Individual Report

Tender/Proposal Detail			
Tender/Proposal ID :	268733	**Invitation Reference No. :**	T-3/481, dt.-02/01/2019
Closing Date and Time :	04-Feb-2019 12:00	**Opening Date and Time :**	04-Feb-2019 12:00
Procuring Entity :	Sunamganj O&M Division		
Brief :	Construction of (4V-1.5m x 1.8m) Dahar Regulator at km 22.588 & (2V-1.5m x 1.8m) Deola Regulator at km 34.280 & (6.00m) Manai Causeway at km 12.560 & (4.00m) Dahar Causeway at km 22.270 & (4.00m) Dahargang Causeway-1 at km 26.980 and (4.00m) Chandrasonar thal Causeway at km 27.770 of Dharmapasha Rui Beel Haor Sub-Project in c/w "Hoar Flood Management and Livelihood Improvement Project (BWDB Part)" under Sunamgang O&M Division-1, BWDB, Sunamganj during FY: 2018-19 & 2019-20.		

Package No	Package Description
BWDB/Sunam/HFMLIP/PW-05	Construction of 4V-1.5m x 1.8m Dahar Regulator at km 22.588 & 2V-1.5m x 1.8m Deola Regulator at km 34.280 & 6.00m Manai Causeway at km 12.560 & 4.00m Dahar Causeway at km 22.270 & 4.00m Dahargang Causeway-1 at km 26.980 and 4.00m Chandrasonar thal Causeway at km 27.770 of Dharmapasha Rui Beel Haor Sub-Project in c/w Hoar Flood Management and Livelihood Improvement Project BWDB Part under Sunamgang O&M Division-1 BWDB Sunamganj during FY 2018-19 & 2019-20.

GS-AS(JV)
(JVCA)

Bill of Quantities

Bill of Quantities

Item no.	Group	Item Code (if any)	Description of Item	Measurement Unit	Quantity	Unit Price In figures (BDT)	Unit Price In Words (BDT)	Total Price In Figures (BDT)	Total Price In Words (BDT)
1	1	1	Construction of B.M. Pillars at site with first class bricks in cement mortar (1:4) of size 38cm x 38cm x 75cm on cement concrete (1:2:4) base of size 50cm x 50cm x 7.5cm with 12mm thick cement plastering (1:2) on exposed surfaces of pillar and cement morter on top (1:2), with inscription of "BWDB" with 25cm of the pillar below ground level etc. complete including ramming the backfill and the cost of all materials as per direction of Engineer in charge.	each	12.000	1323.639	One Thousand Three Hundred and Twenty-Three point Six Three Nine	15883.668	Fifteen Thousand Eight Hundred and Eighty-Three point Six Six Eight
2	2	2	Site preparation by manually removing all miscellaneous objectional materials form entire site and removing soil upto 15cm depth including uprooting stumps, jungle clearing, levelling dressing etc. complete as per direction of Engineer in charge.	sqm	47850.000	34.171	Thirty-Four point One Seven One	1635082.350	Sixteen Lakh Thirty-Five Thousand AND Eighty-Two point Three Five
			Earth work in excavation of foundation trenches in all kinds of soils as per layout plan of						Fifty Lakh

3	3	3	foundation excavation with all leads and lifts and placing the spoil earth for constructing the ring bundh/ cofferdam where necessary as per design and specification or disposing it to a safe distance including pushing, levelling, dressing, etc. complete as per direction of Engineer in charge. For moving spoil earth upto a distance of 100m from the centre of the pit.	cum	33893.076	150.001	One Hundred and Fifty point Zero Zero One	5083995.293	Fifty Lakh Eighty-Three Thousand Nine Hundred and Ninety-Five point Two Nine Three
4	4	4	Installation of pizeometer including supply of 40mm G.I. pipe, brass strainer, socket, labour, by wash boring, lowering, fixing the elevation and providing cover on the top of the well etc. complete as per direction of Engineer in charge.	each	8.000	3120.541	Three Thousand One Hundred and Twenty point Five Four One	24964.328	Twenty-Four Thousand Nine Hundred and Sixty-Four point Three Two Eight
5	5	5	Shoring for slope protection of foundation trench, canal, embankment, road, pond etc. as per design slopes, grades including removal of spoils to a safe distance as per direction of Engineer in charge. By bamboo post of 6.0m length, 60mm to 80mm dia, 20cm c/c driven 2.0m below ground, with drum sheet walling and average 70mm dia half split bamboo batten @ 2.0m c/c fixed with nails.	sqm	766.000	806.221	Eight Hundred and Six point Two Two One	617565.286	Six Lakh Seventeen Thousand Five Hundred and Sixty-Five point Two Eight Six
6	6	6	Bailing out of water with all leads and lifts by manual labour or pump, with all arrengements for protection of ring bund and side slopes of foundation pit against erosion or washout etc. complete (actual volume of work will be measured by sounding method before starting the work) as per direction of Engineer in charge. by pump.	cum	224273.659	7.101	Seven point One Zero One	1592567.253	Fifteen Lakh Ninety-Two Thousand Five Hundred and Sixty-Seven point Two Five Three
7	7	7	Supplying at site U-shape hot rolled steel sheet pile of different section of Phosphorus=0.04%(Maximum), Sulphur = 0.04% (Maximum), Tensile strength=> 490 N/mm2 , Yield strength =>296 N/mm2, Elongation =15% (Minimum) including all taxes, freights, incidental charges etc. complete as per direction of the Engineer -in- charge. U-shape, hot- rolled steel sheet pile width= 400mm to 600mm: height=>100mm, Thickness>=10.5mm. (±0.50mm)	Mton	110.736	115000.001	One Lakh Fifteen Thousand point Zero Zero One	12734640.111	One Crore Twenty-Seven Lakh Thirty-Four Thousand Six Hundred and Forty point One One One
8	8	8	Cutting of steel sheet piles to design and length and shape as per requirement in design and drawing and as per direction of Engineer in charge. Upto 10mm thick.	m	255.000	44.001	Forty-Four point Zero Zero One	11220.255	Eleven Thousand Two Hundred and Twenty point Two

									Five Five
9	9	9	Construction of sump well with dug holes of size 1.80m x 2.0m, laying in position the perforated empty diesel/petrol drum sheet of 1.00m dia to a depth 1.5m having slot area of 1000 sq.cm/sqm, slot dia being 30mm each with supply of necessary shrouding materials comprising of 60% 40mm down graded khoa and 40% coarse sand of FM>=2.50 and placing those around and beneath the drum sheet having thickness of 40cm and 50cm respectively including necessary welding, fitting etc. complete as per direction of Engineer in charge.	each	20.000	18256.881	Eighteen Thousand Two Hundred and Fifty-Six point Eight Eight One	365137.620	Three Lakh Sixty-Five Thousand One Hundred and Thirty-Seven point Six Two
10	10	10	Driving steel sheet piles of various sections and weights of any type of soil, by monkey hammer including handling and placing in position, staging and supplying of all equipments like monkey hammer, pully, rope, bamboo, bullah etc. including correcting leaning beyond tolerance & other defects and any other incidental cost etc. complete (measurement will be taken on projected width x height) as per direction of Engineer in charge. U-type or any other type : Upto 4.50 m depth.	sqm	1037.880	1900.001	One Thousand Nine Hundred point Zero Zero One	1971973.038	Nineteen Lakh Seventy-One Thousand Nine Hundred and Seventy-Three point Zero Three Eight
11	11	11	Provide 1 (one) coat of Zinc phosphate as primary coat and 2 (two) coat of coaltar epoxy coat over primary coat to steel surface with paint of approved colour etc. complete including the cost of all materials as per direction of Engineer in charge.	sqm	3137.520	350.001	Three Hundred and Fifty point Zero Zero One	1098135.138	Ten Lakh Ninety-Eight Thousand One Hundred and Thirty-Five point One Three Eight
12	12	12	Supplying and placing 20mm thick hessian cloth impregnated with bitumen in expansion joints or on top of sheet piles as per specification and direction of Engineer in charge.	sqm	314.760	495.661	Four Hundred and Ninety-Five point Six Six One	156014.256	One Lakh Fifty-Six Thousand AND Fourteen point Two Five Six
13	13	13	Supplying and laying single layer pholythene sheet in floor below cement concrete, RCC slab, on walls etc. complete in all respect as per direction of Engineer in charge. Weighing minimum 1.0 kg per 6.50 sqm	sqm	1844.612	31.371	Thirty-One point Three Seven One	57867.323	Fifty-Seven Thousand Eight Hundred and Sixty-Seven point Three Two Three
			Cement concrete work in leanest mix. 1:3:6 with sand of FM>= 1.5, in foundation or floor, including breaking, screening, grading and washing				Eleven		Thirty-Six

14	14	14	aggregates with clear water, mixing, laying in position, consolidation to levels, curing, including supply of all materials, excluding the cost of formworks etc. complete as per direction of Engineer in charge. With 25mm down graded Stone Chips	cum	318.267	11500.001	Thousand Five Hundred point Zero Zero One	3660070.818	Lakh Sixty Thousand AND Seventy point Eight One Eight
15	15	15	Cement concrete work in leanest mix. 1:4:8, with sand of FM>= 1.5, in foundation or floor, including breaking, screening, grading and washing aggregates with clear water, mixing, laying in position, consolidation to levels, curing, including supply of all materials, excluding the cost of formworks etc. complete as per direction of Engineer in charge. With 25mm down graded Stone chips.	cum	15.602	10614.911	Ten Thousand Six Hundred and Fourteen point Nine One One	165613.841	One Lakh Sixty-Five Thousand Six Hundred and Thirteen point Eight Four One
16	16	16	Form-work for centering and water tight shuttering as per drawing with 14 BWG M.S. sheet, fitted and fixed with 40mmx40mmx6mm M.S. angle frame and 25mmx6mm F.I. bar stiffener, with necessary fabrication, welding, making the forms including fitting, fixing of steel forms with necessary ties, battens, struts, nuts & bolts, props etc. as per desired shape and size including leveling and removing the forms after specified period including the cost of all materials as per direction of Engineer in charge. Footing, footing beams, girder beams, foundation slab with 60-80mm dia barrack bamboo props.	sqm	982.342	1100.001	One Thousand One Hundred point Zero Zero One	1080577.182	Ten Lakh Eighty Thousand Five Hundred and Seventy-Seven point One Eight Two
17	17	17	Form-work for centering and water tight shuttering as per drawing with 14 BWG M.S. sheet, fitted and fixed with 40mmx40mmx6mm M.S. angle frame and 25mmx6mm F.I. bar stiffener, with necessary fabrication, welding, making the forms including fitting, fixing of steel forms with necessary ties, battens, struts, nuts & bolts, props etc. as per desired shape and size including leveling and removing the forms after specified period including the cost of all materials as per direction of Engineer in charge. Vertical and inclined walls, columns, piers with 60-80mm dia barrack bamboo props.	sqm	3144.952	1250.001	One Thousand Two Hundred and Fifty point Zero Zero One	3931193.145	Thirty-Nine Lakh Thirty-One Thousand One Hundred and Ninety-Three point One Four Five
			Form-work for centering and water tight shuttering as per drawing with 14 BWG M.S. sheet, fitted and fixed with 40mmx40mmx6mm M.S. angle frame and 25mmx6mm F.I. bar						Sixty

18	18	18	stiffener, with necessary fabrication, welding, making the forms including fitting, fixing of steel forms with necessary ties, battens, struts, nuts & bolts, props etc. as per desired shape and size including leveling and removing the forms after specified period including the cost of all materials as per direction of Engineer in charge. Deck slab, operating deck slab, top slab of barrel upto 3.5m height with 60-80mm dia barrack bamboo props.	sqm	55.240	1091.451	One Thousand AND Ninety-One point Four Five One	60291.753	Sixty Thousand Two Hundred and Ninety-One point Seven Five Three
19	19	19	Form-work for centering and water tight shuttering as per drawing with 14 BWG M.S. sheet, fitted and fixed with 40mmx40mmx6mm M.S. angle frame and 25mmx6mm F.I. bar stiffener, with necessary fabrication, welding, making the forms including fitting, fixing of steel forms with necessary ties, battens, struts, nuts & bolts, props etc. as per desired shape and size including leveling and removing the forms after specified period including the cost of all materials as per direction of Engineer in charge. Deck slab, operating deck slab, top slab of barrel above 3.5m upto 6.5m height with 50mm dia GI pipe props.	sqm	56.880	1591.561	One Thousand Five Hundred and Ninety-One point Five Six One	90527.990	Ninety Thousand Five Hundred and Twenty-Seven point Nine Nine
20	20	20	Supplying and filling sand in foundation of hydraulic structures, buildings and in protective works with selected sand, in 150mm thick layer, including levelling, dressing, ramming, watering etc. complete (compacted to 50% relative density by manual laqbour using mallet/vibro compactor) as per direction of Engineer in charge. sand of FM>= 1.50	cum	704.021	1089.431	One Thousand AND Eighty-Nine point Four Three One	766982.302	Seven Lakh Sixty-Six Thousand Nine Hundred and Eighty-Two point Three Zero Two
21	21	21	Reinforced cement concrete work in leanest mix. 1:1.5:3, with 20mm down graded coarse aggregates and sand of FM>2.0 to FM<=2.5, to attain a minimum 28 day cylinder strength of 22.0 N/mm², including breaking, screening, grading, washing aggregates with clean water, mixing, laying in forms, consolidation to levels, curing, including supply of all materials, excluding cost of M.S. work for reinforcements and formworks etc. complete and as per direction of Engineer in charge. With stone chips	cum	2040.754	13600.001	Thirteen Thousand Six Hundred point Zero Zero One	27754256.441	Two Crore Seventy-Seven Lakh Fifty-Four Thousand Two Hundred and Fifty-Six point Four Four One
			M.S. Work for reinforcement with deformed M.S. bar, fy=400 N/mm², (made from billet) in RCC works, including local handling, cutting, forging,						One Crore Eighty-Three Lakh

22	22	22	bending, cleaning and fabrication with supply of deformed M.S. bar in different sizes and binding with 22 to 18 gages G.I. wire etc. complete including the cost of all materials as per direction of Engineer in charge. 8mm dia to 30mm dia.	kg	193834.097	94.541	Ninety-Four point Five Four One	18325269.364	Twenty-Five Thousand Two Hundred and Sixty-Nine point Three Six Four
23	23	23	Supply and fitting and fixing 23cm wide P.V.C water stops having minimum strength of 13.80 N/mm² at 225% elongation and of approved quality in contraction and expansion joints with necessary arrangements for modification in shuttering and kepping the water stop in position etc. complete as per design, specification and direction of Engineer in charge. 3 bulb type	m	50.000	1152.571	One Thousand One Hundred and Fifty-Two point Five Seven One	57628.550	Fifty-Seven Thousand Six Hundred and Twenty-Eight point Five Five
24	24	24	Supplying and laying dry 1st class or pick jhama chips as filter in two layers (top and bottom) as per specific size, range and gradation, including breaking chips, grading, preparation of surface, compacting each layer etc. complete with supply of all materials and as per direction of Engineer in charge. Well graded between 40mm to 20mm size.	cum	700.874	3000.001	Three Thousand point Zero Zero One	2102622.701	Twenty-One Lakh Two Thousand Six Hundred and Twenty-Two point Seven Zero One
25	25	25	Supplying and laying dry 1st class or pick jhama chips as filter in two layers (top and bottom) as per specific size, range and gradation, including breaking chips, grading, preparation of surface, compacting each layer etc. complete with supply of all materials and as per direction of Engineer in charge. Well graded between 20mm to 5mm size.	cum	700.874	3300.001	Three Thousand Three Hundred point Zero Zero One	2312884.901	Twenty-Three Lakh Twelve Thousand Eight Hundred and Eighty-Four point Nine Zero One
26	26	26	Supplying and laying sand as filter layers as per specific size ranges and gradation including preparation of surface, compacting in layer etc. complete with supply of all materials and as per direction of Engineer in charge. FM : 1.5 to 2.0	cum	1099.463	800.001	Eight Hundred point Zero Zero One	879571.499	Eight Lakh Seventy-Nine Thousand Five Hundred and Seventy-One point Four Nine Nine
27	27	27	Supplying and laying sand as filter layers as per specific size ranges and gradation including preparation of surface, compacting in layer etc. complete with supply of all materials and as per direction of Engineer in charge. FM : 1.00to 1.50	cum	372.337	930.181	Nine Hundred and Thirty point One Eight One	346340.803	Three Lakh Forty-Six Thousand Three Hundred and Forty point Eight Zero Three

28	28	28	Back filling in hydraulic structures including all leads and lifts in 150mm layer including watering, ramming compacting to 30% relative density etc. complete by compactor or any other suitable method as per direction of Engineer in charge. Sand of FM>= 0.80	cum	5271.798	400.001	Four Hundred point Zero Zero One	2108724.472	Twenty-One Lakh Eight Thousand Seven Hundred and Twenty-Four point Four Seven Two
29	29	29	Manufacturing and supplying C.C. blocks in leanest mix. 1:3:6, with cement, sand (FM>=1.5) and Stone Chips (40mm down graded), to attain a minimum 28 days cylinder strength of 9.0 N/mm² including grading, washing stone chips, mixing, laying in forms, consolidation, curing for at least 21 days, including preparation of platform, shuttering and stacking in measurable stacks etc complete including supply of all materials (steel shutter to be used) as per direction of Engineer in charge. block size 40cmx40cmx20cm	each	53785.000	386.291	Three Hundred and Eighty-Six point Two Nine One	20776661.435	Two Crore Seven Lakh Seventy-Six Thousand Six Hundred and Sixty-One point Four Three Five
30	30	30	Manufacturing and supplying C.C. blocks in leanest mix. 1:3:6, with cement, sand (FM>=1.5) and Stone Chips (40mm down graded), to attain a minimum 28 days cylinder strength of 9.0 N/mm² including grading, washing stone chips, mixing, laying in forms, consolidation, curing for at least 21 days, including preparation of platform, shuttering and stacking in measurable stacks etc complete including supply of all materials (steel shutter to be used) as per direction of Engineer in charge. block size 30cmx30cmx30cm	each	36203.000	321.309	Three Hundred and Twenty-One point Three Zero Nine	11632349.727	One Crore Sixteen Lakh Thirty-Two Thousand Three Hundred and Forty-Nine point Seven Two Seven
31	31	31	Labour charge for protective works in laying C.C. blocks of different sizes including preparation of base, watering and ramming of base etc. complete as per direction of the Engineer in charge. Within 200m	cum	2373.224	1384.921	One Thousand Three Hundred and Eighty-Four point Nine Two One	3286727.755	Thirty-Two Lakh Eighty-Six Thousand Seven Hundred and Twenty-Seven point Seven Five Five
32	32	32	Labour charge for protective works in laying C.C. blocks of different sizes including preparation of base, watering and ramming of base etc. complete as per direction of the Engineer in charge. Beyond 200m	cum	325.365	2472.621	Two Thousand Four Hundred and Seventy-Two point Six Two One	804504.332	Eight Lakh Four Thousand Five Hundred and Four point Three Three Two

33	33	33	Supplying and placing non-woven needle punched type geotextile fabric (100% Polypropylene Fabric, unit weight : 855 Kg/m3 to 946 Kg/m3) as filter materials of elongation at maximum force machine direction (MD) >=60% and <= 100 % , elongation at maximum force (CMD) => 40% and <= 100% ,horizontal and vertical permeability (under 2 kn/m² pressure)=>2x10E-3 m/sec. for effective erosion protection in hydraulic structures/river training works including local handling, placing in position, providing machine seamed joints (with 100% polypropylene or nylon thread) or 35cm lap in dry condition or minimum 100cm lap under water including protecting the geotextile material from UV ray and from any other damages including supply of all materials, labours, equipment's etc. complete as per direction of Engineer in charge. (Geotextile delivered at site should be certified by ISO and clearly labelled with brand name and grade printed at regular intervals across the body of the fabric). Mass =>300 gm/m², thickness(Under 2 kpa pressure) =>2.00mm, EoS<=0.11mm, strip tensile strength =>15kn/m, grab strength =>850N, CBR puncture resistance =>2200N.	sqm	11945.790	209.941	Two Hundred and Nine point Nine Four One	2507911.098	Twenty-Five Lakh Seven Thousand Nine Hundred and Eleven point Zero Nine Eight
34	34	34	M.S. Work for reinforcement with plain M.S. bar, fy=300 N/mm², (made from billet) in RCC works, including local handling, cutting, forging, bending, cleaning and fabrication with supply of plain round M.S. bar in different sizes and binding with 22 to 18 gages G.I. wire etc. complete including the cost of all materials as per direction of Engineer in charge. 6mm dia.	kg	88.800	83.791	Eighty-Three point Seven Nine One	7440.641	Seven Thousand Four Hundred and Forty point Six Four One
35	35	35	Manufacturing, supplying and Installation of Hand Wheel type lifting device for slide gate with 63mm dia steel shaft, 108mm outer dia bronze nut taper roller bearing SKF-50216 etc. as per approved design including supply of all components, labours with a prime coat of redoxide where necessary etc. complete including the cost of all materials as per specification and direction of Engineer in charge.	each	6.000	50921.809	Fifty Thousand Nine Hundred and Twenty-One point Eight Zero Nine	305530.854	Three Lakh Five Thousand Five Hundred and Thirty point Eight Five Four
			Earth work by manual labour in resectioning of embankment/ canal bank/river slopes/ road/							

36	36	36	compound etc. manually compacted by 7.0 kg iron rammer to avoid any air pocket in clayey soil (minimum 30% clay, 0-40% silt and 0-30% sand) within the initial lead of 30m and all lifts including throwing the spoils to profile in layers not exceeding 150mm thickness with clod breaking to a maximum size of 100mm, removing roots & stumps of trees of girth upto 200mm from the ground, benching the side slopes, stripping/ ploughing the base of embankment and borrowpit areas, dug bailing, bail out of water, rough dressing including 150mm cambering at the centre of the crest (where necessary) etc. complete as per direction of Engineer in charge. 0 m to 3.00 m height	cum	16452.000	130.001	One Hundred and Thirty point Zero Zero One	2138776.452	Twenty-One Lakh Thirty-Eight Thousand Seven Hundred and Seventy-Six point Four Five Two
37	37	37	Extra rate for every additional lead of 15m or part thereof beyond the initial lead of 30m upto a maximum of 19 leads (3m neglected) for all kinds of earth work. 3 nos lead	pldcum	11246.400	51.001	Fifty-One point Zero Zero One	573577.646	Five Lakh Seventy-Three Thousand Five Hundred and Seventy-Seven point Six Four Six
38	38	38	Earth work by Mechanical Excavator (Long Boom) in all kinds of soil in excavation / re-excavation of channel/canal/khal etc. Including disposal of spoil-soil upto 30m away from the point of excavation with rough dressing and levelling etc. complete as per direction of Engineer-in-Charge.	cum	76496.200	122.401	One Hundred and Twenty-Two point Four Zero One	9363211.376	Ninety-Three Lakh Sixty-Three Thousand Two Hundred and Eleven point Three Seven Six
39	39	39	Earth work by manual labour with clayey soil (minimum 30% clay, 0-40% silt and 0-30% sand) in construction of cross bundh/ring bundh as per design and specification with all leads and lifts, throwing the earth in layers not exceeding 150mm in thickness, including breaking clods, rough dressing, clearing the jungle, removing stumps, dug bailing and 75mm cambering etc. complete as per direction of Engineer in charge.	cum	17323.190	125.001	One Hundred and Twenty-Five point Zero Zero One	2165416.073	Twenty-One Lakh Sixty-Five Thousand Four Hundred and Sixteen point Zero Seven Three
40	40	40	Back filling in hydraulic structures and slope building in protective works including all leads and lifts with selected local soil in layer of 150mm including watering, ramming etc. complete compacted to 20% relative density by compactor or any other	cum	10986.607	191.731	One Hundred and Ninety-One point Seven Three One	2106473.147	Twenty-One Lakh Six Thousand Four Hundred and Seventy-Three point One

			suitable method as per direction of Engineer in charge.				One		point One Four Seven
41	41	41	Earth work by manual labour in all kinds of soil in removing the cross bundh/ring bundh, including all leads and lifts complete and placing the spoils to a safe distance, (minimum 15m apart from the bank) as per direction of Engineer in charge.	cum	3886.774	175.821	One Hundred and Seventy-Five point Eight Two One	683376.491	Six Lakh Eighty-Three Thousand Three Hundred and Seventy-Six point Four Nine One
42	42	42	M.S. Work in plates, angles, channels, flat bars, Tees etc. including fabricating, machining, cutting, bending, welding, forging, drilling, revetting, embedding anchor bars, staging and fitting, fixing, local handling etc. comlpete with energy consumption and supply of labours including the cost of materials as per design, specification and direction of Engineer in charge.	kg	6375.770	157.351	One Hundred and Fifty-Seven point Three Five One	1003233.785	Ten Lakh Three Thousand Two Hundred and Thirty-Three point Seven Eight Five
43	43	43	Manufacturing & Supplying of M.S. Vertical Lift Gate shutter of 8mm thick M.S. skin plate and stiffener with minimum 75mmx75mmx10mm M.S. angle as frame, horizontal & vertical beam, 75mmx25mmx12mm P-type rubber seal, fixed with 10mm dia x 63.5mm M.S. counter shank bolts with nuts and 40mmx10mm M.S. strip as clamp drilled spaces @ 150mm c/c, stem attachment with proper thread, nut, cotter pin and washer as per approved design including the cost of all materials of proper grade & brand new with a prime coat of redoxide where necessary as per specification and direction of Engineer in charge. Size 1.95m x 1.65m.	each	6.000	107289.361	One Lakh Seven Thousand Two Hundred and Eighty-Nine point Three Six One	643736.166	Six Lakh Forty-Three Thousand Seven Hundred and Thirty-Six point One Six Six
44	44	44	Labour charge for fitting and fixing of M.S. vertical lift gate/ flap gate shutters of different size including making holes in concrete for hooking arrangements with supply of necessary materials, tools and other accessories required for fitting the same to regulator/sluice and mending the damages with CC (1:2:4), removing the spoils etc. complete including the cost of all materials as per direction of Engineer in charge. Size 1.95m x 1.35m or 1.95m x 1.65m.	each	6.000	12145.111	Twelve Thousand One Hundred and Forty-Five point One One One	72870.666	Seventy-Two Thousand Eight Hundred and Seventy point Six Six Six
45	45	45	Supplying pressure treated wooden fall boards/stop logs of different sizes (not less than 15cm in depth) of sal, sundari, garjan, shishu or equivalent for	cum	5.022	90838.649	Ninety Thousand Eight Hundred and	456191.695	Four Lakh Fifty-Six Thousand One Hundred and

			regulator/ sluices, including fixing in position with eye hook etc. complete as per direction of Engineer in charge.				Thirty-Eight point Six Four Nine		and Ninety-One point Six Nine Five
46	46	46	Supplying, laying fitting and fixing of different dia G.I. pipes with all special fittings, such as bends, elbows, sockets, tees, unions, jamnuts etc. including cutting foundation trenches upto required depth where necessary and filling the same with earth duly compacted, making holes in floors and walls and mending the damages, fixing in walls with holders and clips, including cutting threads, making necessary connection etc. all complete,and as per direction of Engineer in charge. 40mm dia G.I. pipe line.	m	80.000	321.411	Three Hundred and Twenty-One point Four One One	25712.880	Twenty-Five Thousand Seven Hundred and Twelve point Eight Eight
47	47	47	Name Plate & Flag Stand and Accessories etc.	LS	2.000	50000.001	Fifty Thousand point Zero Zero One	100000.002	One Lakh point Zero Zero Two
48	48	48	Earth work by manual labour with clayey soil (minimum 30% clay, 0-40% silt and 0-30% sand) for closing breach or channel, with all leads and lifts within the channel width including profiling, clod breaking, ramming etc. complete as per specification and direction of Engineer in charge. Upto 30m width	cum	1482.000	166.681	One Hundred and Sixty-Six point Six Eight One	247021.242	Two Lakh Forty-Seven Thousand AND Twenty-One point Two Four Two
49	49	49	Earth work by manual labour with clayey soil (minimum 30% clay, 0-40% silt and 0-30% sand) for closing breach or channel, with all leads and lifts within the channel width including profiling, clod breaking, ramming etc. complete as per specification and direction of Engineer in charge. Upto 90m width	cum	3446.000	239.961	Two Hundred and Thirty-Nine point Nine Six One	826905.606	Eight Lakh Twenty-Six Thousand Nine Hundred and Five point Six Zero Six
50	50	50	Fine dressing and close turfing of the slopes and the crest of embankment with 75mm thick, good quality durba or charkanta sods of size 200mm x 200mm, with all leads and lifts, including ramming, watering until the turf grows properly, maintaining etc. complete (measurement will be given on well grown grass only). as per direction of Engineer in charge.	sqm	25555.000	15.121	Fifteen point One Two One	386417.155	Three Lakh Eighty-Six Thousand Four Hundred and Seventeen point One Five Five
			Preparation and mobilization of the Site for Construction of Submersible Embankment or other Structural Components in c/w "Haor Flood Management and Livelihood Improved Improvement Project (BWDB Part)" as per Technical				Nine Lakh		Nine Lakh

51	51	51	Specifications, including land lease, rental charges, obtaining permissions for work, developing work area, preparation of platform for temporary semi pucca site office(40sqm), CI Sheet labour sheds(200sqm), CI Sheet Stores(200sqm), supply of wooden & cane seated furniture etc. as specified and as per Contractor's Method Statement and as per direction of Engineer in charge.	LS	1.000	967050.851	Sixty-Seven Thousand AND Fifty point Eight Five One	967050.851	Nine Lakh Sixty-Seven Thousand AND Fifty point Eight Five One
52	52	52	Demobilization and clean-up of the site upon completion of the works, as per Specifications and Contractor's Method Statement and as per direction of Engineer in Charge.	LS	1.000	112344.101	One Lakh Twelve Thousand Three Hundred and Forty-Four point One Zero One	112344.101	One Lakh Twelve Thousand Three Hundred and Forty-Four point One Zero One
53	53	53	Providing and maintaining adequate portable water supply by installing 6 Nos. of tube well and sanitation facilities by installing 6 Nos. of sanitary latrines for usage of labours,officials and others for prevailing the hygenic and healthy environment at allover the working site As per direction of the Engineer in charge.	LS	1.000	111148.951	One Lakh Eleven Thousand One Hundred and Forty-Eight point Nine Five One	111148.951	One Lakh Eleven Thousand One Hundred and Forty-Eight point Nine Five One
54	54	54	Mobilize, strengthen required land based construction equipment such as excavator, dump truck, chain dozer, vibro-compactor, and plants such as generator for site electrification, digital camera for taking photographs and digital video camera for recording/Taking photograph all sequences of works etc for keeping records of the Works by providing following information including transfer to site, complete for the purposes stated in the Technical Specification and Contractor's Method Statement and as per direction of Engineer in charge.	LS	1.000	92026.551	Ninety-Two Thousand AND Twenty-Six point Five Five One	92026.551	Ninety-Two Thousand AND Twenty-Six point Five Five One
55	55	55	Operate, maintain of plant and equipment such as generator for site electrification, for the purpose stated in the Technical Specification and in the Contractor's Method Statement and as per direction of Engineer in charge.	LS	1.000	110909.921	One Lakh Ten Thousand Nine Hundred and Nine point Nine Two One	110909.921	One Lakh Ten Thousand Nine Hundred and Nine point Nine Two One
56	56	56	Part Time Environmental Monitoring through Sample Collection and analysis such as Air quality test, Surface water test, Sound Level monitoring, Traffic signs and road navigation, safety provisions	LS	1.000	250000.001	Two Lakh Fifty Thousand point Zero	250000.001	Two Lakh Fifty Thousand point Zero Zero One

			with first aid and medical Assistant as per direction of engineer in charge.				Zero Zero One		Zero One
							Grand Total:	150765128.281	Fifteen Crore Seven Lakh Sixty-Five Thousand One Hundred and Twenty-Eight point Two Eight One

This Bill of Quantities is Electronically Signed by Mr. Ashim Singha on behalf of GS-AS(JV)

HB-TI JV
(JVCA)

Bill of Quantities

Bill of Quantities

Item no.	Group	Item Code (if any)	Description of Item	Measurement Unit	Quantity	Unit Price In figures (BDT)	Unit Price In Words (BDT)	Total Price In Figures (BDT)	Total Price In Words (BDT)
1	1	1	Construction of B.M. Pillars at site with first class bricks in cement mortar (1:4) of size 38cm x 38cm x 75cm on cement concrete (1:2:4) base of size 50cm x 50cm x 7.5cm with 12mm thick cement plastering (1:2) on exposed surfaces of pillar and cement morter on top (1:2), with inscription of "BWDB" with 25cm of the pillar below ground level etc. complete including ramming the backfill and the cost of all materials as per direction of Engineer in charge.	each	12.000	1323.001	One Thousand Three Hundred and Twenty-Three point Zero Zero One	15876.012	Fifteen Thousand Eight Hundred and Seventy-Six point Zero One Two
2	2	2	Site preparation by manually removing all miscellaneous objectional materials form entire site and removing soil upto 15cm depth including uprooting stumps, jungle clearing, levelling dressing etc. complete as per direction of Engineer in charge.	sqm	47850.000	24.501	Twenty-Four point Five Zero One	1172372.850	Eleven Lakh Seventy-Two Thousand Three Hundred and Seventy-Two point Eight Five
3	3	3	Earth work in excavation of foundation trenches in all kinds of soils as per layout plan of foundation excavation with all leads and lifts and placing the spoil earth for constructing the ring bundh/ cofferdam where necessary as per design and specification or disposing it to a safe distance including pushing, levelling, dressing, etc.	cum	33893.076	220.001	Two Hundred and Twenty point Zero Zero One	7456510.613	Seventy-Four Lakh Fifty-Six Thousand Five Hundred and Ten point Six

			complete as per direction of Engineer in charge. For moving spoil earth upto a distance of 100m from the centre of the pit.						point Six One Three
4	4	4	Installation of pizeometer including supply of 40mm G.I. pipe, brass strainer, socket, labour, by wash boring, lowering, fixing the elevation and providing cover on the top of the well etc. complete as per direction of Engineer in charge.	each	8.000	3120.001	Three Thousand One Hundred and Twenty point Zero Zero One	24960.008	Twenty-Four Thousand Nine Hundred and Sixty point Zero Zero Eight
5	5	5	Shoring for slope protection of foundation trench, canal, embankment, road, pond etc. as per design slopes, grades including removal of spoils to a safe distance as per direction of Engineer in charge. By bamboo post of 6.0m length, 60mm to 80mm dia, 20cm c/c driven 2.0m below ground, with drum sheet walling and average 70mm dia half split bamboo batten @ 2.0m c/c fixed with nails.	sqm	766.000	645.001	Six Hundred and Forty-Five point Zero Zero One	494070.766	Four Lakh Ninety-Four Thousand AND Seventy point Seven Six Six
6	6	6	Bailing out of water with all leads and lifts by manual labour or pump, with all arrengements for protection of ring bund and side slopes of foundation pit against erosion or washout etc. complete (actual volume of work will be measured by sounding method before starting the work) as per direction of Engineer in charge. by pump.	cum	224273.659	6.151	Six point One Five One	1379507.277	Thirteen Lakh Seventy-Nine Thousand Five Hundred and Seven point Two Seven Seven
7	7	7	Supplying at site U-shape hot rolled steel sheet pile of different section of Phosphorus=0.04%(Maximum), Sulphur = 0.04% (Maximum), Tensile strength=> 490 N/mm2 , Yield strength =>296 N/mm2, Elongation =15% (Minimum) including all taxes, freights, incidental charges etc. complete as per direction of the Engineer -in- charge. U-shape, hot- rolled steel sheet pile width= 400mm to 600mm: height=>100mm, Thickness>=10.5mm. (±0.50mm)	Mton	110.736	137000.001	One Lakh Thirty-Seven Thousand point Zero Zero One	15170832.111	One Crore Fifty-One Lakh Seventy Thousand Eight Hundred and Thirty-Two point One One One
8	8	8	Cutting of steel sheet piles to design and length and shape as per requirement in design and drawing and as per direction of Engineer in charge. Upto 10mm thick.	m	255.000	44.001	Forty-Four point Zero Zero One	11220.255	Eleven Thousand Two Hundred and Twenty point Two Five Five
			Construction of sump well with dug holes of size 1.80m x 2.0m, laying in position the perforated empty diesel/petrol drum sheet of 1.00m dia to a						Three Lakh

9	9	9	depth 1.5m having slot area of 1000 sq.cm/sqm, slot dia being 30mm each with supply of necessary shrouding materials comprising of 60% 40mm down graded khoa and 40% coarse sand of FM>=2.50 and placing those around and beneath the drum sheet having thickness of 40cm and 50cm respectively including necessary welding, fitting etc. complete as per direction of Engineer in charge.	each	20.000	18256.001	Eighteen Thousand Two Hundred and Fifty-Six point Zero Zero One	365120.020	Lakh Sixty-Five Thousand One Hundred and Twenty point Zero Two
10	10	10	Driving steel sheet piles of various sections and weights of any type of soil, by monkey hammer including handling and placing in position, staging and supplying of all equipments like monkey hammer, pully, rope, bamboo, bullah etc. including correcting leaning beyond tolerance & other defects and any other incidental cost etc. complete (measurement will be taken on projected width x height) as per direction of Engineer in charge. U-type or any other type : Upto 4.50 m depth.	sqm	1037.880	1594.001	One Thousand Five Hundred and Ninety-Four point Zero Zero One	1654381.758	Sixteen Lakh Fifty-Four Thousand Three Hundred and Eighty-One point Seven Five Eight
11	11	11	Provide 1 (one) coat of Zinc phosphate as primary coat and 2 (two) coat of coaltar epoxy coat over primary coat to steel surface with paint of approved colour etc. complete including the cost of all materials as per direction of Engineer in charge.	sqm	3137.520	236.001	Two Hundred and Thirty-Six point Zero Zero One	740457.858	Seven Lakh Forty Thousand Four Hundred and Fifty-Seven point Eight Five Eight
12	12	12	Supplying and placing 20mm thick hessian cloth impregnated with bitumen in expansion joints or on top of sheet piles as per specification and direction of Engineer in charge.	sqm	314.760	495.001	Four Hundred and Ninety-Five point Zero Zero One	155806.515	One Lakh Fifty-Five Thousand Eight Hundred and Six point Five One Five
13	13	13	Supplying and laying single layer pholythene sheet in floor below cement concrete, RCC slab, on walls etc. complete in all respect as per direction of Engineer in charge. Weighing minimum 1.0 kg per 6.50 sqm	sqm	1844.612	31.001	Thirty-One point Zero Zero One	57184.817	Fifty-Seven Thousand One Hundred and Eighty-Four point Eight One Seven
14	14	14	Cement concrete work in leanest mix. 1:3:6 with sand of FM>= 1.5, in foundation or floor, including breaking, screening, grading and washing aggregates with clear water, mixing, laying in position, consolidation to levels, curing, including supply of all materials,	cum	318.267	11861.001	Eleven Thousand Eight Hundred and Sixty-One point	3774965.205	Thirty-Seven Lakh Seventy-Four Thousand Nine Hundred

			excluding the cost of formworks etc. complete as per direction of Engineer in charge. With 25mm down graded Stone Chips				One point Zero Zero One		and Sixty-Five point Two Zero Five
15	15	15	Cement concrete work in leanest mix. 1:4:8, with sand of FM>= 1.5, in foundation or floor, including breaking, screening, grading and washing aggregates with clear water, mixing, laying in position, consolidation to levels, curing, including supply of all materials, excluding the cost of formworks etc. complete as per direction of Engineer in charge. With 25mm down graded Stone chips.	cum	15.602	11214.001	Eleven Thousand Two Hundred and Fourteen point Zero Zero One	174960.844	One Lakh Seventy-Four Thousand Nine Hundred and Sixty point Eight Four Four
16	16	16	Form-work for centering and water tight shuttering as per drawing with 14 BWG M.S. sheet, fitted and fixed with 40mmx40mmx6mm M.S. angle frame and 25mmx6mm F.I. bar stiffener, with necessary fabrication, welding, making the forms including fitting, fixing of steel forms with necessary ties, battens, struts, nuts & bolts, props etc. as per desired shape and size including leveling and removing the forms after specified period including the cost of all materials as per direction of Engineer in charge. Footing, footing beams, girder beams, foundation slab with 60-80mm dia barrack bamboo props.	sqm	982.342	870.001	Eight Hundred and Seventy point Zero Zero One	854638.522	Eight Lakh Fifty-Four Thousand Six Hundred and Thirty-Eight point Five Two Two
17	17	17	Form-work for centering and water tight shuttering as per drawing with 14 BWG M.S. sheet, fitted and fixed with 40mmx40mmx6mm M.S. angle frame and 25mmx6mm F.I. bar stiffener, with necessary fabrication, welding, making the forms including fitting, fixing of steel forms with necessary ties, battens, struts, nuts & bolts, props etc. as per desired shape and size including leveling and removing the forms after specified period including the cost of all materials as per direction of Engineer in charge. Vertical and inclined walls, columns, piers with 60-80mm dia barrack bamboo props.	sqm	3144.952	1078.001	One Thousand AND Seventy-Eight point Zero Zero One	3390261.401	Thirty-Three Lakh Ninety Thousand Two Hundred and Sixty-One point Four Zero One
			Form-work for centering and water tight shuttering as per drawing with 14 BWG M.S. sheet, fitted and fixed with 40mmx40mmx6mm M.S. angle frame and 25mmx6mm F.I. bar stiffener, with necessary fabrication, welding, making the forms including fitting, fixing of steel forms with necessary				One Thousand AND		Sixty Thousand Two Hundred

18	18	18	ties, battens, struts, nuts & bolts, props etc. as per desired shape and size including leveling and removing the forms after specified period including the cost of all materials as per direction of Engineer in charge. Deck slab, operating deck slab, top slab of barrel upto 3.5m height with 60-80mm dia barrack bamboo props.	sqm	55.240	1091.001	Ninety-One point Zero Zero One	60266.895	and Sixty-Six point Eight Nine Five
19	19	19	Form-work for centering and water tight shuttering as per drawing with 14 BWG M.S. sheet, fitted and fixed with 40mmx40mmx6mm M.S. angle frame and 25mmx6mm F.I. bar stiffener, with necessary fabrication, welding, making the forms including fitting, fixing of steel forms with necessary ties, battens, struts, nuts & bolts, props etc. as per desired shape and size including leveling and removing the forms after specified period including the cost of all materials as per direction of Engineer in charge. Deck slab, operating deck slab, top slab of barrel above 3.5m upto 6.5m height with 50mm dia GI pipe props.	sqm	56.880	1591.001	One Thousand Five Hundred and Ninety-One point Zero Zero One	90496.137	Ninety Thousand Four Hundred and Ninety-Six point One Three Seven
20	20	20	Supplying and filling sand in foundation of hydraulic structures, buildings and in protective works with selected sand, in 150mm thick layer, including levelling, dressing, ramming, watering etc. complete (compacted to 50% relative density by manual laqbour using mallet/vibro compactor) as per direction of Engineer in charge. sand of FM>= 1.50	cum	704.021	817.001	Eight Hundred and Seventeen point Zero Zero One	575185.861	Five Lakh Seventy-Five Thousand One Hundred and Eighty-Five point Eight Six One
21	21	21	Reinforced cement concrete work in leanest mix. 1:1.5:3, with 20mm down graded coarse aggregates and sand of FM>2.0 to FM<=2.5, to attain a minimum 28 day cylinder strength of 22.0 N/mm², including breaking, screening, grading, washing aggregates with clean water, mixing, laying in forms, consolidation to levels, curing, including supply of all materials, excluding cost of M.S. work for reinforcements and formworks etc. complete and as per direction of Engineer in charge. With stone chips	cum	2040.754	14200.001	Fourteen Thousand Two Hundred point Zero Zero One	28978708.841	Two Crore Eighty-Nine Lakh Seventy-Eight Thousand Seven Hundred and Eight point Eight Four One
22	22	22	M.S. Work for reinforcement with deformed M.S. bar, fy=400 N/mm², (made from billet) in RCC works, including local handling, cutting, forging, bending, cleaning and fabrication with supply of deformed M.S. bar in different sizes and binding with 22 to 18	kg	193834.097	89.501	Eighty-Nine point Five Zero One	17348345.516	One Crore Seventy-Three Lakh Forty-Eight Thousand Three Hundred

			gages G.I. wire etc. complete including the cost of all materials as per direction of Engineer in charge. 8mm dia to 30mm dia.						Hundred and Forty-Five point Five One Six
23	23	23	Supply and fitting and fixing 23cm wide P.V.C water stops having minimum strength of 13.80 N/mm² at 225% elongation and of approved quality in contraction and expansion joints with necessary arrangements for modification in shuttering and kepping the water stop in position etc. complete as per design, specification and direction of Engineer in charge. 3 bulb type	m	50.000	1152.001	One Thousand One Hundred and Fifty-Two point Zero Zero One	57600.050	Fifty-Seven Thousand Six Hundred point Zero Five
24	24	24	Supplying and laying dry 1st class or pick jhama chips as filter in two layers (top and bottom) as per specific size, range and gradation, including breaking chips, grading, preparation of surface, compacting each layer etc. complete with supply of all materials and as per direction of Engineer in charge. Well graded between 40mm to 20mm size.	cum	700.874	3808.001	Three Thousand Eight Hundred and Eight point Zero Zero One	2668928.893	Twenty-Six Lakh Sixty-Eight Thousand Nine Hundred and Twenty-Eight point Eight Nine Three
25	25	25	Supplying and laying dry 1st class or pick jhama chips as filter in two layers (top and bottom) as per specific size, range and gradation, including breaking chips, grading, preparation of surface, compacting each layer etc. complete with supply of all materials and as per direction of Engineer in charge. Well graded between 20mm to 5mm size.	cum	700.874	4191.001	Four Thousand One Hundred and Ninety-One point Zero Zero One	2937363.635	Twenty-Nine Lakh Thirty-Seven Thousand Three Hundred and Sixty-Three point Six Three Five
26	26	26	Supplying and laying sand as filter layers as per specific size ranges and gradation including preparation of surface, compacting in layer etc. complete with supply of all materials and as per direction of Engineer in charge. FM : 1.5 to 2.0	cum	1099.463	854.001	Eight Hundred and Fifty-Four point Zero Zero One	938942.501	Nine Lakh Thirty-Eight Thousand Nine Hundred and Forty-Two point Five Zero One
27	27	27	Supplying and laying sand as filter layers as per specific size ranges and gradation including preparation of surface, compacting in layer etc. complete with supply of all materials and as per direction of Engineer in charge. FM : 1.00to 1.50	cum	372.337	697.001	Six Hundred and Ninety-Seven point Zero Zero One	259519.261	Two Lakh Fifty-Nine Thousand Five Hundred and Nineteen point Two Six One
									Thirty-One

28	28	28	Back filling in hydraulic structures including all leads and lifts in 150mm layer including watering, ramming compacting to 30% relative density etc. complete by compactor or any other suitable method as per direction of Engineer in charge. Sand of FM>= 0.80	cum	5271.798	591.001	Five Hundred and Ninety-One point Zero Zero One	3115637.890	One Lakh Fifteen Thousand Six Hundred and Thirty-Seven point Eight Nine
29	29	29	Manufacturing and supplying C.C. blocks in leanest mix. 1:3:6, with cement, sand (FM>=1.5) and Stone Chips (40mm down graded), to attain a minimum 28 days cylinder strength of 9.0 N/mm² including grading, washing stone chips, mixing, laying in forms, consolidation, curing for at least 21 days, including preparation of platform, shuttering and stacking in measurable stacks etc complete including supply of all materials (steel shutter to be used) as per direction of Engineer in charge. block size 40cmx40cmx20cm	each	53785.000	445.001	Four Hundred and Forty-Five point Zero Zero One	23934378.785	Two Crore Thirty-Nine Lakh Thirty-Four Thousand Three Hundred and Seventy-Eight point Seven Eight Five
30	30	30	Manufacturing and supplying C.C. blocks in leanest mix. 1:3:6, with cement, sand (FM>=1.5) and Stone Chips (40mm down graded), to attain a minimum 28 days cylinder strength of 9.0 N/mm² including grading, washing stone chips, mixing, laying in forms, consolidation, curing for at least 21 days, including preparation of platform, shuttering and stacking in measurable stacks etc complete including supply of all materials (steel shutter to be used) as per direction of Engineer in charge. block size 30cmx30cmx30cm	each	36203.000	380.001	Three Hundred and Eighty point Zero Zero One	13757176.203	One Crore Thirty-Seven Lakh Fifty-Seven Thousand One Hundred and Seventy-Six point Two Zero Three
31	31	31	Labour charge for protective works in laying C.C. blocks of different sizes including preparation of base, watering and ramming of base etc. complete as per direction of the Engineer in charge. Within 200m	cum	2373.224	1246.001	One Thousand Two Hundred and Forty-Six point Zero Zero One	2957039.477	Twenty-Nine Lakh Fifty-Seven Thousand AND Thirty-Nine point Four Seven Seven
32	32	32	Labour charge for protective works in laying C.C. blocks of different sizes including preparation of base, watering and ramming of base etc. complete as per direction of the Engineer in charge. Beyond 200m	cum	325.365	2225.001	Two Thousand Two Hundred and Twenty-Five point Zero Zero	723937.450	Seven Lakh Twenty-Three Thousand Nine Hundred and Thirty-Seven

			Beyond 200m				One		Seven point Four Five
33	33	33	Supplying and placing non-woven needle punched type geotextile fabric (100% Polypropylene Fabric, unit weight : 855 Kg/m3 to 946 Kg/m3) as filter materials of elongation at maximum force machine direction (MD) >=60% and <= 100 % , elongation at maximum force (CMD) => 40% and <= 100% ,horizontal and vertical permeability (under 2 kn/m² pressure)=>2x10E-3 m/sec. for effective erosion protection in hydraulic structures/river training works including local handling, placing in position, providing machine seamed joints (with 100% polypropylene or nylon thread) or 35cm lap in dry condition or minimum 100cm lap under water including protecting the geotextile material from UV ray and from any other damages including supply of all materials, labours, equipment's etc. complete as per direction of Engineer in charge. (Geotextile delivered at site should be certified by ISO and clearly labelled with brand name and grade printed at regular intervals across the body of the fabric). Mass =>300 gm/m², thickness(Under 2 kpa pressure) =>2.00mm, EoS<=0.11mm, strip tensile strength =>15kn/m, grab strength =>850N, CBR puncture resistance =>2200N.	sqm	11945.790	210.001	Two Hundred and Ten point Zero Zero One	2508627.846	Twenty-Five Lakh Eight Thousand Six Hundred and Twenty-Seven point Eight Four Six
34	34	34	M.S. Work for reinforcement with plain M.S. bar, fy=300 N/mm², (made from billet) in RCC works, including local handling, cutting, forging, bending, cleaning and fabrication with supply of plain round M.S. bar in different sizes and binding with 22 to 18 gages G.I. wire etc. complete including the cost of all materials as per direction of Engineer in charge. 6mm dia.	kg	88.800	84.001	Eighty-Four point Zero Zero One	7459.289	Seven Thousand Four Hundred and Fifty-Nine point Two Eight Nine
35	35	35	Manufacturing, supplying and Installation of Hand Wheel type lifting device for slide gate with 63mm dia steel shaft, 108mm outer dia bronze nut taper roller bearing SKF-50216 etc. as per approved design including supply of all components, labours with a prime coat of redoxide where necessary etc. complete including the cost of all materials as per specification and direction of Engineer in charge.	each	6.000	50921.001	Fifty Thousand Nine Hundred and Twenty-One point Zero Zero One	305526.006	Three Lakh Five Thousand Five Hundred and Twenty-Six point Zero Zero Six

36	36	36	Earth work by manual labour in resectioning of embankment/ canal bank/river slopes/ road/ compound etc. manually compacted by 7.0 kg iron rammer to avoid any air pocket in clayey soil (minimum 30% clay, 0-40% silt and 0-30% sand) within the initial lead of 30m and all lifts including throwing the spoils to profile in layers not exceeding 150mm thickness with clod breaking to a maximum size of 100mm, removing roots & stumps of trees of girth upto 200mm from the ground, benching the side slopes, stripping/ ploughing the base of embankment and borrowpit areas, dug bailing, bail out of water, rough dressing including 150mm cambering at the centre of the crest (where necessary) etc. complete as per direction of Engineer in charge. 0 m to 3.00 m height	cum	16452.000	170.001	One Hundred and Seventy point Zero Zero One	2796856.452	Twenty-Seven Lakh Ninety-Six Thousand Eight Hundred and Fifty-Six point Four Five Two
37	37	37	Extra rate for every additional lead of 15m or part thereof beyond the initial lead of 30m upto a maximum of 19 leads (3m neglected) for all kinds of earth work. 3 nos lead	pldcum	11246.400	58.001	Fifty-Eight point Zero Zero One	652302.446	Six Lakh Fifty-Two Thousand Three Hundred and Two point Four Four Six
38	38	38	Earth work by Mechanical Excavator (Long Boom) in all kinds of soil in excavation / re-excavation of channel/canal/khal etc. Including disposal of spoil-soil upto 30m away from the point of excavation with rough dressing and levelling etc. complete as per direction of Engineer-in-Charge.	cum	76496.200	90.001	Ninety point Zero Zero One	6884734.496	Sixty-Eight Lakh Eighty-Four Thousand Seven Hundred and Thirty-Four point Four Nine Six
39	39	39	Earth work by manual labour with clayey soil (minimum 30% clay, 0-40% silt and 0-30% sand) in construction of cross bundh/ring bundh as per design and specification with all leads and lifts, throwing the earth in layers not exceeding 150mm in thickness, including breaking clods, rough dressing, clearing the jungle, removing stumps, dug bailing and 75mm cambering etc. complete as per direction of Engineer in charge.	cum	17323.190	130.001	One Hundred and Thirty point Zero Zero One	2252032.023	Twenty-Two Lakh Fifty-Two Thousand AND Thirty-Two point Zero Two Three
40	40	40	Back filling in hydraulic structures and slope building in protective works including all leads and lifts with selected local soil in layer of 150mm including watering, ramming etc. complete compacted to	cum	10986.607	140.001	One Hundred and Forty point Zero	1538135.967	Fifteen Lakh Thirty-Eight Thousand One Hundred and

			20% relative density by compactor or any other suitable method as per direction of Engineer in charge.				Zero One		and Thirty-Five point Nine Six Seven
41	41	41	Earth work by manual labour in all kinds of soil in removing the cross bundh/ring bundh, including all leads and lifts complete and placing the spoils to a safe distance, (minimum 15m apart from the bank) as per direction of Engineer in charge.	cum	3886.774	130.001	One Hundred and Thirty point Zero Zero One	505284.507	Five Lakh Five Thousand Two Hundred and Eighty-Four point Five Zero Seven
42	42	42	M.S. Work in plates, angles, channels, flat bars, Tees etc. including fabricating, machining, cutting, bending, welding, forging, drilling, revetting, embedding anchor bars, staging and fitting, fixing, local handling etc. comlpete with energy consumption and supply of labours including the cost of materials as per design, specification and direction of Engineer in charge.	kg	6375.770	157.001	One Hundred and Fifty-Seven point Zero Zero One	1001002.266	Ten Lakh One Thousand AND Two point Two Six Six
43	43	43	Manufacturing & Supplying of M.S. Vertical Lift Gate shutter of 8mm thick M.S. skin plate and stiffener with minimum 75mmx75mmx10mm M.S. angle as frame, horizontal & vertical beam, 75mmx25mmx12mm P-type rubber seal, fixed with 10mm dia x 63.5mm M.S. counter shank bolts with nuts and 40mmx10mm M.S. strip as clamp drilled spaces @ 150mm c/c, stem attachment with proper thread, nut, cotter pin and washer as per approved design including the cost of all materials of proper grade & brand new with a prime coat of redoxide where necessary as per specification and direction of Engineer in charge. Size 1.95m x 1.65m.	each	6.000	108000.001	One Lakh Eight Thousand point Zero Zero One	648000.006	Six Lakh Forty-Eight Thousand point Zero Zero Six
44	44	44	Labour charge for fitting and fixing of M.S. vertical lift gate/ flap gate shutters of different size including making holes in concrete for hooking arrangements with supply of necessary materials, tools and other accessories required for fitting the same to regulator/sluice and mending the damages with CC (1:2:4), removing the spoils etc. complete including the cost of all materials as per direction of Engineer in charge. Size 1.95m x 1.35m or 1.95m x 1.65m.	each	6.000	12145.001	Twelve Thousand One Hundred and Forty-Five point Zero Zero One	72870.006	Seventy-Two Thousand Eight Hundred and Seventy point Zero Zero Six
			Supplying pressure treated wooden fall boards/stop logs of				Ninety Thousand		Four Lakh Fifty-Six Thousand

45	45	45	different sizes (not less than 15cm in depth) of sal, sundari, garjan, shishu or equivalent for regulator/ sluices, including fixing in position with eye hook etc. complete as per direction of Engineer in charge.	cum	5.022	90838.001	Eight Hundred and Thirty-Eight point Zero Zero One	456188.441	Four Hundred and One Hundred and Eighty-Eight point Four Four One
46	46	46	Supplying, laying fitting and fixing of different dia G.I. pipes with all special fittings, such as bends, elbows, sockets, tees, unions, jamnuts etc. including cutting foundation trenches upto required depth where necessary and filling the same with earth duly compacted, making holes in floors and walls and mending the damages, fixing in walls with holders and clips, including cutting threads, making necessary connection etc. all complete,and as per direction of Engineer in charge. 40mm dia G.I. pipe line.	m	80.000	321.001	Three Hundred and Twenty-One point Zero Zero One	25680.080	Twenty-Five Thousand Six Hundred and Eighty point Zero Eight
47	47	47	Name Plate & Flag Stand and Accessories etc.	LS	2.000	50000.001	Fifty Thousand point Zero Zero One	100000.002	One Lakh point Zero Zero Two
48	48	48	Earth work by manual labour with clayey soil (minimum 30% clay, 0-40% silt and 0-30% sand) for closing breach or channel, with all leads and lifts within the channel width including profiling, clod breaking, ramming etc. complete as per specification and direction of Engineer in charge. Upto 30m width	cum	1482.000	120.001	One Hundred and Twenty point Zero Zero One	177841.482	One Lakh Seventy-Seven Thousand Eight Hundred and Forty-One point Four Eight Two
49	49	49	Earth work by manual labour with clayey soil (minimum 30% clay, 0-40% silt and 0-30% sand) for closing breach or channel, with all leads and lifts within the channel width including profiling, clod breaking, ramming etc. complete as per specification and direction of Engineer in charge. Upto 90m width	cum	3446.000	175.001	One Hundred and Seventy-Five point Zero Zero One	603053.446	Six Lakh Three Thousand AND Fifty-Three point Four Four Six
50	50	50	Fine dressing and close turfing of the slopes and the crest of embankment with 75mm thick, good quality durba or charkanta sods of size 200mm x 200mm, with all leads and lifts, including ramming, watering until the turf grows properly, maintaining etc. complete (measurement will be given on well grown grass only). as per direction of Engineer in charge.	sqm	25555.000	30.001	Thirty point Zero Zero One	766675.555	Seven Lakh Sixty-Six Thousand Six Hundred and Seventy-Five point Five Five Five
			Preparation and mobilization of the Site for Construction of Submersible Embankment or						

51	51	51	other Structural Components in c/w "Haor Flood Management and Livelihood Improved Improvement Project (BWDB Part)" as per Technical Specifications, including land lease, rental charges, obtaining permissions for work, developing work area, preparation of platform for temporary semi pucca site office(40sqm), CI Sheet labour sheds(200sqm), CI Sheet Stores(200sqm), supply of wooden & cane seated furniture etc. as specified and as per Contractor's Method Statement and as per direction of Engineer in charge.	LS	1.000	730000.001	Seven Lakh Thirty Thousand point Zero Zero One	730000.001	Seven Lakh Thirty Thousand point Zero Zero One
52	52	52	Demobilization and clean-up of the site upon completion of the works, as per Specifications and Contractor's Method Statement and as per direction of Engineer in Charge.	LS	1.000	95000.001	Ninety-Five Thousand point Zero Zero One	95000.001	Ninety-Five Thousand point Zero Zero One
53	53	53	Providing and maintaining adequate portable water supply by installing 6 Nos. of tube well and sanitation facilities by installing 6 Nos. of sanitary latrines for usage of labours,officials and others for prevailing the hygenic and healthy environment at allover the working site As per direction of the Engineer in charge.	LS	1.000	111149.001	One Lakh Eleven Thousand One Hundred and Forty-Nine point Zero Zero One	111149.001	One Lakh Eleven Thousand One Hundred and Forty-Nine point Zero Zero One
54	54	54	Mobilize, strengthen required land based construction equipment such as excavator, dump truck, chain dozer, vibro-compactor, and plants such as generator for site electrification, digital camera for taking photographs and digital video camera for recording/Taking photograph all sequences of works etc for keeping records of the Works by providing following information including transfer to site, complete for the purposes stated in the Technical Specification and Contractor's Method Statement and as per direction of Engineer in charge.	LS	1.000	92027.001	Ninety-Two Thousand AND Twenty-Seven point Zero Zero One	92027.001	Ninety-Two Thousand AND Twenty-Seven point Zero Zero One
55	55	55	Operate, maintain of plant and equipment such as generator for site electrification, for the purpose stated in the Technical Specification and in the Contractor's Method Statement and as per direction of Engineer in charge.	LS	1.000	110910.001	One Lakh Ten Thousand Nine Hundred and Ten point Zero Zero One	110910.001	One Lakh Ten Thousand Nine Hundred and Ten point Zero Zero One
56	56	56	Part Time Environmental Monitoring through Sample Collection and analysis such as Air quality test, Surface water test, Sound Level monitoring, Traffic signs and road navigation, safety provisions	LS	1.000	250000.001	Two Lakh Fifty Thousand point Zero Zero One	250000.001	Two Lakh Fifty Thousand point Zero

			with first aid and medical Assistant as per direction of engineer in charge.				Zero One		Zero Zero One
							Grand Total:	157988010.549	Fifteen Crore Seventy-Nine Lakh Eighty-Eight Thousand AND Ten point Five Four Nine

This Bill of Quantities is Electronically Signed by Mr. Mahmudul on behalf of HB-TI JV

RE-KBI(JV)
(JVCA)

Bill of Quantities

Bill of Quantities

Item no.	Group	Item Code (if any)	Description of Item	Measurement Unit	Quantity	Unit Price In figures (BDT)	Unit Price In Words (BDT)	Total Price In Figures (BDT)	Total Price In Words (BDT)
1	1	1	Construction of B.M. Pillars at site with first class bricks in cement mortar (1:4) of size 38cm x 38cm x 75cm on cement concrete (1:2:4) base of size 50cm x 50cm x 7.5cm with 12mm thick cement plastering (1:2) on exposed surfaces of pillar and cement morter on top (1:2), with inscription of "BWDB" with 25cm of the pillar below ground level etc. complete including ramming the backfill and the cost of all materials as per direction of Engineer in charge.	each	12.000	1256.851	One Thousand Two Hundred and Fifty-Six point Eight Five One	15082.212	Fifteen Thousand AND Eighty-Two point Two One Two
2	2	2	Site preparation by manually removing all miscellaneous objectional materials form entire site and removing soil upto 15cm depth including uprooting stumps, jungle clearing, levelling dressing etc. complete as per direction of Engineer in charge.	sqm	47850.000	28.501	Twenty-Eight point Five Zero One	1363772.850	Thirteen Lakh Sixty-Three Thousand Seven Hundred and Seventy-Two point Eight Five
3	3	3	Earth work in excavation of foundation trenches in all kinds of soils as per layout plan of foundation excavation with all leads and lifts and placing the spoil earth for constructing the ring bundh/ cofferdam where necessary as per design and specification or disposing it to a safe distance including pushing, levelling, dressing, etc. complete as per direction of Engineer in charge. For moving spoil earth upto a	cum	33893.076	191.501	One Hundred and Ninety-One point Five Zero One	6490557.947	Sixty-Four Lakh Ninety Thousand Five Hundred and Fifty-Seven point Nine Four Seven

			distance of 100m from the centre of the pit.						
4	4	4	Installation of pizeometer including supply of 40mm G.I. pipe, brass strainer, socket, labour, by wash boring, lowering, fixing the elevation and providing cover on the top of the well etc. complete as per direction of Engineer in charge.	each	8.000	2964.001	Two Thousand Nine Hundred and Sixty-Four point Zero Zero One	23712.008	Twenty-Three Thousand Seven Hundred and Twelve point Zero Zero Eight
5	5	5	Shoring for slope protection of foundation trench, canal, embankment, road, pond etc. as per design slopes, grades including removal of spoils to a safe distance as per direction of Engineer in charge. By bamboo post of 6.0m length, 60mm to 80mm dia, 20cm c/c driven 2.0m below ground, with drum sheet walling and average 70mm dia half split bamboo batten @ 2.0m c/c fixed with nails.	sqm	766.000	765.701	Seven Hundred and Sixty-Five point Seven Zero One	586526.966	Five Lakh Eighty-Six Thousand Five Hundred and Twenty-Six point Nine Six Six
6	6	6	Bailing out of water with all leads and lifts by manual labour or pump, with all arrengements for protection of ring bund and side slopes of foundation pit against erosion or washout etc. complete (actual volume of work will be measured by sounding method before starting the work) as per direction of Engineer in charge. by pump.	cum	224273.659	6.651	Six point Six Five One	1491644.106	Fourteen Lakh Ninety-One Thousand Six Hundred and Forty-Four point One Zero Six
7	7	7	Supplying at site U-shape hot rolled steel sheet pile of different section of Phosphorus=0.04%(Maximum), Sulphur = 0.04% (Maximum), Tensile strength=> 490 N/mm2 , Yield strength =>296 N/mm2, Elongation =15% (Minimum) including all taxes, freights, incidental charges etc. complete as per direction of the Engineer -in- charge. U-shape, hot- rolled steel sheet pile width= 400mm to 600mm: height=>100mm, Thickness>=10.5mm. (±0.50mm)	Mton	110.736	142500.001	One Lakh Forty-Two Thousand Five Hundred point Zero Zero One	15779880.111	One Crore Fifty-Seven Lakh Seventy-Nine Thousand Eight Hundred and Eighty point One One One
8	8	8	Cutting of steel sheet piles to design and length and shape as per requirement in design and drawing and as per direction of Engineer in charge. Upto 10mm thick.	m	255.000	38.001	Thirty-Eight point Zero Zero One	9690.255	Nine Thousand Six Hundred and Ninety point Two Five Five
9	9	9	Construction of sump well with dug holes of size 1.80m x 2.0m, laying in position the perforated empty diesel/petrol drum sheet of 1.00m dia to a depth 1.5m having slot area of 1000 sq.cm/sqm, slot dia being 30mm each with supply of necessary shrouding materials comprising of 60% 40mm down	each	20.000	17343.201	Seventeen Thousand Three Hundred and Forty-	346864.020	Three Lakh Forty-Six Thousand Eight Hundred

			graded khoa and 40% coarse sand of FM>=2.50 and placing those around and beneath the drum sheet having thickness of 40cm and 50cm respectively including necessary welding, fitting etc. complete as per direction of Engineer in charge.				Three point Two Zero One		Hundred and Sixty-Four point Zero Two
10	10	10	Driving steel sheet piles of various sections and weights of any type of soil, by monkey hammer including handling and placing in position, staging and supplying of all equipments like monkey hammer, pully, rope, bamboo, bullah etc. including correcting leaning beyond tolerance & other defects and any other incidental cost etc. complete (measurement will be taken on projected width x height) as per direction of Engineer in charge. U-type or any other type : Upto 4.50 m depth.	sqm	1037.880	1514.301	One Thousand Five Hundred and Fourteen point Three Zero One	1571662.722	Fifteen Lakh Seventy-One Thousand Six Hundred and Sixty-Two point Seven Two Two
11	11	11	Provide 1 (one) coat of Zinc phosphate as primary coat and 2 (two) coat of coaltar epoxy coat over primary coat to steel surface with paint of approved colour etc. complete including the cost of all materials as per direction of Engineer in charge.	sqm	3137.520	224.201	Two Hundred and Twenty-Four point Two Zero One	703435.122	Seven Lakh Three Thousand Four Hundred and Thirty-Five point One Two Two
12	12	12	Supplying and placing 20mm thick hessian cloth impregnated with bitumen in expansion joints or on top of sheet piles as per specification and direction of Engineer in charge.	sqm	314.760	470.251	Four Hundred and Seventy point Two Five One	148016.205	One Lakh Forty-Eight Thousand AND Sixteen point Two Zero Five
13	13	13	Supplying and laying single layer pholythene sheet in floor below cement concrete, RCC slab, on walls etc. complete in all respect as per direction of Engineer in charge. Weighing minimum 1.0 kg per 6.50 sqm	sqm	1844.612	28.501	Twenty-Eight point Five Zero One	52573.287	Fifty-Two Thousand Five Hundred and Seventy-Three point Two Eight Seven
14	14	14	Cement concrete work in leanest mix. 1:3:6 with sand of FM>= 1.5, in foundation or floor, including breaking, screening, grading and washing aggregates with clear water, mixing, laying in position, consolidation to levels, curing, including supply of all materials, excluding the cost of formworks etc. complete as per direction of Engineer in charge. With 25mm down graded Stone Chips	cum	318.267	11875.001	Eleven Thousand Eight Hundred and Seventy-Five point Zero Zero One	3779420.943	Thirty-Seven Lakh Seventy-Nine Thousand Four Hundred and Twenty point Nine Four Three
			Cement concrete work in leanest mix. 1:4:8, with sand of						

15	15	15	FM>= 1.5, in foundation or floor, including breaking, screening, grading and washing aggregates with clear water, mixing, laying in position, consolidation to levels, curing, including supply of all materials, excluding the cost of formworks etc. complete as per direction of Engineer in charge. With 25mm down graded Stone chips.	cum	15.602	10083.301	Ten Thousand AND Eighty-Three point Three Zero One	157319.662	One Lakh Fifty-Seven Thousand Three Hundred and Nineteen point Six Six Two
16	16	16	Form-work for centering and water tight shuttering as per drawing with 14 BWG M.S. sheet, fitted and fixed with 40mmx40mmx6mm M.S. angle frame and 25mmx6mm F.I. bar stiffener, with necessary fabrication, welding, making the forms including fitting, fixing of steel forms with necessary ties, battens, struts, nuts & bolts, props etc. as per desired shape and size including leveling and removing the forms after specified period including the cost of all materials as per direction of Engineer in charge. Footing, footing beams, girder beams, foundation slab with 60-80mm dia barrack bamboo props.	sqm	982.342	826.501	Eight Hundred and Twenty-Six point Five Zero One	811906.645	Eight Lakh Eleven Thousand Nine Hundred and Six point Six Four Five
17	17	17	Form-work for centering and water tight shuttering as per drawing with 14 BWG M.S. sheet, fitted and fixed with 40mmx40mmx6mm M.S. angle frame and 25mmx6mm F.I. bar stiffener, with necessary fabrication, welding, making the forms including fitting, fixing of steel forms with necessary ties, battens, struts, nuts & bolts, props etc. as per desired shape and size including leveling and removing the forms after specified period including the cost of all materials as per direction of Engineer in charge. Vertical and inclined walls, columns, piers with 60-80mm dia barrack bamboo props.	sqm	3144.952	1024.101	One Thousand AND Twenty-Four point One Zero One	3220748.488	Thirty-Two Lakh Twenty Thousand Seven Hundred and Forty-Eight point Four Eight Eight
18	18	18	Form-work for centering and water tight shuttering as per drawing with 14 BWG M.S. sheet, fitted and fixed with 40mmx40mmx6mm M.S. angle frame and 25mmx6mm F.I. bar stiffener, with necessary fabrication, welding, making the forms including fitting, fixing of steel forms with necessary ties, battens, struts, nuts & bolts, props etc. as per desired shape and size including leveling and removing the forms after specified period including the cost of all materials as per direction of Engineer in charge. Deck slab, operating deck slab, top slab of barrel upto	sqm	55.240	1036.451	One Thousand AND Thirty-Six point Four Five One	57253.553	Fifty-Seven Thousand Two Hundred and Fifty-Three point Five Five Three

			3.5m height with 60-80mm dia barrack bamboo props.						
19	19	19	Form-work for centering and water tight shuttering as per drawing with 14 BWG M.S. sheet, fitted and fixed with 40mmx40mmx6mm M.S. angle frame and 25mmx6mm F.I. bar stiffener, with necessary fabrication, welding, making the forms including fitting, fixing of steel forms with necessary ties, battens, struts, nuts & bolts, props etc. as per desired shape and size including leveling and removing the forms after specified period including the cost of all materials as per direction of Engineer in charge. Deck slab, operating deck slab, top slab of barrel above 3.5m upto 6.5m height with 50mm dia GI pipe props.	sqm	56.880	1511.451	One Thousand Five Hundred and Eleven point Four Five One	85971.333	Eighty-Five Thousand Nine Hundred and Seventy-One point Three Three Three
20	20	20	Supplying and filling sand in foundation of hydraulic structures, buildings and in protective works with selected sand, in 150mm thick layer, including levelling, dressing, ramming, watering etc. complete (compacted to 50% relative density by manual laqbour using mallet/vibro compactor) as per direction of Engineer in charge. sand of FM>= 1.50	cum	704.021	1034.441	One Thousand AND Thirty-Four point Four Four One	728268.187	Seven Lakh Twenty-Eight Thousand Two Hundred and Sixty-Eight point One Eight Seven
21	21	21	Reinforced cement concrete work in leanest mix. 1:1.5:3, with 20mm down graded coarse aggregates and sand of FM>2.0 to FM<=2.5, to attain a minimum 28 day cylinder strength of 22.0 N/mm², including breaking, screening, grading, washing aggregates with clean water, mixing, laying in forms, consolidation to levels, curing, including supply of all materials, excluding cost of M.S. work for reinforcements and formworks etc. complete and as per direction of Engineer in charge. With stone chips	cum	2040.754	12350.001	Twelve Thousand Three Hundred and Fifty point Zero Zero One	25203313.941	Two Crore Fifty-Two Lakh Three Thousand Three Hundred and Thirteen point Nine Four One
22	22	22	M.S. Work for reinforcement with deformed M.S. bar, fy=400 N/mm², (made from billet) in RCC works, including local handling, cutting, forging, bending, cleaning and fabrication with supply of deformed M.S. bar in different sizes and binding with 22 to 18 gages G.I. wire etc. complete including the cost of all materials as per direction of Engineer in charge. 8mm dia to 30mm dia.	kg	193834.097	89.701	Eighty-Nine point Seven Zero One	17387112.335	One Crore Seventy-Three Lakh Eighty-Seven Thousand One Hundred and Twelve point Three Three Five
			Supply and fitting and fixing 23cm wide P.V.C water stops						

23	23	23	having minimum strength of 13.80 N/mm² at 225% elongation and of approved quality in contraction and expansion joints with necessary arrangements for modification in shuttering and kepping the water stop in position etc. complete as per design, specification and direction of Engineer in charge. 3 bulb type	m	50.000	1094.401	One Thousand AND Ninety-Four point Four Zero One	54720.050	Fifty-Four Thousand Seven Hundred and Twenty point Zero Five
24	24	24	Supplying and laying dry 1st class or pick jhama chips as filter in two layers (top and bottom) as per specific size, range and gradation, including breaking chips, grading, preparation of surface, compacting each layer etc. complete with supply of all materials and as per direction of Engineer in charge. Well graded between 40mm to 20mm size.	cum	700.874	4019.451	Four Thousand AND Nineteen point Four Five One	2817128.700	Twenty-Eight Lakh Seventeen Thousand One Hundred and Twenty-Eight point Seven
25	25	25	Supplying and laying dry 1st class or pick jhama chips as filter in two layers (top and bottom) as per specific size, range and gradation, including breaking chips, grading, preparation of surface, compacting each layer etc. complete with supply of all materials and as per direction of Engineer in charge. Well graded between 20mm to 5mm size.	cum	700.874	4423.201	Four Thousand Four Hundred and Twenty-Three point Two Zero One	3100106.578	Thirty-One Lakh One Hundred and Six point Five Seven Eight
26	26	26	Supplying and laying sand as filter layers as per specific size ranges and gradation including preparation of surface, compacting in layer etc. complete with supply of all materials and as per direction of Engineer in charge. FM : 1.5 to 2.0	cum	1099.463	1082.051	One Thousand AND Eighty-Two point Zero Five One	1189675.039	Eleven Lakh Eighty-Nine Thousand Six Hundred and Seventy-Five point Zero Three Nine
27	27	27	Supplying and laying sand as filter layers as per specific size ranges and gradation including preparation of surface, compacting in layer etc. complete with supply of all materials and as per direction of Engineer in charge. FM : 1.00to 1.50	cum	372.337	883.501	Eight Hundred and Eighty-Three point Five Zero One	328960.112	Three Lakh Twenty-Eight Thousand Nine Hundred and Sixty point One One Two
28	28	28	Back filling in hydraulic structures including all leads and lifts in 150mm layer including watering, ramming compacting to 30% relative density etc. complete by compactor or any other suitable method as per direction of Engineer in charge. Sand of FM>= 0.80	cum	5271.798	748.601	Seven Hundred and Forty-Eight point Six Zero One	3946473.255	Thirty-Nine Lakh Forty-Six Thousand Four Hundred and Seventy-Three point Two Five Five

29	29	29	Manufacturing and supplying C.C. blocks in leanest mix. 1:3:6, with cement, sand (FM>=1.5) and Stone Chips (40mm down graded), to attain a minimum 28 days cylinder strength of 9.0 N/mm² including grading, washing stone chips, mixing, laying in forms, consolidation, curing for at least 21 days, including preparation of platform, shuttering and stacking in measurable stacks etc complete including supply of all materials (steel shutter to be used) as per direction of Engineer in charge. block size 40cmx40cmx20cm	each	53785.000	361.001	Three Hundred and Sixty-One point Zero Zero One	19416438.785	One Crore Ninety-Four Lakh Sixteen Thousand Four Hundred and Thirty-Eight point Seven Eight Five
30	30	30	Manufacturing and supplying C.C. blocks in leanest mix. 1:3:6, with cement, sand (FM>=1.5) and Stone Chips (40mm down graded), to attain a minimum 28 days cylinder strength of 9.0 N/mm² including grading, washing stone chips, mixing, laying in forms, consolidation, curing for at least 21 days, including preparation of platform, shuttering and stacking in measurable stacks etc complete including supply of all materials (steel shutter to be used) as per direction of Engineer in charge. block size 30cmx30cmx30cm	each	36203.000	304.001	Three Hundred and Four point Zero Zero One	11005748.203	One Crore Ten Lakh Five Thousand Seven Hundred and Forty-Eight point Two Zero Three
31	31	31	Labour charge for protective works in laying C.C. blocks of different sizes including preparation of base, watering and ramming of base etc. complete as per direction of the Engineer in charge. Within 200m	cum	2373.224	950.001	Nine Hundred and Fifty point Zero Zero One	2254565.173	Twenty-Two Lakh Fifty-Four Thousand Five Hundred and Sixty-Five point One Seven Three
32	32	32	Labour charge for protective works in laying C.C. blocks of different sizes including preparation of base, watering and ramming of base etc. complete as per direction of the Engineer in charge. Beyond 200m	cum	325.365	1425.001	One Thousand Four Hundred and Twenty-Five point Zero Zero One	463645.450	Four Lakh Sixty-Three Thousand Six Hundred and Forty-Five point Four Five
			Supplying and placing non-woven needle punched type geotextile fabric (100% Polypropylene Fabric, unit weight : 855 Kg/m3 to 946 Kg/m3) as filter materials of elongation at maximum force machine direction (MD) >=60% and <= 100 % , elongation at maximum force (CMD) => 40% and <= 100% ,horizontal and vertical permeability (under 2 kn/m² pressure)=>2x10E-3 m/sec. for effective erosion						

33	33	33	protection in hydraulic structures/river training works including local handling, placing in position, providing machine seamed joints (with 100% polypropylene or nylon thread) or 35cm lap in dry condition or minimum 100cm lap under water including protecting the geotextile material from UV ray and from any other damages including supply of all materials, labours, equipment's etc. complete as per direction of Engineer in charge. (Geotextile delivered at site should be certified by ISO and clearly labelled with brand name and grade printed at regular intervals across the body of the fabric). Mass =>300 gm/m², thickness(Under 2 kpa pressure) =>2.00mm, EoS<=0.11mm, strip tensile strength =>15kn/m, grab strength =>850N, CBR puncture resistance =>2200N.	sqm	11945.790	190.001	One Hundred and Ninety point Zero Zero One	2269712.046	Twenty-Two Lakh Sixty-Nine Thousand Seven Hundred and Twelve point Zero Four Six
34	34	34	M.S. Work for reinforcement with plain M.S. bar, fy=300 N/mm², (made from billet) in RCC works, including local handling, cutting, forging, bending, cleaning and fabrication with supply of plain round M.S. bar in different sizes and binding with 22 to 18 gages G.I. wire etc. complete including the cost of all materials as per direction of Engineer in charge. 6mm dia.	kg	88.800	78.851	Seventy-Eight point Eight Five One	7001.969	Seven Thousand AND One point Nine Six Nine
35	35	35	Manufacturing, supplying and Installation of Hand Wheel type lifting device for slide gate with 63mm dia steel shaft, 108mm outer dia bronze nut taper roller bearing SKF-50216 etc. as per approved design including supply of all components, labours with a prime coat of redoxide where necessary etc. complete including the cost of all materials as per specification and direction of Engineer in charge.	each	6.000	48374.951	Forty-Eight Thousand Three Hundred and Seventy-Four point Nine Five One	290249.706	Two Lakh Ninety Thousand Two Hundred and Forty-Nine point Seven Zero Six
36	36	36	Earth work by manual labour in resectioning of embankment/ canal bank/river slopes/ road/ compound etc. manually compacted by 7.0 kg iron rammer to avoid any air pocket in clayey soil (minimum 30% clay, 0-40% silt and 0-30% sand) within the initial lead of 30m and all lifts including throwing the spoils to profile in layers not exceeding 150mm thickness with clod breaking to a maximum size of 100mm, removing roots & stumps of trees of girth upto 200mm from the ground, benching the side	cum	16452.000	219.451	Two Hundred and Nineteen point Four Five One	3610407.852	Thirty-Six Lakh Ten Thousand Four Hundred and Seven point Eight Five Two

			slopes, stripping/ ploughing the base of embankment and borrowpit areas, dug bailing, bail out of water, rough dressing including 150mm cambering at the centre of the crest (where necessary) etc. complete as per direction of Engineer in charge. 0 m to 3.00 m height						Five Two
37	37	37	Extra rate for every additional lead of 15m or part thereof beyond the initial lead of 30m upto a maximum of 19 leads (3m neglected) for all kinds of earth work. 3 nos lead	pldcum	11246.400	74.101	Seventy-Four point One Zero One	833369.486	Eight Lakh Thirty-Three Thousand Three Hundred and Sixty-Nine point Four Eight Six
38	38	38	Earth work by Mechanical Excavator (Long Boom) in all kinds of soil in excavation / re-excavation of channel/canal/khal etc. Including disposal of spoil-soil upto 30m away from the point of excavation with rough dressing and levelling etc. complete as per direction of Engineer-in-Charge.	cum	76496.200	115.901	One Hundred and Fifteen point Nine Zero One	8865986.076	Eighty-Eight Lakh Sixty-Five Thousand Nine Hundred and Eighty-Six point Zero Seven Six
39	39	39	Earth work by manual labour with clayey soil (minimum 30% clay, 0-40% silt and 0-30% sand) in construction of cross bundh/ring bundh as per design and specification with all leads and lifts, throwing the earth in layers not exceeding 150mm in thickness, including breaking clods, rough dressing, clearing the jungle, removing stumps, dug bailing and 75mm cambering etc. complete as per direction of Engineer in charge.	cum	17323.190	166.251	One Hundred and Sixty-Six point Two Five One	2879997.661	Twenty-Eight Lakh Seventy-Nine Thousand Nine Hundred and Ninety-Seven point Six Six One
40	40	40	Back filling in hydraulic structures and slope building in protective works including all leads and lifts with selected local soil in layer of 150mm including watering, ramming etc. complete compacted to 20% relative density by compactor or any other suitable method as per direction of Engineer in charge.	cum	10986.607	181.451	One Hundred and Eighty-One point Four Five One	1993530.827	Nineteen Lakh Ninety-Three Thousand Five Hundred and Thirty point Eight Two Seven
41	41	41	Earth work by manual labour in all kinds of soil in removing the cross bundh/ring bundh, including all leads and lifts complete and placing the spoils to a safe distance, (minimum 15m apart from the bank) as per direction of Engineer in charge.	cum	3886.774	161.501	One Hundred and Sixty-One point Five Zero One	627717.888	Six Lakh Twenty-Seven Thousand Seven Hundred and Seventeen point Eight Eight Eight
			M.S. Work in plates, angles, channels, flat bars, Tees etc.						Nine Lakh

42	42	42	including fabricating, machining, cutting, bending, welding, forging, drilling, revetting, embedding anchor bars, staging and fitting, fixing, local handling etc. comlpete with energy consumption and supply of labours including the cost of materials as per design, specification and direction of Engineer in charge.	kg	6375.770	149.151	One Hundred and Forty-Nine point One Five One	950952.471	Nine Lakh Fifty Thousand Nine Hundred and Fifty-Two point Four Seven One
43	43	43	Manufacturing & Supplying of M.S. Vertical Lift Gate shutter of 8mm thick M.S. skin plate and stiffener with minimum 75mmx75mmx10mm M.S. angle as frame, horizontal & vertical beam, 75mmx25mmx12mm P-type rubber seal, fixed with 10mm dia x 63.5mm M.S. counter shank bolts with nuts and 40mmx10mm M.S. strip as clamp drilled spaces @ 150mm c/c, stem attachment with proper thread, nut, cotter pin and washer as per approved design including the cost of all materials of proper grade & brand new with a prime coat of redoxide where necessary as per specification and direction of Engineer in charge. Size 1.95m x 1.65m.	each	6.000	101924.551	One Lakh One Thousand Nine Hundred and Twenty-Four point Five Five One	611547.306	Six Lakh Eleven Thousand Five Hundred and Forty-Seven point Three Zero Six
44	44	44	Labour charge for fitting and fixing of M.S. vertical lift gate/ flap gate shutters of different size including making holes in concrete for hooking arrangements with supply of necessary materials, tools and other accessories required for fitting the same to regulator/sluice and mending the damages with CC (1:2:4), removing the spoils etc. complete including the cost of all materials as per direction of Engineer in charge. Size 1.95m x 1.35m or 1.95m x 1.65m.	each	6.000	11537.751	Eleven Thousand Five Hundred and Thirty-Seven point Seven Five One	69226.506	Sixty-Nine Thousand Two Hundred and Twenty-Six point Five Zero Six
45	45	45	Supplying pressure treated wooden fall boards/stop logs of different sizes (not less than 15cm in depth) of sal, sundari, garjan, shishu or equivalent for regulator/ sluices, including fixing in position with eye hook etc. complete as per direction of Engineer in charge.	cum	5.022	86296.101	Eighty-Six Thousand Two Hundred and Ninety-Six point One Zero One	433379.019	Four Lakh Thirty-Three Thousand Three Hundred and Seventy-Nine point Zero One Nine
46	46	46	Supplying, laying fitting and fixing of different dia G.I. pipes with all special fittings, such as bends, elbows, sockets, tees, unions, jamnuts etc. including cutting foundation trenches upto required depth where necessary and filling the same with earth duly compacted, making holes in floors and walls	m	80.000	299.251	Two Hundred and Ninety-Nine point	23940.080	Twenty-Three Thousand Nine Hundred and Forty

			and mending the damages, fixing in walls with holders and clips, including cutting threads, making necessary connection etc. all complete,and as per direction of Engineer in charge. 40mm dia G.I. pipe line.				Two Five One		and Forty point Zero Eight
47	47	47	Name Plate & Flag Stand and Accessories etc.	LS	2.000	47500.001	Forty-Seven Thousand Five Hundred point Zero Zero One	95000.002	Ninety-Five Thousand point Zero Zero Two
48	48	48	Earth work by manual labour with clayey soil (minimum 30% clay, 0-40% silt and 0-30% sand) for closing breach or channel, with all leads and lifts within the channel width including profiling, clod breaking, ramming etc. complete as per specification and direction of Engineer in charge. Upto 30m width	cum	1482.000	142.001	One Hundred and Forty-Two point Zero Zero One	210445.482	Two Lakh Ten Thousand Four Hundred and Forty-Five point Four Eight Two
49	49	49	Earth work by manual labour with clayey soil (minimum 30% clay, 0-40% silt and 0-30% sand) for closing breach or channel, with all leads and lifts within the channel width including profiling, clod breaking, ramming etc. complete as per specification and direction of Engineer in charge. Upto 90m width	cum	3446.000	190.001	One Hundred and Ninety point Zero Zero One	654743.446	Six Lakh Fifty-Four Thousand Seven Hundred and Forty-Three point Four Four Six
50	50	50	Fine dressing and close turfing of the slopes and the crest of embankment with 75mm thick, good quality durba or charkanta sods of size 200mm x 200mm, with all leads and lifts, including ramming, watering until the turf grows properly, maintaining etc. complete (measurement will be given on well grown grass only). as per direction of Engineer in charge.	sqm	25555.000	25.651	Twenty-Five point Six Five One	655511.305	Six Lakh Fifty-Five Thousand Five Hundred and Eleven point Three Zero Five
51	51	51	Preparation and mobilization of the Site for Construction of Submersible Embankment or other Structural Components in c/w "Haor Flood Management and Livelihood Improved Improvement Project (BWDB Part)" as per Technical Specifications, including land lease, rental charges, obtaining permissions for work, developing work area, preparation of platform for temporary semi pucca site office(40sqm), CI Sheet labour sheds(200sqm), CI Sheet Stores(200sqm), supply of wooden & cane seated furniture etc. as specified and as per Contractor's Method Statement and as per direction	LS	1.000	918697.501	Nine Lakh Eighteen Thousand Six Hundred and Ninety-Seven point Five Zero One	918697.501	Nine Lakh Eighteen Thousand Six Hundred and Ninety-Seven point Five Zero One

			of Engineer in charge.						
52	52	52	Demobilization and clean-up of the site upon completion of the works, as per Specifications and Contractor's Method Statement and as per direction of Engineer in Charge.	LS	1.000	106726.801	One Lakh Six Thousand Seven Hundred and Twenty-Six point Eight Zero One	106726.801	One Lakh Six Thousand Seven Hundred and Twenty-Six point Eight Zero One
53	53	53	Providing and maintaining adequate portable water supply by installing 6 Nos. of tube well and sanitation facilities by installing 6 Nos. of sanitary latrines for usage of labours,officials and others for prevailing the hygenic and healthy environment at allover the working site As per direction of the Engineer in charge.	LS	1.000	105590.601	One Lakh Five Thousand Five Hundred and Ninety point Six Zero One	105590.601	One Lakh Five Thousand Five Hundred and Ninety point Six Zero One
54	54	54	Mobilize, strengthen required land based construction equipment such as excavator, dump truck, chain dozer, vibro-compactor, and plants such as generator for site electrification, digital camera for taking photographs and digital video camera for recording/Taking photograph all sequences of works etc for keeping records of the Works by providing following information including transfer to site, complete for the purposes stated in the Technical Specification and Contractor's Method Statement and as per direction of Engineer in charge.	LS	1.000	87424.701	Eighty-Seven Thousand Four Hundred and Twenty-Four point Seven Zero One	87424.701	Eighty-Seven Thousand Four Hundred and Twenty-Four point Seven Zero One
55	55	55	Operate, maintain of plant and equipment such as generator for site electrification, for the purpose stated in the Technical Specification and in the Contractor's Method Statement and as per direction of Engineer in charge.	LS	1.000	105363.001	One Lakh Five Thousand Three Hundred and Sixty-Three point Zero Zero One	105363.001	One Lakh Five Thousand Three Hundred and Sixty-Three point Zero Zero One
56	56	56	Part Time Environmental Monitoring through Sample Collection and analysis such as Air quality test, Surface water test, Sound Level monitoring, Traffic signs and road navigation, safety provisions with first aid and medical Assistant as per direction of engineer in charge.	LS	1.000	237500.001	Two Lakh Thirty-Seven Thousand Five Hundred point Zero Zero One	237500.001	Two Lakh Thirty-Seven Thousand Five Hundred point Zero Zero One
							Grand Total:	151236215.977	Fifteen Crore Twelve Lakh Thirty-Six Thousand Two Hundred and Fifteen

									point Nine Seven Seven

This Bill of Quantities is Electronically Signed by Mr. AKM Fayekuzzaman on behalf of RE-KBI(JV)