000000	0.00	0.000
6-34-P	85	120	28.27	3993.47	-2.88	-839.48	0.000000	0.00	0.000
6-35-P	85	120	28.27	3993.47	-3.49	-839.48	0.000000	0.00	0.000
6-36-P	85	120	28.27	3993.47	-8.06	-839.48	0.000000	0.00	0.000
6-37-P	85	120	28.27	3993.47	-15.31	-839.48	0.000000	0.00	0.000
6-38-P	85	120	28.27	3993.47	-22.95	-839.48	0.000000	0.00	0.000
6-39-P	85	120	28.27	3993.47	-29.13	-839.48	0.000000	0.00	0.000
6-40-P	85	120	28.27	3993.47	-29.16	-839.48	0.000000	0.00	0.000
6-41-P	85	120	28.27	3993.47	-25.20	-839.48	0.000000	0.00	0.000
6-42-P	85	120	28.27	3993.47	-18.07	-839.48	0.000000	0.00	0.000
6-43-P	85	120	28.27	3993.47	-11.90	-839.48	0.000000	0.00	0.000
6-44-P	85	120	28.27	3993.47	-7.51	-839.48	0.000000	0.00	0.000
6-45-P	85	120	28.27	3993.47	-6.20	-839.48	0.000000	0.00	0.000
6-46-P	85	120	28.27	3993.47	-6.32	-839.48	0.000000	0.00	0.000
6-47-P	85	120	28.27	3993.47	-5.31	-839.48	0.000000	0.00	0.000
6-48-P	85	120	28.27	3993.47	-4.47	-839.48	0.000000	0.00	0.000
6-49-P	85	120	28.27	3993.47	-3.71	-839.48	0.000000	0.00	0.000
7-1-P	85	120	25.13	4040.06	3.12	-823.32	0.000000	0.00	0.000
7-2-P	85	120	25.13	4040.06	4.78	-823.32	0.000000	0.00	0.000
7-3-P	85	120	25.13	4040.06	-8.07	-823.32	0.000000	0.00	0.000
7-4-P	85	120	25.13	4040.06	-17.72	-823.32	0.000000	0.00	0.000
7-5-P	85	120	25.13	4040.06	-21.62	-823.32	0.000000	0.00	0.000
7-6-P	85	120	25.13	4040.06	-25.15	-823.32	0.000000	0.00	0.000
7-7-P	85	120	25.13	4040.06	-17.93	-823.32	0.000000	0.00	0.000
7-8-P	85	120	25.13	4040.06	-10.64	-823.32	0.000000	0.00	0.000
7-9-P	85	120	25.13	4040.06	4.24	-823.32	0.000000	0.00	0.000
7-10-P	85	120	25.13	4040.06	4.99	-823.32	0.000000	0.00	0.000
7-11-P	85	120	25.13	4040.06	6.35	-823.32	0.000000	0.00	0.000
7-12-P	85	120	25.13	4040.06	7.58	-823.32	0.000000	0.00	0.000
7-13-P	85	120	25.13	4040.06	-9.70	-823.32	0.000000	0.00	0.000
7-14-P	85	120	25.13	4040.06	-16.58	-823.32	0.000000	0.00	0.000
7-15-P	85	120	25.13	4040.06	-19.46	-823.32	0.000000	0.00	0.000
7-16-P	85	120	25.13	4040.06	-16.64	-823.32	0.000000	0.00	0.000
7-17-P	85	120	25.13	4040.06	-12.56	-823.32	0.000000	0.00	0.000
7-18-P	85	120	25.13	4040.06	6.22	-823.32	0.000000	0.00	0.000
7-19-P	85	120	25.13	4040.06	10.07	-823.32	0.000000	0.00	0.000
7-20-P	85	120	25.13	4040.06	11.43	-823.32	0.000000	0.00	0.000
7-21-P	85	120	25.13	4040.06	11.31	-823.32	0.000000	0.00	0.000
7-22-P	85	120	25.13	4040.06	9.83	-823.32	0.000000	0.00	0.000
7-23-P	85	120	25.13	4040.06	-8.51	-823.32	0.000000	0.00	0.000
7-24-P	85	120	25.13	4040.06	-11.70	-823.32	0.000000	0.00	0.000
7-25-P	85	120	25.13	4040.06	-18.60	-823.32	0.000000	0.00	0.000
7-26-P	85	120	25.13	4040.06	-11.70	-823.32	0.000000	0.00	0.000
7-27-P	85	120	25.13	4040.06	-8.51	-823.32	0.000000	0.00	0.000
7-28-P	85	120	25.13	4040.06	9.83	-823.32	0.000000	0.00	0.000
7-29-P	85	120	25.13	4040.06	11.31	-823.32	0.000000	0.00	0.000
7-30-P	85	120	25.13	4040.06	11.43	-823.32	0.000000	0.00	0.000
7-31-P	85	120	25.13	4040.06	10.07	-823.32	0.000000	0.00	0.000
7-32-P	85	120	25.13	4040.06	6.22	-823.32	0.000000	0.00	0.000
7-33-P	85	120	25.13	4040.06	-12.56	-823.32	0.000000	0.00	0.000
7-34-P	85	120	25.13	4040.06	-16.64	-823.32	0.000000	0.00	0.000
7-35-P	85	120	25.13	4040.06	-19.46	-823.32	0.000000	0.00	0.000
7-36-P	85	120	25.13	4040.06	-16.58	-823.32	0.000000	0.00	0.000
7-37-P	85	120	25.13	4040.06	-9.70	-823.32	0.000000	0.00	0.000
7-38-P	85	120	25.13	4040.06	7.58	-823.32	0.000000	0.00	0.000
7-39-P	85	120	25.13	4040.06	6.35	-823.32	0.000000	0.00	0.000
7-40-P	85	120	25.13	4040.06	4.99	-823.32	0.000000	0.00	0.000
7-41-P	85	120	25.13	4040.06	4.24	-823.32	0.000000	0.00	0.000
7-42-P	85	120	25.13	4040.06	-10.64	-823.32	0.000000	0.00	0.000
7-43-P	85	120	25.13	4040.06	-17.93	-823.32	0.000000	0.00	0.000
7-44-P	85	120	25.13	4040.06	-25.15	-823.32	0.000000	0.00	0.000
7-45-P	85	120	25.13	4040.06	-21.62	-823.32	0.000000	0.00	0.000
7-46-P	85	120	25.13	4040.06	-17.72	-823.32	0.000000	0.00	0.000
7-47-P	85	120	25.13	4040.06	-8.07	-823.32	0.000000	0.00	0.000
7-48-P	85	120	25.13	4040.06	4.78	-823.32	0.000000	0.00	0.000
7-49-P	85	120	25.13	4040.06	3.12	-823.32	0.000000	0.00	0.000
8-1-P	85	120	28.27	3993.47	0.79	-839.48	0.000000	0.00	0.000
8-2-P	85	120	28.27	3993.47	-3.82	-839.48	0.000000	0.00	0.000
8-3-P	85	120	28.27	3993.47	-9.82	-839.48	0.000000	0.00	0.000
8-4-P	85	120	28.27	3993.47	-19.33	-839.48	0.000000	0.00	0.000
8-5-P	85	120	28.27	3993.47	-37.65	-839.48	0.000000	0.00	0.000
8-6-P	85	120	28.27	3993.47	-52.81	-839.48	0.000000	0.00	0.000
8-7-P	85	120	28.27	3993.47	-25.65	-839.48	0.000000	0.00	0.000
8-8-P	85	120	28.27	3993.47	-12.14	-839.48	0.000000	0.00	0.000
8-9-P	85	120	28.27	3993.47	-2.28	-839.48	0.000000	0.00	0.000
8-10-P	85	120	28.27	1700.00	4.49	839.48	0.000000	0.00	0.000
8-11-P	85	120	28.27	3993.47	5.85	-839.48	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.16.0.5.005.A.DOCX

COMMESSA	LOTTO	CODIFICA	DOCUMENTO	REV.	FOGLIO
IF2R	2.2.E.ZZ	CL	TR.16.0.5.005	A	106 di 118

Is	B [cm]	H [cm]	Af [cmq]	Aeff [cmq]	M [kNm]	Mpf [kNm]	ε [%]	Sm [mm]	w [mm]
8-12-P	85	120	28.27	3993.47	3.72	-839.48	0.000000	0.00	0.000
8-13-P	85	120	28.27	3993.47	-9.16	-839.48	0.000000	0.00	0.000
8-14-P	85	120	28.27	3993.47	-18.77	-839.48	0.000000	0.00	0.000
8-15-P	85	120	28.27	3993.47	-42.11	-839.48	0.000000	0.00	0.000
8-16-P	85	120	28.27	3993.47	-36.15	-839.48	0.000000	0.00	0.000
8-17-P	85	120	28.27	3993.47	-13.74	-839.48	0.000000	0.00	0.000
8-18-P	85	120	28.27	3993.47	-3.91	-839.48	0.000000	0.00	0.000
8-19-P	85	120	28.27	1700.00	7.22	839.48	0.000000	0.00	0.000
8-20-P	85	120	28.27	1700.00	11.96	839.48	0.000000	0.00	0.000
8-21-P	85	120	28.27	1700.00	9.74	839.48	0.000000	0.00	0.000
8-22-P	85	120	28.27	3993.47	5.71	-839.48	0.000000	0.00	0.000
8-23-P	85	120	28.27	3993.47	-8.77	-839.48	0.000000	0.00	0.000
8-24-P	85	120	28.27	3993.47	-22.41	-839.48	0.000000	0.00	0.000
8-25-P	85	120	28.27	3993.47	-48.90	-839.48	0.000000	0.00	0.000
8-26-P	85	120	28.27	3993.47	-22.41	-839.48	0.000000	0.00	0.000
8-27-P	85	120	28.27	3993.47	-8.77	-839.48	0.000000	0.00	0.000
8-28-P	85	120	28.27	3993.47	5.71	-839.48	0.000000	0.00	0.000
8-29-P	85	120	28.27	1700.00	9.74	839.48	0.000000	0.00	0.000
8-30-P	85	120	28.27	1700.00	11.96	839.48	0.000000	0.00	0.000
8-31-P	85	120	28.27	1700.00	7.22	839.48	0.000000	0.00	0.000
8-32-P	85	120	28.27	3993.47	-3.91	-839.48	0.000000	0.00	0.000
8-33-P	85	120	28.27	3993.47	-13.74	-839.48	0.000000	0.00	0.000
8-34-P	85	120	28.27	3993.47	-36.15	-839.48	0.000000	0.00	0.000
8-35-P	85	120	28.27	3993.47	-42.11	-839.48	0.000000	0.00	0.000
8-36-P	85	120	28.27	3993.47	-18.77	-839.48	0.000000	0.00	0.000
8-37-P	85	120	28.27	3993.47	-9.16	-839.48	0.000000	0.00	0.000
8-38-P	85	120	28.27	3993.47	3.72	-839.48	0.000000	0.00	0.000
8-39-P	85	120	28.27	3993.47	5.85	-839.48	0.000000	0.00	0.000
8-40-P	85	120	28.27	1700.00	4.49	839.48	0.000000	0.00	0.000
8-41-P	85	120	28.27	3993.47	-2.28	-839.48	0.000000	0.00	0.000
8-42-P	85	120	28.27	3993.47	-12.14	-839.48	0.000000	0.00	0.000
8-43-P	85	120	28.27	3993.47	-25.65	-839.48	0.000000	0.00	0.000
8-44-P	85	120	28.27	3993.47	-52.81	-839.48	0.000000	0.00	0.000
8-45-P	85	120	28.27	3993.47	-37.65	-839.48	0.000000	0.00	0.000
8-46-P	85	120	28.27	3993.47	-19.33	-839.48	0.000000	0.00	0.000
8-47-P	85	120	28.27	3993.47	-9.82	-839.48	0.000000	0.00	0.000
8-48-P	85	120	28.27	3993.47	-3.82	-839.48	0.000000	0.00	0.000
8-49-P	85	120	28.27	3993.47	0.79	-839.48	0.000000	0.00	0.000
9-1-S	100	120	31.42	4724.96	-6.22	-978.12	0.000000	0.00	0.000
9-2-S	100	120	31.42	4724.96	-10.97	-978.12	0.000000	0.00	0.000
9-3-S	100	120	31.42	4724.96	-15.33	-978.12	0.000000	0.00	0.000
9-4-S	100	120	31.42	4724.96	-18.53	-978.12	0.000000	0.00	0.000
9-5-S	100	120	31.42	4724.96	16.38	-978.12	0.000000	0.00	0.000
9-6-S	100	120	31.42	2000.00	47.10	978.12	0.000000	0.00	0.000
9-7-S	100	120	31.42	4724.96	-211.43	-978.12	0.000000	0.00	0.000
9-8-S	100	120	31.42	4724.96	-154.95	-978.12	0.000000	0.00	0.000
9-9-S	100	120	31.42	4724.96	-113.16	-978.12	0.000000	0.00	0.000
9-10-S	100	120	31.42	4724.96	-78.13	-978.12	0.000000	0.00	0.000
9-11-S	100	120	31.42	4724.96	-45.74	-978.12	0.000000	0.00	0.000
9-12-S	100	120	31.42	4724.96	-22.08	-978.12	0.000000	0.00	0.000
9-13-S	100	120	31.42	4724.96	-7.85	-978.12	0.000000	0.00	0.000
9-14-S	100	120	31.42	4724.96	16.19	-978.12	0.000000	0.00	0.000
9-15-S	100	120	31.42	4724.96	19.43	-978.12	0.000000	0.00	0.000
9-16-S	100	120	31.42	4724.96	19.81	-978.12	0.000000	0.00	0.000
9-17-S	100	120	31.42	4724.96	14.03	-978.12	0.000000	0.00	0.000
9-18-S	100	120	31.42	4724.96	9.67	-978.12	0.000000	0.00	0.000
9-19-S	100	120	31.42	4724.96	-5.56	-978.12	0.000000	0.00	0.000
9-20-S	100	120	31.42	4724.96	3.55	-978.12	0.000000	0.00	0.000
9-21-S	100	120	31.42	4724.96	3.63	-978.12	0.000000	0.00	0.000
10-1-S	100	120	31.42	4724.96	10.07	-978.12	0.000000	0.00	0.000
10-2-S	100	120	31.42	4724.96	18.26	-978.12	0.000000	0.00	0.000
10-3-S	100	120	31.42	4724.96	-14.89	-978.12	0.000000	0.00	0.000
10-4-S	100	120	31.42	4724.96	-73.50	-978.12	0.000000	0.00	0.000
10-5-S	100	120	31.42	4724.96	-47.66	-978.12	0.000000	0.00	0.000
10-6-S	100	120	31.42	2000.00	41.91	978.12	0.000000	0.00	0.000
10-7-S	100	120	31.42	4724.96	-163.40	-978.12	0.000000	0.00	0.000
10-8-S	100	120	31.42	4724.96	-138.43	-978.12	0.000000	0.00	0.000
10-9-S	100	120	31.42	4724.96	-109.99	-978.12	0.000000	0.00	0.000
10-10-S	100	120	31.42	4724.96	-83.09	-978.12	0.000000	0.00	0.000
10-11-S	100	120	31.42	4724.96	-56.01	-978.12	0.000000	0.00	0.000
10-12-S	100	120	31.42	4724.96	-27.84	-978.12	0.000000	0.00	0.000
10-13-S	100	120	31.42	4724.96	-5.67	-978.12	0.000000	0.00	0.000
10-14-S	100	120	31.42	4724.96	18.50	-978.12	0.000000	0.00	0.000
10-15-S	100	120	31.42	4724.96	34.19	-978.12	0.000000	0.00	0.000
10-16-S	100	120	31.42	4724.96	47.16	-978.12	0.000000	0.00	0.000
10-17-S	100	120	31.42	4724.96	6.56	-978.12	0.000000	0.00	0.000
10-18-S	100	120	31.42	4724.96	-33.89	-978.12	0.000000	0.00	0.000
10-19-S	100	120	31.42	4724.96	-28.52	-978.12	0.000000	0.00	0.000
10-20-S	100	120	31.42	4724.96	-17.73	-978.12	0.000000	0.00	0.000
10-21-S	100	120	31.42	4724.96	-4.20	-978.12	0.000000	0.00	0.000
11-1-S	100	120	31.42	4724.96	-7.39	-978.12	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.16.0.5.005.A.DOCX

COMMESSA	LOTTO	CODIFICA	DOCUMENTO	REV.	FOGLIO
IF2R	2.2.E.ZZ	CL	TR.16.0.5.005	A	107 di 118

Is	B [cm]	H [cm]	Af [cmq]	Aeff [cmq]	M [kNm]	Mpf [kNm]	ε [%]	Sm [mm]	w [mm]
11-2-S	100	120	31.42	4724.96	-6.42	-978.12	0.000000	0.00	0.000
11-3-S	100	120	31.42	4724.96	-3.13	-978.12	0.000000	0.00	0.000
11-4-S	100	120	31.42	2000.00	11.43	978.12	0.000000	0.00	0.000
11-5-S	100	120	31.42	2000.00	28.00	978.12	0.000000	0.00	0.000
11-6-S	100	120	31.42	2000.00	46.80	978.12	0.000000	0.00	0.000
11-7-S	100	120	31.42	4724.96	-43.02	-978.12	0.000000	0.00	0.000
11-8-S	100	120	31.42	4724.96	-60.45	-978.12	0.000000	0.00	0.000
11-9-S	100	120	31.42	4724.96	-153.33	-978.12	0.000000	0.00	0.000
11-10-S	100	120	31.42	4724.96	-128.10	-978.12	0.000000	0.00	0.000
11-11-S	100	120	31.42	4724.96	-93.15	-978.12	0.000000	0.00	0.000
11-12-S	100	120	31.42	4724.96	-52.19	-978.12	0.000000	0.00	0.000
11-13-S	100	120	31.42	4724.96	-21.92	-978.12	0.000000	0.00	0.000
11-14-S	100	120	31.42	4724.96	-5.20	-978.12	0.000000	0.00	0.000
11-15-S	100	120	31.42	4724.96	7.87	-978.12	0.000000	0.00	0.000
11-16-S	100	120	31.42	4724.96	12.29	-978.12	0.000000	0.00	0.000
11-17-S	100	120	31.42	4724.96	10.99	-978.12	0.000000	0.00	0.000
11-18-S	100	120	31.42	4724.96	9.29	-978.12	0.000000	0.00	0.000
11-19-S	100	120	31.42	4724.96	6.33	-978.12	0.000000	0.00	0.000
11-20-S	100	120	31.42	4724.96	4.13	-978.12	0.000000	0.00	0.000
11-21-S	100	120	31.42	4724.96	2.41	-978.12	0.000000	0.00	0.000
12-1-S	100	120	31.42	4724.96	12.41	-978.12	0.000000	0.00	0.000
12-2-S	100	120	31.42	4724.96	19.56	-978.12	0.000000	0.00	0.000
12-3-S	100	120	31.42	4724.96	-17.14	-978.12	0.000000	0.00	0.000
12-4-S	100	120	31.42	4724.96	-85.84	-978.12	0.000000	0.00	0.000
12-5-S	100	120	31.42	4724.96	-52.95	-978.12	0.000000	0.00	0.000
12-6-S	100	120	31.42	2000.00	39.97	978.12	0.000000	0.00	0.000
12-7-S	100	120	31.42	4724.96	-130.89	-978.12	0.000000	0.00	0.000
12-8-S	100	120	31.42	4724.96	-106.23	-978.12	0.000000	0.00	0.000
12-9-S	100	120	31.42	4724.96	-89.79	-978.12	0.000000	0.00	0.000
12-10-S	100	120	31.42	4724.96	-70.48	-978.12	0.000000	0.00	0.000
12-11-S	100	120	31.42	4724.96	-50.14	-978.12	0.000000	0.00	0.000
12-12-S	100	120	31.42	4724.96	-26.69	-978.12	0.000000	0.00	0.000
12-13-S	100	120	31.42	4724.96	-5.21	-978.12	0.000000	0.00	0.000
12-14-S	100	120	31.42	4724.96	18.74	-978.12	0.000000	0.00	0.000
12-15-S	100	120	31.42	4724.96	35.35	-978.12	0.000000	0.00	0.000
12-16-S	100	120	31.42	4724.96	49.83	-978.12	0.000000	0.00	0.000
12-17-S	100	120	31.42	4724.96	-10.02	-978.12	0.000000	0.00	0.000
12-18-S	100	120	31.42	4724.96	-40.39	-978.12	0.000000	0.00	0.000
12-19-S	100	120	31.42	4724.96	-33.73	-978.12	0.000000	0.00	0.000
12-20-S	100	120	31.42	4724.96	-20.81	-978.12	0.000000	0.00	0.000
12-21-S	100	120	31.42	4724.96	-4.90	-978.12	0.000000	0.00	0.000
13-1-S	100	120	31.42	4724.96	-6.74	-978.12	0.000000	0.00	0.000
13-2-S	100	120	31.42	4724.96	-9.93	-978.12	0.000000	0.00	0.000
13-3-S	100	120	31.42	4724.96	-9.76	-978.12	0.000000	0.00	0.000
13-4-S	100	120	31.42	4724.96	9.42	-978.12	0.000000	0.00	0.000
13-5-S	100	120	31.42	2000.00	24.79	978.12	0.000000	0.00	0.000
13-6-S	100	120	31.42	2000.00	48.56	978.12	0.000000	0.00	0.000
13-7-S	100	120	31.42	4724.96	-48.18	-978.12	0.000000	0.00	0.000
13-8-S	100	120	31.42	4724.96	-57.57	-978.12	0.000000	0.00	0.000
13-9-S	100	120	31.42	4724.96	-134.20	-978.12	0.000000	0.00	0.000
13-10-S	100	120	31.42	4724.96	-112.33	-978.12	0.000000	0.00	0.000
13-11-S	100	120	31.42	4724.96	-81.75	-978.12	0.000000	0.00	0.000
13-12-S	100	120	31.42	4724.96	-45.27	-978.12	0.000000	0.00	0.000
13-13-S	100	120	31.42	4724.96	-17.78	-978.12	0.000000	0.00	0.000
13-14-S	100	120	31.42	4724.96	3.14	-978.12	0.000000	0.00	0.000
13-15-S	100	120	31.42	4724.96	7.29	-978.12	0.000000	0.00	0.000
13-16-S	100	120	31.42	4724.96	10.45	-978.12	0.000000	0.00	0.000
13-17-S	100	120	31.42	4724.96	10.36	-978.12	0.000000	0.00	0.000
13-18-S	100	120	31.42	4724.96	9.22	-978.12	0.000000	0.00	0.000
13-19-S	100	120	31.42	4724.96	5.48	-978.12	0.000000	0.00	0.000
13-20-S	100	120	31.42	4724.96	3.36	-978.12	0.000000	0.00	0.000
13-21-S	100	120	31.42	4724.96	2.38	-978.12	0.000000	0.00	0.000
14-1-S	100	120	34.56	4680.19	6.90	-994.28	0.000000	0.00	0.000
14-2-S	100	120	34.56	4680.19	-11.64	-994.28	0.000000	0.00	0.000
14-3-S	100	120	34.56	4680.19	-15.10	-994.28	0.000000	0.00	0.000
14-4-S	100	120	34.56	4680.19	-45.57	-994.28	0.000000	0.00	0.000
14-5-S	100	120	34.56	4680.19	-26.70	-994.28	0.000000	0.00	0.000
14-6-S	100	120	34.56	2000.00	44.83	994.28	0.000000	0.00	0.000
14-7-S	100	120	34.56	4680.19	-96.98	-994.28	0.000000	0.00	0.000
14-8-S	100	120	34.56	4680.19	-94.91	-994.28	0.000000	0.00	0.000
14-9-S	100	120	34.56	4680.19	-94.58	-994.28	0.000000	0.00	0.000
14-10-S	100	120	34.56	4680.19	-76.86	-994.28	0.000000	0.00	0.000
14-11-S	100	120	34.56	4680.19	-56.50	-994.28	0.000000	0.00	0.000
14-12-S	100	120	34.56	4680.19	-30.26	-994.28	0.000000	0.00	0.000
14-13-S	100	120	34.56	4680.19	-8.76	-994.28	0.000000	0.00	0.000
14-14-S	100	120	34.56	4680.19	12.74	-994.28	0.000000	0.00	0.000
14-15-S	100	120	34.56	4680.19	22.53	-994.28	0.000000	0.00	0.000
14-16-S	100	120	34.56	4680.19	30.48	-994.28	0.000000	0.00	0.000
14-17-S	100	120	34.56	4680.19	8.80	-994.28	0.000000	0.00	0.000
14-18-S	100	120	34.56	4680.19	-22.05	-994.28	0.000000	0.00	0.000
14-19-S	100	120	34.56	4680.19	-17.89	-994.28	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
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.16.0.5.005.A.DOCX

COMMESSA	LOTTO	CODIFICA	DOCUMENTO	REV.	FOGLIO
IF2R	2.2.E.ZZ	CL	TR.16.0.5.005	A	108 di 118

Is	B [cm]	H [cm]	Af [cmq]	Aeff [cmq]	M [kNm]	Mpf [kNm]	ε [%]	Sm [mm]	w [mm]
14-20-S	100	120	34.56	4680.19	-10.96	-994.28	0.000000	0.00	0.000
14-21-S	100	120	34.56	4680.19	-2.91	-994.28	0.000000	0.00	0.000
15-1-S	100	120	31.42	4724.96	6.90	-978.12	0.000000	0.00	0.000
15-2-S	100	120	31.42	4724.96	-11.64	-978.12	0.000000	0.00	0.000
15-3-S	100	120	31.42	4724.96	-15.10	-978.12	0.000000	0.00	0.000
15-4-S	100	120	31.42	4724.96	-45.57	-978.12	0.000000	0.00	0.000
15-5-S	100	120	31.42	4724.96	-26.70	-978.12	0.000000	0.00	0.000
15-6-S	100	120	31.42	2000.00	44.83	978.12	0.000000	0.00	0.000
15-7-S	100	120	31.42	4724.96	-96.98	-978.12	0.000000	0.00	0.000
15-8-S	100	120	31.42	4724.96	-94.91	-978.12	0.000000	0.00	0.000
15-9-S	100	120	31.42	4724.96	-94.58	-978.12	0.000000	0.00	0.000
15-10-S	100	120	31.42	4724.96	-76.86	-978.12	0.000000	0.00	0.000
15-11-S	100	120	31.42	4724.96	-56.50	-978.12	0.000000	0.00	0.000
15-12-S	100	120	31.42	4724.96	-30.26	-978.12	0.000000	0.00	0.000
15-13-S	100	120	31.42	4724.96	-8.76	-978.12	0.000000	0.00	0.000
15-14-S	100	120	31.42	4724.96	12.74	-978.12	0.000000	0.00	0.000
15-15-S	100	120	31.42	4724.96	22.53	-978.12	0.000000	0.00	0.000
15-16-S	100	120	31.42	4724.96	30.48	-978.12	0.000000	0.00	0.000
15-17-S	100	120	31.42	4724.96	8.80	-978.12	0.000000	0.00	0.000
15-18-S	100	120	31.42	4724.96	-22.05	-978.12	0.000000	0.00	0.000
15-19-S	100	120	31.42	4724.96	-17.89	-978.12	0.000000	0.00	0.000
15-20-S	100	120	31.42	4724.96	-10.96	-978.12	0.000000	0.00	0.000
15-21-S	100	120	31.42	4724.96	-2.91	-978.12	0.000000	0.00	0.000
16-1-S	100	120	31.42	4724.96	-6.74	-978.12	0.000000	0.00	0.000
16-2-S	100	120	31.42	4724.96	-9.93	-978.12	0.000000	0.00	0.000
16-3-S	100	120	31.42	4724.96	-9.76	-978.12	0.000000	0.00	0.000
16-4-S	100	120	31.42	4724.96	9.42	-978.12	0.000000	0.00	0.000
16-5-S	100	120	31.42	2000.00	24.79	978.12	0.000000	0.00	0.000
16-6-S	100	120	31.42	2000.00	48.56	978.12	0.000000	0.00	0.000
16-7-S	100	120	31.42	4724.96	-48.18	-978.12	0.000000	0.00	0.000
16-8-S	100	120	31.42	4724.96	-57.57	-978.12	0.000000	0.00	0.000
16-9-S	100	120	31.42	4724.96	-134.20	-978.12	0.000000	0.00	0.000
16-10-S	100	120	31.42	4724.96	-112.33	-978.12	0.000000	0.00	0.000
16-11-S	100	120	31.42	4724.96	-81.75	-978.12	0.000000	0.00	0.000
16-12-S	100	120	31.42	4724.96	-45.27	-978.12	0.000000	0.00	0.000
16-13-S	100	120	31.42	4724.96	-17.78	-978.12	0.000000	0.00	0.000
16-14-S	100	120	31.42	4724.96	3.14	-978.12	0.000000	0.00	0.000
16-15-S	100	120	31.42	4724.96	7.29	-978.12	0.000000	0.00	0.000
16-16-S	100	120	31.42	4724.96	10.45	-978.12	0.000000	0.00	0.000
16-17-S	100	120	31.42	4724.96	10.36	-978.12	0.000000	0.00	0.000
16-18-S	100	120	31.42	4724.96	9.22	-978.12	0.000000	0.00	0.000
16-19-S	100	120	31.42	4724.96	5.48	-978.12	0.000000	0.00	0.000
16-20-S	100	120	31.42	4724.96	3.36	-978.12	0.000000	0.00	0.000
16-21-S	100	120	31.42	4724.96	2.38	-978.12	0.000000	0.00	0.000
17-1-S	100	120	31.42	4724.96	12.41	-978.12	0.000000	0.00	0.000
17-2-S	100	120	31.42	4724.96	19.56	-978.12	0.000000	0.00	0.000
17-3-S	100	120	31.42	4724.96	-17.14	-978.12	0.000000	0.00	0.000
17-4-S	100	120	31.42	4724.96	-85.84	-978.12	0.000000	0.00	0.000
17-5-S	100	120	31.42	4724.96	-52.95	-978.12	0.000000	0.00	0.000
17-6-S	100	120	31.42	2000.00	39.97	978.12	0.000000	0.00	0.000
17-7-S	100	120	31.42	4724.96	-130.89	-978.12	0.000000	0.00	0.000
17-8-S	100	120	31.42	4724.96	-106.23	-978.12	0.000000	0.00	0.000
17-9-S	100	120	31.42	4724.96	-89.79	-978.12	0.000000	0.00	0.000
17-10-S	100	120	31.42	4724.96	-70.48	-978.12	0.000000	0.00	0.000
17-11-S	100	120	31.42	4724.96	-50.14	-978.12	0.000000	0.00	0.000
17-12-S	100	120	31.42	4724.96	-26.69	-978.12	0.000000	0.00	0.000
17-13-S	100	120	31.42	4724.96	-5.21	-978.12	0.000000	0.00	0.000
17-14-S	100	120	31.42	4724.96	18.74	-978.12	0.000000	0.00	0.000
17-15-S	100	120	31.42	4724.96	35.35	-978.12	0.000000	0.00	0.000
17-16-S	100	120	31.42	4724.96	49.83	-978.12	0.000000	0.00	0.000
17-17-S	100	120	31.42	4724.96	-10.02	-978.12	0.000000	0.00	0.000
17-18-S	100	120	31.42	4724.96	-40.39	-978.12	0.000000	0.00	0.000
17-19-S	100	120	31.42	4724.96	-33.73	-978.12	0.000000	0.00	0.000
17-20-S	100	120	31.42	4724.96	-20.81	-978.12	0.000000	0.00	0.000
17-21-S	100	120	31.42	4724.96	-4.90	-978.12	0.000000	0.00	0.000
18-1-S	100	120	31.42	4724.96	-7.39	-978.12	0.000000	0.00	0.000
18-2-S	100	120	31.42	4724.96	-6.42	-978.12	0.000000	0.00	0.000
18-3-S	100	120	31.42	4724.96	-3.13	-978.12	0.000000	0.00	0.000
18-4-S	100	120	31.42	2000.00	11.43	978.12	0.000000	0.00	0.000
18-5-S	100	120	31.42	2000.00	28.00	978.12	0.000000	0.00	0.000
18-6-S	100	120	31.42	2000.00	46.80	978.12	0.000000	0.00	0.000
18-7-S	100	120	31.42	4724.96	-43.02	-978.12	0.000000	0.00	0.000
18-8-S	100	120	31.42	4724.96	-60.45	-978.12	0.000000	0.00	0.000
18-9-S	100	120	31.42	4724.96	-153.33	-978.12	0.000000	0.00	0.000
18-10-S	100	120	31.42	4724.96	-128.10	-978.12	0.000000	0.00	0.000
18-11-S	100	120	31.42	4724.96	-93.15	-978.12	0.000000	0.00	0.000
18-12-S	100	120	31.42	4724.96	-52.19	-978.12	0.000000	0.00	0.000
18-13-S	100	120	31.42	4724.96	-21.92	-978.12	0.000000	0.00	0.000
18-14-S	100	120	31.42	4724.96	-5.20	-978.12	0.000000	0.00	0.000
18-15-S	100	120	31.42	4724.96	7.87	-978.12	0.000000	0.00	0.000
18-16-S	100	120	31.42	4724.96	12.29	-978.12	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:

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.16.0.5.005.A.DOCX

COMMESSA	LOTTO	CODIFICA	DOCUMENTO	REV.	FOGLIO
IF2R	2.2.E.ZZ	CL	TR.16.0.5.005	A	109 di 118

Is	B [cm]	H [cm]	Af [cmq]	Aeff [cmq]	M [kNm]	Mpf [kNm]	ε [%]	Sm [mm]	w [mm]
18-17-S	100	120	31.42	4724.96	10.99	-978.12	0.000000	0.00	0.000
18-18-S	100	120	31.42	4724.96	9.29	-978.12	0.000000	0.00	0.000
18-19-S	100	120	31.42	4724.96	6.33	-978.12	0.000000	0.00	0.000
18-20-S	100	120	31.42	4724.96	4.13	-978.12	0.000000	0.00	0.000
18-21-S	100	120	31.42	4724.96	2.41	-978.12	0.000000	0.00	0.000
19-1-S	100	120	31.42	4724.96	10.07	-978.12	0.000000	0.00	0.000
19-2-S	100	120	31.42	4724.96	18.26	-978.12	0.000000	0.00	0.000
19-3-S	100	120	31.42	4724.96	-14.89	-978.12	0.000000	0.00	0.000
19-4-S	100	120	31.42	4724.96	-73.50	-978.12	0.000000	0.00	0.000
19-5-S	100	120	31.42	4724.96	-47.66	-978.12	0.000000	0.00	0.000
19-6-S	100	120	31.42	2000.00	41.91	978.12	0.000000	0.00	0.000
19-7-S	100	120	31.42	4724.96	-163.40	-978.12	0.000000	0.00	0.000
19-8-S	100	120	31.42	4724.96	-138.43	-978.12	0.000000	0.00	0.000
19-9-S	100	120	31.42	4724.96	-109.99	-978.12	0.000000	0.00	0.000
19-10-S	100	120	31.42	4724.96	-83.09	-978.12	0.000000	0.00	0.000
19-11-S	100	120	31.42	4724.96	-56.01	-978.12	0.000000	0.00	0.000
19-12-S	100	120	31.42	4724.96	-27.84	-978.12	0.000000	0.00	0.000
19-13-S	100	120	31.42	4724.96	-5.67	-978.12	0.000000	0.00	0.000
19-14-S	100	120	31.42	4724.96	18.50	-978.12	0.000000	0.00	0.000
19-15-S	100	120	31.42	4724.96	34.19	-978.12	0.000000	0.00	0.000
19-16-S	100	120	31.42	4724.96	47.16	-978.12	0.000000	0.00	0.000
19-17-S	100	120	31.42	4724.96	6.56	-978.12	0.000000	0.00	0.000
19-18-S	100	120	31.42	4724.96	-33.89	-978.12	0.000000	0.00	0.000
19-19-S	100	120	31.42	4724.96	-28.52	-978.12	0.000000	0.00	0.000
19-20-S	100	120	31.42	4724.96	-17.73	-978.12	0.000000	0.00	0.000
19-21-S	100	120	31.42	4724.96	-4.20	-978.12	0.000000	0.00	0.000
20-1-S	100	120	31.42	4724.96	-6.22	-978.12	0.000000	0.00	0.000
20-2-S	100	120	31.42	4724.96	-10.97	-978.12	0.000000	0.00	0.000
20-3-S	100	120	31.42	4724.96	-15.33	-978.12	0.000000	0.00	0.000
20-4-S	100	120	31.42	4724.96	-18.53	-978.12	0.000000	0.00	0.000
20-5-S	100	120	31.42	4724.96	16.38	-978.12	0.000000	0.00	0.000
20-6-S	100	120	31.42	2000.00	47.10	978.12	0.000000	0.00	0.000
20-7-S	100	120	31.42	4724.96	-211.43	-978.12	0.000000	0.00	0.000
20-8-S	100	120	31.42	4724.96	-154.95	-978.12	0.000000	0.00	0.000
20-9-S	100	120	31.42	4724.96	-113.16	-978.12	0.000000	0.00	0.000
20-10-S	100	120	31.42	4724.96	-78.13	-978.12	0.000000	0.00	0.000
20-11-S	100	120	31.42	4724.96	-45.74	-978.12	0.000000	0.00	0.000
20-12-S	100	120	31.42	4724.96	-22.08	-978.12	0.000000	0.00	0.000
20-13-S	100	120	31.42	4724.96	-7.85	-978.12	0.000000	0.00	0.000
20-14-S	100	120	31.42	4724.96	16.19	-978.12	0.000000	0.00	0.000
20-15-S	100	120	31.42	4724.96	19.43	-978.12	0.000000	0.00	0.000
20-16-S	100	120	31.42	4724.96	19.81	-978.12	0.000000	0.00	0.000
20-17-S	100	120	31.42	4724.96	14.03	-978.12	0.000000	0.00	0.000
20-18-S	100	120	31.42	4724.96	9.67	-978.12	0.000000	0.00	0.000
20-19-S	100	120	31.42	4724.96	-5.56	-978.12	0.000000	0.00	0.000
20-20-S	100	120	31.42	4724.96	3.55	-978.12	0.000000	0.00	0.000
20-21-S	100	120	31.42	4724.96	3.63	-978.12	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	41.81	3628.18	225.99	-244.28	168.94	0.000000	0.00	0.00
2	1	34.56	3617.50	246.94	-244.28	580.23	0.000000	0.00	0.00
3	1	28.27	2833.68	275.45	-244.28	991.53	0.000000	0.00	0.00

Combinazioni SLEQParamentoApertura 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	0.00	0.00	0.00	0.00	---	---	0.000 (7)
2	100	70	0.00	0.00	0.00	0.00	---	---	0.000 (7)
3	100	70	0.00	0.00	0.00	0.00	0.000037	---	0.000 (7)
4	100	70	0.00	0.00	0.00	0.00	0.000045	---	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	0.000060	---	0.000 (7)
7	100	70	0.00	0.00	0.00	0.00	0.000000	0.00	0.000 (7)

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Mandante:

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PROGETTO ESECUTIVO

Relazione di calcolo

IF2R.2.2.E.ZZ.CL.TR.16.0.5.005.A.DOCX

COMMESSA	LOTTO	CODIFICA	DOCUMENTO	REV.	FOGLIO
IF2R	2.2.E.ZZ	CL	TR.16.0.5.005	A	110 di 118

n°	B [cm]	H [cm]	Af [cmq]	Aeff [cmq]	M [kNm]	Mpf [kNm]	ε [%]	Sm [mm]	w [mm]
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	0.000083	---	0.000 (7)
10	100	70	0.00	0.00	0.00	0.00	0.000090	---	0.000 (7)
11	100	70	0.00	0.00	0.00	0.00	0.000098	---	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	0.000121	---	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	0.000151	---	0.000 (7)
19	100	70	0.00	0.00	0.00	0.00	0.000158	---	0.000 (7)
20	100	70	0.00	0.00	0.00	0.00	0.000166	---	0.000 (7)
21	100	70	0.00	0.00	0.00	0.00	0.000174	---	0.000 (7)
22	100	70	0.00	0.00	0.00	0.00	0.000181	---	0.000 (7)
23	100	70	0.00	0.00	0.00	0.00	0.000189	---	0.000 (7)
24	100	70	0.00	0.00	0.00	0.00	0.000196	---	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	0.000211	---	0.000 (7)
27	100	70	0.00	0.00	0.00	0.00	0.000219	---	0.000 (7)
28	100	70	0.00	0.00	0.00	0.00	0.000227	---	0.000 (7)
29	100	70	0.00	0.00	0.00	0.00	0.000234	---	0.000 (7)
30	100	70	0.00	0.00	0.00	0.00	0.000000	0.00	0.000 (7)
31	100	70	0.00	0.00	0.00	0.00	0.000000	0.00	0.000 (7)
32	100	70	31.42	2000.00	0.03	385.07	0.000000	0.00	0.000 (7)
33	100	70	31.42	2000.00	0.14	385.27	0.000000	0.00	0.000 (7)
34	100	70	31.42	2000.00	0.33	385.48	0.000000	0.00	0.000 (7)
35	100	70	31.42	2000.00	0.60	385.69	0.000000	0.00	0.000 (7)
36	100	70	31.42	2000.00	0.96	385.89	0.000000	0.00	0.000 (7)
37	100	70	31.42	2000.00	1.41	386.10	0.000000	0.00	0.000 (7)
38	100	70	31.42	2000.00	1.96	386.32	0.000000	0.00	0.000 (7)
39	100	70	31.42	2000.00	2.61	386.53	0.000000	0.00	0.000 (7)
40	100	70	31.42	2000.00	3.37	386.73	0.000000	0.00	0.000 (7)
41	100	70	31.42	2000.00	4.23	386.95	0.000000	0.00	0.000 (7)
42	100	120	31.42	2000.00	18.18	1054.56	0.000000	0.00	0.000 (7)
43	100	120	31.42	2000.00	19.37	1055.18	0.000000	0.00	0.000 (7)
44	100	120	31.42	2000.00	21.02	1055.80	0.000000	0.00	0.000 (7)
45	100	120	31.42	2000.00	23.03	1056.38	0.000000	0.00	0.000 (7)
46	100	120	31.42	2000.00	25.26	1056.97	0.000000	0.00	0.000 (7)
47	100	120	31.42	2000.00	27.63	1057.58	0.000000	0.00	0.000 (7)
48	100	120	31.42	2000.00	30.12	1058.15	0.000000	0.00	0.000 (7)
49	100	120	31.42	2000.00	32.74	1058.78	0.000000	0.00	0.000 (7)
50	100	120	31.42	2000.00	35.48	1059.38	0.000000	0.00	0.000 (7)
51	100	120	31.42	2000.00	38.37	1059.96	0.000000	0.00	0.000 (7)
52	100	120	31.42	2000.00	41.39	1060.57	0.000000	0.00	0.000 (7)
53	100	120	31.42	2000.00	44.57	1061.18	0.000000	0.00	0.000 (7)
54	100	120	31.42	2000.00	47.89	1061.75	0.000000	0.00	0.000 (7)
55	100	120	31.42	2000.00	51.38	1062.36	0.000000	0.00	0.000 (7)
56	100	120	31.42	2000.00	55.03	1062.99	0.000000	0.00	0.000 (7)
57	100	120	31.42	2000.00	58.85	1063.59	0.000000	0.00	0.000 (7)
58	100	120	31.42	2000.00	62.85	1064.17	0.000000	0.00	0.000 (7)
59	100	120	31.42	2000.00	67.02	1064.79	0.000000	0.00	0.000 (7)
60	100	120	31.42	2000.00	71.38	1065.39	0.000000	0.00	0.000 (7)
61	100	120	31.42	2000.00	75.92	1065.95	0.000000	0.00	0.000 (7)
62	100	120	31.42	2000.00	80.66	1041.04	0.000000	0.00	0.000 (7)
63	100	120	31.42	2000.00	85.60	1041.61	0.000000	0.00	0.000 (7)
64	100	120	31.42	2000.00	90.74	1067.74	0.000000	0.00	0.000 (7)
65	100	120	31.42	2000.00	96.09	1068.34	0.000000	0.00	0.000 (7)
66	100	120	31.42	2000.00	101.64	1068.96	0.000000	0.00	0.000 (7)
67	100	120	31.42	2000.00	107.76	1068.96	0.000000	0.00	0.000 (7)
68	100	120	31.42	2000.00	107.06	1069.50	0.000000	0.00	0.000 (7)
69	100	120	31.42	2000.00	112.54	1070.08	0.000000	0.00	0.000 (7)
70	100	120	31.42	2000.00	118.21	1070.62	0.000000	0.00	0.000 (7)
71	100	120	31.42	2000.00	124.08	1071.16	0.000000	0.00	0.000 (7)
72	100	120	31.42	2000.00	130.14	1071.71	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	60	120	21.99	2791.30	1.49	-603.04	0.000000	0.00	0.000
1-2-P	60	120	21.99	2791.30	-1.61	-603.04	0.000000	0.00	0.000
1-3-P	60	120	21.99	2791.30	-6.71	-603.04	0.000000	0.00	0.000
1-4-P	60	120	21.99	2791.30	-19.38	-603.04	0.000000	0.00	0.000
1-5-P	60	120	21.99	2791.30	-25.40	-603.04	0.000000	0.00	0.000
1-6-P	60	120	21.99	2791.30	-27.38	-603.04	0.000000	0.00	0.000

APPALTATORE:



**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.16.0.5.005.A.DOCX

COMMESSA	LOTTO	CODIFICA	DOCUMENTO	REV.	FOGLIO
IF2R	2.2.E.ZZ	CL	TR.16.0.5.005	A	111 di 118

Is	B [cm]	H [cm]	Af [cmq]	Aeff [cmq]	M [kNm]	Mpf [kNm]	ε [%]	Sm [mm]	w [mm]
1-7-P	60	120	21.99	2791.30	-18.64	-603.04	0.000000	0.00	0.000
1-8-P	60	120	21.99	2791.30	-5.94	-603.04	0.000000	0.00	0.000
1-9-P	60	120	21.99	2791.30	11.51	-603.04	0.000000	0.00	0.000
1-10-P	60	120	21.99	2791.30	15.45	-603.04	0.000000	0.00	0.000
1-11-P	60	120	21.99	2791.30	16.58	-603.04	0.000000	0.00	0.000
1-12-P	60	120	21.99	2791.30	13.37	-603.04	0.000000	0.00	0.000
1-13-P	60	120	21.99	2791.30	2.69	-603.04	0.000000	0.00	0.000
1-14-P	60	120	21.99	2791.30	-13.67	-603.04	0.000000	0.00	0.000
1-15-P	60	120	21.99	2791.30	-20.68	-603.04	0.000000	0.00	0.000
1-16-P	60	120	21.99	2791.30	-19.29	-603.04	0.000000	0.00	0.000
1-17-P	60	120	21.99	2791.30	-12.32	-603.04	0.000000	0.00	0.000
1-18-P	60	120	21.99	2791.30	4.76	-603.04	0.000000	0.00	0.000
1-19-P	60	120	21.99	2791.30	14.27	-603.04	0.000000	0.00	0.000
1-20-P	60	120	21.99	1200.00	17.76	603.04	0.000000	0.00	0.000
1-21-P	60	120	21.99	2791.30	15.62	-603.04	0.000000	0.00	0.000
1-22-P	60	120	21.99	2791.30	9.94	-603.04	0.000000	0.00	0.000
1-23-P	60	120	21.99	2791.30	-6.74	-603.04	0.000000	0.00	0.000
1-24-P	60	120	21.99	2791.30	-16.57	-603.04	0.000000	0.00	0.000
1-25-P	60	120	21.99	2791.30	-23.57	-603.04	0.000000	0.00	0.000
1-26-P	60	120	21.99	2791.30	-16.57	-603.04	0.000000	0.00	0.000
1-27-P	60	120	21.99	2791.30	-6.74	-603.04	0.000000	0.00	0.000
1-28-P	60	120	21.99	2791.30	9.94	-603.04	0.000000	0.00	0.000
1-29-P	60	120	21.99	2791.30	15.62	-603.04	0.000000	0.00	0.000
1-30-P	60	120	21.99	1200.00	17.76	603.04	0.000000	0.00	0.000
1-31-P	60	120	21.99	2791.30	14.27	-603.04	0.000000	0.00	0.000
1-32-P	60	120	21.99	2791.30	4.76	-603.04	0.000000	0.00	0.000
1-33-P	60	120	21.99	2791.30	-12.32	-603.04	0.000000	0.00	0.000
1-34-P	60	120	21.99	2791.30	-19.29	-603.04	0.000000	0.00	0.000
1-35-P	60	120	21.99	2791.30	-20.68	-603.04	0.000000	0.00	0.000
1-36-P	60	120	21.99	2791.30	-13.67	-603.04	0.000000	0.00	0.000
1-37-P	60	120	21.99	2791.30	2.69	-603.04	0.000000	0.00	0.000
1-38-P	60	120	21.99	2791.30	13.37	-603.04	0.000000	0.00	0.000
1-39-P	60	120	21.99	2791.30	16.58	-603.04	0.000000	0.00	0.000
1-40-P	60	120	21.99	2791.30	15.45	-603.04	0.000000	0.00	0.000
1-41-P	60	120	21.99	2791.30	11.51	-603.04	0.000000	0.00	0.000
1-42-P	60	120	21.99	2791.30	-5.94	-603.04	0.000000	0.00	0.000
1-43-P	60	120	21.99	2791.30	-18.64	-603.04	0.000000	0.00	0.000
1-44-P	60	120	21.99	2791.30	-27.38	-603.04	0.000000	0.00	0.000
1-45-P	60	120	21.99	2791.30	-25.40	-603.04	0.000000	0.00	0.000
1-46-P	60	120	21.99	2791.30	-19.38	-603.04	0.000000	0.00	0.000
1-47-P	60	120	21.99	2791.30	-6.71	-603.04	0.000000	0.00	0.000
1-48-P	60	120	21.99	2791.30	-1.61	-603.04	0.000000	0.00	0.000
1-49-P	60	120	21.99	2791.30	1.49	-603.04	0.000000	0.00	0.000
2-1-P	60	120	18.85	1200.00	4.84	586.87	0.000000	0.00	0.000
2-2-P	60	120	18.85	1200.00	5.69	586.87	0.000000	0.00	0.000
2-3-P	60	120	18.85	2834.97	6.76	-586.87	0.000000	0.00	0.000
2-4-P	60	120	18.85	2834.97	8.95	-586.87	0.000000	0.00	0.000
2-5-P	60	120	18.85	2834.97	-31.43	-586.87	0.000000	0.00	0.000
2-6-P	60	120	18.85	2834.97	-60.51	-586.87	0.000000	0.00	0.000
2-7-P	60	120	18.85	2834.97	-10.30	-586.87	0.000000	0.00	0.000
2-8-P	60	120	18.85	2834.97	12.56	-586.87	0.000000	0.00	0.000
2-9-P	60	120	18.85	1200.00	13.20	586.87	0.000000	0.00	0.000
2-10-P	60	120	18.85	1200.00	13.37	586.87	0.000000	0.00	0.000
2-11-P	60	120	18.85	1200.00	13.52	586.87	0.000000	0.00	0.000
2-12-P	60	120	18.85	1200.00	13.64	586.87	0.000000	0.00	0.000
2-13-P	60	120	18.85	2834.97	13.34	-586.87	0.000000	0.00	0.000
2-14-P	60	120	18.85	2834.97	4.76	-586.87	0.000000	0.00	0.000
2-15-P	60	120	18.85	2834.97	-48.18	-586.87	0.000000	0.00	0.000
2-16-P	60	120	18.85	2834.97	-38.08	-586.87	0.000000	0.00	0.000
2-17-P	60	120	18.85	2834.97	13.67	-586.87	0.000000	0.00	0.000
2-18-P	60	120	18.85	2834.97	13.30	-586.87	0.000000	0.00	0.000
2-19-P	60	120	18.85	1200.00	13.59	586.87	0.000000	0.00	0.000
2-20-P	60	120	18.85	1200.00	13.53	586.87	0.000000	0.00	0.000
2-21-P	60	120	18.85	1200.00	13.55	586.87	0.000000	0.00	0.000
2-22-P	60	120	18.85	1200.00	13.45	586.87	0.000000	0.00	0.000
2-23-P	60	120	18.85	2834.97	13.34	-586.87	0.000000	0.00	0.000
2-24-P	60	120	18.85	2834.97	-18.45	-586.87	0.000000	0.00	0.000
2-25-P	60	120	18.85	2834.97	-67.92	-586.87	0.000000	0.00	0.000
2-26-P	60	120	18.85	2834.97	-18.45	-586.87	0.000000	0.00	0.000
2-27-P	60	120	18.85	2834.97	13.34	-586.87	0.000000	0.00	0.000
2-28-P	60	120	18.85	1200.00	13.45	586.87	0.000000	0.00	0.000
2-29-P	60	120	18.85	1200.00	13.55	586.87	0.000000	0.00	0.000
2-30-P	60	120	18.85	1200.00	13.53	586.87	0.000000	0.00	0.000
2-31-P	60	120	18.85	1200.00	13.59	586.87	0.000000	0.00	0.000
2-32-P	60	120	18.85	2834.97	13.30	-586.87	0.000000	0.00	0.000
2-33-P	60	120	18.85	2834.97	13.67	-586.87	0.000000	0.00	0.000
2-34-P	60	120	18.85	2834.97	-38.08	-586.87	0.000000	0.00	0.000
2-35-P	60	120	18.85	2834.97	-48.18	-586.87	0.000000	0.00	0.000
2-36-P	60	120	18.85	2834.97	4.76	-586.87	0.000000	0.00	0.000
2-37-P	60	120	18.85	2834.97	13.34	-586.87	0.000000	0.00	0.000
2-38-P	60	120	18.85	1200.00	13.64	586.87	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.16.0.5.005.A.DOCX

COMMESSA LOTTO CODIFICA DOCUMENTO REV. FOGLIO
IF2R 2.2.E.ZZ CL TR.16.0.5.005 A 112 di 118

Is	B [cm]	H [cm]	Af [cmq]	Aeff [cmq]	M [kNm]	Mpf [kNm]	ε [%]	Sm [mm]	w [mm]
2-39-P	60	120	18.85	1200.00	13.52	586.87	0.000000	0.00	0.000
2-40-P	60	120	18.85	1200.00	13.37	586.87	0.000000	0.00	0.000
2-41-P	60	120	18.85	1200.00	13.20	586.87	0.000000	0.00	0.000
2-42-P	60	120	18.85	2834.97	12.56	-586.87	0.000000	0.00	0.000
2-43-P	60	120	18.85	2834.97	-10.30	-586.87	0.000000	0.00	0.000
2-44-P	60	120	18.85	2834.97	-60.51	-586.87	0.000000	0.00	0.000
2-45-P	60	120	18.85	2834.97	-31.43	-586.87	0.000000	0.00	0.000
2-46-P	60	120	18.85	2834.97	8.95	-586.87	0.000000	0.00	0.000
2-47-P	60	120	18.85	2834.97	6.76	-586.87	0.000000	0.00	0.000
2-48-P	60	120	18.85	1200.00	5.69	586.87	0.000000	0.00	0.000
2-49-P	60	120	18.85	1200.00	4.84	586.87	0.000000	0.00	0.000
5-1-P	85	120	28.27	3993.47	-8.28	-839.48	0.000000	0.00	0.000
5-2-P	85	120	28.27	3993.47	-11.15	-839.48	0.000000	0.00	0.000
5-3-P	85	120	28.27	3993.47	-13.79	-839.48	0.000000	0.00	0.000
5-4-P	85	120	28.27	3993.47	-15.56	-839.48	0.000000	0.00	0.000
5-5-P	85	120	28.27	3993.47	-15.45	-839.48	0.000000	0.00	0.000
5-6-P	85	120	28.27	3993.47	-14.75	-839.48	0.000000	0.00	0.000
5-7-P	85	120	28.27	3993.47	-13.25	-839.48	0.000000	0.00	0.000
5-8-P	85	120	28.27	3993.47	-15.73	-839.48	0.000000	0.00	0.000
5-9-P	85	120	28.27	3993.47	-21.16	-839.48	0.000000	0.00	0.000
5-10-P	85	120	28.27	3993.47	-57.54	-839.48	0.000000	0.00	0.000
5-11-P	85	120	28.27	3993.47	-62.96	-839.48	0.000000	0.00	0.000
5-12-P	85	120	28.27	3993.47	-23.89	-839.48	0.000000	0.00	0.000
5-13-P	85	120	28.27	3993.47	-9.70	-839.48	0.000000	0.00	0.000
5-14-P	85	120	28.27	3993.47	-3.57	-839.48	0.000000	0.00	0.000
5-15-P	85	120	28.27	3993.47	-4.12	-839.48	0.000000	0.00	0.000
5-16-P	85	120	28.27	3993.47	-3.70	-839.48	0.000000	0.00	0.000
5-17-P	85	120	28.27	3993.47	-3.11	-839.48	0.000000	0.00	0.000
5-18-P	85	120	28.27	3993.47	-8.72	-839.48	0.000000	0.00	0.000
5-19-P	85	120	28.27	3993.47	-27.02	-839.48	0.000000	0.00	0.000
5-20-P	85	120	28.27	3993.47	-64.76	-839.48	0.000000	0.00	0.000
5-21-P	85	120	28.27	3993.47	-41.78	-839.48	0.000000	0.00	0.000
5-22-P	85	120	28.27	3993.47	-10.85	-839.48	0.000000	0.00	0.000
5-23-P	85	120	28.27	3993.47	-3.76	-839.48	0.000000	0.00	0.000
5-24-P	85	120	28.27	3993.47	3.50	-839.48	0.000000	0.00	0.000
5-25-P	85	120	28.27	3993.47	4.40	-839.48	0.000000	0.00	0.000
5-26-P	85	120	28.27	3993.47	3.50	-839.48	0.000000	0.00	0.000
5-27-P	85	120	28.27	3993.47	-3.76	-839.48	0.000000	0.00	0.000
5-28-P	85	120	28.27	3993.47	-10.85	-839.48	0.000000	0.00	0.000
5-29-P	85	120	28.27	3993.47	-41.78	-839.48	0.000000	0.00	0.000
5-30-P	85	120	28.27	3993.47	-64.76	-839.48	0.000000	0.00	0.000
5-31-P	85	120	28.27	3993.47	-27.02	-839.48	0.000000	0.00	0.000
5-32-P	85	120	28.27	3993.47	-8.72	-839.48	0.000000	0.00	0.000
5-33-P	85	120	28.27	3993.47	-3.11	-839.48	0.000000	0.00	0.000
5-34-P	85	120	28.27	3993.47	-3.70	-839.48	0.000000	0.00	0.000
5-35-P	85	120	28.27	3993.47	-4.12	-839.48	0.000000	0.00	0.000
5-36-P	85	120	28.27	3993.47	-3.57	-839.48	0.000000	0.00	0.000
5-37-P	85	120	28.27	3993.47	-9.70	-839.48	0.000000	0.00	0.000
5-38-P	85	120	28.27	3993.47	-23.89	-839.48	0.000000	0.00	0.000
5-39-P	85	120	28.27	3993.47	-62.96	-839.48	0.000000	0.00	0.000
5-40-P	85	120	28.27	3993.47	-57.54	-839.48	0.000000	0.00	0.000
5-41-P	85	120	28.27	3993.47	-21.16	-839.48	0.000000	0.00	0.000
5-42-P	85	120	28.27	3993.47	-15.73	-839.48	0.000000	0.00	0.000
5-43-P	85	120	28.27	3993.47	-13.25	-839.48	0.000000	0.00	0.000
5-44-P	85	120	28.27	3993.47	-14.75	-839.48	0.000000	0.00	0.000
5-45-P	85	120	28.27	3993.47	-15.45	-839.48	0.000000	0.00	0.000
5-46-P	85	120	28.27	3993.47	-15.56	-839.48	0.000000	0.00	0.000
5-47-P	85	120	28.27	3993.47	-13.79	-839.48	0.000000	0.00	0.000
5-48-P	85	120	28.27	3993.47	-11.15	-839.48	0.000000	0.00	0.000
5-49-P	85	120	28.27	3993.47	-8.28	-839.48	0.000000	0.00	0.000
6-1-P	85	120	28.27	3993.47	-4.06	-839.48	0.000000	0.00	0.000
6-2-P	85	120	28.27	3993.47	-4.90	-839.48	0.000000	0.00	0.000
6-3-P	85	120	28.27	3993.47	-5.82	-839.48	0.000000	0.00	0.000
6-4-P	85	120	28.27	3993.47	-6.89	-839.48	0.000000	0.00	0.000
6-5-P	85	120	28.27	3993.47	-6.38	-839.48	0.000000	0.00	0.000
6-6-P	85	120	28.27	3993.47	-6.28	-839.48	0.000000	0.00	0.000
6-7-P	85	120	28.27	3993.47	-9.21	-839.48	0.000000	0.00	0.000
6-8-P	85	120	28.27	3993.47	-14.45	-839.48	0.000000	0.00	0.000
6-9-P	85	120	28.27	3993.47	-20.85	-839.48	0.000000	0.00	0.000
6-10-P	85	120	28.27	3993.47	-23.12	-839.48	0.000000	0.00	0.000
6-11-P	85	120	28.27	3993.47	-22.78	-839.48	0.000000	0.00	0.000
6-12-P	85	120	28.27	3993.47	-18.36	-839.48	0.000000	0.00	0.000
6-13-P	85	120	28.27	3993.47	-11.28	-839.48	0.000000	0.00	0.000
6-14-P	85	120	28.27	3993.47	-4.73	-839.48	0.000000	0.00	0.000
6-15-P	85	120	28.27	3993.47	2.50	-839.48	0.000000	0.00	0.000
6-16-P	85	120	28.27	3993.47	1.53	-839.48	0.000000	0.00	0.000
6-17-P	85	120	28.27	3993.47	-1.70	-839.48	0.000000	0.00	0.000
6-18-P	85	120	28.27	3993.47	-7.91	-839.48	0.000000	0.00	0.000
6-19-P	85	120	28.27	3993.47	-12.69	-839.48	0.000000	0.00	0.000
6-20-P	85	120	28.27	3993.47	-15.97	-839.48	0.000000	0.00	0.000
6-21-P	85	120	28.27	3993.47	-13.61	-839.48	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.16.0.5.005.A.DOCX

COMMESSA LOTTO CODIFICA DOCUMENTO REV. FOGLIO
IF2R 2.2.E.ZZ CL TR.16.0.5.005 A 113 di 118

Is	B [cm]	H [cm]	Af [cmq]	Aeff [cmq]	M [kNm]	Mpf [kNm]	ε [%]	Sm [mm]	w [mm]
6-22-P	85	120	28.27	3993.47	-9.83	-839.48	0.000000	0.00	0.000
6-23-P	85	120	28.27	3993.47	-3.11	-839.48	0.000000	0.00	0.000
6-24-P	85	120	28.27	3993.47	3.55	-839.48	0.000000	0.00	0.000
6-25-P	85	120	28.27	1700.00	5.77	839.48	0.000000	0.00	0.000
6-26-P	85	120	28.27	3993.47	3.55	-839.48	0.000000	0.00	0.000
6-27-P	85	120	28.27	3993.47	-3.11	-839.48	0.000000	0.00	0.000
6-28-P	85	120	28.27	3993.47	-9.83	-839.48	0.000000	0.00	0.000
6-29-P	85	120	28.27	3993.47	-13.61	-839.48	0.000000	0.00	0.000
6-30-P	85	120	28.27	3993.47	-15.97	-839.48	0.000000	0.00	0.000
6-31-P	85	120	28.27	3993.47	-12.69	-839.48	0.000000	0.00	0.000
6-32-P	85	120	28.27	3993.47	-7.91	-839.48	0.000000	0.00	0.000
6-33-P	85	120	28.27	3993.47	-1.70	-839.48	0.000000	0.00	0.000
6-34-P	85	120	28.27	3993.47	1.53	-839.48	0.000000	0.00	0.000
6-35-P	85	120	28.27	3993.47	2.50	-839.48	0.000000	0.00	0.000
6-36-P	85	120	28.27	3993.47	-4.73	-839.48	0.000000	0.00	0.000
6-37-P	85	120	28.27	3993.47	-11.28	-839.48	0.000000	0.00	0.000
6-38-P	85	120	28.27	3993.47	-18.36	-839.48	0.000000	0.00	0.000
6-39-P	85	120	28.27	3993.47	-22.78	-839.48	0.000000	0.00	0.000
6-40-P	85	120	28.27	3993.47	-23.12	-839.48	0.000000	0.00	0.000
6-41-P	85	120	28.27	3993.47	-20.85	-839.48	0.000000	0.00	0.000
6-42-P	85	120	28.27	3993.47	-14.45	-839.48	0.000000	0.00	0.000
6-43-P	85	120	28.27	3993.47	-9.21	-839.48	0.000000	0.00	0.000
6-44-P	85	120	28.27	3993.47	-6.28	-839.48	0.000000	0.00	0.000
6-45-P	85	120	28.27	3993.47	-6.38	-839.48	0.000000	0.00	0.000
6-46-P	85	120	28.27	3993.47	-6.89	-839.48	0.000000	0.00	0.000
6-47-P	85	120	28.27	3993.47	-5.82	-839.48	0.000000	0.00	0.000
6-48-P	85	120	28.27	3993.47	-4.90	-839.48	0.000000	0.00	0.000
6-49-P	85	120	28.27	3993.47	-4.06	-839.48	0.000000	0.00	0.000
7-1-P	85	120	25.13	4040.06	2.87	-823.32	0.000000	0.00	0.000
7-2-P	85	120	25.13	4040.06	4.14	-823.32	0.000000	0.00	0.000
7-3-P	85	120	25.13	4040.06	-8.68	-823.32	0.000000	0.00	0.000
7-4-P	85	120	25.13	4040.06	-18.51	-823.32	0.000000	0.00	0.000
7-5-P	85	120	25.13	4040.06	-27.65	-823.32	0.000000	0.00	0.000
7-6-P	85	120	25.13	4040.06	-34.05	-823.32	0.000000	0.00	0.000
7-7-P	85	120	25.13	4040.06	-21.42	-823.32	0.000000	0.00	0.000
7-8-P	85	120	25.13	4040.06	-10.80	-823.32	0.000000	0.00	0.000
7-9-P	85	120	25.13	4040.06	3.99	-823.32	0.000000	0.00	0.000
7-10-P	85	120	25.13	4040.06	5.79	-823.32	0.000000	0.00	0.000
7-11-P	85	120	25.13	4040.06	7.23	-823.32	0.000000	0.00	0.000
7-12-P	85	120	25.13	4040.06	7.85	-823.32	0.000000	0.00	0.000
7-13-P	85	120	25.13	4040.06	-8.63	-823.32	0.000000	0.00	0.000
7-14-P	85	120	25.13	4040.06	-16.25	-823.32	0.000000	0.00	0.000
7-15-P	85	120	25.13	4040.06	-25.40	-823.32	0.000000	0.00	0.000
7-16-P	85	120	25.13	4040.06	-21.73	-823.32	0.000000	0.00	0.000
7-17-P	85	120	25.13	4040.06	-11.50	-823.32	0.000000	0.00	0.000
7-18-P	85	120	25.13	4040.06	5.85	-823.32	0.000000	0.00	0.000
7-19-P	85	120	25.13	1700.00	11.40	823.32	0.000000	0.00	0.000
7-20-P	85	120	25.13	1700.00	13.88	823.32	0.000000	0.00	0.000
7-21-P	85	120	25.13	1700.00	13.05	823.32	0.000000	0.00	0.000
7-22-P	85	120	25.13	4040.06	10.22	-823.32	0.000000	0.00	0.000
7-23-P	85	120	25.13	4040.06	-7.20	-823.32	0.000000	0.00	0.000
7-24-P	85	120	25.13	4040.06	-14.27	-823.32	0.000000	0.00	0.000
7-25-P	85	120	25.13	4040.06	-25.80	-823.32	0.000000	0.00	0.000
7-26-P	85	120	25.13	4040.06	-14.27	-823.32	0.000000	0.00	0.000
7-27-P	85	120	25.13	4040.06	-7.20	-823.32	0.000000	0.00	0.000
7-28-P	85	120	25.13	4040.06	10.22	-823.32	0.000000	0.00	0.000
7-29-P	85	120	25.13	1700.00	13.05	823.32	0.000000	0.00	0.000
7-30-P	85	120	25.13	1700.00	13.88	823.32	0.000000	0.00	0.000
7-31-P	85	120	25.13	1700.00	11.40	823.32	0.000000	0.00	0.000
7-32-P	85	120	25.13	4040.06	5.85	-823.32	0.000000	0.00	0.000
7-33-P	85	120	25.13	4040.06	-11.50	-823.32	0.000000	0.00	0.000
7-34-P	85	120	25.13	4040.06	-21.73	-823.32	0.000000	0.00	0.000
7-35-P	85	120	25.13	4040.06	-25.40	-823.32	0.000000	0.00	0.000
7-36-P	85	120	25.13	4040.06	-16.25	-823.32	0.000000	0.00	0.000
7-37-P	85	120	25.13	4040.06	-8.63	-823.32	0.000000	0.00	0.000
7-38-P	85	120	25.13	4040.06	7.85	-823.32	0.000000	0.00	0.000
7-39-P	85	120	25.13	4040.06	7.23	-823.32	0.000000	0.00	0.000
7-40-P	85	120	25.13	4040.06	5.79	-823.32	0.000000	0.00	0.000
7-41-P	85	120	25.13	4040.06	3.99	-823.32	0.000000	0.00	0.000
7-42-P	85	120	25.13	4040.06	-10.80	-823.32	0.000000	0.00	0.000
7-43-P	85	120	25.13	4040.06	-21.42	-823.32	0.000000	0.00	0.000
7-44-P	85	120	25.13	4040.06	-34.05	-823.32	0.000000	0.00	0.000
7-45-P	85	120	25.13	4040.06	-27.65	-823.32	0.000000	0.00	0.000
7-46-P	85	120	25.13	4040.06	-18.51	-823.32	0.000000	0.00	0.000
7-47-P	85	120	25.13	4040.06	-8.68	-823.32	0.000000	0.00	0.000
7-48-P	85	120	25.13	4040.06	4.14	-823.32	0.000000	0.00	0.000
7-49-P	85	120	25.13	4040.06	2.87	-823.32	0.000000	0.00	0.000
8-1-P	85	120	28.27	3993.47	0.82	-839.48	0.000000	0.00	0.000
8-2-P	85	120	28.27	3993.47	-3.82	-839.48	0.000000	0.00	0.000
8-3-P	85	120	28.27	3993.47	-10.52	-839.48	0.000000	0.00	0.000
8-4-P	85	120	28.27	3993.47	-21.47	-839.48	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.16.0.5.005.A.DOCX

COMMESSA LOTTO CODIFICA DOCUMENTO REV. FOGLIO
IF2R 2.2.E.ZZ CL TR.16.0.5.005 A 114 di 118

Is	B [cm]	H [cm]	Af [cmq]	Aeff [cmq]	M [kNm]	Mpf [kNm]	ε [%]	Sm [mm]	w [mm]
8-5-P	85	120	28.27	3993.47	-44.29	-839.48	0.000000	0.00	0.000
8-6-P	85	120	28.27	3993.47	-60.69	-839.48	0.000000	0.00	0.000
8-7-P	85	120	28.27	3993.47	-30.65	-839.48	0.000000	0.00	0.000
8-8-P	85	120	28.27	3993.47	-12.54	-839.48	0.000000	0.00	0.000
8-9-P	85	120	28.27	3993.47	2.00	-839.48	0.000000	0.00	0.000
8-10-P	85	120	28.27	1700.00	6.34	839.48	0.000000	0.00	0.000
8-11-P	85	120	28.27	3993.47	8.10	-839.48	0.000000	0.00	0.000
8-12-P	85	120	28.27	3993.47	4.62	-839.48	0.000000	0.00	0.000
8-13-P	85	120	28.27	3993.47	-7.78	-839.48	0.000000	0.00	0.000
8-14-P	85	120	28.27	3993.47	-19.64	-839.48	0.000000	0.00	0.000
8-15-P	85	120	28.27	3993.47	-47.49	-839.48	0.000000	0.00	0.000
8-16-P	85	120	28.27	3993.47	-40.93	-839.48	0.000000	0.00	0.000
8-17-P	85	120	28.27	3993.47	-13.67	-839.48	0.000000	0.00	0.000
8-18-P	85	120	28.27	3993.47	3.19	-839.48	0.000000	0.00	0.000
8-19-P	85	120	28.27	1700.00	10.11	839.48	0.000000	0.00	0.000
8-20-P	85	120	28.27	1700.00	15.36	839.48	0.000000	0.00	0.000
8-21-P	85	120	28.27	1700.00	12.87	839.48	0.000000	0.00	0.000
8-22-P	85	120	28.27	3993.47	7.24	-839.48	0.000000	0.00	0.000
8-23-P	85	120	28.27	3993.47	-7.59	-839.48	0.000000	0.00	0.000
8-24-P	85	120	28.27	3993.47	-25.91	-839.48	0.000000	0.00	0.000
8-25-P	85	120	28.27	3993.47	-54.96	-839.48	0.000000	0.00	0.000
8-26-P	85	120	28.27	3993.47	-25.91	-839.48	0.000000	0.00	0.000
8-27-P	85	120	28.27	3993.47	-7.59	-839.48	0.000000	0.00	0.000
8-28-P	85	120	28.27	3993.47	7.24	-839.48	0.000000	0.00	0.000
8-29-P	85	120	28.27	1700.00	12.87	839.48	0.000000	0.00	0.000
8-30-P	85	120	28.27	1700.00	15.36	839.48	0.000000	0.00	0.000
8-31-P	85	120	28.27	1700.00	10.11	839.48	0.000000	0.00	0.000
8-32-P	85	120	28.27	3993.47	3.19	-839.48	0.000000	0.00	0.000
8-33-P	85	120	28.27	3993.47	-13.67	-839.48	0.000000	0.00	0.000
8-34-P	85	120	28.27	3993.47	-40.93	-839.48	0.000000	0.00	0.000
8-35-P	85	120	28.27	3993.47	-47.49	-839.48	0.000000	0.00	0.000
8-36-P	85	120	28.27	3993.47	-19.64	-839.48	0.000000	0.00	0.000
8-37-P	85	120	28.27	3993.47	-7.78	-839.48	0.000000	0.00	0.000
8-38-P	85	120	28.27	3993.47	4.62	-839.48	0.000000	0.00	0.000
8-39-P	85	120	28.27	3993.47	8.10	-839.48	0.000000	0.00	0.000
8-40-P	85	120	28.27	1700.00	6.34	839.48	0.000000	0.00	0.000
8-41-P	85	120	28.27	3993.47	2.00	-839.48	0.000000	0.00	0.000
8-42-P	85	120	28.27	3993.47	-12.54	-839.48	0.000000	0.00	0.000
8-43-P	85	120	28.27	3993.47	-30.65	-839.48	0.000000	0.00	0.000
8-44-P	85	120	28.27	3993.47	-60.69	-839.48	0.000000	0.00	0.000
8-45-P	85	120	28.27	3993.47	-44.29	-839.48	0.000000	0.00	0.000
8-46-P	85	120	28.27	3993.47	-21.47	-839.48	0.000000	0.00	0.000
8-47-P	85	120	28.27	3993.47	-10.52	-839.48	0.000000	0.00	0.000
8-48-P	85	120	28.27	3993.47	-3.82	-839.48	0.000000	0.00	0.000
8-49-P	85	120	28.27	3993.47	0.82	-839.48	0.000000	0.00	0.000
9-1-S	100	120	31.42	4724.96	-4.66	-978.12	0.000000	0.00	0.000
9-2-S	100	120	31.42	4724.96	-8.40	-978.12	0.000000	0.00	0.000
9-3-S	100	120	31.42	4724.96	-11.68	-978.12	0.000000	0.00	0.000
9-4-S	100	120	31.42	4724.96	-13.45	-978.12	0.000000	0.00	0.000
9-5-S	100	120	31.42	4724.96	16.03	-978.12	0.000000	0.00	0.000
9-6-S	100	120	31.42	2000.00	44.26	978.12	0.000000	0.00	0.000
9-7-S	100	120	31.42	4724.96	-166.82	-978.12	0.000000	0.00	0.000
9-8-S	100	120	31.42	4724.96	-116.82	-978.12	0.000000	0.00	0.000
9-9-S	100	120	31.42	4724.96	-80.32	-978.12	0.000000	0.00	0.000
9-10-S	100	120	31.42	4724.96	-50.84	-978.12	0.000000	0.00	0.000
9-11-S	100	120	31.42	4724.96	-24.72	-978.12	0.000000	0.00	0.000
9-12-S	100	120	31.42	4724.96	-9.25	-978.12	0.000000	0.00	0.000
9-13-S	100	120	31.42	4724.96	12.16	-978.12	0.000000	0.00	0.000
9-14-S	100	120	31.42	4724.96	19.41	-978.12	0.000000	0.00	0.000
9-15-S	100	120	31.42	4724.96	18.42	-978.12	0.000000	0.00	0.000
9-16-S	100	120	31.42	4724.96	14.70	-978.12	0.000000	0.00	0.000
9-17-S	100	120	31.42	4724.96	7.62	-978.12	0.000000	0.00	0.000
9-18-S	100	120	31.42	4724.96	-10.20	-978.12	0.000000	0.00	0.000
9-19-S	100	120	31.42	4724.96	-6.25	-978.12	0.000000	0.00	0.000
9-20-S	100	120	31.42	4724.96	-2.96	-978.12	0.000000	0.00	0.000
9-21-S	100	120	31.42	4724.96	1.73	-978.12	0.000000	0.00	0.000
10-1-S	100	120	31.42	4724.96	7.52	-978.12	0.000000	0.00	0.000
10-2-S	100	120	31.42	4724.96	12.98	-978.12	0.000000	0.00	0.000
10-3-S	100	120	31.42	4724.96	-11.41	-978.12	0.000000	0.00	0.000
10-4-S	100	120	31.42	4724.96	-59.07	-978.12	0.000000	0.00	0.000
10-5-S	100	120	31.42	4724.96	-32.47	-978.12	0.000000	0.00	0.000
10-6-S	100	120	31.42	2000.00	51.06	978.12	0.000000	0.00	0.000
10-7-S	100	120	31.42	4724.96	-120.07	-978.12	0.000000	0.00	0.000
10-8-S	100	120	31.42	4724.96	-100.07	-978.12	0.000000	0.00	0.000
10-9-S	100	120	31.42	4724.96	-76.59	-978.12	0.000000	0.00	0.000
10-10-S	100	120	31.42	4724.96	-54.91	-978.12	0.000000	0.00	0.000
10-11-S	100	120	31.42	4724.96	-33.23	-978.12	0.000000	0.00	0.000
10-12-S	100	120	31.42	4724.96	-11.41	-978.12	0.000000	0.00	0.000
10-13-S	100	120	31.42	4724.96	8.00	-978.12	0.000000	0.00	0.000
10-14-S	100	120	31.42	4724.96	21.67	-978.12	0.000000	0.00	0.000
10-15-S	100	120	31.42	4724.96	28.52	-978.12	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.16.0.5.005.A.DOCX

COMMESSA	LOTTO	CODIFICA	DOCUMENTO	REV.	FOGLIO
IF2R	2.2.E.ZZ	CL	TR.16.0.5.005	A	115 di 118

Is	B [cm]	H [cm]	Af [cmq]	Aeff [cmq]	M [kNm]	Mpf [kNm]	ε [%]	Sm [mm]	w [mm]
10-16-S	100	120	31.42	4724.96	32.54	-978.12	0.000000	0.00	0.000
10-17-S	100	120	31.42	4724.96	-16.48	-978.12	0.000000	0.00	0.000
10-18-S	100	120	31.42	4724.96	-42.92	-978.12	0.000000	0.00	0.000
10-19-S	100	120	31.42	4724.96	-26.15	-978.12	0.000000	0.00	0.000
10-20-S	100	120	31.42	4724.96	-12.94	-978.12	0.000000	0.00	0.000
10-21-S	100	120	31.42	4724.96	-1.82	-978.12	0.000000	0.00	0.000
11-1-S	100	120	31.42	4724.96	-5.76	-978.12	0.000000	0.00	0.000
11-2-S	100	120	31.42	4724.96	-4.48	-978.12	0.000000	0.00	0.000
11-3-S	100	120	31.42	4724.96	2.66	-978.12	0.000000	0.00	0.000
11-4-S	100	120	31.42	2000.00	11.83	978.12	0.000000	0.00	0.000
11-5-S	100	120	31.42	2000.00	26.17	978.12	0.000000	0.00	0.000
11-6-S	100	120	31.42	2000.00	42.10	978.12	0.000000	0.00	0.000
11-7-S	100	120	31.42	4724.96	-24.76	-978.12	0.000000	0.00	0.000
11-8-S	100	120	31.42	4724.96	-43.17	-978.12	0.000000	0.00	0.000
11-9-S	100	120	31.42	4724.96	-122.95	-978.12	0.000000	0.00	0.000
11-10-S	100	120	31.42	4724.96	-94.04	-978.12	0.000000	0.00	0.000
11-11-S	100	120	31.42	4724.96	-58.88	-978.12	0.000000	0.00	0.000
11-12-S	100	120	31.42	4724.96	-27.53	-978.12	0.000000	0.00	0.000
11-13-S	100	120	31.42	4724.96	-6.89	-978.12	0.000000	0.00	0.000
11-14-S	100	120	31.42	4724.96	7.73	-978.12	0.000000	0.00	0.000
11-15-S	100	120	31.42	4724.96	10.42	-978.12	0.000000	0.00	0.000
11-16-S	100	120	31.42	4724.96	10.79	-978.12	0.000000	0.00	0.000
11-17-S	100	120	31.42	4724.96	7.83	-978.12	0.000000	0.00	0.000
11-18-S	100	120	31.42	4724.96	5.15	-978.12	0.000000	0.00	0.000
11-19-S	100	120	31.42	4724.96	2.76	-978.12	0.000000	0.00	0.000
11-20-S	100	120	31.42	4724.96	1.31	-978.12	0.000000	0.00	0.000
11-21-S	100	120	31.42	4724.96	0.69	-978.12	0.000000	0.00	0.000
12-1-S	100	120	31.42	4724.96	9.39	-978.12	0.000000	0.00	0.000
12-2-S	100	120	31.42	4724.96	13.85	-978.12	0.000000	0.00	0.000
12-3-S	100	120	31.42	4724.96	-13.59	-978.12	0.000000	0.00	0.000
12-4-S	100	120	31.42	4724.96	-68.72	-978.12	0.000000	0.00	0.000
12-5-S	100	120	31.42	4724.96	-35.37	-978.12	0.000000	0.00	0.000
12-6-S	100	120	31.42	2000.00	51.19	978.12	0.000000	0.00	0.000
12-7-S	100	120	31.42	4724.96	-88.49	-978.12	0.000000	0.00	0.000
12-8-S	100	120	31.42	4724.96	-69.28	-978.12	0.000000	0.00	0.000
12-9-S	100	120	31.42	4724.96	-57.09	-978.12	0.000000	0.00	0.000
12-10-S	100	120	31.42	4724.96	-42.39	-978.12	0.000000	0.00	0.000
12-11-S	100	120	31.42	4724.96	-26.96	-978.12	0.000000	0.00	0.000
12-12-S	100	120	31.42	4724.96	-9.67	-978.12	0.000000	0.00	0.000
12-13-S	100	120	31.42	4724.96	8.23	-978.12	0.000000	0.00	0.000
12-14-S	100	120	31.42	4724.96	21.58	-978.12	0.000000	0.00	0.000
12-15-S	100	120	31.42	4724.96	29.14	-978.12	0.000000	0.00	0.000
12-16-S	100	120	31.42	4724.96	34.20	-978.12	0.000000	0.00	0.000
12-17-S	100	120	31.42	4724.96	-21.98	-978.12	0.000000	0.00	0.000
12-18-S	100	120	31.42	4724.96	-51.08	-978.12	0.000000	0.00	0.000
12-19-S	100	120	31.42	4724.96	-31.35	-978.12	0.000000	0.00	0.000
12-20-S	100	120	31.42	4724.96	-15.51	-978.12	0.000000	0.00	0.000
12-21-S	100	120	31.42	4724.96	-2.08	-978.12	0.000000	0.00	0.000
13-1-S	100	120	31.42	4724.96	-5.15	-978.12	0.000000	0.00	0.000
13-2-S	100	120	31.42	4724.96	-7.27	-978.12	0.000000	0.00	0.000
13-3-S	100	120	31.42	4724.96	-7.03	-978.12	0.000000	0.00	0.000
13-4-S	100	120	31.42	4724.96	9.43	-978.12	0.000000	0.00	0.000
13-5-S	100	120	31.42	2000.00	23.68	978.12	0.000000	0.00	0.000
13-6-S	100	120	31.42	2000.00	43.59	978.12	0.000000	0.00	0.000
13-7-S	100	120	31.42	4724.96	-28.76	-978.12	0.000000	0.00	0.000
13-8-S	100	120	31.42	4724.96	-38.41	-978.12	0.000000	0.00	0.000
13-9-S	100	120	31.42	4724.96	-104.52	-978.12	0.000000	0.00	0.000
13-10-S	100	120	31.42	4724.96	-79.56	-978.12	0.000000	0.00	0.000
13-11-S	100	120	31.42	4724.96	-49.09	-978.12	0.000000	0.00	0.000
13-12-S	100	120	31.42	4724.96	-21.62	-978.12	0.000000	0.00	0.000
13-13-S	100	120	31.42	4724.96	-3.70	-978.12	0.000000	0.00	0.000
13-14-S	100	120	31.42	4724.96	8.85	-978.12	0.000000	0.00	0.000
13-15-S	100	120	31.42	4724.96	10.04	-978.12	0.000000	0.00	0.000
13-16-S	100	120	31.42	4724.96	8.81	-978.12	0.000000	0.00	0.000
13-17-S	100	120	31.42	4724.96	6.83	-978.12	0.000000	0.00	0.000
13-18-S	100	120	31.42	4724.96	4.64	-978.12	0.000000	0.00	0.000
13-19-S	100	120	31.42	4724.96	-2.00	-978.12	0.000000	0.00	0.000
13-20-S	100	120	31.42	4724.96	-0.98	-978.12	0.000000	0.00	0.000
13-21-S	100	120	31.42	4724.96	0.86	-978.12	0.000000	0.00	0.000
14-1-S	100	120	34.56	4680.19	5.22	-994.28	0.000000	0.00	0.000
14-2-S	100	120	34.56	4680.19	-8.86	-994.28	0.000000	0.00	0.000
14-3-S	100	120	34.56	4680.19	-11.40	-994.28	0.000000	0.00	0.000
14-4-S	100	120	34.56	4680.19	-35.97	-994.28	0.000000	0.00	0.000
14-5-S	100	120	34.56	4680.19	-17.88	-994.28	0.000000	0.00	0.000
14-6-S	100	120	34.56	2000.00	47.94	994.28	0.000000	0.00	0.000
14-7-S	100	120	34.56	4680.19	-61.34	-994.28	0.000000	0.00	0.000
14-8-S	100	120	34.56	4680.19	-61.76	-994.28	0.000000	0.00	0.000
14-9-S	100	120	34.56	4680.19	-62.95	-994.28	0.000000	0.00	0.000
14-10-S	100	120	34.56	4680.19	-48.51	-994.28	0.000000	0.00	0.000
14-11-S	100	120	34.56	4680.19	-32.11	-994.28	0.000000	0.00	0.000
14-12-S	100	120	34.56	4680.19	-11.70	-994.28	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.16.0.5.005.A.DOCX

COMMESSA	LOTTO	CODIFICA	DOCUMENTO	REV.	FOGLIO
IF2R	2.2.E.ZZ	CL	TR.16.0.5.005	A	116 di 118

Is	B [cm]	H [cm]	Af [cmq]	Aeff [cmq]	M [kNm]	Mpf [kNm]	ε [%]	Sm [mm]	w [mm]
14-13-S	100	120	34.56	4680.19	6.63	-994.28	0.000000	0.00	0.000
14-14-S	100	120	34.56	4680.19	16.77	-994.28	0.000000	0.00	0.000
14-15-S	100	120	34.56	4680.19	20.26	-994.28	0.000000	0.00	0.000
14-16-S	100	120	34.56	4680.19	21.65	-994.28	0.000000	0.00	0.000
14-17-S	100	120	34.56	4680.19	-12.63	-994.28	0.000000	0.00	0.000
14-18-S	100	120	34.56	4680.19	-27.42	-994.28	0.000000	0.00	0.000
14-19-S	100	120	34.56	4680.19	-16.99	-994.28	0.000000	0.00	0.000
14-20-S	100	120	34.56	4680.19	-8.46	-994.28	0.000000	0.00	0.000
14-21-S	100	120	34.56	4680.19	-1.27	-994.28	0.000000	0.00	0.000
15-1-S	100	120	31.42	4724.96	5.22	-978.12	0.000000	0.00	0.000
15-2-S	100	120	31.42	4724.96	-8.86	-978.12	0.000000	0.00	0.000
15-3-S	100	120	31.42	4724.96	-11.40	-978.12	0.000000	0.00	0.000
15-4-S	100	120	31.42	4724.96	-35.97	-978.12	0.000000	0.00	0.000
15-5-S	100	120	31.42	4724.96	-17.88	-978.12	0.000000	0.00	0.000
15-6-S	100	120	31.42	2000.00	47.94	978.12	0.000000	0.00	0.000
15-7-S	100	120	31.42	4724.96	-61.34	-978.12	0.000000	0.00	0.000
15-8-S	100	120	31.42	4724.96	-61.76	-978.12	0.000000	0.00	0.000
15-9-S	100	120	31.42	4724.96	-62.95	-978.12	0.000000	0.00	0.000
15-10-S	100	120	31.42	4724.96	-48.51	-978.12	0.000000	0.00	0.000
15-11-S	100	120	31.42	4724.96	-32.11	-978.12	0.000000	0.00	0.000
15-12-S	100	120	31.42	4724.96	-11.70	-978.12	0.000000	0.00	0.000
15-13-S	100	120	31.42	4724.96	6.63	-978.12	0.000000	0.00	0.000
15-14-S	100	120	31.42	4724.96	16.77	-978.12	0.000000	0.00	0.000
15-15-S	100	120	31.42	4724.96	20.26	-978.12	0.000000	0.00	0.000
15-16-S	100	120	31.42	4724.96	21.65	-978.12	0.000000	0.00	0.000
15-17-S	100	120	31.42	4724.96	-12.63	-978.12	0.000000	0.00	0.000
15-18-S	100	120	31.42	4724.96	-27.42	-978.12	0.000000	0.00	0.000
15-19-S	100	120	31.42	4724.96	-16.99	-978.12	0.000000	0.00	0.000
15-20-S	100	120	31.42	4724.96	-8.46	-978.12	0.000000	0.00	0.000
15-21-S	100	120	31.42	4724.96	-1.27	-978.12	0.000000	0.00	0.000
16-1-S	100	120	31.42	4724.96	-5.15	-978.12	0.000000	0.00	0.000
16-2-S	100	120	31.42	4724.96	-7.27	-978.12	0.000000	0.00	0.000
16-3-S	100	120	31.42	4724.96	-7.03	-978.12	0.000000	0.00	0.000
16-4-S	100	120	31.42	4724.96	9.43	-978.12	0.000000	0.00	0.000
16-5-S	100	120	31.42	2000.00	23.68	978.12	0.000000	0.00	0.000
16-6-S	100	120	31.42	2000.00	43.59	978.12	0.000000	0.00	0.000
16-7-S	100	120	31.42	4724.96	-28.76	-978.12	0.000000	0.00	0.000
16-8-S	100	120	31.42	4724.96	-38.41	-978.12	0.000000	0.00	0.000
16-9-S	100	120	31.42	4724.96	-104.52	-978.12	0.000000	0.00	0.000
16-10-S	100	120	31.42	4724.96	-79.56	-978.12	0.000000	0.00	0.000
16-11-S	100	120	31.42	4724.96	-49.09	-978.12	0.000000	0.00	0.000
16-12-S	100	120	31.42	4724.96	-21.62	-978.12	0.000000	0.00	0.000
16-13-S	100	120	31.42	4724.96	-3.70	-978.12	0.000000	0.00	0.000
16-14-S	100	120	31.42	4724.96	8.85	-978.12	0.000000	0.00	0.000
16-15-S	100	120	31.42	4724.96	10.04	-978.12	0.000000	0.00	0.000
16-16-S	100	120	31.42	4724.96	8.81	-978.12	0.000000	0.00	0.000
16-17-S	100	120	31.42	4724.96	6.83	-978.12	0.000000	0.00	0.000
16-18-S	100	120	31.42	4724.96	4.64	-978.12	0.000000	0.00	0.000
16-19-S	100	120	31.42	4724.96	-2.00	-978.12	0.000000	0.00	0.000
16-20-S	100	120	31.42	4724.96	-0.98	-978.12	0.000000	0.00	0.000
16-21-S	100	120	31.42	4724.96	0.86	-978.12	0.000000	0.00	0.000
17-1-S	100	120	31.42	4724.96	9.39	-978.12	0.000000	0.00	0.000
17-2-S	100	120	31.42	4724.96	13.85	-978.12	0.000000	0.00	0.000
17-3-S	100	120	31.42	4724.96	-13.59	-978.12	0.000000	0.00	0.000
17-4-S	100	120	31.42	4724.96	-68.72	-978.12	0.000000	0.00	0.000
17-5-S	100	120	31.42	4724.96	-35.37	-978.12	0.000000	0.00	0.000
17-6-S	100	120	31.42	2000.00	51.19	978.12	0.000000	0.00	0.000
17-7-S	100	120	31.42	4724.96	-88.49	-978.12	0.000000	0.00	0.000
17-8-S	100	120	31.42	4724.96	-69.28	-978.12	0.000000	0.00	0.000
17-9-S	100	120	31.42	4724.96	-57.09	-978.12	0.000000	0.00	0.000
17-10-S	100	120	31.42	4724.96	-42.39	-978.12	0.000000	0.00	0.000
17-11-S	100	120	31.42	4724.96	-26.96	-978.12	0.000000	0.00	0.000
17-12-S	100	120	31.42	4724.96	-9.67	-978.12	0.000000	0.00	0.000
17-13-S	100	120	31.42	4724.96	8.23	-978.12	0.000000	0.00	0.000
17-14-S	100	120	31.42	4724.96	21.58	-978.12	0.000000	0.00	0.000
17-15-S	100	120	31.42	4724.96	29.14	-978.12	0.000000	0.00	0.000
17-16-S	100	120	31.42	4724.96	34.20	-978.12	0.000000	0.00	0.000
17-17-S	100	120	31.42	4724.96	-21.98	-978.12	0.000000	0.00	0.000
17-18-S	100	120	31.42	4724.96	-51.08	-978.12	0.000000	0.00	0.000
17-19-S	100	120	31.42	4724.96	-31.35	-978.12	0.000000	0.00	0.000
17-20-S	100	120	31.42	4724.96	-15.51	-978.12	0.000000	0.00	0.000
17-21-S	100	120	31.42	4724.96	-2.08	-978.12	0.000000	0.00	0.000
18-1-S	100	120	31.42	4724.96	-5.76	-978.12	0.000000	0.00	0.000
18-2-S	100	120	31.42	4724.96	-4.48	-978.12	0.000000	0.00	0.000
18-3-S	100	120	31.42	4724.96	2.66	-978.12	0.000000	0.00	0.000
18-4-S	100	120	31.42	2000.00	11.83	978.12	0.000000	0.00	0.000
18-5-S	100	120	31.42	2000.00	26.17	978.12	0.000000	0.00	0.000
18-6-S	100	120	31.42	2000.00	42.10	978.12	0.000000	0.00	0.000
18-7-S	100	120	31.42	4724.96	-24.76	-978.12	0.000000	0.00	0.000
18-8-S	100	120	31.42	4724.96	-43.17	-978.12	0.000000	0.00	0.000
18-9-S	100	120	31.42	4724.96	-122.95	-978.12	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.16.0.5.005.A.DOCX

COMMESSA	LOTTO	CODIFICA	DOCUMENTO	REV.	FOGLIO
IF2R	2.2.E.ZZ	CL	TR.16.0.5.005	A	117 di 118

Is	B [cm]	H [cm]	Af [cmq]	Aeff [cmq]	M [kNm]	Mpf [kNm]	ε [%]	Sm [mm]	w [mm]
18-10-S	100	120	31.42	4724.96	-94.04	-978.12	0.000000	0.00	0.000
18-11-S	100	120	31.42	4724.96	-58.88	-978.12	0.000000	0.00	0.000
18-12-S	100	120	31.42	4724.96	-27.53	-978.12	0.000000	0.00	0.000
18-13-S	100	120	31.42	4724.96	-6.89	-978.12	0.000000	0.00	0.000
18-14-S	100	120	31.42	4724.96	7.73	-978.12	0.000000	0.00	0.000
18-15-S	100	120	31.42	4724.96	10.42	-978.12	0.000000	0.00	0.000
18-16-S	100	120	31.42	4724.96	10.79	-978.12	0.000000	0.00	0.000
18-17-S	100	120	31.42	4724.96	7.83	-978.12	0.000000	0.00	0.000
18-18-S	100	120	31.42	4724.96	5.15	-978.12	0.000000	0.00	0.000
18-19-S	100	120	31.42	4724.96	2.76	-978.12	0.000000	0.00	0.000
18-20-S	100	120	31.42	4724.96	1.31	-978.12	0.000000	0.00	0.000
18-21-S	100	120	31.42	4724.96	0.69	-978.12	0.000000	0.00	0.000
19-1-S	100	120	31.42	4724.96	7.52	-978.12	0.000000	0.00	0.000
19-2-S	100	120	31.42	4724.96	12.98	-978.12	0.000000	0.00	0.000
19-3-S	100	120	31.42	4724.96	-11.41	-978.12	0.000000	0.00	0.000
19-4-S	100	120	31.42	4724.96	-59.07	-978.12	0.000000	0.00	0.000
19-5-S	100	120	31.42	4724.96	-32.47	-978.12	0.000000	0.00	0.000
19-6-S	100	120	31.42	2000.00	51.06	978.12	0.000000	0.00	0.000
19-7-S	100	120	31.42	4724.96	-120.07	-978.12	0.000000	0.00	0.000
19-8-S	100	120	31.42	4724.96	-100.07	-978.12	0.000000	0.00	0.000
19-9-S	100	120	31.42	4724.96	-76.59	-978.12	0.000000	0.00	0.000
19-10-S	100	120	31.42	4724.96	-54.91	-978.12	0.000000	0.00	0.000
19-11-S	100	120	31.42	4724.96	-33.23	-978.12	0.000000	0.00	0.000
19-12-S	100	120	31.42	4724.96	-11.41	-978.12	0.000000	0.00	0.000
19-13-S	100	120	31.42	4724.96	8.00	-978.12	0.000000	0.00	0.000
19-14-S	100	120	31.42	4724.96	21.67	-978.12	0.000000	0.00	0.000
19-15-S	100	120	31.42	4724.96	28.52	-978.12	0.000000	0.00	0.000
19-16-S	100	120	31.42	4724.96	32.54	-978.12	0.000000	0.00	0.000
19-17-S	100	120	31.42	4724.96	-16.48	-978.12	0.000000	0.00	0.000
19-18-S	100	120	31.42	4724.96	-42.92	-978.12	0.000000	0.00	0.000
19-19-S	100	120	31.42	4724.96	-26.15	-978.12	0.000000	0.00	0.000
19-20-S	100	120	31.42	4724.96	-12.94	-978.12	0.000000	0.00	0.000
19-21-S	100	120	31.42	4724.96	-1.82	-978.12	0.000000	0.00	0.000
20-1-S	100	120	31.42	4724.96	-4.66	-978.12	0.000000	0.00	0.000
20-2-S	100	120	31.42	4724.96	-8.40	-978.12	0.000000	0.00	0.000
20-3-S	100	120	31.42	4724.96	-11.68	-978.12	0.000000	0.00	0.000
20-4-S	100	120	31.42	4724.96	-13.45	-978.12	0.000000	0.00	0.000
20-5-S	100	120	31.42	4724.96	16.03	-978.12	0.000000	0.00	0.000
20-6-S	100	120	31.42	2000.00	44.26	978.12	0.000000	0.00	0.000
20-7-S	100	120	31.42	4724.96	-166.82	-978.12	0.000000	0.00	0.000
20-8-S	100	120	31.42	4724.96	-116.82	-978.12	0.000000	0.00	0.000
20-9-S	100	120	31.42	4724.96	-80.32	-978.12	0.000000	0.00	0.000
20-10-S	100	120	31.42	4724.96	-50.84	-978.12	0.000000	0.00	0.000
20-11-S	100	120	31.42	4724.96	-24.72	-978.12	0.000000	0.00	0.000
20-12-S	100	120	31.42	4724.96	-9.25	-978.12	0.000000	0.00	0.000
20-13-S	100	120	31.42	4724.96	12.16	-978.12	0.000000	0.00	0.000
20-14-S	100	120	31.42	4724.96	19.41	-978.12	0.000000	0.00	0.000
20-15-S	100	120	31.42	4724.96	18.42	-978.12	0.000000	0.00	0.000
20-16-S	100	120	31.42	4724.96	14.70	-978.12	0.000000	0.00	0.000
20-17-S	100	120	31.42	4724.96	7.62	-978.12	0.000000	0.00	0.000
20-18-S	100	120	31.42	4724.96	-10.20	-978.12	0.000000	0.00	0.000
20-19-S	100	120	31.42	4724.96	-6.25	-978.12	0.000000	0.00	0.000
20-20-S	100	120	31.42	4724.96	-2.96	-978.12	0.000000	0.00	0.000
20-21-S	100	120	31.42	4724.96	1.73	-978.12	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	41.81	3628.18	225.99	-244.28	168.94	0.000000	0.00	0.00
2	1	34.56	3617.50	246.94	-244.28	580.23	0.000000	0.00	0.00
3	1	28.27	2833.68	275.45	-244.28	991.53	0.000000	0.00	0.00