

BHARAT SANCHAR NIGAM LIMITED

(A Government of India Enterprises)OFFICE OF THE GENERAL MANAGER, TELECOM DISTRICT, DHENKANAL

BID DOCUMENT (TECHNICAL BID)

OPEN TENDER FOR UNDERGROUND LOCAL CABLE AND O.F.CABLE CONSTRUCTION WORKS WITH ALLIED WORKS IN DHENKANAL TELECOM DISTRICT

TENDER NO. GC-427/13-14/36 DHENKANAL DATED:-20.07.2013

Tender paper Cost: - Rs. 563/-

TABLE OF CONTENTS

Section	Content	Page No.
QUALIFYING	BID DOCUMENT	
l	Notice Inviting Tender	03
II	Bid Form	04
III	Tenderer's Profile	05
IV	Instruction to Bidders	06-12
٧	General (Commercial) conditions of the contract	13-24
VI	Special conditions of the contract	25-31
VII	(A)Scope of Work and jurisdiction of Contract for OF Cable work (B) Scope of Work and jurisdiction of Contract for UG Local Cable work	32-33
VIII	(A)OF Cable construction Specifications (B)UG CABLE construction Specifications	34-41
IX	Material Security Bond Form	42
Χ	Agreement & Integrity Pact	43-45
XI	Letter of authorization for attending bid opening	46
XII	List of the documents to be submitted along with bid	47
XIII	(A)Near relative certificate (B) Undertaking	48-49
FINANCIAL I	BID DOCUMENT	50-55
XIV	Schedule of Rates	51-54
XV	Price Schedule	55

DATED:- 20.07.2013

SECTION-I, NOTICE INVITING TENDER

Properly sealed tenders (preferably Packing with PVC Tape/Sealing Wax) are invited for and on behalf of BHARAT SANCHAR NIGAM LIMITED by the General Manager Telecom District, Dhenkanal, from the bonafied, contractors having experience in O.F. / U.G local Cable laying works in last 7(Seven) years ending on 30.04.2013 for a minimum amount of Rs. 3(Three) Lacs during any 1 (One) year continuous period or less than 1 (One) year continuous period in-between 01.05.2006 to 30.04.2013. The bidders having experience of similar nature of Civil (Earth Excavation and pipe laying) works for minimum Rs. 3(Three) Lacs during the period in-between 01.05.2006 to 30.04.2013 are also eligible.

Sl.	Rs. 3(Three) Lacs during t		s of Item.	03.2006 10 30.04.2013 GIE	diso eligible.		
No		OPEN TENDER FOR UNDERGROUND LOCAL CABLE AND O.F. CABLE CONSTRUCTION WORKS WITH ALLIED					
01.	Name of work		KS IN DHENKANAL				
	Zone No, Name of the Zone, Designation of site Engineer,	Zone No	Name of The Zone	Designation of site Engineer	Designation of Engineer incharge.	Estimated Cost	EMD or Bid Security @2.5% of Estimated Cost
		01	Jurisdiction of AGM(NW OP-CFA), Dhenkanal	SDOT- Dhenkanal SDOP-Dhenkanal SDOT-K. Nagar SDE(OFC Mtce.) DHENKANAL	AGM (NW OP-CFA), Dhenkanal AGM(Trans), Nalconagar	Rs. 32.5 Lakhs	Rs 81250.00
02	Designation of Engineer incharge, Estimated Cost & EMD or Bid Security.	02	Jurisdiction of AGM(NW OP- CFA), Nalconagar	SDOP- Nalco Nagar SDOT-Talcher SDOT-Kaniha SDE(OFC Mtce.), NALCONAGAR	AGM (NW OP-CFA), Nalconagar AGM(Trans), Nalconagar	Rs. 27.5 Lakhs	Rs 68750.00
		03	Jurisdiction of AGM(NW OP- CFA), Angul	SDOT-Angul SDOP-Angul SDE(OFC Mtce.), NALCONAGAR	AGM (NW OP-CFA), Angul AGM(Trans), Nalconagar	Rs. 25 Lakhs	Rs 62500.00
03	Cost of BID Document	Rs 5	63/- including 12			respect of each	Zone senarately)
04.	Mode of deposit for both cost of BID document and EMD or BID Security.	Rs. 563/- including 12.5% S.Charge (For Each bid document in respect of each Zone separately) D.D./B.C. drawn in favour of Accounts Officer (Cash), BSNL, O/o. G.M.T.D., Dhenkanal payable at Dhenkanal.					
05.	Bid Document can be had from	SDE (Plg/MM), O/o. G.M.T.D., Dhenkanal 2 nd Floor, Telephone Bhawan, Dhenkanal or Downloaded from BSNL website:-www.orissa.bsnl.co.in					
06.	Period of issue of Bid documents	All working days between 11.00 Hrs. to 16.00 Hrs. From dt: 31.07.2013 to dt: 20.08.2013					
07.	Time and Last date of submission of bid document	Up to 13.00 hours of dt: 21.08.2013					
08.	Time and date of opening of bid .	At 15.30 Hrs of dt: 21.08.2013 If the date is declared as holiday, then the opening date will automatically be treated as extended to next working day at 15.30 Hrs.					
09	Experience	Contractors having experience in O.F. / U.G local Cable construction works in last 7(Seven) years ending on 30.04.2013 for a minimum amount of Rs. 3(Three) Lacs during any 1(One) year continuous period or less than 1(One) year continuous period in between 01.05.2006 to 30.04.2013 will be eligible. The bidders having experience of similar nature of Civil (Earth Excavation and pipe laying) works for minimum Rs. 3(Three) Lacs during the period in between 01.05.2006 to 30.04.2013 are also eligible. The experience for above cited amount of Rs. 3(Three) Lacs during period in between 01.05.2006 to 30.04.2013 must be in any units of BSNL/MTNL/ any PSU /any state Govt. Department / any Central Govt. Department / any licensed private Telecom Service provider and the experience certificate for the same should have been issued by the officer of the level of minimum STS group A Officer or equivalent.					
10	Criteria for issue of Bid document.			id document amounting h), BSNL, O/o. G.M.T.D			
11	Each bidder is allowed to participate for maximum 02(two) Zones.	Maximum of 2 sets of Bid documents can be issued to each applicant for any 2 zones. Thus, each bidder is allowed to participate in maximum any of the 2(Two) zones out of the 3(Three) Zones.					
12	Mode of receipt of completed sealed tender document	By registered post/courier service or by dropping in the Tender Box placed in the chamber of AGM(HR & Admn) O/O GMTD, Dhenkanal on or before the date / time fixed as shown under Sl. No. 07 as above.					
13.	Rejection of Tender			plete tender, ambiguous and c			
	Down loaded Bid or	Down	. 1	cument from the website			

The G.M.T.D., Dhenkanal reserves the right to accept or reject any or all the tenders without assigning any reason what so ever and is not bound to accept the lowest tender. For more details please visit us / our website:- www.orissa.bsnl.co.in

Sd/-

AGM(HR & Admn) O/O GMTD, Dhenkanal

SECTION - II BID FORM

TENDER NO. GC-427/13-14/36 To,

DHENKANAL DATED:-20.07.2013

0,

The General Manager, BSNL, Telecom District, DHENKANAL

Dear Sir,

Having examined the conditions of contract and specifications including addended No
If our bid is accepted, we shall submit the securities as per the conditions mentioned in the contract.
We agree to abide by this bid for a period of 180 days from the date fixed for bid opening (qualifying bid) and it shall be remain binding upon us and may be accepted at any time before the expiry of that period.
Until a formal agreement is prepared and executed, the bid together with your writter acceptance thereof in your notification of award shall constitute a binding contract between us.
We undertake if our bid is accepted, we will execute the work in accordance with specifications, time limits and terms and conditions stipulated in the tender document / Work Order.
Bid submitted by us is properly sealed and prepared so as to prevent any subsequent alteration and replacement.
Dated this2013
Signature of Authorized Signatory
In capacity of
Duly authorized to sign the bid for
and on behalf of
Witness

SECTION — III TENDERER' S PROFILE General

Passport size
Photograph (To be
pasted) of the
Tenderer / authorized
Signatory holding
Power of autonomy with
signature on the front
side of Photo graph
overlapping the form

Name of the tenderer /firm Name of the person submitting the tender whose photograph is affixed
Shri / Smt
(In case of proprietary /Partnership firms, the tender has to be signed by proprietor/partner only, as the case may be) 3. Address of the firm
4. Telephonic address 5. Tel. Nos. with STD code (O)
7. Name of Proprietor/ Partner / Directors
8. Contractor's Registration Certificate details: a) Category b) Number c) Issuing Authority d) Issued on e) Valid up to
9. Tenderer's bank, its address and his current account number
10. PAN & Income tax circle (Please attach a copy of last income tax return) 11. Infrastructural Capabilities a) Capacity of trenching per day (in meters) b) Capacity of cable laying per day (in meters) c) Capacity of pulling cable through duct per day (in meters) d) Capacity of engaging mazdoors per day
I / We hereby declare that the information furnished above is true and correct.
Place: Date:
Signature of tenderer/Authorised signatory

SECTION – IV INSTRUCTION TO BIDDERS

A. INTRODUCTION

1. **DEFINITIONS**:

 α

BSNL: BSNL means Bharat Sanchar Nigam Limited

(A Government of India Enterprise) under the Department of Telecommunications, ministry of Communications & IT which invites the tenders on behalf of the President of India. All references with

Department/BSNL means:-Chief General Manager Principal General Manager

General Manager

Deputy General Manager / Area Manager / Director / TDM

Divisional Engineer/AGM Sub Divisional Engineer Junior Telecom Officer Chief Accounts Officer Accounts Officer Assistant Accounts Officer Junior Telecom Officer

Including other officers/executives in the department/BSNL, whatever designation assigned to them from time to time, who may be the In-charge of direction, supervision, testing, acceptance and maintenance including their successor(s) in the office appearing in various clauses shall be taken to mean the BSNL under the Department of Telecommunications, the Ministry of Communications & IT, Government of India.

b) The SSA Head: Means The General Manager Telecom DHENKANAL and his successors.

c) The jurisdiction of the SSA Head: The jurisdiction of the General Manager Telecom

means the DHENKANAL Telecom District which

coincides geographically with whole of the Dhenkanal &

Angul revenue District.

d) Representative of the SSA Head: Representative of General Manager Telecom means

Officer and staff for the time being deputed by the General Manager Telecom for inspecting or supervising the work or testing at a

testing etc.

- e) **Engineer-In-Charge:** The Engineer In-Charge means the Engineering Officer nominated by the BSNL to supervise the work, under the contract. (Minimum Asst. General Manager level Officer) as shown in 4th sub-column of column no-3 of NIT against SI. No-02.
- f) **Site Engineer:** Site Engineer shall mean an SDE/SDO of the BSNL who may be placed by the General Manager Telecom, DHENKANAL, as in-charge of the work at site at any particular period of time as shown in third sub-column of column no-3 of NIT against sl. No- 02.
- g) A/T Unit: A/T unit shall be mean Acceptance and Testing unit of the BSNL.
- h) A/T Officer: An Officer authorized by the General Manager Telecom DHENKANAL to conduct A/T.
- Contract: The term contract means the document forming the tender and acceptance thereof and the formal agreement executed between the competent authority on behalf of the BSNL and the contractor, together with the documents referred to therein including these conditions, the specifications, designs, drawings and instructions issued from time to time, by the engineer in-charge and all these documents taken together shall be deemed to form one contract and shall be complementary to one another. In the contract, the following expressions shall, unless the context otherwise requires, have the meanings, hereby respectively assigned to them. The expression works or work shall unless there be something either in the subject or context repugnant to such construction, be construed and taken to mean the works by or by virtue of the contract contracted to be executed whether temporary or permanent and whether original, altered, substituted or additional.
- j) **Contractor:** The contractor shall mean, the individual, firm or company enlisted with BSNL in accordance with procedure for enlistment of contractor, whether incorporated or not, undertaking the works and shall include the legal personal representative of such individual or the persons composing such firm or company, or the successors of such firm or company and the permitted assignees of such individual, firm or company.
- k) Work: The expression "Works" shall unless there be something either in the subject or context repugnant to such construction be construct and taken to mean the works by or by virtue of the contract contracted to be executed whether temporary or permanent and whether original altered, substituted or additional.
- Schedule(s): Schedule(s) referred to in these conditions shall mean the relevant schedule(s) or the standard schedule of rates mentioned in the document.
- m) **Site:** The site shall mean the land / or other places on, into or through which work is to be executed under the contract or any adjacent land, path or street through which, the work is to be executed under the contract or any adjacent land, path, or street which may be allotted or used for the purpose of carrying our the contract.

- Normal time or stipulated time: Normal time or stipulated time means time specified in the work order to complete the work.
- o) **Extension of time:** Extension of time means the time granted by the BSNL to complete the work beyond the normal time or stipulated time.
- p) **Date of commencement of work:** Date of commencement of work means the date of actual commencement of work or 7th day from the date of issue of work order, whichever is earlier.
- q) **Due date of completion:** Due date of completion shall be the date by which the work shall be completed at site including clearance of site.
- r) **Duration of work completion of work:** The duration of completion of work or completion time shall be time specified in the work order plus extension of time granted, if any.
- s) **Excepted risk:** Excepted risk are risks due to war (whether declared or not), invasion, act of foreign enemies, hostilities, civil war, rebellion, revolution, insurrection, military or usurped power, any act of BSNL damages from aircraft, other causes over which, the contractor has no control and the same having been accepted as such by the Accepting Authority or causes solely due to use or occupation by the BSNL of the part of the work, in respect of which a certificate of completion has been issued.
- 2. **ELIGIBILITY OF BIDDERS**

As per Clause No-7

- 3. **BID DOCUMENTS**
- 3.1 The construction work to be carried out, goods required, bidding procedures and contract terms are prescribed in the Bid documents. The bid documents include
 - 3.1.1 Qualifying Bid:
 - 3.1.1.1 Notice Inviting Tender
 - 3.1.1.2 Bid Form
 - 3.1.1.3 Tenderer's profile
 - 3.1.1.4 Instructions to Bidders
 - 3.1.1.5 General (commercial) conditions of the contract.
 - 3.1.1.6 Special conditions of contract
 - 3.1.1.7 Scope of work and jurisdiction of the contract
 - 3.1.1.8 U.G Local cable & O.F. cable construction specifications
 - 3.1.1.9 Material security bond form
 - 3.1.1.10 Agreement (Sample)
 - 3.1.1.11 Letter of Authorization for attending bid opening
 - 3.1.1.12 List of documents to be submitted along with bid.
 - 3.1.1.13 Near relative certificate
 - 3.1.2 Financial Bid
 - 3.1.2.1 SOR
 - 3.1.2.2 Price Schedule.
- 3.2 The bidder is expected to examine all instructions, forms, terms and specification in the bid document. Failure to furnish all information required as per the bid documents or submission of bids not substantially responsive to the bid documents in every respect will be at the bidder's risk and shall result in rejection of bid.

4. QUERIES ON BID DOCUMENTS

A prospective bidder, requiring any clarification of the Bid Documents shall notify the BSNL in writing or by fax at the BSNL's mailing address indicated in the invitation for Bids. The BSNL shall respond in writing to any request for clarification of the Bid Documents, which it receives not later than 7 days prior to the date for the opening of the bids. Copies of the query (without identifying the source) and the clarifications by the BSNL shall be sent to all the prospective bidders who have purchased the bid documents and all such clarifications issued by the BSNL will form part of the bid document.

5. AMENDMENT OF BID DOCUMENTS

- 5.1 At any time, prior to the date for submission of bids, the BSNL may, for any reason whether of motto or in response to the clarification requested by a prospective Bidder, modify the bid documents by amendments.
- 5.2 The amendments shall be notified in writing or by telex or FAX to all prospective bidders on the address intimated at the time or purchase of bid document from the BSNL and these amendments will be binding on them.
- 5.3 In order to afford prospective bidders reasonable time to take the amendments into account in preparing their bids, the BSNL may, at its discretion, extend the deadline for the submission/opening of bids suitably.

B. PREPARATION OF BIDS

6. COST OF BIDDING

The bidder shall bear all costs associated with the preparation and submission of the bid. The BSNL, will in no case, be responsible or liable for these costs, regardless of the conduct or outcome of the bidding process.

7. DOCUMENTS ESTABLISHING BIDDER'S ELIGIBILITY AND QUALIFICATIONS

- i) The bidder shall furnish, the (d) and (e) as below inside the first sealed inner envelop and all other documents that is all documents from (a) to (n) except (d) & (e) inside the second sealed inner envelop along with the Technical bid portion of the bid document. These documents from (a) to (n) must be submitted inside first & Second sealed inner envelops as said above to establish bidder's eligibility:
 - a) Self-Attested photo copy of the valid Registration of individual Contractor / Firm.
 - b) Self-Attested Photo copy of PAN Card.
 - c) Self-Attested Photo copy of Experience Certificate as per column No-3 against Sl. No-09 of NIT.
 - d) Cost of Tender/BID Document as per NIT (As per SI. No. 03.)
 - e) EMD(Bid Security) as per NIT (as per column No. 08 of SI No- 02 of NIT).
 - f) Self-Attested photo Copy of valid EPF Registration Certificate.
 - g) Self-Attested Photo copy of Valid ESI Registration Certificate.
 - Self-Attested Photo copy of valid Labour Registration Certificate or valid labour license certificate from any officer under CLC (Central), New Delhi or any labour ministry official of any State Govt.
 - i) Self-Attested Photo copy of Valid Service Tax Registration Certificate.
 - j) Declaration stating that none of his family members or near relatives are working in BSNL. [Proforma to be filled up and submitted along with technical bid inside second sealed inner envelop as given in section XIII(A)]
 - k) Tender document(s) must be submitted, in original, duly filled in and signed by tenderer or his authorized representative along with seal and signature on each page. All corrections and overwriting must be initialed with date by the tenderer or his authorized representative.
 - Tenderer's profile duly filled in, as per section-III of the technical bid portion of tender document.
 - m) Original "Power of Attorney" in case person other than the tenderer has signed the tender documents must be submitted along with technical bid inside sealed inner envelop number "Second".
 - The tenders submitted by Partnership firms should furnish attested photocopy of "Partnership Deed" duly registered.
 - **II)** The tender is liable for rejection, if any of the document stated in clause No-7 (i) is found missing at the time of opening of the Technical bid. Submission of any document submitted after opening of Technical Bid is not acceptable.

8. BID SECURITY / EMD

- 8.1 The bidder shall furnish, as part of his bid, a bid security (EMD) @ 2.5% of estimated cost of Tender in the form of DD or BC as mentioned in NIT. No interest shall be paid by the BSNL on the bid security for any period, what so ever.
- 8.2 The bid security is required to protect the BSNL against the risk of bidders conduct, which would warrant the bid security's forfeiture, pursuant to para 8.7.
- 8.3 Bid Security shall be paid in the form of Crossed Demand Draft or BC issued by a scheduled bank, drawn in favour of Accounts Officer (Cash), BSNL, O/o. G.M.T.D., Dhenkanal, payable at Dhenkanal.
- 8.4 A bid not secured in accordance with para 8.1 & 8.3 shall be rejected by the BSNL as non-responsive.
- 8.5 The bid security of the unsuccessful bidder will be refunded as promptly as possible but not later than 30 days after the expiry of the period of bid validity prescribed by the BSNL.
- 8.6 The successful bidder's bid security will compulsorily be converted to part performance security deposit in accordance with clause: 25.2.
- 8.7 The bid security / EMD shall be forfeited;
- 8.7.1 If a bidder withdrawals his bid during the period of bid validity specified in the bid document or
- 8.7.2 If the bidder makes any modifications in the terms and conditions of the tender before acceptance of the tender, which are not acceptable to the BSNL or
- 8.7.3 if at any time the documents / Certificates submitted by the bidder found to be false or fabricated. This may lead to black listing of the bidder.
- 8.7.4 In case of a successful bidder, if the bidder fails:
 - (i) to sign the agreement in accordance with Section -IV, clause -25,
 - (ii) to furnish Material Security in accordance with clause-5 of Section-V.

9.BID PRICES

- 9.1 The bidder shall give the total composite price inclusive of all levies and taxes, packing, forwarding, freight and insurance in case of materials to be supplied and inclusive of all taxes and levies in case of works to be executed. The contractor shall be responsible for transporting the materials, to be supplied by BSNL at the sub-divisional store deport or otherwise to execute the work under the contract, to site at his/their own cost.
- 9.2 Prices shall be quoted by the bidder as per Price schedule. The prices quoted at any other place shall not be considered.
- 9.3 The price quoted by the bidder shall remain fixed during the entire period of contract and shall not subject to variation on any account. A bid submitted with an adjustable price quotation will be treated as non-responsive and rejected.
- 9.4 Discount, if any, offered by the bidders shall not be considered unless they are specifically indicated in the schedule of rates (financial Bid). Bidders desiring to offer discount shall therefore modify their offers suitably while quoting and shall quote clearly net price taking all such factors like Discount, free supply, etc. into account.

10. PERIOD OF VALIDITY OF BIDS

- 10.1 Bid shall remain valid for 180 days from date of opening of the bid (Qualifying Bid). A BID VALID FOR A SHORTER PERIOD SHALL BE REJECTED BY BSNL AS NON-RESPONSIVE.
- 10.2 The BSNL reserves the right to request the lowest 3 bidders as per read out list on the opening day to extend the bid validity for a period of further 120 days in addition to 180 days but the bidder has no binding to necessarily extend the bid validity. Refusal to extend the bid validity will result in forfeiture of the bid security. A bidder accepting the request and extending the bid validity will not be permitted to modify his bid.

11. SIGNING OF BID

- 11.1 The bidder shall submit, as a part of his bid, the bid documents (in original) duly signed on each and every page, establishing the conformity of his bid to the bid documents of all the works to be executed by the bidder under the contract. (Note: The tenderer is advised to keep a photocopy (at his own cost) the bid documents for his own reference)
- 11.2 The bid shall contain no inter-lineation, erasures or overwriting necessary to correct errors made by the bidder in which case such correction shall be signed with date by the person or persons signing the bid.

C. SUBMISSION OF BIDS

12. METHOD OF PREPARATION OF BID

12.1 Bid for each tender should be submitted in three envelopes placed inside a main cover. These envelopes should contain the following:

Envelope	Marked on the Cover	Contents of Envelope
First	Bid Security	Containing Bid Security as per clause 8 and cost of Bid document as per NIT.
Second	Qualifying Bid	Containing documents as per clause 7 (i)except the bid security and cost of bid document.
Third	Financial Bid	Rates duly quoted by the tenderer in the format that is price schedule as section-XV

On all these envelopes the name of the firm and whether "Bid Security" OR "Qualifying bid" OR "Financial bid" must be clearly mentioned and should be properly sealed (with sealing wax/packing PVC tape). These envelopes are to be placed inside an outer envelope and properly sealed (with sealing wax/packing PVC tape). The tenders, which are not submitted in above, mentioned manner should be summarily rejected.

12.2 All envelopes (3 inner & one outer) must bear the following :

Tender for "OPEN TENDER FOR UNDERGROUND LOCAL CABLE AND O.F.CABLE CONSTRUCTION WORKS WITH ALLIED WORKS IN DHENKANAL TELECOM DISTRICT"

"NOT TO OPEN BEFORE at 15.30 Hrs "

(TENDER NO. GC-427/13-14/36

DHENKANAL DATED:-20.07.2013)

(Full Address of the Tendering Authority)

- 12.3 The tender will be bound by all terms, conditions and specifications as per the tender documents.
- 12.4 Any tender with conditions other than those specified in the tender document to be summarily rejected. No modification by the contractor in any of the condition will be permitted after the tender is opened.

13. SUBMISSION OF BIDS

13.1 Tenders should be dropped in person in the tender box placed in the office of **AGM(HR & Admn)**, 1st Floor, O/o G.M.T.D., Dhenkanal before the closing (date & time) of tender, as mentioned in NIT & be addressed to , **AGM(HR & Admn)** 1st Floor O/o the General Manager, Telecom District, Dhenkanal-759001. The tenderer is to ensure the delivery of the bids at the correct address. The BSNL shall not be held responsible for delivery of bid to the wrong address. The slit of tender box will be sealed immediately after the specified time for receipt of tender. Any tender presented in person after the sealing of box will not be received by G.M.T.D., Dhenkanal or by any of the subordinates or will not be allowed to deposit in the tender box.

- 13.2 The bids complete in all respect can also be sent by Regd. Post/Speed post /courier service addressing AGM(HR & Admn) O/o GMTD, Dhenkanal which should reach before the scheduled date & time. Late receipt of bid will not be opened and will be returned to the bidder unopened by registered post. BSNL authority is not responsible for late receipt of BID by Regd. Post/Speed post /courier service.
- 13.3 Postponement of Tender opening: Whenever it is considered necessary to postpone the opening of tenders, quick decision must be taken and communicated to the tenderers who have purchased the tender documents and shall be at least one day before the original date of opening. The reason for postponing the tender shall be recorded in writing. Such notice of extension of date of opening shall also be put-up on the notice board and also published in the newspapers in which original NIT's have been published. If the date of opening of bid is declared as holiday, the bids will be opened on the next working date at the same time and venue.
- 13.4 The BSNL if subsequently declares date fixed for opening of bids as holiday, the revised schedule will be notified. However, in absence of such notification, the bids will be opened on next working day, time and venue remaining unaltered.

14. LATE BIDS

- 14.1 Tenders will not be received after the specified time of closing of the tender and the same shall be rejected and returned unopened to the bidder. It is the sole responsibility of the tenderer that he should ensure timely submission of tender.
- 15. MODIFICATIONS AND WITHDRAWAL OF BID
- 15.1 The bidder may modify or withdraw his bid after submission and before opening, provided that the intimation is deposited by the bidder in a properly sealed envelope (with Wax/Packing PVC tape) in the tender box, before the scheduled time & date for closing of tender.
- 15.2 No bid shall be modified subsequent to the deadline for submission of bids.

D. BID OPENING AND EVALUATION

16. **OPENING OF BIDS BY THE BSNL**

- 16.1 The BSNL shall open the bids in the presence of bidders or his authorized representatives who choose to attend the scheduled date & time as per NIT. The bidder's representative, who is present, shall sign an attendance register. The bidder shall submit authority letter to this effect before they are allowed to participate in the bid opening (A format is given in this tender document).
- 16.2 A maximum of two (2) representatives for any bidder shall be authorized and permitted to attend the bid opening.
- 16.3 The Bids shall be opened in the following manner:
- 16.3.1. The bid opening committee shall count the number of bids and numbers to the bids. For example, if 10 tenders have been received the bid shall be numbered as 1 of 10, 2 of 10 etc. All the members shall initial on the outer envelopes of all the bids with date.
- 16.3.2. The envelopes containing the tender offer and not properly sealed, as required vide Para 12 shall not be opened and shall be rejected outright. Closing the cover by gum will not be treated as sealed cover. The reasons for not opening such tender offers shall be recorded on the face of the envelope and all the members of bid opening committee shall initial with date.
- 16.3.3. First the outer envelope containing the three envelopes will be opened. The committee shall initial on all three envelops with date.
- 16.3.4. Among these three envelopes, the envelope marked "BID SECURITIES" will be opened first and examined.
- 16.3.5. The bidders who have submitted proper bid security as per tender documents "QUALIFYING BID" shall be opened and papers/documents submitted by bidder shall be examined and recorded by the TOC. After opening the bid, all the documents contained therein shall be serially numbered and signed by the bid opening committee members.
- 16.3.6. After recording of the "Qualifying Bid" the TOC will place all the financial bids submitted by the bidder in an envelope and will properly sealed by wax/packaging PVC tape for keeping in safe custody.
- 16.4 The Financial Bid shall be opened in the following manner:
- 16.4.1 The envelope marked "Financial Bid", will be opened only for qualified tenders in "Qualifying bid".
- 16.4.2 The date and time of opening of "Financial bid" shall be conveyed to the bidders who have qualified in qualifying bid and their representative shall attend the financial bid opening.
- 16.4.3 After opening the "financial bid" the bidder's name, bid prices, modifications, bid withdrawals and such other details as the BSNL, at its discretion may consider appropriate, will be announced at the opening.
- 16.4.4 In case there is discrepancy in figures and words in the quote, the same shall be announced in the bid opening, but the quote in words shall prevail.

17 CLARIFICATION OF BIDS BY THE BSNL

To assist in examination, evaluation and comparison of bids, the BSNL its discretion asks the bidder for clarification of its bid. The request for its clarification and its response shall be in writing. However, no post bid clarification at the initiative of the bidder shall be entertained.

18. PRELIMINARY EVALUATION

- 18.1 BSNL shall evaluate the bids to determine whether they are complete, whether any computational errors have been made, whether required sureties have been furnished, whether the documents have been properly signed and whether the bids are generally in order.
- 18.2 If there is discrepancy between words and figures, the amount in words shall prevail. If the Contractor does not accept the correction of the errors, his bid shall be rejected.
- 18.3 Prior to the detailed evaluation, pursuant to clause 16, the BSNL will determine the substantial responsiveness of each bid to the bid document. For purpose of these clauses a substantially responsive bid is one, which conforms to all the terms and conditions of the bid documents without deviations. The BSNL's determination of bid's responsiveness is to be based on the contents of the bid itself without recourse to extrinsic evidence.
- 18.4 A bid, determined as substantially non-responsive will be rejected by the BSNL and shall not subsequent to the bid opening be made responsive by the bidder by correction of the non-conformity.
- 18.5 The BSNL may waive any minor infirmity or non-conformity or irregularity in a bid which does not constitute a material deviation, provided such waiver does not prejudice or affect the relative ranking of the bidder

19. EVALUATION AND COMPARISON OF SUBSTANTIALLY RESPONSIVE BIDS

- 19.1 The BSNL shall evaluate in detail and compare the bids previously determined to be substantially responsive pursuant to clause 18.
- 19.2 The evaluation and comparison of substantially responsive bids shall be done on the basis of rates quoted in price schedule of financial bid accordance with the %age of SOR(Below or At Par or Above) and accordingly the lowest bidder will de decided.

20. CONTACTING THE BSNL

- 20.1 Subject to clause 17 no bidder shall try to influence the BSNL on any matter relating to its bid, from the time of bid opening till the time the contract is awarded.
- 20.2 Any effort by the bidder to modify his bid or influence the BSNL in the BSNL's bid evaluation, bid comparison or the contract award decisions shall result in the rejection of the bid.

21. AWARD OF CONTRACT

- 21.1 The BSNL shall consider award of contract only to those eligible bidders whose offers have been found technically, commercially and financially acceptable.
- 21.2 The work against the tender is for one year's requirement and the terms and conditions of this tender shall be operative for a period of one year from the date of signing of agreement between the BSNL and the Contractor.
- 21.3 The BSNL reserves the right to counter offer price (s) against price(s), rate(s) quoted by any bidder.
- 21.4 The BSNL reserves the right to award the work in any area up to maximum 02 bidders. The work allotment among the bidders will be as under.

Incase of 01 bidder - L-1 get 100%

Incase of 02 bidders- L-1 get 60% & L-2 will get 40%

Allotment of work among L-2 bidders will be on the basis of their willingness to accept L-1 bidder rate only. The assessment of GMTD, Dhenkanal is this regard shall be final and binding.

21.5 If the work in one area is awarded to more than one contractor, the demarcation of the work among the various contractors shall be decided by GMTD, Dhenkanal and the demarcation will be communicated in writing to the concerned tenderer. In case L-2 fails to carry out the work, the quantity of work of L-2 will be awarded to L-1 bidder & L-1 will be bound to do the work.

22. BSNL'S RIGHT TO VARY QUANTUM OF WORK

- 22.1 BSNL at the time of award of work under the contract, reserves the right to decrease or increase the work by up to 50% of the total quantum of work specified in the schedule of requirements without any change in the rates or other terms and conditions.
- 22.2 The estimated cost of work is as mentioned in the Notice Inviting Tender. The actual value of work may vary based on the actual requirement but generally being limited to ± 50% of the indicated value.
- 22.3 In exceptional situation where the requirement is of an emergent nature and it is necessary for continuation of works, the G.M.T.D., Dhenkanal reserves the right to increase up to 100% of the quantum of works specified in the schedule of requirement contained in the running tender /contract within a period of 12 months from the earliest date of acceptance of tender at the same rate with the existing approved contractor with the same terms and conditions specified in the tender.

Approximate Quantum work to be done under different Zones

Zone No.	Zones	U/G cable in km.s (approx)	OFC cable in km.s (approx)
1	Jurisdiction of AGM(NW OP-CFA), Dhenkanal	25	20
2	Jurisdiction of AGM(NW OP-CFA), Nalconagar	25	15
3	Jurisdiction of AGM(NW OP-CFA), Angul	30	10

23.BSNL'S RIGHT TO ACCEPT ANY BID AND TO REJECT ANY OR ALL BIDS

The BSNL reserves the right to accept or reject any bid and to annual the bidding process and reject all bids, at any time prior to award of contract without assigning any reason what-so-ever and without thereby incurring any liability to the affected bidder or bidders on the grounds for the BSNL's action.

24.ISSUE OF LETTER OF INTENT

- 24.1 The issue of letter of intent shall constitute the intention of the BSNL to enter in to the contract with the bidder. Letter of intent will be the issued as offered to the successful bidder.
- 24.2 The bidder shall within 15 days of issue of letter of intent, give his acceptance with material security in conformity with clause 5 of Section –V, provided with the bid documents.

25.SIGNING OF AGREEMENT

- 25.1 The signing of agreement shall constitute the award of contract on the bidder. The agreement with the successful bidder shall be signed by the BSNL within a week of submission of material security as per clause 24.2 above.
- 25.2 As soon as the tender is approved by the competent authority the bid security or EMD @2.5% of estimated cost of tender deposited by the successful bidder shall be compulsorily converted in to the part performance security deposit which will be held by the BSNL till the completion of warranty period.

26.ANNULMENT OF AWARD

Failure of the successful bidder to comply with the requirement of Clause-24 & 25 shall constitute sufficient ground for the annulment of the award for forfeiture of bid security, in which event; the BSNL may make the award to any other bidders at the discretion of the BSNL or call for new bids.

SECTION – V GENERAL (COMMERCIAL) CONDITIONS OF THE CONTRACT

1. APPLICATION

The General conditions shall apply in contracts made by the BSNL for execution of U.G. Local & O.F. Cable construction works.

2. STANDARDS

The works to be executed under the contract shall conform to the standards prescribed in the U.G Local & OF Cable construction practices.

3. PRICES

- 3.1 Prices charged by the Contractor for the works performed under the Contract shall not be higher from the prices auoted by the Contractor in his Bid.
- 3.2 Price once fixed will remain valid for the period of contract. Increase and decrease of taxes/duties will not affect the price during this period.

4. SUB-CONTRACTS

The contractor shall not assign, sub contract or subject the whole or any part of the works covered by the contract, under any circumstances.

5. SECURITY DEPOSIT :-

i) Material Security Deposit:-

- (a) The successful tenderer will have to deposit material security as mentioned in the scope of work for an amount of **Rs.1(One)** Lac in the form of bank guarantee (valid up to and including six months after, the period of the contract) from a scheduled bank in favour of Accounts Officer (Cash), BSNL, O/o GMTD, Dhenkanal and in the material security bond form provided in the bid document, Section-IX for each Zone separately. Material Security can also be submitted in the form of crossed Demand Draft drawn in favour of Accounts Officer (Cash), BSNL, O/o GMTD, Dhenkanal issued by a Scheduled bank and payable at Dhenkanal. The Material Security will be a non interest bearing deposit for any period what so ever.
- (b) The contractor at any point of time will not be issued stores costing more than material security. If due to any reason more store has to be issued to the contractor, then the material security will be suitably enhanced. In this regard the decision of the SSA head shall be final and binding.
- (C) The proceeds of the material security shall be payable to the BSNL as a compensation for any loss resulting from the contractor's failure to handle properly the material issued to him under the contract.
- (d) The material security shall be released/refunded within a fortnight from the date of the payment of the last final bill of the work under the contract or final settlement of material account whichever is later on production of "No due certificate" from Engineer-In-charge".

(ii) Performance Security Deposit:-

- (a) The contractor shall permit the BSNL, at the time of making any payment to him for work done under the contract, to deduct such sum in addition to the sum already deposited as security deposit (Due to conversion of bid security) as amount to the tune of 7.5 % of running bills/final bill.
- (b) The proceeds of the performance Security deposit shall be payable to the BSNL as compensation for any loss resulting from the contractor's failure to complete its obligation under the contract.
- (C) The performance Security deposit shall be refunded after expiry of warranty period of last work executed provided there are no recoveries to be made arising out of poor quality of work, incomplete work and / or violation of any terms and conditions of the contract as stipulated in the bid document.
- (d) No interest will be paid to the contractor on security deposit.

6. ISSUE OF WORK ORDERS AND TIME LIMIT

6.1 The work orders shall be issued by the of Engineer Incharge concerned Zone or area after examining the technical and planning details of the works to be executed. The work order shall be given strictly under the provision available in the sanctioned detail estimate. Once the approved Contractor receives work order worth 80% of total cost of agreement, the same shall be intimated to planning or MM section of Office of GMTD, Dhenkanal by approved Contractor immediately so as to float to next Tender. The work order shall be issued so as to include all items of works. The contractor shall organize the work in such a way so as to deliver meaningful output of requisite quality within shortest possible time. The work order for main works will be issued first and a different work order for other related work will be issued separately. The work shall be taken up in such a way that whole work is completed in a shortest possible time.

Time frame for carrying out the work

The contractor is expected to carry out at least 100 mts of Trenching/HDD/ Cable laying at a stretch in a day in case of OF Cable construction and 200mtr of Trenching/Cable laying in case of UG local cable work. The survey of the full route is to be carried out for any underground utilities, in proposed route. This should be done at a rate of 1 Km per day.

The total time allowed to carry out the Construction work will be calculated as below.

Survey of Routes -- 1 KM/ day
Mobilisation of resources -- 1 day

Permission from other govt agencies and other agencies

--maximum 30 days

Trenching/HDD/Cable laying for OFC construction work

Trenching/Cable laying for UG Local construction work

-- 200 mts/ day

The contractors is expected to carry out either 2 joints/ 2 terminations per day in case of OF Cable.

- 6.2 If due to any reason partial work order is to be issued then the same shall be issued with the approval of G.M.T.D., Dhenkanal.
- 6.3 The Engineer Incharge concerned Zone or area shall mention the time limit to execute the work order after seeing the quantum of work and store availability position.
- 6.4 The G.M.T.D., Dhenkanal reserves the right to cancel or modify the scope of work stipulated to be carried out against the work order in the event of change of plan necessitated on account of technical reasons or in the opinion of work order issuing authority, the contractor is not executing the work at the required place.

7. EXTENSION OF THE TIME LIMIT

7.1 General

- 7.1.1. In each work order, the work order issuing authority shall specify the time allowed for completion of work consistent with the magnitude and urgency of work. The time allowed for carrying out the work is to be strictly observed by the contractor and shall be reckoned from seventh day from the date of issue of work order.
- 7.1.2 In as much as "the time being deemed to be the essence of contract", throughout the stipulated period of contract, the work is to be proceeded with all due diligence on the part of the contractor.
- 7.2 Application for Extension of the Time and Sanction of Extension of Time (EOT):
- 7.2.1. There may be some hindrances, other than covered under force majeure, while execution of work and in such cases the contractor shall apply in writing in the prescribed Form (Part A) to the engineer-in-charge for extension of time (EOT), on account of which he desires such extension within three days of occurrence of hindrance. The Engineer-in-charge shall forward the request to the competent authority (an officer of the rank of JAG level in-charge of UG Local cable & OF cable construction work) with his detailed report and photocopy of the hindrance register within three days of receipt of request from the contractor. The competent authority is empowered to grant extension of time for completion of work on certain conditions. He shall exercise such powers, if the following conditions are satisfied.
- 7.2.1.1 The application contains the around(s), which hindered the contractor in execution of work.
- 7.2.1.2 The Engineer-in-charge is of the opinion that the grounds shown for extension of time are reasonable.
- 7.2.2. The competent authority shall consider the request keeping all the facts and circumstances in view and shall grant extension of time, if in his opinion, there are reasonable and sufficient grounds for granting such extension and the reasons for delay are not ascribable to the contractor.
- 7.2.3. The competent authority may also grant extension of time for completion of work in cases where reasons for delay are ascribable to the contractor, but such extension of time shall be with LD charges as per clause dealing with penalty for delays in execution of works. The extension of time with LD charges shall be issued under the signature of JAG level Telecom. Officer competent to grant the extension of time.
- 7.2.4. The competent authority shall grant EOT with time period for completion of work expressly mentioned. The sanction of the competent Authority of EOT shall be issued under the signature of the Engineer incharge.
- 7.2.5. If the competent authority is of the opinion that the grounds shown by the contractors are not reasonable and sufficient and declines to grant the extension of time, the contractor cannot challenge the soundness of the opinion by reference to arbitration. The decision of the competent authority on period of extension of time or refusal for extension of time shall be final and binding on the contractor.

7.3 Grant of Extension of Time without Applications

- 7.3.1. There are, at times, practical difficulties like non-availability of materials, delay in providing permissions/right of way etc. reasons of which are ascribable to the BSNL. In such cases, the Engineer-in-charge with the approval of competent authority to sanction EOT, may issue extension of time suo-moto without waiting for contractor to make an application for EOT. Entry of hindrances shall be made in the Hindrance Register. The BSNL will, however, not be liable to the contractor for any losses of damages, costs, charges, or expenses that the contractor may in any way sustain/suffer due to delay in making the above available.
- 8. MEASUREMENT, INSPECTION, TESTING AND ACCEPTANCE TESTING

8.1 MEASUREMENT

- 8.1.1 The measurement books are to be maintained by the officer-in-charge of the work or his immediate engineering subordinate not below the rank of Junior Telecom Officer. The entry shall be made in ink. No entry shall be erased. If a mistake is made, it should be corrected by crossing out the incorrect words or figures and inserting the corrections, the corrections thus made shall be initialed & dated by the officer concerned.
- 8.1.2 Responsibility of taking and recording measurements: The measurement of various items of work shall be taken and recorded in the measurement book issued with each work order. The measurement shall be taken and recorded by an officer not below the rank of Junior Telecom Officer, supervising the work. The Junior Telecom Officer/Sub Divisional Engineer, directly responsible for supervision of work, shall be responsible for accuracy of 100% of measurements. The Sub Divisional Engineer where Junior Telecom Officer, is supervising officer shall be responsible for conducting test check of 50% of measurements. The Divisional Engineer shall be responsible for conducting test check of 10% of measurements.
- 8.1.3 Method of recording of nomenclature of items: Complete nomenclature of items, as given in the agreement need not be reproduced in the measurement book for recording the measurements but corresponding Item Code as provided, shall be used.
- 8.1.4 **Method of Measurements** : The measurements of the work shall be done for activity wise as and when the item of work is ready for measurement. The methods of measurement of various items are enumerated as under:

Measurement of depth of trenches for OF Cable

The cable routes of one work order shall be divided into a number of segments each of maximum 200 meters length bounded by identifiable landmarks at both the ends of the segments. If landmarks are not available, length of segment may be maintained at 200 meters. The measurement of depth shall be recorded at each point of measurement (POM) in the measurement book in meters in the multiples of 5 cms. For example 97 cms will recorded as 95 cms And 103 cms as 105 cms. The points of measurements shall be at a distance of 10 meters starting from 0 (Zero) Meter. For example, if the length of segment is 75 meters, the POMs shall be at 0M, 10M, 20 M, 30 M, 40 M, 50 M, 60 M, 70 M. The last POM shall be at 75th M to be recorded against Residual POM.

•Measurement of depth of trenches for UG Local Cable

The cable routes of one work order shall be divided into a number of segments each of maximum 100 meters length bounded by identifiable landmarks at both the ends of the segments. If landmarks are not available, length of segment may be maintained at 100 meters. One segment shall cover only one type of trench. The measurement of depth shall be recorded at each point of measurement (POM) in the measurement book in meters up to two decimal points. For example, 57cms depth shall be recorded as 0.57m. The points of measurements shall be at a distance of 10 meters starting from 0 (zero) meter. For example, if length of segment is 75 meters, the POMs shall be at 0 SBP, 10 SBP, 20SBP, 30SBP, 40SBP, 50SBP, 60SBP, 70M. The last POM shall be at 75th M to be recorded against residual POM. For each segment average depth shall be worked out by dividing the total depth by number of POMs. The measurement of depth be recorded in measurement book.

Trench of less Depth incase of OF laying work:

Relaxation and Competent Authorities to Grant Relaxation:

The depth of trench is very important for future life of cables. Therefore, contractor is obligated to ensure that the standard depth is maintained in normal circumstances. The efforts required to excavate trenches is not proportionate especially with reference to depth. Therefore, normally the workers tend to dig shallow trenches. As standard depth of the trench is important for future life and protection of cables, this tendency has to be discouraged. In order to encourage the contractor to achieve best possible depth in the face of site constraints, the following scale of payment shall be applied for digging trenches of lesser depths, subject to condition that relaxation has been granted by the competent authority for lesser depths. If for any reason, the required depth can not be reached and the competent authority is satisfied with the reasons for not achieving the full depth then the payment will be regulated as follows, where more standard width and more depth are required to be done by the contractor, the rates proportionate, which will be decided by the DGM/AM concerned. After digging, the trenches have to be made clear of boulders and other materials and a smooth bed is to be made available for laying cables.

8.1.4.1 However, due to obstructions, if the standard depth cannot be achieved, lower depth up to certain limits are acceptable by the authorities as prescribed below with extra protection as per specifications. The relaxation by the competent authority prescribed below shall be obtained giving reasons for not achieving standard depth.

O.F.Cable Depth slab	Powers delegated for depth Relaxation
<165 Cms to ≥150 Cms	Depth relaxation not required
<150 Cms to ≥130 Cms	AGM
<130 Cms to ≥90 Cms	DGM
<90 Cms to ≥60 Cms	GM
<60 Cms to ≥30 Cms	CGM
<30 Cms	Not permitted.

- In case depth achieved falls under different depth slabs as per the depth slab clause 8.1.4.1, a separate application shall be submitted to the respective competent authority for granting of depth relaxation.
- ii. The competent authority for depth relaxation as per the above depth slab shall inspect/or authorize to inspect the routes/ locations/segment of the routes and enter inspection remarks in a separate sheet.
- 8.1.4.2 The rates payable for the work of shallow –depth as acceptable by DGM/AM/GM, concerned shall be as follows.

Optical Fibre Cable: - Standard Depth 1.65 meter (All kinds of soil)

O.F. Cable trench	% Reduction in rates (ROR)	Amount payable (P)
Depth between		
<165 Cms to ≥150 Cms	5% of RA (approved rates)	95% of the approved rates
<150 Cms to ≥130 Cms	12.5% of RA(approved rates)	87.5% of the approved rates
<130 Cms to ≥100 Cms	25% of RA (approved rates)	75% of the approved rates
Below 100 cms.	40% of RA (approved rates)	60% of the approved rates

8.1.4.3 OFC Standard Depth 1.65 m: Assuming that the standard depth required is 165 cms and the rate approved is Rs.100/- for the standard depth, then as per the above table, the rate reduction for other than

165 cms nominal depth shall be worked out as:

P = Amount Payable per meter.

encountered while digging.

ROR = Reduction in rate in %, as applicable, as per table given

above. RA = Rate approved per meter

Note: Sample Calculation:

If slab is <165 Cms to \geq 150 Cms and RA = Rs 100/- , then ROR = 5%

Therefore P= (100-5) % * 100 = Rs 95/

- Measurement of Lengths and profiles of strata and protection
 The measurements of length of trenches are on running meter basis, irrespective of type of soil
 - The type of protection provided (item code-wise) in a segment shall be recorded in the measurement book in the sheet provided for this purpose.
- Measurement of length of cable: The length of cables laid in trenches, through pipes and through ducts shall be measured by use of RODO Meter/Measuring Tape. The length should be cross verified with the marking of lengths on the cables. The lengths shall be recorded in sheet provided in the measurement book.
- Measurement of other items: The measurement /numerical details of other items in case of OF Cable construction work shall be recorded in the sheets provided for respective items viz.
 - Digging of joint pit and preparation of joint chamber along with its type i.e. Brick chamber of Pre Cast RCC type.
 - Fixing, Painting and sign writing of route/joint indicators
 - > Termination of Cable in equipment room and no. of joints.

- 8.1.5 The contractor shall sign all the measurement recorded in the measurement book. This will be considered as an acceptance by the contractor, of measurements recorded in the MB. In case contractor fails to attend at the measurements or fails to countersign or to record the difference within a week, than in any such events the measurements taken by Engineer-in-charge or by the subordinate as the case may be shall be final and binding on the contractor and the contractor shall have no right to dispute the same.
- 8.1.6 The AGM before passing the bill for sections covered by each set of measurement may carry out test check by re-opening trench at as many locations as necessary as specified in document 'procedures for underground cable construction' and bills will be passed only when he is personally satisfied of the correctness of entries in the "measurement Book" and also when he is satisfied of other aspects of the work as per the terms of the contract. The contractor shall provide the necessary assistance of labour for re-opening of trench for test check by the Divisional Engineer. Separate payment shall not be made to the contractor for excavation of such test checks, however such test pits shall not be more than 10% of the cable laying work.
- 8.1.7 Measurement of the work of cable pulling through pipe/duct will be taken equal to the length of the pipe/duct through which the cable has been pulled and not the total length of the cable pulled through pipe/duct.

8.2 INSPECTION AND QUALITY CONTROL

- 8.2.1 The Quality of Works : The importance of quality of UG Local Cable & Optical Fibre Cable Construction works cannot be over-emphasized. The quality and availability of long distance media and efficiency of the reliable media connectivity to exchanges depends up on quality of laying of Optical Fibre Cable. Similarly the quality of Telecom services largely depends on the quality of external plant of which U.G. cable component covers the major portion Further, the UG local cable & OF Cables are vulnerable to damages due to work of other agencies.
- 8.2.2. The quality of O.F. Cable Plant depends upon the quality of individual items of work involved viz. depth of cables laid, care while paying & laying, protection, jointing of cables and termination in equipment room and at last but not the least on documentation of cable network. In order to ensure quality in Cable Construction Work, each component of work needs attention. The works shall be carried out strictly in accordance with specifications laid down to achieve the requisite quality aim.
- 8.2.3. It is imperative that the contractor(s) is/are fully conversant with the construction practices and shall be fully equipped to carry out the work in accordance with the specifications. The contractors are expected and bound to ensure quality in construction works in accordance with specifications laid down. The contractor shall engage adequate and experienced supervisors to ensure that works are carried out as per specifications and with due diligence and in a professional manner. The contractors shall satisfy himself/themselves that the work conforms to the quality specifications before offering the same to A.T. Wing for Acceptance and Testing.
- 8.2.4. An assessment of extent of interest shown by the contractors in executing the works with requisite quality shall be recorded and used in evaluating the Contractors' Performance Rating (CPR).
- 8.2.5. In addition to Acceptance Testing being carried out by A.T. Wing and supervision by Construction Officers, all works at all times shall be open to inspection of the BSNL. The contractors shall be bound, if called upon to do so, to offer the works for inspection without any extra payment.
- 8.2.6. Site Order Book: The site order book is one of the primary records to be maintained by the JTO supervising the work during the course of execution of works. The noting made by officers as well as contractors, will form as basis for operation of many contractual clauses. The contractor shall remove all the defects pointed out by the BSNL in the site order book. The site order book is to be maintained in the prescribed format. The contractor of their authorized representatives shall also be at liberty to note their difficulties etc. In these books. The site order books shall invariably be consulted at the time of making final payments to the contractor.

8.3 TESTING AND ACCEPTANCE TESTING

(A)FOR OF CABLE:

- 8.3.1 The work shall be deemed to have been completed only after the same has been accepted by the A.T. Officer. The contractor shall make test pits at the locations desired by A.T. Officer for conducting test checks without any extra payment. The contractor shall restore the pits after test measurements to its original shape. The contractor shall be responsible to provide test/measurement tools and testers for conducting various tests.
- 8.3.2 Scope of Acceptance and Testing: The purpose of acceptance and testing is to verify integrity of measurement and quality of work done. The A.T. Officer shall not be responsible for recording of measurement for the purpose of billing and contractual obligations. However, if the Measurements taking by A.T. Officer are found to be lesser than the measurements recorded by the officer responsible for recording the measurements, the measurement taken by A.T. Office shall prevail without prejudice to any punitive action against the contractor as per provisions of the contract and the officer recording the measurements. The Contractor shall be obligated to remove defects/deficiencies pointed out by the A/T Officer without any additional cost to the BSNL.
- 8.3.3 Offering the work for acceptance and testing: The Sub Divisional Engineer responsible for construction, after having satisfied himself of completion of work ready for A.T., shall offer the work to A.T. Officer for conducting Acceptance and Testing. The work shall be offered for A.T. as soon as part

- of work is complete in all respects. The work against any work order can be offered for A.T. in a number of stages.
- 8.3.4 The contractor shall provide labour, if demanded by the A/T officer for digging of test pits and other necessary infrastructure for carrying out the A/T work. No extra payment will be made for the digging of test pit.

(B) FOR HIGHER PAIR UG LOCAL CABLE (Other than 5pr Cable)

For higher size (>5Pr)UG Local cable works A/T will be carried out by an officer nominated by the SSA head.

WARRANTY

- 9.1 The contractor shall warrant that the material supplied for the work shall be new and free from all defects and faults in material, workmanship and manufacture and shall be of the highest grade and consistent with the established and generally accepted standards for materials of the type ordered and shall perform in full conformity with the specifications and drawings. The contractor shall be responsible for any defects that may develop under the conditions provided by the contract and under proper use, arising from faulty materials, design or workmanship such as corrosion of the equipment, inadequate quantity of materials etc. and shall remedy such defects at his own cost when called upon to do so by the BSNL who shall state in writing in what respect the stores are faulty. This warranty shall survive inspection or payment for, and acceptance of goods, but shall expire except in respect of complaints notified prior to such date, twelve months after the acceptance testing.
- 9.2 If it becomes necessary for the contractor to replace or renew any defective portion/portions of the material under this clause, the provisions of the clause shall apply to the portion/portions material so replaced or renewed or until the end of the above mentioned period of twelve months, whichever may be later. If any defect is not remedied within a reasonable time, as prescribed by the BSNL, the BSNL may proceed to do the work at the contractor's risk and costs, but without prejudice to any other rights which the BSNL may have against the contractor in respect of such defects.
- 9.3 The Cable laid shall be guaranteed for a period of one year from the date of laying.
- 9.4 Replacement under warranty clause shall be made by the contractor free of all charges at site including freight, insurance, cost of works and other incidental charges.

9. AUDIT AND TECHNICAL EXAMINATION

- 10.1 BSNL shall have the right to cause an audit and technical examination of the work and the final bills of the contractor including all supporting vouchers, abstract etc. to be made after payment of the final bill and if as a result of such audit and technical examination any sum is found to have been overpaid in respect of any work done by the contractor under the contract or any work claimed by him to have been done by him under the contract and found not to have been executed, the contractor shall be liable the refund the amount if over payment and it shall be lawful for BSNL to recover the same from him in the manner prescribed in clause with the heading payment of bills (same chapter), or in any other manner legally permissible and if it is found that the contractor was paid less than what was due to him under the contract in respect of any work executed by him under it, the amount of such under payment shall be duly paid by BSNL to the contractor.
- 10.2 Provided that BSNL shall be entitled to recover any sum overpaid, nor the contractor shall be entitled to payment of any sum paid short where such payment have been agreed upon between the Divisional engineer or his subordinate officer on one hand and the contractor on the other under any term of the contract permitting payment for work after assessment by the G.M.T.D., Dhenkanal or his sub-ordinate officer.
- 10.3 Any sum of money due and payable to the contractor (including security deposit returnable to him) under this contract may be appropriate by the BSNL for the payment of a sum of money arising out or under any other contract made by the contractor with the BSNL.

10. PAYMENT TERMS

11.1 PROCEDURE FOR PREPARATION AND SETTLEMENT OF BILLS

11.1.1 All items of work involved in the work order shall be completed in all respects before preferring the bills for the work. The provision of running bill has been made to make it easy for the contractor to manage his cash flow and to complete the work systematically and meaningfully in a shortest possible time. The procedure for preparation of running and final bills is enumerated as under:

11.1.1.1 PROCEDURE FOR PREPARATION, PROCESSING AND PAYMENT OF RUNNING BILLS

The contractor shall prepare the running bills in triplicate ensuring execution of part work in its completeness as envisaged above, correctness of rates and quantum of work and submit the bills to S.D.E. in-charge of work. The bills shall be prepared accurately and as per measurement recorded in the measurement book. The S.D.E. in-charge shall record the certificate on the running bill that the site order books have been consulted before signing the running bills. This would enable the S.D.E. to ensure whether the defects pointed during execution have been rectified or not. The S.D.E. in-charge of work shall scrutinize the bills and accord necessary certificates and submit the running bills with the documents as mentioned below to the Divisional Engineer, in-charge of work.

- □ First copy of bill with first copies of measurement sheets of measurement book (Payable Copy)
- Second copy of bill with second copies of measurement sheets of measurement book. (Not for payment)
- ☐ Third copy of the bill with photocopies of measurement sheets (Not for payment)
- 11.1.1.2 The Divisional Engineer shall exercise the prescribed checks on the bills and accord necessary certificates on the bills. The Divisional Engineer shall retain the third copy in record and record it in the estimate file maintained in his office and send first and second copies with all documents to relevant higher office for processing of bills and release of payment.
- 11.1.1.3 The office cell dealing with bills shall process the bills in the estimate file of the concerned work and scrutinize the bills vis-à-vis work order issued, sanctioned provisions in the estimate etc. The bill shall be passed, after necessary scrutiny by Works Section, by the officer competent to pass the bill. Against any running bill, payment to the extent of any 70% shall be made (without A/T) in case of OFC which shall be treated as an advance to the contractor. 7.5 %(Seven and half percent) of the bill amount towards Performance Security Deposit and Statutory taxes (Income Tax etc.) applicable to contract shall be deducted at the time of payment from each running bill. Account payee Cheque for the amount passed in the bill will be issued only after the contractor gives a stamped receipt for the amount, if the bills are not pre-receipted. Details of payment of all the bills shall be entered into contract's ledger by Work Section of the Planning Cell.
- 11.1.1.4 The exceptional cases where work required for preferring a Running Bill can not be completed within reasonable time due to non-availability of stores or any other reason and where the BSNL is responsible for delay, the concerned D.G.M. may permit payment of running bill (prepared without completing the work end-to-end for that unit of work) to the extent of 70% so that the contractor does not face resource crunch. Such payment shall be treated as an advance payment to the contractor like any other Running Bills.
- 11.1.2 Procedure for preparation, processing and payment of final bill: The contractor shall prepare the final bill in triplicate & acceptance and testing of all the works and submit the same to S.D.E. in-charge of work within 30 days of acceptance and testing. The final bill shall be prepared for all the measurements of all items involved in execution of complete work order. The contractor shall prepare the final bill containing the following details:
 - ☐ The bill for all the quantities as per Measurements at the approved rates.
 - □ Adjustment of amount received against running bills.
 - Adjustment of performance security deposit and statutory taxes already recovered.
 - Store reconciliation statement furnishing account of stores received against the work order and returned to the designated Store godown as surplus with requisite verifications from storein-charge/S.D.E. in-charge of work.
 - □ Letters of grant of E.O.T(s), if work could not be completed within stipulated time. Six sets of bound documentation.
- 11.1.2.1 The S.D.E. in-charge of work shall scrutinize the final bill against the works entrusted and accord necessary certificates stating that the work has been executed satisfactorily in accordance with specifications and terms and conditions of the contract. The S.D.E. shall verify the quantities of items of work with reference to measurements recorded in the measurement book (and also A/T reports in case of any deviations noted by A/T Officer). The S.D.E. in-charge of work shall submit the final bills, along with other documents mentioned above, with the documents as mentioned hereunder to the Divisional Engineer/AGM, in-charge of work.
 - Bill prepared by the contractor.
 - Material reconciliation statement.
 - Measurement Book.
 - ◆ A/T Certificates.
 - ♦ The site order Book.
 - The hindrance register.
 - Details of recoveries/penalties for delays, damages to BSNL/third party properties as per provisions of the contract. In case no recovery is to be made, NIL report needs to be submitted.
- 11.1.2.2 The Divisional Engineer/AGM shall exercise the prescribed checks on the bills and accord necessary certificates on the bills. The Divisional Engineer shall retain the third copy of the bill along with photocopies of other documents not available in his estimate file and send first and second copies of the bill, measurement book and other documents submitted by S.D.E. along with the bills as above to the higher office for processing and final payment.
- 11.1.2.3 The office cell dealing with bills shall process the bills in the estimate file of the concerned work and scrutinize the bills vis-à-vis work order issued, sanctioned provisions in the estimate etc. The office cell shall also scrutinize the bill to recover all the liabilities of the Contractor and statutory taxes besides 10% payments against security deposit. The bill shall be passed, after necessary scrutiny by Works Section, by the officer competent to pass the final bill.

11.2 PROCEDURE FOR PAYMENT FOR SUB STANDARD WORKS

- 11.2.1 The contractors are required to execute all works satisfactorily and in accordance with the specifications. If certain items of work are executed with unsound, imperfect or unskilled workmanship or with materials of any inferior description or that any materials or articles provided by him for execution of work are unsound or of a quality inferior to that contracted for or otherwise not in accordance with the contract (referred to as substandard work hereinafter), the Divisional Engineer/AGM in-charge shall make a demand in writing specifying the work, materials or articles about which there is a complaint.
- 11.2.2 Timely action by Construction Officers : Timely reporting and action, to a great extent, can prevent occurrence of sub standard work, which will be difficult or impossible to rectify later on. It is incumbent on the part of construction Officers to point out the defects in work in time during progress of the work The Junior Telecom Officer/Sub Divisional Engineer Responsible for execution and supervision of work shall without any loss of time submit a report of occurrence of any sub standard work to the Divisional Engineer in-charge besides making an entry in the site order book. A notice in respect of defective work shall be given to the contractor by Divisional Engineer in-charge in writing during the progress of work asking the contractor to rectify/replace/remove the sub standard item of work and also definite time period within which such rectification/removal/replacement has to be done. After expiry of the notice period, if the contractor fails to rectify/replace/remove the sub standard items, the defects shall be got rectified/replaced/removed by BSNL or through some other agency at the risk and cost of the contractor.
- 11.2.3 Non-reporting of the sub standard work in time on the part of Construction Officer (s) shall not in any way entitle the contractor to claim that the defects were not pointed out during execution and as such the contractor cannot be absolved of the responsibility for sub standard work and associated liabilities.
- 11.2.4 Authority and Procedure to accept sub standard work and payment thereof
 There may be certain items of work pointed out as sub standard which may be difficult to rectify and
 in the opinion of the Head of SSA, the items in question will not materially deteriorate the quality of
 service provided by the construction, the head of SSA shall appoint committee to work out the
 reduced rates payable to the contractor for such sub standard work. The committee shall constitute
 one Divisional Engineer other than the one who is directly in-charge of Cable Construction involving
 sub standard items of work, as Chairman and one SDE and an Accounts Officer as members. The
 Committee shall take into account the approximate cost of material/work pointed out as sub
 standard and recommend the rates payable for sub standard work, which shall not exceed 60% of
 the approved rates of the item in question.
- 11.2.5 Record of sub standard work: The items adjudged as sub standard shall be entered into the measurement book with red ink.

12. DISPOSAL OF EMPTY CABLE DRUMS

12.1 The contractor shall be responsible to dispose off the empty cable drums after laying of the cable. The competent authority taking in to account the prevailing market rates has fixed the cost of various sizes of cable drums as mentioned below in the table. The cost of empty cable drums shall be deducted as per approved rate from the bill for the work on which the cable along with the drum has been issued or any other amount due to the contractor or from security deposit.

Serial number	Size of Cable drums	Rate Fixed for recovery from Contractor's bill for each drum.
1	1200/800 Pr.	Rs. 500.00
2.	400 Pr.	Rs. 375.00
3.	200 Pr.	Rs. 250.00
4.	100 Pr.	Rs. 150.00
5.	50 Pr.	Rs. 125.00
6.	5/10/20 Pr	Rs. 75.00
7	OF Cable (6/12/24F)	Rs 200.00

- 12.2 The contractor shall be responsible for the accounting of the cable drums issued and shall mention the number and types of cable drums in the bill so that the amount is deducted from the bills due.
- 12.3 The contractor shall not be allowed to dump the empty cable drums in Govt./public place, which may cause inconvenience to Govt./public. If the contractor does not dispose off the empty cable drums within 3 days of becoming empty, the BSNL is at liberty to dispose off the drum in any manner deemed fit and also recover the amount fixed in this contract for empty cable drums along with the transportation charges (to be decided by the General Manger Telecom) from the bill/security deposit/any other amount due to the contractor.

13. PENALTY CLAUSE

- 13.1 Delays in the contractor's performance
- 13.1.1 The time allowed for completion of the work as entered in the tender shall be strictly adhered by the contractor and shall be deemed to be the most important aspect of the contract on the part of the contractor and shall be reckoned from Seventh day from issue of work order by the BSNL. The work shall, throughout the stipulated period of contract, be proceeded with all due diligence to achieve the desired progress uniformly, and the contractor shall pay as penalty an amount equal to 0.25 percent of the billed amount per day of delay in completion of work, subject to a maximum of 10(ten) percent of the cost of the work awarded.
- 13.1.2 On any date the penalty payable as above, reaches 10 (ten) percent of the estimated cost of the work, the contractor should proceed with the work further only on getting a written instruction from the Divisional Engineer that, he is allowed to proceed further with the work. It will be in the discretion of the Divisional Engineer to allow the contactor to continue with the work on the basis of any written agreement reached between the contractor and the Divisional Engineer one of the conditions of such agreement may be a stipulation for the contractor to agree for realization of penalty for delay at a higher rate as may be agreed between the Divisional Engineer and contractor.
- 13.1.3 Penalty for delay in completion of the work shall be recoverable from the bills of the contractor and/or by adjustment from the security deposit or from the bills of any other contract. However, adjustment from security deposit will be made only when the contract has been terminated or at the time of final settlement of bills on completion of work.
- 13.1.4 In case of slow progress of the work in a section which have been awarded to a particular contractor, and the public interest does not permit extension of time limit for completion of the work, the G.M.T.D., Dhenkanal will have the full right to order that the scope of the contractor may be restricted to such fraction of the whole of the work and get the balance executed at the risk and cost of the contractor. The details are given in Rescission of the contract clause of the bid document. All such payments shall be recovered from the contractor's pending bills or security deposit/Performance BG.
- 13.1.5 The G.M.T.D., Dhenkanal reserves the right of cancel the contract and forfeit the security deposit if the contractor fails to commence the work within 7 days after issue of the work order.

13.2 PENALTY FOR CAUSING INCONVENIENCE TO THE PUBLIC

- 13.2.1 To ensure progress during the execution of work and to cause minimum inconvenience to the public, the contractor shall not dig a trench of more than 200 meters at a stretch in a route at a time. He shall cause to lay cable and close such trenches expeditiously. Under any circumstances a stretch of trench of maximum 200 meters shall not be kept open for more than 4 days in case of cable laying by digging paved surfaces. In the event of contractor falling to comply with, these conditions, a penalty of recovery upto Rs. 300/- per day the trench is kept open beyond the time limit allowed may be imposed by the BSNL. This penalty will be in addition to that payable for delay or slow work.
- 13.2.2 The contractor shall not be allowed to dump the empty cable drums/waste materials in Govt./Public place, which may cause inconvenience to Govt/Public. If the contractor does not dispose off the empty cable drums/waste materials within 3 days of becoming empty, the BSNL is at liberty to dispose off the drum in any manner deemed fit and also recover the amount fixed in this contract for empty cable drums/waste materials from the bill/security deposit/along with the costs incurred by the BSNL in disposing off such materials. The BSNL may also levy a penalty upto Rs. One thousand for each such default.
- 13.2.3 If any such penalty is levied on a contractor for more than 2 occasions, then his her contract could be terminated. In this regard the decision of G.M.T.D., Dhenkanal shall be final and binding.

13.3 PENALTY FOR CUTTING/DAMAGING THE OLD CABLE

13.3.1 During excavation of trench utmost care is to be taken by the contractor, so that the existing underground cables are not damaged or cut. In case any damage/cut is done to the existing cables, a penalty as per the schedule given below will be charged from the contractor or the amount will be deducted from his running bills;

Size of existing UG/OF Cables cut/damaged	Amount of penalty per cut/damage
Up to 100 pairs cable	Rs. 500.00 (Five Hundred)
Above 100 pairs & up to 400 pairs	Rs. 1,000.00 (One thousand)
Above 400 pairs	Rs. 2,000.00 (Two thousand)
OF Cable of any size	Rs. 5,000.00 (Five thousand)

Besides the above penalty, the contractor shall carry out such repairs for restoration of the damaged cable free of charge. The cost of jointing kit shall also be borne by the contractor. If contractor fails to repair the damage, the cost of repair (including cost of labour + jointing kit) shall be recovered from the contractor.

13.4 PENALTY TO DAMAGE STORES/MATERIALS SUPPLIED BY THE BSNL WHILE LAYING

- 13.4.1 The contractor while taking delivery of materials supplied by the BSNL at the designated place shall thoroughly inspect all items before taking them over. In case of execution of the work, if any material is found damaged/working unsatisfactorily, then a penalty equivalent to the cost of material + 10% as penalty shall be recovered from the contractor's payment/securities.
- 13.4.2 However, contractor will not be penalized for any defect in workmanship of the materials, which shall be taken up separately with the supplier of the stores.

14. RESCISSION/TERMINATION OF CONTRACT

- 14.1 Circumstances for rescission of contract: Under the following conditions the competent authority may rescind the contract:
- a) If the contractor commits breach of any item of terms and conditions of the contract.
- b) If the contractor suspends or abandons the execution of work and the engineer in-charge of the work comes to conclusion that work could not be completed by due date for completion or the contractor had already failed to complete the work by that date.
- c) If the contractor had been given by the officer-in-charge of work a notice in writing to rectify/replace any defective work and he/she fails to comply with the requirement within the specified period.
- Upon rescission of the contract, the security deposit of the contractor shall be liable to be forfeited and shall be absolutely at the disposal of the BSNL as under:
- 14.2.1. Measurement of Works executed since the date of last measurement and upto the date of rescission of contract shall be taken in the presence of the contractor or his authorized representative who shall sign the same in the MB. If the contractor or his authorized representative do not turn up for joint measurement, the measurement shall be taken by the officer authorized for this purpose after expiry of due date given for joint measurement. The measurement taken by the officer so authorized shall be final and no further request for joint measurement shall be entertained.
- 14.2.2. The unused material (supplied by the BSNL) available at site shall be transported back by the BSNL to the Telecom Store at the risk and cost of the contractor. If any such material is found damaged/lost then the penalty shall also be recovered from the contractor as per conditions in tender documents, ibid.
- 14.2.3. The un-executed work shall be got executed through the qualified bidder from amongst the bidders, who participated in the bidding process, by giving them offers in their order of ranking (L2, L3---) at their quoted rates. If the work was awarded on single tender basis then the BSNL shall get the unexecuted work completed through any other contractor approved in the SSA at the approved rates of that particular section or to execute the work departmentally, as is convenient or expedient to the BSNL at the risk and cost of the contractor. In such a event no compensation shall be payable by the BSNL to the contractor towards any inconvenience/loss that he may be subjected to as a result or such an action by the BSNL. In this regard the decision of G.M.T.D., Dhenkanal shall be final and binding. In all these cases, expenses which may be incurred in excess of the sum which would have been paid to the original contractor if the whole work had been executed by him shall be borne and paid by the original contractor and shall be deducted from any money due to him by the BSNL under the contract or any other account whatsoever any where in the BSNL or from a security deposit.
- 14.2.4. The certificate of the Divisional Engineer in-charge of work as to the value of work done shall be final and conclusive against the contractor, provided always that action shall only be taken after giving notice in writing to the contractor.

14.3 TERMINATION FOR INSOLVENCY

14.3.1 The BSNL may at any time terminate the Contract by giving written notice to the Contractor, without compensation to the Contractor, if the Contractor becomes bankrupt or otherwise insolvent as declared by the competent court provided that such termination will not prejudice or affect any right or action or remedy which has accrued or will accrue thereafter to the BSNL

14.4 OPTIONAL TERMINATION BY BSNL (OTHER THAN DUE DEFAULT OF THE CONTRACTOR)

- 14.4.1 The BSNL may, at any time, at its option cancel and terminate this contract by written notice to the contractor, in which even the contractor shall be entitled to payment for the work done up to the time of such cancellation and a reasonable compensation in accordance with the contract prices for any additional expenses already incurred for balance work exclusive of purchases and/or while of material, machinery and other equipment for use in or in respect of the work.
- 14.4.2 In the event of the termination of the contract, the contractor shall forthwith clear the site of all the contractor's materials, machinery and equipment's and hand over possession of the work/operations concerned to the BSNL or as the BSNL may direct.
- 14.4.3 The BSNL may, at its option, cancel or omit the execution of one or more items of work under this contract and may part of such items without any compensation whatsoever to the contractor.

14.5 ISSUANCE OF NOTICE

14.5.1 The Divisional Engineer in-charge of work shall issue show cause notice giving details of lapses, violation of terms and conditions of the contract, wrongful delays or suspension of work or slow progress to the contractor directing the contractor to take corrective action. A definite time schedule for corrective action shall be mentioned in the show cause notice. If the contractor fails to take corrective action within the stipulated time frame, the Divisional Engineer in-charge shall submit a draft of final notice along with a detailed report to the competent authority who had accepted the contract.

- 14.5.2 The final notice for rescission of contract to the contractor shall expressly state the precise date and time from which the rescission would become effective. The following safe guards shall be taken while issuing the final notice:
 - a) During the period of service of notice and its effectiveness, the contractor should not be allowed to remove from the site any material/equipment belonging to the BSNL.
 - b) The contractor shall give in writing the tools and plants he would like to take away/remove from the site. Such of the materials as belong to him and which may not be required for future execution of balance work may be allowed by the Divisional Engineer in-charge of work to be removed with proper records.
 - c) No new construction beneficial to the contractor shall be allowed.
 - d) Adequate departmental security arrangement in replacement of the contractor watch and ward shall be made forthwith. Expenses on this account are recoverable from the security deposit or any amount due to the contractor.

15. INDEMNITIES

- 15.1 The contractor shall at all times hold the BSNL harmless and indemnify from against all action, suits, proceedings, works, cost, damages, charges claims and demands of every nature and descriptions, brought or procured against the BSNL, its officers and employees and forthwith upon demand and without protect or demur to pay to the BSNL any and all losses and damages and cost (inclusive between attorney and client) and all costs incurred in endorsing this or any other indemnity or security which the BSNL may now or at any time have relative to the work or the contractors obligation or in protecting or endorsing its right in any suit on other legal proceeding, charges and expense and liabilities resulting from or incidental or in connection with injury, damages of the contractor or damage to property resulting from or arising out of or in any way connected with or incidental to the operations caused by the contract documents. In addition the contractor shall reimburse the BSNL or pay to the BSNL forthwith on demand without protect or demur all cost, charges and expenses and losses and damages otherwise incurred by it in consequences of any claim, damages and actions which may be brought against the BSNL arising out of or incidental to or in connection with the operation covered by the contractor.
- 15.2 The contractor shall at his own cost at the BSNL's request defend any suit or other proceeding asserting a claim covered by this indemnity, but shall not settle, compound or compromise any suit or other finding without first consulting the BSNL.

16. FORCE MAJEURE

- 16.1 If any time, during the continuance of this contract, the performance in whole or in part by either party or any obligation under this contract shall be prevented or delayed by reason of any war, or hostility, acts of the public enemy, civil commotion sabotage, fires, floods, explosions, epidemics, quarantine restrictions, strikes, lockouts or act of God (Herein after referred to as events) provided notice of happenings, of any such eventuality is given by either party to the other within 21 days from the date of occurrence thereof, neither party shall by reason of such event be entitled to terminate this contract nor shall either party have any such claim for damages against the other in respect of such non-performance and work under the contract shall be resumed as soon as practicable after such event may come to an end or cease to exist, and the decision of the BSNL as to whether the work have been so resumed or not shall be final and conclusive, provided further that if the performance, in whole or part of any obligation under this contract is prevented or delayed by reason of any such even for a period exceeding 60 days either party may, at his option terminate the contract.
- 16.2 Provided also that if the contract is terminated under this clause, the BSNL shall be at liberty to take over from the contractor at a price to be fixed by the BSNL, which shall be final, all unused, undamaged and acceptable materials, bought out components and stores in the course of execution of the contract, in possession of the contractor at the time of such termination of such portions thereof as the BSNL may deem fit excepting such materials bought out components and stores as the contracts may with the concurrence of the BSNL elect to retain.

17. ARBITRATION

- 17.1 In the event of any question, dispute or difference arising under this agreement or in connection there-with except as to matter the decision of which is specifically provided under this agreement, the same shall be referred to sole arbitration of the Chief General Manager, Orissa Telecom Circle, Bhubaneswar or in case his designation is changed or his office is abolished them in such case to the sole arbitration of the officer for the time bring entrusted whether in addition to the functions of the Chief General Manager, Orissa Telecom Circle, Bhubaneswar) or by whatever designation such officers may be called (hereinafter referred to as the said officer) and if the Chief General Manager, Orissa Telecom Circle, Bhubaneswar or the said officer is unable or unwilling to act as such to the sole arbitration or some other person appointed by the Chief General Manager, Orissa Telecom Circle, Bhubaneswar or the said officer. The agreement to appoint an arbitration will be in accordance with the Arbitration and Conciliation Act, 1996. There will be no objection to any such appointment that the arbitrator is BSNL Servant or that he has to deal with the matter to which the agreement relates or that in the course of his duties as BSNL Servant he has expressed views on all or any other matter under dispute. The award of the arbitrator shall be final and binding on the parties. In the event of such arbitrator to whom the matter is originally referred, being transferred or vacating his office or being unable to act for any reasons whatsoever such Chief General Manager, Orissa Telecom Circle, Bhubaneswar or the said officer shall appoint another person to act as arbitrator in accordance with terms of the agreement and the person so appointed shall be entitled to proceed from the stage at which it was left out by his predecessors.
- 17.2 The arbitrator may from time to time with the consent of parties enlarge the time for making and publishing the award, Subject to aforesaid Indian Arbitration and Conciliation Act 1996 and the Rules made there under, any modification thereof for the time being in force shall be deemed to apply to the arbitration proceeding under this clause.
- 17.3 The venue of the arbitration proceeding shall be the office of the Chief General Manager, Orissa Telecom Circle, Bhubaneswar or such other places as the arbitrator may decide. The following procedure shall be followed:
- 17.3.1. In case parties are unable to reach a settlement by themselves, the dispute should be submitted or arbitration in accordance with contract agreement.
- 17.3.2. There should not be a joint submission with the contractor to the sole Arbitrator.
- 17.3.3. Each party should submit its own claim severally and may oppose the claim put forward by the other party.
- 17.3.4. The onus of establishing his claims will be left to the contractor.
- 17.3.5. Once a claim has been included in the submission by the contractor, a reiteration or modification thereof will be opposed.
- 17.3.6. The 'points of defence' will be based on actual conditions of the contract.
- 17.3.7. Claims in the nature of ex-gratia payments shall not be entertained by the Arbitrator as these are not contractual.
- 17.3.8. The question whether these conditions are equitable shall not receive any consideration in the preparation of 'points of defence'.
- 17.3.9. If the contractor includes such claims in his submission, the fact that they are not contractual will be prominently placed before the Arbitrator.The award of the sole Arbitrator shall be final and binding on all the parties to the dispute.

18. SET OFF

18.1 Any sum of money due and payable to the contractor (including security deposit refundable to him) under this contract may be appropriated by the BSNL or the Govt. or any other person or persons contracting through the Govt. or such other person or persons for payment of a sum of money arising out of this contract made by the contractor with BSNL or Govt. or such person or persons contracting through Govt. of India.

SECTION-VI

SPECIAL CONDITIONS OF CONTRACT

1. GENERAL

- 1.1 The work shall be accepted only after Acceptance Testing carried out by A/T team designated by the BSNL, as per prescribed schedule and work/material passing the test successfully.
- 1.2 The G.M.T.D., Dhenkanal reserves the right to disqualify such bidders who have a record of not meeting contractual obligations against earlier contracts entered into with the BSNL.
- 1.3 The G.M.T.D., Dhenkanal reserves the right to black list a bidder for a suitable period in case he fails to honour his bid without sufficient grounds.
- 1.4 The G.M.T.D., Dhenkanal reserves the right to counter offers price(s) against price(s) quoted by any bidder.
- 1.5 Any clarification issued by G.M.T.D., Dhenkanal, in response to query raised by prospective bidders shall form an integral part of bid documents and it may amount to amendment of relevant clauses of the bid documents.
- 1.6 Tender will be evaluated as a single package of all the items given in the price schedule.
- 1.7 All work to be executed under the contract shall be executed under the direction and subject to the approval in all respects of by the Divisional Engineer or Site Engineer in-charge of work site who shall be entitled to direct at what point or points and what manner they are to be commenced, and from the time to time carried on.
- 1.8 The work in each section may be split up between two or more contractors or each section may be awarded to one contractor or accept any tender in part and not entirely if considered expedient by the G.M.T.D., Dhenkanal.
- 1.9 If the contractor shall desire an extension of time for completion of the work on the grounds of unavoidable hindrance in execution of work or on any other ground he shall apply in writing to the Divisional Engineer within 3 days of the date of hindrance on account of which he desires such extension as aforesaid. In this regard the decision of G.M.T.D., Dhenkanal shall be final.
- 1.10 If any time after the commencement of the work, the G.M.T.D., Dhenkanal may feel that execution of whole or part of work, as specified in the tender is not required to be carried out, then the G.M.T.D., Dhenkanal shall give notice in writing of the fact to the contractor who shall have no claim to any payment of compensation whatsoever on account of any profit or advantage which he might have derived in consequence of the full amount of the work not having been carried out neither shall he had any claim for compensation by reason of any alternations having been made in the original specifications, drawings, designs and instructions which shall involve any curtailment of the work as originally contemplated.
- 1.11 Whenever any claims against the contractor for the payment of a sum of money arises out of or under the contract, the G.M.T.D., Dhenkanal shall be entitled to recover such sum by appropriating in part or whole the security deposit of the contractor, and to sell any G.M.T.D., Dhenkanal promissory notes etc., forming the whole or part of such security or running/final bill pending against any contract with the G.M.T.D., Dhenkanal. In the event of the security being insufficient or if no security has been taken from the contractor, then the balance or the total sum recoverable as the case may be shall be deducted from any sum then due or which at any time there after may become due to the contractor under this or any other contract with G.M.T.D., Dhenkanal. Should this sum be not sufficient to cover the full amount recoverable the contract or shall pay to G.M.T.D., Dhenkanal on demand the balance remaining due.
- 1.12 No official of Gazetted rank or other Gazetted officer employed in Engineering or administrative duties in an Engineering Department or any other Department of the Government of India is allowed to work as a contractor for a period of two years after his retirement from Government service without the previous permission of Government of India. This contract is liable to be cancelled if either the contractor or any of his employee is found at any time to be such a person who hadn't obtained the permission of Government of India as aforesaid before submission of the engagement in the contractor's service as the case may be.
- 1.13 In the event of the contractor being, adjusted insolvent or going voluntarily into liquidation of having received order or other order under insolvency act made against him or in the case of company, of the passing of any resolution, or making of any order for winding up whether voluntarily or otherwise, or in the event of the contractor failing to comply with any of the conditions herein specified the G.M.T.D., Dhenkanal shall have the power to terminate the contract without any notice.
- 1.14 Without prejudice to any of the rights or remedies under this contract, if the contractor dies, the G.M.T.D., Dhenkanal on behalf of the President can terminate the contract without compensation to the contractor. However, G.M.T.D., Dhenkanal, at his discretion may permit contractor's heirs to perform the duties or engagements of the contractor under the contract, in case of his death. In this regard the decision of G.M.T.D., Dhenkanal shall be the final.

- 1.15 In the event of the contractor, winding up his company on account of transfer or merger of his company with any other, the contractor shall make it one of the terms and stipulations of the contract for the transfer of his properties and business, that such other person or company, shall continue to perform the duties or engagement of the contractor under this contract and be subject to his liabilities there under.
- 1.16 Interpretation of the contract document:
- 1.16.1 The representative of G.M.T.D., Dhenkanal and the contractor shall in so far as possible by mutual consultation, try to decide upon the meaning and intent of the contract document. In-case of disagreement the matter shall be referred to G.M.T.D., Dhenkanal whose decision shall be final. Any change in the contract documents shall be set forth in writing by the representative of the parties hereto. It shall be the contractor's responsibility to thoroughly familiarize all of this supervisory personnel with the contents of all the contract documents.

1.17 NOTIFICATION

1.17.1 The contractor shall give in writing to the proper person or authority with a copy to the Divisional Engineer such notification as may be mandatory or necessary in connection with the commencement, suspension, resumption, performance and/or completion of the contracted work. All notice shall be given sufficiently in advance of the proposed operation to permit proper corelation of activities and the contractor shall keep all proper persons or authorities involved and advised of the progress of operations through out the performance of the work and/or with such other information and/or supporting figure and data as may from time to time as director or required.

1.18 SHUT DOWN ON ACCOUNT OF WEATHER CONDITIONS

1.18.1 The contractor shall not be entitled to any compensation whatsoever by reason of suspension of the whole or any part of the work made necessary by the BSNL or deemed advisable on account of bad weather conditions or other Force majeure conditions.

2. STORES SUPPLIED BY THE BSNL

- 2.1 At no point of time the contractor shall be issued stores of value more than the contractor's material security as per clause number 5 of section-V. If at all the work required more amount of materials to issued to the contractor, then the security shall suitably be revised before the issue of the store and the contractor will not have any objection to it.
- 2.2 The contractor shall transport (including loading and unloading) all stores issued to him from District Telecom Store, to the site of work at his own cost. The BSNL shall not pay any transportation charges to the contractor.
- 2.3 All materials supplied to the contractor by the BSNL shall remain the absolute property of BSNL and shall not be removed from site of the work except for use in the work and shall be at all times open to inspection by the Representative of G.M.T.D., Dhenkanal. In-case the materials like cable and accessories are taken delivery of by the contractor and stored at the site office/store of the contractor such site office/store will also be treated "as site" for this purpose. Any such materials remaining unused at the time of the abandonment, completion or determination of the contract shall be returned to the BSNL at a place informed to him by the BSNL, failing which the cost of the unused materials shall be deducted from the contractor's material security or any of his pending bills or from any other security.
- 2.4 The contractor shall be responsible for the transportation of store, storage and safe custody of all material supplied to him by the BSNL, which in the contractor's custody whether, or not installed in the work. The contractor shall satisfy himself regularly the quantity and quality of the materials supplied to him and he will be responsible for any subsequent deterioration and discrepancy (inclusive of theft) in the quantity/quality of the materials.
- 2.5 The contractor shall submit a proper account every month of all the materials supplied to him by the BSNL and those consumed for items of work any discrepancy of difference between the materials issued to the contractor and those consumed in the work as per the "BSNL's calculation" (which shall be final) will be charged to the contractor or deducted from his bills at 1.5 times of prevailing standard price including freight, handling charges, storage charges etc.
- 2.6 The contractor shall ensure that only the required materials are issued to him. Upon completion of work, the contractor shall return to the G.M.T.D., Dhenkanal at the later designated store in good condition, free of charges, any unused materials that were supplied by the BSNL.

3. EASEMENTS, PERMITS, LICENCES AND OTHER FACILITIES

- 3.1 The contractor shall obtain/provide at his own cost all easements, permits and licence necessary to do its work including followings.
 - (a) "Right of User" easements and permits.
 - (b) Railway and Highway crossing permits including bridge.
 - (c) Canal / Stream crossing permits.
- 3.2 The contractor shall be fully responsible for angling and obtaining all necessary easements, permits and licenses, for moving all necessary equipments, tools, supplied materials and men across Railways and Highways across public or private road as well as premises of any public utility within the right of user and for bearing all costs, that may be incurred in respect of the same.
- 3.3 The contractor is to confine his operation to the provided construction work "Right of User" unless it has made other arrangements with the particular property owners and /or tenants such other arrangements shall be entirely at the responsibility of the contractor as to cost and arrangements as also breach and claim and shall be entitled with a copy to the AGM.

- 3.4 The contractor will not be entitled to extra compensation for hardship and increase in cost by the cable trench being routed adjacent to or across other pipeline, Highways, Railways, Telephones or poser poles and wires or guy wires, embankments, cliffs, streams or other obstacles which may physically or otherwise in any manner, restrict or limit the use of the construction "Right of User". Some construction and such contingency shall be deemed to have been providing for in the rates.
- 3.5 At location where the UG Local cable & OF Cable trench is routed across or along railways or roads the contractor shall without extra cost provide and maintain such detours and road controls as are required by the railways or government or local agencies having jurisdiction.
- 3.6 If the contractor is not in position to obtain the permission due to restrictions, ban etc imposed by local authorities,, then the extension of time limit shall be provided as per EOT clause given in tender document.
- 3.7 Contractor has to get road cutting permissions from local authorities. BSNL Dhenkanal will apply for Road permission to the concerned authorities and do the payments that is estimated by the above authorities after getting in writing. The contractor has to liaison with the local authorities for getting these permissions. Contractor has to survey the route for buried utilities, liaison with other agencies for locating their utilities and should get their clearance before starting the execution of the work.
- 3.8 The contractor has to liaison with the local authority viz Municipality, Road authority etc in getting the permissions for which BSNL will apply seeking right of way permission and the estimated payment for the same will be paid by BSNL after getting in writing.
- 3.9 Reinstatement Charges will be paid after getting certificate from the appropriate local authority

4. QUALITY OF WORK

4.1 The BSNL shall be the final judge of the quality of the work and the satisfaction of the BSNL in respect thereof set forth in the contract documents. Laxity or failure to enforce compliance with the contract documents by the BSNL and / or its representative shall not manifest a change or intent of waiver, the intention being that, not withstanding the same, the contractor shall be and remain responsible for complete and proper compliance with the contract documents and the specification there in. The representative of G.M.T.D., Dhenkanal has the right to prohibit the use of men and any tools, materials and equipment which in his opinion do not produce work or performance meet the requirement of the contract documents.

5. TAXES AND DUTIES

5.1 Contractor shall pay all rates, levies, fees royalties, taxes and duties payable or arising from out of, by virtue of or in connection with and/or incidental to the contract or any of the obligations of the parties in terms of the contractor documents and/or in respect of the works or operations or any part thereof to be performed by the contractor and the contractor shall indemnify and keep indemnified the BSNL from and against the same or any default by the contractor in the payment thereof.

6. PROTECTION OF LIFE AND PROPERTY AND EXISTING FACILITIES

- 6.1 The contractor is fully responsible for taking all possible safety precaution during preparation for and actual performance of the works and for keeping the construction site in a reasonable safe condition. The contractor shall protect all life and property from damage or losses resulting from his construction operations and shall minimize the disturbance and inconvenience to the public.
- 6.2 If the excavation of trench alters the contours of the ground around road and highway crossing in such locations dangerous to traffic, the contractor shall at his own cost, take all necessary precautions to protect public and shall comply with all the BSNL regulations as to placing of warning boards (Minimum size 3' x 2'), traffic signals, barricades, flags etc., at such location. If the contractor does not put the warning signal as per above directions, then a penalty of Rs. 500/- per day shall be levied on the contractor, till the directions are complied by the contractor. The contractor shall take due precautions to avoid damages to other pipe lines, water mains, sewers, telephones, telegraphs and power conduits, laid wires poles and guy wires, railways, highways, bridges or other underground or above ground structure and/or property crossing or adjacent to the cable trench being excavated.
- 6.3 Attention of the contractor is drawn to the rules regarding laying of cables at road crossing, along Railways Bridges, Highways safety precautions while working in public street. The contractor in writing shall obtain the detailed engineering instructions from the Divisional Engineer of the area.
- 6.4 The contractor shall be solely responsible for location through approved non-destructive means and ensuring the safety of all existing underground pipeline, electrical cables, and or other structures.
- 6.5 The contractor shall be solely liable for all expense for and in respect of repairs and/or damage occasioned by injury of or damage to such underground and above structures or other properties and under take to indemnify the BSNL from and against all actions, cause of actions, damages, claims and demands what-so-ever, either in law or in equity and all losses and damages and costs (inclusive between attorney and client), charges and expenses in connection therewith and/or incidental thereto. The contractor shall take all responsibilities and risk in crossing other pipelines and cables and shall be responsible for protecting all such existing pipelines, poles, electric lines, sewers, cables or other facilities from damage by the contractor's operation in connection with the work. The contractor without cost of the BSNL shall promptly repair any damage incurred.
- 6.6 The current market value of any commodities lost as a result of any damage to the aforesaid existing facilities shall be paid by the contractor together with such additional sums necessary to liquidate the personal of property damages, resulting there from.

7. LABOUR WELFARE MEASURES AND WORKMEN COMPENSATION

7.1 OBTAINING LICENCE BEFORE COMMENCEMENT OF WORK

The contractor shall obtain a valid contractor licence under the Contract (R&A) Act 1970 and the Contract Labour (Regulation and Abolition) Central Rules 1971, before commencement of the work, and continue to have a valid licence until the completion of work. The contractor shall also abide by the provisions of the Child Labour (Prohibition and Regulation) Act 1986. Any failure to fulfil this requirement shall attract the penal provisions of this contact arising out of the resultant non-execution of work.

- 7.2 CONTRACTORS LABOUR REGULATIONS
- 7.2.1. WORKING HOURS
- 7.2.1.1. Normally working hours of an employee should not exceed 9 hours a day. The working day shall be so arranged that inclusive of interval for rest, if any, it shall not spread over more than 12 hours on any day.
- 7.2.1.2. When a worker is made to work for more than 9 hours on any day or for more than 48 hours in any week he shall be paid over time for the extra hours put in by him.
- 7.2.1.3. Every worker shall be given a weekly holiday normally on a Sunday, in accordance with the provisions of Minimum Wages (Central) Rules 1960, as amended from time to time, irrespective of whether such worker is governed by the Minimum Wages Act or not.
- 7.2.1.4. Where the minimum wages prescribed by the Government, under the Minimum Wages Act, are not inclusive of the wages for the weekly day of rest, the worker shall be entitled to rest day wages, at the rate applicable to the next preceding day, provided he has worked under the same contractor for a continuous period of not less than 6 days.
- 7.2.1.5. Where a contractor is permitted by the Engineer-in-charge to allow a worker to work on a normal weekly holiday, he shall grant a substituted holiday to him for the whole day, on one of the five days, immediately before or after the normal weekly holiday, and pay wages to such worker for the work performed on the normal weekly holiday at the overtime rate.
- 7.2.2. DISPLAY OF NOTICE REGARDING WAGES ETC.
 - The contractor shall, before he commences his work on contract, display and correctly maintain and continue to display and correctly maintain, in a clear and legible condition in conspicuous places on the work, notices in English and in local Indian languages spoken by the majority of the workers, giving the minimum rates of the wages fixed under Minimum Wages Act the actual wages being paid, the hours of work which such wage are earned, wages periods, dates of payments of wages and other relevant information.
- 7.2.3 PAYMENT OF WAGES
- 7.2.3.1 The contractor shall fix wage periods in respect of which wages shall be payable.
- 7.2.3.2 No wage period shall exceed one month.
- 7.2.3.3 The wages of every person employed as contract labour in an establishment or by a contractor, where less than one thousand such persons are employed, shall be paid before the expiry of seventh day and in other cases before the expiry of tenth day after the last day of the wage period in respect of which the wages are payable.
- 7.2.3.4 Where the employment of any worker is terminated by or on behalf of the contractor, the wages earned by him shall be paid before the expiry of the second working day from the date on which his employment is terminated.
- 7.2.3.5 All payment of wages shall be made on a working day at the work premises and during the working time and on a date notified in advance and in case the work is completed before the expiry of the wage period, final payment shall be made within 48 hours of the last working day.
- 7.2.3.6 Wages due to every worker shall be paid to him direct or to other person authorized by him in this behalf.
- 7.2.3.7 All wages shall be paid in current coin or currency or in both.
- 7.2.3.8 Wages shall be paid without any deductions of any kind except those specified by the Central Government by general or special order in this behalf or permissible under the Payment of Wages Act 1956
- 7.2.3.9 A notice showing the wages period and the place and time of disbursement of wages shall be displayed at the place of work and a copy sent by the contractor to the Engineer-in-charge under acknowledgement.
- 7.2.3.10 It shall be the duty of the contractor to ensure the disbursement of wages in presence of the site Engineer or any other authorized representative of the Engineer-in-Charge who will be required to be present at the place and time of the disbursement of wages by the contractor to workmen.
- 7.2.3.11 The contractor shall obtain from the site Engineer or any other authorized representative of the Engineer-in-charge, as the case may be, a certificate under this signature at the end of the entries in the "Register of Wages" as the case may be, in the following form:

 "Certified that the amount shown in the column No....... has been paid to the workman concerned

7.2.4 FINES AND DEDUCTIONS WHICH MAY BE MADE FROM WAGES

- 7.2.4.1 The wages of a worker shall be paid to him without any deduction of any kind except the following:
 - (a) Fines.
 - (b) Deductions for absence from duty i.e. from the place or the places where by the terms of his employment he is required to work. The amount of deduction shall be in proportion to the period for which he was absent.
 - (c) Deductions for damage to or loss of goods expressly entrusted to the employed person for custody, or for loss of money or any other deductions which he is required to account, where such damage or loss is directly attributable to his neglect or default.
 - (d) Deduction for recovery of advances or for adjustment of overpayment of wages, advances granted shall be entered in a register.
 - (e) Any other deduction, which the Central Government may from time to time, allow.
- 7.2.4.2. No fines should be imposed on any worker save in respect of such acts and omissions on his part as have been approved of by the Labour Commissioner.
- 7.2.4.3. No fine shall be imposed on a worker and no deduction for damage or loss shall be made from his wages until the worker has been given an opportunity of showing cause against such fines or deductions.
- 7.2.4.4. Every fine shall be deemed to have been imposed on the day of the act or omission in respect of which it was imposed.

7.2.5 LABOUR RECORDS

- 7.2.5.1 The contractor shall maintain a Register of Persons emplyed on work on contract in Form XIII of the Contract Labour (R&A) Cental Rules 1971.
- 7.2.5.2 The contractor shall maintain a Muster Roll register in respect of all workmen employed by him on the work under contract in Form XVI of the CL (R&A) Rules 1971.
- 7.2.5.3 The contractor shall maintain a Wage Register in respect of all workmen employed by him on the work under contract in form XVII of the CL (R&A) Rules 1971.
- 7.2.5.4 Register of accidents The contractor shall maintain a register of accidents in such form as may be convenient at the work place but the same shall include the following particulars:
 - (a) Full particulars of the labourers who met with accident.
 - (b) Rate of Wages.
 - (c) Sex
 - (d) Age
 - (e) Nature of accident and cause of accident
 - (f) Time and date of accident
 - (g) Date and time when admitted in hospital
 - (h) Date of discharge from the hospital
 - (i) Period of treatment and result of treatment
 - (j) Percentage of loss of earning capacity and disability as assessed by Medical Officer.
 - (k) Claim required to be paid under Workmen's Compensation Act.
 - (I) Date of payment of compensation.
 - (m) Amount paid with details of the person to whom the same was paid.
 - (n) Authority by whom the compensation was assessed
 - (o) Remarks.
- 7.2.5.5. The contractor shall maintain a Register of Fines in the Form XII of the CL (R&A) Rules 1971 the contractor shall display in a good condition and in a conspicuous place of work the approved list of acts and omission for which fines can be imposed.
- 7.2.5.6. The contractor shall maintain a Register of deductions for damage or loss in Form XX of the CL (R&A) Rules 1971.
- 7.2.5.7. The contractor shall maintain a Register of Advances in Form XXIII of the CL (R&A) Rules 1971.
- 7.2.5.8. The contractor shall maintain a Register of Overtime in Form XXIII of the CL (R&A) Rules 1971.

7.2.6 ATTENDANCE CARD-CUM WAGE SLIP

- 7.2.6.1 The contractor shall issue an Attendance card cum wage slip to each workman employed by him.
- 7.2.6.2 The card shall be valid for each wage period.
- 7.2.6.3 The contractor shall mark the attendance of each workman on the card twice each day, once at the commencement of the day and again after the rest interval, before he actually starts work.
- 7.2.6.4 The card shall remain in possession of the worker during the wage period under reference.
- 7.2.6.5 The contractor shall complete the wage slip portion on the reverse of the card at least a day prior to the disbursement of wages in respect of the wage period under reference.
- 7.2.6.6 The contractor shall obtain the signature or thumb impression of the worker on the wage slip at the time of disbursement of wages and retain the card with him.

7.2.7. EMPLOYMENT CARD

The contractor shall issue an employment Card in the Form XIV of CL (R&A) Central Rules 1971 to each worker within three days of the employment of the worker.

7.2.8. SERVICE CERTIFICATE

On termination of employment for any reason whatsoever the contractor shall issue to the workman whose services have been terminated, a Service Certificate in the Form XV of the CL (R&A) Central Rules 1971.

7.2.9 PRESERVATION OF LABOUR RECORDS

The labour records and records of Fines and deductions shall be preserved in original for a period of three years from the date of last entries made in them and shall be made available for inspection by the Engineer-in-charge or Labour Officer or any other officers authorised by the Ministry of Communication in this behalf.

7.3 POWER OF LABOUR OFFICER TO MAKE INVESTIGATIONS OR ENQUIRY

The labour officer or any person authorised by the Central Government on their behalf shall have power to make enquiries with a view to ascertaining and enforcing due and proper observance of Fair Wage Clauses and provisions of these Regulations. He shall investigate into any complaint regarding the default made by the contractor in regard to such provision.

7.4 REPORT OF INVESTIGATING OFFICER AND ACTION THEREON

The Labour Officer or other persons authorized as aforesaid shall submit a report of result of his investigation or enquiry to the Engineer in-charge indicating the extent, if any, to which the default has been committed with a note that necessary deductions from the contractor's bill be made and the wages and other dues be paid to the labourers concerned. The Engineer in-charge shall arrange payments to the labour concerned within 45 days from the receipt of the report from the Labour Officer or the authorized officer as the case may be.

7.5 INSPECTION OF BOOKS & SLIPS

The contractor shall allow inspection of all the prescribed labour records to any of his workers or to his agent at a convenient time and place after due notice is received or to the Labour Officer or any other person, authorized by the Central Government on his behalf.

7.6 SUBMISSION OF RETURNS

The contractor shall submit periodical returns as may be specified from time to time.

7.7 AMENDMENTS

The Central Government may from time to time add to or amend the regulations and on any question as to the application/interpretation or effect of those regulations.

8.0 INSURANCE:

8.1 Without limiting any of his other obligations or liabilities, the contractor shall, at his won expense, take and keep comprehensive insurance including third party risk for the plant, machinery, men, materials etc. brought to the site and for all the work during the execution. The contractor shall also take out workmen's compensations insurance as required by law and undertake to indemnify and keep indemnified the GMTD, Dhenkanal from and against all manner of claims and demands and losses and damages and cost (including between attorney and client) charges and expenses that may arise in regard the same or that the GMTD Dhenkanal may suffer or incur with respect to end/or incidental to the same. The contractor shall have to furnish originals and/or attested copies as required by the BSNL of the policies of insurance taken within 15 (fifteen) days of being called upon to do so together with all premium receipts and other papers related thereto which the BSNL may require.

9. COMPLIANCE WITH LAWS AND REGULATIONS

9.1 During the performance of the works the contractor shall at his own cost and initiative fully comply with all applicable laws of the land and with any and all applicable by-laws rules, regulations and orders and any other provisions having the force of law made or promulgated or deemed to be made or promulgated by the Government, Governmental agency or BSNL, municipal board, government or other regulator or authorized body or persons and shall provide all certificates of compliance therewith as may be required by such applicable law. By-laws, Rules, Regulations, orders and / or provisions. The contractor shall assume full responsibility for the payment of all contributions and pay roll taxes, as to its employees, servants or agents engaged in the performance of the work specified in the contractor documents. If the contractor shall require any assignee or sub-contractor to sham any portion of the work to be performed hereunder may be assigned, sub-leased or sub-contracted to comply with the provisions of the clause and in this connection the contractor agrees as to undertake to save and hold the Government harmless and indemnified from and against any/all penalties, actions, suits, losses and damages, claims and demands and costs (inclusive between attorney and client) charges and expenses whatsoever arising out or occasioned, indirectly or directly, by failure of the contractor or any assignee or sub-contractor to make full and proper compliance with the said by-laws, Rules, Regulations, Laws and Order and provisions as aforesaid.

10. TOOLS AND PLANTS

The contractor shall provide at his own cost all tools, plants appliances, implements, measuring instruments etc. required for proper execution of works. The contractor shall also supply without charge the requisite number of persons with the means and materials necessary for the purpose of setting out works, counting, weighing and assisting the measurements for examination at any time and from time to time. The contractor shall be responsible to make all arrangements, at his own cost for de-watering or trenches/ducts and de-gasification of the ducts before carrying out the work. The contractor shall also be responsible to make arrangements, at his own cost, for water required for carrying of works at sites including curing of CC/RCC works. Failing his so doing the same may be provided by the Engineer-in-charge at the expense of the contractor and the expenses shall be deducted from any money due to the contractor under this contract or otherwise.

11 EXTENSION OF TENDER.

- a) Until unless intimated to the contractor about the expiry of the normal period of contract within last one month of the period of contract, the tender will automatically be extended for a further period of 3 (Three) months at the same terms, conditions & approved rates if, desired by BSNL authority. The contractor must not deny for execution of the tender work in this case.
- b) The GMTD, Dhenkanal reserves the right for extension of tender for a further period of one year after expiry of normal contract period at the same terms, conditions & rates approved earlier by giving prior notice before 15 days to the contractor, if desired by the BSNL authority & agreed by the contractor. In this case the contractor has to submit the performance security for the extended period of contract & to execute the agreement again to continue the tender work. The period of performance security should be Six months more than the period of contract / Agreement.
- 12. The bidder should give a certificate that none of his/her near relative is working in the units as defined below where he/she is going to apply for the tender. In case of proprietorship firm certificate will be given by the proprietor. For the partnership firm, certificate will be given by all the partners and in case of limited company by all the directors of the company excluding government of India/Financial institutions nominees and independent non-official part time Directors appointed by Government of India or the Governor of the state. Due to any breach of these conditions by the company or firm or any other person, the tender will be cancelled and bid security will be forfeited at any stage whenever it is noticed and BSNL will not pay any damage to the company or the firm or the concerned person. The company or firm or the person will also be debarred for further participation in the concerned unit.

The near relatives for this purpose are defined as :-

- (a) Members of a Hindu undivided family.
- (b) They are husband and wife.
- (c) The one is related to the other in the manner as father, Mother, Son(s) and Son's Wife (Daughter-in-law), Daughter(s) and Daughter's husband (Son-in-law), Brother(s) and Brother's wife, Sister(s) & Sister's husband (Bro-in-law).

13. VERIFICATION OF DOCUMENTS AND CERTIFICATES:

The bidder will verify the genuineness and correctness of all documents and certificates including experience/performance certificates, issued either by the bidder or any other firm/associate before submitting them in the bid. The onus of proving genuineness of the submitted documents would rest with the bidder.

As per requirement of the tender conditions, if any document/paper/certificate submitted by the participant bidder is found to be false/fabricated/tampered/manipulated at any stage during bid evaluation or award of contract, then the bid security (EMBG) of the bidder would be forfeited and bidder would be disqualified from the tender. Action would also be taken for banning of business dealing with the defaulting firm. In case, the contract has already awarded to the bidder then PBG would be forfeited and the contract would be rescind/annulled and BSNL would be at liberty to procure the ordered goods and service from any other source at the risk and cost of the defaulting bidder. Action would also be taken for banning business dealing with the defaulting firm.

SECTION-VII (A)SCOPE OF WORK AND JURISDICTION OF CONTRACT FOR OF CABLE WORK

SCOPE OF WORK

- 1.1 The Optical Fibre Cable is laid through PLB / PLBE Pipes buried at a nominal depth of 165 cms. The steps involved in OF Cable construction are as under:
- i) Excavation of trench upto a nominal depth of 165 cms., according to Construction specifications along National/State Highways/other roads and also in city limits as mentioned in the notice inviting tender.
- ii) Laying of PLB Pipes/coils coupled by PLB sockets in excavated trenches, on bridges and culverts, drawing of 6 mm Polypropylene para pro rope (P.P.Rope) through the PLB Pipes/coils as per Construction Specifications and sealing of PLB pipe ends at every manhole by PLB end caps of suitable size.
- iii) Providing of mechanical protection by R.C.C. Pipes/GI pipes and/or concreting/chambering according to construction specifications, wherever required.
- iv) Fixing of GI Pipes / troughs with clamps at culverts/bridges and/or chambering or concreting of G.I. Pipes/troughs, wherever necessary.
- v) Back filling and dressing of the excavated trenches according to construction specifications.
- vi) Opening of manholes (of size 3 meters x 1 meters x 1.65 meters depth), replacing existing 6mm P.P. ropes by 8 mm P.P. rope (from manhole to manhole) for ensuring smooth passage for pulling the cable. Pulling of Optical fibre Cable with proper tools and accessories as per construction specifications. Sealing of both ends of the manholes by hard rubber bush of suitable size to avoid entry of rodents into the PLB Pipes, putting split PLB pipes and split RCC pipes with proper fixtures over cable in the manhole to protect the bare cable in the pulling manhole. Back filling and dressing of manholes.
- vii) Digging of pit of size 2 meter x 2 meter x 1.8 meter (depth) for construction of jointing chamber at approximately every two kilometers of internal size of 1.5 meter x 1.5 meter x 1.2 meter using bricks and mortar or fixing pre-cast jointing chamber of internal diameter of 1.2 meter filling of jointing chamber with clean sand, placing either pre-cast RCC cover or store of suitable size on jointing chamber to protect the joint and back filling of jointing chamber with excavated soil.
- viii) Digging of pits 1 meter towards jungle side at every manhole and jointing chamber to a depth of 60 cms. fixing or route indicator/joint indicator, concreting and back filling of pits. Painting of route indicators with yellow colour and joint indicator by red colour and sign writing denoting route/joint indicator number, as per construction specifications.
 - xi) Documentation.

1.2 ALLIED ACTIVITIES

- 1.2.1 Transportation of Materials : The materials required for executing the work entrusted to the contractors against a work order shall be made available at Sub-divisional Store Deport. The contractor shall be responsible for transporting the materials, to be supplied by the BSNL or otherwise to execute the work under the contract, to site at his/their own cost. The costs of transportation are subsumed in the standard Schedule Rates and therefore no separate charges are payable on this account.
- 1.2.2. Disposal of Empty Cable Drums: The contractor shall be responsible to dispose of the empty cable drums after laying of the cables. The cost of various sizes of empty cable drums recoverable from the contractor has been fixed taking into account the prevailing market rates as mentioned in this document.
- 1.2.2.1 It shall be obligatory on part of the contractor to dispose of the empty cable drums at his / their level and the amount fixed for various empty cable drums shall be recovered from the bill for the work for which the drum(s) was/were issued or from any other amount due to the contractor or the Security Deposit.
- 1.2.2.2 The contractor shall not be allowed to dump the empty cable drums in Govt./Public place, which may cause inconvenience to the BSNL/public. If the contractor does not dispose of the empty cable drums within 3 days of becoming empty, the BSNL shall be at liberty to dispose of the drums in any manner deemed fit and also recover the amount fixed in this contract from the bill/security deposit/any other amount due to the contractor.
- 1.2.3 Supply of Materials: There are some materials required to be supplied by the contractor for execution of works under this contract like Bricks, Cement, Wire Mesh and Steel for protection, etc., besides using other consumables which do/don't become the part of the asset. The contractor shall ensure that the materials supplied are of best quality and workmanship and shall be strictly in accordance with the specifications.

(B)SCOPE OF WORK AND JURISDICTION OF CONTRACT FOR UG LOCAL CABLE

SCOPE OF WORK

1.1 MAIN CABLE CONSTRUCTION ACTIVITIES: The items of work involved in UG cable construction are as under

1.1.1 Excavation of trench up to a depth such that the top of the cable is 60cm for 5 Pair U.G. Cable and 100 Cm. for higher size (more than 5 Pair) U.G. Cable below the normal ground level according to the construction specification. The U/G Local Cable laying work includes laying of armoured / unarmoured cables or any other type of cable, including loading and unloading of cables drums on bridges or on other structure, pulling of cables through G. I. Pipes or through any other pipes or tunnel or cable ducts, shifting of cable, fitting pipes for cable beneath road / rails crossing and under the

bridges, putting sand and leave the cable ends at a place free from all obstacles to enable to jointing work to be done at a later date. If required by the G.M.T.D., Dhenkanal, the cable should be laid under split pipes and tied with string. Laying of the cable shall also includes extra length kept for jointing but no extra charges for laying the extra length shall be claimed. Second class bricks will be laid lengthwise for only cables of size 200 pairs or more and if more than one cable on the same route / trench is laid then bricks will be laid breadth wise.

Depth of cable trench should be 60cms for laying 5pair cables and should be 100cms for laying 10 pairs and above size cables as per departmental instructions. The cable should be laid in such a manner that there in 5 cm soft soil cushion available under and around the cable. The depth may vary in places where underground pipes and electric mains etc. may come in the way of Cable Trenching, or where specifically required by the BSNL due to other reason for which the following scales of payment shall be applied for digging trenches of lesser depth:

5 Pair U/G Cable (Standard nominal depth =60Cms):-

Depth between	Rate applicable as % of approved per meter rates for 60 cms. depth.	
50 cms. to 59 cms.	Proportionate of approved rates	
40 cms. to 49 cms.	65% of approved rates	
30 cms. to 39 cms.	40% of approved rates	
20 cms. to 29 cms.	20% of approved rates	
10 cms. To 19 cms.	NIL (excluding case of 15cms in Subs Premises/ CC/ Pitch road pavements)	
Below 10 cms.	NIL	

10 Pair & above U/G Cable (Standard nominal depth =100Cms):-

Depth between	Rate applicable as % of approved per meter rates for 100 cms. Depth.
90 cms. to 99 cms.	Proportionate of approved rates
80 cms. to 89 cms.	75% of approved rates
70 cms. to 79 cms.	65% of approved rates
60 cms. to 69 cms.	50% of approved rates
50 cms. to 59 cms.	40% of approved rates
40 cms. to 49 cms.	30% of approved rates
30 cms. to 39 cms.	20% of approved rates
20 cms. to 29 cms.	Nii
Below 10 cms.	Nil

Variation in the standard depth of trenches (i.e. 60cms for 5 pairs cables and 100cms for 10pair and above size cables) is permissible only with the prior approval of the respective AGM. So, wherever there is any variation in the standard depth, specific certificate to the effect should be got endorsed with the relevant bill by the executing authority. Ramming and consolidation of trench will be done in layers after back filling the cable trench for a depth of 15cm i.e. the soil should be rammed for every 25cm of depth. Therefore, for trench of 60cms or 100cms standard nominal depth, consolidation will have to be done minimum 4 stages of back filling and ramming, the depth of cable just before closing the trench should be the same as seen by the BSNL officer of acceptance testing unit. No payment will be made of length, where the cable has been laid at substandard depth without the written prior approval of the concerned AGM. The cable laying at substandard depth except in unavoidable cases, that too with prior specific written permission from AGM is not permissible. However, wherever lesser depths have been permitted in writing by AGM, payment will be made on above mentioned basis.

- 1.1.2 Laying and pulling of cables in trenches or through pipes/ducts/walk through trenches
- 1.1.3 Placing of full round RCC pipes as per specifications if required.
- 1.1.4 Back filling and compacting of the excavated trenches according to construction specifications and removal of excess earth from the site.

1.2 ALLIED ACTIVITES

- 1.2.1 Transportation of Materials The materials required for executing the work entrusted to the contractor against a work order shall be made available at concerned Sub-divisional Store Depot. The contractor shall be responsible for transporting the materials, to be supplied by the BSNL or otherwise to execute the work under the contract, to site at his/their own cost. The costs of transportation are subsumed in the standard schedule rates and therefore no separate charges are payable on this account.
- 1.2.2 Disposal of empty cable drums The contractor shall be responsible to dispose of the empty cable drums after laying of the cables. The cost of various sizes of empty cable drums recoverable from the contractor has been fixed taking into account the prevailing market rats as mentioned in the document.
- 1.2.2.1 It shall be obligatory on the part of the contractor to dispose of the empty cable drums at his/their level and the amount fixed for various empty cable drums shall be recovered from the bill for the work for which the drum(s) was/were issued or from any other amount due to the contractor or the security deposit.
- 1.2.2.2 The contractor shall not be allowed to dump the empty cable drums in Govt./public place which may cause inconvenience to the BSNL/Public. If the contractor does not dispose of the empty cable drums within 3 days of becoming empty, the BSNL shall be at liberty to dispose of the drums in any manner deemed fit and also recover the amount fixed in this contract from the bill/security deposit/any other amount due to the contractor.
- 1.2.3 Supply of Materials: There are some material required to be supplied by the contractor for execution of works under this contract like Bricks, Cement, sand and chips for protection etc. besides using other consumables which do/don't become the part of the asset. The contractor shall ensure that the materials supplied are of best quality and workmanship and shall be strictly in accordance with the specifications.

(1.3) VALUE OF WORK

The estimated cost of work is as mentioned in the Notice Inviting Tender which has been worked out based on standard schedule rates mentioned in this tender document. The actual value of work may vary based on the actual requirement but generally being limited to +/- 50% of the indicated value.

In exceptional situation where the requirement is of an emergent nature and it is necessary for continuation of works, the G.M.T.D., Dhenkanal reserves the right to increase up to 100% of the quantum of works specified in the schedule of requirement contained in the running tender/contract within a period of 12months from the earliest date of acceptance of tender at the same rate with the existing approved contractor with the same terms and conditions specified in the tender.

(1.4) JURISDICTION OF CONTRACT

- 1) The jurisdiction of the contract shall be for zone wise. The telephone exchange areas in different zones shall be as under the jurisdiction of all concerned SDOs in that Zone. If any additional telephone exchange is planned, the same shall be included in the zone in the vicinity of concerned exchange keeping in view the logistics of carrying out the work.
- 2) The work of particular Zone may be awarded at the discretion of GMTD, Dhenkanal to 2 Bidders at L1 rates of that particular Zone among which the work will be distributed in 60:40 ratio in between L1 & L2 bidders. In case of failure of L1 bidder to execute the work within time frame, the GMTD, Dhenkanal will be free to increase the ratio of L2 bidder to get the work completed and L1 bidder will not have any objection over the same.

SECTION - VIII

(A)OPTICAL FIBRE CABLE CONSTRUCTION SPECIFICATIONS

The Detailed Optical Fibre construction Specifications are given as follows and the bidders are advised to go through the specification before quoting for bid.

(1) THE WORK INVOLVES:

- a) Excavation of trench upto nominal depth of 165 cms. according to Construction Specification along National/State Highways and also in city limits as mentioned in the notice inviting tender.
- b) Laying of PLB pipes and drawing of nylon rope through the same as per Construction Specification.
- c) Laying of GI and/or RCC pipes as additional protection for the PLB pipes at rail/road crossings, built up area/city limits, on culverts, bridges and also stretches where depth of the trench is less than 120 cms. as per construction specifications.
- d) Chambering or concreting according to construction specification, wherever required.
- e) Reinstatement of the excavated trench according to Construction specification.
- f) Fixing of MS Clamps for suspending GI pipes/GI troughs at culverts, bridges and/or chambering or concreting for GI pipes or troughs wherever necessary.

NOTE: The PLB pipes can be of 75 mm dia and 50 mm dia with collar jointing arrangement or spigot, GI pipe shall mean 100 mm dia and 75 mm dia with coupling arrangement, GI troughs shall mean 76 x 76 mm; RCC pipe shall mean class NP2 upto 300 mm dia with collor or spigot and socket jointing arrangement.

2) DEPTH AND SIZE OF THE TRENCH:

- (a) Depth and size of trench mentioned in this clause are Standardized measurement and applicable to normal site condition where surface is generally uniform. Site Engineer shall be the authority to decide the depth of trench.
- (b) The depth of the trench from top of the surface shall not be less than 165 cms unless otherwise permitted. The width of the trench shall be sufficient to lay the requisite number of PLB/GI/RCC pipes and also concreting wherever required.
- (c) When trenches are excavated in slopes, uneven ground, inclined portion, the lower edge shall be treated as top surface of land and depth of trench measured accordingly.
- (d) In a certain locations, such as uneven ground, hilly areas and all other places, due to any reason whatsoever it can be ordered to excavate beyond standard depth of 165 cms to keep the bed of the trench as smooth as possible. Near the culverts, both ends of the culverts shall be excavated more than 165 cms. in depth to keep the gradient less than 15 degrees with horizontal.
- (e) If excavation is not possible to the minimum depth of 165 cms. as detailed in sub clauses above, full fact shall be brought to the notice of the Engineer-in-charge in writing giving details of location and reason for not able to excavate that particular portion. Approval may be granted by G.M.T.D. in writing under certain genuine circumstances only. The decision of G.M.T.D. shall be final and binding on contractor.

(3) TRENCHING:

- (a) Trenching shall as far as possible be kept ahead of the laying of pipes. Contractor shall exercise due care that the soil from trenching intended to be loses for back filling is not mixed with loose debris. While trenching, the Contractor should not cause damage to any underground installations belonging to others agencies and any damage caused should be made good at his own cost and expense.
- (b) The contractor should provide sufficient width at the trench at all such places, where it is likely to cave in due to soil conditions without any extra payment.
- (c) A minimum free clearances of 15 cm. should be maintained above or below any existing underground installations. No extra payment will be made towards this.
- (d) In order to prevent damage to PLB pipe over a period of time, due to the growth of trees, roots, bushes, etc., the contractor shall cut them if encountered in the path of alignment of trench without any additional charges.
- (e) In large Borrow pits, excavation shall be done not less than 165 cms. in depth and both sides of borrow pit shall be excavated more than 165 cms in depth to keep gradient of bed less than 15 degree with horizontal.
- (f) If not possible as stated in sub clause above, alignment of trench shall be changed to avoid borrow pit completely.

TRENCHING NEAR CULVERTS/BRIDGES AND CAUSEWAYS:

- (g) The PLB pipes shall be laid below the bed at the depth not less than 165 cms. protected by G.I. pipes and brick or concrete chamber as decided by Director (T.I.O, at no extra cost.
- (h) Both ends of culverts shall be excavated more than 165 cms. in depth to keep the gradient not less than 15 degree with horizon. The bed of trench should be as smooth as possible.

(4) LOCATION AND ALIGNMENT OF THE TRENCH:

(a) In city areas the trench will normally follow the foot path of the road except where it may have to come to the edge of the carriage way when cutting across road with specific permissions from the authorities responsible for maintenance of that road (Contractor has to get road cutting permissions from local authorities. BSNL Dhenkanal will apply for Road permission to the concerned authorities and do the payments that is estimated by the above authorities after getting in writing). Outside the city limits the trench will normally follow the boundary of the road side land. However, where the road side land is full of burrow pits or a forestation or when the cable has to cross culverts bridges or streams, the trench may

- be closer to the road edge or in some cases, over the embankment or shoulder of the road (Permission for such deviations for cutting the embankment as well as shoulder of the road shall be obtained by the the contractor. However BSNL, Dhenkanal will apply for the permission).
- (b) The alignment of the trench will be decided by a responsible BSNLal official, not below the rank of S.D.O.. While making the alignment only the centre line will be marked, and the Contractor shall set out all other work to ensure that, the excavated trench is as straight as possible. Contractor shall remove all bushes, undergrowth, stumps, rocks and other obstacles to facilitate marking the centre line without any extra charges.

(5) DEWATERING:

The contractor shall be responsible for all necessary arrangements to remove or pump out water from trench. The contractor should survey the soil condition encountering the section and make his own assessment about dewatering arrangements that may be necessary. No extra payment shall be admissible for this and the tendered rate may take care of this aspect.

(6) METHOD OF EXCAVATION:

- (a) In city limits as well as in built up area, the contractor shall resort to use of manual labour only to ensure no damage is caused to any underground or surface installations belonging to other public utility services and/or private parties.
- (b) However, along the High ways and cross country there shall be no objection to the contractor resorting to mechanical means of excavation, provided that no underground installation existing in the path of excavation if any, are damaged.
- (c) There shall be no objection to resort to horizontal boring to bore a hole of required size and PLB pipe pushed through it at road crossing or rail crossing or small hillocks etc.

(7) LINE-UP:

The line up of the trench must be such that PLB pipe(s) shall be laid in a straight line except at locations where it has to necessarily take a bend because of change in the alignment or gradient of the trench, subject to the restrictions mentioned elsewhere.

(8) LAYING OF H.D.P.E. PIPES:

- (a) After the trench is excavated to the specified depth, the bottom of the trench has to be cleared of all stones or pieces of rock and leveled up properly. A layer of ordinary soil of not less than 5 cm. is to be used for leveling the trench to ensure that the cable when laid will follow a straight alignment.
- (b) When trenches are excavated up to specified depth, properly dressed and leveled, joint measurement of trench shall be taken up representative of contractor and Site Engineer. Measurement shall be recorded in measurement book with their signature. Trenches for which measurements are recorded in measurement book shall be considered as approved trenches.
- (c) PLB pipes/RCC/GI pipes shall be laid only in approved trenches. The contractor shall exercise due care to ensure that the PLB pipe is not subjected to any damage or strain.
- (d) The PLB pipes shall be laid in 150 mm dia RCC spun pipes, at road crossings and through G.I. pipes on culverts and bridges and also in exceptional cases where the depth of the trench is less than 165 cms. as specified by the concerned authority.
- (e) Water present in the trench at the time of laying the PLB Pipes shall be pumped out by the Contractor before lowering in the pipes to ensure that no mud or water gets into the pipes.
- (f) At road crossings, two or more extra PLB pipes shall be laid as per the discretion of the Site Engineer.
- (g) The PLB pipes shall be jointed by 'O' ring type socket fitted with hard rubber rings at both ends. Nylone or P.P. rope shall be drawn through PLB pipes properly at the time of laying pipes.
- (h) In cross country routes, where depth of trench is less than 1.02 m, PLB pipes should be laid within GI/RCC pipes. Alternatively, PLB pipes may be encased in reinforced concrete casing of dimensions 275 mm x 275 mm. In built up areas, where depth of trench is not less than 165 cms. PLB pipes should be laid within GI/RCC pipes. In case of trench depth being less than 165 cms, the PLB pipes may be encased in reinforced concrete casing of dimensions 275 mm x 275 mm with the permission of the concerned authority.
- (i) In case of nullahs, which are dry for nine months in a year, the PLB pipes shall be laid within the RCC pipe laid at a minimum depth of 165 cms. The RCC pipes shall extend 2 m beyond the bed of nullah on either side.
- (j) Notwithstanding anything contained in clauses 255 to 257, the site Engineer may admit in any specific case that the PLB pipes may be encased in reinforced concrete casing only.
- (k) The following construction practices are applicable in general.
 -) Wherever GI pipes are used, rubber bushes shall be used at the two ends of the GI pipes to protect the damage of PLB pipes.
 - Wherever RCC pipes are used, two ends must be properly sealed to bar entry of rodents.
 - iii) On road crossings, the PLB pipes shall be laid a depth 165 cms. encased with RCC pipes. The RCC pipes shall extend 3 metre on either side of the raod.
 - iv) On Rail bridges and crossings, the PLB pipes shall be encased in suitable cast iron/RCC pipes as prescribed by the Railway Authorities.

(9) BACK FILLING AND DRESSING THE TRENCH:

(a) Provided that the PLB pipes have been properly laid in the trench at the specified depth, the back filling operation shall follow as closely as practicable. The back filling operation shall be performed in such a manner as to provide firm support under the above the pipes and to avoid bend or deformation of the PLB pipe when the PLB Pipe gets loaded with the back filled earth. In locations where the back filling is not done properly by the BSNL or done unevenly it shall be re-dressed and back filled properly by the BSNL at the Contractor's expense. No debris shall be allowed in the back fill at any time.

- (b) At locations where the bak filled material contains hard clods, rock fragments and other hard materials which may cause injury to the PLB pipe and where the excavated or rock fragments are intended to refill the trench in whole or in part, the trench should be initially filled, with a layer of ordinary soil or derocked loose earth of not less than 10 cms. above the pipes, without any extra cost.
- (c) Back filling on public, private roads, railway crossings, foot paths in city areas shall be performed immediately after laying the PLB pipes. Back filling at such locations shall be thoroughly rammed, so as to ensure original condition and made safe to traffic. All excess soil/material left out on road/footpath/railway crossing shall be removed without extra cost. However, along the high ways and cross country, the dug up material left out should be kept as heap above the trench while refilling.
- (d) In city limits, no part of the trench should be kept open for more than 50 metre length at any time and in all places where excavation has been done, no part of the trench should be kept open over night to prevent any mishap or accident in darkness.

(10) STORES:

PLB/GI/RCC pipes and other materials shall be collected by the Contractor from the store dumps of the BSNL conveniently located over the route. The Contractor is expected to make his own arrangements for transporting the materials over a distance of 20 Km from the supply point/store, without any additional payment. The basic rate quoted for the purpose of tender should, therefore, take care of all expenses incidental to loading, transportation, unloading and distribution at site, of all materials.

(11) LAYING PROTECTION PIPES ON BRIDGES AND CULVERTS:

- (a) The work involves laying of PLB pipes through GI pipes of not more than 4" dia or GI Troughs of size 4" x 4" laid on the Bridges/Culverts.
- (b) In bridges/Culverts, where proper ducts are already provided, the PLB pipes will be laid through the ducts.
- (c) Normally in the Bridges/Culverts, where there are no ducts and where the cushion on the top of the Arch is 0.5 m or more thick the G.I. Pipe/G.I. Trough (carrying PLB Pipe and Cable) may be buried on the top of the Arch adjoining the parapet wall, by digging close to the wheel guards.
- (d) Where the thickness of the Arch is less than 0.5 m, the pipe must be buried under the wheel guard masonry and the wheel guard rebuilt.
- (e) If any of the above methods is not possible, the G.I.Pipe/G.I.Troughs must be clamped outside the parapet wall with the clamps supplied by the BSNL. If necessary, the pipe may be taken through the parapet wall at the ends where the wall diverges away from the road.
- (f) In case where the methods explained in clause 'b' to 'e' above are not possible, the G.I. Pipes/G.I. Troughs can be fixed on the top of the road kerb close to the inside face of the parapet wall by means of clamps, supplied, using rawl plugs and wood screws or small diameter bolts, without damaging the concrete and limiting the external diameter of the bolts to 7.5 mm. The permission for carrying out this work will be obtained from the Road Authorities by the contractor.
- (g) Method cited in clauses above should be carried out under close supervision of Road authorities and restoration of any damages to the structures in any of the methods adopted should be done to the entire satisfaction of the road authorities.
- (h) When PLB pipes are laid on bridges.culverts as per clause 'a' to 'e' above, except when pipes are clamped outside of the bridge, cement concreting shall be provided over the protection pipes/troughs.

(12) SPECIFICATION FOR CONCRETING:

- (a) The nominal dimension of concreting is of 300 mm x 300 mm section. However, depending on the actual situation, this cross section may be varied to ensure uniformity with any existing structure/base, on which the GI pipes/GI troughs are placed, as demanded by the road authorities. The work should be carried out at the rates applicable for nominal cross section.
- (b) The concreting surface should be thoroughly cleaned and leveled before concreting. Necessary wire mesh of adequate size shall be provided as reinforcement for the concrete.
- (c) At both the ends of the Bridges/Culverts, where the GI Pipes/Troughs slope down and get buried, the concreting should be carried out to ensure that no portion of the GI Pipe/Trough is exposed and further down as required by the site in charge to protect the Pipe/Trough from any possible damage externally caused.
- (d) Any damages caused to the existing structure such as Foot-Path or base of the Parapet or Kerb wall on which GP Pipes/Troughs are placed should be repaired and original condition restored to the satisfaction of Road Authorities.
- (e) Where white wash/color wash is existing on the Bridges/Culverts, the same should also be carried out on the concreted portion to ensure uniformity.
- (f) Cement Concrete Mixture used should be of 1:2:4 Composition i.e. 1 Cement::2 Coarse Sand:4 graded Coarse Stone aggregate of 20 mm nominal size.
- (g) Smooth finishing of exposed surface should be done with a mixture of 1:3 i.e. 1 Cement: 3 Fine sand.
- (h) Portions where cement concreting have been concreting have been done shall be cured with sufficient amount of water for reasonable time to harden the surface.

(13) USE OF HALF ROUND AND FULL ROUND R.C.C. PIPES:

- (a) Wherever it is technically not feasible to secure a standard depth of 165 Cms., RCC Pipes will have to be used for added protection of PLB Pipes, subject to the permission granted by GMT.
- (b) Permission for laying PLB pipes at a depth less than 165 Cms. shall be granted only by GMT and not by the Engineer-in-charge of the Section. The contractor will have to apply in writing to GMT for granting such a relaxation as above, after giving full justification for not being able to maintain the standard depth.
- (c) Half round and full round pipes will be arranged by the G.M.T. For road crossings also, additional protection by using high strength full round RCC pipes will have to be provided.

(B)UG CABLE CONSTRUCTION SPECIFICATIONS

The guidelines in the form of Engineering Instructions on Construction Practices of Underground cables are issued by T & D wing of the BSNL, from time to time. However, the present practices are summarized here under, from the point of view of describing scope of work under various items of work.

- O1. General: The underground cables are extensively used in outdoor network of an exchange system. The cables are laid from Telephone Exchange up-to distribution points (DPs). For the purpose of flexibility, pillars are introduced in the network. The primary cables, which are of higher size, are laid from Telephone Exchange to pillars. The distribution cables are laid from pillar to D.P. The capacity of pillars and D.Ps are decided in accordance with the demand and size of the network. The planning of U.G. cable network is guided by the planning guidelines of the BSNL for external plant issued from time to time. The major portion of investment in telecom network goes into construction of UG cable network. Further, the quality of construction of UG cable network decides the quality and reliability of Telecom Services delivered to the customers to a large extent. Therefore, the construction practices of UG cables should be of very high quality, sturdy in accordance with construction specifications.
- **02. The works involved :** The 5 Pr UG cables and all others sizes of U.G Cables are to be buried to a depth such that the top of the cable is 60 Centimeter in cases of 5pr U/G Local cable and 100 cm in cases of 10pairs & above size U/G local cable respectively below the normal ground level. The items of work involved in UG cable laying are as under
 - i) Excavation of trench up-to a depth such that the top of the cable is 60 Centimeter for 5 pair cable & 100 cm. for 10 pair & above size cables, below the normal ground level according to the construction specifications.
 - ii) Laying & pulling of cables in trenches or through pipes/ducts.
 - iii) Back filling, and compacting of the excavated trenches according to construction specifications and removal of excess earth from the site.
 - iv) The size of excavation of trench will be 45cm(width at the top of the ground) x 30 Cm. (width at the bottom of the trench) x 100cm (total depth) for cables of 10prs and above and 45cm(width at the top of the ground) x 30cm (width at the bottom of the trench) x 60cms(total depth) for 5 pair cable at all places.

03. CONSTRUCTION SPECIFICATIONS

Classification of soil strata: This will include all types of soils – soft soil/hard soil/morrum i.e. any strata, such as sand, gravel, loam, clay, mud, black morrum, shingle, river or nallah bed boulders, soiling of roads, paths, densely pebbles/stones etc. lime concrete, mud concrete and their mixtures which for excavation yields to the application of picks, showels, sacrifiere, ripper and other manual digging implements including chiselling. Resorting to light blasting/electro-mechanical breakers for loosening the materials does not in any way entitle the strata to be classified as rocky.

04. EXCAVATION OF TRENCHES

a)Before excavation of trenches the route should be marked for trenching. Care should be taken to see that the route of the trench to excavate is reasonably straight, avoiding the existing underground services. The contractor should take trial pits to locate the underground services before commencement of actual trenching. These trial pits shall be 30 cms. wide, 120 cms. deep and 120 cms. long at right angles to the proposed trench at an interval of 20 to 50 Mtrs. Along the proposed cable route. If a slab is encountered, the same may be removed and trial pits may be made. In city areas, the trench will normally follow the footpath of the road except where it may have to come to the edge of carriage way or cutting across roads with the specific permission from the concerned authorities maintaining the road (Contractor has to get road cutting permissions from local authorities viz Municipality, Road authority, Railway etc. BSNL Dhenkanal will apply for Road permission to the concerned authorities and do the payments that is estimated by the above authorities after getting in writing). Outside the city limits, the trench will normally follow the boundary of the roadside land. However, where the roadside land is full of burrow pits or a forestation or when the cable have to cross-culverts/bridges or streams, the trench may come closer to the road edge or in some cases, over the embankment or shoulder of the road (Permission for such deviations for cutting the embankment as well as shoulder of the road shall be obtained by the contractor. However BSNL Dhenkanal will apply for the same). The alignment of the trench will be decided by a responsible BSNL Official, not below the rank of a SDO/SDE. Once the alignment is marked, no deviation from the alignment is permissible except with the approval of Engineer In-charge. While making the alignment only the centerline will be marked and the contractor shall set out all other works to ensure that, the excavated trench is as straight as possible. The contractor shall provide all necessary assistance and labour, at his own cost for marking the alignment. Contractor shall

remove all bushes, undergrowth, stumps, rocks and other obstacles to facilitate marking the centre line without any extra charges. It is to be ensured that minimum amount of bushes and shrubs shall be removed to clear the way and the contractor shall give all considerations to the preservation of the trees.

- b) Methods of Excavation In city limits as well as in built up areas, the contractor shall resort to use of manual labour only to ensure that no damage is caused to any underground or surface installations belonging to other public utility services and / or private parties. However, along the Highways and cross country routes, there shall be no objection to the contractor resorting to mechanical means of excavation, provided that no underground installations exist in the path of excavation, if any, are damaged. There shall be no objection to resort to horizontal boring to bore a tube of required size and to push through G.I. pipe through horizontal bore at road crossing or rail crossing or small hillocks etc. In rocky strata, excavation shall be carried out by use of electro mechanical means like breakers, or by blasting wherever permissible with express permission from the competent authority. Necessary barricades, night lamps, warning boards, and required watchman shall be provided by the contractor to prevent any accident to pedestrian or vehicles. While carrying out blasting operations, the contractor shall ensure adequate safety by cautioning the vehicular and other traffic. The contractor shall employ sufficient manpower for this with caution boards, flags, sign writings etc. When trenches are excavated in slopes, uneven ground, inclined portion, the lower edge shall be treated as normal level of the ground for the purpose of measurement of depth of the trench. In certain locations, such as uneven ground, hilly areas and all other places, due to any reason whatsoever it can be ordered to excavate beyond standard depth of 60cms. above the cable to keep the bed of the trench as smooth as possible.
- **c)**If excavation is not possible of minimum depth of 60cms or 100cms, above the cable, as detailed above, full facts shall be brought to the notice of the Engineer In-charge in writing giving details of location and reason for not being able to excavate the particular portion. Approval shall be granted by the competent authority in writing under genuine circumstances.
- **d)**The contractor shall be responsible for all necessary arrangements to remove or pump out water from trench. The contractor should survey the soil conditions encountered in the Zone and make his own arrangement about dewatering arrangements that may be necessary. Wherever the soil is hard due to dry weather conditions, if watering is to be done for wetting the soil to make it loose, the same shall be done by the contractor.
- e)Trenching near Culverts/Bridges: At bridges and culverts, the cable shall be laid in GI pipe of suitable size with the permission of concerned authorities maintaining the roads/bridges (Contractor has to obtain such permission if required). While carrying out the work on bridges and culverts, adequate arrangements for cautioning the traffic by way of caution boards during day time and danger lights at night shall be provided. Of late the bridge construction authorities are providing ducts below the footpaths. The concerned SDO/SDE need to maintain good liaison with the concerned authority to get one side of the duct allotted for Telecom cables. In such ducts GI pipes can be coupled and laid for pulling the cables. It would be pertinent to mention here that close liaison with bridge construction authorities would be of immense advantage in ensuring provision of ducts on one or both sides of the bridges as per future requirements. However, for laying cables on existing bridges, where a duct arrangement does not exist, one of the following methods may be adopted.
- i) Where the cushion on top of the arch of the culvert is 45 cms. or more, the pipe to carry the cable may be buried on the top of the arch adjoining the parapet wall by digging close to the wheel guard. Every precaution shall be taken to see that no damage occurs to the arch of the culvert. After burying the GI pipe, the excavated surface on the arch shall be restored.
- ii) When the thickness of the cushion is less than 45 cms, the pipe to carry the cable may be buried under the wheel award masonry. After burring the pipes, wheel award should be re-built.
- iii) If neither of the two methods mentioned above is possible, the pipe should be clamped to the outside of the parapet wall of the culvert or bridge with the help of clamps, nails, nuts, bolts, and screws of suitable size to ensure that the pipe is securely fixed. The GI clamps should be of minimum 25 mm width and 3 mm thickness and should be fixed at an interval of 50 cms. If necessary, the pipe should be taken to the parapet walls at the ends where the wall diverges away from the roads. The work should be carried out in consultation with the authorities concerned maintaining the roads and bridges. After laying the GI pipes, the wheel guards or arch may require repairing by concreting at site. For carrying out protection by concreting at site, the nominal dimension of concreting shall be according to the requirements of the site, Cement concrete mixture used shall be of 1:2:4 composition i.e. 1: 53 grade cement of a reputed company, 2: Coarse sand, 4: Graded coarse stone aggregate of 6mm nominal size. As the CC as cast at site, it is imperative to ensure that special care is taken to see that proper curing arrangements are made with adequate supply of water. In case of small bridges and culverts, where there is a likelihood of their subsequent expansion and remodeling, the cable should be laid with some curve on both sides of the culvert or the bridge to make some extra length available for readjustment of the cable at the time of reconstruction of culvert or the bridge.
- iv)Road punching:- where road cutting permission can not be obtained from the competent authority and road cutting is not practicable the cable will be laid by punching/boring.
- v)After cable is lowered in the trench, soft soil of 10cms thickness is to be provided in the trench. Then warning bricks are to be laid over the cables. The warning bricks are not required to be provided in case of 5pr/10pr/20pr/50pair cables in rural and 5pr/10pr/20pr/50pr/100pr in plain urban areas.
- vi)In case of loss of cable by theft from open trench made by the contractor, the contractor shall be liable to pay the cost of the cable to the Dhenkanal Telecom District Authority based on the value of the cable stolen.

Vii) Jointing:- The job includes giving assistance for jointing of U.G. Cables, digging pits for jointing, clearing cables, soeldering joints or crimping U.Y. Connector/sleeaves and closing joints by using Thermo shrink canisters and testing. After completion of jointing, joints is to be buried in the ground placing warning bricks and pit is to be filled up and leveled properly.

Viii)Construction of pillar plinth construction of RRC plinth with one / two inlets provided for cable leading in arrangement for accommodating pillar as per the BSNL specified diagram (enclosed). The size of the plinth area will be usually one a half feet above & three feet below the ground level with (5.5' x 2.5' / 3.5' x 2.5') constructed with 1:2:4 cement, metal, sand, and 6 mm. rods for cabinet and pillar fixing plinth. The work also included erection of pillar, earthling painting of two coats of red oxide and 2 coats of smoke grey. Sign writhing and providing a lock. The BSNL will supply the pillar and cabinet box. The erection materials including tools and tents etc. Has to be arranged by the contractor

f) CLASSIFICATION OF TRENCHES

The trenches have been categorized based on its size required for laying different sizes and number of cables as under

SI.	Type of trench	Trench size (in Cms)				
No.		Width at top of trench	Width at bottom of trench	Depth of trench		
1	"A" type for 5 pair cables	45	30	60		
2	"A" type for 10 pair and above size cables	45	30	100		

- The bottom width is mandatory.
- Where more than one cable is being laid in a trench there should be a gap of 5 cms. in between the cables.. No cable should be laid one-over the other.

g)TRENCHES OF LESS DEPTH

Relaxation and Competent Authorities to Grant Relaxation: The depth of trench is very important for future life of cables. Therefore, the contractor is obligated to ensure that the standard depth is maintained in normal circumstances. However, due to obstructions, if the standard depth cannot be achieved, lower depth up to certain limits are acceptable by the authorities as prescribed below with extra protection as per specifications. The relaxation by the competent authority prescribed below shall be obtained giving reasons for not achieving standard depth.

Size of cables	depth in acceptable		Powers delegated for relaxation for depth up to the depth in Cms.	
Size of Cables	cms.	depth without relaxation in cm	DET/AGM	DGM
5 Prs	60	50	40	20
All sizes of 10pairs & above	100	90	80	30

05.LAYING & PULLING OF CABLES

The normal methods used in the BSNL for laying Underground cables is: Laying direct in the Ground

After excavation of trenches, approximately 10 cms. thick bed of soft soil (in case the excavated material contains sharp pieces of rock/stones) is laid before directly laying the cable. Adequate care shall be exercised while laying the cables so that the cables are not put to undue tension/pressure as this may adversely affect the electrical characteristics of cables with passage of time.

The cables shall invariably be laid in the trenches through jack and spindle at appropriate position for easy unwinding, putting cable rollers in the trenches, if required at a regular interval of approx. 20 Mtrs. under proper supervision.

Adequate overlaps shall be left for jointing 2 successive lengths of cables as under -

Size of cable	Length of overlap
5 Pair	1.0 meter
1200 pairs and above	1.5 Meter
800 pairs and 1000 Pairs	1.4 Meter
400 pairs and 600 Pairs	1.2 Meter
Below 400 pairs	1.0 Meter

In case the previous length ends in the middle, of a carriage way / footpath / road crossing/bridge/culvert, it should be negotiated out of the carriage way/foot path/road crossing/bridge/culvert by laying the next length early and removing the excess overlap cable and depositing to the stores under proper receipt.

Where more than one cable are laid in the same trench, the jointing locations shall be suitably staggered. When a cable is to be terminated in a pillar, the depth of cable for such termination shall be equal to (Jointing length + height of the pillar). Sharp bends shall be avoided. Bends, if any, the radius of curvature

should be more than at least six times the diameter of the cable. After the completion of cable laying soft soil shall be placed over the cable to a height of 10 cms. duly leveled and rammed lightly to form a bedding for laying warning bricks for mechanical protection.

The cables may be required to be pulled through RCC/GI pipes at road crossings, railway crossings, bridges and culverts. Extra care should be taken to avoid damage to the cable while pulling through pipes, which may occur due to kinks. The contractor should have the required tools and equipment for the purpose to complete the job in a professional manner.

When trenches are excavated up to specified depth, properly dressed and leveled and the cable(s) is/are laid, joint measurement of depth above cable shall be taken by representatives of contractor and Engineer In-charge. Measurements shall be recorded in measurement book with their signature. Trenches for which measurements are recorded in measurement book shall be considered as approved trenches.

The contractor shall ensure that trenching and cable laying activities are continuous, without leaving patches or portions incomplete in between. When there are number of cables of the same size in the same trench it becomes difficult to identify the particular cable at time of maintenance. Therefore, identification collars bearing L.I. Number of the cable shall be tagged to all the cables. The identification collars shall be provided at an interval of not more than 2 meters.

06. PLACING OF LAYER OF BRICKS: Not Applicable during laying of 5 pr/10 pr/20 pr/50pr/100pr Cable. The bricks must be used while laying 200prs size U/G local cable and above.

07. BACK FILLING AND COMPACTING OF THE EXCAVATED TRENCHES

After laying the cables and providing warning/protection layer as per specifications, the remaining portion of the trench shall be filled in and well tamped in steps. The trench should be back filled in layers not exceeding 15 cms. each at a time and rammed. The contractor shall remove the excess earth from the site and leave only a crown of earth rising approximately 5 cms. in the center. This allows for natural subsidence. When digging on footpaths along road crossings, care should be taken to see that the road is made motor-able as soon as the work is completed. The permanent reinstatement of roads and pavement shall be done by the local authorities.

The BSNL will supply G. I. Pipes, R.C.C. Pipes and U.G. Cables to the contractor at concerned sub-divisional store depot.

08. SAFETY PRECAUTIONS

a) Safety precautions where excavating or working in excavations close to electric cables

The Engineer-In-charge of the work should get full information from Electricity Undertaking regarding any electric cables, which are known or suspect to exist near the proposed excavation and unless this is done, excavation should not be carried out in the Zone concerned. The electricity undertaking should be asked to send a representative and work should be preceded with close coordination with them.

Only wooden handled hand tools should be used until the electric cables have been completely exposed. Power cables not laid in conduits are usually protected from above by a cover slab of concrete, brick or stone. They may or may not be protected on the sides. It is safer, therefore, always to drive the point of the pickaxe downwards then uncovering a cable, so that there is less chance of missing such warning slabs. No workman should be permitted to work alone where there are electric cables involved. At lest one more man should be working near by so that help can be given quickly in case of an accident. If disconnection of power could be arranged in that Zone it will be better. No electric cables shall be moved or altered without the consent of the Electric authority and they should be contacted to do the needful. If an electric cable is damaged even slightly, it should be reported to the Electric authority and any warning bricks disturbed during excavation should be replaced while back filling the trench. Before driving a spike into the ground, the presence of other underground properties should be checked. Information on plans regarding the location of power cables needs not to be assumed as wholly accurate. Full precautions should be taken in the vicinity until the power cable is uncovered. All electric cables should be regarded as being live and consequently dangerous. Any power is generally dangerous, even low voltage proving fatal in several cases.

b) ELECTRIC SHOCK-ACTION AND TREATMENT

Free the victim from the contact as quickly as possible. He should be jerked away from the live conductors by dry timber, dry rope or dry clothing. Care should be taken not to touch with bare hands as his body may be energized while in contact. Artificial respiration should begin immediately to restore breathing even if life appears to be extinct. Every moment of delay is serious, so, in the meanwhile, a doctor should be called for.

c) SAFETY PRECAUTIONS WHILE WORKING IN PUBLIC STREET AND ALONG RAILWAY LINES

When a road or footpath is to be opened in the course of work, special care should be taken to see that proper protection is provided to prevent any accidents from occurring. Excavation work should be done in such a manner that it will not unduly cause inconvenience to pedestrians or occupants of buildings or obstruct road traffic. Suitable bridges over open trenches should be so planned that these are required for the minimum possible time. Where bridges are constructed to accommodate vehicular traffic and is done near or on railway property, it should be with the full consent and knowledge of the competent railway authorities.

d) DANGER FROM FALLING MATERIAL

Care should be taken to see that apparatus, tools or other excavating implements or excavated materials are not left in a dangerous or insecure position so as to fall or be knocked into the trench thereby injuring any workman who may be working inside the trench.

e)CARE WHEN WORKING IN EXCAVATIONS

Jumping into a trench is dangerous. If it is deep, workmen should be encouraged to lower themselves. Workers should work at safe distance so as to avoid striking each other accidentally with tools. If the walls of the trench contain glass bits, corroded wire or a sharp object they should be removed carefully. If an obstruction is encountered, it should be carefully uncovered and protected if necessary. Care must be taken to see that excavated material is not left in such a position that it is likely to cause any accident or obstruction to a roadway or waterway. If possible the excavated material should be put between the workmen and the traffic without encroaching too much on the road.

f) DANGER OF CAVE IN

When working in deep trenches in loose soil, timbering up/shoring the sides will prevent soil subsidence. The excavated material should be kept at sufficient distance from the edge of the trench or pit. Vehicles or heavy equipment must not be permitted to approach too close to the excavation. When making tunneled opening, it should be ensured that the soil is compact enough to prevent cave in even under adverse conditions of traffic. Extra care should be taken while excavating near the foundations of buildings or retaining walls. In such cases, excavation should be done gradually and as far as possible in the presence of the owners of the property.

g) PROTECTION OF EXCAVATIONS

Excavations in populated areas, which are not likely to be filled up on the same day should be protected by barriers or other effective means of preventing accidents and the location of all such openings must in any event be indicated by red flags or other suitable warning signs. During the hours from dusk to dawn, adequate number of red warning lamps should be displayed. Supervisory officers should ensure that all excavations are adequately protected in this manner as serious risk and responsibility is involved. Notwithstanding adoption of the above-mentioned precautions, work-involving excavations should be so arranged as to keep the extent of opened ground and the time to open it to a minimum.

h) PRECAUTIONS WHILE WORKING ON ROADS

The period between half an hour after sun set and half an hour before sun-rise, and any period of fog or abnormal darkness may also be considered as night for the purpose of these instructions, for the purpose of providing the warning signs. Excavation liable to cause danger to vehicles or the public must at all times be protected with fencing of rope tied to strong uprights or bamboo poles at a suitable height or by some other effective means. Any such temporary erection which is likely to cause obstructions and which is not readily visible should be marked by posts carrying red flags or boards with a red background by day and by continuously lighted lamps at night.

The flags and lamps should be in conspicuous positions so as to indicate the pedestrians and drivers of vehicles the full expanse, i.e. both width and length of the obstructions. The distance between lamps or between floors should not generally exceed 1.25 mtrs. Along the width and 6 mtrs. Along length of the obstructions in non congested areas, but 4 mtrs. Along the length in congested areas. If the excavation is extensive, sufficient notice to give adequate warning of the danger, should be displayed conspicuously not less than 1.25 mtrs. Above the ground and close to the excavation. Where any excavation is not clearly visible for a distance of 25 mtrs. To traffic approaching from any direction or any part of the carriage way of the road in which the excavation exists, a warning notice should be placed on the kerb or edge of all such roads from which the excavation or as near the distance as is practicable but not less than 10 cms. from the junction of an entering or intersecting road in which the excavation exists. All warning lamps should exhibit a red light, but white lights may be used in addition to facilitate working at nights.

Wherever required a passage for pedestrians with footbridge should be provided. At excavations, cable drums, tools and all materials likely to offer obstructions should be properly folded round and protected. This applies to jointer's tents as well, leads, hoses etc stretched and across the carriage-way should be guarded adequately for their own protection and also that of the public.

i) TRAFFIC CONTROL

The police authorities are normally responsible for the control of traffic and may require the setting up of traffic controls to reduce the inconvenience occasioned by establishment of a singly line of traffic due to restriction in road width or any other form of obstruction caused by the work. As far as possible, such arrangements should be settled in advance. If there are any specific regulations imposed by the local authorities, these should be followed.

j)WORKING ALONG RAILWAY LINES

Normally, all works at Railway crossing is to be done under supervision of the railway authorities concerned, but it is to be borne in mind that use of while, red or green flags by the BSNL staff is positively forbidden to be used when working along a railway line as this practice may cause accident through engine drivers mistaking them for railway signals. When working along a double line of railway, the men should be warned to keep a sharp look on both the "UP" and "DOWN" lines to avoid the possibility of any accident when trains pass or happen to cross one another ear the work spot.

SECTION -IX

MATERIAL SECURITY BOND FORM

Whereas	(hereinafter	called "th	e Contrac	tor") has	been	awarded the
contract of cable construc	ction work, as per	tender nur	nber			KNOW
ALL MEN by these Presen	ts that WE	OF	ho	aving our	registe	ered office a
		(hereinat	ter called	the "the	: Cont	ractor") are
bound unto	(hereinafter cal	led "the BS	NL") in the	sum of		for which
payment will and truly to b	e made of the said	d BSNL, the	Bank binds	itself, its su	occesso	ors and assigns
by these presents.						

THE CONDITIONS of the obligation are:

- 1. If the Contractor is unable to keep stores issued to him, properly, i.e. the store provided to the contractor, by the BSNL are damaged or
- 2. The stores issued to the contractor by the BSNL are stolen or
- 3. The contractor is not able to provide proper account of the stores issued to him/her/them by the BSNL.

We undertake to pay to the BSNL upto the above amount upon receipt of its first written demand without the BSNL having to substantiate its demand, provided that in its demand, the BSNL will note that the amount claimed by it is doe to it owing to the occurrence of one or two or all of three conditions specifying the occurred conditions on conditions.

The guarantee will remain in force upto and including One hundred and eighty (180) days after the Period of Contract validity, and any demand in respect thereof should reach the Bank not later than the above date

Signature of the Bank

Signature of the Witness

Name of Witness

Address of Witness

SECTION - X

AGREEMENTThe successful Tenderer shall have to execute the following Agreement:

This agreement made on theth day of (r	month)(Year) between Sri
Bharat Sanchar Nigam Limited and Sri	
Son ofR/o	P.S
Distfor UG Local cable & Optical F	
District in Name of Route	•
Where as in response to Tender Notice No	issued by
General Manager, Telecom District, Dhenkanal, Shri	
successful Tenderer vide Letter No	
Datedof General Manager, Tel Construction Works in Dhenkanal	
Construction Works in Dhenkanal Route	
	undertake to carryout the work of Ug Local & Optical
Fibre Cable Construction Works in Dhenkanal Telecom Distric	
for a period of one year starting from the date of execution of	
in his favour and according to the terms and conditions laid of	
	dertake to carryout the work through out the year at the
same approved rate as per Annexure-I and according to t	he BSNLal Standards and up to the satisfaction of the
General Manager, Telecom District, Dhenkanal.	
	undertake to fully abide by the terms and conditions as
stipulated in the Tender Notice No	
Datedreferred to above and sho	all make good any loss caused to the Telecom District
any other Government BSNL or Private Body or to the public.	
	contract with the said BSNL for the execution of work of
trenching & pipe laying for UG Local cable & OG Cable co	, ,
Splicing and termination, Preparation of joint chambers, fixing	
other UG Local & OF Cable associated works under G.M. contained and the rates approved by the G.M.T.D., Dhenkar	
and where as the necessary security deposits have been fur	
document and whereas no interest will be claimed on the sec	
	d and declared by and between the parties to these
presents as follows:	a and accidica by and both con me paines to mose
	his contact that is to say from To
or completion of	
whichever is earlier or un	til this contact shall be determined by such notice as is
hereinafter mentioned, safely carryout, by means of labours	employed at his own expenses and by means of tools,
implements and equipment etc. to be supplied by him to his	s labour at his own expenses, all trenching, pipe laying,
cable pulling, cable splicing, joint chamber preparation, fix	
other UG Local & OF Cable construction related associated	
the agreement), when the G.M.T.D., Dhenkanal or any oth	
behalf required. It is understood by the contractor that the	
change as per actual requirements as demanded by exigence	
2)The NIT (Notice Inviting Tender), Bid documents (Qualify annexed hereto and such other additional particulars, instruc	
to be given during execution of the work shall be deemed ar	
also be deemed to be included in the expression "The Agree	
	er of workmen with means & materials as well as tools,
appliances, machines, implements, vehicles for transportation	
work within the time prescribed in the work orders.	
4)The contractor hereby declares that nobody connec	cted with or in the employment of the BSNL of
Telecommunications/DTS is not/shall not ever be admitted as	
5)The contractor shall abide by the terms and conditions, rule	es, guidelines, construction practices, safety precautions
etc. stipulated in the tender document including any	correspondence between the contractor and the
Government having bearing on execution of work and paym	
In witness whereof parties presents have here into se	et their respective hands and seals the day and year in
Signa orbital of Country about	Canaval Managanay BCM
Signature of Contractor	General Manager, BSNL
Namo	Telecom District, Dhenkanal
Name	Name Address
Addless	Address
Witness	Witness
Name	Name
Address	Address

INTEGRITY PACT

Between

In order to achieve these goals, the principal will appoint an Independent External Monitor who will monitor the tender process and the execution of the contract for compliance with the principles mentioned above.

Section 1- Commitments of the principal

- (1) The principal commits itself to take all measures necessary to prevent corruption and to observe the following principles:-
- (a). No employee of the Principal, personally or through family members, will in connection with the tender for, or the execution of a contract, demand, take a promise for or accept, for him/herself or third person, any material or immaterial benefit which he/she is not legally entitled to.
- (b). The Principal will, during the tender process treat all Bidder(s) with equity and reason. The Principal will in particular, before and during the tender process, provide to all Bidder(s) the same information and will not provide to any Bidder(s) could obtain an advantage in relation to the tender process or the contract execution.
- (c). The Principal will exclude from the process all known prejudiced person.
- (2) If the Principal obtains information on the conduct of any of its employees which is a criminal offence under the relevant Anti-Corruption Laws of India, or if there be a substantive suspicion in this regard, the Principal will inform its Vigilance Office and in addition can initiate disciplinary actions.

Section 2- Commitments of the Bidder(s)/Contractor(s)

- (1) The Bidder(s)/Contractor(s) commits itself to take all measures necessary to prevent corruption. He commits himself to observe the following principles during his participation in the tender process and during the contract execution.
- (a). The Bidder(s)/Contractor(s) will not, directly or through any other person or firm,
- offer, Promise or give to any of the principal's employees involved in the tender process or the execution of the contract or to any third person any material benefit which he/she is not legally entitled to, in order to obtain in exchange any advantage of any kind whatsoever during the tender process or during the execution of the contract.
- (b). The Bidder(s)/Contractor(s) will not enter with other Bidder(s) into any undisclosed agreement or understanding, whether formal or informal. This applies in particular to prices, specifications, subsidiary contracts, submission, or non-submission of bids or any other actions to restrict competitiveness or to introduce cartelization in the bidding process.
- (c). The Bidder(s)/Contractor(s) will not commit any offence under the relevant Anti-corruption Laws of India, further the Bidder(s)/Contractor(s) will not use improperly, for purposes of competition or personal gain, or pass on to others, any information or document provided by the Principal as part of the business relationship, regarding plans, technical proposals and business details, including information contained or transmitted electronically.
- (d). The Bidder(s)/Contractor(s) will, when presenting his bid, disclose any and all payment he has made, is committed to or intends to make agents, brokers or any other intermediaries in connection with the award of the contract.
- (2) The Bidder(s)/Contractor(s) will not instigate third persons to commit offences outline above or be an accessory to such offences.

Section 3- Disqualification from tender process and exclusion from future contracts

If the Bidder(s)/ Contractor(s), before contract award or during execution has committed a transgression through a violation of Section 2, above or in any other form such as to put his reliability or credibility in question, the Principal is entitled to disqualify the Bidder(s)/Contractor(s) from the tender process or take action as per the defined procedure.

Section 4-Compensation for Damages

- (i). If the Principal has disqualified the Bidder(s) from the tender process prior to the award according to Section 3, the Principal is entitled is entitled to demand and recover the damaged equivalent to Earnest Money Deposit/Bid Security.
- (ii). If the Principal has terminated the contract according to Section 3, or if the Principal is entitled to terminate the contract according to Section 3, or if the Principal shall be entitled to demand and recover from the Contractor the amount equivalent to Security Deposit/ Performance Bank Guarantee in addition to any other penalties/recoveries as per terms and conditions of the tender.

Section 5- Previous transgression

(i). The Bidder declares that no previous transgression occurred in the last 3 years with any other company in any country conforming to the Anti-corruption approach or with any other Public Sector Enterprise in India that could justify his exclusion from the tender process.

(ii). If the Bidder makes incorrect statement on this subject, he can be disqualified from the tender process or action can be taken as per the defined procedure.

Section 6- Equal treatment of all Bidders/ Contractors/ Subcontractors

- (i). The Principal will enter into agreements with identical conditions as this one with all Bidders/ Contractors.
- (ii). The Bidder(s)/Contractor(s) undertake(s) to demand from all subcontractors a commitment in conformity with this Integrity Pact.
- (iii). The Principal will disqualify from tender process all bidders who do not sign this pact or violate its provisions.

Section 7- Criminal charges against violating Bidder(s) /Contractor(s)/ Subcontractor(s)

If the Principal obtains knowledge of conduct of a Bidder, Contractor, Subcontractor, or of an employee or a representative or an associate of a Bidder, Contractor, Subcontractor, which constitutes corruption, or if the Principal has substantive suspicion in this regard, the Principal will inform the Corporate Vigilance Office.

Section 8- External Independent Monitor/ Monitors

- 1. Principal appoints competent and credible Independent External Monitor for this pact. The task of the Monitor is to review independently and objectively, whether and to what extent the parties comply with the obligation under this agreement.
- 2. The Monitor is not subject to instructions by the representatives of the parties and performs his functions neutrally and independently. He reports to the CMD of the BSNL.
- 3. The Bidder(s)/ Contractor(s) accepts that the Monitor has the right to access without restriction to all project documentation of the Principal including that provided by the contractor. The contractor will also grant the Monitor, upon his request and demonstration of a valid interest, unrestricted and unconditional access to his project documentation. The same is applicable to Subcontractors. The Monitor is under contractual obligation to treat the information and documents of the Bidder(s) /Contractor(s)/ Subcontractor(s) with confidentiality. Notwithstanding anything contained in the Section, the Bidder(s) /Contractor(s) shall have no obligation whatsoever to provide any internal costing mechanisms or any internal financial or commercial data pursuant to any audit or review conducted by or on behalf of the Principal. Further, the Bidder(s) /Contractor(s) shall not be required to provide any data relating to its other customer, or any personnel or employee related data.
 - 4. The Principal will provide to the Monitor sufficient information about all meeting among the parties related to the project provided such meeting could have an impact on the contractual relations between the Principal and the Contractor. The parties offer to the Monitor the option to participate in such meeting.
 - 5. As soon as the Monitor notices, or believes to notice, a violation of this agreement, he will so inform the Management of the Principal and request the Management to discontinue or take corrective action, or to take other relevant action. The Monitor can in this regard submit non-binding recommendations. Beyond this, the Monitor has no right to demand from the parties they act in a specific manner, refrain from action or tolerate action.
 - 6. The Monitor will submit a written report to the Chairperson of the Board of the Principal within 8 to 10 weeks from the date of reference or intimation to him by the 'Principal' and should the occasion arise, submit proposals for correcting problematic situations.
 - 7. If the Monitor has reported to the CMD of the BSNL, a substantiated suspicion of an offence under relevant Anti-corruption Laws of India, and the BSNL has not, within reasonable time, taken visible action to proceed against such offence or reported it to the corporate Vigilance Office, the Monitor may also transmit this information directly to the Central Vigilance Commissioner, Government of India.
 - 8. The word 'Monitor' would include both singular and plural.

9. Section 9- Pact Duration.

This Pact begins when both parties have legally signed it. It expires for the Contractor 12 months after the last payment under the contract, and for all other Bidders 6 months after the contract has been awarded.

If any claim is made/lodged during this time, the same shall be binding and continue to be valid despite the lapse of this pact as specified above, unless it is discharged/determined by CMD, BSNL.

Section 10- Other Provisions

- 1. This agreement is subject to Indian Law. Place of performance and jurisdiction is the Registered Office of the Principal, i.e. New Delhi. The arbitration clause provided in the tender document/ contract shall not be applicable for any issue / dispute arising under Integrity Pact.
- 2. Changes and supplements as well as termination notices need to be made in writing.
- 3. If the Contractor is a partnership or a consortium, this agreement must be, signed by all partners or consortium members.
- 4. Should one or several provisions of this agreement turn out to be invalid, the remainder of this agreement remains valid. In this case, the parties will strive to come to an agreement to their original intensions.

	•••••
For the Principal	For the Bidder/Contractor
Place	Witness 1:
Date	Witness 2:

SECTION - XI

LETTER OF AUTHORISATION FOR ATTENDING BID OPENING

Tender N	Number		
Subject:	Authorization for attending bid optender of	_	
mentioned ab	ng persons are hereby authorized bove on behalf of ference given below.		. •
Order of Prefe	rence	Name	Specimen Signatures
1.			
II.			
Alternate Representative	e		

Signatures of Bidder
Or
Officer authorized to sign the bid
documents on behalf of the bidder.

- No. 1. Maximum of two representatives will be permitted to attend bid opening. In cases where it is restricted to one, first preference will be allowed. Alternate representative will be permitted when regular representatives are not able to attend.
 - 2. Permission for entry to the hall where bids are opened, may be refused in case authorization as prescribed above is not recovered.

SECTION-XII

LIST OF THE DOCUMENTS TO BE SUBMITTED ALONG WITH BID [SI. No (d) & (e) inside first inner sealed envelope and all others in second inner sealed envelope]:-

The tenderer will have to submit the following documents/deposits with the Technical Bid. Any bid not accompanying the below mentioned documents/deposits will be liable to be rejected:

- a) Self-Attested photo copy of the valid Registration of individual Contractor / Firm.
- b) Self-Attested Photo copy of PAN Card.
- Self-Attested Photo copy of Experience Certificate as per column No-3 against Sl. No-09 of NIT.
- d) Cost of Tender/BID Document as per NIT (As per SI. No. 03.)
- e) EMD(Bid Security) as per NIT (as per column No. 08 of SI No- 02 of NIT).
- f) Self-Attested photo Copy of valid EPF Registration Certificate.
- g) Self-Attested Photo copy of Valid ESI Registration Certificate.
- h) Self-Attested Photo copy of valid Labour Registration Certificate or valid labour license certificate from any officer under CLC (Central), New Delhi or any labour ministry official of any State Govt.
- i) Self-Attested Photo copy of Valid Service Tax Registration Certificate.
- j) Declaration stating that none of his family members or near relatives are working in BSNL.[(Proforma to be filled up and submitted along with technical bid inside second sealed inner envelop as given in section XIII(A)]
- k) Tender document(s) must be submitted, in original, duly filled in and signed by tenderer or his authorized representative along with seal and signature on each page. All corrections and overwriting must be initialed with date by the tenderer or his authorized representative.
- Tenderer's profile duly filled in, as per section-III of the technical bid portion of tender document.
- m) Original "Power of Attorney" in case person other than the tenderer has signed the tender documents must be submitted along with technical bid inside sealed inner envelop number "Second".
- n) The tenders submitted by Partnership firms should furnish attested photocopy of "Partnership Deed" duly registered.

Section- XIII

(A)Near relative certificate

PROFORMA FOR NO NEAR RELATIVES CERTIFICATE IN BSNL

Certificate to be given by the contractor in respect of no near relative (s) in BSNL of the contractor.

l,					
S/o				ent	of
hereby	certify	that	none	of m	y near
relative(s) as defined in the tender document is/are employe	ed any v	vhere	in BSNL	as per	details
given in tender document. In case at any stage, it is found	that the	inform	nation (given b	y me is
false/incorrect, BSNL shall have the absolute right to take and	y action	as de	emed 1	it, with	out any
prior intimation to me.					
	Signat	rure of	the ten	iderer v	vith seal
Note: In case of proprietorship firm, certificate will be given by certificate will be given by all the partners and in case directors of the company.	, ,	•			

(B)

UNDERTAKING

1	Shri/Smt				Son	of	Shri
		do	hereby unc	lertake that	all the d	ocume	nts /
certificate	es submitted	d by me with	this tender	(tender for	U/G loc	al cab	ole &
O.F.cable	constructio	n work under (Ohenkanal SS	SA) are true c	ınd are e	xact c	opies
of the orig	ginal docum	ents/certificate	es are availal	ole with me.			
l fu	rther under	take that if a	t any time	any informat	ion furni:	shed ir	ı the
documen	ts / certifico	ites submitted	by me are	found to be	false, BS	NL will	have
every righ	nt to take su	itable action	against me i	ncluding forf	eiture of	my sec	curity
deposit/m	naterial secu	urity deposit, te	ermination o	f my contac	t agreen	nent ar	nd/or
black-listir	ng of my cor	ntract as deem	ned fit.				
					Signatu	ure of B	idder



BHARAT SANCHAR NIGAM LIMITED

(A Government of India Enterprises)
OFFICE OF THE GENERAL MANAGER, TELECOM DISTRICT, DHENKANAL

BID DOCUMENT (FINANICAL BID)

OPEN TENDER FOR UNDERGROUND LOCAL CABLE AND O.F.CABLE CONSTRUCTION WORKS WITH ALLIED WORKS IN DHENKANAL TELECOM DISTRICT

TENDER NO. TENDER NO. GC-427/13-14/36

DHENKANAL DATED:-20.07.2013

SCHEDULE OF RATES FOR O.F. CABLE CONSTRUCTION WORKS

Sl. No	Item code	Description of item	Unit	Current Scheduled Rate in (Rs)
1	10FCT	Through rate for excavating trenches upto a depth of 165 cms. and back filling the excavated trenches after laying the HDPE pipe with or without protection for all kinds of soil including Hard Rocky soils also.	Per meter	80.00
2	2HDPE	Laying of HDPE Pipes / Coils, Coupled with HDPE sockets and drawing 6 mm PP rope.	Per meter.	4.78
The de	partment v	will supply HDPE pipes in size of 5 meters or coils, H	DPE sockets, PI	Prope, End caps.
2.1	2GIHB	Road/Rail crossing through horizontal boring method and inserting 65/40 mm dia G.I.Pipes and pushing HDPE Pipes/coils inside and drawing 6mm. PP rope.	Per meter.	225.40
The de	partment v	will supply G.I Pipes in length of approx. 6M HDPE	pipes/Coils and	PP rope
2.2	2GIPT	Laying and fixing of 65mm/40mm G.I. pipes in trenches with HDPE Pipes/Coils inside and drawing PP rope.	Per meter	16.71
The De	epartment	will supply GI Pipes in length of approx. 6M. HDPE I	Pipes/Coils and	PP Rope.
2.3	2GIBC	Laying and fixing of 65mm/40mm GI Pipes/G.I Troughs on Bridges and Culverts with HDPE pipes/coils inside and drawing PP rope	Per meter	22.91
	epartment of Coils and F	will supply G,I Troughs/G.I Pipes in length of approxPP Rope.	k. 6 M, Clamps,	HDPE
2.4	2RCCT	Laying full round RCC Pipes in trenches with HDPE pipes/Coils inside and drawing PP rope	Per meter	19.81
		will supply full round RCC Pipes in length of 2M with required for sealing the couplings of RCC Pipes will		
2.5	2PCCT	Providing RCC Protection at site to HDPE or G.I Pipes reinforced by Weld Mesh & Drawing of P.P Rope.	Per cu.meter	2141.30
			Sq. Meter(weld mesh)	33.81
	ed for conc	Pipes, Weld Mesh & P.P Rope will be supplied by the reting including water for curing required for the work		

SI. No	Item code	Description of item	Unit	Proposed current Scheduled Rate in (Rs)
3	3OFCP	Opening of Manholes, replacing 6 mm PP Rope by 8 mm PP Rope, Pulling of O.F.Cable, sealing of HDPE Pipes by Rubber Bushes in Manholes, providing HDPE/RCC Split Pipes in Manhole/Back filling of Manholes.	Per Meter	3.38
		will supply O.F.Cable, 8mm PP Rope, Rubber Bush,		E Pipes, Clamps.
All oth	er materia	ls required for the work shall be arranged by the contr	ractor.	
5	5JCBR	Digging of pit for jointing chamber, construction of brick chamber, filling of brick Chamber with clean sand, supply and placing of Pre-cast RCC Slabs on brick chamber, and back filling of jointing pit.	Per Jointing chamber	1803.20
All ma	terials requ	uired for the work shall be arranged by the contractor.		
5.1	5 JCPC	Digging of pit of Jointing chamber, fixing of precast RCC chamber, filling of RCC chamber with clean sand, placing of Pre-cast RCC slabs on RCC chamber, and backfilling of Jointing pit.	Per Jointing chamber	901.60
The De	epartment	will supply pre-cast RCC chamber with cover.		1
6	6ORJF	Digging of Pit 1 meter towards jungle side on each manhole/joint chamber for fixing of route/joint indicator, fixing and concerting of routes/joint indicator, painting and sign writing of route/joint indicator.	Per Indicator	217.67
		will supply route/joint indicators only. All other mate	rials required	
7		be arranged by the contractor. Documentation (6 copies of documents for each route/Section= one set)	Per Six sets.	2254.00
8	8HDD1	Horizontal Directional Drilling, Laying	Per meter	362.00
Ü		of PLB Duct of 40/33 mm dia through	1 of fileter	302.00
		boring by "NO DIG" method using		
		trench-less technology along road and		
		under railway/road / canal/ streams		
		crossing in all type of soil (including		
		soft rock & hard rock).		
	1	*		
		(Boring up to 120 mm diameters)		

SCHEDULE OF RATES FOR U.G.LOCAL CABLE CONSTRUCTION WORKS

				Current scheduled
				Rate in (R.s)
SI	ITEM CODE	ITEM	UNIT	
		enches of A Type(45 cm width at Top and 30 ottom) including backfilling, Compacting		
1A	site.(The star 100(One Hund	ne cable) and removing excess earth from idard nominal depth of the trench will be dred) cms for U/G Localcable laying of 10 ve size and will be 60 cm for 5 pair size cable)		
	1A1	In non-surfaces strata (For U/G Localcable of 10 pairs size and above at 100cm nominal depth)		
	1A1.1	All kinds of soils except rocky soil & cement concrete	Per meter	37.19
	1A1.2	Rocky Soil	Per meter	68.35
	1A1.3	Cement Concrete	Per meter	46.84
	1A2	In non-surfaces strata (For U/G Localcable of 5 pairs size at 60cm nominal depth)		
	1A2.1	All kinds of soils except rocky soil & cement concrete	Per meter	22.31
	1A2.2	Rocky Soil	Per meter	41.01
	1A2.3	Cement Concrete	Per meter	28.11
1.1	1RCH	Road Crossing through horizotal boring method and inserting 100/150mm dia GI pipe	Per meter	202.86
1.2	1GIP1&1GIP2	Laying and fixing of GI pipes on Bridges and Culverts upto 80MM dia GI Pipe	Per meter	9.03
1.4	1PCC	Providing RCC protection at site reinforced by Weld Mesh	Per cubicmeter	2061.82
	1WLD	Weld Mesh	Per Sq. M	33.81
2	2PLT	Pulling and laying of cables in Trenches and Pipes including the cost of Transportation Charges for 40 KM lead from SDO store godown including loading and unloading charges for cable of different size per meter		
	2PLT 1	up to 50 pairs	Per meter	2.50
	2PLT2	100/200 pairs	Per meter	3.41
	2PLT3	400 pairs	Per meter	12.53
	2PLT4	800 pairs	Per meter	17.25
3	3WB L1	ProvidingWarning/Protection Layer by providing & laying longitudinal brick layer for cable sizes of 200 Prs and above.	Per meter	16.00

				1
SI	ITEM CODE	ITEM	UNIT	Proposed current scheduled Rate in (R.s)
4	4COPP	Construction of Plinth for Pillar	_	
	4COPP1	For pillar up to 1000 pairs	Per Unit	2052.54
	4COPP2	For pillars above 1000 pairs	Per Unit	3075.48
	4ERP	Erection, Painting and Sign writing of pillars		
	4ERP1	For pillar up to 1000 pairs	Per Unit	300.91
	4ERP2	For pillars above 1000 pairs	Per Unit	371.12
5	5DP	Erection, Termination, Painting and signwriting of DPs		
	5DPE	External DPs		
	5DPE1	10Pairs	Per Unit	208.08
	5DPE2	20 Pairs	Per Unit	232.25
	5DPN	Internal DPs		
	5DPN1	5/10 Pairs	Per Unit	170.11
	5DPN2	20/50 Pairs	Per Unit	178.54
6	6TRM	Ternmination of Cables in MDF or Pillars	Per 100 Pair	193.58
7	7JC	Jointing of cables(Straight and Branch) including closing of cable joints by using jointing kits or similar type of Maintenance kits with cost for making jointinting pit of 1mx1mx1m size and end to end testing		
		5 Pair	Per Joint	38.12
		10 Pair	Per Joint	76.23
		20 Pairs	Per Joint	152.46
		50 Pair	Per Joint	253.58
		100 Pair	Per Joint	450.80
		200 Pair	Per Joint	541.08
		400 pairs	Per Joint	702.36
		For above 400 Pairs size cablesadditional rates payable for each 100 Pairs in Excess	Per 100 Pair	80.55
	will supply on	ly Jointing Kits and Connectors.The contracto naterials.	r shall	
8	8HDD1		Per meter	362.00
		For Horizontal Directional Drilling, laying of U.G.Local cable of different size through boring by "NO DIG" method using trenchless technology along road and under railway/road / canal/ streams crossing in all type of soil (including soft rock & hard rock) (Boring up to 120 mm diameters)		
	All m	aterial required for the work shall be arrange	d by contrac	tor.

Section-XV

PRICE SCHEDULE

То	
The GMTD, Dhenkanal	
Dear Sir, Having examine	ed the tender documents, terms and conditions stipulated therein, specifications of work etc., I (the
under signed) offer to exe	ecute the UG Local cable & O.F Cable Construction Works in respect of Zone No:
of 1	Dhenkanal SSA . in conformity with the said specifications and conditions of contract at the
percentage (Below / At I document :-	Par / Above) of all the SOR items as detailed under Section-XIV of financial bid portion of the bid
	In figures%.
BELOW	In wordspercent
OR	
AT PAR	In wordspercent
OR	
ABOVE	In figures%
	In wordspercent
agree to abide by this Bid under Section-IV of the	prepted, we shall submit the securities as per the conditions mentioned in the bid document. We for a period of 180 days and also for further extension of 120 days vide clause No- 10.1 & 10.2 Technical Bid portion of tender document from the date of opening of the qualifying bid and it shall and may be accepted at any time before the expiry of that period.
Date	
	Signature of the Tenderer
	Name of the Tenderer

- 1) If the bidder desires to quote below or above the offered schedule of rates as mentioned under Section -XIV, percentage quote is to be mentioned in figures as well as in words in the appropriate blank space provided as above.
- 2) In case, he is quoting ATPAR with respect to the offered schedule of rates as mentioned under Section -XIV, the same should be mentioned in words as "ATPAR" in blank space provided against ATPAR as above.
- 3) The bidder should fill-up any of the Zone No-01 or 02 or 03 for which he is submitting this price schedule in the blank space provided in the above mentioned first para of this price schedule after Zone No.
- 4) The Service tax will be paid extra to the contractor as applicable from time to time.