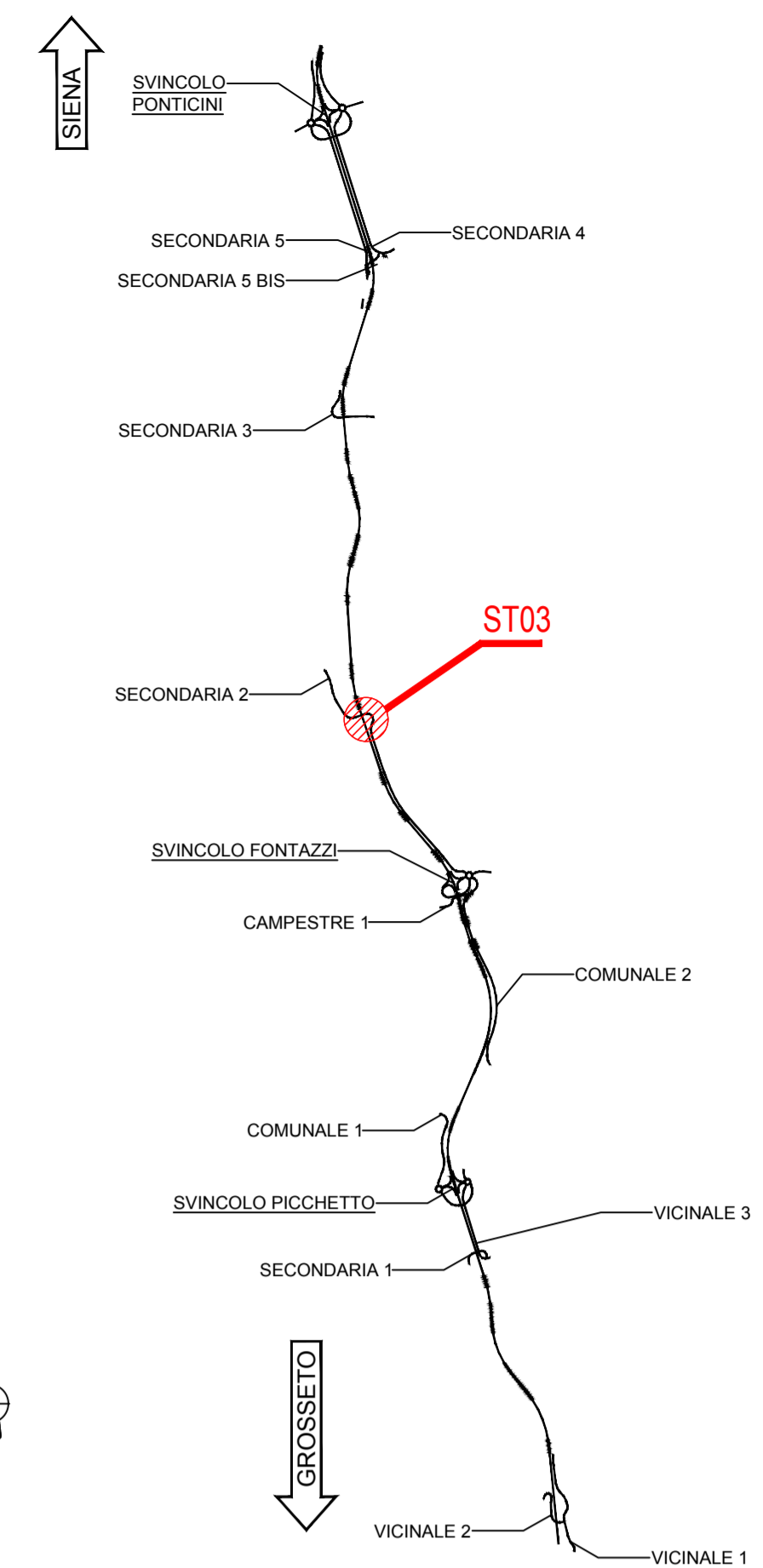


Mark	φ (mm)	Shape (cm)	Length (cm)	QTY	Mass (kg)	% of Total	Notes
1	φ26	[Diagram]	683	161	4583.1	1.8%	
2	φ26	[Diagram]	683	161	4583.1	1.8%	
3	φ26	[Diagram]	271	161	1821.77	0.7%	
4	φ20	[Diagram]	274	161	1086.92	0.4%	
5	φ26	[Diagram]	356-541	161	3008.83	1.2%	
6	φ20	[Diagram]	356-540	161	1777.86	0.7%	
7	φ26	[Diagram]	271	161	1821.77	0.7%	
8	φ20	[Diagram]	274	161	1086.92	0.4%	
9	φ26	[Diagram]	356-541	161	3008.83	1.2%	
10	φ20	[Diagram]	356-540	161	1777.86	0.7%	
11	φ12	[Diagram]	138	861	1053.89	0.4%	
12	φ12	[Diagram]	86-64	810	540.68	0.2%	spille φ12/20x40
13	φ12	[Diagram]	86-64	810	540.68	0.2%	spille φ12/20x40
14	φ20	[Diagram]	297	528	3872.33	1.5%	
15	φ26	[Diagram]	463	161	3106.87	1.2%	
16	φ26	[Diagram]	463	161	3106.87	1.2%	
17	φ26	[Diagram]	600	161	4026.09	1.6%	
18	φ26	[Diagram]	683	161	4583.1	1.8%	
19	φ26	[Diagram]	683	161	4583.1	1.8%	
20	φ26	[Diagram]	463	161	3106.87	1.2%	
21	φ26	[Diagram]	463	161	3106.87	1.2%	
22	φ26	[Diagram]	600	161	4026.09	1.6%	
23	φ20	[Diagram]	297	528	3872.33	1.5%	
24	φ26	[Diagram]	293	161	1966.62	0.8%	
25	φ20	[Diagram]	294	161	1166.49	0.4%	
26	φ26	[Diagram]	541-885	161	4782.44	1.8%	
27	φ20	[Diagram]	540-882	161	2822.1	1.1%	
28	φ20	[Diagram]	294	1	7.25	0%	
29	φ26	[Diagram]	293	1	12.22	0%	
30	φ20	[Diagram]	540-828	161	2913.8	1.1%	
31	φ26	[Diagram]	541-931	161	4938.19	1.9%	
32	φ12	[Diagram]	138	820	1003.71	0.4%	
33	φ12	[Diagram]	86	1296	992.2	0.4%	spille φ12/20x40

34	φ12	[Diagram]	86	1296	992.2	0.4%	spille φ12/20x40
35	φ26	[Diagram]	683	223	6348.02	2.4%	
36	φ26	[Diagram]	683	223	6348.02	2.4%	
37	φ12	[Diagram]	463	223	4303.31	1.7%	
38	φ26	[Diagram]	463	223	4303.31	1.7%	
39	φ26	[Diagram]	600	223	5576.51	2.1%	
40	φ20	[Diagram]	297	720	5280.45	2%	
41	φ26	[Diagram]	271	223	2523.32	1%	
42	φ20	[Diagram]	274	223	1505.48	0.6%	
43	φ26	[Diagram]	557-728	223	5970.69	2.3%	
44	φ20	[Diagram]	556-726	223	3524.16	1.4%	
45	φ12	[Diagram]	138	861	1053.89	0.4%	
46	φ12	[Diagram]	86-64	810	540.68	0.2%	spille φ12/20x40
47	φ12	[Diagram]	86-64	810	540.68	0.2%	spille φ12/20x40
48	φ20	[Diagram]	294	223	1615.69	0.6%	
49	φ26	[Diagram]	293	223	2723.95	1%	
50	φ20	[Diagram]	556-726	223	3524.16	1.4%	
51	φ26	[Diagram]	557	223	5179.02	2%	
52	φ26	[Diagram]	683	201	5721.76	2.2%	
53	φ26	[Diagram]	683	201	5721.76	2.2%	
54	φ26	[Diagram]	463	201	3878.76	1.5%	
55	φ26	[Diagram]	600	201	5026.36	1.9%	
56	φ26	[Diagram]	463	201	3878.76	1.5%	
57	φ20	[Diagram]	297	656	4811.08	1.9%	
58	φ26	[Diagram]	311	201	2608.32	1%	
59	φ20	[Diagram]	312	201	1545.89	0.6%	
60	φ26	[Diagram]	728-931	201	6948.06	2.7%	
61	φ20	[Diagram]	326-828	201	4098.73	1.6%	
62	φ20	[Diagram]	312	201	1545.89	0.6%	
63	φ26	[Diagram]	311	201	2608.32	1%	
64	φ20	[Diagram]	726-882	201	3984.25	1.5%	
65	φ26	[Diagram]	728-885	201	6753.62	2.6%	
66	φ14	[Diagram]	1200	107	1551.72	0.6%	
67	φ14	[Diagram]	1086	107	1404.31	0.5%	

68	φ14	[Diagram]	1200	107	1551.72	0.6%	
69	φ14	[Diagram]	1086	107	1404.31	0.5%	
70	φ14	[Diagram]	289	107	373.7	0.1%	
71	φ14	[Diagram]	289	107	373.7	0.1%	
72	φ14	[Diagram]	1200	132	1914.27	0.7%	
73	φ14	[Diagram]	1086	132	1732.42	0.7%	
74	φ14	[Diagram]	1200	132	1914.27	0.7%	
75	φ14	[Diagram]	1086	132	1732.42	0.7%	
76	φ14	[Diagram]	268-224	132	392.43	0.2%	
77	φ14	[Diagram]	285-224	132	405.98	0.2%	
78	φ14	[Diagram]	1200	112	1624.23	0.6%	
79	φ14	[Diagram]	865	112	1170.59	0.5%	
80	φ14	[Diagram]	1200	112	1624.23	0.6%	
81	φ14	[Diagram]	865	112	1170.59	0.5%	
82	φ14	[Diagram]	289	112	391.16	0.2%	
83	φ14	[Diagram]	135	112	182.71	0.1%	
84	φ14	[Diagram]	237	112	321.43	0.1%	
85	φ14	[Diagram]	1200	160	2320.32	0.9%	
86	φ14	[Diagram]	865	160	1672.28	0.6%	
87	φ14	[Diagram]	1200	160	2320.32	0.9%	
88	φ14	[Diagram]	865	160	1672.28	0.6%	
89	φ14	[Diagram]	289-224	160	495.97	0.2%	
90	φ14	[Diagram]	135-69	160	197.2	0.1%	
91	φ14	[Diagram]	237-204	320	854.57	0.3%	
92	φ14	[Diagram]	1200	109	1580.72	0.6%	
93	φ14	[Diagram]	364	109	479.34	0.2%	
94	φ14	[Diagram]	1200	109	1580.72	0.6%	
95	φ14	[Diagram]	364	109	479.34	0.2%	
96	φ14	[Diagram]	289	109	380.69	0.1%	
97	φ14	[Diagram]	135	109	177.81	0.1%	
98	φ14	[Diagram]	237	218	625.64	0.2%	
99	φ14	[Diagram]	1200	162	2349.33	0.9%	
100	φ14	[Diagram]	364	162	712.41	0.3%	
101	φ14	[Diagram]	1200	162	2349.33	0.9%	

102	φ14	[Diagram]	364	162	712.41	0.3%	
103	φ14	[Diagram]	278-224	162	491.4	0.2%	
104	φ14	[Diagram]	150-69	162	214.35	0.1%	
105	φ14	[Diagram]	245-205	324	879.95	0.3%	
106	φ14	[Diagram]	1200	109	1580.72	0.6%	
107	φ14	[Diagram]	456	109	600.15	0.2%	
108	φ14	[Diagram]	1200	109	1580.72	0.6%	
109	φ14	[Diagram]	456	109	600.15	0.2%	
110	φ14	[Diagram]	289	109	380.69	0.1%	
111	φ14	[Diagram]	289	109	380.69	0.1%	
112	φ14	[Diagram]	1200	106	1537.21	0.6%	
113	φ14	[Diagram]	456	106	583.63	0.2%	
114	φ14	[Diagram]	1200	106	1537.21	0.6%	
115	φ14	[Diagram]	456	106	583.63	0.2%	
116	φ14	[Diagram]	247-224	106	301.68	0.1%	
117	φ14	[Diagram]	266-224	106	313.85	0.1%	
Total mass = 259436 kg							



**NOTE GENERALI**

- TUTTE LE MISURE SONO ESPRESSE IN CENTIMETRI, SALVO OVE DIVERSAMENTE INDICATO

- PER LE CARATTERISTICHE DEI MATERIALI FARE RIFERIMENTO ALL'ELABORATO T00-ST00-STR-SC01

**Sanas** GRUPPO FS ITALIANE

Direzione Progettazione e Realizzazione Lavori

**ITINERARIO INTERNAZIONALE E78**  
**S.G.C. GROSSETO - FANO**  
ADEGUAMENTO A 4 CORSIE  
NEL TRATTO GROSSETO - SIENA (S.S. 223 "DI PAGANICO")  
DAL KM 41+600 AL KM 53+400 - LOTTO 9

**PROGETTO ESECUTIVO** COD. F115

PROGETTAZIONE: **ATI SINTAGMA - GDG - ICARIA**

IL RESPONSABILE DELL'INTEGRAZIONE DELLE PRESTAZIONI SPECIALISTICHE: Dott. Ing. Nando Granati  
Ordine degli Ingegneri della Prov. di Perugia n° A351

IL GRUPPO DI PROGETTAZIONE: MANDANTIA: MANDANTI:

**Sintagma** **GEOTECHNICAL DESIGN GROUP** **ICARIA** Progetti di Ingegneria

IL PROGETTISTA: Dott. Ing. Federico Durastanti  
Ordine degli Ingegneri della Prov. di Terni n° A844

IL GEOLOGO: Dott. Geol. Giorgio Cenquigini  
Ordine dei Geologi della Regione Umbria n°108

IL COORDINATORE PER LA SICUREZZA IN FASE DI PROGETTAZIONE: Dott. Ing. Filippo Terranova  
Ordine degli Ingegneri della Prov. di Perugia n° A1373

REDAZIONE: Dott. Ing. Raffaele Franco Carso

PROTOCOLLO DATA

**SOTTOVIA**  
Sottovia al km 48+521,49 Sulla Viabilità Comunale "2" Km 1+579,41  
Muri d'ala - Armature - Tav. 2 di 2

CODICE PROGETTO	LV. MOD.	N. MOD.	NOME FILE	REVISIONE	SCALA:
L0F115	E	1901	T00-ST02-STR-ARG03	A	VAR

REV.	DESCRIZIONE	DATA	REDATTO	VERIFICATO	APPROVATO
A	Emissione	26/10/2020	V. Inghese	E. Bertolucci	N. Grandi