

Option Analysis			Year 0	Year 1	Year 2	Year 3	Year 4	Year 5 + (Resale Vaule)	Total
O&M Qatar South Performance Based Project (5 years)									
Renting Cost of Equipment	Quantity	Months	Rate						
Asphalt Paver	1	60	91,000	1,092,000	1,092,000	1,092,000	1,092,000	1,092,000	5,460,000
Mini Asphalt Paver	1	60	91,000	1,092,000	1,092,000	1,092,000	1,092,000	1,092,000	5,460,000
Double Drum Steel Roller	2	60	20,800	499,200	499,200	499,200	499,200	499,200	2,496,000
Tyre Roller	2	60	20,800	499,200	499,200	499,200	499,200	499,200	2,496,000
Mini Milling Machine	1	60	117,000	1,404,000	1,404,000	1,404,000	1,404,000	1,404,000	7,020,000
(A) Total Rental Cost				4,586,400	4,586,400	4,586,400	4,586,400	4,586,400	22,932,000
Buying of Asphalt Equipments									
Cost of Purchase & Resale value	Quantity		Year 0	Year 1	Year 2	Year 3	Year 4	Year 5 + (Resale Vaule)	Total
Asphalt Paver with 2 set of Multiplex	1		(1,782,000)					534,500	(1,247,400)
Mini Asphalt Paver	1		(745,000)					149,000	(596,000)
Double Drum Steel Roller	2		(620,000)					186,000	(434,000)
Tyre Roller	2		(684,000)					205,200	(478,800)
Mini Milling Machine	1		(880,000)					264,000	(616,000)
Manpower			(606,324)	(606,324)	(665,253)	(665,253)	(665,253)	(3,208,406)	
Insurance			(85,740)	(77,166)	(69,450)	(62,505)	(56,254)	(351,115)	
Inspection & Istamara			(10,500)	(10,500)	(10,500)	(10,500)	(10,500)	(52,500)	
Depreciation			(674,440)	(674,440)	(674,440)	(674,440)	(674,440)	(3,372,200)	
Repairs & Maintenance									
Routine Maintenance			(92,251)	(187,877)	(206,664)	(227,331)	(250,064)	(964,186)	
Corrective Maintenance			(26,000)	(85,000)	(140,000)	(225,000)	(320,000)	(796,000)	
(B) Total cost on buying including depreciation			(4,711,000)	(1,495,255)	(1,641,306)	(1,766,307)	(1,865,028)	(637,711)	(12,116,607)
Cashflow Statement									
Net Savings (A - B)			(4,711,000)	3,091,145	2,945,094	2,820,093	2,721,372	3,948,689	10,815,393
Depreciation				674,440	674,440	674,440	674,440	674,440	3,372,200
Cash In flow									14,187,593
Purchase Cost			(4,711,000)						
Net Cashflow			(4,711,000)	3,765,585	3,619,534	3,494,533	3,395,812	4,623,129	14,187,593
Discounting Factor		9%	1.000	0.92	0.84	0.77	0.71	0.65	
Discounted Cash Flow			(4,711,000)	3,454,665	3,046,489	2,698,421	2,405,679	3,004,717	9,898,971
Net Present Value (NPV)			9,898,971						
Internal Rate of Return (IRR)			73.49%						
Assumptions / Data Justification									
1. ACC has been awarded with O&M of Qatar South wherein their is a requirement of having all vehicles / equipments with age less than five years. Hence, the asphalt equipment which are required for executing all roads are required to be purchased with latest year of manufacture to fulfill the requirement of the project as all the existing asphalt equipment are more than five years old. Further, ACC does not own any Mini Milling Machine and Mini Paver which are essential for executing the maintenance works under this project with minimal occupancy of roads as per the requirement.									
2. The existing Asphalt equipments have been assumed to be used for executing road works in all other Ashghal & Non-Ashghal Projects.									
3. Used equipment within the age requirement is not available currently and hence purchase of new equipment have been considered.									
4. This purchase of the Asphalt Equipments shall be within the overall budget of QR 4.77 MN (for various similar equipments) budgeted under the project. (Refer annexure 1)									
5. Operating Period = Five Years									
6. Maintenance Cost includes cost of Oil, Greasing, Labour, Tyres and other maintenance cost. The cost has been assumed to be escalated by 10% every year.									

Md. Slobab

Senior Manager Finance

General Manager

ZAD Finance

Chief Financial Officer

Chief Executive Officer