

PROYECTO :
 CONSTRUCCION DE ESCOLLERA Y RECONSTRUCCION DE BORDO MARGEN
 IZQUIERDA RIO ULUA, SECTOR FINCA DEVONIA.

JURISDICCION DE SAN MANUEL
 VOLUMEN ESCOLLERA DE PIEDRA

TALUD: 1.5 /1 CORONA: VARIABLE (PROMEDIO=5.50 mts)

EST	AREA	VOLUMEN	VOL. ACUM
KMS	M2	M3	M3
0+050.00	16.85	0.00	0.00
0+060.00	55.08	359.65	359.65
0+070.00	62.40	587.39	947.04
0+080.00	78.26	703.30	1,650.34
0+090.00	61.77	700.15	2,350.49
0+091.36	64.95	86.17	2,436.66
0+100.00	69.18	579.44	3,016.10
0+110.00	105.73	874.55	3,890.65
0+120.00	82.13	939.30	4,829.95
0+124.19	69.87	318.44	5,148.39
0+130.00	77.18	427.18	5,575.57
0+140.00	60.68	689.30	6,264.87
0+150.00	55.78	582.30	6,847.17
0+160.00	73.20	644.90	7,492.07
0+170.00	89.83	815.15	8,307.22
0+180.00	71.69	807.60	9,114.82
0+180.90	71.79	64.57	9,179.38
0+190.00	73.22	659.80	9,839.18
0+200.00	47.39	603.05	10,442.23
0+210.00	60.39	538.90	10,981.13
0+220.00	33.30	468.45	11,449.58
0+230.00	63.57	484.35	11,933.93
0+240.00	32.01	477.90	12,411.83
0+243.48	25.11	99.39	12,511.22
0+250.00	35.34	197.07	12,708.28
0+260.00	54.55	449.45	13,157.73
0+270.00	36.80	456.75	13,614.48
0+280.00	42.75	397.75	14,012.23
0+288.70	46.70	389.11	14,401.34
0+290.00	40.95	56.97	14,458.31
0+300.00	44.41	426.80	14,885.11
0+310.00	48.33	463.70	15,348.81
0+320.00	46.87	476.00	15,824.81
0+323.81	34.94	155.85	15,980.66

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JURISDICCION DE SAN MANUEL
VOLUMEN ESCOLLERA DE PIEDRA

TALUD: 1.5 /1 CORONA: VARIABLE (PROMEDIO=5.50 mts)

EST	AREA	VOLUMEN	VOL. ACUM
KMS	M2	M3	M3
0+330.00	28.31	195.76	16,176.42
0+340.00	38.57	334.40	16,510.82
0+346.33	33.44	227.91	16,738.74
0+350.00	37.00	129.26	16,868.00

VOL. DE PIEDRA	16,868.00	M3
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PROYECTO : CONSTRUCCION DE ESCOLLERA Y RECONSTRUCCION DE BORDO MARGEN IZQUIERDA RIO ULUA, SECTOR FINCA DEVONIA.

JURISDICCION DE SAN MANUEL

TALUDES: 2:1

CORONA: 3.50 MTS

EST	CORTE (MATERIAL DEL SITIO)		MATERIAL ACARREADO		RELLENO (BORDO)		
	AREA	VOLUMEN	AREA	VOLUMEN	AREA	VOLUMEN	VOL. ACUM.
KMS	M2	M3	M2	M3	M2	M3	M3
0+050.00	1.97	0.00	8.10	0.00	10.06	0.00	0.00
0+060.00	9.36	56.60	16.51	123.03	25.86	179.63	179.63
0+070.00	13.65	115.00	30.11	233.11	43.76	348.11	527.74
0+080.00	19.03	163.37	33.26	316.89	52.29	480.26	1,007.99
0+090.00	21.24	201.34	35.22	342.41	56.46	543.75	1,551.74
0+091.36	21.53	29.00	38.20	49.78	59.73	78.78	1,630.52
0+100.00	20.61	182.14	13.71	224.37	34.32	406.51	2,037.03
0+110.00	25.00	228.08	12.13	129.19	37.13	357.26	2,394.29
0+120.00	29.78	273.90	15.45	137.86	45.22	411.75	2,806.04
0+124.20	32.22	130.04	14.66	63.14	46.88	193.18	2,999.22
0+130.00	36.67	199.96	13.41	81.46	50.08	281.43	3,280.64
0+140.00	39.66	381.64	16.52	149.67	56.18	531.30	3,811.94
0+150.00	36.01	378.31	24.84	206.80	60.84	585.10	4,397.04
0+160.00	33.47	347.40	27.20	260.16	60.67	607.55	5,004.59
0+170.00	31.57	325.23	27.13	271.62	58.70	596.84	5,601.43
0+180.00	30.29	309.29	23.19	251.59	53.48	560.88	6,162.31
0+180.90	30.02	26.99	23.21	20.77	53.23	47.75	6,210.06
0+190.00	25.14	251.10	20.04	196.90	45.17	448.00	6,658.06
0+200.00	21.63	233.84	17.07	185.53	38.70	419.37	7,077.43
0+210.00	18.54	200.88	23.29	201.81	41.84	402.68	7,480.11
0+220.00	20.70	196.20	25.61	244.53	46.31	440.72	7,920.83
0+230.00	25.90	232.97	23.62	246.17	49.52	479.14	8,399.97
0+240.00	27.61	267.52	25.06	243.39	52.66	510.91	8,910.88

PROYECTO : CONSTRUCCION DE ESCOLLERA Y RECONSTRUCCION DE BORDO MARGEN IZQUIERDA RIO ULUA, SECTOR FINCA DEVONIA.

JURISDICCION DE SAN MANUEL

TALUDES: 2:1

CORONA: 3.50 MTS

EST	CORTE (MATERIAL DEL SITIO)		MATERIAL ACARREADO		RELLENO (BORDO)		
	AREA	VOLUMEN	AREA	VOLUMEN	AREA	VOLUMEN	VOL. ACUM.
KMS	M2	M3	M2	M3	M2	M3	M3
0+243.48	28.16	96.92	27.90	92.05	56.06	188.97	9,099.84
0+250.00	30.85	192.47	27.10	179.43	57.95	371.90	9,471.75
0+260.00	33.57	322.09	21.26	241.83	54.84	563.92	10,035.67
0+270.00	36.18	348.76	13.07	171.65	49.25	520.41	10,556.07
0+280.00	37.60	368.89	11.15	121.08	48.75	489.97	11,046.04
0+288.70	35.00	315.84	14.89	113.28	49.89	429.12	11,475.16
0+290.00	34.95	45.43	14.70	19.22	49.65	64.65	11,539.81
0+300.00	31.61	332.80	14.55	146.26	46.16	479.06	12,018.87
0+310.00	27.76	296.85	15.95	152.50	43.71	449.35	12,468.22
0+320.00	26.56	271.62	10.69	133.17	37.25	404.79	12,873.01
0+323.81	25.80	99.85	8.53	36.65	34.33	136.49	13,009.50
0+330.00	22.47	149.29	5.67	43.92	28.14	193.21	13,202.71
0+340.00	14.83	186.47	1.59	36.27	16.41	222.74	13,425.44
0+346.33	11.56	83.54	5.00	20.85	16.56	104.39	13,529.84
0+350.00	18.73	55.56	6.54	21.16	25.27	76.72	13,606.55
0+360.00	25.04	218.87	4.78	56.58	29.82	275.45	13,882.00

8,116.00

5,766.00

13,882.00

TOTAL VOLUMEN ACARREADO	5,766.00	M3
VOL. MATERIAL DEL SITIO (CORTE)	8,116.00	M3
VOLUMEN TOTAL DE RELLENO	13,882.00	M3