

DM/CN/COR-OF/066

Dated: 20.01.2020

LETTER OF ACCEPTANCE

To,

M/s G&G - JVG (JV)
304-305, 3rd Floor, Plot No. 1,
Usha Chambers,
L.S.C. New Rajdhani Enclave
Delhi-110092
Mob: 9667041919, 9810998361
Email: ggjvgjv5@gmail.com

(hereinafter termed as Contractor)

(Kind Attention- Mr. B.K. Goel)

Sub: - Bid No: DM/CN/COR-OF/066: Construction of buildings/structures for CPRI, SVPUAT & IIFSR in Meerut for implementation of Delhi – Ghaziabad - Meerut RRTS Corridor.

Ref: -

- i. Press Advertisement dated 21.08.2019
- ii. Bid Reference No DM/CN/COR-OF/066 dated 26.08.2019.
- iii. Addendum No. 1 Published on 20.09.2019
- iv. Addendum No. 2 Published on 14.10.2019
- v. Addendum No. 3 Published on 28.10.2019
- vi. Technical Bid opened on 08.11.2019.
- vii. Post Bid queries uploaded on 27.11.2019
- viii. Reply of Post Bid queries downloaded on 04.12.2019
- ix. Post bid queries asked vide letter no. DM/CN/COR-OF/066 dated 23.12.2019.
- x. Reply submitted by the bidder via email dated 28.12.2019
- xi. Financial Bid Opened on 10.01.2020

With reference to the above this is to inform to the Contractor that the bid for the subject work of **DM/CN/COR-OF/066: Construction of buildings/structures for CPRI, SVPUAT & IIFSR in Meerut for implementation of Delhi – Ghaziabad - Meerut RRTS Corridor** has been accepted by National Capital Region Transport Corporation Ltd (hereinafter termed as "Employer") at total contract value of **Rs. 9,11,73,149.77/- (Rupees Nine Crore Eleven Lakh Seventy Three Thousand One Hundred Forty Nine and Seventy Seven paisa Only)**, hereinafter termed as "Contract value", **inclusive of all taxes, duties, royalties etc. excluding GST.** The scope of work, accepted rates and terms/conditions applicable to this LOA are as under:

1.0 Scope of Work

In terms of ITB 1.1 (Instructions to Bidders), Section-1 of the bid documents, the scope of work covered under this LOA is as stipulated in **Part-II Employer's Requirement** under the

Bid No. DM/CN/COR-OF/066 Page 1 of 3



Registered & Corporate Office:

7/6, सिरी फोर्ट इंस्टीट्यूशनल एरिया, अगस्त क्रांति मार्ग, नई दिल्ली 110049
7/6, Siri Fort Institutional Area, August Kranti Marg, New Delhi 110049

CIN: U60200DL2013GOI256716

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M: contactus@ncrtc.in

bid documents read with amendments referred above, uploaded on Employer's website and submitted by the Contractor with their bid. The work shall be carried out as per the above scope of work.

2.0 Accepted Rates/Cost and Payment Schedule

2.1 The accepted rates for various items of work covered under this LOA are stipulated in the Bill of Quantities enclosed as **Annexure- A (Bill of Quantities)** to this LOA. The Accepted rates shall include all duties, taxes, royalties, cess and other levies payable by the Bidder under the Contract, or for any other cause (including standard specifications), as on the date 28 days prior to the deadline for submission of bids except Goods and Services Tax (GST). GST will be paid extra as applicable on the submission of GST Invoices for first RA bill. The subsequent RA bill shall be raised for payment upon submission of documentary evidence towards payment of GST collected on the previous bill to the GST Authorities. However, if subsequent bills are raised before return submission date of previous bill period, the documentary evidence towards payment of GST shall be provided within 7 days from the due date of such return filing. The Final bill/single bill payment shall be released on the undertaking by the contractor/supplier for providing evidence within 7 days from the due date of such return filing for final bill based on GST provision for due dates

2.2 As per Bid Conditions, this is fixed priced contract. Price Adjustment shall not be applicable in the present Contract.

3.0 Completion Period

In terms of **Clause 1.2 (c) of IFB** of the bid documents, the entire work shall be completed in a period of **11 months** from the commencement date. As per **clause 8.1 of GCC, Section-5**, the commencement date will start from **27.01.2020** i.e. 07 days from the date of issue of LOA.

4.0 Submission of Performance Security

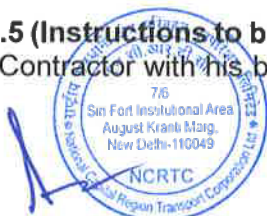
In terms of **ITB 40 (Instructions to Bidders), Section-1** of the bid documents, within 28 days of receipt of this Letter of Acceptance by the Contractor, the Contractor shall furnish to the Employer a Performance Security in the form of Performance Bank Guarantee (Form CF-2, Contract Forms) stipulated in **Clause 4.2 of the General Condition of Contract (GCC), Section-5 and Appendix to Bid, Section-6** of the bid document for an amount of **Rs. 91,17,315/- (Rupees Ninety One Lakh Seventeen Thousand and Three Hundred Fifteen Only)** being amount equal to **10% (Ten Percent)** of the accepted Contract value as stated in **Clause 4.2 of Appendix to Bid, Section-6**.

4.1 Submission of Additional Performance Security

In term of ITB Clause 35.5, **M/s G&G-JVG (JV)** is required to furnish Additional Performance Security in the form of Performance Bank Guarantee (Form CF-7, Contract Forms) for an amount of **INR 6,54,613/- (Rupees Six Lakh Fifty Four Thousand Six Hundred and Thirteen Only)**. The validity of this 'Additional Performance Security' would be up to the completion period of the work as stipulated in ITB Clause 35.5.

5.0 Release of Bid Security

In terms of **ITB 19.5 (Instructions to bidders), Section-1** of the bid document, the bid security submitted by the Contractor with his bid shall be returned upon the execution of the contract



agreement and on receipt of the performance security by the Employer or the condition stipulated in bid documents.

6.0 Signing of Contract Agreement

In terms of **ITB 41 of Section-1 (Instructions to Bidders)** of the bid documents, the Contractor shall enter into a contract agreement with the Employer for the works covered under this LOA within the time limits as specified therein. The Contractor shall be informed by the Employer about signing of contract agreement on receipt of acceptance of this LOA and Performance Security by the Employer.

7.0 Other Terms and Conditions

The execution of this contract shall be governed by the various stipulations in the bid documents and its amendments referred above. Any deviation from the above conditions, submitted by the Contractor in its bid, if any, stands withdrawn.

8.0 Nomination of Engineer in Charge

In terms of Clause 3.1 of General Conditions of Contract, Section-5, it is to inform that **Dy. Chief Engineer-II/ Meerut**, National Capital Region Transport Corporation Limited, E-215, Saket, Meerut – 250001, Tel No.- +91-121-2662654-55 has been nominated as the Engineer for the subject Contract. The Contractor is advised to interact with the above official for further instructions as regards the execution of works.

9.0 Acceptance of the LOA

This letter of acceptance is being issued in duplicate, in favour of the Contractor. The copy marked as "Duplicate" is required to be returned by the Contractor, duly signed and stamped on each page by the authorized signatory of the Contractor, as a token of Contractor unconditional acceptance of the same so as to reach the undersigned within seven days of issue of this letter. This LOA shall constitute a binding agreement between the Employer and the Contractor till such time a formal agreement is signed between the Employer and the Contractor for the execution of this contract.

Please acknowledge receipt of the letter.

Yours faithfully,

For & on behalf of
National Capital Region Transport Corporation Limited



(Saurabh Kohli)
Sr. Deputy General Manager/Procurement-II

Encl: Annexure-A (Bill of Quantities: Total 18 pages).

Copy to: CE/Track, CPM/Meerut, Dy.CE-II/Meerut, GGM/Finance, GM/Planning, Sr. DGM HR.

NATIONAL CAPITAL REGION TRANSPORT CORPORATION LIMITED

ANNEXURE-A



Tender No. DM/CN/COR-OF/066- “ Construction of buildings/ structures for CPRI, SVPUAT & IIFSR in Meerut for implementation of Delhi - Meerut RRTS Corridor.”

Bill of Quantities

**NATIONAL CAPITAL REGION TRANSPORT CORPORATION LIMITED,
7/6, SIRIFORT INSTITUTIONAL AREA,
AUGUST KRANTI MARG, NEW DELHI -110049**



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Bill of Quantities
PREAMBLE

1	The bill of quantities shall be read in conjunction with Instruction to Bidders, General and Particulars Conditions of Contract, Notice for Invitation of bids, Employer's Requirements and Tender Drawings, if any.
2	The accepted rates/prices to be tendered in the bill of quantities are for completed and finished items of work and complete in all respect.
3	Locations, where the road vehicles/ pedestrians are mixing along the construction site, shall be provided and maintained with barricading as per drawing provided in the tender. The cost of barricading including shifting etc. are included in the accepted rates of respective items & nothing extra shall be paid separately for the same.
4	The work Executed against the bill of quantities items would be on measurement basis.
5	The Contractor may raise their 'On Account' payments on monthly basis as per the status of work on the last day of the respective month.
6	The accepted rates/percentage shall be inclusive of necessary lighting, drinking water, lead & lift of the materials, security guards, housekeeping, general safety of site, cost towards any other statutory compliances etc complete and any other cost towards in compliance of tender document.
7	The accepted rates/percentage are inclusive of all taxes, duties, levies, cess, Royalties, insurances & all other incidental charges except Goods and Services Tax, required to fulfill the Bid Conditions including statutory deductions viz. TDS towards Income Tax / Works Contract Tax / GST TDS / Labour Cess etc. GST shall be paid as per para 2.1 of LOA.



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Bill of Quantities

SUMMARY SHEET

Name of Work: DM/CN/COR-OF/066- "Construction of buildings/ structures for CPRI, SVPUAT & IIFSR in Meerut for implementation of Delhi - Meerut RRTS Corridor".

NAME OF BIDDER		M/s G&G -JVG (JV)			
S.No.	Description	Financial Amount (In INR)	Percentage' accepted by the bidder above/below/ at par the respective Schedule		Amount (In INR) (in fig.)
			Above/below/at par	(Percentage (%age) in numerical figure)	
1	2	3	4	5	6
1	Schedule A (Civil DSR Works)	10,40,46,796	Below	34.50	₹ 6,81,50,651.31
2	Schedule B (Civil NDSR Works)	24,71,735	Below	21.00	₹ 19,52,670.49
3	Schedule C (Electrical Works)	84,68,027	Below	21.00	₹ 66,89,741.08
4	Schedule D (HVAC Works)	1,72,22,210	Below	21.00	₹ 1,36,05,545.90
5	Schedule E (Fire Fighting Works)	9,80,432	Below	21.00	₹ 7,74,540.98
	Total Amount (Excluding GST)	13,31,89,199	N.A.	N.A.	₹ 9,11,73,149.77



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Name of Work: Construction of buildings/ structures for CPRI, SVPUAT & IIFSR in Meerut for implementation of Delhi - Meerut RRTS Corridor

Sr. No.	DSR 2018 Item No.	Description	Unit	Rate	Qty	Amount
(I) CARRIAGE OF MATERIAL						
1	1.1	Carrriage of materials by mechanical transport including loading, unloading and stacking	Cum	173.62	250.00	₹ 43,405.00
2	1.1.2	Lime, moorum, building rubbish upto 10km	Cum	217.03	400.00	₹ 86,812.00
				Total (I)		₹ 1,30,217.00
(II) EARTH WORK						
2.8		Earth work in excavation by mechanical means (hydraulic excavator) /manual means in foundation trenches or drains (not exceeding 1.5 m inwidth or 10 sqm on plan), including dressing of sides and ramming ofbottoms, lift upto 1.5 m, including getting out the excavated soil anddisposal of surplus excavated soil as directed, within a lead of 50 m.				
3	2.8.1	All kinds of soil	Cum	252.30	3000.00	₹ 7,56,900.00
4	2.25	Filling available excavated earth (excluding rock) in trenches, plinth, sides of foundations etc. in layers not exceeding 20cm in depth, consolidating each deposited layer by ramming and watering. lead up to 50 m and lift upto 1.5 m	Cum	219.65	550.00	₹ 1,20,807.50
5	2.27	Supplying and filling in plinth with sand under floors; including watering, ramming, consolidating and dressing complete.	Cum	1953.05	750.00	₹ 14,64,787.50
2.35		Diluting and injecting chemical emulsion for POST-CONSTRUCTIONAL anti-termite treatment (excluding the cost of chemical emulsion) :				
2.35.3		Treatment of soil under existing floors using chemical emulsion @ one litre per hole, 300 mm apart including drilling 12 mm diameter holes and plugging with cement mortar 1 : 2 (1 cement : 2 Coarse sand) to match the existing floor.				
6	2.35.3.1	With Chloropyriphos/Lindane E.C. 20% with 1% concentration	Cum	227.05	2400.00	₹ 5,44,920.00
				Total (II)		₹ 28,87,415.00
(III) Concrete Work						
4.1		Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work up to plinth level.				
7	4.1.2	1:1½:3 (1 Cement: 1½ coarse sand (zone-II) : 3 graded stone aggregate 20 mm nominal size)	Cum	7210.55	80	₹ 5,76,844.00
8	4.1.5	1:3:6 (1 Cement : 3 coarse sand (zone-II) : 6 graded stone aggregate 20 mm nominal size)	Cum	6259.10	350	₹ 21,90,685.00
9	4.1.1	Providing and laying damp-proof course 50mm thick with cement concrete 1:2:4 (1 cement : 2 coarse sand(zone-II) : 4 graded stone aggregate 20mm nominal size).	Sqm	418.90	500	₹ 2,09,450.00
10	4.1.7	Making plinth protection 50mm thick of cement concrete 1:3:6 (1 cement: 3 coarse sand : 6 graded stone aggregate 20 mm nominal size) over 75mm thick bed of dry brick ballast 40 mm nominal size, well rammedand consolidated and grouted with fine sand, including necessary excavation, levelling & dressing & finishing the top smooth.	Sqm	614.05	450	₹ 2,76,322.50
				Total (III)		₹ 32,53,301.50
(IV) RCC Work						
5.1		Providing and laying in position specified grade of reinforced cement concrete, excluding the cost of centering, shuttering, finishing and reinforcement - All work up to plinth level :				
11	5.1.2	1:1.5:3 (1 cement : 1.5 coarse sand (zone-III); 3 graded stone aggregate 20 mm nominal size)	Cum	7718.25	560	₹ 43,22,220.00
5.2		Reinforced cement concrete work in walls (any thickness), including attached pilasters, buttresses, plinth and string courses, fillets, columns, pillars, piers, abutments, posts and struts etc. above plinth level up to floor five level, excluding cost of centering, shuttering, finishing and reinforcement :				
12	5.2.2	1:1.5:3 (1 cement : 1.5 coarse sand(zone-II) : 3 graded stone aggregate 20 mm nominal size)	Cum	9306.00	170	₹ 15,82,020.00
13	5.3	Reinforced cement concrete work in beams, suspended floors, roofs having slope up to 15° landings, balconies, shelves, chajjas, lintels, bands, plain window sills, staircases and spiral stair cases above plinth level up to floor five level, excluding the cost of centering, shuttering, finishing and reinforcement with 1:1.5:3 (1 cement : 1.5 coarse sand(zone-II) : 3 graded stone aggregate 20 mm nominal size).	Cum	9763.80	1100.00	₹ 1,07,40,180.00
5.9		Centering and shuttering including strutting, propping etc. and removal of form for all heights :				
14	5.9.1	Foundations, footings, bases of columns, etc. for mass concrete	Sqm	284.85	1220.00	₹ 3,47,517.00
15	5.9.3	Suspended floors, roofs, landings, balconies and access platform	Sqm	693.05	4000.00	₹ 27,72,200.00
16	5.9.5	Lintels, beams, plinth beams, girders, bressumers and cantilevers	Sqm	562.05	3200.00	₹ 17,66,560.00
17	5.9.6	Columns, Pillars, Piers, Abutments, Posts and Struts	Sqm	733.70	1520.00	₹ 11,15,224.00
18	5.9.7	Stairs, (excluding landings) except spiral-staircases	Sqm	622.35	240.00	₹ 1,49,364.00
5.22 & 5.22A		Steel reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding all complete above plinth level.				

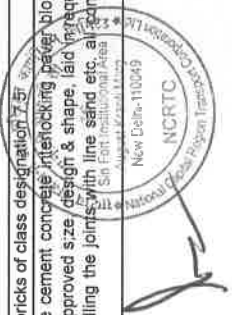


(VIII) STEEL WORK						
29	10.1	Structural steel work in single section, fixed with or without connecting plate, including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer all complete.	Kg	86.05	1150.00	₹ 98,957.50
30	10.2	Structural steel work riveted, bolted or welded in built up sections, trusses and framed work, including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer all complete.	Kg	101.75	6500.00	₹ 6,61,375.00
31	10.25.2	Steel work welded in built up sections/ framed work, including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer using structural steel etc. as required.	Kg	131.00	14000	₹ 18,34,000.00
32	10.30.1	Structural steel work riveted, bolted or welded in built up sections, trusses and framed work, including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer all complete.	Sqrm	900.55	230.00	₹ 2,07,126.50
		4.0 mm thick glass panes		Total (VIII)		₹ 28,01,459.00
(IX) Flooring						
33	11.3.1	Cement concrete flooring 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate) finished with a floating coat of neat cement, including cement slurry, but excluding the cost of nosing of steps etc. complete.	Sqrm	498.35	400.00	₹ 1,99,340.00
34	11.5	62 mm thick cement concrete flooring with concrete hardener topping, under layer 50 mm thick cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20mm nominal size) and top layer 12mm thick cement hardener consisting of mix 1:2 (1 cement hardener mix : 2 graded stone aggregate, 6mm nominal size) by volume, hardening compound mixed @ 2 litre per 50 kg of cement or as per manufacturer's specifications. This includes cost of cement slurry, but excluding the cost of nosing of steps etc. complete.	Sqrm	854.30	600.00	₹ 5,12,580.00
35	11.38	Providing and laying Ceramic glazed floor tiles of size 300x300 mm (thickness to be specified by the manufacturer), of 1st quality conforming to IS : 15622, of approved make, in all colours, shades, except White, Ivory, Grey, Fume Red Brown, laid on 20 mm thick bed of cement mortar 1:4 (1 Cement : 4 Coarse sand), jointing with grey cement slurry @ 3.3 kg/ sq.m including pointing the joints with white cement and matching pigments etc., complete.	Sqrm	996.70	500.00	₹ 4,98,350.00
36	11.41.2	Providing and laying vitrified floor tiles in different sizes (thickness to be specified by the manufacturer) with water absorption less than 0.08% and conforming to IS: 15622, of approved make, in all colours and shades, laid on 20mm thick cement mortar 1:4 (1 cement : 4 coarse sand), jointing with grey cement slurry @ 3.3kg/sqm including grouting the joints with white cement and matching pigments etc., complete.	Sqrm	1,500.55	3150.00	₹ 47,26,732.50
37	11.47.2	Size of Tile 600x600 mm Providing and laying Vitrified tiles in different sizes (thickness to be specified by the manufacturer), with water absorption less than 0.08% and conforming to IS: 15622, of approved brand & manufacturer, in all colours and shade, in skirting, riser of steps, laid with cement based high polymer modified quick set tile adhesive (water based) conforming to IS: 15477, in average 6 mm thickness, including grouting of joints (Payment for grouting of joints to be made separately).	Sqrm	1,734.00	380.00	₹ 6,58,920.00
38	11.56.1	Size of Tile 600x600 mm Providing and laying Polished Granite stone flooring in required design and patterns, in linear as well as curvilinear portions of the building all complete as per the architectural drawings with 18 mm thick stone slab over 20 mm (average) thick base of cement mortar 1:4 (1 cement : 4 coarse sand) laid and jointed with cement slurry and pointing with white cement slurry admixed with pigment of matching shade including rubbing, curing and polishing etc. all complete as specified and as directed by the Engineer-in-Charge.	Sqrm	3,526.60	870.00	₹ 30,68,142.00
				Total (IX)		₹ 96,64,064.50
(X) False Ceiling						
39	12.20	Providing and laying pressed clay tiles (as per approved pattern 20 mm nominal thickness of approved size) on roofs jointed with cement mortar 1:4 (1 cement : 4 coarse sand) mixed with 2% integral water proofing compound, laid over a bed of 20 mm thick cement mortar 1:4 (1 cement : 4 coarse sand) and finished neat complete	Sqrm	584.55	2100.00	₹ 12,27,555.00
40	12.22	Making khurras 45x45 cm with average minimum thickness of 5 cm cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate of 20 mm nominal size) over P.V.C. sheet 1 m x 1 m x 400 micron, finished with 12 mm cement plaster 1:3 (1 cement : 3 coarse sand) and a coat of neat cement, rounding the edges and making and finishing the outlet complete	Each	244.05	60.00	₹ 14,643.00

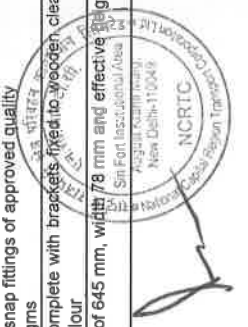


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12.52	Providing and fixing tiled false ceiling of specified materials of size 595x595 mm in true horizontal level, suspended on inter locking metal grid of hot dipped galvanized steel sections (galvanized @ 120 grams/ sqm, both side inclusive) consisting of main "T" runner with suitably spaced joints to get required length and of size 24x38 mm made from 0.30 mm thick (minimum) sheet, spaced at 1200 mm center to center and cross "T" of size 24x25 mm made of 0.30 mm thick (minimum) sheet, 1200 mm long spaced between main "T" at 600 mm center to center to form a grid of 1200x600 mm and secondary cross "T" of length 600 mm and size 24x25 mm made of 0.30 mm thick (minimum) sheet to be interlocked at middle of the 1200x600 mm panel to form grids of 600x600 mm and wall angle of size 24x24x0.3 mm and laying false ceiling tiles of approved texture in the grid including, required cutting/making, opening for services like diffusers, grills, light fittings, fixtures, smoke detectors etc. Main "T" runners to be suspended from ceiling using GI slotted cleats of size 27 x 37 x 25 x 1.6 mm fixed to ceiling with 12.5 mm dia and 50 mm long dash fasteners, 4 mm GI adjustable rods with galvanised butterfly level clips of size 85 x 30 x 0.8 mm spaced at 1200 mm center to center along main T, bottom exposed width of 24 mm of all T-sections shall be pre-painted with polyester paint, all complete for all heights as per specifications, drawings and as directed by Engineer-in-charge.	Sqm	1,504.45	2400.00	₹ 36,10,680.00
41	GI Metal Ceiling Lay in plain Tegular edge Global white color tiles of size 595x595 mm, and 0.5 mm thick with 8 mm drop, made of G I sheet having galvanizing of 100 gms/sqm (both sides inclusive) and electro statically polyester powder coated of thickness 60 microns (minimum), including factory painted after bending.	Sqm	1,504.45	2400.00	₹ 36,10,680.00
(XI) Finishing			Total (X)		₹ 48,52,878.00
13.1	12 mm cement plaster of mix :				
13.1.1	1:4 (1 cement: 4 fine sand)	Sqm	266.85	3850.00	₹ 10,27,372.50
13.1.2	1:6 (1 cement: 6 fine sand)	Sqm	254.25	9900.00	₹ 25,17,075.00
13.2	15 mm cement plaster on the rough side of single or half brick wall of mix:				
13.2.2	1:5 (1 cement: 6 fine sand)	Sqm	292.85	1100.00	₹ 3,22,135.00
13.16	6 mm cement plaster of mix :				
13.16.1	1:3 (1 cement : 3 fine sand)	Sqm	227.35	1800.00	₹ 4,09,230.00
13.43	Applying one coat of water thinnable cement primer of approved brand and manufacture on wall surface	Sqm	60.00	4600.00	₹ 2,76,000.00
13.43.1	Water thinnable cement primer				
13.46	Finishing walls with Acrylic Smooth exterior paint of required shade :				
13.46.1	New work (Two or more coat applied @ 1.67 ltr/10 sqm over and including priming coat of exterior primer applied @ 2.20 kg/10 sqm)	Sqm	164.70	3000.00	₹ 4,94,100.00
13.61	Painting with synthetic enamel paint of approved brand and manufacture to give an even shade :				
13.61.1	Two or more coats on new work	Sqm	121.55	1500.00	₹ 1,82,325.00
13.69	Polishing on wood work with ready mixed wax polish of approved brand and manufacture :				
13.69.1	New work	Sqm	150.90	1800.00	₹ 2,71,620.00
13.80	Providing and applying white cement based putty of average thickness 1 mm, of approved brand and manufacturer, over the plastered wall surface to prepare the surface even and smooth complete.	Sqm	115.15	12700.00	₹ 14,62,405.00
13.83	Wall painting with premium acrylic emulsion paint of interior grade, having VOC (Volatile Organic Compound) content less than 50 grams/ litre of approved brand and manufacture, including applying additional coats wherever required to achieve even shade and colour.				
13.83.2	Two coats	Sqm	113.90	12700.00	₹ 14,46,530.00
(XII) Front Area Development			Total (XI)		₹ 84,08,792.50
16.1	Preparation and consolidation of sub grade with power road roller of 8 to 12 tonne capacity after excavating earth to an average of 22.5 cm depth, dressing to camber and consolidating with road roller including making good the undulations etc. and re-rolling the sub grade and disposal of surplus earth with lead upto 50 metres	Sqm	156.75	1180	₹ 1,84,965.00
16.3	Supplying and stacking at site				
16.3.5	Over burnt (Jhama) brick aggregate 90 mm to 45 mm	cum	793.1	270	₹ 2,14,137.00
16.5	Laying water bound macadam sub-base with brick aggregate and binding material, earth etc. including screening, sorting and spreading to template and consolidation with light power road-roller etc. complete.(payment for brick aggregate and moorum etc. to be made separately)				
16.5.2	Over burnt (Jhama) brick aggregate 90 mm to 45 mm	cum	630.35	190	₹ 1,19,766.50
16.7	Brick edging in full brick width and half brick depth including excavation, refilling and disposal of surplus earth lead upto 50 metres				
16.7.1	With common burnt clay F.P.S. (non modular) bricks of class designation 7.5f	Meter	167.8	250	₹ 41,950.00
16.68	Providing and laying 60mm thick factory made cement concrete interlocking paver block of M -30 grade made by block making machine with strong vibratory compaction, of approved size, design & shape, laid in required colour and pattern over and including 50mm thick compacted bed of coarse sand, filling the joints with line sand etc. all complete as per the direction of Engineer-in-charge.	Sqm	859.35	700	₹ 6,01,545.00



(XIII) Sanitary Work & Water Supply		Total (XIII)	₹	11,62,363.50
12.41	Providing and fixing on wall face unplasticised Rigid PVC rain water pipes conforming to IS : 13592 Type A, including jointing with seal ring conforming to IS : 5382, leaving 10 mm gap for thermal expansion, (i) Single socketed pipes.			
57	12.41.2 Providing and fixing water closet squatting pan (Indian type W.C. pan) with 100 mm sand cast iron P or S trap, 10 litre low level white P.V.C. flushing cistern, including flush pipe, with manually controlled device (handle lever) conforming to IS : 7231, with all fittings and fixtures complete, including cutting and making good the walls and floors wherever required.	Meter	305.05	₹ 1,28,121.00
58	17.1.1 White Vitreous china Crissa pattern W.C. pan of size 580x440 mm with integral type foot rests	Each	5421.50	₹ 37,950.50
17.3	Providing and fixing white vitreous china pedestal type water closet (European type) with seat and lid, 10 litre low level white vitreous china flushing cistern & C.P. flush bend with fittings & C.I. brackets, 40 mm flush bend, overflow arrangement with specials of standard make and mosquito proof coupling of approved municipal design complete, including painting of fittings and brackets, cutting and making good the walls and floors wherever required :			
59	17.3.1 W.C. pan with ISI marked white solid plastic seat and lid	Each	6685.00	₹ 1,67,125.00
17.5	Providing and fixing white vitreous china flat back half stall urinal of size 580x380x350 mm with white PVC automatic flushing cistern, with fittings, standard size C.P. brass flush pipe, spreaders with unions and clamps (all in C.P. brass) with waste fitting as per IS : 2556, C.I. trap with outlet grating and other couplings in C.P. brass, including painting of fittings and cutting and making good the walls and floors wherever required :			
60	17.5.1 Single half stall urinal with 5 litre P.V.C. automatic flushing cistern	Each	9360.60	₹ 1,31,048.40
17.7	Providing and fixing wash basin with C.I. brackets, 15 mm C.P. brass pillar taps, 32 mm C.P. brass waste of standard pattern, including painting of fittings and brackets, cutting and making good the walls wherever required.			
61	17.7.8 White Vitreous China Surgeon type wash basin of size 600x460 mm with a pair of 15 mm C.P. brass pillar taps with elbow including operated levers	Each	4052.35	₹ 1,09,413.45
17.10.	Providing and fixing Stainless Steel A ISI 304 (18/8) kitchen sink as per IS:1983 with C.I. brackets and stainless steel plug 40 mm, including painting of fittings and brackets, cutting and making good the walls wherever required			
17.10.2	Kitchen sink without drain board			
62	17.10.2.2 610x460 mm bowl depth 200 mm	Each	2828.75	₹ 42,431.25
17.11	Providing and fixing white vitreous china laboratory sink with C.I. brackets, C.P. brass chain with rubber plug, 40 mm C.P. brass waste and 40mm C.P. brass trap with necessary C.P. brass unions complete, including painting of fittings and brackets, cutting and making good the wall wherever required :			
63	17.11.2 Size 600x450x200 mm	Each	5460.45	₹ 3,05,785.20
64	17.16A Providing and fixing 8 mm dia C.P. / S.S. Jet with flexible tube upto 1 metre long with S.S. triangular plate to Europeantype W.C. of quality and make as approved by Engineer - in-charge.	Each	297.55	₹ 2,975.50
17.18	Providing and fixing P.V.C. low level flushing cistern with manually controlled device (handle lever) conforming to IS : 7231, with all fittings and fixtures complete.			
65	17.18.1 10 litre capacity - White	Each	999.95	₹ 9,999.50
66	17.22A Providing and fixing CP Brass 32mm size Bottle Trap of approved quality & make and as per the direction of Engineer-in-charge	Each	883.05	₹ 17,661.00
17.22B	Providing and fixing CP Brass Single lever telephonic wall mixer of quality & make as approved by Engineer in charge.			
67	17.22B (a) 15 mm nominal dia	Each	6113.60	₹ 5,50,224.00
17.28	Providing and fixing P.V.C. waste pipe for sink or wash basin including P.V.C. waste fittings complete			
68	17.28.2.2 Flexible pipe 40mm dia	Each	101.10	₹ 12,132.00
17.32	Providing and fixing mirror of superior glass (of approved quality) and of required shape and size with plastic moulded frame of approved make and shade with 6 mm thick hard board backing			
69	17.32.2 Rectangular shape 453x357 mm	Each	1120.25	₹ 39,208.75
17.34	Providing and fixing toilet paper holder			
70	17.34.1 C.P. brass	Each	583.75	₹ 11,675.00
17.69	Providing and fixing PTMT Waste Coupling for wash basin and sink, of approved quality and colour.			
71	17.69.2 Waste coupling 38 mm dia of 83 mm length and 77mm breadth, weighing not less than 60 gms	Each	118.50	₹ 4,147.50
17.71	Providing and fixing PTMT liquid soap container 109 mm wide, 125 mm high and 112 mm distance from wall of standard shape with bracket of the same materials with snap fittings of approved quality and colour, weighing not less than 105 gms	Each	158.55	₹ 4,756.50
17.73	Providing and fixing PTMT tower rail complete with brackets fixed to wooden cleats with CP brass screws with concealed fittings arrangement of approved quality and colour			
17.73.2	600 mm long tower rail with total length of 645 mm, width 78 mm and effective height of 88 mm, weighing not less than 190 gms	Each	595.50	₹ 17,865.00



74	17.80	Providing and fixing white vitreous china battery based infrared sensor operated urinal of approx. size 610 x 390 x 370 mm having pre & post flushing with water (250 ml & 500 ml consumption), having water inlet from back side, including fixing to wall with suitable brackets all as per manufacturers specification and direction of Engineer-in-charge	Each	6913.90	18.00	₹	1,24,450.20
75	18.8.1	15 mm nominal outer dia Pipes	Meter	409.55	310.00	₹	1,26,991.50
76	18.8.2	20 mm nominal outer dia Pipes	Meter	478.15	330.00	₹	1,57,789.50
77	18.9	Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot & cold water supply including all CPVC plain & brass threaded fittings, i/c fixing the pipe with clamps at 1.00 m spacing. This includes jointing of pipes & fittings with one step CPVC solvent cement and the cost of cutting chases and making good the same including testing of joints complete as per direction of Engineer in Charge. Concealed work, including cutting chases and making good the walls etc.					
78	18.9.1	15 mm nominal outer dia Pipes	Meter	202.85	320.00	₹	64,912.00
79	18.9.2	20 mm nominal outer dia Pipes	Meter	253.70	320.00	₹	81,184.00
80	18.9.3	100 mm nominal inner dia Pipes	Meter	2779.55	1100.00	₹	30,57,505.00
81	18.11	Providing and fixing G.I. Pipes complete with G.I. fittings and clamps, i/c making good the walls etc. concealed pipe, including painting with anti corrosive bitumastic paint, cutting chases and making good the wall :					
82	18.11.1	15 mm dia nominal bore	Meter	447.60	1650.00	₹	7,38,540.00
83	18.11.2	20 mm dia nominal bore	Meter	494.10	1450.00	₹	7,16,445.00
84	18.13	Making connection of G.I. distribution branch with G.I. main of following sizes by providing and fixing tee, including cutting and threading the pipe etc. complete :					
85	18.13.1	25 to 40 mm nominal bore	Each	673.45	1310.00	₹	8,82,219.50
86	18.16	Providing and fixing brass stop cock of approved quality	Each	302.55	150.00	₹	45,382.50
87	18.16.1	15 mm dia nominal bore	Each	326.45	120.00	₹	39,174.00
88	18.16.2	20 mm dia nominal bore	Each	8.80	25000.00	₹	2,20,000.00
89	18.48	Providing and placing on terrace (at all floor levels) polyethylene water storage tank, IS : 12701 marked, with cover and suitable locking arrangement and making necessary holes for inlet, outlet and overflow pipes but without fittings and the base support for tank.	Per Litre				
90	18.49	Circular tank					
91	18.49.1	Providing and fixing C.P. brass bib cock of approved quality conforming to IS:8931 :	Each	418.95	30.00	₹	12,568.50
92	18.50	Providing and fixing C.P. brass long nose bib cock of approved quality conforming to IS standards and weighing not less than 810 gms.					
93	18.50.1	15 mm nominal bore	Each	618.80	40.00	₹	24,752.00
94	18.53	Providing and fixing C.P. brass angle valve for basin mixer and geyser points of approved quality conforming to IS:8931					
95	18.53.1	15mm nominal bore	Each	532.00	30.00	₹	15,960.00
96	18.58	Providing and fixing PTMT grating of approved quality and colour.					
97	18.58.1	Circular type					
98	18.58.1.1	100 mm nominal dia	Each	37.90	70.00	₹	2,653.00
99	18.84	Providing & fixing chrome plated brass battery based infrared sensor operated pillar cock, having foam flow technology					
100	18.84.1	15 mm nominal bore	Each	7781.60	69.00	₹	5,36,930.40
				Total (XIII)		₹	84,39,976.65
(XIV) Drainage							
101	19.6	Providing and laying non-pressure NP2 class (light duty) R.C.C. pipes with collars jointed with stiff mixture of cement mortar in the proportion of 1:2 (1 cement : 2 fine sand) including testing of joints etc. complete :					
102	19.6.3	250 mm dia. R.C.C. pipe	Meter	754.45	200	₹	1,50,890.00
103	19.6.5	450 mm dia. R.C.C. pipe	Meter	1392.70	160	₹	2,22,832.00
104	19.6.7	600 mm dia. R.C.C. pipe	Meter	1948.35	160	₹	3,11,736.00
105	19.9	Constructing brick masonry circular type manhole 0.91 m internal dia at bottom and 0.56m dia at top in cement mortar 1:4 (1 cement : 4 coarse sand), inside cement plaster 12 mm thick with cement mortar 1:3 (1 cement : 3 coarse sand) finished with a floating coat of neat cement, foundation concrete 1:3:6 mix (1 cement : 3 coarse sand : 6 graded stone aggregate 40 mm nominal size), and making necessary channel in cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size) finished with a floating coat of neat cement, all complete as per standard design :					



19.9.1	0.91 m deep with S.F.R.C. cover and frame (heavy duty, HD-20 grade designation) 560 mm internal diameter conforming to I.S. 12592, total weight of cover and frame to be not less than 182 kg., fixed in cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size) including centering, shuttering all complete. (Excavation, foot rests and 12mm thick cement plaster at the external surface shall be paid for separately) :	Each	11038.1	40	₹	4,41,524.00
94	19.9.1.1 With common burnt clay F.P.S. (non modular) bricks of class designation 7.5	Each				
19.32	Making soak pit 2.5 m diameter 3.0 metre deep with 45 x 45 cm dry brick honey comb shaft with bricks and S.W. drain pipe 100 mm diameter, 1.8 m long complete as per standard design	Each	25278.75	7	₹	1,76,951.25
95	19.32.1 With common burnt clay F.P.S. (non modular) bricks of class designation 7.5	Each				
			Total(XIV)		₹	13,03,933.25
(XV) ALUMINIUM & WOOD WORK						
21.1	Providing and fixing aluminium work for doors, windows, ventilators and partitions with extruded built up standard tubular sections/ appropriate Z sections and other sections of approved make conforming to IS: 733 and IS: 1285, fixing with dash fasteners of required dia and size, including necessary filling up the gaps at junctions, i.e. at top, bottom and sides with required EPDM rubber/ neoprene gasket etc. Aluminium sections shall be smooth, rust free, straight, mitted and jointed mechanically wherever required including cleat angle, Aluminium snap beading for glazing / paneling, C.P. brass / stainless steel screws, all complete as per architectural drawings and the directions of Engineer-in-charge. (Glazing, paneling and dash fasteners to be paid for separately) : For fixed portion					
96	21.1.1.2 Powder coated aluminium (minimum thickness of powder coating 50 micron)	Kg	456.3	1750	₹	7,98,525.00
21.3	Providing and fixing glazing in aluminium door, window, ventilator shutters and partitions etc. with EPDM rubber / neoprene gasket etc. complete as per the architectural drawings and the directions of engineer-in-charge. (Cost of aluminium snap beading shall be paid in basic item):					
97	21.3.3 With float glass panes of 8 mm thickness (weight not less than 20 kg/ sqm)	Sqm	1462.35	300	₹	4,38,705.00
21.4	Providing and fixing double action hydraulic floor spring of approved brand and manufacture conforming to IS : 6315, having brand logo embossed on the body / plate with double spring mechanism and door weight upto 125 kg, for doors, including cost of cutting floors, embedding in floors as required and making good the same matching to the existing floor finishing and cover plates with brass pivot and single piece M.S. sheet outer box with slide plate etc. complete as per the direction of Engineer-in-charge.					
98	21.4.2 With brass cover plate minimum 1.25 mm thickness	Each	2573.05	10	₹	25,730.50
99	21.18 Providing and fixing 12 mm thick frameless toughened glass door shutter of approved brand and manufacture, including providing and fixing top & bottom pivot & double action hydraulic floor spring type fixing arrangement and making necessary holes etc. for fixing required door fittings, all complete as per direction of Engineer-in-charge (Door handle, lock and stopper etc to be paid separately)	Sqm	4447.9	100	₹	4,44,790.00
100	26.10 Providing and fixing factory made Kitchen Cabinet Shutter/Partition 20 mm nominal thickness of approved shade, quality and make, made from rigid foam sheets (Single extruded) having density 600 Kg/cum and laminated on both side by laminate Sheet/PVC foil lamination. The exposed edges shall be sealed with PVC edge beading of same shade and colour. The shutter shall be fire retardant having necessary screw holding capacity. Shutter shall be fixed to frame using approved hinges with necessary stainless steel screws, all complete as per direction of Engineer-in-charge	Sqm	4535.3	480	₹	21,76,944.00
101	Any Other DSR-2018 Item (Civil & electrical)	LS				
			Total(XV)		₹	38,84,694.50
					₹	92,00,000.00
				Sub Total	₹	11,65,32,411.40
				Amount Excluding GST (@ 12% GST)	₹	10,40,46,795.89
				Total Amount Excluding GST	₹	10,40,46,795.89
				Quoted Rate @ 34.50% below	₹	3,58,96,144.58
				Net Payment for Schedule-A (excluding GST)	₹	6,81,50,651.31

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SCHEDULE-B

Name of Work: Construction of buildings/ structures for CPRI, SVPUAT & IIFSR in Meerut for implementation of Delhi - Meerut RRTS Corridor					
Sr. No.	Description	Unit	Rate	Qty	Amount
1	Providing and fixing vertical for windows (Make Vista) (synthetic material) on windows including complete installation of track, blinds upto working condition, all items of approved make and as per direction of Engineer-in-Charge	Sqm	710	280.00	₹ 1,98,800.00
2	Providing and fixing Platform basin with single faucet hole in white with Bottle trap in polished chrome, pillar basin faucet, C.P. Brass waste coupling (make Jaquar, Kohler or equivalent) complete with C.I. brackets, including painting of fittings and brackets, cutting and making good the walls wherever require, with approval of Engineer-In-Charge	Set	11019.2	19.00	₹ 2,09,364.80
3	Providing, fixing, testing and commissioning of basin angle valve (make Jaquar, Kohler, Hindware or equivalent) with C.P. wall flange, Nut and Washer etc. complete as required, with approval of Engineer-In-Charge	Each	1167.3	15.00	₹ 17,509.50
4	Providing and fixing in position first quality Wall Hung EWC with UF soft close seat cover (make Jaquar, Kohler or equivalent), Hinges, Accessories set Size: 355x585x410mm approx or as per approval, and fitted with water saving concealed cistern (make Jaquar, Kohler or equivalent) with half frame including Faceplate (make Jaquar, Kohler or equivalent) strictly upon approval with P/S trap as required, star white in colour and making connections of W.C. with other accessories such as flush valve inlet, outlet, anti syphonic pipe etc. (if required) complete including fitting in the wall and repairing the same with cement mortar (1:3) plastering, tiling etc, with approval of Engineer-In-Charge	Set	22246.9	19.00	₹ 4,22,691.10
5	Providing & Fixing CP finish Bib cock 2-way bib tap (make Jaquar, Kohler, Hindware or equivalent) complete including fixing and connecting and including all materials, teflon tape, cp nipples, cover plates with testing etc. complete, with approval of Engineer-In-Charge	Each	1728.2	25.00	₹ 43,205.00
6	Providing and fixing in position first quality white Gents Urinal (make Jaquar, Kohler, Hindware or equivalent) without sensor with Fixing Accessories Set, Size: 480x300x740mm approx or as per approval with Sensotronic Sens Flushing Valve (make Jaquar, Kohler, Hindware or equivalent) for Urinal with complete Kit Urinal sensor (make Jaquar, Kohler, Hindware or equivalent) as per approval and making all connections of urinal with other accessories such as waste/ flush pipe, outlet, etc. filling including making chases and holes in floors and walls and repairing the same with cement mortar (1:3) plastering etc. to original condition and painting of fittings etc. complete including all brackets, pipes, connections etc. upto proper working condition, with approval of Engineer-In-Charge	Each	14886.9	18.00	₹ 2,67,964.20
7	Providing and fixing in position curved shaped urinal partition/division plates (make Jaquar, Kohler, Hindware or equivalent) with frosted glass 8mm Finish: Chrome Size H: 900 W: 450 approx or as per approval including appropriate fixing on the wall as recommended by the manufacturer, with approval of Engineer-In-Charge	Each	4679.5	16.00	₹ 74,872.00
8	Providing and fixing sets of Bathroom Accessories of reputed brand and matching designs with concealed/ hidden screws. The cost shall include proper and careful fixing of all sets with Galvanised countersunk screws and nylon gattis as required without damaging existing pipelines, conduits, cables, wires, switchboards or any such item concealed inside wall below the tiles. The fixing must be in proper level and at places. all items of approved make and as per direction of Engineer-in-Charge.				
8a	Providing and fixing in position Soap dispenser (make Jaquar, Kohler, Hindware or equivalent) complete including fixing and connecting and including all materials, with approval of Engineer-In-Charge	Each	1029.9	78.00	₹ 80,332.20
8b	Providing and fixing in position Tissue holder (make Jaquar, Kohler, Hindware or equivalent) with cover in polished chrome including fixing and connecting and including all materials complete, with approval of Engineer-In-Charge	Each	1143.5	20.00	₹ 22,870.00
8c	Providing and fixing in position Hand dryer (make Jaquar, Kohler, Hindware or equivalent) including fixing and connecting and including all materials complete, with approval of Engineer-In-Charge	Each	13873.2	55.00	₹ 7,63,026.00
9	Providing and fixing stainless steel sink (make Nirali Grace plain super satin or equivalent as per approval) of size approx. 610x510x200 mm or as per approval, in platform complete including all required cutting, filling, preparation for installation, connecting waste coupling, waste pipe, adhesives/ sealers/ fillers etc, with approval of Engineer-In-Charge	Each	6185	60.00	₹ 3,71,100.00
Total Amount Excluding GST					₹ 24,71,734.80
Quoted Rate @ 21.00% below					₹ 5,19,064.31
Net Payment for Schedule-B (excluding GST)					₹ 19,52,670.49



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SCHEDULE-C

Name of Work: Construction of buildings/ structures for CPRI, SVPUAT & IFSR in Meerut for implementation of Delhi - Meerut RRTS Corridor

S.N.	Item No.	DESCRIPTION	UNIT	Qty	Rate (INR)	AMOUNT (INR)
A						
Sub Head:Point Wiring						
1	DSR 1.10.3	Wiring for light point / fan point / call bell point with 1.5 sq. mm FR PVC insulated copper conductor single core cable in surface / recessed heavy duty PVC conduit with modular switch, modular plate, suitable GI box and earthing the point with 1.5 sq. mm FR PVC insulated copper conductor single core cable etc as required - Group C	Point	772	990.00	7,64,280
2	DSR 1.55.3	Wiring for group controlled (looped) light point/fan point/exhaust fan point/ call bell point (without independent switch etc.) with 1.5 sq. mm FRLS PVC Insulated copper conductor single core cable in surface/ recessed PVC conduit, and earthing the point with 1.5 sq. mm FRLS PVC insulated copper conductor single core cable etc. as required (SECONDARY/ LOOP POINTS)- GroupC	Point	140	555.00	77,700
3	DSR 1.12	Wiring for power plug with 2 x 4 sq. mm FR PVC insulated copper conductor single core cable in surface / recessed in suitable size of heavy duty PVC conduit along with 1 No. 4 sq. mm FR PVC insulated copper conductor single core cable for loop earthing as required.	Metre	2,640	200.00	5,28,000
4	DSR 1.14	Wiring for circuit/ submain wiring along with earth wire with the following sizes of FRLS PVC Insulated copper conductor, single core cable in surface/recessed medium class PVC conduit as required				
4.1	1.14.1	2 X 1.5 sq.mm +1X 1.5 sq.mm earth wire	Metre	1710	146.00	2,49,660
4.2	1.14.2	2 X 2.5 sq.mm +1X 2.5 sq.mm earth wire	Metre	2655	167.00	4,43,385
4.3	1.14.4	2 X 6.0 sq.mm +1X 6.0 sq.mm earth wire	Metre	225	249.00	56,025
4.7	1.14.8	4 X 4 sq.mm +2 X 4 sq.mm earth wire	Metre	150	308.00	46,200
4.8	1.14.9	4 X 6 sq.mm +2 X 6 sq.mm earth wire	Metre	850	394.00	3,34,900
4.9	1.14.10	4 X 10 sq.mm +2 X 10 sq.mm earth wire	Metre	550	543.00	2,98,650
4.10	1.14.11	4 X 16 sq.mm +2 X 16 sq.mm earth wire	Metre	450	752.00	3,38,400
5	DSR 1.24	Supplying and fixing following modular switch/socket on the existing modular plate & switch box including connections but excluding modular plate etc. as required				
5.1	1.24.6	Telephone socket outlet	Each	58	119.00	6,902
5.2	1.24.7	TV antenna socket outlets	Each	11	119.00	1,309
5.3	1.24.8	Bell push	Each	25	126.00	3,150
6	DSR 1.26	Supplying and fixing modular blanking plate on the existing modular plate and switch box excluding modular plate as required.	Each	125	32.00	4,000
7	DSR 1.27	Supplying and fixing following size/ modules, GI box along with modular base & cover plate & for modular switches in recess etc as required.				
7.2	1.27.2	3 Module (100mmX75mm)	Each	25	267.00	6,675
7.3	1.27.3	4 Module (125mmX75mm)	Each	58	287.00	16,646
7.4	1.27.4	6 Module (200mmX75mm)	Each	11	333.00	3,663
8	DSR 1.31	Supplying and fixing suitable size GI box with modular plate and cover in front on surface or in recess, including providing and fixing 3 pin 5/6 amps modular socket outlet and 5/6 amps modular switch, connection etc. as required.	Each	74	401.00	29,674
9	DSR 1.32	Supplying and fixing suitable size GI box with modular plate and cover in front on surface or in recess, including providing and fixing 6 pin 5/6 & 15/16 amps modular socket outlet and 15/16 amps modular switch, connection etc. as required. (For Power plugs)	Each	183	495.00	90,585
10	DSR 1.56	Supplying and fixing suitable size GI box with modular plate and cover in front on surface or in recess, including providing and fixing 2 nos. 3 pin 5/6 A modular socket outlet and 2 nos. 5/6 A modular switch, connections etc. as required. (For light plugs to be used in non residential buildings).	Each	55	582.00	32,010
11	DSR 1.21	Supplying and fixing of following sizes medium PVC conduit along with accessories in surface / recess including painting in case of surface conduit, or cutting the wall and making good the same in case of recessed conduit as required.				
11.1	1.21.1	20 mm	Metre	550	84.00	46,200
11.2	1.21.2	25 mm	Metre	850	90.00	76,500
11.3	1.21.3	32 mm	Metre	450	92.00	41,400
12	DSR 1.38	Supplying and fixing call bell/buzzer suitable for single phase,230 Volts,complete as required	Nos.	25	92.00	2,300
13	DSR 1.18	Supply and drawing of following pair 0.5 sq.mm FRLS PVC insulated annealed copper conductor, unarmoured telephone cable in the existing surface/ recessed steel/ pvc conduit as required.				
	1.18.3	4 Pair	Metre	1450	29.00	42,050
14	DSR 1.19	Supplying and drawing co-axial TV cable RG-6 grade, 0.7 mm solid copper conductor PE insulated, shielded with fine tinned copper braid and protected with PVC sheath in the existing surface/ recessed steel/ PVC conduit as required.	Metre	280	33.00	9,240
15	DSR 1.53.1	Supplying and drawing of UTP 4 pair CAT 6 LAN Cable in the existing surface/ recessed steel/ PVC conduit as required.	Metre	1275	49.00	62,475
TOTAL SUB HEAD - A						36,11,979.00
B						
DISTRIBUTION BOARD						
1	DSR 2.4	Supplying and fixing following way, horizontal type three pole and neutral, sheet steel, MCB distribution board, 415 V, on surface/ recess, complete with tinned copper bus bar, neutral bus bar, earth bar, din bar, interconnections, powder painted including earthing etc. as required. (But without MCB/RCCB/isolator)				
1.1	2.4.2	6 way (4 + 18), Double door	Each	12	3,693.00	44,316
1.2	2.4.3	8 way (4 + 24), Double door	Each	10	4,601.00	46,010
2		S/F prewired TP MCB DB: Supplying and fixing of following ways surface/recessed mounting vertical type, 415V TPN MCB Distribution board of sheet steel dust protected, duly power painted, inclusive of 200A, tinned copper bus bar, common neutral link, earth bar, din bar for mounting MCBs (but without MCBs and incomer) as required. (Note: Vertical type MCB TPDB is normally used where 3 phase out let are required.)				
3	DSR 2.5.3	12 way (4 + 36), Double door, vertical type	Nos.	5	9,828.00	49,140
4		S/F prewired SP MCB DB: Supplying and fixing following way, single pole and neutral,prewired, sheet steel, MCB distribution board, 240 volts, on surface/recess, complete with tinned copper busbar, neutral busbar, earth bar, din bar, interconnections Powder painted including earthing complete etc. as required. (But without MCB/RCCB/isolator)				
4.1	DSR 2.3.2	8 way, Double door	Nos.	4	1,760.00	7,040
6	DSR 2.23	Supplying and fixing Cable End Box (Loose Wire Box) suitable for following single pole and neutral, sheet steel, MCB distribution board, 240 Volts, on surface/ recess, complete with testing and commissioning etc as required				
5.1	2.23.2	For 8 way, Double door SPN MCBDB	Each	4	731.00	2,924



6	DSR 2.24	Supplying and fixing Cable End Box (Loose Wire Box) suitable for following triple pole and neutral, sheet steel, MCB distribution board, 415 Volts, on surface/ recess, complete with testing and commissioning etc. as required.				
6.1	2.24.2	For 6 way, Double door TPN MCBDB	Each	12	1,062.00	12,744
6.2	2.24.3	For 8 way, Double door TPN MCBDB	Each	10	1,239.00	12,390
7	DSR 2.25	Supplying and fixing Cable End Box (Loose Wire Box) suitable for triple pole and neutral, sheet steel, Vertical MCB distribution board, 415 Volts, on surface/ recess, complete with testing and commissioning etc. as required.	Each	5	764.00	3,820
8	DSR 2.13	S/F TP MCB isolator: Supplying and fixing following rating, FP, 415 volts, isolator in the existing MCB DB complete with connections, testing and commissioning etc. as required.				
8.1	2.13.1	40 amps	Each	24	832.00	19,968
8.2	2.13.2	63 amps	Each	20	839.00	16,780
9		Supplying and fixing following rating, double pole, (single phase and neutral), 240 volts, residual current circuit breaker (RCCB), having a sensitivity current upto 300 milliamperes in the existing MCB DB complete with connections, testing and commissioning etc. as required. (4.14)				
9.1	DSR 2.14.2	40 amps	Each	40	2,095.00	83,800
9.2	DSR 2.14.3	63 amps	Each	30	2,640.00	79,200
10		Supplying and fixing 5 amps to 32 amps rating, 240 volts, 'C' series, miniature circuit breaker suitable for inductive load of following poles in the existing MCB DB complete with connections, testing and commissioning etc. as required.				
10.1	DSR 2.10.1	Single pole	Nos.	303	199.00	60,297
11	DSR 2.2	Providing and fixing following rating and breaking capacity and pole MCCB with thermomagnetic release and terminal spreaders in existing cubicle panel board including drilling holes in cubicle panel, making connections, etc. as required				
11.1	2.2.2	125 A, 16 KA,TPMCCB	Each	2	4,145.00	8,290
11.2	2.2.6	250 A, 25 KA,TPMCCB	Each	1	12,917.00	12,917
12		Supplying and fixing following rating, four pole, (three phase and neutral), 415 volts, residual current circuit breaker (RCCB), having a sensitivity current 30 mA in the existing MCB DB complete with connections, testing and commissioning etc. as required.				
12.1	DSR 2.15.2	40 amps	Each	4	2,626.00	10,504
12.2	DSR 2.15.3	63 amps	Each	3	2,777.00	8,331
13	DSR 2.18	Supplying and fixing 20 A, 240 V, SPN Industrial type socket outlet, with 2 pole and earth, metal enclosed plug top alongwith 20 A, "C" curve, SP, MCB, in sheet steel enclosure, on surface or in recess, with chained metal cover for the socket out let and complete with connections, testing and commissioning etc. as required	Nos.	35	1,232.00	43,120
14	DSR 2.20	Supplying and fixing 30 A, 415 V, TPN Industrial type socket outlet, with 4 pole and earth, metal enclosed plug top alongwith 30 A "C" curve, TPMCB, in sheet steel enclosure, on surface or in recess, with chained metal cover for the socket out let and complete with connections, testing and commissioning etc. as required.	Each	3	3,048.00	9,144
15	DSR 2.11	Supplying and fixing single pole blanking plate in the existing MCB DB complete etc. as required.	Each	75	8.00	600
TOTAL SUB HEAD - B						5,31,335.00
C		LIGHT FIXTURES AND FANS				
		Supply of following fittings/ luminaires/ ceiling fans complete with necessary starter/s & copper wound/ electronic ballasts, capacitors, lamps, louvers & all other accessories, down rods of suitable length, connections with 1.5 sq.mm. PVC insulated FR, copper conductor, single core cable including loop earthing with 1.5 sq mm FR PVC insulated copper conductor, single core cable etc. complete as required.				
1	NDSR-1	11w LED Bulkhead Luminaire housing made of aluminium Die cast white powder coated with Opal PMMA Dome, Powder coated wire guard, High efficiency, long life LEDs, Dome with silicon gasket for IP65 Protection, Complete assembly with LED, Driver and accessories pre wired up to terminal block, IP65 - Dust, water and insect proof Similar. Make Philips /Havells /Bajaj	Nos.	62	2,439.00	1,51,218
2	NDSR-2	MIRROR Light Supply of LED Batton in 10w, 750 lm, 1ft Extruded aluminium housing fitted with engg. Plastic end plates. Easy fit profiles acrylic diffuser provides smooth light distribution. LED populated on PCB comprising of White / Warm White / Neutral White LED's connected in series parallel. Driver: constant current output driver, operating range 150 - 275V AC supply voltages. . Make Trilux/ Philips /	Nos.	18	854.00	15,372
3	NDSR-3	Supply of parking Light LED Batton in 18/20w, 1400 lm, 4ft Extruded aluminium housing fitted with engg. Plastic end plates. Easy fit profiles acrylic diffuser provides smooth light distribution. LED populated on PCB comprising of White / Warm White / Neutral White LED's connected in series parallel. Driver: constant current output driver, operating range 150 - 275V AC supply voltages. Very user-friendly and maintenance friendly. make Trilux/ Philips	Nos.	285	1,463.00	4,16,955
4	NDSR-4	Supply, Installation, Testing & commissioning of Recessed LED luminaire with translucent PMMA cover. For system ceilings with exposed grids. Version M73, system dimension 600 x 600 mm. Cover of translucent PMMA. With wide light intensity distribution. Luminaire luminous flux 3400 lm, connected load 34 W, luminous efficiency of luminaire 100lm/w, light colour neutral white, colour temperature 4000k, colour rendering index Ra more than 80 specific parameter for temp (ta) 25 degree c ser life 35000 op hours Aluminium luminaire body white coated safety class II ,rating IP 30,make Philips/Havells/Bajaj (a) supplying & fixing	Nos.	197	5,000.00	9,85,000
5	NDSR-5	Supply, Installation, Testing & commissioning of recessed downlighter LED luminaire.(12 Watt) White powder coated die-cast aluminium housing. High power White (WH) LED chips mounted on MCPCB, pasted on diecast housing and high efficiency PMMA diffuser. Specially designed flat opal diffuser fixed to housing with engg. Plastic front cover, Driver installed on cast aluminium housing and prewired upto the terminal block. The system level lifetime is around 50,000 burning hours with 70% percent lumen maintenance. Make Philips /Havells /Bajaj	Nos.	133	2,500.00	3,32,500
6	NDSR-6	Installation, testing and commissioning of pre-wired, LED fittings/compact fluorescent fitting of all types complete with all accessories and tube etc. directly on ceiling/wall, including connection with 1.5 sq mm FR PVC insulated, copper conductor, single core cable and earthing etc as required	Each	365	91.00	33,215



7	NDSR-7	Supplying, storing, assembling, installation, testing & commissioning of ceiling fan 1200 MM/wall fan 600MM including stepped type electronic fan regulator on the existing modular plate switch box including connections but excluding modular plate etc. as required.	Each	50	2,634.00	1,31,700
8	NDSR-8	Supplying, storing, assembling, installation, testing & commissioning of Exhaust fan complete with louver and with 3 core flexible wire as required upto socket/ ceiling boxes as required, complete with cutting of wall, grouling of fan and making good of the wall.	Each	18	3,909.00	70,362
TOTAL SUB HEAD - C						21,36,322.00
D FIRE ALARM AND PUBLIC ADDRESS SYSTEM						
1	NDSR-9	SITC of Heat cum smoke detectors (combined type multi sensor detector) with linking light LED and base. Make - Agni/Suraksha/Honeywell/siemens/daksh Electronic or any other reputed make.	Nos	169	2,200.00	3,71,800
2	NDSR-10	Break Glass unit- Make - Agni/Suraksha/Honeywell/siemens/daksh Electronic or any other reputed make.	Nos	13	1,737.50	22,588
3	NDSR-11	SITC of response indicator constructed from 16 gauge MS stove /ABS Plastic enamelled sheet 16 gauge steel cover plates/ABS plastic complete as required. Make - Agni/Suraksha/Honeywell/siemens/daksh Electronic or any other reputed make.	Nos	57	187.50	10,688
4	NDSR-12	SITC of strobes for visual indication as required and as approved Make - Agni/Suraksha/Honeywell/siemens/daksh Electronic or any other reputed make.	Nos	15	3,575.00	53,625
5	NDSR-13	SITC of Hooter cum speaker with philps make 4 watt speaker and line matching tranformer or piezo soulder of minimum 100 Db at 10M distance as under	Nos	15	5,962.50	89,438
6		hooter cum speaker	Nos	15	5,962.50	89,438
7	NDSR-14	Supplying, erection, testing and commissioning of FR unarmoured twisted pair FR copper conductor flexible cable with terminations etc. as required 2 x 1.5 sq.mm	Mtrs.	1,352	110.00	1,48,720
8	NDSR-15	Supply and Installation of portable Fire Extinguishers,9 Litre Capacity of water CO2 Type IS marked wit discharge tube including clamp etc	Nos	10	2,150.00	21,500
9	NDSR-16	Supply and Installation of portable Fire ExtinguishersCarbon dioxide extinguishers cofirming to relevent IS with high pressure discharge tube,horn control valves IS marked including Clamp etc (4.5 Kg Capacity extinguisher)	Nos	10	6,125.00	61,250
TOTAL SUB HEAD - D						7,79,607.50
E CABLES						
1	NDSR-17	Supply and laying of following sizes of PVC sheathed LT XLPE armoured, aluminium/copper 1.1KV grade, as required of the following sizes.				
a	NDSR-18	3-1/2 x 185 Sq.mm. AL(supply)	Mtr	250	925.00	2,31,250
b	NDSR-19	3-1/2 x 95 Sq.mm. AL	Mtr	250	670.00	1,67,500
c	NDSR-20	3-1/2 x 50 Sq.mm. AL	Mtr	50	400.00	20,000
d	NDSR-21	4 x 25 Sq.mm. AL	Mtr	150	270.00	40,500
e	NDSR-22	4 x 16 Sq.mm. AL	Mtr	250	205.00	51,250
f	NDSR-23	2 x 6 Sq.mm. Copper	Mtr	150	250.00	37,500
2	NDSR-24	Supplying and making end termination with brass compression gland and aluminium lugs for following size of PVC insulated and PVC sheathed / XLPE aluminium conductor cable of 1.1 KV grade as required				
a	NDSR-25	3-1/2 x 185 Sq.mm. AL	Nos	8	1,437.50	11,500
b	NDSR-26	3-1/2 x 95 Sq.mm. AL	Nos	10	466.00	4,660
c	NDSR-27	3-1/2 x 50 Sq.mm. (35 mm)	Nos	4	342.00	1,368
d	NDSR-28	4 x 25 Sq.mm. (28 MM)	Nos	18	248.00	4,464
e	NDSR-29	4 x 16 Sq.mm. (28 MM)	Nos	16	245.00	3,920
f	NDSR-30	2 x 6 Sq.mm. (19 MM)	Nos	30	160.00	4,800
3	DSR 7.3	Laying of one number PVC insulated and PVC sheathed / XLPE power cable of 1.1 kV grade of following size direct in ground including excavation, sand cushioning, protective covering and refilling the trench etc. as required.				
a	DSR 7.3.1	Upto 35 sq. mm	Mtr.	200	149.11	29,821
b	DSR 7.3.3	Above 95 sq. mm and upto 185 sq. mm	Mtr.	200	175.00	35,000
TOTAL SUB HEAD - E						6,43,533.43
F EARTHING AND EARTH CONDUCTOR						
1	DSR5.1	Earthing with GI earth pipe 4.5 meter long, 40 mm dia including accessories, and providing masonry enclosure with cover plate having locking arrangement and watering pipe etc. with charcoalcole and salt as required	Each	24	3,600.89	86,421
2	DSR5.16	Providing and fixing 8 SWG dia G.I. wire on surface or in recess for loop earthing asrequired.	Mtr	650	50.89	33,080
3	DSR5.15	Supply and fixing of following GI strip on surface or in recess for connection etc. asrequired 25 x 5 mm GI strip	Mtr.	240	183.03	44,143
TOTAL SUB HEAD - F						1,63,644.64
Total						78,66,422
TOTAL - X (excluding GST)						70,23,590.69
G NON DSR/MR Items						
1	NDSR-31	Supply of MAIN FIRE ALARM CONTROL PANEL 2 ZONE expendable up to 8 Zone microcontroller based with its own fire detection zone interface card for initiating and indicating devices and should also be networkable with other Pane lthrough RS 485 communication, power supply, Battery Charger & Battery .The panel shall have its own operating system, E-PROM for event logging system etc as required. a) Material construction - CRC sheet with powder coating. b) Display Type - Display consisting of 32 CHR backlight alphanumeric with 16 X 2 LCD Display & yellow / green / red LED for fault / isolate / fire. c) Keypad for operation and monitoring display requirement to display all types alarm condition, short, open condition with zone address & should also indicate time & date.	Nos.	1	20,944.00	20,944
LT Panel						
2	NDSR-32	Supply, installation, testing & commissioning of main incoming Distribution board floor mounted cubical type made of 2 mm CRCA sheet, modular, dust and vermin proof construction, concealed hinges, special type locks, high quality power coated in approved shade, complete suitable aluminium bus bars, internal wiring duly tested unit, with engraved name plates, schematic diagramme, ready to use comprising of the following feeders and meters.	Set	1		
Incoming 1: (Mains)						
One no.400 A 4 pole MCCB having microprocessor based releases with shunt trip/under voltage release, earth fault protection, reverse power protection with separate Protection Class CT's . Ics = Icu=36KA with ROHM					1	
3 Nos. of LED type phase indicating lamps, Digital Ammeter, Voltmeter, Power factor, Frequency meter. 6 Amp MCB and CTs.						
Incoming 2: (DG Supply)						
One no.400 A 4 pole MCCB having microprocessor based releases with shunt trip/under voltage release, earth fault protection, reverse power protection with separate Protection Class CT's . Ics = Icu=36KA with ROHM					1	
3 Nos. of LED type phase indicating lamps, Digital Ammeter, Voltmeter, Power factor, Frequency meter. 6 Amp MCB and CTs.						
1		400A,4P,Auto Transfer Switch		1		
2		500A,TPN Aluminium Busbar with derating factor of 0.68%		1		



3							
4		Out goings feeders:- Ics = Icu=25KA			1		
		2 Nos 250Amps TPN feeder each having 250A FP MCCB with isolable neutral and indication light for ON with ROHM			2		
		2 Nos 125 Amps TPN feeder each having 125A FP MCCB with isolable neutral and indication light for ON with ROHM.			2		
		Street light feeder 32 Amp FP MCB ,Out going 32A, FP Power contactor , 230V AC , auto/manual selector switch 24 hours time switch (0-24) hrs ,AUX , Supply 230 V , AC ,on,off indicating Lamp ,230VAC (LED type) ,Start ,Stop Push button(shrouded types) , 6A SPMCB C cuve 10KA ,32 A FP MCB C curve 10 KA , 2 NOS.			1		
		2 Nos 63A , FP ,MCB plus 2 nos 40A FP, MCB, Feeder for services			4		
		Complete set of panel as per required and latest relevant IEC	Set		2	4,24,528.00	8,49,056
		TOTAL SUB HEAD - G					8,70,000.00
	H	External lighting					
1	NDSR-33	Supply ,installation,testing and commissioning of outdoor 48-W LED road light IP 65 standard, model no :- Havells LHETA XU7PN6W048 or equivalent including bracket and wire for connection , GI Conduit Flexible ,40 mm bracket as required	NOS		36	7,829.00	2,81,844
2	NDSR-34	IP 65 Enclosure Box 1800 x 240 x 135 complete with din chanel and connector	NOS		36	1,665.00	59,940
3	NDSR-35	Supplying and fixing 5A to 32 Amps rating 240 volts , C series MCB suitable for inductive loads of following poles in the existing MCB DB complete with connection , testing and commissioning etc as required . SP MCB	Nos		36	249.00	8,964
4	NDSR-36	Supplying and fixing of GI B class pole 65 mm dia and 6 mtrs of hight with base plate of size 300mm x 300mm x 3 mm on base as required	each		36	4,627.00	1,66,572
5	NDSR-37	SITC of 75 mm Dia HDPE pipe conforming to PN-4 boring of road channel area by using open trench method and laying of HDPE pipe properly continuously jointed restoring the surface where pitting is done ,to original position.	Mtr		75	289.28	21,696
6	NDSR-38	SITC of post-top Large lantern LED for entry gate equivalent to 40 W , Make :-Havells code:-LHEVBHP7PN6K040 .	Nos		4	8,855.00	35,420
		TOTAL SUB HEAD - H					5,74,436.00
		TOTAL - Y					14,44,436
		Total Amount Excluding GST (X+Y)					84,68,026.69
		Quoted Rate @ 21.00% below					17,78,285.60
		Net Payment for Schedule-C (excluding GST)					66,89,741.08



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SCHEDULE-D

Name of Work: Construction of buildings/ structures for CPRI, SVPDAT & IIFSR in Meerut for implementation of Delhi - Meerut RRTS Corridor

(Air Conditioning System)

S.N	DESCRIPTION	UNIT	QTY.	RATE (INR)	AMOUNT (INR)
Equipment for VRV System - Part I (Supply)					
1.(A)	Outdoor Heat Pump (R410A)				
i)	16HP	Nos.	2	3,64,230.00	7,28,460
ii)	36HP	Nos.	2	8,00,100.00	16,00,200
iii)	40HP	Nos.	2	8,81,820.00	17,63,640
iv)	44HP	Nos.	2	10,04,670.00	20,09,340
1.(B)	DUCTABLE TYPE INDOOR UNIT				
i)	1.2 Tr Ductable Type	Nos.	3	39,150.00	1,17,450
ii)	1.6 Tr Ductable Type	Nos.	2	40,770.00	81,540
iii)	2.0 Tr Ductable Type	Nos.	6	43,020.00	2,58,120
iv)	2.6 Tr Ductable Type	Nos.	10	50,850.00	5,08,500
v)	3.2 Tr Ductable Type	Nos.	10	54,270.00	5,42,700
vi)	4.0 Tr Ductable Type	Nos.	11	57,510.00	6,32,610
vii)	4.5 Tr Ductable Type	Nos.	6	69,750.00	4,18,500
viii)	5.5 Tr Ductable Type	Nos.	2	97,110.00	1,94,220
1.(C)	HI-WALL TYPE INDOOR UNIT				
i)	1.0 TR HI-WALL TYPE	Nos.	2	35,820.00	71,640
ii)	1.2 TR HI-WALL TYPE	Nos.	1	39,150.00	39,150
iii)	1.6 TR HI-WALL TYPE	Nos.	19	40,770.00	7,74,630
iv)	2.0 TR HI-WALL TYPE	Nos.	18	43,020.00	7,74,360
2	TFA UNIT (4.0) TR UNIT	Nos.	3	1,18,440.00	3,55,320
3	Y-JOINTS	NOS.	85	5,913.00	5,02,605
4	CORDED REMOTES	Nos.	93	4,698.00	4,36,914
5	CENTRAL CONTROLLER	NOS.	2	33,858.00	67,716
6	OUTDOOR CONNECTION KIT	NOS.	5	9,882.00	49,410
Total Amount Without GST (Part - I)					1,19,27,025

Installation of VRV airconditioning system - Part II

Variable Refrigerant FLOW System					
1	Lifting, Shifting, Installation, Testing and Commissioning of Outdoor Units Equipped with Highly efficient Multiple scroll Compressors with Variable and fixed speed in each outdoor unit with noise level not exceeding 68db(A), etc. with Nitrogen Reprocessing and vacuumising.				
i)	16HP	Nos.	2	18,000.00	36,000
ii)	36HP	Nos.	2	34,000.00	68,000
iii)	40HP	Nos.	2	34,000.00	68,000
iv)	44HP	Nos.	2	40,000.00	80,000
v)	Commission of VRV systems including topping R410A gas per site requirements	Nos.	8	31,000.00	2,48,000
INDOOR UNITS					
2	Lifting, Shifting, Supply, Installation, Testing and Commissioning of Indoor Units with outer cabinet equipped with pre air-filters, multispeed Inverter Motor, DX Coil Section, Drain Pan, electronic expansion valves, pipe connections, PCBs etc.				
A DUCTABLE TYPE INDOOR UNIT					
i)	1.2 Tr Ductable Type	Nos.	3	1,500.00	4,500
ii)	1.6 Tr Ductable Type	Nos.	2	2,200.00	4,400
iii)	2.0 Tr Ductable Type	Nos.	6	2,500.00	15,000
iv)	2.6 Tr Ductable Type	Nos.	10	3,000.00	30,000
v)	3.2 Tr Ductable Type	Nos.	10	3,500.00	35,000
vi)	4.0 Tr Ductable Type	Nos.	11	4,500.00	49,500
vii)	4.5 Tr Ductable Type	Nos.	6	4,500.00	27,000
viii)	5.5 Tr Ductable Type	Nos.	2	5,000.00	10,000
B HI-WALL TYPE INDOOR UNIT					
i)	1.0 Tr HI-Wall Type	Nos.	2	1,500.00	3,000
ii)	1.2 Tr HI-Wall Type	Nos.	1	1,500.00	1,500
iii)	1.6 Tr HI-Wall Type	Nos.	19	2,200.00	41,800
iv)	2.0 Tr HI-Wall Type	Nos.	18	2,500.00	45,000
C TFA UNIT					
i)	4.0 Tr TFA Unit	Nos.	3	4,500.00	13,500
3	Installation of Controllers				
i)	Corded Remotes	Nos.	93	450.00	41,850
4	Lifting, Shifting, Installation, testing & commissioning of Interconnecting "Y" Joints i.e. Refnet Joints/Header with Insulation for Distribution of Refrigerant in Refrigerant Pipe Network	Nos.	85	550.00	46,750
5	Supply, Installation, Testing and Commissioning of refrigerant piping, tees, sockets, expanders and reducers as per requirement at site complete with supports, threaded rods, channel, tie, fastners etc. interconnecting the outdoor condensing units and indoor evaporating units with closed cell elastomeric nitrile rubber tubular insulation of 19mm on gas pipe line and 13mm on liquid pipe line. (Quantities Quoted here are only for estimation purpose on tentative basis and However they are to be Charged as per actual measurement at site on Rmt basis as applicable)				



i)	41.3 mm (1.43mm- Half Hard Pipe with 19mm Insulation)	Rmt	132	1,810.00	2,38,920
ii)	34.9 mm (1.21mm- Half Hard Pipe with 19mm Insulation)	Rmt	106	1,710.00	1,81,260
iii)	28.6 mm (0.99mm- Half Hard Pipe with 19mm Insulation)	Rmt	235	1,395.00	3,27,825
iv)	22.2 mm (0.8mm- Half Hard Pipe with 19mm Insulation)	Rmt	133	1,170.00	1,55,610
v)	19.1 mm (0.8mm- Half Hard Pipe with 13mm/19mm Insulation)	Rmt	233	990.00	2,30,670
vi)	15.9 mm (1.0mm- Soft Pipe with 13mm/19mm Insulation)	Rmt	600	920.00	5,52,000
vii)	12.7 mm (0.8mm- Soft Pipe with 13mm/19mm Insulation)	Rmt	275	860.00	2,36,500
viii)	9.5 mm (0.8mm- Soft Pipe with 13mm Insulation)	Rmt	675	680.00	4,59,000
ix)	6.4 mm (0.8mm- Soft Pipe with 13mm Insulation)	Rmt	255	560.00	1,42,800
6	Supply, Installation, Testing and Commissioning of G.I. perforated cable trays with covers for exposed refrigerant pipes and cables horizontally and vertically along with threaded rod, nut, bolt, saddle, tie etc. (Quantities Quoted here are only for estimation purpose on tentative basis and However they are to be Charged as per actual measurement at site on Rmt basis as applicable)				
i)	150mm	Rmt	100	450.00	45,000
ii)	300mm	Rmt	80	750.00	60,000
7	Supply, Installation, Testing and Commissioning of 2 core x 1.0 sq.mm copper conductor shielded communication cable as per requirement at site complete with supports, threaded rods, channel, tie, fastners etc. for control between indoor and outdoor unit & for communication between Indoor Unit & Remote Controllers in suitable PVC Conduit (Quantities Quoted here are only for estimation purpose on tentative basis and However they are to be Charged as per actual measurement at site on Rmt basis as applicable)	Rmt	2600	195.00	5,07,000
8	Controller Wiring				
i)	Providing & fixing control wiring of 3C core 1.0sqmm copper conductor/cable between indoor units and their wired remote.	Rmt	230	195.00	44,850
9	Supply, Installation, Testing and Commissioning of Hard u-PVC condensate drain piping with 6 or 9 mm thick closed cell elastomeric nitrile rubber tubular insulation up to the nearest drain point along with necessary fittings. (Quantities Quoted here are only for estimation purpose on tentative basis and However they are to be Charged as per actual measurement at site on Rmt basis as applicable)				
i)	40 mm	Rmt	90	300.00	27,000
ii)	32 mm	Rmt	150	170.00	25,500
iii)	25 mm	Rmt	160	135.00	21,600
10	MS Stand Duly Painted with VI Pad for VRV Outdoor Unit	Nos.	16	6,100.00	97,600
i)	Supply fabrication installation testing				
11	Supply, Installation, Testing and Commissioning of Un-Insulated Square/ Rectangular sheet metal ducts as per requirement at site complete with threaded rods, channel, tie, fastners, brackets/slotted "C" channel for supply air ducting as per the approved shop drawings.(Quantities Quoted here are only for estimation purpose on tentative basis and However they are to be Charged as per actual measurement at site on Sq.mt. basis as applicable)				
i)	24 Gauge	Sq.mt.	630	790.00	4,97,700
12	Supply, Installation, Testing and Commissioning of Closed cell cross linked polymers XLPE insulation sheet over the duct (one layer externally on the duct).(Quantities Quoted here are only for estimation purpose on tentative basis and However they are to be Charged as per actual measurement at site on Sq.mt. basis as applicable)				
i)	9 mm	Sq.mt.	690	350.00	2,41,500
13	Accosutic Insulation for Sound attenuation inside ducts with 10 mm Elastomeric Nitrile insulation	Sq.mt.	40	495.00	19,800
14	Supply, Installation, Testing and Commissioning of extruded aluminum powder coated supply air grills/difusers with dampers and return air grills/difusers without dampers. (Quantities Quoted here are only for estimation purpose on tentative basis and However they are to be Charged as per actual measurement at site on Sq.mt. basis as applicable)				
i)	Supply/Return Air Grills/Difusers without Volume Control Dampers	Sq.mt.	35	5,950.00	2,08,250
15	Supply & Installation charges of Accessories Fire Retardent Canvas Connection & Filters as required for Duct Type Indoor Units.				
i)	Canvas Connection	Nos.	53	2,000.00	1,06,000
Total Amount Excluding GST (Part - II)					52,95,185
Total Amount Excluding GST (Part - I & II)					1,72,22,210.00
Quoted Rate @ 21.00% below					36,16,664.10
Net Payment for Schedule D (excluding GST)					1,36,05,545.90



Schedule-E

Name of Work: Construction of buildings/ structures for CPRI, SVPUAT & IIFSR in Meerut for implementation of Delhi - Meerut RRTS Corridor					
Sr No	Description	Unit	Qty	Rate (in INR)	Amount (in INR)
1	Providing ,Fixing Testing & Commissioning Main Fire Pump 900 LPM 35 MTR 2900 RPM (Make -Kirloskar or equivalent)	No	2	88,690.61	1,77,381
2	Providing ,Fixing Testing & Commissioning Main/Jockey Fire Pump 180 LPM 35 MTR 2900 RPM (Make -Kirloskar or equivalent)	No	2	66,646.13	1,33,292
3	SITC of Fire Main Panel for starting (Auto & Manually) of above Sr No 1 & 2 Fire pumps with complete switchgear Ameter, Voltmeter etc of reputed make.	No	2	68,696.78	1,37,394
4	Supply and Fixing of of pressure swich in ms pipe line including connection etc required.	No	4	4,511.43	18,046
5	Supply and Fixing of of pressure Gauge in ms pipe line including connection etc required.	No	4	1,589.25	6,357
6	SITC of interal hydrant all compete as requiredas approved with fillwing accessories of reputed make.	No	4	31,685.82	1,26,743
6.1	Internal hydrants/ landing valves IS marked (SS)				
6.2	First aid hose reel 25 mm dia 45 M long thermoplastic as per IS rubber hose, ball valve Piping 7-8 mm nozzle as required.				
6.3	38 mm Synthetic hoses with 63 mm hose as per IS marked 15MX2 length & suitable for connecting the hose pipe with complete as required.				
6.4	Branch pipe & nozzle IS marked				
6.5	Pressure Gauge with stop cock				
7	Hose Cabinet as per site universal locking arrangement,Glazzed with 5.5 mm clear powder coated ,Aluminium shutter door as appropriate for universal lock arrangement having size 1500x 1200 in 2 mm thick stove enamell MS sheet	No	4	8,636.17	34,545
8	S/F of SS hose cabinet of size 900x600x 400 mm made of 2mm thick 6 mm glazzed glass doors including necessary locking arrangement with suitable external hydrant with 2 No 63 mm dia synthetic hose pipe 15 m long 1 No. Branch pipe ss with 4 nos MS angle (40x40x8) support grouted in floor and duly coated post office red external and white internal paint complete as approved.	No	4	22,739.93	90,960
9	Supply Fabrication & laying of heavy duty MS Pipe dia 100 mm pipe with proper support on ms frame painted of reputed make.	Mtr	50	1,072.08	53,604
10	Supply Fabrication & laying of heavy duty MS dia 80 mm pipe with proper support on ms frame painted of reputed make.	Mtr	80	738.54	59,083
11	Supply & Fixing of 100 mm nominal bore butter fly valve of reputed make.	No	4	4,824.34	19,297
12	Supply & Fixing of 80 mm nominal bore butter fly valve of reputed make.	No	4	3,907.12	15,628
13	S/F of 100/80 mm nominal bore Non return fly valve of reputed make.	No	4	6,253.78	25,015
14	Providing & Fixing of 2 way Fire Brigade connection of reputed make.	No	2	13,739.36	27,479
15	Excavation as per general profile in backfilling of all kind of soils.	Cub.m	10	393.09	3,931
16	Providing & Fixing of Y Strainer of 100 mm dia of reputed make.	No	4	12,919.10	51,676
Total Amount (Excluding GST)					9,80,431.62
Quoted Rate @ 21.00% below					2,05,890.64
Net Payment for Schedule-E (excluding GST)					7,74,540.98

