



Project Implementation Unit (PIU)
Khyber Pakhtunkhwa Rural Investment and Institutional
Support Project (KP-RIISP)
Public Health Engineering Department (PHED)
Government of Khyber Pakhtunkhwa (GOKP)

PROCUREMENT OF SMALL WORKS
SANITATION SCHEME - JAMRUD, DISTRICT KHYBER
(RFB No. KH-SNW-01)

BILL OF QUANTITIES (BOQ)

SEPTEMBER 2026

BILL OF QUANTITIES

Preamble

1. The Bill of Quantities shall be read in conjunction with the Conditions of Contract, Specifications and Drawings.
2. The quantities given in the Bill of Quantities are estimated and provisional, and are given to provide a common basis for bidding. The basis of payment will be the actual quantities of work executed and measured by the Contractor and verified by the Engineer and valued at the rates and prices as given in the priced Bill of Quantities, where applicable, and otherwise at such rates and prices as the Engineer may fix as per the Contract.
3. The rates and prices as given in the priced Bill of Quantities shall, except insofar as it is otherwise provided under the Contract include all costs of Contractor's plant, labour, supervision, materials, execution, insurance, profit, taxes and duties, together with all general risks, liabilities and obligations set out or implied in the Contract. Furthermore, all duties, taxes and other levies payable by the Contractor under the Contract, or for any other cause, as on the date 28 days prior to deadline for submission of Bids, shall be included in the rates and prices and the total Bid Price submitted by the Bidder.
4. A rate or price shall be entered against each item in the priced Bill of Quantities, whether quantities are stated or not. The cost of items against which the Contractor will have failed to enter a rate or price shall be deemed to be covered by other rates and prices entered in the Bill of Quantities.
5. The whole cost of complying with the provisions of the Contract shall be included in the items provided in the priced Bill of Quantities, and where no items are provided, the cost shall be deemed to be distributed among the rates and prices entered for the related items of the Works, or the same shall be determined by the Engineer in accordance with Conditions of Contract.
6. General directions and description of work and materials are not necessarily repeated nor summarized in the Bill of Quantities. References to the relevant sections of the Bidding Documents shall be made before entering prices against each item in the Bill of Quantities.
7. Rates and prices for solar-related equipment shall include the complete cost of new, genuine and fully compliant equipment obtained through a traceable supply channel, together with technical submissions, type-test and conformity certificates, warranties, supply-chain and authenticity records, serial-number documentation, inspection, testing, commissioning and all approvals required by the Technical Specifications. No separate payment shall be made for these requirements.
8. The following abbreviations for units have been used in Bill of Quantities:

Units		Abbreviations
Cubic Meter	=	Cum
Square Meter	=	Sqm
Meter	=	Mtr

**KHYBER PAKHTUNKHWA RURAL INVESTMENT & INSTITUTIONAL SUPPORT
PROJECT (KP-RIISP)**

SANITATION SCHEME JAMRUD, DISTRICT KHYBER

CONTRACT PACKAGE : RFB-KH-SNW-01

SUMMARY OF WORKS

Bill No.	Works Description	Amount (Rs.)
1	Sewerage Works	
2	Streets Pavement & Drainage Works	
3	Construction of Manholes & Interception Sump Manholes	
4	Construction of Septic Tanks	
5	Construction of Soakage Pits	
6	Construction of Inspection & House Connection Chambers	
7	Installation of Solar System	
8	Construction of Sewerage Treatment Plants (STP's)	
9	E&S Compliance	
Total Amount		
Total Amount (Millions)		

KHYBER PAKHTUNKHWA RURAL INVESTMENT & INSTITUTIONAL SUPPORT PROJECT (KP-RIISP)

SANITATION SCHEME JAMRUD, DISTRICT KHYBER

CONTRACT PACKAGE : RFB-KH-SNW-01

BILL OF QUANTITIES

Bill No. 01: SEWERAGE WORKS

BOQ Item	Description	Unit	Quantity	Unit Rate (Rs.)		Amount (Rs.)
				In Figure	In Words	
1.1	Earth excavation in open cut upto 3 m depth for drains, pipes/sewers etc & disposal : in Gravel & shingle	Cum	27999.09			-
1.2	Excavation in open cut for sewers & manhole except shingle, gravel & rock : Upto 2m	Cum	9999.68			-
1.3	Structural Excavation In Medium Rock Material	Cum	506.45			-
1.4	Mixing & moistening of earth to OMC in layers for compaction etc complete	Cum	36321.36			-
1.5	Transportation of earth all types beyond 250 m and upto 500 m.	Cum	3332.71			-
1.6	Structural Backfill using Common Material available at site	Cum	32874.81			-
1.7	Structural Backfill using Common Material brought from outside	Cum	3446.55			-
1.8	Dry rammed shingle, brick ballast or stone ballast 1.5" to 2" guage	Cum	2297.70			-
1.9	Supplying and filling sand under floor or plugging in wells	Cum	577.78			-
1.10	Providing and laying R.C.C. pipe, moulded with cement concrete 1:1-1/2:3, with spigot, socket or collar joint, etc. including cost of reinforcement, conforming to B.S. 5911: Part-I, 1981 Class "L" including carriage, lowering in trenches to correct alignment and grade, jointing, cutting pipe where necessary, finishing and testing, etc. complete:- 9" dia (225mm)	Meter	23970.00			-
1.11	Providing and laying R.C.C. pipe, moulded with cement concrete 1:1-1/2:3, with spigot, socket or collar joint, etc. including cost of reinforcement, conforming to B.S. 5911: Part-I, 1981 Class "L" including carriage, lowering in trenches to correct alignment and grade, jointing, cutting pipe where necessary, finishing and testing, etc. complete:- 6" dia (150mm)	Meter	1560.00			-
1.12	Supply & fabricate M.S. reinforcement for cement concrete (Hot rolled deformed bars Grade 60)	Tonne	2.50			-
1.13	RCC in roof slab, beam, column & other structural members, insitu or precast. (1:2:4)	Cum	25.00			-
1.14	Plain Cement Concrete including placing, compacting, finishing & curing (Ratio 1:4:8)	Cum	9.00			-
1.15	Erection and removal of Form work with Plywood sheet finishing for RCC or Plain cement Concrete in any shape - Position / Vertical	Sqm	80.00			-
1.16	Erection and removal of Form work with Plywood sheet finishing for RCC or Plain cement Concrete in any shape - Position / Horizontal	Sqm	96.00			-
1.17	Dismantling : Plain Cement Concrete 1:2:4	Cum	179.78			-
1.18	Dismantling : Plain Cement Concrete 1:4:8	Cum	89.89			-
1.19	Dismantling brick work in lime or cement mortar	Cum	323.60			-
1.20	Dismantling & removing road pavement etc including screening & stacking of by-products upto 50m	Sqm	719.10			-
1.21	Dismantling RCC, separating reinforcement, cleaning & straightening the same	Cum	97.08			-
Total Amount						

KHYBER PAKHTUNKHWA RURAL INVESTMENT & INSTITUTIONAL SUPPORT PROJECT (KP-RIISP)

SANITATION SCHEME JAMRUD, DISTRICT KHYBER

CONTRACT PACKAGE : RFB-KH-SNW-01

BILL OF QUANTITIES

Bill No. 02: STREET PAVEMENT & DRAINAGE WORKS

BOQ Item	Description	Unit	Quantity	Unit Rate (Rs.)		Amount (Rs.)
				In Figure	In Words	
Pavement Works						
2.1	Dressing & levelling earth to designed sections Ordinary or hard soil upto cut or fill 6 inches	Cum	4981.04			-
2.2	Plain Cement Concrete including placing, compacting, finishing & curing (Ratio 1:4:8)	Cum	2490.52			-
2.3	Plain Cement Concrete including placing, compacting, finishing & curing (Ratio 1:2:4)	Cum	2156.58			-
2.4	Dry rammed shingle brick ballast or stone ballast 1.5" to 2" guage	Cum	4981.04			-
2.5	Providing and Fixing Precast Concrete 5000 psi TUFF Tiles 50mm thick over bed of 2" thick sand	Sqm	4394.00			-
2.6	Providing and Fixing marble strip 2" wide and 3/8" thick for dividing the floor into panels	Meter	9458.67			-
2.7	Rehandling of earthwork upto a lead of 25 m.	Cum	4313.15			-
Drainage & Culvert Works						
2.8	Earthwork by mechanical means in drains and irrigation channels in DRY & WET soil dressed to designed section, grades profile/with excavated material, disposed off within 50 feet (15.2 m) lead and dressed as directed.	Cum	1255.00			-
2.9	Earth excavation in open cut upto 3 m depth for drains, pipes etc & disposal : in Gravel & shingle	Cum	374.92			-
2.10	Plain Cement Concrete including placing, compacting, finishing & curing (Ratio 1:4:8)	Cum	49.60			-
2.11	Construct PHE Standard Drains, of cement concrete 1:1.5:3, complete : Type III	Meter	204.81			-
2.12	Construct PHE Standard Drains, of cement concrete 1:1.5:3, complete : Type IV	Meter	127.23			-
2.13	Construct PHE Standard Drains, of cement concrete 1:1.5:3, complete : Type V	Meter	364.43			-
2.14	Construct PHE Standard Drains, of cement concrete 1:1.5:3, complete : Type VI	Meter	168.74			-
2.15	Construct PHE Standard Drains, of cement concrete 1:1.5:3, complete : Type VII	Meter	91.80			-
2.16	Construct PHE Standard Drains, of cement concrete 1:1.5:3, complete : Type VIII	Meter	156.68			-
2.17	Construct PHE Standard Drains, of cement concrete 1:1.5:3, complete : Type IX	Meter	12.43			-
2.18	Construct PHE Standard Drains, of cement concrete 1:1.5:3, complete : Type X	Meter	65.06			-
2.19	Construct PHE Standard Drains, of cement concrete 1:1.5:3, complete : Type XI	Meter	20.28			-
2.20	Construct PHE Standard Drains, of cement concrete 1:1.5:3, complete : Type XII	Meter	25.01			-
2.21	Plain Cement Concrete including placing, compacting, finishing & curing (Ratio 1:1.5:3)	Cum	80.50			-

2.22	Plain Cement Concrete including placing, compacting, finishing & curing (Ratio 1:2:4)	Cum	172.81			-
2.23	RCC in roof slab, beam, column & other structural members, insitu or precast. (1:2:4)	Cum	92.71			-
2.24	Supply & fabricate M.S. reinforcement for cement concrete (Hot rolled deformed bars Grade 60)	Tonne	9.27			-
2.25	Erection and removal of Form work with Plywood sheet finishing for RCC or Plain cement Concrete in any shape - Position / Horizontal	Sqm	430.70			-
2.26	Erection and removal of Form work with Plywood sheet finishing for RCC or Plain cement Concrete in any shape - Position / Vertical	Sqm	1983.66			-
2.27	Erection and removal of Form work with Steel Surface Finishing for RCC or Plain cement Concrete in any shape - Position / Vertical	Sqm	991.83			-
2.28	Dry rammed shingle brick ballast or stone ballast 1.5" to 2" gauge	Cum	94.33			-
2.29	Structural backfill using Common Material available at site.	Cum	551.90			-
2.30	Transportation of earth all types beyond 250 m and upto 500 m.	Cum	515.20			-
2.31	Mixing & moistening of earthwork to OMC in layers for compaction etc complete	Cum	551.90			-
2.32	Dismantling : Plain Cement Concrete 1:4:8	Cum	12.41			-
2.33	Dismantling : Plain Cement Concrete 1:2:4	Cum	18.62			-
2.34	Dismantling RCC, separating reinforcement, cleaning & straightening the same	Cum	24.82			-
2.35	Dismantling brick work in lime or cement mortar	Cum	124.12			-
2.36	Dismantling & removing road pavement etc including screening & stacking of by-products upto 50m	Sqm	165.49			-
2.37	Constructing gully grating chamber complete With CI gully trap, weighing 81 lbs. frame hinged	Each	12.00			-
2.39	Providing and fixing grating in opening including fixing at site with flat iron 2" x 3/8" and 3/4" round bars at 4" center to center.	Sqm	200.00			-
2.39	Fabrication of heavy steel work with angle, tees, sheet iron etc for making trusses, girders etc	Tonne	3.00			-
Total Amount						

KHYBER PAKHTUNKHWA RURAL INVESTMENT & INSTITUTIONAL SUPPORT PROJECT (KP-RIISP)

SANITATION SCHEME JAMRUD, DISTRICT KHYBER

CONTRACT PACKAGE : RFB-KH-SNW-01

BILL OF QUANTITIES

Bill No. 03: CONSTRUCTION OF MANHOLES/INTERCEPTION SUMP MANHOLES (Centralized System)

BOQ Item	Description	Unit	Quantity	Unit Rate (Rs.)		Amount (Rs.)
				In Figure	In Words	
3.10	Earth excavation in open cut upto 3 m depth for drains, pipes etc & disposal : in Gravel & shingle	Cum	2403.641			-
3.20	Structural backfill using Common Material available at site	Cum	811.02			-
3.30	Structural Backfill using Common Material brought from outside	Cum	52.11			-
3.40	Rehandling of earthwork Lead upto a single throw of kassi, shovel, phaorah	Cum	863.13			-
3.50	Mixing & moistening of earthwork to OMC in layers for compaction etc complete	Cum	863.13			-
3.60	Transportation of earth all types beyond 250 m and upto 500 m.	Cum	1540.51			-
3.70	Plain Cement Concrete including placing, compacting, finishing & curing (Ratio 1:4:8)	Cum	137.779			-
3.80	1st class brick work other than building upto 10 ft. height : Cement, sand mortar 1:4	Cum	647.455			-
3.90	Add extra on item No. 07-07 for every 10 ft. additional height, or part thereof	Cum	129.491			-
3.10	Cement plaster 1:3 upto 20' height 1/2" thick	Sqm	4799.063			-
3.11	Plain Cement Concrete including placing, compacting, finishing & curing (Ratio 1:2:4)	Cum	279.84			-
3.12	Galvanised MS ladder rings 3/4" dia inside and outside water tanks; Each rung of 12" width, 6" projected outside the wall and 6" embedded in RCC on both ends; including all necessary works for complete installation.	Kg	4110.60			-
3.13	RCC manhole cover 22" dia with: 3"x3"x1/4" angle iron frame, 22" i/d complete	Set	403.00			-
3.14	Bitumen coating to plastered / cement concrete surface : 20 lbs. per 100 sft.	Sqm	2613.68			-
3.15	Erection and removal of Form work with Plywood sheet finishing for RCC or Plain cement Concrete in any shape - Position / Vertical	Sqm	868.72			-
3.16	Supply & fabricate M.S. reinforcement for cement concrete (Hot rolled deformed bars Grade 60)	Tonne	7.402			-
3.17	RCC in roof slab, beam, column & other structural members, insitu or precast. (1:1.5:3)	Cum	8.419			-
Total Amount						

KHYBER PAKHTUNKHWA RURAL INVESTMENT & INSTITUTIONAL SUPPORT PROJECT (KP-RIISP)

SANITATION SCHEME JAMRUD, DISTRICT KHYBER

CONTRACT PACKAGE : RFB-KH-SNW-01

BILL OF QUANTITIES

Bill No. 04: CONSTRUCTION OF SEPTIC TANKS

BOQ Item	Description	Unit	Quantity	Unit Rate (Rs.)		Amount (Rs.)
				In Figure	In Words	
4.10	Excavation in foundation of building, bridges etc complete : in shingle/gravel	Cum	908.483			-
4.20	Structural backfill using Common Material available at site	Cum	174.957			-
4.30	Structural Backfill using Common Material brought from outside	Cum	42.99			-
4.40	Plain Cement Concrete including placing, compacting, finishing & curing (Ratio 1:4:8)	Cum	24.095			-
4.50	RCC in roof slab, beam, column & other structural members, insitu or precast. (1:1.5:3)	Cum	52.158			-
4.60	Supply & fabricate M.S. reinforcement for cement concrete (Hot rolled deformed bars Grade 60)	Tonne	5.133			-
4.70	Erection and removal of Form work with Plywood sheet finishing for RCC or Plain cement Concrete in any shpae - Position / Vertical	Sqm	52.74			-
4.80	Providing, laying, cutting, jointing, testing and disinfecting UPVC pressure pipeline in trenches (conforming to BS 3505 manufactured) jointed with socket, elbow, tee, bend and plug bend etc.manufactured by the respective manufacturer complete as per specifications UPVC Pressure Pipes Class B (6 Bar) except excavation. 6" Nominal Pipe Size (NPS)	Meter	313.00			-
4.90	Providing, laying, cutting, jointing, testing and disinfecting UPVC pressure pipeline in trenches (conforming to BS 3505 manufactured) jointed with socket, elbow, tee, bend and plug bend etc.manufactured by the respective manufacturer complete as per specifications UPVC Pressure Pipes Class B (6 Bar) except excavation. 8" Nominal Pipe Size (NPS)	Meter	20.00			-
4.10	Supplying and Fixing UPVC soil waste and vent pipe class B : 4" dia	Meter	10.50			-
4.11	Supplying and Fixing UPVC soil waste and vent pipe class B : 3" dia	Meter	6.15			-
4.12	1st class brick work other than building upto 10 ft. height : Cement, sand mortar 1:4	Cum	150.17			-
4.13	Cement plaster 1:3 upto 20' height 1/2" thick	Sqm	1507.99			-
4.14	Bitumen coating to plastered / cement concrete surface : 20 lbs. per 100 sft.	Sqm	708.78			-
4.15	Supply & fabricate M.S reinforcement for cement concrete (Plain bars) as Lifting Hooks (#6 / 20 mm plain bars), complete in all respects	Tonne	0.31			-
4.16	Rehandling of earthwork Lead upto a single throw of kassi, shovel, phaorah	Cum	217.95			-
4.17	Mixing & moistening of earthwork to OMC in layers for compaction etc complete	Cum	217.95			-
4.18	Transportation of earth all types beyond 250 m and upto 500 m.	Cum	733.53			-
Total Amount						

KHYBER PAKHTUNKHWA RURAL INVESTMENT & INSTITUTIONAL SUPPORT PROJECT (KP-RIISP)

SANITATION SCHEME JAMRUD, DISTRICT KHYBER

CONTRACT PACKAGE : RFB-KH-SNW-01

BILL OF QUANTITIES

Bill No. 05: CONSTRUCTION OF SOAKAGE PITS

BOQ Item	Description	Unit	Quantity	Unit Rate (Rs.)		Amount (Rs.)
				In Figure	In Words	
5.10	Excavation in foundation of building, bridges etc complete : in shingle/gravel	Cum	749.50			-
5.20	Structural backfill using Common Material available at site	Cum	185.42			-
5.30	Structural Backfill using Common Material brought from outside	Cum	4.36			-
5.40	RCC in roof slab, beam, column & other structural members, insitu or precast. (1:1.5:3)	Cum	20.20			-
5.50	Supply & fabricate M.S. reinforcement for cement concrete (Hot rolled deformed bars Grade 60)	Tonne	1.62			-
5.60	Erection and removal of Form work with Plywood sheet finishing for RCC or Plain cement Concrete in any shpae - Position / Horizontal	Sqm	76.93			-
5.70	Erection and removal of Form work with Plywood sheet finishing for RCC or Plain cement Concrete in any shpae - Position / Vertical	Sqm	100.10			-
5.80	1st class brick work other than building upto 10 ft. height : Cement, sand mortar 1:4	Cum	173.01			-
5.90	Add extra on item No. 07-07 for every 10 ft. additional height, or part thereof	Cum	135.49			-
5.10	Dry rammed shingle brick ballast or stone ballast 1.5" to 2" guage	Cum	316.30			-
5.11	Providing, laying, cutting, jointing, testing and disinfecting UPVC pressure pipeline in trenches (conforming to BS 3505 manufactured) jointed with socket, elbow, tee, bend and plug bend etc.manufactured by the respective manufacturer complete as per specifications UPVC Pressure Pipes Class B (6 Bar) except excavation. 6" Nominal Pipe Size (NPS)	Meter	47.00			-
5.12	Providing, laying, cutting, jointing, testing and disinfecting UPVC pressure pipeline in trenches (conforming to BS 3505 manufactured) jointed with socket, elbow, tee, bend and plug bend etc.manufactured by the respective manufacturer complete as per specifications UPVC Pressure Pipes Class B (6 Bar) except excavation. 8" Nominal Pipe Size (NPS)	Meter	12.50			-
5.13	Supply and Fixing Plastic manhole cover with frame etc (Heavey Type) of approved quality complete: 24" (610 mm) dia	Each	26.00			-
5.14	Rehandling of earthwork Lead upto a single throw of kassi, shovel, phaorah	Cum	189.77			-
5.15	Mixing & moistening of earthwork to OMC in layers for compaction etc complete	Cum	189.77			-
5.16	Transportation of earth all types beyond 250 m and upto 500 m.	Cum	564.09			-
Total Amount						

KHYBER PAKHTUNKHWA RURAL INVESTMENT & INSTITUTIONAL SUPPORT PROJECT (KP-RIISP)

SANITATION SCHEME JAMRUD, DISTRICT KHYBER

CONTRACT PACKAGE : RFB-KH-SNW-01

BILL OF QUANTITIES

Bill No. 06: CONSTRUCTION OF INSPECTION/CHAMBERS (De-Centralized System) & HOUSE CONNECTION CHAMBERS

BOQ Item	Description	Unit	Quantity	Unit Rate (Rs.)		Amount (Rs.)
				In Figure	In Words	
6.10	Excavation in foundation of building, bridges etc complete : in shingle/gravel	Cum	3981.003			-
6.20	Structural backfill using Common Material available at site	Cum	2583.842			-
6.30	Plain Cement Concrete including placing, compacting, finishing & curing (Ratio 1:4:8)	Cum	241.916			-
6.40	1st class brick work other than building upto 10 ft. height : Cement, sand mortar 1:4	Cum	968.998			-
6.50	Cement plaster 1:3 upto 20' height 1/2" thick	Sqm	6767.607			-
6.60	Plain Cement Concrete including placing, compacting, finishing & curing (Ratio 1:2:4)	Cum	103.05			-
6.70	RCC in roof slab, beam, column & other structural members, insitu or precast. (1:1.5:3)	Cum	67.25			-
6.80	Supply & fabricate M.S. reinforcement for cement concrete (Hot rolled deformed bars Grade 60)	Tonne	9.15			-
6.90	Supply and Fixing cast iron (CI) manhole cover with frame etc (Heavey Type) of approved quality complete: 24" (610 mm) dia	Set	350			-
6.10	Bitumen coating to plastered / cement concrete surface : 20 lbs. per 100 sft.	Sqm	4306.66			-
6.11	Providing and laying R.C.C. pipe, moulded with cement concrete 1:1-1/2:3, with spigot, socket or collar joint, etc. including cost of reinforcement, conforming to B.S. 5911: Part-I, 1981 Class "L" including carriage, lowering in trenches to correct alignment and grade, jointing, cutting pipe where necessary, finishing and testing, etc. complete:- 4" dia:	Meter	100.00			-
6.12	Providing and laying R.C.C. pipe, moulded with cement concrete 1:1-1/2:3, with spigot, socket or collar joint, etc. including cost of reinforcement, conforming to B.S. 5911: Part-I, 1981 Class "L" including carriage, lowering in trenches to correct alignment and grade, jointing, cutting pipe where necessary, finishing and testing, etc. complete:- 6" dia:	Meter	65.00			-
6.13	Providing, laying, cutting, jointing, testing and disinfecting UPVC pressure pipeline in trenches (conforming to BS 3505 manufactured) jointed with socket, elbow, tee, bend and plug bend etc.manufactured by the respective manufacturer complete as per specifications UPVC Pressure Pipes Class B (6 Bar) except excavation. 4" Nominal Pipe Size (NPS)	Meter	3050.00			-
6.14	Providing, laying, cutting, jointing, testing and disinfecting UPVC pressure pipeline in trenches (conforming to BS 3505 manufactured) jointed with socket, elbow, tee, bend and plug bend etc.manufactured by the respective manufacturer complete as per specifications UPVC Pressure Pipes Class B (6 Bar) except excavation. 6" Nominal Pipe Size (NPS)	Meter	122.00			-

6.15	Rehandling of earthwork Lead upto a single throw of kassi, shovel, phaorah	Cum	2583.842			-
6.16	Mixing & moistening of earthwork to OMC in layers for compaction etc complete	Cum	2583.842			-
6.17	Transportation of earth all types beyond 250 m and upto 500 m.	Cum	1397.161			-
6.18	Providing, laying, cutting, jointing, testing and disinfecting High Density Polyethylene Pipe (HDPE) Din-8074/Din-8075/ISO-4427 in trenches, complete in all respects except excavation. (25mm dia) PN-10	Meter	10.000			-
6.19	Providing, laying, cutting, jointing, testing and disinfecting High Density Polyethylene Pipe (HDPE) Din-8074/Din-8075/ISO-4427 in trenches, complete in all respects except excavation. (32mm dia) PN-10	Meter	12.000			-
6.20	Providing, laying, cutting, jointing, testing and disinfecting High Density Polyethylene Pipe (HDPE) Din-8074/Din-8075/ISO-4427 in trenches, complete in all respects except excavation. (40mm dia) PN-10	Meter	15.000			-
6.21	Providing, laying, cutting, jointing, testing and disinfecting High Density Polyethylene Pipe (HDPE) Din-8074/Din-8075/ISO-4427 in trenches, complete in all respects except excavation. (50mm dia) PN-10	Meter	18.000			-
6.22	Providing, laying, cutting, jointing, testing and disinfecting High Density Polyethylene Pipe (HDPE) Din-8074/Din-8075/ISO-4427 in trenches, complete in all respects except excavation. (63mm dia) PN-10	Meter	15.000			-
6.23	Providing, laying, cutting, jointing, testing and disinfecting High Density Polyethylene Pipe (HDPE) Din-8074/Din-8075/ISO-4427 in trenches, complete in all respects except excavation. (75mm dia) PN-10	Meter	12.000			-
6.24	Providing, laying, cutting, jointing, testing and disinfecting High Density Polyethylene Pipe (HDPE) Din-8074/Din-8075/ISO-4427 in trenches, complete in all respects except excavation. (90mm dia) PN-10	Meter	10.000			-
6.25	Providing, laying, cutting, jointing, testing and disinfecting High Density Polyethylene Pipe (HDPE) Din-8074/Din-8075/ISO-4427 in trenches, complete in all respects except excavation. (110mm dia) PN-10	Meter	15.000			-
6.26	Providing, laying, cutting, jointing, testing and disinfecting High Density Polyethylene Pipe (HDPE) Din-8074/Din-8075/ISO-4427 in trenches, complete in all respects except excavation. (160mm dia) PN-10	Meter	10.000			-
Total Amount						

KHYBER PAKHTUNKHWA RURAL INVESTMENT & INSTITUTIONAL SUPPORT PROJECT (KP-RIISP)

SANITATION SCHEME JAMRUD, DISTRICT KHYBER

CONTRACT PACKAGE : RFB-KH-SNW-01

BILL OF QUANTITIES

Bill No. 07: SOLAR WORKS (STP-01, STP-02 & STP-03)

BOQ Item	Description	Unit	Quantity	Unit Rate (Rs.)		Amount (Rs.)
				In Figure	In Words	
7.1	Supply and Erection of A-Grade Solar PV Modules containing N-Type Mono-crystalline silicon A-Grade solar cells, As per approved specifications.	Watt	30160.00			-
7.2	P/L approved quality UPVC pipes for water supply and gas supply i/c fitting, cutting, jointing, jointing material making holes in walls and filling the same with 1:4 CSM, excavation and back filling : 3" dia	Meter	80.00			-
7.3	Supply and installation of Submersible Flat Cable made of 99.9% copper, coated with double PVC as per BSS Standards, 3x6 mm2	Meter	80.00			-
7.4	Supply & Erection of elevated structure of hot dipped (80 microns Average) G.I Sheet Channel, angle as per design. including Stainless Steel Nuts & Bolts/washers	Kg	760.00			-
7.5	Supply and Erection 1x6 sq.mm single core (XPLO/XPLO insulated/PCV sheathed) flexible copper cable	Meter	360.00			-
7.6	Plain Cement Concrete including placing, compacting, finishing & curing (Ratio 1:2:4)	Cum	6.12			-
7.7	Supply and Installation of 20 to 63A DC Circuit breaker 2P - MCB Type	Each	4.00			-
7.8	Supply and Installation of AC Circuit Breaker 4P - MCB Type	Each	6.00			-
7.9	Supply and Installation of Copper Rod/ Plate with copper clamps	Kg	12.00			-
7.10	Supply and Installation of Earthing Chemical	Kg	56.00			-
7.11	Supply and Installation of DC surge protection device 2P 1000VDC, In = 20kA & Imax = 40kA	Each	4.00			-
7.12	Supply and Erection of Copper Conductor of 10 AWG	Meter	180.00			-
7.13	Earth excavation in open cut upto 3 m depth for drains, pipes etc & disposal : in Hard Soil	Cum	56.40			-
7.14	Supply & Erection of Change over switch 100 Amp	Each	6.00			-
7.15	Supply & Installation, testing and commissioning of Sewage Pump for sewerage water type SV 20 -50+3 HP (3x380-415 V (50 HZ) 2850 rpm, with 10 Meter Power Cable including transportation and installation	Each	7.00			-
7.16	Supply and Erection of 3 phase 380V Solar Pump inverter (MPPT) 4 KW	Each	4.00			-
7.17	Supply & Installation, testing and commissioning of Distribution Box (Hot Dipped Galvanized 80 Microns) with busbar for earthing complete in all respects	Each	4.00			-
7.18	Supply and Erection of 3-Phase 380V Diesel Generator 9 KVA with MCU having (Auto Off Function, Dry run protection, 3-Phase change over, Connecting wires, Timer relay etc) complete in all respects	Each	2.00			-
7.19	Supply and Erection of 3-Phase 380V Diesel Generator 15 KVA with MCU having (Auto Off Function, Dry run protection, 3-Phase change over, Connecting wires, Timer relay etc) complete in all respects	Each	1.00			-
Total Amount						

KHYBER PAKHTUNKHWA RURAL INVESTMENT & INSTITUTIONAL SUPPORT PROJECT (KP-RIISP)

SANITATION SCHEME JAMRUD, DISTRICT KHYBER

CONTRACT PACKAGE : RFB-KH-SNW-01

CONSTRUCTION OF SEWERAGE TREATMENT PLANTS (STP's)

ABSTRACT OF COST

Bill No.	Works Description	Amount (Rs.)
08-A	Construction of Screen Chamber & Lift Station	
08-B	Construction of Dissipator	
08-C	Construction of ABR	
08-D	Construction of Sludge Drying Bed	
08-E	Construction of Operator Room	
08-F	Construction of Boundary Wall & Landscape Works	
Total Amount		

KHYBER PAKHTUNKHWA RURAL INVESTMENT & INSTITUTIONAL SUPPORT PROJECT (KP-RIISP)

SANITATION SCHEME JAMRUD, DISTRICT KHYBER

CONTRACT PACKAGE : RFB-KH-SNW-01

BILL OF QUANTITIES

Bill No. 08-A: CONSTRUCTION OF SCREEN CHAMBER & LIFT STATION

BOQ Item	Description	Unit	Quantity	Unit Rate (Rs.)		Amount (Rs.)
				In Figure	In Words	
8.1 A	Excavation in foundation of building, bridges etc complete : in shingle/gravel	Cum	704.018			-
8.2 A	Structural backfill using Common Material available at site	Cum	127.914			-
8.3 A	Structural Backfill using Common Material brought from outside	Cum	5.988			-
8.4 A	P/L Stone soling under foundation including consolidation etc	Cum	17.849			-
8.5 A	Plain Cement Concrete including placing, compacting, finishing & curing (Ratio 1:4:8)	Cum	17.835			-
8.6 A	Supplying and Fixing PVC Water Stopper 8" wide 3/8" thick. Providing and fixing PVC water stopper 8" wide 3/8" thick in verticle (Wall/Column)or horizontal (Floor/Slab) expansion joint including cutting and jointing complete in all respects.	Meter	101.80			-
8.7 A	RCC in roof slab, beam, column & other structural members, insitu or precast. (1:1.5:3)	Cum	134.413			-
8.8 A	Supply & fabricate M.S. reinforcement for cement concrete (Hot rolled deformed bars Grade 60)	Tonne	13.441			-
8.9 A	Erection and removal of Form work with Plywood sheet finishing for RCC or Plain cement Concrete in any shpae - Position / Horizontal	Sqm	88.520			-
8.10 A	Erection and removal of Form work with Plywood sheet finishing for RCC or Plain cement Concrete in any shpae - Position / Vertical	Sqm	826.178			-
8.11 A	Supplying and Fixing UPVC soil waste and vent pipe class B : 4" dia (Ventilation + Pump Riser Pipe)	Meter	51.00			-
8.12 A	Erection of Steel Girder 4"x8"x3/16" (Commercial size) including fitting in position	Meter	11.25			-
8.13 A	Providing and Fixing of Non return valve (NRV) of BSS quality (BS 5163) for GI, PVC, MS , HDPE and also for all type of pipes i/c rubber sheet , jointing material complete in all respect 4" (100 mm) dia of Valve	Each	7.00			-
8.14 A	Providing and Fixing Brass peet / gate valve heavy 4" dia	Each	7.00			-
8.15 A	Providing and fixing GI pipe railing (3 feet high)	m/3row	21.00			-
8.16 A	Supplying and Fixing flat iron (2"x3/8") ladder for OHR, holes @ 15" c/c, steps of MS bars 5/8" i/d & paint compl	Meter	30.00			-
8.17 A	Bitumen coating to plastered / cement concrete surface : 20 lbs. per 100 sft.	Sqm	369.890			-
8.18 A	Fabrication of heavy steel work with angle, tees, sheet iron etc for making trusses, girders etc (Screen/Trash Rack), Complete in all respects	Tonne	1.05			-
Total Amount						

KHYBER PAKHTUNKHWA RURAL INVESTMENT & INSTITUTIONAL SUPPORT PROJECT (KP-RIISP)

SANITATION SCHEME JAMRUD, DISTRICT KHYBER

CONTRACT PACKAGE : RFB-KH-SNW-01

BILL OF QUANTITIES

Bill No. 08-B: CONSTRUCTION OF DISSIPATOR

BOQ Item	Description	Unit	Quantity	Unit Rate (Rs.)		Amount (Rs.)
				In Figure	In Words	
8.1 B	Excavation in foundation of building, bridges etc complete : in shingle/gravel	Cum	52.500			-
8.2 B	Structural backfill using Common Material available at site	Cum	25.200			-
8.3 B	Structural Backfill using Common Material brought from outside	Cum	0.900			-
8.4 B	Plain Cement Concrete including placing, compacting, finishing & curing (Ratio 1:4:8)	Cum	1.200			-
8.5 B	RCC in roof slab, beam, column & other structural members, insitu or precast. (1:1.5:3)	Cum	17.162			-
8.6 B	Supply & fabricate M.S. reinforcement for cement concrete (Hot rolled deformed bars Grade 60)	Tonne	1.716			-
8.7 B	Erection and removal of Form work with Plywood sheet finishing for RCC or Plain cement Concrete in any shpae - Position / Horizontal	Sqm	8.670			-
8.8 B	Erection and removal of Form work with Plywood sheet finishing for RCC or Plain cement Concrete in any shpae - Position / Vertical	Sqm	103.560			-
8.9 B	Bitumen coating to plastered / cement concrete surface : 20 lbs. per 100 sft.	Sqm	59.160			-
8.10 B	Supplying and Fixing UPVC soil waste and vent pipe class B : 4" dia	Meter	6.00			-
8.11 B	Providing, laying, cutting, jointing, testing and disinfecting UPVC pressure pipeline in trenches (conforming to BS 3505 manufactured) jointed with socket, elbow, tee, bend and plug bend etc.manufactured by the respective manufacturer complete as per specifications UPVC Pressure Pipes Class B (6 Bar) except excavation. 6" Nominal Pipe Size (NPS)	Meter	3.00			-
8.12 B	Providing, laying, cutting, jointing, testing and disinfecting UPVC pressure pipeline in trenches (conforming to BS 3505 manufactured) jointed with socket, elbow, tee, bend and plug bend etc.manufactured by the respective manufacturer complete as per specifications UPVC Pressure Pipes Class B (6 Bar) except excavation. 8" Nominal Pipe Size (NPS)	Meter	3.00			-
8.13 B	Providing and installing PVC tees BSS Class 'B'working pressure : 4" i/d	Each	3.00			-
8.14 B	Supply and Fixing Plastic manhole cover with frame etc (Heavey Type) of approved quality complete: 24" (610 mm) dia	Each	3.00			-
8.15 B	Supplying and Fixing PVC Water Stopper 8" wide 3/8" thick. Providing and fixing PVC water stopper 8" wide 3/8" thick in verticle (Wall/Column)or horizontal (Floor/Slab) expansion joint including cutting and jointing complete in all respects.	Meter	20.40			-
Total Amount						

KHYBER PAKHTUNKHWA RURAL INVESTMENT & INSTITUTIONAL SUPPORT PROJECT (KP-RIISP)

SANITATION SCHEME JAMRUD, DISTRICT KHYBER

CONTRACT PACKAGE : RFB-KH-SNW-01

BILL OF QUANTITIES

Bill No. 08-C: CONSTRUCTION OF ANAEROBIC BAFFLED REACTOR (ABR)

BOQ Item	Description	Unit	Quantity	Unit Rate (Rs.)		Amount (Rs.)
				In Figure	In Words	
8.1 C	Excavation in foundation of building, bridges etc complete : in shingle/gravel	Cum	1037.232			-
8.2 C	Structural backfill using Common Material available at site	Cum	109.200			-
8.3 C	Structural Backfill using Common Material brought from outside	Cum	5.46			-
8.4 C	Plain Cement Concrete including placing, compacting, finishing & curing (Ratio 1:4:8)	Cum	21.528			-
8.5 C	RCC in roof slab, beam, column & other structural members, insitu or precast. (1:1.5:3)	Cum	253.274			-
8.6 C	Supply & fabricate M.S. reinforcement for cement concrete (Hot rolled deformed bars Grade 60)	Tonne	25.327			-
8.7 C	Erection and removal of Form work with Plywood sheet finishing for RCC or Plain cement Concrete in any shpae - Position / Horizontal	Sqm	190.53			-
8.8 C	Erection and removal of Form work with Plywood sheet finishing for RCC or Plain cement Concrete in any shpae - Position / Vertical	Sqm	1521.72			-
8.9 C	Supply and Fixing Plastic manhole cover with frame etc (Heavey Type) of approved quality complete: 24" (610 mm) dia	Each	15.00			-
8.10 C	Supplying and Fixing UPVC soil waste and vent pipe class B : 4" dia	Meter	30.00			-
8.11 C	Providing, laying, cutting, jointing, testing and disinfecting UPVC pressure pipeline in trenches (conforming to BS 3505 manufactured) jointed with socket, elbow, tee, bend and plug bend etc.manufactured by the respective manufacturer complete as per specifications UPVC Pressure Pipes Class B (6 Bar) except excavation. 6" Nominal Pipe Size (NPS)	Meter	820.00			-
8.12 C	Providing, laying, cutting, jointing, testing and disinfecting UPVC pressure pipeline in trenches (conforming to BS 3505 manufactured) jointed with socket, elbow, tee, bend and plug bend etc.manufactured by the respective manufacturer complete as per specifications UPVC Pressure Pipes Class B (6 Bar) except excavation. 8" Nominal Pipe Size (NPS)	Meter	52.20			-
8.13 C	Bitumen coating to plastered / cement concrete surface : 20 lbs. per 100 sft.	Sqm	394.680			-
8.14 C	Supplying and Fixing PVC Water Stopper 8" wide 3/8" thick. Providing and fixing PVC water stopper 8" wide 3/8" thick in verticle (Wall/Column)or horizontal (Floor/Slab) expansion joint including cutting and jointing complete in all respects.	Meter	100.950			-
Total Amount						

KHYBER PAKHTUNKHWA RURAL INVESTMENT & INSTITUTIONAL SUPPORT PROJECT (KP-RIISP)

SANITATION SCHEME JAMRUD, DISTRICT KHYBER

CONTRACT PACKAGE : RFB-KH-SNW-01

BILL OF QUANTITIES

Bill No. 08-D: CONSTRUCTION OF SLUDGE DRYING BEDS

BOQ Item	Description	Unit	Quantity	Unit Rate (Rs.)		Amount (Rs.)
				In Figure	In Words	
8.1 D	Excavation in foundation of building, bridges etc complete : in shingle/gravel	Cum	113.950			-
8.2 D	Structural backfill using Common Material available at site	Cum	12.870			-
8.3 D	Plain Cement Concrete including placing, compacting, finishing & curing (Ratio 1:4:8)	Cum	9.45			-
8.4 D	RCC in roof slab, beam, column & other structural members, insitu or precast. (1:1.5:3)	Cum	31.694			-
8.5 D	Supply & fabricate M.S. reinforcement for cement concrete (Hot rolled deformed bars Grade 60)	Tonne	3.169			-
8.6 D	Erection and removal of Form work with Plywood sheet finishing for RCC or Plain cement Concrete in any shpae - Position / Vertical	Sqm	158.040			-
8.7 D	Providing and installing PVC Strainer BSS Class "B" of approved make \ quality in tubewell bore hole, including socket, special sockets, studs etc. complete as per specification:- 6" Nominal Pipe Size (NPS) (150mm)	Meter	18.00			-
8.8 D	Provide & lay stone/boulder dry hand packed as filling behind retaining walls or in pitching	Cum	12.73			-
8.9 D	Providing and Laying stone or spawl filling : On level	Cum	12.73			-
8.10 D	Dry rammed shingle brick ballast or stone ballast 1.5" to 2" guage	Cum	8.10			-
8.11 D	Supplying and filling sand under floor or plugging in wells (Filter Layer)	Cum	4.05			-
8.12 D	Bitumen coating to plastered / cement concrete surface : 20 lbs. per 100 sft.	Sqm	73.290			-
8.13 D	Supplying and Fixing PVC Water Stopper 8" wide 3/8" thick. Providing and fixing PVC water stopper 8" wide 3/8" thick in verticle (Wall/Column)or horizontal (Floor/Slab) expansion joint including cutting and jointing complete in all respects.	Meter	66.450			-
Total Amount						

KHYBER PAKHTUNKHWA RURAL INVESTMENT & INSTITUTIONAL SUPPORT PROJECT (KP-RIISP)

SANITATION SCHEME JAMRUD, DISTRICT KHYBER

CONTRACT PACKAGE : RFB-KH-SNW-01

BILL OF QUANTITIES

Bill No. 08-E: CONSTRUCTION OF OPERATOR ROOM

BOQ Item	Description	Unit	Quantity	Unit Rate (Rs.)		Amount (Rs.)
				In Figure	In Words	
8.1 E	Excavation in foundation of building, bridges etc complete : in shingle/gravel	Cum	25.219			-
8.2 E	Structural backfill using Common Material available at site	Cum	6.382			-
8.3 E	Plain Cement Concrete including placing, compacting, finishing & curing (Ratio 1:4:8)	Cum	17.67			-
8.4 E	1st class brick work in foundation and plinth in Cement, sand mortar 1:3	Cum	8.80			-
8.5 E	Dry rammed shingle brick ballast or stone ballast 1.5" to 2" guage	Cum	6.81			-
8.6 E	Damp proof course of cem. conc. 1:2:4 including bitumen coat, 1 layer polythene & 1 coat bitumen (2" thick	Sqm	13.12			-
8.7 E	1st class brick work in ground floor Cement, sand mortar 1:4	Cum	46.60			-
8.8 E	RCC in roof slab, beam, column & other structural members, insitu or precast. (1:2:4)	Cum	13.831			-
8.9 E	Supply & fabricate M.S. reinforcement for cement concrete (Hot rolled deformed bars Grade 60)	Tonne	1.494			-
8.10 E	Cement plaster 3/8" thick under soffit of RCC roof slabs only upto 20' height : (1:4)	Sqm	78.373			-
8.11 E	Cement plaster 1:4 upto 20' height 1/2" thick	Sqm	233.567			-
8.12 E	White washing: New surface : Three coats	Sqm	50.881			-
8.13 E	Distempering New surface : Two coats	Sqm	276.368			-
8.14 E	Cement pointing struck joints, on walls, upto 20' height : Ratio 1:3	Sqm	226.391			-
8.15 E	Plain Cement Concrete including placing, compacting, finishing & curing (Ratio 1:2:4)	Cum	8.39			-
8.16 E	Providing and Fixing marble strip 2" wide and 3/8" thick for dividing the floor into panels	Meter	143.70			-
8.17 E	Supplying and Fixing 18 SWG MS Sheet Door with angle iron frame (1.5"x1.5"x1/8"), bolt, hinges,paint etc complete	Sqm	17.69			-
8.18 E	First class tile roofing including earth, mud plaster, gobri leeping, cement plaster etc complete	Sqm	79.37			-
8.19 E	Extra cost of labour & material for red oxide pigment in cement pointing to match bricks	Sqm	226.39			-
8.20 E	Erection and removal of Form work with Plywood sheet finishing for RCC or Plain cement Concrete in any shpae - Position / Horizontal	Sqm	78.37			-
8.21 E	Providing, laying, cutting, jointing, testing and disinfecting UPVC pressure pipeline in trenches (conforming to BS 3505 manufactured) jointed with socket, elbow, tee, bend and plug bend etc.manufactured by the respective manufacturer complete as per specifications UPVC Pressure Pipes Class B (6 Bar) except excavation. 3" Nominal Pipe Size (NPS)	Meter	12.36			-

Plumbing Works						
8.22 E	Providing and Fixing cast iron (CI) floor trap approved quality including CI grating & concrete chamber all round : 4"x3" (100 mm x 75 mm)	Each	3			-
8.23 E	Providing and fixing superior quality plastic towel rail.	Each	3			-
8.24 E	Providing and fitting glazed earthenware water closet (WC), squatter type (orisa pattern) combined with foot rest. complete in all respects : White	Each	3			-
8.25 E	Providing & fixing chromium plated double bib-cock with Muslim Shower of approved quality Complete is all respects.	Each	3			-
8.26 E	Supplying and Fixing UPVC soil waste and vent pipe class B : 4" dia	Meter	30			-
8.27 E	P-Trap (uPVC) for squatting type WC 4"	Each	3			-
8.28 E	Providing, laying cutting, jointing, testing PPRC pipeline in walls/trenches with pipes (confirming to DIN 8077/8078, PN 20 of approved quality & fittings conforming to DIN 16962,PN25 of the same manufacturer) for cold/hot water supply systems including specials complete in all respect as per specifications: except excavation 3/4" i/d	Meter	300			-
Electrical Works						
8.29 E	Wiring of light point in 3/0.029" PVC insulated bare cable in PVC pipe recessed in wall comp.	Each	12			-
8.30 E	Wiring of light/fan/call-bell point in 3/0.029" PVC insulated bare cable in PVC pipe recessed	Each	9			-
8.31 E	Supply and Erection best quality AC ceiling fan complete with GI rod, canopy, blades & regulator : 48" sweep	Each	3			-
8.32 E	Wiring of 2/3-pin 5-Amp plug point in 3/0.029" PVC insulated & sheathed cable on sahl wood	Each	6			-
8.33 E	Supply and Erection of AC ENERGY EFFICIENT LED LIGHT BULBS (16-20 W)	No	12			-
8.34 E	Supply at site, installation, testing and commissioning of Six gang light control switches 10 Amps, 250Volts one way, including appropriate size concealed MS, powder coated back box, complete in all respects.	Each	6			-
8.35 E	Supply and Fixing dimmer switch complete	Each	3			-
8.36 E	Wiring of main & sub-main in 2 single core PVC insulated & sheathed cable : 7/0.029"	Meter	3			-
8.37 E	Supply and Erection single phase imported auto circuit breaker 20 Amp.	Each	6			-
Total Amount						

KHYBER PAKHTUNKHWA RURAL INVESTMENT & INSTITUTIONAL SUPPORT PROJECT (KP-RIISP)

SANITATION SCHEME JAMRUD, DISTRICT KHYBER

CONTRACT PACKAGE : RFB-KH-SNW-01

BILL OF QUANTITIES

Bill No. 08-F: CONSTRUCTION OF BOUNDARY WALL & LANDSCAPING

BOQ Item	Description	Unit	Quantity	Unit Rate (Rs.)		Amount (Rs.)
				In Figure	In Words	
8.1 F	Excavation in foundation of building, bridges etc complete : in shingle/gravel	Cum	82.55			-
8.2 F	Structural backfill using Common Material available at site	Cum	59.607			-
8.3 F	1st class brick work in foundation and plinth in Cement, sand mortar 1:4	Cum	31.58			-
8.4 F	Plain Cement Concrete including placing, compacting, finishing & curing (Ratio 1:4:8)	Cum	46.42			-
8.5 F	1st class brick work other than building upto 10 ft. height : Cement, sand mortar 1:4	Cum	56.17			-
8.6 F	Damp proof course of cem. conc. 1:2:4 including bitumencoat, 1 layer polythene & 1 coat bitumen 2" thick	Sqm	21.13			-
8.7 F	Cement pointing struck joints, on walls, upto 20' height : Ratio 1:3	Sqm	440.88			-
8.8 F	Extra cost of labour & material for red oxide pigment in cement pointing to match bricks	Sqm	440.88			-
8.9 F	Cement plaster 1:4 upto 20' height 1/2" thick	Sqm	440.88			-
8.10 F	Plain Cement Concrete including placing, compacting, finishing & curing (Ratio 1:2:4) as in coping	Sqm	9.46			-
8.11 F	White washing: New surface :Three coats	Sqm	440.88			-
8.12 F	Providing and fixing steel gate of 16-18 SWG MS Sheet Gate with angle iron frame (2"x2"x3/16") with side window, lock, painting etc M.S. sheet covering including hold fast, with or without rollers and track arrangement including providing wicket shutter of required size with all accessories and locking arrangement complete	Sqm	22.50			-
8.13 F	Prepare & Paint new surface, doors & windows Priming coat	Sqm	45.00			-
8.14 F	Prepare & Paint new surface, doors & windows Each subsequent coat of paint	Sqm	45.00			-
8.15 F	Providing and Fixing Precast Concrete 3000 psi TUFF Tiles 50mm thick over bed of 2" thick sand	Sqm	300.00			-
8.16 F	Levelling, dressing and making lawns	Sqm	840.00			-
8.17 F	Clearing and Grubbing by mechanical means	Sqm	937.00			-
8.18 F	Furnishing And Planting Of Trees Including Maintenance For 2 Years	Each	178.00			-

8.19 F	RCC in roof slab, beam, column & other structural members, insitu or precast. (1:1.5:3)	Cum	2.38			-
8.20 F	Supply & fabricate M.S. reinforcement for cement concrete (Hot rolled deformed bars Grade 60)	Tonne	0.24			-
8.21 F	Erection and removal of Form work with Plywood sheet finishing for RCC or Plain cement Concrete in any shpae - Position / Vertical	Sqm	24.00			-
8.22 F	Bitumen coating to plastered / cement concrete surface : 20 lbs. per 100 sft.	Sqm	9.30			-
Network Pipes						
8.23 F	Providing, laying, cutting, jointing, testing and disinfecting UPVC pressure pipeline in trenches (conforming to BS 3505 manufactured) jointed with socket, elbow, tee, bend and plug bend etc.manufactured by the respective manufacturer complete as per specifications UPVC Pressure Pipes Class B (6 Bar) except excavation. 6" Nominal Pipe Size (NPS)	Meter	75.00			-
8.24 F	Providing, laying, cutting, jointing, testing and disinfecting UPVC pressure pipeline in trenches (conforming to BS 3505 manufactured) jointed with socket, elbow, tee, bend and plug bend etc.manufactured by the respective manufacturer complete as per specifications UPVC Pressure Pipes Class B (6 Bar) except excavation. 8" Nominal Pipe Size (NPS)	Meter	30.00			-
8.25 F	Providing and laying R.C.C. pipe, moulded with cement concrete 1:1-1/2:3, with spigot, socket or collar joint, etc. including cost of reinforcement, conforming to B.S. 5911: Part-I, 1981 Class "L" including carriage, lowering in trenches to correct alignment and grade, jointing, cutting pipe where necessary, finishing and testing, etc. complete:- 9" dia:	Meter	36.00			-
Total Amount						

KHYBER PAKHTUNKHWA RURAL INVESTMENT & INSTITUTIONAL SUPPORT PROJECT (KP-RIISP)

SANITATION SCHEME JAMRUD, DISTRICT KHYBER

CONTRACT PACKAGE : RFB-KH-SNW-01

BILL OF QUANTITIES

Bill No. 9: E&S COMPLIANCE

BOQ Item	Description	Unit	Quantity	Unit Rate (Rs.)		Amount (Rs.)
				In Figure	In Words	
9.1	Provision of an E&S Specialist (Bachelor's or Master's degree) (16 years of education) in Environmental Sciences/Engineering or Social Sciences) with atleast 3 years of relevant work experience.	Months	12			-
9.2	Provision of green cloth, 4 colour waste bins (240 Liters), signages, warning tape, necessary plastic and tarpulin sheet for covering of construction raw material on site and during transportation to the site	Each Site	20			-
9.3	Handling of solid waste (storage, collection, transportation, treatment, utilization, processing, and final disposal of solid wastes)	Months	12			-
9.4	DCP Fire extinguishers (6 kg) in case of fire (The material of the cylinder is steel. The extinguishing agent is mono ammonium phosphate and ammonium sulfate powder and the discharge time of the agent is 13 seconds). Including the refilling of used chemical and replacement of expired chemical.	Each Site	8			-
9.5	Fire alarm (Signal Transmission: Wired Alarm, Working Principle: Manual Alarm Button)	Each Site	4			-
9.6	Ear plugs (corded Reusable silicon Earplugs)	Each	150			-
9.7	Safety Helmets (PE shell with vents Lining; material: Plastic Chin strap included; Adjust head size by ratchet knob)	Each	150			-
9.8	Safety shoes (Renowned brand)	Each	150			-
9.9	Protective goggles (Anti-fog, Anti scratch, Poly-carbonate Scratch and impact resistant, side protection sheet)	Each	150			-
9.10	Gloves (made up of nylon, polyurethane with ironclad) and safety Vest	Each	150			-
9.11	Dust Mask	Each	2000			-
9.12	First Aid Kit (pain killers, eyewash solution, antibiotic ointment, thermometer, plasters, sterile gauze dressings, sterile eye dressings, triangular bandages, crepe rolled bandages, safety pins, disposable sterile gloves and tweezers). Including the refilling of used contents and replacement of expired content.	Each Site	8			-
9.13	Ground water and drinking water Quality Testing (To be performed quarterly during the pre-construction and construction phase) at different locations	Lab Test	40			-
9.14	Ambient noise level at different locations in the project area (24 hours, readings taken at 15 s intervals over 15 min. every hour at 15 m from the receptors, and then averaged)	Test	20			-
9.15	Capacity building and training on Health, Safety & Environment, E&S requirements for workers/staff of contractor and local community	Session	10			-
9.16	Removal of Existing Trees upto any Girth, including removal of stumps & backfilling with sand & Plantation of (10 No.s) New Trees of the Type removed at each location and as per environmental compliance requirements	Job	5			-
9.17	Air Quality Testing for the Parameters CO, NO2, SO2, O3, PM2.5 & PM10 (To be performed quarterly during the pre-construction & construction phase) at different locations	Test	20			-
9.18	GRM operation, implementation of SEA/SH mitigation measures, E&S monitoring and reporting	Job	1			-
9.19	Safety Sign Boards/Warning Signs for each construction site including signs for, Grievance Rederess Mechanism (GRM) details, Emergency Contact Numbers, PPE's requirements, First Aid / Fire Extinguishers placement, Emergency Exists, Procedure of use of Fire Extinguishers & other construction related safety / warning signs	Each	40			-
Total Amount						-