



**Amaravati Development Corporation Ltd**  
**VIJAYAWADA-520003**

**BID DOCUMENT**



**Amaravati Development Corporation Ltd**

**VIJAYAWADA-520003**

**BID DOCUMENT**

**NIT No: - CE/ADC/2018-19, Dated: - 07-2018**

**VOLUME-I**

**NAME OF WORK:**

**“Soil Investigation for safe bearing capacity for Structural design to Major Arterial Roads in Amaravati Capital City”**

NAME AND ADDRESS OF THE CONTRACTOR WHO DOWN LOADED THE BID DOCUMENTS.

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TENDERER/CONTRACTOR

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**NOTICE INVITING TENDER  
(NIT)**

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# Amaravati Development Corporation Ltd

VIJAYAWADA-520003

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## NOTICE INVITING TENDERS (NIT)

**NIT NO: 18/2018-19, Dated:18-07-2018**

**Tenders for the work mentioned below are invited from the Contractors / Contracting firms registered with Government of Andhra Pradesh.**

1)	Name of the work	<b>Soil Investigation for safe bearing capacity for Structural design to Major Arterial Roads in Amaravati Capital City.</b>
2)	Estimate Contract value of work put to tender	<b>Rs.17,79,400/-</b>
3)	Period of completion of work	<b>45 days</b>
4)	Form of contract / class of contractor eligible	Empaneled Geo Technical Consultants of APCRDA
5)	E.M.D	<b>Rs. 17,794/-</b> By of D.D in favour of the Chairperson & Managing Director, ADCL, Vijayawada
6)	Date and time for Issue of tenders documents	<b>20-07-2018 3.00 P.M</b>
7)	Last date and time for submission of Tenders @ the O/o CMD, ADCL, Vijayawada.	<b>27-07-2018 up to 3.00 P.M.</b>
8)	Date and time of opening of tenders	<b>27-07-2018 3.30 P.M.</b>
	Price Bid opening date	<b>Will be intimated later</b>
	All Communications about this bid must be made	: To The Chairperson and Managing Director, Amaravati Development Corporation, Anand heights, Near Prabhas College, Kedareswarapet, Vijayawada, Krishna District- 520003. Andhra Pradesh (India)

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1. Tender submission by Conventional method in two covers Technical & Price bid personally or by courier at the address mentioned in NIT.
2. a) The bidders need to contact the Sri. M.V.Suryanarayana, Superintending Engineer, A.D.C Limited, Vijayawada, Mobile Number: 7095599774. Email: narasimhamurthyb.adc@ap.gov.in Web:www.ccdmc.co.in for information on work.  
b) The bidders should be Empaneled Geo Technical Consultants of APCRDA.  
c) The tenderer shall submit the original D.D towards EMD.  
  
(i) Should possess the Key Technical personnel as shown in the Tender documents. The names along with the certificates showing their academical qualifications.
3. The tenders will be opened by the CE, ADCL, Vijayawada or his nominee at his office in the presence of tenderers / or their authorized representatives, on the date mentioned above.
4. The price-bids of those tenderers, who are determined to have complied with the eligibility criteria, will only be opened. Bidders are requested to submit unconditional bids only. Conditional bids are liable to be rejected summarily
5. If the office happens to be closed on the dates specified above, the respective activity will be performed at the designated time on the next working day without any notification.
6. Any other details can be had from the Office of the SE, ADCL, Vijayawada

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# INSTRUCTIONS TO TENDERERS

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## **INSTRUCTIONS TO TENDERERS**

### **A – GENERAL**

Name of work: **“Soil Investigation for safe bearing capacity for Structural design to Major Arterial Roads in Amaravati Capital City.”**

#### **1. Scope of Work:**

The Government of Andhra Pradesh has envisaged development of a world class people’s capital which is located in between the cities of Vijayawada and Guntur in an extent of about 8,420 Sq.km.

It is proposed to construct Government Complex comprises of buildings of Secretariat, Legislative Assembly, Legislative Council, Raj Bhavan and High Court in an extent of 960 acres, which necessitated the AP CRDA to explore the characteristics of the sub-soil strata in the proposed area to plan and design the structures. The work comprises the following items of work.

- Extraction of Soil Samples by SPT in 150mm diameter size bore up to 30m or upto a depth where a rock stratum which ever met earlier.
- Profiling of sub-surface (Bore Log) detailing with different soil stratum and their variation along the alignment.
- Collection of disturbed (DS) and undisturbed (UDS) soil samples at every 1mt interval or wherever soil strata is observed to be changed.
- Recording of depth of ground water table in each borehole after 24 hrs.
- Conducting all necessary geo-technical exploration of bore-wise samples collected and have to arrive SBC duly following all applicable codes and relevant guidelines.
- Submit the plan showing bore-log data and SBC of each bore along with its coordinates.

#### **2. Location:**

The proposed area is located in Amaravati Capital City Area within the global co-ordinates as appended at the end.

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The total proposed bore holes to be explored is 41 nos . It is proposed to extract the soil sample upto a depth of 30m or upto a depth where firm rock is found.

3. The CMD, ADCL, Vijayawada invites bids for the above work during the period, for which dates and time specified in the NIT and will be opened by the CE or his nominee at his office on the date and time mentioned in the NIT.

3.1 Deleted\_.

3.2 The tenders should be in the prescribed form as per the tender document by the CMD, ADCL, Vijayawada that can be downloaded at free of cost from the website [Web:www.ccdmc.co.in](http://www.ccdmc.co.in) .

3.3 The dates stipulated in the tender notice are firm and under any circumstances, they will not be relaxed unless officially extended. The Tenderer furnish the copy empanelment of APCRDA duly self-attested for evidence of their Empanelment in APCRDA (As specified in NIT). Contractor should produce the originals of all documents for verification if asked for by the Competent Authority.

3.4 The Tender opening Authority will not consider any tender received after expiry of date and time fixed (As specified in NIT) for receipt of tenders.

3.5 Tenderers shall furnish declaration that they have not been blacklisted in any department in Andhra Pradesh. Any wrong declaration in this regard which comes to notice at a later date will disqualify them and the tenders so received will be rejected.

3.6 **Charges payable to:**

a) Deleted

a) Deleted

3.7 The successful tenderer is expected to complete the work within the time period specified in the NIT.

#### 4 **Qualification Crieteria for Technical selection of Biddder:**

4.1 The Firms who

- i) Are empaneled Geo technical consultants of APCRDA.
- ii) are not blacklisted or debarred or suspended by the Government for what ever the reason, prohibiting them not to continue in the contracting business
- iii) have complied with the eligibility criteria specified in the NIT.

4.2 Deleted.

4.3 Qualification requirements:

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To qualify for consideration of award of contract each bidder should fulfill the following certificate and documents and to be self attested and to be submitted along with the bid.

- I) Copy empanelment of APCRDA duly self-attested
- II) Original EMD in the form of crossed Demand Draft drawn in favour of CMD, ADCL, Vijayawada, issued by any Nationalised or Scheduled Commercial Bank valid for 3 Months from the date of Notice Inviting Tender.
- III) Deleted.
- IV) Copy of IT PAN card .
- V) Copy of GST registration Certificate.

4.4 Even though the tenderers meet the above qualifying criteria, they are liable to be disqualified / debarred / suspended / blacklisted if they have

- Furnished false / fabricated particulars in the forms, statements and /annexures submitted in proof of the qualification requirements and/or
- Not turned up for entering into agreement, when called upon.
- record of poor progress such as abandoning the work, not properly completing the contract, inordinate delays in completion, litigation history or financial failures etc. and/or
- participated in the previous bidding for the same work and had quoted unreasonably high tender percentage and
- even while execution of the work, if found that the work was awarded to the Contractor based on false / fake certificates of experience, the Contractor will be blacklisted and work will be taken over invoking clause 61 of PS to APSS.

#### **5.0 Firms ineligible to Tender:**

- i) A retired officer of the Govt. of AP or Govt. of India executing works is disqualified from tendering for a period of two years from the date of retirement without the prior permission of the Government.
- ii) The Tenderer who has employed any retired officer as mentioned above shall be considered as an ineligible tenderer.
- iii) The contractor himself or any of his employees is found to be Gazetted Officer who retired from Government Service and had not obtained permission from the Government for accepting the contractor's employment within a period of 2 years from the date of his retirement.
- iv) The Contractor or any of his employees is found at any time after award of contract, to be such a person who had not obtained the permission of the Government as aforesaid before submission of the tender or engagement in the Contractor's service.
- v) Contractor shall not be eligible to tender for works in the division / circle where any of his near relatives are employed in the rank of Assistant Engineer or Assistant Executive Engineers and above on the

Engineering side and Divisional Accounts Officer and above on the administrative side. The Contractor shall intimate the names of persons who are working with him in any capacity or are subsequently employed. He shall also furnish a list of Gazetted /Non-Gazetted, State Government Employees related to him. Failure to furnish such information tenderer is liable to be removed from the list of approved contractors and his contract is liable for cancellation.

- 5.1 Tenders with an excess of above 5% of the estimated contract value shall summarily be rejected.
- 5.2 For tenders up to 25% less than the estimated contract value of work, no additional security deposit is required. But for tenders less than 25% of the estimated Contract Value of work, the difference between the tendered amount and 75% of the estimated contract value, shall be paid by the successful tenderer at the time of concluding agreement as an additional security to fulfill the contract through a Bank Guarantee or Demand Draft on a Nationalised Bank / Scheduled bank in the prescribed format valid till completion of the work in all respects
- 5.3 a) If the percentage quoted by a tenderer is found to be either abnormally high or with in the permissible ceiling limits prescribed but under collusion or due to unethical practices adopted at the time of tendering process, such tenders shall be rejected.
- b) A tenderer submitting a Tender which the tender accepting authority considers excessive and or indicative of insufficient knowledge of current prices or definite attempt of profiteering will render himself liable to be debarred permanently from tendering or for such period as the tender accepting authority may decide. The tenderer over all percentage should be based on the controlled prices for the materials, if any, fixed by the Government or the reasonable prices permissible for the tenderer to charge a private purchaser under the provisions of clause-6 of the hoarding and profiteering prevention ordinance of 1943 as amended from time to time and on similar principle in regard to labour supervision on the work.

**5.4 One Tender per Tenderer:**

Each Tenderer shall submit only one Tender for the work. A Tenderer who submits more than one Tender will cause dis-qualification of all the Tenders submitted by the Tenderer.

**5.5 (a) Note: Near relatives include**

1. Sons, step sons, daughters, and step daughters.
2. Son-in-law, and daughter-in-law.
3. Brother-in-law, and sister-in-law.
4. Brothers and Sisters.
5. Father and Mother.
6. Wife / Husband.
7. Father-in-law and Mother-in-law
8. Nephews, nieces, uncle and aunties
9. Cousins and
10. Any person residing with or dependent on the contractor.

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5.6 Tenders from Joint Ventures are not acceptable unless specifically stated otherwise.

## **6 Cost of Tendering**

The Tenderer shall bear all costs associated with the preparation and submission of his Tender and the tender inviting authority will in no case be responsible and liable for those costs.

## **7 Site Visit.**

The Tenderer, at the Tenderer's own responsibility and risk is advised to visit and examine the Site of Work and its surroundings and obtain all information that may be necessary for preparing the Tender for entering into a contract, for the work. The costs of visiting the site shall be at the Tenderer's own expense.

# **B. TENDER DOCUMENT**

## **9 Contents of Tender document.**

9.1 One set of Tender document, comprises of the following:

9.1.a

### **Technical bid**

- i. Notice Inviting Tenders (NIT)
- ii. Instruction to Tenderers
- iii. Forms of Tender and qualification information
- iv. Conditions of Contract.
- v. Specifications.
- vi. Drawings.
- vii. Forms of Securities. i.e., EMD, Additional Security etc.

9.1.b. **Price bid**

Bill of Quantities and Price bid as appended.

## **10 Clarification on Tender Documents**

10.1 A prospective Tenderer requiring any clarification on Tender documents may contact the Tender Inviting Officer at the address indicated in the NIT. The Tender Inviting Officer will also respond to any request for clarification, received through post.

## **11 Amendment to Tender Documents**

11.1 Before the last date for submission of Tenders, the Tender Inviting Officer may modify any of the Contents of the Tender Notice, Tender documents by issuing amendment / Addendum.

- 11.2 Any addendum/amendments issued by the Tender Inviting Officer shall be part of the Tender Document and it shall either be communicated in writing to all the purchasers of the Tender documents or notified in the News Papers in which NIT was published.
- 11.3 To give prospective Tenderers reasonable time to take an addendum into account in preparing their bids, the Tender Inviting Officer may extend if necessary, the last date for submission of tenders.

## **C. PREPARATION OF TENDERS.**

### **12 Language of the Tender.**

- 12.1 All documents relating to the tender shall be in the English Language only.

### **13 Documents comprising the Tender.**

- 13.1 The tender comprise the following.
- (a) Technical Bid, and drawings. [Both are available online at <http://www.ccdmc.co.in/tenders>].
  - (b) Qualification information and supporting documents [to be furnished in technical bid cover].
  - (c) Price bid containing bill of quantities (Schedule –A) and the Bid offer. [both are available online at <http://www.ccdmc.co.in/tenders>].

### **14 Bid Offer:**

- 14.1 Bill of Quantities called Schedule “A” and the bid offer accompanies the tender document as Volume-II. It shall be explicitly understood that the Tender Inviting Officer does not accept any responsibility for the correctness or completeness of this schedule ‘A’ and this schedule ‘A’ is liable to alterations by omissions, deductions or additions at the discretion of the CE/Group Director(U) or as set forth in the conditions of the contract. The Schedule “A” shall contain the items of work indicated as part– I and LS provisions as part–II. The percentage quoted by the contractor shall be applicable only to part –I. However, the provisions contained in the part –II will be operable basing on the conditions provided in the Tender Document. The tenderers will have to state clearly their willingness to execute the work at certain specific percentage of excess or less or at par of the ECV indicated in Part-I at the space provided therein in Schedule ‘A’. The L.S. amounts indicated in part-II are maximum reimbursable amounts. The tenderer should however quote his lump sum tender based on this schedule of quantities. He should quote his offer as a overall tender percentage. The over all tender percentage should be written both in words and figures. The bid offers i.e., percentage shall be written both in figures and words legibly and free from errors.

- 14.2 The Schedule –A (or Price-bid) contains not only the quantities but also the rates worked out by the Department and the amount for each item and total value of the estimated contract. The tenderer should workout his own rates keeping in view the work, site conditions and quote his overall tender percentage with which he intends to execute the work.
- 14.3 The bid offer shall be for the whole work and not for individual items / part of the work.
- 14.4 All duties, taxes, and other levies payable by the contractor as per State / Central Government rules, shall be included in the tender percentage quoted by the tenderer, however keeping in view the maximum reimbursable amounts specified in Part-II of Price bid.
- 14.5 The tendered contract amount as computed based on overall tender percentage is subject to variation during the performance of the Contract in accordance with variation in quantities etc.

## **15 Validity of Tenders:**

- 15.1 Tenders shall remain valid for a period of not less than three months from the last date for receipt of Tender specified in NIT.
- 15.2 During the above mentioned period no plea by the tenderer for any sort of modification of the tender based upon or arising out of any alleged misunderstanding of misconceptions or mistake or for any reason will be entertained.
- 15.3 In exceptional circumstances, prior to expiry of the original time limit, the Tender Inviting Officer may request the bidders to extend the period of validity for a specified additional period. Such request to the Tenderers shall be made in writing. A Tenderer may refuse the request without forfeiting his E.M.D. A Tenderer agreeing to the request will not be permitted to modify his Tender, but will be required to extend the validity of his E.M.D. for a period of the extension.

## **16 Earnest Money Deposit**

- 16.1 The Tenderer shall furnish, Earnest Money Deposit equivalent to 1% of ECV along with the tender. (As specified in NIT).

The balance EMD @ 1½% of ECV / TCV which ever is higher shall be paid at the time of concluding Agreement by the successful Tenderer. This balance EMD can be in the form of :

- a) a bank demand draft on any scheduled bank / Nationalised bank.
- b) a bank guarantee in the form given [under formats of securities] in Section 8, from a Nationalised or Scheduled Indian bank approved by the Reserve Bank of India.
- 16.2 Demand Drafts furnished towards EMD along with tender shall be valid for a period of six months from the date of tender notice.

- 16.3 Original Demand Draft is to be submitted along with the Bid. Failure to furnish the original Demand Draft on the bid opening date will entail rejection of bid and blacklisting.
- 16.4 The EMD of un successful Tenderers will be returned no sooner the tenders are finalised or end date of the Tender validity period which ever is earlier.
- 16.5 Deleted.
- 16.6 The earnest money deposited by the successful tenderer will not carry any interest and it will be dealt with as provided in the conditions stipulated in the tender.
- 16.7 The E.M.D. shall be forfeited.  
(a) If the Tenderer withdraws the Tender during the validity period of Tender.  
(b) In the case of a successful tenderer, if he fails to sign the Agreement for whatever the reason.
- 16.8 In consideration of the CE/Group Director(U) / Executive Engineer /Chief Engineer /Commissionerate of Tenders undertaking to investigate and to take into account each tender and in consideration of the work thereby involved, all earnest monies deposited by the tenderer will be forfeited to the Government in the event of such tenderer either modifying or with-drawing his tender at his instance within the said validity period of three months.
- 17 No alteration which is made by the tenderer in the contract form, the conditions of the contract, the drawings, specifications or statements / formats or quantities accompanying the same will be recognized; and, if any such alterations are made **the tender will be void.**

## **D. SUBMISSION OF TENDERS.**

### **18 Submission of Tenders:**

- 18.1 The Tenderers who are desirous of participating shall submit their Technical bids, price bids etc., in the Standard formats prescribed in the Tender documents, displayed at the office of CMD, ADCL. The tenderers should submit the copies in support of their Technical bids. The bidders shall sign on all the statements, documents, certificates, uploaded by him, owning responsibility for their correctness / authenticity.

If any of the certificates, documents, etc., furnished by the tenderer is found to be false / fabricated / bogus, the bidder will be blacklisted and the EMD forfeited.

- 18.2 The Department will not hold any risk and responsibility for the loss in transit before reaching the office, and any other problem(s) encountered by the Tenderers while submitting his bids.
- 18.3 The following certificates, documents etc., are to be submitted in technical cover.  
a) Empanelment of APCRDA as Geo technical consultant

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- b) Copy of Pan Card
- c) Copy of GST Registration Certificate.
- d) Copy of Demand Draft towards EMD.
- e) Deleted.

18.4 Any other condition regarding receipt of tenders in e-procurement appearing in Tender document may be treated as Non-applicable.

**19 Last date / time for Submission of the Tenders.**

4.2 Tenders must be submitted through conventional method not later than the date and time specified in NIT.

19.1 The CE/Group Director(U) may extend the dates for issue and receipt of Tenders by issuing an amendment in which case all rights and obligations of the CE/Group Director(U) and the Tenderers will remain same as previously.

**20 Late Tenders.**

20.1 Tenders will not be received after the last date / time prescribed in NIT.

**21 Modification to the Tender.**

21.1 Tenderers can modify their Tender percentage online before the submission of bid.

21.2 No Tender shall be modified after the last date /time of submission of Tenders.

21.3 In Modification Tenderer may offer, 'only discounts' to the percentage of the Tender percentage they quoted in the original Tender submitted prior to the last date and time specified for submission of Tenders.



## **E. TENDER OPENING AND EVALUATION**

### **22 Tender opening**

- 22.1 The Technical bids will be opened at the office of CMD, ADCL by the concerned CE/Group Director (U) at the time and date as specified in the tender documents. All the Statements, documents, certificates, Demand Draft / Bank Guarantee etc., submitted in technical cover by the Tenders will be verified for technical evaluation. The clarifications, particulars, if any, required from the bidders, will be obtained either online or in the conventional method by addressing the bidders. The technical bids will be evaluated against the specified parameters / criteria same as in the case of conventional tenders and the technically qualified bidders will be identified. The result of Technical bids evaluation will be intimated by telephone or e-mail to all the tenderers who participated in the Tenders. The tenderers or their authorised representatives can be present at the time of opening of the tenders.
- 22.2 The Technical bid will be opened and certificates will be verified. The details of the above shall invariably be recorded.

### **23 Clarification on the Technical Bid.**

- 23.1 The tender opening authority may call upon any tenderer for clarification on the statements, documentary proof relating to the technical bid. The request for clarification and response thereto shall be in writing and it shall be only on the qualification information submitted by the tenderer. The clarification called for from the tenderers shall be furnished within the stipulated time, which shall not be more than a week.
- 23.2 The tenderer if so desirous, shall agree in writing to furnish the clarification called for within the stipulated time and, for disqualification and rejection of his tender in the event of failure to do so.

### **24 Examination of technical Bids and Determination of Responsiveness**

- 24.1 The CE/Group Director(U) will evaluate whether each Tenderer is satisfying the eligibility criteria prescribed in the tender document and declares them as a qualified Tenderer.
- 24.2 If the technical bid of a Tenderer is not satisfying any of the eligibility criteria it will be rejected by the CE/Group Director(U). However, the tender accepting authority detects any error in the evaluation of Tenders by CE/Group Director(U), the tender accepting authority while returning the tenders may direct the Executive Engineer or CE/Group Director(U) as the case may be, to re-evaluate the tenders.
- 24.3 If any alteration is made by the tenderer in the tender documents, the conditions of the contract, the drawings, specifications or statements / formats or quantities the tender will be rejected.

### **25 Price Bid Opening:**

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- 25.1 At the specified date and time, the price bids of all the technically qualified bidders will be opened by the concerned CE/Group Director(U) and the result will be intimated by or e-mail to all the bidders who participated in the Tenders.
- 25.2 Only the Price Bids of qualified Tenderers whose technical Bids are found satisfying the eligibility criteria shall be opened in the presence of the qualified Tenderers or their authorised representatives present on the date and time fixed. The bid offers are read out and minutes recorded and the signatures of the Tenderers present are taken in the minutes.
- 25.3 The Price Bid of the Unqualified Tenderers will not be opened.
- 25.4 Tenders shall be scrutinised in accordance with the conditions stipulated in the Tender document. In case of any discrepancy of non-adherence Conditions the Tender accepting authority shall communicate the same which will be binding both on the tender Opening authority and the Tenderer. In case of any ambiguity, the decision taken by the Tender Accepting Authority on tenders shall be final.

## **26 Evaluation and Comparison of Price Bids**

- 26.1 The CE/Group Director (U) will evaluate and compare the price bids of all the qualified Tenderers.
- 26.2 Negotiations at any level are strictly prohibited. However, good gesture rebate, if offered by the lowest tenderer prior to finalisation of tenders may be accepted by the tender accepting authority.
- 26.3 Selection of Tenderer among the lowest & equally quoted tenderers will be in the following orders:
- a) The tenderer whose bid capacity is lowest will be selected.
  - b) In case the bid capacity is also same the tenderer whose annual turnover is more will be preferred.
  - c) Even if the criteria incidentally become the same, the turnover on similar works and thereafter machinery available for the work and then the clean track record will be considered for selection.

## **27 Discrepancy in Tender percentage quoted.**

- 27.1 In case of any discrepancy between the overall tender percentage quoted in words and figures, the percentage quoted in words shall prevail.

## **28 Process to be Confidential.**

- 28.1 Information relating to the examination, clarification, evaluation and comparison of Tenders and recommendations for the award of a contract shall not be disclosed to Tenderers or any other persons not officially concerned with such process until the award to the successful Tenderer has been announced by the tender accepting authority. Any effort by a Tenderer to influence the processing of Tenders or award decisions may result in the rejection of his Tender.

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- 28.2 No Tenderer shall contact the CE/Group Director(U) or any authority concerned with finalisation of tenders on any matter relating to its Tender from the time of the Tender opening to the time the Contract is awarded. If the Tenderer wishes to bring additional information to the notice of the CE/Group Director(U), it should do so in writing.
- 28.3 Before recommending / accepting the tender, the tender recommending / accepting authority shall verify the correctness of certificates submitted to meet the eligibility criteria and specifically experience. The authenticated agreements of previous works executed by the lowest tenderer shall be called for.
- 28.4 Tenders will be finalised by the CMD, ADCL in accordance with the conditions stipulated in the tender document and in case any discrepancy of non-adherence to the conditions, the same shall be communicated which will be binding both on the tender concluding authority and contractor. In case of any ambiguity the decision taken by the COT on tenders shall be final.

## F. AWARD OF CONTRACT

### **29 Award Criteria**

- 29.1 CE/Group Director(U) will award or recommend to the competent tender accepting authority for award of the contract to the Tenderer who is found technically qualified as per the Tender conditions and whose price bid is lowest. (Not applicable)
- 29.2 The tender accepting authority reserves the right to accept or reject any Tender or all tenders and to cancel the Tendering process, at any time prior to the award of Contract, without thereby incurring any liability to the affected Tenderer or Tenderers or any obligation to inform the affected Tenderer or Tenderers of the reasons for such action.

### **30 Notification of Award and Signing of Agreement.**

- 30.1 The Tenderer whose Tender has been accepted will be notified of the award of the work by the CE/Group Director(U), prior to expiration of the Tender validity period by registered letter. This letter (hereinafter and in the Conditions of Contract called "Letter of Acceptance") will indicate the sum that the Government will pay the Contractor in consideration of the execution, completion, and maintenance of the Works by the Contractor as prescribed by the Contract (hereinafter and in the Contract called the "Contract Amount").
- 30.2 When a tender is to be accepted the concerned tenderer shall attend the office of the CE/Group Director(U) concerned on the date fixed in the Letter of acceptance. Upon intimation being given by the CE/Group Director(U, of acceptance of his tender, the tenderers shall make payment of the balance E.M.D., and additional security deposit wherever needed by way of Demand Draft and sign an agreement in the form prescribed by the department for the due fulfillment of the contract. Failure to attend the CE/Group Director(U)'s office on the date fixed, in the written intimation, to enter into the required agreement shall entail forfeiture of the Earnest Money deposited. The written agreement to be entered into between the contractor and the Government shall be the foundation of the rights and obligations of both the parties and the contract shall not be deemed to be complete until the agreement has first been signed by the contractor and then by the proper officer authorised to enter into contract on behalf of the Government.
- 30.3 The successful tenderer has to sign an agreement within a period of 15 days from the date of receipt of communication of acceptance of his tender. On failure to do so his tender will be cancelled duly forfeiting the E.M.D., paid by him without issuing any further notice and action will be initiated for black listing the tenderer.

### **31 Corrupt or Fraudulent Practices**

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31.1 The Government require that the bidders / suppliers / contractors under Government financed contracts, observe the highest standard of ethics during the procurement and execution of such contracts. In pursuance of this policy, the Government

(a) define for the purposes of the provision, the terms set forth below as follows:

(i) "corrupt practices" means the offering, giving, receiving or soliciting of any thing of value to influence the action of a Government official in procurement process or in contract execution: and

(ii) "fraudulent practice" means a misrepresentation of facts in order to influence a procurement process or the execution of a contract to the detriment of the

Government and includes collusive practice among Tenderers (prior to or after Tender submission) designed to establish in Tender prices at artificial non-competitive levels and to deprive the Government of the benefits of free and open competition.

(b) Will reject a proposal for award if it determines that the Tenderer recommended for award has engaged in corrupt or fraudulent practices in competing for the contract in question.

(c) Will blacklist / or debar a firm, either indefinitely or for a stated period of time, if at any time determines that the firm has engaged in corrupt or fraudulent practices in competing for, or in executing a Government Contract.

(d) Further more, Tenderers shall be aware of the provisions stated in the General Conditions of Contract.

**FORMS OF TENDER  
QUALIFICATION INFORMATION**

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**QUALIFICATION INFORMATION**  
**Annexure –I**

**CHECKLIST TO ACOMPANY THE TENDER**

S.No	Description	Submitted	Page No. (see Note below)
1	2	3	4
1	Copy of Contractors Empanelment with APCRDA as Geo technical consultant	Yes / No	
2	Copy of GST Registration Certificate	Yes / No	
3	Copy of Demand Draft towards EMD	Yes / No	
4	Copy of declaration stating that the submitted by them are genuine		
5	List of certificates enclosed	Yes / No	

**Notes:-**

1. All the statements copies of the certificates, documents etc., shall be given page numbers on the right corner of each certificate, which will be indicated in column (4) against each item. The statements furnished shall be in the formats appended to the tender document.
- 2) The information shall be filled-in by the Tenderer in the checklist and statements I to VII, for the purposes of verification as well as evaluation of the tenderer's Compliance to the qualification criteria as provided in the Tender document. Hard copies of only the Certificates, as per check-list shall be submitted by the tenderer before the date and time of price bid opening.

**DECLARATION**

I / WE ..... have gone through carefully all the Tender conditions and solemnly declare that I / we will abide by any penal action such as disqualification or black listing or determination of contract or any other action deemed fit, taken by, the Department against us, if it is found that the statements, documents, certificates produced by us are false / fabricated.

I / WE hereby declare that, I / WE have not been blacklisted / debarred / Suspended / demoted in any department in Andhra Pradesh or in any State due to any reasons.

**Signature of the Tenderer**

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# **CONDITIONS OF CONTRACT**

TENDERER/CONTRACTOR

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# TENDER

Date: .....

To  
The Chairman & Managing Director,

\_\_\_\_\_,  
\_\_\_\_\_,  
\_\_\_\_\_.

Sir,

I / We do hereby tender and if this tender be accepted, under take to execute the following work viz (As per NIT) and described in the specifications deposited in the office of the CMD, ADCL, Vijayawada with such variations by way of alterations or additions to, and omissions from the said works and method of payment as provided for in the "conditions of the contract" for the sum of Rupees ..... or such other sum as may be arrived under the clause of the standard preliminary specifications relating to "Payment on lump-sum basis or by final measurement at unit rates"

I/WE have also quoted percentage excess or less on E.C.V., in Schedule 'A' Part-I, annexed (in words and figures) for which I/We agree to execute the work when the lumpsum payment under the terms of the agreement is varied by payment on measurement quantities.

I/WE have quoted Percentage excess or less on E.C.V., in Schedule 'A' Part – I both in words & figures. In case of any discrepancy between the Percentage excess or less on E.C.V., in words and figures, the rates quoted words only shall prevail.

I/WE agreed to keep the offer in this tender valid a period of Three month(s) mentioned in the tender notice and not to modify the whole or any part of it for any reason within above period. If the tender is withdrawn by me/us for any reasons whatsoever, the earnest money paid by me/us will be forfeited to Government

I/WE hereby distinctly and expressly, declare and acknowledge that, before the submission of my/our tender I/We have carefully followed the instructions in the tender notice and have read the A.P.S.S. and the preliminary specifications therein and the A.P.S.S. addenda volume and that I/We have made such examination of the contract documents and the plans, specifications and quantities and of the location where the said work is to be done, and such investigation of the work required to be done, and in regard to the material required to be furnished as to enable me/us to thoroughly understand the intention of same and the requirements, covenants, agreements, stipulations and restrictions contained in the contract, and in the said plans and specifications and distinctly agree that I/We will not hereafter make any claim or demand upon the Government based upon or arising out of any alleged misunderstanding or misconception /or mistake on my/or our part of the said requirement, covenants, agreements, stipulations, restrictions and conditions.

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I/WE enclosed to my/our application for tender a crossed demand draft (No.....dated:.....) for Rs.....as earnest money not to bear interest.

I/WE shall not assign the contractor or sublet any portion of the same. In case if it becomes necessary such subletting with the permission of the CE/Group Director(U) shall be limited to (1) Labour contract, (2) Material contract, (3) Transport contract and (4) Engaging specialists for special item of work enjoined in A.P.S.S.

IF MY/OUR tender is not accepted the sum shall be returned to me/us on application when intimation is sent to me/us of rejection or at the expiration of three months from last date of receipt of this tender, whichever is earlier. If my/our tender is accepted the earnest money shall be retained by the Government as security for the due fulfillment of this contract. If upon written intimation to me/us by the Superintending / Executive Engineer's Office, I/We fail to attend the said office on the date herein fixed or if upon intimation being given to me/us by the Superintending /Executive Engineer or acceptance of my/our tender, and if I/We fail to make the additional security deposit or to enter into the required agreement as defined in condition-3 of the tender notice, then I/We agree the forfeiture of the earnest money. Any notice required to be served on me/us here under shall be sufficiently served on me/us if delivered to me/us hereunder shall be sufficiently served on me/us if delivered to me/us personally or forwarded to me/us by post to (registered or ordinary) or left at my/our address given herein. Such notice shall if sent by post be deemed to have been served on me/us at the time wherein due course of post it would be delivered at the address to which it is sent.

I/WE fully understand that the written agreement to be entered into between me/us and Government shall be the foundation of the rights of the both the parties and the contract shall not be deemed to be complete until the agreement has first been signed by me/us and then by the proper officer authorised to enter into contract on behalf of Government.

I AM/WE ARE professionally qualified an my/our qualifications are given below:

Name	Qualified
------	-----------

I/WE will employ the following technical staff for supervising the work and will see that one of them is always at site during working hours, personally checking all items of works and paint extra attention to such works as required special attention (eg) Reinforced concrete work.

Name of members of technical staff proposed to be employed	Qualification.
1 no. Engineer	
1 no. Diploma Engineer	

I / WE declare that I/WE agree to recover the salaries of the technical staff actually engaged on the work by the department, from the work bills, if I/We fail to employ technical staff as per the tender condition.

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## **TENDERERS / CONTRACTOR'S CERTIFICATE**

- (1) I/We hereby declare that I/We have perused in detail and examined closely the Andhra Pradesh Standard Specifications, all clauses of the preliminary specifications with all amendments and have either examined all the standards specifications or will examine all the standard specifications for items for which I/We tender, before I/We submit such tender and agree to be bound and comply with all such specifications for this agreement which I/We execute in the Irrigation & Command Area Development Department.
- (2) I/We certify that I/We have inspected the site of the work before quoting my Percentage excess or less on ECV, I /We have satisfied about the quality, availability and transport facilities for stones sand and other materials.
- (3) I/We am/are prepared to furnish detailed data in support of all my quoted rates, if and when called upon to do so without any reservations.
- (4) I/We hereby declare that I/We will pay an additional security deposit in terms of conditions, the difference between 85% of ECV and my/out tender amount, in case if my / our offer is less than (-)15%.
- (5) I/We hereby declare that I am/we are accepting to reject my tender in terms of condition, if my /our offer is more than 5% of ECV.
- (6) I/We hereby declare that I/We will not claim any price escalation.
- (7) I/We hereby declare that I am/We are accepting for the defect liability period as 24 months instead of 6 months under clause 28 of APSS.
- (8)
  - a) I/We declare that I/We will procure the required materials including earth and use for the work after approval of the Engineer-in-Charge. The responsibility for arranging and obtaining the land for borrowing or exploitation in any other way shall rest with me/us for the materials for the work, I/WE shall ensure smooth and un-interrupted supply of materials.
  - b) I/We declare that the responsibility for arranging and obtaining the land for disposal of spoil/soil not useful for purposes shall rest with me/us.
  - c) I/We declare that I/We shall not claim any compensation or any payment for the land so arranged for disposal of soil and the land for borrow area. My/our quoted percentage excess or less ECV., are inclusive of the land so arranged and I/We will hand over the land so arranged for disposal of soil to; the department after completion of work.
  - d) I/We declare that I/We will not claim any extra amount towards any material used for the work other than the quoted works for respective schedule 'A' items.

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- (9) I/We declare that I/We will execute the work as per the mile stone programme, and if I/We fail to complete the work as per the mile stone programme I abide by the condition to recover liquidated damages as per the tender conditions.
- (10) I/We declare that I/We will abide for settlement of disputes as per the tender conditions.

**DECLARATION OF THE TENDERER.**

- 1) I/WE have not been black listed in any department in Andhra Pradesh due to any reasons.
- 2) I/WE have not been demoted to the next lower category for not filing the tenders after buying the tender schedules in a whole year and my/our registration has not been cancelled for a similar default in two consecutive years.
- 3) I/WE agree to disqualify me/us for any wrong declaration in respect of the above and to summarily reject my/our tender.

Address of the Tenderer:

Phone No.:

Fax No.:

**CONTRACTOR.**

**Note: If the tender is made by an individual, it shall be signed with his full name and his address shall be given. If it is made by a firm, it shall be signed with the co-partnership name by a member of the firm, who shall also sign his own name, and the name and address of each member of the firm shall be given, if the tender is made by a corporation it shall be signed by a duly authorised officer who shall produce with his tender satisfactory evidence of his authorisation. Such tendering corporation may be required before the contract is executed, to furnish evidence of its corporate existence. Tenders signed on behalf of G.P.A. holder will be rejected**

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# Conditions of Contract

## A. GENERAL

### 1. Interpretation:

- 1.1 In interpreting these Conditions of Contract, singular also means plural, male also means female, and vice-versa. Headings have no significance. Works have their normal meaning under the language of the contract unless specifically defined. The Engineers-in-charge will provide instructions clarifying queries about the conditions of Contract.
- 1.2 The documents forming the Contract shall be interpreted in the following order of priority:
- 1) Agreement
  - 2) Letter of Acceptance, notice to proceed with the works
  - 3) Contractor's Tender (Technical bid)
  - 4) Conditions of contract
  - 5) Specifications
  - 6) Drawings
  - 7) Bill of quantities (Price-bid)
  - 8) Any other document listed as forming part of the Contract.

### 2. Engineer-in-Charge's Decisions:

- 2.1 Except where otherwise specifically stated, the Engineer-in-charge will decide the contractual matters between the Department and the Contractor in the role representing the Department.

### 3. Delegation:

- 3.1 The Engineer-in-charge may delegate any of his duties and responsibilities to other officers and may Cancel any delegation by an official order issued.

### 4. Communications:

- 6.1 Communications between parties, which are referred to in the conditions, are effective only when in writing. A notice shall be effective only when it is delivered (in terms of Indian Contract Act)

### 5. Sub-contracting:

- 5.1 If the prime contractor desires to sub-let a part of the work, he should submit the same at the time of filing tenders itself or during execution, giving the name of the proposed Sub-contractor, along with details of his qualification and experience. The Tender Accepting Authority should verify the experience of the Sub-contractor and if the Sub-contractor satisfies the qualification criteria in proportion to the value of work proposed to be sub-let, he may permit the same. The total value of works to be awarded on sub-letting shall not exceed 50% of contract value. The extent of subletting shall be added to the experience of the sub-contractor and to that extent deducted from that of the main contractor.

**6. Other Contractors:**

- 6.1 The Contractor shall cooperate and share the Site with other contractors, Public authorities, utilities, and the Department. The Contractor shall also provide facilities and services for them as directed by the Engineer-in-charge.

**7. Personnel:**

- 7.1 The Contractor shall employ the required Key Personnel named in the Schedule of Key Personnel to carry out the functions stated in the Schedule or other personnel approved by the Engineer-in-charge. The Engineer-in-charge will approve any proposed replacement of Key Personnel only if their qualifications, abilities, and relevant experience are substantially equal to or better than those of the personnel listed in the Schedule.
- 7.2 The names of the key personnel along with their academical qualifications and experiences have to be uploaded at the time of tendering for the work and the originals of the same have to be furnished by the successful bidder at the time of concluding agreement.
- 7.3 Failure to employ the required technical personnel by the contractor the following amounts will be recovered from the contractor over and above the provision made in part two of schedule-A from the contractors bills.
- 7.4 The technical personnel should be on full time and available at site whenever required by Engineer in Charge to take instructions.
- 7.5 In case the contractor is already having more than one work on hand and has undertaken more than one work at the same time, he should employ separate technical personnel on each work.
- 7.6 If the contractor fails to employ technical personnel the work will be suspended or department will engage a technical personnel and recover the cost thereof from the contractor.
- 7.7 If the Engineer-in-charge asks the Contractor to remove a person who is a member of Contractor's staff or his work force stating the reasons the Contractor shall ensure that the person leaves the site forthwith and has no further connection with the work in the contract.

**8. Contractor's Risks:**

- 8.1 All risks of loss of or damage to physical property and of personnel injury and death, which arise during and in consequence of the performance of the Contract are the responsibility of the Contractor.

**9. Insurance:**

Deleted. Vide G.O.Ms.No.5, dt.5-3-2014 of Finance(Works and Projects-F7) Department

**10. Site Inspections:**

10.1 The contractor should inspect the site and quote his percentage including quarrying, conveyance and all other charges etc.

10.2 deleted.

**11. Contractor to Construct the Works:**

11.1 The Contractor shall conduct survey at the site Work in accordance with the specifications.

**12. Diversion of streams / Vagus / Drains.**

Deleted

**13. Power Supply.**

13.1 The contractor shall make his own arrangements for obtaining power from the Electricity dept., at his own cost. The contractor will pay the bills of Electricity Department for the cost of power consumed by him.

13.2 The contractor shall satisfy all the conditions and rules required as per Indian Electricity Act 1910 and under Rule-45(I) of the Indian Electricity Rules, 1956 as amended from time to time and other pertinent rules.

13.3 The power shall be used for bonafide Departmental work only.

**14. Monsoon Damages:**

Damages due to rain or flood either in cutting or in banks shall have to be made good by the contractor till the work is handed over to the Department. The responsibility of de-silting and making good the damages due to rain or flood rests with the contractor. No extra payment is payable for such operations and the contractor shall therefore, have to take all necessary precautions to protect the work done during the period.

**15. The works to be Completed by the Intended Completion Date:**

15.1 The Contractor may commence execution of the Works on the Start Date and shall carry out the Works in accordance with the programme submitted by the Contractor, as updated with the approval of the Engineer-in-Charge, and complete the work by the Intended Completion Date.

**16. Safety:**

16.1 The Contractor shall be responsible for the safety of all activities on the Site.

**17. Discoveries:**

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17.1 Anything of historical or other interest or of significant value unexpectedly discovered on the Site is the property of the Government. The Contractor is to notify the Engineer-in-charge of such discoveries and carry out the Engineer-in-Charge's instructions for dealing with them.

**18. Possession of the Site.**

18.1 The Department shall give possession of the site to the Contractor. If possession of a part site is given, the Department will ensure that the part site so handed over is amenable to carryout the work at site by the Contractor.

**19. Access to the Site:**

19.1 The Contractor shall provide the Engineer-in-Charge and any person authorised by the Engineer-in-Charge, access to the site and to any place where work in connection with the Contract is being carried out or is intended to be carried out.

**20. Instructions:**

20.1 The Contractor shall carry out all instructions of the Engineer-in-charge and comply with all the applicable local laws where the Site is located.

**21. Settlement of disputes:**

21.1 If any dispute of difference of any kind whatsoever arises between the department and the Contractor in connection with, or arising out of the Contract, whether during the progress of the works or after their completion and whether before or after the termination, abandonment or breach of the Contract, it shall in the first place, be referred to and settled by the Engineer-in-charge who shall, within a period of thirty days after being requested by the Contractor to do so, give written notice of his decision to the Contractor. Upon receipt of the written notice of the decision of the Engineer-in-Charge the Contractor shall promptly proceed without delay to comply with such notice of decision.

21.2 If the Engineer-in-Charge fails to give notice of his decision in writing within a period of thirty days after being requested or if the Contractor is dissatisfied with the notice of the decision of the Engineer-in-Charge, the Contractor may within thirty days after receiving the notice of decision appeal to the Department who shall offer an opportunity to the contractor to be heard and to offer evidence in support of his appeal, the Department shall give notice of his decision within a period of thirty days after the Contractor has given the said evidence in support of his appeal, subject to arbitration, as hereinafter provided. Such decision of the Department in respect of every matter so referred shall be final and binding upon the Contractor and shall forthwith be given effect to by the Contractor, who shall proceed with the execution of the works with all due diligence whether he requires arbitration as hereinafter provided, or not. If the Department has given written notice of his decision to the Contractor and no claim to arbitration, has been communicated to him by the Contractor within a period of thirty days from receipt of such notice the said decision shall remain final and binding upon the Contractor. If the Department fail to give notice of his decision, as aforesaid within a period of thirty days after being requested as aforesaid, or if the Contractor be dissatisfied with any such decision, then and in any such case the



contractor within thirty days after the expiration of the first named period of thirty days as the case may be, require that the matter or matters in dispute be referred to arbitration as detailed below:-

SETTLEMENT OF CLAIMS:

Settlement of claims for Rs. 10,00,000/- and below by Arbitration.

All disputes or difference arising of or relating to the Contract shall be referred to the International Centre for Alternative Dispute Resolution.

The arbitration shall be conducted in accordance with the provisions of Indian Arbitration and Conciliation Act 1996 or any statutory modification thereof.

The arbitrator shall state his reasons in passing the award.

Claims above Rs.10,00,000/-.

All claims of above Rs.10,00,000/- are to be settled by a Civil Court of competent jurisdiction by way of Civil suit and not by arbitration.

A reference for adjudication under this clauses shall be made by the contractor within six months from the date of intimating the contractor of the preparation of final bill or his having accepted payment whichever is earlier.

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## B. TIME FOR COMPLETION

### 22. Program:

- 22.1 The total period of completion is (as specified in the NIT) from the date of entering with agreement to proceed including rainy season. Keeping in view, the schedule for handing over of site given in condition 11.2 below, the work should be programmed such as to achieve the mile-stones as in "Rate of progress statement" enclosed.
- 22.2 The attention of the tenderer is directed to the contract requirement at the time of beginning of the work, the rate of progress and the dates for the whole work and its several parts as per milestones. The following rate of progress and proportionate value of work done from time to time as will be indicated by the CE/Group Director(U)'s Certificate for the value of work done and completion of mile-stones will be required. Date of commencement of their programme will be the date for concluding agreement.
- 22.3 After signing the agreement, the contractor shall forthwith begin the work, shall regularly and continuously proceed with them.
- 22.4 Rate of progress :
- i) Work programme of achieving the milestones (Statement).
  - ii) Site. Schedule of programme of handing over Site to the Contractor. (Statement).
- 22.5 The contractor shall commence the works on site within the period specified under condition 11.1 to 11.3 above after the receipt by him of a written order to this effect from the CE/Group Director(U) and shall proceed with the same with due expedition and without delay, except as may be expressly sanctioned or ordered by the CE/Group Director(U), or be wholly beyond the contractor's control.
- 22.6 Save in so far as the contractor may prescribe, the extent of portions of the site of which the contractor is to be given possession from time to time and the order in which such portions shall be made available to him and, Subject to any requirement in the contract as to the order in which the works shall be executed, the CE/Group Director(U) will with the CE/Group Director(U)'s written order to commence the works, give to the contractor possession of so much of the site as may be required to enable the contractor to commence proceed with the execution of the works in accordance with the programme if any, and otherwise in accordance with such reasonable proposals of the contractor as he shall by written notice to the CE/Group Director(U), make and will from time to time as the works proceed, give to the contractor possession of such further portions of the site as may be required to enable the contractor to proceed with the execution of the works with due dispatch in accordance with the said programme or proposals as the case maybe ; if the contractor suffers delay or incurs cost from failure on the part of the CE/Group Director(U) to give possession in accordance with the terms of this clause, the CE/Group Director(U) shall grant an extension of time for the completion of works.

22.7 The contractor shall bear all costs and charges for special or temporary way leases required by him in connection with access to the site. The contractor shall also provide at his own cost any additional accommodation outside the site required by him for the purposes of the work.

22.8 Subject to any requirement in the contract as to completion of any section of the works before completion of the whole of the works shall be completed in accordance with provisions of clauses in the Schedule within the time stated in the contract calculated from the last day of the period named in the statement to the tender as that within which the works are to be commenced or such extended time as may be allowed.

22.9 Delays and extension of time:

No claim for compensation on account of delays or hindrances to the work from any cause whatever shall lie, except as hereafter defined. Reasonable extension of time will be allowed by the CE/Group Director(U) or by the office competent to sanction the extension, for unavoidable delays, such as may result from causes, which in the opinion of the CE/Group Director(U), are undoubtedly beyond the control of the contractor. The CE/Group Director(U) shall assess the period of delay or hindrance caused by any written instructions issued by him, at twenty five per cent in excess of the actual working period so lost.

In the event of the CE/Group Director(U) failing to issue necessary instructions and thereby causing delay and hindrance to the contractor, the latter shall have the right to claim an assessment of such delay by the Executive Engineer of the Circle whose decision will be final and binding. The contractor shall lodge in writing with the Executive Engineer a statement of claim for any delay or hindrance referred to above, within fourteen days from its commencement, otherwise no extension of time will be allowed.

Whenever authorised alterations or additions made during the progress of the work are of such a nature in the opinion of the CE/Group Director(U) as to justify an extension of time in consequence thereof, such extension will be granted in writing by the CE/Group Director(U) or other competent authority when ordering such alterations or additions.

**23. Programme Schedule:**

23.1 The Contractor shall furnish a programme showing the sequence in which he proposed to carry out the work expected to be achieved. The schedule should be such that it is practicable to achieve completion of the whole work within the time limit fixed and in keeping with the Mile stone programme specified and shall obtain the approval of the Engineer-in-charge. Further rate of the progress as in the program shall be kept upto date. In case it is subsequently found necessary to alter this program, the contractor shall submit sufficiently in advance the revised program incorporating necessary modifications and get the same approved by the Engineer-in-charge. No revised program shall be operative without approval of Engineer-in-charge.

23.2 The CE/Group Director(U) shall have all times the right, without any way violating this contract, or forming grounds for any claim, to alter the order of progress of

the works or any part thereof and the contractor shall after receiving such directions proceed in the order directed. The contractor shall also report the progress to the CE/Group Director(U) within 7 days of the Executive Engineer's direction to alter the order of progress of works.

- 23.3 The Contractor shall give written notice to the Engineer-in-Charge whenever planning or progress of the works is likely to be delayed or disrupted unless any further drawings or order including a direction, instruction or approval is issued by the Engineer-in-Charge within a reasonable time. The notice shall include details of the drawing or order required and of why and by when it is required and of any delay or disruption likely to be suffered if it is late.

**24. Speed of Work:**

- 24.1 The Contractor shall at all times maintain the progress of work to conform to the latest operative progress schedule approved by the Engineer-in-Charge. The contractor should furnish progress report indicating the programme and progress once in a month. The Engineer-in-Charge may at any time in writing direct the contractor to slow down any part or whole of the work for any reason (which shall not be questioned) whatsoever, and the contractor shall comply with such orders of the Engineer-in-Charge. The compliance of such orders shall not entitle the contractor to any claim of compensation. Such orders of the Engineer-in-Charge for slowing down the work will however be duly taken into account while granting extension of time if asked by the contractor for which no extra payment will be entertained.

- 24.2 Delays in Commencement or progress or neglect of work and forfeiture of earnest money, Security deposit and withheld amounts:

If, at any time, the Engineer-in-Charge shall be of the opinion that the Contractor is delaying Commencement of the work or violating any of the provisions of the Contractor is neglecting or delaying the progress of the work as defined by the tabular statement. "Rate of progress" in the Articles of Agreement", he shall so advise the Contractors in writing and at the same time demand compliance in accordance with conditions of Tender notice. If the Contractor neglects to comply with such demand within seven days after receipt of such notice, it shall then or at any time there after, be lawful for the Engineer-in-Charge to take suitable action in accordance with Clause.60 of APSS.

**25. Suspension of works by the Contractor:**

- 25.1 If the Contractor shall suspend the works, or sublet the work without sanction of the Engineer-in-Charge, or in the opinion of the Engineer-in-Charge shall neglect or fail to proceed with due diligence in the performance of his part of the Contract as laid down in the Schedule rate of progress, or if he shall continue to default or repeat such default in the respects mentioned in clause.27 of the APSS Engineer-in-Charge shall take action in accordance with Clause 61 of APSS.
- 25.2 If the Contractor stops work for 28 days and the Stoppage has not been authorised by the Engineer-in-Charge the Contract will be terminated under Clause 61 of APSS.

25.3 If the Contractor has delayed the completion of works the Contract will be terminated under Clause.61 of APSS.

**26. Extension of the Intended Completion Date:**

26.1 The Engineer-in-Charge shall extend or recommend for extension, in accordance with the Government orders in force, the Intended Completion Date if a Variation is issued which makes it impossible for Completion to be achieved by the Intended Completion Date.

26.2 The Engineer-in-Charge shall decide whether and by how much to extend the Intended Completion Date within 21 days of the Contractor asking the Engineer for a decision upon the effect of a Variation and submitting full supporting information. If the Contractor has failed to give early warning of a delay or has failed to cooperate in dealing with a delay, the delay by this failure shall not be considered in assessing the new Intended Completion Date.

**27. Delays Ordered by the Engineer-in-Charge:**

27.1 The Engineer-in-Charge may instruct the Contractor to delay the start or progress of any activity within the Work.

**28. Early Warning:**

28.1 The contractor is to warn the Engineer-in-Charge at the earliest opportunity of specific likely future events or circumstances that may adversely affect the Execution of Works.

28.2 The Contractor shall cooperate with the Engineer-in-Charge in making and considering proposals for how the effect of such an event or circumstance can be avoided or reduced by anyone involved in the work and in carrying out any resulting instruction of the Engineer-in-Charge.

**29. Management Meetings:**

29.1 The Engineer-in-Charge may require the Contractor to attend a management meeting. The business of a management meeting shall be to review the programme for remaining work and to deal with matters raised in accordance with the early warning procedure.

## **C. QUALITY CONTROL**

**30. Identifying Defects:**

30.1 The Engineer-in-Charge shall check the Contractor's work and notify the Contractor of any Defects that are found. Such checking shall not affect the Contractor's responsibilities. The Engineer-in-Charge may instruct the Contractor to verify the Defect and to uncover and test any work that the Engineer considers may be a Defect.

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**31. Tests:**

- 31.1 If the Engineer-in-Charge instructs the Contractor to carry out a test not specified in the Specification to check whether any work has a Defect and the Contractor shall pay for the test and any samples.

**32. Correction of Defects:**

- 32.1 The Engineer-in-Charge shall give notice to the Contractor of any Defects before the end of the Defects Liability Period, which begins on Completion. The defects liability period shall be extended for as long as defects remain to be corrected by the Contractor.
- 32.2 Every time notice of a Defect is given, the Contractor shall correct the notified defect within the length of time specified by the Engineer-in-Charge's notice.

**33. Uncorrected Defects:**

- 33.1 If the contractor has not corrected the defect within the time specified in the Engineer-in-Charge's notice, the Engineer-in-Charge will assess the cost of having the defect corrected and the contractor will pay this amount.
- 33.2 The Engineer-in-Charge shall introduce O.K. cards and prescribed the formats there of. O.K. cards shall relate to all major components of the work. The contractor / his authorised representative shall be required to initiate and fill in and present the O.K. card to the construction staff who would check the respective items and send to the quality control staff for final check and clearance / O.K. Any defects pointed out by the construction supervision staff or by the Quality Control staff shall promptly be attended to by the contractors and the fact of doing so be duly recorded on the back of O.K. card.
- 33.3 The Engineer-in-Charge may also introduce check lists which shall be kept in Bound registers by the construction supervision staff. The contractor may be required to fill up these lists in the first instance and shall be subsequently checked by the Construction / Quality Control engineers.

**34. Quality Control:**

In addition to the normal inspection by the regular staff in charge of the work, the work will also be inspected by the CE/Group Director(U)/Executive Engineer Quality control Circle or by the State or District level Vigilance Cell Unit and any other authorised external Agency if any sub-standard work or excess payments are noticed with reference to measurement books etc., during inspection, action will be taken based on their observations and these will be effected by the Engineer-in-Charge of the execution of the work.

For all works costing more than Rs.2.00 Crores the Contractor shall submit quality plan and also show proof of owning quality lab or tie-up with an established quality lab.

## **D. Cost Control**

### **35. Bill of Quantities:**

35.1 The Bill Quantities shall contain items for the work to be done by the Contractor.

35.2 The Contractor is paid for the quantity of the work done at the estimate rate in the Bill of Quantities for each item plus or minus Tender percentage.

### **36. Changes in the Quantities:**

36.1 The contractor is bound to execute all supplemental works that are found essential, incidental and inevitable during execution of main work.

36.2 The payment of rates for such supplemental items of work will be regulated as under;  
Supplemental items directly deducible from similar items in the original agreement.

36.2.1 The rates shall be derived by adding to or subtracting from the agreement rate of such similar item the cost of the difference in the quantity of materials labour between the new items and similar items in the agreement worked out with reference to the Standard Schedule of Rates adopted in the sanctioned estimate with which the tenders are accepted plus or minus over all tender percentage.

36.2.2 (a) Similar items but the rates of which cannot be directly deduced from the original agreement.

(b) Purely new items which do not correspond to any item in the agreement.

36.2.3 The rates of all such items shall be Estimated Rates plus or minus overall Tender premium.

### **37. Extra Items:**

37.1 Extra items of work shall not vitiate the contract. The contractor shall be bound to execute extra items of work as directed by the Engineer-in-Charge. The rates for extra items shall be worked out by the CE/Group Director(U) as per the conditions of the Contract and the same are binding on the Contractor.

37.2 The contractor shall before the 15<sup>th</sup> day of each month, submit in writing to the CE/Group Director(U) a statement of extra items if any that they have executed during the preceding month failing which the contractor shall not be entitled to claim any.

37.3 Entrustment of additional items:

37.3.1 Where ever additional items not contingent on the main work and outside the scope of original agreement are to be entrusted to the original contractor dispensing with bids and if the value of such items exceeds the limits up to which the officer is empowered to entrust works initially to contractor without calling for

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tenders, approval of **next higher authority** shall be obtained. Entrustment of such items on nomination shall be at rates not exceeding the estimated rates.

37.3.2 Entrustment of the additional items contingent on the main work will be authorised by the officers up to the monetary limits up to which they themselves are competent to accept items in the original agreement so long as the total amounts up to which they are competent to accept in an original agreement rates for such items shall be worked out in accordance with the procedure (I) For all items of work in excess of the quantities shown in the Bill of Quantities of the Tenders, the rate payable for such items shall be estimate rates for the items (+) or (-) over all tender percentage accepted by the competent authority.

37.3.3 Entrustment of either the additional or supplemental items shall be subject to the provisions of the agreement entered into by a Competent Authority after the tender is accepted. The CE/Group Director(U) being the authority next higher to the Executive Engineer, who entered into the agreement, approves the rate for the items / variation in quantity in the current agreement. The items shall not be ordered by an officer on his own responsibility if the revised estimate or deviation statement providing for the same requires the sanction of higher authority.

**Note:** It may be noted that the term Estimate Rate used above means the rate in the sanctioned estimate with which the tenders are accepted, or if no such rates is available in the estimate, the rate derived will be with reference to the Standard Schedule of Rates adopted in the sanctioned estimate with which tenders are accepted.

**38. Cash flow forecasts:**

38.1 When the program is updated, the contractor is to provide the Engineer-in-charge with an updated cash flow forecast.

**39. Payment Certificates:**

39.1 The Contractor shall submit to the Engineer-in-charge monthly statements of the estimated value of the work completed less the cumulative amount certified previously.

39.2 The Engineer-in-charge shall check the Contractor's monthly statement within 14 days.

39.3 The value of work executed shall be determined by the Engineer-in-charge.

39.4 The value of work executed shall comprise the value of the quantities of the items in the Bill of Quantities completed.

39.5 The Engineer-in-charge may exclude any item certified in a previous certificate or reduce the proportion of any item previously certified in any certificate in the light of later information.

**40. Payments:**

40.1 Payment for the work done by the contractor will be made for the finished work based on the measurements recorded in measurement books by any officer of

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the department not lower in rank than a Assistant Engineer and check measured by any officer not lower in rank than a Deputy Executive Engineer. The measurement shall be recorded at various stages of the work done and also after work is completed. The contractor shall be present at the time of recording of each set of measurement and their check measurement and accept them then and there so as to avoid disputes at a later stage. If the contractor is not available at the work spot at the time of recording measurements or check measurements the particulars of measurements shall be signed by the authorised agent of contractor based on which the contractor shall accept the set of measurements without any further dispute. If for any reason the contractor's authorised agent is also not available at site when the department decides to suspend the work recording of measurements in the absence of the contractor or his authorised representative the department shall not entertain any claim from the contractor for any loss incurred by him on this account. The Contractor shall however note that the Department cannot indefinitely wait for recording the measurement due to the absence of the Contractor and his authorised agent and check measure them even in the absence of the contractor.

#### 40.2 Payments and Certificates:

40.2.1 Payments shall be adjusted for recovery of advance payments, liquidated damages in terms of tender conditions and security deposit for the due fulfillment of the contract. Payment will be made to the Contractor under the certificate to be issued at reasonably frequent intervals by the Engineer-in-Charge, and intermediate payment will be the sum equal to 92½% of the value of work done as so certified and balance of 7½% will be withheld and retained as security for the due fulfillment of the contractor under the certificate to be issued by the Engineer-in-Charge. On completion of the entire works the contractor will receive the final payment of all the moneys due or payable to him under or by virtue of the contract except earnest money deposit retained as security and a sum equal to 2½ percent of the total value of the work done. The amount withheld from the final bill will be retained under deposits and paid to the contractor together with the earnest money deposit retained as security after a period of 24 months as all defects shall have been made good according to the true intent and meaning there of.

40.2.2 In case of over payments or wrong payment if any made to the contractor due to wrong interpretation of the provisions of the contract, APSS or Contract conditions etc., such unauthorized payment will be deducted in the subsequent bills or final bill for the work or from the bills under any other contracts with the Government or at any time there after from the deposits available with the Government.

40.2.3 Any recovery or recoveries advised by the Government Department either state or central, due to non-fulfillment of any contract entered into with them by the contractor shall be recovered from any bill or deposits of the contractor.

40.2.4 No claim shall be entertained, if the same is not represented in writing to the Engineer-in-Charge within 15 days of its occurrence.

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40.2.5 The contractor is not eligible for any compensation for inevitable delay in handing over the site or for any other reason. In such case, suitable extensions of time will be granted after considering the merits of the case.

40.3 Intermediate Payments:

40.3.1 For intermediate Stage of work, only part rates as fixed by the Engineer-in-Charge will be paid.

40.3.2 Part rates shall be worked out for the work done portion based on the actual operations involved keeping in view the value of the balance work to be done, to avoid unintended benefit to the Contractor in initial Stage.

40.3.3 Full rate shall be paid when the work is completed to the full profile as noted in the drawings.

**41. Interest on Money due to the Contractor:**

41.1 No omission by the Executive Engineer or the sub-divisional officer to pay the amount due upon certificates shall vitiate or make void the contract, nor shall the contractor be entitled to interest upon any guarantee fund or payments in arrear, nor upon any balance which may, on the final settlement of his accounts, found to be due to him.

**42. Certificate of Completion of works:**

42.1 Certificate of Completion of works:

42.1.1 Similarly, the Contractor may request and the Engineer-in-Charge shall issue a Certificate of Completion in respect of:

- a) Any section of the Permanent works in respect of which a separate time for completion is provided in the Contract, and
- b) Any substantial part of the Permanent Works which has been both completed to the satisfaction of the Engineer-in-Charge and occupied or used by the Department.

42.1.2 If any part of the Permanent Works shall have been completed and shall have satisfactorily passed any final test that may be prescribed by the Contract, the Engineer-in-Charge may issue such certificate, and the Contractor shall be deemed to have undertaken to complete any outstanding work in that part of the Works during the period of Maintenance.

**43. Taxes included in the bid:**

43.1 The percentage quoted by the contractor shall be deemed to be inclusive of the sales Tax and other taxes on all materials that the contractor will have to purchase for performance of this contract.

43.2 Any Central or State sales and other taxes on completed items of works of this contract as may be levied and paid by the contractor shall be reimbursed by the department to the contractor on proof of payment to the extent indicated in Part.II of Schedule-A.

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**44. Retention:**

- 44.1 The department shall retain from each payment due to the contractor @ the rate of 7.5% of bill amount until completion of the whole of the Works.
- 44.2 On completion of the whole of the Works half the total amount retained is re-paid to the Contractor and half when the Defects Liability Period has passed and the Engineer-in-Charge has certified that all the Defects notified by the Engineer-in-Charge to the Contractor before the end of this period have been corrected.
- 44.3 On completion of the whole works, the Contractor may substitute retention money with an “**on demand**” Bank Guarantee.

**45. Liquidated Damages:**

- 45.1 If for any reason, which does not entitle the contractor to an extension of item, the rate of progress of works, or any section is at any time, in the opinion of the CE/Group Director(U) too slow to ensure completion by the prescribed time or extended time for completion CE/Group Director(U) shall so notify the contractor in writing and the contractor shall there upon take such steps as are necessary and the CE/Group Director(U) may approve to expedite progress so as to complete the works or such section by the prescribed time or extended time. The contractor shall not be entitled to any additional payment for taking such steps. If as a result of any notice given by the CE/Group Director(U) under this clause the contractor shall seek the Executive Engineer s permission to do any work at night or on Sundays, if locally recognized as days or rest, or their locally recognized equivalent, such permission shall not be unreasonably refused.
- 45.2 If the contractor fails to complete whole of the works or any part thereof or section of the works within the stipulated periods of individual mile stones (including any bonafide extensions allowed by the competent authority without levying liquidated damages), the CE/Group Director(U) may without prejudice to any other method of recovery will deduct one tenth of one percent of contract value per calendar day or part of the day for the period of delays subject to a maximum of 10% of the contract value not as a penalty from any monies in his hands due or which may become due to the contractor. The payment or deductions of such damages shall not relieve the contractor from his obligation to complete the works, or from any other of his obligations and liabilities under the contract.
- 45.3 The liquidated damages for the whole of the work are  
Rs. 50.00 per lakh per day for balance work. (amount per day)

For milestone 1 (100%)	Rs. 50.00	Per day
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The maximum amount of liquidated damages for the whole of the works is ten percent of final contract price.

**46. Mobilisation Advance: Deleted.**

**47. Cost of Repairs:**

- 47.1 Loss or damage to the Works or materials to the Works between the Start Date and the end of the Defects Correction Periods shall be remedied by the Contractor at the Contractor's cost if the loss or damage arises from the Contractor's acts or omissions.

**E. FINISHING THE CONTRACT**

**48. Completion:**

- 48.1 The Contractor shall request the Engineer-in-Charge to issue a Certificate of completion of the Works and the Engineer-in-Charge will do so upon deciding that the work is completed.

**49. Taking Over:**

- 49.1 The Department shall take over the Site and the Works within seven days of the Engineer-in-Charge issuing a certificate of Completion.

**50. Final Account:**

- 54.1 The Contractor shall supply to the Engineer-in-Charge a detailed account of the total amount that the Contractor considers payable under the Contract before the end of the Defects Liability Period. The Engineer-in-Charge shall issue a Defects Liability Certificate and certify any final payment that is due to the Contractor within 56 days of receiving the Contractor's account if it is correct and complete. If it is not, the Engineer-in-Charge shall issue within 56 days a schedule that states the scope of the corrections or additions that are necessary. If the final Account is still unsatisfactory after it has been resubmitted, the Engineer-in-Charge shall decide on the amount payable to the Contractor and issue a payment certificate within 56 days of receiving the Contractor's revised account.

**51. Termination:**

- 51.1 The Department may terminate the Contract if the contractor causes a fundamental breach of the Contract.
- 51.2 Fundamental breaches of Contract include, but shall not be limited to the following.
- a) The Contractor stops work for 28 days when no stoppage of work is shown on the current program and the stoppage has not been authorised by the Engineer-in-Charge.
  - b) The Contractor is made bankrupt or goes into liquidation other than for a reconstruction or amalgamation.
  - c) The Engineer-in-Charge gives Notice that failure to correct a particular Defect is a fundamental breach of Contract and the Contractor fails to

correct it within a reasonable period of time determined by the Engineer-in-Charge; and

- d) The Contractor does not maintain a security which is required and
- e) The Contractor has delayed the completion of works by the number of days for which the maximum amount of liquidated damages can be paid as defined.
- f) If the contractor, in the judgment of the Department has engaged in corrupt or fraudulent practices in competing for or in the executing the contract.

For the purpose of this paragraph: "corrupt practice" means the offering, giving, receiving or soliciting of any thing of value to influence the action of a public official in the procurement process or in contract execution. "Fraudulent practice" means a misrepresentation of facts in order to influence a procurement process or the execution of a contract to the detriment of the Government and includes collusive practice among Tenderers (prior to or after Tender submission) designed to establish Tender prices at artificial non-competitive levels and to deprive the Government of the benefits of free and open competition.

51.3 Notwithstanding the above the Department may terminate the contract for convenience.

51.4 If the Contract is terminated, the Contractor shall stop work immediately, make the Site safe and secured leave the Site as soon as reasonably possible.

## **52. Payment upon Termination:**

52.1 If the Contract is terminated because of a fundamental breach of Contract by the Contractor, the Engineer-in-Charge shall issue a certificate for the value of the work done less advance payments received upon the date of the issue of the certificate, less other recoveries due in terms of the Contract, less taxes due to be deducted at source as per applicable law and less the percentage to apply to the work not completed. Additional Liquidated Damages shall not apply. If the total amount due to the Department exceeds any payment due to the Contractor the difference shall be a debt payable to the Department.

## **53. Property:**

53.1 All materials on the Site, Plant, Equipment, Temporary Works and Works are deemed to be the property of the Department if the Contract is terminated because of Contractor's default.

## **54. Release from Performance:**

54.1 If the Contract is frustrated by the outbreak of war or by any other event entirely outside the control of either the Department or the Contractor the Engineer-in-Charge shall certify that the contract has been frustrated. The Contractor shall make the site safe and stop work as quickly as possible after receiving this

certificate and shall be paid for all works carried out before receiving it and for any work carried out after wards to which commitment was made.

## F. Special Conditions

### 55. **Water Supply:**

The Contractor has to make his own arrangements for water required for the work and to the colonies and work sites, which are to be established by the Contractor.

### 56. **Electrical Power:**

The Contractors will have to make their own arrangements for drawing electric power from the nearest power line after obtaining permission from the Andhra Pradesh State Electricity Board at his own cost. In case of failure of electricity, the Contractor has to make alternative arrangements for supply of electricity by Diesel Generator sets of suitable capacity at place of work. If the supply is arranged by the Department, necessary Tariff rates shall have to be paid based on the prevailing rates.

The contractor will pay the bills of Electricity Board for the cost of power consumed by him.

The contractor shall satisfy all the conditions and rules required as per Indian Electricity Act 1910 and under rule –45(l) of the Indian Electricity Rules, 1956 as amended from time to time and other pertinent rules.

The power shall be used for bonafide Departmental works only.

#### 56.1 Electric Power for Domestic Supply:

- a) The contractor has to make his own arrangements for the supply of electric power for domestic purposes and the charges for this purpose have to be paid by him at the rates as fixed by the Andhra Pradesh State Electricity Board from time to time.
- b) The contractor will have to make his own arrangements to lay and maintain the necessary distribution lines and wiring for the camp at his own cost. The layout and the methods of laying the lines and wiring shall have the prior approval of the Engineer-in-Charge. All camp area shall be properly electrified. All lines, streets, approaches for the camp etc., shall be sufficiently lighted for the safety of staff and labour of the contractor, at the cost of the Contractor and it will be subject to the approval of the Engineer-in-Charge.

### 57. **Land:**

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### 57.1 Land for Contractor's use:

The contractor will be permitted to use Government land for execution of work. The contractor shall have to make his own arrangements for acquiring and clearing the site, levelling, providing drainage and other facilities for labour staff colonies, site office, work-shop or stores and for related activities. The Contractor shall apply to the Department within a reasonable time after the award of the contract and atleast 30 days in advance of its use, the details of land required by him for the work at site and the land required for his camp and should any private land which has not been acquired, be required by the contractor for his use. The same may be acquired by the contractor at his own cost by private negotiations and no claim shall be admissible to him on this account.

The Engineer-in-Charge reserves the right to refuse permission for use of any government land for which no claim or compensation shall be admissible to the contractor. The contractor shall, however, not be required to pay cost or any rent for the Government land given to him.

### 57.2 Surrender of Occupied Land:

- a) The Government land as here in before mentioned shall be surrendered to the Engineer-in-Charge within seven days, after issue of completion certificate. Also no land shall be held by the contractor longer than the Engineer-in-Charge shall deem necessary and the contractor shall on the receipt of due notice from the Engineer-in-Charge, vacate and surrender the land which the Engineer-in-Charge may certify as no longer required by the Contractor for the purpose of the work.
- b) The contractor shall make good to the satisfaction of the Engineer-in-Charge any damage to areas, which he has to return or to other property or land handed over to him for purpose of this work. Temporary structures may be erected by the contractor for storage sheds, offices, residences etc., for non-commercial use, with the permission of the CE/Group Director(U) on the land handed over to him at his own cost. At the completion of the work these structures shall be dismantled site cleared and handed over to the CE/Group Director(U). The land required for providing amenities will be given free of cost from Government lands if available otherwise the contractor shall have to make his own arrangements.

### 57.3 Contractor not to dispose off Spoil etc. :-

The contractor shall not dispose off or remove except for the purpose of fulfillment of this contract, sand, stone, clay ballast, earth, trees and shrubs or other materials obtained in the excavation made or lying on the site of the work, and all such materials and produce shall remain property of the Government. The Department may upon request from the contractor, or if so stipulated in the conditions of the contract allow the contractor to use any of the above materials for the works either free of cost or after payment as may be specifically mentioned or considered necessary during the execution of the work.

**58. Roads:**

Deleted

**59. Payment for Camp Construction:**

Deleted

**60. Explosive And Fuel Storage Tanks:**

No explosive shall be stored within ½ (half) KM of the limit of the camp sites. The storage of gasoline and other fuel oils or of Butane, Propane and other liquified petroleum gases, shall conform to the regulations of Andhra Pradesh State Government and Government of India. The tanks, above ground and having capacity in excess of 2000 litres, shall not be located within the camp area, nor within 200m, of any building.

**61. Labour:**

The contractor shall, make his own arrangements for the engagement of all staff and labour, local or other, and for their payment, housing, feeding and transport.

Labour importation and amenities to labour and contractor's staff shall be to the contractor's account. His quoted percentage shall include the expenditure towards importation of labour amenities to labour and staff;

The contractor shall, if required by the Engineer-in-Charge, deliver to the Engineer-in-Charge a written in detail, in such form and at such intervals as the Engineer-in-Charge may prescribe, showing the staff and the numbers of the several classes of labour from time to time employed by the contractor on the Site and such information respecting Contractor's Equipment as the Engineer-in-Charge may require.

**61.1 Transportation of Labour:**

- I. The contractor shall make his own arrangement for the daily transportation of the labour and staff from labour camps colonies to the work spot and no labour or staff of the contractor shall stay at the work spot. No extra payment will be made to the contractor for the above transportation of the labour and his quoted percentage to the work shall include the transportation charges of labour from colonies to work spot and back.
- II. The contractor will at all times duly observe the provisions of employment of children Act XXVI of 1938 and any enactment or modification of the same and will not employ or permit any person to do any work for the purpose under the provisions of this agreement in contravention of said Act. The contractor here by agrees to indemnify the department from and against all claims, penalties which may be suffered by the department or any person employed by the department by any default on the part of the contractor in the observance and performance of the provisions of the employment of children Act. XXVI of 1938 or any enactment or modification of the same.

As per Govt. memo No.721/Gr. (1)/81-35, dt: 17.11.87. The contractor shall obtain the insurance at his own cost to cover the risk on the works to labour engaged by

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him during period of execution against fire and other usual risks and produce the same to the CE/Group Director(U) concerned before commencement of work.

**62. Safety Measures:**

1. The contractor shall take necessary precautions for safety of the workers and preserving their health while working in such jobs, which require special protection and precautions. The following are some of the measures listed but they are not exhaustive and contractor shall add to and augment these precautions on his own initiative where necessary and shall comply with directions issued by the CE/Group Director(U) or on his behalf from time to time and at all times.
2. Providing protective foot wear to workers situations like mixing and placing of mortar or concrete sand in quarries and places where the work is done under much wet conditions.
3. Providing protective head wear to workers at places like under ground excavations to protect them against rock falls.
4. Providing masks to workers at granulates or at other locations where too much fine dust is floating about and sprinkling water at frequent intervals by water hoses on all stone crushing area and storage bins abate to dust.
5. Getting the workers in such jobs periodically examined for chest trouble due to too much breathing in to fine dust.
6. Taking such normal precautions like fencing and lightening in excavation of trenches, not allowing rolls and metal parts of useless timber spread around, making danger areas for blasting providing whistles etc.
7. Supply work men with proper belts, ropes etc., when working in precarious slopes etc.
8. Avoiding named electrical wire etc., as they would electrocute the works.
9. Taking necessary steps towards training the workers concerned on the machinery before they are allowed to handle them independently and taking all necessary precautions in around the areas where machines hoists and similar units are working.

**63. Fair Wage Clause:**

1. The contractor shall pay not less than fair wages to labourers engaged by him on the work.
2. "Fair" wages means wages whether for time or piecework notified by the Government from time to time in the area in which the work is situated
3. The contractor shall not with-standing the revisions of any contract to the contrary cause to be paid to the labour, in directly engaged on the work including any labour engaged by the sub-contractor in connection with the said work, as if the labourers had been directly employed by him.
4. In respect of labour directly or indirectly employed in the works for the purpose of the contractors part of the agreement the contractor shall comply with the rules and regulations on the maintenance of suitable records prescribed for this purpose from time to time by the Government. He shall maintain his accounts and vouchers on the payment of wages to the labourers to the satisfaction of the CE/Group Director(U).

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5. The CE/Group Director(U) shall have the right to call for such record as required to satisfy himself on the payment of fair wages to the labourers and shall have the right to deduct from the contract amount a suitable amount for making good the loss suffered by the worker or workers by reason of the "fair wages" clause to the workers.
6. The contractor shall be primarily liable for all payments to be made and for the observance of the regulations framed by the Govt. from time to time without prejudice to his right to claim indemnity from his sub-contractors.
7. As per contract labour (Regulation and abolition) Act. 1970 the contractor has to produce the license obtained from the licensing officers of the labour department along with the tender or at the time of agreement.
8. Any violation of the conditions above shall be deemed to be a breach of his contract.
9. Equal wages are to be paid for both men and women if the nature of work is same and similar.
10. The contractor shall arrange for the recruitment of skilled and unskilled labour local and imported to the extent necessary to complete the work within the agreed period as directed by the CE/Group Director(U) in writing.

**64. Indemnity Bond:**

Name of work:.....

I \_\_\_\_\_ contractor S/o. \_\_\_\_\_  
 aged \_\_\_\_\_ Resident of \_\_\_\_\_  
 do hereby bind myself to pay all the claims may come (a) under Workmen's Compensation Act. 1933 with any statutory modification there of and rules there under or otherwise for or in respect of any damage or compensation payable in connection with any accident or injury sustained (b) under Minimum wages Act 1948 (c) under payment of wages Act.1936 (d) under the Contractor labour (Regulation and Abolition) Act. 1970 by workmen engaged for the performance of the business relating to the above contract i.e., Failing such payment of claims of workmen engaged in the above work, I abide in accepting for the recovery of such claims, effected from any of my assets with the departments.

**65. Compliance With Labour Regulations:**

During continuance of the contract, the contractor and his sub contractors shall abide at all times by all existing labour enactments and rules made there under, regulations, notifications and bye laws of the State or Central Government or local authority and any other labour law (including rules), regulations, bye laws that may be passed or notifications that may be issued under any labour law in future either by the State or the Central Government or the local authority and also applicable labour regulations, health and sanitary arrangements for workmen, insurance and other benefits. Salient features of some of the major labour laws that are applicable to construction industry are given below. The

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contractor shall keep the Department indemnified in case any action is taken against Department by the competent authority on account of contravention of any of the provisions of any Act or rules made there under, regulations or notifications including amendments. If the Department is caused to pay or reimburse, such amounts as may be necessary to cause or observe, or for non-observance of the provision stipulated in the notifications/bye laws/Acts/Rules/regulations including amendments, if any, on the part of the contractor, the Engineer-in-charge /Department shall have the right to deduct any money due to the contractor including his amount of performance security. The Department/Engineer-in-Charge shall also have right to recover from the contractor any sum required or estimated to be required for making good the loss or damage suffered by the Department.

The employees of the Contractor and the Sub-contractor in no case shall be treated as the Department of the Department at any point of time.

**66. Salient features of some major labour laws applicable to establishment engaged in buildings and other construction work:**

- (a) Workmen compensation Act 1923: The Act provides for compensation in case if injury by accident arising out of and during the course of employment.
- (b) Payment of Gratuity Act 1972: Gratuity is payable to an employee under the Act on satisfaction of certain conditions on separation if any employee has completed 5 years service or more, or on death, the rate of 15 days wages for every completed year of service. The Act is applicable to all establishments, employing 10 or more employees.
- (c) Employees P.F. and Miscellaneous provision Act 1952: The Act provides for monthly contributions by the Department plus workers @ 10% or 8.33%. The benefits payable under the Act are:
  - (i) Pension or family pension on retirement or death, as the case may be.
  - (ii) Deposit linked insurance on the death in harness of the worker.
  - (iii) Payment of P.F. accumulation on retirement/death etc.,
- (d) Maternity Benefit Act 1951: The Act provides for leave and some other benefits to women employees in case of confinements or miscarriage etc.
- (e) Contract Labour (Regulation & Abolition) Act 1970: The Act provides for certain welfare measures to be provided by the contractor to contract labour and in case the Contractor fails to provide, the same are required to be provided by the Principal Department by Law. The Principal Department is required to take certificate of Registration and the contractor is required to take license from the designated Officer. The Act is applicable to the establishments or Contractor of Principal Department if they employ 20 or more contract labour.

- (f) Minimum wages Act 1948: The Department is supposed to pay not less than the Minimum wages fixed by appropriate Government as per provisions of the Act if the employment is a scheduled employment construction of Buildings, Roads, Runways are scheduled employments.
- (g) Payment of wages Act 1936: It lays down as to by what date the wages are to be paid, when it will be paid and what deductions can be made from the wages of the workers.
- (h) Equal Remuneration Act 1979: The Act provides for payment of equal wages for work of equal nature to Male or Female workers and for not making discrimination against Female employee in the matters of transfers, training and promotions etc.
- (i) Payment of Bonus Act 1965: The Act is applicable to all establishments employing 20 or more employees. The Act provides for payment of annual bonus subject to a minimum of 8.33% of wages and maximum of 20% of wages to employees drawing Rs. 3500/- per month or less. The bonus to be paid to employees getting Rs.2500/- per months or above and upto Rs.3500/- per month shall be worked out by taking wages as Rs.2500/- per monthly only. The Act does not apply to certain establishments. The newly set-up establishments are exempted for five years in certain circumstances. Some of the State Governments have reduced the employment size from 20 to 10 for the purpose of applicability of this Act.
- (j) Industrial Disputes Act 1947: The Act lays down the machinery and procedure for resolution of Industrial disputes, in what situations a strike or lock-out becomes illegal and what are the requirements for laying off or retrenching the employees or closing down the establishment.
- (k) Industrial Employment (Standing Orders) Act 1946: It is applicable to all establishments employing 100 or more workmen (employment size reduced by some of the State and Central Government to 50). The Act provides for laying down rules governing the conditions of employment by the Department on matters provided in the Act and gets the same certified by the designated Authority.
- (l) Trade Unions Act 1926: The Act lays down the procedure for registration of trade unions of workmen and Departments. The Trade Unions registered under the act have been given certain immunities from civil and criminal liabilities.
- (m) Child Labour (Prohibition & Regulation) Act 1986: The Act prohibits employment of children below 14 years of age in certain occupations and processes and provides for regulation of employment of children in all other occupations and processes; Employment Child Labour is prohibited in Building and Construction Industry.
- (n) Inter-State Migrant workmen's (Regulation of Employment & Conditions of service) Act 1979: The Act applicable to an establishment, which employs 5 or more inter-state migrant workmen through an intermediary (who has recruited workmen in one state for employment in the establishment situated in another

State). The inter State migrant workmen, in an establishment to which this Act becomes applicable, are required to be provided certain facilities such as housing, medical aid, travelling expenses from home upto the establishment and back, etc.

- (o) The Building and Other Construction workers (regulation of Employment and conditions of service) Act 1996 and the Cess Act of 1996: All the establishments who carry on any building or other construction work and employs 10 or more workers are covered under this Act. All such establishments are required to pay cess at the rate not exceeding 2% of the cost of construction as may be modified by the Government. The Department of the establishment is required to provide safety measures at the Building or construction work and other welfare measures, such as Canteens, First-aid facilities, Ambulance, Housing accommodations for workers near the work place etc. The Department to whom the Act applies has to obtain a registration certificate from the Registering Officer appointed by the Government.
- (p) Factories Act 1948: The Act lays down the procedure for approval of plans before setting up a factory, health and safety provisions, welfare provisions, working hours, annual earned leave and rendering information regarding accidents or dangerous occurrences to designated authorities. It is applicable to premises employing 10 person or more with aid of power or 20 or more persons without the aid of power engaged in manufacturing process.

## **67. Liabilities of the Contractor:**

### **67.1 Accident Relief and workmen compensation:**

The contractor should make all necessary arrangements for the safety of workmen on the occurrence of the accident, which results in the injury or death of any of the workmen employed by the contractor, the contractor shall within 24 hours of the happenings of the accident and such accidents should intimate in writing to the concerned Asst. Engineer / Asst. Executive Engineer of the Department the act of such accident. The contractor shall indemnify Government against all loss or damage sustained by the Government resulting directly or indirectly from his failure to give intimation in the manner aforesaid including the penalties or fines if any payable by Govt. as a consequence of Govt. failure to give notice under workmen's compensation Act or otherwise conform to the provisions of the said Act. In regard to such accident.

67.2 In the event of an accident in respect of which compensation may become payable under the workmen's compensation Act VIII 23 whether by the contractor, by the Government it shall be lawful for the CE/Group Director(U) to retain such sum of money which may in the opinion of the CE/Group Director(U) be sufficient to meet such liability. The opinion of the CE/Group Director(U) shall be final in regard to all matters arising under this clause.

67.3 The contractor shall at all times indemnify the Govt. of A.P. against all claims which may be made under the workmen's compensation act or any statutory modification thereafter or rules there under or otherwise consequent of any damage or compensation payable in consequent of any accident or injuries

sustained or death of any workmen engaged in the performance of the business relating to the contractor.

**68. Contractor's Staff, Representatives and Labour:**

- (a) The contractor shall, at all times, maintain on the works, staff of qualified Engineers, and Supervisors of sufficient experience of similar other jobs to assure that the quality of work turned out shall be as intended in the specifications. The contractor shall also maintain at the works, a Work Manager or sufficient status, experience and office and duly authorise him to deal with all aspects of the day-today work. All communications to any commitments by the Work Manager shall be considered as binding on the Contractor.
- (b) The Contractor shall at all times submit details of skilled and unskilled labour and equipment employed to the Engineer-in-Charge in prescribed proforma as he may require to assess and ensure the proper progress of work.
- (c) If the contractor does not employ the technical person agreed to on the work a fine of Rs.25,000/- will be imposed. If he does not employ for 30 days, thereafter it becomes a fundamental breach of contract.

**69. Accommodation and food:**

The contractor should arrange accommodation he needs, at his own cost. The contractor shall make his own arrangements for supply of food grains, fuel and other provision to his staff and labourers including controlled commodities.

**70. Relationship :**

Contractor shall have to furnish information along with tender, about the relationship he is having with any officer of the Department, Government of Andhra Pradesh of the rank Assistant Engineer and above engaged in the work and any officer of the rank of Assistant Secretary and above of the Department of Government of Andhra Pradesh.

**71. Protection of adjoining premises:**

The contractor shall protect adjoining sites against structural, decorative and other damages that could be caused by the execution of these works and make good at his cost any such damages.

**72. Work during night or on Sundays and holidays:**

The works can be allowed to be carried out during night, Sundays or authorised holidays in order to enable him to meet the schedule targets and the work shall require almost round the clock working keeping in view:

- (i) The provisions of relevant labour laws being adhered to:
- (ii) Adequate lighting, supervision and safety measures are established to the satisfaction of the Engineer-in-Charge and
- (iii) The construction programme given by the Contractor and agreed upon by the Engineer-in-Charge envisages such night working or working during Sundays or authorised holidays.

**73. Layout of materials stacks:**

The contractor shall deposit materials for the purpose of the work on such parts only of the ground as may be approved by the Engineer-in-Charge before starting work. A detailed survey, clearly indicating position and areas where materials shall be stacked and sheds built is to be conducted by the contractor at his own cost and only after obtaining necessary approval of the plan for use of sites by the Engineer-in-Charge, the Contractor can use the sites accordingly.

**74. Use of blasting materials:**

Procurement of blasting materials and its storage is the responsibility of the contractor. The contractor shall engage licensed blaster for blasting operation. The contractor is to act in accordance with Indian Explosive Act and other rules prevailing, during the execution of work. It is the responsibility of the contractor to see, that works by other agencies in the vicinity are not hampered, in such cases if any claim is made by other agencies that should be borne by the contractor. Carriage of blasting materials, from the magazine to the work site, is the responsibility of the contractor.

**75. Plant and Equipment:**

75.1 The contractor shall have sufficient plant, equipment and labour and shall work such hours and shifts as may be necessary to maintain the progress on the work as per the approval progress schedule. The working and shifts hours shall comply with the Govt. Regulations in force.

75.2 It is to expressly and clearly understood that contractor shall make his own arrangements to equip himself with all machinery and special tools and plant for the speedy and proper execution of the work and the department does not undertake responsibility towards their supply.

75.3 The department shall supply such of the machinery that may be available on hire basis but their supply cannot be demanded as matter of right and no delay in progress can be attributed to such non-supply of the plant by the department and the department cannot be made liable for any damage to the contractor. The Contractor shall be responsible for safe custody of the departmental machinery supplied to him (which will be delivered to contractor at the machinery yard at site of work) and he has to make good all damages and losses if any other than fire, wear and tear to bring it to the conditions that existed at the time of issue to the contractor before handing over the same to the department. The hire charges for the machinery handed over to the contractor will be recovered at the rate prevalent at the time of supply. The contractor will have to execute supplemental agreement with CE/Group Director(U) at the time of supply of the machinery.

75.4 The acceptance of departmental machinery on hire is optional to the contractor.

**76. Steel forms:**

Steel forms should be used for all items involving and use of centering and shuttering shall be single plane without any dents and undulations.

**77. Inconvenience to public:**

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The contractor shall not deposit materials at any site, which will cause inconvenience to public. The Engineer-in-Charge may direct the contractor to remove such materials or may undertake the job at the cost of the contractor.

**78. Conflict of interest:**

Any bribe, commission, gift or advantage given, promised or offered by or on behalf of contractor or his partner, agent or servant or any one on his behalf to any officer, servant, representatives, agents of Engineer-in-Charge, or any persons on their behalf, in relation to the obtaining or to execution of this, or any other contract with Engineer-in-Charge shall in addition to any criminal liability, which it may incur, subject to the cancellation of this or all other contracts and also to payment of any loss or damage resulting from any such cancellation. Engineer-in-Charge shall then be entitled to deduct the amount, so payable from any money, otherwise due to the contractor under this or any other contract.

**79. Contract documents and materials to be treated as confidential:**

All documents, correspondences, decisions and orders, concerning the contract shall be considered as confidential and/or restricted in nature by the contractor and he shall not divulge or allow access to them by any unauthorized person.

**80. General obligations of Contractor:**

- 80.1 The contractor shall, subject to the provision of the contract and with due care and diligence, execute and maintain the works in accordance with specifications and drawings.
- 80.2 The contractor shall promptly inform the Department and the Engineer-in-Charge of any error, omission, fault and toerh defect in the design of or specifications for the works which are discovered when reviewing the contract documents or in the process of execution of the works.
- 80.3 If Contractor believes that a decision taken by the Engineer-in-Charge was either outside the authority given to the Engineer-in-Charge by the Contract or that the decision was wrongly taken, the decision shall be referred to the technical expert within 14 days of the notification of the Engineer-in-Charge's decisions.
- 80.4 Pending finalisation of disputes, the contractor shall proceed with execution of work with all due deligence.

**81. Security measures:**

- a) Security requirements for the work shall be in accordance with the Government's general requirements including provisions of this clause and the Contractor shall conform to such requirements and shall be held responsible for the actions of all his staff, employees and the staff and employees of his sub-contractors.
- b) All contractors' employees, representatives and sub-contractor's employees shall wear identifications badges provided by the contractor. Badges shall identify the contractor, showing and employee's number and shall be worn at all times while at the site. Individual labour will not be required to wear identification badges.



- c) All vehicles used by the contractor shall be clearly marked with contractor's name.
- d) The contractor shall be responsible for the security of the works for the duration of the contract and shall provide and maintain continuously adequate security personnel to fulfill these obligations. The requirements of security measures shall include, but not limited to maintenance of order on the site, provision of all lighting, fencing, guard flagmen and all other measures necessary for the protection of the works within the colonies, camps and elsewhere on the site, all materials delivered to the site, all persons employed in connection with the works continuously throughout working and non working period including nights, Sundays and holidays for duration of the contract.
- e) Other contractors working on the site concurrently with the contractor will provide security for their own plant and materials. However, their security provisions shall in no way relieve the contractor of his responsibilities in this respect
- f) Separate payment will not be made for provision of security services.

**82. Fire fighting measures:**

- a) The contractor shall provide and maintain adequate fire fighting equipment and take adequate fire precaution measures for the safety of all personnel and temporary and permanent works and shall take action to prevent damage to destruction by fire of trees shrubs and grasses.
- b) Separate payment will not be made for the provision of fire prevention measures.

**83. Sanitation:**

The contractor shall implement the sanitary and watch and ward rules and regulations for all forces employed under this contract and if the Contractor fails to enforce these rules, the Engineer-in-Charge may enforce them at the expenses of the Contractor.

**84. Training of personnel:**

The contractor, shall, if and as directed by the Engineer-in-Charge provide free of any charge adequate facilities, for vocational training of Government Officers, students, Engineers, supervisors, foremen, skilled workmen etc. not exceeding six in number at any one time on the contractor's work. Their salaries, allowances etc. will be borne by the Government and the training schemes will be drawn up by the Engineer-in-Charge in consultation with the contractor.

**85. Ecological balance:**

- a) The contractor shall maintain ecological balance by preventing de-forestation, water pollution and defacing of natural landscape. The contractor shall so conduct his construction operation as to prevent any unnecessary destruction, scarring, or defacing of the natural surrounding in the vicinity of the work. In respect of the ecological balance, Contractor shall observe the following instructions.

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- i) Where unnecessary destruction, scarring, damage or defacing may occur, as result of the operation, the same shall be repaired replanted or otherwise corrected at the contractor's expense. The contractor shall adopt precautions when using explosives, which will prevent scattering of rocks or other debris outside the work area. All work area including borrow areas shall be smoothed and graded in a manner to conform to the natural appearances of the landscape as directed by the Engineer-in-Charge.
  - iii) All trees and shrubbery which are not specifically required to be cleared or removed for purposes shall be preserved and shall be protected from any damage that may be caused by the contractor's operation and equipment. The removal of trees and shrubs will be permitted only after prior approval by the Engineer-in-Charge. Special care shall be exercised where trees or shrubs are exposed to injuries by equipment, blasting, excavating, dumping, chemical damage or other operation and the contractor shall adequately protect such trees by use of protective barriers or other methods approval by the Engineer-in-Charge. Trees shall not be used for anchorages. The contractor shall be responsible for injuries to trees and shrubs caused by his operations. The term "injury" shall include, without limitation bruising, scarring, tearing and breaking of roots, trunks or branches. All injured trees and shrubs be restored as nearly as practicable without delay to their original condition at the contractor's expense.
  - (iii) The contractor's activities shall be performed by methods that will prevent entrance or accidental spillage of solid matter contaminants, debris and other objectionable pollutants and wastage into river. Such pollutant and waste include earth and earth products, garbage, cement concrete, sewage effluent, industrial wastes, radio-active substances, mercury, oil and other petroleum products, aggregate processing, mineral salts and thermal pollution. Pollutants and wastes shall be disposed off in a manner and at sites approved by the Engineer-in-Charge.
  - (iv) In conduct of activities and operation of equipments the contractor shall utilise such practicable methods and devices as are reasonably available to control, prevent and otherwise minimize the air pollution. The excessive omission of dust in to the atmosphere will not be permitted during the manufacture, handling and storage of concrete aggregates and the contractor shall use such methods and equipment as a necessary for collection and disposal or prevention of dust during these operation. The contractor's methods of storing and handling cement shall also include means of eliminating atmospheric discharges of dust, equipment and vehicles that give objectionable omission of exhaust gases shall not be operated. Burning of materials resulting from clearing of trees, bushes, combustible construction materials and rubbish may be permitted only when atmospheric conditions for burning are considered favourable.
- b) Separate payment will not be made for complying with the provisions of this clause and all cost shall be deemed to have been included in the unit rates and

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prices included in the contract if any provision is not complied with within a reasonable time even after issue of a notice in this respect, the necessary operations would be carried out by the Engineer-in-Charge at the cost of the Contractor, Orders of the Engineer-in-Charge in this respect would be final and binding on the contractor.

**86. Preservation of existing vegetation:**

- a) The contractor will preserve and protect all existing vegetation such as trees, on or adjacent to the site which do not unreasonably interfere with the execution as may be determined by the Engineer-in-Charge. The contractor will be held responsible for all unauthorised cutting or damage of trees, including damage due to careless operation of equipment, stockpiling of materials or trekking of grass areas by equipment. Care shall be taken by the Contractor in felling trees authorised for removal to avoid any unnecessary damages to vegetation and trees that are to remain in place and to structures under construction or in existence and to workmen.
- b) All the produce from such cutting of trees by the contractor shall remain the property of Government and shall be properly stacked at site, approved by the Engineer-in-Charge. No payment whatsoever, shall be made for such cutting and its stacking by the Contractor. If any produce from such cutting is not handed over to the Government by the contractor, he shall be charged for the same at the rates to be decided by the Engineer-in-Charge. The recovery of this amount shall be made in full from the intermediate bill that follows.
- c) The contractor shall also make arrangements of fuel deposits for supply of required fuel for the labourer to be employed for cooking purpose at his own cost in order to prevent destruction of vegetation growth in the surrounding area of the work site.

**87. Possession prior to completion:**

The Engineer-in-charge shall have the right to take possession of or use any completed part of work or works or any part there of under construction either temporarily or permanently. Such possession or use shall not be deemed as an acceptance of any work either completed or not completed in accordance with the contract with in the interest of Clause 28 of APSS except where expressly otherwise specified by the Engineer-in-charge.

**88. Payment upon termination:**

If the contract is terminated because of a fundamental breach of contract by the contractor, the Engineer-in-Charge shall issue a certificate for the value of the work done less advance payment received upon the date of the issue of the certificate and less the percentage to apply to the work not completed as indicated in the contract data. Additional liquidated damages shall not apply. If the total amount due to the Department exceeds any payment due to the contractor the difference shall be a debt payable to the Department. In case of default for payment within 28 days from the date of issue of notice to the above effect, the contractor shall be liable to pay interest at 12% per annum for the period of delay.

- 89. Access to the contractor's books:**  
Whenever it is considered necessary by the Engineer-in-Charge to ascertain the actual cost of execution of any particular extra item of work or supply of the plant or material on which advance is to be made or of extra items or claims, he shall direct the contractor to produce the relevant documents such as payrolls, records of personnel, invoices of materials and any or all data relevant to the item or necessary to determine its cost etc. and the contractor shall when so required furnish all information pertaining to the aforesaid items in the mode and manner that may be specified by the Engineer-in-Charge.
- 90. Drawing to be kept at site:**  
Deleted
- 91. B.I.S. [I.S.I.] books and APSS to be kept at site:**  
A complete set of Indian Standard specification referred to in "Technical Specifications" and A.P.S.S. shall be kept at site for reference.
- 92. Site Order Book:**  
An order book shall be kept at the site of the work. As far as possible, all orders regarding the work are to be entered in this book. All entries shall be signed and dated by the Department Officer in direct charge of the work and by the contractor or by his representative. In important cases, the CE/Group Director(U) or the Executive Engineer will countersign the entries, which have been made. The order book shall not be removed from the work, except with the written permission of the CE/Group Director(U).
- 93. Variations by way of modification, omissions or additions:**  
For all modifications, omissions from or additions to the drawings and specifications, the CE/Group Director(U) will issue revised plans, or written instructions, or both and no modification, omission or addition shall be made unless so authorised and directed by the CE/Group Director(U) in writing.  
  
The CE/Group Director(U) shall have the privilege of ordering modifications, omission or additions at any time before the completion of the work and such orders shall not operate to annul those portions of the specifications with which said changes do not conflict.
- Engineer-in-Charge's Decision:  
  
It shall be accepted as in separable part of the contract that in matters regarding materials, workmanship, removal of improper work, interpretation of the contract drawings and contract specification, mode of the procedure and the carrying out of the work, the decision of the Engineer-in-Charge, which shall be given in writing, shall be binding on the contractor.
- 94. Care and diversion of river/stream:**  
The contractor shall submit details regarding the diversion and care of river or stream during execution of the work along with a separate print-out of the time table showing earliest and latest start and finish dates of various activities. He should submit a detailed layout plan with drawings for the diversion and care of

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river during execution of work. The above arrangements shall be at contractor's cost.

**95. Income tax:**

- a) During the currency of the contract deduction of income tax at 2.24% shall be made from the gross value of each bill of the contract, the contract value of which is in excess of Rs.10,000/- for deduction of tax at rates lower than 2.24% procedure stipulated under section 194-C(4) of Income Tax Act, 1961 shall be followed.
- b) Income Tax clearance certificate should be furnished before the payment of final bill.
- c) The contractor's staff, personnel and labour will be liable to pay personnel income taxes in respect of their salaries and wages as are chargeable under the laws and regulations for the time being in force, and the contractor shall perform such duties in regard to such deductions thereof as may be imposed on him by such laws and regulations.

**96. Seigniorage charges:**

96.1 Deleted.

**97. Supply of required materials:**

- i) The contractor has to make his own arrangements for procurements, supply and use of required materials.
- ii) All materials so procured should confirm to the relevant specifications indicated in the bidding documents.
- iii) The contractor shall follow all regulations of the Department/Government of India in respect of import licenses etc., of the procurement of the materials is through imports and he shall be responsible for the payment of applicable duties and taxes, port clearances, inland transportation etc.
- iv) The contractor shall make his own arrangements for adequate storage of the materials.

***[Any other special conditions applicable to the work put to Tender.]***

# **TECHNICAL SPECIFICATIONS**

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## 98. TECHNICAL SPECIFICATIONS:

### 98.1. Laboratory Tests Procedures:

Soil samples shall be obtained in disturbed/undisturbed form and various laboratory investigations such as (a) Indices tests, which include natural moisture content, specific gravity, liquid limit, plastic limit and unit weight, (b) Physical experimentation like sieve analysis for establishing the particle size distribution curves and for soil classification, and (c) Free swell index tests on clayey soils shall be conducted.

In addition, the strength tests such as Unconfined Compressive Strength and Direct Shear Tests, based on the soil type, shall also to be conducted on UDS samples to determine the shear strength parameters i.e., cohesion, C, and angle of internal friction,  $\phi$ , of the soils. The field and laboratory shall be conducted in accordance with the I.S. specifications listed below.

- IS – 1498 : Classification and identification of soils for general engineering purpose.
- IS:1892 : Code of practice for sub-soil investigations for foundations.
- IS: 2131 : Method for standard penetration test for soils.
- IS: 2132 : Code of practice for thin walled tube sampling of soils.
- IS: 2720 (I) : Preparation of dry samples various Tests.
- IS: 2720 (II) : Determination of water content.
- IS: 2720 (III) : Determination of specific gravity of fine, medium and coarse grained soil
- IS:2720 (IV) : Grain Size Analysis
- IS: 2720 (V) : Determination of liquid and plastic limit.
- IS:2720 (XI) : Determination of shear strength parameter of soil Unconsolidated Untrained triaxial compression test without measurement of pore pressure.
- IS – 2720 (XIII): Direct shear test
- IS – 2720 (XL): Free swell Index Test

### 98.2. Field Dry Density & Natural Moisture Content:

The weight of undistributed soil sample with sampler (Shelby Tube) shall be determined after removing paraffin wax and loose soil. The total length of soil sample recovered will be determined after deducting empty length from the total length of sampler. The volume of soil mass retained in sampler is thus determined from the known inside diameter of sampler and total length of soil mass. The soil mass is then removed and the average moisture content is determined by keeping the soil sample along with crucible in oven at 100-105 degree centigrade for 24 hours. The empty weight of the sampler is then found out. From the total weight of sampler with soil mass, the weight of empty sampler is deducted. The field density is then found out as follows.

Field density (bulk),  $t = \text{weight of soil mass} / \text{volume of soil mass}$   
And, Field dry density,  $d = t / (1+w)$  Where 'w' is water content.

### 98.3. Particle Size Analysis:

The sieve analysis shall be carried out in accordance with IS: 2720 (Part 4, 1985). The results are to be presented in the form of Grain size distribution curve.

Representative soil sample obtained from the bulk soil sample collected shall be preserved. Quantity of soil taken will be dependent on the maximum size of particle size present in the soil. Sieve analysis is conducted in two parts.

**98.4. Soil fraction retained on 4.75 mm ISS:**

Soil portion retained on 4.75 ISS is weighed. The sample is then separated into various fractions by Sieving through the following sieves: 100, 75, 19 and 4.75 mm ISS

While sieving through each sieve, sieve is agitated so that sample rolls in irregular motion over the sieve, at no time the particles are pushed through; Care is also taken to see that no individual soil particles are broken, though particles adhering one another are rubbed by rubber pestle when required. Care is also taken not to overload the sieve beyond the permitted maximum load for respective sieve.

The mass of the material retained on each sieve is recorded. The percentage of soil retained on each sieve is then calculated on the basis of the total mass of soil taken and from these results, the percentage passing through each sieve is calculated.

**98.5. Soil fraction passing 4.75 ISS:**

The portion of the soil passing 4.75mm ISS is oven dried at 105 to 110 centigrade. The portion is coned & quartered to obtain required representative quantity of the material. The material is weighed and placed in tray/bucket filled with water for soaking and loosening the adhered cohesive materials. The soaked soil specimen is then washed on 75 micron IS Sieve until the water passing the sieve is almost clear. The material retained on 75 micron IS Sieve is then transferred in a tray, dried in oven.

Sieve analysis is then conducted on a nest of sieves (viz. 2 mm, 425 and 75 micron ISS) either by hand or by using mechanical sieve shaker. The fraction retained on each of the sieves is weighed separately and masses recorded. Cumulative mass of soil fraction retained on each sieve is then calculated. The combined gradation on the basis of the total sample taken for analysis is finally calculated.

**98.6. Atterberg's Limits:**

For fine grained soils, consistency limits are important in addition to natural moisture content. The Consistency Limits are Liquid Limit, Plastic Limit and Shrinkage Limit. Liquid and plastic limits are determined by using procedure given in IS: 2720.

The Liquid Limit test shall be conducted on disturbed soil samples using Cassagrande's Liquid Limit device and grooving tool. The moisture content of the soil paste corresponding to number of blows required to close the groove made by the grooving tool in the apparatus is to be determined. The liquid limit of the soil which corresponds to the moisture content of a paste which would give 25 blows is to be determined.

For determination of plastic limit, a soil sample weighing at least 20 gm from the soil sample passing 425micron IS sieve is to be thoroughly mixed with water such that it can be easily moulded with fingers. A ball is formed with about 8 to 10 gm of this soil and is rolled between the fingers and the glass plate with just sufficient pressure to



roll the mass into a thread of uniform diameter of 3mm throughout its length. The soil is then kneaded together to a uniform mass and rolled again. The process is continued until the thread crumbles. The pieces of crumbled soil thread are collected and moisture content is determined and reported as plastic limit.

**98.7. Specific Gravity:**

The specific gravity of soil solids is to be determined by a 50ml density bottle. The weight ( $w_i$ ) of the empty dry bottle is taken first. A sample of oven-dried soil about 10-20 g cooled in a desiccators, is put in the bottle, and weight ( $W_2$ ) of the bottle and the soil is taken. The bottle is then filled with distilled water gradually removing the entrapped air either by applying vacuum or by shaking the bottle. The weight ( $W_3$ ) of the bottle, soil and water (full up to the top) is then taken. Finally the bottle is emptied completely and thoroughly washed and clean water is filled to the top and the weight ( $W_4$ ) is taken.

$$\text{Specific Gravity (G)} = \frac{(W_2 - W_i)}{(W_2 - W_i) - (W_2 - W_4)}$$

**98.8. Shear Test:**

Tri-axial (undrained) tests are to be carried out to determine the shear parameters. The shear tests are carried out in accordance with IS: 2720 (pt. X, XI, XII and XIII) on saturated samples. For unconsolidated undrained tri-axial compression test, the undisturbed soil specimen having diameter 38 mm and height to diameter ratio 2 is prepared and placed on the pedestal of the tri-axial cell. The cell is then assembled with the loading ram and then placed in the loading machine. The cell fluid is admitted to the cell and the pressure is raised to the desired value. An initial reading of the gauge measuring axial compression of the specimen is recorded. The test is then commenced and sufficient number of simultaneous readings of load and compression measuring gauge being taken. The test is continued until the maximum value of the stress has been passed or until an axial strain of 20 per cent has been reached. Additional tests are carried out on identical specimen at confining pressure of 1kg/cm<sup>2</sup>, 2 kg/cm<sup>2</sup> and 3 kg/cm<sup>2</sup>. The shear parameters are obtained from the plot of Mohr circles.

Direct Shear Test is to be carried out using shear box with the specimens (60mm x 60mm). Specimen with plain grid plate at the bottom of the specimen and plain grid plate at the top of the specimen is fitted into position in the shear box housing and assembly placed on the load frame. The serrations of the grid plates are kept at right angle to the direction of shear. The loading pad is kept on the top grid plate. The required normal stress is applied and the rate of longitudinal - displacement/shear stress application so adjusted that no drainage can occur in the sample during the test (1.25mm/min). The upper part of the shear box is raised such

that a gap of about 1mm is left between the two parts of the box. The test is conducted by applying horizontal shear load to failure or to 20 percent longitudinal displacement whichever occurs first. The test is repeated on identical specimens.

**98.9 Consolidation Test:**

The consolidation tests are to be carried out on undisturbed soil specimen in order to determine the settlement characteristics of soil at different depths. The tests were conducted in accordance to IS: 2720 (Pt-XV).

An undisturbed soil specimen is to be extruded to the consolidation ring of 60mm diameter. The edge is trimmed carefully such that the sample flushes with the top and bottom edges of the ring. The thickness of the specimens measured and the weight is recorded. The bottom porous stone is then centered on the base of the consolidation cell.

The specimen shall be placed centrally between the bottom porous stone and the upper porous stone. A filter paper is provided in-between specimen and porous stones. Then the loading cap is placed on the top. The consolidometer is placed in position in the loading device and suitably adjusted. The dial gauge is then clamped into position for recording the relative movement between the base of the cell and the loading cap.

A seating Pressure of 0.05 kg/cm<sup>2</sup> is applied to the specimen. The cell is kept filled with water. After 24 hours the test is continued using a loading sequence on the soil specimen of 0.25, 0.5, 1.0, 2.0, 4.0 and 8.0 kg/cm<sup>2</sup>. For each loading increment after application of load, readings of the dial gauge is taken using time sequence 0, 0.25, 1, 2.25, 2, 6.25, 9, 16, 25, 36, 49 up to 24 hrs. From the observations of all incremental pressure, void ratio versus log (pressure) curve is obtained. The slope of the straight line portion is designated as compression index C<sub>c</sub>.

**98.10 Differential Free Swell Test:**

In order to determine the swelling characteristics of the soil, differential free swell test is to be carried out on oven dried soil sample. 10 gm passing through 425 micron is poured in two 100 ml graduated cylinders. One cylinder was filled with distilled water and another with kerosene up to 100 ml mark. After removal of entrapped air, sample was allowed sufficient time to attain equilibrium state of volume. The final volume of soil in each cylinder was recorded.

$$\text{DFS} = \frac{\text{Soil volume in water} - \text{soil volume in kerosene}}{\text{Soil volume in kerosene}}$$

**98.11. Purpose of Field Investigation:**

The sub-soil investigation was carried out to determine,

1. Establish sequence and extent of each soil strata and rock formation that need to be considered for the proposed work.
2. Profiling nature of each soil strata and determining their engineering properties, Which may affect the mode of construction of the proposed structure and its foundation .
3. Location of ground water table in each borehole.

**98.12. Field Soil Investigation Procedure**

Sub-soil investigations at various locations as specified are to be carried out following the guidelines provided by IS: 1892-1979. When pit was progressing soil was extruded into a tube of 150 mm diameter, which facilitates the collection of undisturbed soil samples. Each trial pit was terminated at a depth of 30.45 m below the existing ground level. A stratum is considered to be hard when the standard penetration test value N i.e the number of blows required for 300mm penetration of the SPT spoon beyond a seating penetration of 150mm in the strata is more than 50. If the penetration of the spoon is less than 300mm and more than 50 blows the N value is written as  $N > 50$ . The depth of water table at the end of boring is observed. All the results obtained from the field operations are shown in the log of bores (Fig. 1&2). Since trial pits falls under shallow depth category for excavation process manual methods were adopted.

**98.13. Drilling:**

Each bore hole of 150mm diameter is to be drilled up to the depth of 15.0m. Where ever caving of the borehole occurred, casing was used to keep the borehole stable. The work was in general accordance with IS: 1892-1979. The borehole is located at 300x300mt. grid or as shown by the Engineer In charge during progress of work.

**98.14. Distributed Samples:**

Disturbed but representative soil samples are to be collected, logged labeled and placed in polythene bags.

**98.15 Undisturbed Samples:**

Undisturbed soil samples are to be collected in 100 mm diameter thin walled sampler (Shelby tube) from the borehole. The sampler used for the sampling had smooth surface and appropriate area ratio and cutting edge angle thereby minimizing disturbance of soil during sampling. Samples are logged and labeled properly and transfer to the laboratory for further testing.

**98.16 Method of Sampling:**

Sampler is to be coupled together with a sampler head to form a sampling assemble. The sampler head provide a non-flexible connection between the sampling tube and the drill roads. Vent hole are provided in the sampler head to allow escape of water from the top of sampler tube during penetration. The sampling tubes are made free from dust and rust. Coating of oil is applied on both sides to obtain the undisturbed samples in best possible manner.

The sampler is then lowered inside the bore hole on a string of rods and driven to a predetermined level. On completion of driving the sampler is first rotated within the borehole to shear the soil sample at bottom and then pulled out. Upon removal of the sampling tubes, the length of sample in the tube is recorded. The disturbed material in the upper end of the tube, if any, is completely removed before sealing.

**98.17. The standard penetration test (SPT Test):**

The standard penetration tests are to be conducted in each bore as per IS: 2131: 1981(Reaffirmed 2002). The split spoon sampler resting on the bottom of bore hole is allowed to sink under its own weight, then the split spoon sampler is seated 15 cm with the blow of hammer falling through 750mm. the driving assembly consists of a driving head and a 63.5 kg weight. It is ensured that the energy of the falling weight is not reduced by friction between the drive weight and the guides or between ropes. The rods to which the sampler is attached for driving are straight, tightly coupled and straight in alignment. Thereafter the split spoon sampler is further driven by 30cm. The number of blow required to drive each 15cm penetration is recorded. The first 15cm of drive considered as seating drive. The total blows required for the second and third 15cm penetration is termed as a penetration resistance- N value. The N-Values for each bore hole are given in bore logs.

A Strata is considered to be hard, when the 'N' Value i.e. the number of blows required for 300 mm penetration of the SPT spoon beyond a seating penetration of 150 mm in the strata is more than 50 ( Clause 3.3.3 of 15:3132-1981). If the penetration of the spoon is less than 300 mm more than 50 blows, the N value is written as N>50. All the results obtained from the field operations are shown in the log of bore (Figure: 1 - 9).

**98.18 Water Table:**

The depth of water table shall be recorded at different stages of work.

98.19 **Testing :**

Testing of samples shall be done in any of the following reputed Engineering colleges.

- V.R.Siddhartha Engineering College, Vijayawada.
- RVR &JC Engineering College, Guntur.
- JNTU College of Engineering, Kakinada
- Vignan University, Guntur.

98.20 **Equipment:**

The agency or contractor shall possess the required machinery for extracting the soil samples in the field.

99. **DELIVERABLES:**

The agency shall deliver the following in neatly bounded book format in specified no of copies along with the soft copies.

1. Safe bearing capacity of the soil.
2. Type of Soil.
3. Water table details.
4. Depth of hard stratum.
5. Suitable tests for cohesive/Non Cohesive Soils.
6. Engineering properties of soil.
7. 'N' value.
8. Natural Moisture Content.
9. Liquid limit, Plastic Limit, Plasticity Index and Unit Weight shall be determined for disturbed and undisturbed soils sieve analysis.
10. Tests for sandy/ gravelly soils, particle size distribution and classification of soil. 11. Differential free swell index.
11. C and  $\phi$  values of Soil.
12. The agency shall bound to conduct any laboratory test other than mentioned above as per the instructions of the Engineer in Charge.

**1.0    **SECRECY CLAUSE:****

The drawings and specifications made available to the tenderer shall exclusively be used on the work and they are retained from passing on each plan to any unauthorized hand either in parts or in full under the provisions of Section-3 and 5 of the official secrets Act 1923. Any violation in this regard will entail suitable action under appropriate clause or official secret Act 1923.

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**BILL OF QUANTITIES  
AND  
PRICE BID.**

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**Name of work: Soil Investigation for safe bearing capacity for Structural design to Major Arterial Roads in Amaravati Capital City**

*BILL OF QUANTITIES*

**PREAMBLE**

1. The Bill of Quantities shall be read in conjunction with the instructions to Tenderers, General and Special conditions of Contract Technical Specifications and Drawings.
2. The quantities given in the Bill of Quantities are estimated and provisional and are given to provide common basis for tendering. The quantities here given are those upon which the lumpsum tender cost of the work is based but they are subject to alterations, omissions, deductions or additions as provided for in the conditions of this contract and do not necessarily show the actual quantities of work to be done. The basis of payment will be actual quantities of work ordered and carried out as measured by the Contractor and verified by the Engineer and valued at the estimate rate plus or minus tender percentage quoted in the Bill of Quantities where applicable, and otherwise at such rates and prices as the Engineer-in-Charge may fix within the terms of Contract.
3. The estimate rates in the Bill of Quantities shall, except in so-far as it is otherwise provided under the Contract include cost of all the material, labour, machinery, transportation, erection, maintenance, profit, taxes and duties together with all general risks, liabilities and obligations set out or implied in the Contract.
4. The plans enclosed with the tender are liable to be altered during execution of work as per necessity of site conditions. The Tender percentage quoted by the tenderer shall hold good for execution of work even with altered plans.
5. The whole cost of complying with the provisions of the Contract shall be included in the estimated rates for items provided in the Bill of Quantities and where no items are provided in the Bill of Quantities, their cost shall be deemed to be distributed among the estimate rates entered for the related items of work.
6. General directions and descriptions of work and materials are not necessarily repeated nor summarised in the Bill of Quantities. References to the relevant sections of the Contract documentation shall be made before entering estimate rate against each item in the Bill of Quantities.
7. The method of measurements of completed work for payment shall be in accordance with the relevant B.I.S. Codes & A. P. S. Specifications.
8. All items of work are to be executed as per the drawings / specifications supplied with the contract documents.

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If there is any contradiction between the drawings and the text of the specifications, the later shall prevail.

9. The Tenderer should inspect and select the quarries of his choice before he quotes the tender percentage in the Schedule of Bill of Quantities and satisfy himself about the availability of required quantum of materials.
10. Diversion drains should be excavated before completion of the embankments and the useful soils should be used in the nearby embankments.
11. The actual mix proportion by weight to be adopted during execution will be got designed in the laboratories to suit the grade of concrete and mortar to be used. It will be the responsibility of the contractor to manufacture concrete and mortar of required strength.
12. The quantum of measurement for all items of earthwork involving conveyance manually or by machinery shall be as assessed by level measurement. The measurements for the embankment will be for the consolidated banks only.
13. Wherever bailing out of water is involved either for excavation or for foundations or for constructions, the percentage quoted shall take into account the dewatering charges necessary. No separate payment will be made for dewatering.
14. Wherever embankment work is involved, useful soils approved by the Engineer-in-Charge from the cutting reaches and diversion drains shall be taken and used for forming nearby embankments soils used for constructions will be at free of cost.
15. The quoted tender percentage shall also include the work of any kind necessary for the due and satisfactory completion of the works according to the drawings and these specifications and further drawings and orders that may be issued by the Engineer-in-Charge from time to time. The quoted tender percentage shall include compliance by the Contractor with all the general conditions of contract, whether specifically mentioned or not in the various clauses of these specifications, all materials, machinery, plant, equipment, tools, fuel, water, strutting, timbering, transport, offices, stores, workshop staff, labour and the provision of proper and sufficient protective works, diversions, temporary fencing and lighting. It shall also include safety of workers, first aid equipments suitable accommodation for the staff and workmen, with adequate sanitary arrangements, the effecting and maintenance of all insurances, the payment of all wages, salaries, fees, royalties / Taxes, duties or other charges arising out of the execution of works and the regular clearance of rubbish, reinstatement and clearing-up of the site as may be required on completion of works safety of the public and protection of the works and adjoining land. The work of Building in quality control / assurance shall be deemed to be covered in the quoted percentage.
16. The Contractor shall ensure that, the quoted tender percentage shall cover all stages of work such as setting out, selection of materials, selection of methods, selection of equipment and plant, deployment of personnel and supervisory staff,

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- quality control testing etc. The work quality assurance shall be deemed to be covered in the tender percentage.
17. a) The special attention of the tenderer is drawn to the conditions in the tender notices wherein reference has been made to the Andhra Pradesh Standard Specifications [APSS] and the Standard preliminary specifications containing therein. These preliminary specifications shall apply to the agreement to be entered into between the contractor and the Government of Andhra Pradesh and shall form an in-separable condition of the contract along with the estimate. All these documents taken together shall be deemed to form one contract and shall be complimentary to another.
- b) The tenderer shall examine, closely the A.P.S.S. / MOST and also the standard preliminary specifications contained therein and sign the CE/Group Director(U) office copy of the APSS / MOST and its addenda volume in token of such study before submitting his overall tender percentage which shall be for finished work in-situ. He shall also carefully study the drawings and additional specifications and all the documents, which form part of the agreement to be entered into by the successful tenderer. The APSS / MOST and other documents connected with contract such as estimate plans, specifications, can be seen on all working days in the office of the CE/Group Director(U) [As specified in the NIT].
18. The tenderers attention is directed to requirements for materials under the clause 'materials and workmanship' in the preliminary specifications of APSS. Materials conforming to the Bureau of Indian Standards specifications, APSS etc., shall be used on the work and the tenderers shall quote his overall tender percentage accordingly.
19. The tenderer has to do his own testing of materials and satisfy himself that they conform to the specifications of respective I.S.I. Codes before tendering.
20. The contractor shall himself procure the required materials of approved quality including the earth for formation of embankment and water from quarries / sources of his choice. All such quarries / sources of materials required for the work shall be got approved by the Engineer-in-Charge in writing well before their use of the work.
21. The contractor shall himself procure the steel, cement, Bitumen, Blasting materials, sand, metal, soils, etc., and such other materials required for the work well in advance. The contractor has to bear the cost of materials for conveyance. The department will not take any responsibility for fluctuations in market in cost of the materials, transportation and for loss of materials etc.
22. Inspection of site and quarries by the tenderer: Every tenderer is expected before quoting his overall tender percentage, to inspect the site of proposed work. He should also inspect the quarries and satisfy himself about the quality, and availability of materials. The best class of materials to be obtained from quarries, or other sources shall be used on the work. In every case the materials must comply with the relevant standard specifications. Samples of materials as

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called for in the standard specifications or in this tender notice, or as required by the CE/Group Director(U), in any case, shall be submitted for the CE/Group Director(U)'s approval before the supply to site of work is begun.

23. The tenderer's particular attention is drawn to the sections and clauses in the A.P. standard specification dealing with
- a) Test, inspection and rejection of defective materials and work.
  - b) Carriage
  - c) Construction plant
  - d) Water and lighting
  - e) Cleaning up during the progress and for delivery.
  - f) Accidents
  - g) Delays
  - h) Particulars of payments.

The contractor should closely peruse all the specification clauses, which govern the overall tender percentage he is tendering.

24. The defect liability period of contract in terms of GO Ms.No.8, T.R&B Dept., dt:8.1.2003 is twenty four months.
25. The estimate rates for items shown in the Schedule "A" include all materials. No escalation in rates will be paid unless specified in the tender document. The tenderer has to quote an overall tender percentage considering all the aspects of the tender to complete the finished item of work as per the APSS / MOST / B.I.S. specifications, the special specifications appended, Drawings etc.
26. If there is any contradiction between APSS / MOST and B.I.S. specifications, listed and detailed technical specifications, the latter shall prevail.
27. In case of a job for which specifications are not available with the Schedule or in APSS / MOST or B.I.S. code and are required to be prescribed, such work shall be carried out in accordance with the written instructions of the Engineer-in-charge.
28. Deleted.
29. Additions and alternations by the Tenderer in the Schedule of quantities will disqualify the tender.
30. In the case of discrepancies between the written description of the item in the Schedule "A" and the detailed description in the specification of the same item, the latter shall be adopted.
31. The Unit rates noted below are those governing payment of extras or deductions for omissions according to the conditions or the contract as set-forth in the preliminary specifications of the A.P. standard specifications and other conditions of specification of this contract.

32. It is to be expressly understood that the measured work is to be taken according to the actual quantities when in place and finished according to the drawings or as may be ordered from time to time by the CE/Group Director(U) and the cost calculated by measurement or weight at their respective rates without any additional charge for any necessary or contingent works connected works connected herewith. The Percentage Excess or less on ECV quoted are for works in situ and complete in every respect.
33. For all items of work in excess of the quantities indicated the rates payable for such excess quantities will be tendered rates i.e., estimate rates plus or minus tender percentage.
34. For all items of work, intermediate payment will be made provisionally as per relevant clause. Full-accepted agreement rates will be paid only after all the items of works are completed.
35. The contractor is bound to execute all supplemental works that are found essential incidental and inevitable during execution of main work.
36. The payment of rates for supplement items of work will be regulated as under. Supplemental items directly deductible from similar items in the original agreement.

The rates shall be derived by adding to or subtracting from the agreement rate of such similar item the cost of the difference in the quantity of materials labour between the new items and similar items in the agreement worked out with reference to the schedule of rates adopted in the sanctioned estimate with which the tenders are compared.

- a) Similar items but the rates of which cannot be directly deducted from the original agreement.
- b) Purely new items which do not correspond to any item in the agreement.

The rate of all such items shall be estimated rates plus or minus overall tender percentage.

37. ENTRUSTMENT OF ADDITIONAL ITEMS.
  - a) Where ever additional items not contingent on the main work and outside the scope of original agreement are to be entrusted to the original contractor dispensing with tenders and if the value of such items exceeds the limits upto which the officer is empowered to entrust works initially to contractor without calling for tenders approval of next higher authority shall be obtained. Entrustment of all such items on nomination shall be rates not exceeding the estimate rates.

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- b) Entrustment of supplement items contingent on the main work will be authorised by the officers upto the monetary limits upto which they themselves are competent to accept items in the original agreement so long as the total amounts upto which they are competent to accept in an original agreement rates for such items shall be worked in accordance with the procedure prescribed in GO Ms.No.1493 PWD, dated: 25-10-1971 and as amended in Govt. Memo number 544 cod 72-22 dt: 06-07-1973.
- c) Entrustment of either the additional supplemental items shall be further subject to the provisions under para 176(b) of APWD Code Viz., the items shall not be ordered by an officer on his own responsibility if the revised estimate or deviation statement providing for the same requires the sanction of higher authority.

**Note:** It may be noted that the term estimate rate used above means the rate in the sanctioned estimate with which the tender's compared or if no such rate is available in the estimate the rate derived will be with reference to the schedule of rates adopted in the sanctioned estimate with which tenders are compared.

## BILL OF QUANTITIES

[Part-I]

**Name of work: Soil Investigation for safe bearing capacity for Structural design to Major Arterial Roads in Amaravati Capital City.**

Approximate Quantity In figures/ words	Description of work	Specification No. / APSS / BIS / MOST	Unit In figures / words	Estimate Rate In figures / words	Amount in Rs.
1025.00	Drilling of exploratory bore holes of 150 mm dia by roatary drilling through all type of soils expect rock from EGL to specified depth, disturbed sampels at every 3 mt and SPT @ 1.5 m depth interval preparation and submission of samples and testing as per IS:1892-1979 upto N value <100	As per SS	Rmt	1200.00	1230000.00
82	Drilling in boulders/All type of rock/SDR/weatered rock using NX casing bit including collection of rock samples and submisison of samples and testing as per IS:1892-1979& IS:4078-1980 RQD>30 Recovery >50 %	As per SS	Rmt.	2200.00	180400.00

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123.00	Drilling in all types of hard rock with double core barrel using NX diamond bit upto depth of 3 mt for confirmation of hard rock including collection of samples and testing as per IS:1892-1979& IS:4078-1980 RQD>30	As per SS	Rmt	3000.00	369000.00
	<b>Total</b>				17,79,400.00

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PRICE BID

Name of work: **Conducting Sub Soil Exploration for Major Arterial roads in Amaravathi Capital City Area**

**ESTIMATED CONTRACT VALUE (IN FIGURES & WORDS): Rs. 17,79,400/-**

(Rupees Seventeen Lakhs Seventy Nine Thousand Four hundred only).

I/We - -----do hereby express my willingness to execute the aforesaid work as per the conditions, standards, specifications, rules, regulations, etc., stipulated in the tender documents at an overall tender percentage of -----(numbers)-----  
--(in words) Excess over estimated value or at Estimate rates or Less than estimate rates.

Signature, Name of the Contractor/Authorized Signatory

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## **SCHEDULE – A**

### **PART-II**

- |           |                                |                                |
|-----------|--------------------------------|--------------------------------|
| <b>1.</b> | <b>Provision towards GST :</b> | <b>As per Prevailing G.O's</b> |
| <b>2.</b> | <b>Provision towards NAC:</b>  | <b>0.1%</b>                    |

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