ANEJO Nº 8. MOVIMIENTO DE TIERRAS

INDICE

1. INTRODUCCIÓN 3
1.1. OBJETO 3
1.2. DATOS DE PARTIDA 3
1.2.1. Volúmenes resultantes 3
1.2.2. Desmontes, excavabilidad y utilización de los materiales 6
1.2.3. Sección tipo 6
2. DESCRIPCIÓN DE LA COMPENSACIÓN DE TIERRAS 6
3. PRÉSTAMOS Y VERTEDEROS 9
APÉNDICE 1. COMPENSACIÓN DE TIERRAS. LISTADOS DE BALANCE DE TIERRAS 10

1. INTRODUCCIÓN

1.1. OBJETO

En el presente anejo se procede a estudiar el movimiento de tierras que resulta como consecuencia de las obras contempladas en el Estudio, y la compensación de los volúmenes correspondientes.

Debido a las particularidades del terreno atravesado y los condicionantes propios del estudio, el balance determinará zonas de préstamo y de vertedero.

A la hora de realizar el balance, en primer lugar se organizan por alternativas las mediciones del movimiento de tierras mediante unos listados que se incluyen en el Apéndice 1 Compensación de tierras. Listados del balance de tierras. En estos cuadros figuran los volúmenes parciales de movimiento de tierras de la plataforma cada 100 m de acuerdo con las mediciones auxiliares que figuran en el capítulo correspondiente del Presupuesto. En ellos se refleja el coeficiente de paso que se utiliza para calcular el volumen de excavación obtenido, tanto cuando el material es empleado en rellenos, como cuando es llevado a vertedero.

Se incluyen en estos cuadros los volúmenes correspondientes a los desmontes y terraplenes de la plataforma.

Las alternativas 2.0 y 6.0 corresponden a los tramos en los que solo se ha contemplado la duplicación de la vía actual. Las alternativas 1.0, 3.0, 8.0 y 9.0 corresponden a tramos en los que, además de la duplicación de la vía actual, se incluyen otras alternativas.

1.2. DATOS DE PARTIDA

1.2.1. Volúmenes resultantes

A continuación se presenta un cuadro con el resumen de los volúmenes resultantes del movimiento de tierras por alternativas de cada uno de los tramos.

Dichos volúmenes están justificados en el Presupuesto, dentro del apartado de mediciones.

	CAPA DE FORMA	SUBBALASTO	D TIERRA	VEGETAL	TERRAPLEN	BALASTO	EXCAVACIÓN SANEO	TERRAPLÉN SANEO
TRAMO 1								
ALTERNATIVA 1.0	21.746,70	9.572,00	76.778,70	38.256,00	25.620,80	13.280,70	0,00	0,00
ALTERNATIVA 1.1	39.661,80	17.457,20	2.479.509,30	113.602,40	52.679,60	25.274,70	0,00	0,00
ALTERNATIVA 1.2	33.332,50	14.671,10	762.293,20	70.109,20	48.696,30	20.508,20	0,00	0,00
TRAMO 2								
ALTERNATIVA 2.0	256.641,60	112.968,20	511.264,00	336.123,40	107.455,90	151.408,30	5.143,40	5.143,40
TRAMO 3								
ALTERNATIVA 3.0	35.182,90	15.485,90	85.775,60	54.110,60	31.484,90	22.065,40	0,00	0,00
ALTERNATIVA 3.1	69.137,50	30.431,20	441.750,80	113.946,50	110.556,80	42.473,30	7.367,60	7.367,60
TRAMO 4								
ALTERNATIVA 4.1	152.328,10	67.050,60	706.120,60	2.011.712,00	638.849,60	94.967,50	47.236,50	47.236,50
ALTERNATIVA 4.2	150.253,50	66.135,90	704.710,30	199.513,50	629.057,30	92.459,30	52.946,60	52.946,60
ALTERNATIVA 4.3	148.697,60	65.452,30	1.114.005,40	194.148,70	698.316,30	92.755,60	28.778,80	28.778,80
TRAMO 5								
ALTERNATIVA 5.1	128.948,50	56.756,90	7.811.913,90	306.811,80	105.999,70	79.122,00	0,00	0,00
ALTERNATIVA 5.2	136.594,20	60.120,90	8.356.127,10	314.831,70	57.522,00	84.329,60	0,00	0,00

TRAMO 6								
ALTERNATIVA 6.0	57.351,30	27.928,20	121.095,40	74.431,10	94.300,30	39.253,00	3.603,30	3.603,30
TRAMO 7								
ALTERNATIVA 7.1	226.067,70	99.508,20	1.927.301,60	239.060,00	341.525,00	139.259,60	1.192,10	1.192,10
ALTERNATIVA 7.2	241.443,50	106.273,60	2.271.470,10	289.023,70	832.477,00	148.999,50	39.614,10	39.614,10
TRAMO 8								
ALTERNATIVA 8.0	107.620,10	47.357,90	513.366,00	180.239,60	60.805,10	66.879,20	278,00	278,00
ALTERNATIVA 8.1	125.450,70	55.204,30	846.837,10	214.339,80	72.044,00	78.568,50	292,20	292,20
TRAMO 9								
ALTERNATIVA 9.0	64.604,10	28.424,50	102.515,80	68.019,40	25.701,40	39.362,30	2.140,40	2.140,40
ALTERNATIVA 9.1	85.490,20	37.613,40	252.651,60	98.546,00	20.366,40	52.773,40	3.055,20	3.055,20
ALTERNATIVA 9.2	103.631,00	45.595,40	906.074,40	146.510,80	11.827,00	64.226,30	7.671,00	7.671,00
TRAMO 10 (vía única)								
ALTERNATIVA 10.1	21.134,50	8.801,10	358.080,10	36.048,90	16.470,50	9.052,50	0,00	0,00
TRAMO 11 (vía única)								
ALTERNATIVA 11.1	28.737,00	11.967,10	18.849,80	47.778,70	376.358,10	11.851,10	0,00	0,00

1.2.2. Desmontes, excavabilidad y utilización de los materiales

En el Apartado 4 Movimiento de Tierras del Anejo nº 7 Geología y Geotecnia. Hidrogeología del presente Estudio Informativo, en los puntos 4.1 Desmontes y 4.2 Rellenos se describen las características que deben presentar para su diseño, también se incluye un punto 4.3 Cuadro resumen movimiento de tierras en el que figurann unos cuadros resumen de las características principales de los materiales atravesados por alternativas, indicando la situación, el tipo de material, el talud recomendado para desmontes, la excavabilidad del material, su aprovechabilidad y el porcentaje de utilización.

En el punto 4.1 Desmontes se incluyen los coeficientes de paso correspondientes a los materiales excavados. Se han adoptado los siguientes valores en función del tipo de material:

Material	Uso	Coeficiente de paso a relleno	Coeficiente de paso a vertedero
Suelos cuaternarios	Terraplén	1,00	1,25
Terciarios (Conglomerados, arenas y arcillas)	Terraplén	1,00	1,250
Paleozoico (Pizarras, cuarcitas y areniscas)	“Todo-uno” (Cuarcitas pedraplén)	1,15 Cuarcitas (1,20)	1,44 Cuarcitas (1,50)
Rellenos antrópicos. Facies Terciaria evaporíticas (yesos)	Inadecuado Vertedero	No se reutiliza	1,25

Tabla 1. Coeficientes de paso.

1.2.3. Sección tipo

Las características geométricas de la sección tipo de la plataforma adoptada para vías generales y túneles se incluyen en el Documento Planos.

Estas secciones tipo son las que se han utilizado para la cubicación de las tierras en desmonte, terraplén y en la excavación de los túneles.

2. DESCRIPCIÓN DE LA COMPENSACIÓN DE TIERRAS

Partiendo de los datos que se han citado en los apartados anteriores referentes a la sección tipo adoptada para la línea, y a los taludes de desmonte y terraplén así como al aprovechamiento de materiales y su excavabilidad, se han obtenido, para cada alternativa, los valores de los volúmenes de desmonte y de terraplén.

Estos volúmenes aparecen reflejados en los listados del balance de tierras, que se incluyen en el Apéndice.1 Compensación de Tierras. Listados de Balance de Tierras. A continuación se incluye un cuadro con el resumen de los volúmenes obtenidos para cada alternativa.

TRAMO 1								
ALTERNATIVA	EXCAVACIÓN	TERRAPLÉN	EXCAVACIÓN TÚNEL	VEGETAL	NO APROVECHABLE	APROVECHABLE	COMPENSACIÓN TRANSVERSAL	BALANCE
1.0	76.778,657	25.620,790	0,000	38.255,963	6.557,120	71.532,961	1.287,970	45.912,171
1.1	2.479.509,270	52.679,621	0,000	113.602,398	8.404,711	2.472.785,500	3.811,994	2.420.105,879
1.2	762.293,231	48.696,276	0,000	70.109,234	8.100,778	755.812,609	5.833,583	707.116,333
TRAMO 2								
ALTERNATIVA	EXCAVACIÓN	TERRAPLÉN	EXCAVACIÓN TÚNEL	VEGETAL	NO APROVECHABLE	APROVECHABLE	COMPENSACIÓN TRANSVERSAL	BALANCE
2.0	511.264,003	107.455,906	0,000	336.123,410	321.675,801	253.923,362	19.004,343	146.467,456
TRAMO 3								
ALTERNATIVA	EXCAVACIÓN	TERRAPLÉN	EXCAVACIÓN TÚNEL	VEGETAL	NO APROVECHABLE	APROVECHABLE	COMPENSACIÓN TRANSVERSAL	BALANCE
3.0	85.775,586	31.484,861	0,000	54.110,580	38.279,310	55.152,138	5.880,468	23.667,277
3.1	441.750,785	110.556,801	0,000	113.946,510	66.327,380	388.688,881	3.868,049	278.132,080
TRAMO 4								
ALTERNATIVA	EXCAVACIÓN	TERRAPLÉN	EXCAVACIÓN TÚNEL	VEGETAL	NO APROVECHABLE	APROVECHABLE	COMPENSACIÓN TRANSVERSAL	BALANCE
4.1	706.120,599	638.849,643	174.165,970	201.171,230	0,000	880.286,569	20.827,702	241.436,926
4.2	704.710,316	629.057,277	184.165,930	199.513,530	0,000	888.876,246	16.747,145	259.818,969
4.3	1.114.005,347	698.316,347	108.332,900	194.148,720	0,000	1.222.338,247	22.354,060	524.021,900
TRAMO 5								
ALTERNATIVA	EXCAVACIÓN	TERRAPLÉN	EXCAVACIÓN TÚNEL	VEGETAL	NO APROVECHABLE	APROVECHABLE	COMPENSACIÓN TRANSVERSAL	BALANCE
5.1	7.811.913,917	105.999,659	224.800,000	306.811,760	0,000	8.056.337,897	15.254,861	7.950.338,238
5.2	8.356.127,141	57.521,981	224.800,000	314.831,710	0,000	8.654.814,267	16.781,526	8.597.292,286

TRAMO 6								
ALTERNATIVA	EXCAVACIÓN	TERRAPLÉN	EXCAVACIÓN TÚNEL	VEGETAL	NO APROVECHABLE	APROVECHABLE	COMPENSACIÓN TRANSVERSAL	BALANCE
6.0	121.095,447	94.300,288	0,000	74.431,090	63.229,496	70.511,851	1.542,099	-23.788,438
TRAMO 7								
ALTERNATIVA	EXCAVACIÓN	TERRAPLÉN	EXCAVACIÓN TÚNEL	VEGETAL	NO APROVECHABLE	APROVECHABLE	COMPENSACIÓN TRANSVERSAL	BALANCE
7.1	1.927.301,601	341.525,015	1.009.500,000	239.059,960	17.713,760	3.359.232,675	20.222,617	3.017.707,660
7.2	2.271.470,124	832.476,975	1.009.500,000	289.023,670	17.713,760	3.703.401,198	20.234,909	2.870.924,223
TRAMO 8								
ALTERNATIVA	EXCAVACIÓN	TERRAPLÉN	EXCAVACIÓN TÚNEL	VEGETAL	NO APROVECHABLE	APROVECHABLE	COMPENSACIÓN TRANSVERSAL	BALANCE
8.0	513.366,026	60.805,091	0,000	180.239,630	0,000	513.366,026	17.578,745	452.560,935
8.1	846.837,064	72.044,014	0,000	214.339,790	0,000	846.837,064	16.149,874	774.793,050
TRAMO 9								
ALTERNATIVA	EXCAVACIÓN	TERRAPLÉN	EXCAVACIÓN TÚNEL	VEGETAL	NO APROVECHABLE	APROVECHABLE	COMPENSACIÓN TRANSVERSAL	BALANCE
9.0	102.515,782	25.701,389	0,000	68.019,430	13.036,769	92.086,367	6.252,851	66.384,978
9.1	252.651,583	20.366,409	0,000	98.546,010	10.772,516	244.033,570	7.743,198	223.667,161
9.2	906.074,376	118.227,041	0,000	146.510,780	10.824,156	897.415,051	28.572,076	779.188,010
TRAMO 10								
ALTERNATIVA	EXCAVACIÓN	TERRAPLÉN	EXCAVACIÓN TÚNEL	VEGETAL	NO APROVECHABLE	APROVECHABLE	COMPENSACIÓN TRANSVERSAL	BALANCE
10.1	358.080,071	16.470,461	0,000	36.048,880	402.043,785	36.445,043	1.044,398	199.874,582
TRAMO 11								
ALTERNATIVA	EXCAVACIÓN	TERRAPLÉN	EXCAVACIÓN TÚNEL	VEGETAL	NO APROVECHABLE	APROVECHABLE	COMPENSACIÓN TRANSVERSAL	BALANCE
11.1	18.849,849	376.358,093	0,000	47.778,710	21.757,210	1.444,081	337,125	-374.914,012

3. PRÉSTAMOS Y VERTEDEROS

A la vista de los resultados obtenidos en el cálculo del balance de tierras, es necesario disponer zonas de préstamos y vertederos. Las zonas de préstamos deben tener capacidad suficiente para la extracción de los materiales a emplear en las terraplenes de la plataforma, mientras que las zonas de vertederos deben tener capacidad para depositar el material sobrante de las excavaciones.

En el siguiente cuadro se determinan, para cada una de las alternativas, los volúmenes resultantes de préstamos y de vertederos:

TRAMO 1		
ALTERNATIVA	VERTEDERO	PRÉSTAMO
1.0	63.947,334	0,000
1.1	3.033.537,060	0,000
1.2	891.996,194	0,000
TRAMO 2		
ALTERNATIVA	VERTEDERO	PRÉSTAMO
2.0	504.760,121	0,000
TRAMO 3		
ALTERNATIVA	VERTEDERO	PRÉSTAMO
3.0	67.863,406	0,000
3.1	413.992,480	0,000
TRAMO 4		
ALTERNATIVA	VERTEDERO	PRÉSTAMO
4.1	301.796,158	0,000
4.2	324.773,711	0,000
4.3	655.027,375	0,000
TRAMO 5		
ALTERNATIVA	VERTEDERO	PRÉSTAMO
5.1	9.938.067,605	0,000
5.2	10.747.782,750	0,000

TRAMO 6		
ALTERNATIVA	VERTEDERO	PRÉSTAMO
6.0	63.229,496	23.788,438
TRAMO 7		
ALTERNATIVA	VERTEDERO	PRÉSTAMO
7.1	3.731.424,149	0,000
7.2	3.547.928,389	0,000
TRAMO 8		
ALTERNATIVA	VERTEDERO	PRÉSTAMO
8.0	565.701,169	0,000
8.1	968.491,313	0,000
TRAMO 9		
ALTERNATIVA	VERTEDERO	PRÉSTAMO
9.0	96.017,992	0,000
9.1	290.356,467	0,000
9.2	984.809,169	0,000
TRAMO 10		
ALTERNATIVA	VERTEDERO	PRÉSTAMO
10.1	651.887,013	0,000
TRAMO 11		
ALTERNATIVA	VERTEDERO	PRÉSTAMO
11.1	21.757,210	374.914,012

APENDICE 1. COMPENSACIÓN DE TIERRAS. LISTADOS DE BALANCE DE TIERRAS

ESTUDIO INFORMATIVO DEL CORREDOR CÁNTABRICO - MEDITERRÁNEO DE ALTA VELOCIDAD. TRAMO TERUEL - ZARAGOZA.

DIAGRAMA DE EQUILIBRIO DE MOVIMIENTOS DE TIERRAS

Alternativa 1.0

PK	d	PLATAFORMA		EXCAVACIÓN TÚNEL EN MINA		COEF. PASO		EXCAVACIÓN			COMPENS.	BALANCE	VOL. ACUMULADOS		
		EXCAV.	TERRAPLÉN	NOMBRE	EXCAV.	RELLENOS	VERTEDERO	% APROV	NO APROV.	APROV.	TRANS.		A VERTEDERO	COM.TRAN.	BALANCE
1+000	0	0	0			1,00	1,25	0,00%	0,00	0,00	0,00	0,00	0,00	0,00	0,00
1+100	100	0,000	0,000			1,00	1,25	0,00%	0,00	0,00	0,00	0,00	0,00	0,00	0,00
1+200	100	0,000	0,000			1,00	1,25	0,00%	0,00	0,00	0,00	0,00	0,00	0,00	0,00
1+300	100	77,711	10,735			1,00	1,25	0,00%	97,14	0,00	0,00	-10,74	97,14	0,00	-10,74
1+400	100	157,464	302,678			1,00	1,25	0,00%	196,83	0,00	0,00	-302,68	293,97	0,00	-313,41
1+500	100	17,815	765,110			1,00	1,25	0,00%	22,27	0,00	0,00	-765,11	316,24	0,00	-1.078,52
1+600	100	511,314	327,765			1,00	1,25	0,00%	639,14	0,00	0,00	-327,77	955,38	0,00	-1.406,29
1+700	100	1.167,453	0,053			1,00	1,25	0,00%	1.459,32	0,00	0,00	-0,05	2.414,70	0,00	-1.406,34
1+800	100	1.318,725	8,842			1,00	1,25	0,00%	1.648,406	0,000	0,000	-8,842	4.063,103	0,000	-1.415,183
1+900	100	551,464	764,748			1,00	1,25	0,00%	689,330	0,000	0,000	-764,748	4.752,433	0,000	-2.179,931
2+000	100	23,327	1.835,285			1,00	1,25	0,00%	29,159	0,000	0,000	-1.835,285	4.781,591	0,000	-4.015,216
2+100	100	61,742	1.127,950			1,00	1,25	0,00%	77,178	0,000	0,000	-1.127,950	4.858,769	0,000	-5.143,166
2+200	100	93,716	555,399			1,00	1,25	0,00%	117,145	0,000	0,000	-555,399	4.975,914	0,000	-5.698,565
2+300	100	428,927	18,640			1,00	1,25	0,00%	536,159	0,000	0,000	-18,640	5.512,073	0,000	-5.717,205
2+400	100	302,712	18,245			1,00	1,25	0,00%	378,390	0,000	0,000	-18,245	5.890,463	0,000	-5.735,450
2+500	100	275,641	269,050			1,00	1,25	0,00%	344,551	0,000	0,000	-269,050	6.235,014	0,000	-6.004,500
2+600	100	31,085	1.617,762			1,00	1,25	0,00%	38,856	0,000	0,000	-1.617,762	6.273,870	0,000	-7.622,262
2+700	100	16,714	1.826,770			1,00	1,25	0,00%	20,893	0,000	0,000	-1.826,770	6.294,763	0,000	-9.449,032
2+800	100	7,643	2.475,734			1,00	1,25	0,00%	9,554	0,000	0,000	-2.475,734	6.304,316	0,000	-11.924,766
2+900	100	73,123	2.229,042			1,00	1,25	0,00%	91,404	0,000	0,000	-2.229,042	6.395,720	0,000	-14.153,808
3+000	100	17,009	3.054,892			1,00	1,25	0,00%	21,261	0,000	0,000	-3.054,892	6.416,981	0,000	-17.208,700
3+100	100	18,359	583,534			1,00	1,25	0,00%	22,949	0,000	0,000	-583,534	6.439,930	0,000	-17.792,234
3+200	100	43,298	2.756,416			1,00	1,25	0,00%	54,123	0,000	0,000	-2.756,416	6.494,053	0,000	-20.548,650
3+300	100	50,454	2.600,760			1,00	1,25	0,00%	63,068	0,000	0,000	-2.600,760	6.557,120	0,000	-23.149,410
3+400	100	569,697	1.753,107			1,00	1,25	100,00%	0,000	569,697	569,697	-1.183,410	6.557,120	569,697	-24.332,820
3+500	100	6.407,640	18,815			1,00	1,25	100,00%	0,000	6.407,640	18,815	6.388,825	6.557,120	588,512	-17.943,995
3+600	100	6.207,815	21,003			1,00	1,25	100,00%	0,000	6.207,815	21,003	6.186,812	6.557,120	609,515	-11.757,183
3+700	100	5.751,566	35,224			1,00	1,25	100,00%	0,000	5.751,566	35,224	5.716,342	6.557,120	644,739	-6.040,841
3+800	100	6.258,323	20,910			1,00	1,25	100,00%	0,000	6.258,323	20,910	6.237,413	6.557,120	665,649	196,572
3+900	100	7.812,040	28,645			1,00	1,25	100,00%	0,000	7.812,040	28,645	7.783,395	6.557,120	694,294	7.979,967
4+000	100	4.528,409	62,571			1,00	1,25	100,00%	0,000	4.528,409	62,571	4.465,838	6.557,120	756,865	12.445,805
4+100	100	2.498,254	23,107			1,00	1,25	100,00%	0,000	2.498,254	23,107	2.475,147	6.557,120	779,972	14.920,952
4+200	100	2.414,147	36,134			1,00	1,25	100,00%	0,000	2.414,147	36,134	2.378,013	6.557,120	816,106	17.298,965
4+300	100	3.167,797	27,367			1,00	1,25	100,00%	0,000	3.167,797	27,367	3.140,430	6.557,120	843,473	20.439,395
4+400	100	3.039,295	20,640			1,00	1,25	100,00%	0,000	3.039,295	20,640	3.018,655	6.557,120	864,113	23.458,050
4+500	100	2.470,859	20,790			1,00	1,25	100,00%	0,000	2.470,859	20,790	2.450,069	6.557,120	884,903	25.908,119
4+600	100	1.528,930	22,017			1,00	1,25	100,00%	0,000	1.528,930	22,017	1.506,913	6.557,120	906,920	27.415,032
4+700	100	662,696	31,117			1,00	1,25	100,00%	0,000	662,696	31,117	631,579	6.557,120	938,037	28.046,611
4+800	100	1.630,273	20,735			1,00	1,25	100,00%	0,000	1.630,273	20,735	1.609,538	6.557,120	958,772	29.656,149
4+900	100	1.604,426	21,218			1,00	1,25	100,00%	0,000	1.604,426	21,218	1.583,208	6.557,120	979,990	31.239,357
5+000	100	3.216,927	23,658			1,00	1,25	100,00%	0,000	3.216,927	23,658	3.193,269	6.557,120	1.003,648	34.432,626
5+100	100	6.081,110	25,710			1,00	1,25	100,00%	0,000	6.081,110	25,710	6.055,400	6.557,120	1.029,358	40.488,026
5+200	100	2.114,597	24,161			1,00	1,25	100,00%	0,000	2.114,597	24,161	2.090,436	6.557,120	1.053,519	42.578,462
5+300	100	1.762,290	23,629			1,00	1,25	100,00%	0,000	1.762,290	23,629	1.738,661	6.557,120	1.077,148	44.317,123
5+400	100	986,757	19,970			1,00	1,25	100,00%	0,000	986,757	19,970	966,787	6.557,120	1.097,118	45.283,910
5+500	100	457,370	26,919			1,00	1,25	100,00%	0,000	457,370	26,919	430,451	6.557,120	1.124,037	45.714,361
5+600	100	266,641	112,341			1,00	1,25	100,00%	0,000	266,641	112,341	154,300	6.557,120	1.236,378	45.868,661
5+630	30	95,102	51,592			1,00	1,25	100,00%	0,000	95,102	51,592	43,510	6.557,120	1.287,970	45.912,171
TOTAL		**76.778,657**	**25.620,790**						**6.557,120**	**71.532,961**	**1.287,970**	**45.912,171**			

ESTUDIO INFORMATIVO DEL CORREDOR CÁNTABRICO - MEDITERRÁNEO DE ALTA VELOCIDAD. TRAMO TERUEL - ZARAGOZA.

DIAGRAMA DE EQUILIBRIO DE MOVIMIENTOS DE TIERRAS

Alternativa 1.1

PK	d	PLATAFORMA		EXCAVACIÓN TÚNEL EN MINA		COEF. PASO		EXCAVACIÓN			COMPENS.	BALANCE	VOL. ACUMULADOS		
		EXCAV.	TERRAPLÉN	NOMBRE	EXCAV.	RELLENOS	VERTEDERO	% APROV	NO APROV.	APROV.	TRANS.		A VERTEDERO	COM.TRAN.	BALANCE
1+000		0,000	0,000			1,00	1,25	0,00%	0,000	0,000	0,00	0,00	0,00	0,00	0,00
1+100	100	0,000	0,000			1,00	1,25	0,00%	0,000	0,000	0,00	0,00	0,00	0,00	0,00
1+200	100	119,676	4,508			1,00	1,25	0,00%	149,595	0,000	0,00	-4,51	149,60	0,00	-4,51
1+300	100	309,795	230,165			1,00	1,25	0,00%	387,244	0,000	0,00	-230,17	536,84	0,00	-234,67
1+400	100	55,923	580,014			1,00	1,25	0,00%	69,904	0,000	0,00	-580,01	606,74	0,00	-814,69
1+500	100	643,440	242,247			1,00	1,25	0,00%	804,300	0,000	0,00	-242,25	1.411,04	0,00	-1.056,93
1+600	100	1.410,614	0,049			1,00	1,25	0,00%	1.763,268	0,000	0,000	-0,049	3.174,310	0,000	-1.056,983
1+700	100	1.596,995	8,842			1,00	1,25	0,00%	1.996,244	0,000	0,000	-8,842	5.170,554	0,000	-1.065,825
1+800	100	0,000	0,000			1,00	1,25	0,00%	0,000	0,000	0,000	0,000	5.170,554	0,000	-1.065,825
1+900	100	2.350,911	1.137,897			1,00	1,25	0,00%	2.938,639	0,000	0,000	-1.137,897	8.109,193	0,000	-2.203,722
2+000	100	236,416	4.049,595			1,00	1,25	0,00%	295,520	0,000	0,000	-4.049,595	8.404,713	0,000	-6.253,317
2+100	100	0,000	3.297,037			1,00	1,25	0,00%	0,000	0,000	0,000	-3.297,037	8.404,713	0,000	-9.550,354
2+200	100	0,000	4.015,947			1,00	1,25	0,00%	0,000	0,000	0,000	-4.015,947	8.404,713	0,000	-13.566,301
2+300	100	0,000	5.051,230			1,00	1,25	0,00%	0,000	0,000	0,000	-5.051,230	8.404,713	0,000	-18.617,531
2+400	100	0,000	5.253,063			1,00	1,25	0,00%	0,000	0,000	0,000	-5.253,063	8.404,713	0,000	-23.870,594
2+500	100	0,000	9.219,349			1,00	1,25	0,00%	0,000	0,000	0,000	-9.219,349	8.404,713	0,000	-33.089,943
2+600	100	1.003,913	7.965,657			1,00	1,25	100,00%	0,000	1.003,913	1.003,913	-6.961,744	8.404,713	1.003,913	-40.051,687
2+700	100	40.510,972	267,589			1,00	1,25	100,00%	0,000	40.510,972	267,589	40.243,383	8.404,713	1.271,502	191,696
2+800	100	82.452,759	36,900			1,00	1,25	100,00%	0,000	82.452,759	36,900	82.415,859	8.404,713	1.308,402	82.607,555
2+900	100	133.258,440	37,118			1,00	1,25	100,00%	0,000	133.258,440	37,118	133.221,322	8.404,713	1.345,520	215.828,877
3+000	100	181.986,538	38,159			1,00	1,25	100,00%	0,000	181.986,538	38,159	181.948,379	8.404,713	1.383,679	397.777,256
3+100	100	186.677,196	37,531			1,00	1,25	100,00%	0,000	186.677,196	37,531	186.639,665	8.404,713	1.421,210	584.416,921
3+200	100	204.864,405	35,480			1,00	1,25	100,00%	0,000	204.864,405	35,480	204.828,925	8.404,713	1.456,690	789.245,846
3+300	100	235.548,731	36,554			1,00	1,25	100,00%	0,000	235.548,731	36,554	235.512,177	8.404,713	1.493,244	1.024.758,023
3+400	100	226.437,310	37,740			1,00	1,25	100,00%	0,000	226.437,310	37,740	226.399,570	8.404,713	1.530,984	1.251.157,593
3+500	100	206.729,168	37,699			1,00	1,25	100,00%	0,000	206.729,168	37,699	206.691,469	8.404,713	1.568,683	1.457.849,062
3+600	100	135.312,588	39,370			1,00	1,25	100,00%	0,000	135.312,588	39,370	135.273,218	8.404,713	1.608,053	1.593.122,280
3+700	100	133.389,340	34,288			1,00	1,25	100,00%	0,000	133.389,340	34,288	133.355,052	8.404,713	1.642,341	1.726.477,332
3+800	100	157.830,127	37,347			1,00	1,25	100,00%	0,000	157.830,127	37,347	157.792,780	8.404,713	1.679,688	1.884.270,112
3+900	100	134.753,470	36,791			1,00	1,25	100,00%	0,000	134.753,470	36,791	134.716,679	8.404,713	1.716,479	2.018.986,791
4+000	100	108.163,859	36,442			1,00	1,25	100,00%	0,000	108.163,859	36,442	108.127,417	8.404,713	1.752,921	2.127.114,208
4+100	100	89.514,755	38,478			1,00	1,25	100,00%	0,000	89.514,755	38,478	89.476,277	8.404,713	1.791,399	2.216.590,485
4+200	100	72.110,041	39,475			1,00	1,25	100,00%	0,000	72.110,041	39,475	72.070,566	8.404,713	1.830,874	2.288.661,051
4+300	100	45.674,673	38,352			1,00	1,25	100,00%	0,000	45.674,673	38,352	45.636,321	8.404,713	1.869,226	2.334.297,372
4+400	100	22.619,526	37,608			1,00	1,25	100,00%	0,000	22.619,526	37,608	22.581,918	8.404,713	1.906,834	2.356.879,290
4+500	100	21.951,666	37,639			1,00	1,25	100,00%	0,000	21.951,666	37,639	21.914,027	8.404,713	1.944,473	2.378.793,317
4+600	100	13.053,055	37,768			1,00	1,25	100,00%	0,000	13.053,055	37,768	13.015,287	8.404,713	1.982,241	2.391.808,604
4+700	100	2.286,769	37,961			1,00	1,25	100,00%	0,000	2.286,769	37,961	2.248,808	8.404,713	2.020,202	2.394.057,412
4+800	100	9.299,708	40,292			1,00	1,25	100,00%	0,000	9.299,708	40,292	9.259,416	8.404,713	2.060,494	2.403.316,828
4+900	100	14.627,187	37,714			1,00	1,25	100,00%	0,000	14.627,187	37,714	14.589,473	8.404,713	2.098,208	2.417.906,301
5+000	100	11.352,234	336,716			1,00	1,25	100,00%	0,000	11.352,234	336,716	11.015,518	8.404,713	2.434,924	2.428.921,819
5+100	100	536,180	2.158,405			1,00	1,25	100,00%	0,000	536,180	536,180	-1.622,225	8.404,713	2.971,104	2.427.299,594
5+200	100	463,550	3.103,992			1,00	1,25	100,00%	0,000	463,550	463,550	-2.640,442	8.404,713	3.434,654	2.424.659,152
5+300	100	0,000	2.449,648			1,00	1,25	100,00%	0,000	0,000	0,000	-2.449,648	8.404,713	3.434,654	2.422.209,504
5+400	100	27,034	1.545,007			1,00	1,25	100,00%	0,000	27,034	27,034	-1.517,973	8.404,713	3.461,688	2.420.691,531
5+500	100	322,676	896,817			1,00	1,25	100,00%	0,000	322,676	322,676	-574,141	8.404,713	3.784,364	2.420.117,390
5+507	7	27,630	39,141			1,00	1,25	100,00%	0,000	27,630	27,630	-11,511	8.404,713	3.811,994	2.420.105,879
TOTAL		**2.479.509,270**	**52.679,621**						**8.404,713**	**2.472.785,500**	**3.811,994**	**2.420.105,879**			

ESTUDIO INFORMATIVO DEL CORREDOR CÁNTABRICO - MEDITERRÁNEO DE ALTA VELOCIDAD. TRAMO TERUEL - ZARAGOZA.

DIAGRAMA DE EQUILIBRIO DE MOVIMIENTOS DE TIERRAS

Alternativa 1.2

PK	d	PLATAFORMA		EXCAVACIÓN TÚNEL EN MINA		COEF. PASO		EXCAVACIÓN			COMPENS.	BALANCE	VOL. ACUMULADOS		
		EXCAV.	TERRAPLÉN	NOMBRE	EXCAV.	RELLENOS	VERTEDERO	% APROV	NO APROV.	APROV.	TRANS.		A VERTEDERO	COM.TRAN.	BALANCE
1+000		0,000	0,000			1,00	1,25	0,00%	0,000	0,000	0,000	0,000	0,000	0,000	0,000
1+100	100	0,000	0,000			1,00	1,25	0,00%	0,000	0,000	0,000	0,000	0,000	0,000	0,000
1+200	100	0,000	0,000			1,00	1,25	0,00%	0,000	0,000	0,000	0,000	0,000	0,000	0,000
1+300	100	119,683	4,509			1,00	1,25	0,00%	149,604	0,000	0,000	-4,509	149,604	0,000	-4,509
1+400	100	309,802	230,157			1,00	1,25	0,00%	387,253	0,000	0,000	-230,157	536,856	0,000	-234,666
1+500	100	55,938	579,984			1,00	1,25	0,00%	69,923	0,000	0,000	-579,984	606,779	0,000	-814,650
1+600	100	643,451	242,232			1,00	1,25	0,00%	804,314	0,000	0,000	-242,232	1.411,093	0,000	-1.056,882
1+700	100	1.408,652	0,049			1,00	1,25	0,00%	1.760,815	0,000	0,000	-0,049	3.171,908	0,000	-1.056,931
1+800	100	1.573,980	8,840			1,00	1,25	0,00%	1.967,475	0,000	0,000	-8,840	5.139,383	0,000	-1.065,771
1+900	100	707,990	645,645			1,00	1,25	0,00%	884,988	0,000	0,000	-645,645	6.024,370	0,000	-1.711,416
2+000	100	55,070	1.563,627			1,00	1,25	0,00%	68,838	0,000	0,000	-1.563,627	6.093,208	0,000	-3.275,043
2+100	100	127,328	930,556			1,00	1,25	0,00%	159,160	0,000	0,000	-930,556	6.252,368	0,000	-4.205,599
2+200	100	223,308	448,933			1,00	1,25	0,00%	279,135	0,000	0,000	-448,933	6.531,503	0,000	-4.654,532
2+300	100	528,815	18,549			1,00	1,25	0,00%	661,019	0,000	0,000	-18,549	7.192,521	0,000	-4.673,081
2+400	100	331,408	18,246			1,00	1,25	0,00%	414,260	0,000	0,000	-18,246	7.606,781	0,000	-4.691,327
2+500	100	297,764	263,939			1,00	1,25	0,00%	372,205	0,000	0,000	-263,939	7.978,986	0,000	-4.955,266
2+600	100	34,908	1.593,254			1,00	1,25	0,00%	43,635	0,000	0,000	-1.593,254	8.022,621	0,000	-6.548,520
2+700	100	18,626	1.799,428			1,00	1,25	0,00%	23,283	0,000	0,000	-1.799,428	8.045,904	0,000	-8.347,948
2+800	100	5,984	2.485,590			1,00	1,25	0,00%	7,480	0,000	0,000	-2.485,590	8.053,384	0,000	-10.833,538
2+900	100	37,915	2.488,341			1,00	1,25	0,00%	47,394	0,000	0,000	-2.488,341	8.100,778	0,000	-13.321,879
3+000	100	1,017	3.753,510			1,00	1,25	100,00%	0,000	1,017	1,017	-3.752,493	8.100,778	1,017	-17.074,372
3+100	100	0,000	1.461,097			1,00	1,25	100,00%	0,000	0,000	0,000	-1.461,097	8.100,778	1,017	-18.535,469
3+200	100	1,111	7.284,068			1,00	1,25	100,00%	0,000	1,111	1,111	-7.282,957	8.100,778	2,128	-25.818,426
3+300	100	1,747	12.746,617			1,00	1,25	100,00%	0,000	1,747	1,747	-12.744,870	8.100,778	3,875	-38.563,296
3+400	100	3.308,739	6.634,581			1,00	1,25	100,00%	0,000	3.308,739	3.308,739	-3.325,842	8.100,778	3.312,614	-41.889,138
3+500	100	36.225,143	33,963			1,00	1,25	100,00%	0,000	36.225,143	33,963	36.191,180	8.100,778	3.346,577	-5.697,958
3+600	100	58.327,649	38,721			1,00	1,25	100,00%	0,000	58.327,649	38,721	58.288,928	8.100,778	3.385,298	52.590,970
3+700	100	84.704,793	38,185			1,00	1,25	100,00%	0,000	84.704,793	38,185	84.666,608	8.100,778	3.423,483	137.257,578
3+800	100	99.910,925	36,409			1,00	1,25	100,00%	0,000	99.910,925	36,409	99.874,516	8.100,778	3.459,892	237.132,094
3+900	100	102.804,324	37,311			1,00	1,25	100,00%	0,000	102.804,324	37,311	102.767,013	8.100,778	3.497,203	339.899,107
4+000	100	94.922,991	36,892			1,00	1,25	100,00%	0,000	94.922,991	36,892	94.886,099	8.100,778	3.534,095	434.785,206
4+100	100	79.045,425	37,250			1,00	1,25	100,00%	0,000	79.045,425	37,250	79.008,175	8.100,778	3.571,345	513.793,381
4+200	100	52.372,009	36,653			1,00	1,25	100,00%	0,000	52.372,009	36,653	52.335,356	8.100,778	3.607,998	566.128,737
4+300	100	47.197,496	38,805			1,00	1,25	100,00%	0,000	47.197,496	38,805	47.158,691	8.100,778	3.646,803	613.287,428
4+400	100	17.726,908	88,599			1,00	1,25	100,00%	0,000	17.726,908	88,599	17.638,309	8.100,778	3.735,402	630.925,737
4+500	100	18.164,466	38,101			1,00	1,25	100,00%	0,000	18.164,466	38,101	18.126,365	8.100,778	3.773,503	649.052,102
4+600	100	14.934,995	37,497			1,00	1,25	100,00%	0,000	14.934,995	37,497	14.897,498	8.100,778	3.811,000	663.949,600
4+700	100	8.560,625	37,451			1,00	1,25	100,00%	0,000	8.560,625	37,451	8.523,174	8.100,778	3.848,451	672.472,774
4+800	100	8.187,943	38,312			1,00	1,25	100,00%	0,000	8.187,943	38,312	8.149,631	8.100,778	3.886,763	680.622,405
4+900	100	9.109,782	44,055			1,00	1,25	100,00%	0,000	9.109,782	44,055	9.065,727	8.100,778	3.930,818	689.688,132
5+000	100	12.979,778	73,286			1,00	1,25	100,00%	0,000	12.979,778	73,286	12.906,492	8.100,778	4.004,104	702.594,624
5+100	100	3.236,292	59,522			1,00	1,25	100,00%	0,000	3.236,292	59,522	3.176,770	8.100,778	4.063,626	705.771,394
5+200	100	2.017,346	243,901			1,00	1,25	100,00%	0,000	2.017,346	243,901	1.773,445	8.100,778	4.307,527	707.544,839
5+300	100	1.085,405	540,356			1,00	1,25	100,00%	0,000	1.085,405	540,356	545,049	8.100,778	4.847,883	708.089,888
5+400	100	532,481	806,372			1,00	1,25	100,00%	0,000	532,481	532,481	-273,891	8.100,778	5.380,364	707.815,997
5+500	100	312,567	980,721			1,00	1,25	100,00%	0,000	312,567	312,567	-668,154	8.100,778	5.692,931	707.147,843
5+534	34	140,652	172,162			1,00	1,25	100,00%	0,000	140,652	140,652	-31,510	8.100,778	5.833,583	707.116,333
TOTAL		**762.293,231**	**48.696,276**						**8.100,778**	**755.812,609**	**5.833,583**	**707.116,333**			

ESTUDIO INFORMATIVO DEL CORREDOR CÁNTABRICO - MEDITERRÁNEO DE ALTA VELOCIDAD. TRAMO TERUEL - ZARAGOZA.

DIAGRAMA DE EQUILIBRIO DE MOVIMIENTOS DE TIERRAS

Alternativa 2.0

PK	d	PLATAFORMA		EXCAVACIÓN TÚNEL EN MINA			COEF. PASO		EXCAVACIÓN			COMPENS.	BALANCE	VOL. ACUMULADOS		
		EXCAV.	TERRAPLÉN	NOMBRE	EXCAV.	TERRAPLÉN	RELLENOS	VERTEDERO	% APROV	NO APROV.	APROV.	TRANS.		A VERTEDERO	COM.TRAN.	BALANCE
2+000		0,000	0,000				1,00	1,25	0,00%	0,000	0,000	0,000	0,000	0,000	0,000	0,000
2+100	100	179,526	385,500				1,00	1,25	0,00%	224,408	0,000	0,000	-385,500	224,408	0,000	-385,500
2+200	100	279,967	517,592				1,00	1,25	0,00%	349,959	0,000	0,000	-517,592	574,366	0,000	-903,092
2+300	100	239,845	418,731				1,00	1,25	0,00%	299,806	0,000	0,000	-418,731	874,173	0,000	-1.321,823
2+400	100	481,163	137,296				1,00	1,25	0,00%	601,454	0,000	0,000	-137,296	1.475,626	0,000	-1.459,119
2+500	100	355,369	208,637				1,00	1,25	0,00%	444,211	0,000	0,000	-208,637	1.919,838	0,000	-1.667,756
2+600	100	302,110	298,475				1,00	1,25	0,00%	377,638	0,000	0,000	-298,475	2.297,475	0,000	-1.966,231
2+700	100	838,094	17,078				1,00	1,25	0,00%	1.047,618	0,000	0,000	-17,078	3.345,093	0,000	-1.983,309
2+800	100	321,084	164,886				1,00	1,25	0,00%	401,355	0,000	0,000	-164,886	3.746,448	0,000	-2.148,195
2+900	100	265,094	296,128				1,00	1,25	0,00%	331,368	0,000	0,000	-296,128	4.077,815	0,000	-2.444,323
3+000	100	3.776,597	24,472				1,00	1,25	0,00%	4.720,746	0,000	0,000	-24,472	8.798,561	0,000	-2.468,795
3+100	100	4.695,320	22,126				1,00	1,25	0,00%	5.869,150	0,000	0,000	-22,126	14.667,711	0,000	-2.490,921
3+200	100	3.824,826	21,547				1,00	1,25	0,00%	4.781,033	0,000	0,000	-21,547	19.448,744	0,000	-2.512,468
3+300	100	2.872,317	21,251				1,00	1,25	0,00%	3.590,396	0,000	0,000	-21,251	23.039,140	0,000	-2.533,719
3+400	100	2.355,392	22,705				1,00	1,25	0,00%	2.944,240	0,000	0,000	-22,705	25.983,380	0,000	-2.556,424
3+500	100	3.571,749	21,867				1,00	1,25	0,00%	4.464,686	0,000	0,000	-21,867	30.448,066	0,000	-2.578,291
3+600	100	2.632,557	20,132				1,00	1,25	0,00%	3.290,696	0,000	0,000	-20,132	33.738,763	0,000	-2.598,423
3+700	100	2.156,553	19,537				1,00	1,25	0,00%	2.695,691	0,000	0,000	-19,537	36.434,454	0,000	-2.617,960
3+800	100	1.992,805	18,987				1,00	1,25	0,00%	2.491,006	0,000	0,000	-18,987	38.925,460	0,000	-2.636,947
3+900	100	2.531,205	19,422				1,00	1,25	0,00%	3.164,006	0,000	0,000	-19,422	42.089,466	0,000	-2.656,369
4+000	100	1.252,971	35,275				1,00	1,25	0,00%	1.566,214	0,000	0,000	-35,275	43.655,680	0,000	-2.691,644
4+100	100	456,589	97,069				1,00	1,25	0,00%	570,736	0,000	0,000	-97,069	44.226,416	0,000	-2.788,713
4+200	100	363,462	78,809				1,00	1,25	0,00%	454,328	0,000	0,000	-78,809	44.680,744	0,000	-2.867,522
4+300	100	222,672	237,704				1,00	1,25	0,00%	278,340	0,000	0,000	-237,704	44.959,084	0,000	-3.105,226
4+400	100	284,178	362,507				1,00	1,25	0,00%	355,223	0,000	0,000	-362,507	45.314,306	0,000	-3.467,733
4+500	100	335,913	214,573				1,00	1,25	0,00%	419,891	0,000	0,000	-214,573	45.734,198	0,000	-3.682,306
4+600	100	2.509,997	27,834				1,00	1,25	0,00%	3.137,496	0,000	0,000	-27,834	48.871,694	0,000	-3.710,140
4+700	100	3.675,822	34,460				1,00	1,25	0,00%	4.594,778	0,000	0,000	-34,460	53.466,471	0,000	-3.744,600
4+800	100	2.434,336	30,644				1,00	1,25	0,00%	3.042,920	0,000	0,000	-30,644	56.509,391	0,000	-3.775,244
4+900	100	4.565,594	29,214				1,00	1,25	0,00%	5.706,993	0,000	0,000	-29,214	62.216,384	0,000	-3.804,458
5+000	100	896,273	427,185				1,00	1,25	0,00%	1.120,341	0,000	0,000	-427,185	63.336,725	0,000	-4.231,643
5+100	100	232,866	810,946				1,00	1,25	0,00%	291,083	0,000	0,000	-810,946	63.627,808	0,000	-5.042,589
5+200	100	22,189	2.317,740				1,00	1,25	0,00%	27,736	0,000	0,000	-2.317,740	63.655,544	0,000	-7.360,329
5+300	100	63,056	1.967,057				1,00	1,25	0,00%	78,820	0,000	0,000	-1.967,057	63.734,364	0,000	-9.327,386
5+400	100	800,044	217,574				1,00	1,25	0,00%	1.000,055	0,000	0,000	-217,574	64.734,419	0,000	-9.544,960
5+500	100	1.625,354	20,291				1,00	1,25	0,00%	2.031,693	0,000	0,000	-20,291	66.766,111	0,000	-9.565,251
5+600	100	206,880	191,171				1,00	1,25	0,00%	258,600	0,000	0,000	-191,171	67.024,711	0,000	-9.756,422
5+700	100	50,948	747,037				1,00	1,25	0,00%	63,685	0,000	0,000	-747,037	67.088,396	0,000	-10.503,459
5+800	100	54,756	1.242,383				1,00	1,25	0,00%	68,445	0,000	0,000	-1.242,383	67.156,841	0,000	-11.745,842
5+900	100	64,301	1.498,849				1,00	1,25	0,00%	80,376	0,000	0,000	-1.498,849	67.237,218	0,000	-13.244,691
6+000	100	108,680	1.445,317				1,00	1,25	0,00%	135,850	0,000	0,000	-1.445,317	67.373,068	0,000	-14.690,008
6+100	100	245,632	204,863				1,00	1,25	0,00%	307,040	0,000	0,000	-204,863	67.680,108	0,000	-14.894,871
6+200	100	264,288	71,248				1,00	1,25	0,00%	330,360	0,000	0,000	-71,248	68.010,468	0,000	-14.966,119
6+300	100	743,114	18,696				1,00	1,25	0,00%	928,893	0,000	0,000	-18,696	68.939,360	0,000	-14.984,815
6+400	100	323,109	818,170				1,00	1,25	0,00%	403,886	0,000	0,000	-818,170	69.343,246	0,000	-15.802,985
6+500	100	83,695	982,442				1,00	1,25	0,00%	104,619	0,000	0,000	-982,442	69.447,865	0,000	-16.785,427
6+600	100	152,304	391,930				1,00	1,25	0,00%	190,380	0,000	0,000	-391,930	69.638,245	0,000	-17.177,357
6+700	100	304,000	191,293				1,00	1,25	0,00%	380,000	0,000	0,000	-191,293	70.018,245	0,000	-17.368,650
6+800	100	14.650,841	209,309				1,00	1,25	0,00%	18.313,551	0,000	0,000	-209,309	88.331,796	0,000	-17.577,959
6+900	100	165,356	270,240				1,00	1,25	0,00%	206,695	0,000	0,000	-270,240	88.538,491	0,000	-17.848,199
7+000	100	195,539	400,911				1,00	1,25	0,00%	244,424	0,000	0,000	-400,911	88.782,915	0,000	-18.249,110
7+100	100	258,635	202,230				1,00	1,25	0,00%	323,294	0,000	0,000	-202,230	89.106,209	0,000	-18.451,340

ESTUDIO INFORMATIVO DEL CORREDOR CÁNTABRICO - MEDITERRÁNEO DE ALTA VELOCIDAD. TRAMO TERUEL - ZARAGOZA.

DIAGRAMA DE EQUILIBRIO DE MOVIMIENTOS DE TIERRAS

Alternativa 2.0

PK	d	PLATAFORMA		EXCAVACIÓN TÚNEL EN MINA			COEF. PASO		EXCAVACIÓN			COMPENS.	BALANCE	VOL. ACUMULADOS		
		EXCAV.	TERRAPLÉN	NOMBRE	EXCAV.	TERRAPLÉN	RELLENOS	VERTEDERO	% APROV	NO APROV.	APROV.	TRANS.		A VERTEDERO	COM.TRAN.	BALANCE
7+200	100	693,152	44,082				1,00	1,25	0,00%	866,440	0,000	0,000	-44,082	89.972,649	0,000	-18.495,422
7+300	100	1.116,940	18,111				1,00	1,25	0,00%	1.396,175	0,000	0,000	-18,111	91.368,824	0,000	-18.513,533
7+400	100	1.070,296	17,110				1,00	1,25	0,00%	1.337,870	0,000	0,000	-17,110	92.706,694	0,000	-18.530,643
7+500	100	916,401	84,361				1,00	1,25	0,00%	1.145,501	0,000	0,000	-84,361	93.852,195	0,000	-18.615,004
7+600	100	2.387,605	19,979				1,00	1,25	0,00%	2.984,506	0,000	0,000	-19,979	96.836,701	0,000	-18.634,983
7+700	100	2.579,980	20,946				1,00	1,25	0,00%	3.224,975	0,000	0,000	-20,946	100.061,676	0,000	-18.655,929
7+800	100	1.789,212	20,985				1,00	1,25	0,00%	2.236,515	0,000	0,000	-20,985	102.298,191	0,000	-18.676,914
7+900	100	1.546,222	23,565				1,00	1,25	0,00%	1.932,778	0,000	0,000	-23,565	104.230,969	0,000	-18.700,479
8+000	100	1.014,750	31,834				1,00	1,25	0,00%	1.268,438	0,000	0,000	-31,834	105.499,406	0,000	-18.732,313
8+100	100	1.035,123	18,922				1,00	1,25	0,00%	1.293,904	0,000	0,000	-18,922	106.793,310	0,000	-18.751,235
8+200	100	84,063	197,837				1,00	1,25	0,00%	105,079	0,000	0,000	-197,837	106.898,389	0,000	-18.949,072
8+300	100	1.908,118	64,409				1,00	1,25	0,00%	2.385,148	0,000	0,000	-64,409	109.283,536	0,000	-19.013,481
8+400	100	1.919,105	18,954				1,00	1,25	0,00%	2.398,881	0,000	0,000	-18,954	111.682,418	0,000	-19.032,435
8+500	100	1.421,869	18,874				1,00	1,25	0,00%	1.777,336	0,000	0,000	-18,874	113.459,754	0,000	-19.051,309
8+600	100	1.080,928	19,029				1,00	1,25	0,00%	1.351,160	0,000	0,000	-19,029	114.810,914	0,000	-19.070,338
8+700	100	2.247,237	19,170				1,00	1,25	0,00%	2.809,046	0,000	0,000	-19,170	117.619,960	0,000	-19.089,508
8+800	100	1.953,962	18,830				1,00	1,25	0,00%	2.442,453	0,000	0,000	-18,830	120.062,413	0,000	-19.108,338
8+900	100	1.631,472	18,990				1,00	1,25	0,00%	2.039,340	0,000	0,000	-18,990	122.101,753	0,000	-19.127,328
9+000	100	1.216,440	18,984				1,00	1,25	0,00%	1.520,550	0,000	0,000	-18,984	123.622,303	0,000	-19.146,312
9+100	100	1.164,938	18,890				1,00	1,25	0,00%	1.456,173	0,000	0,000	-18,890	125.078,475	0,000	-19.165,202
9+200	100	1.027,801	18,731				1,00	1,25	0,00%	1.284,751	0,000	0,000	-18,731	126.363,226	0,000	-19.183,933
9+300	100	291,351	45,049				1,00	1,25	0,00%	364,189	0,000	0,000	-45,049	126.727,415	0,000	-19.228,982
9+400	100	75,575	334,393				1,00	1,25	0,00%	94,469	0,000	0,000	-334,393	126.821,884	0,000	-19.563,375
9+500	100	77,718	522,157				1,00	1,25	0,00%	97,148	0,000	0,000	-522,157	126.919,031	0,000	-20.085,532
9+600	100	779,791	210,692				1,00	1,25	0,00%	974,739	0,000	0,000	-210,692	127.893,770	0,000	-20.296,224
9+700	100	2.681,760	24,669				1,00	1,25	0,00%	3.352,200	0,000	0,000	-24,669	131.245,970	0,000	-20.320,893
9+800	100	653,588	24,436				1,00	1,25	0,00%	816,985	0,000	0,000	-24,436	132.062,955	0,000	-20.345,329
9+900	100	126,812	130,193				1,00	1,25	0,00%	158,515	0,000	0,000	-130,193	132.221,470	0,000	-20.475,522
10+000	100	43,532	247,495				1,00	1,25	0,00%	54,415	0,000	0,000	-247,495	132.275,885	0,000	-20.723,017
10+100	100	266,911	76,210				1,00	1,25	0,00%	333,639	0,000	0,000	-76,210	132.609,524	0,000	-20.799,227
10+200	100	845,544	18,574				1,00	1,25	0,00%	1.056,930	0,000	0,000	-18,574	133.666,454	0,000	-20.817,801
10+300	100	931,284	18,664				1,00	1,25	0,00%	1.164,105	0,000	0,000	-18,664	134.830,559	0,000	-20.836,465
10+400	100	735,630	18,708				1,00	1,25	0,00%	919,538	0,000	0,000	-18,708	135.750,096	0,000	-20.855,173
10+500	100	505,773	19,912				1,00	1,25	0,00%	632,216	0,000	0,000	-19,912	136.382,313	0,000	-20.875,085
10+600	100	260,811	84,584				1,00	1,25	0,00%	326,014	0,000	0,000	-84,584	136.708,326	0,000	-20.959,669
10+700	100	10.202,548	13,456				1,00	1,25	0,00%	12.753,185	0,000	0,000	-13,456	149.461,511	0,000	-20.973,125
10+800	100	7.929,299	36,566				1,00	1,25	0,00%	9.911,624	0,000	0,000	-36,566	159.373,135	0,000	-21.009,691
10+900	100	1.346,450	39,147				1,00	1,25	0,00%	1.683,063	0,000	0,000	-39,147	161.056,198	0,000	-21.048,838
11+000	100	1.143,869	19,226				1,00	1,25	0,00%	1.429,836	0,000	0,000	-19,226	162.486,034	0,000	-21.068,064
11+100	100	1.228,533	19,225				1,00	1,25	0,00%	1.535,666	0,000	0,000	-19,225	164.021,700	0,000	-21.087,289
11+200	100	1.592,166	19,296				1,00	1,25	0,00%	1.990,208	0,000	0,000	-19,296	166.011,908	0,000	-21.106,585
11+300	100	1.236,361	19,803				1,00	1,25	0,00%	1.545,451	0,000	0,000	-19,803	167.557,359	0,000	-21.126,388
11+400	100	1.328,013	19,415				1,00	1,25	0,00%	1.660,016	0,000	0,000	-19,415	169.217,375	0,000	-21.145,803
11+500	100	1.441,745	19,068				1,00	1,25	0,00%	1.802,181	0,000	0,000	-19,068	171.019,556	0,000	-21.164,871
11+600	100	1.268,546	17,749				1,00	1,25	0,00%	1.585,683	0,000	0,000	-17,749	172.605,239	0,000	-21.182,620
11+700	100	1.181,054	16,409				1,00	1,25	0,00%	1.476,318	0,000	0,000	-16,409	174.081,556	0,000	-21.199,029
11+800	100	1.001,549	16,651				1,00	1,25	0,00%	1.251,936	0,000	0,000	-16,651	175.333,493	0,000	-21.215,680
11+900	100	780,892	19,948				1,00	1,25	0,00%	976,115	0,000	0,000	-19,948	176.309,608	0,000	-21.235,628
12+000	100	750,081	18,163				1,00	1,25	0,00%	937,601	0,000	0,000	-18,163	177.247,209	0,000	-21.253,791
12+100	100	645,334	20,897				1,00	1,25	0,00%	806,668	0,000	0,000	-20,897	178.053,876	0,000	-21.274,688
12+200	100	591,526	23,549				1,00	1,25	0,00%	739,408	0,000	0,000	-23,549	178.793,284	0,000	-21.298,237
12+300	100	267,904	66,957				1,00	1,25	0,00%	334,880	0,000	0,000	-66,957	179.128,164	0,000	-21.365,194

ESTUDIO INFORMATIVO DEL CORREDOR CÁNTABRICO - MEDITERRÁNEO DE ALTA VELOCIDAD. TRAMO TERUEL - ZARAGOZA.

DIAGRAMA DE EQUILIBRIO DE MOVIMIENTOS DE TIERRAS

Alternativa 2.0

PK	d	PLATAFORMA		EXCAVACIÓN TÚNEL EN MINA			COEF. PASO		EXCAVACIÓN			COMPENS.	BALANCE	VOL. ACUMULADOS		
		EXCAV.	TERRAPLÉN	NOMBRE	EXCAV.	TERRAPLÉN	RELLENOS	VERTEDERO	% APROV	NO APROV.	APROV.	TRANS.		A VERTEDERO	COM.TRAN.	BALANCE
12+400	100	202,895	80,701				1,00	1,25	0,00%	253,619	0,000	0,000	-80,701	179.381,783	0,000	-21.445,895
12+500	100	121,312	106,290				1,00	1,25	0,00%	151,640	0,000	0,000	-106,290	179.533,423	0,000	-21.552,185
12+600	100	146,785	58,010				1,00	1,25	0,00%	183,481	0,000	0,000	-58,010	179.716,904	0,000	-21.610,195
12+700	100	472,581	124,618				1,00	1,25	0,00%	590,726	0,000	0,000	-124,618	180.307,630	0,000	-21.734,813
12+800	100	1.328,620	17,483				1,00	1,25	0,00%	1.660,775	0,000	0,000	-17,483	181.968,405	0,000	-21.752,296
12+900	100	1.507,072	18,040				1,00	1,25	0,00%	1.883,840	0,000	0,000	-18,040	183.852,245	0,000	-21.770,336
13+000	100	1.583,922	18,181				1,00	1,25	0,00%	1.979,903	0,000	0,000	-18,181	185.832,148	0,000	-21.788,517
13+100	100	1.772,660	18,233				1,00	1,25	0,00%	2.215,825	0,000	0,000	-18,233	188.047,973	0,000	-21.806,750
13+200	100	1.879,392	18,284				1,00	1,25	0,00%	2.349,240	0,000	0,000	-18,284	190.397,213	0,000	-21.825,034
13+300	100	1.577,585	18,414				1,00	1,25	0,00%	1.971,981	0,000	0,000	-18,414	192.369,194	0,000	-21.843,448
13+400	100	1.058,410	18,548				1,00	1,25	0,00%	1.323,013	0,000	0,000	-18,548	193.692,206	0,000	-21.861,996
13+500	100	587,356	18,720				1,00	1,25	0,00%	734,195	0,000	0,000	-18,720	194.426,401	0,000	-21.880,716
13+600	100	343,999	42,104				1,00	1,25	0,00%	429,999	0,000	0,000	-42,104	194.856,400	0,000	-21.922,820
13+700	100	1.691,837	18,286				1,00	1,25	0,00%	2.114,796	0,000	0,000	-18,286	196.971,196	0,000	-21.941,106
13+800	100	1.557,520	18,222				1,00	1,25	0,00%	1.946,900	0,000	0,000	-18,222	198.918,096	0,000	-21.959,328
13+900	100	1.954,963	18,881				1,00	1,25	0,00%	2.443,704	0,000	0,000	-18,881	201.361,800	0,000	-21.978,209
14+000	100	1.862,376	18,918				1,00	1,25	0,00%	2.327,970	0,000	0,000	-18,918	203.689,770	0,000	-21.997,127
14+100	100	1.942,487	18,916				1,00	1,25	0,00%	2.428,109	0,000	0,000	-18,916	206.117,879	0,000	-22.016,043
14+200	100	1.912,159	18,949				1,00	1,25	0,00%	2.390,199	0,000	0,000	-18,949	208.508,078	0,000	-22.034,992
14+300	100	3.098,495	19,347				1,00	1,25	0,00%	3.873,119	0,000	0,000	-19,347	212.381,196	0,000	-22.054,339
14+400	100	383,622	3,685				1,00	1,25	100,00%	0,000	383,622	3,685	379,937	212.381,196	3,685	-21.674,402
14+500	100	0,000	0,000				1,00	1,25	100,00%	0,000	0,000	0,000	0,000	212.381,196	3,685	-21.674,402
14+600	100	0,000	0,000				1,00	1,25	100,00%	0,000	0,000	0,000	0,000	212.381,196	3,685	-21.674,402
14+700	100	0,000	0,000				1,00	1,25	100,00%	0,000	0,000	0,000	0,000	212.381,196	3,685	-21.674,402
14+800	100	0,000	0,000				1,00	1,25	100,00%	0,000	0,000	0,000	0,000	212.381,196	3,685	-21.674,402
14+900	100	0,000	0,000				1,00	1,25	100,00%	0,000	0,000	0,000	0,000	212.381,196	3,685	-21.674,402
15+000	100	0,000	0,000				1,00	1,25	100,00%	0,000	0,000	0,000	0,000	212.381,196	3,685	-21.674,402
15+100	100	0,000	0,000				1,00	1,25	100,00%	0,000	0,000	0,000	0,000	212.381,196	3,685	-21.674,402
15+200	100	0,000	0,000				1,00	1,25	100,00%	0,000	0,000	0,000	0,000	212.381,196	3,685	-21.674,402
15+300	100	0,000	0,000				1,00	1,25	100,00%	0,000	0,000	0,000	0,000	212.381,196	3,685	-21.674,402
15+400	100	2.187,222	15,149				1,00	1,25	100,00%	0,000	2.187,222	15,149	2.172,073	212.381,196	18,834	-19.502,329
15+500	100	2.274,538	21,537				1,00	1,25	100,00%	0,000	2.274,538	21,537	2.253,001	212.381,196	40,371	-17.249,328
15+600	100	1.073,866	22,099				1,00	1,25	100,00%	0,000	1.073,866	22,099	1.051,767	212.381,196	62,470	-16.197,561
15+700	100	965,863	18,752				1,00	1,25	100,00%	0,000	965,863	18,752	947,111	212.381,196	81,222	-15.250,450
15+800	100	811,288	19,215				1,00	1,25	100,00%	0,000	811,288	19,215	792,073	212.381,196	100,437	-14.458,377
15+900	100	376,811	80,230				1,00	1,25	100,00%	0,000	376,811	80,230	296,581	212.381,196	180,667	-14.161,796
16+000	100	125,599	85,543				1,00	1,25	100,00%	0,000	125,599	85,543	40,056	212.381,196	266,210	-14.121,740
16+100	100	2.179,632	20,044				1,00	1,25	100,00%	0,000	2.179,632	20,044	2.159,588	212.381,196	286,254	-11.962,152
16+200	100	1.247,415	18,750				1,00	1,25	100,00%	0,000	1.247,415	18,750	1.228,665	212.381,196	305,004	-10.733,487
16+300	100	1.911,418	18,862				1,00	1,25	100,00%	0,000	1.911,418	18,862	1.892,556	212.381,196	323,866	-8.840,931
16+400	100	1.983,334	18,899				1,00	1,25	100,00%	0,000	1.983,334	18,899	1.964,435	212.381,196	342,765	-6.876,496
16+500	100	2.091,772	18,919				1,00	1,25	100,00%	0,000	2.091,772	18,919	2.072,853	212.381,196	361,684	-4.803,643
16+600	100	2.032,215	18,925				1,00	1,25	100,00%	0,000	2.032,215	18,925	2.013,290	212.381,196	380,609	-2.790,353
16+700	100	2.176,080	18,900				1,00	1,25	100,00%	0,000	2.176,080	18,900	2.157,180	212.381,196	399,509	-633,173
16+800	100	2.097,652	18,946				1,00	1,25	100,00%	0,000	2.097,652	18,946	2.078,706	212.381,196	418,455	1.445,533
16+900	100	1.994,869	18,872				1,00	1,25	100,00%	0,000	1.994,869	18,872	1.975,997	212.381,196	437,327	3.421,530
17+000	100	2.061,562	18,725				1,00	1,25	100,00%	0,000	2.061,562	18,725	2.042,837	212.381,196	456,052	5.464,367
17+100	100	1.215,653	18,787				1,00	1,25	100,00%	0,000	1.215,653	18,787	1.196,866	212.381,196	474,839	6.661,233
17+200	100	972,389	18,722				1,00	1,25	100,00%	0,000	972,389	18,722	953,667	212.381,196	493,561	7.614,900
17+300	100	1.270,598	18,248				1,00	1,25	100,00%	0,000	1.270,598	18,248	1.252,350	212.381,196	511,809	8.867,250
17+400	100	564,838	40,023				1,00	1,25	100,00%	0,000	564,838	40,023	524,815	212.381,196	551,832	9.392,065
17+500	100	686,804	31,222				1,00	1,25	100,00%	0,000	686,804	31,222	655,582	212.381,196	583,054	10.047,647

ESTUDIO INFORMATIVO DEL CORREDOR CÁNTABRICO - MEDITERRÁNEO DE ALTA VELOCIDAD. TRAMO TERUEL - ZARAGOZA.

DIAGRAMA DE EQUILIBRIO DE MOVIMIENTOS DE TIERRAS

Alternativa 2.0

PK	d	PLATAFORMA		EXCAVACIÓN TÚNEL EN MINA			COEF. PASO		EXCAVACIÓN			COMPENS.	BALANCE	VOL. ACUMULADOS		
		EXCAV.	TERRAPLÉN	NOMBRE	EXCAV.	TERRAPLÉN	RELLENOS	VERTEDERO	% APROV	NO APROV.	APROV.	TRANS.		A VERTEDERO	COM.TRAN.	BALANCE
17+600	100	412,175	60,803				1,00	1,25	100,00%	0,000	412,175	60,803	351,372	212.381,196	643,857	10.399,019
17+700	100	1.037,892	33,415				1,00	1,25	100,00%	0,000	1.037,892	33,415	1.004,477	212.381,196	677,272	11.403,496
17+800	100	1.965,908	27,394				1,00	1,25	100,00%	0,000	1.965,908	27,394	1.938,514	212.381,196	704,666	13.342,010
17+900	100	209,117	144,237				1,00	1,25	100,00%	0,000	209,117	144,237	64,880	212.381,196	848,903	13.406,890
18+000	100	490,534	22,137				1,00	1,25	100,00%	0,000	490,534	22,137	468,397	212.381,196	871,040	13.875,287
18+100	100	1.229,565	18,750				1,00	1,25	100,00%	0,000	1.229,565	18,750	1.210,815	212.381,196	889,790	15.086,102
18+200	100	1.824,318	18,759				1,00	1,25	100,00%	0,000	1.824,318	18,759	1.805,559	212.381,196	908,549	16.891,661
18+300	100	1.639,219	18,832				1,00	1,25	100,00%	0,000	1.639,219	18,832	1.620,387	212.381,196	927,381	18.512,048
18+400	100	1.490,677	18,877				1,00	1,25	100,00%	0,000	1.490,677	18,877	1.471,800	212.381,196	946,258	19.983,848
18+500	100	1.683,411	18,888				1,00	1,25	100,00%	0,000	1.683,411	18,888	1.664,523	212.381,196	965,146	21.648,371
18+600	100	2.182,901	18,883				1,00	1,25	100,00%	0,000	2.182,901	18,883	2.164,018	212.381,196	984,029	23.812,389
18+700	100	2.426,400	18,882				1,00	1,25	100,00%	0,000	2.426,400	18,882	2.407,518	212.381,196	1.002,911	26.219,907
18+800	100	1.916,328	18,917				1,00	1,25	100,00%	0,000	1.916,328	18,917	1.897,411	212.381,196	1.021,828	28.117,318
18+900	100	1.257,931	18,900				1,00	1,25	100,00%	0,000	1.257,931	18,900	1.239,031	212.381,196	1.040,728	29.356,349
19+000	100	1.118,888	18,784				1,00	1,25	100,00%	0,000	1.118,888	18,784	1.100,104	212.381,196	1.059,512	30.456,453
19+100	100	1.354,897	18,796				1,00	1,25	100,00%	0,000	1.354,897	18,796	1.336,101	212.381,196	1.078,308	31.792,554
19+200	100	1.464,159	18,724				1,00	1,25	100,00%	0,000	1.464,159	18,724	1.445,435	212.381,196	1.097,032	33.237,989
19+300	100	381,787	24,016				1,00	1,25	100,00%	0,000	381,787	24,016	357,771	212.381,196	1.121,048	33.595,760
19+400	100	602,724	18,995				1,00	1,25	100,00%	0,000	602,724	18,995	583,729	212.381,196	1.140,043	34.179,489
19+500	100	662,191	18,976				1,00	1,25	100,00%	0,000	662,191	18,976	643,215	212.381,196	1.159,019	34.822,704
19+600	100	2.053,189	19,346				1,00	1,25	100,00%	0,000	2.053,189	19,346	2.033,843	212.381,196	1.178,365	36.856,547
19+700	100	1.260,110	18,775				1,00	1,25	100,00%	0,000	1.260,110	18,775	1.241,335	212.381,196	1.197,140	38.097,882
19+800	100	1.519,824	18,749				1,00	1,25	100,00%	0,000	1.519,824	18,749	1.501,075	212.381,196	1.215,889	39.598,957
19+900	100	1.711,542	18,792				1,00	1,25	100,00%	0,000	1.711,542	18,792	1.692,750	212.381,196	1.234,681	41.291,707
20+000	100	1.957,219	18,793				1,00	1,25	50,00%	1.223,262	978,610	18,793	959,817	213.604,458	1.253,474	42.251,524
20+100	100	1.736,331	18,940				1,00	1,25	50,00%	1.085,207	868,166	18,940	849,226	214.689,665	1.272,414	43.100,749
20+200	100	1.509,789	18,987				1,00	1,25	50,00%	943,618	754,895	18,987	735,908	215.633,283	1.291,401	43.836,657
20+300	100	849,012	19,034				1,00	1,25	50,00%	530,633	424,506	19,034	405,472	216.163,916	1.310,435	44.242,129
20+400	100	898,867	19,070				1,00	1,25	50,00%	561,792	449,434	19,070	430,364	216.725,708	1.329,505	44.672,492
20+500	100	956,559	19,080				1,00	1,25	50,00%	597,849	478,280	19,080	459,200	217.323,557	1.348,585	45.131,692
20+600	100	690,718	19,076				1,00	1,25	50,00%	431,699	345,359	19,076	326,283	217.755,256	1.367,661	45.457,975
20+700	100	861,488	19,014				1,00	1,25	50,00%	538,430	430,744	19,014	411,730	218.293,686	1.386,675	45.869,705
20+800	100	804,851	18,885				1,00	1,25	50,00%	503,032	402,426	18,885	383,541	218.796,718	1.405,560	46.253,245
20+900	100	1.614,772	19,605				1,00	1,25	50,00%	1.009,233	807,386	19,605	787,781	219.805,950	1.425,165	47.041,026
21+000	100	618,428	27,497				1,00	1,25	50,00%	386,518	309,214	27,497	281,717	220.192,468	1.452,662	47.322,743
21+100	100	548,778	35,684				1,00	1,25	50,00%	342,986	274,389	35,684	238,705	220.535,454	1.488,346	47.561,448
21+200	100	982,309	18,151				1,00	1,25	50,00%	613,943	491,155	18,151	473,004	221.149,397	1.506,497	48.034,452
21+300	100	885,546	18,571				1,00	1,25	50,00%	553,466	442,773	18,571	424,202	221.702,863	1.525,068	48.458,654
21+400	100	609,034	18,665				1,00	1,25	50,00%	380,646	304,517	18,665	285,852	222.083,509	1.543,733	48.744,506
21+500	100	970,092	18,617				1,00	1,25	50,00%	606,308	485,046	18,617	466,429	222.689,817	1.562,350	49.210,935
21+600	100	1.247,452	18,573				1,00	1,25	50,00%	779,658	623,726	18,573	605,153	223.469,474	1.580,923	49.816,088
21+700	100	1.001,626	18,619				1,00	1,25	50,00%	626,016	500,813	18,619	482,194	224.095,491	1.599,542	50.298,282
21+800	100	1.252,332	18,611				1,00	1,25	50,00%	782,708	626,166	18,611	607,555	224.878,198	1.618,153	50.905,837
21+900	100	746,354	18,626				1,00	1,25	50,00%	466,471	373,177	18,626	354,551	225.344,669	1.636,779	51.260,388
22+000	100	1.122,871	19,739				1,00	1,25	50,00%	701,794	561,436	19,739	541,697	226.046,464	1.656,518	51.802,084
22+100	100	1.081,059	20,120				1,00	1,25	50,00%	675,662	540,530	20,120	520,410	226.722,126	1.676,638	52.322,494
22+200	100	109,211	112,478				1,00	1,25	50,00%	68,257	54,606	54,606	-57,873	226.790,383	1.731,244	52.264,621
22+300	100	20,994	159,756				1,00	1,25	50,00%	13,121	10,497	10,497	-149,259	226.803,504	1.741,741	52.115,362
22+400	100	66,168	88,297				1,00	1,25	50,00%	41,355	33,084	33,084	-55,213	226.844,859	1.774,825	52.060,149
22+500	100	1.243,357	21,039				1,00	1,25	50,00%	777,098	621,679	21,039	600,640	227.621,957	1.795,864	52.660,789
22+600	100	1.656,440	18,591				1,00	1,25	50,00%	1.035,275	828,220	18,591	809,629	228.657,232	1.814,455	53.470,418
22+700	100	1.677,750	18,591				1,00	1,25	50,00%	1.048,594	838,875	18,591	820,284	229.705,826	1.833,046	54.290,702

ESTUDIO INFORMATIVO DEL CORREDOR CÁNTABRICO - MEDITERRÁNEO DE ALTA VELOCIDAD. TRAMO TERUEL - ZARAGOZA.

DIAGRAMA DE EQUILIBRIO DE MOVIMIENTOS DE TIERRAS

Alternativa 2.0

PK	d	PLATAFORMA		EXCAVACIÓN TÚNEL EN MINA			COEF. PASO		EXCAVACIÓN			COMPENS.	BALANCE	VOL. ACUMULADOS		
		EXCAV.	TERRAPLÉN	NOMBRE	EXCAV.	TERRAPLÉN	RELLENOS	VERTEDERO	% APROV	NO APROV.	APROV.	TRANS.		A VERTEDERO	COM.TRAN.	BALANCE
22+800	100	1.805,124	18,567				1,00	1,25	50,00%	1.128,203	902,562	18,567	883,995	230.834,028	1.851,613	55.174,697
22+900	100	1.656,129	18,726				1,00	1,25	50,00%	1.035,081	828,065	18,726	809,339	231.869,109	1.870,339	55.984,035
23+000	100	1.108,509	18,749				1,00	1,25	50,00%	692,818	554,255	18,749	535,506	232.561,927	1.889,088	56.519,541
23+100	100	1.324,000	18,698				1,00	1,25	50,00%	827,500	662,000	18,698	643,302	233.389,427	1.907,786	57.162,843
23+200	100	994,974	18,773				1,00	1,25	50,00%	621,859	497,487	18,773	478,714	234.011,286	1.926,559	57.641,557
23+300	100	1.277,762	18,701				1,00	1,25	50,00%	798,601	638,881	18,701	620,180	234.809,887	1.945,260	58.261,737
23+400	100	1.138,666	18,706				1,00	1,25	50,00%	711,666	569,333	18,706	550,627	235.521,553	1.963,966	58.812,364
23+500	100	1.183,872	18,710				1,00	1,25	50,00%	739,920	591,936	18,710	573,226	236.261,473	1.982,676	59.385,590
23+600	100	1.244,026	18,703				1,00	1,25	50,00%	777,516	622,013	18,703	603,310	237.038,989	2.001,379	59.988,900
23+700	100	1.121,396	18,734				1,00	1,25	50,00%	700,873	560,698	18,734	541,964	237.739,862	2.020,113	60.530,864
23+800	100	1.389,781	18,694				1,00	1,25	50,00%	868,613	694,891	18,694	676,197	238.608,475	2.038,807	61.207,060
23+900	100	974,696	18,756				1,00	1,25	50,00%	609,185	487,348	18,756	468,592	239.217,660	2.057,563	61.675,652
24+000	100	1.356,588	19,541				1,00	1,25	50,00%	847,868	678,294	19,541	658,753	240.065,528	2.077,104	62.334,405
24+100	100	839,332	18,653				1,00	1,25	50,00%	524,583	419,666	18,653	401,013	240.590,110	2.095,757	62.735,418
24+200	100	1.078,121	18,569				1,00	1,25	50,00%	673,826	539,061	18,569	520,492	241.263,936	2.114,326	63.255,910
24+300	100	811,670	18,506				1,00	1,25	50,00%	507,294	405,835	18,506	387,329	241.771,229	2.132,832	63.643,239
24+400	100	570,550	18,460				1,00	1,25	50,00%	356,594	285,275	18,460	266,815	242.127,823	2.151,292	63.910,054
24+500	100	682,660	18,454				1,00	1,25	50,00%	426,663	341,330	18,454	322,876	242.554,486	2.169,746	64.232,930
24+600	100	1.007,233	18,046				1,00	1,25	50,00%	629,521	503,617	18,046	485,571	243.184,006	2.187,792	64.718,500
24+700	100	707,217	19,335				1,00	1,25	50,00%	442,011	353,609	19,335	334,274	243.626,017	2.207,127	65.052,774
24+800	100	163,593	175,166				1,00	1,25	50,00%	102,246	81,797	81,797	-93,370	243.728,263	2.288,923	64.959,404
24+900	100	57,774	190,006				1,00	1,25	50,00%	36,109	28,887	28,887	-161,119	243.764,371	2.317,810	64.798,285
25+000	100	39,496	244,874				1,00	1,25	50,00%	24,685	19,748	19,748	-225,126	243.789,056	2.337,558	64.573,159
25+100	100	53,039	169,580				1,00	1,25	50,00%	33,149	26,520	26,520	-143,061	243.822,206	2.364,078	64.430,099
25+200	100	127,579	106,000				1,00	1,25	50,00%	79,737	63,790	63,790	-42,211	243.901,943	2.427,867	64.387,888
25+300	100	53,640	60,738				1,00	1,25	50,00%	33,525	26,820	26,820	-33,918	243.935,468	2.454,687	64.353,970
25+400	100	5,863	363,821				1,00	1,25	50,00%	3,664	2,932	2,932	-360,890	243.939,132	2.457,619	63.993,081
25+500	100	20,297	643,384				1,00	1,25	50,00%	12,686	10,149	10,149	-633,236	243.951,818	2.467,767	63.359,845
25+600	100	55,382	375,130				1,00	1,25	50,00%	34,614	27,691	27,691	-347,439	243.986,431	2.495,458	63.012,406
25+700	100	45,950	383,214				1,00	1,25	50,00%	28,719	22,975	22,975	-360,239	244.015,150	2.518,433	62.652,167
25+800	100	35,397	394,746				1,00	1,25	50,00%	22,123	17,699	17,699	-377,048	244.037,273	2.536,132	62.275,120
25+900	100	62,414	319,693				1,00	1,25	50,00%	39,009	31,207	31,207	-288,486	244.076,282	2.567,339	61.986,634
26+000	100	59,245	389,294				1,00	1,25	50,00%	37,028	29,623	29,623	-359,672	244.113,310	2.596,961	61.626,962
26+100	100	63,203	253,179				1,00	1,25	50,00%	39,502	31,602	31,602	-221,578	244.152,812	2.628,563	61.405,385
26+200	100	91,746	79,465				1,00	1,25	50,00%	57,341	45,873	45,873	-33,592	244.210,153	2.674,436	61.371,793
26+300	100	143,475	43,655				1,00	1,25	50,00%	89,672	71,738	43,655	28,083	244.299,825	2.718,091	61.399,875
26+400	100	209,571	32,130				1,00	1,25	50,00%	130,982	104,786	32,130	72,656	244.430,807	2.750,221	61.472,531
26+500	100	306,913	93,671				1,00	1,25	50,00%	191,821	153,457	93,671	59,786	244.622,628	2.843,892	61.532,316
26+600	100	70,132	1.110,889				1,00	1,25	50,00%	43,833	35,066	35,066	-1.075,823	244.666,460	2.878,958	60.456,493
26+700	100	86,986	1.072,077				1,00	1,25	50,00%	54,366	43,493	43,493	-1.028,584	244.720,826	2.922,451	59.427,909
26+800	100	91,668	901,089				1,00	1,25	50,00%	57,293	45,834	45,834	-855,255	244.778,119	2.968,285	58.572,654
26+900	100	141,831	637,428				1,00	1,25	50,00%	88,644	70,916	70,916	-566,513	244.866,763	3.039,200	58.006,142
27+000	100	698,777	259,976				1,00	1,25	50,00%	436,736	349,389	259,976	89,413	245.303,499	3.299,176	58.095,554
27+100	100	1.103,228	18,045				1,00	1,25	50,00%	689,518	551,614	18,045	533,569	245.993,016	3.317,221	58.629,123
27+200	100	649,256	18,376				1,00	1,25	50,00%	405,785	324,628	18,376	306,252	246.398,801	3.335,597	58.935,375
27+300	100	173,165	79,634				1,00	1,25	50,00%	108,228	86,583	79,634	6,949	246.507,029	3.415,231	58.942,324
27+400	100	143,164	85,932				1,00	1,25	50,00%	89,478	71,582	71,582	-14,350	246.596,507	3.486,813	58.927,974
27+500	100	197,657	90,075				1,00	1,25	50,00%	123,536	98,829	90,075	8,754	246.720,043	3.576,888	58.936,727
27+600	100	315,787	27,143				1,00	1,25	50,00%	197,367	157,894	27,143	130,751	246.917,409	3.604,031	59.067,478
27+700	100	288,907	109,613				1,00	1,25	50,00%	180,567	144,454	109,613	34,841	247.097,976	3.713,644	59.102,318
27+800	100	140,078	362,495				1,00	1,25	50,00%	87,549	70,039	70,039	-292,456	247.185,525	3.783,683	58.809,862
27+900	100	119,374	356,324				1,00	1,25	50,00%	74,609	59,687	59,687	-296,637	247.260,134	3.843,370	58.513,225

ESTUDIO INFORMATIVO DEL CORREDOR CÁNTABRICO - MEDITERRÁNEO DE ALTA VELOCIDAD. TRAMO TERUEL - ZARAGOZA.

DIAGRAMA DE EQUILIBRIO DE MOVIMIENTOS DE TIERRAS

Alternativa 2.0

PK	d	PLATAFORMA		EXCAVACIÓN TÚNEL EN MINA			COEF. PASO		EXCAVACIÓN			COMPENS.	BALANCE	VOL. ACUMULADOS		
		EXCAV.	TERRAPLÉN	NOMBRE	EXCAV.	TERRAPLÉN	RELLENOS	VERTEDERO	% APROV	NO APROV.	APROV.	TRANS.		A VERTEDERO	COM.TRAN.	BALANCE
28+000	100	247,333	230,124				1,00	1,25	50,00%	154,583	123,667	123,667	-106,458	247.414,717	3.967,037	58.406,768
28+100	100	981,733	19,179				1,00	1,25	50,00%	613,583	490,867	19,179	471,688	248.028,300	3.986,216	58.878,455
28+200	100	1.094,845	17,878				1,00	1,25	50,00%	684,278	547,423	17,878	529,545	248.712,578	4.004,094	59.408,000
28+300	100	871,474	17,799				1,00	1,25	50,00%	544,671	435,737	17,799	417,938	249.257,249	4.021,893	59.825,938
28+400	100	1.335,368	219,036				1,00	1,25	50,00%	834,605	667,684	219,036	448,648	250.091,854	4.240,929	60.274,586
28+500	100	138,661	425,711				1,00	1,25	50,00%	86,663	69,331	69,331	-356,381	250.178,518	4.310,259	59.918,205
28+600	100	127,014	316,548				1,00	1,25	50,00%	79,384	63,507	63,507	-253,041	250.257,901	4.373,766	59.665,164
28+700	100	61,032	317,608				1,00	1,25	50,00%	38,145	30,516	30,516	-287,092	250.296,046	4.404,282	59.378,072
28+800	100	90,789	468,649				1,00	1,25	50,00%	56,743	45,395	45,395	-423,255	250.352,789	4.449,677	58.954,818
28+900	100	121,433	267,011				1,00	1,25	50,00%	75,896	60,717	60,717	-206,295	250.428,685	4.510,393	58.748,523
29+000	100	257,109	182,274				1,00	1,25	50,00%	160,693	128,555	128,555	-53,720	250.589,378	4.638,948	58.694,804
29+100	100	126,083	6,881				1,00	1,25	50,00%	78,802	63,042	6,881	56,161	250.668,180	4.645,829	58.750,964
29+200	100	0,000	0,000				1,00	1,25	50,00%	0,000	0,000	0,000	0,000	250.668,180	4.645,829	58.750,964
29+300	100	0,000	0,000				1,00	1,25	50,00%	0,000	0,000	0,000	0,000	250.668,180	4.645,829	58.750,964
29+400	100	0,000	0,000				1,00	1,25	50,00%	0,000	0,000	0,000	0,000	250.668,180	4.645,829	58.750,964
29+500	100	0,000	0,000				1,00	1,25	50,00%	0,000	0,000	0,000	0,000	250.668,180	4.645,829	58.750,964
29+600	100	0,000	0,000				1,00	1,25	50,00%	0,000	0,000	0,000	0,000	250.668,180	4.645,829	58.750,964
29+700	100	0,000	0,000				1,00	1,25	50,00%	0,000	0,000	0,000	0,000	250.668,180	4.645,829	58.750,964
29+800	100	0,000	0,000				1,00	1,25	50,00%	0,000	0,000	0,000	0,000	250.668,180	4.645,829	58.750,964
29+900	100	0,000	0,000				1,00	1,25	50,00%	0,000	0,000	0,000	0,000	250.668,180	4.645,829	58.750,964
30+000	100	0,000	0,000				1,00	1,25	50,00%	0,000	0,000	0,000	0,000	250.668,180	4.645,829	58.750,964
30+100	100	354,024	3,994				1,00	1,25	50,00%	221,265	177,012	3,994	173,018	250.889,445	4.649,823	58.923,982
30+200	100	1.808,614	18,837				1,00	1,25	50,00%	1.130,384	904,307	18,837	885,470	252.019,829	4.668,660	59.809,452
30+300	100	1.690,170	16,167				1,00	1,25	50,00%	1.056,356	845,085	16,167	828,918	253.076,185	4.684,827	60.638,370
30+400	100	1.493,839	17,361				1,00	1,25	50,00%	933,649	746,920	17,361	729,559	254.009,834	4.702,188	61.367,929
30+500	100	1.092,913	17,466				1,00	1,25	50,00%	683,071	546,457	17,466	528,991	254.692,905	4.719,654	61.896,919
30+600	100	833,821	17,475				1,00	1,25	50,00%	521,138	416,911	17,475	399,436	255.214,043	4.737,129	62.296,355
30+700	100	594,876	32,616				1,00	1,25	50,00%	371,798	297,438	32,616	264,822	255.585,841	4.769,745	62.561,177
30+800	100	289,005	109,198				1,00	1,25	50,00%	180,628	144,503	109,198	35,305	255.766,469	4.878,943	62.596,481
30+900	100	1.045,672	26,962				1,00	1,25	50,00%	653,545	522,836	26,962	495,874	256.420,014	4.905,905	63.092,355
31+000	100	348,962	61,463				1,00	1,25	50,00%	218,101	174,481	61,463	113,018	256.638,115	4.967,368	63.205,373
31+100	100	460,090	61,132				1,00	1,25	50,00%	287,556	230,045	61,132	168,913	256.925,671	5.028,500	63.374,286
31+200	100	535,836	50,086				1,00	1,25	50,00%	334,898	267,918	50,086	217,832	257.260,569	5.078,586	63.592,118
31+300	100	442,360	60,148				1,00	1,25	50,00%	276,475	221,180	60,148	161,032	257.537,044	5.138,734	63.753,150
31+400	100	326,713	66,331				1,00	1,25	50,00%	204,196	163,357	66,331	97,026	257.741,239	5.205,065	63.850,176
31+500	100	202,435	176,765				1,00	1,25	50,00%	126,522	101,218	101,218	-75,548	257.867,761	5.306,282	63.774,628
31+600	100	224,275	89,751				1,00	1,25	50,00%	140,172	112,138	89,751	22,387	258.007,933	5.396,033	63.797,015
31+700	100	329,880	44,909				1,00	1,25	50,00%	206,175	164,940	44,909	120,031	258.214,108	5.440,942	63.917,046
31+800	100	313,879	49,541				1,00	1,25	50,00%	196,174	156,940	49,541	107,399	258.410,283	5.490,483	64.024,444
31+900	100	370,970	61,972				1,00	1,25	50,00%	231,856	185,485	61,972	123,513	258.642,139	5.552,455	64.147,957
32+000	100	729,139	45,019				1,00	1,25	50,00%	455,712	364,570	45,019	319,551	259.097,851	5.597,474	64.467,508
32+100	100	1.391,293	19,245				1,00	1,25	50,00%	869,558	695,647	19,245	676,402	259.967,409	5.616,719	65.143,909
32+200	100	721,315	22,695				1,00	1,25	50,00%	450,822	360,658	22,695	337,963	260.418,231	5.639,414	65.481,872
32+300	100	1.434,295	17,279				1,00	1,25	50,00%	896,434	717,148	17,279	699,869	261.314,665	5.656,693	66.181,740
32+400	100	2.000,827	18,131				1,00	1,25	50,00%	1.250,517	1.000,414	18,131	982,283	262.565,182	5.674,824	67.164,023
32+500	100	1.896,497	18,267				1,00	1,25	50,00%	1.185,311	948,249	18,267	929,982	263.750,493	5.693,091	68.094,004
32+600	100	1.575,541	18,124				1,00	1,25	50,00%	984,713	787,771	18,124	769,647	264.735,206	5.711,215	68.863,651
32+700	100	1.135,568	17,459				1,00	1,25	50,00%	709,730	567,784	17,459	550,325	265.444,936	5.728,674	69.413,976
32+800	100	290,884	100,142				1,00	1,25	50,00%	181,803	145,442	100,142	45,300	265.626,738	5.828,816	69.459,276
32+900	100	308,982	96,203				1,00	1,25	50,00%	193,114	154,491	96,203	58,288	265.819,852	5.925,019	69.517,564
33+000	100	237,391	73,871				1,00	1,25	50,00%	148,369	118,696	73,871	44,825	265.968,221	5.998,890	69.562,388
33+100	100	253,940	69,547				1,00	1,25	50,00%	158,713	126,970	69,547	57,423	266.126,934	6.068,437	69.619,811

ESTUDIO INFORMATIVO DEL CORREDOR CÁNTABRICO - MEDITERRÁNEO DE ALTA VELOCIDAD. TRAMO TERUEL - ZARAGOZA.

DIAGRAMA DE EQUILIBRIO DE MOVIMIENTOS DE TIERRAS

Alternativa 2.0

PK	d	PLATAFORMA		EXCAVACIÓN TÚNEL EN MINA			COEF. PASO		EXCAVACIÓN			COMPENS.	BALANCE	VOL. ACUMULADOS		
		EXCAV.	TERRAPLÉN	NOMBRE	EXCAV.	TERRAPLÉN	RELLENOS	VERTEDERO	% APROV	NO APROV.	APROV.	TRANS.		A VERTEDERO	COM.TRAN.	BALANCE
33+200	100	201,198	140,364				1,00	1,25	50,00%	125,749	100,599	100,599	-39,765	266.252,683	6.169,036	69.580,046
33+300	100	138,784	195,282				1,00	1,25	50,00%	86,740	69,392	69,392	-125,890	266.339,423	6.238,428	69.454,156
33+400	100	198,531	124,697				1,00	1,25	50,00%	124,082	99,266	99,266	-25,432	266.463,504	6.337,694	69.428,725
33+500	100	534,523	40,348				1,00	1,25	40,00%	400,892	213,809	40,348	173,461	266.864,397	6.378,042	69.602,186
33+600	100	208,364	100,297				1,00	1,25	40,00%	156,273	83,346	83,346	-16,951	267.020,670	6.461,387	69.585,234
33+700	100	235,081	96,161				1,00	1,25	40,00%	176,311	94,032	94,032	-2,129	267.196,980	6.555,420	69.583,106
33+800	100	428,103	61,056				1,00	1,25	40,00%	321,077	171,241	61,056	110,185	267.518,058	6.616,476	69.693,291
33+900	100	892,135	19,334				1,00	1,25	40,00%	669,101	356,854	19,334	337,520	268.187,159	6.635,810	70.030,811
34+000	100	974,785	15,154				1,00	1,25	40,00%	731,089	389,914	15,154	374,760	268.918,248	6.650,964	70.405,571
34+100	100	928,434	22,960				1,00	1,25	40,00%	696,326	371,374	22,960	348,414	269.614,573	6.673,924	70.753,985
34+200	100	1.201,683	15,867				1,00	1,25	40,00%	901,262	480,673	15,867	464,806	270.515,835	6.689,791	71.218,791
34+300	100	1.317,772	15,469				1,00	1,25	40,00%	988,329	527,109	15,469	511,640	271.504,164	6.705,260	71.730,431
34+400	100	1.294,037	16,365				1,00	1,25	40,00%	970,528	517,615	16,365	501,250	272.474,692	6.721,625	72.231,680
34+500	100	1.415,638	15,504				1,00	1,25	40,00%	1.061,729	566,255	15,504	550,751	273.536,421	6.737,129	72.782,432
34+600	100	1.315,737	15,648				1,00	1,25	40,00%	986,803	526,295	15,648	510,647	274.523,223	6.752,777	73.293,078
34+700	100	1.033,421	31,313				1,00	1,25	40,00%	775,066	413,368	31,313	382,055	275.298,289	6.784,090	73.675,134
34+800	100	847,998	46,296				1,00	1,25	40,00%	635,999	339,199	46,296	292,903	275.934,288	6.830,386	73.968,037
34+900	100	854,537	29,406				1,00	1,25	40,00%	640,903	341,815	29,406	312,409	276.575,190	6.859,792	74.280,446
35+000	100	804,856	31,082				1,00	1,25	40,00%	603,642	321,942	31,082	290,860	277.178,832	6.890,874	74.571,306
35+100	100	755,234	30,498				1,00	1,25	40,00%	566,426	302,094	30,498	271,596	277.745,258	6.921,372	74.842,902
35+200	100	688,148	44,642				1,00	1,25	40,00%	516,111	275,259	44,642	230,617	278.261,369	6.966,014	75.073,519
35+300	100	585,495	65,925				1,00	1,25	40,00%	439,121	234,198	65,925	168,273	278.700,490	7.031,939	75.241,792
35+400	100	487,807	59,521				1,00	1,25	40,00%	365,855	195,123	59,521	135,602	279.066,345	7.091,460	75.377,394
35+500	100	371,047	64,145				1,00	1,25	40,00%	278,285	148,419	64,145	84,274	279.344,631	7.155,605	75.461,668
35+600	100	274,579	70,009				1,00	1,25	40,00%	205,934	109,832	70,009	39,823	279.550,565	7.225,614	75.501,490
35+700	100	232,928	74,243				1,00	1,25	40,00%	174,696	93,171	74,243	18,928	279.725,261	7.299,857	75.520,418
35+800	100	293,265	76,833				1,00	1,25	40,00%	219,949	117,306	76,833	40,473	279.945,210	7.376,690	75.560,891
35+900	100	374,434	69,824				1,00	1,25	40,00%	280,826	149,774	69,824	79,950	280.226,035	7.446,514	75.640,841
36+000	100	456,028	52,793				1,00	1,25	40,00%	342,021	182,411	52,793	129,618	280.568,056	7.499,307	75.770,459
36+100	100	410,992	68,383				1,00	1,25	40,00%	308,244	164,397	68,383	96,014	280.876,300	7.567,690	75.866,473
36+200	100	393,675	71,322				1,00	1,25	40,00%	295,256	157,470	71,322	86,148	281.171,556	7.639,012	75.952,621
36+300	100	342,025	76,508				1,00	1,25	40,00%	256,519	136,810	76,508	60,302	281.428,075	7.715,520	76.012,923
36+400	100	392,177	57,368				1,00	1,25	40,00%	294,133	156,871	57,368	99,503	281.722,208	7.772,888	76.112,426
36+500	100	420,700	66,086				1,00	1,25	40,00%	315,525	168,280	66,086	102,194	282.037,733	7.838,974	76.214,620
36+600	100	502,657	41,997				1,00	1,25	40,00%	376,993	201,063	41,997	159,066	282.414,726	7.880,971	76.373,686
36+700	100	608,017	16,924				1,00	1,25	40,00%	456,013	243,207	16,924	226,283	282.870,738	7.897,895	76.599,968
36+800	100	683,995	16,968				1,00	1,25	40,00%	512,996	273,598	16,968	256,630	283.383,735	7.914,863	76.856,598
36+900	100	1.019,720	17,384				1,00	1,25	40,00%	764,790	407,888	17,384	390,504	284.148,525	7.932,247	77.247,102
37+000	100	1.757,100	18,676				1,00	1,25	40,00%	1.317,825	702,840	18,676	684,164	285.466,350	7.950,923	77.931,266
37+100	100	2.059,998	18,750				1,00	1,25	40,00%	1.544,999	823,999	18,750	805,249	287.011,348	7.969,673	78.736,516
37+200	100	2.402,136	18,750				1,00	1,25	40,00%	1.801,602	960,854	18,750	942,104	288.812,950	7.988,423	79.678,620
37+300	100	2.720,533	18,750				1,00	1,25	40,00%	2.040,400	1.088,213	18,750	1.069,463	290.853,350	8.007,173	80.748,083
37+400	100	2.607,987	18,748				1,00	1,25	40,00%	1.955,990	1.043,195	18,748	1.024,447	292.809,340	8.025,921	81.772,530
37+500	100	2.993,680	18,750				1,00	1,25	40,00%	2.245,260	1.197,472	18,750	1.178,722	295.054,600	8.044,671	82.951,252
37+600	100	3.029,881	18,749				1,00	1,25	40,00%	2.272,411	1.211,952	18,749	1.193,203	297.327,011	8.063,420	84.144,455
37+700	100	3.148,020	18,750				1,00	1,25	40,00%	2.361,015	1.259,208	18,750	1.240,458	299.688,026	8.082,170	85.384,913
37+800	100	3.078,857	18,749				1,00	1,25	40,00%	2.309,143	1.231,543	18,749	1.212,794	301.997,169	8.100,919	86.597,707
37+900	100	3.143,263	18,750				1,00	1,25	40,00%	2.357,447	1.257,305	18,750	1.238,555	304.354,616	8.119,669	87.836,262
38+000	100	3.297,171	18,750				1,00	1,25	40,00%	2.472,878	1.318,868	18,750	1.300,118	306.827,494	8.138,419	89.136,381
38+100	100	3.502,967	18,629				1,00	1,25	40,00%	2.627,225	1.401,187	18,629	1.382,558	309.454,719	8.157,048	90.518,939
38+200	100	2.620,947	18,952				1,00	1,25	40,00%	1.965,710	1.048,379	18,952	1.029,427	311.420,430	8.176,000	91.548,365
38+300	100	1.875,420	18,750				1,00	1,25	40,00%	1.406,565	750,168	18,750	731,418	312.826,995	8.194,750	92.279,783

ESTUDIO INFORMATIVO DEL CORREDOR CÁNTABRICO - MEDITERRÁNEO DE ALTA VELOCIDAD. TRAMO TERUEL - ZARAGOZA.

DIAGRAMA DE EQUILIBRIO DE MOVIMIENTOS DE TIERRAS

Alternativa 2.0

PK	d	PLATAFORMA		EXCAVACIÓN TÚNEL EN MINA			COEF. PASO		EXCAVACIÓN			COMPENS.	BALANCE	VOL. ACUMULADOS		
		EXCAV.	TERRAPLÉN	NOMBRE	EXCAV.	TERRAPLÉN	RELLENOS	VERTEDERO	% APROV	NO APROV.	APROV.	TRANS.		A VERTEDERO	COM.TRAN.	BALANCE
38+400	100	1.425,498	14,981				1,00	1,25	40,00%	1.069,124	570,199	14,981	555,218	313.896,118	8.209,731	92.835,002
38+500	100	1.175,442	19,147				1,00	1,25	40,00%	881,582	470,177	19,147	451,030	314.777,700	8.228,878	93.286,031
38+600	100	671,792	48,692				1,00	1,25	40,00%	503,844	268,717	48,692	220,025	315.281,544	8.277,570	93.506,056
38+700	100	665,897	52,341				1,00	1,25	40,00%	499,423	266,359	52,341	214,018	315.780,966	8.329,911	93.720,074
38+800	100	435,249	53,796				1,00	1,25	40,00%	326,437	174,100	53,796	120,304	316.107,403	8.383,707	93.840,378
38+900	100	291,281	25,853				1,00	1,25	40,00%	218,461	116,512	25,853	90,659	316.325,864	8.409,560	93.931,037
39+000	100	368,480	41,252				1,00	1,25	40,00%	276,360	147,392	41,252	106,140	316.602,224	8.450,812	94.037,177
39+100	100	349,327	133,977				1,00	1,25	40,00%	261,995	139,731	133,977	5,754	316.864,219	8.584,789	94.042,931
39+200	100	651,447	26,547				1,00	1,25	40,00%	488,585	260,579	26,547	234,032	317.352,804	8.611,336	94.276,963
39+300	100	847,393	24,135				1,00	1,25	40,00%	635,545	338,957	24,135	314,822	317.988,349	8.635,471	94.591,785
39+400	100	788,471	27,907				1,00	1,25	40,00%	591,353	315,388	27,907	287,481	318.579,702	8.663,378	94.879,266
39+500	100	888,763	31,915				1,00	1,25	40,00%	666,572	355,505	31,915	323,590	319.246,275	8.695,293	95.202,856
39+600	100	656,068	36,486				1,00	1,25	40,00%	492,051	262,427	36,486	225,941	319.738,326	8.731,779	95.428,798
39+700	100	982,222	14,593				1,00	1,25	40,00%	736,667	392,889	14,593	378,296	320.474,992	8.746,372	95.807,093
39+800	100	626,183	46,252				1,00	1,25	40,00%	469,637	250,473	46,252	204,221	320.944,629	8.792,624	96.011,315
39+900	100	199,115	76,039				1,00	1,25	40,00%	149,336	79,646	76,039	3,607	321.093,966	8.868,663	96.014,922
40+000	100	208,087	74,039				1,00	1,25	40,00%	156,065	83,235	74,039	9,196	321.250,031	8.942,702	96.024,117
40+100	100	242,634	46,333				1,00	1,25	40,00%	181,976	97,054	46,333	50,721	321.432,006	8.989,035	96.074,838
40+200	100	35,593	461,834				1,00	1,25	40,00%	26,695	14,237	14,237	-447,597	321.458,701	9.003,272	95.627,241
40+300	100	7,805	554,237				1,00	1,25	40,00%	5,854	3,122	3,122	-551,115	321.464,555	9.006,394	95.076,126
40+400	100	5,829	669,385				1,00	1,25	40,00%	4,372	2,332	2,332	-667,053	321.468,927	9.008,725	94.409,073
40+500	100	24,442	771,625				1,00	1,25	40,00%	18,332	9,777	9,777	-761,848	321.487,258	9.018,502	93.647,225
40+600	100	8,306	923,714				1,00	1,25	40,00%	6,230	3,322	3,322	-920,392	321.493,488	9.021,825	92.726,833
40+700	100	0,039	1.299,517				1,00	1,25	40,00%	0,029	0,016	0,016	-1.299,501	321.493,517	9.021,840	91.427,332
40+800	100	0,889	1.427,231				1,00	1,25	40,00%	0,667	0,356	0,356	-1.426,875	321.494,184	9.022,196	90.000,456
40+900	100	0,000	1.760,417				1,00	1,25	40,00%	0,000	0,000	0,000	-1.760,417	321.494,184	9.022,196	88.240,039
41+000	100	0,851	1.952,930				1,00	1,25	40,00%	0,638	0,340	0,340	-1.952,590	321.494,822	9.022,536	86.287,450
41+100	100	17,206	1.708,818				1,00	1,25	40,00%	12,905	6,882	6,882	-1.701,936	321.507,726	9.029,419	84.585,514
41+200	100	28,334	1.955,124				1,00	1,25	40,00%	21,251	11,334	11,334	-1.943,790	321.528,977	9.040,752	82.641,724
41+300	100	16,367	2.006,495				1,00	1,25	40,00%	12,275	6,547	6,547	-1.999,948	321.541,252	9.047,299	80.641,775
41+400	100	18,325	2.290,402				1,00	1,25	40,00%	13,744	7,330	7,330	-2.283,072	321.554,996	9.054,629	78.358,703
41+500	100	21,543	1.906,980				1,00	1,25	40,00%	16,157	8,617	8,617	-1.898,363	321.571,153	9.063,246	76.460,341
41+600	100	42,063	1.575,306				1,00	1,25	40,00%	31,547	16,825	16,825	-1.558,481	321.602,700	9.080,071	74.901,860
41+700	100	48,095	1.379,814				1,00	1,25	40,00%	36,071	19,238	19,238	-1.360,576	321.638,772	9.099,309	73.541,284
41+800	100	27,389	1.325,004				1,00	1,25	40,00%	20,542	10,956	10,956	-1.314,048	321.659,313	9.110,265	72.227,235
41+900	100	21,984	1.509,404				1,00	1,25	40,00%	16,488	8,794	8,794	-1.500,610	321.675,801	9.119,059	70.726,625
42+000	100	2.108,661	844,277				1,00	1,25	100,00%	0,000	2.108,661	844,277	1.264,384	321.675,801	9.963,336	71.991,009
42+100	100	102,739	861,411				1,00	1,25	100,00%	0,000	102,739	102,739	-758,672	321.675,801	10.066,075	71.232,337
42+200	100	574,374	458,017				1,00	1,25	100,00%	0,000	574,374	458,017	116,357	321.675,801	10.524,092	71.348,694
42+300	100	78,844	814,965				1,00	1,25	100,00%	0,000	78,844	78,844	-736,121	321.675,801	10.602,936	70.612,573
42+400	100	43,877	921,156				1,00	1,25	100,00%	0,000	43,877	43,877	-877,279	321.675,801	10.646,813	69.735,294
42+500	100	51,943	845,965				1,00	1,25	100,00%	0,000	51,943	51,943	-794,022	321.675,801	10.698,756	68.941,272
42+600	100	261,421	462,250				1,00	1,25	100,00%	0,000	261,421	261,421	-200,829	321.675,801	10.960,177	68.740,443
42+700	100	267,490	203,062				1,00	1,25	100,00%	0,000	267,490	203,062	64,428	321.675,801	11.163,239	68.804,871
42+800	100	41,080	388,443				1,00	1,25	100,00%	0,000	41,080	41,080	-347,363	321.675,801	11.204,319	68.457,508
42+900	100	95,163	580,302				1,00	1,25	100,00%	0,000	95,163	95,163	-485,139	321.675,801	11.299,482	67.972,369
43+000	100	180,100	923,673				1,00	1,25	100,00%	0,000	180,100	180,100	-743,573	321.675,801	11.479,582	67.228,796
43+100	100	143,777	1.097,646				1,00	1,25	100,00%	0,000	143,777	143,777	-953,869	321.675,801	11.623,359	66.274,927
43+200	100	139,981	1.030,160				1,00	1,25	100,00%	0,000	139,981	139,981	-890,179	321.675,801	11.763,340	65.384,748
43+300	100	57,371	1.273,601				1,00	1,25	100,00%	0,000	57,371	57,371	-1.216,230	321.675,801	11.820,711	64.168,518
43+400	100	89,362	1.294,625				1,00	1,25	100,00%	0,000	89,362	89,362	-1.205,263	321.675,801	11.910,073	62.963,255
43+500	100	91,477	1.227,253				1,00	1,25	100,00%	0,000	91,477	91,477	-1.135,776	321.675,801	12.001,550	61.827,479

ESTUDIO INFORMATIVO DEL CORREDOR CÁNTABRICO - MEDITERRÁNEO DE ALTA VELOCIDAD. TRAMO TERUEL - ZARAGOZA.

DIAGRAMA DE EQUILIBRIO DE MOVIMIENTOS DE TIERRAS

Alternativa 2.0

PK	d	PLATAFORMA		EXCAVACIÓN TÚNEL EN MINA			COEF. PASO		EXCAVACIÓN			COMPENS.	BALANCE	VOL. ACUMULADOS		
		EXCAV.	TERRAPLÉN	NOMBRE	EXCAV.	TERRAPLÉN	RELLENOS	VERTEDERO	% APROV	NO APROV.	APROV.	TRANS.		A VERTEDERO	COM.TRAN.	BALANCE
43+600	100	64,796	1.295,968				1,00	1,25	100,00%	0,000	64,796	64,796	-1.231,172	321.675,801	12.066,346	60.596,307
43+700	100	45,421	1.370,448				1,00	1,25	100,00%	0,000	45,421	45,421	-1.325,027	321.675,801	12.111,767	59.271,280
43+800	100	38,447	1.298,045				1,00	1,25	100,00%	0,000	38,447	38,447	-1.259,598	321.675,801	12.150,214	58.011,682
43+900	100	52,125	1.393,715				1,00	1,25	100,00%	0,000	52,125	52,125	-1.341,590	321.675,801	12.202,339	56.670,092
44+000	100	35,824	1.517,935				1,00	1,25	100,00%	0,000	35,824	35,824	-1.482,111	321.675,801	12.238,163	55.187,981
44+100	100	15,382	1.688,404				1,00	1,25	100,00%	0,000	15,382	15,382	-1.673,022	321.675,801	12.253,545	53.514,959
44+200	100	18,515	1.504,697				1,00	1,25	100,00%	0,000	18,515	18,515	-1.486,182	321.675,801	12.272,060	52.028,777
44+300	100	75,176	994,110				1,00	1,25	100,00%	0,000	75,176	75,176	-918,934	321.675,801	12.347,236	51.109,843
44+400	100	100,522	1.040,164				1,00	1,25	100,00%	0,000	100,522	100,522	-939,642	321.675,801	12.447,758	50.170,201
44+500	100	101,555	1.059,591				1,00	1,25	100,00%	0,000	101,555	101,555	-958,036	321.675,801	12.549,313	49.212,165
44+600	100	108,787	980,381				1,00	1,25	100,00%	0,000	108,787	108,787	-871,594	321.675,801	12.658,100	48.340,571
44+700	100	158,538	673,778				1,00	1,25	100,00%	0,000	158,538	158,538	-515,240	321.675,801	12.816,638	47.825,331
44+800	100	156,048	630,490				1,00	1,25	100,00%	0,000	156,048	156,048	-474,442	321.675,801	12.972,686	47.350,889
44+900	100	225,402	624,654				1,00	1,25	100,00%	0,000	225,402	225,402	-399,252	321.675,801	13.198,088	46.951,637
45+000	100	237,283	390,418				1,00	1,25	100,00%	0,000	237,283	237,283	-153,135	321.675,801	13.435,371	46.798,502
45+100	100	618,444	139,390				1,00	1,25	100,00%	0,000	618,444	139,390	479,054	321.675,801	13.574,761	47.277,556
45+200	100	1.521,271	18,056				1,00	1,25	100,00%	0,000	1.521,271	18,056	1.503,215	321.675,801	13.592,817	48.780,771
45+300	100	1.888,343	18,063				1,00	1,25	100,00%	0,000	1.888,343	18,063	1.870,280	321.675,801	13.610,880	50.651,051
45+400	100	888,614	46,536				1,00	1,25	100,00%	0,000	888,614	46,536	842,078	321.675,801	13.657,416	51.493,129
45+500	100	1.126,171	23,068				1,00	1,25	100,00%	0,000	1.126,171	23,068	1.103,103	321.675,801	13.680,484	52.596,232
45+600	100	1.286,839	19,315				1,00	1,25	100,00%	0,000	1.286,839	19,315	1.267,524	321.675,801	13.699,799	53.863,756
45+700	100	996,145	17,950				1,00	1,25	100,00%	0,000	996,145	17,950	978,195	321.675,801	13.717,749	54.841,951
45+800	100	1.307,975	18,342				1,00	1,25	100,00%	0,000	1.307,975	18,342	1.289,633	321.675,801	13.736,091	56.131,584
45+900	100	1.607,517	18,563				1,00	1,25	100,00%	0,000	1.607,517	18,563	1.588,954	321.675,801	13.754,654	57.720,538
46+000	100	1.699,360	18,593				1,00	1,25	100,00%	0,000	1.699,360	18,593	1.680,767	321.675,801	13.773,247	59.401,305
46+100	100	1.818,592	18,568				1,00	1,25	100,00%	0,000	1.818,592	18,568	1.800,024	321.675,801	13.791,815	61.201,329
46+200	100	1.784,993	18,572				1,00	1,25	100,00%	0,000	1.784,993	18,572	1.766,421	321.675,801	13.810,387	62.967,750
46+300	100	734,307	22,493				1,00	1,25	100,00%	0,000	734,307	22,493	711,814	321.675,801	13.832,880	63.679,564
46+400	100	835,579	19,221				1,00	1,25	100,00%	0,000	835,579	19,221	816,358	321.675,801	13.852,101	64.495,922
46+500	100	2.951,527	19,991				1,00	1,25	100,00%	0,000	2.951,527	19,991	2.931,536	321.675,801	13.872,092	67.427,458
46+600	100	962,440	18,581				1,00	1,25	100,00%	0,000	962,440	18,581	943,859	321.675,801	13.890,673	68.371,317
46+700	100	959,829	18,624				1,00	1,25	100,00%	0,000	959,829	18,624	941,205	321.675,801	13.909,297	69.312,522
46+800	100	809,431	18,653				1,00	1,25	100,00%	0,000	809,431	18,653	790,778	321.675,801	13.927,950	70.103,300
46+900	100	493,843	23,020				1,00	1,25	100,00%	0,000	493,843	23,020	470,823	321.675,801	13.950,970	70.574,123
47+000	100	304,478	120,586				1,00	1,25	100,00%	0,000	304,478	120,586	183,892	321.675,801	14.071,556	70.758,015
47+100	100	269,752	168,436				1,00	1,25	100,00%	0,000	269,752	168,436	101,316	321.675,801	14.239,992	70.859,331
47+200	100	283,376	119,771				1,00	1,25	100,00%	0,000	283,376	119,771	163,605	321.675,801	14.359,763	71.022,936
47+300	100	388,549	95,549				1,00	1,25	100,00%	0,000	388,549	95,549	293,000	321.675,801	14.455,312	71.315,936
47+400	100	371,154	94,928				1,00	1,25	100,00%	0,000	371,154	94,928	276,226	321.675,801	14.550,240	71.592,162
47+500	100	197,896	159,157				1,00	1,25	100,00%	0,000	197,896	159,157	38,739	321.675,801	14.709,397	71.630,901
47+600	100	126,921	183,198				1,00	1,25	100,00%	0,000	126,921	126,921	-56,277	321.675,801	14.836,318	71.574,624
47+700	100	63,613	622,467				1,00	1,25	100,00%	0,000	63,613	63,613	-558,854	321.675,801	14.899,931	71.015,770
47+800	100	141,750	456,291				1,00	1,25	100,00%	0,000	141,750	141,750	-314,541	321.675,801	15.041,681	70.701,229
47+900	100	204,163	160,835				1,00	1,25	100,00%	0,000	204,163	160,835	43,328	321.675,801	15.202,516	70.744,557
48+000	100	333,148	109,479				1,00	1,25	100,00%	0,000	333,148	109,479	223,669	321.675,801	15.311,995	70.968,226
48+100	100	760,225	18,565				1,00	1,25	100,00%	0,000	760,225	18,565	741,660	321.675,801	15.330,560	71.709,886
48+200	100	1.164,572	18,689				1,00	1,25	100,00%	0,000	1.164,572	18,689	1.145,883	321.675,801	15.349,249	72.855,769
48+300	100	1.491,809	18,590				1,00	1,25	100,00%	0,000	1.491,809	18,590	1.473,219	321.675,801	15.367,839	74.328,988
48+400	100	1.602,278	18,594				1,00	1,25	100,00%	0,000	1.602,278	18,594	1.583,684	321.675,801	15.386,433	75.912,672
48+500	100	1.738,343	18,631				1,00	1,25	100,00%	0,000	1.738,343	18,631	1.719,712	321.675,801	15.405,064	77.632,384
48+600	100	1.535,154	18,610				1,00	1,25	100,00%	0,000	1.535,154	18,610	1.516,544	321.675,801	15.423,674	79.148,928
48+700	100	1.608,743	18,614				1,00	1,25	100,00%	0,000	1.608,743	18,614	1.590,129	321.675,801	15.442,288	80.739,057

ESTUDIO INFORMATIVO DEL CORREDOR CÁNTABRICO - MEDITERRÁNEO DE ALTA VELOCIDAD. TRAMO TERUEL - ZARAGOZA.

DIAGRAMA DE EQUILIBRIO DE MOVIMIENTOS DE TIERRAS

Alternativa 2.0

PK	d	PLATAFORMA		EXCAVACIÓN TÚNEL EN MINA			COEF. PASO		EXCAVACIÓN			COMPENS.	BALANCE	VOL. ACUMULADOS		
		EXCAV.	TERRAPLÉN	NOMBRE	EXCAV.	TERRAPLÉN	RELLENOS	VERTEDERO	% APROV	NO APROV.	APROV.	TRANS.		A VERTEDERO	COM.TRAN.	BALANCE
48+800	100	315,315	410,113				1,00	1,25	100,00%	0,000	315,315	315,315	-94,798	321.675,801	15.757,603	80.644,259
48+900	100	3.304,052	136,576				1,00	1,25	100,00%	0,000	3.304,052	136,576	3.167,476	321.675,801	15.894,179	83.811,735
49+000	100	1.564,330	18,599				1,00	1,25	100,00%	0,000	1.564,330	18,599	1.545,731	321.675,801	15.912,778	85.357,466
49+100	100	1.704,704	18,864				1,00	1,25	100,00%	0,000	1.704,704	18,864	1.685,840	321.675,801	15.931,642	87.043,306
49+200	100	2.020,787	18,984				1,00	1,25	100,00%	0,000	2.020,787	18,984	2.001,803	321.675,801	15.950,626	89.045,109
49+300	100	3.446,217	19,665				1,00	1,25	100,00%	0,000	3.446,217	19,665	3.426,552	321.675,801	15.970,291	92.471,661
49+400	100	4.805,214	19,840				1,00	1,25	100,00%	0,000	4.805,214	19,840	4.785,374	321.675,801	15.990,131	97.257,035
49+500	100	4.978,277	19,624				1,00	1,25	100,00%	0,000	4.978,277	19,624	4.958,653	321.675,801	16.009,755	102.215,688
49+600	100	1.212,301	20,508				1,00	1,25	100,00%	0,000	1.212,301	20,508	1.191,793	321.675,801	16.030,263	103.407,481
49+700	100	951,116	20,269				1,00	1,25	100,00%	0,000	951,116	20,269	930,847	321.675,801	16.050,532	104.338,328
49+800	100	208,110	213,650				1,00	1,25	100,00%	0,000	208,110	208,110	-5,540	321.675,801	16.258,642	104.332,788
49+900	100	102,764	421,231				1,00	1,25	100,00%	0,000	102,764	102,764	-318,467	321.675,801	16.361,406	104.014,321
50+000	100	1.176,681	74,471				1,00	1,25	100,00%	0,000	1.176,681	74,471	1.102,210	321.675,801	16.435,877	105.116,531
50+100	100	1.895,143	18,888				1,00	1,25	100,00%	0,000	1.895,143	18,888	1.876,255	321.675,801	16.454,765	106.992,786
50+200	100	1.353,128	20,855				1,00	1,25	100,00%	0,000	1.353,128	20,855	1.332,273	321.675,801	16.475,620	108.325,059
50+300	100	1.156,256	21,815				1,00	1,25	100,00%	0,000	1.156,256	21,815	1.134,441	321.675,801	16.497,435	109.459,500
50+400	100	1.162,767	21,489				1,00	1,25	100,00%	0,000	1.162,767	21,489	1.141,278	321.675,801	16.518,924	110.600,778
50+500	100	1.458,764	20,444				1,00	1,25	100,00%	0,000	1.458,764	20,444	1.438,320	321.675,801	16.539,368	112.039,098
50+600	100	1.478,649	18,627				1,00	1,25	100,00%	0,000	1.478,649	18,627	1.460,022	321.675,801	16.557,995	113.499,120
50+700	100	1.070,401	20,145				1,00	1,25	100,00%	0,000	1.070,401	20,145	1.050,256	321.675,801	16.578,140	114.549,376
50+800	100	1.918,211	18,999				1,00	1,25	100,00%	0,000	1.918,211	18,999	1.899,212	321.675,801	16.597,139	116.448,588
50+900	100	1.474,186	18,434				1,00	1,25	100,00%	0,000	1.474,186	18,434	1.455,752	321.675,801	16.615,573	117.904,340
51+000	100	1.238,415	108,298				1,00	1,25	100,00%	0,000	1.238,415	108,298	1.130,117	321.675,801	16.723,871	119.034,457
51+100	100	992,019	170,390				1,00	1,25	100,00%	0,000	992,019	170,390	821,629	321.675,801	16.894,261	119.856,086
51+200	100	2.151,856	18,372				1,00	1,25	100,00%	0,000	2.151,856	18,372	2.133,484	321.675,801	16.912,633	121.989,570
51+300	100	2.153,371	18,489				1,00	1,25	100,00%	0,000	2.153,371	18,489	2.134,882	321.675,801	16.931,122	124.124,452
51+400	100	2.105,251	18,511				1,00	1,25	100,00%	0,000	2.105,251	18,511	2.086,740	321.675,801	16.949,633	126.211,192
51+500	100	1.007,065	18,750				1,00	1,25	100,00%	0,000	1.007,065	18,750	988,315	321.675,801	16.968,383	127.199,507
51+600	100	347,175	359,601				1,00	1,25	100,00%	0,000	347,175	347,175	-12,426	321.675,801	17.315,558	127.187,081
51+700	100	922,916	570,238				1,00	1,25	100,00%	0,000	922,916	570,238	352,678	321.675,801	17.885,796	127.539,759
51+800	100	2.352,701	19,188				1,00	1,25	100,00%	0,000	2.352,701	19,188	2.333,513	321.675,801	17.904,984	129.873,272
51+900	100	1.576,605	18,757				1,00	1,25	100,00%	0,000	1.576,605	18,757	1.557,848	321.675,801	17.923,741	131.431,120
52+000	100	2.904,690	18,697				1,00	1,25	100,00%	0,000	2.904,690	18,697	2.885,993	321.675,801	17.942,438	134.317,113
52+100	100	3.182,732	18,632				1,00	1,25	100,00%	0,000	3.182,732	18,632	3.164,100	321.675,801	17.961,070	137.481,213
52+200	100	3.027,432	18,679				1,00	1,25	100,00%	0,000	3.027,432	18,679	3.008,753	321.675,801	17.979,749	140.489,966
52+300	100	1.598,760	78,349				1,00	1,25	100,00%	0,000	1.598,760	78,349	1.520,411	321.675,801	18.058,098	142.010,377
52+400	100	128,982	3.499,670				1,00	1,25	100,00%	0,000	128,982	128,982	-3.370,688	321.675,801	18.187,080	138.639,689
52+500	100	769,258	1.668,490				1,00	1,25	100,00%	0,000	769,258	769,258	-899,232	321.675,801	18.956,338	137.740,457
52+600	100	0,000	0,000				1,00	1,25	100,00%	0,000	0,000	0,000	0,000	321.675,801	18.956,338	137.740,457
52+700	100	0,000	0,000				1,00	1,25	100,00%	0,000	0,000	0,000	0,000	321.675,801	18.956,338	137.740,457
52+800	100	0,000	0,000				1,00	1,25	100,00%	0,000	0,000	0,000	0,000	321.675,801	18.956,338	137.740,457
52+900	100	0,000	0,000				1,00	1,25	100,00%	0,000	0,000	0,000	0,000	321.675,801	18.956,338	137.740,457
53+000	100	0,000	0,000				1,00	1,25	100,00%	0,000	0,000	0,000	0,000	321.675,801	18.956,338	137.740,457
53+100	100	0,000	0,000				1,00	1,25	100,00%	0,000	0,000	0,000	0,000	321.675,801	18.956,338	137.740,457
53+200	100	0,000	0,000				1,00	1,25	100,00%	0,000	0,000	0,000	0,000	321.675,801	18.956,338	137.740,457
53+300	100	0,000	0,000				1,00	1,25	100,00%	0,000	0,000	0,000	0,000	321.675,801	18.956,338	137.740,457
53+400	100	526,015	3,740				1,00	1,25	100,00%	0,000	526,015	3,740	522,275	321.675,801	18.960,078	138.262,732
53+500	100	2.871,410	18,731				1,00	1,25	100,00%	0,000	2.871,410	18,731	2.852,679	321.675,801	18.978,809	141.115,411
53+600	100	3.520,660	18,661				1,00	1,25	100,00%	0,000	3.520,660	18,661	3.501,999	321.675,801	18.997,470	144.617,410
53+636	36	1.856,919	6,873				1,00	1,25	100,00%	0,000	1.856,919	6,873	1.850,046	321.675,801	19.004,343	146.467,456
TOTAL		**511.264,003**	**107.455,906**							**321.675,801**	**253.923,362**	**19.004,343**	**146.467,456**			

ESTUDIO INFORMATIVO DEL CORREDOR CÁNTABRICO - MEDITERRÁNEO DE ALTA VELOCIDAD. TRAMO TERUEL - ZARAGOZA.

DIAGRAMA DE EQUILIBRIO DE MOVIMIENTOS DE TIERRAS

Alternativa 3.0

PK	d	PLATAFORMA		EXCAVACIÓN TÚNEL EN MINA		COEF. PASO		EXCAVACIÓN			COMPENS.	BALANCE	VOL. ACUMULADOS		
		EXCAV.	TERRAPLÉN	NOMBRE	EXCAV.	RELLENOS	VERTEDERO	% APROV	NO APROV.	APROV.	TRANS.		A VERTEDERO	COM.TRAN.	BALANCE
3+000		0,000	0,000			1,00	1,25	100,00%	0,000	0,000	0,000	0,000	0,000	0,000	0,000
3+100	100	4.376,626	18,891			1,00	1,25	100,00%	0,000	4.376,626	18,891	4.357,735	0,000	18,891	4.357,735
3+200	100	3.291,694	323,393			1,00	1,25	100,00%	0,000	3.291,694	323,393	2.968,301	0,000	342,284	7.326,036
3+300	100	107,563	3.108,815			1,00	1,25	100,00%	0,000	107,563	107,563	-3.001,252	0,000	449,847	4.324,784
3+400	100	116,143	1.676,402			1,00	1,25	100,00%	0,000	116,143	116,143	-1.560,259	0,000	565,990	2.764,525
3+500	100	1.337,071	43,987			1,00	1,25	100,00%	0,000	1.337,071	43,987	1.293,084	0,000	609,977	4.057,609
3+600	100	4.654,160	23,597			1,00	1,25	100,00%	0,000	4.654,160	23,597	4.630,563	0,000	633,574	8.688,172
3+700	100	3.506,092	37,420			1,00	1,25	100,00%	0,000	3.506,092	37,420	3.468,672	0,000	670,994	12.156,844
3+800	100	851,539	19,196			1,00	1,25	100,00%	0,000	851,539	19,196	832,343	0,000	690,190	12.989,187
3+900	100	518,287	17,320			1,00	1,25	100,00%	0,000	518,287	17,320	500,967	0,000	707,510	13.490,154
4+000	100	313,423	594,078			1,00	1,25	100,00%	0,000	313,423	313,423	-280,655	0,000	1.020,933	13.209,499
4+100	100	48,421	1.705,613			1,00	1,25	100,00%	0,000	48,421	48,421	-1.657,192	0,000	1.069,354	11.552,307
4+200	100	147,209	1.915,723			1,00	1,25	50,00%	92,006	73,605	73,605	-1.842,119	92,006	1.142,959	9.710,189
4+300	100	162,587	1.248,092			1,00	1,25	50,00%	101,617	81,294	81,294	-1.166,799	193,623	1.224,252	8.543,390
4+400	100	118,721	1.043,727			1,00	1,25	50,00%	74,201	59,361	59,361	-984,367	267,823	1.283,613	7.559,024
4+500	100	137,945	434,652			1,00	1,25	50,00%	86,216	68,973	68,973	-365,680	354,039	1.352,585	7.193,344
4+600	100	885,346	114,266			1,00	1,25	50,00%	553,341	442,673	114,266	328,407	907,380	1.466,851	7.521,751
4+700	100	820,685	61,313			1,00	1,25	50,00%	512,928	410,343	61,313	349,030	1.420,308	1.528,164	7.870,781
4+800	100	1.783,446	104,801			1,00	1,25	50,00%	1.114,654	891,723	104,801	786,922	2.534,962	1.632,965	8.657,703
4+900	100	542,838	591,218			1,00	1,25	50,00%	339,274	271,419	271,419	-319,799	2.874,236	1.904,384	8.337,904
5+000	100	157,292	1.752,148			1,00	1,25	50,00%	98,308	78,646	78,646	-1.673,502	2.972,543	1.983,030	6.664,402
5+100	100	236,525	1.160,980			1,00	1,25	50,00%	147,828	118,263	118,263	-1.042,718	3.120,371	2.101,293	5.621,684
5+200	100	823,737	17,059			1,00	1,25	50,00%	514,836	411,869	17,059	394,810	3.635,207	2.118,352	6.016,494
5+300	100	965,205	59,233			1,00	1,25	100,00%	0,000	965,205	59,233	905,972	3.635,207	2.177,585	6.922,466
5+400	100	130,785	1.162,854			1,00	1,25	100,00%	0,000	130,785	130,785	-1.032,069	3.635,207	2.308,370	5.890,397
5+500	100	121,907	2.090,678			1,00	1,25	100,00%	0,000	121,907	121,907	-1.968,771	3.635,207	2.430,277	3.921,626
5+600	100	129,324	2.564,214			1,00	1,25	100,00%	0,000	129,324	129,324	-2.434,890	3.635,207	2.559,601	1.486,736
5+700	100	194,687	1.798,354			1,00	1,25	100,00%	0,000	194,687	194,687	-1.603,667	3.635,207	2.754,288	-116,931
5+800	100	169,961	1.734,556			1,00	1,25	100,00%	0,000	169,961	169,961	-1.564,595	3.635,207	2.924,249	-1.681,527
5+900	100	134,194	956,957			1,00	1,25	100,00%	0,000	134,194	134,194	-822,763	3.635,207	3.058,443	-2.504,290
6+000	100	1.316,122	187,721			1,00	1,25	100,00%	0,000	1.316,122	187,721	1.128,401	3.635,207	3.246,164	-1.375,889
6+100	100	1.802,485	271,639			1,00	1,25	100,00%	0,000	1.802,485	271,639	1.530,846	3.635,207	3.517,803	154,958
6+200	100	165,070	1.025,271			1,00	1,25	100,00%	0,000	165,070	165,070	-860,201	3.635,207	3.682,873	-705,243
6+300	100	156,155	813,366			1,00	1,25	100,00%	0,000	156,155	156,155	-657,211	3.635,207	3.839,028	-1.362,455
6+400	100	251,434	677,614			1,00	1,25	100,00%	0,000	251,434	251,434	-426,180	3.635,207	4.090,462	-1.788,635
6+500	100	621,273	217,747			1,00	1,25	100,00%	0,000	621,273	217,747	403,526	3.635,207	4.308,209	-1.385,109
6+600	100	2.428,819	147,446			1,00	1,25	100,00%	0,000	2.428,819	147,446	2.281,373	3.635,207	4.455,655	896,265
6+700	100	3.322,576	222,106			1,00	1,25	50,00%	2.076,610	1.661,288	222,106	1.439,182	5.711,817	4.677,761	2.335,447
6+800	100	2.775,227	151,607			1,00	1,25	50,00%	1.734,517	1.387,614	151,607	1.236,007	7.446,334	4.829,368	3.571,453
6+900	100	156,652	392,781			1,00	1,25	50,00%	97,908	78,326	78,326	-314,455	7.544,241	4.907,694	3.256,998
7+000	100	761,675	219,311			1,00	1,25	50,00%	476,047	380,838	219,311	161,527	8.020,288	5.127,005	3.418,525
7+100	100	865,709	20,264			1,00	1,25	50,00%	541,068	432,855	20,264	412,591	8.561,356	5.147,269	3.831,115
7+200	100	1.029,423	18,270			1,00	1,25	50,00%	643,389	514,712	18,270	496,442	9.204,746	5.165,539	4.327,557
7+300	100	1.503,862	17,444			1,00	1,25	50,00%	939,914	751,931	17,444	734,487	10.144,659	5.182,983	5.062,044
7+400	100	1.008,059	28,823			1,00	1,25	50,00%	630,037	504,030	28,823	475,207	10.774,696	5.211,806	5.537,250
7+500	100	568,385	37,183			1,00	1,25	50,00%	355,241	284,193	37,183	247,010	11.129,937	5.248,989	5.784,260
7+600	100	776,446	22,099			1,00	1,25	50,00%	485,279	388,223	22,099	366,124	11.615,216	5.271,088	6.150,384
7+700	100	308,074	135,352			1,00	1,25	50,00%	192,546	154,037	135,352	18,685	11.807,762	5.406,440	6.169,069
7+800	100	1.158,694	85,248			1,00	1,25	50,00%	724,184	579,347	85,248	494,099	12.531,946	5.491,688	6.663,168
7+900	100	1.673,217	18,147			1,00	1,25	50,00%	1.045,761	836,609	18,147	818,462	13.577,706	5.509,835	7.481,629
8+000	100	2.067,128	26,501			1,00	1,25	50,00%	1.291,955	1.033,564	26,501	1.007,063	14.869,661	5.536,336	8.488,692
8+100	100	1.739,279	18,013			1,00	1,25	50,00%	1.087,049	869,640	18,013	851,627	15.956,711	5.554,349	9.340,319

ESTUDIO INFORMATIVO DEL CORREDOR CÁNTABRICO - MEDITERRÁNEO DE ALTA VELOCIDAD. TRAMO TERUEL - ZARAGOZA.

DIAGRAMA DE EQUILIBRIO DE MOVIMIENTOS DE TIERRAS

Alternativa 3.0

PK	d	PLATAFORMA		EXCAVACIÓN TÚNEL EN MINA		COEF. PASO		EXCAVACIÓN			COMPENS.	BALANCE	VOL. ACUMULADOS		
		EXCAV.	TERRAPLÉN	NOMBRE	EXCAV.	RELLENOS	VERTEDERO	% APROV	NO APROV.	APROV.	TRANS.		A VERTEDERO	COM.TRAN.	BALANCE
8+200	100	1.810,960	18,165			1,00	1,25	50,00%	1.131,850	905,480	18,165	887,315	17.088,561	5.572,514	10.227,634
8+300	100	1.862,196	18,090			1,00	1,25	50,00%	1.163,873	931,098	18,090	913,008	18.252,433	5.590,604	11.140,642
8+400	100	974,808	18,403			1,00	1,25	50,00%	609,255	487,404	18,403	469,001	18.861,688	5.609,007	11.609,643
8+500	100	1.452,588	18,346			1,00	1,25	50,00%	907,868	726,294	18,346	707,948	19.769,556	5.627,353	12.317,591
8+600	100	1.635,975	18,049			1,00	1,25	50,00%	1.022,484	817,988	18,049	799,939	20.792,040	5.645,402	13.117,529
8+700	100	1.770,596	17,954			1,00	1,25	50,00%	1.106,623	885,298	17,954	867,344	21.898,663	5.663,356	13.984,873
8+800	100	1.735,334	17,952			1,00	1,25	50,00%	1.084,584	867,667	17,952	849,715	22.983,246	5.681,308	14.834,588
8+900	100	1.884,817	18,325			1,00	1,25	50,00%	1.178,011	942,409	18,325	924,084	24.161,257	5.699,633	15.758,672
9+000	100	1.829,935	18,427			1,00	1,25	50,00%	1.143,709	914,968	18,427	896,541	25.304,966	5.718,060	16.655,212
9+100	100	1.598,402	18,306			1,00	1,25	50,00%	999,001	799,201	18,306	780,895	26.303,968	5.736,366	17.436,107
9+200	100	1.417,222	17,989			1,00	1,25	50,00%	885,764	708,611	17,989	690,622	27.189,731	5.754,355	18.126,729
9+300	100	1.653,567	17,957			1,00	1,25	50,00%	1.033,479	826,784	17,957	808,827	28.223,211	5.772,312	18.935,556
9+400	100	1.458,842	18,296			1,00	1,25	50,00%	911,776	729,421	18,296	711,125	29.134,987	5.790,608	19.646,681
9+500	100	1.749,114	18,347			1,00	1,25	50,00%	1.093,196	874,557	18,347	856,210	30.228,183	5.808,955	20.502,891
9+600	100	1.823,365	18,407			1,00	1,25	50,00%	1.139,603	911,683	18,407	893,276	31.367,786	5.827,362	21.396,166
9+700	100	1.611,822	18,078			1,00	1,25	50,00%	1.007,389	805,911	18,078	787,833	32.375,175	5.845,440	22.183,999
9+800	100	1.407,522	17,494			1,00	1,25	50,00%	879,701	703,761	17,494	686,267	33.254,876	5.862,934	22.870,266
9+900	100	1.679,594	17,534			1,00	1,25	50,00%	1.049,746	839,797	17,534	822,263	34.304,623	5.880,468	23.692,529
10+000	100	2.612,567	18,217			1,00	1,25	0,00%	3.265,709	0,000	0,000	-18,217	37.570,331	5.880,468	23.674,312
10+100	100	0,000	0,000			1,00	1,25	0,00%	0,000	0,000	0,000	0,000	37.570,331	5.880,468	23.674,312
10+200	100	0,000	0,000			1,00	1,25	0,00%	0,000	0,000	0,000	0,000	37.570,331	5.880,468	23.674,312
10+300	100	0,000	0,000			1,00	1,25	0,00%	0,000	0,000	0,000	0,000	37.570,331	5.880,468	23.674,312
10+400	100	0,000	0,000			1,00	1,25	0,00%	0,000	0,000	0,000	0,000	37.570,331	5.880,468	23.674,312
10+500	100	0,000	0,000			1,00	1,25	0,00%	0,000	0,000	0,000	0,000	37.570,331	5.880,468	23.674,312
10+600	100	0,000	0,000			1,00	1,25	0,00%	0,000	0,000	0,000	0,000	37.570,331	5.880,468	23.674,312
10+700	100	0,000	0,000			1,00	1,25	0,00%	0,000	0,000	0,000	0,000	37.570,331	5.880,468	23.674,312
10+800	100	0,000	0,000			1,00	1,25	0,00%	0,000	0,000	0,000	0,000	37.570,331	5.880,468	23.674,312
10+900	100	0,000	0,000			1,00	1,25	0,00%	0,000	0,000	0,000	0,000	37.570,331	5.880,468	23.674,312
11+000	100	530,259	6,570			1,00	1,25	0,00%	662,824	0,000	0,000	-6,570	38.233,155	5.880,468	23.667,742
11+002	2	36,924	0,465			1,00	1,25	0,00%	46,155	0,000	0,000	-0,465	38.279,310	5.880,468	23.667,277
TOTAL		**85.775,586**	**31.484,861**						**38.279,310**	**55.152,138**	**5.880,468**	**23.667,277**			

ESTUDIO INFORMATIVO DEL CORREDOR CÁNTABRICO - MEDITERRÁNEO DE ALTA VELOCIDAD. TRAMO TERUEL - ZARAGOZA.

DIAGRAMA DE EQUILIBRIO DE MOVIMIENTOS DE TIERRAS

Alternativa 3.1

PK	d	PLATAFORMA		EXCAVACIÓN TÚNEL EN MINA		COEF. PASO		EXCAVACIÓN			COMPENS.	BALANCE	VOL. ACUMULADOS		
		EXCAV.	TERRAPLÉN	NOMBRE	EXCAV.	RELLENOS	VERTEDERO	% APROV	NO APROV.	APROV.	TRANS.		A VERTEDERO	COM.TRAN.	BALANCE
3+000		0,000	0,000			1,00	1,25	0,00%	0,000	0,000	0,000	0,000	0,000	0,000	0,000
3+100	100	6.939,687	37,586			1,00	1,25	0,00%	8.674,609	0,000	0,000	-37,586	8.674,609	0,000	-37,586
3+200	100	5.875,268	538,837			1,00	1,25	0,00%	7.344,085	0,000	0,000	-538,837	16.018,694	0,000	-576,423
3+300	100	799,448	3.904,156			1,00	1,25	0,00%	999,310	0,000	0,000	-3.904,156	17.018,004	0,000	-4.480,579
3+400	100	811,303	1.044,016			1,00	1,25	0,00%	1.014,129	0,000	0,000	-1.044,016	18.032,133	0,000	-5.524,595
3+500	100	2.349,204	173,185			1,00	1,25	0,00%	2.936,505	0,000	0,000	-173,185	20.968,638	0,000	-5.697,780
3+600	100	10.988,556	105,226			1,00	1,25	0,00%	13.735,695	0,000	0,000	-105,226	34.704,333	0,000	-5.803,006
3+700	100	8.249,311	37,235			1,00	1,25	0,00%	10.311,639	0,000	0,000	-37,235	45.015,971	0,000	-5.840,241
3+800	100	1.203,105	37,563			1,00	1,25	100,00%	0,000	1.203,105	37,563	1.165,542	45.015,971	37,563	-4.674,699
3+900	100	542,870	70,649			1,00	1,25	100,00%	0,000	542,870	70,649	472,221	45.015,971	108,212	-4.202,478
4+000	100	158,519	827,505			1,00	1,25	100,00%	0,000	158,519	158,519	-668,986	45.015,971	266,731	-4.871,464
4+100	100	35,051	599,327			1,00	1,25	100,00%	0,000	35,051	35,051	-564,276	45.015,971	301,782	-5.435,740
4+200	100	6,779	1.071,337			1,00	1,25	100,00%	0,000	6,779	6,779	-1.064,558	45.015,971	308,561	-6.500,298
4+300	100	0,000	1.432,341			1,00	1,25	100,00%	0,000	0,000	0,000	-1.432,341	45.015,971	308,561	-7.932,639
4+400	100	2.417,540	406,803			1,00	1,25	100,00%	0,000	2.417,540	406,803	2.010,737	45.015,971	715,364	-5.921,902
4+500	100	11.330,464	37,686			1,00	1,25	100,00%	0,000	11.330,464	37,686	11.292,778	45.015,971	753,050	5.370,876
4+600	100	18.927,802	38,013			1,00	1,25	100,00%	0,000	18.927,802	38,013	18.889,789	45.015,971	791,063	24.260,665
4+700	100	24.146,187	38,069			1,00	1,25	100,00%	0,000	24.146,187	38,069	24.108,118	45.015,971	829,132	48.368,783
4+800	100	30.139,927	37,578			1,00	1,25	100,00%	0,000	30.139,927	37,578	30.102,349	45.015,971	866,710	78.471,132
4+900	100	22.900,635	41,863			1,00	1,25	100,00%	0,000	22.900,635	41,863	22.858,772	45.015,971	908,573	101.329,904
5+000	100	6.481,066	40,645			1,00	1,25	100,00%	0,000	6.481,066	40,645	6.440,421	45.015,971	949,218	107.770,325
5+100	100	801,540	3.659,613			1,00	1,25	100,00%	0,000	801,540	801,540	-2.858,073	45.015,971	1.750,758	104.912,252
5+200	100	0,000	13.828,434			1,00	1,25	100,00%	0,000	0,000	0,000	-13.828,434	45.015,971	1.750,758	91.083,818
5+300	100	0,000	20.342,894			1,00	1,25	100,00%	0,000	0,000	0,000	-20.342,894	45.015,971	1.750,758	70.740,924
5+400	100	20,503	8.946,973			1,00	1,25	100,00%	0,000	20,503	20,503	-8.926,470	45.015,971	1.771,261	61.814,454
5+500	100	1.114,554	90,909			1,00	1,25	100,00%	0,000	1.114,554	90,909	1.023,645	45.015,971	1.862,170	62.838,099
5+600	100	238,441	816,535			1,00	1,25	100,00%	0,000	238,441	238,441	-578,094	45.015,971	2.100,611	62.260,005
5+700	100	499,020	409,155			1,00	1,25	100,00%	0,000	499,020	409,155	89,865	45.015,971	2.509,766	62.349,870
5+800	100	5.692,851	37,587			1,00	1,25	100,00%	0,000	5.692,851	37,587	5.655,264	45.015,971	2.547,353	68.005,134
5+900	100	11.360,261	36,800			1,00	1,25	100,00%	0,000	11.360,261	36,800	11.323,461	45.015,971	2.584,153	79.328,595
6+000	100	4.975,191	37,440			1,00	1,25	100,00%	0,000	4.975,191	37,440	4.937,751	45.015,971	2.621,593	84.266,346
6+100	100	392,182	646,253			1,00	1,25	100,00%	0,000	392,182	392,182	-254,071	45.015,971	3.013,775	84.012,275
6+200	100	946,486	109,299			1,00	1,25	100,00%	0,000	946,486	109,299	837,187	45.015,971	3.123,074	84.849,462
6+300	100	424,378	100,980			1,00	1,25	100,00%	0,000	424,378	100,980	323,398	45.015,971	3.224,054	85.172,860
6+400	100	1.188,097	45,345			1,00	1,25	100,00%	0,000	1.188,097	45,345	1.142,752	45.015,971	3.269,399	86.315,612
6+500	100	2.321,231	37,498			1,00	1,25	100,00%	0,000	2.321,231	37,498	2.283,733	45.015,971	3.306,897	88.599,345
6+600	100	5.005,671	37,486			1,00	1,25	100,00%	0,000	5.005,671	37,486	4.968,185	45.015,971	3.344,383	93.567,530
6+700	100	9.640,012	37,357			1,00	1,25	100,00%	0,000	9.640,012	37,357	9.602,655	45.015,971	3.381,740	103.170,185
6+800	100	12.285,707	37,501			1,00	1,25	100,00%	0,000	12.285,707	37,501	12.248,206	45.015,971	3.419,241	115.418,391
6+900	100	14.924,093	37,498			1,00	1,25	100,00%	0,000	14.924,093	37,498	14.886,595	45.015,971	3.456,739	130.304,986
7+000	100	19.389,995	37,387			1,00	1,25	100,00%	0,000	19.389,995	37,387	19.352,608	45.015,971	3.494,126	149.657,594
7+100	100	12.978,534	37,425			1,00	1,25	100,00%	0,000	12.978,534	37,425	12.941,109	45.015,971	3.531,551	162.598,703
7+200	100	9.446,688	37,505			1,00	1,25	100,00%	0,000	9.446,688	37,505	9.409,183	45.015,971	3.569,056	172.007,886
7+300	100	12.088,775	37,550			1,00	1,25	100,00%	0,000	12.088,775	37,550	12.051,225	45.015,971	3.606,606	184.059,111
7+400	100	12.897,882	37,570			1,00	1,25	100,00%	0,000	12.897,882	37,570	12.860,312	45.015,971	3.644,176	196.919,423
7+500	100	20.983,193	37,560			1,00	1,25	100,00%	0,000	20.983,193	37,560	20.945,633	45.015,971	3.681,736	217.865,056
7+600	100	31.284,591	36,523			1,00	1,25	100,00%	0,000	31.284,591	36,523	31.248,068	45.015,971	3.718,259	249.113,124
7+700	100	28.493,163	37,488			1,00	1,25	100,00%	0,000	28.493,163	37,488	28.455,675	45.015,971	3.755,747	277.568,799
7+800	100	23.212,837	37,509			1,00	1,25	100,00%	0,000	23.212,837	37,509	23.175,328	45.015,971	3.793,256	300.744,127
7+900	100	17.654,944	37,441			1,00	1,25	100,00%	0,000	17.654,944	37,441	17.617,503	45.015,971	3.830,697	318.361,630
8+000	100	10.138,116	37,352			1,00	1,25	100,00%	0,000	10.138,116	37,352	10.100,764	45.015,971	3.868,049	328.462,394
8+100	100	2.207,281	270,084			1,00	1,25	0,00%	2.759,101	0,000	0,000	-270,084	47.775,073	3.868,049	328.192,310

ESTUDIO INFORMATIVO DEL CORREDOR CÁNTABRICO - MEDITERRÁNEO DE ALTA VELOCIDAD. TRAMO TERUEL - ZARAGOZA.

DIAGRAMA DE EQUILIBRIO DE MOVIMIENTOS DE TIERRAS

Alternativa 3.1

PK	d	PLATAFORMA		EXCAVACIÓN TÚNEL EN MINA		COEF. PASO		EXCAVACIÓN			COMPENS.	BALANCE	VOL. ACUMULADOS		
		EXCAV.	TERRAPLÉN	NOMBRE	EXCAV.	RELLENOS	VERTEDERO	% APROV	NO APROV.	APROV.	TRANS.		A VERTEDERO	COM.TRAN.	BALANCE
8+200	100	7,962	1.785,152			1,00	1,25	0,00%	9,953	0,000	0,000	-1.785,152	47.785,025	3.868,049	326.407,158
8+300	100	0,000	4.967,504			1,00	1,25	0,00%	0,000	0,000	0,000	-4.967,504	47.785,025	3.868,049	321.439,654
8+400	100	0,000	6.351,696			1,00	1,25	0,00%	0,000	0,000	0,000	-6.351,696	47.785,025	3.868,049	315.087,958
8+500	100	0,000	6.922,672			1,00	1,25	0,00%	0,000	0,000	0,000	-6.922,672	47.785,025	3.868,049	308.165,286
8+600	100	0,000	7.137,221			1,00	1,25	0,00%	0,000	0,000	0,000	-7.137,221	47.785,025	3.868,049	301.028,065
8+700	100	0,000	6.278,924			1,00	1,25	0,00%	0,000	0,000	0,000	-6.278,924	47.785,025	3.868,049	294.749,141
8+800	100	0,000	5.519,861			1,00	1,25	0,00%	0,000	0,000	0,000	-5.519,861	47.785,025	3.868,049	289.229,280
8+900	100	0,000	4.010,547			1,00	1,25	0,00%	0,000	0,000	0,000	-4.010,547	47.785,025	3.868,049	285.218,733
9+000	100	1,371	1.968,381			1,00	1,25	0,00%	1,714	0,000	0,000	-1.968,381	47.786,739	3.868,049	283.250,352
9+100	100	10,384	1.918,638			1,00	1,25	0,00%	12,980	0,000	0,000	-1.918,638	47.799,719	3.868,049	281.331,714
9+200	100	0,000	1.391,791			1,00	1,25	0,00%	0,000	0,000	0,000	-1.391,791	47.799,719	3.868,049	279.939,923
9+300	100	26,031	848,930			1,00	1,25	0,00%	32,539	0,000	0,000	-848,930	47.832,258	3.868,049	279.090,993
9+400	100	311,529	668,309			1,00	1,25	0,00%	389,411	0,000	0,000	-668,309	48.221,669	3.868,049	278.422,684
9+500	100	2.136,570	112,395			1,00	1,25	0,00%	2.670,713	0,000	0,000	-112,395	50.892,381	3.868,049	278.310,289
9+600	100	2.799,004	35,666			1,00	1,25	0,00%	3.498,755	0,000	0,000	-35,666	54.391,136	3.868,049	278.274,623
9+700	100	2.277,958	66,272			1,00	1,25	0,00%	2.847,448	0,000	0,000	-66,272	57.238,584	3.868,049	278.208,351
9+800	100	2.779,314	35,508			1,00	1,25	0,00%	3.474,143	0,000	0,000	-35,508	60.712,726	3.868,049	278.172,843
9+900	100	3.480,690	26,172			1,00	1,25	0,00%	4.350,863	0,000	0,000	-26,172	65.063,589	3.868,049	278.146,671
10+000	100	0,000	0,000			1,00	1,25	0,00%	0,000	0,000	0,000	0,000	65.063,589	3.868,049	278.146,671
10+100	100	0,000	0,000			1,00	1,25	0,00%	0,000	0,000	0,000	0,000	65.063,589	3.868,049	278.146,671
10+200	100	0,000	0,000			1,00	1,25	0,00%	0,000	0,000	0,000	0,000	65.063,589	3.868,049	278.146,671
10+300	100	0,000	0,000			1,00	1,25	0,00%	0,000	0,000	0,000	0,000	65.063,589	3.868,049	278.146,671
10+400	100	0,000	0,000			1,00	1,25	0,00%	0,000	0,000	0,000	0,000	65.063,589	3.868,049	278.146,671
10+500	100	0,000	0,000			1,00	1,25	0,00%	0,000	0,000	0,000	0,000	65.063,589	3.868,049	278.146,671
10+600	100	0,000	0,000			1,00	1,25	0,00%	0,000	0,000	0,000	0,000	65.063,589	3.868,049	278.146,671
10+700	100	0,000	0,000			1,00	1,25	0,00%	0,000	0,000	0,000	0,000	65.063,589	3.868,049	278.146,671
10+800	100	0,000	0,000			1,00	1,25	0,00%	0,000	0,000	0,000	0,000	65.063,589	3.868,049	278.146,671
10+880	80	1.011,033	14,591			1,00	1,25	0,00%	1.263,791	0,000	0,000	-14,591	66.327,380	3.868,049	278.132,080
TOTAL		**441.750,785**	**110.556,801**						**66.327,380**	**388.688,881**	**3.868,049**	**278.132,080**			

ESTUDIO INFORMATIVO DEL CORREDOR CÁNTABRICO - MEDITERRÁNEO DE ALTA VELOCIDAD. TRAMO TERUEL - ZARAGOZA.

DIAGRAMA DE EQUILIBRIO DE MOVIMIENTOS DE TIERRAS

Alternativa 4.1

PK	d	PLATAFORMA		EXCAVACIÓN TÚNEL EN MINA		COEF. PASO		EXCAVACIÓN			COMPENS.	BALANCE	VOL. ACUMULADOS		
		EXCAV.	TERRAPLÉN	NOMBRE	EXCAV.	RELLENOS	VERTEDERO	% APROV	NO APROV.	APROV.	TRANS.		A VERTEDERO	COM.TRAN.	BALANCE
4+000		0,000	0,000			1,00	1,25	100,00%	0,000	0,000	0,000	0,000	0,000	0,000	0,000
4+100	100	2.096,852	21,146			1,00	1,25	100,00%	0,000	2.096,852	21,146	2.075,706	0,000	21,146	2.075,706
4+200	100	1.804,883	0,000			1,00	1,25	100,00%	0,000	1.804,883	0,000	1.804,883	0,000	21,146	3.880,589
4+300	100	1.434,465	6,496			1,00	1,25	100,00%	0,000	1.434,465	6,496	1.427,969	0,000	27,642	5.308,558
4+400	100	195,003	1.622,036			1,00	1,25	100,00%	0,000	195,003	195,003	-1.427,033	0,000	222,645	3.881,525
4+500	100	0,000	9.621,326			1,00	1,25	100,00%	0,000	0,000	0,000	-9.621,326	0,000	222,645	-5.739,801
4+600	100	0,000	6.426,296			1,00	1,25	100,00%	0,000	0,000	0,000	-6.426,296	0,000	222,645	-12.166,097
4+700	100	0,000	7.020,960			1,00	1,25	100,00%	0,000	0,000	0,000	-7.020,960	0,000	222,645	-19.187,057
4+800	100	0,000	5.799,802			1,00	1,25	100,00%	0,000	0,000	0,000	-5.799,802	0,000	222,645	-24.986,859
4+900	100	0,000	3.883,472			1,00	1,25	100,00%	0,000	0,000	0,000	-3.883,472	0,000	222,645	-28.870,331
5+000	100	197,223	975,489			1,00	1,25	100,00%	0,000	197,223	197,223	-778,266	0,000	419,868	-29.648,597
5+100	100	2.654,090	0,000			1,00	1,25	100,00%	0,000	2.654,090	0,000	2.654,090	0,000	419,868	-26.994,507
5+200	100	4.809,772	0,000			1,00	1,25	100,00%	0,000	4.809,772	0,000	4.809,772	0,000	419,868	-22.184,735
5+300	100	2.338,798	0,000			1,00	1,25	100,00%	0,000	2.338,798	0,000	2.338,798	0,000	419,868	-19.845,937
5+400	100	6.266,684	0,000			1,00	1,25	100,00%	0,000	6.266,684	0,000	6.266,684	0,000	419,868	-13.579,253
5+500	100	8.028,207	0,000			1,00	1,25	100,00%	0,000	8.028,207	0,000	8.028,207	0,000	419,868	-5.551,046
5+600	100	9.791,573	0,000			1,00	1,25	100,00%	0,000	9.791,573	0,000	9.791,573	0,000	419,868	4.240,527
5+700	100	9.262,563	0,000			1,00	1,25	100,00%	0,000	9.262,563	0,000	9.262,563	0,000	419,868	13.503,090
5+800	100	8.480,874	0,000			1,00	1,25	100,00%	0,000	8.480,874	0,000	8.480,874	0,000	419,868	21.983,964
5+900	100	10.991,619	0,000			1,00	1,25	100,00%	0,000	10.991,619	0,000	10.991,619	0,000	419,868	32.975,583
6+000	100	12.208,998	0,000			1,00	1,25	100,00%	0,000	12.208,998	0,000	12.208,998	0,000	419,868	45.184,581
6+100	100	6.663,606	0,000			1,00	1,25	100,00%	0,000	6.663,606	0,000	6.663,606	0,000	419,868	51.848,187
6+200	100	5.095,448	0,000			1,00	1,25	100,00%	0,000	5.095,448	0,000	5.095,448	0,000	419,868	56.943,635
6+300	100	3.733,237	0,394			1,00	1,25	100,00%	0,000	3.733,237	0,394	3.732,843	0,000	420,262	60.676,478
6+400	100	697,145	1.525,903			1,00	1,25	100,00%	0,000	697,145	697,145	-828,758	0,000	1.117,407	59.847,720
6+500	100	0,000	5.296,334			1,00	1,25	100,00%	0,000	0,000	0,000	-5.296,334	0,000	1.117,407	54.551,386
6+600	100	0,830	3.973,601			1,00	1,25	100,00%	0,000	0,830	0,830	-3.972,771	0,000	1.118,237	50.578,615
6+700	100	1.755,858	309,955			1,00	1,25	100,00%	0,000	1.755,858	309,955	1.445,903	0,000	1.428,192	52.024,518
6+800	100	1.168,001	350,476			1,00	1,25	100,00%	0,000	1.168,001	350,476	817,525	0,000	1.778,668	52.842,043
6+900	100	0,552	2.163,245			1,00	1,25	100,00%	0,000	0,552	0,552	-2.162,693	0,000	1.779,220	50.679,350
7+000	100	0,000	4.195,635			1,00	1,25	100,00%	0,000	0,000	0,000	-4.195,635	0,000	1.779,220	46.483,715
7+100	100	0,000	6.930,174			1,00	1,25	100,00%	0,000	0,000	0,000	-6.930,174	0,000	1.779,220	39.553,541
7+200	100	0,000	11.754,711			1,00	1,25	100,00%	0,000	0,000	0,000	-11.754,711	0,000	1.779,220	27.798,830
7+300	100	0,000	21.161,122			1,00	1,25	100,00%	0,000	0,000	0,000	-21.161,122	0,000	1.779,220	6.637,708
7+400	100	0,000	10.420,152			1,00	1,25	100,00%	0,000	0,000	0,000	-10.420,152	0,000	1.779,220	-3.782,444
7+500	100	0,000	0,000			1,00	1,25	100,00%	0,000	0,000	0,000	0,000	0,000	1.779,220	-3.782,444
7+600	100	0,000	0,000			1,00	1,25	100,00%	0,000	0,000	0,000	0,000	0,000	1.779,220	-3.782,444
7+700	100	0,000	0,000			1,00	1,25	100,00%	0,000	0,000	0,000	0,000	0,000	1.779,220	-3.782,444
7+800	100	0,000	4.098,755			1,00	1,25	100,00%	0,000	0,000	0,000	-4.098,755	0,000	1.779,220	-7.881,199
7+900	100	0,000	39.188,055			1,00	1,25	100,00%	0,000	0,000	0,000	-39.188,055	0,000	1.779,220	-47.069,254
8+000	100	0,000	40.015,317			1,00	1,25	100,00%	0,000	0,000	0,000	-40.015,317	0,000	1.779,220	-87.084,571
8+100	100	0,000	39.234,844			1,00	1,25	100,00%	0,000	0,000	0,000	-39.234,844	0,000	1.779,220	-126.319,415
8+200	100	0,000	35.699,293			1,00	1,25	100,00%	0,000	0,000	0,000	-35.699,293	0,000	1.779,220	-162.018,708
8+300	100	0,000	29.713,426			1,00	1,25	100,00%	0,000	0,000	0,000	-29.713,426	0,000	1.779,220	-191.732,134
8+400	100	0,000	24.119,346			1,00	1,25	100,00%	0,000	0,000	0,000	-24.119,346	0,000	1.779,220	-215.851,480
8+500	100	0,000	17.258,792			1,00	1,25	100,00%	0,000	0,000	0,000	-17.258,792	0,000	1.779,220	-233.110,272
8+600	100	0,000	6.835,452			1,00	1,25	100,00%	0,000	0,000	0,000	-6.835,452	0,000	1.779,220	-239.945,724
8+700	100	0,000	3.856,737			1,00	1,25	100,00%	0,000	0,000	0,000	-3.856,737	0,000	1.779,220	-243.802,461
8+800	100	0,688	1.533,109			1,00	1,25	100,00%	0,000	0,688	0,688	-1.532,421	0,000	1.779,908	-245.334,882
8+900	100	762,540	279,277			1,00	1,25	100,00%	0,000	762,540	279,277	483,263	0,000	2.059,185	-244.851,619
9+000	100	775,979	83,553			1,00	1,25	100,00%	0,000	775,979	83,553	692,426	0,000	2.142,738	-244.159,193
9+100	100	2.041,130	46,962			1,00	1,25	100,00%	0,000	2.041,130	46,962	1.994,168	0,000	2.189,700	-242.165,025

ESTUDIO INFORMATIVO DEL CORREDOR CÁNTABRICO - MEDITERRÁNEO DE ALTA VELOCIDAD. TRAMO TERUEL - ZARAGOZA.

DIAGRAMA DE EQUILIBRIO DE MOVIMIENTOS DE TIERRAS

Alternativa 4.1

PK	d	PLATAFORMA		EXCAVACIÓN TÚNEL EN MINA		COEF. PASO		EXCAVACIÓN			COMPENS.	BALANCE	VOL. ACUMULADOS		
		EXCAV.	TERRAPLÉN	NOMBRE	EXCAV.	RELLENOS	VERTEDERO	% APROV	NO APROV.	APROV.	TRANS.		A VERTEDERO	COM.TRAN.	BALANCE
9+200	100	0,000	0,000			1,00	1,25	100,00%	0,000	0,000	0,000	0,000	0,000	2.189,700	-242.165,025
9+300	100	7.461,682	358,911			1,00	1,25	100,00%	0,000	7.461,682	358,911	7.102,771	0,000	2.548,611	-235.062,254
9+400	100	22.700,206	0,000			1,00	1,25	100,00%	0,000	22.700,206	0,000	22.700,206	0,000	2.548,611	-212.362,048
9+500	100	10.268,339	623,500			1,00	1,25	100,00%	0,000	10.268,339	623,500	9.644,839	0,000	3.172,111	-202.717,209
9+600	100	23,622	3.378,309			1,00	1,25	100,00%	0,000	23,622	23,622	-3.354,687	0,000	3.195,733	-206.071,896
9+700	100	0,000	5.372,032			1,00	1,25	100,00%	0,000	0,000	0,000	-5.372,032	0,000	3.195,733	-211.443,928
9+800	100	0,000	8.238,779			1,00	1,25	100,00%	0,000	0,000	0,000	-8.238,779	0,000	3.195,733	-219.682,707
9+900	100	0,000	11.011,743			1,00	1,25	100,00%	0,000	0,000	0,000	-11.011,743	0,000	3.195,733	-230.694,450
10+000	100	0,000	11.564,260			1,00	1,25	100,00%	0,000	0,000	0,000	-11.564,260	0,000	3.195,733	-242.258,710
10+100	100	0,000	9.464,316			1,00	1,25	100,00%	0,000	0,000	0,000	-9.464,316	0,000	3.195,733	-251.723,026
10+200	100	953,150	9.856,265			1,00	1,25	100,00%	0,000	953,150	953,150	-8.903,115	0,000	4.148,883	-260.626,141
10+300	100	20.193,796	0,000			1,00	1,25	100,00%	0,000	20.193,796	0,000	20.193,796	0,000	4.148,883	-240.432,345
10+400	100	11.271,689	73,689			1,00	1,25	100,00%	0,000	11.271,689	73,689	11.198,000	0,000	4.222,572	-229.234,345
10+500	100	1,887	2.966,940			1,00	1,25	100,00%	0,000	1,887	1,887	-2.965,053	0,000	4.224,459	-232.199,398
10+600	100	6.025,613	128,838			1,00	1,25	100,00%	0,000	6.025,613	128,838	5.896,775	0,000	4.353,297	-226.302,623
10+700	100	2.211,436	2.002,489			1,00	1,25	100,00%	0,000	2.211,436	2.002,489	208,947	0,000	6.355,786	-226.093,676
10+800	100	184,919	1.152,446			1,00	1,25	100,00%	0,000	184,919	184,919	-967,527	0,000	6.540,705	-227.061,203
10+900	100	4.271,455	0,291			1,00	1,25	100,00%	0,000	4.271,455	0,291	4.271,164	0,000	6.540,996	-222.790,039
11+000	100	3.798,803	280,515			1,00	1,25	100,00%	0,000	3.798,803	280,515	3.518,288	0,000	6.821,511	-219.271,751
11+100	100	1.749,046	580,179			1,00	1,25	100,00%	0,000	1.749,046	580,179	1.168,867	0,000	7.401,690	-218.102,884
11+200	100	5.938,047	0,000			1,00	1,25	100,00%	0,000	5.938,047	0,000	5.938,047	0,000	7.401,690	-212.164,837
11+300	100	6.677,436	0,000			1,00	1,25	100,00%	0,000	6.677,436	0,000	6.677,436	0,000	7.401,690	-205.487,401
11+400	100	9.584,879	0,000			1,00	1,25	100,00%	0,000	9.584,879	0,000	9.584,879	0,000	7.401,690	-195.902,522
11+500	100	6.880,636	0,000			1,00	1,25	100,00%	0,000	6.880,636	0,000	6.880,636	0,000	7.401,690	-189.021,886
11+600	100	4.325,505	0,000			1,00	1,25	100,00%	0,000	4.325,505	0,000	4.325,505	0,000	7.401,690	-184.696,381
11+700	100	8.486,833	0,000			1,00	1,25	100,00%	0,000	8.486,833	0,000	8.486,833	0,000	7.401,690	-176.209,548
11+800	100	10.106,656	0,000			1,00	1,25	100,00%	0,000	10.106,656	0,000	10.106,656	0,000	7.401,690	-166.102,892
11+900	100	16.496,853	0,000			1,00	1,25	100,00%	0,000	16.496,853	0,000	16.496,853	0,000	7.401,690	-149.606,039
12+000	100	22.173,152	0,000			1,00	1,25	100,00%	0,000	22.173,152	0,000	22.173,152	0,000	7.401,690	-127.432,887
12+100	100	18.003,200	0,000			1,00	1,25	100,00%	0,000	18.003,200	0,000	18.003,200	0,000	7.401,690	-109.429,687
12+200	100	4.029,345	5.840,456			1,00	1,25	100,00%	0,000	4.029,345	4.029,345	-1.811,111	0,000	11.431,035	-111.240,798
12+300	100	0,000	3.626,528			1,00	1,25	100,00%	0,000	0,000	0,000	-3.626,528	0,000	11.431,035	-114.867,326
12+400	100	0,000	6.374,675			1,00	1,25	100,00%	0,000	0,000	0,000	-6.374,675	0,000	11.431,035	-121.242,001
12+500	100	1.004,469	11.031,215			1,00	1,25	100,00%	0,000	1.004,469	1.004,469	-10.026,746	0,000	12.435,504	-131.268,747
12+600	100	10.093,714	0,000			1,00	1,25	100,00%	0,000	10.093,714	0,000	10.093,714	0,000	12.435,504	-121.175,033
12+700	100	6.520,693	126,126			1,00	1,25	100,00%	0,000	6.520,693	126,126	6.394,567	0,000	12.561,630	-114.780,466
12+800	100	1.319,054	2.082,042			1,00	1,25	100,00%	0,000	1.319,054	1.319,054	-762,988	0,000	13.880,684	-115.543,454
12+900	100	1.482,997	1.325,051			1,00	1,25	100,00%	0,000	1.482,997	1.325,051	157,946	0,000	15.205,735	-115.385,508
13+000	100	7.843,534	0,000			1,00	1,25	100,00%	0,000	7.843,534	0,000	7.843,534	0,000	15.205,735	-107.541,974
13+100	100	5.051,011	257,800			1,00	1,25	100,00%	0,000	5.051,011	257,800	4.793,211	0,000	15.463,535	-102.748,763
13+200	100	12.985,838	0,000			1,00	1,25	100,00%	0,000	12.985,838	0,000	12.985,838	0,000	15.463,535	-89.762,925
13+300	100	517,182	9.311,592			1,00	1,25	100,00%	0,000	517,182	517,182	-8.794,410	0,000	15.980,717	-98.557,335
13+400	100	0,000	9.442,328			1,00	1,25	100,00%	0,000	0,000	0,000	-9.442,328	0,000	15.980,717	-107.999,663
13+500	100	0,000	0,000			1,00	1,25	100,00%	0,000	0,000	0,000	0,000	0,000	15.980,717	-107.999,663
13+600	100	0,000	0,000			1,00	1,25	100,00%	0,000	0,000	0,000	0,000	0,000	15.980,717	-107.999,663
13+700	100	0,000	0,000			1,00	1,25	100,00%	0,000	0,000	0,000	0,000	0,000	15.980,717	-107.999,663
13+800	100	0,000	0,000			1,00	1,25	100,00%	0,000	0,000	0,000	0,000	0,000	15.980,717	-107.999,663
13+900	100	0,000	0,000			1,00	1,25	100,00%	0,000	0,000	0,000	0,000	0,000	15.980,717	-107.999,663
14+000	100	0,000	0,000			1,00	1,25	100,00%	0,000	0,000	0,000	0,000	0,000	15.980,717	-107.999,663
14+100	100	0,000	0,000			1,00	1,25	100,00%	0,000	0,000	0,000	0,000	0,000	15.980,717	-107.999,663
14+200	100	0,000	7.221,350			1,00	1,25	100,00%	0,000	0,000	0,000	-7.221,350	0,000	15.980,717	-115.221,013
14+300	100	0,000	5.948,147			1,00	1,25	100,00%	0,000	0,000	0,000	-5.948,147	0,000	15.980,717	-121.169,160

ESTUDIO INFORMATIVO DEL CORREDOR CÁNTABRICO - MEDITERRÁNEO DE ALTA VELOCIDAD. TRAMO TERUEL - ZARAGOZA.

DIAGRAMA DE EQUILIBRIO DE MOVIMIENTOS DE TIERRAS

Alternativa 4.1

PK	d	PLATAFORMA		EXCAVACIÓN TÚNEL EN MINA		COEF. PASO		EXCAVACIÓN			COMPENS.	BALANCE	VOL. ACUMULADOS		
		EXCAV.	TERRAPLÉN	NOMBRE	EXCAV.	RELLENOS	VERTEDERO	% APROV	NO APROV.	APROV.	TRANS.		A VERTEDERO	COM.TRAN.	BALANCE
14+400	100	18.735,946	257,350			1,00	1,25	100,00%	0,000	18.735,946	257,350	18.478,596	0,000	16.238,067	-102.690,564
14+500	100	52.456,295	0,000			1,00	1,25	100,00%	0,000	52.456,295	0,000	52.456,295	0,000	16.238,067	-50.234,269
14+600	100	103.203,981	0,000			1,00	1,25	100,00%	0,000	103.203,981	0,000	103.203,981	0,000	16.238,067	52.969,712
14+700	100	0,000	0,000		16.666,600	1,00	1,25	100,00%	0,000	16.666,600	0,000	16.666,600	0,000	16.238,067	69.636,312
14+800	100	0,000	0,000		16.666,600	1,00	1,25	100,00%	0,000	16.666,600	0,000	16.666,600	0,000	16.238,067	86.302,912
14+900	100	0,000	0,000		16.666,600	1,00	1,25	100,00%	0,000	16.666,600	0,000	16.666,600	0,000	16.238,067	102.969,512
15+000	100	0,000	0,000		16.666,600	1,00	1,25	100,00%	0,000	16.666,600	0,000	16.666,600	0,000	16.238,067	119.636,112
15+100	100	0,000	0,000		16.666,600	1,00	1,25	100,00%	0,000	16.666,600	0,000	16.666,600	0,000	16.238,067	136.302,712
15+200	100	0,000	0,000		16.666,600	1,00	1,25	100,00%	0,000	16.666,600	0,000	16.666,600	0,000	16.238,067	152.969,312
15+300	100	0,000	0,000		16.666,600	1,00	1,25	100,00%	0,000	16.666,600	0,000	16.666,600	0,000	16.238,067	169.635,912
15+400	100	0,000	0,000		16.666,600	1,00	1,25	100,00%	0,000	16.666,600	0,000	16.666,600	0,000	16.238,067	186.302,512
15+500	100	0,000	0,000		16.666,600	1,00	1,25	100,00%	0,000	16.666,600	0,000	16.666,600	0,000	16.238,067	202.969,112
15+600	100	0,000	0,000		16.666,600	1,00	1,25	100,00%	0,000	16.666,600	0,000	16.666,600	0,000	16.238,067	219.635,712
15+700	100	47.291,395	0,000		7.499,970	1,00	1,25	100,00%	0,000	54.791,365	0,000	54.791,365	0,000	16.238,067	274.427,077
15+800	100	28.402,277	0,000			1,00	1,25	100,00%	0,000	28.402,277	0,000	28.402,277	0,000	16.238,067	302.829,354
15+900	100	572,960	10.265,050			1,00	1,25	100,00%	0,000	572,960	572,960	-9.692,090	0,000	16.811,027	293.137,264
16+000	100	0,000	0,000			1,00	1,25	100,00%	0,000	0,000	0,000	0,000	0,000	16.811,027	293.137,264
16+100	100	0,000	0,000			1,00	1,25	100,00%	0,000	0,000	0,000	0,000	0,000	16.811,027	293.137,264
16+200	100	0,000	0,000			1,00	1,25	100,00%	0,000	0,000	0,000	0,000	0,000	16.811,027	293.137,264
16+300	100	0,000	0,000			1,00	1,25	100,00%	0,000	0,000	0,000	0,000	0,000	16.811,027	293.137,264
16+400	100	1.956,879	482,137			1,00	1,25	100,00%	0,000	1.956,879	482,137	1.474,742	0,000	17.293,164	294.612,006
16+500	100	2.770,413	196,431			1,00	1,25	100,00%	0,000	2.770,413	196,431	2.573,982	0,000	17.489,595	297.185,988
16+600	100	5.253,882	95,783			1,00	1,25	100,00%	0,000	5.253,882	95,783	5.158,099	0,000	17.585,378	302.344,087
16+700	100	9.530,486	0,000			1,00	1,25	100,00%	0,000	9.530,486	0,000	9.530,486	0,000	17.585,378	311.874,573
16+800	100	7.245,260	53,786			1,00	1,25	100,00%	0,000	7.245,260	53,786	7.191,474	0,000	17.639,164	319.066,047
16+900	100	7.639,686	103,640			1,00	1,25	100,00%	0,000	7.639,686	103,640	7.536,046	0,000	17.742,804	326.602,093
17+000	100	14.461,757	0,000			1,00	1,25	100,00%	0,000	14.461,757	0,000	14.461,757	0,000	17.742,804	341.063,850
17+100	100	10.916,103	0,000			1,00	1,25	100,00%	0,000	10.916,103	0,000	10.916,103	0,000	17.742,804	351.979,953
17+200	100	12.221,571	65,309			1,00	1,25	100,00%	0,000	12.221,571	65,309	12.156,262	0,000	17.808,113	364.136,215
17+300	100	5.346,716	613,200			1,00	1,25	100,00%	0,000	5.346,716	613,200	4.733,516	0,000	18.421,313	368.869,731
17+400	100	16.406,037	0,000			1,00	1,25	100,00%	0,000	16.406,037	0,000	16.406,037	0,000	18.421,313	385.275,768
17+500	100	1.097,116	6.744,436			1,00	1,25	100,00%	0,000	1.097,116	1.097,116	-5.647,320	0,000	19.518,429	379.628,448
17+600	100	0,000	22.493,986			1,00	1,25	100,00%	0,000	0,000	0,000	-22.493,986	0,000	19.518,429	357.134,462
17+700	100	0,000	23.075,098			1,00	1,25	100,00%	0,000	0,000	0,000	-23.075,098	0,000	19.518,429	334.059,364
17+800	100	0,000	0,000			1,00	1,25	100,00%	0,000	0,000	0,000	0,000	0,000	19.518,429	334.059,364
17+900	100	0,000	0,000			1,00	1,25	100,00%	0,000	0,000	0,000	0,000	0,000	19.518,429	334.059,364
18+000	100	0,000	0,000			1,00	1,25	100,00%	0,000	0,000	0,000	0,000	0,000	19.518,429	334.059,364
18+100	100	0,000	0,000			1,00	1,25	100,00%	0,000	0,000	0,000	0,000	0,000	19.518,429	334.059,364
18+200	100	0,000	0,000			1,00	1,25	100,00%	0,000	0,000	0,000	0,000	0,000	19.518,429	334.059,364
18+300	100	0,000	0,000			1,00	1,25	100,00%	0,000	0,000	0,000	0,000	0,000	19.518,429	334.059,364
18+400	100	0,000	0,000			1,00	1,25	100,00%	0,000	0,000	0,000	0,000	0,000	19.518,429	334.059,364
18+500	100	0,000	0,000			1,00	1,25	100,00%	0,000	0,000	0,000	0,000	0,000	19.518,429	334.059,364
18+600	100	0,000	24.600,168			1,00	1,25	100,00%	0,000	0,000	0,000	-24.600,168	0,000	19.518,429	309.459,196
18+700	100	0,000	18.094,281			1,00	1,25	100,00%	0,000	0,000	0,000	-18.094,281	0,000	19.518,429	291.364,915
18+800	100	0,000	21.981,072			1,00	1,25	100,00%	0,000	0,000	0,000	-21.981,072	0,000	19.518,429	269.383,843
18+900	100	0,000	11.703,817			1,00	1,25	100,00%	0,000	0,000	0,000	-11.703,817	0,000	19.518,429	257.680,026
19+000	100	0,000	11.350,995			1,00	1,25	100,00%	0,000	0,000	0,000	-11.350,995	0,000	19.518,429	246.329,031
19+100	100	839,576	11.140,952			1,00	1,25	100,00%	0,000	839,576	839,576	-10.301,376	0,000	20.358,005	236.027,655
19+200	100	2.832,899	469,697			1,00	1,25	100,00%	0,000	2.832,899	469,697	2.363,202	0,000	20.827,702	238.390,857
19+235	35	3.046,069	0,000			1,00	1,25	100,00%	0,000	3.046,069	0,000	3.046,069	0,000	20.827,702	241.436,926
TOTAL		**706.120,599**	**638.849,643**		**174.165,970**				**0,000**	**880.286,569**	**20.827,702**	**241.436,926**			

ESTUDIO INFORMATIVO DEL CORREDOR CÁNTABRICO - MEDITERRÁNEO DE ALTA VELOCIDAD. TRAMO TERUEL - ZARAGOZA.

DIAGRAMA DE EQUILIBRIO DE MOVIMIENTOS DE TIERRAS

Alternativa 4.2

PK	d	PLATAFORMA		EXCAVACIÓN TÚNEL EN MINA		COEF. PASO		EXCAVACIÓN			COMPENS.	BALANCE	VOL. ACUMULADOS		
		EXCAV.	TERRAPLÉN	NOMBRE	EXCAV.	RELLENOS	VERTEDERO	% APROV	NO APROV.	APROV.	TRANS.		A VERTEDERO	COM.TRAN.	BALANCE
4+000		0,000	0,000			1,00	1,25	100,00%	0,000	0,000	0,000	0,000	0,000	0,000	0,000
4+100	100	2.096,852	21,146			1,00	1,25	100,00%	0,000	2.096,852	21,146	2.075,706	0,000	21,146	2.075,706
4+200	100	1.804,883	0,000			1,00	1,25	100,00%	0,000	1.804,883	0,000	1.804,883	0,000	21,146	3.880,589
4+300	100	1.434,465	6,496			1,00	1,25	100,00%	0,000	1.434,465	6,496	1.427,969	0,000	27,642	5.308,558
4+400	100	195,003	1.622,036			1,00	1,25	100,00%	0,000	195,003	195,003	-1.427,033	0,000	222,645	3.881,525
4+500	100	0,000	9.621,326			1,00	1,25	100,00%	0,000	0,000	0,000	-9.621,326	0,000	222,645	-5.739,801
4+600	100	0,000	6.426,296			1,00	1,25	100,00%	0,000	0,000	0,000	-6.426,296	0,000	222,645	-12.166,097
4+700	100	0,000	7.020,960			1,00	1,25	100,00%	0,000	0,000	0,000	-7.020,960	0,000	222,645	-19.187,057
4+800	100	0,000	5.799,802			1,00	1,25	100,00%	0,000	0,000	0,000	-5.799,802	0,000	222,645	-24.986,859
4+900	100	0,000	3.883,472			1,00	1,25	100,00%	0,000	0,000	0,000	-3.883,472	0,000	222,645	-28.870,331
5+000	100	197,223	975,489			1,00	1,25	100,00%	0,000	197,223	197,223	-778,266	0,000	419,868	-29.648,597
5+100	100	2.524,158	0,000			1,00	1,25	100,00%	0,000	2.524,158	0,000	2.524,158	0,000	419,868	-27.124,439
5+200	100	4.488,167	0,000			1,00	1,25	100,00%	0,000	4.488,167	0,000	4.488,167	0,000	419,868	-22.636,272
5+300	100	2.227,641	0,000			1,00	1,25	100,00%	0,000	2.227,641	0,000	2.227,641	0,000	419,868	-20.408,631
5+400	100	5.748,581	0,000			1,00	1,25	100,00%	0,000	5.748,581	0,000	5.748,581	0,000	419,868	-14.660,050
5+500	100	7.277,073	0,000			1,00	1,25	100,00%	0,000	7.277,073	0,000	7.277,073	0,000	419,868	-7.382,977
5+600	100	8.711,383	0,000			1,00	1,25	100,00%	0,000	8.711,383	0,000	8.711,383	0,000	419,868	1.328,406
5+700	100	8.297,052	0,000			1,00	1,25	100,00%	0,000	8.297,052	0,000	8.297,052	0,000	419,868	9.625,458
5+800	100	7.677,856	0,000			1,00	1,25	100,00%	0,000	7.677,856	0,000	7.677,856	0,000	419,868	17.303,314
5+900	100	9.758,346	0,000			1,00	1,25	100,00%	0,000	9.758,346	0,000	9.758,346	0,000	419,868	27.061,660
6+000	100	10.757,123	0,000			1,00	1,25	100,00%	0,000	10.757,123	0,000	10.757,123	0,000	419,868	37.818,783
6+100	100	6.311,395	0,000			1,00	1,25	100,00%	0,000	6.311,395	0,000	6.311,395	0,000	419,868	44.130,178
6+200	100	5.154,447	0,000			1,00	1,25	100,00%	0,000	5.154,447	0,000	5.154,447	0,000	419,868	49.284,625
6+300	100	3.784,892	0,397			1,00	1,25	100,00%	0,000	3.784,892	0,397	3.784,495	0,000	420,265	53.069,120
6+400	100	703,445	1.499,598			1,00	1,25	100,00%	0,000	703,445	703,445	-796,153	0,000	1.123,710	52.272,967
6+500	100	0,000	5.266,556			1,00	1,25	100,00%	0,000	0,000	0,000	-5.266,556	0,000	1.123,710	47.006,411
6+600	100	0,000	4.198,173			1,00	1,25	100,00%	0,000	0,000	0,000	-4.198,173	0,000	1.123,710	42.808,238
6+700	100	908,496	404,002			1,00	1,25	100,00%	0,000	908,496	404,002	504,494	0,000	1.527,712	43.312,732
6+800	100	630,540	654,573			1,00	1,25	100,00%	0,000	630,540	630,540	-24,033	0,000	2.158,252	43.288,699
6+900	100	28,281	1.650,839			1,00	1,25	100,00%	0,000	28,281	28,281	-1.622,558	0,000	2.186,533	41.666,141
7+000	100	2,789	1.580,774			1,00	1,25	100,00%	0,000	2,789	2,789	-1.577,985	0,000	2.189,322	40.088,156
7+100	100	0,561	1.595,521			1,00	1,25	100,00%	0,000	0,561	0,561	-1.594,960	0,000	2.189,883	38.493,196
7+200	100	0,000	2.429,042			1,00	1,25	100,00%	0,000	0,000	0,000	-2.429,042	0,000	2.189,883	36.064,154
7+300	100	0,000	3.962,835			1,00	1,25	100,00%	0,000	0,000	0,000	-3.962,835	0,000	2.189,883	32.101,319
7+400	100	0,000	3.704,076			1,00	1,25	100,00%	0,000	0,000	0,000	-3.704,076	0,000	2.189,883	28.397,243
7+500	100	0,000	4.151,234			1,00	1,25	100,00%	0,000	0,000	0,000	-4.151,234	0,000	2.189,883	24.246,009
7+600	100	0,000	3.903,861			1,00	1,25	100,00%	0,000	0,000	0,000	-3.903,861	0,000	2.189,883	20.342,148
7+700	100	0,000	3.572,125			1,00	1,25	100,00%	0,000	0,000	0,000	-3.572,125	0,000	2.189,883	16.770,023
7+800	100	74,127	3.750,565			1,00	1,25	100,00%	0,000	74,127	74,127	-3.676,438	0,000	2.264,010	13.093,585
7+900	100	82,667	2.513,140			1,00	1,25	100,00%	0,000	82,667	82,667	-2.430,473	0,000	2.346,677	10.663,112
8+000	100	240,638	532,514			1,00	1,25	100,00%	0,000	240,638	240,638	-291,876	0,000	2.587,315	10.371,236
8+100	100	219,623	1.120,506			1,00	1,25	100,00%	0,000	219,623	219,623	-900,883	0,000	2.806,938	9.470,353
8+200	100	0,000	5.965,775			1,00	1,25	100,00%	0,000	0,000	0,000	-5.965,775	0,000	2.806,938	3.504,578
8+300	100	121,586	4.746,028			1,00	1,25	100,00%	0,000	121,586	121,586	-4.624,442	0,000	2.928,524	-1.119,864
8+400	100	42,150	2.063,549			1,00	1,25	100,00%	0,000	42,150	42,150	-2.021,399	0,000	2.970,674	-3.141,263
8+500	100	0,000	5.331,203			1,00	1,25	100,00%	0,000	0,000	0,000	-5.331,203	0,000	2.970,674	-8.472,466
8+600	100	0,000	8.826,548			1,00	1,25	100,00%	0,000	0,000	0,000	-8.826,548	0,000	2.970,674	-17.299,014
8+700	100	2.658,139	4.126,494			1,00	1,25	100,00%	0,000	2.658,139	2.658,139	-1.468,355	0,000	5.628,813	-18.767,369
8+800	100	6.191,881	0,000			1,00	1,25	100,00%	0,000	6.191,881	0,000	6.191,881	0,000	5.628,813	-12.575,488
8+900	100	10.164,731	0,000			1,00	1,25	100,00%	0,000	10.164,731	0,000	10.164,731	0,000	5.628,813	-2.410,757
9+000	100	19.306,791	0,000			1,00	1,25	100,00%	0,000	19.306,791	0,000	19.306,791	0,000	5.628,813	16.896,034
9+100	100	27.367,381	0,000			1,00	1,25	100,00%	0,000	27.367,381	0,000	27.367,381	0,000	5.628,813	44.263,415

ESTUDIO INFORMATIVO DEL CORREDOR CÁNTABRICO - MEDITERRÁNEO DE ALTA VELOCIDAD. TRAMO TERUEL - ZARAGOZA.

DIAGRAMA DE EQUILIBRIO DE MOVIMIENTOS DE TIERRAS

Alternativa 4.2

PK	d	PLATAFORMA		EXCAVACIÓN TÚNEL EN MINA		COEF. PASO		EXCAVACIÓN			COMPENS.	BALANCE	VOL. ACUMULADOS		
		EXCAV.	TERRAPLÉN	NOMBRE	EXCAV.	RELLENOS	VERTEDERO	% APROV	NO APROV.	APROV.	TRANS.		A VERTEDERO	COM.TRAN.	BALANCE
9+200	100	18.432,563	0,000			1,00	1,25	100,00%	0,000	18.432,563	0,000	18.432,563	0,000	5.628,813	62.695,978
9+300	100	284,259	235,438			1,00	1,25	100,00%	0,000	284,259	235,438	48,821	0,000	5.864,251	62.744,799
9+400	100	14.000,365	61,449			1,00	1,25	100,00%	0,000	14.000,365	61,449	13.938,916	0,000	5.925,700	76.683,715
9+500	100	40.665,834	0,000			1,00	1,25	100,00%	0,000	40.665,834	0,000	40.665,834	0,000	5.925,700	117.349,549
9+600	100	42.203,135	0,000			1,00	1,25	100,00%	0,000	42.203,135	0,000	42.203,135	0,000	5.925,700	159.552,684
9+700	100	7.860,553	3.637,261			1,00	1,25	100,00%	0,000	7.860,553	3.637,261	4.223,292	0,000	9.562,961	163.775,976
9+800	100	0,000	9.638,353			1,00	1,25	100,00%	0,000	0,000	0,000	-9.638,353	0,000	9.562,961	154.137,623
9+900	100	0,000	10.938,447			1,00	1,25	100,00%	0,000	0,000	0,000	-10.938,447	0,000	9.562,961	143.199,176
10+000	100	0,000	6.759,133			1,00	1,25	100,00%	0,000	0,000	0,000	-6.759,133	0,000	9.562,961	136.440,043
10+100	100	299,133	3.841,985			1,00	1,25	100,00%	0,000	299,133	299,133	-3.542,852	0,000	9.862,094	132.897,191
10+200	100	26.385,852	484,005			1,00	1,25	100,00%	0,000	26.385,852	484,005	25.901,847	0,000	10.346,099	158.799,038
10+300	100	44.430,558	0,000			1,00	1,25	100,00%	0,000	44.430,558	0,000	44.430,558	0,000	10.346,099	203.229,596
10+400	100	24.394,234	0,000			1,00	1,25	100,00%	0,000	24.394,234	0,000	24.394,234	0,000	10.346,099	227.623,830
10+500	100	6.904,449	0,000			1,00	1,25	100,00%	0,000	6.904,449	0,000	6.904,449	0,000	10.346,099	234.528,279
10+600	100	2.955,138	148,643			1,00	1,25	100,00%	0,000	2.955,138	148,643	2.806,495	0,000	10.494,742	237.334,774
10+700	100	1.257,274	116,900			1,00	1,25	100,00%	0,000	1.257,274	116,900	1.140,374	0,000	10.611,642	238.475,148
10+800	100	24,217	1.406,035			1,00	1,25	100,00%	0,000	24,217	24,217	-1.381,818	0,000	10.635,859	237.093,330
10+900	100	0,000	2.682,778			1,00	1,25	100,00%	0,000	0,000	0,000	-2.682,778	0,000	10.635,859	234.410,552
11+000	100	0,000	3.485,393			1,00	1,25	100,00%	0,000	0,000	0,000	-3.485,393	0,000	10.635,859	230.925,159
11+100	100	0,000	3.444,941			1,00	1,25	100,00%	0,000	0,000	0,000	-3.444,941	0,000	10.635,859	227.480,218
11+200	100	0,000	3.013,076			1,00	1,25	100,00%	0,000	0,000	0,000	-3.013,076	0,000	10.635,859	224.467,142
11+300	100	0,000	3.515,171			1,00	1,25	100,00%	0,000	0,000	0,000	-3.515,171	0,000	10.635,859	220.951,971
11+400	100	0,000	3.681,226			1,00	1,25	100,00%	0,000	0,000	0,000	-3.681,226	0,000	10.635,859	217.270,745
11+500	100	0,000	3.984,762			1,00	1,25	100,00%	0,000	0,000	0,000	-3.984,762	0,000	10.635,859	213.285,983
11+600	100	10,078	3.995,771			1,00	1,25	100,00%	0,000	10,078	10,078	-3.985,693	0,000	10.645,937	209.300,290
11+700	100	24,503	5.176,173			1,00	1,25	100,00%	0,000	24,503	24,503	-5.151,670	0,000	10.670,440	204.148,620
11+800	100	25,008	10.177,310			1,00	1,25	100,00%	0,000	25,008	25,008	-10.152,302	0,000	10.695,448	193.996,318
11+900	100	24,394	14.621,019			1,00	1,25	100,00%	0,000	24,394	24,394	-14.596,625	0,000	10.719,842	179.399,693
12+000	100	4,866	19.534,111			1,00	1,25	100,00%	0,000	4,866	4,866	-19.529,245	0,000	10.724,708	159.870,448
12+100	100	0,000	19.196,004			1,00	1,25	100,00%	0,000	0,000	0,000	-19.196,004	0,000	10.724,708	140.674,444
12+200	100	0,000	19.086,551			1,00	1,25	100,00%	0,000	0,000	0,000	-19.086,551	0,000	10.724,708	121.587,893
12+300	100	0,000	14.982,779			1,00	1,25	100,00%	0,000	0,000	0,000	-14.982,779	0,000	10.724,708	106.605,114
12+400	100	0,000	17.173,798			1,00	1,25	100,00%	0,000	0,000	0,000	-17.173,798	0,000	10.724,708	89.431,316
12+500	100	0,000	25.978,821			1,00	1,25	100,00%	0,000	0,000	0,000	-25.978,821	0,000	10.724,708	63.452,495
12+600	100	0,000	24.144,083			1,00	1,25	100,00%	0,000	0,000	0,000	-24.144,083	0,000	10.724,708	39.308,412
12+700	100	0,000	22.816,430			1,00	1,25	100,00%	0,000	0,000	0,000	-22.816,430	0,000	10.724,708	16.491,982
12+800	100	0,000	21.441,425			1,00	1,25	100,00%	0,000	0,000	0,000	-21.441,425	0,000	10.724,708	-4.949,443
12+900	100	0,000	16.875,372			1,00	1,25	100,00%	0,000	0,000	0,000	-16.875,372	0,000	10.724,708	-21.824,815
13+000	100	0,000	13.667,920			1,00	1,25	100,00%	0,000	0,000	0,000	-13.667,920	0,000	10.724,708	-35.492,735
13+100	100	0,000	0,000			1,00	1,25	100,00%	0,000	0,000	0,000	0,000	0,000	10.724,708	-35.492,735
13+200	100	0,000	0,000			1,00	1,25	100,00%	0,000	0,000	0,000	0,000	0,000	10.724,708	-35.492,735
13+300	100	0,000	0,000			1,00	1,25	100,00%	0,000	0,000	0,000	0,000	0,000	10.724,708	-35.492,735
13+400	100	0,000	0,000			1,00	1,25	100,00%	0,000	0,000	0,000	0,000	0,000	10.724,708	-35.492,735
13+500	100	0,000	0,000			1,00	1,25	100,00%	0,000	0,000	0,000	0,000	0,000	10.724,708	-35.492,735
13+600	100	0,000	0,000			1,00	1,25	100,00%	0,000	0,000	0,000	0,000	0,000	10.724,708	-35.492,735
13+700	100	0,000	0,000			1,00	1,25	100,00%	0,000	0,000	0,000	0,000	0,000	10.724,708	-35.492,735
13+800	100	0,000	0,000			1,00	1,25	100,00%	0,000	0,000	0,000	0,000	0,000	10.724,708	-35.492,735
13+900	100	0,000	25.325,184			1,00	1,25	100,00%	0,000	0,000	0,000	-25.325,184	0,000	10.724,708	-60.817,919
14+000	100	0,000	10.609,638			1,00	1,25	100,00%	0,000	0,000	0,000	-10.609,638	0,000	10.724,708	-71.427,557
14+100	100	374,624	2.055,007			1,00	1,25	100,00%	0,000	374,624	374,624	-1.680,383	0,000	11.099,332	-73.107,940
14+200	100	26.626,848	0,000			1,00	1,25	100,00%	0,000	26.626,848	0,000	26.626,848	0,000	11.099,332	-46.481,092
14+300	100	73.526,906	0,000			1,00	1,25	100,00%	0,000	73.526,906	0,000	73.526,906	0,000	11.099,332	27.045,814

ESTUDIO INFORMATIVO DEL CORREDOR CÁNTABRICO - MEDITERRÁNEO DE ALTA VELOCIDAD. TRAMO TERUEL - ZARAGOZA.

DIAGRAMA DE EQUILIBRIO DE MOVIMIENTOS DE TIERRAS

Alternativa 4.2

PK	d	PLATAFORMA		EXCAVACIÓN TÚNEL EN MINA		COEF. PASO		EXCAVACIÓN			COMPENS.	BALANCE	VOL. ACUMULADOS		
		EXCAV.	TERRAPLÉN	NOMBRE	EXCAV.	RELLENOS	VERTEDERO	% APROV	NO APROV.	APROV.	TRANS.		A VERTEDERO	COM.TRAN.	BALANCE
14+400	100	40.610,402	0,000		10.833,290	1,00	1,25	100,00%	0,000	51.443,692	0,000	51.443,692	0,000	11.099,332	78.489,506
14+500	100	0,000	0,000		16.666,600	1,00	1,25	100,00%	0,000	16.666,600	0,000	16.666,600	0,000	11.099,332	95.156,106
14+600	100	0,000	0,000		16.666,600	1,00	1,25	100,00%	0,000	16.666,600	0,000	16.666,600	0,000	11.099,332	111.822,706
14+700	100	0,000	0,000		16.666,600	1,00	1,25	100,00%	0,000	16.666,600	0,000	16.666,600	0,000	11.099,332	128.489,306
14+800	100	0,000	0,000		16.666,600	1,00	1,25	100,00%	0,000	16.666,600	0,000	16.666,600	0,000	11.099,332	145.155,906
14+900	100	0,000	0,000		16.666,600	1,00	1,25	100,00%	0,000	16.666,600	0,000	16.666,600	0,000	11.099,332	161.822,506
15+000	100	0,000	0,000		16.666,600	1,00	1,25	100,00%	0,000	16.666,600	0,000	16.666,600	0,000	11.099,332	178.489,106
15+100	100	0,000	0,000		16.666,600	1,00	1,25	100,00%	0,000	16.666,600	0,000	16.666,600	0,000	11.099,332	195.155,706
15+200	100	0,000	0,000		16.666,600	1,00	1,25	100,00%	0,000	16.666,600	0,000	16.666,600	0,000	11.099,332	211.822,306
15+300	100	0,000	0,000		16.666,600	1,00	1,25	100,00%	0,000	16.666,600	0,000	16.666,600	0,000	11.099,332	228.488,906
15+400	100	0,000	0,000		16.666,600	1,00	1,25	100,00%	0,000	16.666,600	0,000	16.666,600	0,000	11.099,332	245.155,506
15+500	100	47.462,793	0,000		6.666,640	1,00	1,25	100,00%	0,000	54.129,433	0,000	54.129,433	0,000	11.099,332	299.284,939
15+600	100	25.361,576	0,000			1,00	1,25	100,00%	0,000	25.361,576	0,000	25.361,576	0,000	11.099,332	324.646,515
15+700	100	354,743	9.710,849			1,00	1,25	100,00%	0,000	354,743	354,743	-9.356,106	0,000	11.454,075	315.290,409
15+800	100	0,000	0,000			1,00	1,25	100,00%	0,000	0,000	0,000	0,000	0,000	11.454,075	315.290,409
15+900	100	0,000	0,000			1,00	1,25	100,00%	0,000	0,000	0,000	0,000	0,000	11.454,075	315.290,409
16+000	100	0,000	0,000			1,00	1,25	100,00%	0,000	0,000	0,000	0,000	0,000	11.454,075	315.290,409
16+100	100	0,000	0,000			1,00	1,25	100,00%	0,000	0,000	0,000	0,000	0,000	11.454,075	315.290,409
16+200	100	2.168,179	1.018,558			1,00	1,25	100,00%	0,000	2.168,179	1.018,558	1.149,621	0,000	12.472,633	316.440,030
16+300	100	2.734,839	630,614			1,00	1,25	100,00%	0,000	2.734,839	630,614	2.104,225	0,000	13.103,247	318.544,255
16+400	100	5.807,505	57,975			1,00	1,25	100,00%	0,000	5.807,505	57,975	5.749,530	0,000	13.161,222	324.293,785
16+500	100	9.535,871	0,000			1,00	1,25	100,00%	0,000	9.535,871	0,000	9.535,871	0,000	13.161,222	333.829,656
16+600	100	6.928,469	76,514			1,00	1,25	100,00%	0,000	6.928,469	76,514	6.851,955	0,000	13.237,736	340.681,611
16+700	100	8.225,724	186,854			1,00	1,25	100,00%	0,000	8.225,724	186,854	8.038,870	0,000	13.424,590	348.720,481
16+800	100	15.099,602	0,000			1,00	1,25	100,00%	0,000	15.099,602	0,000	15.099,602	0,000	13.424,590	363.820,083
16+900	100	9.069,821	153,601			1,00	1,25	100,00%	0,000	9.069,821	153,601	8.916,220	0,000	13.578,191	372.736,303
17+000	100	12.440,435	162,743			1,00	1,25	100,00%	0,000	12.440,435	162,743	12.277,692	0,000	13.740,934	385.013,995
17+100	100	6.322,493	638,437			1,00	1,25	100,00%	0,000	6.322,493	638,437	5.684,056	0,000	14.379,371	390.698,051
17+200	100	16.613,064	1,289			1,00	1,25	100,00%	0,000	16.613,064	1,289	16.611,775	0,000	14.380,660	407.309,826
17+300	100	833,000	8.213,770			1,00	1,25	100,00%	0,000	833,000	833,000	-7.380,770	0,000	15.213,660	399.929,056
17+400	100	0,000	22.978,992			1,00	1,25	100,00%	0,000	0,000	0,000	-22.978,992	0,000	15.213,660	376.950,064
17+500	100	0,000	22.572,136			1,00	1,25	100,00%	0,000	0,000	0,000	-22.572,136	0,000	15.213,660	354.377,928
17+600	100	0,000	0,000			1,00	1,25	100,00%	0,000	0,000	0,000	0,000	0,000	15.213,660	354.377,928
17+700	100	0,000	0,000			1,00	1,25	100,00%	0,000	0,000	0,000	0,000	0,000	15.213,660	354.377,928
17+800	100	0,000	0,000			1,00	1,25	100,00%	0,000	0,000	0,000	0,000	0,000	15.213,660	354.377,928
17+900	100	0,000	0,000			1,00	1,25	100,00%	0,000	0,000	0,000	0,000	0,000	15.213,660	354.377,928
18+000	100	0,000	0,000			1,00	1,25	100,00%	0,000	0,000	0,000	0,000	0,000	15.213,660	354.377,928
18+100	100	0,000	0,000			1,00	1,25	100,00%	0,000	0,000	0,000	0,000	0,000	15.213,660	354.377,928
18+200	100	0,000	0,000			1,00	1,25	100,00%	0,000	0,000	0,000	0,000	0,000	15.213,660	354.377,928
18+300	100	0,000	0,000			1,00	1,25	100,00%	0,000	0,000	0,000	0,000	0,000	15.213,660	354.377,928
18+400	100	0,000	27.444,474			1,00	1,25	100,00%	0,000	0,000	0,000	-27.444,474	0,000	15.213,660	326.933,454
18+500	100	0,000	19.296,380			1,00	1,25	100,00%	0,000	0,000	0,000	-19.296,380	0,000	15.213,660	307.637,074
18+600	100	0,000	21.285,099			1,00	1,25	100,00%	0,000	0,000	0,000	-21.285,099	0,000	15.213,660	286.351,975
18+700	100	0,000	11.273,954			1,00	1,25	100,00%	0,000	0,000	0,000	-11.273,954	0,000	15.213,660	275.078,021
18+800	100	0,000	12.181,455			1,00	1,25	100,00%	0,000	0,000	0,000	-12.181,455	0,000	15.213,660	262.896,566
18+900	100	1.359,741	10.140,496			1,00	1,25	100,00%	0,000	1.359,741	1.359,741	-8.780,755	0,000	16.573,401	254.115,811
19+000	100	3.194,175	173,744			1,00	1,25	100,00%	0,000	3.194,175	173,744	3.020,431	0,000	16.747,145	257.136,242
19+027	27	2.682,727	0,000			1,00	1,25	100,00%	0,000	2.682,727	0,000	2.682,727	0,000	16.747,145	259.818,969
TOTAL		**704.710,316**	**629.057,277**		**184.165,930**				**0,000**	**888.876,246**	**16.747,145**	**259.818,969**			

ESTUDIO INFORMATIVO DEL CORREDOR CÁNTABRICO - MEDITERRÁNEO DE ALTA VELOCIDAD. TRAMO TERUEL - ZARAGOZA.

DIAGRAMA DE EQUILIBRIO DE MOVIMIENTOS DE TIERRAS

Alternativa 4.3

PK	d	PLATAFORMA		EXCAVACIÓN TÚNEL EN MINA		COEF. PASO		EXCAVACIÓN			COMPENS.	BALANCE	VOL. ACUMULADOS		
		EXCAV.	TERRAPLÉN	NOMBRE	EXCAV.	RELLENOS	VERTEDERO	% APROV	NO APROV.	APROV.	TRANS.		A VERTEDERO	COM.TRAN.	BALANCE
4+000		0,000	0,000			1,00	1,25	100,00%	0,000	0,000	0,000	0,000	0,000	0,000	0,000
4+100	100	1.794,768	21,150			1,00	1,25	100,00%	0,000	1.794,768	21,150	1.773,618	0,000	21,150	1.773,618
4+200	100	1.655,124	0,000			1,00	1,25	100,00%	0,000	1.655,124	0,000	1.655,124	0,000	21,150	3.428,742
4+300	100	1.416,977	6,496			1,00	1,25	100,00%	0,000	1.416,977	6,496	1.410,481	0,000	27,646	4.839,223
4+400	100	214,716	1.510,243			1,00	1,25	100,00%	0,000	214,716	214,716	-1.295,527	0,000	242,362	3.543,696
4+500	100	0,000	9.956,882			1,00	1,25	100,00%	0,000	0,000	0,000	-9.956,882	0,000	242,362	-6.413,186
4+600	100	0,000	5.949,233			1,00	1,25	100,00%	0,000	0,000	0,000	-5.949,233	0,000	242,362	-12.362,419
4+700	100	0,000	4.482,720			1,00	1,25	100,00%	0,000	0,000	0,000	-4.482,720	0,000	242,362	-16.845,139
4+800	100	0,000	4.162,621			1,00	1,25	100,00%	0,000	0,000	0,000	-4.162,621	0,000	242,362	-21.007,760
4+900	100	0,000	3.028,871			1,00	1,25	100,00%	0,000	0,000	0,000	-3.028,871	0,000	242,362	-24.036,631
5+000	100	340,601	854,035			1,00	1,25	100,00%	0,000	340,601	340,601	-513,434	0,000	582,963	-24.550,065
5+100	100	3.765,933	0,000			1,00	1,25	100,00%	0,000	3.765,933	0,000	3.765,933	0,000	582,963	-20.784,132
5+200	100	4.848,421	0,000			1,00	1,25	100,00%	0,000	4.848,421	0,000	4.848,421	0,000	582,963	-15.935,711
5+300	100	4.175,510	0,000			1,00	1,25	100,00%	0,000	4.175,510	0,000	4.175,510	0,000	582,963	-11.760,201
5+400	100	7.982,758	0,000			1,00	1,25	100,00%	0,000	7.982,758	0,000	7.982,758	0,000	582,963	-3.777,443
5+500	100	9.768,829	0,000			1,00	1,25	100,00%	0,000	9.768,829	0,000	9.768,829	0,000	582,963	5.991,386
5+600	100	12.463,539	0,000			1,00	1,25	100,00%	0,000	12.463,539	0,000	12.463,539	0,000	582,963	18.454,925
5+700	100	11.727,884	0,000			1,00	1,25	100,00%	0,000	11.727,884	0,000	11.727,884	0,000	582,963	30.182,809
5+800	100	7.740,600	0,000			1,00	1,25	100,00%	0,000	7.740,600	0,000	7.740,600	0,000	582,963	37.923,409
5+900	100	10.273,211	0,000			1,00	1,25	100,00%	0,000	10.273,211	0,000	10.273,211	0,000	582,963	48.196,620
6+000	100	10.312,599	0,000			1,00	1,25	100,00%	0,000	10.312,599	0,000	10.312,599	0,000	582,963	58.509,219
6+100	100	3.481,421	142,749			1,00	1,25	100,00%	0,000	3.481,421	142,749	3.338,672	0,000	725,712	61.847,891
6+200	100	1.424,310	75,160			1,00	1,25	100,00%	0,000	1.424,310	75,160	1.349,150	0,000	800,872	63.197,041
6+300	100	818,191	12,045			1,00	1,25	100,00%	0,000	818,191	12,045	806,146	0,000	812,917	64.003,187
6+400	100	74,463	2.473,480			1,00	1,25	100,00%	0,000	74,463	74,463	-2.399,017	0,000	887,380	61.604,170
6+500	100	0,000	5.705,808			1,00	1,25	100,00%	0,000	0,000	0,000	-5.705,808	0,000	887,380	55.898,362
6+600	100	22,084	4.130,350			1,00	1,25	100,00%	0,000	22,084	22,084	-4.108,266	0,000	909,464	51.790,096
6+700	100	28,156	1.753,677			1,00	1,25	100,00%	0,000	28,156	28,156	-1.725,521	0,000	937,620	50.064,575
6+800	100	0,000	2.020,618			1,00	1,25	100,00%	0,000	0,000	0,000	-2.020,618	0,000	937,620	48.043,957
6+900	100	0,000	2.379,851			1,00	1,25	100,00%	0,000	0,000	0,000	-2.379,851	0,000	937,620	45.664,106
7+000	100	0,000	4.506,518			1,00	1,25	100,00%	0,000	0,000	0,000	-4.506,518	0,000	937,620	41.157,588
7+100	100	0,000	7.876,456			1,00	1,25	100,00%	0,000	0,000	0,000	-7.876,456	0,000	937,620	33.281,132
7+200	100	0,000	13.937,658			1,00	1,25	100,00%	0,000	0,000	0,000	-13.937,658	0,000	937,620	19.343,474
7+300	100	0,000	19.208,693			1,00	1,25	100,00%	0,000	0,000	0,000	-19.208,693	0,000	937,620	134,781
7+400	100	0,000	9.882,219			1,00	1,25	100,00%	0,000	0,000	0,000	-9.882,219	0,000	937,620	-9.747,438
7+500	100	0,000	0,000			1,00	1,25	100,00%	0,000	0,000	0,000	0,000	0,000	937,620	-9.747,438
7+600	100	0,000	0,000			1,00	1,25	100,00%	0,000	0,000	0,000	0,000	0,000	937,620	-9.747,438
7+700	100	0,000	0,000			1,00	1,25	100,00%	0,000	0,000	0,000	0,000	0,000	937,620	-9.747,438
7+800	100	0,000	3.689,106			1,00	1,25	100,00%	0,000	0,000	0,000	-3.689,106	0,000	937,620	-13.436,544
7+900	100	0,000	34.421,261			1,00	1,25	100,00%	0,000	0,000	0,000	-34.421,261	0,000	937,620	-47.857,805
8+000	100	0,000	32.929,801			1,00	1,25	100,00%	0,000	0,000	0,000	-32.929,801	0,000	937,620	-80.787,606
8+100	100	0,000	27.446,984			1,00	1,25	100,00%	0,000	0,000	0,000	-27.446,984	0,000	937,620	-108.234,590
8+200	100	0,000	26.952,869			1,00	1,25	100,00%	0,000	0,000	0,000	-26.952,869	0,000	937,620	-135.187,459
8+300	100	0,000	20.304,471			1,00	1,25	100,00%	0,000	0,000	0,000	-20.304,471	0,000	937,620	-155.491,930
8+400	100	0,000	16.518,132			1,00	1,25	100,00%	0,000	0,000	0,000	-16.518,132	0,000	937,620	-172.010,062
8+500	100	0,000	11.278,651			1,00	1,25	100,00%	0,000	0,000	0,000	-11.278,651	0,000	937,620	-183.288,713
8+600	100	0,000	6.926,533			1,00	1,25	100,00%	0,000	0,000	0,000	-6.926,533	0,000	937,620	-190.215,246
8+700	100	0,000	2.585,122			1,00	1,25	100,00%	0,000	0,000	0,000	-2.585,122	0,000	937,620	-192.800,368
8+800	100	0,337	1.493,646			1,00	1,25	100,00%	0,000	0,337	0,337	-1.493,309	0,000	937,957	-194.293,677
8+900	100	26,970	1.031,489			1,00	1,25	100,00%	0,000	26,970	26,970	-1.004,519	0,000	964,927	-195.298,196
9+000	100	1.735,255	13,213			1,00	1,25	100,00%	0,000	1.735,255	13,213	1.722,042	0,000	978,140	-193.576,154
9+100	100	307,213	2.613,079			1,00	1,25	100,00%	0,000	307,213	307,213	-2.305,866	0,000	1.285,353	-195.882,020

ESTUDIO INFORMATIVO DEL CORREDOR CÁNTABRICO - MEDITERRÁNEO DE ALTA VELOCIDAD. TRAMO TERUEL - ZARAGOZA.

DIAGRAMA DE EQUILIBRIO DE MOVIMIENTOS DE TIERRAS

Alternativa 4.3

PK	d	PLATAFORMA		EXCAVACIÓN TÚNEL EN MINA		COEF. PASO		EXCAVACIÓN			COMPENS.	BALANCE	VOL. ACUMULADOS		
		EXCAV.	TERRAPLÉN	NOMBRE	EXCAV.	RELLENOS	VERTEDERO	% APROV	NO APROV.	APROV.	TRANS.		A VERTEDERO	COM.TRAN.	BALANCE
9+200	100	0,000	7.604,024			1,00	1,25	100,00%	0,000	0,000	0,000	-7.604,024	0,000	1.285,353	-203.486,044
9+300	100	0,000	10.387,871			1,00	1,25	100,00%	0,000	0,000	0,000	-10.387,871	0,000	1.285,353	-213.873,915
9+400	100	0,000	15.714,871			1,00	1,25	100,00%	0,000	0,000	0,000	-15.714,871	0,000	1.285,353	-229.588,786
9+500	100	0,000	14.287,123			1,00	1,25	100,00%	0,000	0,000	0,000	-14.287,123	0,000	1.285,353	-243.875,909
9+600	100	0,000	11.847,836			1,00	1,25	100,00%	0,000	0,000	0,000	-11.847,836	0,000	1.285,353	-255.723,745
9+700	100	0,000	10.836,560			1,00	1,25	100,00%	0,000	0,000	0,000	-10.836,560	0,000	1.285,353	-266.560,305
9+800	100	0,000	10.144,158			1,00	1,25	100,00%	0,000	0,000	0,000	-10.144,158	0,000	1.285,353	-276.704,463
9+900	100	0,000	10.299,949			1,00	1,25	100,00%	0,000	0,000	0,000	-10.299,949	0,000	1.285,353	-287.004,412
10+000	100	0,000	12.210,881			1,00	1,25	100,00%	0,000	0,000	0,000	-12.210,881	0,000	1.285,353	-299.215,293
10+100	100	0,000	21.268,041			1,00	1,25	100,00%	0,000	0,000	0,000	-21.268,041	0,000	1.285,353	-320.483,334
10+200	100	0,000	25.866,706			1,00	1,25	100,00%	0,000	0,000	0,000	-25.866,706	0,000	1.285,353	-346.350,040
10+300	100	87,702	6.959,023			1,00	1,25	100,00%	0,000	87,702	87,702	-6.871,321	0,000	1.373,055	-353.221,361
10+400	100	344,660	305,202			1,00	1,25	100,00%	0,000	344,660	305,202	39,458	0,000	1.678,257	-353.181,903
10+500	100	492,841	810,434			1,00	1,25	100,00%	0,000	492,841	492,841	-317,593	0,000	2.171,098	-353.499,496
10+600	100	934,208	1.182,811			1,00	1,25	100,00%	0,000	934,208	934,208	-248,603	0,000	3.105,306	-353.748,099
10+700	100	1.522,627	0,000			1,00	1,25	100,00%	0,000	1.522,627	0,000	1.522,627	0,000	3.105,306	-352.225,472
10+800	100	1.638,662	0,000			1,00	1,25	100,00%	0,000	1.638,662	0,000	1.638,662	0,000	3.105,306	-350.586,810
10+900	100	1.701,947	0,000			1,00	1,25	100,00%	0,000	1.701,947	0,000	1.701,947	0,000	3.105,306	-348.884,863
11+000	100	1.795,755	0,000			1,00	1,25	100,00%	0,000	1.795,755	0,000	1.795,755	0,000	3.105,306	-347.089,108
11+100	100	1.648,433	0,000			1,00	1,25	100,00%	0,000	1.648,433	0,000	1.648,433	0,000	3.105,306	-345.440,675
11+200	100	1.762,710	0,000			1,00	1,25	100,00%	0,000	1.762,710	0,000	1.762,710	0,000	3.105,306	-343.677,965
11+300	100	1.721,590	0,000			1,00	1,25	100,00%	0,000	1.721,590	0,000	1.721,590	0,000	3.105,306	-341.956,375
11+400	100	647,127	1,878			1,00	1,25	100,00%	0,000	647,127	1,878	645,249	0,000	3.107,184	-341.311,126
11+500	100	1.201,418	0,000			1,00	1,25	100,00%	0,000	1.201,418	0,000	1.201,418	0,000	3.107,184	-340.109,708
11+600	100	763,397	0,000			1,00	1,25	100,00%	0,000	763,397	0,000	763,397	0,000	3.107,184	-339.346,311
11+700	100	1.422,634	0,000			1,00	1,25	100,00%	0,000	1.422,634	0,000	1.422,634	0,000	3.107,184	-337.923,677
11+800	100	1.086,192	196,383			1,00	1,25	100,00%	0,000	1.086,192	196,383	889,809	0,000	3.303,567	-337.033,868
11+900	100	765,294	147,092			1,00	1,25	100,00%	0,000	765,294	147,092	618,202	0,000	3.450,659	-336.415,666
12+000	100	948,558	1,508			1,00	1,25	100,00%	0,000	948,558	1,508	947,050	0,000	3.452,167	-335.468,616
12+100	100	964,664	15,531			1,00	1,25	100,00%	0,000	964,664	15,531	949,133	0,000	3.467,698	-334.519,483
12+200	100	1.461,417	0,000			1,00	1,25	100,00%	0,000	1.461,417	0,000	1.461,417	0,000	3.467,698	-333.058,066
12+300	100	1.584,631	0,000			1,00	1,25	100,00%	0,000	1.584,631	0,000	1.584,631	0,000	3.467,698	-331.473,435
12+400	100	1.236,669	0,000			1,00	1,25	100,00%	0,000	1.236,669	0,000	1.236,669	0,000	3.467,698	-330.236,766
12+500	100	1.296,257	0,000			1,00	1,25	100,00%	0,000	1.296,257	0,000	1.296,257	0,000	3.467,698	-328.940,509
12+600	100	2.646,875	0,000			1,00	1,25	100,00%	0,000	2.646,875	0,000	2.646,875	0,000	3.467,698	-326.293,634
12+700	100	607,001	0,003			1,00	1,25	100,00%	0,000	607,001	0,003	606,998	0,000	3.467,701	-325.686,636
12+800	100	2.108,316	0,004			1,00	1,25	100,00%	0,000	2.108,316	0,004	2.108,312	0,000	3.467,705	-323.578,324
12+900	100	3.920,896	6,307			1,00	1,25	100,00%	0,000	3.920,896	6,307	3.914,589	0,000	3.474,012	-319.663,735
13+000	100	3.889,875	0,024			1,00	1,25	100,00%	0,000	3.889,875	0,024	3.889,851	0,000	3.474,036	-315.773,884
13+100	100	2.632,700	116,086			1,00	1,25	100,00%	0,000	2.632,700	116,086	2.516,614	0,000	3.590,122	-313.257,270
13+200	100	4.529,258	21,189			1,00	1,25	100,00%	0,000	4.529,258	21,189	4.508,069	0,000	3.611,311	-308.749,201
13+300	100	9.358,618	0,020			1,00	1,25	100,00%	0,000	9.358,618	0,020	9.358,598	0,000	3.611,331	-299.390,603
13+400	100	26.170,382	0,000			1,00	1,25	100,00%	0,000	26.170,382	0,000	26.170,382	0,000	3.611,331	-273.220,221
13+500	100	63.937,405	0,000		5.833,310	1,00	1,25	100,00%	0,000	69.770,715	0,000	69.770,715	0,000	3.611,331	-203.449,506
13+600	100	0,000	0,000		16.666,600	1,00	1,25	100,00%	0,000	16.666,600	0,000	16.666,600	0,000	3.611,331	-186.782,906
13+700	100	0,000	0,000		16.666,600	1,00	1,25	100,00%	0,000	16.666,600	0,000	16.666,600	0,000	3.611,331	-170.116,306
13+800	100	0,000	0,000		16.666,600	1,00	1,25	100,00%	0,000	16.666,600	0,000	16.666,600	0,000	3.611,331	-153.449,706
13+900	100	0,000	0,000		16.666,600	1,00	1,25	100,00%	0,000	16.666,600	0,000	16.666,600	0,000	3.611,331	-136.783,106
14+000	100	0,000	0,000		16.666,600	1,00	1,25	100,00%	0,000	16.666,600	0,000	16.666,600	0,000	3.611,331	-120.116,506
14+100	100	0,000	0,000		16.666,600	1,00	1,25	100,00%	0,000	16.666,600	0,000	16.666,600	0,000	3.611,331	-103.449,906
14+200	100	0,000	0,000		2.499,990	1,00	1,25	100,00%	0,000	2.499,990	0,000	2.499,990	0,000	3.611,331	-100.949,916
14+300	100	0,000	0,000			1,00	1,25	100,00%	0,000	0,000	0,000	0,000	0,000	3.611,331	-100.949,916

ESTUDIO INFORMATIVO DEL CORREDOR CÁNTABRICO - MEDITERRÁNEO DE ALTA VELOCIDAD. TRAMO TERUEL - ZARAGOZA.

DIAGRAMA DE EQUILIBRIO DE MOVIMIENTOS DE TIERRAS

Alternativa 4.3

PK	d	PLATAFORMA		EXCAVACIÓN TÚNEL EN MINA		COEF. PASO		EXCAVACIÓN			COMPENS.	BALANCE	VOL. ACUMULADOS		
		EXCAV.	TERRAPLÉN	NOMBRE	EXCAV.	RELLENOS	VERTEDERO	% APROV	NO APROV.	APROV.	TRANS.		A VERTEDERO	COM.TRAN.	BALANCE
14+400	100	12.107,688	0,000			1,00	1,25	100,00%	0,000	12.107,688	0,000	12.107,688	0,000	3.611,331	-88.842,228
14+500	100	53.551,357	0,000			1,00	1,25	100,00%	0,000	53.551,357	0,000	53.551,357	0,000	3.611,331	-35.290,871
14+600	100	17.335,623	0,000			1,00	1,25	100,00%	0,000	17.335,623	0,000	17.335,623	0,000	3.611,331	-17.955,248
14+700	100	1.604,307	179,566			1,00	1,25	100,00%	0,000	1.604,307	179,566	1.424,741	0,000	3.790,897	-16.530,507
14+800	100	17.580,631	18,747			1,00	1,25	100,00%	0,000	17.580,631	18,747	17.561,884	0,000	3.809,644	1.031,377
14+900	100	46,033	5.176,903			1,00	1,25	100,00%	0,000	46,033	46,033	-5.130,870	0,000	3.855,677	-4.099,493
15+000	100	0,000	11.923,252			1,00	1,25	100,00%	0,000	0,000	0,000	-11.923,252	0,000	3.855,677	-16.022,745
15+100	100	0,000	14.442,064			1,00	1,25	100,00%	0,000	0,000	0,000	-14.442,064	0,000	3.855,677	-30.464,809
15+200	100	0,000	22.359,938			1,00	1,25	100,00%	0,000	0,000	0,000	-22.359,938	0,000	3.855,677	-52.824,747
15+300	100	0,000	13.120,285			1,00	1,25	100,00%	0,000	0,000	0,000	-13.120,285	0,000	3.855,677	-65.945,032
15+400	100	0,000	0,000			1,00	1,25	100,00%	0,000	0,000	0,000	0,000	0,000	3.855,677	-65.945,032
15+500	100	0,000	0,000			1,00	1,25	100,00%	0,000	0,000	0,000	0,000	0,000	3.855,677	-65.945,032
15+600	100	0,000	0,000			1,00	1,25	100,00%	0,000	0,000	0,000	0,000	0,000	3.855,677	-65.945,032
15+700	100	0,000	0,000			1,00	1,25	100,00%	0,000	0,000	0,000	0,000	0,000	3.855,677	-65.945,032
15+800	100	0,000	0,000			1,00	1,25	100,00%	0,000	0,000	0,000	0,000	0,000	3.855,677	-65.945,032
15+900	100	0,000	0,000			1,00	1,25	100,00%	0,000	0,000	0,000	0,000	0,000	3.855,677	-65.945,032
16+000	100	0,000	0,000			1,00	1,25	100,00%	0,000	0,000	0,000	0,000	0,000	3.855,677	-65.945,032
16+100	100	0,000	0,000			1,00	1,25	100,00%	0,000	0,000	0,000	0,000	0,000	3.855,677	-65.945,032
16+200	100	0,000	0,000			1,00	1,25	100,00%	0,000	0,000	0,000	0,000	0,000	3.855,677	-65.945,032
16+300	100	0,000	5.239,070			1,00	1,25	100,00%	0,000	0,000	0,000	-5.239,070	0,000	3.855,677	-71.184,102
16+400	100	0,000	14.634,190			1,00	1,25	100,00%	0,000	0,000	0,000	-14.634,190	0,000	3.855,677	-85.818,292
16+500	100	0,000	31.231,815			1,00	1,25	100,00%	0,000	0,000	0,000	-31.231,815	0,000	3.855,677	-117.050,107
16+600	100	354,056	11.626,131			1,00	1,25	100,00%	0,000	354,056	354,056	-11.272,075	0,000	4.209,733	-128.322,182
16+700	100	11.619,738	4.068,263			1,00	1,25	100,00%	0,000	11.619,738	4.068,263	7.551,475	0,000	8.277,996	-120.770,707
16+800	100	5.417,990	9.520,534			1,00	1,25	100,00%	0,000	5.417,990	5.417,990	-4.102,544	0,000	13.695,986	-124.873,251
16+900	100	37.128,564	1.231,243			1,00	1,25	100,00%	0,000	37.128,564	1.231,243	35.897,321	0,000	14.927,229	-88.975,930
17+000	100	59.561,207	0,000			1,00	1,25	100,00%	0,000	59.561,207	0,000	59.561,207	0,000	14.927,229	-29.414,723
17+100	100	45.940,364	0,000			1,00	1,25	100,00%	0,000	45.940,364	0,000	45.940,364	0,000	14.927,229	16.525,641
17+200	100	94.369,594	0,000			1,00	1,25	100,00%	0,000	94.369,594	0,000	94.369,594	0,000	14.927,229	110.895,235
17+300	100	102.841,312	0,000			1,00	1,25	100,00%	0,000	102.841,312	0,000	102.841,312	0,000	14.927,229	213.736,547
17+400	100	129.925,810	0,000			1,00	1,25	100,00%	0,000	129.925,810	0,000	129.925,810	0,000	14.927,229	343.662,357
17+500	100	131.980,598	0,000			1,00	1,25	100,00%	0,000	131.980,598	0,000	131.980,598	0,000	14.927,229	475.642,955
17+600	100	99.700,155	0,000			1,00	1,25	100,00%	0,000	99.700,155	0,000	99.700,155	0,000	14.927,229	575.343,110
17+700	100	29.062,871	988,781			1,00	1,25	100,00%	0,000	29.062,871	988,781	28.074,090	0,000	15.916,010	603.417,200
17+800	100	12.655,673	2.331,849			1,00	1,25	100,00%	0,000	12.655,673	2.331,849	10.323,824	0,000	18.247,859	613.741,024
17+900	100	1.481,247	19.586,886			1,00	1,25	100,00%	0,000	1.481,247	1.481,247	-18.105,639	0,000	19.729,106	595.635,385
18+000	100	68,482	15.784,584			1,00	1,25	100,00%	0,000	68,482	68,482	-15.716,102	0,000	19.797,588	579.919,283
18+100	100	0,000	0,000			1,00	1,25	100,00%	0,000	0,000	0,000	0,000	0,000	19.797,588	579.919,283
18+200	100	0,000	0,000			1,00	1,25	100,00%	0,000	0,000	0,000	0,000	0,000	19.797,588	579.919,283
18+300	100	0,000	0,000			1,00	1,25	100,00%	0,000	0,000	0,000	0,000	0,000	19.797,588	579.919,283
18+400	100	0,000	0,000			1,00	1,25	100,00%	0,000	0,000	0,000	0,000	0,000	19.797,588	579.919,283
18+500	100	0,000	0,000			1,00	1,25	100,00%	0,000	0,000	0,000	0,000	0,000	19.797,588	579.919,283
18+600	100	0,000	0,000			1,00	1,25	100,00%	0,000	0,000	0,000	0,000	0,000	19.797,588	579.919,283
18+700	100	0,000	0,000			1,00	1,25	100,00%	0,000	0,000	0,000	0,000	0,000	19.797,588	579.919,283
18+800	100	0,000	0,000			1,00	1,25	100,00%	0,000	0,000	0,000	0,000	0,000	19.797,588	579.919,283
18+900	100	0,000	0,000			1,00	1,25	100,00%	0,000	0,000	0,000	0,000	0,000	19.797,588	579.919,283
19+000	100	0,000	0,000			1,00	1,25	100,00%	0,000	0,000	0,000	0,000	0,000	19.797,588	579.919,283
19+100	100	0,000	0,000			1,00	1,25	100,00%	0,000	0,000	0,000	0,000	0,000	19.797,588	579.919,283
19+200	100	0,000	0,000			1,00	1,25	100,00%	0,000	0,000	0,000	0,000	0,000	19.797,588	579.919,283
19+300	100	0,000	0,000			1,00	1,25	100,00%	0,000	0,000	0,000	0,000	0,000	19.797,588	579.919,283
19+400	100	0,000	0,000			1,00	1,25	100,00%	0,000	0,000	0,000	0,000	0,000	19.797,588	579.919,283
19+500	100	0,000	0,000			1,00	1,25	100,00%	0,000	0,000	0,000	0,000	0,000	19.797,588	579.919,283

ESTUDIO INFORMATIVO DEL CORREDOR CÁNTABRICO - MEDITERRÁNEO DE ALTA VELOCIDAD. TRAMO TERUEL - ZARAGOZA.

DIAGRAMA DE EQUILIBRIO DE MOVIMIENTOS DE TIERRAS

Alternativa 4.3

PK	d	PLATAFORMA		EXCAVACIÓN TÚNEL EN MINA		COEF. PASO		EXCAVACIÓN			COMPENS.	BALANCE	VOL. ACUMULADOS		
		EXCAV.	TERRAPLÉN	NOMBRE	EXCAV.	RELLENOS	VERTEDERO	% APROV	NO APROV.	APROV.	TRANS.		A VERTEDERO	COM.TRAN.	BALANCE
19+600	100	0,000	23.409,488			1,00	1,25	100,00%	0,000	0,000	0,000	-23.409,488	0,000	19.797,588	556.509,795
19+700	100	0,000	16.336,325			1,00	1,25	100,00%	0,000	0,000	0,000	-16.336,325	0,000	19.797,588	540.173,470
19+800	100	0,000	15.576,194			1,00	1,25	100,00%	0,000	0,000	0,000	-15.576,194	0,000	19.797,588	524.597,276
19+900	100	2.303,611	6.763,973			1,00	1,25	100,00%	0,000	2.303,611	2.303,611	-4.460,362	0,000	22.101,199	520.136,914
20+000	100	3.878,792	252,861			1,00	1,25	100,00%	0,000	3.878,792	252,861	3.625,931	0,000	22.354,060	523.762,845
20+002	2	259,055	0,000			1,00	1,25	100,00%	0,000	259,055	0,000	259,055	0,000	22.354,060	524.021,900
TOTAL		**1.114.005,347**	**698.316,347**		**108.332,900**				**0,000**	**1.222.338,247**	**22.354,060**	**524.021,900**			

ESTUDIO INFORMATIVO DEL CORREDOR CÁNTABRICO - MEDITERRÁNEO DE ALTA VELOCIDAD. TRAMO TERUEL - ZARAGOZA.

DIAGRAMA DE EQUILIBRIO DE MOVIMIENTOS DE TIERRAS

Alternativa 5.1

PK	d	PLATAFORMA		EXCAVACIÓN TÚNEL EN MINA		COEF. PASO		EXCAVACIÓN			COMPENS.	BALANCE	VOL. ACUMULADOS		
		EXCAV.	TERRAPLÉN	NOMBRE	EXCAV.	RELLENOS	VERTEDERO	% APROV	NO APROV.	APROV.	TRANS.		A VERTEDERO	COM.TRAN.	BALANCE
5+000		0,000	0,000			1,00	1,25	100,00%	0,000	0,000	0,000	0,000	0,000	0,000	0,000
5+100	100	40.292,454	715,028			1,00	1,25	100,00%	0,000	40.292,454	715,028	39.577,426	0,000	715,028	39.577,426
5+200	100	11.084,220	754,325			1,00	1,25	100,00%	0,000	11.084,220	754,325	10.329,895	0,000	1.469,353	49.907,321
5+300	100	24.185,104	0,000			1,00	1,25	100,00%	0,000	24.185,104	0,000	24.185,104	0,000	1.469,353	74.092,425
5+400	100	7.576,928	2.539,396			1,00	1,25	100,00%	0,000	7.576,928	2.539,396	5.037,532	0,000	4.008,749	79.129,957
5+500	100	642,702	4.835,172			1,00	1,25	100,00%	0,000	642,702	642,702	-4.192,470	0,000	4.651,451	74.937,487
5+600	100	988,739	6.892,002			1,00	1,25	100,00%	0,000	988,739	988,739	-5.903,263	0,000	5.640,190	69.034,224
5+700	100	37.083,106	157,859			1,00	1,25	100,00%	0,000	37.083,106	157,859	36.925,247	0,000	5.798,049	105.959,471
5+800	100	118.177,176	0,000			1,00	1,25	100,00%	0,000	118.177,176	0,000	118.177,176	0,000	5.798,049	224.136,647
5+900	100	46.110,517	0,000			1,00	1,25	100,00%	0,000	46.110,517	0,000	46.110,517	0,000	5.798,049	270.247,164
6+000	100	109.567,294	0,000			1,00	1,25	100,00%	0,000	109.567,294	0,000	109.567,294	0,000	5.798,049	379.814,458
6+100	100	110.101,954	0,000			1,00	1,25	100,00%	0,000	110.101,954	0,000	110.101,954	0,000	5.798,049	489.916,412
6+200	100	76.277,997	0,000			1,00	1,25	100,00%	0,000	76.277,997	0,000	76.277,997	0,000	5.798,049	566.194,409
6+300	100	29.536,805	26,366			1,00	1,25	100,00%	0,000	29.536,805	26,366	29.510,439	0,000	5.824,415	595.704,848
6+400	100	57.050,236	0,000			1,00	1,25	100,00%	0,000	57.050,236	0,000	57.050,236	0,000	5.824,415	652.755,084
6+500	100	16.992,325	152,665			1,00	1,25	100,00%	0,000	16.992,325	152,665	16.839,660	0,000	5.977,080	669.594,744
6+600	100	7.897,484	1.569,824			1,00	1,25	100,00%	0,000	7.897,484	1.569,824	6.327,660	0,000	7.546,904	675.922,404
6+700	100	0,000	790,177			1,00	1,25	100,00%	0,000	0,000	0,000	-790,177	0,000	7.546,904	675.132,227
6+800	100	0,000	0,000			1,00	1,25	100,00%	0,000	0,000	0,000	0,000	0,000	7.546,904	675.132,227
6+900	100	0,000	0,000			1,00	1,25	100,00%	0,000	0,000	0,000	0,000	0,000	7.546,904	675.132,227
7+000	100	0,000	0,000			1,00	1,25	100,00%	0,000	0,000	0,000	0,000	0,000	7.546,904	675.132,227
7+100	100	4.362,038	97,468			1,00	1,25	100,00%	0,000	4.362,038	97,468	4.264,570	0,000	7.644,372	679.396,797
7+200	100	37.939,872	0,000			1,00	1,25	100,00%	0,000	37.939,872	0,000	37.939,872	0,000	7.644,372	717.336,669
7+300	100	111.896,334	0,000			1,00	1,25	100,00%	0,000	111.896,334	0,000	111.896,334	0,000	7.644,372	829.233,003
7+400	100	82.732,841	0,000			1,00	1,25	100,00%	0,000	82.732,841	0,000	82.732,841	0,000	7.644,372	911.965,844
7+500	100	0,000	0,000			1,00	1,25	100,00%	0,000	0,000	0,000	0,000	0,000	7.644,372	911.965,844
7+600	100	10.914,259	0,000			1,00	1,25	100,00%	0,000	10.914,259	0,000	10.914,259	0,000	7.644,372	922.880,103
7+700	100	84.886,303	0,000			1,00	1,25	100,00%	0,000	84.886,303	0,000	84.886,303	0,000	7.644,372	1.007.766,406
7+800	100	20.794,912	1.330,866			1,00	1,25	100,00%	0,000	20.794,912	1.330,866	19.464,046	0,000	8.975,238	1.027.230,452
7+900	100	27.806,954	2.299,407			1,00	1,25	100,00%	0,000	27.806,954	2.299,407	25.507,547	0,000	11.274,645	1.052.737,999
8+000	100	62.888,077	0,000		4.000,000	1,00	1,25	100,00%	0,000	66.888,077	0,000	66.888,077	0,000	11.274,645	1.119.626,076
8+100	100	0,000	0,000		16.000,000	1,00	1,25	100,00%	0,000	16.000,000	0,000	16.000,000	0,000	11.274,645	1.135.626,076
8+200	100	0,000	0,000		16.000,000	1,00	1,25	100,00%	0,000	16.000,000	0,000	16.000,000	0,000	11.274,645	1.151.626,076
8+300	100	0,000	0,000		16.000,000	1,00	1,25	100,00%	0,000	16.000,000	0,000	16.000,000	0,000	11.274,645	1.167.626,076
8+400	100	0,000	0,000		16.000,000	1,00	1,25	100,00%	0,000	16.000,000	0,000	16.000,000	0,000	11.274,645	1.183.626,076
8+500	100	0,000	0,000		16.000,000	1,00	1,25	100,00%	0,000	16.000,000	0,000	16.000,000	0,000	11.274,645	1.199.626,076
8+600	100	0,000	0,000		16.000,000	1,00	1,25	100,00%	0,000	16.000,000	0,000	16.000,000	0,000	11.274,645	1.215.626,076
8+700	100	0,000	0,000		16.000,000	1,00	1,25	100,00%	0,000	16.000,000	0,000	16.000,000	0,000	11.274,645	1.231.626,076
8+800	100	0,000	0,000		16.000,000	1,00	1,25	100,00%	0,000	16.000,000	0,000	16.000,000	0,000	11.274,645	1.247.626,076
8+900	100	0,000	0,000		16.000,000	1,00	1,25	100,00%	0,000	16.000,000	0,000	16.000,000	0,000	11.274,645	1.263.626,076
9+000	100	0,000	0,000		16.000,000	1,00	1,25	100,00%	0,000	16.000,000	0,000	16.000,000	0,000	11.274,645	1.279.626,076
9+100	100	0,000	0,000		16.000,000	1,00	1,25	100,00%	0,000	16.000,000	0,000	16.000,000	0,000	11.274,645	1.295.626,076
9+200	100	0,000	0,000		16.000,000	1,00	1,25	100,00%	0,000	16.000,000	0,000	16.000,000	0,000	11.274,645	1.311.626,076
9+300	100	0,000	0,000		16.000,000	1,00	1,25	100,00%	0,000	16.000,000	0,000	16.000,000	0,000	11.274,645	1.327.626,076
9+400	100	57.396,284	0,000		12.800,000	1,00	1,25	100,00%	0,000	70.196,284	0,000	70.196,284	0,000	11.274,645	1.397.822,360
9+500	100	59.397,570	0,000			1,00	1,25	100,00%	0,000	59.397,570	0,000	59.397,570	0,000	11.274,645	1.457.219,930
9+600	100	30.279,317	0,000			1,00	1,25	100,00%	0,000	30.279,317	0,000	30.279,317	0,000	11.274,645	1.487.499,247
9+700	100	32.296,322	0,000			1,00	1,25	100,00%	0,000	32.296,322	0,000	32.296,322	0,000	11.274,645	1.519.795,569
9+800	100	29.406,897	0,000			1,00	1,25	100,00%	0,000	29.406,897	0,000	29.406,897	0,000	11.274,645	1.549.202,466
9+900	100	97.919,349	0,000			1,00	1,25	100,00%	0,000	97.919,349	0,000	97.919,349	0,000	11.274,645	1.647.121,815
10+000	100	156.928,351	0,000			1,00	1,25	100,00%	0,000	156.928,351	0,000	156.928,351	0,000	11.274,645	1.804.050,166
10+100	100	113.486,939	0,000			1,00	1,25	100,00%	0,000	113.486,939	0,000	113.486,939	0,000	11.274,645	1.917.537,105

ESTUDIO INFORMATIVO DEL CORREDOR CÁNTABRICO - MEDITERRÁNEO DE ALTA VELOCIDAD. TRAMO TERUEL - ZARAGOZA.

DIAGRAMA DE EQUILIBRIO DE MOVIMIENTOS DE TIERRAS

Alternativa 5.1

PK	d	PLATAFORMA		EXCAVACIÓN TÚNEL EN MINA		COEF. PASO		EXCAVACIÓN			COMPENS.	BALANCE	VOL. ACUMULADOS		
		EXCAV.	TERRAPLÉN	NOMBRE	EXCAV.	RELLENOS	VERTEDERO	% APROV	NO APROV.	APROV.	TRANS.		A VERTEDERO	COM.TRAN.	BALANCE
10+200	100	157.328,655	0,000			1,00	1,25	100,00%	0,000	157.328,655	0,000	157.328,655	0,000	11.274,645	2.074.865,760
10+300	100	179.299,446	0,000			1,00	1,25	100,00%	0,000	179.299,446	0,000	179.299,446	0,000	11.274,645	2.254.165,206
10+400	100	153.895,573	0,000			1,00	1,25	100,00%	0,000	153.895,573	0,000	153.895,573	0,000	11.274,645	2.408.060,779
10+500	100	121.235,023	0,000			1,00	1,25	100,00%	0,000	121.235,023	0,000	121.235,023	0,000	11.274,645	2.529.295,802
10+600	100	119.538,028	0,000			1,00	1,25	100,00%	0,000	119.538,028	0,000	119.538,028	0,000	11.274,645	2.648.833,830
10+700	100	124.728,011	0,000			1,00	1,25	100,00%	0,000	124.728,011	0,000	124.728,011	0,000	11.274,645	2.773.561,841
10+800	100	151.582,371	0,000			1,00	1,25	100,00%	0,000	151.582,371	0,000	151.582,371	0,000	11.274,645	2.925.144,212
10+900	100	187.173,019	0,000			1,00	1,25	100,00%	0,000	187.173,019	0,000	187.173,019	0,000	11.274,645	3.112.317,231
11+000	100	199.155,562	0,000			1,00	1,25	100,00%	0,000	199.155,562	0,000	199.155,562	0,000	11.274,645	3.311.472,793
11+100	100	165.396,357	0,000			1,00	1,25	100,00%	0,000	165.396,357	0,000	165.396,357	0,000	11.274,645	3.476.869,150
11+200	100	170.539,707	0,000			1,00	1,25	100,00%	0,000	170.539,707	0,000	170.539,707	0,000	11.274,645	3.647.408,857
11+300	100	148.378,222	0,000			1,00	1,25	100,00%	0,000	148.378,222	0,000	148.378,222	0,000	11.274,645	3.795.787,079
11+400	100	154.430,092	0,000			1,00	1,25	100,00%	0,000	154.430,092	0,000	154.430,092	0,000	11.274,645	3.950.217,171
11+500	100	163.026,246	0,000			1,00	1,25	100,00%	0,000	163.026,246	0,000	163.026,246	0,000	11.274,645	4.113.243,417
11+600	100	151.044,376	0,000			1,00	1,25	100,00%	0,000	151.044,376	0,000	151.044,376	0,000	11.274,645	4.264.287,793
11+700	100	167.545,169	0,000			1,00	1,25	100,00%	0,000	167.545,169	0,000	167.545,169	0,000	11.274,645	4.431.832,962
11+800	100	171.531,351	0,000			1,00	1,25	100,00%	0,000	171.531,351	0,000	171.531,351	0,000	11.274,645	4.603.364,313
11+900	100	175.624,249	0,000			1,00	1,25	100,00%	0,000	175.624,249	0,000	175.624,249	0,000	11.274,645	4.778.988,562
12+000	100	174.463,356	0,000			1,00	1,25	100,00%	0,000	174.463,356	0,000	174.463,356	0,000	11.274,645	4.953.451,918
12+100	100	168.727,994	0,000			1,00	1,25	100,00%	0,000	168.727,994	0,000	168.727,994	0,000	11.274,645	5.122.179,912
12+200	100	149.379,904	0,000			1,00	1,25	100,00%	0,000	149.379,904	0,000	149.379,904	0,000	11.274,645	5.271.559,816
12+300	100	135.259,679	0,000			1,00	1,25	100,00%	0,000	135.259,679	0,000	135.259,679	0,000	11.274,645	5.406.819,495
12+400	100	118.502,678	0,000			1,00	1,25	100,00%	0,000	118.502,678	0,000	118.502,678	0,000	11.274,645	5.525.322,173
12+500	100	97.496,361	0,000			1,00	1,25	100,00%	0,000	97.496,361	0,000	97.496,361	0,000	11.274,645	5.622.818,534
12+600	100	93.661,737	0,000			1,00	1,25	100,00%	0,000	93.661,737	0,000	93.661,737	0,000	11.274,645	5.716.480,271
12+700	100	109.024,125	0,000			1,00	1,25	100,00%	0,000	109.024,125	0,000	109.024,125	0,000	11.274,645	5.825.504,396
12+800	100	119.098,588	0,000			1,00	1,25	100,00%	0,000	119.098,588	0,000	119.098,588	0,000	11.274,645	5.944.602,984
12+900	100	117.293,393	0,000			1,00	1,25	100,00%	0,000	117.293,393	0,000	117.293,393	0,000	11.274,645	6.061.896,377
13+000	100	118.454,936	0,000			1,00	1,25	100,00%	0,000	118.454,936	0,000	118.454,936	0,000	11.274,645	6.180.351,313
13+100	100	105.051,889	0,000			1,00	1,25	100,00%	0,000	105.051,889	0,000	105.051,889	0,000	11.274,645	6.285.403,202
13+200	100	95.255,758	0,000			1,00	1,25	100,00%	0,000	95.255,758	0,000	95.255,758	0,000	11.274,645	6.380.658,960
13+300	100	105.163,530	0,000			1,00	1,25	100,00%	0,000	105.163,530	0,000	105.163,530	0,000	11.274,645	6.485.822,490
13+400	100	127.213,492	0,000			1,00	1,25	100,00%	0,000	127.213,492	0,000	127.213,492	0,000	11.274,645	6.613.035,982
13+500	100	122.730,009	0,000			1,00	1,25	100,00%	0,000	122.730,009	0,000	122.730,009	0,000	11.274,645	6.735.765,991
13+600	100	102.836,465	0,000			1,00	1,25	100,00%	0,000	102.836,465	0,000	102.836,465	0,000	11.274,645	6.838.602,456
13+700	100	97.893,527	0,000			1,00	1,25	100,00%	0,000	97.893,527	0,000	97.893,527	0,000	11.274,645	6.936.495,983
13+800	100	84.820,398	0,000			1,00	1,25	100,00%	0,000	84.820,398	0,000	84.820,398	0,000	11.274,645	7.021.316,381
13+900	100	68.900,268	0,000			1,00	1,25	100,00%	0,000	68.900,268	0,000	68.900,268	0,000	11.274,645	7.090.216,649
14+000	100	48.934,428	0,000			1,00	1,25	100,00%	0,000	48.934,428	0,000	48.934,428	0,000	11.274,645	7.139.151,077
14+100	100	34.282,979	0,000			1,00	1,25	100,00%	0,000	34.282,979	0,000	34.282,979	0,000	11.274,645	7.173.434,056
14+200	100	48.248,832	0,000			1,00	1,25	100,00%	0,000	48.248,832	0,000	48.248,832	0,000	11.274,645	7.221.682,888
14+300	100	73.364,827	0,000			1,00	1,25	100,00%	0,000	73.364,827	0,000	73.364,827	0,000	11.274,645	7.295.047,715
14+400	100	74.861,545	0,000			1,00	1,25	100,00%	0,000	74.861,545	0,000	74.861,545	0,000	11.274,645	7.369.909,260
14+500	100	52.742,979	0,000			1,00	1,25	100,00%	0,000	52.742,979	0,000	52.742,979	0,000	11.274,645	7.422.652,239
14+600	100	60.005,450	0,000			1,00	1,25	100,00%	0,000	60.005,450	0,000	60.005,450	0,000	11.274,645	7.482.657,689
14+700	100	62.441,049	0,000			1,00	1,25	100,00%	0,000	62.441,049	0,000	62.441,049	0,000	11.274,645	7.545.098,738
14+800	100	46.125,808	0,000			1,00	1,25	100,00%	0,000	46.125,808	0,000	46.125,808	0,000	11.274,645	7.591.224,546
14+900	100	45.013,735	0,000			1,00	1,25	100,00%	0,000	45.013,735	0,000	45.013,735	0,000	11.274,645	7.636.238,281
15+000	100	47.234,758	0,000			1,00	1,25	100,00%	0,000	47.234,758	0,000	47.234,758	0,000	11.274,645	7.683.473,039
15+100	100	38.588,683	0,000			1,00	1,25	100,00%	0,000	38.588,683	0,000	38.588,683	0,000	11.274,645	7.722.061,722
15+200	100	34.841,131	0,000			1,00	1,25	100,00%	0,000	34.841,131	0,000	34.841,131	0,000	11.274,645	7.756.902,853
15+300	100	41.709,477	0,000			1,00	1,25	100,00%	0,000	41.709,477	0,000	41.709,477	0,000	11.274,645	7.798.612,330

ESTUDIO INFORMATIVO DEL CORREDOR CÁNTABRICO - MEDITERRÁNEO DE ALTA VELOCIDAD. TRAMO TERUEL - ZARAGOZA.

DIAGRAMA DE EQUILIBRIO DE MOVIMIENTOS DE TIERRAS

Alternativa 5.1

PK	d	PLATAFORMA		EXCAVACIÓN TÚNEL EN MINA		COEF. PASO		EXCAVACIÓN			COMPENS.	BALANCE	VOL. ACUMULADOS		
		EXCAV.	TERRAPLÉN	NOMBRE	EXCAV.	RELLENOS	VERTEDERO	% APROV	NO APROV.	APROV.	TRANS.		A VERTEDERO	COM.TRAN.	BALANCE
15+400	100	39.984,286	0,000			1,00	1,25	100,00%	0,000	39.984,286	0,000	39.984,286	0,000	11.274,645	7.838.596,616
15+500	100	27.790,193	0,000			1,00	1,25	100,00%	0,000	27.790,193	0,000	27.790,193	0,000	11.274,645	7.866.386,809
15+600	100	12.625,325	0,000			1,00	1,25	100,00%	0,000	12.625,325	0,000	12.625,325	0,000	11.274,645	7.879.012,134
15+700	100	4.714,696	0,000			1,00	1,25	100,00%	0,000	4.714,696	0,000	4.714,696	0,000	11.274,645	7.883.726,830
15+800	100	1.205,928	1.253,933			1,15	1,44	100,00%	0,000	1.386,817	1.253,933	132,884	0,000	12.528,578	7.883.859,714
15+900	100	0,000	6.554,782			1,15	1,44	100,00%	0,000	0,000	0,000	-6.554,782	0,000	12.528,578	7.877.304,932
16+000	100	0,000	6.929,084			1,15	1,44	100,00%	0,000	0,000	0,000	-6.929,084	0,000	12.528,578	7.870.375,848
16+100	100	0,000	17.642,565			1,15	1,44	100,00%	0,000	0,000	0,000	-17.642,565	0,000	12.528,578	7.852.733,283
16+200	100	0,000	22.408,832			1,15	1,44	100,00%	0,000	0,000	0,000	-22.408,832	0,000	12.528,578	7.830.324,451
16+300	100	4.910,026	854,293			1,15	1,44	100,00%	0,000	5.646,530	854,293	4.792,237	0,000	13.382,871	7.835.116,688
16+400	100	2.044,327	1.492,625			1,15	1,44	100,00%	0,000	2.350,976	1.492,625	858,351	0,000	14.875,496	7.835.975,039
16+500	100	11.333,006	0,000			1,15	1,44	100,00%	0,000	13.032,957	0,000	13.032,957	0,000	14.875,496	7.849.007,996
16+600	100	7.758,923	4,456			1,15	1,44	100,00%	0,000	8.922,761	4,456	8.918,305	0,000	14.879,952	7.857.926,302
16+700	100	15.354,737	0,000			1,15	1,44	100,00%	0,000	17.657,948	0,000	17.657,948	0,000	14.879,952	7.875.584,249
16+800	100	18.161,011	0,000			1,15	1,44	100,00%	0,000	20.885,163	0,000	20.885,163	0,000	14.879,952	7.896.469,412
16+900	100	26.624,438	0,000			1,15	1,44	100,00%	0,000	30.618,104	0,000	30.618,104	0,000	14.879,952	7.927.087,515
17+000	100	6.406,427	0,825			1,15	1,44	100,00%	0,000	7.367,391	0,825	7.366,566	0,000	14.880,777	7.934.454,081
17+100	100	22.295,232	0,000			1,15	1,44	100,00%	0,000	25.639,517	0,000	25.639,517	0,000	14.880,777	7.960.093,598
17+200	100	13.534,922	0,000			1,15	1,44	100,00%	0,000	15.565,160	0,000	15.565,160	0,000	14.880,777	7.975.658,759
17+300	100	1.183,340	357,737			1,15	1,44	100,00%	0,000	1.360,841	357,737	1.003,104	0,000	15.238,514	7.976.661,863
17+400	100	0,245	4.261,594			1,15	1,44	100,00%	0,000	0,282	0,282	-4.261,312	0,000	15.238,796	7.972.400,550
17+500	100	13,970	2.154,325			1,15	1,44	100,00%	0,000	16,066	16,066	-2.138,260	0,000	15.254,861	7.970.262,291
17+600	100	0,000	4.083,177			1,15	1,44	100,00%	0,000	0,000	0,000	-4.083,177	0,000	15.254,861	7.966.179,114
17+700	100	0,000	5.806,348			1,15	1,44	100,00%	0,000	0,000	0,000	-5.806,348	0,000	15.254,861	7.960.372,766
17+800	100	0,000	5.478,667			1,15	1,44	100,00%	0,000	0,000	0,000	-5.478,667	0,000	15.254,861	7.954.894,099
17+896	96	0,000	4.555,861			1,15	1,44	100,00%	0,000	0,000	0,000	-4.555,861	0,000	15.254,861	7.950.338,238
TOTAL		**7.811.913,917**	**105.999,659**		**224.800,000**				**0,000**	**8.056.337,897**	**15.254,861**	**7.950.338,238**			

ESTUDIO INFORMATIVO DEL CORREDOR CÁNTABRICO - MEDITERRÁNEO DE ALTA VELOCIDAD. TRAMO TERUEL - ZARAGOZA.

DIAGRAMA DE EQUILIBRIO DE MOVIMIENTOS DE TIERRAS

Alternativa 5.2

PK	d	PLATAFORMA		EXCAVACIÓN TÚNEL EN MINA		COEF. PASO		EXCAVACIÓN			COMPENS.	BALANCE	VOL. ACUMULADOS		
		EXCAV.	TERRAPLÉN	NOMBRE	EXCAV.	RELLENOS	VERTEDERO	% APROV	NO APROV.	APROV.	TRANS.		A VERTEDERO	COM.TRAN.	BALANCE
5+000		0,000	0,000			1,00	1,25	100,00%	0,000	0,000	0,000	0,000	0,000	0,000	0,000
5+100	100	40.296,614	655,363			1,00	1,25	100,00%	0,000	40.296,614	655,363	39.641,251	0,000	655,363	39.641,251
5+200	100	11.387,878	1.109,163			1,00	1,25	100,00%	0,000	11.387,878	1.109,163	10.278,715	0,000	1.764,526	49.919,966
5+300	100	24.185,100	0,000			1,00	1,25	100,00%	0,000	24.185,100	0,000	24.185,100	0,000	1.764,526	74.105,066
5+400	100	7.573,914	2.708,738			1,00	1,25	100,00%	0,000	7.573,914	2.708,738	4.865,176	0,000	4.473,264	78.970,242
5+500	100	638,735	5.710,287			1,00	1,25	100,00%	0,000	638,735	638,735	-5.071,552	0,000	5.111,999	73.898,690
5+600	100	705,362	7.075,107			1,00	1,25	100,00%	0,000	705,362	705,362	-6.369,745	0,000	5.817,361	67.528,945
5+700	100	38.558,564	157,859			1,00	1,25	100,00%	0,000	38.558,564	157,859	38.400,705	0,000	5.975,220	105.929,650
5+800	100	119.736,982	0,000			1,00	1,25	100,00%	0,000	119.736,982	0,000	119.736,982	0,000	5.975,220	225.666,632
5+900	100	46.357,241	172,873			1,00	1,25	100,00%	0,000	46.357,241	172,873	46.184,368	0,000	6.148,093	271.851,000
6+000	100	110.376,585	0,000			1,00	1,25	100,00%	0,000	110.376,585	0,000	110.376,585	0,000	6.148,093	382.227,585
6+100	100	108.515,316	0,000			1,00	1,25	100,00%	0,000	108.515,316	0,000	108.515,316	0,000	6.148,093	490.742,901
6+200	100	76.566,977	0,000			1,00	1,25	100,00%	0,000	76.566,977	0,000	76.566,977	0,000	6.148,093	567.309,878
6+300	100	29.303,847	26,366			1,00	1,25	100,00%	0,000	29.303,847	26,366	29.277,481	0,000	6.174,459	596.587,359
6+400	100	56.412,864	0,000			1,00	1,25	100,00%	0,000	56.412,864	0,000	56.412,864	0,000	6.174,459	653.000,223
6+500	100	16.456,940	124,218			1,00	1,25	100,00%	0,000	16.456,940	124,218	16.332,722	0,000	6.298,677	669.332,945
6+600	100	7.909,593	1.411,285			1,00	1,25	100,00%	0,000	7.909,593	1.411,285	6.498,308	0,000	7.709,962	675.831,253
6+700	100	0,000	639,392			1,00	1,25	100,00%	0,000	0,000	0,000	-639,392	0,000	7.709,962	675.191,861
6+800	100	0,000	0,000			1,00	1,25	100,00%	0,000	0,000	0,000	0,000	0,000	7.709,962	675.191,861
6+900	100	0,000	0,000			1,00	1,25	100,00%	0,000	0,000	0,000	0,000	0,000	7.709,962	675.191,861
7+000	100	0,000	0,000			1,00	1,25	100,00%	0,000	0,000	0,000	0,000	0,000	7.709,962	675.191,861
7+100	100	4.277,249	77,685			1,00	1,25	100,00%	0,000	4.277,249	77,685	4.199,564	0,000	7.787,647	679.391,425
7+200	100	37.562,283	0,000			1,00	1,25	100,00%	0,000	37.562,283	0,000	37.562,283	0,000	7.787,647	716.953,708
7+300	100	111.960,713	0,000			1,00	1,25	100,00%	0,000	111.960,713	0,000	111.960,713	0,000	7.787,647	828.914,421
7+400	100	83.320,215	0,000			1,00	1,25	100,00%	0,000	83.320,215	0,000	83.320,215	0,000	7.787,647	912.234,636
7+500	100	0,000	0,000			1,00	1,25	100,00%	0,000	0,000	0,000	0,000	0,000	7.787,647	912.234,636
7+600	100	10.926,418	0,000			1,00	1,25	100,00%	0,000	10.926,418	0,000	10.926,418	0,000	7.787,647	923.161,054
7+700	100	85.316,402	0,000			1,00	1,25	100,00%	0,000	85.316,402	0,000	85.316,402	0,000	7.787,647	1.008.477,456
7+800	100	21.664,367	1.322,184			1,00	1,25	100,00%	0,000	21.664,367	1.322,184	20.342,183	0,000	9.109,831	1.028.819,639
7+900	100	27.808,809	2.299,817			1,00	1,25	100,00%	0,000	27.808,809	2.299,817	25.508,992	0,000	11.409,648	1.054.328,631
8+000	100	63.757,268	0,000		4.000,000	1,00	1,25	100,00%	0,000	67.757,268	0,000	67.757,268	0,000	11.409,648	1.122.085,899
8+100	100	0,000	0,000		16.000,000	1,00	1,25	100,00%	0,000	16.000,000	0,000	16.000,000	0,000	11.409,648	1.138.085,899
8+200	100	0,000	0,000		16.000,000	1,00	1,25	100,00%	0,000	16.000,000	0,000	16.000,000	0,000	11.409,648	1.154.085,899
8+300	100	0,000	0,000		16.000,000	1,00	1,25	100,00%	0,000	16.000,000	0,000	16.000,000	0,000	11.409,648	1.170.085,899
8+400	100	0,000	0,000		16.000,000	1,00	1,25	100,00%	0,000	16.000,000	0,000	16.000,000	0,000	11.409,648	1.186.085,899
8+500	100	0,000	0,000		16.000,000	1,00	1,25	100,00%	0,000	16.000,000	0,000	16.000,000	0,000	11.409,648	1.202.085,899
8+600	100	0,000	0,000		16.000,000	1,00	1,25	100,00%	0,000	16.000,000	0,000	16.000,000	0,000	11.409,648	1.218.085,899
8+700	100	0,000	0,000		16.000,000	1,00	1,25	100,00%	0,000	16.000,000	0,000	16.000,000	0,000	11.409,648	1.234.085,899
8+800	100	0,000	0,000		16.000,000	1,00	1,25	100,00%	0,000	16.000,000	0,000	16.000,000	0,000	11.409,648	1.250.085,899
8+900	100	0,000	0,000		16.000,000	1,00	1,25	100,00%	0,000	16.000,000	0,000	16.000,000	0,000	11.409,648	1.266.085,899
9+000	100	0,000	0,000		16.000,000	1,00	1,25	100,00%	0,000	16.000,000	0,000	16.000,000	0,000	11.409,648	1.282.085,899
9+100	100	0,000	0,000		16.000,000	1,00	1,25	100,00%	0,000	16.000,000	0,000	16.000,000	0,000	11.409,648	1.298.085,899
9+200	100	0,000	0,000		16.000,000	1,00	1,25	100,00%	0,000	16.000,000	0,000	16.000,000	0,000	11.409,648	1.314.085,899
9+300	100	0,000	0,000		16.000,000	1,00	1,25	100,00%	0,000	16.000,000	0,000	16.000,000	0,000	11.409,648	1.330.085,899
9+400	100	57.396,353	0,000		12.800,000	1,00	1,25	100,00%	0,000	70.196,353	0,000	70.196,353	0,000	11.409,648	1.400.282,252
9+500	100	59.397,570	0,000			1,00	1,25	100,00%	0,000	59.397,570	0,000	59.397,570	0,000	11.409,648	1.459.679,822
9+600	100	30.279,317	0,000			1,00	1,25	100,00%	0,000	30.279,317	0,000	30.279,317	0,000	11.409,648	1.489.959,139
9+700	100	32.296,322	0,000			1,00	1,25	100,00%	0,000	32.296,322	0,000	32.296,322	0,000	11.409,648	1.522.255,461
9+800	100	29.406,897	0,000			1,00	1,25	100,00%	0,000	29.406,897	0,000	29.406,897	0,000	11.409,648	1.551.662,358
9+900	100	97.919,349	0,000			1,00	1,25	100,00%	0,000	97.919,349	0,000	97.919,349	0,000	11.409,648	1.649.581,707
10+000	100	156.928,351	0,000			1,00	1,25	100,00%	0,000	156.928,351	0,000	156.928,351	0,000	11.409,648	1.806.510,058
10+100	100	113.486,939	0,000			1,00	1,25	100,00%	0,000	113.486,939	0,000	113.486,939	0,000	11.409,648	1.919.996,997

ESTUDIO INFORMATIVO DEL CORREDOR CÁNTABRICO - MEDITERRÁNEO DE ALTA VELOCIDAD. TRAMO TERUEL - ZARAGOZA.

DIAGRAMA DE EQUILIBRIO DE MOVIMIENTOS DE TIERRAS

Alternativa 5.2

PK	d	PLATAFORMA		EXCAVACIÓN TÚNEL EN MINA		COEF. PASO		EXCAVACIÓN			COMPENS.	BALANCE	VOL. ACUMULADOS		
		EXCAV.	TERRAPLÉN	NOMBRE	EXCAV.	RELLENOS	VERTEDERO	% APROV	NO APROV.	APROV.	TRANS.		A VERTEDERO	COM.TRAN.	BALANCE
10+200	100	157.328,655	0,000			1,00	1,25	100,00%	0,000	157.328,655	0,000	157.328,655	0,000	11.409,648	2.077.325,652
10+300	100	179.298,772	0,000			1,00	1,25	100,00%	0,000	179.298,772	0,000	179.298,772	0,000	11.409,648	2.256.624,424
10+400	100	153.899,244	0,000			1,00	1,25	100,00%	0,000	153.899,244	0,000	153.899,244	0,000	11.409,648	2.410.523,668
10+500	100	120.145,337	0,000			1,00	1,25	100,00%	0,000	120.145,337	0,000	120.145,337	0,000	11.409,648	2.530.669,005
10+600	100	118.713,062	0,000			1,00	1,25	100,00%	0,000	118.713,062	0,000	118.713,062	0,000	11.409,648	2.649.382,067
10+700	100	125.569,527	0,000			1,00	1,25	100,00%	0,000	125.569,527	0,000	125.569,527	0,000	11.409,648	2.774.951,594
10+800	100	157.587,488	0,000			1,00	1,25	100,00%	0,000	157.587,488	0,000	157.587,488	0,000	11.409,648	2.932.539,082
10+900	100	190.557,833	0,000			1,00	1,25	100,00%	0,000	190.557,833	0,000	190.557,833	0,000	11.409,648	3.123.096,915
11+000	100	200.307,658	0,000			1,00	1,25	100,00%	0,000	200.307,658	0,000	200.307,658	0,000	11.409,648	3.323.404,573
11+100	100	158.245,077	0,000			1,00	1,25	100,00%	0,000	158.245,077	0,000	158.245,077	0,000	11.409,648	3.481.649,650
11+200	100	147.708,402	0,000			1,00	1,25	100,00%	0,000	147.708,402	0,000	147.708,402	0,000	11.409,648	3.629.358,052
11+300	100	127.965,347	0,000			1,00	1,25	100,00%	0,000	127.965,347	0,000	127.965,347	0,000	11.409,648	3.757.323,399
11+400	100	137.318,016	0,000			1,00	1,25	100,00%	0,000	137.318,016	0,000	137.318,016	0,000	11.409,648	3.894.641,415
11+500	100	128.362,019	0,000			1,00	1,25	100,00%	0,000	128.362,019	0,000	128.362,019	0,000	11.409,648	4.023.003,434
11+600	100	118.632,378	0,000			1,00	1,25	100,00%	0,000	118.632,378	0,000	118.632,378	0,000	11.409,648	4.141.635,812
11+700	100	138.831,531	0,000			1,00	1,25	100,00%	0,000	138.831,531	0,000	138.831,531	0,000	11.409,648	4.280.467,343
11+800	100	147.189,145	0,000			1,00	1,25	100,00%	0,000	147.189,145	0,000	147.189,145	0,000	11.409,648	4.427.656,488
11+900	100	166.908,346	0,000			1,00	1,25	100,00%	0,000	166.908,346	0,000	166.908,346	0,000	11.409,648	4.594.564,834
12+000	100	174.194,569	0,000			1,00	1,25	100,00%	0,000	174.194,569	0,000	174.194,569	0,000	11.409,648	4.768.759,403
12+100	100	175.328,699	0,000			1,00	1,25	100,00%	0,000	175.328,699	0,000	175.328,699	0,000	11.409,648	4.944.088,102
12+200	100	160.208,309	0,000			1,00	1,25	100,00%	0,000	160.208,309	0,000	160.208,309	0,000	11.409,648	5.104.296,411
12+300	100	139.665,999	0,000			1,00	1,25	100,00%	0,000	139.665,999	0,000	139.665,999	0,000	11.409,648	5.243.962,410
12+400	100	123.443,829	0,000			1,00	1,25	100,00%	0,000	123.443,829	0,000	123.443,829	0,000	11.409,648	5.367.406,239
12+500	100	116.960,134	0,000			1,00	1,25	100,00%	0,000	116.960,134	0,000	116.960,134	0,000	11.409,648	5.484.366,373
12+600	100	101.429,303	0,000			1,00	1,25	100,00%	0,000	101.429,303	0,000	101.429,303	0,000	11.409,648	5.585.795,676
12+700	100	82.934,211	0,000			1,00	1,25	100,00%	0,000	82.934,211	0,000	82.934,211	0,000	11.409,648	5.668.729,887
12+800	100	92.148,099	0,000			1,00	1,25	100,00%	0,000	92.148,099	0,000	92.148,099	0,000	11.409,648	5.760.877,986
12+900	100	105.807,581	0,000			1,00	1,25	100,00%	0,000	105.807,581	0,000	105.807,581	0,000	11.409,648	5.866.685,567
13+000	100	105.192,527	0,000			1,00	1,25	100,00%	0,000	105.192,527	0,000	105.192,527	0,000	11.409,648	5.971.878,094
13+100	100	102.398,802	0,000			1,00	1,25	100,00%	0,000	102.398,802	0,000	102.398,802	0,000	11.409,648	6.074.276,896
13+200	100	95.781,741	0,000			1,00	1,25	100,00%	0,000	95.781,741	0,000	95.781,741	0,000	11.409,648	6.170.058,637
13+300	100	99.760,673	0,000			1,00	1,25	100,00%	0,000	99.760,673	0,000	99.760,673	0,000	11.409,648	6.269.819,310
13+400	100	111.973,103	0,000			1,00	1,25	100,00%	0,000	111.973,103	0,000	111.973,103	0,000	11.409,648	6.381.792,413
13+500	100	123.238,772	0,000			1,00	1,25	100,00%	0,000	123.238,772	0,000	123.238,772	0,000	11.409,648	6.505.031,185
13+600	100	131.645,051	0,000			1,00	1,25	100,00%	0,000	131.645,051	0,000	131.645,051	0,000	11.409,648	6.636.676,236
13+700	100	118.454,658	0,000			1,00	1,25	100,00%	0,000	118.454,658	0,000	118.454,658	0,000	11.409,648	6.755.130,894
13+800	100	94.223,804	0,000			1,00	1,25	100,00%	0,000	94.223,804	0,000	94.223,804	0,000	11.409,648	6.849.354,698
13+900	100	93.640,676	0,000			1,00	1,25	100,00%	0,000	93.640,676	0,000	93.640,676	0,000	11.409,648	6.942.995,374
14+000	100	104.131,044	0,000			1,00	1,25	100,00%	0,000	104.131,044	0,000	104.131,044	0,000	11.409,648	7.047.126,418
14+100	100	139.482,563	0,000			1,00	1,25	100,00%	0,000	139.482,563	0,000	139.482,563	0,000	11.409,648	7.186.608,981
14+200	100	174.863,406	0,000			1,00	1,25	100,00%	0,000	174.863,406	0,000	174.863,406	0,000	11.409,648	7.361.472,387
14+300	100	163.582,151	0,000			1,00	1,25	100,00%	0,000	163.582,151	0,000	163.582,151	0,000	11.409,648	7.525.054,538
14+400	100	137.439,614	0,000			1,00	1,25	100,00%	0,000	137.439,614	0,000	137.439,614	0,000	11.409,648	7.662.494,152
14+500	100	109.248,795	0,000			1,00	1,25	100,00%	0,000	109.248,795	0,000	109.248,795	0,000	11.409,648	7.771.742,947
14+600	100	85.710,003	0,000			1,00	1,25	100,00%	0,000	85.710,003	0,000	85.710,003	0,000	11.409,648	7.857.452,950
14+700	100	77.081,061	0,000			1,00	1,25	100,00%	0,000	77.081,061	0,000	77.081,061	0,000	11.409,648	7.934.534,011
14+800	100	59.254,597	0,000			1,00	1,25	100,00%	0,000	59.254,597	0,000	59.254,597	0,000	11.409,648	7.993.788,608
14+900	100	24.272,858	0,000			1,00	1,25	100,00%	0,000	24.272,858	0,000	24.272,858	0,000	11.409,648	8.018.061,466
15+000	100	23.917,990	0,000			1,00	1,25	100,00%	0,000	23.917,990	0,000	23.917,990	0,000	11.409,648	8.041.979,456
15+100	100	18.312,386	0,000			1,00	1,25	100,00%	0,000	18.312,386	0,000	18.312,386	0,000	11.409,648	8.060.291,842
15+200	100	4.564,120	1.699,327			1,00	1,25	100,00%	0,000	4.564,120	1.699,327	2.864,793	0,000	13.108,975	8.063.156,635
15+300	100	0,000	4.757,333			1,15	1,44	100,00%	0,000	0,000	0,000	-4.757,333	0,000	13.108,975	8.058.399,302

ESTUDIO INFORMATIVO DEL CORREDOR CÁNTABRICO - MEDITERRÁNEO DE ALTA VELOCIDAD. TRAMO TERUEL - ZARAGOZA.

DIAGRAMA DE EQUILIBRIO DE MOVIMIENTOS DE TIERRAS

Alternativa 5.2

PK	d	PLATAFORMA		EXCAVACIÓN TÚNEL EN MINA		COEF. PASO		EXCAVACIÓN			COMPENS.	BALANCE	VOL. ACUMULADOS		
		EXCAV.	TERRAPLÉN	NOMBRE	EXCAV.	RELLENOS	VERTEDERO	% APROV	NO APROV.	APROV.	TRANS.		A VERTEDERO	COM.TRAN.	BALANCE
15+400	100	0,000	6.079,314			1,15	1,44	100,00%	0,000	0,000	0,000	-6.079,314	0,000	13.108,975	8.052.319,988
15+500	100	2.992,120	470,995			1,15	1,44	100,00%	0,000	3.440,938	470,995	2.969,943	0,000	13.579,970	8.055.289,931
15+600	100	4.020,497	40,032			1,15	1,44	100,00%	0,000	4.623,572	40,032	4.583,540	0,000	13.620,002	8.059.873,471
15+700	100	0,000	0,000			1,15	1,44	100,00%	0,000	0,000	0,000	0,000	0,000	13.620,002	8.059.873,471
15+800	100	0,000	0,000			1,15	1,44	100,00%	0,000	0,000	0,000	0,000	0,000	13.620,002	8.059.873,471
15+900	100	0,000	0,000			1,15	1,44	100,00%	0,000	0,000	0,000	0,000	0,000	13.620,002	8.059.873,471
16+000	100	0,000	0,000			1,15	1,44	100,00%	0,000	0,000	0,000	0,000	0,000	13.620,002	8.059.873,471
16+100	100	0,000	0,000			1,15	1,44	100,00%	0,000	0,000	0,000	0,000	0,000	13.620,002	8.059.873,471
16+200	100	0,000	0,000			1,15	1,44	100,00%	0,000	0,000	0,000	0,000	0,000	13.620,002	8.059.873,471
16+300	100	0,000	0,000			1,15	1,44	100,00%	0,000	0,000	0,000	0,000	0,000	13.620,002	8.059.873,471
16+400	100	8.500,685	0,000			1,15	1,44	100,00%	0,000	9.775,788	0,000	9.775,788	0,000	13.620,002	8.069.649,258
16+500	100	4.411,647	0,000			1,15	1,44	100,00%	0,000	5.073,394	0,000	5.073,394	0,000	13.620,002	8.074.722,652
16+600	100	8.599,810	0,000			1,15	1,44	100,00%	0,000	9.889,782	0,000	9.889,782	0,000	13.620,002	8.084.612,434
16+700	100	11.356,219	0,000			1,15	1,44	100,00%	0,000	13.059,652	0,000	13.059,652	0,000	13.620,002	8.097.672,086
16+800	100	845,606	1.249,851			1,15	1,44	100,00%	0,000	972,447	972,447	-277,404	0,000	14.592,449	8.097.394,682
16+900	100	3.137,179	812,525			1,15	1,44	100,00%	0,000	3.607,756	812,525	2.795,231	0,000	15.404,974	8.100.189,912
17+000	100	13.019,971	0,000			1,15	1,44	100,00%	0,000	14.972,967	0,000	14.972,967	0,000	15.404,974	8.115.162,879
17+100	100	22.966,703	0,000			1,15	1,44	100,00%	0,000	26.411,708	0,000	26.411,708	0,000	15.404,974	8.141.574,588
17+200	100	31.897,389	0,000			1,15	1,44	100,00%	0,000	36.681,997	0,000	36.681,997	0,000	15.404,974	8.178.256,585
17+300	100	35.911,293	0,000			1,15	1,44	100,00%	0,000	41.297,987	0,000	41.297,987	0,000	15.404,974	8.219.554,572
17+400	100	36.367,924	0,000			1,15	1,44	100,00%	0,000	41.823,113	0,000	41.823,113	0,000	15.404,974	8.261.377,684
17+500	100	47.298,957	0,000			1,15	1,44	100,00%	0,000	54.393,801	0,000	54.393,801	0,000	15.404,974	8.315.771,485
17+600	100	73.323,079	0,000			1,15	1,44	100,00%	0,000	84.321,541	0,000	84.321,541	0,000	15.404,974	8.400.093,026
17+700	100	77.179,058	0,000			1,15	1,44	100,00%	0,000	88.755,917	0,000	88.755,917	0,000	15.404,974	8.488.848,943
17+800	100	62.668,064	0,000			1,15	1,44	100,00%	0,000	72.068,274	0,000	72.068,274	0,000	15.404,974	8.560.917,216
17+900	100	33.056,525	0,000			1,15	1,44	100,00%	0,000	38.015,004	0,000	38.015,004	0,000	15.404,974	8.598.932,220
18+000	100	10.743,475	0,000			1,15	1,44	100,00%	0,000	12.354,996	0,000	12.354,996	0,000	15.404,974	8.611.287,216
18+100	100	3.182,881	109,528			1,15	1,44	100,00%	0,000	3.660,313	109,528	3.550,785	0,000	15.514,502	8.614.838,001
18+200	100	726,919	1.011,759			1,15	1,44	100,00%	0,000	835,957	835,957	-175,802	0,000	16.350,459	8.614.662,199
18+300	100	374,841	1.513,458			1,15	1,44	100,00%	0,000	431,067	431,067	-1.082,391	0,000	16.781,526	8.613.579,808
18+400	100	0,000	3.695,451			1,15	1,44	100,00%	0,000	0,000	0,000	-3.695,451	0,000	16.781,526	8.609.884,357
18+500	100	0,000	5.213,958			1,15	1,44	100,00%	0,000	0,000	0,000	-5.213,958	0,000	16.781,526	8.604.670,399
18+600	100	0,000	4.568,706			1,15	1,44	100,00%	0,000	0,000	0,000	-4.568,706	0,000	16.781,526	8.600.101,693
18+661	861	0,000	2.809,407			1,15	1,44	100,00%	0,000	0,000	0,000	-2.809,407	0,000	16.781,526	8.597.292,286
TOTAL		**8.356.127,141**	**57.521,981**		**224.800,000**				**0,000**	**8.654.814,267**	**16.781,526**	**8.597.292,286**			

ESTUDIO INFORMATIVO DEL CORREDOR CÁNTABRICO - MEDITERRÁNEO DE ALTA VELOCIDAD. TRAMO TERUEL - ZARAGOZA.

DIAGRAMA DE EQUILIBRIO DE MOVIMIENTOS DE TIERRAS

Alternativa 6.0

PK	d	PLATAFORMA		EXCAVACIÓN TÚNEL EN MINA		COEF. PASO		EXCAVACIÓN			COMPENS.	BALANCE	VOL. ACUMULADOS		
		EXCAV.	TERRAPLÉN	NOMBRE	EXCAV.	RELLENOS	VERTEDERO	% APROV	NO APROV.	APROV.	TRANS.		A VERTEDERO	COM.TRAN.	BALANCE
6+000		0,000	0,000			1,00	1,25	0,00%	0,000	0,000	0,000	0,000	0,000	0,000	0,000
6+100	100	0,000	2.931,059			1,00	1,25	0,00%	0,000	0,000	0,000	-2.931,059	0,000	0,000	-2.931,059
6+200	100	0,000	3.129,706			1,00	1,25	0,00%	0,000	0,000	0,000	-3.129,706	0,000	0,000	-6.060,765
6+300	100	0,000	4.062,335			1,00	1,25	0,00%	0,000	0,000	0,000	-4.062,335	0,000	0,000	-10.123,100
6+400	100	0,000	4.626,131			1,00	1,25	0,00%	0,000	0,000	0,000	-4.626,131	0,000	0,000	-14.749,231
6+500	100	0,000	5.596,741			1,00	1,25	0,00%	0,000	0,000	0,000	-5.596,741	0,000	0,000	-20.345,972
6+600	100	0,000	9.682,572			1,00	1,25	0,00%	0,000	0,000	0,000	-9.682,572	0,000	0,000	-30.028,544
6+700	100	0,000	10.269,460			1,00	1,25	0,00%	0,000	0,000	0,000	-10.269,460	0,000	0,000	-40.298,004
6+800	100	0,000	9.230,304			1,00	1,25	0,00%	0,000	0,000	0,000	-9.230,304	0,000	0,000	-49.528,308
6+900	100	0,000	9.304,307			1,00	1,25	0,00%	0,000	0,000	0,000	-9.304,307	0,000	0,000	-58.832,615
7+000	100	0,000	3.582,653			1,00	1,25	0,00%	0,000	0,000	0,000	-3.582,653	0,000	0,000	-62.415,268
7+100	100	0,000	10.149,893			1,00	1,25	0,00%	0,000	0,000	0,000	-10.149,893	0,000	0,000	-72.565,161
7+200	100	0,000	7.361,404			1,00	1,25	0,00%	0,000	0,000	0,000	-7.361,404	0,000	0,000	-79.926,565
7+300	100	0,000	3.933,381			1,00	1,25	0,00%	0,000	0,000	0,000	-3.933,381	0,000	0,000	-83.859,946
7+400	100	0,000	2.764,316			1,00	1,25	0,00%	0,000	0,000	0,000	-2.764,316	0,000	0,000	-86.624,262
7+500	100	0,000	2.612,567			1,00	1,25	0,00%	0,000	0,000	0,000	-2.612,567	0,000	0,000	-89.236,829
7+600	100	0,232	1.074,462			1,00	1,25	0,00%	0,290	0,000	0,000	-1.074,462	0,290	0,000	-90.311,291
7+700	100	5,758	830,998			1,00	1,25	0,00%	7,198	0,000	0,000	-830,998	7,488	0,000	-91.142,289
7+800	100	0,000	471,056			1,00	1,25	0,00%	0,000	0,000	0,000	-471,056	7,488	0,000	-91.613,345
7+900	100	157,642	115,091			1,00	1,25	0,00%	197,053	0,000	0,000	-115,091	204,540	0,000	-91.728,436
8+000	100	491,097	0,059			1,00	1,25	0,00%	613,871	0,000	0,000	-0,059	818,411	0,000	-91.728,495
8+100	100	872,154	0,007			1,00	1,25	0,00%	1.090,193	0,000	0,000	-0,007	1.908,604	0,000	-91.728,502
8+200	100	1.384,127	0,000			1,00	1,25	0,00%	1.730,159	0,000	0,000	0,000	3.638,763	0,000	-91.728,502
8+300	100	1.168,471	0,000			1,00	1,25	50,00%	730,294	584,236	0,000	584,236	4.369,057	0,000	-91.144,267
8+400	100	1.001,931	0,000			1,00	1,25	50,00%	626,207	500,966	0,000	500,966	4.995,264	0,000	-90.643,301
8+500	100	3.623,752	0,000			1,00	1,25	50,00%	2.264,845	1.811,876	0,000	1.811,876	7.260,109	0,000	-88.831,425
8+600	100	2.491,399	0,000			1,00	1,25	50,00%	1.557,124	1.245,700	0,000	1.245,700	8.817,233	0,000	-87.585,726
8+700	100	1.524,028	0,000			1,00	1,25	50,00%	952,518	762,014	0,000	762,014	9.769,751	0,000	-86.823,712
8+800	100	1.709,112	0,000			1,00	1,25	50,00%	1.068,195	854,556	0,000	854,556	10.837,946	0,000	-85.969,156
8+900	100	4.458,842	0,000			1,00	1,25	50,00%	2.786,776	2.229,421	0,000	2.229,421	13.624,722	0,000	-83.739,735
9+000	100	1.260,150	0,000			1,00	1,25	50,00%	787,594	630,075	0,000	630,075	14.412,316	0,000	-83.109,660
9+100	100	1.792,915	0,000			1,00	1,25	50,00%	1.120,572	896,458	0,000	896,458	15.532,888	0,000	-82.213,202
9+200	100	1.739,954	0,000			1,00	1,25	50,00%	1.087,471	869,977	0,000	869,977	16.620,359	0,000	-81.343,225
9+300	100	1.522,991	0,520			1,00	1,25	50,00%	951,869	761,496	0,520	760,976	17.572,228	0,520	-80.582,250
9+400	100	565,707	1,167			1,00	1,25	50,00%	353,567	282,854	1,167	281,687	17.925,795	1,687	-80.300,563
9+500	100	1.180,243	0,027			1,00	1,25	50,00%	737,652	590,122	0,027	590,095	18.663,447	1,714	-79.710,469
9+600	100	1.753,312	0,000			1,00	1,25	50,00%	1.095,820	876,656	0,000	876,656	19.759,267	1,714	-78.833,813
9+700	100	1.811,820	0,000			1,00	1,25	50,00%	1.132,388	905,910	0,000	905,910	20.891,654	1,714	-77.927,903
9+800	100	2.170,099	0,000			1,00	1,25	50,00%	1.356,312	1.085,050	0,000	1.085,050	22.247,966	1,714	-76.842,853
9+900	100	1.730,781	0,000			1,00	1,25	50,00%	1.081,738	865,391	0,000	865,391	23.329,704	1,714	-75.977,463
10+000	100	1.432,431	0,000			1,00	1,25	50,00%	895,269	716,216	0,000	716,216	24.224,974	1,714	-75.261,247
10+100	100	2.093,050	0,000			1,00	1,25	50,00%	1.308,156	1.046,525	0,000	1.046,525	25.533,130	1,714	-74.214,722
10+200	100	1.896,362	0,000			1,00	1,25	50,00%	1.185,226	948,181	0,000	948,181	26.718,356	1,714	-73.266,541
10+300	100	1.117,546	0,000			1,00	1,25	50,00%	698,466	558,773	0,000	558,773	27.416,823	1,714	-72.707,768
10+400	100	684,761	0,194			1,00	1,25	50,00%	427,976	342,381	0,194	342,187	27.844,798	1,908	-72.365,582
10+500	100	217,696	57,999			1,00	1,25	50,00%	136,060	108,848	57,999	50,849	27.980,858	59,907	-72.314,733
10+600	100	373,534	3,592			1,00	1,25	50,00%	233,459	186,767	3,592	183,175	28.214,317	63,499	-72.131,558
10+700	100	746,569	0,089			1,00	1,25	50,00%	466,606	373,285	0,089	373,196	28.680,923	63,588	-71.758,362
10+800	100	768,428	0,060			1,00	1,25	50,00%	480,268	384,214	0,060	384,154	29.161,190	63,648	-71.374,208
10+900	100	602,876	7,678			1,00	1,25	50,00%	376,798	301,438	7,678	293,760	29.537,988	71,326	-71.080,448
11+000	100	457,362	4,369			1,00	1,25	50,00%	285,851	228,681	4,369	224,312	29.823,839	75,695	-70.856,136
11+100	100	1.320,903	0,100			1,00	1,25	50,00%	825,564	660,452	0,100	660,352	30.649,403	75,795	-70.195,785

ESTUDIO INFORMATIVO DEL CORREDOR CÁNTABRICO - MEDITERRÁNEO DE ALTA VELOCIDAD. TRAMO TERUEL - ZARAGOZA.

DIAGRAMA DE EQUILIBRIO DE MOVIMIENTOS DE TIERRAS

Alternativa 6.0

PK	d	PLATAFORMA		EXCAVACIÓN TÚNEL EN MINA		COEF. PASO		EXCAVACIÓN			COMPENS.	BALANCE	VOL. ACUMULADOS		
		EXCAV.	TERRAPLÉN	NOMBRE	EXCAV.	RELLENOS	VERTEDERO	% APROV	NO APROV.	APROV.	TRANS.		A VERTEDERO	COM.TRAN.	BALANCE
11+200	100	4.719,233	0,000			1,00	1,25	50,00%	2.949,521	2.359,617	0,000	2.359,617	33.598,924	75,795	-67.836,168
11+300	100	1.582,273	0,000			1,00	1,25	50,00%	988,921	791,137	0,000	791,137	34.587,844	75,795	-67.045,032
11+400	100	1.927,317	0,000			1,00	1,25	50,00%	1.204,573	963,659	0,000	963,659	35.792,418	75,795	-66.081,373
11+500	100	2.232,812	0,000			1,00	1,25	50,00%	1.395,508	1.116,406	0,000	1.116,406	37.187,925	75,795	-64.964,967
11+600	100	2.250,713	0,000			1,00	1,25	50,00%	1.406,696	1.125,357	0,000	1.125,357	38.594,621	75,795	-63.839,611
11+700	100	3.277,194	0,014			1,00	1,25	50,00%	2.048,246	1.638,597	0,014	1.638,583	40.642,867	75,809	-62.201,028
11+800	100	300,061	772,537			1,00	1,25	50,00%	187,538	150,031	150,031	-622,507	40.830,405	225,840	-62.823,534
11+900	100	699,557	23,854			1,00	1,25	50,00%	437,223	349,779	23,854	325,925	41.267,628	249,694	-62.497,610
12+000	100	1.288,627	0,000			1,00	1,25	50,00%	805,392	644,314	0,000	644,314	42.073,020	249,694	-61.853,296
12+100	100	1.299,023	0,000			1,00	1,25	50,00%	811,889	649,512	0,000	649,512	42.884,909	249,694	-61.203,785
12+200	100	1.415,665	0,000			1,00	1,25	50,00%	884,791	707,833	0,000	707,833	43.769,700	249,694	-60.495,952
12+300	100	1.609,315	0,000			1,00	1,25	50,00%	1.005,822	804,658	0,000	804,658	44.775,522	249,694	-59.691,295
12+400	100	1.804,793	0,000			1,00	1,25	50,00%	1.127,996	902,397	0,000	902,397	45.903,518	249,694	-58.788,898
12+500	100	2.178,818	0,000			1,00	1,25	50,00%	1.361,761	1.089,409	0,000	1.089,409	47.265,279	249,694	-57.699,489
12+600	100	2.330,484	0,716			1,00	1,25	50,00%	1.456,553	1.165,242	0,716	1.164,526	48.721,831	250,410	-56.534,963
12+700	100	2.524,039	0,007			1,00	1,25	50,00%	1.577,524	1.262,020	0,007	1.262,013	50.299,356	250,417	-55.272,951
12+800	100	1.814,880	130,899			1,00	1,25	50,00%	1.134,300	907,440	130,899	776,541	51.433,656	381,316	-54.496,410
12+900	100	1.305,010	915,522			1,00	1,25	50,00%	815,631	652,505	652,505	-263,017	52.249,287	1.033,821	-54.759,427
13+000	100	1.614,198	260,938			1,00	1,25	50,00%	1.008,874	807,099	260,938	546,161	53.258,161	1.294,759	-54.213,266
13+100	100	2.157,672	6,573			1,00	1,25	50,00%	1.348,545	1.078,836	6,573	1.072,263	54.606,706	1.301,332	-53.141,003
13+200	100	2.102,381	12,368			1,00	1,25	50,00%	1.313,988	1.051,191	12,368	1.038,823	55.920,694	1.313,700	-52.102,180
13+300	100	2.066,408	22,862			1,00	1,25	50,00%	1.291,505	1.033,204	22,862	1.010,342	57.212,199	1.336,562	-51.091,838
13+400	100	1.719,026	22,387			1,00	1,25	50,00%	1.074,391	859,513	22,387	837,126	58.286,590	1.358,949	-50.254,712
13+500	100	761,552	0,834			1,00	1,25	50,00%	475,970	380,776	0,834	379,942	58.762,560	1.359,783	-49.874,770
13+600	100	700,654	0,331			1,00	1,25	50,00%	437,909	350,327	0,331	349,996	59.200,469	1.360,114	-49.524,774
13+700	100	899,095	0,000			1,00	1,25	50,00%	561,934	449,548	0,000	449,548	59.762,403	1.360,114	-49.075,227
13+800	100	818,111	0,301			1,00	1,25	50,00%	511,319	409,056	0,301	408,755	60.273,723	1.360,415	-48.666,472
13+900	100	816,915	0,106			1,00	1,25	50,00%	510,572	408,458	0,106	408,352	60.784,294	1.360,521	-48.258,121
14+000	100	910,825	0,000			1,00	1,25	50,00%	569,266	455,413	0,000	455,413	61.353,560	1.360,521	-47.802,708
14+100	100	815,240	0,000			1,00	1,25	50,00%	509,525	407,620	0,000	407,620	61.863,085	1.360,521	-47.395,088
14+200	100	537,855	0,087			1,00	1,25	50,00%	336,159	268,928	0,087	268,841	62.199,244	1.360,608	-47.126,248
14+300	100	568,594	0,264			1,00	1,25	50,00%	355,371	284,297	0,264	284,033	62.554,616	1.360,872	-46.842,215
14+400	100	597,785	0,689			1,00	1,25	50,00%	373,616	298,893	0,689	298,204	62.928,231	1.361,561	-46.544,011
14+500	100	274,935	5,642			1,00	1,25	50,00%	171,834	137,468	5,642	131,826	63.100,066	1.367,203	-46.412,186
14+600	100	207,088	247,708			1,00	1,25	50,00%	129,430	103,544	103,544	-144,164	63.229,496	1.470,747	-46.556,350
14+700	100	757,022	0,697			1,00	1,25	100,00%	0,000	757,022	0,697	756,325	63.229,496	1.471,444	-45.800,025
14+800	100	614,574	0,186			1,00	1,25	100,00%	0,000	614,574	0,186	614,388	63.229,496	1.471,630	-45.185,637
14+900	100	518,750	0,460			1,00	1,25	100,00%	0,000	518,750	0,460	518,290	63.229,496	1.472,090	-44.667,347
15+000	100	490,513	0,106			1,00	1,25	100,00%	0,000	490,513	0,106	490,407	63.229,496	1.472,196	-44.176,940
15+100	100	556,457	0,577			1,00	1,25	100,00%	0,000	556,457	0,577	555,880	63.229,496	1.472,773	-43.621,060
15+200	100	686,874	0,439			1,00	1,25	100,00%	0,000	686,874	0,439	686,435	63.229,496	1.473,212	-42.934,625
15+300	100	725,171	0,036			1,00	1,25	100,00%	0,000	725,171	0,036	725,135	63.229,496	1.473,248	-42.209,490
15+400	100	760,412	0,039			1,00	1,25	100,00%	0,000	760,412	0,039	760,373	63.229,496	1.473,287	-41.449,117
15+500	100	504,522	0,288			1,00	1,25	100,00%	0,000	504,522	0,288	504,234	63.229,496	1.473,575	-40.944,883
15+600	100	382,506	0,798			1,00	1,25	100,00%	0,000	382,506	0,798	381,708	63.229,496	1.474,373	-40.563,175
15+700	100	200,917	0,197			1,00	1,25	100,00%	0,000	200,917	0,197	200,720	63.229,496	1.474,570	-40.362,455
15+800	100	176,870	0,687			1,00	1,25	100,00%	0,000	176,870	0,687	176,183	63.229,496	1.475,257	-40.186,272
15+900	100	527,930	0,325			1,00	1,25	100,00%	0,000	527,930	0,325	527,605	63.229,496	1.475,582	-39.658,667
16+000	100	577,392	0,633			1,00	1,25	100,00%	0,000	577,392	0,633	576,759	63.229,496	1.476,215	-39.081,908
16+100	100	501,052	0,208			1,00	1,25	100,00%	0,000	501,052	0,208	500,844	63.229,496	1.476,423	-38.581,064
16+200	100	1.555,442	31,962			1,00	1,25	100,00%	0,000	1.555,442	31,962	1.523,480	63.229,496	1.508,385	-37.057,584
16+300	100	1.832,199	0,565			1,00	1,25	100,00%	0,000	1.832,199	0,565	1.831,634	63.229,496	1.508,950	-35.225,950

ESTUDIO INFORMATIVO DEL CORREDOR CÁNTABRICO - MEDITERRÁNEO DE ALTA VELOCIDAD. TRAMO TERUEL - ZARAGOZA.

DIAGRAMA DE EQUILIBRIO DE MOVIMIENTOS DE TIERRAS

Alternativa 6.0

PK	d	PLATAFORMA		EXCAVACIÓN TÚNEL EN MINA		COEF. PASO		EXCAVACIÓN			COMPENS.	BALANCE	VOL. ACUMULADOS		
		EXCAV.	TERRAPLÉN	NOMBRE	EXCAV.	RELLENOS	VERTEDERO	% APROV	NO APROV.	APROV.	TRANS.		A VERTEDERO	COM.TRAN.	BALANCE
16+400	100	686,984	0,077			1,00	1,25	100,00%	0,000	686,984	0,077	686,907	63.229,496	1.509,027	-34.539,043
16+500	100	815,779	0,033			1,00	1,25	100,00%	0,000	815,779	0,033	815,746	63.229,496	1.509,060	-33.723,297
16+600	100	349,459	0,129			1,00	1,25	100,00%	0,000	349,459	0,129	349,330	63.229,496	1.509,189	-33.373,967
16+700	100	843,756	0,069			1,00	1,25	100,00%	0,000	843,756	0,069	843,687	63.229,496	1.509,258	-32.530,280
16+800	100	1.098,921	0,000			1,00	1,25	100,00%	0,000	1.098,921	0,000	1.098,921	63.229,496	1.509,258	-31.431,359
16+900	100	1.161,399	0,000			1,00	1,25	100,00%	0,000	1.161,399	0,000	1.161,399	63.229,496	1.509,258	-30.269,960
17+000	100	768,664	0,000			1,00	1,25	100,00%	0,000	768,664	0,000	768,664	63.229,496	1.509,258	-29.501,296
17+100	100	597,119	0,233			1,00	1,25	100,00%	0,000	597,119	0,233	596,886	63.229,496	1.509,491	-28.904,410
17+200	100	1.184,995	0,011			1,00	1,25	100,00%	0,000	1.184,995	0,011	1.184,984	63.229,496	1.509,502	-27.719,426
17+300	100	630,121	0,066			1,00	1,25	100,00%	0,000	630,121	0,066	630,055	63.229,496	1.509,568	-27.089,371
17+400	100	984,961	0,000			1,00	1,25	100,00%	0,000	984,961	0,000	984,961	63.229,496	1.509,568	-26.104,410
17+500	100	938,333	0,613			1,00	1,25	100,00%	0,000	938,333	0,613	937,720	63.229,496	1.510,181	-25.166,690
17+600	100	405,899	0,746			1,00	1,25	100,00%	0,000	405,899	0,746	405,153	63.229,496	1.510,927	-24.761,537
17+700	100	468,903	0,783			1,00	1,25	100,00%	0,000	468,903	0,783	468,120	63.229,496	1.511,710	-24.293,417
17+800	100	481,131	30,389			1,00	1,25	100,00%	0,000	481,131	30,389	450,742	63.229,496	1.542,099	-23.842,675
17+804	4	54,237	0,000			1,00	1,25	100,00%	0,000	54,237	0,000	54,237	63.229,496	1.542,099	-23.788,438
TOTAL		**121.095,447**	**94.300,288**						**63.229,496**	**70.511,851**	**1.542,099**	**-23.788,438**			

ESTUDIO INFORMATIVO DEL CORREDOR CÁNTABRICO - MEDITERRÁNEO DE ALTA VELOCIDAD. TRAMO TERUEL - ZARAGOZA.

DIAGRAMA DE EQUILIBRIO DE MOVIMIENTOS DE TIERRAS

Alternativa 7.1

PK	d	PLATAFORMA		EXCAVACIÓN TÚNEL EN MINA		COEF. PASO		EXCAVACIÓN			COMPENS.	BALANCE	VOL. ACUMULADOS		
		EXCAV.	TERRAPLÉN	NOMBRE	EXCAV.	RELLENOS	VERTEDERO	% APROV	NO APROV.	APROV.	TRANS.		A VERTEDERO	COM.TRAN.	BALANCE
7+000		0,000	0,000			1,00	1,25	0,00%	0,000	0,000	0,000	0,000	0,000	0,000	0,000
7+100	100	2.652,402	12,175			1,00	1,25	0,00%	3.315,503	0,000	0,000	-12,175	3.315,503	0,000	-12,175
7+200	100	1.692,261	122,598			1,00	1,25	0,00%	2.115,326	0,000	0,000	-122,598	5.430,829	0,000	-134,773
7+300	100	668,373	1.287,935			1,00	1,25	0,00%	835,466	0,000	0,000	-1.287,935	6.266,295	0,000	-1.422,708
7+400	100	534,339	1.894,725			1,00	1,25	0,00%	667,924	0,000	0,000	-1.894,725	6.934,219	0,000	-3.317,433
7+500	100	161,658	215,252			1,00	1,25	0,00%	202,073	0,000	0,000	-215,252	7.136,291	0,000	-3.532,685
7+600	100	1.944,356	34,557			1,00	1,25	0,00%	2.430,445	0,000	0,000	-34,557	9.566,736	0,000	-3.567,242
7+700	100	1.622,635	36,366			1,00	1,25	0,00%	2.028,294	0,000	0,000	-36,366	11.595,030	0,000	-3.603,608
7+800	100	1.293,412	128,227			1,00	1,25	0,00%	1.616,765	0,000	0,000	-128,227	13.211,795	0,000	-3.731,835
7+900	100	434,739	56,774			1,00	1,25	0,00%	543,424	0,000	0,000	-56,774	13.755,219	0,000	-3.788,609
8+000	100	0,000	0,000			1,00	1,25	0,00%	0,000	0,000	0,000	0,000	13.755,219	0,000	-3.788,609
8+100	100	0,000	0,000			1,00	1,25	0,00%	0,000	0,000	0,000	0,000	13.755,219	0,000	-3.788,609
8+200	100	0,000	0,000			1,00	1,25	0,00%	0,000	0,000	0,000	0,000	13.755,219	0,000	-3.788,609
8+300	100	839,320	0,038			1,00	1,25	0,00%	1.049,150	0,000	0,000	-0,038	14.804,369	0,000	-3.788,647
8+400	100	0,000	0,000			1,00	1,25	0,00%	0,000	0,000	0,000	0,000	14.804,369	0,000	-3.788,647
8+500	100	0,000	0,000			1,00	1,25	0,00%	0,000	0,000	0,000	0,000	14.804,369	0,000	-3.788,647
8+600	100	0,000	0,000			1,00	1,25	0,00%	0,000	0,000	0,000	0,000	14.804,369	0,000	-3.788,647
8+700	100	0,000	0,000			1,00	1,25	0,00%	0,000	0,000	0,000	0,000	14.804,369	0,000	-3.788,647
8+800	100	0,000	0,000			1,00	1,25	0,00%	0,000	0,000	0,000	0,000	14.804,369	0,000	-3.788,647
8+900	100	331,694	3,646			1,00	1,25	0,00%	414,618	0,000	0,000	-3,646	15.218,986	0,000	-3.792,293
9+000	100	1.995,819	70,213			1,00	1,25	0,00%	2.494,774	0,000	0,000	-70,213	17.713,760	0,000	-3.862,506
9+100	100	3.297,813	23,892			1,15	1,44	100,00%	0,000	3.792,485	23,892	3.768,593	17.713,760	23,892	-93,913
9+200	100	14.509,995	24,862			1,15	1,44	100,00%	0,000	16.686,494	24,862	16.661,632	17.713,760	48,754	16.567,719
9+300	100	33.229,353	24,800			1,15	1,44	100,00%	0,000	38.213,756	24,800	38.188,956	17.713,760	73,554	54.756,675
9+400	100	35.826,979	25,108			1,15	1,44	100,00%	0,000	41.201,026	25,108	41.175,918	17.713,760	98,662	95.932,593
9+500	100	52.738,523	25,025			1,15	1,44	100,00%	0,000	60.649,301	25,025	60.624,276	17.713,760	123,687	156.556,869
9+600	100	48.916,459	24,867			1,15	1,44	100,00%	0,000	56.253,928	24,867	56.229,061	17.713,760	148,554	212.785,930
9+700	100	48.797,883	25,089			1,15	1,44	100,00%	0,000	56.117,565	25,089	56.092,476	17.713,760	173,643	268.878,407
9+800	100	38.082,223	25,005			1,15	1,44	100,00%	0,000	43.794,556	25,005	43.769,551	17.713,760	198,648	312.647,958
9+900	100	11.794,592	25,010			1,15	1,44	100,00%	0,000	13.563,781	25,010	13.538,771	17.713,760	223,658	326.186,729
10+000	100	5.803,110	25,012			1,15	1,44	100,00%	0,000	6.673,577	25,012	6.648,565	17.713,760	248,670	332.835,294
10+100	100	11.738,371	56,199			1,15	1,44	100,00%	0,000	13.499,127	56,199	13.442,928	17.713,760	304,869	346.278,221
10+200	100	7.267,242	649,511			1,15	1,44	100,00%	0,000	8.357,328	649,511	7.707,817	17.713,760	954,380	353.986,038
10+300	100	39.579,206	25,060			1,15	1,44	100,00%	0,000	45.516,087	25,060	45.491,027	17.713,760	979,440	399.477,065
10+400	100	84.999,243	25,453			1,15	1,44	100,00%	0,000	97.749,129	25,453	97.723,676	17.713,760	1.004,893	497.200,742
10+500	100	133.295,845	24,267			1,15	1,44	100,00%	0,000	153.290,222	24,267	153.265,955	17.713,760	1.029,160	650.466,697
10+600	100	168.889,769	24,911			1,15	1,44	100,00%	0,000	194.223,234	24,911	194.198,323	17.713,760	1.054,071	844.665,020
10+700	100	152.396,574	25,826			1,15	1,44	100,00%	0,000	175.256,060	25,826	175.230,234	17.713,760	1.079,897	1.019.895,254
10+800	100	0,000	0,000		15.000,000	1,20	1,50	100,00%	0,000	18.000,000	0,000	18.000,000	17.713,760	1.079,897	1.037.895,254
10+900	100	0,000	0,000		15.000,000	1,20	1,50	100,00%	0,000	18.000,000	0,000	18.000,000	17.713,760	1.079,897	1.055.895,254
11+000	100	0,000	0,000		15.000,000	1,20	1,50	100,00%	0,000	18.000,000	0,000	18.000,000	17.713,760	1.079,897	1.073.895,254
11+100	100	0,000	0,000		15.000,000	1,20	1,50	100,00%	0,000	18.000,000	0,000	18.000,000	17.713,760	1.079,897	1.091.895,254
11+200	100	0,000	0,000		15.000,000	1,20	1,50	100,00%	0,000	18.000,000	0,000	18.000,000	17.713,760	1.079,897	1.109.895,254
11+300	100	0,000	0,000		15.000,000	1,20	1,50	100,00%	0,000	18.000,000	0,000	18.000,000	17.713,760	1.079,897	1.127.895,254
11+400	100	0,000	0,000		15.000,000	1,20	1,50	100,00%	0,000	18.000,000	0,000	18.000,000	17.713,760	1.079,897	1.145.895,254
11+500	100	0,000	0,000		15.000,000	1,20	1,50	100,00%	0,000	18.000,000	0,000	18.000,000	17.713,760	1.079,897	1.163.895,254
11+600	100	0,000	0,000		15.000,000	1,20	1,50	100,00%	0,000	18.000,000	0,000	18.000,000	17.713,760	1.079,897	1.181.895,254
11+700	100	0,000	0,000		15.000,000	1,20	1,50	100,00%	0,000	18.000,000	0,000	18.000,000	17.713,760	1.079,897	1.199.895,254
11+800	100	0,000	0,000		15.000,000	1,20	1,50	100,00%	0,000	18.000,000	0,000	18.000,000	17.713,760	1.079,897	1.217.895,254
11+900	100	0,000	0,000		15.000,000	1,20	1,50	100,00%	0,000	18.000,000	0,000	18.000,000	17.713,760	1.079,897	1.235.895,254
12+000	100	0,000	0,000		15.000,000	1,20	1,50	100,00%	0,000	18.000,000	0,000	18.000,000	17.713,760	1.079,897	1.253.895,254
12+100	100	0,000	0,000		15.000,000	1,20	1,50	100,00%	0,000	18.000,000	0,000	18.000,000	17.713,760	1.079,897	1.271.895,254

ESTUDIO INFORMATIVO DEL CORREDOR CÁNTABRICO - MEDITERRÁNEO DE ALTA VELOCIDAD. TRAMO TERUEL - ZARAGOZA.

DIAGRAMA DE EQUILIBRIO DE MOVIMIENTOS DE TIERRAS

Alternativa 7.1

PK	d	PLATAFORMA		EXCAVACIÓN TÚNEL EN MINA		COEF. PASO		EXCAVACIÓN			COMPENS.	BALANCE	VOL. ACUMULADOS		
		EXCAV.	TERRAPLÉN	NOMBRE	EXCAV.	RELLENOS	VERTEDERO	% APROV	NO APROV.	APROV.	TRANS.		A VERTEDERO	COM.TRAN.	BALANCE
12+200	100	0,000	0,000		15.000,000	1,20	1,50	100,00%	0,000	18.000,000	0,000	18.000,000	17.713,760	1.079,897	1.289.895,254
12+300	100	0,000	0,000		15.000,000	1,20	1,50	100,00%	0,000	18.000,000	0,000	18.000,000	17.713,760	1.079,897	1.307.895,254
12+400	100	0,000	0,000		15.000,000	1,20	1,50	100,00%	0,000	18.000,000	0,000	18.000,000	17.713,760	1.079,897	1.325.895,254
12+500	100	0,000	0,000		15.000,000	1,20	1,50	100,00%	0,000	18.000,000	0,000	18.000,000	17.713,760	1.079,897	1.343.895,254
12+600	100	0,000	0,000		15.000,000	1,20	1,50	100,00%	0,000	18.000,000	0,000	18.000,000	17.713,760	1.079,897	1.361.895,254
12+700	100	0,000	0,000		15.000,000	1,20	1,50	100,00%	0,000	18.000,000	0,000	18.000,000	17.713,760	1.079,897	1.379.895,254
12+800	100	0,000	0,000		15.000,000	1,20	1,50	100,00%	0,000	18.000,000	0,000	18.000,000	17.713,760	1.079,897	1.397.895,254
12+900	100	0,000	0,000		15.000,000	1,20	1,50	100,00%	0,000	18.000,000	0,000	18.000,000	17.713,760	1.079,897	1.415.895,254
13+000	100	0,000	0,000		15.000,000	1,20	1,50	100,00%	0,000	18.000,000	0,000	18.000,000	17.713,760	1.079,897	1.433.895,254
13+100	100	0,000	0,000		15.000,000	1,20	1,50	100,00%	0,000	18.000,000	0,000	18.000,000	17.713,760	1.079,897	1.451.895,254
13+200	100	0,000	0,000		15.000,000	1,20	1,50	100,00%	0,000	18.000,000	0,000	18.000,000	17.713,760	1.079,897	1.469.895,254
13+300	100	0,000	0,000		15.000,000	1,20	1,50	100,00%	0,000	18.000,000	0,000	18.000,000	17.713,760	1.079,897	1.487.895,254
13+400	100	0,000	0,000		15.000,000	1,20	1,50	100,00%	0,000	18.000,000	0,000	18.000,000	17.713,760	1.079,897	1.505.895,254
13+500	100	0,000	0,000		15.000,000	1,20	1,50	100,00%	0,000	18.000,000	0,000	18.000,000	17.713,760	1.079,897	1.523.895,254
13+600	100	0,000	0,000		15.000,000	1,20	1,50	100,00%	0,000	18.000,000	0,000	18.000,000	17.713,760	1.079,897	1.541.895,254
13+700	100	0,000	0,000		15.000,000	1,20	1,50	100,00%	0,000	18.000,000	0,000	18.000,000	17.713,760	1.079,897	1.559.895,254
13+800	100	0,000	0,000		15.000,000	1,20	1,50	100,00%	0,000	18.000,000	0,000	18.000,000	17.713,760	1.079,897	1.577.895,254
13+900	100	0,000	0,000		15.000,000	1,20	1,50	100,00%	0,000	18.000,000	0,000	18.000,000	17.713,760	1.079,897	1.595.895,254
14+000	100	0,000	0,000		15.000,000	1,20	1,50	100,00%	0,000	18.000,000	0,000	18.000,000	17.713,760	1.079,897	1.613.895,254
14+100	100	0,000	0,000		15.000,000	1,20	1,50	100,00%	0,000	18.000,000	0,000	18.000,000	17.713,760	1.079,897	1.631.895,254
14+200	100	0,000	0,000		15.000,000	1,20	1,50	100,00%	0,000	18.000,000	0,000	18.000,000	17.713,760	1.079,897	1.649.895,254
14+300	100	0,000	0,000		15.000,000	1,20	1,50	100,00%	0,000	18.000,000	0,000	18.000,000	17.713,760	1.079,897	1.667.895,254
14+400	100	0,000	0,000		15.000,000	1,20	1,50	100,00%	0,000	18.000,000	0,000	18.000,000	17.713,760	1.079,897	1.685.895,254
14+500	100	0,000	0,000		15.000,000	1,20	1,50	100,00%	0,000	18.000,000	0,000	18.000,000	17.713,760	1.079,897	1.703.895,254
14+600	100	0,000	0,000		15.000,000	1,20	1,50	100,00%	0,000	18.000,000	0,000	18.000,000	17.713,760	1.079,897	1.721.895,254
14+700	100	0,000	0,000		15.000,000	1,20	1,50	100,00%	0,000	18.000,000	0,000	18.000,000	17.713,760	1.079,897	1.739.895,254
14+800	100	0,000	0,000		15.000,000	1,20	1,50	100,00%	0,000	18.000,000	0,000	18.000,000	17.713,760	1.079,897	1.757.895,254
14+900	100	0,000	0,000		15.000,000	1,20	1,50	100,00%	0,000	18.000,000	0,000	18.000,000	17.713,760	1.079,897	1.775.895,254
15+000	100	0,000	0,000		15.000,000	1,20	1,50	100,00%	0,000	18.000,000	0,000	18.000,000	17.713,760	1.079,897	1.793.895,254
15+100	100	0,000	0,000		15.000,000	1,20	1,50	100,00%	0,000	18.000,000	0,000	18.000,000	17.713,760	1.079,897	1.811.895,254
15+200	100	0,000	0,000		15.000,000	1,20	1,50	100,00%	0,000	18.000,000	0,000	18.000,000	17.713,760	1.079,897	1.829.895,254
15+300	100	0,000	0,000		15.000,000	1,20	1,50	100,00%	0,000	18.000,000	0,000	18.000,000	17.713,760	1.079,897	1.847.895,254
15+400	100	0,000	0,000		15.000,000	1,20	1,50	100,00%	0,000	18.000,000	0,000	18.000,000	17.713,760	1.079,897	1.865.895,254
15+500	100	0,000	0,000		15.000,000	1,20	1,50	100,00%	0,000	18.000,000	0,000	18.000,000	17.713,760	1.079,897	1.883.895,254
15+600	100	0,000	0,000		15.000,000	1,20	1,50	100,00%	0,000	18.000,000	0,000	18.000,000	17.713,760	1.079,897	1.901.895,254
15+700	100	0,000	0,000		15.000,000	1,20	1,50	100,00%	0,000	18.000,000	0,000	18.000,000	17.713,760	1.079,897	1.919.895,254
15+800	100	0,000	0,000		15.000,000	1,20	1,50	100,00%	0,000	18.000,000	0,000	18.000,000	17.713,760	1.079,897	1.937.895,254
15+900	100	0,000	0,000		15.000,000	1,20	1,50	100,00%	0,000	18.000,000	0,000	18.000,000	17.713,760	1.079,897	1.955.895,254
16+000	100	0,000	0,000		15.000,000	1,20	1,50	100,00%	0,000	18.000,000	0,000	18.000,000	17.713,760	1.079,897	1.973.895,254
16+100	100	0,000	0,000		15.000,000	1,20	1,50	100,00%	0,000	18.000,000	0,000	18.000,000	17.713,760	1.079,897	1.991.895,254
16+200	100	0,000	0,000		15.000,000	1,20	1,50	100,00%	0,000	18.000,000	0,000	18.000,000	17.713,760	1.079,897	2.009.895,254
16+300	100	0,000	0,000		15.000,000	1,20	1,50	100,00%	0,000	18.000,000	0,000	18.000,000	17.713,760	1.079,897	2.027.895,254
16+400	100	0,000	0,000		15.000,000	1,20	1,50	100,00%	0,000	18.000,000	0,000	18.000,000	17.713,760	1.079,897	2.045.895,254
16+500	100	0,000	0,000		15.000,000	1,20	1,50	100,00%	0,000	18.000,000	0,000	18.000,000	17.713,760	1.079,897	2.063.895,254
16+600	100	0,000	0,000		15.000,000	1,20	1,50	100,00%	0,000	18.000,000	0,000	18.000,000	17.713,760	1.079,897	2.081.895,254
16+700	100	0,000	0,000		15.000,000	1,20	1,50	100,00%	0,000	18.000,000	0,000	18.000,000	17.713,760	1.079,897	2.099.895,254
16+800	100	0,000	0,000		15.000,000	1,20	1,50	100,00%	0,000	18.000,000	0,000	18.000,000	17.713,760	1.079,897	2.117.895,254
16+900	100	0,000	0,000		15.000,000	1,20	1,50	100,00%	0,000	18.000,000	0,000	18.000,000	17.713,760	1.079,897	2.135.895,254
17+000	100	0,000	0,000		15.000,000	1,20	1,50	100,00%	0,000	18.000,000	0,000	18.000,000	17.713,760	1.079,897	2.153.895,254
17+100	100	0,000	0,000		15.000,000	1,20	1,50	100,00%	0,000	18.000,000	0,000	18.000,000	17.713,760	1.079,897	2.171.895,254
17+200	100	0,000	0,000		15.000,000	1,20	1,50	100,00%	0,000	18.000,000	0,000	18.000,000	17.713,760	1.079,897	2.189.895,254
17+300	100	0,000	0,000		15.000,000	1,20	1,50	100,00%	0,000	18.000,000	0,000	18.000,000	17.713,760	1.079,897	2.207.895,254

ESTUDIO INFORMATIVO DEL CORREDOR CÁNTABRICO - MEDITERRÁNEO DE ALTA VELOCIDAD. TRAMO TERUEL - ZARAGOZA.

DIAGRAMA DE EQUILIBRIO DE MOVIMIENTOS DE TIERRAS

Alternativa 7.1

PK	d	PLATAFORMA		EXCAVACIÓN TÚNEL EN MINA		COEF. PASO		EXCAVACIÓN			COMPENS.	BALANCE	VOL. ACUMULADOS		
		EXCAV.	TERRAPLÉN	NOMBRE	EXCAV.	RELLENOS	VERTEDERO	% APROV	NO APROV.	APROV.	TRANS.		A VERTEDERO	COM.TRAN.	BALANCE
17+400	100	0,000	0,000		15.000,000	1,20	1,50	100,00%	0,000	18.000,000	0,000	18.000,000	17.713,760	1.079,897	2.225.895,254
17+500	100	46.963,403	18,361		4.500,000	1,15	1,44	100,00%	0,000	59.182,913	18,361	59.164,552	17.713,760	1.098,258	2.285.059,806
17+600	100	120.922,055	25,364			1,15	1,44	100,00%	0,000	139.060,363	25,364	139.034,999	17.713,760	1.123,622	2.424.094,806
17+700	100	106.413,935	26,269			1,15	1,44	100,00%	0,000	122.376,025	26,269	122.349,756	17.713,760	1.149,891	2.546.444,562
17+800	100	77.950,424	25,592			1,15	1,44	100,00%	0,000	89.642,988	25,592	89.617,396	17.713,760	1.175,483	2.636.061,958
17+900	100	44.273,048	25,237			1,15	1,44	100,00%	0,000	50.914,005	25,237	50.888,768	17.713,760	1.200,720	2.686.950,726
18+000	100	69.028,236	27,572			1,15	1,44	100,00%	0,000	79.382,471	27,572	79.354,899	17.713,760	1.228,292	2.766.305,625
18+100	100	53.277,742	26,659			1,15	1,44	100,00%	0,000	61.269,403	26,659	61.242,744	17.713,760	1.254,951	2.827.548,369
18+200	100	14.439,901	25,523			1,15	1,44	100,00%	0,000	16.605,886	25,523	16.580,363	17.713,760	1.280,474	2.844.128,733
18+300	100	6.113,762	66,232			1,15	1,44	100,00%	0,000	7.030,826	66,232	6.964,594	17.713,760	1.346,706	2.851.093,327
18+400	100	684,138	685,884			1,15	1,44	100,00%	0,000	786,759	685,884	100,875	17.713,760	2.032,590	2.851.194,202
18+500	100	758,280	1.223,365			1,15	1,44	100,00%	0,000	872,022	872,022	-351,343	17.713,760	2.904,612	2.850.842,859
18+600	100	3.936,631	58,912			1,15	1,44	100,00%	0,000	4.527,126	58,912	4.468,214	17.713,760	2.963,524	2.855.311,072
18+700	100	9.260,557	30,472			1,15	1,44	100,00%	0,000	10.649,641	30,472	10.619,169	17.713,760	2.993,996	2.865.930,241
18+800	100	6.883,101	43,645			1,00	1,25	100,00%	0,000	6.883,101	43,645	6.839,456	17.713,760	3.037,641	2.872.769,697
18+900	100	391,745	3.245,087			1,00	1,25	100,00%	0,000	391,745	391,745	-2.853,342	17.713,760	3.429,386	2.869.916,355
19+000	100	449,245	3.214,529			1,00	1,25	100,00%	0,000	449,245	449,245	-2.765,284	17.713,760	3.878,631	2.867.151,071
19+100	100	2.370,780	2.006,312			1,00	1,25	100,00%	0,000	2.370,780	2.006,312	364,468	17.713,760	5.884,943	2.867.515,539
19+200	100	7.812,670	2.354,301			1,15	1,44	100,00%	0,000	8.984,571	2.354,301	6.630,270	17.713,760	8.239,244	2.874.145,808
19+300	100	24.911,378	24,007			1,15	1,44	100,00%	0,000	28.648,085	24,007	28.624,078	17.713,760	8.263,251	2.902.769,886
19+400	100	28.472,894	22,887			1,15	1,44	100,00%	0,000	32.743,828	22,887	32.720,941	17.713,760	8.286,138	2.935.490,827
19+500	100	16.631,072	87,476			1,15	1,44	100,00%	0,000	19.125,733	87,476	19.038,257	17.713,760	8.373,614	2.954.529,084
19+600	100	27.281,532	25,634			1,15	1,44	100,00%	0,000	31.373,762	25,634	31.348,128	17.713,760	8.399,248	2.985.877,212
19+700	100	15.885,709	40,001			1,15	1,44	100,00%	0,000	18.268,565	40,001	18.228,564	17.713,760	8.439,249	3.004.105,776
19+800	100	1.550,371	9.123,364			1,00	1,25	100,00%	0,000	1.550,371	1.550,371	-7.572,993	17.713,760	9.989,620	2.996.532,783
19+900	100	0,000	0,000			1,00	1,25	100,00%	0,000	0,000	0,000	0,000	17.713,760	9.989,620	2.996.532,783
20+000	100	0,000	0,000			1,00	1,25	100,00%	0,000	0,000	0,000	0,000	17.713,760	9.989,620	2.996.532,783
20+100	100	0,000	0,000			1,00	1,25	100,00%	0,000	0,000	0,000	0,000	17.713,760	9.989,620	2.996.532,783
20+200	100	99,047	8.647,379			1,00	1,25	100,00%	0,000	99,047	99,047	-8.548,332	17.713,760	10.088,667	2.987.984,451
20+300	100	10.454,203	321,887			1,00	1,25	100,00%	0,000	10.454,203	321,887	10.132,316	17.713,760	10.410,554	2.998.116,767
20+400	100	5.785,904	74,637			1,00	1,25	100,00%	0,000	5.785,904	74,637	5.711,267	17.713,760	10.485,191	3.003.828,034
20+500	100	4.633,135	1.444,527			1,00	1,25	100,00%	0,000	4.633,135	1.444,527	3.188,608	17.713,760	11.929,718	3.007.016,642
20+600	100	585,879	8.410,065			1,00	1,25	100,00%	0,000	585,879	585,879	-7.824,186	17.713,760	12.515,597	2.999.192,456
20+700	100	1.266,567	6.060,935			1,00	1,25	100,00%	0,000	1.266,567	1.266,567	-4.794,368	17.713,760	13.782,164	2.994.398,088
20+800	100	11.016,779	44,402			1,00	1,25	100,00%	0,000	11.016,779	44,402	10.972,377	17.713,760	13.826,566	3.005.370,465
20+900	100	23.099,551	39,531			1,00	1,25	100,00%	0,000	23.099,551	39,531	23.060,020	17.713,760	13.866,097	3.028.430,485
21+000	100	17.638,117	26,054			1,00	1,25	100,00%	0,000	17.638,117	26,054	17.612,063	17.713,760	13.892,151	3.046.042,548
21+100	100	5.036,577	33,592			1,00	1,25	100,00%	0,000	5.036,577	33,592	5.002,985	17.713,760	13.925,743	3.051.045,533
21+200	100	1.017,194	748,509			1,00	1,25	100,00%	0,000	1.017,194	748,509	268,685	17.713,760	14.674,252	3.051.314,218
21+300	100	222,975	793,991			1,00	1,25	100,00%	0,000	222,975	222,975	-571,016	17.713,760	14.897,227	3.050.743,202
21+400	100	906,215	17,253			1,00	1,25	100,00%	0,000	906,215	17,253	888,962	17.713,760	14.914,480	3.051.632,164
21+500	100	1.101,256	17,497			1,00	1,25	100,00%	0,000	1.101,256	17,497	1.083,759	17.713,760	14.931,977	3.052.715,923
21+600	100	1.012,276	16,942			1,00	1,25	100,00%	0,000	1.012,276	16,942	995,334	17.713,760	14.948,919	3.053.711,257
21+700	100	615,737	192,441			1,00	1,25	100,00%	0,000	615,737	192,441	423,296	17.713,760	15.141,360	3.054.134,553
21+800	100	363,392	47,433			1,00	1,25	100,00%	0,000	363,392	47,433	315,959	17.713,760	15.188,793	3.054.450,512
21+900	100	58,886	131,105			1,00	1,25	100,00%	0,000	58,886	58,886	-72,219	17.713,760	15.247,679	3.054.378,293
22+000	100	547,868	79,731			1,00	1,25	100,00%	0,000	547,868	79,731	468,137	17.713,760	15.327,410	3.054.846,430
22+100	100	339,245	272,031			1,00	1,25	100,00%	0,000	339,245	272,031	67,214	17.713,760	15.599,441	3.054.913,644
22+200	100	398,853	178,078			1,00	1,25	100,00%	0,000	398,853	178,078	220,775	17.713,760	15.777,519	3.055.134,419
22+300	100	630,154	16,673			1,00	1,25	100,00%	0,000	630,154	16,673	613,481	17.713,760	15.794,192	3.055.747,900
22+400	100	1.570,620	16,696			1,00	1,25	100,00%	0,000	1.570,620	16,696	1.553,924	17.713,760	15.810,888	3.057.301,824
22+500	100	4.140,360	16,617			1,00	1,25	100,00%	0,000	4.140,360	16,617	4.123,743	17.713,760	15.827,505	3.061.425,567

ESTUDIO INFORMATIVO DEL CORREDOR CÁNTABRICO - MEDITERRÁNEO DE ALTA VELOCIDAD. TRAMO TERUEL - ZARAGOZA.

DIAGRAMA DE EQUILIBRIO DE MOVIMIENTOS DE TIERRAS

Alternativa 7.1

PK	d	PLATAFORMA		EXCAVACIÓN TÚNEL EN MINA		COEF. PASO		EXCAVACIÓN			COMPENS.	BALANCE	VOL. ACUMULADOS		
		EXCAV.	TERRAPLÉN	NOMBRE	EXCAV.	RELLENOS	VERTEDERO	% APROV	NO APROV.	APROV.	TRANS.		A VERTEDERO	COM.TRAN.	BALANCE
22+600	100	3.657,317	17,682			1,00	1,25	100,00%	0,000	3.657,317	17,682	3.639,635	17.713,760	15.845,187	3.065.065,202
22+700	100	2.106,222	17,888			1,00	1,25	100,00%	0,000	2.106,222	17,888	2.088,334	17.713,760	15.863,075	3.067.153,536
22+800	100	4.906,140	17,473			1,00	1,25	100,00%	0,000	4.906,140	17,473	4.888,667	17.713,760	15.880,548	3.072.042,203
22+900	100	5.208,331	17,658			1,00	1,25	100,00%	0,000	5.208,331	17,658	5.190,673	17.713,760	15.898,206	3.077.232,876
23+000	100	2.744,617	115,090			1,00	1,25	100,00%	0,000	2.744,617	115,090	2.629,527	17.713,760	16.013,296	3.079.862,403
23+100	100	446,454	1.975,107			1,00	1,25	100,00%	0,000	446,454	446,454	-1.528,653	17.713,760	16.459,750	3.078.333,750
23+200	100	160,089	3.899,544			1,00	1,25	100,00%	0,000	160,089	160,089	-3.739,455	17.713,760	16.619,839	3.074.594,295
23+300	100	64,584	3.966,682			1,00	1,25	100,00%	0,000	64,584	64,584	-3.902,098	17.713,760	16.684,423	3.070.692,197
23+400	100	78,766	2.302,086			1,00	1,25	100,00%	0,000	78,766	78,766	-2.223,320	17.713,760	16.763,189	3.068.468,877
23+500	100	274,018	81,685			1,00	1,25	100,00%	0,000	274,018	81,685	192,333	17.713,760	16.844,874	3.068.661,210
23+600	100	334,981	112,055			1,00	1,25	100,00%	0,000	334,981	112,055	222,926	17.713,760	16.956,929	3.068.884,136
23+700	100	619,196	25,052			1,00	1,25	100,00%	0,000	619,196	25,052	594,144	17.713,760	16.981,981	3.069.478,280
23+800	100	38,323	680,055			1,00	1,25	100,00%	0,000	38,323	38,323	-641,732	17.713,760	17.020,304	3.068.836,548
23+900	100	1.115,461	34,904			1,00	1,25	100,00%	0,000	1.115,461	34,904	1.080,557	17.713,760	17.055,208	3.069.917,105
24+000	100	2.571,465	67,646			1,00	1,25	100,00%	0,000	2.571,465	67,646	2.503,819	17.713,760	17.122,854	3.072.420,924
24+100	100	1.680,545	101,159			1,00	1,25	100,00%	0,000	1.680,545	101,159	1.579,386	17.713,760	17.224,013	3.074.000,310
24+200	100	3.048,633	41,324			1,00	1,25	100,00%	0,000	3.048,633	41,324	3.007,309	17.713,760	17.265,337	3.077.007,619
24+300	100	643,563	394,279			1,00	1,25	100,00%	0,000	643,563	394,279	249,284	17.713,760	17.659,616	3.077.256,903
24+400	100	53,767	1.071,354			1,00	1,25	100,00%	0,000	53,767	53,767	-1.017,587	17.713,760	17.713,383	3.076.239,316
24+500	100	46,539	2.453,242			1,00	1,25	100,00%	0,000	46,539	46,539	-2.406,703	17.713,760	17.759,922	3.073.832,613
24+600	100	0,000	1.481,048			1,00	1,25	100,00%	0,000	0,000	0,000	-1.481,048	17.713,760	17.759,922	3.072.351,565
24+700	100	118,896	862,715			1,00	1,25	100,00%	0,000	118,896	118,896	-743,819	17.713,760	17.878,818	3.071.607,746
24+800	100	1.169,603	521,222			1,00	1,25	100,00%	0,000	1.169,603	521,222	648,381	17.713,760	18.400,040	3.072.256,127
24+900	100	1,801	1.549,352			1,00	1,25	100,00%	0,000	1,801	1,801	-1.547,551	17.713,760	18.401,841	3.070.708,576
25+000	100	0,000	5.135,485			1,00	1,25	100,00%	0,000	0,000	0,000	-5.135,485	17.713,760	18.401,841	3.065.573,091
25+100	100	0,000	15.415,197			1,00	1,25	100,00%	0,000	0,000	0,000	-15.415,197	17.713,760	18.401,841	3.050.157,894
25+200	100	0,000	18.869,351			1,00	1,25	100,00%	0,000	0,000	0,000	-18.869,351	17.713,760	18.401,841	3.031.288,543
25+300	100	0,000	0,000			1,00	1,25	100,00%	0,000	0,000	0,000	0,000	17.713,760	18.401,841	3.031.288,543
25+400	100	0,000	7.167,045			1,00	1,25	100,00%	0,000	0,000	0,000	-7.167,045	17.713,760	18.401,841	3.024.121,498
25+500	100	0,000	4.449,134			1,00	1,25	100,00%	0,000	0,000	0,000	-4.449,134	17.713,760	18.401,841	3.019.672,364
25+600	100	0,000	3.976,122			1,00	1,25	100,00%	0,000	0,000	0,000	-3.976,122	17.713,760	18.401,841	3.015.696,242
25+700	100	0,000	7.169,775			1,00	1,25	100,00%	0,000	0,000	0,000	-7.169,775	17.713,760	18.401,841	3.008.526,467
25+800	100	0,000	8.473,161			1,00	1,25	100,00%	0,000	0,000	0,000	-8.473,161	17.713,760	18.401,841	3.000.053,306
25+900	100	0,000	10.008,545			1,00	1,25	100,00%	0,000	0,000	0,000	-10.008,545	17.713,760	18.401,841	2.990.044,761
26+000	100	0,000	22.167,831			1,00	1,25	100,00%	0,000	0,000	0,000	-22.167,831	17.713,760	18.401,841	2.967.876,930
26+100	100	0,000	25.419,617			1,00	1,25	100,00%	0,000	0,000	0,000	-25.419,617	17.713,760	18.401,841	2.942.457,313
26+200	100	0,000	23.926,341			1,00	1,25	100,00%	0,000	0,000	0,000	-23.926,341	17.713,760	18.401,841	2.918.530,972
26+300	100	0,000	19.867,211			1,00	1,25	100,00%	0,000	0,000	0,000	-19.867,211	17.713,760	18.401,841	2.898.663,761
26+400	100	0,000	5.663,871			1,00	1,25	100,00%	0,000	0,000	0,000	-5.663,871	17.713,760	18.401,841	2.892.999,890
26+500	100	0,000	5.099,769			1,00	1,25	100,00%	0,000	0,000	0,000	-5.099,769	17.713,760	18.401,841	2.887.900,121
26+600	100	0,000	4.757,932			1,00	1,25	100,00%	0,000	0,000	0,000	-4.757,932	17.713,760	18.401,841	2.883.142,189
26+700	100	0,000	7.065,115			1,00	1,25	100,00%	0,000	0,000	0,000	-7.065,115	17.713,760	18.401,841	2.876.077,074
26+800	100	0,000	4.297,103			1,00	1,25	100,00%	0,000	0,000	0,000	-4.297,103	17.713,760	18.401,841	2.871.779,971
26+900	100	0,000	3.394,836			1,00	1,25	100,00%	0,000	0,000	0,000	-3.394,836	17.713,760	18.401,841	2.868.385,135
27+000	100	0,000	3.680,758			1,00	1,25	100,00%	0,000	0,000	0,000	-3.680,758	17.713,760	18.401,841	2.864.704,377
27+100	100	0,000	4.799,163			1,00	1,25	100,00%	0,000	0,000	0,000	-4.799,163	17.713,760	18.401,841	2.859.905,214
27+200	100	42,413	1.869,305			1,00	1,25	100,00%	0,000	42,413	42,413	-1.826,892	17.713,760	18.444,254	2.858.078,322
27+300	100	2.099,338	43,921			1,00	1,25	100,00%	0,000	2.099,338	43,921	2.055,417	17.713,760	18.488,175	2.860.133,739
27+400	100	4.324,090	37,527			1,00	1,25	100,00%	0,000	4.324,090	37,527	4.286,563	17.713,760	18.525,702	2.864.420,302
27+500	100	5.464,879	37,512			1,00	1,25	100,00%	0,000	5.464,879	37,512	5.427,367	17.713,760	18.563,214	2.869.847,669
27+600	100	8.341,596	37,507			1,00	1,25	100,00%	0,000	8.341,596	37,507	8.304,089	17.713,760	18.600,721	2.878.151,758
27+700	100	10.815,757	37,502			1,00	1,25	100,00%	0,000	10.815,757	37,502	10.778,255	17.713,760	18.638,223	2.888.930,013

ESTUDIO INFORMATIVO DEL CORREDOR CÁNTABRICO - MEDITERRÁNEO DE ALTA VELOCIDAD. TRAMO TERUEL - ZARAGOZA.

DIAGRAMA DE EQUILIBRIO DE MOVIMIENTOS DE TIERRAS

Alternativa 7.1

PK	d	PLATAFORMA		EXCAVACIÓN TÚNEL EN MINA		COEF. PASO		EXCAVACIÓN			COMPENS.	BALANCE	VOL. ACUMULADOS		
		EXCAV.	TERRAPLÉN	NOMBRE	EXCAV.	RELLENOS	VERTEDERO	% APROV	NO APROV.	APROV.	TRANS.		A VERTEDERO	COM.TRAN.	BALANCE
27+800	100	12.579,170	37,506			1,00	1,25	100,00%	0,000	12.579,170	37,506	12.541,664	17.713,760	18.675,729	2.901.471,677
27+900	100	13.757,200	37,562			1,00	1,25	100,00%	0,000	13.757,200	37,562	13.719,638	17.713,760	18.713,291	2.915.191,315
28+000	100	16.580,094	37,558			1,00	1,25	100,00%	0,000	16.580,094	37,558	16.542,536	17.713,760	18.750,849	2.931.733,851
28+100	100	19.779,381	37,499			1,00	1,25	100,00%	0,000	19.779,381	37,499	19.741,882	17.713,760	18.788,348	2.951.475,733
28+200	100	22.329,918	37,503			1,00	1,25	100,00%	0,000	22.329,918	37,503	22.292,415	17.713,760	18.825,851	2.973.768,148
28+300	100	24.285,261	37,540			1,00	1,25	100,00%	0,000	24.285,261	37,540	24.247,721	17.713,760	18.863,391	2.998.015,869
28+400	100	23.958,564	37,536			1,00	1,25	100,00%	0,000	23.958,564	37,536	23.921,028	17.713,760	18.900,927	3.021.936,897
28+500	100	22.330,691	37,502			1,00	1,25	100,00%	0,000	22.330,691	37,502	22.293,189	17.713,760	18.938,429	3.044.230,086
28+600	100	0,000	0,000			1,00	1,25	100,00%	0,000	0,000	0,000	0,000	17.713,760	18.938,429	3.044.230,086
28+700	100	0,000	0,000			1,00	1,25	100,00%	0,000	0,000	0,000	0,000	17.713,760	18.938,429	3.044.230,086
28+800	100	0,000	0,000			1,00	1,25	100,00%	0,000	0,000	0,000	0,000	17.713,760	18.938,429	3.044.230,086
28+900	100	0,000	0,000			1,00	1,25	100,00%	0,000	0,000	0,000	0,000	17.713,760	18.938,429	3.044.230,086
29+000	100	0,000	0,000			1,00	1,25	100,00%	0,000	0,000	0,000	0,000	17.713,760	18.938,429	3.044.230,086
29+100	100	0,000	0,000			1,00	1,25	100,00%	0,000	0,000	0,000	0,000	17.713,760	18.938,429	3.044.230,086
29+200	100	0,000	0,000			1,00	1,25	100,00%	0,000	0,000	0,000	0,000	17.713,760	18.938,429	3.044.230,086
29+300	100	0,000	0,000			1,00	1,25	100,00%	0,000	0,000	0,000	0,000	17.713,760	18.938,429	3.044.230,086
29+400	100	0,000	8.094,750			1,00	1,25	100,00%	0,000	0,000	0,000	-8.094,750	17.713,760	18.938,429	3.036.135,336
29+500	100	0,000	8.875,319			1,00	1,25	100,00%	0,000	0,000	0,000	-8.875,319	17.713,760	18.938,429	3.027.260,017
29+600	100	0,000	7.967,004			1,00	1,25	100,00%	0,000	0,000	0,000	-7.967,004	17.713,760	18.938,429	3.019.293,013
29+700	100	0,000	6.588,577			1,00	1,25	100,00%	0,000	0,000	0,000	-6.588,577	17.713,760	18.938,429	3.012.704,436
29+800	100	0,000	6.570,839			1,00	1,25	100,00%	0,000	0,000	0,000	-6.570,839	17.713,760	18.938,429	3.006.133,597
29+900	100	0,000	6.199,009			1,00	1,25	100,00%	0,000	0,000	0,000	-6.199,009	17.713,760	18.938,429	2.999.934,588
30+000	100	7,085	3.965,548			1,00	1,25	100,00%	0,000	7,085	7,085	-3.958,463	17.713,760	18.945,514	2.995.976,125
30+100	100	248,840	1.656,330			1,00	1,25	100,00%	0,000	248,840	248,840	-1.407,490	17.713,760	19.194,354	2.994.568,635
30+200	100	63,649	626,787			1,00	1,25	100,00%	0,000	63,649	63,649	-563,138	17.713,760	19.258,003	2.994.005,497
30+300	100	699,413	142,480			1,00	1,25	100,00%	0,000	699,413	142,480	556,933	17.713,760	19.400,483	2.994.562,430
30+400	100	2.138,468	37,502			1,00	1,25	100,00%	0,000	2.138,468	37,502	2.100,966	17.713,760	19.437,985	2.996.663,396
30+500	100	3.165,342	37,501			1,00	1,25	100,00%	0,000	3.165,342	37,501	3.127,841	17.713,760	19.475,486	2.999.791,237
30+600	100	2.763,013	37,502			1,00	1,25	100,00%	0,000	2.763,013	37,502	2.725,511	17.713,760	19.512,988	3.002.516,748
30+700	100	2.516,295	37,637			1,00	1,25	100,00%	0,000	2.516,295	37,637	2.478,658	17.713,760	19.550,625	3.004.995,406
30+800	100	2.517,794	33,389			1,00	1,25	100,00%	0,000	2.517,794	33,389	2.484,405	17.713,760	19.584,014	3.007.479,811
30+900	100	2.154,212	268,571			1,00	1,25	100,00%	0,000	2.154,212	268,571	1.885,641	17.713,760	19.852,585	3.009.365,452
31+000	100	2.677,577	278,478			1,00	1,25	100,00%	0,000	2.677,577	278,478	2.399,099	17.713,760	20.131,063	3.011.764,551
31+100	100	4.400,723	78,252			1,00	1,25	100,00%	0,000	4.400,723	78,252	4.322,471	17.713,760	20.209,315	3.016.087,022
31+145	45	1.633,940	13,302			1,00	1,25	100,00%	0,000	1.633,940	13,302	1.620,638	17.713,760	20.222,617	3.017.707,660
TOTAL		**1.927.301,601**	**341.525,015**		**1.009.500,000**				**17.713,760**	**3.359.232,675**	**20.222,617**	**3.017.707,660**			

ESTUDIO INFORMATIVO DEL CORREDOR CÁNTABRICO - MEDITERRÁNEO DE ALTA VELOCIDAD. TRAMO TERUEL - ZARAGOZA.

DIAGRAMA DE EQUILIBRIO DE MOVIMIENTOS DE TIERRAS

Alternativa 7.2

PK	d	PLATAFORMA		EXCAVACIÓN TÚNEL EN MINA		COEF. PASO		EXCAVACIÓN			COMPENS.	BALANCE	VOL. ACUMULADOS		
		EXCAV.	TERRAPLÉN	NOMBRE	EXCAV.	RELLENOS	VERTEDERO	% APROV	NO APROV.	APROV.	TRANS.		A VERTEDERO	COM.TRAN.	BALANCE
7+000		0,000	0,000			1,00	1,25	0,00%	0,000	0,000	0,000	0,000	0,000	0,000	0,000
7+100	100	2.652,402	12,175			1,00	1,25	0,00%	3.315,503	0,000	0,000	-12,175	3.315,503	0,000	-12,175
7+200	100	1.692,261	122,598			1,00	1,25	0,00%	2.115,326	0,000	0,000	-122,598	5.430,829	0,000	-134,773
7+300	100	668,373	1.287,935			1,00	1,25	0,00%	835,466	0,000	0,000	-1.287,935	6.266,295	0,000	-1.422,708
7+400	100	534,339	1.894,725			1,00	1,25	0,00%	667,924	0,000	0,000	-1.894,725	6.934,219	0,000	-3.317,433
7+500	100	161,658	215,252			1,00	1,25	0,00%	202,073	0,000	0,000	-215,252	7.136,291	0,000	-3.532,685
7+600	100	1.944,356	34,557			1,00	1,25	0,00%	2.430,445	0,000	0,000	-34,557	9.566,736	0,000	-3.567,242
7+700	100	1.622,635	36,366			1,00	1,25	0,00%	2.028,294	0,000	0,000	-36,366	11.595,030	0,000	-3.603,608
7+800	100	1.293,412	128,227			1,00	1,25	0,00%	1.616,765	0,000	0,000	-128,227	13.211,795	0,000	-3.731,835
7+900	100	434,739	56,774			1,00	1,25	0,00%	543,424	0,000	0,000	-56,774	13.755,219	0,000	-3.788,609
8+000	100	0,000	0,000			1,00	1,25	0,00%	0,000	0,000	0,000	0,000	13.755,219	0,000	-3.788,609
8+100	100	0,000	0,000			1,00	1,25	0,00%	0,000	0,000	0,000	0,000	13.755,219	0,000	-3.788,609
8+200	100	0,000	0,000			1,00	1,25	0,00%	0,000	0,000	0,000	0,000	13.755,219	0,000	-3.788,609
8+300	100	839,320	0,038			1,00	1,25	0,00%	1.049,150	0,000	0,000	-0,038	14.804,369	0,000	-3.788,647
8+400	100	0,000	0,000			1,00	1,25	0,00%	0,000	0,000	0,000	0,000	14.804,369	0,000	-3.788,647
8+500	100	0,000	0,000			1,00	1,25	0,00%	0,000	0,000	0,000	0,000	14.804,369	0,000	-3.788,647
8+600	100	0,000	0,000			1,00	1,25	0,00%	0,000	0,000	0,000	0,000	14.804,369	0,000	-3.788,647
8+700	100	0,000	0,000			1,00	1,25	0,00%	0,000	0,000	0,000	0,000	14.804,369	0,000	-3.788,647
8+800	100	0,000	0,000			1,00	1,25	0,00%	0,000	0,000	0,000	0,000	14.804,369	0,000	-3.788,647
8+900	100	331,694	3,646			1,00	1,25	0,00%	414,618	0,000	0,000	-3,646	15.218,986	0,000	-3.792,293
9+000	100	1.995,819	70,213			1,00	1,25	0,00%	2.494,774	0,000	0,000	-70,213	17.713,760	0,000	-3.862,506
9+100	100	3.297,813	23,892			1,15	1,44	100,00%	0,000	3.792,485	23,892	3.768,593	17.713,760	23,892	-93,913
9+200	100	14.509,995	24,862			1,15	1,44	100,00%	0,000	16.686,494	24,862	16.661,632	17.713,760	48,754	16.567,719
9+300	100	33.229,353	24,800			1,15	1,44	100,00%	0,000	38.213,756	24,800	38.188,956	17.713,760	73,554	54.756,675
9+400	100	35.826,979	25,108			1,15	1,44	100,00%	0,000	41.201,026	25,108	41.175,918	17.713,760	98,662	95.932,593
9+500	100	52.738,523	25,025			1,15	1,44	100,00%	0,000	60.649,301	25,025	60.624,276	17.713,760	123,687	156.556,869
9+600	100	48.916,459	24,867			1,15	1,44	100,00%	0,000	56.253,928	24,867	56.229,061	17.713,760	148,554	212.785,930
9+700	100	48.797,883	25,089			1,15	1,44	100,00%	0,000	56.117,565	25,089	56.092,476	17.713,760	173,643	268.878,407
9+800	100	38.082,223	25,005			1,15	1,44	100,00%	0,000	43.794,556	25,005	43.769,551	17.713,760	198,648	312.647,958
9+900	100	11.794,592	25,010			1,15	1,44	100,00%	0,000	13.563,781	25,010	13.538,771	17.713,760	223,658	326.186,729
10+000	100	5.803,110	25,012			1,15	1,44	100,00%	0,000	6.673,577	25,012	6.648,565	17.713,760	248,670	332.835,294
10+100	100	11.738,371	56,199			1,15	1,44	100,00%	0,000	13.499,127	56,199	13.442,928	17.713,760	304,869	346.278,221
10+200	100	7.267,242	649,511			1,15	1,44	100,00%	0,000	8.357,328	649,511	7.707,817	17.713,760	954,380	353.986,038
10+300	100	39.579,206	25,060			1,15	1,44	100,00%	0,000	45.516,087	25,060	45.491,027	17.713,760	979,440	399.477,065
10+400	100	84.999,243	25,453			1,15	1,44	100,00%	0,000	97.749,129	25,453	97.723,676	17.713,760	1.004,893	497.200,742
10+500	100	133.295,845	24,267			1,15	1,44	100,00%	0,000	153.290,222	24,267	153.265,955	17.713,760	1.029,160	650.466,697
10+600	100	168.889,769	24,911			1,15	1,44	100,00%	0,000	194.223,234	24,911	194.198,323	17.713,760	1.054,071	844.665,020
10+700	100	152.396,574	25,826			1,15	1,44	100,00%	0,000	175.256,060	25,826	175.230,234	17.713,760	1.079,897	1.019.895,254
10+800	100	0,000	0,000		15.000,000	1,20	1,50	100,00%	0,000	18.000,000	0,000	18.000,000	17.713,760	1.079,897	1.037.895,254
10+900	100	0,000	0,000		15.000,000	1,20	1,50	100,00%	0,000	18.000,000	0,000	18.000,000	17.713,760	1.079,897	1.055.895,254
11+000	100	0,000	0,000		15.000,000	1,20	1,50	100,00%	0,000	18.000,000	0,000	18.000,000	17.713,760	1.079,897	1.073.895,254
11+100	100	0,000	0,000		15.000,000	1,20	1,50	100,00%	0,000	18.000,000	0,000	18.000,000	17.713,760	1.079,897	1.091.895,254
11+200	100	0,000	0,000		15.000,000	1,20	1,50	100,00%	0,000	18.000,000	0,000	18.000,000	17.713,760	1.079,897	1.109.895,254
11+300	100	0,000	0,000		15.000,000	1,20	1,50	100,00%	0,000	18.000,000	0,000	18.000,000	17.713,760	1.079,897	1.127.895,254
11+400	100	0,000	0,000		15.000,000	1,20	1,50	100,00%	0,000	18.000,000	0,000	18.000,000	17.713,760	1.079,897	1.145.895,254
11+500	100	0,000	0,000		15.000,000	1,20	1,50	100,00%	0,000	18.000,000	0,000	18.000,000	17.713,760	1.079,897	1.163.895,254
11+600	100	0,000	0,000		15.000,000	1,20	1,50	100,00%	0,000	18.000,000	0,000	18.000,000	17.713,760	1.079,897	1.181.895,254
11+700	100	0,000	0,000		15.000,000	1,20	1,50	100,00%	0,000	18.000,000	0,000	18.000,000	17.713,760	1.079,897	1.199.895,254
11+800	100	0,000	0,000		15.000,000	1,20	1,50	100,00%	0,000	18.000,000	0,000	18.000,000	17.713,760	1.079,897	1.217.895,254
11+900	100	0,000	0,000		15.000,000	1,20	1,50	100,00%	0,000	18.000,000	0,000	18.000,000	17.713,760	1.079,897	1.235.895,254
12+000	100	0,000	0,000		15.000,000	1,20	1,50	100,00%	0,000	18.000,000	0,000	18.000,000	17.713,760	1.079,897	1.253.895,254
12+100	100	0,000	0,000		15.000,000	1,20	1,50	100,00%	0,000	18.000,000	0,000	18.000,000	17.713,760	1.079,897	1.271.895,254
12+200	100	0,000	0,000		15.000,000	1,20	1,50	100,00%	0,000	18.000,000	0,000	18.000,000	17.713,760	1.079,897	1.289.895,254

ESTUDIO INFORMATIVO DEL CORREDOR CÁNTABRICO - MEDITERRÁNEO DE ALTA VELOCIDAD. TRAMO TERUEL - ZARAGOZA.

DIAGRAMA DE EQUILIBRIO DE MOVIMIENTOS DE TIERRAS

Alternativa 7.2

PK	d	PLATAFORMA		EXCAVACIÓN TÚNEL EN MINA		COEF. PASO		EXCAVACIÓN			COMPENS.	BALANCE	VOL. ACUMULADOS		
		EXCAV.	TERRAPLÉN	NOMBRE	EXCAV.	RELLENOS	VERTEDERO	% APROV	NO APROV.	APROV.	TRANS.		A VERTEDERO	COM.TRAN.	BALANCE
12+300	100	0,000	0,000		15.000,000	1,20	1,50	100,00%	0,000	18.000,000	0,000	18.000,000	17.713,760	1.079,897	1.307.895,254
12+400	100	0,000	0,000		15.000,000	1,20	1,50	100,00%	0,000	18.000,000	0,000	18.000,000	17.713,760	1.079,897	1.325.895,254
12+500	100	0,000	0,000		15.000,000	1,20	1,50	100,00%	0,000	18.000,000	0,000	18.000,000	17.713,760	1.079,897	1.343.895,254
12+600	100	0,000	0,000		15.000,000	1,20	1,50	100,00%	0,000	18.000,000	0,000	18.000,000	17.713,760	1.079,897	1.361.895,254
12+700	100	0,000	0,000		15.000,000	1,20	1,50	100,00%	0,000	18.000,000	0,000	18.000,000	17.713,760	1.079,897	1.379.895,254
12+800	100	0,000	0,000		15.000,000	1,20	1,50	100,00%	0,000	18.000,000	0,000	18.000,000	17.713,760	1.079,897	1.397.895,254
12+900	100	0,000	0,000		15.000,000	1,20	1,50	100,00%	0,000	18.000,000	0,000	18.000,000	17.713,760	1.079,897	1.415.895,254
13+000	100	0,000	0,000		15.000,000	1,20	1,50	100,00%	0,000	18.000,000	0,000	18.000,000	17.713,760	1.079,897	1.433.895,254
13+100	100	0,000	0,000		15.000,000	1,20	1,50	100,00%	0,000	18.000,000	0,000	18.000,000	17.713,760	1.079,897	1.451.895,254
13+200	100	0,000	0,000		15.000,000	1,20	1,50	100,00%	0,000	18.000,000	0,000	18.000,000	17.713,760	1.079,897	1.469.895,254
13+300	100	0,000	0,000		15.000,000	1,20	1,50	100,00%	0,000	18.000,000	0,000	18.000,000	17.713,760	1.079,897	1.487.895,254
13+400	100	0,000	0,000		15.000,000	1,20	1,50	100,00%	0,000	18.000,000	0,000	18.000,000	17.713,760	1.079,897	1.505.895,254
13+500	100	0,000	0,000		15.000,000	1,20	1,50	100,00%	0,000	18.000,000	0,000	18.000,000	17.713,760	1.079,897	1.523.895,254
13+600	100	0,000	0,000		15.000,000	1,20	1,50	100,00%	0,000	18.000,000	0,000	18.000,000	17.713,760	1.079,897	1.541.895,254
13+700	100	0,000	0,000		15.000,000	1,20	1,50	100,00%	0,000	18.000,000	0,000	18.000,000	17.713,760	1.079,897	1.559.895,254
13+800	100	0,000	0,000		15.000,000	1,20	1,50	100,00%	0,000	18.000,000	0,000	18.000,000	17.713,760	1.079,897	1.577.895,254
13+900	100	0,000	0,000		15.000,000	1,20	1,50	100,00%	0,000	18.000,000	0,000	18.000,000	17.713,760	1.079,897	1.595.895,254
14+000	100	0,000	0,000		15.000,000	1,20	1,50	100,00%	0,000	18.000,000	0,000	18.000,000	17.713,760	1.079,897	1.613.895,254
14+100	100	0,000	0,000		15.000,000	1,20	1,50	100,00%	0,000	18.000,000	0,000	18.000,000	17.713,760	1.079,897	1.631.895,254
14+200	100	0,000	0,000		15.000,000	1,20	1,50	100,00%	0,000	18.000,000	0,000	18.000,000	17.713,760	1.079,897	1.649.895,254
14+300	100	0,000	0,000		15.000,000	1,20	1,50	100,00%	0,000	18.000,000	0,000	18.000,000	17.713,760	1.079,897	1.667.895,254
14+400	100	0,000	0,000		15.000,000	1,20	1,50	100,00%	0,000	18.000,000	0,000	18.000,000	17.713,760	1.079,897	1.685.895,254
14+500	100	0,000	0,000		15.000,000	1,20	1,50	100,00%	0,000	18.000,000	0,000	18.000,000	17.713,760	1.079,897	1.703.895,254
14+600	100	0,000	0,000		15.000,000	1,20	1,50	100,00%	0,000	18.000,000	0,000	18.000,000	17.713,760	1.079,897	1.721.895,254
14+700	100	0,000	0,000		15.000,000	1,20	1,50	100,00%	0,000	18.000,000	0,000	18.000,000	17.713,760	1.079,897	1.739.895,254
14+800	100	0,000	0,000		15.000,000	1,20	1,50	100,00%	0,000	18.000,000	0,000	18.000,000	17.713,760	1.079,897	1.757.895,254
14+900	100	0,000	0,000		15.000,000	1,20	1,50	100,00%	0,000	18.000,000	0,000	18.000,000	17.713,760	1.079,897	1.775.895,254
15+000	100	0,000	0,000		15.000,000	1,20	1,50	100,00%	0,000	18.000,000	0,000	18.000,000	17.713,760	1.079,897	1.793.895,254
15+100	100	0,000	0,000		15.000,000	1,20	1,50	100,00%	0,000	18.000,000	0,000	18.000,000	17.713,760	1.079,897	1.811.895,254
15+200	100	0,000	0,000		15.000,000	1,20	1,50	100,00%	0,000	18.000,000	0,000	18.000,000	17.713,760	1.079,897	1.829.895,254
15+300	100	0,000	0,000		15.000,000	1,20	1,50	100,00%	0,000	18.000,000	0,000	18.000,000	17.713,760	1.079,897	1.847.895,254
15+400	100	0,000	0,000		15.000,000	1,20	1,50	100,00%	0,000	18.000,000	0,000	18.000,000	17.713,760	1.079,897	1.865.895,254
15+500	100	0,000	0,000		15.000,000	1,20	1,50	100,00%	0,000	18.000,000	0,000	18.000,000	17.713,760	1.079,897	1.883.895,254
15+600	100	0,000	0,000		15.000,000	1,20	1,50	100,00%	0,000	18.000,000	0,000	18.000,000	17.713,760	1.079,897	1.901.895,254
15+700	100	0,000	0,000		15.000,000	1,20	1,50	100,00%	0,000	18.000,000	0,000	18.000,000	17.713,760	1.079,897	1.919.895,254
15+800	100	0,000	0,000		15.000,000	1,20	1,50	100,00%	0,000	18.000,000	0,000	18.000,000	17.713,760	1.079,897	1.937.895,254
15+900	100	0,000	0,000		15.000,000	1,20	1,50	100,00%	0,000	18.000,000	0,000	18.000,000	17.713,760	1.079,897	1.955.895,254
16+000	100	0,000	0,000		15.000,000	1,20	1,50	100,00%	0,000	18.000,000	0,000	18.000,000	17.713,760	1.079,897	1.973.895,254
16+100	100	0,000	0,000		15.000,000	1,20	1,50	100,00%	0,000	18.000,000	0,000	18.000,000	17.713,760	1.079,897	1.991.895,254
16+200	100	0,000	0,000		15.000,000	1,20	1,50	100,00%	0,000	18.000,000	0,000	18.000,000	17.713,760	1.079,897	2.009.895,254
16+300	100	0,000	0,000		15.000,000	1,20	1,50	100,00%	0,000	18.000,000	0,000	18.000,000	17.713,760	1.079,897	2.027.895,254
16+400	100	0,000	0,000		15.000,000	1,20	1,50	100,00%	0,000	18.000,000	0,000	18.000,000	17.713,760	1.079,897	2.045.895,254
16+500	100	0,000	0,000		15.000,000	1,20	1,50	100,00%	0,000	18.000,000	0,000	18.000,000	17.713,760	1.079,897	2.063.895,254
16+600	100	0,000	0,000		15.000,000	1,20	1,50	100,00%	0,000	18.000,000	0,000	18.000,000	17.713,760	1.079,897	2.081.895,254
16+700	100	0,000	0,000		15.000,000	1,20	1,50	100,00%	0,000	18.000,000	0,000	18.000,000	17.713,760	1.079,897	2.099.895,254
16+800	100	0,000	0,000		15.000,000	1,20	1,50	100,00%	0,000	18.000,000	0,000	18.000,000	17.713,760	1.079,897	2.117.895,254
16+900	100	0,000	0,000		15.000,000	1,20	1,50	100,00%	0,000	18.000,000	0,000	18.000,000	17.713,760	1.079,897	2.135.895,254
17+000	100	0,000	0,000		15.000,000	1,20	1,50	100,00%	0,000	18.000,000	0,000	18.000,000	17.713,760	1.079,897	2.153.895,254
17+100	100	0,000	0,000		15.000,000	1,20	1,50	100,00%	0,000	18.000,000	0,000	18.000,000	17.713,760	1.079,897	2.171.895,254
17+200	100	0,000	0,000		15.000,000	1,20	1,50	100,00%	0,000	18.000,000	0,000	18.000,000	17.713,760	1.079,897	2.189.895,254
17+300	100	0,000	0,000		15.000,000	1,20	1,50	100,00%	0,000	18.000,000	0,000	18.000,000	17.713,760	1.079,897	2.207.895,254
17+400	100	0,000	0,000		15.000,000	1,20	1,50	100,00%	0,000	18.000,000	0,000	18.000,000	17.713,760	1.079,897	2.225.895,254
17+500	100	46.963,403	18,361		4.500,000	1,15	1,44	100,00%	0,000	59.182,913	18,361	59.164,552	17.713,760	1.098,258	2.285.059,806

ESTUDIO INFORMATIVO DEL CORREDOR CÁNTABRICO - MEDITERRÁNEO DE ALTA VELOCIDAD. TRAMO TERUEL - ZARAGOZA.

DIAGRAMA DE EQUILIBRIO DE MOVIMIENTOS DE TIERRAS

Alternativa 7.2

PK	d	PLATAFORMA		EXCAVACIÓN TÚNEL EN MINA		COEF. PASO		EXCAVACIÓN			COMPENS.	BALANCE	VOL. ACUMULADOS		
		EXCAV.	TERRAPLÉN	NOMBRE	EXCAV.	RELLENOS	VERTEDERO	% APROV	NO APROV.	APROV.	TRANS.		A VERTEDERO	COM.TRAN.	BALANCE
17+600	100	120.922,055	25,364			1,15	1,44	100,00%	0,000	139.060,363	25,364	139.034,999	17.713,760	1.123,622	2.424.094,806
17+700	100	106.413,935	26,269			1,15	1,44	100,00%	0,000	122.376,025	26,269	122.349,756	17.713,760	1.149,891	2.546.444,562
17+800	100	77.950,424	25,592			1,15	1,44	100,00%	0,000	89.642,988	25,592	89.617,396	17.713,760	1.175,483	2.636.061,958
17+900	100	44.273,048	25,237			1,15	1,44	100,00%	0,000	50.914,005	25,237	50.888,768	17.713,760	1.200,720	2.686.950,726
18+000	100	69.028,236	27,572			1,15	1,44	100,00%	0,000	79.382,471	27,572	79.354,899	17.713,760	1.228,292	2.766.305,625
18+100	100	53.277,742	26,659			1,15	1,44	100,00%	0,000	61.269,403	26,659	61.242,744	17.713,760	1.254,951	2.827.548,369
18+200	100	14.439,901	25,523			1,15	1,44	100,00%	0,000	16.605,886	25,523	16.580,363	17.713,760	1.280,474	2.844.128,733
18+300	100	6.113,762	66,232			1,15	1,44	100,00%	0,000	7.030,826	66,232	6.964,594	17.713,760	1.346,706	2.851.093,327
18+400	100	684,138	685,884			1,15	1,44	100,00%	0,000	786,759	685,884	100,875	17.713,760	2.032,590	2.851.194,202
18+500	100	758,280	1.223,365			1,15	1,44	100,00%	0,000	872,022	872,022	-351,343	17.713,760	2.904,612	2.850.842,859
18+600	100	3.936,631	58,912			1,15	1,44	100,00%	0,000	4.527,126	58,912	4.468,214	17.713,760	2.963,524	2.855.311,072
18+700	100	9.260,557	30,472			1,15	1,44	100,00%	0,000	10.649,641	30,472	10.619,169	17.713,760	2.993,996	2.865.930,241
18+800	100	6.883,101	43,645			1,00	1,25	100,00%	0,000	6.883,101	43,645	6.839,456	17.713,760	3.037,641	2.872.769,697
18+900	100	391,745	3.245,087			1,00	1,25	100,00%	0,000	391,745	391,745	-2.853,342	17.713,760	3.429,386	2.869.916,355
19+000	100	449,245	3.214,529			1,00	1,25	100,00%	0,000	449,245	449,245	-2.765,284	17.713,760	3.878,631	2.867.151,071
19+100	100	2.370,780	2.006,312			1,00	1,25	100,00%	0,000	2.370,780	2.006,312	364,468	17.713,760	5.884,943	2.867.515,539
19+200	100	7.812,670	2.354,301			1,15	1,44	100,00%	0,000	8.984,571	2.354,301	6.630,270	17.713,760	8.239,244	2.874.145,808
19+300	100	24.911,378	24,007			1,15	1,44	100,00%	0,000	28.648,085	24,007	28.624,078	17.713,760	8.263,251	2.902.769,886
19+400	100	28.472,894	22,887			1,15	1,44	100,00%	0,000	32.743,828	22,887	32.720,941	17.713,760	8.286,138	2.935.490,827
19+500	100	16.631,072	87,476			1,15	1,44	100,00%	0,000	19.125,733	87,476	19.038,257	17.713,760	8.373,614	2.954.529,084
19+600	100	27.281,532	25,634			1,15	1,44	100,00%	0,000	31.373,762	25,634	31.348,128	17.713,760	8.399,248	2.985.877,212
19+700	100	15.885,709	40,001			1,15	1,44	100,00%	0,000	18.268,565	40,001	18.228,564	17.713,760	8.439,249	3.004.105,776
19+800	100	1.550,371	9.123,364			1,00	1,25	100,00%	0,000	1.550,371	1.550,371	-7.572,993	17.713,760	9.989,620	2.996.532,783
19+900	100	0,000	0,000			1,00	1,25	100,00%	0,000	0,000	0,000	0,000	17.713,760	9.989,620	2.996.532,783
20+000	100	0,000	0,000			1,00	1,25	100,00%	0,000	0,000	0,000	0,000	17.713,760	9.989,620	2.996.532,783
20+100	100	0,000	0,000			1,00	1,25	100,00%	0,000	0,000	0,000	0,000	17.713,760	9.989,620	2.996.532,783
20+200	100	99,047	8.647,379			1,00	1,25	100,00%	0,000	99,047	99,047	-8.548,332	17.713,760	10.088,667	2.987.984,451
20+300	100	10.454,203	321,887			1,00	1,25	100,00%	0,000	10.454,203	321,887	10.132,316	17.713,760	10.410,554	2.998.116,767
20+400	100	5.785,904	74,637			1,00	1,25	100,00%	0,000	5.785,904	74,637	5.711,267	17.713,760	10.485,191	3.003.828,034
20+500	100	4.633,135	1.444,527			1,00	1,25	100,00%	0,000	4.633,135	1.444,527	3.188,608	17.713,760	11.929,718	3.007.016,642
20+600	100	585,879	8.410,065			1,00	1,25	100,00%	0,000	585,879	585,879	-7.824,186	17.713,760	12.515,597	2.999.192,456
20+700	100	1.266,567	6.060,935			1,00	1,25	100,00%	0,000	1.266,567	1.266,567	-4.794,368	17.713,760	13.782,164	2.994.398,088
20+800	100	11.016,779	44,402			1,00	1,25	100,00%	0,000	11.016,779	44,402	10.972,377	17.713,760	13.826,566	3.005.370,465
20+900	100	23.099,551	39,531			1,00	1,25	100,00%	0,000	23.099,551	39,531	23.060,020	17.713,760	13.866,097	3.028.430,485
21+000	100	17.638,117	26,054			1,00	1,25	100,00%	0,000	17.638,117	26,054	17.612,063	17.713,760	13.892,151	3.046.042,548
21+100	100	5.036,577	33,592			1,00	1,25	100,00%	0,000	5.036,577	33,592	5.002,985	17.713,760	13.925,743	3.051.045,533
21+200	100	1.017,194	748,509			1,00	1,25	100,00%	0,000	1.017,194	748,509	268,685	17.713,760	14.674,252	3.051.314,218
21+300	100	222,975	793,991			1,00	1,25	100,00%	0,000	222,975	222,975	-571,016	17.713,760	14.897,227	3.050.743,202
21+400	100	906,215	17,253			1,00	1,25	100,00%	0,000	906,215	17,253	888,962	17.713,760	14.914,480	3.051.632,164
21+500	100	1.101,256	17,497			1,00	1,25	100,00%	0,000	1.101,256	17,497	1.083,759	17.713,760	14.931,977	3.052.715,923
21+600	100	1.012,276	16,942			1,00	1,25	100,00%	0,000	1.012,276	16,942	995,334	17.713,760	14.948,919	3.053.711,257
21+700	100	615,737	192,441			1,00	1,25	100,00%	0,000	615,737	192,441	423,296	17.713,760	15.141,360	3.054.134,553
21+800	100	363,392	47,433			1,00	1,25	100,00%	0,000	363,392	47,433	315,959	17.713,760	15.188,793	3.054.450,512
21+900	100	58,886	131,105			1,00	1,25	100,00%	0,000	58,886	58,886	-72,219	17.713,760	15.247,679	3.054.378,293
22+000	100	547,868	79,731			1,00	1,25	100,00%	0,000	547,868	79,731	468,137	17.713,760	15.327,410	3.054.846,430
22+100	100	339,245	272,031			1,00	1,25	100,00%	0,000	339,245	272,031	67,214	17.713,760	15.599,441	3.054.913,644
22+200	100	398,853	178,078			1,00	1,25	100,00%	0,000	398,853	178,078	220,775	17.713,760	15.777,519	3.055.134,419
22+300	100	630,154	16,673			1,00	1,25	100,00%	0,000	630,154	16,673	613,481	17.713,760	15.794,192	3.055.747,900
22+400	100	1.570,620	16,696			1,00	1,25	100,00%	0,000	1.570,620	16,696	1.553,924	17.713,760	15.810,888	3.057.301,824
22+500	100	4.140,360	16,617			1,00	1,25	100,00%	0,000	4.140,360	16,617	4.123,743	17.713,760	15.827,505	3.061.425,567
22+600	100	3.657,317	17,682			1,00	1,25	100,00%	0,000	3.657,317	17,682	3.639,635	17.713,760	15.845,187	3.065.065,202
22+700	100	2.106,222	17,888			1,00	1,25	100,00%	0,000	2.106,222	17,888	2.088,334	17.713,760	15.863,075	3.067.153,536
22+800	100	4.906,140	17,473			1,00	1,25	100,00%	0,000	4.906,140	17,473	4.888,667	17.713,760	15.880,548	3.072.042,203

ESTUDIO INFORMATIVO DEL CORREDOR CÁNTABRICO - MEDITERRÁNEO DE ALTA VELOCIDAD. TRAMO TERUEL - ZARAGOZA.

DIAGRAMA DE EQUILIBRIO DE MOVIMIENTOS DE TIERRAS

Alternativa 7.2

PK	d	PLATAFORMA		EXCAVACIÓN TÚNEL EN MINA		COEF. PASO		EXCAVACIÓN			COMPENS.	BALANCE	VOL. ACUMULADOS		
		EXCAV.	TERRAPLÉN	NOMBRE	EXCAV.	RELLENOS	VERTEDERO	% APROV	NO APROV.	APROV.	TRANS.		A VERTEDERO	COM.TRAN.	BALANCE
22+900	100	5.208,331	17,658			1,00	1,25	100,00%	0,000	5.208,331	17,658	5.190,673	17.713,760	15.898,206	3.077.232,876
23+000	100	2.744,617	115,090			1,00	1,25	100,00%	0,000	2.744,617	115,090	2.629,527	17.713,760	16.013,296	3.079.862,403
23+100	100	446,454	1.975,107			1,00	1,25	100,00%	0,000	446,454	446,454	-1.528,653	17.713,760	16.459,750	3.078.333,750
23+200	100	160,089	3.899,544			1,00	1,25	100,00%	0,000	160,089	160,089	-3.739,455	17.713,760	16.619,839	3.074.594,295
23+300	100	64,584	3.966,682			1,00	1,25	100,00%	0,000	64,584	64,584	-3.902,098	17.713,760	16.684,423	3.070.692,197
23+400	100	78,766	2.302,086			1,00	1,25	100,00%	0,000	78,766	78,766	-2.223,320	17.713,760	16.763,189	3.068.468,877
23+500	100	274,018	81,685			1,00	1,25	100,00%	0,000	274,018	81,685	192,333	17.713,760	16.844,874	3.068.661,210
23+600	100	334,981	112,055			1,00	1,25	100,00%	0,000	334,981	112,055	222,926	17.713,760	16.956,929	3.068.884,136
23+700	100	619,196	25,052			1,00	1,25	100,00%	0,000	619,196	25,052	594,144	17.713,760	16.981,981	3.069.478,280
23+800	100	38,323	680,055			1,00	1,25	100,00%	0,000	38,323	38,323	-641,732	17.713,760	17.020,304	3.068.836,548
23+900	100	1.171,821	36,148			1,00	1,25	100,00%	0,000	1.171,821	36,148	1.135,673	17.713,760	17.056,452	3.069.972,221
24+000	100	2.715,860	61,977			1,00	1,25	100,00%	0,000	2.715,860	61,977	2.653,883	17.713,760	17.118,429	3.072.626,104
24+100	100	3.252,127	40,432			1,00	1,25	100,00%	0,000	3.252,127	40,432	3.211,695	17.713,760	17.158,861	3.075.837,799
24+200	100	4.546,746	37,756			1,00	1,25	100,00%	0,000	4.546,746	37,756	4.508,990	17.713,760	17.196,617	3.080.346,789
24+300	100	3.436,547	38,098			1,00	1,25	100,00%	0,000	3.436,547	38,098	3.398,449	17.713,760	17.234,715	3.083.745,238
24+400	100	5.195,477	38,141			1,00	1,25	100,00%	0,000	5.195,477	38,141	5.157,336	17.713,760	17.272,856	3.088.902,574
24+500	100	2.907,382	37,121			1,00	1,25	100,00%	0,000	2.907,382	37,121	2.870,261	17.713,760	17.309,977	3.091.772,835
24+600	100	1.779,050	38,617			1,00	1,25	100,00%	0,000	1.779,050	38,617	1.740,433	17.713,760	17.348,594	3.093.513,268
24+700	100	2.085,605	38,791			1,00	1,25	100,00%	0,000	2.085,605	38,791	2.046,814	17.713,760	17.387,385	3.095.560,082
24+800	100	2.345,432	36,917			1,00	1,25	100,00%	0,000	2.345,432	36,917	2.308,515	17.713,760	17.424,302	3.097.868,597
24+900	100	3.162,780	37,698			1,00	1,25	100,00%	0,000	3.162,780	37,698	3.125,082	17.713,760	17.462,000	3.100.993,679
25+000	100	3.174,591	32,063			1,00	1,25	100,00%	0,000	3.174,591	32,063	3.142,528	17.713,760	17.494,063	3.104.136,207
25+100	100	2.832,016	18,854			1,00	1,25	100,00%	0,000	2.832,016	18,854	2.813,162	17.713,760	17.512,917	3.106.949,369
25+200	100	1.212,374	19,453			1,00	1,25	100,00%	0,000	1.212,374	19,453	1.192,921	17.713,760	17.532,370	3.108.142,290
25+300	100	1.543,382	17,399			1,00	1,25	100,00%	0,000	1.543,382	17,399	1.525,983	17.713,760	17.549,769	3.109.668,273
25+400	100	2.927,547	17,479			1,00	1,25	100,00%	0,000	2.927,547	17,479	2.910,068	17.713,760	17.567,248	3.112.578,341
25+500	100	0,000	0,000			1,00	1,25	100,00%	0,000	0,000	0,000	0,000	17.713,760	17.567,248	3.112.578,341
25+600	100	0,000	0,000			1,00	1,25	100,00%	0,000	0,000	0,000	0,000	17.713,760	17.567,248	3.112.578,341
25+700	100	0,000	0,000			1,00	1,25	100,00%	0,000	0,000	0,000	0,000	17.713,760	17.567,248	3.112.578,341
25+800	100	0,000	0,000			1,00	1,25	100,00%	0,000	0,000	0,000	0,000	17.713,760	17.567,248	3.112.578,341
25+900	100	0,000	0,000			1,00	1,25	100,00%	0,000	0,000	0,000	0,000	17.713,760	17.567,248	3.112.578,341
26+000	100	0,000	0,000			1,00	1,25	100,00%	0,000	0,000	0,000	0,000	17.713,760	17.567,248	3.112.578,341
26+100	100	0,000	0,000			1,00	1,25	100,00%	0,000	0,000	0,000	0,000	17.713,760	17.567,248	3.112.578,341
26+200	100	691,217	311,334			1,00	1,25	100,00%	0,000	691,217	311,334	379,883	17.713,760	17.878,582	3.112.958,224
26+300	100	633,356	336,734			1,00	1,25	100,00%	0,000	633,356	336,734	296,622	17.713,760	18.215,316	3.113.254,846
26+400	100	2.884,497	37,868			1,00	1,25	100,00%	0,000	2.884,497	37,868	2.846,629	17.713,760	18.253,184	3.116.101,475
26+500	100	9.969,296	37,766			1,00	1,25	100,00%	0,000	9.969,296	37,766	9.931,530	17.713,760	18.290,950	3.126.033,005
26+600	100	22.431,602	37,523			1,00	1,25	100,00%	0,000	22.431,602	37,523	22.394,079	17.713,760	18.328,473	3.148.427,084
26+700	100	46.642,308	37,513			1,00	1,25	100,00%	0,000	46.642,308	37,513	46.604,795	17.713,760	18.365,986	3.195.031,879
26+800	100	68.255,024	36,940			1,00	1,25	100,00%	0,000	68.255,024	36,940	68.218,084	17.713,760	18.402,926	3.263.249,963
26+900	100	55.052,904	37,272			1,00	1,25	100,00%	0,000	55.052,904	37,272	55.015,632	17.713,760	18.440,198	3.318.265,595
27+000	100	28.436,387	37,603			1,00	1,25	100,00%	0,000	28.436,387	37,603	28.398,784	17.713,760	18.477,801	3.346.664,379
27+100	100	23.063,613	37,828			1,00	1,25	100,00%	0,000	23.063,613	37,828	23.025,785	17.713,760	18.515,629	3.369.690,164
27+200	100	26.754,461	37,399			1,00	1,25	100,00%	0,000	26.754,461	37,399	26.717,062	17.713,760	18.553,028	3.396.407,226
27+300	100	55.368,961	37,008			1,00	1,25	100,00%	0,000	55.368,961	37,008	55.331,953	17.713,760	18.590,036	3.451.739,179
27+400	100	50.719,598	37,768			1,00	1,25	100,00%	0,000	50.719,598	37,768	50.681,830	17.713,760	18.627,804	3.502.421,009
27+500	100	52.213,741	36,766			1,00	1,25	100,00%	0,000	52.213,741	36,766	52.176,975	17.713,760	18.664,570	3.554.597,984
27+600	100	27.357,575	37,722			1,00	1,25	100,00%	0,000	27.357,575	37,722	27.319,853	17.713,760	18.702,292	3.581.917,837
27+700	100	17.092,798	37,892			1,00	1,25	100,00%	0,000	17.092,798	37,892	17.054,906	17.713,760	18.740,184	3.598.972,743
27+800	100	15.312,392	36,937			1,00	1,25	100,00%	0,000	15.312,392	36,937	15.275,455	17.713,760	18.777,121	3.614.248,198
27+900	100	7.388,803	37,439			1,00	1,25	100,00%	0,000	7.388,803	37,439	7.351,364	17.713,760	18.814,560	3.621.599,562
28+000	100	483,420	683,513			1,00	1,25	100,00%	0,000	483,420	483,420	-200,093	17.713,760	19.297,980	3.621.399,469
28+100	100	0,000	4.437,019			1,00	1,25	100,00%	0,000	0,000	0,000	-4.437,019	17.713,760	19.297,980	3.616.962,450

ESTUDIO INFORMATIVO DEL CORREDOR CÁNTABRICO - MEDITERRÁNEO DE ALTA VELOCIDAD. TRAMO TERUEL - ZARAGOZA.

DIAGRAMA DE EQUILIBRIO DE MOVIMIENTOS DE TIERRAS

Alternativa 7.2

PK	d	PLATAFORMA		EXCAVACIÓN TÚNEL EN MINA		COEF. PASO		EXCAVACIÓN			COMPENS.	BALANCE	VOL. ACUMULADOS		
		EXCAV.	TERRAPLÉN	NOMBRE	EXCAV.	RELLENOS	VERTEDERO	% APROV	NO APROV.	APROV.	TRANS.		A VERTEDERO	COM.TRAN.	BALANCE
28+200	100	0,000	8.503,244			1,00	1,25	100,00%	0,000	0,000	0,000	-8.503,244	17.713,760	19.297,980	3.608.459,206
28+300	100	0,000	8.927,446			1,00	1,25	100,00%	0,000	0,000	0,000	-8.927,446	17.713,760	19.297,980	3.599.531,760
28+400	100	0,000	10.221,667			1,00	1,25	100,00%	0,000	0,000	0,000	-10.221,667	17.713,760	19.297,980	3.589.310,093
28+500	100	0,000	11.720,377			1,00	1,25	100,00%	0,000	0,000	0,000	-11.720,377	17.713,760	19.297,980	3.577.589,716
28+600	100	0,000	13.006,714			1,00	1,25	100,00%	0,000	0,000	0,000	-13.006,714	17.713,760	19.297,980	3.564.583,002
28+700	100	0,000	16.382,746			1,00	1,25	100,00%	0,000	0,000	0,000	-16.382,746	17.713,760	19.297,980	3.548.200,256
28+800	100	0,000	11.665,106			1,00	1,25	100,00%	0,000	0,000	0,000	-11.665,106	17.713,760	19.297,980	3.536.535,150
28+900	100	0,000	8.437,330			1,00	1,25	100,00%	0,000	0,000	0,000	-8.437,330	17.713,760	19.297,980	3.528.097,820
29+000	100	0,000	5.666,753			1,00	1,25	100,00%	0,000	0,000	0,000	-5.666,753	17.713,760	19.297,980	3.522.431,067
29+100	100	0,000	4.367,223			1,00	1,25	100,00%	0,000	0,000	0,000	-4.367,223	17.713,760	19.297,980	3.518.063,844
29+200	100	0,000	2.780,014			1,00	1,25	100,00%	0,000	0,000	0,000	-2.780,014	17.713,760	19.297,980	3.515.283,830
29+300	100	0,530	2.159,363			1,00	1,25	100,00%	0,000	0,530	0,530	-2.158,833	17.713,760	19.298,510	3.513.124,997
29+400	100	189,722	774,024			1,00	1,25	100,00%	0,000	189,722	189,722	-584,302	17.713,760	19.488,232	3.512.540,695
29+500	100	581,378	116,274			1,00	1,25	100,00%	0,000	581,378	116,274	465,104	17.713,760	19.604,506	3.513.005,799
29+600	100	30,242	781,070			1,00	1,25	100,00%	0,000	30,242	30,242	-750,828	17.713,760	19.634,748	3.512.254,971
29+700	100	26,045	1.726,398			1,00	1,25	100,00%	0,000	26,045	26,045	-1.700,353	17.713,760	19.660,793	3.510.554,618
29+800	100	0,000	2.981,801			1,00	1,25	100,00%	0,000	0,000	0,000	-2.981,801	17.713,760	19.660,793	3.507.572,817
29+900	100	0,000	3.008,546			1,00	1,25	100,00%	0,000	0,000	0,000	-3.008,546	17.713,760	19.660,793	3.504.564,271
30+000	100	0,000	2.841,571			1,00	1,25	100,00%	0,000	0,000	0,000	-2.841,571	17.713,760	19.660,793	3.501.722,700
30+100	100	0,000	4.066,426			1,00	1,25	100,00%	0,000	0,000	0,000	-4.066,426	17.713,760	19.660,793	3.497.656,274
30+200	100	0,000	4.946,378			1,00	1,25	100,00%	0,000	0,000	0,000	-4.946,378	17.713,760	19.660,793	3.492.709,896
30+300	100	0,000	5.827,852			1,00	1,25	100,00%	0,000	0,000	0,000	-5.827,852	17.713,760	19.660,793	3.486.882,044
30+400	100	0,000	13.154,199			1,00	1,25	100,00%	0,000	0,000	0,000	-13.154,199	17.713,760	19.660,793	3.473.727,845
30+500	100	0,000	16.012,507			1,00	1,25	100,00%	0,000	0,000	0,000	-16.012,507	17.713,760	19.660,793	3.457.715,338
30+600	100	0,000	20.729,860			1,00	1,25	100,00%	0,000	0,000	0,000	-20.729,860	17.713,760	19.660,793	3.436.985,478
30+700	100	0,000	25.119,892			1,00	1,25	100,00%	0,000	0,000	0,000	-25.119,892	17.713,760	19.660,793	3.411.865,586
30+800	100	0,000	31.350,234			1,00	1,25	100,00%	0,000	0,000	0,000	-31.350,234	17.713,760	19.660,793	3.380.515,352
30+900	100	0,000	36.870,188			1,00	1,25	100,00%	0,000	0,000	0,000	-36.870,188	17.713,760	19.660,793	3.343.645,164
31+000	100	0,000	43.515,732			1,00	1,25	100,00%	0,000	0,000	0,000	-43.515,732	17.713,760	19.660,793	3.300.129,432
31+100	100	0,000	46.335,655			1,00	1,25	100,00%	0,000	0,000	0,000	-46.335,655	17.713,760	19.660,793	3.253.793,777
31+200	100	0,000	51.561,808			1,00	1,25	100,00%	0,000	0,000	0,000	-51.561,808	17.713,760	19.660,793	3.202.231,969
31+300	100	0,000	58.648,000			1,00	1,25	100,00%	0,000	0,000	0,000	-58.648,000	17.713,760	19.660,793	3.143.583,969
31+400	100	0,000	66.793,984			1,00	1,25	100,00%	0,000	0,000	0,000	-66.793,984	17.713,760	19.660,793	3.076.789,985
31+500	100	0,000	58.550,712			1,00	1,25	100,00%	0,000	0,000	0,000	-58.550,712	17.713,760	19.660,793	3.018.239,273
31+600	100	0,000	0,000			1,00	1,25	100,00%	0,000	0,000	0,000	0,000	17.713,760	19.660,793	3.018.239,273
31+700	100	0,000	0,000			1,00	1,25	100,00%	0,000	0,000	0,000	0,000	17.713,760	19.660,793	3.018.239,273
31+800	100	0,000	0,000			1,00	1,25	100,00%	0,000	0,000	0,000	0,000	17.713,760	19.660,793	3.018.239,273
31+900	100	0,000	25.639,602			1,00	1,25	100,00%	0,000	0,000	0,000	-25.639,602	17.713,760	19.660,793	2.992.599,671
32+000	100	0,000	46.093,036			1,00	1,25	100,00%	0,000	0,000	0,000	-46.093,036	17.713,760	19.660,793	2.946.506,635
32+100	100	0,000	30.109,092			1,00	1,25	100,00%	0,000	0,000	0,000	-30.109,092	17.713,760	19.660,793	2.916.397,543
32+200	100	0,000	22.356,924			1,00	1,25	100,00%	0,000	0,000	0,000	-22.356,924	17.713,760	19.660,793	2.894.040,619
32+300	100	0,000	15.156,536			1,00	1,25	100,00%	0,000	0,000	0,000	-15.156,536	17.713,760	19.660,793	2.878.884,083
32+400	100	0,000	10.316,228			1,00	1,25	100,00%	0,000	0,000	0,000	-10.316,228	17.713,760	19.660,793	2.868.567,855
32+500	100	1,115	6.140,454			1,00	1,25	100,00%	0,000	1,115	1,115	-6.139,339	17.713,760	19.661,908	2.862.428,516
32+600	100	255,904	1.610,963			1,00	1,25	100,00%	0,000	255,904	255,904	-1.355,059	17.713,760	19.917,812	2.861.073,457
32+700	100	2.162,175	206,895			1,00	1,25	100,00%	0,000	2.162,175	206,895	1.955,280	17.713,760	20.124,707	2.863.028,737
32+800	100	5.390,868	90,148			1,00	1,25	100,00%	0,000	5.390,868	90,148	5.300,720	17.713,760	20.214,855	2.868.329,457
32+843	1.743	2.614,830	20,064			1,00	1,25	100,00%	0,000	2.614,830	20,064	2.594,766	17.713,760	20.234,919	2.870.924,223
TOTAL		**2.271.470,124**	**832.476,975**		**1.009.500,000**				**17.713,760**	**3.703.401,198**	**20.234,919**	**2.870.924,223**			

ESTUDIO INFORMATIVO DEL CORREDOR CÁNTABRICO - MEDITERRÁNEO DE ALTA VELOCIDAD. TRAMO TERUEL - ZARAGOZA.

DIAGRAMA DE EQUILIBRIO DE MOVIMIENTOS DE TIERRAS

Alternativa 8.0

PK	d	PLATAFORMA		EXCAVACIÓN TÚNEL EN MINA		COEF. PASO		EXCAVACIÓN			COMPENS.	BALANCE	VOL. ACUMULADOS		
		EXCAV.	TERRAPLÉN	NOMBRE	EXCAV.	RELLENOS	VERTEDERO	% APROV	NO APROV.	APROV.	TRANS.		A VERTEDERO	COM.TRAN.	BALANCE
8+000		0,000	0,000			1,00	1,25	100,00%	0,000	0,000	0,000	0,000	0,000	0,000	0,000
8+100	100	4.722,128	19,421			1,00	1,25	100,00%	0,000	4.722,128	19,421	4.702,707	0,000	19,421	4.702,707
8+200	100	3.600,300	20,435			1,00	1,25	100,00%	0,000	3.600,300	20,435	3.579,865	0,000	39,856	8.282,572
8+300	100	2.701,886	40,049			1,00	1,25	100,00%	0,000	2.701,886	40,049	2.661,837	0,000	79,905	10.944,409
8+400	100	3.242,837	61,083			1,00	1,25	100,00%	0,000	3.242,837	61,083	3.181,754	0,000	140,988	14.126,163
8+500	100	2.246,840	30,259			1,00	1,25	100,00%	0,000	2.246,840	30,259	2.216,581	0,000	171,247	16.342,744
8+600	100	4.879,680	19,524			1,00	1,25	100,00%	0,000	4.879,680	19,524	4.860,156	0,000	190,771	21.202,900
8+700	100	4.770,250	20,964			1,00	1,25	100,00%	0,000	4.770,250	20,964	4.749,286	0,000	211,735	25.952,186
8+800	100	4.670,459	26,197			1,00	1,25	100,00%	0,000	4.670,459	26,197	4.644,262	0,000	237,932	30.596,448
8+900	100	5.101,981	20,081			1,00	1,25	100,00%	0,000	5.101,981	20,081	5.081,900	0,000	258,013	35.678,348
9+000	100	3.987,679	20,926			1,00	1,25	100,00%	0,000	3.987,679	20,926	3.966,753	0,000	278,939	39.645,101
9+100	100	4.253,552	19,675			1,00	1,25	100,00%	0,000	4.253,552	19,675	4.233,877	0,000	298,614	43.878,978
9+200	100	5.849,429	19,708			1,00	1,25	100,00%	0,000	5.849,429	19,708	5.829,721	0,000	318,322	49.708,699
9+300	100	8.472,697	18,625			1,00	1,25	100,00%	0,000	8.472,697	18,625	8.454,072	0,000	336,947	58.162,771
9+400	100	7.804,844	18,119			1,00	1,25	100,00%	0,000	7.804,844	18,119	7.786,725	0,000	355,066	65.949,496
9+500	100	5.498,688	18,354			1,00	1,25	100,00%	0,000	5.498,688	18,354	5.480,334	0,000	373,420	71.429,830
9+600	100	1.939,189	18,593			1,00	1,25	100,00%	0,000	1.939,189	18,593	1.920,596	0,000	392,013	73.350,426
9+700	100	950,797	773,595			1,00	1,25	100,00%	0,000	950,797	773,595	177,202	0,000	1.165,608	73.527,628
9+800	100	439,547	969,720			1,00	1,25	100,00%	0,000	439,547	439,547	-530,173	0,000	1.605,155	72.997,455
9+900	100	480,049	920,903			1,00	1,25	100,00%	0,000	480,049	480,049	-440,854	0,000	2.085,204	72.556,601
10+000	100	3.365,409	18,950			1,00	1,25	100,00%	0,000	3.365,409	18,950	3.346,459	0,000	2.104,154	75.903,060
10+100	100	3.247,258	19,887			1,00	1,25	100,00%	0,000	3.247,258	19,887	3.227,371	0,000	2.124,041	79.130,431
10+200	100	1.472,538	118,714			1,00	1,25	100,00%	0,000	1.472,538	118,714	1.353,824	0,000	2.242,755	80.484,255
10+300	100	232,782	308,859			1,00	1,25	100,00%	0,000	232,782	232,782	-76,077	0,000	2.475,537	80.408,178
10+400	100	105,166	967,820			1,00	1,25	100,00%	0,000	105,166	105,166	-862,654	0,000	2.580,703	79.545,524
10+500	100	78,416	985,839			1,00	1,25	100,00%	0,000	78,416	78,416	-907,423	0,000	2.659,119	78.638,101
10+600	100	59,098	597,896			1,00	1,25	100,00%	0,000	59,098	59,098	-538,798	0,000	2.718,217	78.099,303
10+700	100	35,616	2.617,189			1,00	1,25	100,00%	0,000	35,616	35,616	-2.581,573	0,000	2.753,833	75.517,730
10+800	100	22,505	1.505,618			1,00	1,25	100,00%	0,000	22,505	22,505	-1.483,113	0,000	2.776,338	74.034,617
10+900	100	5,775	1.163,563			1,00	1,25	100,00%	0,000	5,775	5,775	-1.157,788	0,000	2.782,113	72.876,829
11+000	100	14,663	1.686,634			1,00	1,25	100,00%	0,000	14,663	14,663	-1.671,971	0,000	2.796,776	71.204,858
11+100	100	16,838	2.568,185			1,00	1,25	100,00%	0,000	16,838	16,838	-2.551,347	0,000	2.813,614	68.653,511
11+200	100	37,801	2.644,907			1,00	1,25	100,00%	0,000	37,801	37,801	-2.607,106	0,000	2.851,415	66.046,405
11+300	100	45,150	3.688,937			1,00	1,25	100,00%	0,000	45,150	45,150	-3.643,787	0,000	2.896,565	62.402,618
11+400	100	44,176	1.743,696			1,00	1,25	100,00%	0,000	44,176	44,176	-1.699,520	0,000	2.940,741	60.703,098
11+500	100	29,045	2.642,148			1,00	1,25	100,00%	0,000	29,045	29,045	-2.613,103	0,000	2.969,786	58.089,995
11+600	100	46,432	2.172,137			1,00	1,25	100,00%	0,000	46,432	46,432	-2.125,705	0,000	3.016,218	55.964,290
11+700	100	86,825	1.882,850			1,00	1,25	100,00%	0,000	86,825	86,825	-1.796,025	0,000	3.103,043	54.168,265
11+800	100	37,056	2.000,161			1,00	1,25	100,00%	0,000	37,056	37,056	-1.963,105	0,000	3.140,099	52.205,160
11+900	100	48,230	1.415,148			1,00	1,25	100,00%	0,000	48,230	48,230	-1.366,918	0,000	3.188,329	50.838,242
12+000	100	261,181	673,582			1,00	1,25	100,00%	0,000	261,181	261,181	-412,401	0,000	3.449,510	50.425,841
12+100	100	783,723	105,004			1,00	1,25	100,00%	0,000	783,723	105,004	678,719	0,000	3.554,514	51.104,560
12+200	100	130,229	464,298			1,00	1,25	100,00%	0,000	130,229	130,229	-334,069	0,000	3.684,743	50.770,491
12+300	100	447,058	316,932			1,00	1,25	100,00%	0,000	447,058	316,932	130,126	0,000	4.001,675	50.900,617
12+400	100	1.626,802	152,656			1,00	1,25	100,00%	0,000	1.626,802	152,656	1.474,146	0,000	4.154,331	52.374,763
12+500	100	3.330,026	96,608			1,00	1,25	100,00%	0,000	3.330,026	96,608	3.233,418	0,000	4.250,939	55.608,181
12+600	100	5.843,202	29,223			1,00	1,25	100,00%	0,000	5.843,202	29,223	5.813,979	0,000	4.280,162	61.422,160
12+700	100	9.378,536	20,385			1,00	1,25	100,00%	0,000	9.378,536	20,385	9.358,151	0,000	4.300,547	70.780,311
12+800	100	5.480,376	29,117			1,00	1,25	100,00%	0,000	5.480,376	29,117	5.451,259	0,000	4.329,664	76.231,570
12+900	100	5.872,036	22,039			1,00	1,25	100,00%	0,000	5.872,036	22,039	5.849,997	0,000	4.351,703	82.081,567
13+000	100	3.510,681	27,914			1,00	1,25	100,00%	0,000	3.510,681	27,914	3.482,767	0,000	4.379,617	85.564,334
13+100	100	1.729,742	53,667			1,00	1,25	100,00%	0,000	1.729,742	53,667	1.676,075	0,000	4.433,284	87.240,409

ESTUDIO INFORMATIVO DEL CORREDOR CÁNTABRICO - MEDITERRÁNEO DE ALTA VELOCIDAD. TRAMO TERUEL - ZARAGOZA.

DIAGRAMA DE EQUILIBRIO DE MOVIMIENTOS DE TIERRAS

Alternativa 8.0

PK	d	PLATAFORMA		EXCAVACIÓN TÚNEL EN MINA		COEF. PASO		EXCAVACIÓN			COMPENS.	BALANCE	VOL. ACUMULADOS		
		EXCAV.	TERRAPLÉN	NOMBRE	EXCAV.	RELLENOS	VERTEDERO	% APROV	NO APROV.	APROV.	TRANS.		A VERTEDERO	COM.TRAN.	BALANCE
13+200	100	737,900	138,583			1,00	1,25	100,00%	0,000	737,900	138,583	599,317	0,000	4.571,867	87.839,726
13+300	100	325,094	255,643			1,00	1,25	100,00%	0,000	325,094	255,643	69,451	0,000	4.827,510	87.909,177
13+400	100	457,248	230,867			1,00	1,25	100,00%	0,000	457,248	230,867	226,381	0,000	5.058,377	88.135,558
13+500	100	429,587	136,136			1,00	1,25	100,00%	0,000	429,587	136,136	293,451	0,000	5.194,513	88.429,009
13+600	100	1.286,711	324,734			1,00	1,25	100,00%	0,000	1.286,711	324,734	961,977	0,000	5.519,247	89.390,986
13+700	100	3.221,031	39,213			1,00	1,25	100,00%	0,000	3.221,031	39,213	3.181,818	0,000	5.558,460	92.572,804
13+800	100	2.462,052	21,003			1,00	1,25	100,00%	0,000	2.462,052	21,003	2.441,049	0,000	5.579,463	95.013,853
13+900	100	2.410,996	28,381			1,00	1,25	100,00%	0,000	2.410,996	28,381	2.382,615	0,000	5.607,844	97.396,468
14+000	100	1.922,082	25,338			1,00	1,25	100,00%	0,000	1.922,082	25,338	1.896,744	0,000	5.633,182	99.293,212
14+100	100	265,993	68,453			1,00	1,25	100,00%	0,000	265,993	68,453	197,540	0,000	5.701,635	99.490,752
14+200	100	150,138	311,480			1,00	1,25	100,00%	0,000	150,138	150,138	-161,342	0,000	5.851,773	99.329,410
14+300	100	309,396	190,343			1,00	1,25	100,00%	0,000	309,396	190,343	119,053	0,000	6.042,116	99.448,463
14+400	100	457,220	68,021			1,00	1,25	100,00%	0,000	457,220	68,021	389,199	0,000	6.110,137	99.837,662
14+500	100	228,307	144,950			1,00	1,25	100,00%	0,000	228,307	144,950	83,357	0,000	6.255,087	99.921,019
14+600	100	1.582,480	67,173			1,00	1,25	100,00%	0,000	1.582,480	67,173	1.515,307	0,000	6.322,260	101.436,326
14+700	100	5.290,023	26,278			1,00	1,25	100,00%	0,000	5.290,023	26,278	5.263,745	0,000	6.348,538	106.700,071
14+800	100	2.700,029	49,429			1,00	1,25	100,00%	0,000	2.700,029	49,429	2.650,600	0,000	6.397,967	109.350,671
14+900	100	1.201,515	42,677			1,00	1,25	100,00%	0,000	1.201,515	42,677	1.158,838	0,000	6.440,644	110.509,509
15+000	100	4.575,489	22,188			1,00	1,25	100,00%	0,000	4.575,489	22,188	4.553,301	0,000	6.462,832	115.062,810
15+100	100	13.405,931	24,608			1,00	1,25	100,00%	0,000	13.405,931	24,608	13.381,323	0,000	6.487,440	128.444,133
15+200	100	11.411,718	25,208			1,00	1,25	100,00%	0,000	11.411,718	25,208	11.386,510	0,000	6.512,648	139.830,643
15+300	100	2.541,979	23,956			1,00	1,25	100,00%	0,000	2.541,979	23,956	2.518,023	0,000	6.536,604	142.348,666
15+400	100	1.056,169	26,117			1,00	1,25	100,00%	0,000	1.056,169	26,117	1.030,052	0,000	6.562,721	143.378,718
15+500	100	816,977	21,328			1,00	1,25	100,00%	0,000	816,977	21,328	795,649	0,000	6.584,049	144.174,367
15+600	100	1.579,226	18,611			1,00	1,25	100,00%	0,000	1.579,226	18,611	1.560,615	0,000	6.602,660	145.734,982
15+700	100	426,316	206,016			1,00	1,25	100,00%	0,000	426,316	206,016	220,300	0,000	6.808,676	145.955,282
15+800	100	1.525,119	39,156			1,00	1,25	100,00%	0,000	1.525,119	39,156	1.485,963	0,000	6.847,832	147.441,245
15+900	100	3.542,778	17,196			1,00	1,25	100,00%	0,000	3.542,778	17,196	3.525,582	0,000	6.865,028	150.966,827
16+000	100	5.362,347	17,542			1,00	1,25	100,00%	0,000	5.362,347	17,542	5.344,805	0,000	6.882,570	156.311,632
16+100	100	3.324,143	18,581			1,00	1,25	100,00%	0,000	3.324,143	18,581	3.305,562	0,000	6.901,151	159.617,194
16+200	100	1.256,959	119,396			1,00	1,25	100,00%	0,000	1.256,959	119,396	1.137,563	0,000	7.020,547	160.754,757
16+300	100	290,150	224,268			1,00	1,25	100,00%	0,000	290,150	224,268	65,882	0,000	7.244,815	160.820,639
16+400	100	337,467	272,377			1,00	1,25	100,00%	0,000	337,467	272,377	65,090	0,000	7.517,192	160.885,729
16+500	100	590,481	100,011			1,00	1,25	100,00%	0,000	590,481	100,011	490,470	0,000	7.617,203	161.376,199
16+600	100	196,372	401,727			1,00	1,25	100,00%	0,000	196,372	196,372	-205,355	0,000	7.813,575	161.170,844
16+700	100	636,186	158,571			1,00	1,25	100,00%	0,000	636,186	158,571	477,615	0,000	7.972,146	161.648,459
16+800	100	695,151	842,487			1,00	1,25	100,00%	0,000	695,151	695,151	-147,336	0,000	8.667,297	161.501,123
16+900	100	238,841	2.491,783			1,00	1,25	100,00%	0,000	238,841	238,841	-2.252,942	0,000	8.906,138	159.248,181
17+000	100	306,996	1.170,255			1,00	1,25	100,00%	0,000	306,996	306,996	-863,259	0,000	9.213,134	158.384,922
17+100	100	292,574	1.121,220			1,00	1,25	100,00%	0,000	292,574	292,574	-828,646	0,000	9.505,708	157.556,276
17+200	100	339,287	936,632			1,00	1,25	100,00%	0,000	339,287	339,287	-597,345	0,000	9.844,995	156.958,931
17+300	100	394,267	557,181			1,00	1,25	100,00%	0,000	394,267	394,267	-162,914	0,000	10.239,262	156.796,017
17+400	100	865,878	17,667			1,00	1,25	100,00%	0,000	865,878	17,667	848,211	0,000	10.256,929	157.644,228
17+500	100	973,367	35,539			1,00	1,25	100,00%	0,000	973,367	35,539	937,828	0,000	10.292,468	158.582,056
17+600	100	878,854	24,151			1,00	1,25	100,00%	0,000	878,854	24,151	854,703	0,000	10.316,619	159.436,759
17+700	100	1.491,767	18,089			1,00	1,25	100,00%	0,000	1.491,767	18,089	1.473,678	0,000	10.334,708	160.910,437
17+800	100	1.935,264	18,021			1,00	1,25	100,00%	0,000	1.935,264	18,021	1.917,243	0,000	10.352,729	162.827,680
17+900	100	2.064,341	18,132			1,00	1,25	100,00%	0,000	2.064,341	18,132	2.046,209	0,000	10.370,861	164.873,889
18+000	100	2.159,965	18,350			1,00	1,25	100,00%	0,000	2.159,965	18,350	2.141,615	0,000	10.389,211	167.015,504
18+100	100	2.043,810	12,814			1,00	1,25	100,00%	0,000	2.043,810	12,814	2.030,996	0,000	10.402,025	169.046,500
18+200	100	1.339,732	12,339			1,00	1,25	100,00%	0,000	1.339,732	12,339	1.327,393	0,000	10.414,364	170.373,893
18+300	100	547,036	470,960			1,00	1,25	100,00%	0,000	547,036	470,960	76,076	0,000	10.885,324	170.449,969

ESTUDIO INFORMATIVO DEL CORREDOR CÁNTABRICO - MEDITERRÁNEO DE ALTA VELOCIDAD. TRAMO TERUEL - ZARAGOZA.

DIAGRAMA DE EQUILIBRIO DE MOVIMIENTOS DE TIERRAS

Alternativa 8.0

PK	d	PLATAFORMA		EXCAVACIÓN TÚNEL EN MINA		COEF. PASO		EXCAVACIÓN			COMPENS.	BALANCE	VOL. ACUMULADOS		
		EXCAV.	TERRAPLÉN	NOMBRE	EXCAV.	RELLENOS	VERTEDERO	% APROV	NO APROV.	APROV.	TRANS.		A VERTEDERO	COM.TRAN.	BALANCE
18+400	100	477,714	1.509,691			1,00	1,25	100,00%	0,000	477,714	477,714	-1.031,977	0,000	11.363,038	169.417,992
18+500	100	2.847,546	11,478			1,00	1,25	100,00%	0,000	2.847,546	11,478	2.836,068	0,000	11.374,516	172.254,060
18+600	100	3.069,248	14,782			1,00	1,25	100,00%	0,000	3.069,248	14,782	3.054,466	0,000	11.389,298	175.308,526
18+700	100	1.991,439	26,482			1,00	1,25	100,00%	0,000	1.991,439	26,482	1.964,957	0,000	11.415,780	177.273,483
18+800	100	427,451	57,377			1,00	1,25	100,00%	0,000	427,451	57,377	370,074	0,000	11.473,157	177.643,557
18+900	100	285,022	377,116			1,00	1,25	100,00%	0,000	285,022	285,022	-92,094	0,000	11.758,179	177.551,463
19+000	100	1.305,625	36,230			1,00	1,25	100,00%	0,000	1.305,625	36,230	1.269,395	0,000	11.794,409	178.820,858
19+100	100	1.615,042	17,309			1,00	1,25	100,00%	0,000	1.615,042	17,309	1.597,733	0,000	11.811,718	180.418,591
19+200	100	1.768,014	17,931			1,00	1,25	100,00%	0,000	1.768,014	17,931	1.750,083	0,000	11.829,649	182.168,674
19+300	100	1.565,638	20,782			1,00	1,25	100,00%	0,000	1.565,638	20,782	1.544,856	0,000	11.850,431	183.713,530
19+400	100	508,428	760,410			1,00	1,25	100,00%	0,000	508,428	508,428	-251,982	0,000	12.358,859	183.461,548
19+500	100	1.991,211	24,884			1,00	1,25	100,00%	0,000	1.991,211	24,884	1.966,327	0,000	12.383,743	185.427,875
19+600	100	2.933,709	18,328			1,00	1,25	100,00%	0,000	2.933,709	18,328	2.915,381	0,000	12.402,071	188.343,256
19+700	100	4.451,240	17,739			1,00	1,25	100,00%	0,000	4.451,240	17,739	4.433,501	0,000	12.419,810	192.776,757
19+800	100	6.876,627	18,210			1,00	1,25	100,00%	0,000	6.876,627	18,210	6.858,417	0,000	12.438,020	199.635,174
19+900	100	9.241,582	18,488			1,00	1,25	100,00%	0,000	9.241,582	18,488	9.223,094	0,000	12.456,508	208.858,268
20+000	100	11.525,860	16,781			1,00	1,25	100,00%	0,000	11.525,860	16,781	11.509,079	0,000	12.473,289	220.367,347
20+100	100	10.565,005	16,816			1,00	1,25	100,00%	0,000	10.565,005	16,816	10.548,189	0,000	12.490,105	230.915,536
20+200	100	7.037,485	18,576			1,00	1,25	100,00%	0,000	7.037,485	18,576	7.018,909	0,000	12.508,681	237.934,445
20+300	100	6.594,312	21,887			1,00	1,25	100,00%	0,000	6.594,312	21,887	6.572,425	0,000	12.530,568	244.506,870
20+400	100	8.179,862	23,114			1,00	1,25	100,00%	0,000	8.179,862	23,114	8.156,748	0,000	12.553,682	252.663,618
20+500	100	10.576,877	19,747			1,00	1,25	100,00%	0,000	10.576,877	19,747	10.557,130	0,000	12.573,429	263.220,748
20+600	100	8.531,940	18,184			1,00	1,25	100,00%	0,000	8.531,940	18,184	8.513,756	0,000	12.591,613	271.734,504
20+700	100	5.713,153	19,494			1,00	1,25	100,00%	0,000	5.713,153	19,494	5.693,659	0,000	12.611,107	277.428,163
20+800	100	4.918,416	20,329			1,00	1,25	100,00%	0,000	4.918,416	20,329	4.898,087	0,000	12.631,436	282.326,250
20+900	100	3.951,808	18,178			1,00	1,25	100,00%	0,000	3.951,808	18,178	3.933,630	0,000	12.649,614	286.259,880
21+000	100	3.565,473	15,032			1,00	1,25	100,00%	0,000	3.565,473	15,032	3.550,441	0,000	12.664,646	289.810,321
21+100	100	2.463,352	85,939			1,00	1,25	100,00%	0,000	2.463,352	85,939	2.377,413	0,000	12.750,585	292.187,734
21+200	100	5.626,887	16,460			1,00	1,25	100,00%	0,000	5.626,887	16,460	5.610,427	0,000	12.767,045	297.798,161
21+300	100	6.326,531	17,838			1,00	1,25	100,00%	0,000	6.326,531	17,838	6.308,693	0,000	12.784,883	304.106,854
21+400	100	6.592,103	18,100			1,00	1,25	100,00%	0,000	6.592,103	18,100	6.574,003	0,000	12.802,983	310.680,857
21+500	100	2.568,910	18,720			1,00	1,25	100,00%	0,000	2.568,910	18,720	2.550,190	0,000	12.821,703	313.231,047
21+600	100	1.741,503	14,592			1,00	1,25	100,00%	0,000	1.741,503	14,592	1.726,911	0,000	12.836,295	314.957,958
21+700	100	2.054,371	19,005			1,00	1,25	100,00%	0,000	2.054,371	19,005	2.035,366	0,000	12.855,300	316.993,324
21+800	100	586,235	1.571,370			1,00	1,25	100,00%	0,000	586,235	586,235	-985,135	0,000	13.441,535	316.008,189
21+900	100	1.348,470	12,754			1,00	1,25	100,00%	0,000	1.348,470	12,754	1.335,716	0,000	13.454,289	317.343,905
22+000	100	0,000	0,000			1,00	1,25	100,00%	0,000	0,000	0,000	0,000	0,000	13.454,289	317.343,905
22+100	100	1.128,601	11,394			1,00	1,25	100,00%	0,000	1.128,601	11,394	1.117,207	0,000	13.465,683	318.461,112
22+200	100	2.408,027	16,671			1,00	1,25	100,00%	0,000	2.408,027	16,671	2.391,356	0,000	13.482,354	320.852,468
22+300	100	1.074,732	64,953			1,00	1,25	100,00%	0,000	1.074,732	64,953	1.009,779	0,000	13.547,307	321.862,247
22+400	100	984,172	42,297			1,00	1,25	100,00%	0,000	984,172	42,297	941,875	0,000	13.589,604	322.804,122
22+500	100	479,006	1.444,301			1,00	1,25	100,00%	0,000	479,006	479,006	-965,295	0,000	14.068,610	321.838,827
22+600	100	327,805	2.420,287			1,00	1,25	100,00%	0,000	327,805	327,805	-2.092,482	0,000	14.396,415	319.746,345
22+700	100	980,839	860,634			1,00	1,25	100,00%	0,000	980,839	860,634	120,205	0,000	15.257,049	319.866,550
22+800	100	1.050,296	811,580			1,00	1,25	100,00%	0,000	1.050,296	811,580	238,716	0,000	16.068,629	320.105,266
22+900	100	152,995	1.377,727			1,00	1,25	100,00%	0,000	152,995	152,995	-1.224,732	0,000	16.221,624	318.880,534
23+000	100	2.218,649	19,294			1,00	1,25	100,00%	0,000	2.218,649	19,294	2.199,355	0,000	16.240,918	321.079,889
23+100	100	6.570,927	21,083			1,00	1,25	100,00%	0,000	6.570,927	21,083	6.549,844	0,000	16.262,001	327.629,733
23+200	100	5.684,554	19,899			1,00	1,25	100,00%	0,000	5.684,554	19,899	5.664,655	0,000	16.281,900	333.294,388
23+300	100	5.801,001	20,171			1,00	1,25	100,00%	0,000	5.801,001	20,171	5.780,830	0,000	16.302,071	339.075,218
23+400	100	3.031,596	19,112			1,00	1,25	100,00%	0,000	3.031,596	19,112	3.012,484	0,000	16.321,183	342.087,702
23+500	100	1.941,726	18,804			1,00	1,25	100,00%	0,000	1.941,726	18,804	1.922,922	0,000	16.339,987	344.010,624

ESTUDIO INFORMATIVO DEL CORREDOR CÁNTABRICO - MEDITERRÁNEO DE ALTA VELOCIDAD. TRAMO TERUEL - ZARAGOZA.

DIAGRAMA DE EQUILIBRIO DE MOVIMIENTOS DE TIERRAS

Alternativa 8.0

PK	d	PLATAFORMA		EXCAVACIÓN TÚNEL EN MINA		COEF. PASO		EXCAVACIÓN			COMPENS.	BALANCE	VOL. ACUMULADOS		
		EXCAV.	TERRAPLÉN	NOMBRE	EXCAV.	RELLENOS	VERTEDERO	% APROV	NO APROV.	APROV.	TRANS.		A VERTEDERO	COM.TRAN.	BALANCE
23+600	100	1.511,222	19,025			1,00	1,25	100,00%	0,000	1.511,222	19,025	1.492,197	0,000	16.359,012	345.502,821
23+700	100	1.183,231	19,018			1,00	1,25	100,00%	0,000	1.183,231	19,018	1.164,213	0,000	16.378,030	346.667,034
23+800	100	361,369	130,685			1,00	1,25	100,00%	0,000	361,369	130,685	230,684	0,000	16.508,715	346.897,718
23+900	100	1.532,871	45,888			1,00	1,25	100,00%	0,000	1.532,871	45,888	1.486,983	0,000	16.554,603	348.384,701
24+000	100	1.920,419	18,750			1,00	1,25	100,00%	0,000	1.920,419	18,750	1.901,669	0,000	16.573,353	350.286,370
24+100	100	2.610,142	18,750			1,00	1,25	100,00%	0,000	2.610,142	18,750	2.591,392	0,000	16.592,103	352.877,762
24+200	100	2.326,819	18,750			1,00	1,25	100,00%	0,000	2.326,819	18,750	2.308,069	0,000	16.610,853	355.185,831
24+300	100	1.859,204	18,750			1,00	1,25	100,00%	0,000	1.859,204	18,750	1.840,454	0,000	16.629,603	357.026,285
24+400	100	2.306,968	18,750			1,00	1,25	100,00%	0,000	2.306,968	18,750	2.288,218	0,000	16.648,353	359.314,503
24+500	100	2.401,470	18,750			1,00	1,25	100,00%	0,000	2.401,470	18,750	2.382,720	0,000	16.667,103	361.697,223
24+600	100	1.815,433	18,750			1,00	1,25	100,00%	0,000	1.815,433	18,750	1.796,683	0,000	16.685,853	363.493,906
24+700	100	1.867,871	18,750			1,00	1,25	100,00%	0,000	1.867,871	18,750	1.849,121	0,000	16.704,603	365.343,027
24+800	100	1.770,167	18,750			1,00	1,25	100,00%	0,000	1.770,167	18,750	1.751,417	0,000	16.723,353	367.094,444
24+900	100	1.943,622	18,750			1,00	1,25	100,00%	0,000	1.943,622	18,750	1.924,872	0,000	16.742,103	369.019,316
25+000	100	1.888,876	18,750			1,00	1,25	100,00%	0,000	1.888,876	18,750	1.870,126	0,000	16.760,853	370.889,442
25+100	100	1.700,309	18,750			1,00	1,25	100,00%	0,000	1.700,309	18,750	1.681,559	0,000	16.779,603	372.571,001
25+200	100	1.931,011	18,750			1,00	1,25	100,00%	0,000	1.931,011	18,750	1.912,261	0,000	16.798,353	374.483,262
25+300	100	1.748,681	18,750			1,00	1,25	100,00%	0,000	1.748,681	18,750	1.729,931	0,000	16.817,103	376.213,193
25+400	100	1.900,496	18,750			1,00	1,25	100,00%	0,000	1.900,496	18,750	1.881,746	0,000	16.835,853	378.094,939
25+500	100	2.069,607	18,750			1,00	1,25	100,00%	0,000	2.069,607	18,750	2.050,857	0,000	16.854,603	380.145,796
25+600	100	2.286,553	18,750			1,00	1,25	100,00%	0,000	2.286,553	18,750	2.267,803	0,000	16.873,353	382.413,599
25+700	100	2.241,108	18,750			1,00	1,25	100,00%	0,000	2.241,108	18,750	2.222,358	0,000	16.892,103	384.635,957
25+800	100	2.002,193	18,750			1,00	1,25	100,00%	0,000	2.002,193	18,750	1.983,443	0,000	16.910,853	386.619,400
25+900	100	1.783,562	18,750			1,00	1,25	100,00%	0,000	1.783,562	18,750	1.764,812	0,000	16.929,603	388.384,212
26+000	100	2.357,662	18,750			1,00	1,25	100,00%	0,000	2.357,662	18,750	2.338,912	0,000	16.948,353	390.723,124
26+100	100	2.244,947	18,749			1,00	1,25	100,00%	0,000	2.244,947	18,749	2.226,198	0,000	16.967,102	392.949,322
26+200	100	1.889,154	18,749			1,00	1,25	100,00%	0,000	1.889,154	18,749	1.870,405	0,000	16.985,851	394.819,727
26+300	100	2.085,522	18,750			1,00	1,25	100,00%	0,000	2.085,522	18,750	2.066,772	0,000	17.004,601	396.886,499
26+400	100	2.503,651	18,750			1,00	1,25	100,00%	0,000	2.503,651	18,750	2.484,901	0,000	17.023,351	399.371,400
26+500	100	2.205,015	18,750			1,00	1,25	100,00%	0,000	2.205,015	18,750	2.186,265	0,000	17.042,101	401.557,665
26+600	100	1.829,571	18,750			1,00	1,25	100,00%	0,000	1.829,571	18,750	1.810,821	0,000	17.060,851	403.368,486
26+700	100	1.893,718	18,750			1,00	1,25	100,00%	0,000	1.893,718	18,750	1.874,968	0,000	17.079,601	405.243,454
26+800	100	1.821,989	18,750			1,00	1,25	100,00%	0,000	1.821,989	18,750	1.803,239	0,000	17.098,351	407.046,693
26+900	100	1.891,953	18,750			1,00	1,25	100,00%	0,000	1.891,953	18,750	1.873,203	0,000	17.117,101	408.919,896
27+000	100	2.230,573	18,750			1,00	1,25	100,00%	0,000	2.230,573	18,750	2.211,823	0,000	17.135,851	411.131,719
27+100	100	1.677,610	18,750			1,00	1,25	100,00%	0,000	1.677,610	18,750	1.658,860	0,000	17.154,601	412.790,579
27+200	100	1.721,974	18,750			1,00	1,25	100,00%	0,000	1.721,974	18,750	1.703,224	0,000	17.173,351	414.493,803
27+300	100	1.975,289	18,750			1,00	1,25	100,00%	0,000	1.975,289	18,750	1.956,539	0,000	17.192,101	416.450,342
27+400	100	1.663,797	18,750			1,00	1,25	100,00%	0,000	1.663,797	18,750	1.645,047	0,000	17.210,851	418.095,389
27+500	100	1.691,153	18,750			1,00	1,25	100,00%	0,000	1.691,153	18,750	1.672,403	0,000	17.229,601	419.767,792
27+600	100	1.425,992	18,750			1,00	1,25	100,00%	0,000	1.425,992	18,750	1.407,242	0,000	17.248,351	421.175,034
27+700	100	1.920,200	18,750			1,00	1,25	100,00%	0,000	1.920,200	18,750	1.901,450	0,000	17.267,101	423.076,484
27+800	100	1.884,451	18,750			1,00	1,25	100,00%	0,000	1.884,451	18,750	1.865,701	0,000	17.285,851	424.942,185
27+900	100	1.398,465	18,750			1,00	1,25	100,00%	0,000	1.398,465	18,750	1.379,715	0,000	17.304,601	426.321,900
28+000	100	1.050,458	18,749			1,00	1,25	100,00%	0,000	1.050,458	18,749	1.031,709	0,000	17.323,350	427.353,609
28+100	100	1.409,530	18,750			1,00	1,25	100,00%	0,000	1.409,530	18,750	1.390,780	0,000	17.342,100	428.744,389
28+200	100	1.892,840	18,749			1,00	1,25	100,00%	0,000	1.892,840	18,749	1.874,091	0,000	17.360,849	430.618,480
28+300	100	1.940,747	18,750			1,00	1,25	100,00%	0,000	1.940,747	18,750	1.921,997	0,000	17.379,599	432.540,477
28+400	100	1.846,700	18,750			1,00	1,25	100,00%	0,000	1.846,700	18,750	1.827,950	0,000	17.398,349	434.368,427
28+500	100	1.855,430	18,750			1,00	1,25	100,00%	0,000	1.855,430	18,750	1.836,680	0,000	17.417,099	436.205,107
28+600	100	1.839,307	18,750			1,00	1,25	100,00%	0,000	1.839,307	18,750	1.820,557	0,000	17.435,849	438.025,664
28+700	100	1.726,446	18,750			1,00	1,25	100,00%	0,000	1.726,446	18,750	1.707,696	0,000	17.454,599	439.733,360

ESTUDIO INFORMATIVO DEL CORREDOR CÁNTABRICO - MEDITERRÁNEO DE ALTA VELOCIDAD. TRAMO TERUEL - ZARAGOZA.

DIAGRAMA DE EQUILIBRIO DE MOVIMIENTOS DE TIERRAS

Alternativa 8.0

PK	d	PLATAFORMA		EXCAVACIÓN TÚNEL EN MINA		COEF. PASO		EXCAVACIÓN			COMPENS.	BALANCE	VOL. ACUMULADOS		
		EXCAV.	TERRAPLÉN	NOMBRE	EXCAV.	RELLENOS	VERTEDERO	% APROV	NO APROV.	APROV.	TRANS.		A VERTEDERO	COM.TRAN.	BALANCE
28+800	100	2.195,331	18,750			1,00	1,25	100,00%	0,000	2.195,331	18,750	2.176,581	0,000	17.473,349	441.909,941
28+900	100	2.239,856	18,750			1,00	1,25	100,00%	0,000	2.239,856	18,750	2.221,106	0,000	17.492,099	444.131,047
29+000	100	1.885,221	18,750			1,00	1,25	100,00%	0,000	1.885,221	18,750	1.866,471	0,000	17.510,849	445.997,518
29+100	100	1.720,029	18,750			1,00	1,25	100,00%	0,000	1.720,029	18,750	1.701,279	0,000	17.529,599	447.698,797
29+200	100	1.959,969	18,750			1,00	1,25	100,00%	0,000	1.959,969	18,750	1.941,219	0,000	17.548,349	449.640,016
29+300	100	2.065,080	18,750			1,00	1,25	100,00%	0,000	2.065,080	18,750	2.046,330	0,000	17.567,099	451.686,346
29+365	65	886,235	11,646			1,00	1,25	100,00%	0,000	886,235	11,646	874,589	0,000	17.578,745	452.560,935
TOTAL		**513.366,026**	**60.805,091**						**0,000**	**513.366,026**	**17.578,745**	**452.560,935**			

ESTUDIO INFORMATIVO DEL CORREDOR CÁNTABRICO - MEDITERRÁNEO DE ALTA VELOCIDAD. TRAMO TERUEL - ZARAGOZA.

DIAGRAMA DE EQUILIBRIO DE MOVIMIENTOS DE TIERRAS

Alternativa 8.1

PK	d	PLATAFORMA		EXCAVACIÓN TÚNEL EN MINA		COEF. PASO		EXCAVACIÓN			COMPENS.	BALANCE	VOL. ACUMULADOS		
		EXCAV.	TERRAPLÉN	NOMBRE	EXCAV.	RELLENOS	VERTEDERO	% APROV	NO APROV.	APROV.	TRANS.		A VERTEDERO	COM.TRAN.	BALANCE
8+000		0,000	0,000			1,00	1,25	100,00%	0,000	0,000	0,000	0,000	0,000	0,000	0,000
8+100	100	4.722,128	19,421			1,00	1,25	100,00%	0,000	4.722,128	19,421	4.702,707	0,000	19,421	4.702,707
8+200	100	3.600,300	20,435			1,00	1,25	100,00%	0,000	3.600,300	20,435	3.579,865	0,000	39,856	8.282,572
8+300	100	2.701,886	40,049			1,00	1,25	100,00%	0,000	2.701,886	40,049	2.661,837	0,000	79,905	10.944,409
8+400	100	3.242,837	61,083			1,00	1,25	100,00%	0,000	3.242,837	61,083	3.181,754	0,000	140,988	14.126,163
8+500	100	2.246,840	30,259			1,00	1,25	100,00%	0,000	2.246,840	30,259	2.216,581	0,000	171,247	16.342,744
8+600	100	4.879,680	19,524			1,00	1,25	100,00%	0,000	4.879,680	19,524	4.860,156	0,000	190,771	21.202,900
8+700	100	4.770,250	20,964			1,00	1,25	100,00%	0,000	4.770,250	20,964	4.749,286	0,000	211,735	25.952,186
8+800	100	4.670,459	26,197			1,00	1,25	100,00%	0,000	4.670,459	26,197	4.644,262	0,000	237,932	30.596,448
8+900	100	5.101,981	20,081			1,00	1,25	100,00%	0,000	5.101,981	20,081	5.081,900	0,000	258,013	35.678,348
9+000	100	3.987,679	20,926			1,00	1,25	100,00%	0,000	3.987,679	20,926	3.966,753	0,000	278,939	39.645,101
9+100	100	4.253,552	19,675			1,00	1,25	100,00%	0,000	4.253,552	19,675	4.233,877	0,000	298,614	43.878,978
9+200	100	5.849,429	19,708			1,00	1,25	100,00%	0,000	5.849,429	19,708	5.829,721	0,000	318,322	49.708,699
9+300	100	8.472,697	18,625			1,00	1,25	100,00%	0,000	8.472,697	18,625	8.454,072	0,000	336,947	58.162,771
9+400	100	7.804,844	18,119			1,00	1,25	100,00%	0,000	7.804,844	18,119	7.786,725	0,000	355,066	65.949,496
9+500	100	5.498,688	18,354			1,00	1,25	100,00%	0,000	5.498,688	18,354	5.480,334	0,000	373,420	71.429,830
9+600	100	1.939,189	18,593			1,00	1,25	100,00%	0,000	1.939,189	18,593	1.920,596	0,000	392,013	73.350,426
9+700	100	950,797	773,595			1,00	1,25	100,00%	0,000	950,797	773,595	177,202	0,000	1.165,608	73.527,628
9+800	100	439,547	969,720			1,00	1,25	100,00%	0,000	439,547	439,547	-530,173	0,000	1.605,155	72.997,455
9+900	100	480,049	920,903			1,00	1,25	100,00%	0,000	480,049	480,049	-440,854	0,000	2.085,204	72.556,601
10+000	100	3.365,409	18,950			1,00	1,25	100,00%	0,000	3.365,409	18,950	3.346,459	0,000	2.104,154	75.903,060
10+100	100	3.247,258	19,887			1,00	1,25	100,00%	0,000	3.247,258	19,887	3.227,371	0,000	2.124,041	79.130,431
10+200	100	1.472,538	118,714			1,00	1,25	100,00%	0,000	1.472,538	118,714	1.353,824	0,000	2.242,755	80.484,255
10+300	100	232,782	308,859			1,00	1,25	100,00%	0,000	232,782	232,782	-76,077	0,000	2.475,537	80.408,178
10+400	100	105,166	967,820			1,00	1,25	100,00%	0,000	105,166	105,166	-862,654	0,000	2.580,703	79.545,524
10+500	100	78,416	985,839			1,00	1,25	100,00%	0,000	78,416	78,416	-907,423	0,000	2.659,119	78.638,101
10+600	100	59,098	597,896			1,00	1,25	100,00%	0,000	59,098	59,098	-538,798	0,000	2.718,217	78.099,303
10+700	100	35,616	2.617,189			1,00	1,25	100,00%	0,000	35,616	35,616	-2.581,573	0,000	2.753,833	75.517,730
10+800	100	22,505	1.505,618			1,00	1,25	100,00%	0,000	22,505	22,505	-1.483,113	0,000	2.776,338	74.034,617
10+900	100	5,775	1.163,563			1,00	1,25	100,00%	0,000	5,775	5,775	-1.157,788	0,000	2.782,113	72.876,829
11+000	100	14,663	1.686,634			1,00	1,25	100,00%	0,000	14,663	14,663	-1.671,971	0,000	2.796,776	71.204,858
11+100	100	16,838	2.568,185			1,00	1,25	100,00%	0,000	16,838	16,838	-2.551,347	0,000	2.813,614	68.653,511
11+200	100	37,801	2.644,907			1,00	1,25	100,00%	0,000	37,801	37,801	-2.607,106	0,000	2.851,415	66.046,405
11+300	100	45,150	3.688,937			1,00	1,25	100,00%	0,000	45,150	45,150	-3.643,787	0,000	2.896,565	62.402,618
11+400	100	44,176	1.743,696			1,00	1,25	100,00%	0,000	44,176	44,176	-1.699,520	0,000	2.940,741	60.703,098
11+500	100	29,045	2.642,148			1,00	1,25	100,00%	0,000	29,045	29,045	-2.613,103	0,000	2.969,786	58.089,995
11+600	100	46,432	2.172,137			1,00	1,25	100,00%	0,000	46,432	46,432	-2.125,705	0,000	3.016,218	55.964,290
11+700	100	86,825	1.882,850			1,00	1,25	100,00%	0,000	86,825	86,825	-1.796,025	0,000	3.103,043	54.168,265
11+800	100	37,056	2.000,161			1,00	1,25	100,00%	0,000	37,056	37,056	-1.963,105	0,000	3.140,099	52.205,160
11+900	100	48,230	1.415,148			1,00	1,25	100,00%	0,000	48,230	48,230	-1.366,918	0,000	3.188,329	50.838,242
12+000	100	261,181	673,582			1,00	1,25	100,00%	0,000	261,181	261,181	-412,401	0,000	3.449,510	50.425,841
12+100	100	783,723	105,004			1,00	1,25	100,00%	0,000	783,723	105,004	678,719	0,000	3.554,514	51.104,560
12+200	100	130,229	464,298			1,00	1,25	100,00%	0,000	130,229	130,229	-334,069	0,000	3.684,743	50.770,491
12+300	100	447,058	316,932			1,00	1,25	100,00%	0,000	447,058	316,932	130,126	0,000	4.001,675	50.900,617
12+400	100	1.626,802	152,656			1,00	1,25	100,00%	0,000	1.626,802	152,656	1.474,146	0,000	4.154,331	52.374,763
12+500	100	3.330,026	96,608			1,00	1,25	100,00%	0,000	3.330,026	96,608	3.233,418	0,000	4.250,939	55.608,181
12+600	100	5.843,202	29,223			1,00	1,25	100,00%	0,000	5.843,202	29,223	5.813,979	0,000	4.280,162	61.422,160
12+700	100	9.378,536	20,385			1,00	1,25	100,00%	0,000	9.378,536	20,385	9.358,151	0,000	4.300,547	70.780,311
12+800	100	5.480,376	29,117			1,00	1,25	100,00%	0,000	5.480,376	29,117	5.451,259	0,000	4.329,664	76.231,570
12+900	100	5.872,036	22,039			1,00	1,25	100,00%	0,000	5.872,036	22,039	5.849,997	0,000	4.351,703	82.081,567
13+000	100	3.510,681	27,914			1,00	1,25	100,00%	0,000	3.510,681	27,914	3.482,767	0,000	4.379,617	85.564,334
13+100	100	1.729,742	53,667			1,00	1,25	100,00%	0,000	1.729,742	53,667	1.676,075	0,000	4.433,284	87.240,409

ESTUDIO INFORMATIVO DEL CORREDOR CÁNTABRICO - MEDITERRÁNEO DE ALTA VELOCIDAD. TRAMO TERUEL - ZARAGOZA.

DIAGRAMA DE EQUILIBRIO DE MOVIMIENTOS DE TIERRAS

Alternativa 8.1

PK	d	PLATAFORMA		EXCAVACIÓN TÚNEL EN MINA		COEF. PASO		EXCAVACIÓN			COMPENS.	BALANCE	VOL. ACUMULADOS		
		EXCAV.	TERRAPLÉN	NOMBRE	EXCAV.	RELLENOS	VERTEDERO	% APROV	NO APROV.	APROV.	TRANS.		A VERTEDERO	COM.TRAN.	BALANCE
13+200	100	737,900	138,583			1,00	1,25	100,00%	0,000	737,900	138,583	599,317	0,000	4.571,867	87.839,726
13+300	100	325,094	255,643			1,00	1,25	100,00%	0,000	325,094	255,643	69,451	0,000	4.827,510	87.909,177
13+400	100	457,248	230,867			1,00	1,25	100,00%	0,000	457,248	230,867	226,381	0,000	5.058,377	88.135,558
13+500	100	429,587	136,136			1,00	1,25	100,00%	0,000	429,587	136,136	293,451	0,000	5.194,513	88.429,009
13+600	100	1.286,711	324,734			1,00	1,25	100,00%	0,000	1.286,711	324,734	961,977	0,000	5.519,247	89.390,986
13+700	100	3.221,031	39,213			1,00	1,25	100,00%	0,000	3.221,031	39,213	3.181,818	0,000	5.558,460	92.572,804
13+800	100	2.462,052	21,003			1,00	1,25	100,00%	0,000	2.462,052	21,003	2.441,049	0,000	5.579,463	95.013,853
13+900	100	2.410,996	28,381			1,00	1,25	100,00%	0,000	2.410,996	28,381	2.382,615	0,000	5.607,844	97.396,468
14+000	100	1.922,082	25,338			1,00	1,25	100,00%	0,000	1.922,082	25,338	1.896,744	0,000	5.633,182	99.293,212
14+100	100	265,993	68,453			1,00	1,25	100,00%	0,000	265,993	68,453	197,540	0,000	5.701,635	99.490,752
14+200	100	150,138	311,480			1,00	1,25	100,00%	0,000	150,138	150,138	-161,342	0,000	5.851,773	99.329,410
14+300	100	588,607	208,876			1,00	1,25	100,00%	0,000	588,607	208,876	379,731	0,000	6.060,649	99.709,141
14+400	100	1.111,530	104,266			1,00	1,25	100,00%	0,000	1.111,530	104,266	1.007,264	0,000	6.164,915	100.716,405
14+500	100	1.050,577	196,956			1,00	1,25	100,00%	0,000	1.050,577	196,956	853,621	0,000	6.361,871	101.570,026
14+600	100	2.378,620	99,859			1,00	1,25	100,00%	0,000	2.378,620	99,859	2.278,761	0,000	6.461,730	103.848,787
14+700	100	5.986,884	88,218			1,00	1,25	100,00%	0,000	5.986,884	88,218	5.898,666	0,000	6.549,948	109.747,453
14+800	100	3.488,452	86,765			1,00	1,25	100,00%	0,000	3.488,452	86,765	3.401,687	0,000	6.636,713	113.149,140
14+900	100	2.179,553	74,922			1,00	1,25	100,00%	0,000	2.179,553	74,922	2.104,631	0,000	6.711,635	115.253,771
15+000	100	5.691,987	48,134			1,00	1,25	100,00%	0,000	5.691,987	48,134	5.643,853	0,000	6.759,769	120.897,624
15+100	100	14.103,836	82,249			1,00	1,25	100,00%	0,000	14.103,836	82,249	14.021,587	0,000	6.842,018	134.919,211
15+200	100	11.859,428	45,234			1,00	1,25	100,00%	0,000	11.859,428	45,234	11.814,194	0,000	6.887,252	146.733,405
15+300	100	3.273,859	57,378			1,00	1,25	100,00%	0,000	3.273,859	57,378	3.216,481	0,000	6.944,630	149.949,886
15+400	100	1.615,548	77,011			1,00	1,25	100,00%	0,000	1.615,548	77,011	1.538,537	0,000	7.021,641	151.488,423
15+500	100	1.497,763	51,639			1,00	1,25	100,00%	0,000	1.497,763	51,639	1.446,124	0,000	7.073,280	152.934,547
15+600	100	2.820,564	37,107			1,00	1,25	100,00%	0,000	2.820,564	37,107	2.783,457	0,000	7.110,387	155.718,004
15+700	100	1.260,960	484,024			1,00	1,25	100,00%	0,000	1.260,960	484,024	776,936	0,000	7.594,411	156.494,940
15+800	100	4.729,848	71,008			1,00	1,25	100,00%	0,000	4.729,848	71,008	4.658,840	0,000	7.665,419	161.153,780
15+900	100	17.441,695	41,610			1,00	1,25	100,00%	0,000	17.441,695	41,610	17.400,085	0,000	7.707,029	178.553,865
16+000	100	23.003,760	41,080			1,00	1,25	100,00%	0,000	23.003,760	41,080	22.962,680	0,000	7.748,109	201.516,545
16+100	100	13.216,976	38,051			1,00	1,25	100,00%	0,000	13.216,976	38,051	13.178,925	0,000	7.786,160	214.695,470
16+200	100	29.492,404	42,699			1,00	1,25	100,00%	0,000	29.492,404	42,699	29.449,705	0,000	7.828,859	244.145,175
16+300	100	23.366,579	38,414			1,00	1,25	100,00%	0,000	23.366,579	38,414	23.328,165	0,000	7.867,273	267.473,340
16+400	100	18.957,871	37,781			1,00	1,25	100,00%	0,000	18.957,871	37,781	18.920,090	0,000	7.905,054	286.393,430
16+500	100	31.881,016	37,390			1,00	1,25	100,00%	0,000	31.881,016	37,390	31.843,626	0,000	7.942,444	318.237,056
16+600	100	25.635,475	38,376			1,00	1,25	100,00%	0,000	25.635,475	38,376	25.597,099	0,000	7.980,820	343.834,155
16+700	100	69.178,282	38,090			1,00	1,25	100,00%	0,000	69.178,282	38,090	69.140,192	0,000	8.018,910	412.974,347
16+800	100	63.616,792	34,726			1,00	1,25	100,00%	0,000	63.616,792	34,726	63.582,066	0,000	8.053,636	476.556,413
16+900	100	11.482,889	47,052			1,00	1,25	100,00%	0,000	11.482,889	47,052	11.435,837	0,000	8.100,688	487.992,250
17+000	100	96,212	8.717,791			1,00	1,25	100,00%	0,000	96,212	96,212	-8.621,579	0,000	8.196,900	479.370,671
17+100	100	0,000	4.529,827			1,00	1,25	100,00%	0,000	0,000	0,000	-4.529,827	0,000	8.196,900	474.840,844
17+200	100	0,000	0,000			1,00	1,25	100,00%	0,000	0,000	0,000	0,000	0,000	8.196,900	474.840,844
17+300	100	0,004	4.619,060			1,00	1,25	100,00%	0,000	0,004	0,004	-4.619,056	0,000	8.196,904	470.221,788
17+400	100	489,566	829,270			1,00	1,25	100,00%	0,000	489,566	489,566	-339,704	0,000	8.686,470	469.882,084
17+500	100	1.874,623	36,778			1,00	1,25	100,00%	0,000	1.874,623	36,778	1.837,845	0,000	8.723,248	471.719,929
17+600	100	2.951,350	37,296			1,00	1,25	100,00%	0,000	2.951,350	37,296	2.914,054	0,000	8.760,544	474.633,983
17+700	100	4.331,544	38,466			1,00	1,25	100,00%	0,000	4.331,544	38,466	4.293,078	0,000	8.799,010	478.927,061
17+800	100	5.143,296	37,179			1,00	1,25	100,00%	0,000	5.143,296	37,179	5.106,117	0,000	8.836,189	484.033,178
17+900	100	5.024,659	37,176			1,00	1,25	100,00%	0,000	5.024,659	37,176	4.987,483	0,000	8.873,365	489.020,661
18+000	100	2.363,296	14,701			1,00	1,25	100,00%	0,000	2.363,296	14,701	2.348,595	0,000	8.888,066	491.369,256
18+100	100	1.341,629	12,338			1,00	1,25	100,00%	0,000	1.341,629	12,338	1.329,291	0,000	8.900,404	492.698,547
18+200	100	550,726	410,380			1,00	1,25	100,00%	0,000	550,726	410,380	140,346	0,000	9.310,784	492.838,893
18+300	100	471,760	1.498,203			1,00	1,25	100,00%	0,000	471,760	471,760	-1.026,443	0,000	9.782,544	491.812,450

ESTUDIO INFORMATIVO DEL CORREDOR CÁNTABRICO - MEDITERRÁNEO DE ALTA VELOCIDAD. TRAMO TERUEL - ZARAGOZA.

DIAGRAMA DE EQUILIBRIO DE MOVIMIENTOS DE TIERRAS

Alternativa 8.1

PK	d	PLATAFORMA		EXCAVACIÓN TÚNEL EN MINA		COEF. PASO		EXCAVACIÓN			COMPENS.	BALANCE	VOL. ACUMULADOS		
		EXCAV.	TERRAPLÉN	NOMBRE	EXCAV.	RELLENOS	VERTEDERO	% APROV	NO APROV.	APROV.	TRANS.		A VERTEDERO	COM.TRAN.	BALANCE
18+400	100	2.819,626	11,475			1,00	1,25	100,00%	0,000	2.819,626	11,475	2.808,151	0,000	9.794,019	494.620,601
18+500	100	3.072,991	14,777			1,00	1,25	100,00%	0,000	3.072,991	14,777	3.058,214	0,000	9.808,796	497.678,815
18+600	100	2.025,112	24,423			1,00	1,25	100,00%	0,000	2.025,112	24,423	2.000,689	0,000	9.833,219	499.679,504
18+700	100	431,128	57,675			1,00	1,25	100,00%	0,000	431,128	57,675	373,453	0,000	9.890,894	500.052,957
18+800	100	285,313	395,468			1,00	1,25	100,00%	0,000	285,313	285,313	-110,155	0,000	10.176,207	499.942,802
18+900	100	1.300,460	40,215			1,00	1,25	100,00%	0,000	1.300,460	40,215	1.260,245	0,000	10.216,422	501.203,047
19+000	100	1.613,040	17,298			1,00	1,25	100,00%	0,000	1.613,040	17,298	1.595,742	0,000	10.233,720	502.798,789
19+100	100	1.756,285	17,930			1,00	1,25	100,00%	0,000	1.756,285	17,930	1.738,355	0,000	10.251,650	504.537,144
19+200	100	1.577,134	20,764			1,00	1,25	100,00%	0,000	1.577,134	20,764	1.556,370	0,000	10.272,414	506.093,514
19+300	100	490,978	959,828			1,00	1,25	100,00%	0,000	490,978	490,978	-468,850	0,000	10.763,392	505.624,664
19+400	100	1.979,904	25,133			1,00	1,25	100,00%	0,000	1.979,904	25,133	1.954,771	0,000	10.788,525	507.579,435
19+500	100	2.916,153	18,336			1,00	1,25	100,00%	0,000	2.916,153	18,336	2.897,817	0,000	10.806,861	510.477,252
19+600	100	4.416,769	17,745			1,00	1,25	100,00%	0,000	4.416,769	17,745	4.399,024	0,000	10.824,606	514.876,276
19+700	100	6.850,695	18,215			1,00	1,25	100,00%	0,000	6.850,695	18,215	6.832,480	0,000	10.842,821	521.708,756
19+800	100	9.148,694	18,526			1,00	1,25	100,00%	0,000	9.148,694	18,526	9.130,168	0,000	10.861,347	530.838,924
19+900	100	11.532,429	16,767			1,00	1,25	100,00%	0,000	11.532,429	16,767	11.515,662	0,000	10.878,114	542.354,586
20+000	100	10.599,982	16,795			1,00	1,25	100,00%	0,000	10.599,982	16,795	10.583,187	0,000	10.894,909	552.937,773
20+100	100	7.036,208	18,556			1,00	1,25	100,00%	0,000	7.036,208	18,556	7.017,652	0,000	10.913,465	559.955,425
20+200	100	6.592,077	21,882			1,00	1,25	100,00%	0,000	6.592,077	21,882	6.570,195	0,000	10.935,347	566.525,620
20+300	100	8.139,320	23,081			1,00	1,25	100,00%	0,000	8.139,320	23,081	8.116,239	0,000	10.958,428	574.641,859
20+400	100	10.582,324	19,786			1,00	1,25	100,00%	0,000	10.582,324	19,786	10.562,538	0,000	10.978,214	585.204,397
20+500	100	8.549,901	18,176			1,00	1,25	100,00%	0,000	8.549,901	18,176	8.531,725	0,000	10.996,390	593.736,122
20+600	100	5.758,339	19,499			1,00	1,25	100,00%	0,000	5.758,339	19,499	5.738,840	0,000	11.015,889	599.474,962
20+700	100	4.920,866	20,369			1,00	1,25	100,00%	0,000	4.920,866	20,369	4.900,497	0,000	11.036,258	604.375,459
20+800	100	3.944,938	18,142			1,00	1,25	100,00%	0,000	3.944,938	18,142	3.926,796	0,000	11.054,400	608.302,255
20+900	100	3.564,881	15,810			1,00	1,25	100,00%	0,000	3.564,881	15,810	3.549,071	0,000	11.070,210	611.851,326
21+000	100	2.409,077	92,360			1,00	1,25	100,00%	0,000	2.409,077	92,360	2.316,717	0,000	11.162,570	614.168,043
21+100	100	5.732,452	16,998			1,00	1,25	100,00%	0,000	5.732,452	16,998	5.715,454	0,000	11.179,568	619.883,497
21+200	100	6.346,069	17,801			1,00	1,25	100,00%	0,000	6.346,069	17,801	6.328,268	0,000	11.197,369	626.211,765
21+300	100	6.546,325	18,124			1,00	1,25	100,00%	0,000	6.546,325	18,124	6.528,201	0,000	11.215,493	632.739,966
21+400	100	2.603,452	18,704			1,00	1,25	100,00%	0,000	2.603,452	18,704	2.584,748	0,000	11.234,197	635.324,714
21+500	100	1.705,501	14,633			1,00	1,25	100,00%	0,000	1.705,501	14,633	1.690,868	0,000	11.248,830	637.015,582
21+600	100	2.049,911	19,401			1,00	1,25	100,00%	0,000	2.049,911	19,401	2.030,510	0,000	11.268,231	639.046,092
21+700	100	679,389	1.085,569			1,00	1,25	100,00%	0,000	679,389	679,389	-406,180	0,000	11.947,620	638.639,912
21+800	100	1.317,796	12,654			1,00	1,25	100,00%	0,000	1.317,796	12,654	1.305,142	0,000	11.960,274	639.945,054
21+900	100	0,000	0,000			1,00	1,25	100,00%	0,000	0,000	0,000	0,000	0,000	11.960,274	639.945,054
22+000	100	1.130,812	11,390			1,00	1,25	100,00%	0,000	1.130,812	11,390	1.119,422	0,000	11.971,664	641.064,476
22+100	100	2.452,015	17,460			1,00	1,25	100,00%	0,000	2.452,015	17,460	2.434,555	0,000	11.989,124	643.499,031
22+200	100	983,023	155,771			1,00	1,25	100,00%	0,000	983,023	155,771	827,252	0,000	12.144,895	644.326,283
22+300	100	989,297	40,439			1,00	1,25	100,00%	0,000	989,297	40,439	948,858	0,000	12.185,334	645.275,141
22+400	100	482,345	1.422,265			1,00	1,25	100,00%	0,000	482,345	482,345	-939,920	0,000	12.667,679	644.335,221
22+500	100	326,685	2.417,528			1,00	1,25	100,00%	0,000	326,685	326,685	-2.090,843	0,000	12.994,364	642.244,378
22+600	100	964,220	859,215			1,00	1,25	100,00%	0,000	964,220	859,215	105,005	0,000	13.853,579	642.349,383
22+700	100	1.038,102	793,840			1,00	1,25	100,00%	0,000	1.038,102	793,840	244,262	0,000	14.647,419	642.593,645
22+800	100	149,228	1.365,959			1,00	1,25	100,00%	0,000	149,228	149,228	-1.216,731	0,000	14.796,647	641.376,914
22+900	100	2.121,459	19,200			1,00	1,25	100,00%	0,000	2.121,459	19,200	2.102,259	0,000	14.815,847	643.479,173
23+000	100	6.377,676	20,073			1,00	1,25	100,00%	0,000	6.377,676	20,073	6.357,603	0,000	14.835,920	649.836,776
23+100	100	5.663,847	19,908			1,00	1,25	100,00%	0,000	5.663,847	19,908	5.643,939	0,000	14.855,828	655.480,715
23+200	100	5.792,568	20,276			1,00	1,25	100,00%	0,000	5.792,568	20,276	5.772,292	0,000	14.876,104	661.253,007
23+300	100	3.037,704	19,163			1,00	1,25	100,00%	0,000	3.037,704	19,163	3.018,541	0,000	14.895,267	664.271,548
23+400	100	1.947,037	18,765			1,00	1,25	100,00%	0,000	1.947,037	18,765	1.928,272	0,000	14.914,032	666.199,820
23+500	100	1.516,799	18,985			1,00	1,25	100,00%	0,000	1.516,799	18,985	1.497,814	0,000	14.933,017	667.697,634

ESTUDIO INFORMATIVO DEL CORREDOR CÁNTABRICO - MEDITERRÁNEO DE ALTA VELOCIDAD. TRAMO TERUEL - ZARAGOZA.

DIAGRAMA DE EQUILIBRIO DE MOVIMIENTOS DE TIERRAS

Alternativa 8.1

PK	d	PLATAFORMA		EXCAVACIÓN TÚNEL EN MINA		COEF. PASO		EXCAVACIÓN			COMPENS.	BALANCE	VOL. ACUMULADOS		
		EXCAV.	TERRAPLÉN	NOMBRE	EXCAV.	RELLENOS	VERTEDERO	% APROV	NO APROV.	APROV.	TRANS.		A VERTEDERO	COM.TRAN.	BALANCE
23+600	100	1.195,100	18,772			1,00	1,25	100,00%	0,000	1.195,100	18,772	1.176,328	0,000	14.951,789	668.873,962
23+700	100	362,589	129,271			1,00	1,25	100,00%	0,000	362,589	129,271	233,318	0,000	15.081,060	669.107,280
23+800	100	1.534,092	44,457			1,00	1,25	100,00%	0,000	1.534,092	44,457	1.489,635	0,000	15.125,517	670.596,915
23+900	100	1.912,958	18,750			1,00	1,25	100,00%	0,000	1.912,958	18,750	1.894,208	0,000	15.144,267	672.491,123
24+000	100	2.608,039	18,750			1,00	1,25	100,00%	0,000	2.608,039	18,750	2.589,289	0,000	15.163,017	675.080,412
24+100	100	2.334,096	18,750			1,00	1,25	100,00%	0,000	2.334,096	18,750	2.315,346	0,000	15.181,767	677.395,758
24+200	100	1.856,123	18,750			1,00	1,25	100,00%	0,000	1.856,123	18,750	1.837,373	0,000	15.200,517	679.233,131
24+300	100	2.304,576	18,750			1,00	1,25	100,00%	0,000	2.304,576	18,750	2.285,826	0,000	15.219,267	681.518,957
24+400	100	2.408,643	18,750			1,00	1,25	100,00%	0,000	2.408,643	18,750	2.389,893	0,000	15.238,017	683.908,850
24+500	100	1.817,525	18,750			1,00	1,25	100,00%	0,000	1.817,525	18,750	1.798,775	0,000	15.256,767	685.707,625
24+600	100	1.871,317	18,750			1,00	1,25	100,00%	0,000	1.871,317	18,750	1.852,567	0,000	15.275,517	687.560,192
24+700	100	1.764,724	18,750			1,00	1,25	100,00%	0,000	1.764,724	18,750	1.745,974	0,000	15.294,267	689.306,166
24+800	100	1.944,980	18,750			1,00	1,25	100,00%	0,000	1.944,980	18,750	1.926,230	0,000	15.313,017	691.232,396
24+900	100	1.890,607	18,750			1,00	1,25	100,00%	0,000	1.890,607	18,750	1.871,857	0,000	15.331,767	693.104,253
25+000	100	1.701,449	18,750			1,00	1,25	100,00%	0,000	1.701,449	18,750	1.682,699	0,000	15.350,517	694.786,952
25+100	100	1.929,726	18,750			1,00	1,25	100,00%	0,000	1.929,726	18,750	1.910,976	0,000	15.369,267	696.697,928
25+200	100	1.750,937	18,750			1,00	1,25	100,00%	0,000	1.750,937	18,750	1.732,187	0,000	15.388,017	698.430,115
25+300	100	1.895,533	18,750			1,00	1,25	100,00%	0,000	1.895,533	18,750	1.876,783	0,000	15.406,767	700.306,898
25+400	100	2.069,164	18,750			1,00	1,25	100,00%	0,000	2.069,164	18,750	2.050,414	0,000	15.425,517	702.357,312
25+500	100	2.282,446	18,750			1,00	1,25	100,00%	0,000	2.282,446	18,750	2.263,696	0,000	15.444,267	704.621,008
25+600	100	2.240,719	18,750			1,00	1,25	100,00%	0,000	2.240,719	18,750	2.221,969	0,000	15.463,017	706.842,977
25+700	100	2.007,143	18,750			1,00	1,25	100,00%	0,000	2.007,143	18,750	1.988,393	0,000	15.481,767	708.831,370
25+800	100	1.782,877	18,750			1,00	1,25	100,00%	0,000	1.782,877	18,750	1.764,127	0,000	15.500,517	710.595,497
25+900	100	2.350,071	18,750			1,00	1,25	100,00%	0,000	2.350,071	18,750	2.331,321	0,000	15.519,267	712.926,818
26+000	100	2.253,241	18,750			1,00	1,25	100,00%	0,000	2.253,241	18,750	2.234,491	0,000	15.538,017	715.161,309
26+100	100	1.888,506	18,749			1,00	1,25	100,00%	0,000	1.888,506	18,749	1.869,757	0,000	15.556,766	717.031,066
26+200	100	2.081,861	18,749			1,00	1,25	100,00%	0,000	2.081,861	18,749	2.063,112	0,000	15.575,515	719.094,178
26+300	100	2.501,175	18,750			1,00	1,25	100,00%	0,000	2.501,175	18,750	2.482,425	0,000	15.594,265	721.576,603
26+400	100	2.210,071	18,750			1,00	1,25	100,00%	0,000	2.210,071	18,750	2.191,321	0,000	15.613,015	723.767,924
26+500	100	1.832,515	18,750			1,00	1,25	100,00%	0,000	1.832,515	18,750	1.813,765	0,000	15.631,765	725.581,689
26+600	100	1.893,839	18,750			1,00	1,25	100,00%	0,000	1.893,839	18,750	1.875,089	0,000	15.650,515	727.456,778
26+700	100	1.821,975	18,750			1,00	1,25	100,00%	0,000	1.821,975	18,750	1.803,225	0,000	15.669,265	729.260,003
26+800	100	1.889,937	18,750			1,00	1,25	100,00%	0,000	1.889,937	18,750	1.871,187	0,000	15.688,015	731.131,190
26+900	100	2.226,754	18,750			1,00	1,25	100,00%	0,000	2.226,754	18,750	2.208,004	0,000	15.706,765	733.339,194
27+000	100	1.688,300	18,750			1,00	1,25	100,00%	0,000	1.688,300	18,750	1.669,550	0,000	15.725,515	735.008,744
27+100	100	1.716,381	18,750			1,00	1,25	100,00%	0,000	1.716,381	18,750	1.697,631	0,000	15.744,265	736.706,375
27+200	100	1.975,558	18,749			1,00	1,25	100,00%	0,000	1.975,558	18,749	1.956,809	0,000	15.763,014	738.663,184
27+300	100	1.667,979	18,750			1,00	1,25	100,00%	0,000	1.667,979	18,750	1.649,229	0,000	15.781,764	740.312,413
27+400	100	1.689,950	18,749			1,00	1,25	100,00%	0,000	1.689,950	18,749	1.671,201	0,000	15.800,513	741.983,614
27+500	100	1.431,442	18,750			1,00	1,25	100,00%	0,000	1.431,442	18,750	1.412,692	0,000	15.819,263	743.396,306
27+600	100	1.912,354	18,750			1,00	1,25	100,00%	0,000	1.912,354	18,750	1.893,604	0,000	15.838,013	745.289,910
27+700	100	1.889,721	18,750			1,00	1,25	100,00%	0,000	1.889,721	18,750	1.870,971	0,000	15.856,763	747.160,881
27+800	100	1.408,399	18,750			1,00	1,25	100,00%	0,000	1.408,399	18,750	1.389,649	0,000	15.875,513	748.550,530
27+900	100	1.049,362	18,750			1,00	1,25	100,00%	0,000	1.049,362	18,750	1.030,612	0,000	15.894,263	749.581,142
28+000	100	1.400,813	18,750			1,00	1,25	100,00%	0,000	1.400,813	18,750	1.382,063	0,000	15.913,013	750.963,205
28+100	100	1.888,709	18,750			1,00	1,25	100,00%	0,000	1.888,709	18,750	1.869,959	0,000	15.931,763	752.833,164
28+200	100	1.943,478	18,750			1,00	1,25	100,00%	0,000	1.943,478	18,750	1.924,728	0,000	15.950,513	754.757,892
28+300	100	1.846,599	18,749			1,00	1,25	100,00%	0,000	1.846,599	18,749	1.827,850	0,000	15.969,262	756.585,742
28+400	100	1.856,727	18,750			1,00	1,25	100,00%	0,000	1.856,727	18,750	1.837,977	0,000	15.988,012	758.423,719
28+500	100	1.840,706	18,750			1,00	1,25	100,00%	0,000	1.840,706	18,750	1.821,956	0,000	16.006,762	760.245,675
28+600	100	1.724,523	18,750			1,00	1,25	100,00%	0,000	1.724,523	18,750	1.705,773	0,000	16.025,512	761.951,448
28+700	100	2.188,169	18,750			1,00	1,25	100,00%	0,000	2.188,169	18,750	2.169,419	0,000	16.044,262	764.120,867

ESTUDIO INFORMATIVO DEL CORREDOR CÁNTABRICO - MEDITERRÁNEO DE ALTA VELOCIDAD. TRAMO TERUEL - ZARAGOZA.

DIAGRAMA DE EQUILIBRIO DE MOVIMIENTOS DE TIERRAS

Alternativa 8.1

PK	d	PLATAFORMA		EXCAVACIÓN TÚNEL EN MINA		COEF. PASO		EXCAVACIÓN			COMPENS.	BALANCE	VOL. ACUMULADOS		
		EXCAV.	TERRAPLÉN	NOMBRE	EXCAV.	RELLENOS	VERTEDERO	% APROV	NO APROV.	APROV.	TRANS.		A VERTEDERO	COM.TRAN.	BALANCE
28+800	100	2.243,715	18,750			1,00	1,25	100,00%	0,000	2.243,715	18,750	2.224,965	0,000	16.063,012	766.345,832
28+900	100	1.887,811	18,750			1,00	1,25	100,00%	0,000	1.887,811	18,750	1.869,061	0,000	16.081,762	768.214,893
29+000	100	1.718,005	18,749			1,00	1,25	100,00%	0,000	1.718,005	18,749	1.699,256	0,000	16.100,511	769.914,149
29+100	100	1.955,503	18,750			1,00	1,25	100,00%	0,000	1.955,503	18,750	1.936,753	0,000	16.119,261	771.850,902
29+200	100	2.074,867	18,750			1,00	1,25	100,00%	0,000	2.074,867	18,750	2.056,117	0,000	16.138,011	773.907,019
29+266	66	897,894	11,863			1,00	1,25	100,00%	0,000	897,894	11,863	886,031	0,000	16.149,874	774.793,050
TOTAL		**846.837,064**	**72.044,014**						**0,000**	**846.837,064**	**16.149,874**	**774.793,050**			

ESTUDIO INFORMATIVO DEL CORREDOR CÁNTABRICO - MEDITERRÁNEO DE ALTA VELOCIDAD. TRAMO TERUEL - ZARAGOZA.

DIAGRAMA DE EQUILIBRIO DE MOVIMIENTOS DE TIERRAS

Alternativa 9.0

PK	d	PLATAFORMA		EXCAVACIÓN TÚNEL EN MINA		COEF. PASO		EXCAVACIÓN			COMPENS.	BALANCE	VOL. ACUMULADOS		
		EXCAV.	TERRAPLÉN	NOMBRE	EXCAV.	RELLENOS	VERTEDERO	% APROV	NO APROV.	APROV.	TRANS.		A VERTEDERO	COM.TRAN.	BALANCE
9+000		0,000	0,000			1,00	1,25	100,00%	0,000	0,000	0,000	0,000	0,000	0,000	0,000
9+100	100	1.503,298	18,749			1,00	1,25	100,00%	0,000	1.503,298	18,749	1.484,549	0,000	18,749	1.484,549
9+200	100	1.112,028	26,136			1,00	1,25	100,00%	0,000	1.112,028	26,136	1.085,892	0,000	44,885	2.570,441
9+300	100	354,178	223,693			1,00	1,25	100,00%	0,000	354,178	223,693	130,485	0,000	268,578	2.700,926
9+400	100	474,115	427,450			1,00	1,25	100,00%	0,000	474,115	427,450	46,665	0,000	696,028	2.747,591
9+500	100	602,596	173,934			1,00	1,25	100,00%	0,000	602,596	173,934	428,662	0,000	869,962	3.176,253
9+600	100	1.460,836	15,987			1,00	1,25	100,00%	0,000	1.460,836	15,987	1.444,849	0,000	885,949	4.621,102
9+700	100	708,022	753,320			1,00	1,25	100,00%	0,000	708,022	708,022	-45,298	0,000	1.593,971	4.575,804
9+800	100	1.035,434	114,676			1,00	1,25	100,00%	0,000	1.035,434	114,676	920,758	0,000	1.708,647	5.496,562
9+900	100	2.026,551	18,381			1,00	1,25	100,00%	0,000	2.026,551	18,381	2.008,170	0,000	1.727,028	7.504,732
10+000	100	1.134,845	20,248			1,00	1,25	100,00%	0,000	1.134,845	20,248	1.114,597	0,000	1.747,276	8.619,329
10+100	100	1.033,268	18,992			1,00	1,25	100,00%	0,000	1.033,268	18,992	1.014,276	0,000	1.766,268	9.633,605
10+200	100	962,435	22,619			1,00	1,25	100,00%	0,000	962,435	22,619	939,816	0,000	1.788,887	10.573,421
10+300	100	911,163	27,861			1,00	1,25	100,00%	0,000	911,163	27,861	883,302	0,000	1.816,748	11.456,723
10+400	100	3.564,187	20,601			1,00	1,25	100,00%	0,000	3.564,187	20,601	3.543,586	0,000	1.837,349	15.000,309
10+500	100	3.539,962	23,157			1,00	1,25	100,00%	0,000	3.539,962	23,157	3.516,805	0,000	1.860,506	18.517,114
10+600	100	316,975	215,378			1,00	1,25	100,00%	0,000	316,975	215,378	101,597	0,000	2.075,884	18.618,711
10+700	100	533,335	34,069			1,00	1,25	100,00%	0,000	533,335	34,069	499,266	0,000	2.109,953	19.117,977
10+800	100	421,170	99,640			1,00	1,25	100,00%	0,000	421,170	99,640	321,530	0,000	2.209,593	19.439,507
10+900	100	238,210	222,751			1,00	1,25	100,00%	0,000	238,210	222,751	15,459	0,000	2.432,344	19.454,966
11+000	100	100,027	253,174			1,00	1,25	100,00%	0,000	100,027	100,027	-153,147	0,000	2.532,371	19.301,819
11+100	100	5,136	465,550			1,00	1,25	100,00%	0,000	5,136	5,136	-460,414	0,000	2.537,507	18.841,405
11+200	100	0,000	2.981,850			1,00	1,25	100,00%	0,000	0,000	0,000	-2.981,850	0,000	2.537,507	15.859,555
11+300	100	0,000	947,812			1,00	1,25	100,00%	0,000	0,000	0,000	-947,812	0,000	2.537,507	14.911,743
11+400	100	1,758	411,343			1,00	1,25	100,00%	0,000	1,758	1,758	-409,585	0,000	2.539,265	14.502,158
11+500	100	0,000	443,103			1,00	1,25	100,00%	0,000	0,000	0,000	-443,103	0,000	2.539,265	14.059,055
11+600	100	0,000	856,322			1,00	1,25	100,00%	0,000	0,000	0,000	-856,322	0,000	2.539,265	13.202,733
11+700	100	0,005	2.265,668			1,00	1,25	100,00%	0,000	0,005	0,005	-2.265,663	0,000	2.539,270	10.937,070
11+800	100	4,936	2.728,018			1,00	1,25	100,00%	0,000	4,936	4,936	-2.723,082	0,000	2.544,206	8.213,988
11+900	100	1,147	1.260,980			1,00	1,25	100,00%	0,000	1,147	1,147	-1.259,833	0,000	2.545,353	6.954,155
12+000	100	9,097	335,093			1,00	1,25	100,00%	0,000	9,097	9,097	-325,996	0,000	2.554,450	6.628,159
12+100	100	2.295,867	33,231			1,00	1,25	100,00%	0,000	2.295,867	33,231	2.262,636	0,000	2.587,681	8.890,795
12+200	100	767,606	19,667			1,00	1,25	100,00%	0,000	767,606	19,667	747,939	0,000	2.607,348	9.638,734
12+300	100	498,146	10,146			1,00	1,25	100,00%	0,000	498,146	10,146	488,000	0,000	2.617,494	10.126,734
12+400	100	0,000	0,000			1,00	1,25	100,00%	0,000	0,000	0,000	0,000	0,000	2.617,494	10.126,734
12+500	100	0,000	0,000			1,00	1,25	100,00%	0,000	0,000	0,000	0,000	0,000	2.617,494	10.126,734
12+600	100	0,000	0,000			1,00	1,25	100,00%	0,000	0,000	0,000	0,000	0,000	2.617,494	10.126,734
12+700	100	0,000	0,000			1,00	1,25	100,00%	0,000	0,000	0,000	0,000	0,000	2.617,494	10.126,734
12+800	100	0,000	0,000			1,00	1,25	100,00%	0,000	0,000	0,000	0,000	0,000	2.617,494	10.126,734
12+900	100	0,000	0,000			1,00	1,25	100,00%	0,000	0,000	0,000	0,000	0,000	2.617,494	10.126,734
13+000	100	0,000	0,000			1,00	1,25	100,00%	0,000	0,000	0,000	0,000	0,000	2.617,494	10.126,734
13+100	100	134,636	6,210			1,00	1,25	100,00%	0,000	134,636	6,210	128,426	0,000	2.623,704	10.255,160
13+200	100	418,118	73,797			1,00	1,25	100,00%	0,000	418,118	73,797	344,321	0,000	2.697,501	10.599,481
13+300	100	3.474,849	67,038			1,00	1,25	100,00%	0,000	3.474,849	67,038	3.407,811	0,000	2.764,539	14.007,292
13+400	100	82,759	175,438			1,00	1,25	100,00%	0,000	82,759	82,759	-92,679	0,000	2.847,298	13.914,613
13+500	100	0,000	80,675			1,00	1,25	100,00%	0,000	0,000	0,000	-80,675	0,000	2.847,298	13.833,938
13+600	100	0,000	391,187			1,00	1,25	100,00%	0,000	0,000	0,000	-391,187	0,000	2.847,298	13.442,751
13+700	100	919,734	90,363			1,00	1,25	100,00%	0,000	919,734	90,363	829,371	0,000	2.937,661	14.272,122
13+800	100	1.476,769	67,997			1,00	1,25	100,00%	0,000	1.476,769	67,997	1.408,772	0,000	3.005,658	15.680,894
13+900	100	1.338,155	18,248			1,00	1,25	100,00%	0,000	1.338,155	18,248	1.319,907	0,000	3.023,906	17.000,801
14+000	100	1.764,377	42,251			1,00	1,25	100,00%	0,000	1.764,377	42,251	1.722,126	0,000	3.066,157	18.722,927
14+100	100	1.237,661	43,173			1,00	1,25	100,00%	0,000	1.237,661	43,173	1.194,488	0,000	3.109,330	19.917,415

ESTUDIO INFORMATIVO DEL CORREDOR CÁNTABRICO - MEDITERRÁNEO DE ALTA VELOCIDAD. TRAMO TERUEL - ZARAGOZA.

DIAGRAMA DE EQUILIBRIO DE MOVIMIENTOS DE TIERRAS

Alternativa 9.0

PK	d	PLATAFORMA		EXCAVACIÓN TÚNEL EN MINA		COEF. PASO		EXCAVACIÓN			COMPENS.	BALANCE	VOL. ACUMULADOS		
		EXCAV.	TERRAPLÉN	NOMBRE	EXCAV.	RELLENOS	VERTEDERO	% APROV	NO APROV.	APROV.	TRANS.		A VERTEDERO	COM.TRAN.	BALANCE
14+200	100	1.914,146	12,414			1,00	1,25	100,00%	0,000	1.914,146	12,414	1.901,732	0,000	3.121,744	21.819,147
14+300	100	1.833,370	17,408			1,00	1,25	100,00%	0,000	1.833,370	17,408	1.815,962	0,000	3.139,152	23.635,109
14+400	100	150,575	72,538			1,00	1,25	100,00%	0,000	150,575	72,538	78,037	0,000	3.211,690	23.713,146
14+500	100	1.365,197	147,302			1,00	1,25	100,00%	0,000	1.365,197	147,302	1.217,895	0,000	3.358,992	24.931,041
14+600	100	54,990	402,928			1,00	1,25	100,00%	0,000	54,990	54,990	-347,938	0,000	3.413,982	24.583,103
14+700	100	5,326	1.138,369			1,00	1,25	100,00%	0,000	5,326	5,326	-1.133,043	0,000	3.419,308	23.450,060
14+800	100	2.150,732	23,061			1,00	1,25	100,00%	0,000	2.150,732	23,061	2.127,671	0,000	3.442,369	25.577,731
14+900	100	1.720,067	13,569			1,00	1,25	100,00%	0,000	1.720,067	13,569	1.706,498	0,000	3.455,938	27.284,229
15+000	100	1.430,590	15,412			1,00	1,25	100,00%	0,000	1.430,590	15,412	1.415,178	0,000	3.471,350	28.699,407
15+100	100	425,503	753,726			1,00	1,25	100,00%	0,000	425,503	425,503	-328,223	0,000	3.896,853	28.371,184
15+200	100	629,012	218,883			1,00	1,25	100,00%	0,000	629,012	218,883	410,129	0,000	4.115,736	28.781,313
15+300	100	1.881,539	18,408			1,00	1,25	100,00%	0,000	1.881,539	18,408	1.863,131	0,000	4.134,144	30.644,444
15+400	100	1.727,832	11,923			1,00	1,25	100,00%	0,000	1.727,832	11,923	1.715,909	0,000	4.146,067	32.360,353
15+500	100	0,000	0,000			1,00	1,25	100,00%	0,000	0,000	0,000	0,000	0,000	4.146,067	32.360,353
15+600	100	135,169	1.339,510			1,00	1,25	100,00%	0,000	135,169	135,169	-1.204,341	0,000	4.281,236	31.156,012
15+700	100	1.323,439	197,598			1,00	1,25	100,00%	0,000	1.323,439	197,598	1.125,841	0,000	4.478,834	32.281,853
15+800	100	2.502,062	17,279			1,00	1,25	100,00%	0,000	2.502,062	17,279	2.484,783	0,000	4.496,113	34.766,636
15+900	100	2.467,813	17,486			1,00	1,25	100,00%	0,000	2.467,813	17,486	2.450,327	0,000	4.513,599	37.216,963
16+000	100	2.452,868	19,426			1,00	1,25	100,00%	0,000	2.452,868	19,426	2.433,442	0,000	4.533,025	39.650,405
16+100	100	4.604,411	23,835			1,00	1,25	100,00%	0,000	4.604,411	23,835	4.580,576	0,000	4.556,860	44.230,981
16+200	100	2.394,325	18,785			1,00	1,25	100,00%	0,000	2.394,325	18,785	2.375,540	0,000	4.575,645	46.606,521
16+300	100	1.966,068	18,555			1,00	1,25	100,00%	0,000	1.966,068	18,555	1.947,513	0,000	4.594,200	48.554,034
16+400	100	2.874,752	17,751			1,00	1,25	100,00%	0,000	2.874,752	17,751	2.857,001	0,000	4.611,951	51.411,035
16+500	100	2.834,374	19,014			1,00	1,25	100,00%	0,000	2.834,374	19,014	2.815,360	0,000	4.630,965	54.226,395
16+600	100	1.401,907	19,305			1,00	1,25	100,00%	0,000	1.401,907	19,305	1.382,602	0,000	4.650,270	55.608,997
16+700	100	1.065,706	18,948			1,00	1,25	100,00%	0,000	1.065,706	18,948	1.046,758	0,000	4.669,218	56.655,755
16+800	100	1.004,234	19,327			1,00	1,25	100,00%	0,000	1.004,234	19,327	984,907	0,000	4.688,545	57.640,662
16+900	100	1.124,915	27,398			1,00	1,25	100,00%	0,000	1.124,915	27,398	1.097,517	0,000	4.715,943	58.738,179
17+000	100	883,195	17,045			1,00	1,25	100,00%	0,000	883,195	17,045	866,150	0,000	4.732,988	59.604,329
17+100	100	326,024	23,726			1,00	1,25	100,00%	0,000	326,024	23,726	302,298	0,000	4.756,714	59.906,627
17+200	100	296,445	672,123			1,00	1,25	100,00%	0,000	296,445	296,445	-375,678	0,000	5.053,159	59.530,949
17+300	100	71,598	1.114,334			1,00	1,25	100,00%	0,000	71,598	71,598	-1.042,736	0,000	5.124,757	58.488,213
17+400	100	136,608	280,774			1,00	1,25	100,00%	0,000	136,608	136,608	-144,166	0,000	5.261,365	58.344,047
17+500	100	336,002	90,974			1,00	1,25	100,00%	0,000	336,002	90,974	245,028	0,000	5.352,339	58.589,075
17+600	100	327,452	67,896			1,00	1,25	100,00%	0,000	327,452	67,896	259,556	0,000	5.420,235	58.848,631
17+700	100	285,762	29,222			1,00	1,25	100,00%	0,000	285,762	29,222	256,540	0,000	5.449,457	59.105,171
17+800	100	29,673	264,187			1,00	1,25	100,00%	0,000	29,673	29,673	-234,514	0,000	5.479,130	58.870,657
17+900	100	155,163	283,973			1,00	1,25	100,00%	0,000	155,163	155,163	-128,810	0,000	5.634,293	58.741,847
18+000	100	193,890	39,877			1,00	1,25	100,00%	0,000	193,890	39,877	154,013	0,000	5.674,170	58.895,860
18+100	100	106,453	123,942			1,00	1,25	100,00%	0,000	106,453	106,453	-17,489	0,000	5.780,623	58.878,371
18+200	100	378,084	1.261,412			1,00	1,25	100,00%	0,000	378,084	378,084	-883,328	0,000	6.158,707	57.995,043
18+300	100	1.295,321	19,212			1,00	1,25	100,00%	0,000	1.295,321	19,212	1.276,109	0,000	6.177,919	59.271,152
18+400	100	1.666,224	19,895			1,00	1,25	100,00%	0,000	1.666,224	19,895	1.646,329	0,000	6.197,814	60.917,481
18+500	100	1.102,238	18,751			1,00	1,25	100,00%	0,000	1.102,238	18,751	1.083,487	0,000	6.216,565	62.000,968
18+600	100	1.770,767	17,936			1,00	1,25	100,00%	0,000	1.770,767	17,936	1.752,831	0,000	6.234,501	63.753,799
18+700	100	2.821,155	18,350			1,00	1,25	100,00%	0,000	2.821,155	18,350	2.802,805	0,000	6.252,851	66.556,604
18+800	100	1.499,268	34,089			1,00	1,25	0,00%	1.874,085	0,000	0,000	-34,089	1.874,085	6.252,851	66.522,515
18+900	100	1.334,638	45,202			1,00	1,25	0,00%	1.668,298	0,000	0,000	-45,202	3.542,383	6.252,851	66.477,313
19+000	100	2.227,764	35,660			1,00	1,25	0,00%	2.784,705	0,000	0,000	-35,660	6.327,088	6.252,851	66.441,653
19+100	100	2.986,360	33,597			1,00	1,25	0,00%	3.732,950	0,000	0,000	-33,597	10.060,038	6.252,851	66.408,056
19+200	100	2.370,773	22,978			1,00	1,25	0,00%	2.963,466	0,000	0,000	-22,978	13.023,504	6.252,851	66.385,078
19+300	100	0,000	0,000			1,00	1,25	0,00%	0,000	0,000	0,000	0,000	13.023,504	6.252,851	66.385,078

ESTUDIO INFORMATIVO DEL CORREDOR CÁNTABRICO - MEDITERRÁNEO DE ALTA VELOCIDAD. TRAMO TERUEL - ZARAGOZA.

DIAGRAMA DE EQUILIBRIO DE MOVIMIENTOS DE TIERRAS

Alternativa 9.0

PK	d	PLATAFORMA		EXCAVACIÓN TÚNEL EN MINA		COEF. PASO		EXCAVACIÓN			COMPENS.	BALANCE	VOL. ACUMULADOS		
		EXCAV.	TERRAPLÉN	NOMBRE	EXCAV.	RELLENOS	VERTEDERO	% APROV	NO APROV.	APROV.	TRANS.		A VERTEDERO	COM.TRAN.	BALANCE
19+400	100	0,000	0,000			1,00	1,25	0,00%	0,000	0,000	0,000	0,000	13.023,504	6.252,851	66.385,078
19+500	100	0,000	0,000			1,00	1,25	0,00%	0,000	0,000	0,000	0,000	13.023,504	6.252,851	66.385,078
19+600	100	0,000	0,000			1,00	1,25	0,00%	0,000	0,000	0,000	0,000	13.023,504	6.252,851	66.385,078
19+700	100	0,000	0,000			1,00	1,25	0,00%	0,000	0,000	0,000	0,000	13.023,504	6.252,851	66.385,078
19+800	100	0,000	0,000			1,00	1,25	0,00%	0,000	0,000	0,000	0,000	13.023,504	6.252,851	66.385,078
19+900	100	0,000	0,000			1,00	1,25	0,00%	0,000	0,000	0,000	0,000	13.023,504	6.252,851	66.385,078
20+000	100	0,000	0,000			1,00	1,25	0,00%	0,000	0,000	0,000	0,000	13.023,504	6.252,851	66.385,078
20+100	100	0,000	0,000			1,00	1,25	0,00%	0,000	0,000	0,000	0,000	13.023,504	6.252,851	66.385,078
20+200	100	0,000	0,000			1,00	1,25	0,00%	0,000	0,000	0,000	0,000	13.023,504	6.252,851	66.385,078
20+300	100	0,000	0,000			1,00	1,25	0,00%	0,000	0,000	0,000	0,000	13.023,504	6.252,851	66.385,078
20+326	226	10,612	0,100			1,00	1,25	0,00%	13,265	0,000	0,000	-0,100	13.036,769	6.252,851	66.384,978
TOTAL		**102.515,782**	**25.701,389**						**13.036,769**	**92.086,367**	**6.252,851**	**66.384,978**			

ESTUDIO INFORMATIVO DEL CORREDOR CÁNTABRICO - MEDITERRÁNEO DE ALTA VELOCIDAD. TRAMO TERUEL - ZARAGOZA.

DIAGRAMA DE EQUILIBRIO DE MOVIMIENTOS DE TIERRAS

Alternativa 9.1

PK	d	PLATAFORMA		EXCAVACIÓN TÚNEL EN MINA		COEF. PASO		EXCAVACIÓN			COMPENS.	BALANCE	VOL. ACUMULADOS		
		EXCAV.	TERRAPLÉN	NOMBRE	EXCAV.	RELLENOS	VERTEDERO	% APROV	NO APROV.	APROV.	TRANS.		A VERTEDERO	COM.TRAN.	BALANCE
9+000		0,000	0,000			1,00	1,25	100,00%	0,000	0,000	0,000	0,000	0,000	0,000	0,000
9+100	100	3.689,688	47,179			1,00	1,25	100,00%	0,000	3.689,688	47,179	3.642,509	0,000	47,179	3.642,509
9+200	100	3.665,625	53,213			1,00	1,25	100,00%	0,000	3.665,625	53,213	3.612,412	0,000	100,392	7.254,921
9+300	100	2.642,581	135,918			1,00	1,25	100,00%	0,000	2.642,581	135,918	2.506,663	0,000	236,310	9.761,584
9+400	100	2.547,775	50,312			1,00	1,25	100,00%	0,000	2.547,775	50,312	2.497,463	0,000	286,622	12.259,047
9+500	100	3.475,361	34,867			1,00	1,25	100,00%	0,000	3.475,361	34,867	3.440,494	0,000	321,489	15.699,541
9+600	100	2.505,560	35,650			1,00	1,25	100,00%	0,000	2.505,560	35,650	2.469,910	0,000	357,139	18.169,451
9+700	100	569,983	2.491,854			1,00	1,25	100,00%	0,000	569,983	569,983	-1.921,871	0,000	927,122	16.247,580
9+800	100	904,750	724,147			1,00	1,25	100,00%	0,000	904,750	724,147	180,603	0,000	1.651,269	16.428,183
9+900	100	6.282,968	35,962			1,00	1,25	100,00%	0,000	6.282,968	35,962	6.247,006	0,000	1.687,231	22.675,189
10+000	100	7.626,606	36,346			1,00	1,25	100,00%	0,000	7.626,606	36,346	7.590,260	0,000	1.723,577	30.265,449
10+100	100	3.708,095	62,724			1,00	1,25	100,00%	0,000	3.708,095	62,724	3.645,371	0,000	1.786,301	33.910,820
10+200	100	1.372,051	87,889			1,00	1,25	100,00%	0,000	1.372,051	87,889	1.284,162	0,000	1.874,190	35.194,982
10+300	100	7.899,030	39,636			1,00	1,25	100,00%	0,000	7.899,030	39,636	7.859,394	0,000	1.913,826	43.054,376
10+400	100	12.651,303	35,842			1,00	1,25	100,00%	0,000	12.651,303	35,842	12.615,461	0,000	1.949,668	55.669,837
10+500	100	19.299,237	35,086			1,00	1,25	100,00%	0,000	19.299,237	35,086	19.264,151	0,000	1.984,754	74.933,988
10+600	100	12.848,918	47,252			1,00	1,25	100,00%	0,000	12.848,918	47,252	12.801,666	0,000	2.032,006	87.735,654
10+700	100	17.226,374	43,634			1,00	1,25	100,00%	0,000	17.226,374	43,634	17.182,740	0,000	2.075,640	104.918,394
10+800	100	14.233,264	49,340			1,00	1,25	100,00%	0,000	14.233,264	49,340	14.183,924	0,000	2.124,980	119.102,318
10+900	100	9.664,347	40,287			1,00	1,25	100,00%	0,000	9.664,347	40,287	9.624,060	0,000	2.165,267	128.726,378
11+000	100	5.590,328	27,848			1,00	1,25	100,00%	0,000	5.590,328	27,848	5.562,480	0,000	2.193,115	134.288,858
11+100	100	2.609,523	184,200			1,00	1,25	100,00%	0,000	2.609,523	184,200	2.425,323	0,000	2.377,315	136.714,181
11+200	100	114,040	3.756,637			1,00	1,25	100,00%	0,000	114,040	114,040	-3.642,597	0,000	2.491,355	133.071,584
11+300	100	1.975,343	1.251,034			1,00	1,25	100,00%	0,000	1.975,343	1.251,034	724,309	0,000	3.742,389	133.795,893
11+400	100	5.156,644	36,052			1,00	1,25	100,00%	0,000	5.156,644	36,052	5.120,592	0,000	3.778,441	138.916,485
11+500	100	4.246,358	37,538			1,00	1,25	100,00%	0,000	4.246,358	37,538	4.208,820	0,000	3.815,979	143.125,305
11+600	100	1.751,657	37,340			1,00	1,25	100,00%	0,000	1.751,657	37,340	1.714,317	0,000	3.853,319	144.839,622
11+700	100	1.699,964	37,515			1,00	1,25	100,00%	0,000	1.699,964	37,515	1.662,449	0,000	3.890,834	146.502,071
11+800	100	2.416,846	37,697			1,00	1,25	100,00%	0,000	2.416,846	37,697	2.379,149	0,000	3.928,531	148.881,220
11+900	100	1.956,878	38,802			1,00	1,25	100,00%	0,000	1.956,878	38,802	1.918,076	0,000	3.967,333	150.799,296
12+000	100	2.044,157	43,910			1,00	1,25	100,00%	0,000	2.044,157	43,910	2.000,247	0,000	4.011,243	152.799,543
12+100	100	8.426,230	41,533			1,00	1,25	100,00%	0,000	8.426,230	41,533	8.384,697	0,000	4.052,776	161.184,240
12+200	100	3.207,320	26,322			1,00	1,25	100,00%	0,000	3.207,320	26,322	3.180,998	0,000	4.079,098	164.365,238
12+300	100	742,332	6,396			1,00	1,25	100,00%	0,000	742,332	6,396	735,936	0,000	4.085,494	165.101,174
12+400	100	0,000	0,000			1,00	1,25	100,00%	0,000	0,000	0,000	0,000	0,000	4.085,494	165.101,174
12+500	100	0,000	0,000			1,00	1,25	100,00%	0,000	0,000	0,000	0,000	0,000	4.085,494	165.101,174
12+600	100	0,000	0,000			1,00	1,25	100,00%	0,000	0,000	0,000	0,000	0,000	4.085,494	165.101,174
12+700	100	0,000	0,000			1,00	1,25	100,00%	0,000	0,000	0,000	0,000	0,000	4.085,494	165.101,174
12+800	100	0,000	0,000			1,00	1,25	100,00%	0,000	0,000	0,000	0,000	0,000	4.085,494	165.101,174
12+900	100	0,000	0,000			1,00	1,25	100,00%	0,000	0,000	0,000	0,000	0,000	4.085,494	165.101,174
13+000	100	0,000	0,000			1,00	1,25	100,00%	0,000	0,000	0,000	0,000	0,000	4.085,494	165.101,174
13+100	100	175,655	11,025			1,00	1,25	100,00%	0,000	175,655	11,025	164,630	0,000	4.096,519	165.265,804
13+200	100	1.597,378	66,465			1,00	1,25	100,00%	0,000	1.597,378	66,465	1.530,913	0,000	4.162,984	166.796,717
13+300	100	1.822,785	103,364			1,00	1,25	100,00%	0,000	1.822,785	103,364	1.719,421	0,000	4.266,348	168.516,138
13+400	100	78,149	179,514			1,00	1,25	100,00%	0,000	78,149	78,149	-101,365	0,000	4.344,497	168.414,773
13+500	100	0,000	286,867			1,00	1,25	100,00%	0,000	0,000	0,000	-286,867	0,000	4.344,497	168.127,906
13+600	100	0,504	351,838			1,00	1,25	100,00%	0,000	0,504	0,504	-351,334	0,000	4.345,001	167.776,572
13+700	100	1.233,172	58,638			1,00	1,25	100,00%	0,000	1.233,172	58,638	1.174,534	0,000	4.403,639	168.951,106
13+800	100	1.451,331	55,416			1,00	1,25	100,00%	0,000	1.451,331	55,416	1.395,915	0,000	4.459,055	170.347,021
13+900	100	1.365,755	13,797			1,00	1,25	100,00%	0,000	1.365,755	13,797	1.351,958	0,000	4.472,852	171.698,979
14+000	100	1.007,649	60,560			1,00	1,25	100,00%	0,000	1.007,649	60,560	947,089	0,000	4.533,412	172.646,068
14+100	100	1.416,116	17,428			1,00	1,25	100,00%	0,000	1.416,116	17,428	1.398,688	0,000	4.550,840	174.044,756

ESTUDIO INFORMATIVO DEL CORREDOR CÁNTABRICO - MEDITERRÁNEO DE ALTA VELOCIDAD. TRAMO TERUEL - ZARAGOZA.

DIAGRAMA DE EQUILIBRIO DE MOVIMIENTOS DE TIERRAS

Alternativa 9.1

PK	d	PLATAFORMA		EXCAVACIÓN TÚNEL EN MINA		COEF. PASO		EXCAVACIÓN			COMPENS.	BALANCE	VOL. ACUMULADOS		
		EXCAV.	TERRAPLÉN	NOMBRE	EXCAV.	RELLENOS	VERTEDERO	% APROV	NO APROV.	APROV.	TRANS.		A VERTEDERO	COM.TRAN.	BALANCE
14+200	100	2.009,051	12,121			1,00	1,25	100,00%	0,000	2.009,051	12,121	1.996,930	0,000	4.562,961	176.041,686
14+300	100	1.468,016	18,863			1,00	1,25	100,00%	0,000	1.468,016	18,863	1.449,153	0,000	4.581,824	177.490,839
14+400	100	247,809	115,557			1,00	1,25	100,00%	0,000	247,809	115,557	132,252	0,000	4.697,381	177.623,091
14+500	100	1.222,440	195,620			1,00	1,25	100,00%	0,000	1.222,440	195,620	1.026,820	0,000	4.893,001	178.649,911
14+600	100	0,512	430,432			1,00	1,25	100,00%	0,000	0,512	0,512	-429,920	0,000	4.893,513	178.219,991
14+700	100	221,903	1.701,925			1,00	1,25	100,00%	0,000	221,903	221,903	-1.480,022	0,000	5.115,416	176.739,969
14+800	100	2.464,819	9,402			1,00	1,25	100,00%	0,000	2.464,819	9,402	2.455,417	0,000	5.124,818	179.195,386
14+900	100	1.519,389	15,376			1,00	1,25	100,00%	0,000	1.519,389	15,376	1.504,013	0,000	5.140,194	180.699,399
15+000	100	1.291,546	15,043			1,00	1,25	100,00%	0,000	1.291,546	15,043	1.276,503	0,000	5.155,237	181.975,902
15+100	100	304,109	737,507			1,00	1,25	100,00%	0,000	304,109	304,109	-433,398	0,000	5.459,346	181.542,504
15+200	100	955,746	18,041			1,00	1,25	100,00%	0,000	955,746	18,041	937,705	0,000	5.477,387	182.480,209
15+300	100	2.320,348	19,448			1,00	1,25	100,00%	0,000	2.320,348	19,448	2.300,900	0,000	5.496,835	184.781,109
15+400	100	953,183	6,250			1,00	1,25	100,00%	0,000	953,183	6,250	946,933	0,000	5.503,085	185.728,042
15+500	100	0,000	0,000			1,00	1,25	100,00%	0,000	0,000	0,000	0,000	0,000	5.503,085	185.728,042
15+600	100	185,257	1.225,134			1,00	1,25	100,00%	0,000	185,257	185,257	-1.039,877	0,000	5.688,342	184.688,165
15+700	100	1.916,579	28,345			1,00	1,25	100,00%	0,000	1.916,579	28,345	1.888,234	0,000	5.716,687	186.576,399
15+800	100	2.582,805	17,177			1,00	1,25	100,00%	0,000	2.582,805	17,177	2.565,628	0,000	5.733,864	189.142,027
15+900	100	2.455,865	17,698			1,00	1,25	100,00%	0,000	2.455,865	17,698	2.438,167	0,000	5.751,562	191.580,194
16+000	100	3.873,449	20,889			1,00	1,25	100,00%	0,000	3.873,449	20,889	3.852,560	0,000	5.772,451	195.432,754
16+100	100	5.243,665	23,427			1,00	1,25	100,00%	0,000	5.243,665	23,427	5.220,238	0,000	5.795,878	200.652,992
16+200	100	2.088,862	18,411			1,00	1,25	100,00%	0,000	2.088,862	18,411	2.070,451	0,000	5.814,289	202.723,443
16+300	100	1.994,019	18,430			1,00	1,25	100,00%	0,000	1.994,019	18,430	1.975,589	0,000	5.832,719	204.699,032
16+400	100	3.261,170	18,558			1,00	1,25	100,00%	0,000	3.261,170	18,558	3.242,612	0,000	5.851,277	207.941,644
16+500	100	2.487,105	20,308			1,00	1,25	100,00%	0,000	2.487,105	20,308	2.466,797	0,000	5.871,585	210.408,441
16+600	100	1.135,567	20,504			1,00	1,25	100,00%	0,000	1.135,567	20,504	1.115,063	0,000	5.892,089	211.523,504
16+700	100	1.112,438	19,052			1,00	1,25	100,00%	0,000	1.112,438	19,052	1.093,386	0,000	5.911,141	212.616,890
16+800	100	983,265	18,890			1,00	1,25	100,00%	0,000	983,265	18,890	964,375	0,000	5.930,031	213.581,265
16+900	100	1.202,412	32,352			1,00	1,25	100,00%	0,000	1.202,412	32,352	1.170,060	0,000	5.962,383	214.751,325
17+000	100	699,257	16,773			1,00	1,25	100,00%	0,000	699,257	16,773	682,484	0,000	5.979,156	215.433,809
17+100	100	238,287	26,926			1,00	1,25	100,00%	0,000	238,287	26,926	211,361	0,000	6.006,082	215.645,170
17+200	100	258,188	1.839,562			1,00	1,25	100,00%	0,000	258,188	258,188	-1.581,374	0,000	6.264,270	214.063,796
17+300	100	111,610	253,236			1,00	1,25	100,00%	0,000	111,610	111,610	-141,626	0,000	6.375,880	213.922,170
17+400	100	158,367	263,716			1,00	1,25	100,00%	0,000	158,367	158,367	-105,349	0,000	6.534,247	213.816,821
17+500	100	436,448	34,673			1,00	1,25	100,00%	0,000	436,448	34,673	401,775	0,000	6.568,920	214.218,596
17+600	100	209,438	65,086			1,00	1,25	100,00%	0,000	209,438	65,086	144,352	0,000	6.634,006	214.362,948
17+700	100	185,564	44,482			1,00	1,25	100,00%	0,000	185,564	44,482	141,082	0,000	6.678,488	214.504,030
17+800	100	12,494	483,358			1,00	1,25	100,00%	0,000	12,494	12,494	-470,864	0,000	6.690,982	214.033,166
17+900	100	225,466	145,540			1,00	1,25	100,00%	0,000	225,466	145,540	79,926	0,000	6.836,522	214.113,092
18+000	100	93,130	49,842			1,00	1,25	100,00%	0,000	93,130	49,842	43,288	0,000	6.886,364	214.156,380
18+100	100	116,529	420,406			1,00	1,25	100,00%	0,000	116,529	116,529	-303,877	0,000	7.002,893	213.852,503
18+200	100	607,502	809,181			1,00	1,25	100,00%	0,000	607,502	607,502	-201,679	0,000	7.610,395	213.650,824
18+300	100	1.449,562	19,614			1,00	1,25	100,00%	0,000	1.449,562	19,614	1.429,948	0,000	7.630,009	215.080,772
18+400	100	1.587,955	19,615			1,00	1,25	100,00%	0,000	1.587,955	19,615	1.568,340	0,000	7.649,624	216.649,112
18+500	100	1.040,799	18,749			1,00	1,25	100,00%	0,000	1.040,799	18,749	1.022,050	0,000	7.668,373	217.671,162
18+600	100	2.111,805	17,615			1,00	1,25	100,00%	0,000	2.111,805	17,615	2.094,190	0,000	7.685,988	219.765,352
18+700	100	2.512,030	18,760			1,00	1,25	100,00%	0,000	2.512,030	18,760	2.493,270	0,000	7.704,748	222.258,622
18+800	100	1.578,180	38,450			1,00	1,25	100,00%	0,000	1.578,180	38,450	1.539,730	0,000	7.743,198	223.798,352
18+900	100	1.463,105	47,895			1,00	1,25	0,00%	1.828,881	0,000	0,000	-47,895	1.828,881	7.743,198	223.750,457
19+000	100	2.424,804	34,654			1,00	1,25	0,00%	3.031,005	0,000	0,000	-34,654	4.859,886	7.743,198	223.715,803
19+100	100	3.106,462	33,462			1,00	1,25	0,00%	3.883,078	0,000	0,000	-33,462	8.742,964	7.743,198	223.682,341
19+200	100	1.569,901	14,668			1,00	1,25	0,00%	1.962,376	0,000	0,000	-14,668	10.705,340	7.743,198	223.667,673
19+300	100	0,000	0,000			1,00	1,25	0,00%	0,000	0,000	0,000	0,000	10.705,340	7.743,198	223.667,673

ESTUDIO INFORMATIVO DEL CORREDOR CÁNTABRICO - MEDITERRÁNEO DE ALTA VELOCIDAD. TRAMO TERUEL - ZARAGOZA.

DIAGRAMA DE EQUILIBRIO DE MOVIMIENTOS DE TIERRAS

Alternativa 9.1

PK	d	PLATAFORMA		EXCAVACIÓN TÚNEL EN MINA		COEF. PASO		EXCAVACIÓN			COMPENS.	BALANCE	VOL. ACUMULADOS		
		EXCAV.	TERRAPLÉN	NOMBRE	EXCAV.	RELLENOS	VERTEDERO	% APROV	NO APROV.	APROV.	TRANS.		A VERTEDERO	COM.TRAN.	BALANCE
19+400	100	0,000	0,000			1,00	1,25	0,00%	0,000	0,000	0,000	0,000	10.705,340	7.743,198	223.667,673
19+500	100	0,000	0,000			1,00	1,25	0,00%	0,000	0,000	0,000	0,000	10.705,340	7.743,198	223.667,673
19+600	100	0,000	0,000			1,00	1,25	0,00%	0,000	0,000	0,000	0,000	10.705,340	7.743,198	223.667,673
19+700	100	0,000	0,000			1,00	1,25	0,00%	0,000	0,000	0,000	0,000	10.705,340	7.743,198	223.667,673
19+800	100	0,000	0,000			1,00	1,25	0,00%	0,000	0,000	0,000	0,000	10.705,340	7.743,198	223.667,673
19+900	100	0,000	0,000			1,00	1,25	0,00%	0,000	0,000	0,000	0,000	10.705,340	7.743,198	223.667,673
20+000	100	0,000	0,000			1,00	1,25	0,00%	0,000	0,000	0,000	0,000	10.705,340	7.743,198	223.667,673
20+100	100	0,000	0,000			1,00	1,25	0,00%	0,000	0,000	0,000	0,000	10.705,340	7.743,198	223.667,673
20+200	100	0,000	0,000			1,00	1,25	0,00%	0,000	0,000	0,000	0,000	10.705,340	7.743,198	223.667,673
20+300	100	0,000	0,000			1,00	1,25	0,00%	0,000	0,000	0,000	0,000	10.705,340	7.743,198	223.667,673
20+303	3	53,741	0,512			1,00	1,25	0,00%	67,176	0,000	0,000	-0,512	10.772,516	7.743,198	223.667,161
TOTAL		**252.651,583**	**20.366,409**						**10.772,516**	**244.033,570**	**7.743,198**	**223.667,161**			

ESTUDIO INFORMATIVO DEL CORREDOR CÁNTABRICO - MEDITERRÁNEO DE ALTA VELOCIDAD. TRAMO TERUEL - ZARAGOZA.

DIAGRAMA DE EQUILIBRIO DE MOVIMIENTOS DE TIERRAS

Alternativa 9.2

PK	d	PLATAFORMA		EXCAVACIÓN TÚNEL EN MINA		COEF. PASO		EXCAVACIÓN			COMPENS.	BALANCE	VOL. ACUMULADOS		
		EXCAV.	TERRAPLÉN	NOMBRE	EXCAV.	RELLENOS	VERTEDERO	% APROV	NO APROV.	APROV.	TRANS.		A VERTEDERO	COM.TRAN.	BALANCE
9+000		0,000	0,000			1,00	1,25	100,00%	0,000	0,000	0,000	0,000	0,000	0,000	0,000
9+100	100	3.689,688	47,179			1,00	1,25	100,00%	0,000	3.689,688	47,179	3.642,509	0,000	47,179	3.642,509
9+200	100	3.665,625	53,213			1,00	1,25	100,00%	0,000	3.665,625	53,213	3.612,412	0,000	100,392	7.254,921
9+300	100	2.642,581	135,918			1,00	1,25	100,00%	0,000	2.642,581	135,918	2.506,663	0,000	236,310	9.761,584
9+400	100	2.547,775	50,312			1,00	1,25	100,00%	0,000	2.547,775	50,312	2.497,463	0,000	286,622	12.259,047
9+500	100	3.475,361	34,867			1,00	1,25	100,00%	0,000	3.475,361	34,867	3.440,494	0,000	321,489	15.699,541
9+600	100	2.505,560	35,650			1,00	1,25	100,00%	0,000	2.505,560	35,650	2.469,910	0,000	357,139	18.169,451
9+700	100	569,983	2.491,854			1,00	1,25	100,00%	0,000	569,983	569,983	-1.921,871	0,000	927,122	16.247,580
9+800	100	904,750	724,147			1,00	1,25	100,00%	0,000	904,750	724,147	180,603	0,000	1.651,269	16.428,183
9+900	100	6.282,968	35,962			1,00	1,25	100,00%	0,000	6.282,968	35,962	6.247,006	0,000	1.687,231	22.675,189
10+000	100	7.626,606	36,346			1,00	1,25	100,00%	0,000	7.626,606	36,346	7.590,260	0,000	1.723,577	30.265,449
10+100	100	3.708,095	62,724			1,00	1,25	100,00%	0,000	3.708,095	62,724	3.645,371	0,000	1.786,301	33.910,820
10+200	100	1.372,051	87,889			1,00	1,25	100,00%	0,000	1.372,051	87,889	1.284,162	0,000	1.874,190	35.194,982
10+300	100	7.899,030	39,636			1,00	1,25	100,00%	0,000	7.899,030	39,636	7.859,394	0,000	1.913,826	43.054,376
10+400	100	12.651,303	35,842			1,00	1,25	100,00%	0,000	12.651,303	35,842	12.615,461	0,000	1.949,668	55.669,837
10+500	100	19.299,237	35,086			1,00	1,25	100,00%	0,000	19.299,237	35,086	19.264,151	0,000	1.984,754	74.933,988
10+600	100	12.848,918	47,252			1,00	1,25	100,00%	0,000	12.848,918	47,252	12.801,666	0,000	2.032,006	87.735,654
10+700	100	17.226,374	43,634			1,00	1,25	100,00%	0,000	17.226,374	43,634	17.182,740	0,000	2.075,640	104.918,394
10+800	100	14.233,264	49,340			1,00	1,25	100,00%	0,000	14.233,264	49,340	14.183,924	0,000	2.124,980	119.102,318
10+900	100	9.664,347	40,287			1,00	1,25	100,00%	0,000	9.664,347	40,287	9.624,060	0,000	2.165,267	128.726,378
11+000	100	5.590,328	27,848			1,00	1,25	100,00%	0,000	5.590,328	27,848	5.562,480	0,000	2.193,115	134.288,858
11+100	100	2.609,523	184,200			1,00	1,25	100,00%	0,000	2.609,523	184,200	2.425,323	0,000	2.377,315	136.714,181
11+200	100	114,040	3.756,637			1,00	1,25	100,00%	0,000	114,040	114,040	-3.642,597	0,000	2.491,355	133.071,584
11+300	100	1.975,343	1.251,034			1,00	1,25	100,00%	0,000	1.975,343	1.251,034	724,309	0,000	3.742,389	133.795,893
11+400	100	5.156,644	36,052			1,00	1,25	100,00%	0,000	5.156,644	36,052	5.120,592	0,000	3.778,441	138.916,485
11+500	100	4.246,358	37,538			1,00	1,25	100,00%	0,000	4.246,358	37,538	4.208,820	0,000	3.815,979	143.125,305
11+600	100	1.751,657	37,340			1,00	1,25	100,00%	0,000	1.751,657	37,340	1.714,317	0,000	3.853,319	144.839,622
11+700	100	1.699,964	37,515			1,00	1,25	100,00%	0,000	1.699,964	37,515	1.662,449	0,000	3.890,834	146.502,071
11+800	100	2.416,846	37,697			1,00	1,25	100,00%	0,000	2.416,846	37,697	2.379,149	0,000	3.928,531	148.881,220
11+900	100	1.956,878	38,802			1,00	1,25	100,00%	0,000	1.956,878	38,802	1.918,076	0,000	3.967,333	150.799,296
12+000	100	2.044,157	43,910			1,00	1,25	100,00%	0,000	2.044,157	43,910	2.000,247	0,000	4.011,243	152.799,543
12+100	100	8.426,230	41,533			1,00	1,25	100,00%	0,000	8.426,230	41,533	8.384,697	0,000	4.052,776	161.184,240
12+200	100	3.207,320	26,322			1,00	1,25	100,00%	0,000	3.207,320	26,322	3.180,998	0,000	4.079,098	164.365,238
12+300	100	742,332	6,396			1,00	1,25	100,00%	0,000	742,332	6,396	735,936	0,000	4.085,494	165.101,174
12+400	100	0,000	0,000			1,00	1,25	100,00%	0,000	0,000	0,000	0,000	0,000	4.085,494	165.101,174
12+500	100	0,000	0,000			1,00	1,25	100,00%	0,000	0,000	0,000	0,000	0,000	4.085,494	165.101,174
12+600	100	0,000	0,000			1,00	1,25	100,00%	0,000	0,000	0,000	0,000	0,000	4.085,494	165.101,174
12+700	100	0,000	0,000			1,00	1,25	100,00%	0,000	0,000	0,000	0,000	0,000	4.085,494	165.101,174
12+800	100	0,000	0,000			1,00	1,25	100,00%	0,000	0,000	0,000	0,000	0,000	4.085,494	165.101,174
12+900	100	0,000	0,000			1,00	1,25	100,00%	0,000	0,000	0,000	0,000	0,000	4.085,494	165.101,174
13+000	100	0,000	0,000			1,00	1,25	100,00%	0,000	0,000	0,000	0,000	0,000	4.085,494	165.101,174
13+100	100	111,775	1.051,069			1,00	1,25	100,00%	0,000	111,775	111,775	-939,294	0,000	4.197,269	164.161,880
13+200	100	1.734,455	2.783,998			1,00	1,25	100,00%	0,000	1.734,455	1.734,455	-1.049,543	0,000	5.931,724	163.112,337
13+300	100	3.919,024	1.640,749			1,00	1,25	100,00%	0,000	3.919,024	1.640,749	2.278,275	0,000	7.572,473	165.390,612
13+400	100	6.367,515	3.878,532			1,00	1,25	100,00%	0,000	6.367,515	3.878,532	2.488,983	0,000	11.451,005	167.879,595
13+500	100	135,841	3.580,924			1,00	1,25	100,00%	0,000	135,841	135,841	-3.445,083	0,000	11.586,846	164.434,512
13+600	100	4.878,005	1.921,411			1,00	1,25	100,00%	0,000	4.878,005	1.921,411	2.956,594	0,000	13.508,257	167.391,106
13+700	100	13.582,111	38,226			1,00	1,25	100,00%	0,000	13.582,111	38,226	13.543,885	0,000	13.546,483	180.934,991
13+800	100	25.264,939	36,962			1,00	1,25	100,00%	0,000	25.264,939	36,962	25.227,977	0,000	13.583,445	206.162,968
13+900	100	36.367,018	35,477			1,00	1,25	100,00%	0,000	36.367,018	35,477	36.331,541	0,000	13.618,922	242.494,509
14+000	100	3.532,689	455,993			1,00	1,25	100,00%	0,000	3.532,689	455,993	3.076,696	0,000	14.074,915	245.571,205
14+100	100	44.767,652	36,229			1,00	1,25	100,00%	0,000	44.767,652	36,229	44.731,423	0,000	14.111,144	290.302,628

ESTUDIO INFORMATIVO DEL CORREDOR CÁNTABRICO - MEDITERRÁNEO DE ALTA VELOCIDAD. TRAMO TERUEL - ZARAGOZA.

DIAGRAMA DE EQUILIBRIO DE MOVIMIENTOS DE TIERRAS

Alternativa 9.2

PK	d	PLATAFORMA		EXCAVACIÓN TÚNEL EN MINA		COEF. PASO		EXCAVACIÓN			COMPENS.	BALANCE	VOL. ACUMULADOS		
		EXCAV.	TERRAPLÉN	NOMBRE	EXCAV.	RELLENOS	VERTEDERO	% APROV	NO APROV.	APROV.	TRANS.		A VERTEDERO	COM.TRAN.	BALANCE
14+200	100	50.824,406	35,043			1,00	1,25	100,00%	0,000	50.824,406	35,043	50.789,363	0,000	14.146,187	341.091,991
14+300	100	15.960,502	40,457			1,00	1,25	100,00%	0,000	15.960,502	40,457	15.920,045	0,000	14.186,644	357.012,036
14+400	100	42.881,521	39,230			1,00	1,25	100,00%	0,000	42.881,521	39,230	42.842,291	0,000	14.225,874	399.854,327
14+500	100	68.726,299	35,593			1,00	1,25	100,00%	0,000	68.726,299	35,593	68.690,706	0,000	14.261,467	468.545,033
14+600	100	33.846,177	196,995			1,00	1,25	100,00%	0,000	33.846,177	196,995	33.649,182	0,000	14.458,462	502.194,215
14+700	100	2.500,190	5.683,836			1,00	1,25	100,00%	0,000	2.500,190	2.500,190	-3.183,646	0,000	16.958,652	499.010,569
14+800	100	52.337,583	32,972			1,00	1,25	100,00%	0,000	52.337,583	32,972	52.304,611	0,000	16.991,624	551.315,180
14+900	100	2.751,594	0,986			1,00	1,25	100,00%	0,000	2.751,594	0,986	2.750,608	0,000	16.992,610	554.065,788
15+000	100	31.727,306	12,925			1,00	1,25	100,00%	0,000	31.727,306	12,925	31.714,381	0,000	17.005,535	585.780,169
15+100	100	53.609,722	38,618			1,00	1,25	100,00%	0,000	53.609,722	38,618	53.571,104	0,000	17.044,153	639.351,273
15+200	100	38.294,380	34,254			1,00	1,25	100,00%	0,000	38.294,380	34,254	38.260,126	0,000	17.078,407	677.611,399
15+300	100	30.303,783	23,439			1,00	1,25	100,00%	0,000	30.303,783	23,439	30.280,344	0,000	17.101,846	707.891,743
15+400	100	45.476,136	36,280			1,00	1,25	100,00%	0,000	45.476,136	36,280	45.439,856	0,000	17.138,126	753.331,599
15+500	100	29.658,557	183,404			1,00	1,25	100,00%	0,000	29.658,557	183,404	29.475,153	0,000	17.321,530	782.806,752
15+600	100	355,105	27.693,634			1,00	1,25	100,00%	0,000	355,105	355,105	-27.338,529	0,000	17.676,635	755.468,223
15+700	100	15.405,988	7.755,856			1,00	1,25	100,00%	0,000	15.405,988	7.755,856	7.650,132	0,000	25.432,491	763.118,355
15+800	100	27.384,713	35,950			1,00	1,25	100,00%	0,000	27.384,713	35,950	27.348,763	0,000	25.468,441	790.467,118
15+900	100	3.067,608	479,774			1,00	1,25	100,00%	0,000	3.067,608	479,774	2.587,834	0,000	25.948,215	793.054,952
16+000	100	6.138,970	325,809			1,00	1,25	100,00%	0,000	6.138,970	325,809	5.813,161	0,000	26.274,024	798.868,113
16+100	100	2.789,845	662,657			1,00	1,25	100,00%	0,000	2.789,845	662,657	2.127,188	0,000	26.936,681	800.995,301
16+200	100	1.223,737	366,006			1,00	1,25	100,00%	0,000	1.223,737	366,006	857,731	0,000	27.302,687	801.853,032
16+300	100	0,026	5.293,110			1,00	1,25	100,00%	0,000	0,026	0,026	-5.293,084	0,000	27.302,713	796.559,948
16+400	100	40,248	9.135,940			1,00	1,25	100,00%	0,000	40,248	40,248	-9.095,692	0,000	27.342,961	787.464,256
16+500	100	61,256	9.171,178			1,00	1,25	100,00%	0,000	61,256	61,256	-9.109,922	0,000	27.404,217	778.354,334
16+600	100	0,000	10.772,892			1,00	1,25	100,00%	0,000	0,000	0,000	-10.772,892	0,000	27.404,217	767.581,442
16+700	100	0,000	7.773,307			1,00	1,25	100,00%	0,000	0,000	0,000	-7.773,307	0,000	27.404,217	759.808,135
16+800	100	0,000	4.442,762			1,00	1,25	100,00%	0,000	0,000	0,000	-4.442,762	0,000	27.404,217	755.365,373
16+900	100	50,994	766,681			1,00	1,25	100,00%	0,000	50,994	50,994	-715,687	0,000	27.455,211	754.649,686
17+000	100	602,870	18,133			1,00	1,25	100,00%	0,000	602,870	18,133	584,737	0,000	27.473,344	755.234,423
17+100	100	1.217,228	17,009			1,00	1,25	100,00%	0,000	1.217,228	17,009	1.200,219	0,000	27.490,353	756.434,642
17+200	100	1.555,346	20,092			1,00	1,25	100,00%	0,000	1.555,346	20,092	1.535,254	0,000	27.510,445	757.969,896
17+300	100	1.127,219	185,227			1,00	1,25	100,00%	0,000	1.127,219	185,227	941,992	0,000	27.695,672	758.911,888
17+400	100	1.149,956	18,857			1,00	1,25	100,00%	0,000	1.149,956	18,857	1.131,099	0,000	27.714,529	760.042,987
17+500	100	1.672,929	18,715			1,00	1,25	100,00%	0,000	1.672,929	18,715	1.654,214	0,000	27.733,244	761.697,201
17+600	100	1.691,596	17,849			1,00	1,25	100,00%	0,000	1.691,596	17,849	1.673,747	0,000	27.751,093	763.370,948
17+700	100	1.698,001	18,402			1,00	1,25	100,00%	0,000	1.698,001	18,402	1.679,599	0,000	27.769,495	765.050,547
17+800	100	1.071,992	20,900			1,00	1,25	100,00%	0,000	1.071,992	20,900	1.051,092	0,000	27.790,395	766.101,639
17+900	100	1.296,245	18,438			1,00	1,25	100,00%	0,000	1.296,245	18,438	1.277,807	0,000	27.808,833	767.379,446
18+000	100	1.492,840	17,881			1,00	1,25	100,00%	0,000	1.492,840	17,881	1.474,959	0,000	27.826,714	768.854,405
18+100	100	748,154	77,573			1,00	1,25	100,00%	0,000	748,154	77,573	670,581	0,000	27.904,287	769.524,986
18+200	100	539,536	1.309,777			1,00	1,25	100,00%	0,000	539,536	539,536	-770,241	0,000	28.443,823	768.754,745
18+300	100	1.471,055	19,202			1,00	1,25	100,00%	0,000	1.471,055	19,202	1.451,853	0,000	28.463,025	770.206,598
18+400	100	1.760,449	19,898			1,00	1,25	100,00%	0,000	1.760,449	19,898	1.740,551	0,000	28.482,923	771.947,149
18+500	100	1.104,401	18,753			1,00	1,25	100,00%	0,000	1.104,401	18,753	1.085,648	0,000	28.501,676	773.032,797
18+600	100	1.841,913	17,939			1,00	1,25	100,00%	0,000	1.841,913	17,939	1.823,974	0,000	28.519,615	774.856,771
18+700	100	3.128,615	18,346			1,00	1,25	100,00%	0,000	3.128,615	18,346	3.110,269	0,000	28.537,961	777.967,040
18+800	100	1.415,900	34,115			1,00	1,25	100,00%	0,000	1.415,900	34,115	1.381,785	0,000	28.572,076	779.348,825
18+900	100	1.265,787	64,465			1,00	1,25	0,00%	1.582,234	0,000	0,000	-64,465	1.582,234	28.572,076	779.284,360
19+000	100	2.161,154	39,214			1,00	1,25	0,00%	2.701,443	0,000	0,000	-39,214	4.283,676	28.572,076	779.245,146
19+100	100	2.889,622	34,002			1,00	1,25	0,00%	3.612,028	0,000	0,000	-34,002	7.895,704	28.572,076	779.211,144
19+200	100	2.326,946	22,983			1,00	1,25	0,00%	2.908,683	0,000	0,000	-22,983	10.804,386	28.572,076	779.188,161
19+300	100	0,000	0,000			1,00	1,25	0,00%	0,000	0,000	0,000	0,000	10.804,386	28.572,076	779.188,161

ESTUDIO INFORMATIVO DEL CORREDOR CÁNTABRICO - MEDITERRÁNEO DE ALTA VELOCIDAD. TRAMO TERUEL - ZARAGOZA.

DIAGRAMA DE EQUILIBRIO DE MOVIMIENTOS DE TIERRAS

Alternativa 9.2

PK	d	PLATAFORMA		EXCAVACIÓN TÚNEL EN MINA		COEF. PASO		EXCAVACIÓN			COMPENS.	BALANCE	VOL. ACUMULADOS		
		EXCAV.	TERRAPLÉN	NOMBRE	EXCAV.	RELLENOS	VERTEDERO	% APROV	NO APROV.	APROV.	TRANS.		A VERTEDERO	COM.TRAN.	BALANCE
19+400	100	0,000	0,000			1,00	1,25	0,00%	0,000	0,000	0,000	0,000	10.804,386	28.572,076	779.188,161
19+500	100	0,000	0,000			1,00	1,25	0,00%	0,000	0,000	0,000	0,000	10.804,386	28.572,076	779.188,161
19+600	100	0,000	0,000			1,00	1,25	0,00%	0,000	0,000	0,000	0,000	10.804,386	28.572,076	779.188,161
19+700	100	0,000	0,000			1,00	1,25	0,00%	0,000	0,000	0,000	0,000	10.804,386	28.572,076	779.188,161
19+800	100	0,000	0,000			1,00	1,25	0,00%	0,000	0,000	0,000	0,000	10.804,386	28.572,076	779.188,161
19+900	100	0,000	0,000			1,00	1,25	0,00%	0,000	0,000	0,000	0,000	10.804,386	28.572,076	779.188,161
20+000	100	0,000	0,000			1,00	1,25	0,00%	0,000	0,000	0,000	0,000	10.804,386	28.572,076	779.188,161
20+100	100	0,000	0,000			1,00	1,25	0,00%	0,000	0,000	0,000	0,000	10.804,386	28.572,076	779.188,161
20+200	100	0,000	0,000			1,00	1,25	0,00%	0,000	0,000	0,000	0,000	10.804,386	28.572,076	779.188,161
20+300	100	0,000	0,000			1,00	1,25	0,00%	0,000	0,000	0,000	0,000	10.804,386	28.572,076	779.188,161
20+326	26	15,816	0,151			1,00	1,25	0,00%	19,770	0,000	0,000	-0,151	10.824,156	28.572,076	779.188,010
TOTAL		**906.074,376**	**118.227,041**						**10.824,156**	**897.415,051**	**28.572,076**	**779.188,010**			

ESTUDIO INFORMATIVO DEL CORREDOR CÁNTABRICO - MEDITERRÁNEO DE ALTA VELOCIDAD. TRAMO TERUEL - ZARAGOZA.

DIAGRAMA DE EQUILIBRIO DE MOVIMIENTOS DE TIERRAS

Alternativa 10.1

PK	d	PLATAFORMA		EXCAVACIÓN TÚNEL EN MINA		COEF. PASO		EXCAVACIÓN			COMPENS.	BALANCE	VOL. ACUMULADOS		
		EXCAV.	TERRAPLÉN	NOMBRE	EXCAV.	RELLENOS	VERTEDERO	% APROV	NO APROV.	APROV.	TRANS.		A VERTEDERO	COM.TRAN.	BALANCE
10+000		0,000	0,000			1,00	1,25	100,00%	0,000	0,000	0,000	0,000	0,000	0,000	0,000
10+100	100	1.799,976	19,469			1,00	1,25	100,00%	0,000	1.799,976	19,469	1.780,507	0,000	19,469	1.780,507
10+200	100	2.375,438	18,232			1,00	1,25	100,00%	0,000	2.375,438	18,232	2.357,206	0,000	37,701	4.137,713
10+300	100	3.824,077	19,093			1,00	1,25	100,00%	0,000	3.824,077	19,093	3.804,984	0,000	56,794	7.942,697
10+400	100	4.356,031	19,782			1,00	1,25	100,00%	0,000	4.356,031	19,782	4.336,249	0,000	76,576	12.278,946
10+500	100	4.615,187	19,382			1,00	1,25	100,00%	0,000	4.615,187	19,382	4.595,805	0,000	95,958	16.874,751
10+600	100	5.338,710	19,100			1,00	1,25	100,00%	0,000	5.338,710	19,100	5.319,610	0,000	115,058	22.194,361
10+700	100	4.608,283	19,386			1,00	1,25	100,00%	0,000	4.608,283	19,386	4.588,897	0,000	134,444	26.783,258
10+800	100	1.024,747	19,380			1,00	1,25	100,00%	0,000	1.024,747	19,380	1.005,367	0,000	153,824	27.788,625
10+900	100	1.172,993	53,700			1,00	1,25	100,00%	0,000	1.172,993	53,700	1.119,293	0,000	207,524	28.907,918
11+000	100	442,756	112,703			1,00	1,25	100,00%	0,000	442,756	112,703	330,053	0,000	320,227	29.237,971
11+100	100	1.014,656	35,047			1,00	1,25	100,00%	0,000	1.014,656	35,047	979,609	0,000	355,274	30.217,580
11+200	100	1.695,051	98,299			1,00	1,25	100,00%	0,000	1.695,051	98,299	1.596,752	0,000	453,573	31.814,332
11+300	100	3.615,611	29,298			1,00	1,25	100,00%	0,000	3.615,611	29,298	3.586,313	0,000	482,871	35.400,645
11+400	100	561,527	2.880,307			1,00	1,25	100,00%	0,000	561,527	561,527	-2.318,780	0,000	1.044,398	33.081,865
11+500	100	19,404	9.196,043			1,00	1,25	0,00%	24,255	0,000	0,000	-9.196,043	24,255	1.044,398	23.885,822
11+600	100	12.492,854	415,608			1,00	1,25	0,00%	15.616,068	0,000	0,000	-415,608	15.640,323	1.044,398	23.470,214
11+700	100	22.323,660	14,144			1,00	1,25	0,00%	27.904,575	0,000	0,000	-14,144	43.544,898	1.044,398	23.456,070
11+800	100	32.414,342	15,853			1,00	1,25	0,00%	40.517,928	0,000	0,000	-15,853	84.062,825	1.044,398	23.440,217
11+900	100	40.451,034	16,750			1,00	1,25	0,00%	50.563,793	0,000	0,000	-16,750	134.626,618	1.044,398	23.423,467
12+000	100	12.021,646	16,801			1,00	1,25	0,00%	15.027,058	0,000	0,000	-16,801	149.653,675	1.044,398	23.406,666
12+100	100	3.063,672	255,429			1,00	1,25	0,00%	3.829,590	0,000	0,000	-255,429	153.483,265	1.044,398	23.151,237
12+200	100	2.275,283	2.433,600			1,00	1,25	0,00%	2.844,104	0,000	0,000	-2.433,600	156.327,369	1.044,398	20.717,637
12+300	100	2.460,679	1,100			1,00	1,25	0,00%	3.075,849	0,000	0,000	-1,100	159.403,218	1.044,398	20.716,537
12+400	100	20.505,572	9,661			1,00	1,25	0,00%	25.631,965	0,000	0,000	-9,661	185.035,183	1.044,398	20.706,876
12+500	100	40.340,570	16,073			1,00	1,25	0,00%	50.425,713	0,000	0,000	-16,073	235.460,895	1.044,398	20.690,803
12+600	100	60.389,708	12,846			1,00	1,25	0,00%	75.487,135	0,000	0,000	-12,846	310.948,030	1.044,398	20.677,957
12+700	100	60.944,235	5,887			1,00	1,25	0,00%	76.180,294	0,000	0,000	-5,887	387.128,324	1.044,398	20.672,070
12+800	100	7.956,974	697,383			1,00	1,25	0,00%	9.946,218	0,000	0,000	-697,383	397.074,541	1.044,398	19.974,687
12+900	100	3.145,359	0,067			1,00	1,25	0,00%	3.931,699	0,000	0,000	-0,067	401.006,240	1.044,398	19.974,620
12+943	43	830,036	0,038			1,00	1,25	0,00%	1.037,545	0,000	0,000	-0,038	402.043,785	1.044,398	19.974,582
TOTAL		**358.080,071**	**16.470,461**						**402.043,785**	**36.445,043**	**1.044,398**	**19.974,582**			

ESTUDIO INFORMATIVO DEL CORREDOR CÁNTABRICO - MEDITERRÁNEO DE ALTA VELOCIDAD. TRAMO TERUEL - ZARAGOZA.

DIAGRAMA DE EQUILIBRIO DE MOVIMIENTOS DE TIERRAS

Alternativa 11.1

PK	d	PLATAFORMA		EXCAVACIÓN TÚNEL EN MINA		COEF. PASO		EXCAVACIÓN			COMPENS.	BALANCE	VOL. ACUMULADOS		
		EXCAV.	TERRAPLÉN	NOMBRE	EXCAV.	RELLENOS	VERTEDERO	% APROV	NO APROV.	APROV.	TRANS.		A VERTEDERO	COM.TRAN.	BALANCE
11+000		0,000	0,000			1,00	1,25	100,00%	0,000	0,000	0,000	0,000	0,000	0,000	0,000
11+100	100	1.125,125	18,169			1,00	1,25	100,00%	0,000	1.125,125	18,169	1.106,956	0,000	18,169	1.106,956
11+200	100	124,199	1.489,396			1,00	1,25	100,00%	0,000	124,199	124,199	-1.365,197	0,000	142,368	-258,241
11+300	100	0,253	2.255,265			1,00	1,25	100,00%	0,000	0,253	0,253	-2.255,012	0,000	142,621	-2.513,253
11+400	100	0,000	10.274,539			1,00	1,25	100,00%	0,000	0,000	0,000	-10.274,539	0,000	142,621	-12.787,792
11+500	100	0,000	1.906,043			1,00	1,25	100,00%	0,000	0,000	0,000	-1.906,043	0,000	142,621	-14.693,835
11+600	100	0,000	2.412,676			1,00	1,25	100,00%	0,000	0,000	0,000	-2.412,676	0,000	142,621	-17.106,511
11+700	100	28,375	3.781,288			1,00	1,25	100,00%	0,000	28,375	28,375	-3.752,913	0,000	170,996	-20.859,424
11+800	100	49,072	6.200,729			1,00	1,25	100,00%	0,000	49,072	49,072	-6.151,657	0,000	220,068	-27.011,081
11+900	100	46,857	10.073,466			1,00	1,25	100,00%	0,000	46,857	46,857	-10.026,609	0,000	266,925	-37.037,690
12+000	100	28,347	13.558,444			1,00	1,25	100,00%	0,000	28,347	28,347	-13.530,097	0,000	295,272	-50.567,787
12+100	100	30,738	11.456,808			1,00	1,25	100,00%	0,000	30,738	30,738	-11.426,070	0,000	326,010	-61.993,857
12+200	100	0,000	0,000			1,00	1,25	100,00%	0,000	0,000	0,000	0,000	0,000	326,010	-61.993,857
12+300	100	0,000	0,000			1,00	1,25	100,00%	0,000	0,000	0,000	0,000	0,000	326,010	-61.993,857
12+400	100	11,115	30.265,071			1,00	1,25	100,00%	0,000	11,115	11,115	-30.253,956	0,000	337,125	-92.247,813
12+500	100	0,000	38.030,965			1,00	1,25	0,00%	0,000	0,000	0,000	-38.030,965	0,000	337,125	-130.278,778
12+600	100	0,000	34.957,527			1,00	1,25	0,00%	0,000	0,000	0,000	-34.957,527	0,000	337,125	-165.236,305
12+700	100	0,000	31.072,099			1,00	1,25	0,00%	0,000	0,000	0,000	-31.072,099	0,000	337,125	-196.308,404
12+800	100	0,000	31.689,847			1,00	1,25	0,00%	0,000	0,000	0,000	-31.689,847	0,000	337,125	-227.998,251
12+900	100	0,000	28.942,198			1,00	1,25	0,00%	0,000	0,000	0,000	-28.942,198	0,000	337,125	-256.940,449
13+000	100	0,000	30.395,354			1,00	1,25	0,00%	0,000	0,000	0,000	-30.395,354	0,000	337,125	-287.335,803
13+100	100	0,000	26.765,020			1,00	1,25	0,00%	0,000	0,000	0,000	-26.765,020	0,000	337,125	-314.100,823
13+200	100	14,472	19.612,528			1,00	1,25	0,00%	18,090	0,000	0,000	-19.612,528	18,090	337,125	-333.713,351
13+300	100	23,629	13.728,443			1,00	1,25	0,00%	29,536	0,000	0,000	-13.728,443	47,626	337,125	-347.441,794
13+400	100	23,309	7.569,293			1,00	1,25	0,00%	29,136	0,000	0,000	-7.569,293	76,763	337,125	-355.011,087
13+500	100	24,903	4.350,126			1,00	1,25	0,00%	31,129	0,000	0,000	-4.350,126	107,891	337,125	-359.361,213
13+600	100	11,197	5.702,950			1,00	1,25	0,00%	13,996	0,000	0,000	-5.702,950	121,888	337,125	-365.064,163
13+700	100	84,002	4.070,076			1,00	1,25	0,00%	105,003	0,000	0,000	-4.070,076	226,890	337,125	-369.134,239
13+800	100	176,717	2.963,615			1,00	1,25	0,00%	220,896	0,000	0,000	-2.963,615	447,786	337,125	-372.097,854
13+900	100	486,148	2.017,583			1,00	1,25	0,00%	607,685	0,000	0,000	-2.017,583	1.055,471	337,125	-374.115,437
14+000	100	401,912	553,394			1,00	1,25	0,00%	502,390	0,000	0,000	-553,394	1.557,861	337,125	-374.668,831
14+100	100	1.183,848	48,587			1,00	1,25	0,00%	1.479,810	0,000	0,000	-48,587	3.037,671	337,125	-374.717,418
14+200	100	2.083,059	17,269			1,00	1,25	0,00%	2.603,824	0,000	0,000	-17,269	5.641,495	337,125	-374.734,687
14+300	100	2.649,765	17,607			1,00	1,25	0,00%	3.312,206	0,000	0,000	-17,607	8.953,701	337,125	-374.752,294
14+400	100	2.022,816	19,535			1,00	1,25	0,00%	2.528,520	0,000	0,000	-19,535	11.482,221	337,125	-374.771,829
14+500	100	1.430,252	17,375			1,00	1,25	0,00%	1.787,815	0,000	0,000	-17,375	13.270,036	337,125	-374.789,204
14+600	100	1.504,850	21,331			1,00	1,25	0,00%	1.881,063	0,000	0,000	-21,331	15.151,099	337,125	-374.810,535
14+700	100	787,945	43,418			1,00	1,25	0,00%	984,931	0,000	0,000	-43,418	16.136,030	337,125	-374.853,953
14+800	100	1.233,952	24,141			1,00	1,25	0,00%	1.542,440	0,000	0,000	-24,141	17.678,470	337,125	-374.878,094
14+900	100	1.749,871	18,349			1,00	1,25	0,00%	2.187,339	0,000	0,000	-18,349	19.865,809	337,125	-374.896,443
15+000	100	1.475,006	17,173			1,00	1,25	0,00%	1.843,758	0,000	0,000	-17,173	21.709,566	337,125	-374.913,616
15+002	2	38,115	0,396			1,00	1,25	0,00%	47,644	0,000	0,000	-0,396	21.757,210	337,125	-374.914,012
TOTAL		**18.849,849**	**376.358,093**						**21.757,210**	**1.444,081**	**337,125**	**-374.914,012**			