Individual Report

Tender/Proposal Detail			
Tender/Proposal ID :	143780	**Invitation Reference No. :**	BWDB/Kishore/T-1/6591 Date: 30/11/2017
Closing Date and Time :	04-Jan-2018 14:40	**Opening Date and Time :**	04-Jan-2018 14:40
Procuring Entity :	Kishoreganj WD Division		
Brief :	WDB/Kish/HFMLIP/PW-20 Construction of 1 Causeway-4 nos a Chhitra Khal 4.00m at km 21.77 of Nunnir Haor b Nabinpur Khal 4.00m at km 23.38 of Noapara Haor c Dipjuri Khal 4.0m at km 27.00 of Boro Haor d Sudhi Khal 4.00m at km 33.30 of Boro Haor 2Box sluice/Dranage Culvert- 4 nos a Chhagalia khal at km 10.48 of Noapara haor b Near Nasir at km 7.74 of Nunnir haor c Singhpur khal at km 11.17 of Noapara haor d Goru Chara Khal at km. 10.00 of Boro Haor 3 Irrigation Inlet structure-36 nos in different placess in Noapara haor Nunnir haor & Boro haor in c/w Haor Flood Management and Livelihood Improved Improvement ProjectBWDB Part under Kishoregange WD Division BWDB Kishoregonj during the FY 2017-18 & 2018-19. Package No. WDB/Kish/HFMLI/PW-20.		

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WDB/Kish/HFMLIP/PW-20	Construction of 1 Causeway-4 nos a Chhitra Khal 4.00m at km 21.77 of Nunnir Haor b Nabinpur Khal 4.00m at km 23.38 of Noapara Haor c Dipjuri Khal 4.0m at km 27.00 of Boro Haor d Sudhi Khal 4.00m at km 33.30 of Boro Haor 2Box sluice/Dranage Culvert- 4 nos a Chhagalia khal at km 10.48 of Noapara haor b Near Nasir at km 7.74 of Nunnir haor c Singhpur khal at km 11.17 of Noapara haor d Goru Chara Khal at km. 10.00 of Boro Haor 3 Irrigation Inlet structure-36 nos in different placess in Noapara haor Nunnir haor & Boro haor in c/w Haor Flood Management and Livelihood Improved Improvement ProjectBWDB Part under Kishoregange WD Division BWDB Kishoregonj during the FY 2017-18 & 2018-19. Package No. WDB/Kish/HFMLI/PW-20.

AKA-UCL (JV)
(JVCA)

Bill Of Quantity -04-(Dipjhuri khal causeway)

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)
74	04-120	04-120	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 balow ground level etc. complete including ramming the backfill and the cost of all materials as per direction of Engineer in charge.	each	5.000	1203.771	One Thousand Two Hundred and Three point Seven Seven One	6018.855	Six Thousand AND Eighteen point Eight Five Five
75	04-180	04-180	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.	sqm	9000.000	27.701	Twenty-Seven point Seven Zero One	249309.000	Two Lakh Forty-Nine Thousand Three Hundred

			complete as per direction of Engineer in charge.						Hundred and Nine
76	12-100	12-100	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	6.000	2584.221	Two Thousand Five Hundred and Eighty-Four point Two Two One	15505.326	Fifteen Thousand Five Hundred and Five point Three Two Six
77	16-310	16-310-10	Earth work in excavation of foundation trenches in all kinds of soil as per layout plan of foundation excavation with all leads and lifts and placing the spoil earth for constructing the ring bundh/offerdam 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. 16-310-10 : For moving spoil earth upto a distance of 100m from the centre of the pit	cum	1963.933	246.711	Two Hundred and Forty-Six point Seven One One	484523.874	Four Lakh Eighty-Four Thousand Five Hundred and Twenty-Three point Eight Seven Four
78	16-560	16-560-20	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. 16-560-20: By bamboo post of 6.0m length, c/c fixed with nails.	sqm	345.600	837.151	Eight Hundred and Thirty-Seven point One Five One	289319.386	Two Lakh Eighty-Nine Thousand Three Hundred and Nineteen point Three Eight Six
79	12-310	12-310-20	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. 12-310-20 : By pump.	cum	50971.286	6.131	Six point One Three One	312504.954	Three Lakh Twelve Thousand Five Hundred and Four point Nine Five Four
80	44-240	44-240-30	Supplying at site U-shape hot rolled steel sheet pile of different section of Phosphorus=0.04%(Maximum), Sulphur = 0.04% (Maximum), Copper= 0.25% (Minimum), 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. 44-240-30 : U-shape, hot-rolled steel sheet pile width= 400mm to 600mm: height=> 100mm, Th.= > 10.5: wt. per sqm of pile wall =>120 kg/m2: sectional modulus per one meter of pile wall width => 874	Mton	17.568	150000.001	One Lakh Fifty Thousand point Zero Zero One	2635200.018	Twenty-Six Lakh Thirty-Five Thousand Two Hundred point Zero One Eight

			cm3/m						
81	44-320	44-320-10	Cutting of steel sheet piles to design length and shape as per requirement in design and drawing and as per direction of Engineer in charge. 44-320-10 : Upto 10mm thick.	m	82.960	39.161	Thirty-Nine point One Six One	3248.797	Three Thousand Two Hundred and Forty-Eight point Seven Nine Seven
82	12-300	12-300	Construction of sump well with dug holes of size 1.80 m x 2.0 m, laying in position the perforated empty diesel/petrol drum sheet of 1.00 m 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	8.000	17211.171	Seventeen Thousand Two Hundred and Eleven point One Seven One	137689.368	One Lakh Thirty-Seven Thousand Six Hundred and Eighty-Nine point Three Six Eight
83	44-270	44-270-20	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. 44-270-20: U-type or any other type : Upto 4.50 m depth.	sqm	128.100	1250.751	One Thousand Two Hundred and Fifty point Seven Five One	160221.203	One Lakh Sixty Thousand Two Hundred and Twenty-One point Two Zero Three
84	72-180	72-180	Painting of steel sheet piles, 2 coats of bitumen paint, including preparation of surface with sand paper, iron brush etc. including the cost of all materials and labour etc. complete as per direction of Engineer in charge.	sqm	497.760	293.331	Two Hundred and Ninety-Three point Three Three One	146008.439	One Lakh Forty-Six Thousand AND Eight point Four Three Nine
85	44-310	44-310	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	62.220	461.801	Four Hundred and Sixty-One point Eight Zero One	28733.258	Twenty-Eight Thousand Seven Hundred and Thirty-Three point Two Five Eight
			Supplying and laying single						Eleven Thousand

86	44-220	44-220-10	layer polythene sheet in floor below cement concrete, RCC slab, on walls etc. complete in all respect as per direction of Engineer in charge. 44-220-10: Weighing minimum 1.0 kg per 6.50 sqm	sqm	369.428	31.221	Thirty-One point Two Two One	11533.912	Five Hundred and Thirty-Three point Nine One Two
87	28-120	28-120-20	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. 28-120-20: With 25mm down graded stone chips.	cum	41.147	11500.001	Eleven Thousand Five Hundred point Zero Zero One	473190.541	Four Lakh Seventy-Three Thousand One Hundred and Ninety point Five Four One
88	28-100	28-100-20	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. 28-100-20 : With 25mm down graded stone chips	cum	1.702	11500.001	Eleven Thousand Five Hundred point Zero Zero One	19573.002	Nineteen Thousand Five Hundred and Seventy-Three point Zero Zero Two
89	28-200	28-200-10	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. 28-200-10 : with stone chips	cum	256.457	12500.001	Twelve Thousand Five Hundred point Zero Zero One	3205712.756	Thirty-Two Lakh Five Thousand Seven Hundred and Twelve point Seven Five Six
90	76-120	76-120-10	M.S. Work for reinforcement with deformed M.S. bar, fy=414 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. 76-120-10: 8mm dia to 30mm dia	kg	34102.333	81.001	Eighty-One point Zero Zero One	2762323.075	Twenty-Seven Lakh Sixty-Two Thousand Three Hundred and Twenty-Three point Zero Seven Five

91(a)	36-150	36-150-60	Formwork 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 levelling and removing the forms after specified period including the cost of all materials as per direction of Engineer in charge. 36-150-60: Footing, footing beams, grade beams, foundation slab with 60-80mm dia barrack bamboo props.	sqm	202.173	735.351	Seven Hundred and Thirty-Five point Three Five One	148668.118	One Lakh Forty-Eight Thousand Six Hundred and Sixty-Eight point One One Eight
91(b)	36-150	36-150-10	Vertical and inclined walls, columns, piers with 60-80mm dia barrack bamboo props.	sqm	680.240	909.691	Nine Hundred and Nine point Six Nine One	618808.206	Six Lakh Eighteen Thousand Eight Hundred and Eight point Two Zero Six
92	16-520	16-520-20	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 labour using mallet/ vibro compactor) as per direction of Engineer in charge. 16-520-20 : sand of FM>=1.50	cum	105.638	921.991	Nine Hundred and Twenty-One point Nine Nine One	97397.285	Ninety-Seven Thousand Three Hundred and Ninety-Seven point Two Eight Five
93(a)	40-610	40-610-20	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: 40-610-20: Well graded between 40mm to 20mm size.	cum	27.666	3730.471	Three Thousand Seven Hundred and Thirty point Four Seven One	103207.211	One Lakh Three Thousand Two Hundred and Seven point Two One One
93(b)	40-610	40-610-30	Well graded between 20mm to 5mm size. (Combination of sub-item 10 & 30 or 20 & 30 shall be used)	cum	27.666	4076.091	Four Thousand AND Seventy-Six point Zero Nine One	112769.134	One Lakh Twelve Thousand Seven Hundred and Sixty-Nine point One Three Four
			Manufacturing and supplying C.C. blocks in leanest mix. 1:3:6, with cement, sand						

94(a)	40-140	40-140-50	(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. (a) 40-140-50 : block size 30cmx30cmx30cm.	nos	5583.000	485.001	Four Hundred and Eighty-Five point Zero Zero One	2707760.583	Twenty-Seven Lakh Seven Thousand Seven Hundred and Sixty point Five Eight Three
94(b)	40-140	40-140-40	40-140-40 :block size 40cmx40cmx20cm	nos	2910.000	485.001	Four Hundred and Eighty-Five point Zero Zero One	1411352.910	Fourteen Lakh Eleven Thousand Three Hundred and Fifty-Two point Nine One
95	40-220	40-220-10	Labour charge for protective works in laying CC blocks of different sizes including preparation of base, watering and ramming of base etc. complete as per direction of Engineer in charge. 40-220-10 : Within 200 m.	cum	290.404	1250.001	One Thousand Two Hundred and Fifty point Zero Zero One	363005.290	Three Lakh Sixty-Three Thousand AND Five point Two Nine
96	40-600	40-600-40	Supplying and placing non-woven needle punched type geotextile fabric 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% polypropeline 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, equipments 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 accross the body of the fabric).Supplying and placing non-woven needle punched type geotextile fabric as filter materials of elongation at maximum force machine direction (MD) >=60% and <=	sqm	527.334	158.661	One Hundred and Fifty-Eight point	83667.340	Eighty-Three Thousand Six Hundred and Sixty

		40	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% polypropeline 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, equipments 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 accross the body of the fabric). 40-600-20 . Mass =>300 gm/m², thickness(Under 2 kpa pressure) =>2.00 mm, EoS<=0.11mm, strip tensile strength =>15 kn/m, grab strength =>850 N, CBR puncture resistance =>2200 N.				Six Six One		Sixty-Seven point Three Four
97	16-140	16-140-10	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. 16-140-10: 0 m to 3 m height	cum	5590.000	187.791	One Hundred and Eighty-Seven point Seven Nine One	1049751.690	Ten Lakh Forty-Nine Thousand Seven Hundred and Fifty-One point Six Nine
98	16-130	16-130	Earth work by manual labour in all kinds of soil in excavation or reexcavation of channels with the initial lead of 30m and lift of 1.5m including levelling, dressing and throwing the spoils to profile with breaking clods, rough dressing, clearing jungles including cutting trees	cum	3080.000	142.471	One Hundred and Forty-Two point Four Seven One	438810.680	Four Lakh Thirty-Eight Thousand Eight Hundred and Ten

			upto 200mm girth, dug bailing etc. complete as per direction of Engineer in charge.				One		point Six Eight
99	16-200	16-200	Extra rate for every additional lift of 1.00 meter part thereof beyond the initial lift of 1.5m (30 cm neglected) for all kinds of earth work. 1 no. lift	plt/cum	3080.000	10.991	Ten point Nine Nine One	33852.280	Thirty-Three Thousand Eight Hundred and Fifty-Two point Two Eight
100	16-220	16-220	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	3616.067	142.421	One Hundred and Forty-Two point Four Two One	515003.878	Five Lakh Fifteen Thousand AND Three point Eight Seven Eight
101	16-190	16-190	Extra rate for every additional lead of 15 m or part thereof beyond the initial lead of 30m up to a maximum of 19 leads (3m neglected) for all kinds of earth work 1 no lead	pld/cum	3626.067	14.571	Fourteen point Five Seven One	52835.422	Fifty-Two Thousand Eight Hundred and Thirty-Five point Four Two Two
102	04-280	04-280-10	Constructing at site, cement mortar gauge on masonry wall, including engraving in meter, decimeter & centimeter, painting and figuring with black and red water proof paint, etc. complete as per direction of Engineer in charge. 04-280-10: 150mm x 25mm	m	6.600	44.731	Forty-Four point Seven Three One	295.225	Two Hundred and Ninety-Five point Two Two Five
103	16-240	16-240	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, (minimun 15m apart from the bank) as per direction of Engineer in charge.	cum	3616.067	142.471	One Hundred and Forty-Two point Four Seven One	515184.682	Five Lakh Fifteen Thousand One Hundred and Eighty-Four point Six Eight Two
104	16-540	16-540-20	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. 16-540-20 : Sand of FM>=0.80	cum	1035.441	757.751	Seven Hundred and Fifty-Seven point Seven Five One	784606.453	Seven Lakh Eighty-Four Thousand Six Hundred and Six point Four Five Three
			Back filling in hydraulic structures and slope building in protective works including all				One		One Lakh Thirty

105	16-530	16-530	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 ofEngineer in charge.	cum	817.960	159.491	One Hundred and Fifty-Nine point Four Nine One	130457.258	Thousand Four Hundred and Fifty-Seven point Two Five Eight
106	48-100	48-100	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 (measurment will be given on well grown grass only), as per direction of Engineer in charge.	sqm	1062.000	26.171	Twenty-Six point One Seven One	27793.602	Twenty-Seven Thousand Seven Hundred and Ninety-Three point Six Zero Two
							Grand Total:	20135843.011	Two Crore One Lakh Thirty-Five Thousand Eight Hundred and Forty-Three point Zero One One

This Bill Of Quantity -04-(Dipjhuri khal causeway) is Electronically Signed by Mr. Md Ali on behalf of AKA-UCL (JV)

Ashim Singh-M/S Subroto Suttradhar-M/S Pritom Enterprise (JV)
(JVCA)

Bill Of Quantity -04-(Dipjhuri khal causeway)

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			Site preparation by manually removing all miscellaneous objectional materials form				Twenty		Two Lakh Forty-Nine

75	04-180	04-180	objectional materials from 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	9000.000	27.721	Twenty-Seven point Seven Two One	249489.000	Two Four Four Hundred and Eighty-Nine
76	12-100	12-100	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	6.000	2584.221	Two Thousand Five Hundred and Eighty-Four point Two Two One	15505.326	Fifteen Thousand Five Hundred and Five point Three Two Six
77	16-310	16-310-10	Earth work in excavation of foundation trenches in all kinds of soil as per layout plan of foundation excavation with all leads and lifts and placing the spoil earth for constructing the ring bundh/offerdam 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. 16-310-10 : For moving spoil earth upto a distance of 100m from the centre of the pit	cum	1963.933	246.711	Two Hundred and Forty-Six point Seven One One	484523.874	Four Lakh Eighty-Four Thousand Five Hundred and Twenty-Three point Eight Seven Four
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			100mm, Th.= > 10.5: wt. per sqm of pile wall =>120 kg/m2: sectional modulus per one meter of pile wall width => 874 cm3/m						
81	44-320	44-320-10	Cutting of steel sheet piles to design length and shape as per requirement in design and drawing and as per direction of Engineer in charge. 44-320-10 : Upto 10mm thick.	m	82.960	39.161	Thirty-Nine point One Six One	3248.797	Three Thousand Two Hundred and Forty-Eight point Seven Nine Seven
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			Supplying and laying single layer polythene sheet in floor						Eleven Thousand Five

86	44-220	44-220-10	below cement concrete, RCC slab, on walls etc. complete in all respect as per direction of Engineer in charge. 44-220-10: Weighing minimum 1.0 kg per 6.50 sqm	sqm	369.428	31.221	Thirty-One point Two Two One	11533.912	Five Hundred and Thirty-Three point Nine One Two
87	28-120	28-120-20	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. 28-120-20: With 25mm down graded stone chips.	cum	41.147	10954.481	Ten Thousand Nine Hundred and Fifty-Four point Four Eight One	450744.030	Four Lakh Fifty Thousand Seven Hundred and Forty-Four point Zero Three
88	28-100	28-100-20	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. 28-100-20 : With 25mm down graded stone chips	cum	1.702	10601.191	Ten Thousand Six Hundred and One point One Nine One	18043.227	Eighteen Thousand AND Forty-Three point Two Two Seven
89	28-200	28-200-10	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. 28-200-10 : with stone chips	cum	256.457	11674.491	Eleven Thousand Six Hundred and Seventy-Four point Four Nine One	2994004.938	Twenty-Nine Lakh Ninety-Four Thousand AND Four point Nine Three Eight
90	76-120	76-120-10	M.S. Work for reinforcement with deformed M.S. bar, fy=414 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. 76-120-10: 8mm dia to 30mm dia	kg	34102.333	77.341	Seventy-Seven point Three Four One	2637508.537	Twenty-Six Lakh Thirty-Seven Thousand Five Hundred and Eight point Five Three Seven
			Formwork for centering and						

91(a)	36-150	36-150-60	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 levelling and removing the forms after specified period including the cost of all materials as per direction of Engineer in charge. 36-150-60: Footing, footing beams, grade beams, foundation slab with 60-80mm dia barrack bamboo props.	sqm	202.173	735.351	Seven Hundred and Thirty-Five point Three Five One	148668.118	One Lakh Forty-Eight Thousand Six Hundred and Sixty-Eight point One One Eight
91(b)	36-150	36-150-10	Vertical and inclined walls, columns, piers with 60-80mm dia barrack bamboo props.	sqm	680.240	909.691	Nine Hundred and Nine point Six Nine One	618808.206	Six Lakh Eighteen Thousand Eight Hundred and Eight point Two Zero Six
92	16-520	16-520-20	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 labour using mallet/ vibro compactor) as per direction of Engineer in charge. 16-520-20 : sand of FM>=1.50	cum	105.638	1420.061	One Thousand Four Hundred and Twenty point Zero Six One	150012.404	One Lakh Fifty Thousand AND Twelve point Four Zero Four
93(a)	40-610	40-610-20	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: 40-610-20: Well graded between 40mm to 20mm size.	cum	27.666	3730.471	Three Thousand Seven Hundred and Thirty point Four Seven One	103207.211	One Lakh Three Thousand Two Hundred and Seven point Two One One
93(b)	40-610	40-610-30	Well graded between 20mm to 5mm size. (Combination of sub-item 10 & 30 or 20 & 30 shall be used)	cum	27.666	4076.091	Four Thousand AND Seventy-Six point Zero Nine One	112769.134	One Lakh Twelve Thousand Seven Hundred and Sixty-Nine point One Three Four
			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						Seventeen Lakh

94(a)	40-140	40-140-50	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. (a) 40-140-50 : block size 30cmx30cmx30cm.	nos	5583.000	317.011	Three Hundred and Seventeen point Zero One One	1769872.413	Lakh Sixty-Nine Thousand Eight Hundred and Seventy-Two point Four One Three
94(b)	40-140	40-140-40	40-140-40 :block size 40cmx40cmx20cm	nos	2910.000	381.461	Three Hundred and Eighty-One point Four Six One	1110051.510	Eleven Lakh Ten Thousand AND Fifty-One point Five One
95	40-220	40-220-10	Labour charge for protective works in laying CC blocks of different sizes including preparation of base, watering and ramming of base etc. complete as per direction of Engineer in charge. 40-220-10 : Within 200 m.	cum	290.404	1145.881	One Thousand One Hundred and Forty-Five point Eight Eight One	332768.426	Three Lakh Thirty-Two Thousand Seven Hundred and Sixty-Eight point Four Two Six
96	40-600	40-600-40	Supplying and placing non-woven needle punched type geotextile fabric 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% polypropeline 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, equipments 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 accross the body of the fabric).Supplying and placing non-woven needle punched type geotextile fabric as filter materials of elongation at maximum force machine direction (MD) >=60% and <= 100 % , elongation at maximum force (CMD) => 40% and <=	sqm	527.334	215.881	Two Hundred and Fifteen point Eight Eight One	113841.391	One Lakh Thirteen Thousand Eight Hundred and Forty-One point Three

			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% polypropeline 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, equipments 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 accross the body of the fabric). 40-600-20 . Mass =>300 gm/m², thickness(Under 2 kpa pressure) =>2.00 mm, EoS<=0.11mm, strip tensile strength =>15 kn/m, grab strength =>850 N, CBR puncture resistance =>2200 N.						Three Nine One
97	16-140	16-140-10	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. 16-140-10: 0 m to 3 m height	cum	5590.000	155.001	One Hundred and Fifty-Five point Zero Zero One	866455.590	Eight Lakh Sixty-Six Thousand Four Hundred and Fifty-Five point Five Nine
98	16-130	16-130	Earth work by manual labour in all kinds of soil in excavation or reexcavation of channels with the initial lead of 30m and lift of 1.5m including levelling, dressing and throwing the spoils to profile with breaking clods, rough dressing, clearing jungles including cutting trees upto 200mm girth, dug bailing etc. complete as per direction	cum	3080.000	130.001	One Hundred and Thirty point Zero Zero One	400403.080	Four Lakh Four Hundred and Three point Zero Eight

			of Engineer in charge.						
99	16-200	16-200	Extra rate for every additional lift of 1.00 meter part thereof beyond the initial lift of 1.5m (30 cm neglected) for all kinds of earth work. 1 no. lift	plt/cum	3080.000	10.991	Ten point Nine Nine One	33852.280	Thirty-Three Thousand Eight Hundred and Fifty-Two point Two Eight
100	16-220	16-220	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	3616.067	142.421	One Hundred and Forty-Two point Four Two One	515003.878	Five Lakh Fifteen Thousand AND Three point Eight Seven Eight
101	16-190	16-190	Extra rate for every additional lead of 15 m or part thereof beyond the initial lead of 30m up to a maximum of 19 leads (3m neglected) for all kinds of earth work 1 no lead	pld/cum	3626.067	14.571	Fourteen point Five Seven One	52835.422	Fifty-Two Thousand Eight Hundred and Thirty-Five point Four Two Two
102	04-280	04-280-10	Constructing at site, cement mortar gauge on masonry wall, including engraving in meter, decimeter & centimeter, painting and figuring with black and red water proof paint, etc. complete as per direction of Engineer in charge. 04-280-10: 150mm x 25mm	m	6.600	77.731	Seventy-Seven point Seven Three One	513.025	Five Hundred and Thirteen point Zero Two Five
103	16-240	16-240	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, (minimun 15m apart from the bank) as per direction of Engineer in charge.	cum	3616.067	142.471	One Hundred and Forty-Two point Four Seven One	515184.682	Five Lakh Fifteen Thousand One Hundred and Eighty-Four point Six Eight Two
104	16-540	16-540-20	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. 16-540-20 : Sand of FM>=0.80	cum	1035.441	600.001	Six Hundred point Zero Zero One	621265.635	Six Lakh Twenty-One Thousand Two Hundred and Sixty-Five point Six Three Five
105	16-530	16-530	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	817.960	159.491	One Hundred and Fifty-Nine point Four Nine	130457.258	One Lakh Thirty Thousand Four Hundred and Fifty-

			20% relative density by compactor or any other suitable method as per direction ofEngineer in charge.				Four Nine One		Seven point Two Five Eight
106	48-100	48-100	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 (measurment will be given on well grown grass only), as per direction of Engineer in charge.	sqm	1062.000	26.171	Twenty-Six point One Seven One	27793.602	Twenty-Seven Thousand Seven Hundred and Ninety-Three point Six Zero Two
							Grand Total:	18118337.858	One Crore Eighty-One Lakh Eighteen Thousand Three Hundred and Thirty-Seven point Eight Five Eight

This Bill Of Quantity -04-(Dipjhuri khal causeway) is Electronically Signed by Mr. Ashim on behalf of Ashim Singh-M/S Subroto Suttradhar-M/S Pritom Enterprise (JV)

M/S. BHAWAL CONSTRUCTION

Bill Of Quantity -04-(Dipjhuri khal causeway)

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)
74	04-120	04-120	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 balow ground level etc. complete including ramming the backfill and the cost of all materials as per direction of Engineer in charge.	each	5.000	1203.771	One Thousand Two Hundred and Three point Seven Seven One	6018.855	Six Thousand AND Eighteen point Eight Five Five
75	04-180	04-180	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	9000.000	27.721	Twenty-Seven point Seven Two One	249489.000	Two Lakh Forty-Nine Thousand Four Hundred and Eighty-Nine
			Installation of pizeometer				Two		Fifteen

76	12-100	12-100	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	6.000	2584.221	Thousand Five Hundred and Eighty-Four point Two Two One	15505.326	Fifteen Thousand Five Hundred and Five point Three Two Six
77	16-310	16-310-10	Earth work in excavation of foundation trenches in all kinds of soil as per layout plan of foundation excavation with all leads and lifts and placing the spoil earth for constructing the ring bundh/offerdam 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. 16-310-10 : For moving spoil earth upto a distance of 100m from the centre of the pit	cum	1963.933	246.711	Two Hundred and Forty-Six point Seven One One	484523.874	Four Lakh Eighty-Four Thousand Five Hundred and Twenty-Three point Eight Seven Four
78	16-560	16-560-20	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. 16-560-20: By bamboo post of 6.0m length, c/c fixed with nails.	sqm	345.600	837.151	Eight Hundred and Thirty-Seven point One Five One	289319.386	Two Lakh Eighty-Nine Thousand Three Hundred and Nineteen point Three Eight Six
79	12-310	12-310-20	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. 12-310-20 : By pump.	cum	50971.286	6.131	Six point One Three One	312504.954	Three Lakh Twelve Thousand Five Hundred and Four point Nine Five Four
80	44-240	44-240-30	Supplying at site U-shape hot rolled steel sheet pile of different section of Phosphorus=0.04%(Maximum), Sulphur = 0.04% (Maximum), Copper= 0.25% (Minimum), 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. 44-240-30 : U-shape, hot-rolled steel sheet pile width= 400mm to 600mm: height=> 100mm, Th.= > 10.5: wt. per sqm of pile wall =>120 kg/m2: sectional modulus per one meter of pile wall width => 874 cm3/m	Mton	17.568	145120.531	One Lakh Forty-Five Thousand One Hundred and Twenty point Five Three One	2549477.489	Twenty-Five Lakh Forty-Nine Thousand Four Hundred and Seventy-Seven point Four Eight Nine
			Cutting of steel sheet piles to						Three Thousand Two

81	44-320	44-320-10	design length and shape as per requirement in design and drawing and as per direction of Engineer in charge. 44-320-10 : Upto 10mm thick.	m	82.960	39.161	Thirty-Nine point One Six One	3248.797	Two Hundred and Forty-Eight point Seven Nine Seven
82	12-300	12-300	Construction of sump well with dug holes of size 1.80 m x 2.0 m, laying in position the perforated empty diesel/petrol drum sheet of 1.00 m 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	8.000	17211.171	Seventeen Thousand Two Hundred and Eleven point One Seven One	137689.368	One Lakh Thirty-Seven Thousand Six Hundred and Eighty-Nine point Three Six Eight
83	44-270	44-270-20	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. 44-270-20: U-type or any other type : Upto 4.50 m depth.	sqm	128.100	1250.751	One Thousand Two Hundred and Fifty point Seven Five One	160221.203	One Lakh Sixty Thousand Two Hundred and Twenty-One point Two Zero Three
84	72-180	72-180	Painting of steel sheet piles, 2 coats of bitumen paint, including preparation of surface with sand paper, iron brush etc. including the cost of all materials and labour etc. complete as per direction of Engineer in charge.	sqm	497.760	293.331	Two Hundred and Ninety-Three point Three Three One	146008.439	One Lakh Forty-Six Thousand AND Eight point Four Three Nine
85	44-310	44-310	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	62.220	461.801	Four Hundred and Sixty-One point Eight Zero One	28733.258	Twenty-Eight Thousand Seven Hundred and Thirty-Three point Two Five Eight
86	44-220	44-220-10	Supplying and laying single layer polythene sheet in floor below cement concrete, RCC slab, on walls etc. complete in all respect as per direction of Engineer in charge. 44-220-10: Weighing minimum 1.0 kg per 6.50 sqm	sqm	369.428	31.221	Thirty-One point Two Two One	11533.912	Eleven Thousand Five Hundred and Thirty-Three point Nine One Two
			Cement concrete work in						

87	28-120	28-120-20	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. 28-120-20: With 25mm down graded stone chips.	cum	41.147	10954.481	Ten Thousand Nine Hundred and Fifty-Four point Four Eight One	450744.030	Four Lakh Fifty Thousand Seven Hundred and Forty-Four point Zero Three
88	28-100	28-100-20	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. 28-100-20 : With 25mm down graded stone chips	cum	1.702	10601.191	Ten Thousand Six Hundred and One point One Nine One	18043.227	Eighteen Thousand AND Forty-Three point Two Two Seven
89	28-200	28-200-10	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. 28-200-10 : with stone chips	cum	256.457	11674.491	Eleven Thousand Six Hundred and Seventy-Four point Four Nine One	2994004.938	Twenty-Nine Lakh Ninety-Four Thousand AND Four point Nine Three Eight
90	76-120	76-120-10	M.S. Work for reinforcement with deformed M.S. bar, fy=414 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. 76-120-10: 8mm dia to 30mm dia	kg	34102.333	77.341	Seventy-Seven point Three Four One	2637508.537	Twenty-Six Lakh Thirty-Seven Thousand Five Hundred and Eight point Five Three Seven
			Formwork 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				Seven Hundred		One Lakh Forty-Eight

91(a)	36-150	36-150-60	steel forms with necessary ties, battens, struts, nuts & bolts, props etc. as per desired shape and size including levelling and removing the forms after specified period including the cost of all materials as per direction of Engineer in charge. 36-150-60: Footing, footing beams, grade beams, foundation slab with 60-80mm dia barrack bamboo props.	sqm	202.173	735.351	Hundred and Thirty-Five point Three Five One	148668.118	Thousand Six Hundred and Sixty-Eight point One One Eight
91(b)	36-150	36-150-10	Vertical and inclined walls, columns, piers with 60-80mm dia barrack bamboo props.	sqm	680.240	909.691	Nine Hundred and Nine point Six Nine One	618808.206	Six Lakh Eighteen Thousand Eight Hundred and Eight point Two Zero Six
92	16-520	16-520-20	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 labour using mallet/ vibro compactor) as per direction of Engineer in charge. 16-520-20 : sand of FM>=1.50	cum	105.638	1420.061	One Thousand Four Hundred and Twenty point Zero Six One	150012.404	One Lakh Fifty Thousand AND Twelve point Four Zero Four
93(a)	40-610	40-610-20	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: 40-610-20: Well graded between 40mm to 20mm size.	cum	27.666	3730.471	Three Thousand Seven Hundred and Thirty point Four Seven One	103207.211	One Lakh Three Thousand Two Hundred and Seven point Two One One
93(b)	40-610	40-610-30	Well graded between 20mm to 5mm size. (Combination of sub-item 10 & 30 or 20 & 30 shall be used)	cum	27.666	4076.091	Four Thousand AND Seventy-Six point Zero Nine One	112769.134	One Lakh Twelve Thousand Seven Hundred and Sixty-Nine point One Three Four
94(a)	40-140	40-140-50	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	nos	5583.000	317.011	Three Hundred and Seventeen point Zero One One	1769872.413	Seventeen Lakh Sixty-Nine Thousand Eight Hundred and Seventy-Two point Four One

			complete including supply of all materials (steel shutter to be used) as per direction of Engineer in charge. (a) 40-140-50 : block size 30cmx30cmx30cm.						Four One Three
94(b)	40-140	40-140-40	40-140-40 :block size 40cmx40cmx20cm	nos	2910.000	381.461	Three Hundred and Eighty-One point Four Six One	1110051.510	Eleven Lakh Ten Thousand AND Fifty-One point Five One
95	40-220	40-220-10	Labour charge for protective works in laying CC blocks of different sizes including preparation of base, watering and ramming of base etc. complete as per direction of Engineer in charge. 40-220-10 : Within 200 m.	cum	290.404	1145.881	One Thousand One Hundred and Forty-Five point Eight Eight One	332768.426	Three Lakh Thirty-Two Thousand Seven Hundred and Sixty-Eight point Four Two Six
96	40-600	40-600-40	Supplying and placing non-woven needle punched type geotextile fabric 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% polypropeline 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, equipments 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 accross the body of the fabric).Supplying and placing non-woven needle punched type geotextile fabric 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	sqm	527.334	215.881	Two Hundred and Fifteen point Eight Eight One	113841.391	One Lakh Thirteen Thousand Eight Hundred and Forty-One point Three Nine One

			joints (with 100% polypropeline 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, equipments 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 accross the body of the fabric). 40-600-20 . Mass =>300 gm/m², thickness(Under 2 kpa pressure) =>2.00 mm, EoS<=0.11mm, strip tensile strength =>15 kn/m, grab strength =>850 N, CBR puncture resistance =>2200 N.						
97	16-140	16-140-10	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. 16-140-10: 0 m to 3 m height	cum	5590.000	187.791	One Hundred and Eighty-Seven point Seven Nine One	1049751.690	Ten Lakh Forty-Nine Thousand Seven Hundred and Fifty-One point Six Nine
98	16-130	16-130	Earth work by manual labour in all kinds of soil in excavation or reexcavation of channels with the initial lead of 30m and lift of 1.5m including levelling, dressing and throwing the spoils to profile with breaking clods, rough dressing, clearing jungles including cutting trees upto 200mm girth, dug bailing etc. complete as per direction of Engineer in charge.	cum	3080.000	142.471	One Hundred and Forty-Two point Four Seven One	438810.680	Four Lakh Thirty-Eight Thousand Eight Hundred and Ten point Six Eight
99	16-200	16-200	Extra rate for every additional lift of 1.00 meter part thereof beyond the initial lift of 1.5m (30 cm neglected) for all kinds of earth work. 1 no. lift	plt/cum	3080.000	10.991	Ten point Nine Nine One	33852.280	Thirty-Three Thousand Eight Hundred and Fifty-Two point

									Two Eight
100	16-220	16-220	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	3616.067	142.421	One Hundred and Forty-Two point Four Two One	515003.878	Five Lakh Fifteen Thousand AND Three point Eight Seven Eight
101	16-190	16-190	Extra rate for every additional lead of 15 m or part thereof beyond the initial lead of 30m up to a maximum of 19 leads (3m neglected) for all kinds of earth work 1 no lead	pld/cum	3626.067	14.571	Fourteen point Five Seven One	52835.422	Fifty-Two Thousand Eight Hundred and Thirty-Five point Four Two Two
102	04-280	04-280-10	Constructing at site, cement mortar gauge on masonry wall, including engraving in meter, decimeter & centimeter, painting and figuring with black and red water proof paint, etc. complete as per direction of Engineer in charge. 04-280-10: 150mm x 25mm	m	6.600	77.731	Seventy-Seven point Seven Three One	513.025	Five Hundred and Thirteen point Zero Two Five
103	16-240	16-240	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, (minimun 15m apart from the bank) as per direction of Engineer in charge.	cum	3616.067	142.471	One Hundred and Forty-Two point Four Seven One	515184.682	Five Lakh Fifteen Thousand One Hundred and Eighty-Four point Six Eight Two
104	16-540	16-540-20	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. 16-540-20 : Sand of FM>=0.80	cum	1035.441	757.751	Seven Hundred and Fifty-Seven point Seven Five One	784606.453	Seven Lakh Eighty-Four Thousand Six Hundred and Six point Four Five Three
105	16-530	16-530	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 ofEngineer in charge.	cum	817.960	159.491	One Hundred and Fifty-Nine point Four Nine One	130457.258	One Lakh Thirty Thousand Four Hundred and Fifty-Seven point Two Five Eight
			Fine dressing and close turfing of the slopes and the crest of embankment with 75mm thick, good quality durba or						Twenty-Seven Thousand

106	48-100	48-100	charkanta sods of size 200mm x 200mm, with all leads and lifts, including ramming, watering until the turf grows properly, maintaining etc. complete (measurment will be given on well grown grass only), as per direction of Engineer in charge.	sqm	1062.000	26.171	Twenty-Six point One Seven One	27793.602	Thousand Seven Hundred and Ninety-Three point Six Zero Two
							Grand Total:	18503382.376	One Crore Eighty-Five Lakh Three Thousand Three Hundred and Eighty-Two point Three Seven Six

This Bill Of Quantity -04-(Dipjhuri khal causeway) is Electronically Signed by Mr. FAKHAR UDDIN AHMED on behalf of M/S. BHAWAL CONSTRUCTION