

**Construction of Lara Dandokai Weir, District Bajaur**

**Bill of Quantities**

**SUMMARY**

<b>Bill No.</b>	<b>Description</b>	<b>Cost (PKR)</b>
1	Diversion and Protection of Works from Floods	
2	Weir	
3	Irrigation Channel	
4	On-farm Water Management Works	
5	General Items	
6	EMP Implementation Cost	
<b>Total Project Cost</b>		
<b>Total Project Cost (In Words):</b>		

Construction of Lara Dandokai Weir, District Bajaur

Bill of Quantities

Bill No.1 - Diversion Arrangements

Item	Item Description	Unit	Quantity	Unit Rate (Rs) in Figures	Amount (Rs.) in Figures	Amount (Rs) in Words
1.1	Diversion and Protection of Works from Floods	Provisional Sum	1			
<b>Total Cost for Bill No.1</b>						

**Construction of Lara Dandokai Weir, District Bajaur**

**Bill of Quantities**

**Bill No.2 - Weir**

<b>Item</b>	<b>Item Description</b>	<b>Unit</b>	<b>Quantity</b>	<b>Unit Rate (Rs) in Figures</b>	<b>Amount (Rs.) in Figures</b>	<b>Amount (Rs) in Words</b>
2.1	Provide and weave GI wire netting for wire crates 4"x4" mesh: 8 SWG wire.	sq.m	360.00			
2.2	Providing and Laying stone pitching/filling, dry hand packed in pitching & aprons	cu.m	60.00			
<b>Total Cost for Bill No.2</b>						

**Construction of Lara Dandokai Weir, District Bajaur**

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**Bill No.3 - Irrigation Channels**

Item	Item Description	Unit	Quantity	Unit Rate (Rs) in Figures	Amount (Rs.) in Figures	Amount (Rs) in Words
3.1	Excavation for core trench of Dam Embankment/Spillway/Intake & Outlet Structure and Irrigation System upto a minimum depth of 35 ft in shingle gravel including removing of excavated material by machinery in 1 KM	cu.m	134.28			
3.2	Dressing slopes of banks or ground surface	sq.m	8,940.00			
3.3	Structural backfill using common Material available at site.	cu.m	1,157.68			
3.4	Supplying clean and screened river or pit sand within 150m including removal of loose earth or overburden.	cu.m	30.62			
3.5	Carriage on Item (03-43) above. (Lead upto 10km)	5 tonne/km	10.81			
3.6	Providing and Laying pre-cast segments in PCC lining (parabola type) type C	Rm	1,900.00			
3.7	Providing and Laying pre-cast segments in PCC lining (parabola type) type E	Rm	335.00			
3.8	Providing Plain Cement Concrete including placing, compacting, finishing & curing G10 (Beneath RCC)	cu.m	9.04			
3.9	Erecting & removing formwork to concrete in any shape / position (Vertical)	sq.m	168.04			

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**Bill No.3 - Irrigation Channels**

Item	Item Description	Unit	Quantity	Unit Rate (Rs) in Figures	Amount (Rs.) in Figures	Amount (Rs) in Words
3.10	Reinforced cement concrete work as in dams, spillways, weirs, barrages, culverts, cross drainage works and other hydrolic structures using crushed stone aggregate (screening & washing) and coarse sand i/c cost of all labour and material and all kinds of form works, moulds, shuttering, lifting /pumping, curing, rendering and finishing the exposed surface, cast in situ/precast excluding the cost of steel reinforcement and labour for bending binding also excluding cost of additives which have to be paid separately. Type B G20	Cu.m	17.69			
3.11	Supply & fabricate M.S. reinforcement for cement concrete (Hot rolled deformed bars Grade 60)	Tonne	2.01			
3.12	Providing and Laying stone pitching/filling, dry hand packed in pitching & aprons	cu.m	189.04			
3.13	Reinforced Concrete Pipe Culvert (AASHTO M-170) Dia: 610mm	Rm	11.88			
<b>Total Cost for Bill No.3</b>						

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**Bill No.4 - On-Farm Water Management Works**

Item	Item Description	Unit	Quantity	Unit Rate (Rs) in Figures	Amount (Rs.) in Figures	Amount (Rs) in Words
<b>LINING OF 1680 R/M WATERCOURSE USING PRECAST PARABOLIC SEGMENTS</b>						
4.1	Earth excavation in irrigation channels/drains & disposal upto 25m. & dressing : in Ordinary Soil	cu.m	103.82			
4.2	Earth excavation in irrigation channels/drains & disposal upto 25m. & dressing : in Shingle/Gravel	cu.m	103.82			
4.3	Embankment formation in ordinary soil and compaction by mechanical means at optimum content to 90% max. modified AASHTO dry density(borrow area).	cu.m	656.54			
4.4	Supplying clean and screened river or pit sand within 150m including removal of loose earth or overburden	cu.m	28.56			
4.5	Providing and Laying pre-cast segments in PCC lining (parabola type) type E	Rm	1,680.00			
<b>2 FIELD BOX CULVERTS (0.70M x 0.50M) IN THE COMMAND</b>						
4.6	RCC in roof slabs, beam, column and other structural members, in situ or precast. Type B G20	cu.m	1.856			
4.7	Supply and fabricate M.S reinforcement for cement concrete (Hot rolled deformed bars Grade 40)	tonnes	0.129			
4.8	Plain Cement Concrete including placing, compacting, finishing and curing. G20	cu.m	3.420			
4.9	Providing & laying RCC pipe sewer complete As per ASTM C-76-79, Class II: 12" i/d. Wall B	Rm	10.00			
4.10	Providing & laying RCC pipe sewer complete As per ASTM C-76-79, Class II: 24" i/d. Wall B	Rm	10.00			

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**Bill of Quantities**

**Bill No.4 - On-Farm Water Management Works**

<b>Item</b>	<b>Item Description</b>	<b>Unit</b>	<b>Quantity</b>	<b>Unit Rate (Rs) in Figures</b>	<b>Amount (Rs.) in Figures</b>	<b>Amount (Rs) in Words</b>
<b>2 NUMBER WASHING PADS NEAR HOUSES OF FARMING COMMUNITY IN THE COMMAND</b>						
4.11	Plain Cement Concrete including placing, compacting, finishing and curing G20	cu.m	2.37			
4.12	Supply and fabricate M.S reinforcement for cement concrete (Hot rolled deformed bars Grade 40)	Tonne	0.015			
<b>INSTALLATION OF 93 NACCA PANELS</b>						
4.13	Standard Nacca Panels (0.31m)	No	93.00			
4.14	4" thick PCC lining using washed screened and graded crushed stone aggregate On slope, G20 (on sides of Naccas)	cu.m	22.32			
<b>Sub-Total Cost for Bill No.4</b>						

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**Bill of Quantities**

**Bill No. 5 - General Items**

<b>Item</b>	<b>Item Description</b>	<b>Unit</b>	<b>Quantity</b>	<b>Unit Rate (Rs) in Figures</b>	<b>Amount (Rs.) in Figures</b>
<b>Engineer's Main Office (RE Office)</b>					
<b>Rental of Vehicles</b>					
5.1	1 No. Rental 4WD Toyota Hilux (model-2012 and above)	Month	6		
<b>Provisional Sum</b>					
5.2	O & M (PoL, Oil & Service) - Vehicles + Generators	Month	6	40,000.00	240,000.00
5.3	Monthly rent of the Engineer's Office and laboratory	No	2	35,000.00	70,000.00
5.4	Monthly rent of the Engineer's Accommodation	No	2	30,000.00	60,000.00
5.5	Repair of Furtinure and Fixture	No	1	13,333.00	13,333.00
5.6	Maintenance and Operations of Office	LS	1	10,000.00	10,000.00
5.7	Maintenance and Operations of Accommodation	LS	1	10,000.00	10,000.00
5.8	Maitenance of Laboratoty	LS	1	33,333.00	33,333.00
<b>Sub-Total:</b>					



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**Bill No. 5 - General Items**

<b>Item</b>	<b>Item Description</b>	<b>Unit</b>	<b>Quantity</b>	<b>Unit Rate (Rs) in Figures</b>	<b>Amount (Rs.) in Figures</b>
	<b>Utility Services</b>				
5.9	Office & Accommodation Utility Bills (will be paid to the contractor as per actual)	Month	2	30,000.00	60,000.00
5.10	Communications Fax, Landline, DSL, 3G/4G Services, Mobile, courier services etc.	Month	2	20,000.00	40,000.00
<b>Sub-Total:</b>					<b>100,000.00</b>
<b>Add 10 % Contractor's Profit on items under provisional sum:</b>					
<b>Total Cost for Bill No.5</b>					


<b>Amount (Rs) in Words</b>
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(Rupees Two Hundred Forty Thousand Only)
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(Rupees Seventy Thousand Only)
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(Rupees Sixty Thousand Only)
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(Rupees Thirteen Thousand Three Hundred Thirty Three Only)
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(Rupees Ten Thousand Only)
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(Rupees Ten Thousand Only)
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(Rupees Thirty Three Thousand Three Hundred Thirty Three Only)
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<b>Amount (Rs) in Words</b>
(Rupees Sixty Thousand Only)
(Rupees Forty Thousand Only)
<b>(Rupees One Hundred Thousand Only)</b>

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**Bill of Quantities**

**Bill No.6 - EMP Implementation Cost**

Item	Item Description	Unit	Quantity	Unit Rate (Rs) in Figures	Amount (Rs.) in Figures	Amount (Rs) in Words
9.1	<u>Air Testing at site</u> 1. Carbon Monoxide (CO) 2. Sulfur Dioxide (SO <sub>2</sub> ) 3. Nitric Oxide(NO) 4. Nitrogen Dioxide(NO <sub>2</sub> ) 5. PM10 6. PM2.5	No	4	8,000.00	32,000.00	(Rupees Thirty Two Thousand Only)
9.2	<u>Noise Testing at site</u> 1. Noise	No	4	1,000.00	4,000.00	(Rupees Four Thousand Only)
9.3	Water Testing in Lab 1. Total Coli form 2. E.coli 3. pH 4. Total Dissolved solids (TDS) 5. Total Hardness as CaCO <sub>3</sub> 6. Sodium 7. Potassium 9. Sulphate 9. Chloride 10. Alkalinity 11. Color 12. Odor 13. Taste 14. Nitrogen-Nitrates 15. TSS	No	8	11,000.00	88,000.00	(Rupees Eighty Eight Thousand Only)
<b>Sub-Total Cost</b>					<b>124,000.00</b>	<b>(Rupees One Hundred Twenty Four Thousand Only)</b>
<b>Contingency Cost @ 5%</b>					<b>6,200.00</b>	<b>(Rupees Six Thousand Two Hundred Only)</b>
<b>Total Cost for Bill No. 6</b>					<b>130,200.00</b>	<b>(Rupees One Hundred Thirty Thousand Two Hundred Only)</b>