

达瑞铅锌矿项目进矿道路维护工程
Maintenance Engineering of Access Road of Dairi Lead and Zinc Mine Project

自Parongil到Manjolor营地段进矿道路维护，长度大约3.5km，桩号K0+000-K3+543
Road Maintenance from Parongil to Manjolor Camp, Length approx 3.5km, Chainage K0+000 to K3+543

工程量清单
Table of bill of quantities

序号 No.	子目名称 Name of sub-item	特征描述 Description of Engineering Characteristics	单位 Unit	数量 Quantity	全费用综合单价 (IDR) (不含 VAT/PPN) Comprehensive unit price of full cost (excluding VAT/PPN) / IDR Unit price	合价 (IDR) Total price (IDR)
1	植被清理 Clearing of Vegetation					
1.1	路肩清表及除根 Clear and grub, shoulder of road	路肩表土、杂草清理、装车并运输、卸车至 指定位置; Clearing topsoil and plant from road shoulders, loading and transporting the goods, and unloading them at the designated location;	m ²	14,000		
1.2	涵管进出口和集水池 清表及除根 Clear & grub, Inlet & out-let of culverts & water collection pond ..		m ²	240		
1.3	树木清理与掘除 Clearing and Cutting the trees		颗 strain	100		
1.4	小计 (I) Subtotal (I)					
2	土方工程 Earthworks					
2.1	路基挖方 Roadbed excavation	土方开挖，部分含碎石，运距300m; Earthwork excavation, some of which contains gravel, with a haul distance of 300m;	m ³	22,000		

2.2	路基填方 Roadbed filling	30cm分层碾压, 压实度要求不小于93%; Compact the material in 30cm layers, ensuring a compaction degree of no less than 93%.	m ³	17,000		
2.3	清淤及换填 Dredging and replacement		m ³	500		
2.4	小计 (II) Subtotal (II)					
3	道路维护 Road Maintenance Work					
3.1	未筛分碎石路面铺路 Road Pavement with unscreened gravel	厚度100mm碎石路面铺路, 压实度要求不小于93%; Pave a 200cm thick gravel road, with a compaction requirement of not less than 93%;	m ³	2,000		
3.2	排水沟 Drainage Water Ditch	浆砌块石水沟, 水沟截面为40*40cm, 1:3水泥砂浆抹面 Rubble stone masonry ditch, the ditch cross-section is 40*40cm, plastered with 1:3 cement mortar	m	3,500		
3.3	排水钢波纹管Φ1.5m Drainage Corrugated steel pipe Φ1.5m	DPM提供钢波纹管材料, 承包商负责所有工作内容(涵道开挖、吊装设备、安装、管涵内填土等)。DPM provides corrugated steel pipe materials, and the contractor is responsible for all the construction works (Trench excavation, hoisting equipment, installation, backfilling inside the culvert, etc.).	m	30		

3.4	格宾笼施工 Gabion Construction	<p>格宾填石要求:可采用卵石、块石或片石,孔隙率不超过30%,要求石料质地坚硬,强度等级MU30,比重不小于2.5t/m,遇水不易崩解和水解,抗风化,软化系数不小于0.75;格宾填石粒径以10~30cm为宜。土工布铺设:所有格宾填土面全部铺设土工布,土工布每平方米200g,搭接宽度100mm</p> <p>Gabion fill requirements: Cobblestones, block stones, or slab stones can be used, with a porosity not exceeding 30%. The stone material should be hard, with a strength grade of MU30, and a specific gravity of not less than 2.5 t/m³. It should not easily disintegrate or hydrolyze when exposed to water, should be weather-resistant, and have a softening coefficient of not less than 0.75. The particle size of gabion fill is preferably 10–30 cm. Geotextile laying: Geotextile should be laid on all gabion fill surfaces, with a weight of 200 g per square meter and an overlap width of 100 mm.</p>	m ³	600		
3.5	小计 (III) Subtotal (III)					
4	防护工程 Fence installation					

4.1	围栏安装 Fence installation	按照图纸标注位置安装围栏，承包方工作范围包括：材料采购与安装，直径60mm镀锌方柱，方柱壁为3mm，埋入地面，深度500mm，间隔4米支撑整个结构的重量；使用C20混凝土将60mm柱子固定在地面上；安装所需的所有其他配件。Install the fence according to the locations marked on the drawings. The contractor's scope of work includes: material procurement and installation; 60mm diameter galvanized square posts with 3mm thick walls, buried in the ground to a depth of 500mm, spaced 4 meters apart to support the weight of the entire structure; fixing the 60mm posts to the ground using C20 concrete; and installing all other necessary accessories.	m	7,000		
4.2	居民下穿通道设施 Crossing Facilities (Underpass) for resident	管涵直径为4m。报价需含成沟所有工作内容（涵道开挖、吊装设备、安装、管涵内填土等）。The culvert has a diameter of 4 meters. The quotation must include all work contents for trench construction (Trench excavation, hoisting equipment, installation, backfilling inside the culvert, etc.).	m	39		
4.3	小计 (IV) Subtotal (IV)					
5	安全文明施工费 HSE Cost	按照工程费用的2.5%计取； Calculated at 2.5% of the engineering cost;	Ls	1		
5.1	小计 (V) Subtotal (V)					
	合计 (I+II+III+IV+V) Total (I+II+III+IV+V)					

进矿道路土方工程量计算表

Table of Earthwork Quantity Calculation of Mine Access Road

序号 SN	桩号 Chainage	现状标高 Current Elevation/m	设计标高 Designed Elevation/m	道路宽度 Road Width/m	填挖高度 Cut&Fill Height/m	填方面积 Fill Area/m ²	挖方面积 Cut Area/m ²	填方量 Fill Quantity/m ³	挖方量 Cut Quantity/m ³
1	K0+000	595	595	7	0	0.000	0.000	0.000	0.000
2	K0+050	595	597.287	7	2.287	33.639	0.000	235.473	0.000
3	K0+100	597.851	601.03	7	3.179	136.960	0.000	958.720	0.000
4	K0+150	602.887	604.772	7	1.885	126.886	0.000	888.202	0.000
5	K0+200	607.302	608.515	7	1.213	77.878	0.000	545.143	0.000
6	K0+250	614.646	612.257	7	-2.389	10.932	38.202	76.523	267.413
7	K0+300	620.291	615.312	7	-4.979	0.000	199.834	0.000	1398.836
8	K0+350	617.382	614.363	7	-3.019	0.000	202.627	0.000	1418.392
9	K0+400	614.979	611.345	7	-3.634	0.000	166.194	0.000	1163.359
10	K0+450	612	608.191	7	-3.809	0.000	178.542	0.000	1249.791
11	K0+500	608.486	605.036	7	-3.45	0.000	188.474	0.000	1319.317
12	K0+550	604.683	601.882	7	-2.801	0.000	151.830	0.000	1062.813
13	K0+600	603	598.727	7	-4.273	0.000	175.969	0.000	1231.781
14	K0+650	597.5	595.49	7	-2.01	0.000	177.929	0.000	1245.501
15	K0+700	593.147	592.418	7	-0.729	0.000	70.189	0.000	491.320
16	K0+750	588.685	589.264	7	0.579	3.556	14.137	24.892	98.962
17	K0+800	582.6	586.109	7	3.509	100.439	0.000	703.072	0.000
18	K0+850	578.253	583.044	7	4.791	217.348	0.000	1521.433	0.000
19	K0+900	576.078	580.693	7	4.615	236.299	0.000	1654.090	0.000
20	K0+950	578.762	579.176	7	0.414	144.596	0.000	1012.169	0.000
21	K1+000	579.547	578.371	7	-1.176	1.237	40.690	8.659	284.830
22	K1+050	575.733	577.657	7	1.924	15.839	34.872	110.873	244.104
23	K1+100	574.851	576.943	7	2.092	137.264	0.000	960.848	0.000
24	K1+150	576.435	576.229	7	-0.206	43.562	0.718	304.934	5.026
25	K1+200	576.792	575.909	7	-0.883	0.000	31.086	0.000	217.602
26	K1+250	574.514	576.577	7	2.063	32.626	9.171	228.382	64.197
27	K1+300	576.686	578.594	7	1.908	107.788	0.000	754.516	0.000
28	K1+350	582.103	581.8	7	-0.303	38.622	1.024	270.354	7.168

29	K1+400	586.766	585.306	7	-1.46	0.000	40.618	0.000	284.326
30	K1+450	590.5	588.8	7	-1.7	0.000	86.262	0.000	603.834
31	K1+500	593.5	592.3	7	-1.2	0.000	76.517	0.000	535.619
32	K1+550	596.994	595.29	7	-1.704	0.000	60.080	0.000	420.560
33	K1+600	599.171	597.036	7	-2.135	0.000	90.747	0.000	635.229
34	K1+650	597.11	597.533	7	0.423	1.506	47.891	10.542	335.237
35	K1+700	594.68	596.786	7	2.106	67.021	0.000	469.147	0.000
36	K1+750	593.887	595.529	7	1.642	100.116	0.000	700.812	0.000
37	K1+800	593.407	594.271	7	0.864	64.268	0.000	449.876	0.000
38	K1+850	592.86	593.014	7	0.154	25.471	0.000	178.297	0.000
39	K1+900	590.888	591.757	7	0.869	18.935	0.000	132.545	0.000
40	K1+950	590.761	591.557	7	0.796	43.143	0.000	302.001	0.000
41	K2+000	594.057	593.84	7	-0.217	7.037	2.633	49.259	18.431
42	K2+050	596.494	597.18	7	0.686	12.597	1.433	88.179	10.031
43	K2+100	600.322	600.52	7	0.198	17.656	0.000	123.592	0.000
44	K2+150	604.475	603.86	7	-0.615	6.583	8.318	46.081	58.226
45	K2+200	607.172	606.028	7	-1.144	0.000	33.674	0.000	235.718
46	K2+250	604.754	605.695	7	0.941	15.493	11.720	108.451	82.040
47	K2+300	602.633	603.56	7	0.927	58.842	0.000	411.894	0.000
48	K2+350	601.865	601.42	7	-0.445	16.213	3.349	113.491	23.443
49	K2+400	600.079	599.28	7	-0.799	0.000	30.886	0.000	216.202
50	K2+450	597.472	597.14	7	-0.332	0.000	28.549	0.000	199.843
51	K2+500	595	595.663	7	0.663	6.053	6.105	42.371	42.735
52	K2+550	596.618	596.525	7	-0.093	4.683	4.597	32.781	32.179
53	K2+600	597.558	598.5	7	0.942	0.234	26.615	1.638	186.305
54	K2+650	600.686	600.5	7	-0.186	20.225	0.660	141.575	4.620
55	K2+700	604.789	602.5	7	-2.289	0.000	66.944	0.000	468.608
56	K2+750	605	603.887	7	-1.113	0.000	94.191	0.000	659.337
57	K2+800	604.154	602.835	7	-1.319	0.000	55.593	0.000	389.151
58	K2+850	600.781	598.933	7	-1.848	0.000	81.377	0.000	569.639
59	K2+900	595.589	594.867	7	-0.722	0.000	64.914	0.000	454.398
60	K2+950	590.449	591.294	7	0.845	8.017	11.662	56.119	81.634
61	K3+000	591.149	589.443	7	-1.706	19.132	15.528	133.922	108.694
62	K3+050	592.573	590.882	7	-1.691	0.000	94.001	0.000	658.007
63	K3+100	591.141	592.464	7	1.323	9.135	41.766	63.946	292.359

64	K3+150	590.345	594.046	7	3.701	140.842	0.000	985.891	0.000
65	K3+200	592.691	595.629	7	2.938	188.410	0.000	1,318.87	0.000
66	K3+250	596.462	597.211	7	0.749	93.497	0.000	654.477	0.000
67	K3+300	599.546	598.793	7	-0.753	9.891	9.002	69.239	63.012
68	K3+350	602	600.375	7	-1.625	0.000	67.469	0.000	472.280
69	K3+400	604	601.957	7	-2.043	0.000	90.871	0.000	636.097
70	K3+450	605.441	603.539	7	-1.902	0.000	98.666	0.000	690.664
71	K3+500	606	605.121	7	-0.879	0.000	70.114	0.000	490.799
72	K3+543.569	606.5	606.5	7	0	0.000	19.665	0.000	137.658
								16,943.28	21,867.32
	合计量(m³) Total Qty.								