

PROYECTO MODIFICACIÓN N°2 DE
CANALIZACIÓN DE AGUAS Y DISEÑO AMBIENTAL DE LA CUENCA
DEL ARROYO ZARAUNA AL TORROGUICO EN EL ENTORNO DE LA
URBANIZACIÓN DE ZABALGUNA

INGENIERO DIRECTOR DEL PROYECTO
INGENIERO DE CAMINOS, C. Y P.
MIGUEL ANGEL AGUADO

INGENIERO AUTOR DEL PROYECTO
INGENIERO DE CAMINOS, C. Y P.
ELADIO GUILLART DOMENCH
Colegiado N° 8083

INGENIERO TECNICO INDUSTRIAL
JUAN ANTONIO RICO SAN VICENTE
COLEGIADO N° 284

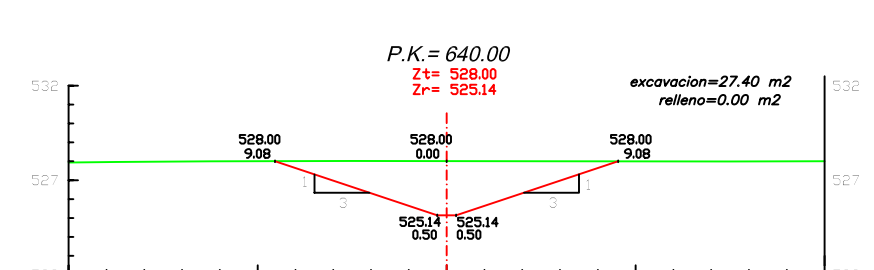
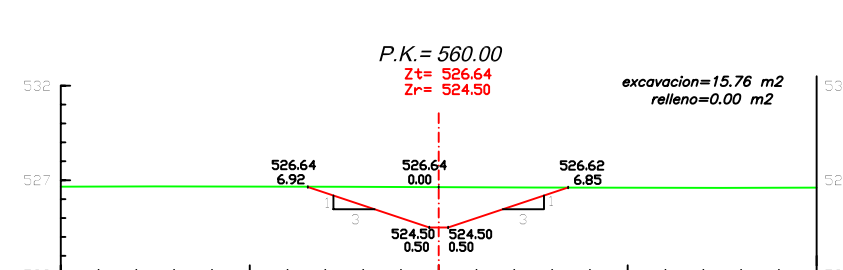
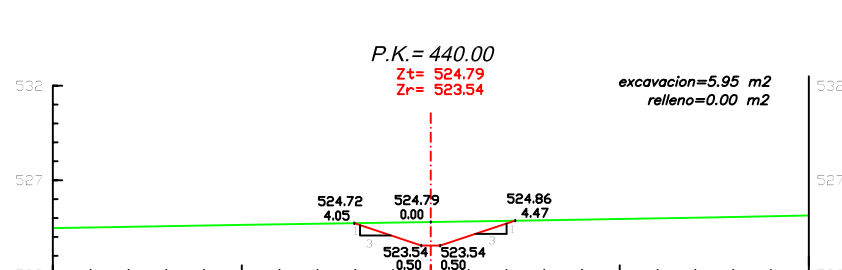
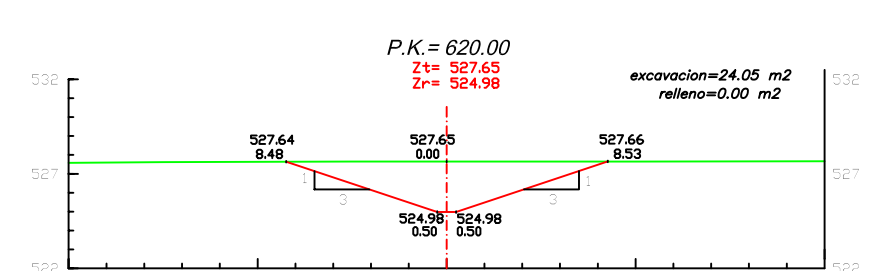
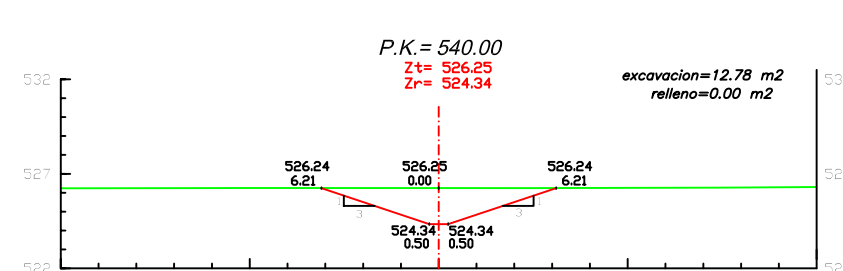
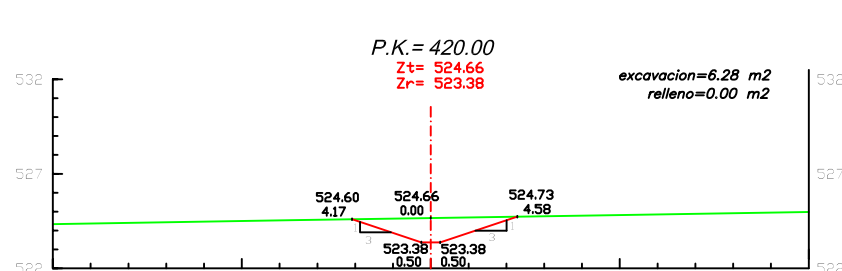
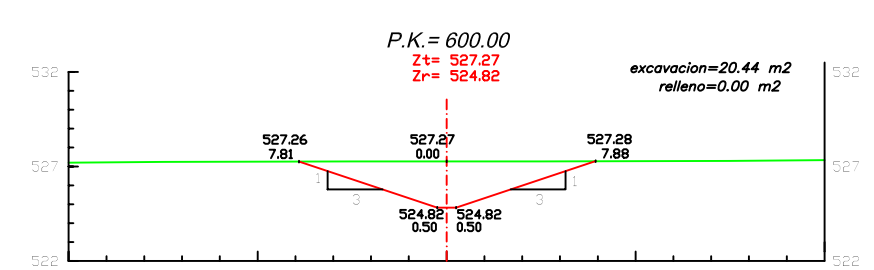
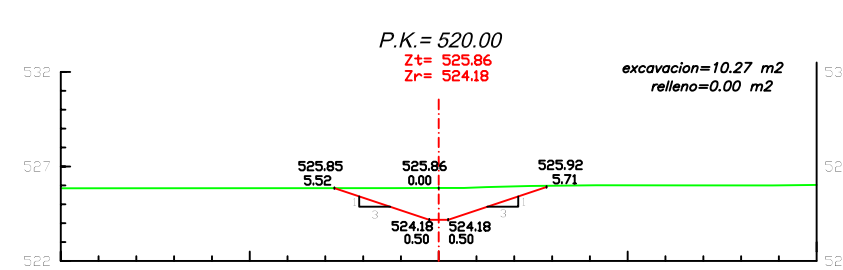
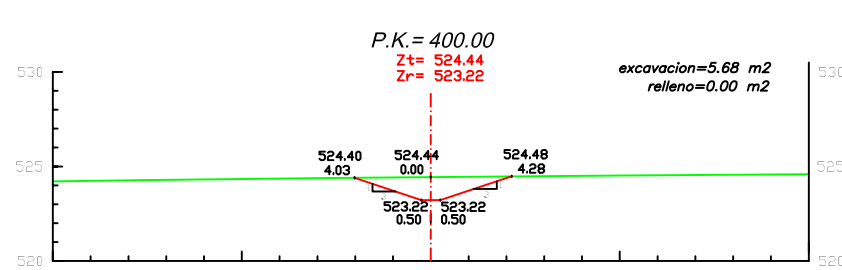
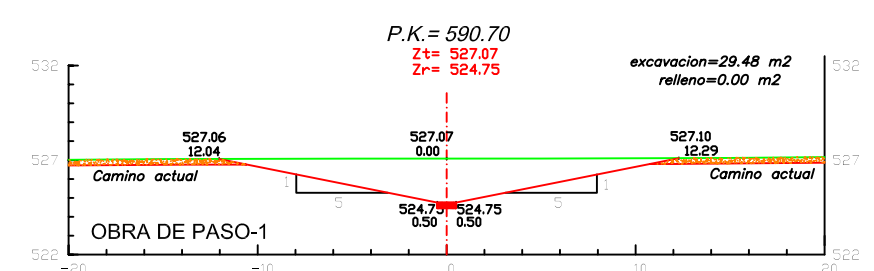
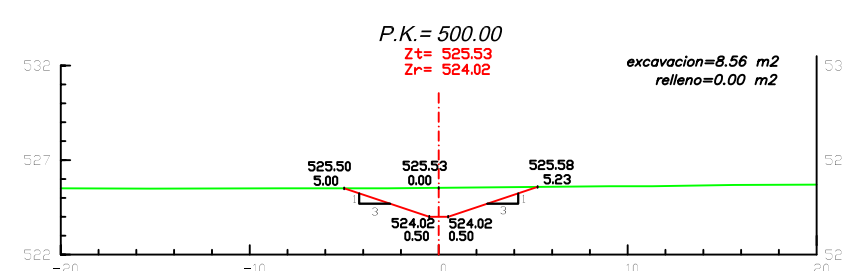
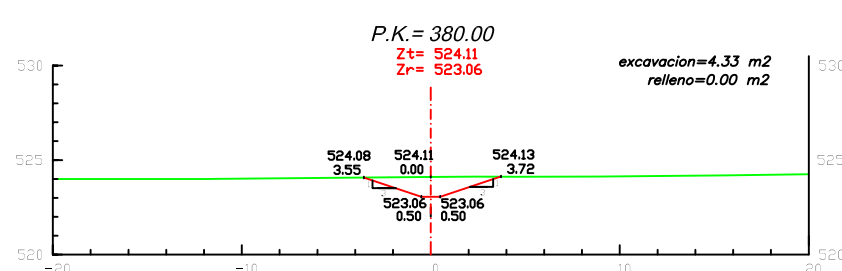
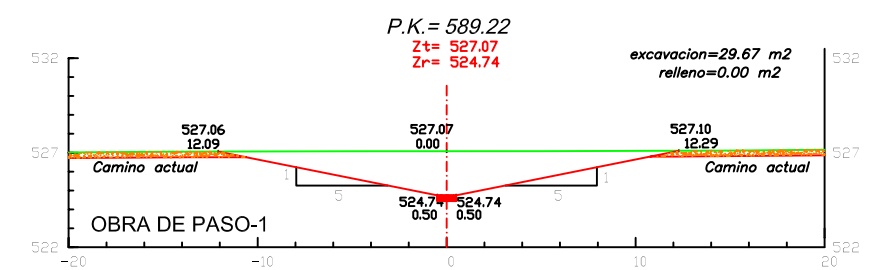
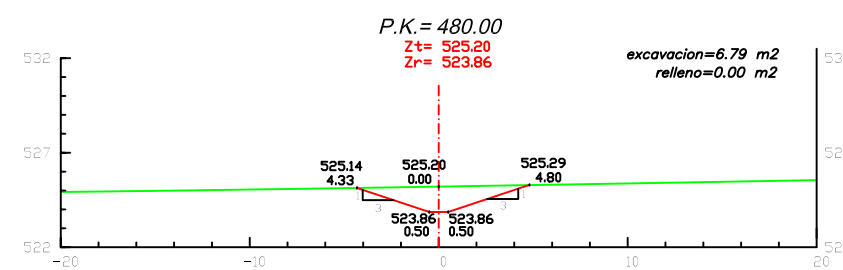
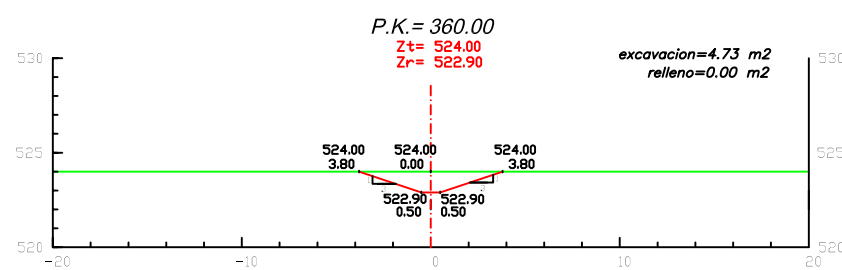
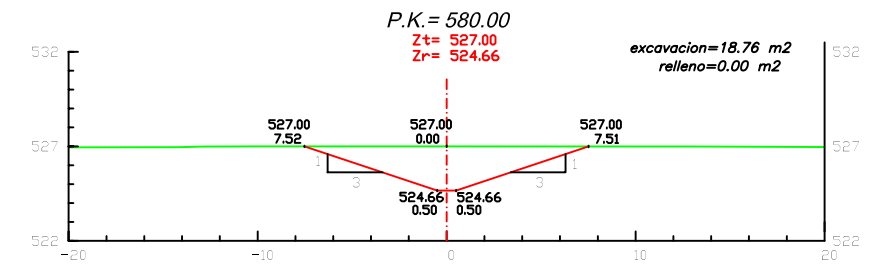
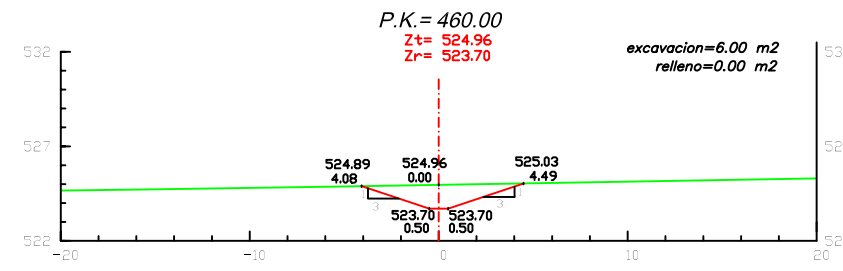
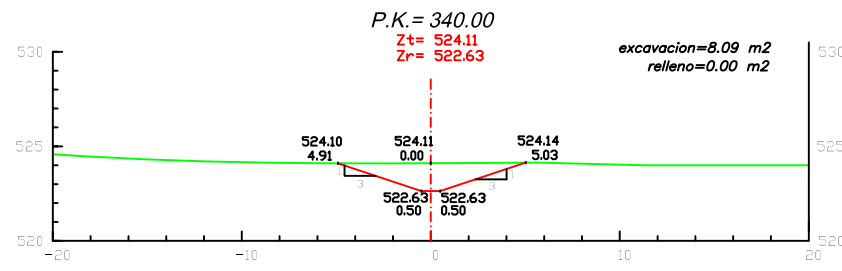
CONSULTOR
INGENIERIA NUEVOS PROYECTOS

CASTILLO DE QUEJANA 9, OF.13
01007 VITORIA - GASTELIZ
Tel: (34) 945 15 18 20
Fax: (34) 945 14 88 20
www.ingenieria-np.com
E-mail: ing-np@ingenieria-np.com

ESCALA A1
1:200
ESCALA A3
1:400
N.º DE PLANO
P-11-2147-05
REVISIONES
EDICION
NOV-2011

DESIGNACION DEL PLANO:
TRAMO-1 - PERFILES TRANSVERSALES
P.K. = 0+000.00 a P.K. = 0+851.53

FECHA:
NOVIEMBRE-2011
PAGINA:
HOJA 1 de 3



PROYECTO MODIFICACIÓN N°2 DE
CANALIZACIÓN DE AGUAS Y DISEÑO AMBIENTAL DE LA CUENCA
DEL ARROYO ZARAUNA AL TORROGUICO EN EL ENTORNO DE LA
URBANIZACIÓN DE ZABALGUNA

INGENIERO DIRECTOR DEL PROYECTO
INGENIERO DE CAMINOS, C. Y P.
MIGUEL ANGEL AGUADO

INGENIERO AUTOR DEL PROYECTO
INGENIERO DE CAMINOS, C. Y P.
ELADIO GUALLART DOMENICH
Colegiado N° 8083

INGENIERO TECNICO INDUSTRIAL
JUAN ANTONIO RICO SAN VICENTE
COLEGIADO N° 284

CONSULTOR
INGENIERIA NIEVOS PROYECTOS

CASTILLO DE QUEJANA 9, OF.13
01007 VITORIA - GASTELIZ
Tel: (+34) 945 15 18 20
Fax: (+34) 945 14 88 21
www.ingenieria-niexi.com
E-mail: ing-niexi@ingenieria-niexi.com

ESCALA A1
1:200
ESCALA A3
1:400
N.º DE PLANO
P-11-2147-05
REVISIONES
EDICION
NOV-2011

DESIGNACION DEL PLANO:
TRAMO-1 - PERFILES TRANSVERSALES
P.K. = 0+000.00 a P.K. = 0+851.53

FECHA:
NOVIEMBRE-2011
PAGINA:
HOJA 2 de 3

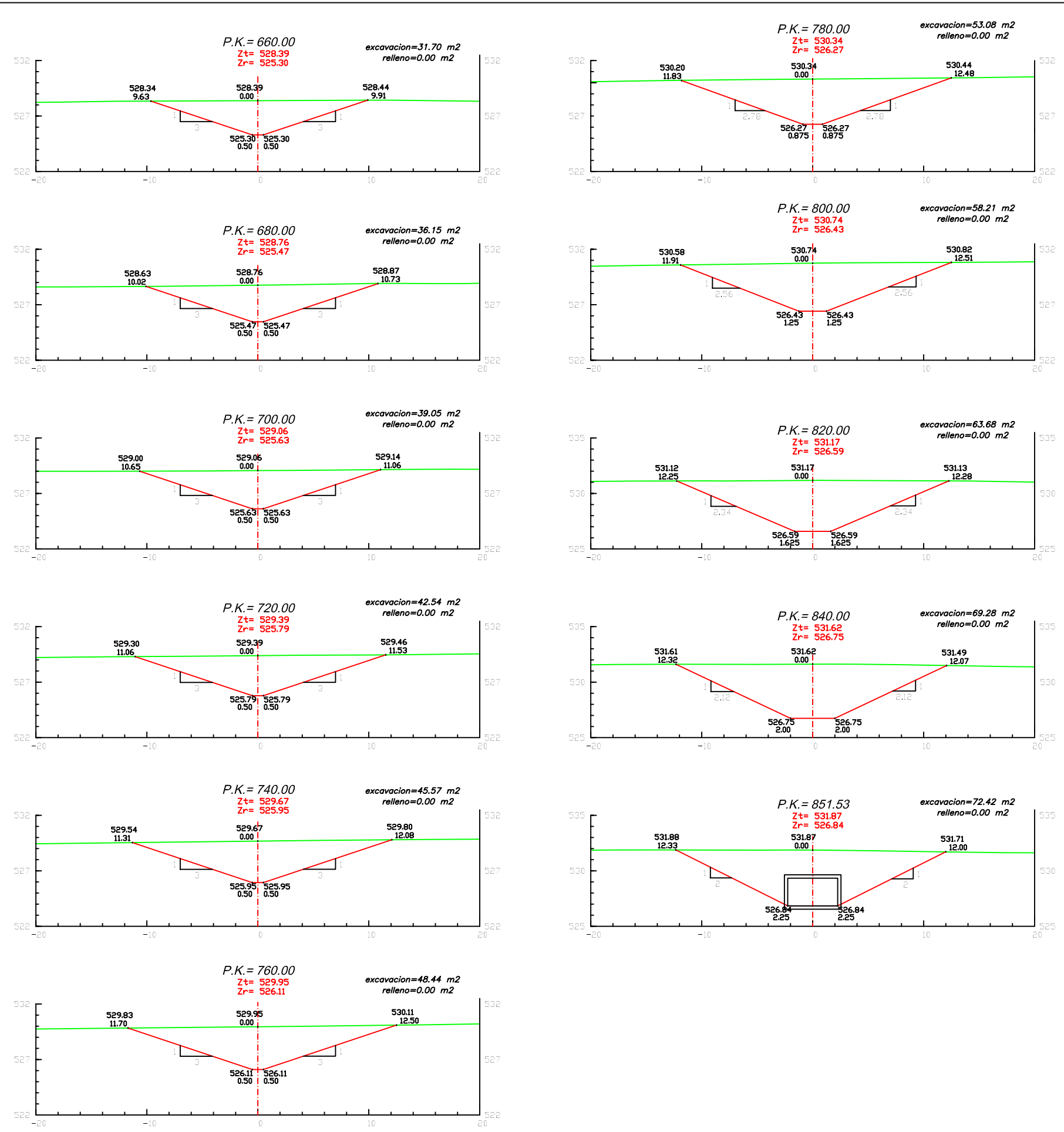


TABLA DE CUBICACIONES DE TRAMO-1					
P.K.	Sup.Desmorte M2	Sup.Relleno M2	Distancia	Vol.Desmorte M3	Vol.Relleno M3
0.00	0.00	0.00	0.00		
20.00	0.00	2.63	20.00	0.00	26.30
40.00	0.00	2.85	20.00	0.00	54.80
60.00	0.00	2.54	20.00	0.00	53.90
80.00	0.00	2.80	20.00	0.00	53.40
100.00	1.68	3.10	20.00	16.80	59.00
120.00	1.10	3.20	20.00	27.80	63.00
140.00	1.58	2.37	20.00	26.80	55.70
160.00	3.08	1.36	20.00	46.60	37.30
180.00	6.57	0.42	20.00	96.50	17.80
200.00	9.08	0.06	20.00	156.50	4.80
220.00	9.74	0.17	20.00	188.20	2.30
240.00	10.52	0.00	20.00	202.60	1.70
260.00	20.42	0.00	20.00	309.40	0.00
280.00	17.46	0.00	20.00	378.80	0.00
300.00	16.96	0.00	20.00	344.20	0.00
320.00	15.30	0.00	20.00	322.60	0.00
340.00	8.09	0.00	20.00	233.90	0.00
360.00	4.73	0.00	20.00	128.20	0.00
380.00	4.33	0.00	20.00	90.60	0.00
400.00	5.68	0.00	20.00	100.10	0.00
420.00	6.28	0.00	20.00	119.60	0.00
440.00	5.95	0.00	20.00	122.30	0.00
460.00	6.00	0.00	20.00	119.50	0.00
480.00	6.79	0.00	20.00	127.90	0.00
500.00	8.56	0.00	20.00	153.50	0.00
520.00	10.27	0.00	20.00	188.30	0.00
540.00	12.78	0.00	20.00	230.50	0.00
560.00	15.76	0.00	20.00	285.40	0.00
580.00	18.76	0.00	20.00	345.20	0.00
589.22	29.67	0.00	9.22	223.26	0.00
590.70	29.48	0.00	1.48	43.77	0.00
600.00	20.44	0.00	9.30	232.13	0.00
620.00	24.05	0.00	20.00	444.90	0.00
640.00	27.40	0.00	20.00	514.50	0.00
660.00	31.70	0.00	20.00	591.00	0.00
680.00	36.15	0.00	20.00	678.50	0.00
700.00	39.05	0.00	20.00	752.00	0.00
720.00	42.54	0.00	20.00	815.90	0.00
740.00	45.57	0.00	20.00	881.10	0.00
760.00	48.44	0.00	20.00	940.10	0.00
780.00	53.08	0.00	20.00	1015.20	0.00
800.00	58.21	0.00	20.00	1112.90	0.00
820.00	63.68	0.00	20.00	1218.90	0.00
840.00	69.28	0.00	20.00	1329.60	0.00
851.53	72.42	0.00	11.53	816.90	0.00
VOLUMEN DE DESMONTE TOTAL TRAMO-1				15972.46	430.00