

**NUOVA S.S. 341 "GALLARATESE" - TRATTO DA SAMARATE A CONFINE
CON LA PROVINCIA DI NOVARA - TRATTO NORD**

**STRALCIO FUNZIONALE DAL KM 6+500 (SVINCOLO S.S. 336 NORD)
AL KM 8+844 (SVINCOLO AUTOSTRADA A8)
"BRETELLA DI GALLARATE"**

PROGETTO ESECUTIVO

		ING. RENATO DEL PRETE		
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VISTO: IL RESPONSABILE DEL PROCEDIMENTO	RESPONSABILE INTEGRAZIONE DELLE PRESTAZIONI SPECIALISTICHE	IL PROGETTISTA FIRMATARIO DELLA PRESTAZIONE	GEOLOGO	COORDINATORE DELLA SICUREZZA IN FASE DI PROGETTAZIONE
				

FA061

**F-PROGETTO IDRAULICO
FA- RETICOLO IDROGRAFICO
Tabulato movimenti materia Canale Trapezio n. 04**

CODICE PROGETTO PROGETTO LIV. PROG. N. PROG. MI533 E 1801		NOME FILE FA061-P00ID01IDRCM04_A.dwg		REVISIONE	SCALA:
CODICE ELAB.		P00ID01IDRCM04		A	1:100
C					
B					
A	EMISSIONE	Maggio 2021	ING. MICHELE SCINTO	ING. VALERIO BAJETTI	ING. RENATO DEL PRETE
REV.	DESCRIZIONE	DATA	REDATTO	VERIFICATO	APPROVATO

		CALCOLO DELLE AREE	Foglio n. 1		
RINTERRO					
N. SEZIONE PROG.	FIG.	ELEMENTI DI CALCOLO	AREA ELEMENTARE mq	AREA FIGURA mq	NOTE
8 140.0	A1	$(-1.4--1.0) \times (235.1+235.4) / 2$ $(-0.8--1.4) \times (234.8+235.1) / 2$ $(0.0--0.8) \times (234.4+234.8) / 2$ $(-0.5--0.0) \times (235.4+235.4) / 2$ $(-1.0--0.5) \times (235.4+235.4) / 2$	-94.1 141.0 187.7 -117.7 -117.7		
9 160.0	A1	$(-1.3--1.0) \times (235.0+235.3) / 2$ $(-0.8--1.3) \times (234.7+235.0) / 2$ $(0.0--0.8) \times (234.3+234.7) / 2$ $(-0.5--0.0) \times (235.3+235.3) / 2$ $(-1.0--0.5) \times (235.3+235.3) / 2$	-70.5 117.4 187.6 -117.7 -117.7	0.8	
10 180.0	A1	$(-1.0--1.2) \times (236.1+236.0) / 2$ $(0.0--1.0) \times (236.1+236.1) / 2$ $(-1.2--0.0) \times (236.0+235.6) / 2$	47.2 236.1 -283.0	0.9	
11 200.0	A1	$(-0.8--0.9) \times (238.4+238.4) / 2$ $(0.0--0.8) \times (238.2+238.4) / 2$ $(-0.4--0.0) \times (238.4+238.4) / 2$ $(-0.9--0.4) \times (238.4+238.4) / 2$	23.8 190.6 -95.4 -119.2	0.3	
13 240.0	A1	$(-3.0--3.7) \times (238.8+238.3) / 2$ $(-2.5--3.0) \times (238.8+238.8) / 2$ $(-2.2--2.5) \times (238.5+238.8) / 2$ $(-3.7--2.2) \times (238.3+238.5) / 2$	167.0 119.4 71.6 -357.6	0.2	
13 240.0	A2	$(-1.0--1.2) \times (238.8+238.7) / 2$ $(-0.0--1.0) \times (238.8+238.8) / 2$ $(-1.2--0.0) \times (238.7+238.8) / 2$	47.7 238.8 -286.5	0.4	
14 260.0	A1	$(-2.5--3.0) \times (236.2+236.2) / 2$ $(-3.0--2.5) \times (236.2+236.2) / 2$	118.1 -118.1		
15 280.0	A1	$(-2.5--3.0) \times (235.9+235.9) / 2$ $(-3.0--2.5) \times (235.9+235.9) / 2$	118.0 -118.0		
15 280.0	A2	$(-0.0--1.0) \times (235.9+235.9) / 2$ $(-1.0--0.0) \times (235.9+235.9) / 2$	235.9 -235.9		
16 300.0	A1	$(-0.0--1.0) \times (236.3+236.3) / 2$ $(-1.0--0.0) \times (236.3+236.3) / 2$	236.3 -236.3		
17 320.0	A1	$(-3.0--4.9) \times (238.5+237.2) / 2$ $(-2.5--3.0) \times (238.5+238.5) / 2$ $(-2.0--2.5) \times (238.0+238.5) / 2$ $(-4.3--2.0) \times (237.4+238.0) / 2$ $(-4.9--4.3) \times (237.2+237.4) / 2$	451.9 119.3 119.1 -546.7 -142.4		
17 320.0	A2	$(-1.0--1.3) \times (238.5+238.1) / 2$ $(-0.0--1.0) \times (238.5+238.5) / 2$ $(-1.3--0.0) \times (238.1+238.5) / 2$	71.5 238.5 -309.8	1.2	
18 340.0	A1	$(-3.0--3.1) \times (240.1+240.1) / 2$ $(-2.5--3.0) \times (240.1+240.1) / 2$ $(-3.1--2.5) \times (240.1+240.1) / 2$	24.0 120.0 -144.1	0.2	
19 360.0	A1	$(-2.5--3.0) \times (240.8+240.8) / 2$ $(-2.6--2.5) \times (240.8+240.8) / 2$ $(-3.0--2.6) \times (240.7+240.8) / 2$	120.4 -24.1 -96.3	0.1	
20 364.4	A1	$(-3.0--3.1) \times (240.8+240.8) / 2$ $(-2.5--3.0) \times (240.8+240.8) / 2$ $(-2.7--2.5) \times (240.8+240.8) / 2$ $(-3.1--2.7) \times (240.8+240.8) / 2$	24.1 120.4 -48.2 -96.3		
20 364.4	A2	$(-0.0--1.0) \times (240.8+240.8) / 2$ $(-0.9--0.0) \times (240.8+240.8) / 2$ $(-1.0--0.9) \times (240.8+240.8) / 2$	240.8 -216.7 -24.1		
Il Direttore dei Lavori		L'Impresa			

		CALCOLO DELLE AREE	Foglio n. 2		
SCAVO FOSSO					
N. SEZIONE PROG.	FIG.	ELEMENTI DI CALCOLO	AREA ELEMENTARE mq	AREA FIGURA mq	NOTE
1 0.0	B1	$(-0.0--2.6) \times (234.2+234.3) / 2$ $(-1.0--0.0) \times (234.2+234.2) / 2$ $(-1.5--1.0) \times (233.7+234.2) / 2$ $(-2.0--1.5) \times (233.7+233.7) / 2$ $(-2.5--2.0) \times (234.2+233.7) / 2$ $(-2.6--2.5) \times (234.3+234.2) / 2$	609.1 -234.2 -117.0 -116.8 -117.0 -23.4		
2 20.0	B1	$(-1.2--2.6) \times (234.1+234.1) / 2$ $(0.0--1.2) \times (234.1+234.1) / 2$ $(-1.0-0.0) \times (234.1+234.1) / 2$ $(-1.5--1.0) \times (233.6+234.1) / 2$ $(-2.0--1.5) \times (233.6+233.6) / 2$ $(-2.5--2.0) \times (234.1+233.6) / 2$ $(-2.6--2.5) \times (234.1+234.1) / 2$	327.7 280.9 -234.1 -116.9 -116.8 -116.9 -23.4	0.7	
3 40.0	B1	$(-0.0--2.6) \times (234.2+234.2) / 2$ $(-1.0--0.0) \times (234.2+234.2) / 2$ $(-1.5--1.0) \times (233.7+234.2) / 2$ $(-2.0--1.5) \times (233.7+233.7) / 2$ $(-2.5--2.0) \times (234.2+233.7) / 2$ $(-2.6--2.5) \times (234.2+234.2) / 2$	608.9 -234.2 -117.0 -116.8 -117.0 -23.4		
4 60.0	B1	$(0.0--2.5) \times (234.3+234.3) / 2$ $(-1.0-0.0) \times (234.3+234.3) / 2$ $(-1.5--1.0) \times (233.8+234.3) / 2$ $(-2.0--1.5) \times (233.8+233.8) / 2$ $(-2.5--2.0) \times (234.3+233.8) / 2$	585.8 -234.3 -117.0 -116.9 -117.0	0.5	
5 80.0	B1	$(0.0--2.5) \times (234.2+234.2) / 2$ $(-1.0-0.0) \times (234.2+234.2) / 2$ $(-1.5--1.0) \times (233.7+234.2) / 2$ $(-2.0--1.5) \times (233.7+233.7) / 2$ $(-2.5--2.0) \times (234.2+233.7) / 2$	585.5 -234.2 -117.0 -116.8 -117.0	0.6	
6 100.0	B1	$(-0.1--2.6) \times (234.2+234.3) / 2$ $(0.0--0.1) \times (234.2+234.2) / 2$ $(-1.0-0.0) \times (234.2+234.2) / 2$ $(-1.5--1.0) \times (233.7+234.2) / 2$ $(-2.0--1.5) \times (233.7+233.7) / 2$ $(-2.5--2.0) \times (234.2+233.7) / 2$ $(-2.6--2.5) \times (234.3+234.2) / 2$	585.6 23.4 -234.2 -117.0 -116.8 -117.0 -23.4	0.5	
7 120.0	B1	$(-1.6--2.8) \times (234.8+234.9) / 2$ $(-0.8--1.6) \times (234.7+234.8) / 2$ $(0.0--0.8) \times (234.6+234.7) / 2$ $(-1.0-0.0) \times (234.6+234.6) / 2$ $(-1.5--1.0) \times (234.1+234.6) / 2$ $(-2.0--1.5) \times (234.1+234.1) / 2$ $(-2.5--2.0) \times (234.6+234.1) / 2$ $(-2.8--2.5) \times (234.9+234.6) / 2$	281.8 187.8 187.7 -234.6 -117.2 -117.0 -117.2 -70.4	0.6	
8 140.0	B1	$(-2.6--2.8) \times (235.7+235.7) / 2$ $(-1.4--2.6) \times (235.1+235.7) / 2$ $(-1.5--1.4) \times (234.9+235.1) / 2$ $(-2.0--1.5) \times (234.9+234.9) / 2$ $(-2.5--2.0) \times (235.4+234.9) / 2$ $(-2.8--2.5) \times (235.7+235.4) / 2$	47.1 282.5 -23.5 -117.5 -117.6 -70.7	0.9	
9 160.0	B1	$(-1.3--3.3) \times (235.0+236.1) / 2$ $(-1.5--1.3) \times (234.8+235.0) / 2$ $(-2.0--1.5) \times (234.8+234.8) / 2$ $(-2.5--2.0) \times (235.3+234.8) / 2$ $(-3.3--2.5) \times (236.1+235.3) / 2$	471.1 -47.0 -117.4 -117.5 -188.6	0.3	
10 180.0	B1	$(-2.0--2.8) \times (236.2+236.5) / 2$ $(-1.2--2.0) \times (236.0+236.2) / 2$ $(-1.5--1.2) \times (235.6+236.0) / 2$ $(-2.0--1.5) \times (235.6+235.6) / 2$ $(-2.5--2.0) \times (236.1+235.6) / 2$ $(-2.8--2.5) \times (236.5+236.1) / 2$	189.1 188.9 -70.7 -117.8 -117.9 -70.9	0.6	
11 200.0	B1	$(-0.9--3.0) \times (238.4+238.9) / 2$ $(-1.0--0.9) \times (238.4+238.4) / 2$ $(-1.5--1.0) \times (237.9+238.4) / 2$ $(-2.0--1.5) \times (237.9+237.9) / 2$ $(-2.5--2.0) \times (238.4+237.9) / 2$ $(-3.0--2.5) \times (238.9+238.4) / 2$	501.2 -23.8 -119.1 -119.0 -119.1 -119.3	0.7	
12 220.0	B1	$(-0.0--2.7) \times (239.4+239.6) / 2$ $(-1.0--0.0) \times (239.4+239.4) / 2$ $(-1.5--1.0) \times (238.9+239.4) / 2$ $(-2.0--1.5) \times (238.9+238.9) / 2$ $(-2.5--2.0) \times (239.4+238.9) / 2$ $(-2.7--2.5) \times (239.6+239.4) / 2$	646.7 -239.4 -119.6 -119.5 -119.6 -47.9	0.9	
13 240.0	B1	$(-1.2--2.2) \times (238.7+238.5) / 2$ $(-1.5--1.2) \times (238.3+238.7) / 2$ $(-2.0--1.5) \times (238.3+238.3) / 2$ $(-2.2--2.0) \times (238.5+238.3) / 2$	238.6 -71.6 -119.2 -47.7	0.7	
14 260.0	B1	$(-1.0--2.5) \times (236.2+236.2) / 2$ $(-1.5--1.0) \times (235.7+236.2) / 2$ $(-2.0--1.5) \times (235.7+235.7) / 2$ $(-2.5--2.0) \times (236.2+235.7) / 2$	354.3 -118.0 -117.8 -118.0	0.1	
15 280.0	B1	$(-2.3--2.5) \times (235.9+235.9) / 2$ $(-1.0--2.3) \times (235.9+235.9) / 2$ $(-1.5--1.0) \times (235.4+235.9) / 2$ $(-2.0--1.5) \times (235.4+235.4) / 2$ $(-2.5--2.0) \times (235.9+235.4) / 2$	47.2 306.7 -117.8 -117.7 -117.8	0.5	
16 300.0	B1	$(-1.4--2.5) \times (236.3+236.3) / 2$ $(-1.0--1.4) \times (236.3+236.3) / 2$ $(-1.5--1.0) \times (235.8+236.3) / 2$ $(-2.0--1.5) \times (235.8+235.8) / 2$ $(-2.5--2.0) \times (236.3+235.8) / 2$	259.9 94.5 -118.0 -117.9 -118.0	0.6	
				0.5	
A RIPORTARE mq					

		CALCOLO DELLE AREE			Foglio n. 3
SCAVO FOSSO					
N. SEZIONE PROG.	FIG.	ELEMENTI DI CALCOLO	AREA ELEMENTARE mq	AREA FIGURA mq	NOTE
RIPORTO mq					
17 320.0	B1	$(-1.3--2.0) \times (238.1+238.0) / 2$ $(-1.5--1.3) \times (238.0+238.1) / 2$ $(-2.0--1.5) \times (238.0+238.0) / 2$	166.6 -47.6 -119.0		
18 340.0	B1	$(-1.4--2.5) \times (240.2+240.1) / 2$ $(-1.3--1.4) \times (240.2+240.2) / 2$ $(0.0--1.3) \times (240.1+240.2) / 2$ $(-1.0-0.0) \times (240.1+240.1) / 2$ $(-1.5--1.0) \times (239.6+240.1) / 2$ $(-2.0--1.5) \times (239.6+239.6) / 2$ $(-2.5--2.0) \times (240.1+239.6) / 2$	264.2 24.0 312.2 -240.1 -119.9 -119.8 -119.9		
19 360.0	B1	$(-1.0--2.5) \times (240.8+240.8) / 2$ $(-1.5--1.0) \times (240.3+240.8) / 2$ $(-2.0--1.5) \times (240.3+240.3) / 2$ $(-2.5--2.0) \times (240.8+240.3) / 2$	361.2 -120.3 -120.2 -120.3	0.7	
20 364.4	B1	$(-1.0--2.5) \times (240.8+240.8) / 2$ $(-1.5--1.0) \times (240.3+240.8) / 2$ $(-2.0--1.5) \times (240.3+240.3) / 2$ $(-2.5--2.0) \times (240.8+240.3) / 2$	361.2 -120.3 -120.2 -120.3	0.4 0.4	
Il Direttore dei Lavori		L'Impresa			

		COMPUTO DEI VOLUMI					Foglio n. 4	
RINTERRO								
DALLA SEZ. DA PROG.	ALLA SEZ. A PROG.	SEZIONE	FIGURA	AREA	DISTANZA SEZIONI m	DISTANZA DI CALCOLO m	VOLUME PARZIALE mc	VOLUME TOTALE mc
7	8	8	A1	0.8	20.0	10.0	8.0	8.0
8	9	8	A1	0.8	20.0	10.0	8.0	
140.0	160.0	9	A1	0.9	20.0	10.0	9.0	17.0
9	10	9	A1	0.9	20.0	10.0	9.0	
160.0	180.0	10	A1	0.3	20.0	10.0	3.0	12.0
10	11	10	A1	0.3	20.0	10.0	3.0	
180.0	200.0	11	A1	0.2	20.0	10.0	2.0	5.0
11	12	11	A1	0.2	20.0	10.0	2.0	2.0
12	13	13	A1	0.4	20.0	10.0	4.0	
220.0	240.0	13	A2	0.0	20.0	10.0	0.0	4.0
13	14	13	A1	0.4	20.0	10.0	4.0	
240.0	260.0	13	A2	0.0	20.0	10.0	0.0	
		14	A1	0.0	20.0	10.0	0.0	4.0
14	15	14	A1	0.0	20.0	10.0	0.0	
14	15	15	A1	0.0	20.0	10.0	0.0	
14	15	15	A2	0.0	20.0	10.0	0.0	
15	16	15	A1	0.0	20.0	10.0	0.0	
15	16	15	A2	0.0	20.0	10.0	0.0	
15	16	16	A1	0.0	20.0	10.0	0.0	
16	17	16	A1	0.0	20.0	10.0	0.0	
16	17	17	A1	1.2	20.0	10.0	12.0	
300.0	320.0	17	A2	0.2	20.0	10.0	2.0	14.0
17	18	17	A1	1.2	20.0	10.0	12.0	
320.0	340.0	17	A2	0.2	20.0	10.0	2.0	
		18	A1	0.1	20.0	10.0	1.0	15.0
18	19	18	A1	0.1	20.0	10.0	1.0	
340.0	360.0	19	A1	0.0	20.0	10.0	0.0	1.0
19	20	19	A1	0.0	4.4	2.2	0.0	
19	20	20	A1	0.0	4.4	2.2	0.0	
19	20	20	A2	0.0	4.4	2.2	0.0	
Il Direttore dei Lavori		L'Impresa			TOTALE ARTICOLO			82.0

		COMPUTO DEI VOLUMI			Foglio n. 5			
SCAVO FOSSO								
DALLA SEZ. DA PROG.	ALLA SEZ. A PROG.	SEZIONE	FIGURA	AREA	DISTANZA SEZIONI m	DISTANZA DI CALCOLO m	VOLUME PARZIALE mc	VOLUME TOTALE mc
1	2	1	B1	0.7	20.0	10.0	7.0	
0.0	20.0	2	B1	0.5	20.0	10.0	5.0	12.0
2	3	2	B1	0.5	20.0	10.0	5.0	
20.0	40.0	3	B1	0.5	20.0	10.0	5.0	10.0
3	4	3	B1	0.5	20.0	10.0	5.0	
40.0	60.0	4	B1	0.6	20.0	10.0	6.0	11.0
4	5	4	B1	0.6	20.0	10.0	6.0	
60.0	80.0	5	B1	0.5	20.0	10.0	5.0	11.0
5	6	5	B1	0.5	20.0	10.0	5.0	
80.0	100.0	6	B1	0.6	20.0	10.0	6.0	11.0
6	7	6	B1	0.6	20.0	10.0	6.0	
100.0	120.0	7	B1	0.9	20.0	10.0	9.0	15.0
7	8	7	B1	0.9	20.0	10.0	9.0	
120.0	140.0	8	B1	0.3	20.0	10.0	3.0	12.0
8	9	8	B1	0.3	20.0	10.0	3.0	
140.0	160.0	9	B1	0.6	20.0	10.0	6.0	9.0
9	10	9	B1	0.6	20.0	10.0	6.0	
160.0	180.0	10	B1	0.7	20.0	10.0	7.0	13.0
10	11	10	B1	0.7	20.0	10.0	7.0	
180.0	200.0	11	B1	0.9	20.0	10.0	9.0	16.0
11	12	11	B1	0.9	20.0	10.0	9.0	
200.0	220.0	12	B1	0.7	20.0	10.0	7.0	16.0
12	13	12	B1	0.7	20.0	10.0	7.0	
220.0	240.0	13	B1	0.1	20.0	10.0	1.0	8.0
13	14	13	B1	0.1	20.0	10.0	1.0	
240.0	260.0	14	B1	0.5	20.0	10.0	5.0	6.0
14	15	14	B1	0.5	20.0	10.0	5.0	
260.0	280.0	15	B1	0.6	20.0	10.0	6.0	11.0
15	16	15	B1	0.6	20.0	10.0	6.0	
280.0	300.0	16	B1	0.5	20.0	10.0	5.0	11.0
16	17	16	B1	0.5	20.0	10.0	5.0	
300.0	320.0	17	B1	0.0	20.0	10.0	0.0	5.0
17	18	17	B1	0.0	20.0	10.0	0.0	
17	18	18	B1	0.7	20.0	10.0	7.0	7.0
18	19	18	B1	0.7	20.0	10.0	7.0	
340.0	360.0	19	B1	0.4	20.0	10.0	4.0	11.0
19	20	19	B1	0.4	4.4	2.2	0.9	
360.0	364.4	20	B1	0.4	4.4	2.2	0.9	1.8
Il Direttore dei Lavori		L'Impresa			TOTALE ARTICOLO			196.8