Government of the People's Republic of Bangladesh
Prime Minister's Office
Bangladesh Economic Zones Authority (BEZA)
Bangabandhu Sheikh Mujib Shilpa Nagar (BSMSN) Development Project
Bangladesh PRIDE (P 170688)
Biniyog Bhaban (Level 7,8,9)
Plot#E-6/B, W Agargaon, Dhaka 1207, Bangladesh
www.beza.gov.bd

Addendum-01

Letter No.: 03.07.000.056.014.055.21- 618 Date: 28.06.2022

It is notified for all concerned that the following amendments are hereby made in the Request for Bids (RFB) of 'Road and Storm Water Network for Mirsarai-2B EZ, Package No.: WD-2-BSMSN-BEZA' :

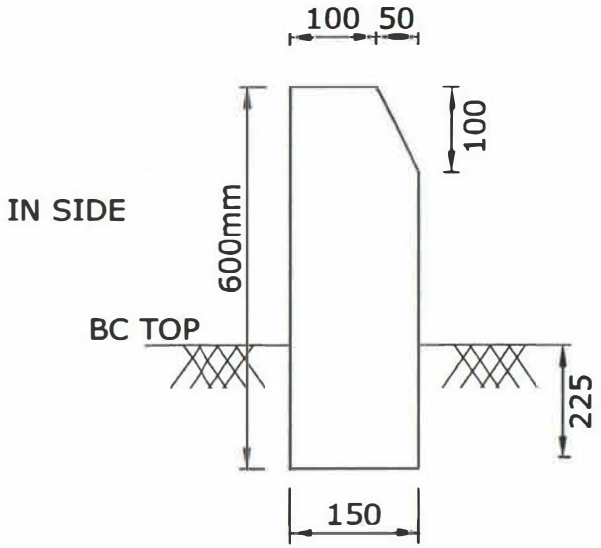
Sl. No.	Name of Criteria or Clause Identification	Existing	Amended
1	Section IV: Bill of Quantities (BOQ)	Exiting BOQ	Revised BOQ
2	Section IX: Particular Condition of Contract, Page No-207 of Bidding Document	The Lump Sum price of the contractor's facilities of the BOQ Item no. 1.02	'Item no. 1.02' is deleted.
3	Drawing	-	(1) Kerb Stone, (2) Pre-Cast RCC Pile, (3) Sand Compaction Pile & (4) Semi-Pucca Site Office indicative Drawings attached.
4	Quantity of Bituminous Road Work in SPN, Issued on: 26 May 2022	About 9.450 km	About 12.10 km

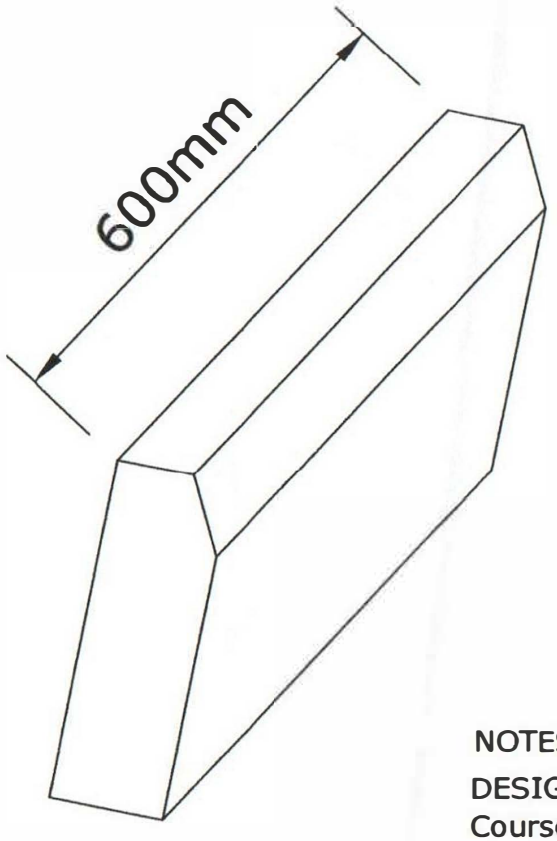
All other terms & conditions as laid down in the Request for Bid (RFB) will remain unchanged.

This Addendum notice shall form a part and parcel of the Request for Bid (RFB).

28/06/2022

Abdullah Al Mahmud Faruk
Project Director
Bangabandhu Sheikh Mujib Shilpa Nagar (BSMSN) Development Project
Bangladesh PRIDE (P170688)
Bangladesh Economic Zones Authority (BEZA)
Biniyog Bhaban (Level 7,8,9)
Plot#E-6/B, W Agargaon, Dhaka 1207, Bangladesh.
Phone: +880244826050
E-mail: pd.bsmsn.pride@beza.gov.bd



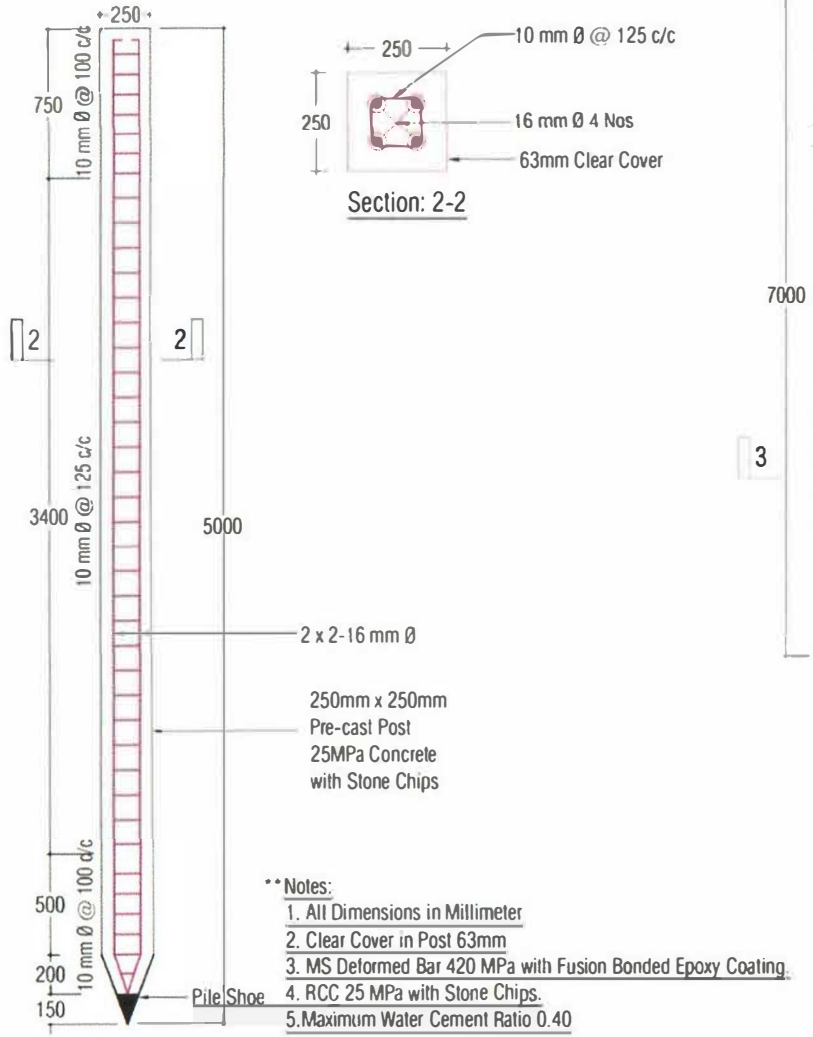


OUT SIDE

NOTES:

DESIGN STRENGTH = 25 MPa
Course Aggregate = Stone Chips
Maximum Water Cement Ratio = 0.40
All Dimensions are in Milimeter

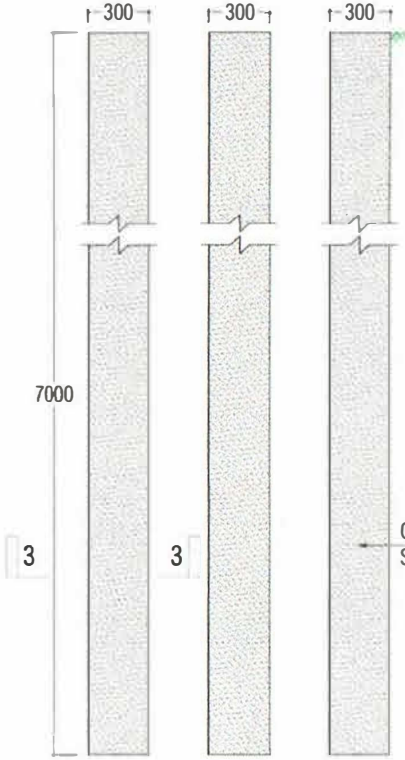
TYPICAL DESIGN OF KERB STONE



Section: 2-2

**Notes:
1. All Dimensions in Millimeter
2. Clear Cover in Post 63mm
3. MS Deformed Bar 420 MPa with Fusion Bonded Epoxy Coating
4. RCC 25 MPa with Stone Chips.
5. Maximum Water Cement Ratio 0.40

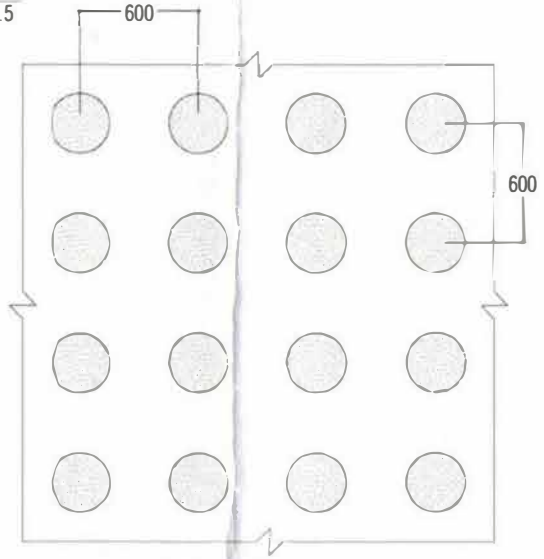
Long Section of 5.0m Pre-Cast Pile



Long Section of Sand Pile

Section: 3-3

**Notes:
1. Sand FM shall be > 1.5
2. Drop Hammer Minimum Weight 1 Ton
3. Drop Hammer Fall Height 1.5m
4. Minimum SPT 8 (Eight) After Complete Sand Compaction Pile



Typical Plan of Sand Compaction Pile

Indicative Drawing for Sand Compaction Pile

CLIENT	PROJECT NAME	SUBMITTED BY	DRAWN BY	Consultant Architect	Executive Engineer	Deputy Project Director	Approved By (Project Director)	REVISION NO	REVISION	DATE	ISSUE DATE
BANGLADESH ECONOMIC ZONES AUTHORITY(BEZA)	Securities and Support Amenities/Protection Wall/Fence Surveillance (Lot-01) WD-10, BSMSN-BEZA DRAWING TITLE: Structural Details of Pre-Cast Pile & Sand Compaction Pile		Tarun Ahmed		MOHAMMAD NURUL ISLAM Bangladesh Small Multi Purpose Utilities Development Project			01 02 03 04 05			FOR CONSTRUCTION Drawing No. S-001

FRONT ELEVATION

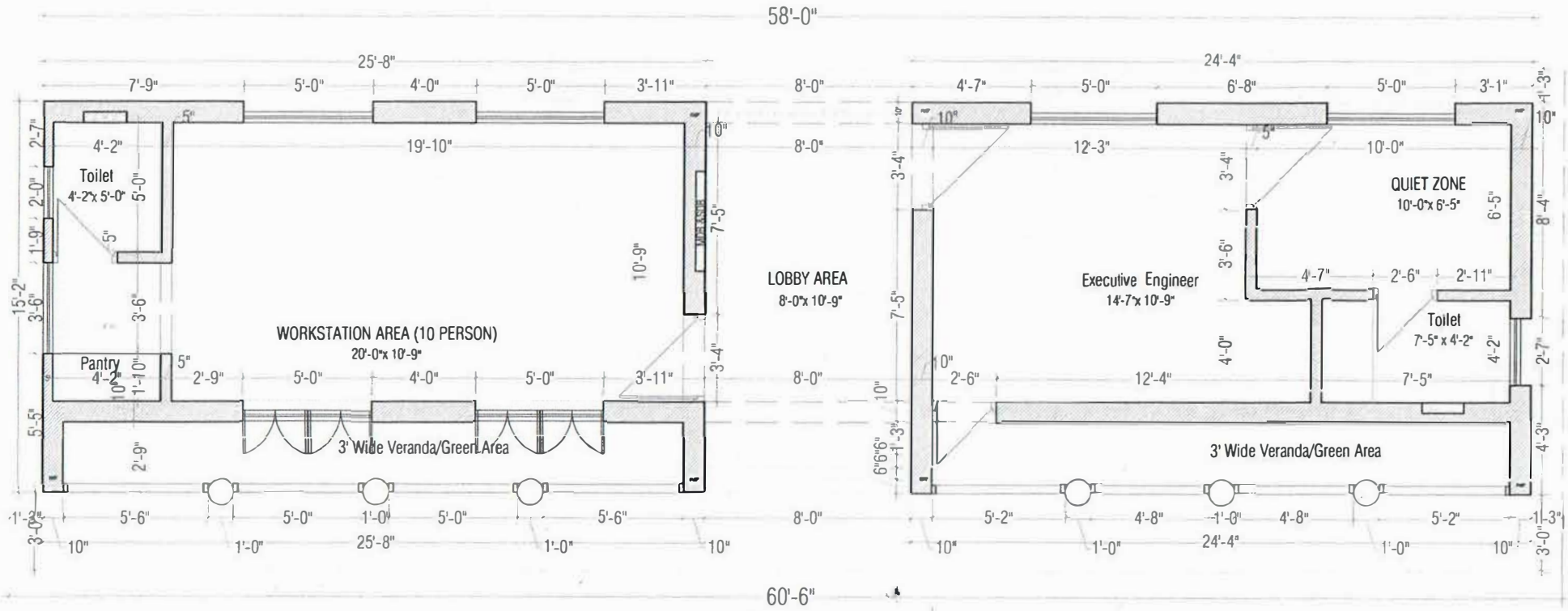
12" Shal Wood Log (Bolli Wood)

Ms Grill Fencing as per design with outer frames having 38mmx38mmx6mm MS angle and inner member made of 6mm dia Ms Rod placed 110mmC/C Horizontal and 38 mmC/C Vertical direction with each point welded finished with Enamel Paint.

Brick wall

05/05/22
AMIN AHMED ARIF
REGISTRATION NO. A-139
JR ARCHITECTURAL CONSULTANCY
BANGABANDHU SHEIKH MUJIB

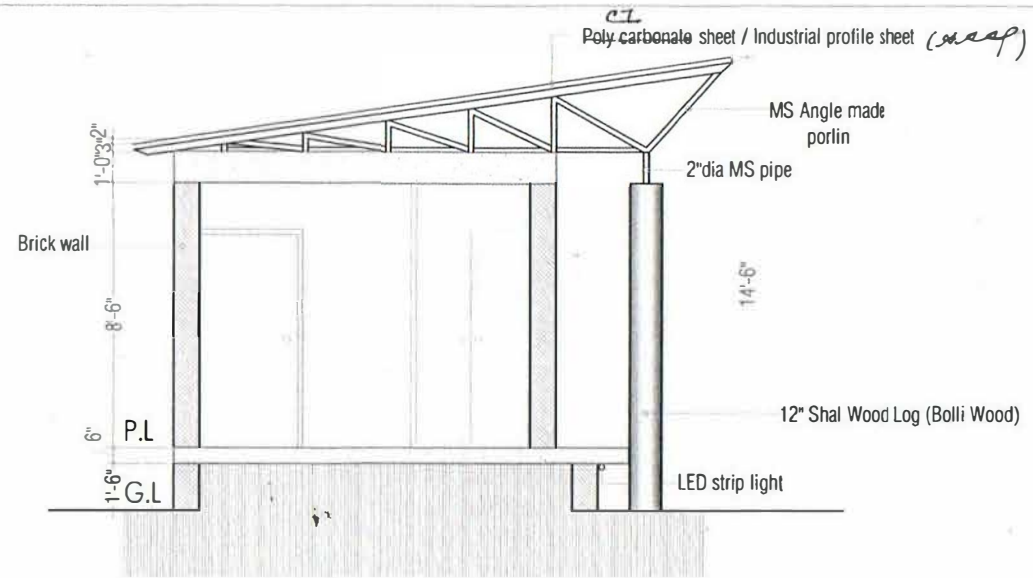
CLIENT	PROJECT NAME	SUBMITTED BY	DRAWN BY	Consultant Architect	Executive Engineer	Deputy Project Director	Approved by	REVISION			DRAWING STATUS
							Project Director	NO.	REVISION	DATE	
BANGLADESH ECONOMIC ZONES AUTHORITY(BEZA)	PROTOTYPE PROJECT OFFICE LAYOUT PLAN AT ZONE 2B	AMIN AHMED ARIF (IAAB A-133) Jr. Consultant Architect Bangabandhu Sheikh Mujib Shilpanagar(BSMSN) Development Project	AMIN AHMED ARIF (IAAB A-133) Jr. Consultant Architect Bangabandhu Sheikh Mujib Shilpanagar(BSMSN) Development Project					01			FOR CONSTRUCTION
	DRAWING TITLE: FRONT ELEVATION							02			Sheet No: A-02
								03			
								04			
								05			



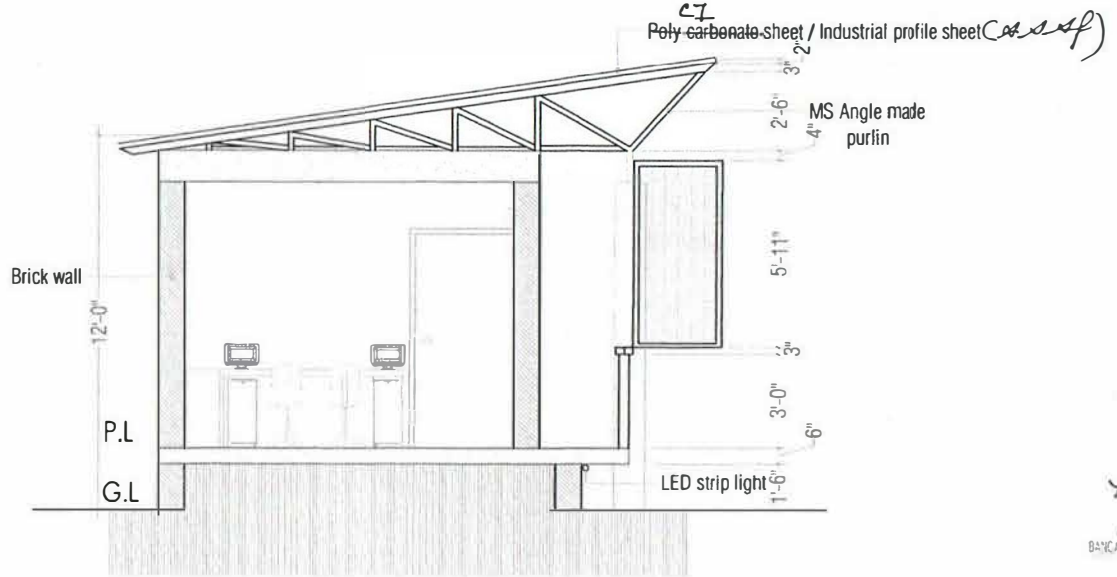
Working Plan

05/05/22
AMIN AHMED ARIF
IAB REGISTRATION NO. A-133
JR ARCHITECTURAL CONSULTANT
BANGABANDHU SHEIKH MUJIB SHILPANAGAR (BSMSN)
DEVELOPMENT PROJECT

CLIENT	PROJECT NAME	SUBMITTED BY	DRAWN BY	Consultant Architect	Executive Engineer	Deputy Project Director	Approved by	REVISION			DRAWING STATUS
BANGLADESH ECONOMIC ZONES AUTHORITY(BEZA)	PROTOTYPE PROJECT OFFICE LAYOUT PLAN AT ZONE -28	AMIN AHMED ARIF (IAB,A-133), Jr. Consultant Architect Bangabandhu Sheikh Mujib Shilpanagar(BSMSN) Development Project	AMIN AHMED ARIF (IAB,A-133) Jr. Consultant Architect Bangabandhu Sheikh Mujib Shilpanagar(BSMSN) Development Project				Project Director	NO.	REVISION	DATE	FOR CONSTRUCTION
	DRAWING TITLE: WORKING PLAN							01			Sheet No. A-04
								02			
								03			
								04			
								05			



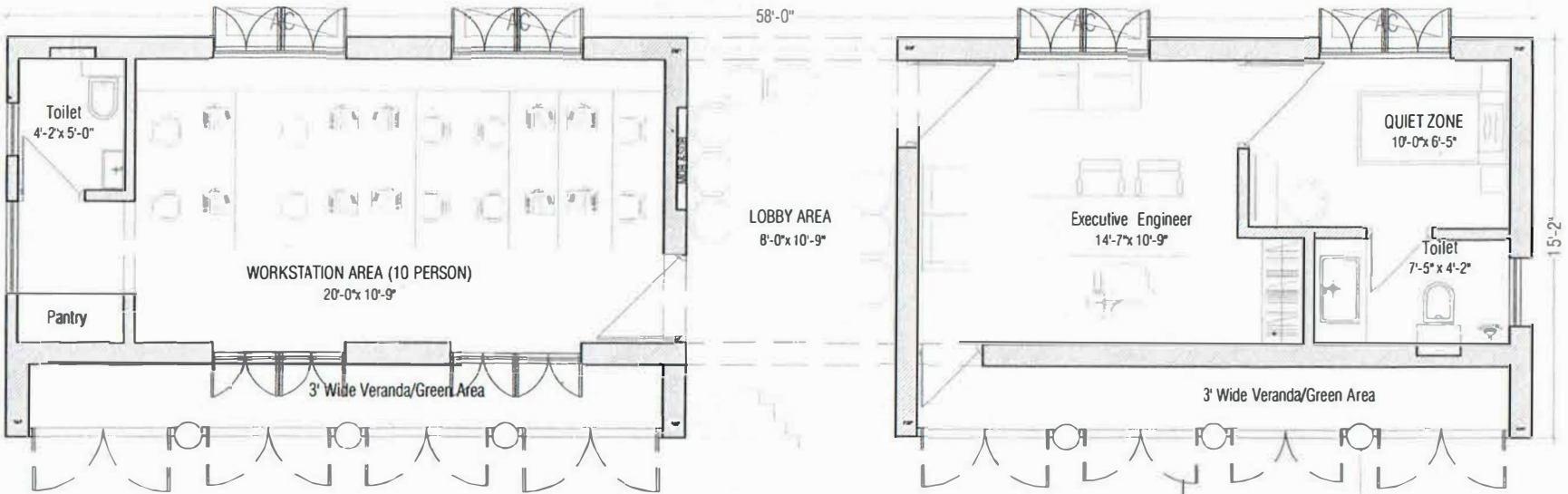
SECTION : X-X



SECTION : Y-Y

AMIN AHMED ARIF
IAB REGISTRATION NO. A-133
JR ARCHITECTURAL CONSULTANT
BANGABANDHU SHEIKH MUJIB SHILPANAGAR (BSMSN)
DEVELOPMENT PROJECT

CLIENT	PROJECT NAME	SUBMITTED BY	DRAWN BY	Consultant Architect	Executive Engineer	Deputy Project Director	Approved by	REVISION			DRAWING STATUS
								NO	REVISION	DATE	
BANGLADESH ECONOMIC ZONES AUTHORITY(BEZA)	PROTOTYPE PROJECT OFFICE LAYOUT PLAN AT ONE -2B	AMIN AHMED ARIF (IAB A-133) Jr. Consultant Architect Bangabandhu Sheikh Mujib Shilpanagar(BSMSN) Development Project	AMIN AHMED ARIF (IAB A-133) Jr. Consultant Architect Bangabandhu Sheikh Mujib Shilpanagar(BSMSN) Development Project				Project Director	01			FOR CONSTRUCTION
	DRAWING TITLE: SECTION : X-X , Y-Y							02			DWG No. A-03
								03			
								04			
								05			



N.B. 1.ALL FLOOR FINISH WOULD BE LOCAL 1'X1' HOMOGENOUS TILES,EXCEPT BRICK MADE ENTRY STEPS
2.ALL TOILET WALL-FLOOR FINISH WILL BE LOCAL TILES.
3.ALL TOILET FALSE CEILING IS 2'X2' PVC GRID CEILING.(If required)
4.ALL SWITCH BOARD WILL BE BOTTOM 36" AND SOCKET BOTTOM WILL BE 8".
5.NO TILES SKIRTING IS REQUIRED ON BOTTOM OF WALL.
6.PLEASE INSERT HEAT INSULATOR UNDERNEATH INDUSTRIAL/CI SHEET.

PROTOTYPE PROJECT OFFICE LAYOUT PLAN AT ZONE -2A/2B

AREA - 880Sft.

AMIN AHMED ARIF
05/05/22 IAB REGISTRATION NO. A-133
JR ARCHITECTURAL CONSULTANT
BANGABANDHU SHEIKH MUJIB SHIPNAGAR DEVELOPMENT PROJECT

CLIENT:	PROJECT NAME	SUBMITTED BY	DRAWN BY	Consultant Architect	Executive Engineer	Deputy Project Director	Approved by	REVISION			DRAWING STATUS
								NO.	REVISION	DATE	
BANGLADESH ECONOMIC ZONES AUTHORITY(BEZA)	PROTOTYPE PROJECT OFFICE LAYOUT PLAN ZONE -2B DRAWING TITLE FLOOR PLAN	AMIN AHMED ARIF (IAB A-133) Jr. Consultant Architect Bangabandhu Sheikh Mujib Shipnagar(BSMSN) Development Project	AMIN AHMED ARIF (IAB A-133) Jr. Consultant Architect Bangabandhu Sheikh Mujib Shipnagar(BSMSN) Development Project				Project Director	01 02 03 04 05			FOR CONSTRUCTION DRAWING NO. A-01

Bill of Quantities (BOQ)

A. Preamble

1. The Bill of Quantities shall be read in conjunction with the Instructions to Bidders, General and Particular Conditions, Technical Specifications, and Drawings.
2. The quantities given in the Bill of Quantities are estimated and provisional, and are given to provide a common basis for bidding. The basis of payment will be the actual quantities of work ordered and carried out, as measured by the Contractor and verified by the Engineer and valued at the rates and prices bid in the priced Bill of Quantities, where applicable, and otherwise at such rates and prices as the Engineer may fix within the terms of the Contract.
3. The rates and prices bid in the priced Bill of Quantities shall, except insofar as it is otherwise provided under the Contract, include all Constructional Plant, labour, supervision, materials, erection, maintenance, insurance, profit, taxes, and duties, together with all general risks, liabilities, and obligations set out or implied in the Contract.
4. A rate or price shall be entered against each item in the priced Bill of Quantities, whether quantities are stated or not. The cost of Items against which the Contractor has failed to enter a rate or price shall be deemed to be covered by other rates and prices entered in the Bill of Quantities.
5. The whole cost of complying with the provisions of the Contract shall be included in the Items provided in the priced Bill of Quantities, and where no Items are provided, the cost shall be deemed to be distributed among the rates and prices entered for the related Items of Work.
6. General directions and descriptions of work and materials are not necessarily repeated nor summarized in the Bill of Quantities. References to the relevant sections of the Contract documentation shall be made before entering prices against each item in the priced Bill of Quantities.
7. Provisional Sums included and so designated in the Bill of Quantities shall be expended in whole or in part at the direction and discretion of the Engineer in accordance with Sub-Clauses 13.4 and 13.5 of the General Conditions except with respect to DAAB Fees and Expenses for which no instruction will be required from the Engineer.
8. The method of measurement of completed work for payment shall be in accordance with BOQ.

B. Work Items

1. The Bill of Quantities usually contains the following part Bills, which have been grouped according to the nature or timing of the work:

Bill No. 1—Road Work;
Bill No. 2— Construction of Storm Water RCC Drains;
Bill No. 3— Environmental, Social, Occupational Health and Safety
Bill No.4- Provisional Sums
and
Summary Bill of Quantities.

2. If BDS-ITB 15.1 (a) applies, Bidders shall price the Bill of Quantities in local currency only and shall indicate in the Appendix to Bid the percentage expected for payment in foreign currency or currencies. If BDS-ITB 15.1 (b) applies Bidders shall price the Bill of Quantities in the applicable currency or currencies.

Bill of Quantities

Bill No. 1: Road Work

Item no.	*Description*	*Unit*	*Quantity*	*Rate*		*Amount*
				Figure	*Word*	
1	Project Profile Signboard: Providing and maintenance one project profile signboard as perdirection of E-I-C, to be placed at a suitable place of the site including submission of proposals for the materials & size of the signboards (recommended size: 1800mm x 1200 mm with 2 nos. 75mm dia. MS post, outer & inner frames of board shall be 50mm x 50mm x 5mm & 20mm x 25mm x 5 mm respectively) and text layout to the engineer for approval which will be positioned as directed by the engineer and removing the same on completion of the works or as instructed by the E-I-C. Sheeting will be made of encapsulated lens with retro-reflective type and messages/ borders will be screen printed. The text shall mention among others thename of the project, name of the implementing agency, cost of the project, completion time, name of the contractor etc.	Sqm	12.960			
2	Bench Mark Pillar: Manufacturing, supplying & fixing in position RCC (1:2:4) Bench Mark Pillars of size 150mm x 150mm x 750mm, with 400mm x 400mm x 100mm base having 3 nos. 10mm dia MS bar each way at base, 4 nos. 10mm dia vertical bar and 8 nos. 6mm dia tie, including costof form works, concreting, reinforcement, plastering at top, inscribing on exposed surface, finishing surface, curing, earth cutting, embedding 450mm below GL. backfilling, ramming etc. complete as per direction of E-I-C.	Each	12.000			
3	Clearing and Grubbing	Sqm	107,692.50			

Item no.	Description	Unit	Quantity	Rate		Amount
				Figure	Word	
4	Roadway Excavation in Suitable Soil	Cum	89,881.143			
5	Embankment fill from borrow pit in contractor'sArranged land	Cum	119,215.04			
6	Preparation of subgrade 300mm depth	Sqm	138,370.380			
7	Improved Subgrade (Sand F.M >0.80)	Cum	38,530.464			
8	Sub-Base (Sand F.M >1.0 and Brick Khoa <40mm)	Cum	33,737.595			
9	Aggregate base type-II	Cum	23,376.950			
10	Aggregate base type-I	Cum	32,714.147			
11	Bituminous Prime Coat (Plant Placed)	Sqm	149,344.88			
12	Bituminous Tack Coat (Plant Work)	Sqm	143,772.88			
13	80 mm Dense Bituminous Surfacing-Base Course(Plant Method) Bitumen Grade 60/70 (Coarse Sand F.M >2.5, Crushed boulder/gravel aggregate <25 mm etc.	Cum	11,501.83			
14	40 mm Dense bituminous surfacing wearingcourse (Plant method) Bitumen Grade 60/70	Cum	5,973.795			
15	125 mm Thick Brick on End Edging (1st Class)	Lin. Metre	9,330.000			
16	Reflecting Road Studs	Number	6,960.000			
17	Road Marking (Thermoplastic Material (indicateif screed or by spray)	Sqm	6,079.500			
18	Creating turf on the side slopes and top of embankment with good quality turf not less than225 mm square chunk, watering till the grass grown including all leads and lifts etc. complete as per direction of Engineer in charge.	Sqm	66,313.240			
19	Traffic Signs	Number	52.000			
20	Sign Post	Number	52.000			
21	Rumble strips 25mm thick	Cum	4.062			
22	Construction of Sand compaction pile up to required depth and diameter with temporary steel casing in specified type of soil including Derrick/winch machine & Drop hammer (weight minimum 1 ton). The rate shall contribute the fullcompensation of furnishing all materials like sand (minimum F.M-1.5), driving pile holes, boring casing pipe, placing of materials & other compaction. SPT or any other method & tests for determining the improvement in the bearing capacity (N-value minimum 8), arranging all equipment and machinery, labour, tools and	M	80,000.000			

Item no.	Description	Unit	Quantity	Rate		Amount
				Figure	Word	
	incidentals necessary to complete the work as per requirements described under this item of work as shown on the drawings and direction ofthe E-I-C. (including the cost of SPT) Cost of sand compaction pile (size 300mm dia)					
23	Item Code PWD-31.3.1 : Sub soil Investigation: Sub -soil investigation by 100 mm dia wash boring and or by DCP etc, including collecting disturbed and undisturbed soil samples in numbers as required for classification of soil, conducting SPT, stratification of layers and entering all these data & information in necessary tables & graphs, furnishing them in theform of standard sub - soil investigation report duly signed by competent engineer & exploratoryoffice . (Only after written advice from E-I-C) Bore hole depth from 0 to 20 m	Per bore hole	250.000			
24	Supply, fitting & fixing of Armco-Guard Rail confirming AASHTO M180 as per design and specification with all necessary nut-bolts, cementconcrete grounding etc. Specification: the Rail and Post of the Armco-Guard Rail will be of galvanized steel. The post will be @ 2000 mm C/C fixed with rail bar with necessary nut-bolt, post clear height is 0.75m from existing ground level to rail bar bottom; post total length is 2.75m. The rail and Post will be Three Wave in shape with anti-rust- Zinc layercoating confirming of AASHTO M180. Rail bar size of 4120mmX 510mmX 85mm and rail post size 2750mmX 85mm, Thickness 3.43mm. Material: S355, Surface treatment of hot dip galvanized as per ASTM A653, zinc coating thickness 1100g/m2, or customized, Standards AASHTO M180, Material: S355, Base metal nominal thickness is 3.43mm, Surface Treatmentis hot dip galvanized as per ASTM A653, AASHTOM180. The post will be grounded of minimum 500mm from existing ground with Cement Concrete (Grade-20 MPa) of 250mm x 250mm x 500mm of base; all complete as per Engineer-in- charge.	M	3,940.000			
25	Excavation & Backfill for Structures	Cum	719.772			
26	Concrete Class as Detailed on Drawings(Class10) (Concrete Mixer)	Cum	35.422			
27	Concrete Class-25 (Foundation) as Detailed onDrawings (Concrete Mixer)	Cum	794.676			
28	Supplying and fabrication of Ribbed or deformed bar reinforcement for all types of RCCwork including straightening, removing ruts, cleaning, cutting, hooking, bending, lapping and/or welding wherever required as directed, placing in position, tieing with 22 BWG black annealed binding wire (PVC coated in case of					

Item no.	Description	Unit	Quantity	Rate		Amount
				Figure	Word	
	FBEC rebar) double fold, cost of binding wire andanchoring to the adjoining members wherever necessary, supplying and placing with proper cover blocks (1:1), supports, chairs, spacers, splices or laps etc. including cost of all materials, cost of labour, cost of equipment & machinery, loading and unloading, transportation, all other incidental charges and work at all leads and lifts etc. to complete the work as per design, drawing, specifications and direction of the E-I-C. Measurement relating to nominal mass, dimensions and tolerances of various types of steel shall conform to relevant BDS/ ASTM codes.Reinforcement shall be measured only in lengths of bar as actually placed in position on standard weight i.e. 7850 kg/m3 (BNBC Table 6.2.1) basis. No separate payment shall be allowed for chairs of any shape & profile, spacer bar of any shape & profile, lap/ splice unless otherwise shown in thedrawing, wastages, binding wire, concrete cover blocks etc. as the cost of these is included in the unit rate. Test-Unit wt. Elongation & Tensile Strength-1set/ Dia/ 10,000Kg Note: Tests for reinforcing bars shall be conducted at LGED/ BUET/ CUET/ KUET/ RUET.					
	Grade 400 (RB 400/ 400W): Ribbed or Deformedbar produced and marked as per BDS ISO 6935- 2:2006 with minimum yield strength, fy (ReH) = 400 MPa, but the tested yield strength shall not exceed fy by more than the 125 MPa and the ratioof tested ultimate strength, fu (Re) to tested yieldstrength (fy) shall be at least 1.25 and minimum elongation after fracture (A5.65) & minimum total elongation at maximum force (Agt) is 14% and 2.5% respectively. Test- Unit wt. Elongation & Tensile Strength-1set/ Dia/ 10,000Kg	Kg	20,138.220			
29	Supply & Fitting Fixing of 30 watt LED Solar Street Light complete fitting with Solar panel andunique optics and photometric design optimize the light distribution to comply with safety and road lighting standards in terms of luminance, uniformity, glare control etc. **G.I. Pole:** 9.00M (30′) long GI pipe pole, 1st 6.00M (20′) long 150mm (6″) diameter, thickness 3.65mm & 2nd 3.00M (10′) long 100mm (4″) diameter, thickness 3.65mm with base plate 300mm×300mm×10mm size welded and Nut bolt at the bottom, two coat aluminium/desired colour painting. The pole will be installed as per drawing, refilling and RCC 0.3M (1′) Zebra colourabove ground. **Solar Panel:** Max Power: 12V/150WP, Cell Type: Polycrystalline/Monocrystalline, Voltage at	Each	558.000			

Item no.	Description	Unit	Quantity	Rate		Amount
				Figure	Word	
	Maximum Power (Vmpp): 17.8V, Current at Maximum Power (Impp): 8.43A, Open Circuit Voltage (Voc):22.5A, Short Circuit Current (Isc): 9.36A, Cell Efficiency: 18.0%, Junction Box Protection Class: IP 65, Power Tolerance: ± 10%,Lifespan: 25years. **Battery:** AH Lithium iron phosphet battery, Battery Type:LifePO4, Capacity: 28Ah, Rated Working Voltage:12.8V, Efficiency: 95%, Operating Temperature Range: -10°C ~ 70°C, Life Span: >8Years. **Controller:** Type: MPPT, Capacity: 10A, Rated voltage: 11.0V-14.6V, Self-Consumption (Av.): ≤5mA, HVD: 17.0V×2/24V, Efficiency: 92%-95%, Lifespan: >10 Years, Protection: Load short circuit protection, Polarity reverse polarity protection,Reverse discharge protection. **LED Light: (30W)** i) Lamp Efficiency : >125.53Im/Watt ii) LED Type : SMD iii) CRI : >80 iv) Input Voltage : DC 12V v) Beam Angle : 120° vi) LifeSpan : >50000 Hours vii) Color Temperature : 6000-6500K viii) Working Temperature : -10°C~70°C ix) Lamp Fixture : High Pressure Die castingAluminum Corrosion resistant alloy heat sink. x) Classification : IP65					
30	Labour charge for Setting/Resetting of single layer Curve Stone of different sizes on road top, including preparation base, true to level, maintaining camber, super elevation, grade, watering and ramming the base, including carrying Curve Stone, supplying and filling the interstices tightly with Flush Pointing etc. all complete in all respect as per approved drawing,specification and direction of the Engineer-in- charge.	Cum	708.515			
				Total for Bill No. 1 (carried forward to Summary, p.___)		———

Bill No. 2: Construction of Storm Water RCC Drains

Item no.	Description	Unit	Quantity	Rate		Amount
				Figure	Word	
1	Clearing and Grubbing	Sqm	52,015.690			
2	Earth work in excavation of foundation of structures by mechanical (Hydraulic excavator - Long Boom)/ manual means in all sorts of soil up to specified depth in accordance with requirements of lines, grades, cross sections and elevation as shown in the drawing including setting out, removal of stumps, logs, boulders and other deleterious materials, providing necessary tools and plants, construction of shoring and bracing, cleaning the excavated materials to a safe distance out of the site premises, cut to a firm surface including pumping/ bailing out water, removal of spoils toa safe distance, dressing of sides and bottom and backfilling of trenches up to original level with approved material etc. all complete as per approval of E-I-C. Contractor shall get acquainted with site conditions, nature of soil and adopt suitable adequate dewatering system as deemed fit for the nature of soil and prevailing water table to get the surface reasonably dry for laying PCC at the time of execution so that execution will not be hampered or delayed. Back-filled materials shall be compacted to a density comparable with the adjacent undisturbed material. For depth 3m to 6m	Cum	48,001.845			
3	Polythene sheet : Supplying and laying of single layer polythene sheet weiging one kilogram per 6.5 square metewr in floorf or any where below cement concrete complete in all respect and accepted by Engineer in charge.	Sqm	29,630.050			
4	75mm thick lean cement concrete (1:3:6) in floor and wherever needed with Portland Composite Cement (CEM II/AM, 42.5N), best quality coarse sand (minimum FM1.2) and 20mm down well graded picked brick chips (LAA value not exceeding 38), in/c breaking bricks into chips screening, mixing by concrete mixer machine, laying, compacting, washing of sand, curing for requisite period, etc. all complete as per direction of the E-I-C.	Sqm	29,630.050			
5	RCC-25SCBP: Reinforced cement concrete work with minimum cement content relates to mix ratio 1:1.5:3 and maximum water cement ratio 0.4 having minimum required average strength, f'cr = 33.5 MPa and satisfying a compressive strength f'c = 25 MPa at 28 days on standard cylinders as per standard practice of Code AASHTO/ ASTM and cement conforming to BDS EN 197-1 : 2003 CEM-II/A-L/M/V/W 42.5N,	Cum	19,823.250			

Item no.	Description	Unit	Quantity	Rate		Amount
				Figure	Word	
	high range water reducing admixture of complying type A or F under ASTM C 494 (Dosesof admixture to be fixed by the mix design), sandof minimum FM 2.5 and 20mm down well graded crushed stone chips broken from boulders (Preferably stone chips from Madhyapara, Dinajpur, LAA value not exceeding 30) conforming to ASTM C33 including breakingchips, screening through proper sieves, cleaning,placing shutter in position, making shutter water-tight properly, placing reinforcement in position, mixing in mechanized batch mix plant and pumping using line pump or boom placer, maintaining allowable slump of 75mm to 100mm, casting in forms, compacting by mechanical vibrator machine, curing for 28 days,removing centering-shuttering after approved specified time period, other incidental charges, etc. all complete as per drawing, specification & direction of the E-I-C. The cost of reinforcement and it's fabrication, welding, coupling, placing, binding etc. is not included but the cost of admixture is included in this unit rate. Additional quantity of cement to be added if required to attain the strength at the contractor's own cost.Note: Using Batching Plant, Transit Mixer & Concrete PumpFor pile caps, abutment base, facing elements of Reinforced/ Mechanically Stabilized Earth Structure, bottom slab of Box Culvert etc. Test- i) FM- one 50cum, ii)W/A (Coarse Aggregate)- one 50cum, iii) LAA/ACV- one 50cum, iv) Gradation of CA- one 50cum, v) Setting Time ofCement-one 50cum, vi) CS of Cement (3,7,28 days)- one 50cum, vii) CS of Concrete-one 50cum					
6	RCC-30MPa, Stone Chips (SC), Batching Plant (BP): Reinforced cement concrete work with minimum cement content and maximum water cement ratio as specified by Quality Control Laboratory, LGED or approved laboratory instruction by the Engineer before execution of the work. Having minimum required average compressive strength, f'cr = 40 Mpa and satisfying a specified compressive strength, f'c = 30 Mpa at 28 days on standard cylinder as per standard practice of Code AASHTO/ ASTM and cement conforming to BDS EN 197-1 : 2003 CEM-I 52.5N / ASTM C150 Type-1, high range water reducing admixture of complying type F/ G under ASTM C494 (Doses of admixture to be fixed by the mix design from approved laboratory instruction by the Engineer) for smart dynamic concrete (i.e. Low fines self compacting concrete), sand of minimum FM 2.50 and 20mm down well graded crushed stone chips broken from boulders (Preferably stone	Cum	1,111.460			

Item no.	Description	Unit	Quantity	Rate		Amount
				Figure	Word	
	chips from Madhyapara, Dinajpur, LAA value not exceeding 30) conforming to ASTM C33 and Aggregate Grading Appendix-3 LGED Schedule of Rates or any other International recognized envelop in/c cost of breaking chips, screening through proper sieves, cleaning and washing thoroughly, centering, shuttering in position with plain 16 BWG steel sheet fitted over 38mmx38mmx5mm MS angle and 25mmx5mm FI bar frame and 38mm/50mm steel or GI pipe props suitably braced and 12 BWG steel sheet plate box of proper size where required i/c cost of nuts, bolts, J-hooks etc, placing of reinforcement in position, mixing in mechanized a batching and mixing plant and pumping using line pump or boom placer, maintaining allowable slump of 100mm to150mm casting in steel forms, compacting by Mechanical vibrators and tapered rods and curing at least for 28 days removing centering-shuttering after approved specified time period i/c cost of additional testing charges of materials and cylinders required (Excluding the cost of reinforcements and its fabrication welding, coupling, placing, binding etc. Additional quantity of cement to be added if required to attain the strength at the contractor's own cost) etc. all complete as per approval of the Engineer in charge. The Mix Design report shall have to approved by the Central Quality Control Laboratory (CQCL), LGED or approved laboratory instruction by the Engineer before execution of the work. Note: Using Batching Plant, Transit Mixer & Concrete Pump; Test- i) FM- one 50cum, ii)W/A (Coarse Aggregate)- one 50cum, iii) LAA/ACV- one 50cum, iv) Gradation of CA- one 50cum, v) Setting Time of Cement-one 50cum, vi) CS ofCement (3,7,28 days)- one 50cum, vii) CS of Concrete-one 50cum					
7	Manufacturing and supplying C.C blocks (Size:300X300X150 mm) in leanest mix 1:3:6 , with cement, sand (F.M>=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 tobe used) as per direction of E.I.C	Each	2,133.000			
8	Labour charge for protective works in laying CC blocks of different sizes including preparation ofbase, watering and ramming of base etc. complete as per direction of Engineer in charge.	Cum	28.796			

Item no.	Description	Unit	Quantity	Rate		Amount
				Figure	Word	
9	Reinforced cement concrete work in pre-cast RCC piles and pile heads with Portland Composite Cement (CEM II/A-M, 42.5N), sand (minimum FM 2.50) and 20mm down well graded crushed stone chips (Preferably stone chips from Madhyapara, Dinajpur), (LAA value not exceeding 30), including shuttering, mixing by concrete mixer machine, casting, laying compacting, curing for the requisite period etc. all complete as per design, drawing, specification and direction of the E-I-C but excluding the cost of reinforcement. Strength of concrete should not be less than 25 MPa (suggested mix proportion 1:1.5:3). Additional quantity of cement to be added if required to atta in at his own cost.	Cum	17.520			
10	Labour for driving pre-cast RCC piles in any type of soil, handling and keeping in position and driving with suitable monkey to the required depth including fitting and fixing steel cap, etc. all complete as per direction of E-I-C. Size: 300mm x 300mm From 6m to 12m and above	M	200.000			
11	Labour for breaking head of cast-in-situ bored pile/pre-cast pile up to required length by any means and removing the dismantled materials, such as, concrete to a safe distance including scrapping and removing concrete from steel/MS rods, preparation and making of platform where necessary, carrying, all sorts of handling, stacking the same properly after clearing, leveling and dressing the site and clearing the river bed, etc. all complete as per direction of the E-I-C. (Measurement will be given for the actual pile head volume to be broken).	Cum	0.720			
12	Supplying and fabrication of Ribbed or deformed bar reinforcement for all types of RCC work including straightening, removing ruts, cleaning, cutting, hooking, bending, lapping and/or welding wherever required as directed, placing in position, tieing with 22 BWG black annealed binding wire (PVC coated in case of FBEC rebar) double fold, cost of binding wire and anchoring to the adjoining members wherever necessary, supplying and placing with proper cover blocks (1:1), supports, chairs, spacers, splices or laps etc. including cost of all materials, cost of labour,cost of equipment & machinery, loading and unloading, transportation, all other incidental charges and work at all leads and lifts etc. to complete the work as per design, drawing, specifications and direction of the E-I-C. Measurement relating to nominal mass, dimensions and tolerances of various types of steel shall conform to relevant BDS/ ASTM					

Item no.	Description	Unit	Quantity	Rate		Amount
				Figure	Word	
	codes. Reinforcement shall be measured only inlengths of bar as actually placed in position on standard weight i.e. 7850 kg/m3 (BNBC Table 6.2.1) basis. No separate payment shall be allowed for chairs of any shape & profile, spacerbar of any shape & profile, lap/ splice unless otherwise shown in the drawing, wastages, binding wire, concrete cover blocks etc. as the cost of these is included in the unit rate. Test- Unit wt. Elongation & Tensile Strength-1set/ Dia/ 10,000Kg Note: Tests for reinforcing bars shall be conducted at LGED/ BUET/ CUET/ KUET/ RUET.					
	Grade 400 (RB 400/ 400W): Ribbed or Deformed bar produced and marked as per BDSISO 6935-2:2006 with minimum yield strength, fy (ReH) = 400 MPa, but the tested yield strength shall not exceed fy by more than the 125 MPa and the ratio of tested ultimate strength, fu (Re) to tested yield strength (fy) shall be at least 1.25 and minimum elongation after fracture (A5.65) & minimum total elongation at maximum force (Agt) is 14% and 2.5% respectively.	Kg	2,335,624.473			
13	Extra over item code:5.06.01 for providing Fusion Bonded Epoxy Coating (FBEC) to reinforcement bars as per ASTM A775/ BDS ISO14654: 2013 specification for a coating thickness (after curing) of 175 to 300 microns for 10mm to 16mm and 175 to 400 microns for 20mmm to 50mm re-bars including extra cost on account of careful handling during straightening, cutting, bending & placing, extra cost on account of using PVC coated binding wire instead of G.I. wire, extra cost on account oftouch-up material (All cut edges/weld areas andbend locations where coating has been damaged touch up shall be done with same paint, the upper thickness limit shall not apply to repairedareas of damaged coating) supplied by coating agency and repair work, extra cost on account oftransportation to and fro from steel yard to plant and plant to work site by trailer (if required), loading, unloading, flexibility & holiday testing, including all taxes, etc. completeto ensure proper resistance of FBE against corrosive environment. [Fusion Bonded Epoxy Coating to be proposed only in Coastal Area/Severe Exposure Condition with prior approval of Design Unit, LGED.] 8mm to 12mm	Kg	1,324,299.076			
14	Extra over item code 5.06.01 for providing Fusion Bonded Epoxy Coating (FBEC) to reinforcement bars as per ASTM A775/ BDS ISO14654: 2013 specification for a coating thickness (after curing) of 175 to 300 microns for 10mm to 16mm and 175 to 400 microns for	Kg	1,011,325.397			

Item no.	Description	Unit	Quantity	Rate		Amount
				Figure	Word	
	20mmm to 50mm re-bars including extra cost on account of careful handling during straightening, cutting, bending & placing, extra cost on account of using PVC coated binding wire instead of G.I. wire, extra cost on account oftouch-up material (All cut edges/weld areas andbend locations where coating has been damagedtouch up shall be done with same paint, the upper thickness limit shall not apply to repairedareas of damaged coating) supplied by coating agency and repair work, extra cost on account of transportation to and fro from steel yard to plant and plant to work site by trailer (if required), loading, unloading, flexibility & holiday testing, including all taxes, etc. completeto ensure proper resistance of FBE against corrosive environment. [Fusion Bonded Epoxy Coating to be proposed only in Coastal Area/Severe Exposure Condition with prior approval of Design Unit, LGED.] 16mm to 50mm					
15	Single layer brick flat soling with 1st class or picked kiln burnt bricks in foundation, filling the interstices tightly with sand of minimum FM0.50, watering, leveling, dressing, etc. all complete as per instruction of the E-I-C.	Sqm	29,636.050			
16	Brick work with 1st class brick in specified cement mortar in foundation with sand of minimum FM 1.20 and cement conforming toBDS EN 197-1 : 2003 CEM-II/A-L/M/V/W 42.5N, filling the interstices tightly with mortar,raking out joints, cleaning and soaking bricks atleast for 24 hours before use, washing of sand, curing at least for 7 days etc. all complete as perdesign, specification & direction of the E-I-C. Cement mortar (1:4)	Cum	30.520			
17	125mm brick work with Kiln 1st class bricks/automatic machine made first class bricks in cement mortar (1:4) with Portland Composite cement (CEM II/AM, 42.5N) and bestquality sand (minimum FM1.2) and making bond with connected walls with uniform width and depth joints, true to vertical and horizontal lines in/c necessary scaffolding, raking out joints, cleaning and soaking the bricks at least for 24 hours before use, washing of sand, curingfor requisite period, etc. all complete as per direction of the E-I-C. Kiln bricks	Sqm	59.400			

18	Supply of MS work in plates, angles, channels, flat bars, Tees etc. with minimum yield strength,fy (ReH) = 300 MPa, including fabricating, machining, cutting, bending, welding, forging drilling, riveting, embedding anchor bars, staging and fitting, fixing, local handling etc including energy consumption etc. all complete as per design, specification and direction of the	Kg	4,860.644			

Item no.	Description	Unit	Quantity	Rate		Amount
				Figure	Word	
	Engineer-In-charge.					
19	Supplying, fitting and fixing in position MS plates , nuts, bolts , MS clamps u-straps etc. (minimum yield strength, fy (ReH) = 300 Mpa) complete as per drawings specifications and directions of the Engineer-in-charge. Size: 100mm x 25mm x 6mm M.S Clamp twisted withfour holes for fixing	Each	2,072.000			
20	WH: Providing weep holes in Brick masonry/ Plain/ Reinforced concrete retaining wall, abutment, wing/ return wall, with 50 - 100 mmdia PVC pipe extending through the full width ofstructure with slope 1V : 20H towards draining face including hand packing of 0.85 cum pervious backfill material (40mm - 63mm sized 1st class/picked brick) wrapped in filter fabric in the back of each weep hole etc. all compete asper direction of the E-I-C. [Cost of PVC pipe is included in this item andshall not be paid separately.]	Each	25,926.000			
21	Construction of Sand compaction pile up to required depth and diameter with temporary steel casing in specified type of soil including Derrick/winch machine & Drop hammer (weight minimum 1 ton). The rate shall contribute the full compensation of furnishing all materials like sand (minimum F.M-1.5), driving pile holes, boring casing pipe, placing of materials & other compaction. SPT or any other method & tests for determining the improvement in the bearing capacity (N-value minimum 8), arranging all equipment and machinery, labour, tools and incidentals necessary to complete the work as per requirements described under this item of workas shown on the drawings and direction of the E-I-C. (including the cost of SPT) Cost of sand compaction pile (size 300mm dia)	M	20,000.000			
				Total for Bill No. 2 (carried forward to Summary, p.___)		———

Bill No. 3: Environmental, Social, Occupational Health and Safety

Item no.	*Description*	*Unit*	*Quantity*	*Rate*		*Amount*
				Figure	*Word*	
9.1	Tree Plantation (combinationof medicinal, fruit and timber plant)	Nos	7,000.000			
9.2	Air Quality sampling and testing satisfying the provision of the bidding document	Nos	60.000			
9.3	Noise sampling and testing satisfying the provision of the biddingdocument	Nos	180.000			
9.4	Surface water quality sampling and testing of nearby waterbodies/canals receiving wastewater satisfying the provision ofthe bidding document	Nos	36.000			
9.5	Groundwater quality sampling and testing satisfying the provision ofthe bidding document	Nos	12.000			
9.6	Drinking water testing satisfying the provision of the biddingdocument	Nos	120.000			
9.7	Soil sampling and testing satisfying the provision of the bidding document	Nos	24.000			

9.8	Implementation of Site specific Environment Management Plan, Contractor's EnvironmentalAction Plan (CEAP) satisfying the provision of the bidding document, obtaining approval of the					

Item no.	Description	Unit	Quantity	Rate		Amount
				Figure	Word	
	same from the Engineer and maintenance of such approval.					
9.8A	Drinking Water Facilities: Providing continuous adequate drinking water supply at worksite and site office as well by installing necessary tube-well/s where applicable or any other means depending on local situation, also providing essential arrangement for storing drinking water by supplying portable best quality water tank equivalent to Gazi/Padma of adequate capacity depending on the number of users, including supplying 1 (one) no. best quality water filter of minimum capacity 30 liters with necessary kits, etc. All complete as per satisfaction and direction of the Engineer-in-charge, all relevant goods and equipment under this item shall be property of the contractor and payment will be made after 100% completion of the contract successfully.	Set	5.000			
9.8B	Temporary Toilet Facilities: Providing at least two nos. portable toilets or constructing temporary semi pucca toilets with two pit latrine one for female worker and another for male worker at worksite and workers accommodation site in a safe	Set	5.000			

Item no.	Description	Unit	Quantity	Rate		Amount
				Figure	Word	
	location, so that no adverse impact will generate on the surrounding environment, including providing requisite arrangement for water supplying etc. All complete as per drawing, specification, direction and satisfaction of the Engineer-in-charge. All relevant accessories and arrangements under this item shall be property of the contractor and payment will be made after 100% completion of the contract successfully.					
9.8 C	Waste Disposal Facilities: Providing, installing and maintaining at least 2 (two) nos. waste collection bins one for organic waste and other for inorganic waste of minimum capacity of 30liters with hinge supported 450mm dia cover plate for opening, made of durable plastic material at worksite, both bins will be kept in a safe and easily accessible place, so that will easy to use and no adverse impact will generate on the surrounding environment, including continuing the full functioning of waste disposal(buried/incineration) in accordance with the full satisfaction of the project manager throughout the contract period, all complete as per drawing, specification and direction of the	Set	5.000			

Item no.	Description	Unit	Quantity	Rate		Amount
				Figure	Word	
	Engineer-in-charge. Entire relevant accessories and arrangements under this item shall be property of the contractor and payment will be made after 100% completion of the contract successfully.					
9.8 D	Traffic Management: Maintaining traffic management at worksite from time of commencement of contractor's activities to time of completion activities, including ensuring that the road is safe for users, providing a safe working area for those involved in work on trafficked network and minimizing any disruption to smooth flow of traffic (this includes providing necessary barricades, warning signs/lights, guide signs, flagmen, maintaining diversion roads by cutting, filling, constructing, etc. or by any other means) in accordance with the full satisfaction of the Engineering-in-charge, unless specified otherwise, including keeping provision for existing traffic and pedestrian movements in such a way as to assure that a single lane at least 3.0m wide is available for public traffic at all times (including access to properties and local roads) affected by the	LS	As required			

Item no.	Description	Unit	Quantity	Rate		Amount
				Figure	Word	
	contractor's activities shall be maintained at all times (day & night), including removal of all temporary constructions on completion of the activities, etc. all complete as per requirement and instruction of Engineer-in-charge. All relevant accessories and arrangements under this item shall be property of the contractor and payment will be made after 100% completion of the contract successfully with documentary evidences as stated in section 9.9.					
9.8 E	Control of Air Pollution (Dust Suppression): Maintaining, carrying out proper and efficient measures wherever and as often as necessary to reduce dust nuisance, and to prevent dust which has originated from contractor's activities/ operations at the worksite and site office, including sprinkling water on aggregates/unpaved roads at least three times a day or more depending on the atmospheric conditions, including keeping necessary covering/protection on stockpiled fine aggregates to reduce dust nuisance during natural air blowing, all complete like emission of dust into the atmosphere shall be strictly controlled during manufacture,	LS	As required			

Item no.	Description	Unit	Quantity	Rate		Amount
				Figure	Word	
	handling, storage of concrete, road aggregates, and to be used such methods and equipment as are necessary for collection and disposal, or prevention, of dust during these operations means of eliminating atmospheric discharges of dust as per requirement and carrying out air quality test as PM10, PM25, SPM, NOx, Sox including concerned tests to be carried out three times (baseline, monthly/quarterly and end of physical work) from any laboratories approved by PM, all complete as per requirement and full satisfaction of Engineer-in-charge. Payment will be made after 100% completion of the contract successfully with documentary and reporting evidence as stated in section 9.9.					
9.8 F	Control of Soil Pollution: Providing appropriate controlling measures to prevent entrance, or accidental spillage, solid matter, contaminants, debris, garbage, cement, concrete, sanitary waste, oil, other petroleum products and wastes into soil to avoid soil pollution at worksite and to evade emission of high concentration of sediments into wetlands, swampy areas and other particular sensitive areas, All complete as per	LS	As required			

Item no.	Description	Unit	Quantity	Rate		Amount
				Figure	Word	
	requirement and full satisfaction of Engineer-in-charge. Payment will be made after 100% completion of the contract with documentary and reporting evidence as stated in section 9.9.					
9.8 G	Control of Water Pollution: Providing necessary arrangement to prevent entrance, or accidental spillage, solid matter, contaminants, debris, garbage, cement, concrete, sanitary waste, oil, other petroleum products, pollutants and wastewaters from aggregate processing, concrete batching, or other construction operations into streams, flowing or dry watercourses, lakes, and underground water sources for ensuring water quality, including monitoring pH value, dissolved oxygen (DO), biochemical oxygen demand (BOD), chemical oxygen demand (COD), total dissolved solids (TDS), turbidity etc, including concerned tests to be carried out three times (baseline, monthly/quarterly and end of physical work) from any laboratories approved by PM, all complete as per requirement and full satisfaction of Engineer-in-charge. Payment will be made after 100% completion	LS	As required			

Item no.	Description	Unit	Quantity	Rate		Amount
				Figure	Word	
	of the contract successfully with documentary evidences as stated in section 9.9.					
9.8 H	Providing and maintaining semi pucca site office as per drawing with necessary furniture, sanitary & electrical/ power facilities with full time Air-Conditioned, water supply arrangement, office and survey equipment for the use of the Engineer and his staff, all complete including removal of structures and restoration of the site on completion of the work. The contractor shall submit the detailed plan and drawing of the site office for approval of the engineer. The site office should be provided with sufficient natural light, heat protecting ceiling, dam proofing etc. as per direction of E-I-C. All materials, equipment and plant, furniture, fittings recovered from dismantling the office and removing access road will be the property of the contractor upon completion of the work. The contractor will responsible for maintaining the facilities of site office in good condition throughout the contract period and payment of this item shall be made only with the final bill. Area of field office: 80 sqm	No	1.000			
9.8 I	First Aid Box: Supplying,					

Item no.	Description	Unit	Quantity	Rate		Amount
				Figure	Word	
	equipping and maintaining adequate first-aid box throughout the working period at worksite and site office, and erect conspicuous notice boards directing where these are situated and providing all requisite emergency medical first aid kits, including complying with the government medical or labor requirements at all times, and provide, equip and maintain necessary dressing kits throughout the working period for attending minor injuries, etc. all complete as per requirement and full satisfaction of Engineer-in-charge. Payment will be made after 100% completion of the contract successfully.	Set	5.000			
9.8 J	Personal Protection Equipment for Workers: Providing and maintaining appropriate (safe design, fit and comfort) personal protection equipment (PPE) to ensure the highest possible protection for employees in establishing and maintaining a safe and healthful working environment at workplace, including demonstrating, providing training on proper understanding and development of skill in the use of PPE, including supplying (i) best quality safety jacket for construction workers made of 100%	Set	100.000			

Item no.	Description	Unit	Quantity	Rate		Amount
				Figure	Word	
	polyester waterproof fabric, fluorescent yellow/orange/green/red/blue or pantone color, (ii) suitable hand protection gloves for construction work of Flexible/ durable/ excellent puncture resistance working gloves with PVC palm and T/C drill back, pasted cuff, palm liner and fit properly and be reasonably comfortable to wear, (iii) appropriate foot protection shoes having impact-resistant toes and heat-resistant soles that will protect the feet against hot working surfaces, (iv) best quality safety helmets of ABS shell, tough, lightweight, durable which will be able to resist penetration by objects, absorb the shock of a blow and water-resistant and slow burning with available four-six-point adjustable suspension for shock-absorbing, slotted sides to accommodate accessories, such as face shields, ear muffs(v) suitable eye protection goggles to protect against specific workplace hazards, fit properly and be reasonably comfortable to wear, provide unrestricted vision and movement, including instructing workers to wear strictly during working time and reviewing periodically, updating, evaluating the					

Item no.	Description	Unit	Quantity	Rate		Amount
				Figure	Word	
	effectiveness of PPE and maintaining, replacing worn or damaged PPE etc. all complete as per requirement and full satisfaction of Engineer-in-charge. Payment will be made after 100% completion of the contract successfully.					
9.8 K	Site Preparation, Protective Fencing & Safety Measure with Warning Sign: Erecting and maintaining temporary fencing and gates, and if necessary, providing watchmen to ensure that livestock cannot stray at surrounding premises of site office/work site with using of best practice construction techniques to minimize disturbance to fauna and flora, and confining it within defined working areas, utilizing of appropriate techniques to minimize soil erosion, including filling and cutting slopes shall be repaired immediately whenever damaged by surface water, compacting the filled material, using suitable light equipment and confine the effects of vegetation clearance and soil disturbance within defined allocated land boundaries including avoiding environmentally sensitive or valuable areas such as nature reserves, archaeological sites, areas inhabited by	LS	As required			

Item no.	Description	Unit	Quantity	Rate		Amount
				Figure	Word	
	sensitive species, areas adjacent to surface water bodies, providing necessary protective fencing and safety measures with warning signboard, including furnishing and placing all materials, labor, equipment, tools and incidentals necessary to complete the work and removal, disposal at a safe distance after completion of work etc. all complete as per requirement and full satisfaction of Engineer-in-charge. Payment will be made after 100% completion of the contract successfully with documentary and reporting evidence as stated in section 9.9.					
9.8 L	**Site Cleaning, Removal and Disposal Activity:** Cleaning and maintaining at all times, keeping the construction area, storage areas used, free from accumulations of waste materials or rubbish, with necessary arrangement for collecting at a central disposal area, on a daily basis and disposing in a manner approved and satisfaction by the Engineer, especially waste water and sewage from office, residential and mobile camps shall be piped to soak pits or other disposal areas, all used fuels, oils, other plant or vehicle fluids, old tires, tubes, other solid	LS	As requird		-	

Item no.	Description	Unit	Quantity	Rate		Amount
				Figure	Word	
	waste from household, office, workshop, construction materials, etc. to be kept at safe places and any spillages shall be cleaned up by either burning in place or collecting the contaminated soils and burning them at the central disposal area, including removing all waste, debris, rubbish, unused materials, concrete forms and other like material, tools, equipment, machinery and surplus/ unwanted materials buried or cleaned up in a manner acceptable to the Engineer after completion of work etc. all complete as per requirement and full satisfaction of Engineer-in-charge. Payment will be made after 100% completion of the contract successfully with documentary and reporting evidence as stated in section 9.9.					
9.8 M	**Supplying and distribution** of 1) Washable Reusable 3 Layer cotton face mask/KN95 Respiratory face mask 2) Disposable Plastic hand gloves appropriate for Protection glasses (Eye protection safety goggle) with PVC frame and dust Proof transparent lances etc. of approved quality all complete as per direction of E-I-C	Set	200.000			
9.8 N	**Supply and installation** of Hand Wash arrangement					

Item no.	Description	Unit	Quantity	Rate		Amount
				Figure	Word	
	with soap and water at the location of Site entry gate shall include supplying of appropriate designed fabricated (To be approved by the Engineer-in-charge) iron stand for fitting fixing of a ceramic Hand Wash Basin of standard size along with supply and fitting fixing of C.P Pillar cock, SS soap tray , Towel Rail. Also there shall be an arrangement for continuous supply of safe water and soap for hand wash purpose etc. of approved quality all complete and direction of the Engineer-in-charge.	Set	5.000			
9.8 O	**Supplying of hand sanitizer** like ACI Hexisol hand rub or its equivalent viz. Sepnil Instant Hand Sanitizer among all the workers in the site from commencement of work to completion of work etc. all complete as per direction of the Engineer-in-charge.	LS	As required			
9.8 P	**Providing, fitting and fixing COVID- 19 awareness display Sign (Digital) Board** as per standard Text of size 500x700mm fitted in 18BWG M.S sheet erected with 38mm dia. and 2.0m long G.I post, fixing M.S sheet by continuous welding including proper foundation etc. of approved quality all complete as per direction of the Engineer-in-charge.	Set	20.000			

Item no.	Description	Unit	Quantity	Rate		Amount
				Figure	Word	
9.8 Q	**Supplying and distribution of Covid-19 awareness leaf let / poster** (Multi color) in A4 size glossy paper etc. all complete as per direction of the Engineer-in-charge.	LS	As required			
9.8 R	**Supplying, maintaining and providing services among all the workers** in the site from commencement to completion of work 1 No. Digital Thermal scanner of K3 Pro Infrared Thermometer or its equivalent having temperature unit in 0Fwith response time 0.5sec.and accuracy level +/-0.2oF etc. of approved quality all complete and direction of the Engineer-in-charge.	Set	5.000			
9.9	**Reports: Environmental**					
	(a). Preparation, Submission and obtaining approval from the Engineer of the Monthly Progress Report satisfying the provision of Particular Condition .	Nos	30.00			
	(b). Preparation, Submission and obtaining approval from the Engineer of the Quarterly Progress Report satisfying the provision of Particular Condition	Nos	10.00			

9

Item no.	Description	Unit	Quantity	Rate		Amount
				Figure	Word	
	(c). Preparation, Submission and obtaining approval from the Engineer of the Yearly/annual report satisfying the provision of Particular Condition.	Nos	2.00			
	(d). Preparation, Submission and obtaining approval from the Engineer of the Completion report satisfying the provision of Particular Condition.	Nos	2.00			
B	**Social Related Activities**					
	GBV/SEA/SH risk mitigation					
9.10	Design of Grievance Complain Box, Obtaining approval of Engineer, Manufacture, Supply, Erection at Pre-approved location of the Site and Maintenance during the entire period of Construction to the satisfaction of the Engineer.	Nos	5.00			
9.11	Design of billboards for posting of GRM related information, Obtaining approval of Engineer, Manufacture, Supply, Erection at Pre approved public places and Maintenance during the entire period of Construction to the satisfaction of the Engineer.	Nos	5.00			
9.12	Provision for receiving Daily grievance, Proper registration of complain and management, resolution of such grievances, selection,	Nos	8.00			

Item no.	Description	Unit	Quantity	Rate		Amount
				Figure	Word	
	engagement and monitoring of the referral service providers (GO, NGO, Private) satisfying the provision of GBV/SEA/SH risk mitigation guidelines during the period of construction and submission of Report Quarterly satisfying the provision of Particular Condition and obtaining approval from the Engineer.					
	Labor Influx Management					
9.13	Daily recording of Labor Inflow and Out Flow satisfying the provision of Labor Influx Management and submission of Report Monthly satisfying the provision of Particular Condition and obtaining approval from the Engineer.	Nos	24.00			
	Grievance Redress Mechanism (GRM)					
9.14	Preparation of Grievance Redress Mechanism (GRM) and obtaining approval, Receiving of grievance, documentation of the same, resolution of such grievance satisfying the provision of GRM and submission of Report Quarterly satisfying the provision of Particular Condition and obtaining approval from the Engineer.	Nos	12.00			

Item no.	Description	Unit	Quantity	Rate		Amount
				Figure	Word	
	Communication					
9.16	Preparation of information brochures related to GBV/SEA/SH risk, mitigation measures, Design, Obtaining approval of Engineer, Manufacture, Supply Erection and Maintenance of billboards, dissemination of information to adjacent community through brochures/leaflets and community consultation during the period of construction satisfying the provision of Communication guidelines andsubmission of Report Monthly satisfying the provision of Particular Condition and obtaining approval from the Engineer.	Nos	36.00			
	Occupational Health & Safety (OHS) including Covid-19 issue					
9.16	Supply, Commissioning, Operation & Maintenance of Occupational Health & Safety (OHS) including Covid-19 issues satisfying the provision of Contract, Engineer and covering the following: Case Management comprising of COVID-19 tests, Quarantine/ isolation facilities, Emergency medical transport & Hospitalization/ treatment, etc.; Manpower comprising of Cleaners, Public Health Specialist, etc.;	Nos	36.00			

Item no.	Description	Unit	Quantity	Rate		Amount
				Figure	Word	
	and submission of Monthly Report satisfying the provision of Particular Condition and obtaining approval from the Engineer.					
9.17	Reports: Social					
	(a). Preparation, Submission and obtaining approval from the Engineer of the Monthly Progress Report and obtaining approval from the Engineer satisfying the provision of Particular Condition .	Nos	30.00			
	(b). Preparation, Submission and obtaining approval from Engineer of the Yearly /annual report and obtaining approval from the Engineer satisfying the provision of Particular Condition.	Nos	2.00			
	(c). Preparation, Submission and obtaining approval from Engineer of the Completion report and obtaining approval from Engineer satisfying the provision of Particular Condition .	Nos	1.00			
9.18	Manpower for ES-MSIP					
	(a). Environment Health Safety Specialist	MM	36.00			
	(a). Social Specialist	MM	36.00			
	(a). Gender Specialist	MM	36.00			
C	**Awareness training**					
9.18	Preparation of the Awareness Training	Nos	36.00			

Item no.	*Description*	*Unit*	*Quantity*	*Rate*		*Amount*
				Figure	*Word*	
	program for the Contractors personnel, obtaining approval of the Engineer and performance of the training during the period of Construction satisfying the provision of Environment and environmental issue, OHS & COVID 19 issues and Social Issues including submission of Monthly Report satisfying the provision of Particular Condition and obtaining approval from the Engineer.					
					Total for Bill No. 3 (Carried forward to Summary, p.___)	_____

Bill of Quantities

Bill No. 4: Provisional Sums

Item no.	*Description*	*Unit*	*Quantity*	*Rate*		*Amount*
				Figure	*Word*	
(i) PS1	Quantity Over-run	LS	1	20,000,000.00	Two crore	20,000,000.00
(ii)PS2	Price Adjustment	LS	1	200,000,000.00	Twenty crore	200,000,000.00
(iii)PS 3	Unforeseen Work	LS	1	10,000,000.00	One Crore	10,000,000.00
Total for Bill No. 4 (carried forward to Summary, p.)						230,000,000.00

Grand Summary

Contract Name: **Road and Storm Water Network for Mirsarai-2B EZ**

Contract No.: W-1/2021-22

General Summary	*Page*	*Amount*
Bill No. 1: Road Work		
Bill No. 2: Drainage Work		
Bill No. 3: Environmental, Social, Occupational Health and Safety		
Sum (Bill no.1 to 3)		
Bill No.4: Provisional Sums		
Bid Price (Carried forward to Letter of Bid)		

i) All Provisional Sums are to be expended in whole or in part at the direction and discretion of the Engineer in accordance with Sub-Clauses 13.4 and 13.5 of the General Conditions except with respect to DAAB Fees and Expenses for which Sub-Clause 13.4 of the Particular Conditions – Part B shall apply.

ii) To be entered by the Employer.

* For evaluation purposes, Provisional Sum, other than Daywork will be excluded