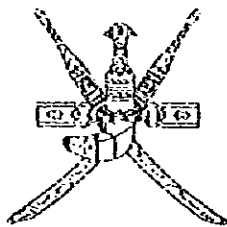


SULTANATE OF OMAN
MINISTRY OF COMMUNICATIONS
DIRECTORATE GENERAL OF ROADS



**CONSTRUCTION OF
FLYOVER
AT
SOHAR ROUNDABOUT
BATINAH HIGHWAY**

TENDER DOCUMENTS

BILL OF QUANTITIES

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**CONSTRUCTION OF FLYOVER AT
SOHAR
BILL OF QUANTITIES
BILL 1 - PRELIMINARIES**

Item No	Description	Unit	Estimated Quantity	Unit Rate		Amount	
				R.O.	Bz	R.O.	Bz
	SECTION 100 PRELIMINARIES						
	101 Bonds and Insurance						
101.1	Performance Bond (Clause 10 of Standard Conditions of Contract)	lump sum					
101.2	Insurance of the Works (Clause 21 of Standard Conditions of Contract)	lump sum					
101.3	Damage to Persons and Property (Clause 22 of Standard Condition of Contract)	lump sum					
101.4	Third Party Insurance (Clause 23 of Standard Conditions of Contract)	lump sum					
101.5	Accident or injury to Workmen (Clause 24 of Standard Condition of Contract)	lump sum					
				1-1	Carried to summary		41250.000

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CONSTRUCTION OF FLYOVER AT

SOHAR

BILL OF QUANTITIES

BILL 1 - PRELIMINARIES

Item No	Description	Unit	Estimated Quantity	Unit Rate		Amount	
				R.O.	Bz	R.O.	Bz
	104 Facilities for the Engineer						
104.1	Provision of Engineer's office (Type A, 1 unit x 24)	month	24	250.000		6000.000	
104.2	Maintenance of Engineer's office (Type A, 1 unit x 24)	month	24	150.000		3600.000	
104.3	Provision of surveying instruments	month	22	300.000		6600.000	
104.4	Maintenance of surveying instruments	month	22	150.000		3300.000	
104.5	Provision of Engineer's accommodation						
	(i) Resident Engineer's accommodation (Type B, 1 unit x 24)	month	N/A	250.000			
	(ii) Engineer's accommodation (Type C, 5 units x 24)	month	N/A	150.000			
	(iii) Engineer's accommodation (Type B, 1 unit x 24)	month	N/A	250.000			
	(iv) Dining/Kitchen (Type D, 1 unit x 24)	month	N/A	250.000			
		1-2		Carried to summary		19500.000	

CONSTRUCTION OF FLYOVER AT

SOHAR

BILL OF QUANTITIES

BILL 1 - PRELIMINARIES

Item No	Description	Unit	Estimated Quantity	Unit Rate		Amount
				R.O.	Bz	
104.6	Maintenance of Engineer's accommodation					
	(i) Resident Engineer's accommodation (Type B, 1 unit x 24)	month	N/A	150.000		
	(ii) Engineer's accommodation (Type C, 5 unit x 24)	month	N/A	250.000		
	(iii) Engineer's accommodation (Type B, 1 unit x 24)	month	N/A	150.000		
	(iv) Dining/Kitchen (Type D, 1 unit x 24)	month	N/A	250.000		
104.7	Provision of laboratory	month	22	400.000		8900.000
104.8	Maintenance of laboratory	month	22	150.000		3300.000
104.10	In situ soil bearing capacity tests	n.r.	20	20.000		400.000
104.11	Sub-soil investigation by specialist Contractor	prov. sum		8,000.000		8000.000
1-3				Carried to summary		20500.000

CONSTRUCTION OF FLYOVER AT

SOHAR

BILL OF QUANTITIES

BILL 1 - PRELIMINARIES

Item No	Description	Unit	Estimated Quantity	Unit Rate		Amount
				R.O.	Bz	
	105 Assistance for Engineer					
105.1	Laborers to assist the Engineer (no x months)	man month	N/A			
	106 Contractor's Compound					
106.1	Mobilization and demobilization of Contractor's facility	lump sum				100000.000
106.2	Maintenance of Contractor's facility	month	22		5,000.000	110000.000
	107 Maintenance and Protection of Traffic					
107.1	Maintenance and protection of traffic	lump sum				100000.000
107.2	Extra over item 107.1 for supply and compaction of subbase on diversions where ordered by the Engineer (10 cm. thick)	cu. m.				
107.3	Extra over item 107.1 for supply and compaction of bituminous basecourse on diversions where ordered by the Engineer (3 cm. thick)	cu. m.				
			1-4	Carried to summary		310000.000

CONSTRUCTION OF FLYOVER AT

SOHAR

BILL OF QUANTITIES

BILL 1 - PRELIMINARIES

Item No	Description	Unit	Estimated Quantity	Unit Rate		Amount	
				R.O.	Bz	R.O.	Bz
	108 Progress Photographs						
108.1	Provision of negatives and 5 sets of photographs (14 photos max.) (Mountable-Size 100 x 150 mm.)	month	22		30.000		660.000
	109 Sign Boards						
109.1	Provision, erection, moving and maintenance of signboard (Wooden Type)	n.r.	2		300.000		600.000
	110 Commemoration Plaque and Opening Ceremony						
110.1	Supply and erection of commemoration plaque (Optional)	n.r.	1		Option		
110.2	Opening ceremony (Optional)	lump sum					
			1-5	Carried to summary			1260.000

CONSTRUCTION OF FLYOVER AT

SOHAR

BILL OF QUANTITIES

BILL 1 - PRELIMINARIES

Item No	Description	Unit	Estimated Quantity	Unit Rate		Amount
				R.O.	Bz	
115.1	115 Compliance with the Tender Documents Allow for all costs and expense for complying with all the conditions and requirements stipulated in the Tender Documents, including all Clause of the Standard Conditions of Contract, which the Tenderer considers have financial implications on his tender and which are not covered separately in the various pay items of the Bill of Quantities					
	Clause No	lump sum				
	Clause No	lump sum				
	Clause No	lump sum				
	Clause No	lump sum				
	Clause No	lump sum				
	Clause No	lump sum				
	Clause No	lump sum				
	Clause No	lump sum				
				1-6	Carried to summary	

CONSTRUCTION OF FLYOVER AT

SOHAR

BILL OF QUANTITIES
BILL 1 - PRELIMINARIES

Item No	Description	Unit	Estimated Quantity	Unit Rate		Amount	
				R.O.	Bz	R.O.	Bz
	SUMMARY						
	Page 1-1					44250.000	
	Page 1-2					19500.000	
	Page 1-3					20500.000	
	Page 1-4					310000.000	
	Page 1-5					1260.000	
	Page 1-6					0.000	
			1-7	To Ground Summary		395510.000	

**CONSTRUCTION OF FLYOVER AT
SOHAR
BILL OF QUANTITIES
BILL 2 - EARTHWORKS**

Item No	Description	Unit	Estimated Quantity	Unit Rate		Amount	
				R.O.	Bz	R.O.	Bz
	200 EARTHWORKS						
	201 Clearing and Grubbing						
201.1	Removal and delivery of trees of 300mm trunk diameter or greater	n.r.	257	15.000		3855.000	
	202 Removal of Structures and Obstructions						
202.1	Removal of existing building (Shop, etc)	n.r.	5	200.000		1000.000	
202.2	Removal of misc. reinforced concrete structures	cu. m.	83	5.000		415.000	
202.3	Removal of pipe culvert (D=0.6,0.75,0.9)	lin.m.	37	2.000		74.000	
202.4	Removal of asphaltic concrete pavement (100 mm thick)	cu. m.	6079	2.000		12158.000	
202.5	Removal of damaged steel safety barrier (Gurdrail)	lin.m.	2434	1.800		4381.200	
		2-1		Carried to summary		21893.200	

**CONSTRUCTION OF FLYOVER AT
SOHAR
BILL OF QUANTITIES
BILL 2 - EARTHWORKS**

Item No	Description	Unit	Estimated Quantity	Unit Rate		Amount	
				R.O.	Bz	R.O.	Bz
202.6	Remove carefully and relocate sign boards and road signs (size)	n.r.	72	3.500		252.000	
202.7	Removal of damaged Irish crossing marker posts	n.r.	N/A	2.500			
202.8	Removal of damaged drainage protection works (gabions, conc. tiles, mortared riprap, dry rip rap)	cu. m.	N/A	3.500			
202.9	Removal of existing fences (wire mesh, chicken wire)	lin.m.	192	1.500		288.000	
202.10	Removal of existing fences (block or masonry wall)	lin.m.	N/A	2.000			
202.11	Removal of existing box culvert (2 x 1 m)	lin.m.	252	5.000		1260.000	
202.12	Removal of existing interlocking tiles	sq. m	2893	1.200		3471.600	
202.13	Removal of existing crush stone	lin.m.	N/A	1.000			
202.14	Removal of existing plain concrete	cu. m.	362	2.000		724.000	
202.15	Removal of Curb Stone	m	6689	1.500		10033.500	
				Carried to summary		16029.100	

**CONSTRUCTION OF FLYOVER AT
SOHAR
BILL OF QUANTITIES
BILL 2 - EARTHWORKS**

Item No	Description	Unit	Estimated Quantity	Unit Rate		Amount	
				R.O.	Bz	R.O.	Bz
203.1	203 Earthworks Excavation Suitable excavation to embankment	cu. m.	33832	0.600		20299.200	
203.2	Suitable excavation to waste	cu. m.	11439	0.300		3431.700	
203.3	Unsuitable excavation to waste	cu. m.	N/A	0.400			
203.4	Borrow excavation to embankment	cu. m.	91820	1.500		137730.000	
203.5	Extra over item 203.1, 2, 3 for excavation under water	cu. m.	N/A	3.000			
206.1	206 Excavation and Backfilling for Structures Structure excavation in soils to a depth of 2m	cu. m.	4890	1.000		4890.000	
206.2	Structure excavation in soils to a depth more than 2m	cu. m.	N/A	1.700			
			2-3	Carried to summary		166350.900	

**CONSTRUCTION OF FLYOVER AT
SOHAR
BILL OF QUANTITIES
BILL 2 - EARTHWORKS**

Item No	Description	Unit	Estimated Quantity	Unit Rate		Amount	
				R.O.	Bz	R.O.	Bz
206.3	Structural excavation in rock to a depth of 2m	cu. m.	N/A	1.100			
206.4	Structural excavation in rock to a depth more than 2m	cu. m.	N/A	2.600			
206.5	Extra over 206.1,2,3,4 for excavation under water	cu. m.	N/A	2.900			
				2-4		Carried to summary	
						0.000	

CONSTRUCTION OF FLYOVER AT
SOHAR
BILL OF QUANTITIES
BILL 2 - EARTHWORKS

Item No	Description	Unit	Estimated Quantity	Unit Rate		Amount
				R.O.	Bz	
	SUMMARY					
	Page 2-1					21883.200
	Page 2-2					16029.100
	Page 2-3					166350.900
	Page 2-4					0.000
				2-5	To Grand Summary	204263.200

CONSTRUCTION OF FLYOVER AT

SOHAR

BILL OF QUANTITIES

BILL 3 - GRANULAR AND STABILIZED SUBBASE, BASE COURSE, STABILIZED SUBGRADE

Item No	Description	Unit	Estimated Quantity	Unit Rate		Amount
				R.O.	Bz	
	300 GRANULAR AND STABILIZED SUBBASE, BASECOURSE AND STABILIZED SUBGRADE					
	302 Granular Subbase					
302.1	Granular subbase (class B) (150 mm thick)	cu. m.	10030	2.000		20060.000
	303 Aggregate Basecourse					
303.1	Aggregate basecourse (class B) (300 mm thick)	cu. m.	2396	3.600		8625.600
303.2	Aggregate basecourse (class B) (250 mm thick)	cu. m.	6474	3.500		22659.000
303.3	Aggregate basecourse (class B) (200 mm thick)	cu. m.	226	3.300		745.800
303.4	Aggregate basecourse (class B) (150 mm thick)	cu. m.	3389	3.000		10167.000
		3-1		Carried to summary		62257.400

**CONSTRUCTION OF FLYOVER AT
 SOHAR
 BILL OF QUANTITIES
 BILL 3 - GRANULAR AND STABILIZED SUBBASE, BASE COURSE, STABILIZED SUBGRADE**

Item No	Description	Unit	Estimated Quantity	Unit Rate		Amount
				R.O.	Bz	
	SUMMARY					62257.400
	Page 3-1					
				3-2	Carried to summary	62257.400

**CONSTRUCTION OF FLYOVER AT
SOHAR
BILL OF QUANTITIES
BILL 4 - BITUMINOUS PAVEMENT**

Item No	Description	Unit	Estimated Quantity	Unit Rate		Amount
				R.O.	Bz	
	400 BITUMINOUS PAVEMENT					
	401 Bituminous Prime Coat and Tack Coat					
401.1	Bituminous prime coat (MC 70)	kg	46086	0.250		11521.500
401.2	Bituminous tack coat (RC 250)	kg	7003	0.300		2100.900
	402 Bituminous Basecourse					
402.1	Bituminous basecourse (class B) 50 mm.thick	cu. m.	13302	22.000		292644.000
402.2	Bituminous basecourse (class B) 100 mm.thick	cu.m.	3501	28.000		98028.000
402.4	Increase or decrease in bituminous content from nominal rate	kg	rate only	0.050		
			4-1	Carried to summary		404294.400

CONSTRUCTION OF FLYOVER AT

SOHAR

BILL OF QUANTITIES

BILL 5 - CONCRETE AND CONCRETE STRUCTURE

Item No	Description	Unit	Estimated Quantity	Unit Rate		Amount	
				R.O.	Bz	R.O.	Bz
	500 CONCRETE AND CONCRETE STRUCTURE						
	504 Concrete for Structure						
504.1	Concrete Class 16/20 (OPC cement) Blinding, Gravity Wall	cu. m.	4390		30.000		131700.000
504.2	Concrete Class A 24/20 for retaining wall, abutment and piers (OPC)	cu.m	11896		35.000		416360.000
504.3	Concrete Class 32/20 for bridge deck, cross beam and joint	cu.m	430		50.000		21500.000
504.4	Cast-in-Situ Concrete Class 24/20 for bridge deck for cantilever	cu.m	1210		38.000		45980.000
						Carried to summary	615540.000

CONSTRUCTION OF FLYOVER AT

SOHAR

BILL OF QUANTITIES

BILL 5 - CONCRETE AND CONCRETE STRUCTURE

Item No	Description	Unit	Estimated Quantity	Unit Rate		Amount
				R.O.	Bz	R.O.
506.1	506 Prestressed Concrete for Bridge Precast pre-stressed bridge beam reinforced concrete class AA40 including all reinforcement tendons tension cable strands approved anchorage points "Ercysinet" system or equal and approved sheaths de-watering pipes grouting in accordance with manufacturers recommendations all complete and as detailed on tender drawings					
	a) PS Box girders (Internal) 35 m long	n.r.	154	3,700.000		569800.000
	b) PS Box girders (External) 35 m long	n.r.	44	4,100.000		180400.000
				5-2	Carried to summary	750200.000

CONSTRUCTION OF FLYOVER AT

SOHAR

BILL OF QUANTITIES

BILL 5 - CONCRETE AND CONCRETE STRUCTURE

Item No	Description	Unit	Estimated Quantity	Unit Rate		Amount
				R.O.	Bz	
509.1	509 Reinforcing Steel High yield steel bar reinforcement of any diameter	tone	1014	285.000		288990.000
509.2	Mild steel bar reinforcement of any diameter	tone	N/A	300.000		
509.3	Mesh reinforcement of any size	tone	N/A	400.000		
				5-3		Carried to summary
						288990.000

CONSTRUCTION OF FLYOVER AT

SOHAR

BILL OF QUANTITIES

BILL 5 - CONCRETE AND CONCRETE STRUCTURE

Item No	Description	Unit	Estimated Quantity	Unit Rate		Amount	
				R.O.	Bz	R.O.	Bz
	SUMMARY						
	Page 5-1					615540.000	
	Page 5-2					750200.000	
	Page 5-3					288990.000	
				5-4	Carried to summary		1654730.000

CONSTRUCTION OF FLYOVER AT
SOHAR

BILL OF QUANTITIES

BILL 6 - STRUCTURAL STEEL AND OTHER METALWORK

Item No	Description	Unit	Estimated Quantity	Unit Rate		Amount	
				R.O.	Bz	R.O.	Bz
600	STRUCTURAL STEEL AND OTHER METALWORK						
603	Bridge Parapets						
603.1	Bridge Handrails (Aluminum) (H=500 mm)	lin.m.	2313		45.000		104085.000
				6-1	Carried to summary		104085.000

CONSTRUCTION OF FLYOVER AT

SOHAR

BILL OF QUANTITIES

BILL 6 - STRUCTURAL STEEL AND OTHER METALWORK

Item No	Description	Unit	Estimated Quantity	Unit Rate		Amount	
				R.O.	Bz	R.O.	Bz
	SUMMARY						
	Page 6-1						104085.000
			6-2	Carried to summary		104085.000	

CONSTRUCTION OF FLYOVER AT

SOHAR

BILL OF QUANTITIES

BILL 8 - DRAINAGE AND SERVICE DUCTS

Item No	Description	Unit	Estimated Quantity	Unit Rate		Amount	
				R.O.	Ez	R.O.	Ez
800 DRAINAGE AND SERVICE DUCTS							
801 Pipe Culverts							
801.1	Reinforced concrete pipe culvert (600 mm. dia.)	lin.m	154		35.000		5390.000
801.2	Reinforced concrete pipe culvert (750 mm. dia.)	lin.m	N/A		45.000		
802 Reinforced Concrete Box Culverts, Box Culverts and Pipe Culverts Headwalls, Wingwalls and Aprons (SRP cement)							
802.1	Concrete (Class 28/20), Box Culverts, Box Culverts and Pipe Culverts Headwalls, Wingwalls, Wingwalls and Aprons (SRP Cement), all complete and as detailed on drawing						
802.1.1	Box culvert 2 x 1 m 1 cell	lin.m	86		60.000		5160.000
802.1.2	Box culvert 2 x 1 m 2 cell	lin.m	241		110.000		26510.000
802.1.3	Box culvert 2 x 1 m 12 cell	lin.m	N/A		650.000		
				8-1	Carried to summary		37060.000

CONSTRUCTION OF FLYOVER AT

SOHAR

BILL OF QUANTITIES

BILL 8 - DRAINAGE AND SERVICE DUCTE

Item No	Description	Unit	Estimated Quantity	Unit Rate		Amount	
				R.O.	Bz	R.O.	Bz
	804 Catch Basins, Catch Pits, Manholes, Curb Inlets, Ditch Inlets and Outlets						
	Reinforced concrete catch pit comprising excavation, backfilling, disposal, 100 mm thick plain in-situ sulphate resisting concrete class (12/20) binding, concrete class (24/20) for structure, all complete and as detailed on drawing						
804.1	Catch Pits 1 x 1 x 2 m	n.r.	6	180.000		1080.000	
	Reinforced concrete gullies comprising excavation, backfilling, disposal, 150 mm bed and walls of reinforced sulphate resisting concrete class (24/20) all complete and as detailed on drawings						
804.2	Gullies 300 x 300 mm	lin.m	1149	25.000		28725.000	
				8-2	Carried to summary		29805.000

**CONSTRUCTION OF FLYOVER AT
SOHAR**

**BILL OF QUANTITIES
BILL 8 - DRAINAGE AND SERVICE DUCTS**

Item No	Description	Unit	Estimated Quantity	Unit Rate		Amount
				R.O.	Bz	
	805 Water proofing for structure					
805.1	Waterproofing membrane	sq.m.	N/A	1.800		
805.2	Mastic asphalt waterproofing	sq.m.	N/A	8.000		
805.3	Bituminous paint	sq.m.	3000	0.350		1050.000
	807 Service Ducts					
807.1	Service duct (A.C. 150 mm dia. -1 way with concrete surround), including duct markers	lin.m.	N/A	2.200		
807.1.1	Service duct (A.C. 150 mm dia. -2 way with concrete surround), including duct markers	lin.m.	388	4.000		1552.000
807.2	Extra over for excavation in rock for service ducts	cu.m.	N/A			
				8-3	Carried to summary	2602.000

CONSTRUCTION OF FLYOVER AT

SOHAR

BILL OF QUANTITIES

BILL 8 - DRAINAGE AND SERVICE DUCTS

Item No	Description	Unit	Estimated Quantity	Unit Rate		Amount
				R.O.	Bz	
	SUMMARY					
	Page 8-1					37060.000
	Page 8-2					29805.000
	Page 8-3					2602.000
				8-4	Carried to summary	69467.000

CONSTRUCTION OF FLYOVER AT

SOHAR

BILL OF QUANTITIES

BILL 9 - SLOPE PROTECTION AND STABILISATION

Item No	Description	Unit	Estimated Quantity	Unit Rate		Amount	
				R.O.	Bz	R.O.	Bz
900	SLOPE PROTECTION AND STABILISATION						
901	Riprap						
901.2	Mortared stone riprap (Class A), in Irish Crossing	cu.m.	N/A		13.000		
901.2.1	Mortared stone riprap (Class A), other than Irish Crossing	cu.m.	1099		16.000		17584.000
				9-1	Carried to summary		17584.000

CONSTRUCTION OF FLYOVER AT

SOHAR

BILL OF QUANTITIES

BILL 9 - SLOPE PROTECTION AND STABILISATION

Item No	Description	Unit	Estimated Quantity	Unit Rate		Amount
				R.O.	Bz	
	SUMMARY					17584.000
	Page 9-1					
				9-2	Carried to summary	17584.000

CONSTRUCTION OF FLYOVER AT
SOHAR
BILL OF QUANTITIES
BILL 10 - PILING

Item No	Description	Unit	Estimated Quantity	Unit Rate		Amount	
				R.O.	Bz	R.O.	Bz
1000	PILING						
1001	Piling						
1001.1	Reverse Piling Method or equivalent Diameter = 600 mm including setting up of piles, driving and testing, all complete and as detailed on tender drawings	lin.m	11751		30.000		352530.000
			10-1	Carried to summary			352530.000

CONSTRUCTION OF FLYOVER AT
SOHAR
BILL OF QUANTITIES
BILL 10 - PILING

Item No	Description	Unit	Estimated Quantity	Unit Rate		Amount	
				R.O.	Bz	R.O.	Bz
	SUMMARY						
	Page 10-1						352530.000
		10-2				Carried to summary	352530.000

CONSTRUCTION OF FLYOVER AT

SOHAR

BILL OF QUANTITIES

BILL 11 - BRIDGE BEARINGS, EXPANSION JOINT, JOINTS SEAL AND FILLERS

Item No	Description	Unit	Estimated Quantity	Unit Rate		Amount	
				R.O.	Bz	R.O.	Bz
	1100 BRIDGE BEARINGS, EXPANSION JOINT, JOINTS SEALS AND FILLERS						
	1101 Bridge Bearings						
1101.1	Synthetic Rubber Shoe 460 x 360 x 80 mm including anchor bar, cap, filler reinforcing bar, spiral bar and shrinkage mortar	n.r.	396		40.000		15840.000
	1102 Bridge Expansion Joints						
1102.1	Bridge expansion joint Movement Range W=50 mm	m	44		150.000		6600.000
1102.1.1	Bridge expansion joint Movement Range W=100 mm	m	176		280.000		49280.000
			11-1		To Grand Summary		71720.000

CONSTRUCTION OF FLYOVER AT

SOHAR

BILL OF QUANTITIES

BILL 11 - BRIDGE BEARINGS, EXPANSION JOINT, JOINTS SEAL AND FILLERS

Item No	Description	Unit	Estimated Quantity	Unit Rate		Amount	
				R.O.	Bz	R.O.	Bz
	SUMMARY						
	Page 11-1						71720.000
			11-2	To Grand Summary			71720.000

CONSTRUCTION OF FLYOVER AT
SOHAR

BILL OF QUANTITIES
BILL 12 - SIDEWALKS, PAVED AREAS AND CURBS

Item No	Description	Unit	Estimated Quantity	Unit Rate		Amount	
				R.O.	Bz	R.O.	Bz
	1200 SIDE WALKS, PAVED AREAS AND CURBS						
	1201 Sidewalks						
1201.1	Interlocking Block Pavement including granular Basecourse t = 150 mm	sq. m	10030		4.000		40120.000
	1202 Curbs						
1202.1.1	Curb 100 x 200 (Mountable)	lin. m.	8528		3.500		29848.000
1202.1.2	Curb 150 x 350 (Mountable)	lin. m	5588		5.000		27940.000
1202.1.3	Curb 150 x 350 (None mountable)	lin. m.	80		4.000		320.000
	All curbs are hydraulically pressed sulphate resisting concrete class A (45/20) bedded jointed and pointed in 10 mm thick sand cement grout. including all necessary excavation, backfill, dispose, formwork and all necessary works for complete						
		12-1		Carried to summary			98228.000

CONSTRUCTION OF FLYOVER AT

SOHAR

BILL OF QUANTITIES

BILL 12 - SIDEWALKS, PAVED AREAS AND CURBS

Item No	Description	Unit	Estimated Quantity	Unit Rate		Amount
				R.O.	Bz	
	SUMMARY					98228.000
	Page 12-1					
				12-2	Carried to summary	98228.000

CONSTRUCTION OF FLYOVER AT

SOHAR

BILL OF QUANTITIES
BILL 13 - SAFETY BARRIERS, DELINEATORS AND FENCES

Item No	Description	Unit	Estimated Quantity	Unit Rate		Amount
				R.O.	Bz	
1300	SAFETY BARRIERS, DELINEATORS AND FENCE					
1301	Corrugated Steel Beam Safety Barrier					
1301.1.1	Safety barrier beam (Type-A) including posts and end anchor	lin.m.	N/A	12.000		
1301.1.2	Safety barrier beam (Type-C) including posts and end anchor	lin.m	1774	13.000		23062.000
1302	Reflectorised Markers for Safety Barriers					
1303.1	Reflectorised markers attached to guardrail	n.r.	88	8.000		704.000
1303.2	Reflectorised markers attached to concrete	n.r.	N/A			
				13-1	Carried to summary	23766.000

CONSTRUCTION OF FLYOVER AT

SOHAR

BILL OF QUANTITIES

BILL 13 - SAFETY BARRIERS, DELINEATORS AND FENCES

Item No	Description	Unit	Estimated Quantity	Unit Rate		Amount
				R.O.	Bz	
	SUMMARY					23766.000
	Page 13-1					
					Carried to summary	23766.000
		13-2				

CONSTRUCTION OF FLYOVER AT

SOHAR

BILL OF QUANTITIES

BILL 14 - HIGHWAY SIGNS AND ROAD MARKING

Item No	Description	Unit	Estimated Quantity	Unit Rate		Amount	
				R.O.	Bz	R.O.	Bz
	1400 HIGHWAY SIGNS AND ROAD MARKING						
	1401 Highway Signs						
1401.1	Highway sign, triangular, size (900 mm)	n.r.	17		40.000		680.000
1401.2	Highway sign, circular, diameter (900 mm)	n.r.	17		50.000		850.000
1401.3	Highway sign, rectangular, (600 x 2400, 750 x 1400 mm)	n.r.	12		200.000		2400.000
1401.4	Highway sign, square	n.r.	17		50.000		850.000
1401.6.1	Overhead sign post and support assembling cantilever	n.r.	4		2,000.000		8000.000
1401.6.2	Overhead sign post and support assembling gantry	n.r.	2		10,000.000		20000.000
			14-1	Carried to summary			32780.000

CONSTRUCTION OF FLYOVER AT

SOHAR

BILL OF QUANTITIES

BILL 14 - HIGHWAY SIGNS AND ROAD MARKING

Item No	Description	Unit	Estimated Quantity	Unit Rate		Amount	
				R.O.	Bz	R.O.	Bz
1402.1	1402 Road Markings Traffic lines (Mechanically sprayed)	sq. m	2501	1.500		3751.500	
1402.2	Special markings (Hand sprayed)	sq. m	1074	5.000		5370.000	
1402.3	Curb painting (Black and yellow)	sq. m	2985	1.600		4776.000	
1402.4	Reflecting road studs type red	n.r.	1091	4.410		4811.310	
			14-2	Carried to summary		18708.810	

CONSTRUCTION OF FLYOVER AT

SOHAR

BILL OF QUANTITIES

BILL 14 - HIGHWAY SIGNS AND ROAD MARKING

Item No	Description	Unit	Estimated Quantity	Unit Rate		Amount	
				R.O.	Bz	R.O.	Bz
	SUMMARY						
	Page 14-1					32780.000	
	Page 14-2					18708.810	
				14-3	To Grand Summary	51488.810	

CONSTRUCTION OF FLYOVER AT

SOHAR

BILL OF QUANTITIES

BILL 15 - ELECTRICAL INSTALLATION

Item No	Description	Unit	Estimated Quantity	Unit Rate		Amount
				R.O.	Bz	
	1500 ELECTRICAL INSTALLATION					
	1502 Medium Voltage Switching Stations	prov sum				50000.000
1502.1	Medium Voltage Switching Stations	n.r.				
	1503 Package Sub-stations					
1503.1	Package sub-station	n.r.				
	1504 Package Medium Voltage Switching Stations					
1504.1	Packing medium voltage switching station	n.r.				
				15-1	Carried to summary	50000.000

CONSTRUCTION OF FLYOVER AT

SOHAR

BILL OF QUANTITIES

BILL 15 - ELECTRICAL INSTALLATION

Item No	Description	Unit	Estimated Quantity	Unit Rate		Amount	
				R.O.	Bz	R.O.	Bz
	1505 33kV and 11kV Pole Mounted Transformer Stations						
1505.1	33kV pole mounted transformer station	n.r.					
1505.2	11kV pole mounted transformer station	n.r.					
	1506 Feeder Pillars						
1506.1	Feeder pillar	n.r.					
	1507 Cables						
1507.1	Cable (type) (size)	lin.m.					
				15-2	Carried to summary		

CONSTRUCTION OF FLYOVER AT

SOHAR

BILL OF QUANTITIES

BILL 15 - ELECTRICAL INSTALLATION

Item No	Description	Unit	Estimated Quantity	Unit Rate		Amount
				R.O.	Bz	
	1508 Road Lighting Masts and Column					
1508.1	High mast assembly (type) (height)	n.r.				
1508.2	Lighting columns (type) (number of arms) (Height)	n.r.				
	1509 Traffic Sign Illumination					
1509.1	Overhead sign lighting (gantry or cantilever ref no)	n.r.				
1509.2	Roadside sign lighting (sign ref no)	n.r.				
	1510 Recessed Lighting					
1510.1	Recessed lighting (type)	n.r.				
				15-3	Carried to summary	

CONSTRUCTION OF FLYOVER AT

SOHAR

BILL OF QUANTITIES

BILL 15 - ELECTRICAL INSTALLATION

Item No	Description	Unit	Estimated Quantity	Unit Rate		Amount
				R.O.	Bz	
	1511 Traffic Signals					
1511.1	Traffic signal installation (location)	lump sum				
	1512 Earthing					
1512.1	Twin rod earthing installation (location)	n.r.				
1512.2	Single rod earthing installation (location)	n.r.				
				15-4	Carried to summary	

CONSTRUCTION OF FLYOVER AT
SOHAR
BILL OF QUANTITIES
BILL 15 - ELECTRICAL INSTALLATION

Item No	Description	Unit	Estimated Quantity	Unit Rate		Amount
				R.O.	Bz	
	SUMMARY					
	Page 15-1					
	Page 15-2					
	Page 15-3					
	Page 15-4					
	Provisional Sum	Prov Sum				50000.000
				15-5	To Grand Summary	50000.000

CONSTRUCTION OF FLYOVER AT
SOHAR
BILL OF QUANTITIES
BILL 17 - UTILITIES

Item No	Description	Unit	Estimated Quantity	Unit Rate		Amount	
				R.O.	Bz	R.O.	Bz
1700	UTILITIES						
1701	Utilities						
1701.1	Remove carefully and relocate low voltage electric poles, telephone poles, including removal of lines, excavation, backfilling and other related works as directed by the Engineer	prov sum				50000	0.000
1701.1.1	Protect of existing utilities crossing the roadway as shown in Drawing, or as directed by the Engineer	lin. m.					
				17-1	Carried to summary		50000.000

CONSTRUCTION OF FLYOVER AT

SOHAR

BILL OF QUANTITIES

BILL 17 - UTILITIES

Item No	Description	Unit	Estimated Quantity	Unit Rate		Amount
				R.O.	Bz	
	SUMMARY					
	Page 17-1	Prov Sum				50000.000
				17-2	To Grand Summary	50000.000

CONSTRUCTION OF FLYOVER AT

SOHAR

**BILL OF QUANTITIES
BILL 19 - DAYWORKS**

Item No	Description	Unit	Estimated Quantity	Unit Rate		Amount	
				R.O.	Bz	R.O.	Bz
A. WAGES							
These include proper wages, all used allowance, medical expense and all other charges provided for by local laws							
A.1	Supervisor	hour	100		4.000		400.000
A.2	Site Surveyor	hour	1000		3.500		3500.000
A.3	Foreman	hour	480		3.200		1536.000
A.4	1st Class Operator	hour	480		1.100		528.000
A.5	2nd Class Operator	hour	100		0.950		95.000
A.6	Mechanic	hour	190		1.000		190.000
A.7	Driver	hour	480		1.000		480.000
A.8	Skilled Labour	hour	1000		0.650		650.000
A.9	Semi Skilled Labour	hour	1000		0.600		600.000
			19-1	Carried to Summary		7979.000	

CONSTRUCTION OF FLYOVER AT

SOHAR

BILL OF QUANTITIES

BILL 19 - DAYWORKS

Item No	Description	Unit	Estimated Quantity	Unit Rate		Amount
				R.O.	Bz	
A.10	Ordinary Labour	hour	1000	0.550		550.000
A.11	Mason	hour	200	0.650		130.000
A.12	Painter	hour	100	0.750		75.000
A.13	Carpenter	hour	200	0.650		130.000
A.14	Steel Fitter	hour	100	0.650		65.000
A.15	Electrician	hour	20	0.850		17.000
				Carried to Summary		967.000

**CONSTRUCTION OF FLYOVER AT
SOHAR
BILL OF QUANTITIES
BILL 19 - DAYWORKS**

Item No	Description	Unit	Estimated Quantity	Unit Rate		Amount	
				R.O.	Ez	R.O.	Ez
B. OPERATING EQUIPMENT ON SITE							
These rate include : fuel and lubricants cost, charges for depreciation interest, repairs, maintenance, spare parts, tyres, insurance, etc. Payment will not be made for mechanics or maintenance time which shall be include in and spread over the rates.							
B.1	Motorgrader from 100 hp up to 120 hp	hour	5		9.500		47.500
B.2	Motorgrader from 120 hp up to 150 hp	hour	11		11.500		126.500
B.3	Tractor from 60 to 100 hp	hour	5		4.000		20.000
B.4	Bulldozer with ripper from 100 hp to 150 hp	hour	5		7.000		35.000
B.5	Bulldozer with ripper from 150 hp to 200 hp	hour	7		8.000		56.000
B.6	Bulldozer with ripper from 200 hp to 250 hp	hour	6		18.000		108.000
B.7	Bulldozer with ripper from 250 hp to 300 hp	hour	4		19.500		78.000
B.8	Wheel tractor up to 50 hp	hour	10		4.000		40.000
				19-3	Carried to Summary		511.000

**CONSTRUCTION OF FLYOVER AT
SOHAR
BILL OF QUANTITIES
BILL 19 - DAYWORKS**

Item No	Description	Unit	Estimated Quantity	Unit Rate		Amount	
				R.O.	Bz	R.O.	Bz
B.9	Wheel tractor over 50 hp	hour	10	7.000		70.000	
B.10	Motor scraper capacity up to 18 cu.m.	hour	10	19.000		190.000	
B.11	Motor scraper capacity from 18 to 24 cu.m.	hour	10	19.000		190.000	
B.12	Sheeps foot roller, from 5 tonnes to 10 tonnes	hour	10	5.000		50.000	
B.13	Grid roller	hour	4	7.000		28.000	
B.14	Vibratory compactor with prime mover up to 5 tonnes	hour	4	5.000		20.000	
B.15	Vibratory compactor with prime mover from 5 to 10 tonnes	hour	4	7.000		28.000	
B.16	Pneumatic compactor with prime mover from 30 to 50 tonnes	hour	4	7.000		28.000	
B.17	Pneumatic self-propelled rollers from 15 to 20 tonnes	hour	8	4.500		36.000	
B.18	Tandem roller up to 8 tonnes	hour	24	4.500		108.000	
B.19	Tandem roller from 8 to 12 tonnes	hour	8	5.000		40.000	
			19-4	Carried to Summary		788.000	

CONSTRUCTION OF FLYOVER AT

SOHAR

BILL OF QUANTITIES
BILL 19 - DAYWORKS

Item No	Description	Unit	Estimated Quantity	Unit Rate		Amount	
				R.O.	Bz	R.O.	Bz
B.20	Triaxle roller from 10 to 15 tonnes	hour	24	5.000		120.000	
B.21	Light frog-rammer 0.1 tonne	hour	20	0.500		10.000	
B.22	Heavy frog-rammer 0.5 tonne	hour	20	0.700		14.000	
B.23	Wheel loader 1.2 to 1.6 cu.m.	hour	20	9.500		190.000	
B.24	Wheel loader 1.6 to 2.0 cu.m.	hour	20	10.000		200.000	
B.25	Wheel loader 2.0 to 2.5 cu.m.	hour	20	11.000		220.000	
B.26	Excavator up to 0.8 cu.m.	hour	15	5.500		82.500	
B.27	Excavator from 0.8 to 1.2 cu.m.	hour	15	7.500		112.500	
B.28	Bituminous mixing plant with batching apparatus up to 80 t/h.	hour	5	18.000		90.000	
B.29	Bituminous mixing plant with batching apparatus from 80 to 150 t/h.	hour	5	23.000		115.000	
B.30	Finisher up to 80 t/h.	hour	10	9.000		90.000	
			19-5	Carried to Summary		1244.000	

**CONSTRUCTION OF FLYOVER AT
SOHAR
BILL OF QUANTITIES
BILL 19 - DAYWORKS**

Item No	Description	Unit	Estimated Quantity	Unit Rate		Amount	
				R.O. Bz	Bz	R.O. Bz	Bz
B.31	Finisher from 80 t/h to 120 t/h.	hour	10	10.000		100.000	
B.32	Bitumen sprayer up to 6 tonnes	hour	10	5.000		50.000	
B.33	Tanker truck up to 6 cu.m.	hour	15	5.000		75.000	
B.34	Dump truck up to 10 tonnes	hour	17	5.500		93.500	
B.35	Dump truck from 10 to 15 tonnes	hour	20	6.000		120.000	
B.36	Screening plant from 80 to 100 t/h.	hour	5	16.000		80.000	
B.37	Crushing plant from 40 to 60 t/h.	hour	5	20.000		100.000	
B.38	Crushing plant with primary and secondary from 60 to 100 t/h.	hour	5	30.000		150.000	
B.39	Air compressor up to 6000 l/m.	hour	15	1.500		22.500	
B.40	Air compressor over 6000 l/m.	hour	15	2.000		30.000	
B.41	Mechanical broom	hour	7	4.000		28.000	
			19-6	Carried to Summary		849.000	

CONSTRUCTION OF FLYOVER AT

SOHAR

BILL OF QUANTITIES

BILL 19 - DAYWORKS

Item No	Description	Unit	Estimated Quantity	Unit Rate		Amount
				R.O.	Bz	
B.42	Power water pump	hour	118	0.700		82,600
B.43	Steel cutting machine	hour	5	0.800		4,000
B.44	Steel bending machine	hour	5	1.200		6,000
B.45	Belt conveyor	hour	5	7.000		35,000
B.46	Concrete mixer up to 0.5 cu.m.	hour	10	2.000		20,000
B.47	Concrete mixer over 0.5 cu.m.	hour	12	4.000		48,000
B.48	Automatic concrete batch plant without mixing drum	hour	5	7.500		37,500
B.49	Transmixer up to 5 cu.m.	hour	10	6.500		65,000
B.50	Concrete vibrators	hour	59	0.150		8,850
B.51	Crane up to 5 tonnes.	hour	9	4.500		40,500
B.52	Crane with broom and jib 5 to 10 tonnes	hour	7	8.000		56,000
			19-7	Carried to Summary		403,450

**CONSTRUCTION OF FLYOVER AT
SOHAR
BILL OF QUANTITIES
BILL 19 - DAYWORKS**

Item No	Description	Unit	Estimated Quantity	Unit Rate		Amount	
				R.O.	Bz	R.O.	Bz
B.53	Crane with boom and jib over 10 tonnes	hour	7	11.000		77.000	
B.54	Generator 60 kw	hour	5	1.500		7.500	
B.55	Generator 75 kw	hour	5	1.800		9.000	
B.56	Drilling equipment	hour	5	0.200		1.000	
B.57	Generator 100 kw	hour	5	3.000		15.000	
B.58	Generator 150 kw	hour	5	4.000		20.000	
B.59	Generator 200 kw	hour	5	5.000		25.000	
B.60	Gravel strewer	hour	5	10.000		50.000	
			19-8	Carried to Summary			204.500

CONSTRUCTION OF FLYOVER AT

SOHAR

**BILL OF QUANTITIES
BILL 19 - DAYWORKS**

Item No	Description	Unit	Estimated Quantity	Unit Rate		Amount	
				R.O.	Bz	R.O.	Bz
C. MATERIALS							
These rates include all the charges for the supply of the materials, loading, transport to site, unloading and stores as well as all the charges provided for in the General and Special Specifications and in the Contract.							
C.1	Aggregate for granular sub-base course in accordance with the General and Special Specifications, in place as specified.	cu.m.	50	1.000		50.000	
C.2	Aggregate for granular aggregate base course in accordance with the General and Special Specifications, in place as specified.	cu.m.	25	2.000		50.000	
C.3	Aggregate for bituminous base course in accordance with the General and Special Specifications, near the asphalt plant, in bulk	cu.m.	50	2.000		100.000	
C.4	Fine aggregate for concrete, in accordance with the General and Special Specifications, in place, in bulk	cu.m.	25	2.000		50.000	
C.5	Coarse aggregates for concrete, in accordance with the General and Special specifications, in place, in bulk	cu.m.	50	1.200		60.000	
				19-9	Carried to Summary	310.000	

**CONSTRUCTION OF FLYOVER AT
SOHAR
BILL OF QUANTITIES
BILL 19 - DAYWORKS**

Item No	Description	Unit	Estimated Quantity	Unit Rate		Amount	
				R.O.	Bz	R.O.	Bz
C.6	Stone for drainage, masonry and slope protection, in accordance with the General and Special Specifications in place	cu.m.	25	2.500		62.500	
C.7	Asphalt cement, grade 60-70 on site	ton	1	44.000		44.000	
C.8	Asphalt cement, grade 50-60 on site	ton	1	48.000		48.000	
C.9	Emulsified asphalt, grade RS-1 on site	ton	1	70.000		70.000	
C.10	Outback asphalt, MC and RC type on site	ton	1	75.000		75.000	
C.11	Portland cement on site	ton	1	25.000		25.000	
C.12	Deformed billet steel bars, AASHTO M 31 grade 60 (High Yield) of any diameter	ton	1	135.000		135.000	
C.13	Deformed billet steel bars AASHTO M 31 grade 40 (Mild) of any diameter	ton	1	135.000		135.000	
C.14	Highway signs	sq.m.	3	32.000		96.000	
C.15	Highway sign supports - 1 post	nr.	4	15.000		60.000	
			19-10	Carried to Summary		750.500	

**CONSTRUCTION OF FLYOVER AT
SOHAR
BILL OF QUANTITIES
BILL 19 - DAYWORKS**

Item No	Description	Unit	Estimated Quantity	Unit Rate		Amount	
				R.O.	Bz	R.O.	Bz
C.16	Highway sign supports - 2 post	nr.	2	20.000		40.000	
C.17	Timber plank, on site	cu.m.	2	105.000		210.000	
C.18	Timber props, on site	cu.m.	2	105.000		210.000	
C.19	Wire mesh gabions, on site	ton	0.5	320.000		160.000	
C.20	Explosive, on site	kg.	5	20.000		100.000	
C.21	Gas oil, on site	litre	100	0.080		8.000	
C.22	Gasoline, on site	litre	500	0.120		60.000	
C.23	Lubricant	kg.	5	0.300		1.500	
			19-11	Carried to Summary		789.500	

CONSTRUCTION OF FLYOVER AT
SOHAR
BILL OF QUANTITIES
BILL 19 - DAYWORKS

Item No	Description	Unit	Estimated Quantity	Unit Rate		Amount	
				R.O.	Bz	R.O.	Bz
	SUMMARY						
	Page 19-1					7979.000	
	Page 19-2					967.000	
	Page 19-3					511.000	
	Page 19-4					788.000	
	Page 19-5					1244.000	
	Page 19-6					849.000	
	Page 19-7					403.450	
	Page 19-8					204.500	
	Page 19-9					310.000	
	Page 19-10					750.500	
	Page 19-11					789.500	
				19-12	To Grand Summary		14795.950

BILL OF QUANTITIES

GRAND SUMMARY

Bill No	Description	Amount
		R.O.
1	Preliminaries	395510.000
2	Earthworks	204263.200
3	Granular and stabilized subbase, basecourse and stabilized subgrade	62257.400
4	Bituminous Pavement	492102.400
5	Concrete and concrete structure	1654730.000
6	Structural steel and other metal work	104085.000
7	Paint	N/A
8	Drainage and service ducts	69467.000
9	Slope protection and stabilization	17584.000
10	Piling	352530.000
11	Bridge bearing, expansion joints, joint seals and fillers	71720.000
12	Sidewalks, paved areas and kerbs	98228.000
13	Safety barriers, delineators and fences	23766.000
14	Highway signs and road marking	51488.810
15	Electrical installations	50000.000
16	Landscape and irrigation	N/A
17	Utilities	50000.000
18	Plant and Equipment	N/A
19	Dayworks	14795.950
	Sub-total	3712527.760
	Contingencies (10%)	371252.776
	TOTAL CONTRACT VALUE (R.O)	4083780.536

(IN WORDS, THE TOTAL TENDER VALUE IS RIJAL OMANI)

NAME OF TENDERER

DATE

SIGNATURE OF TENDERER

