

PREAMBLE TO BILL OF QUANTITIES

1. The bill of quantities is to be read, for the purpose of pricing, in conjunction with the Technical Specifications and Drawings.
2. No change in unit rate shall be allowed for any change in quantity or for any other reason whatsoever.
3. Rates quoted shall be inclusive of all materials, labour, tools & tackles, power, water, taxes, duties, conveyance and all expenses, including all safety gadgets, adherence of safety etc., unless specified otherwise.
4. The prices inserted in the Bill of Quantities shall be all inclusive of value of the work described including all costs and expenses which may be required in and for the construction of work described together with all general risks, liabilities and obligations set forth or implied in the document on which the Tender is to be based.
5. The quantities stated are to be considered as approximate only and the unit prices entered in the Bill of Quantities shall apply to the quantities actually executed. The quantities measured for the purpose of payment shall be limited to two decimals only
6. The Tenderer must quote his rate in specified column in the Bill of Quantities for each item of work both in words as well as in figures. **The cost of items against which the tenderer has failed to enter a rate or price shall be deemed to have been covered by other rates and prices entered in the Bill of Quantities.**
7. The total amount tendered for viz. the total obtained by adding up all the items in the Bill of Quantities must be written in words as well as in figures.
8. Unless mentioned otherwise, all finishing of concrete surfaces shall be unformed finish.
9. The Tenderer shall specify the brand of different bought out items offered by him along with the offer.
10. In case of conflicts between the different parts of this Tender, the following order of precedence shall govern.
 - (1) Agreement
 - (2) Letter of Acceptance, notice to proceed with the works
 - (3) Bill of quantities

- (4) Minutes of Meeting of Pretender Meeting
 - (5) Contractor's Tender
 - (6) Contract Data
 - (7) Conditions of Contract
 - (8) Specifications (including annexure)
 - (9) Drawings
 - (10) Any other document listed in the Contract Data as forming part of the Contract.
 - (11) Codes of practice
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11. The Tenderer shall affix his signature and the seal at the space provided in each page of Bill of Quantities and all pages of Tender document.
 12. The Tenderer shall furnish the makes and details of special items such as water proofing, aluminium sections, and the like along with the tender.
 13. Reinforcing steel shall be procured directly from the main suppliers of primary manufacturers such as TICO, SAIL, etc.
 14. Contractor should furnish the mix design for all grades of concrete works included in Bill of Quantities.
 15. The contractor shall make his own arrangement and include in the rates the cost to dispose off the excavated earth and debris without causing any infringements.
 16. Discrepancy observed during evaluation of rates i.e., between amount written in words and amount written in figures, least of the two will be considered as final.
 17. Irrespective of what is contained in different items of Bill of Quantities, surfaces of all steel works excluding reinforcement shall be metalized with sealer coat on top.
 18. Samples of all approved makes shall be submitted to the Engineer-in-charge and got approved well before the intended supply.
 19. Various sizes, spacing etc., indicated under various items of work in BOQ are only indicative and they are liable for minor modifications at the time of execution of work. The Contractor will not be eligible to make any claim whatsoever for incorporating such changes ordered by Engineer-in-charge.
 20. The tenderer shall indicate the basic rates of Cement, Reinforcement steel, Structural steel & Bitumen considered.
 21. The guidelines for classification of soil shall be as follows:
 - a) All kinds of soil:

Any soil which generally yields to the application of picks and shovels, phawras, rakes, jumpers or any such ordinary excavating implements / excavators or organic soil, gravel, silt, sand, turf loam, mud, clay, peat, stiff clay gravel, cobble stone etc. fall under this category.

(Note: Cobble stone is the rock fragment usually rounded or semi-rounded having maximum diameter in any one direction between 80 & 300 mm)

b) Ordinary rock:

This shall include the type of rock and boulders, which may be quarried or split with crow - bars. Laterite, hard conglomerate and amygdaloidal basalts also come under this category.

c) Hard rock:

This shall include the type of rock or boulder for which quarrying or splitting requires the use of chiseling, wedging or other suitable method where excavation is prohibited by mechanical plant or blasting.

(Note: Boulder is a rock fragment usually rounded by weathering, disintegration and exploitation or abrasion by water or ice having minimum dimension in any direction of more than 300 mm).

- 22 Concreting of all structural elements shall be done by Ready Mix Concrete using Batching Plant, transit mixer and concrete pump supplied by approved manufacturer. Rates quoted shall include the cost of admixtures, mix design & quality control tests for concrete etc.
23. 'Alternate', under amount column means the particular item could be operated during execution in place of similar item in the BOQ. The tenderer shall quote his rate for this item and no amount shall be entered in the amount column.
- 24 The tenderers who submitted their offers shall be deemed to have acquainted themselves of site conditions such as current water table level up to which the ground water table will rise during monsoon, soil conditions, soil parameters, the existing utilities and other site constraints, etc. The rates quoted by the tenderers against various items in the schedule of quantities shall be inclusive of the cost of continuous bailing out water to the extent required, pumping, and making enabling works to facilitate pumping/bailing and other related works.
- 25 The Successful tenderer, on the approval of the Engineer-in-charge shall dismantle the existing structure, which comes within the site premises and cart away and disposing the debris from the work spot to such a place where the same shall not cause any nuisance and shall be acceptable to the authorities concerned. The Successful tenderer shall exercise all diligence and care during the dismantling operations and shall get the dismantling scheme approved by the Engineer-in-charge before commencement of the work.

- 26 The successful tenderer shall keep the excavated surfaces absolutely dry during the process of concreting and laying reinforcement bars. The surfaces shall continue to be kept dry till permitted by the Engineer-In-Charge. The water shall not be allowed to come in contact with the green concrete till the final setting time of the concrete is over. The rate quoted by the tenderer for the works shall be inclusive of shoring, strutting by sheet piling or any approved method as approved by the Engineer – in – Charge.
- 27 The tenderers shall also note that the rates quoted shall also be inclusive of the cost of protective works necessary to protect water supply lines, sewage lines, power and communication lines and adjoining structures wherever required.
- 28 The successful tenderer shall make all precautionary measures to ensure the safety and stability of the already constructed structural elements and the cost involved for such items of work shall be deemed to be incidental.
- 29 If the existing roads used by the successful tenderer for the purpose of construction, the same shall be maintained under motorable conditions during entire contract period at his own cost as directed by Engineer – in – Charge.
- 30 The successful tenderer shall be responsible to handover the surrounding areas disturbed during construction in original condition and make good / rebuild / repair the structures wherever they are disturbed. The decision of the Engineer-in-Charge shall be final as to what is considered as disturbed during construction.
- 31 Unless specified otherwise all measurements shall be taken in accordance with Indian standard Method of Measurements of Building and Civil Engineering Works - IS: 1200.
- 32 The installation price of switchboards, metering panels, DB's or any other items shall include supply and fixing of supporting steel structures/MS channels, grouting of the same, civil works etc. as required.
- 33 Any error in description or in quantity or omission of items from the contract shall not vitiate this contract but shall be corrected and deemed to be a variation required by the architects/BDA.
- 34 The Liaison Service charges shall include the following:
- i) Any Electricity Board, starting from getting approval of the drawing, upto servicing the installation and getting the safety certificate.
 - ii) Preparation of detailed drawings required by the Electrical Inspectorate.

- iii) Obtaining approval of drawings and installation, including carrying out modifications insisted by the Statutory Authorities
 - iv) Renewal of any temporary power supply connection during construction/ securing additional temporary power.
 - v) All incidental charges/expenses associated with the above work.
 - vi) High voltage testing by voltage Boosters, Relay calibration by secondary injection and meter calibration, Pre-Commission and De-commissioning test will have to be carried out at site.
- 35 Written approval shall be taken from the BDA, in case of using the material other than list of approved makes.
- 36 In case of additional temporary power required to execute the work in time, same shall be organized by the contractor in case of power cut by EB during the execution of work.
- 37 The contractor should provide all the required lighting samples to site to make trails and may have to be fixed for approval.
- 38 Guarantee period: - The guarantee period for LED luminaries shall be for period of 5 years & the security deposit corresponding to 5% of the LED luminaries cost will be refunded on expiry of 5 years guarantee period after successful completion & handing over of the entire work and the standard LED drivers has protection CKT if voltage goes above 300v ac , Driver will switch OFF Luminaries and voltage comes at normal rated voltage automatically it will switch ON the luminaries.
- 39 Contractor's risks
- a. All risks of loss or damage to physical property and of personal injury and death which arises during and in consequence of the performance of the contract other than the excepted risks are the responsibility of the Contractor.
- 40 Approval by the employer
- a. The Contractor shall submit Specification and Electrical drawings showing the proposed Temporary Works to the employer, who is to approve them if they comply with the Specifications and Drawings.
 - b. The Contractor shall be responsible for the design of Temporary Electrical Works.
 - c. All electrical drawings prepared by the Contractor for the execution of the temporary or permanent Works, are subjected to prior approval by Employer before their use.
- 41 Safety
- a. The Contractors shall be responsible for the safety of all activities on the site as per KPTCL./BESCOM/Electrical Inspectorate's safety manual.
- 42 Uncorrected defects
- a. If the Contractor has not corrected Electrical equipments Defect within the time specified in the Employer's notice, the Employer will assess the cost of having the Defect corrected, and the Contractor will pay this amount.
- 43 ADDITIONAL CONDITIONS OF CONTRACT

43.1 The specifications of the materials not covered in this document but to be used:

- a. Shall confirm to the current specification adopted by KPTCL/BESCOM and relevant BIS.
 - b. For such of the materials for which KPTCL/BESCOM have not finalized the specifications OR is not available the specifications for such materials shall confirm to latest relevant BIS specifications read with amendments, if any.
 - c. For any such materials, if bidder is not able to obtain the specifications from KPTCL/BESCOM, the same will be furnished by BDA on specific request by the bidder within a reasonable time.
- 44 Test on equipments / materials wherever insisted by BDA shall be conducted in CPRI in the presence of BDA and test certificate to be issued by NABL/CPRI and other govt. certified agency. The contractor should arrange for such tests and intimate BDA in 15 days advance. The unit to be tested will be selected by BDA. Materilas will be accepted/ cleared for installation only after inspection and submission of validity certificate by the contractor. All costs towards the above tests shall be borne by the Contractor.
- 45 Makes: The makes of the material shall be as follows:
- 66 KV UG cable : LS cable, Universal-unistar cable,KEI cable,KEC(RPG) cable.
11 KV 3 core U G Cable flat armoured dry-cured: Unistar, Universal, NICCON, CCI.
RMU'S: M E I, ABB. Sneider.
LT UG cable : SBEE, Unistar,Havells.
Insulated wires: PVC insulated copper wires of makes Finolex, polycab, SBEE, Anchor
LT & HT Insulators: BHEL, Jayashree.
Aerial Bunched Cables: XLPE insulated cable of the makes Unistar, CCI, Nicco, SBEE.
- 46 The Contractor shall strictly follow Line-clear procedures of KPTCL/BESCOM while executing the work and all safety precautions shall be followed strictly. Contractor shall be solely responsible for accidents of any kind to their staff or the general public and loss of public property during execution of works.
- 47 Statutory payment to KPTCL/ BESCOM / Electrical Inspectorate / BBMP etc., will be made by BDA. On the site and shall observe all the precautionary and safety measures throughout the execution of the work.
- 48 The contractor shall engage only qualified Engineer/ staff as per the requirement of IE Rules, Electrical Inspectorate, Labour Commissioner and the workers shall be provided with all safety equipments / tools throughout the execution of work.
- 49 BDA will not be responsible for any unforeseen incidents, mishaps, loss to any public property and accidents to the personnel engaged by the contractor and the general public during execution of work.
- 50 Any dispute between the contractor and the staff/workers employed by the contractor shall amicably be settled s per the prevailing labour laws. BDA will not be responsible to intervene in the dispute. BDA reserves the right to terminate the contractor due to any dispute between the contractor and the staff employed by the agency as per the terms of the contract.
- 51 All released materials pertaining to KPTCL/BESCOM/BBMP shall be returned to to respective authorities/stores.

52 Further LED luminaries shall conform to following Indian standards on LED.

- 16101 : 2012 : General Lighting – LEDs and LED modules – terms and Definitions
- 16102(part 1) : 2012 : Self- Ballasted LED- Lamps for general Lighting Services
Part 1 safety Requirements
- 16102(part 2) : 2012 : Self- Ballasted LED- Lamps for general Lighting Services
Part 2 safety Requirements
- 16103(part 1) : 2012 : LEC Modules for general Lighting- Safety Requirements
- 15885(part 2/ Sec 13) : 2012 Lamp Control Gear part 2 particular Requirements sections
13 d.c or a.c Supplied Electronic Control gear for Led Modules.
- 16104 : 2012 : D.C or A.C. Supplied Electronic Control gear for LED
Modules – Performance Requirements
- 16105 : 2012 : Method of Measurements of Lumen Maintenance of Solid – State
Light (LED) Sources
- 16106 : 2012 : Method of Electrical and photometric Measurements of Solid –State
Light (LED) products
- 16108 : 2012 : Photo biological Safety of Lamps and Lamp Systems