DIRECTOR GENERAL PROJECT SEABIRD
IHQ MoD(NAVY)
NEW DELHI

TENDER NO. DGSB 02 of 2015-16
FOR
TOPOGRAPHICAL SURVEY
FOR PROJECT SEABIRD AT KARWAR

2015

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SECTION I

INVITATION TO TENDER
SUB: TOPOGRAPHICAL SURVEY FOR PROJECT SEABIRD AT KARWAR

1. DETAILS OF TENDER:-

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<td>DGSB –02/2015-16</td>
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<td>ITEM DESCRIPTION</td>
<td>Tender For Topographical Survey For Project Seabird At Karwar.</td>
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<td>C.</td>
<td>DUE DATE &amp; TIME OF SUBMISSION OF TENDER</td>
<td>: 18 Jan 2016 Up to 1500 Hours</td>
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<td>D.</td>
<td>DATE &amp; TIME OF OPENING OF TENDER</td>
<td>: 18 Jan 2016 on 1515 Hours</td>
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<td>E.</td>
<td>PLACE OF SUBMISSION OF YOUR TENDER</td>
<td>Office of: Director General Project Seabird West Block V, R K Puram New Delhi -110066</td>
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<td>F.</td>
<td>EARNEST MONEY DEPOSIT</td>
<td>Rs. 1,58,000/-</td>
</tr>
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<td>G.</td>
<td>PERFORMANCE SECURITY</td>
<td>10% of Contract value.</td>
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<td>H.</td>
<td>TIME SCHEDULE</td>
<td>180 days from the date of work order</td>
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<td>J.</td>
<td>EFFECTIVE DATE</td>
<td>Date of signing of Contract</td>
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<td>K.</td>
<td>DETAILS OF THE CONTACT PERSONNEL</td>
<td>Chief Engineer / Sh. SK Maurya (Jt Dir) Tel:- 011-26102357/26176048 Fax:- 011-26100608 Email:- <a href="mailto:dgpsb-navy@nic.in">dgpsb-navy@nic.in</a></td>
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Dear Sir(s),

We have pleasure in enclosing the following tender documents for the above work and would invite you to submit your best binding Offer;

Section I. Invitation of Tender

Section II. General Conditions of Contract

Section III. Special Conditions of Contract

Section IV. Technical Specifications and scope of work including drgs.

Section V. Price bid

2. **SUBMISSION OF TENDER/ BID**

2.1 Tender shall be prepared and submitted in **SEPARATE SEALED COVERS IN TWO PARTS** as follows:

2.1.1 **Part-I: COMPLETE TENDER (INCLUDING EMD, TECHNICAL PART DULY FILLED IN)**

2.1.2 Tenderer is requested to submit Tender **Part-1** under a covering letter indicating clearly details of tender, chapters and annexure/schedules of complete Tender. Total Technical Offer including drawings and documents, EMD are to be included in this packet.

This shall also contain the un-priced bid i.e. bill of quantities of the bid duly filled up but blanking the price figures. The price and rates shall be submitted in Part II.

**Part –II: PRICE PART**

2.2 Price Part should consist of only price schedule supplied by Project Seabird/Engineer under a covering letter and no other documents. Schedule of price shall be read with work description, relevant specifications, invitation to tender, General Condition of Contract, Special Conditions of Contract.

2.2.1 No soft copy of the tender documents can be given. Tenderer shall photocopy Project Seabird/Engineer’s price format (bill of quantities) and fill up the rates in figures and words. Tenderer shall not retype the bill of quantities.

**THE PRICE FORMAT GIVEN ALONG WITH SPECIFICATION SHOULD BE FILLED, STAMPED AND SIGNED.**

2.3 Tender must be submitted as under:
2.3.1 Part-I in 3 (three) copies and

2.3.2 Part-II in 3 (three) copies in a separate Sealed Covers as mentioned above, super scribing the Tender No., Part No. (i.e. Part – I or Part-II), and the last date of receipt of tender on the cover.

**BOTH SEALED PACKET OF PART-I & PART-II SHALL BE SENT IN ANOTHER COVER DULY SEALED INDICATING TENDER NO. DESCRIPTION AND DUE DATE OF OPENING.**

2.4 Insertion, post-script, addition and alteration shall not be recognized unless confirmed by tenderer's signature and stamp.

2.5 Incomplete tender or tenders (not submitted as per requirement as indicated in the 'Invitation to Tender') are likely to be rejected.

2.6 Tenderer shall submit Earnest Money along with Part-I as detailed in the Tender for consideration of the offer.

2.7 The tenders as submitted will consist of the following:

- **2.7.1 Earnest Money Deposit in line with Notice Inviting Tender.**
- **2.7.2 Power of Attorney from court of Law in favour of a person signing the tender documents duly notarised in original.** This will be in a stamp paper and the signature of the person shall be duly attested.
- **2.7.3 One set of entire tender documents duly signed on each page as a token of acceptance of all the tender terms and conditions mentioned therein including priced bill of quantities.**
- **2.7.4 Duly filled in annexure enclosed**
- **2.7.5 Details of work of similar magnitude carried out by the tenderer in past.**
- **2.7.6 Details of present work Contracts under execution by the Tenderer with their date of completion and any other commitment (work-load if any) as per the Form -III enclosed duly signed by Auditor.**
- **2.7.7 Blank**
- **2.7.8 Man power, tools and equipment deployment programme (category wise and month wise)**
- **2.7.9 Any other technical information the tenderer wishes to furnish**
- **2.7.10 Latest Sales Tax Clearance Certificate along with PAN and Sales Tax numbers;**
- **2.7.11 Deviation to the Technical Specification/Commercial terms, if any, to be spelt out separately.**
- **2.7.12 Specific confirmation (Annexure-A)**
- **2.7.13 Duly filled Check List**

2.8 Tenders prepared in any other form may be liable for rejection

2.9 The tenders will be received at the Office or can be submitted in the Tender Box at Reception of:-
2.10 Opening of Tender:- The Bidders may depute their representatives, duly authorized in writing, to attend the opening of Bids on the Due Date and Time. Rates and important commercial/technical clauses quoted by all Bidders will be read out in the presence of the representatives of all the Bidders. This event will not be postponed due to non-presence of your representative.

2.11 The Tender/ Bids submitted should remain valid for 180 days from last date of submission.

3. BRIEF SCOPE OF WORK

3.1 The Topography survey which includes natural and constructed features, is required by designers to determine the levels on which their respective designed structures will be constructed and this input is fundamental for the design process. The detailed scope of work is mentioned in Section III of this tender document and the tenderer has to consider the same whilst preparing and submitting the Proposal. The details of the area of the Project site which are required to be surveyed (site wise) is placed at Annexure-J in tabulated format. The scope of work (in brief) covers :-

3.1.1 Detailed Topography survey at Project site i.e. complete Site C (site C1 and C2) and part of Site A, B1,B2 & E. Validation of topography survey details undertaken earlier of the Project site (Site A, B1, B2 & E) and submission of report for the same. The Topographical maps for the area encompassing Project Seabird area are available from the Survey of India at scale of 1:42000 or 1:25000.

3.1.2 Establishing permanent/ temporary control pillars at the site.

3.1.3 Establishing new Benchmarks in the concrete base. These new Benchmarks shall connect available nearest Great Trigonometrical Survey (GTS) benchmarking.

3.1.4 Detailed survey of streams, creeks and nullahs The survey of the river/ stream course upto the firm banks or upto high flood levels.

3.1.5 Cross section should be plotted to the horizontal scale of 1:1000 and vertical scale of 1:100.

3.1.6 Survey of one longitudinal section along the centerline of the bed/ at water level extent for approx. 1.0 km length. The data is also required for flood study.
3.1.7 Cross section to be performed at three locations for each river/stream, one at each bridge site, one upstream of the bridge and one downstream of the bridge.

4. PRICE

4.1 The tenderer shall quote lump sum price in respect of each item of work including each mobilization of equipments& with unit rates duly filled up in Price format given in tender documents. The lump sum price of each item of work shall be firm and binding for the detailed scope of work as per specifications and drawings.

4.2 The contract price shall be adjusted based on the actual quantity executed under various items of work as per the schedule of items and the unit rates as agreed.

4.3 The tenderer shall quote the prices/unit rates both in figure and words. No material modification to the specifications, item description in schedule of items, contract clauses shall be entertained. However, any deviation and financial implications may be reflected in Covering Letter of tender under Part-I of tender.

4.4 In case of difference in the rates mentioned in words and figures, the rate mentioned in words shall be considered.

4.5 All the taxes & duties and other Govt. levies as applicable shall be included in the above price, as explained in Clause 5.1 & 5.2 hereinafter.

4.6 The tenderer shall quote the prices considering supply of all materials by tenderer.

4.7 Any work which is not specifically included in drawings/schedule of items but required to be executed to complete the scope of work within the minimum engineering practice shall be done at no extra cost. In case of any additions/deletions in defined scope of work beyond scope of work as per schedule of quantities, the valuation of deviation shall be made as per Condition 62 of General conditions of Contract. The total contract price shall be adjusted accordingly.

5. TAXES AND DUTIES

5.1 All the taxes & duties are to be included in the enclosed Schedule of Rates. The Schedule of Rates quoted shall bear all applicable taxes (such as value added or sales tax, service tax or income taxes, duties, fees, levies) including tax on Works Contract.

5.2 All existing taxes and duties like Excise Duty, Sales Tax, Service Tax, Works Contract Tax, Entry Tax, Fees, levies, octroi or other charges levied on the tenderer in connection with the contract work shall be borne by the tenderer. All new taxes on the contract as a whole imposed by Govt. legislation during the
contract period shall be reimbursed at actual by Project Seabird against documentary evidence. However, such reimbursement shall not apply for any intermediate components/items including raw materials.

6. **TERMS OF PAYMENT**
   6.1 Subject to any deductions which are authorized to be made under the contract, the contract price shall be payable as indicated in the enclosed General Conditions of Contract.

7. **TIME OF COMPLETION**
   7.1 Time of completion is the essence of the contract. Tenderer shall complete the work in accordance with the Completion Schedule indicated in this Specification to Tender.

8. **LIQUIDATED DAMAGES**
   8.1 Liquidated Damages shall be applicable as per Condition 50 of General Conditions of Contract (Section II).

9. **PERIOD OF VALIDITY OF TENDER**
   9.1 Unless otherwise specified, the Tenderer shall keep his tender valid initially for a period of 180 days from the date on which the tenders are due to be submitted.

10. **LANGUAGE**
    10.1 The tender shall be submitted in English language.

11. **EARNEST MONEY DEPOSIT**
    11.1 The Contractor(s) shall submit Earnest Money Deposit as detailed in Invitation to tender in one of the following form along with their tender.

    11.2 DD/FDR/Banker's Cheque/Bank Guarantee as per Form DPM-13 available in public domain from any Indian Nationalised bank/ Scheduled Commercial Bank in favour of DG Project Seabird Payable at New Delhi. The DD/FDR/Banker's Cheque/ Bank Guarantee shall be kept valid initially for a period of Forty Five days beyond the final bid validity date.

**NON-SUBMISSION OF EARNEST MONEY WILL RENDER THE TENDER AS INVALID AND CONSEQUENTLY IGNORED.**

12. **CAPACITY OF THE TENDERER**

12.1 **TECHNICAL CAPACITY**

The Tenderer shall satisfy Employer's Representative/Engineer that he possesses the necessary technical experience and qualification and that he has
at his disposal suitable modern facilities and properly qualified staff to ensure that he can undertake the work to the best of quality and workmanship. The Tenderer shall furnish necessary particulars with documentary proof in this regard with the Tender.

12.2 LEGAL CAPACITY

The Tenderer shall satisfy Employer’s Representative/Engineer that he is competent and authorized to submit Tender and/or to enter into a legally binding Contract with Accepting Officer. To this effect any person giving a Tender shall render documentary evidence that his signature on the Tender submitted by him is legally binding upon himself, his firm or company, as the case may be.

12.3 AUTHORITY OF PERSON SIGNING DOCUMENTS

Even in case of firm or companies which have already granted Power of Attorney to an individual authorizing him to sign tender and in pursuance of which tenders are being signed by such person as a routine, fresh Power of Attorney duly executed in his favour stating specifically that the person has authority to bind such partners of the firm or the company as the case may be to the condition relating to Arbitration Clause, should be submitted with the tender unless such authority has already been given by the firm or the company.

13. ARRANGEMENT OF TENDER

13.1 The tender shall be neatly arranged, plain and legible, type-written on white paper with consecutively numbered pages in solid binding and each page stamped and signed. They should not contain any terms and conditions, printed or otherwise, which are not applicable to the tender.

14. NO CLAIM OR COMPENSATION FOR SUBMISSION OF TENDER

14.1 The Tenderer whose Tender is not accepted shall not be entitled to claim any costs, charges, expenses of any incidental to or incurred by him through or in connection with his submission of Tenders, even though DG Project Seabird may withdraw the Invitation to Tender.

15. CONDITION OF WORKING

15.1 The work lies in Restricted Area. Refer Condition 7 of Special Conditions of Contract (Section III) here-in-after.

16. SIGNING OF CONTRACT

16.1 On the Tender being accepted by Accepting Officer, a Contract will be signed and executed by and between Accepting Officer and the successful Tenderer, on the basis of the Terms and Conditions indicated in the Invitation to Tender, Technical Specification and correspondence exchanged along with other relevant documents.
17. PERFORMANCE SECURITY

17.1 Upon acceptance of tender, the contractor within the time specified in the Letter of Acceptance, shall deposit with the DG Project Seabird Bank Guarantee as per Proforma, at Annexure H, from any nationalized Bank for an amount equivalent to 10% (Ten percent) of the total value of the Contract. The contractor shall ensure that Bank Guarantee against Performance Security shall remain valid beyond 60 days of physical completion of work as certified by Engineer-in-charge.

17.2 Whenever the Consultant determines on addition to the Contract Price as a result of variation amounting to more than 10% (ten percent) of the Contract Price, the contractor at the request of PSB, shall promptly increase the value of the Security Deposit by an equal percentage.

18. GENERAL INSTRUCTION FOR COMPLIANCE

18.1 In case of ‘BLANK TENDER’ is submitted, it should be indicated by endorsement ‘BLANK’ made prominently on the envelope and signed by the tenderer.

18.2 In view of postal and other delays, it is suggested that the tender be sent by a special messenger if necessary or posted sufficiently in advance of the date and time fixed for receipt of tenders. Tenders received late will not be considered. Telegraphic/ Electronic offers will not be considered even if they are received in time.

18.3 Tenders will be opened in the presence of tenderers on the Due Date and Time for opening of the tender. Tenderers, who have submitted their tenders and are desirous of being present at the time of opening of the tenders, may do so at the appointed time.

18.4 Critical Path Method (CPM)

18.4.1 The tender is based on CPM.

18.4.2 The tenderers are expected to be fully conversant with the technique and employ technical staff who can use the technique in sufficient details. Sufficient books and other literature on the subject are widely available which the tenderer may make use of.

18.4.3 The time allowed for the completion of the work has been worked out through CPM after dividing the work in broad stages.

18.4.4 The tenderer’s attention is drawn to special conditions of the tender regarding preparation of the detailed net work and time schedule, for the work and it is his liability for employing sufficient resources to adhere to this schedule. Any inability on the part of the tenderer in using the technique will be taken as his technical insufficiency.

18.4.5 The Govt/Engineer may issue amendments/errata to the tender documents before due date of submission of tenders. The tenderer is
required to read the tender documents in conjunction with the amendments, if any, issued by the Govt./Engineer. The tenderer is not to incorporate the amendments/errata in the body of the tender documents either in ink or pencil. In case the amendments/errata issued are incorporated by the tenderer in the body of the tender, these shall not be considered and the amendments/errata to tender documents as issued by the Govt/Engineer shall only hold good.

19. Under no circumstances will close relations who have business dealing with one another/sister concern be allowed to tender for the same contract as separate competitors. A breach of this condition will render the tenders of both the parties liable for rejection.

20. The DG, Project Seabird, West Block V, R K Puram, New Delhi – 110066 will be the Accepting Officer here-in-after referred to as such for the purpose of this contract.

21. DG, Project Seabird shall return the Earnest Money where applicable to all unsuccessful tenderer by endorsing an authority on the deposit receipt for its refund. The DG, Project Seabird will either return the earnest money to the successful tenderer by endorsing on the deposit receipt for its refund on receipt of an appropriate amount of security deposit or will retain the same in part or full on account of security deposit if such a transaction is feasible.

22. The Accepting Officer reserves his right to accept a tender submitted by a public undertaking giving a purchase preference over other tender(s) which may be lower as are admissible under the Government Policy. No claim for any compensation or otherwise shall be admissible from such tenderers whose tenders may be rejected on account of the said policy.

23. The tenderers are advised to visit the site by making prior appointment with Employer’s Representative/Engineer.

24. A tenderer shall be deemed to have full knowledge of all related documents, samples, site etc. whether he has inspected them or not.

25. Any tender which proposes any alterations to any of the conditions laid down or which proposes any other conditions of any description whatsoever is liable to be rejected. The specific confirmation sheet enclosed as ANNEXURE –A shall be duly signed and submitted.

26. The submission of a tender by a tenderer implies that he had fully read this notice and other communications of contract and has made himself/herself aware of the scope, specifications of and local condition of the work that may be awarded to him and other factors likely to have bearing on the execution of the work.

27. Tenderers must be very careful to deliver a bonafide tender or in the alternative return blank tender complete with all the documents forming part of the tender. A bonafide tender must satisfy each and every condition laid down in this notice.
28. The Accepting Officer does not bind himself to accept the lowest or any Tender or to give reason for not doing so.

29. **PRE-QUALIFICATION CRITERIA**

29.1 The tenderers meeting the PQ criteria as per the tender notification enclosed vide **Annexure–B** only shall be considered for further evaluation. The tenderer shall furnish the **Forms I,II,IIA, III, IV,V,VI & VII** duly filed in with all the supporting documents such as annual reports/balance sheets, work order copies and completion certificates from clients in support of meeting the PQ criteria.

30. **ACKNOWLEDGEMENT**

Please acknowledge receipt of this Invitation to Tender and confirm that you will submit the tender on due date. If you are not in a position to quote please return the Tender Document to us.

Thanking you,

Yours Sincerely,
For and on behalf of
DG PROJECTSEABIRD

Encl: As above.

1. Annexure A
2. Annexure B
3. Annexure C
4. Forms I,II,IIA, III to VII
5. Check List - Annexure D
SPECIFIC CONFIRMATION

(_TO BE SIGNED BY TENDERER_)

WE HEREBY CONFIRM THE FOLLOWING:

1. Our quotation is in total conformity with the tender stipulations and we do not have any additional technical or commercial conditions.

2. We have familiarised ourselves with the site conditions and have satisfied ourselves of the availability of the specified construction materials/resources.

3. We are submitting the bar chart for the project activities, details of manpower and equipment to be deployed and methodology in line with the indicated completion schedule.

4. We accept all your commercial terms and conditions.

SIGNATURE OF TENDERER

SEAL

PLACE:

DATE
NOTICE INVITING TENDER

Ref No: DGSB/02OF2015-16

Sealed tenders are invited from eligible contractors/firms under two bid system for the work of “Topographical Survey for Project Seabird, at Karwar.” as per the details furnished hereunder:

Cost of tender document : Rs 3000/- (Rupees three thousand only)

EMD: Rs 1,58,000/- in favour of DG Project Seabird payable at New Delhi. EMD will be submitted along with offer in the form of DD/FDR/Bankers cheque/ Bank Guarantee from any Indian Nationalised Bank/Scheduled commercial Bank. Exemption from submission of EMD is allowed for SSI units registered with NSIC against valid NSIC certificate.

Site of Work: Naval Base at Karwar located at 120 KM South of Goa on Western Coast of India in Uttar Kannada District of Karnataka State.

Completion period: 180 days from the effective date of issue of letter of acceptance/ date of signing of Contract. Extension of contracted completion period will be at sole discretion of the buyer, with applicability of LD clause.

Non transferable tender documents with relevant details can be obtained from the office of DG, Project Seabird, West Block V, RK Puram, New Delhi 110066 between 16 Dec 2015 to 15 Jan 2016 during working hours, on payment of non-refundable fee of Rs 3000/- in the form of Demand Draft drawn in favour of DG Seabird.

1. Eligibility:

(i) Should have satisfactorily completed the “similar works” of values listed below during the last 7 years (as on 31 Mar 15)

a) Three similar completed works each costing not less than Rs 42 lakhs (or)

b) Two similar completed works each costing not less than Rs 52.5 lakhs (or)

c) One similar completed work costing not less than Rs 84 lakhs and

(ii) Average Annual turnover during the last 3 years (as on 31st March 2015) should be at least Rs 31.5 lakhs

Documentary proof such as work order, completion certificate for experience, audited balance sheet, profit & loss account statement for annual turnover for meeting all the eligibility criteria shall be enclosed with the tender in original or copies notarized. The bids of those firms who do not meet the eligibility criteria shall be treated as invalid and will be summarily rejected and their price bid (under cover II) shall be returned to them unopened. “Similar Work” means Topography Survey carried on a similar scale.

2. Tenderer shall have sufficient experienced specialized manpower and equipment to ensure work of best quality and workmanship and tenderers shall furnish the organizational technical manpower and equipment details to support their claim.
3. Qualification shall also be based on the past performance, technical and financial capability available resources and shall be subject to verification of all statements submitted by applicant to establish his capacity to execute the work.

4. Tenderer will either have an office at site to make adequate arrangements for effective interaction with the Client. Also, the tenderer shall be required to set up their office at Site for effective execution of the work.

5. The Contractor/Firm should be in sound financial position. Statement submitted to establish his capacity to execute the work shall be subject to verification of all documents.

6. Project Seabird takes no responsibility for delay or non-receipt of offers sent by post. Offers received after due date and time will not be considered.

7. Project Seabird reserves the absolute right to reject any or all offers and cancel the tendering process without assigning any reasons whatsoever. The opinion/decision of Project Seabird shall be final and conclusive. Project Seabird shall neither be held liable for such action nor be under any obligations to inform the applicant of the reasons for the same.

8. Purchase preference policies as per the latest Government of India guidelines will be applicable.

9. Offers from Joint Ventures/Consortium will not be considered.

Last date for Submission of tender **1500 hrs on 18 Jan 2016**

Date of opening of tender **1515 hrs on 18 Jan 2016 (Part-I) at HQ, Project Seabird.**

For any further details, enquiry can be made from DG, Project Seabird on any working day during working hours. (0900 to 1730 hrs)
LETTER FROM THE CONTRACTOR

To,

Director General
Project Seabird
West Block V
RK Puram
New Delhi 110066

Dear Sir,

I/we have examined the following documents and site relating to the Topography Survey for Project Seabird at Karwar:

1. Invitation of Tender with annexures and forms
2. General Conditions of Contract
3. Special Terms of Contract
4. Technical Specifications, scope of work, drawings
5. Bills of quantities/Price Format

I/we hereby tender for the works referred to in the aforesaid documents upon the terms and conditions contained or referred to therein and in accordance, in all respect with the specifications of quantities and within the period of completion.

I/we hereby agree to submit Earnest Money Deposit (EMD) in favour of DG Project Seabird payable at New Delhi along with tender. I/We agree to keep the EMD as the security deposit, which is not to bear any interest for the due executing of the contract works.

Having examined the tender documents (containing hereto) relating to the works specified in the memorandum here in after set out and having visited and examined the site of the works specified in their said memorandum and having acquired the requisite information relating thereto as affecting the tender. I/We hereby offer to execute the works specified in the said memorandum at the rates mentioned in the schedule of quantities here to and in accordance with all respects of the specifications, design, drawings and instructions in writing referred to in the tender schedule and with such material as are provided with for by and in all other respects in accordance with such conditions so for as they may be applicable.

I/We hereby agree that if the work is not commenced within 14 days from the date of issuing the work order, the Employer has the right to cancel the letter of acceptance, work order issued to me/us, agreement entered with me/us and the EMD deposited by me/us can be forfeited without giving any notice to me/us and also the Employer has the right to execute the work to other agencies at our risk and expense if I/We fail to commence the work within 14 days from the date of issuing the Work Order.
My/Our Address is;

My/Our Bankers are:

The names of the partners of our firms are:

The name of the authorized person to sign the contract is:

Or, Name of the person having the power of attorney to sign the contract is:

Latest Income tax clearance certificate No., issued date, ward no., place:

Yours Sincerely,

Signature of the tenderer along with seal

The undersigned declares that the statement made and the information provided in the application being submitted, are complete, true and correct in every detail.

Signed : ___________________________

Name : ___________________________

For and on behalf of : ___________________________

Note: Certified true copies as proof for power of attorney, it certified to be enclosed along with tender documents.

Signature of the Contractor with seal
FORM – I
Annual turnover data form

(SHOULD BE COUNTERSIGNED BY AUDITOR)

Name of Applicant:

<table>
<thead>
<tr>
<th>Year</th>
<th>Annual Turnover in Rs. In Lakhs</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012-2013</td>
<td></td>
</tr>
<tr>
<td>2013-2014</td>
<td></td>
</tr>
<tr>
<td>2014-2015</td>
<td></td>
</tr>
</tbody>
</table>

AUDITOR’S SIGNATURE            TENDERER’S SIGNATURE
                                 WITH STAMP

Attach: - Copies of audited balance sheets for the year as mentioned above.
FORM – II
PARTICULAR EXPERIENCE RECORD

(List those works which are similar to the proposed works for which the pre-qualification is sought. Should contain only the works awarded and executed from 1-4-2008 onwards)

(FURNISH INFORMATION IN THIS FORM FOR ALL SIMILAR WORKS UNDERTAKEN. USE SEPARATE SHEET FOR EACH ITEM)

<table>
<thead>
<tr>
<th>Name of the Applicant:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Work Description</th>
<th>Date of award</th>
<th>Value in Rs (in Lakhs)</th>
<th>Whether Form II A furnished Yes/No</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Yes/No</td>
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<td>Yes/No</td>
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<td></td>
<td></td>
<td>Yes/No</td>
</tr>
</tbody>
</table>

Signature of the tenderer

In the above Table, list only those works which have similar nature and complexity to the nature of work under this contract. The details of each of the works mentioned in the above table must be provided separately in Form IIA.

Where ever Form IIA is not furnished for any item, the item will be ignored.
## FORM – IIA

### DETAILS OF CONTRACTS OF SIMILAR NATURE AND COMPLEXITY

(FURNISH INFORMATION IN THIS FORM FOR ALL THE ITEMS LISTED IN FORM II. USE SEPARATE SHEET FOR EACH ITEM)

<table>
<thead>
<tr>
<th>Name of the Applicant:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Name of the Contract</td>
<td></td>
</tr>
<tr>
<td>2 Country</td>
<td></td>
</tr>
<tr>
<td>3 Name of the employer</td>
<td></td>
</tr>
<tr>
<td>4 Employer’s Address</td>
<td></td>
</tr>
<tr>
<td>5 Name of works and special feature relevant to this contract</td>
<td></td>
</tr>
<tr>
<td>6 Value of the total contract (Rs. In lakhs)</td>
<td></td>
</tr>
<tr>
<td>7 Date of Award</td>
<td></td>
</tr>
<tr>
<td>8 Date of completion</td>
<td></td>
</tr>
<tr>
<td>9 Specified requirements</td>
<td></td>
</tr>
<tr>
<td>10 Specified requirements</td>
<td></td>
</tr>
<tr>
<td>11 Were there any penalties/fines /stop-notice /compensation/liquidated damages imposed? (Yes/No)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>If yes, give amount and explanation</td>
</tr>
</tbody>
</table>

Provide completion certificates/satisfactory progress for above mentioned work. In the absence of documentary proof, the details will be ignored.
FORM – III

CURRENT CONTRACT COMMITMENTS

(TO BE COUNTERSIGNED BY AN AUDITOR)

<table>
<thead>
<tr>
<th>Name of Contract</th>
<th>Name of client</th>
<th>Value of Firm’s portion of total contract (Rs. Lakhs)</th>
<th>Stipulated date of completion</th>
<th>Value of outstanding work for the next 2 years (Rs. Lakhs)</th>
<th>Estimated completion date</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

Total value

Signature of Auditor

Signature of Contractor

1. Details of all works which are at various stages of execution, including works for which work orders have been received but work is yet to start, or works approaching completion but for which full completion certificates are yet to be issued, are to be provide.

2. Details as available at the time of preparation of this documents have to be provided.

3. Enclose copies of Work Orders.
FORM –IV

Equipment proposed for the work

The tenderer will provide adequate information to demonstrate clearly that it has the capability to meet the requirements for each and all items of equipment listed below.

For Topography Survey

List of equipment, Nos. Owned /Proposed to be hired

Note: If the contractor does not own the equipment, he should attach the confirmatory letter from the owner of the equipment for hiring it/ utilization of service

DATE: TENDERER’S SIGNATURE WITH STAMP
FORM – V

Personnel/Staff proposed for the Project

(Here specify the qualification and experience summary of the Key Personnel proposed to be employed for the work)

<table>
<thead>
<tr>
<th>Position</th>
<th>Name</th>
<th>Qualification</th>
<th>Years of experience (general)</th>
<th>Years of experience in the proposed position</th>
</tr>
</thead>
</table>

DATE: 

TENDERER’S SIGNATURE WITH STAMP
FORM – VI

Proposed Site Organisation

(Here narrate the SiteOrganisation Chart)

DATE: TENDERER'S SIGNATURE WITH STAMP
FORM VII

Additional Information

Please add any further information that you consider to be relevant to the evaluation of your application for qualification. If you wish to attach any other documents, please list below.

Tenderers should not enclose testimonials, certificates and publicity material with their applications. They will not be taken into account in the evaluation of qualifications and will be discarded.
CHECK LIST FOR THE INFORMATION TO BE FURNISHED BY THE TENDERER ALONG WITH OFFER FOR TOPOGRAPHY SURVEY

<table>
<thead>
<tr>
<th>Sl. No</th>
<th>DESCRIPTION</th>
<th>FURNISHED</th>
<th>NOT FURNISHED</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Earnest Money Deposit in line with Clause 1 of Invitation to Tender.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Power of Attorney from court of Law in favour of a person signing the tender documents duly notarized in original. This will be in a stamp paper and the signature of the person shall be duly attested.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>One set of entire tender documents duly signed on each page as a token of acceptance of all the tender terms and conditions mentioned therein including unpriced BOQ and excluding tender drawings.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Duly filled-in Form I, II, IIA, III to VIII with all the supporting documents such as annual reports/balance sheets, work order copies and completion certificates from clients in support of meeting the PQ criteria enclosed.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Details of work of similar magnitude carried out by the tenderer in past.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Details of present work Contracts under execution by the Tenderer with their date of completion and any other commitment (work-load if any) as per the Form-III enclosed duly signed by Auditor.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Quality Assurance Plan</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Man power and tools and equipment deployment programme (category wise and month wise)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Any other technical information the tenderer wishes to furnish</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>Latest Sales tax Clearance Certificate along with PAN and Sales Tax numbers as applicable</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>Deviations if any, to be spelt out separately</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>Site organization chart</td>
<td></td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>Specific confirmation (Annexure-A)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>Duly signed all correspondence letters received from PSB in token of its acceptance.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
SECTION II

GENERAL CONDITIONS OF CONTRACT
CHAPTER I

1. DEFINITIONS

1.1 The “Contract” means the documents forming the tender and acceptance thereof, together with the documents referred to therein including these Conditions, Schedules and/or General Summary attached to the form of tender, the Specifications and the drawings, and all these documents, as applicable taken together shall be deemed to form one Contract and shall be complementary to one another.

1.2 The “tender documents” means the form of tender, the applicable Schedules and/or General Summary, these Conditions, and the Specifications and/or Drawings as loaned to Contractors for the purpose of preparing their tenders.

1.3 The “Works” means the works described in the tender documents, or in individual Works Orders and/or accompanying Drawings and Specifications as may be issued from time to time to the Contractor by the Engineer within the powers conferred upon them, including all modified extra or additional works and obligations to be carried out either on the Site or at any factory or workshop or other place for subsequent incorporation, as required for the performance of the Contract.

1.4 The “Site” means the lands, coastal areas and/or other places on, in, into or through which 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 out the Contract.

1.5 The “Contractor” means the individual or firm or company, whether incorporated or not, undertaking the Works and shall include the legal personal representatives of such individual or the persons composing such firm or company, or the successors of such individual or firm or company and the permitted assigns of such individual or firm or company.

1.6 “Government” means the President of India, represented by Director General Project Seabird (DGPSB), his successors in office and assigns and the “Accepting Officer” means the duly authorised officer who signs the contract on behalf of the President for this contract, Director General, Project Seabird.

1.7 The word DG/DDG (PI) means Employer who administers the contract.

1.8 The “Engineer-in-Charge” means the qualified Engineer appointed by the DG, PSB to supervise the Works or part of the Works.

1.9 “Approved” and “directed” mean the approval or direction of the DG, PSB or person deputed by him for the particular purpose.

1.10 “MoD.” means the “Government of India (Ministry of Defence)”. 
1.11 “I.S.” means “Indian Standards” as issued by the Indian Standards Institution. In the case of Measurement and Term Contracts, “Specifications” means those contained, in the contract together with any amendments, etc., authorised thereto by the tender documents, “Drawings” refer to those accompanying the tender documents and/or any Works Orders referred to therein.

1.12 The “Contract Sum” means:
   - 1.12.1 In the case of Lump Sum Contracts, the sum for which the tender is accepted;
   - 1.12.2 In the case of Item Rate Contracts for Works by Measurement, the total cost of the work arrived at after extension of the quantities shown in Schedule by the item rates quoted by the tenderer for the various items.

1.13 The “Final Sum” means the amount payable under the contract by Government to the Contractor for the full and entire execution and completion of the Works.

1.14 “Accepted Risks” mean the risk on the Site accepted by the Accepting Officer of riots (otherwise than among Contractor’s employees), war, invasion, act of foreign enemies, hostilities, civil war, rebellion, revolution, insurrection, military or usurped power, damage from air craft and acts of God such as earthquake, lighting, unprecedented floods and tornado.

1.15 The “Date for Completion” is the date or dates for completion of the whole or any part of the works, set out or ascertained in accordance with the individual Works Orders or the tender documents, or any subsequent amendment thereto as provided in the condition 9 and 11 hereinafter.

1.16 A “Week” means seven days without regard to the number of hours worked or not worked in that week.

1.17 A “Day” means a day of 24 hours irrespective of the number of hours worked or not worked in that day.

1.18 A “Working Day” means any day other than that prescribed by the Negotiable Instruments Acts as being a holiday and consists of the number of hours of labour as commonly recognised by good employers in the trade in the district where the work is carried out.

1.19 “Emergency Works” mean any urgent measures which, in the opinion of the Engineer-in-Charge, become necessary during the progress of the Works to obviate any risk of accident or failure or which become necessary for security, or rectifications to essential services like water supply and electrification during the maintenance period of the contract.

1.20 “Provisional Items” mean items for which approximate quantities have been included in the tender documents.

1.21 “Day work” means items of labour and/or materials which, in the opinion of the Engineer, are not capable of being evaluated by the accepted methods of measurement or assessment.
CHAPTER II

SCOPE OF CONTRACT

2. Heads and Secrecy to the Conditions
   2.1 The headings to these Conditions shall not affect the interpretation thereof.

   2.2 The Contractor shall take all steps necessary to ensure that all persons employed on any work in connection with the Contract have taken due notice that the Indian Official Secrets Act, 1923 (XIX of 1923) applies to them and will continue so to apply even after the execution of such works under the Contract.

3. Contract Documents

   3.1 The Contract is confidential and must be strictly confined to the Contractor’s own use (except so far as confidential disclosure to sub-contractors or suppliers is necessary) and to the purposes of the Contract.

   3.2 The Accepting Officer, empowered to issue the Work Order shall furnish to the Contractor free of cost two copies of the signed Drawings, the Specifications, the blank Bills of Quantities, if any, and two copies of all further drawings issued during the progress of the Works. The Contractor shall keep one copy of all Drawings and of the Specifications on the Site and the Engineer-in-Charge or his representative shall at all reasonable times have access to them.

   3.3 All documents, copies thereof and extracts therefrom furnished to the Contractor shall be returned to the Engineer-in-Charge/PSB on the completion of the Works or the earlier determination of the Contract.

4. Works to be carried out

   4.1 The Contracts shall, except as provided under Schedules include all labour materials, tools, plant, equipment and transport which may be required in preparation for, and for and in the full and entire execution and completion of the Works. The descriptions given in Schedules and the Bills of Quantities shall, unless otherwise stated, be held to include waste on materials, carriage and cartage, carrying in, return of empties, hoisting, setting, fitting and fixing in position and all other labours necessary in and for the full and entire execution and completion aforesaid in accordance with good practice and recognised principles.

   4.2 The Contractor shall be deemed to have satisfied himself as to the nature of the Site, local facilities of access and all matters affecting the execution and completion of the Works. No extra charges consequent on misunderstanding or otherwise will be allowed.

5. Blank
6. Provisional Items

6.1 The full amount of provisional lump sums and the value annexed to each provisional item inserted in the tender documents shall be deducted from the Contract Sum and the value of work ordered and executed there under shall be ascertained by measurement or valuation as for deviations.

6.2 No work under these items is to be begun without instructions in writing from the Engineer-in-Charge.

6.3 The extent of quantities or items described as “provisional” shall not be varied beyond the limits laid down in Condition 7.

6.4 No addition or deduction shall be made by the Contractor to the amount of the provisional lump sums as included in the tender documents.

6A. Discrepancies and Adjustment of Errors

6.5 The several documents forming the contract are to be taken as mutually explanatory of one another, detailed drawings being followed in preference to small scale drawings and figured dimensions in preference to scale.

6.6 In the case of discrepancy between Schedule, the Bills of Quantities, the Specifications and/or the Drawings, the following order of precedence shall be observed:

6.6.1 Description of Schedule/Bills of Quantities.
6.6.2 Technical Specification.
6.6.3 Drawings.

6.7 If there are varying or conflicting provisions made in any one document forming part of the Contract DG Seabird shall be the sole deciding authority with regard to the intention of the document and his decision in this respect shall be final and binding.

6.8 Any error in description, quantity or rate in Schedules and Bills of Quantities, or any omission there from shall not vitiate the Contract or relieve the Contractor from the execution of the whole or any part of the Works comprised therein according to the Drawings and Specifications or from any of his obligations under the Contract. Any error in quantity, rate or amount in Schedule/Bills of Quantities and general summary shall be adjusted in accordance with the following rules:

6.8.1 General (applicable to all types of contracts):

6.8.1.1 In the event of a discrepancy between description in words and figures quoted by a tenderer the description in words shall prevail.

6.8.1.2 In the event of an error occurring in the amount column of Schedule or Bill of Quantities as a result of wrong extension of unit rate and quantity, the unit rate whether inserted by Engineer-in-Charge prior to issue of tenders or quoted by tenderers, shall be regarded as firm and the extensions shall be amended on the basis of the rate. Where Provisional
Lump Sum, Provisional Sum and/or “Prime Cost” Sum is/are inserted by Engineer-in-Charge is required to quote a percentage as well as an amount of addition/deduction thereon, and there is any Discrepancy between the percentage and the corresponding amount of addition/deduction, the percentage quoted by the Contractor shall be regarded as firm, the amount and total shall be amended on the basis of the percentage.

6.8.1.3 All errors in totalling in the amount column and in carrying forward totals shall be corrected.

6.8.1.4 Any omissions to include in the totals or to carry forward, the Prime Cost Sums and the percentage thereon, or the Provisional Sums, shall be corrected, if no percentage on Prime Cost Sums is quoted by the Contractor, the percentage shall be considered as ‘NIL’.

6.8.1.5 In case of Contracts for addition/alteration works where Contractors are required to quote credit for demolished materials specified to become Contractor’s property, in the event of omission on the part of a Contractor to indicate any credit, the tender shall be treated as one with “nil” credit.

6.8.1.6 The totals of Bills of Quantities, as amended above, shall be carried over to Schedule. Similarly, totals of various sections of Schedule as amended shall be carried over to the General Summary and the tendered sum amended accordingly. The tendered sum so altered shall, for the purpose of the tender, be substituted for the sum originally tendered and considered for acceptance instead of the original sum quoted by the Contractor. Any rounding off of totals in various sections of Schedule or in General Summary by the tenderer shall be ignored.

6.8.2 Lump Sum Contracts based on Drawings and Specifications and Item Rate Contracts – The Contractor shall be deemed to have calculated his own details from Drawings and Specifications before quoting unit rates against different items of Schedule. Notwithstanding any errors or inaccuracies in the unit rates quoted by the Contractor those rates shall be deemed to include for the full and entire completion of the items of Work in accordance with the provisions of the Contract and no adjustment shall be made on account of any errors in those rates.

7. Variation

7.1 The contractor shall not make any alteration in, addition to or omission from the Works as described in the tender documents except in pursuance of the written instructions of the Engineer-in-Charge.

7.2 No work that radically changes the original nature & scope of the Contract shall be ordered as a Variation and in the event of disagreement between the Contractor and Engineer, the decision, of the DG, Project Seabird shall be final and binding on the Contractor.

7.3 The Accepting Officer, or person specially authorised by him on his behalf, may vary either by way of addition to and/or deduction from the Works so described provided that the Contract Sum be not thereby varied on the whole by
more than the +/- 10% set out in the tender documents under Clause 22 of Special Condition of Contract (Section IV) here-in-after.

7.4 All additions and deductions will be priced as per Condition 62 here-in-after and added to or deducted from the Contract Sum. Whenever the Accepting Officer intends to exercise such right his intention shall be communicated to the Engineer-in-Charge whose order in writing shall specify the deviations which are to be made, the lump sum assessment or the proposed basis of payment, the change, if any, in the date or completion of the relevant phase and/or the entire Contract. Any objection by the Contractor to any matter concerning the Variation Order, shall be notified by him in writing to the Engineer within fifteen days from the date of receipt of such order, but under no circumstances shall the progress of the Works be stopped (unless so ordered by the Engineer) owing to differences or controversy that may arise from such objection. In default of such notification the Contractor will be deemed to have accepted the order and the conditions stated therein without in any way affecting the right of the parties to rectify any mistake on the basis of payment only to the extent it differs from Condition 62. In the event of the Contractor failing to agree with the Engineer-in-Charge regarding the proposed alteration of time, the objection shall be referred to the DG Seabird whose decision shall be final and binding.

8. **Emergency Works**

8.1 If any Emergency Works become necessary and the Contractor is unable (in respect whereof the decision of the DG Seabird shall be final and binding) or unwilling at once to carry them out, the DG Seabird may by his own or other work-people, carry them out as he may consider necessary. If the Emergency Works shall be such as the Contractor is liable under the Contract to carry out at his own expense or which are included in the Contract rates for Works being executed by the Contractor, all expenses incurred on them by Government shall be recoverable from the Contractor, and if necessary, be adjusted or set off against any sum payable to him under this or any other Contract.

9. **Suspension of Works**

9.1 The Contractor shall, on receipt of the order in writing of the Engineer, suspend the progress of the Works or any part thereof for such time and in such manner as the Engineer may consider necessary for any of the following reasons:

9.1.1 on account of any default on the part of the Contractor; or

9.1.2 for proper execution of the Works or part thereof for reasons other than the default of the Contractor; or

9.1.3 for safety of the Works or part thereof.

9.2 The contractor shall, during such suspension, properly protect and secure the Works to the extent necessary and carry out the instructions given in that behalf by the Engineer-in-Charge.

9.3 If the suspension is ordered for reasons at Condition 9.1.2 and 9.1.3:
9.3.1 the Contractor shall be entitled to an extension of time equal to the period of every such suspension plus 25% for completion of the item or group of items of work for which a separate period of completion is specified in the Contract and of which the suspended work forms a part, and

9.3.2 If the total period of all suspensions in respect of an item or group of items of work for which a separate period of completion is specified in the Contract exceeds 60 days the Contractor shall, in addition, be entitled to compensation, as the Engineer-in-Charge may on the basis of facts consider reasonable, in respect of salaries and/or wages paid by the contractor to his employees & labour at site actually remaining idle during the period of suspension.

9.4 If the Works or part thereof is suspended on the orders of the Engineer-in-Charge for more than four months at a time, except when suspension is ordered for reason 9.1.1, the Contractor may after 60 days from receipt of such order serve a written notice on the Engineer-in-Charge requiring permission within fifteen days from receipt by the Engineer-in-Charge of the said notice, to proceed with the Works or part thereof in regard to which progress has been suspended and if such permission is not granted within that time, the Contractor, if he intends to treat the suspension, where it affects only a part of the Works as an omission of such part by government under Condition 7 or where it affects the whole of the works, as an abandonment of the Works by Government, shall within ten days of expiry of such period of 15 days give notice in writing of his intention to the Engineer-in-Charge. In the event of the Contractor treating the suspension as an abandonment of the Contract by Government, he shall have no claim to payment of any compensation on account of any profit or advantage which he may have derived from the execution of the work in full but which he could not derive in consequence of the abandonment. He shall, however, be entitled to compensation, as the Engineer-in-Charge may on the basis of facts consider reasonable, in respect of salaries and/or wages paid by him to his employees and labour at Site actually remaining idle in consequence and also for loss on materials collected which could not be utilised on these or other Works including 5% as overheads on materials, salaries and wages.

10 Materials

10.1 Materials to be provided by the Contractor –

10.1.1 The contractor shall, at his own cost and expense, provide all materials required for the Works. All materials to be provided by the Contractor shall be new and in conformity with the specifications laid down in the Contract and the Contractor shall, if requested by the Engineer-in-Charge, furnish proof, to the satisfaction of the Engineer-in-Charge that the materials so comply.

10.1.2 The Contractor shall, at his own cost and expense and without delay, supply to the Engineer-in-Charge samples of materials proposed to be used in the Works. The Engineer-in-Charge shall within seven days of supply of
samples or within such further period as he may require and intimate to the Contractor in writing inform the Contractor whether samples are approved by him or not. If samples are not approved the Contractor shall forthwith arrange to supply to the Engineer-in-Charge for his approval fresh samples complying with the specifications laid down in the Contract.

10.1.3 The Engineer-in-Charge shall have full powers to require removal of any or all of the materials brought to Site by the Contractor which are not new and in accordance with the Contract specifications or do not conform in character or quality to samples approved by him. In case of default on the part of the Contractor in removing rejected materials the Engineer-in-Charge shall be at liberty to have them removed by other means at the Contractor's expense and risk. The Engineer-in-Charge shall have full powers to require other proper materials to be substituted for rejected materials and in the event of the Contractor refusing to comply he may cause the same to be supplied by other means. All costs/charges and expenses which may attend upon such substitution shall be borne by the Contractor.

10.1.4 The Contractor shall indemnify Government or any Agent, servant or employee of Government against any action, claim or proceeding relating to infringement or use of any patent or design or any alleged patent or design rights and shall pay any royalties or other charges which may be payable in respect of any article or material or part thereof included in the Contract. In the event of any claims being made or action being brought against government or any agent, servant or employee of Government in respect of any such matters as aforesaid, the Contractor shall immediately be notified thereof. Provided that such indemnity shall not apply when such infringement has taken place in complying with the specific direction issued by Government but the Contractor shall pay any royalties or other charges payable in respect of any such use, the amount so paid being reimbursed to the Contractor only if the use was the result of any drawing and/or specifications issued after submission of the tender.

10.1.5 Subject as hereinafter provided in Condition 63 all charges on account of octroi, terminal or sales tax and other duties on materials obtained for the Works from any source (excluding materials supplied by Government) shall be borne by the Contractor.

10.1.6 The Engineer-in-Charge shall be entitled to have tests carried out as specified in the contract for any materials supplied by the Contractor other than those for which, as stated above, satisfactory proof has already been furnished, at the cost of the Contractor and the Contractor shall provide at his expense all facilities which the Engineer-in-Charge may require for the purpose. If no tests are specified in the Contract, and such tests are required by the Engineer-in-Charge, the Contractor shall provide all facilities required for the purpose and the charges for these tests shall be borne by the Contractor only if the tests disclose that the said material are not in accordance with the provision of the Contract. The cost of material consumed in tests shall be borne by the Contractor in all cases except when otherwise provided.
10.2 Materials to be supplied by Government –

10.2.1 Materials which Government, shall supply are shown in Condition 3.05 of Special Conditions of Contract which also stipulates place of issue and rate(s) to be charged in respect thereof. Soon after acceptance of the tender the Contractor shall agree in writing with the Engineer-in-Charge on a phased programme of his requirements with regard to delivery of materials.

10.2.2 In the event of delay in the supply of any stores and materials mentioned by Government, the Contractor shall be entitled to reasonable extension of time as provided for under Condition 11 but no claim for compensation or damage on any ground whatsoever shall be entertained by the Government.

10.2.3 The Contractor will be paid for “fixing only” in respect of materials salvaged from and re-fixed in the same building or another building situated within a radius of 200 metres whether such salvaged materials are included in the list of materials supplied by Govt. or not.

10.2.4 If after acceptance of the tender the Contractor desires Government to supply any further materials out of those mentioned in the Schedule and/or any other materials, such materials may be supplied by government, if available, at rates to be agreed upon between the parties. For the materials to be supplied by Govt. the Contractor shall give a reasonable notice in writing of his requirements to the Engineer-in-Charge in accordance with the agreed phased programme. Such materials shall be supplied for the purposes of the Contract only and the value of materials so supplied at the rates specified in the aforesaid Schedule shall be set off or deducted from any sums then due or which may thereafter become due to the Contractor, under the Contract.

10.2.5 The Contractor shall bear the cost of loading, transporting to Site, unloading, storing under cover as required, assembling and joining the several parts together as necessary and incorporating or fixing materials in the Works including all preparatory work of whatever description as may be required, and of closing, preparing, loading and returning empty cases or containers to the place of issue.

10.2.6 All materials issued to the Contractor by Government for incorporation or fixing in the Works (including preparatory work) shall, on completion or on foreclosure of the works and before submission of bills, be returned by the Contractor at his expense, at the place of issue, after making due allowance for actual consumption, reasonable wear and tear and/or waste. If the Contractor is required to deliver such materials at a place other than the place of issue, he shall do so and the transportation charges from the Site to such place, less the transportation charges which
would have been incurred by the Contractor had such materials been delivered at the place of issue, shall be borne by Government.

10.2.7 Surplus materials returned by the Contractor shall be credited to him by the Engineer-in-Charge at rates not exceeding those at which these were originally issued to him after taking into considerations any deterioration or damage which may have been caused to the said materials whilst in the custody of the Contractor.

10.2.8 If on completion of Works the contractor fails to return surplus materials out of those supplied by Government, then in addition to any other liability which the contractor would incur, the Engineer-in-Charge may, by a written notice to the Contractor, require him to pay within a fortnight of receipt of the notice for such unreturned and surplus materials at double the prevailing market rate as decided by the Engineer-in-Charge. If however, the contractor is not satisfied with the decision of the Engineer-in-Charge with regard to market rate, he shall be entitled to represent the matter to DG Seabird within seven days of receipt of Engineer-in-Charge decision and the decision of the DG Seabird thereon shall be final and binding.

10.3 General –

10.3.1 Materials required for the works, whether brought by the Contractor or supplied by Government, shall be stored by the Contractor only at places approved by the Engineer-in-Charge. Storage and safe custody of materials shall be at the risk and the responsibility of the Contractor.

10.3.2 Government officials concerned with the Contract shall be entitled at any time to inspect and examine any materials intended to be used in or on the Works, either on the Site or at factory or workshop or other place(s) where such materials are assembled, fabricated or manufactured or at any place(s) where these are lying or from which these are being obtained and the Contractor shall give such facilities as may be required for such inspection and examination.

10.3.3 All materials brought to the Site shall become the property of Government and shall not be removed off the Site without the prior written approval of the Engineer-in-Charge. But whenever the Works are finally completed and advance, if any, in respect of any such materials is fully recovered, the Contractor shall at his own expense forthwith remove from the Site all surplus materials originally supplied by him and upon such removal the same shall remain in and become the property of the Contractor.

11. Time, Delay and extension –

11.1 Time is of the essence of the Contract and is specified in the contract documents or in each individual Works Order.

11.1.1 As soon as possible after the Contract is let or any substantial Works Order is placed and before Work under it is begun, the Engineer-in-Charge and the Contractor shall agree upon a Time and Progress Chart.
The Chart shall be prepared in direct relation to the time stated in the contract documents or the Works Order for completion of the individual items thereof and/or the Contract or Works Order as a whole. It shall indicate the forecast of the dates for commencement and completion of the various trade processes or sections of the work, and shall be amended as may be required by agreement between the Engineer-in-Charge and the Contractor within the limitation of time imposed in the contract documents or Works Order. If the Works be delayed.

11.1.1.1 by force majeure, or

11.1.1.2 by reason of abnormally bad weather, or

11.1.1.3 by reason of serious loss or damage by fire, or

11.1.1.4 by reason of civil commotion, local combination of workmen, strike or lockout, affecting any of the trades employed on the work, or

11.1.1.5 by reason of delay on part of nominated sub-contractors, or nominated suppliers which the Contractor has, in the opinion of Engineer-in-Charge, taken all practicable steps to avoid, or reduce, or

11.1.1.6 by reason of delay on the part of Contractors or tradesmen engaged by Government in executing works not forming part of the contract, or

11.1.1.7 by reason of any other cause, which in the absolute discretion of the DG Seabird is beyond the Contractor’s control; then, in any such case the Accepting Officer may make fair and reasonable extension in the completion dates of individual items or groups of items of Works for which separate periods of completion are mentioned in the contract documents or Works Order, as applicable.

11.1.2 Upon the happening of any such event causing delay, the Contractor shall immediately, but not later than 30 days of the happening of the event, give notice thereof in writing to the Engineer-in-Charge but shall nevertheless use constantly his best endeavour to prevent or make good the delay and shall do all that may reasonably be required to the satisfaction of the Engineer-in-Charge to proceed with the works. Extension of time shall be granted by Accepting Officer of the contract

11.1.3 In case the Contractor fails to notify the Engineer-in-Charge of happening of an event(s) causing delay within the period of 30 days stipulated in 11.1.2 above, he shall forfeit his right to claim extension of time for the delay caused due to such event(s).

11.1.4 Extension of time, as granted above, shall be communicated to the Contractor by Engineer-in-Charge in writing and shall be final and binding.
11.2 If the works be delayed by reason of non-availability of Government materials then, in any such event, notwithstanding the provisions herein before contained, the Accepting Officer may in his discretion grant such extension of time as may appear reasonable to him and the same shall be communicated to the Contractor by Engineer-in-Charge in writing. The decision so communicated shall be final and binding and the contractor shall be bound to complete the works within such extended time.

11.3 No claim in respect of compensation or otherwise, howsoever arising, as a result of extensions granted under Condition 11 above shall be admitted.

12. **Patents and other Industrial Property Rights**: The prices stated in the present Contract shall be deemed to include all amounts payable for the use of patents, copyrights, registered charges, trademarks and payments for any other industrial property rights. The Seller shall indemnify the Buyer against all claims from a third party at any time on account of the infringement of any or all the rights mentioned in the previous paragraphs, whether such claims arise in respect of manufacture or use. The Seller shall be responsible for the completion of the supplies including spares, tools, technical literature and training aggregates irrespective of the fact of infringement of the supplies, irrespective of the fact of infringement of any or all the rights mentioned above.

13. **Blank**

14. **Royalties**

14.1 No royalty will be recovered for materials, which the Contractor may be allowed to remove from the land/sea which is within the premises of the Naval Base or in charge of the Govt. Authorities.

15. **Plant and Equipment**

15.1 The contractor shall at his own cost and expense, supply all tools, plants and equipment (hereinafter referred to as T & P) required for the execution of work.

16. **Transport**

16.1 The Contractor shall at his own expense arrange all transport required for the execution of the Contract.

17. **Assignment or Transfer of Contract.**

17.1 The Contractor shall not without the prior written approval of the DG Seabird assign or transfer the Contract, or any part thereof or any share, or interest therein. No sum of money to become payable under the Contract shall be payable to any person other than the Contractor unless the prior written approval of the DG Seabird to the assignment or transfer of such money is given.

18. **Sub-contracts**
18.1 The Contractor shall not sub-let any portion of the Contract without the prior written approval of the DG Seabird. The DG Seabird may invite offers for performance by sub-contractors of any work in satisfaction of prime cost sums included in the tender documents. In the exercise of this option, offers will be made returnable to the DG Seabird who shall select the firm to do the Work and inform the Contractor, who will be required to conclude a Contract with the nominated sub-contractor for the execution of the Work as specified by the DG Seabird to the sub-contractor. The DG Seabird shall not nominate any sub-contractor against whom the contractor shall make reasonable objection.

18.2 The Contractor shall be responsible for any sub-contractor or contractor who may carry out any work or supply any material in connection with the Contract, whether such person be selected by the Accepting Officer or by the Contractor. The Contractor shall make good any loss or damage suffered by Government by reason of any default, neglect or failure on the part of such person in relation to such work or material.

18.3 Nothing herein contained shall relieve the Contractor of his liabilities and obligations under the Contract or in any way affect the Contractor’s direct responsibility to Government nor shall it render Government in any way responsible to such sub-contractor.
CHAPTER- III

PERFORMANCE OF THE CONTRACT


22.1 The Contractor, within ten days of the receipt of Letter of Acceptance of his tender, shall submit a Performance Bank Guarantee of the value of 10% of the contract amount, valid up to 60 days beyond due date of completion. The format for PBG is given in Annexure-H here-in-after.

22.2 Earnest Money will be refunded to the Contractor after the PBG has been received.

23. Orders under the Contract.

23.1 All orders, notices, etc., to be given under the Contract shall be in writing, typescript or printed and if sent by registered post to the last known place of abode or business of the Contractor shall be deemed to have been served on the date when in the ordinary course of post it would have been delivered to him. The Contractor shall carry out without delay all orders given to him.


24.1 The Contractor will not be permitted to enter on (other than for inspection purposes) or take possession of the Site until instructed to do so by the Engineer-in-Charge. The portions of the Site to be occupied by the Contractor will be clearly defined and/or marked on the Site plan, and the Contractor will on no account be allowed to extend his operations beyond these areas.

24.2 The Contractor shall provide if necessary or if required on the Site all temporary access thereto and shall alter, adapt and maintain the same as required from time to time and shall take up and clear away as and when no longer required and make all good.

24.3 Engineer-in-Charge shall have power to execute other Works (whether or not in connection with the Works) on the Site contemporaneously with the execution of the Works and the Contractor shall give reasonable facilities for such purpose.

24.4 The Govt. reserves the right of taking over, at any time, any portion of the Site which it may require and the Contractor shall at his own expense clear such portion forthwith. No photographs of the Site or of the Works or any part thereof shall be taken, published or otherwise circulated, without the prior written approval of the Engineer-in-Charge. No such approval shall however exempt the Contractor from complying with any statutory provisions in regard to the taking and publication of such photographs.
24.5 Any Govt. Officials connected with the Contract shall have right of entry to the Site at all time.

24.6 The Engineer-in-Charge shall have the power to exclude from the site any labour whose admission thereto may in his opinion be undesirable for any reason whatsoever. Engineer-in-Charge shall have the power to exclude from the site any person whose admission thereto may in his opinion be undesirable for any reason whatsoever. The Contractor shall not be allowed any compensation on account of the foregoing.

25. Contractor’s Supervision –

25.1 The Contractor shall either himself (in case of Proprietor firm) supervise the execution of the Contract or shall appoint a competent Agent approved by the Engineer-in-Charge to act in his stead.

25.2 Where the Contractor is not a qualified Civil Engineer or even if he is so qualified, he cannot, in the opinion of the Engineer-in-Charge, give his full personal attention to the Works, he shall at his own expense, employ a person, possessing the adequate qualifications in Civil Engineering and/or experience as his accredited Agent to supervise the Works and to receive instructions from the Engineer-in-Charge. Contractor shall also engage adequate no of Civil Engineer/Land Surveyor for topographical survey.

25.3 The employment of Agent(s) as aforesaid shall be to the approval of the Engineer-in-Charge who may verify his qualifications and experience by referring to original degree/diploma/testimonials which shall be made available to him by the Contractor or by the individual employed or proposed to be employed.

25.4 If the Contractor fails to appoint a suitable Agent on being ordered to do so, the Engineer-in-Charge shall have full powers to suspend the execution of the Works until such date as a suitable Agent is appointed and the Contractor shall be held responsible for the delay so caused to the Works.

25.6 Orders given to the Contractor’s Agent shall be considered to have the same force as if they had been given to the Contractor himself.

25.7 The Contractor or his Agent shall be in attendance at the Site during all working hours and shall superintend the execution of the Works with such additional assistance in each trade as the Engineer-in-Charge may consider necessary.

25.8 The Contractor or his accredited Agent shall attend, when required and without making any charge for doing so, either at the office of the Engineer-in-Charge or on the Works to receive instructions.

25.9 The Engineer-in-charge shall have full powers, and without giving any reason, to require the Contractor immediately to cease to employ in connection with this Contract any Agent, servant or employee whose continued employment is in his opinion undesirable. The Contractor shall not be allowed any compensation on this account.
26. **Labour.**

26.1 The Contractor shall employ labour in sufficient number to maintain the required rate of progress and of quality to ensure workmanship of the degree required by the Specifications and to the satisfaction of the Engineer-in-Charge.

26.2 The Contractor shall remain liable for the payment of all wages or other money to his work-people or employees under the Payment of Wages Act, 1936, Minimum Wages Act, 1948, Employer’s Liability Act, 1938, Workmen’s Compensation Act, 1923, or any other Act or enactments relating thereto and rules framed there under from time to time. The Contractor shall work only on and during the hours of a working day unless he obtains the prior written approval of the Engineer-in-Charge to do otherwise. If such approval is given no liability in respect of any excess cost arising there from shall be incurred by Government.

26.3 The Contractor shall furnish to the Engineer-in-Charge every morning a distribution return of the number and description by trades of his work-people employed on the Works.

26.4 The Contractor shall during the progress of the Works comply at his own expense with all the rules and provisions contained in the Govt. Model Rules for the protection of health and sanitary arrangements for workers employed by contractors and shall at his own expense provide for all facilities in connection therewith to the satisfaction of the Engineer-in-Charge and on his failure to do so, the Engineer-in-Charge shall be entitled to provide the same and recover the cost thereof from the contractor.

26.5 The Contractor shall not employ in connection with the Works any person who has not completed his eighteen years of age.

26.6 The Contractor shall at his own expense arrange for all the safety provisions as per the Govt. Safety Code and shall at his own expense provide for all facilities in connection therewith to the satisfaction of the Engineer-in-Charge. and on his failure to do so, the Engineer-in-Charge shall be entitled to provide the same and recover the cost incurred in that behalf from the Contractor. Provided further that in case of failure to arrange for the safety provisions as above the contractor should in addition be liable to pay a penalty of Rs. 500 for each default.

27. **Blank**

28. **Anti-malarial Precautions**
28.1 The Contractor shall, at his own expense conform to all anti-malarial instructions given to him by the Engineer-in-Charge, including the filling up of borrow-pits.

29. Blank

30. Nuisance

30.1 The Contractor will not at any time do, cause or permit any nuisance or the Site or do anything which shall cause unnecessary disturbance or inconvenience to the owners, tenants or occupiers of other properties near the Site and to the public generally and will secure the efficient protection of all streams and waterways against pollution.

31. Water

31.1 Water will not be arranged by Government. Contractor shall make his own arrangements for all requirements of water. The contractor shall make his own arrangements for storing the water required for the works, labour & workmen etc at his own expense. Potable water shall be used to fulfil the requirements.

32. Temporary Workshops, Stores, etc.

32.1 The Contractor shall during the progress of the Works provide, erect and maintain at his own expense all necessary temporary workshops, stores, offices, etc., as are required for the proper and efficient execution of the Works. The planning, siting and erection of these buildings shall be to the approval of the Engineer-in-Charge and they shall at all times be kept tidy and in a clean and sanitary condition in consonance with environmental norms at Karwar, Naval Base to the entire satisfaction of the Engineer-in-Charge and at the Contractor's expense.

32.2 On completion of the Works the whole of such temporary buildings shall be cleared away and the Site reinstated and left clean and tidy to the entire satisfaction of the Engineer-in-Charge and at the Contractor's expense.

32.3 Additionally, the Engineer-in-Charge may at his discretion permit the Contractor to occupy as workshops and stores such Government buildings as may be available at the Site or Station for that purpose and, in the event of the Contractor occupying such accommodation, the prescribed rent for the same shall be recoverable from him. The Contractor undertakes to maintain such premises at his own expense in a clean and sanitary condition and to deliver up the same on the completion of the Works or the termination of the Contract, or in the event of the said buildings being required by the Engineer-in-Charge within one month of an order to that effect, in a clean state complete in every particular (damage from the accepted risks and fair wear and tear excepted).

33. Blank

34. Tools and Plant on Site
34.1 All tools, plant and equipment brought to the Site shall become the property of Government and shall not be removed off the Site without the prior written approval of the Engineer-in-Charge. But whenever the Works are finally completed or the Contract is determined for reasons other than the default of the Contractor, the Contractor shall forthwith remove from the Site all tools, plant and equipment (other than such as may have been provided by Government) and upon such removal, the same shall revert in, and become the property of the Contractor.

35. Statement of Hire Charges (Not Applicable)

35.1 A weekly detailed statement of the hire charges incurred in respect of Government tools, plant, equipment and/or transport shall be given to the Contractor by the Engineer-in-Charge. (Not Applicable)

36. Precautions against Risks

36.1 The Contractor shall be responsible at his own expense, for precautions to prevent loss or damage from any and all risks other than for Accepted Risks and to minimize the amount of any such loss or damage and for the provision of all protective works, casings, coverings, etc., required for the purpose, until the Works have been handed over complete to the Engineer-in-Charge.

36.2 All Government buildings rented to the Contractor for workshops or stores shall be insured by the Contractor in favour of Government to their full value against risk of loss or damage from whatsoever cause arising other than the accepted risk, and the policy of insurance and receipts for premiums shall be produced when required by the Engineer-in-Charge; provided always that where part only of a building is rented to the contractor, he will be required to insure the building only if used by him for the purpose of storing or using materials of a combustible nature, as to which the decision of the Engineer-in-Charge shall be final and binding.

36.3 The Contractor shall provide all watchmen necessary for the protection of the Site, the Works and of materials and plant and all things on the Site during the progress of the Works, and shall solely be responsible for and shall take all reasonable and proper steps for protecting, securing, lighting and watching all places on or about the Works and the Site which may be dangerous to any person whomsoever.

37. Notices and Fees

37.1 The Contractor shall give all notices required by any statutory provisions or by the regulations and/or bye-laws of any local authority and/or of any public service, company or authority affected by the Works or with whose systems the same are or will be connected and he shall pay and indemnify Government against any fees, or charges demandable by law under such acts, regulations and/or bye-laws in respect of the Works and shall make and supply all drawings and plans required in connection with any such notices.
38. Setting out the Works (As applicable)

38.1 The Engineer-in-Charge, shall supply dimensioned drawings, levels and other information necessary to enable the Contractor to set out the Works. The Contractor shall set out the Works and shall provide and fix all setting out apparatus required and solely be responsible for the correctness and maintenance of the setting out. No work shall commence till the setting out is approved by the Engineer-in-Charge.

39. Site Drainage (As applicable)

39.1 All water that may accumulate on the Site during the progress of the Works, or in trenches and excavations, from other than the accepted risks, shall be removed from the Site to the entire satisfaction of the Engineer-in-Charge, and at the Contractor's expense.

40. Excavation

40.1 Material of any kind obtained from excavation on the Site shall remain the property of Government and shall be disposed off as Engineer-in-Charge directs.

41. Foundations

41.1 The Contractor shall not lay any foundations until the excavations for the same have been examined and approved in writing by the Engineer-in-Charge.

42. Covering in Work

42.1 The Contractor shall give reasonable notice in writing to the Engineer-in-Charge whenever any work is to be permanently covered or concealed, whether by earth or other means and in default of so doing shall, if required by the Engineer-in-Charge uncover such work at his own expense. Extra soil required for filling, etc. shall be obtained only from those places for which prior written approval has been given by the Engineer-in-Charge.

43. Approval of Works by Stages

43.1 All Work embracing more than one process, shall be subject to examination and approval at each stage thereof and the Contractor shall give due notice in writing to the Engineer-in-Charge when each stage is ready. In default of such notice being received, the Engineer-in-Charge shall be entitled to appraise the quality and extent thereof and in the event of any dispute the decision of the Engineer-in-Charge thereon shall be final and binding.
44. **Execution of the Works**

44.1 The works shall be executed in a workmanlike manner and to the satisfaction in all respect of the Engineer-in-Charge. In the case of Measurement and Lump Sum Contracts, the Engineer-in-Charge will communicate or confirm his instructions to the Contractor in respect of the execution of work in a “Works Site Order Book” maintained at his office and the Contractor shall visit this office daily and shall confirm receipt of such instructions by signing the relevant entries in this book. Such entries will rank as orders or notices in writing within the intent and meaning or these conditions.

45. **Day Work**

45.1 No day work shall be performed without the prior instructions of the Engineer-in-Charge.

45.2 The Contractor shall give to the Engineer-in-Charge reasonable notice of the start of any work ordered to be executed by day work and shall deliver to the Engineer-in-Charge within two days of the end of each pay week a return in duplicate giving full detailed account of labour and materials for that pay week. One of these returns if found correct, will be certified by the Engineer-in-Charge and returned to the Contractor and must be produced at the adjustment of account.

46. **Inspection of the Works**

46.1 Govt. Officers concerned with the contract shall have power at any time to inspect and examine any part of the Works and the Contractor shall give such facilities as may be required to be given for such inspection and examination.

46.2 Should the Engineer-in-Charge consider, at any time during the progress of work or prior to the expiry of twelve calendar months after the works have been handed over (hereinafter referred to as the ‘Defect Liability Period’) that any work has been executed with unsound, imperfect or unskilful workmanship or of a quality inferior to that contracted for or not otherwise in accordance with the Contract (in respect whereof the decision of the Engineer-in-Charge shall be final and binding), the Contractor shall, on demand in writing from the Engineer-in-Charge specifying the fault notwithstanding that the same may have been inadvertently passed, certified and paid for, forthwith rectify or remove and reconstruct the Work so specified, in whole or in part as the case may require, at his own expense; and in the event of his failing to do so within a period to be specified by the Engineer-in-Charge in his demand aforesaid, the Engineer-in-Charge may carry out the Work by other means at the risk and expense in all respects of the Contractor.
47. **Responsibility for Buildings**

47.1 In the event of any building or part, of a building being handed over to the Contractor for the execution of Works thereto under the provisions of the Contract, he shall give a written receipt for all fixtures, glass etc., and he shall be required to make good at his own expense all damage resulting from any cause whatsoever, accepted risks and fire excepted (unless such fire shall have been caused through the negligence of the Contractor or any of his agents, servants or employees) while in his charge and to deliver up the said building or part thereof to the Engineer-in-Charge in a clean state complete in every particular, on the completion of the Works.

48. **Damage and Loss**

48.1 All plant, temporary building, equipment, and things on the Site provided by or on behalf of the Contractor for the construction of, but not for incorporation in the Works shall stand at the risk and be in the sole charge of the Contractor and the Contractor shall be responsible for, and with all possible speed make good, any loss or damage thereto arising from any cause whatsoever, including the accepted risk.

48.2 Save as above, the works and all materials and things whatsoever including such as may have been provided by Government on the Site in connection with and for the purpose of the Contract shall stand at the risk and be in the sole charge of the Contractor and the Contractor shall be responsible for, and with all possible speed make good, any loss or damage thereto arising from any cause whatsoever, other than the accepted risks and shall deliver up all the Works to the Engineer-in-Charge in a clean state, complete in every particular. In the event of any loss or damage to Works & materials on the Site from any of the accepted risks, or loss or damage from accepted risk and fire to Govt. buildings handed over to contractor for execution of works referred to in Condition 47, the following provisions shall have effect:

48.2.1 the Contractor shall, as may be directed in writing by the Engineer-in-Charge, remove from the Site any debris and so much of the Works as shall have been damaged, taking to the Engineer-in-Charge store such articles and/or materials as may be directed;

48.2.2 the Contractor shall, as may be directed in writing by the Engineer-in-Charge, proceed with the erection and completion of the Works under and in accordance with the provisions and conditions of the contract; and

48.2.3 there shall be added to the Contract Sum the net amount due, ascertained in the same manner as for deviations, or as prescribed for payment, in respect of the re-execution of the Works lost or damaged, the
replacement of any materials and things lost or damaged but not incorporated in the Works at the date when the loss or damage occurred, and the removal by the Contractor as provided above the debris and damaged Work referred to therein.

48.2.4 Provided always that the Contractor shall not be entitled to payment under this Condition in respect of so much loss or damage as has been occasioned by any failure on his part to perform his obligations under the Contract.

48.3 Save as provided above, the Contractor shall at his own expense reinstate and make good to the satisfaction of the Engineer-in-Charge or make compensation for any injury, loss or damage occasioned to any property or right whatever including property and rights of Government (or agents, servants, or employees of Government) being injury, loss or damage arising out of or in any way in connection with the execution or purported execution of the Contract and further, the Contractor shall indemnify Government against all claims enforceable against Government (or any agent, servant or employee of Government) or which would be so enforceable against Government were Government, a private person, in respect of such injury (including injury resulting in death), loss or damage to any person whomsoever or property, including all claims which may arise under the Workmen’s Compensation Act or otherwise.

49. Completion

49.1 The Works shall be completed to the entire satisfaction of the Engineer-in-Charge and in accordance with the Contractor’s forecast of time and progress where operative. All unused stores and materials, tools, plant, equipment, scaffolding, temporary buildings, huts and things belonging to the Contractor (other than such items as are required for rectification of defects) shall be removed and the Site of Works cleared of rubbish and all waste materials by the Contractor, at his own expense and delivered up clean and tidy to the satisfaction of the Engineer-in-Charge on or before the date for completion.

49.2 All unused or surplus stores and materials and other items out of those provided by the Government shall be returned by the Contractor, at his own expense, within such period as may be notified by the Engineer-in-Charge, to the place of issue against written receipts from the Engineer-in-Charge.

49.3 Soon after the rectification of defects, any stores and materials and other items mentioned above, retained for rectification of defects shall also be removed and Site and Works cleared as above and delivered to the Engineer-in-Charge in a neat state.

49.4 Immediately after completion of an item of Works or a group of items of Works for which a separate period of completion has been mentioned in contract, the Contractor shall give notice thereof to the Engineer-in-Charge.

49.5 In the case of groups of items of Works for which separate periods of completion are given in the Contract, the Engineer-in-Charge may take over from the Contractor such individual items as are completed to his satisfaction before
the completion of the entire group, but for all purposes of the Contract except for compensation for delay, the completion of the entire group shall be taken into account.

49.6 The Project Seabird based on Engineer-in-Charge recommendation shall take over from the Contractor from time to time items or groups of items of Works for which separate periods of completion have been mentioned in the contract and which have been completed to the satisfaction of the Project Seabird/Engineer-in-Charge.

49.7 The Project Seabird shall certify to the Contractor the Date(s) on which the items or group of items of Works are completed and taken over and the state thereof based on Engineer-in-Charge certification.

50. Compensation for Delay/Liquidated Damages

50.1 If the Contractor fails to complete the Works and clear the site on or before the date(s) fixed for completion, he shall, without prejudice to any other right or remedy of Government on account of such breach, be liable to pay compensation and not as penalty at the rate of ½ % (half a percent) of the Contract value of the item or group of items of Work (excluding the contract value of such individual items as are completed and taken over by Engineer-in-Charge on or before the date(s) fixed for completion, in terms of Condition 49 hereof) for which a separate period of completion is given in the Contract, for every week or part thereof that the whole of the work in respect of the item or group of items of Works concerned remains uncompleted, even though the Contract as a whole be completed by the latest date-specified in the Contract for any item or group of items of Works.

50.2 For the purpose of this condition the “Contract Value” shall be the value at contract rates of the work as actually ordered including all deviation orders on the Contractor. Provided always that the total amount of compensation to be paid under this Condition shall not exceed to 10% (Ten percent) of the contract value of the item or group of items of Work for which a separate period of completion is given.

50.3 The provision under this Clause shall not apply in the cases of delay for which CONTRACTOR is entitled to extension of completion time as per contract.

50.4 The Project Seabird may without prejudice to any other method of recovery, deduct the amount of liquidated damages from any money in his hands due or become due to the CONTRACTOR.

50.5 The payment or deduction of such liquidated damages shall not relieve the CONTRACTOR of his obligation to complete the work or any other of his obligations and liabilities under the Contract.

51. Laws Governing the Contract

51.1 This Contract shall be governed by the Indian Laws for the time being in force.
52. **Cancellation of Contract for Corrupt Acts**

52.1 The Accepting Officer whose decision shall be final and binding, shall, without prejudice to any other right or remedy which shall have accrued or shall accrue thereafter to Government, cancel the Contract in any of the following cases and the Contractor shall be subject to payment of any loss or damage resulting, from any such cancellation to the like extent as is provided in the case of cancellation for default:

If the Contractor shall –

52.1.1 offer or give or agree to give to any person in Government service any gift or consideration of any kind as an inducement or reward for doing or forbearing to do or for having done or forborne to do any act in relation to the obtaining or execution of this or any other Contract for Government service, or

52.1.2 enter into a Contract with Government in connection with which commission has been paid or agreed to be paid by him or to his knowledge, unless the particulars of any such commission and the terms of payments thereof have previously been disclosed in writing to the Accepting Officer, or

52.1.3 obtain a contract with Government as a result of ring tendering or other *non bonafide* methods of competitive tendering without first disclosing the fact in writing to the Accepting Officer.

53. **Cancellation of Contract for Insolvency, Sub-letting, etc**

53.1 The Accepting Officer may, without prejudice to any other right or remedy which shall have accrued or shall accrue thereafter to Government, cancel the Contract in any of the following cases:

53.1.1 If the Contractor –

53.1.1.1 being an individual or if a firm, any partner thereof shall at any time be adjudged insolvent or have a receiving order or order for administration of his estate made against him or shall take any proceedings for liquidation or composition under any Insolvency Act for the time being in force or make any conveyance or assignment of his effects or composition or arrangement for the benefit of his creditors or purport so to do or if any application be made under any
Insolvency Act for the time being in force for the sequestration of his estate or if a trust deed be granted by him for behalf of his creditors;

or

53.1.1.2 being a company shall pass a resolution or the Court shall make an order for the liquidation of its affairs or a receiver or manager on behalf of the debenture holders shall be appointed or circumstances shall arise which entitle the Court or debenture holders to appoint a receiver or manager;

or

53.1.1.3 assigns, transfers, sub-lets or attempts to assign, transfer or sub-let, any portion of the Works without the prior written approval of the Accepting Officer.

53.2 Whenever the Accepting Officer exercises his authority to cancel the Contract under this condition, he may complete the Works by any means at the Contractor’s risk and expense provided always that in the event of cost of completion or after alternative arrangements have been finalised by the Government to get the Works completed, estimated cost of completion (as certified by Engineer-in-Charge) being less than the Contract cost, the advantage shall accrue to the Government. If the cost of completion or after alternative arrangements have been finalised by the Government to get the Works completed, estimated cost of completion (as certified by Engineer-in-Charge) exceeds the moneys due to the Contractor under this Contract, the Contractor shall either pay the excess amount ordered by Engineer-in-Charge or the same shall be recovered from the Contractor by other means.

53.3 The Government shall also be at liberty to hold and retain in their hands materials, tackle, machinery and stores of all kinds on Site, as they may think proper and may at any time sell any of the said materials, tackle, machinery and stores and apply the proceeds of sale in or towards the satisfaction of any loss which may arise from the cancellation of the Contract as aforesaid.

53.4 The Government shall also be at liberty to use the materials, tackle, machinery and other stores on site of the Contractor as they think proper in completing the work and the Contractor will be allowed the necessary credit. The value of the materials and stores and the amount or credit to be allowed for tackle and machinery belonging to the Contractor and used by the Government in completing the work shall be assessed by the Engineer-in-Charge and the amount so assessed shall be final and binding.

53.5 In case the Government completes or decides to complete the Works under the provisions of this Condition the cost of such completion to be taken into account in determining the excess cost to be charged to the Contractor under this Condition shall consist of the cost or estimated cost (as certified by Engineer-in-Charge) of materials purchased or required to be purchased and/or the labour provided or required to be provided by the Government as also the cost of the Contractor’s materials used with an addition of such percentage to cover
superintendence and establishment charges as may be decided by the Accepting Officer whose decision shall be final and binding.

54. Cancellation of Contract in part or in full for Contractor's Default

54.1 If the Contractor:

54.1.1 makes default in commencing the Works within a reasonable time from the date of the handing over the site, and continues in that state after a reasonable notice.

or

54.1.2 in the opinion of the Engineer-in-Charge at any time, whether before or after the date or extended date for completion, makes default in proceeding with the Works, with due diligence and continues in that state after a reasonable notice.

or

54.1.3 fails to comply with any of the terms and conditions of the Contract, or after reasonable notice in writing with orders properly issued there under,

or

54.1.4 fails to complete the Works, Work order and items of Works, with individual dates for completion and clear the Site on or before the date of completion.

or

54.1.5 Stops the work at site for two week continuously at any time, whether before or after the date or extended date of completion.

or

54.1.6 Shows his inability to continue with the work at any time, whether before or after the date or extended date of completion.

54.2 The Accepting Officer may, without prejudice to any other right or remedy which shall have accrued or shall accrue thereafter to Government, cancel the Contract as a whole or only such Work Order(s) or items of Work in default from the Contract. Whenever the Accepting Officer exercises his authority to cancel the Contract as a whole or in part under this Condition he may complete the Work by any means at Contractor's risk and cost, provided always that in the event of cost of completion or after alternative arrangements have been finalised by the Government to get the Works completed, estimated cost of completion (as certified by Engineer-in-Charge) being less than the Contract cost, the advantage shall accrue to the Government. If the cost of completion or after alternative arrangements have been finalised by the Government to get the Works completed, estimated cost of completion (as certified by Engineer-in-Charge) exceeds the moneys due to Contractor under this Contract, the Contractor shall either pay the excess amount ordered by Engineer-in-Charge or the same shall be recovered from the Contractor by other means. The Government shall also be at liberty to hold and retain in their hands materials, tackle, machinery and stores of all kinds on Site, as they may think proper and may at any time sell any of the said materials, tackle, machinery and stores and apply the proceeds of sale in or
towards the satisfaction of any loss which may arise from the cancellation of the Contract as aforesaid.

54.3 The Government shall also be at liberty to use the materials, tackle, machinery and other stores on Site of the Contractor as they think proper in completing the work and the Contractor will be allowed the necessary credit. The value of the materials and stores and the amount of credit to be allowed for tackle and machinery belonging to the Contractor and used by the Government in completing the work shall be assessed by the Engineer-in-Charge and the amount so assessed shall be final and binding. In case the Government completes or decides to complete the Works or any part thereof under the provision of this Condition, the cost of such completion to be taken into account in determining the excess cost to be charged to the Contractor under this Condition shall consist of the cost or estimated cost (as certified by Engineer-in-Charge) of materials purchased or required to be purchased and/or the labour provided or required to be provided by the Government as also the cost of the Contractor’s materials used with an addition of such percentage to cover superintendence and establishment charges as may be decided by the Accepting Officer, whose decision shall be final and binding.

55. **Termination of Contract for Death**

55.1 Without prejudice to any of the rights or remedies under this contract, if the Contractor dies, the Accepting Officer shall have the option of terminating the Contract without compensation to the Contractor.

56. **Blank**

57. **Special Powers of Determination**

57.1 If at any time after the acceptance of the tender Government shall for any reason whatsoever not require the whole or any part of the Works, to be carried out, the Accepting Officer shall give notice in writing of the fact to the Contractor, who shall have no claim to any payment of compensation or otherwise howsoever on account of any profit or advantage which he might have derived from the execution of the Works in full but which he did not derive in consequence of the foreclosing of the Works.

57.2 He shall be paid at Contract rates for the full amount of the Work executed including such additional Works, e.g., clearing of Site, etc., as may be rendered necessary by the said foreclosing. He shall also be allowed a reasonable payment (as decided by the Accepting Officer) for any expenses sustained on account of labour and materials collected but which could not be utilised on the Works as verified by the Engineer-in-Charge.

58. **Fair Wage**

58.1 The contractor shall pay not less than the “fair wage” as defined below or the minimum wage fixed under the Minimum Wages Act, whichever is higher to labourers engaged by him on the Work.
“Fair Wage” means wage whether for time or piece work notified at the time of inviting tenders for the Work and where such wages have not been so notified the wages prescribed by the Accepting Officer for the stations at which the Work is done.

58.2 The Contractor shall notwithstanding the provision of any Contract to the contrary, cause to be paid a “fair wage” or minimum wage fixed under the Minimum Wages Act whichever is higher to labourers indirectly engaged on the Work including any labour engaged by his sub-contractors in connection with the said Work, as if the labourers had been directly employed by him.

58.3 In respect of all labour directly or indirectly employed on the Works for the performance of the Contractor’s part of this Agreement, the Contractor shall comply with or cause to be complied with the Contractor’s Labour Regulations (appended hereto as Annexure “A” to these Conditions) in regard to all matters provided therein and with all other Labour Laws as may be applicable.

58.4 The Engineer-in-Charge concerned shall have the right to deduct, from the moneys due to the Contractor, any sum required or estimated to be required for making good the loss suffered by a worker or workers by reason of non-fulfilment of the Conditions of the Contract for the benefit of the workers, non-payment of wages or of deductions made from his or their wages, which are not justified by the terms of the Contract or non-observance of the Regulations.

58.5 Vis-à-vis the Government, the Contractor shall be primarily liable for all payments to be made under and for the observance of the Regulations aforesaid without prejudice to his right to claim indemnity from his sub-contractors.

58.6 The Regulations aforesaid shall be deemed to be a part of this Contract and any breach thereof shall be a breach of this Contract.
CHAPTER-IV

VALUATION AND PAYMENT

61. Records and Measurement

61.1 All items having a financial value shall be entered in the Measurement Book or other approved Form, as applicable so that a complete record is obtained of all Work performed under the Contract.

61.2 Mobilisation/ demobilisation, etc priced in Schedule /Bill of quantities as a unit lump sum will be entered by number as the unit lump sum.

61.3 Work carried out for agreed lump sums will be described and similarly recorded.

61.4 Measurement shall be restricted to that required to ascertain the financial liability of Government under the Contract.

61.5 Work which falls to be measured in details shall be measured physically, without reference to any local custom that may obtain, excepting where it may otherwise be directed in the tender documents. The measurements shall be taken jointly by any person or persons duly authorized on the part of the Engineer in charge and by the Contractor.

61.6 The Engineer-in-Charge shall give reasonable notice in writing to the Contractor of appointment for measurement.

61.7 The contractor shall, without extra charge, provide assistance with every appliance and other things necessary for measurement.

61.8 The Contractor shall bear all the costs of his own measurement.

61.9 Measurements shall be entered in the Measurement Book or other approved Form as applicable and signed and dated by both parties each day on the Site on completion of measurement. If the Contractor objects to any of the Measurements recorded on behalf of the Engineer-in-Charge a note to that effect will be made in the Measurement Book or other approved Form as applicable against the item or items objected to; and such note shall be signed and dated by both parties engaged in taking the measurements.

61.10 If as a result of such objection, it becomes necessary to re-measure the Work wholly or in part the expense of such re-measurement shall be borne by the party requiring the measurements to be retaken provided that a net error is found by this re-measurement to amount to less than 5 per cent of the value as recorded by the first measurements. But where the net errors amount to 5 per cent or over of the said value, then the cost is to be borne by the other Party. In any case, if the net value of errors found exceeds Rs.1000, the expense of re-measurement is to be borne by the other party.
61.11 If the Contractor’s representative fails to attend when required, the Engineer-in-Charge shall have power to proceed by himself to take measurements and in that case, these measurements shall be accepted by the Contractor as final.

62. Valuation of Variations

62.1 Should it be found necessary to execute any item of work (either in fixed scope or variable scope) which is not included in the scope of contract/drawings, the rates for such item of work shall be fixed as follows:

   62.1.1 Where the extra works are of similar character and of equivalent value and/ or executed under similar conditions as to any item of work appearing at schedule of quantities, then the rates for such extra items shall be equal to the rates of such items or lower rate of the identical item

   62.1.2 If the extra works are of similar character but differing in particulars and value then the rate of such item or items as modified by the applicable price variation or at direct pro-rata rates shall be derived from Schedule of Quantities.

62.1.3 Where items of similar character are not contained in the schedule of quantities and none of the foregoing methods are applicable, rates shall be based on the MES standard schedule of rates (SSR) 2010 (Part II – Rates) together with up-to-date amendments as applicable to said schedule plus 20% increase.

62.1.3 If the rate cannot be obtained by any of the methods referred above, the rates shall be decided on the basis of the cost to the Contractor at site of work plus 15% to cover overheads and profit.

63. Re-imbursement/refund on variation in price

63.1 The contract price/agreed rates shall be firm and binding and shall not be subject to any variation/escalation due to change in cost of materials, labour rates, any exchange variations fluctuations in railway freight and any conditions whatsoever during the tenure of the contract.

64. Blank.

65. Final Bill

65.1 The Final Bills shall be submitted by the Contractor in seven copies within three months of physical completion of the works to the satisfaction of the Engineer-in-Charge.

65.2 It shall be accompanied by all abstracts, vouchers, etc., supporting it and shall be prepared in the manner prescribed by the Engineer-in-Charge.

65.3 No further claims shall be made by the Contractor after submission of the Final Bill and these shall be deemed to have been waived and extinguished.
65.4 The Contractor shall be entitled to be paid the final sum less the value of payments already made on account, subject to the certification of the final bill by the Engineer-in-Charge.

65.5 No charges shall be allowed to the Contractor on account of the preparation of the final Bill.

65.6 The following documents are required to be submitted by the contractor to the paying authority along with the bill:-

65.6.1 Ink-signed copy of contingent bill / Seller’s bill/ Commercial Invoice.

65.6.2 DP extension letter indicating whether extension is with or without LD.

65.6.3 Details for electronic payment viz Account holder’s name, Bank name, Branch name and address, Account type, Account number, IFSC code, MICR code.

65.6.4 Any other document / certificate that may be provided for in the Supply Order / Contract.

65.6.5 Completion certificate issued by Project Seabird/Project Consultant Engineer.

66. Payments of Bills

66.1 Payment of those items of the Final Bill in respect of which there is no dispute shall be made within the period specified hereunder, the period being reckoned from the date of receipt of the Bill by the Engineer-in-Charge:-

66.1.1 Contract amount not exceeding Rs.100 lakhs – Four months

66.1.2 Contract amount exceeding Rs.100 lakhs – Six months

66.2 After payment of the amount of the final bill payable as aforesaid has been made, the Contractor, may if he so desires, reconsider his position in respect of the disputed portion of the final bill and if he fails to do so within 90 days, his disputed claim shall be dealt with as provided in the Contract.

66.3 All payments due under this Contract shall be made by means of a crossed cheque to the Contractor “A/c Payee” only at the treasury located in the station where either the Work is executed or services rendered or at the treasury nearest to the station where the office of the Accepting Officer is located or through E-Payment.

66.4 The Contractor is required to acknowledge receipt of all cheques issued in his favour. With regard to Cheques sent to him by post, he shall acknowledge receipt within fifteen days from the date of their receipt. Failure on the part of the Contractor to acknowledge receipt will render him liable to forfeit the facility of receiving cheques by post and unless the Contractor furnishes a satisfactory
explanation for his default in this respect payment through cheques sent by post shall not be resumed, and the Contractor shall be required to obtain cheques for future payments on this Contract from the office of the Accepting Officer after rendering proper receipt.

67. **Recovery from Contractor**

67.1 Whenever any claim(s) for payment of sum of money arise(s) out of or under this Contract against the contractor, the Contractor shall on demand make the payment of the same or agree for effecting adjustment from any amounts due to him by the Government. If, however, he refuses or neglects to make the payment on demand, or does not agree for effecting adjustment from any amounts due to him, Government shall be entitled to withhold an amount not exceeding the amount of the claim(s), from any sum when due or which at any time thereafter may become due to the Contractor, under this or any other Contract with the Government or from any other sum due to the Contractor from the Government (which may be available with the Government) or from the Contractor’s Security Deposit or Security Bond amount, and retain the same by way of lien till such time, payment is made by the Contractor or till the claim(s) is/are settled or adjudicated upon, or till the Contractor, at his expense furnishes Fixed Deposit Receipt(s) duly endorsed as directed by the Accepting Officer, or a Guarantee Bond from a Scheduled Bank for an amount equal to the amount of the claim(s) in the form as directed by the Accepting Officer.

67.2 It is an agreed condition of this Contract that the sum of money so withheld or retained as and by way of lien under this condition by the Government, will be kept withheld or retained as such by the Government, till the claim(s) arising out of or under this Contract is/are settled or adjudicated upon and that the Contractor will have no claim for interest or damages whatsoever on any account in respect of such sum so withheld.

67.3 For the purpose of this Condition, where the contractor is a Partnership Firm, the Government shall be entitled to withhold in whole or in part as may be necessary to cover the amount claimed, any sum found payable to any partner of the Firm, whether in his individual capacity or otherwise.

67.4 Any amount due to the Contractor under this contract may be withheld by way of lien against any amount claimed or which may at any time hereafter be claimed by the Government from the contractor on any account whatsoever, under this or any other contract between them and retained, till the claim(s) is/are settled or adjudicated upon.

67.5 Government reserve the right to carry out post-payment audit and technical examination of the works and Final Bill, including all supporting vouchers, abstracts, etc. Government further reserve the right to carry out the aforesaid examination and enforce recovery when detected, notwithstanding the fact that the amount of the Final Bill may have been included by one of the parties as an item of dispute before an Arbitrator appointed under the Arbitration clause of the Contract and notwithstanding the fact that the amount of the Final Bill figures in the Arbitrator’s award.
67.6 If, as a result of such audit and technical examination, any over-payment is discovered in respect of the work done under this Contract, the contractor shall on demand make payment of a sum equal to the amount of over-payment or agree for effecting necessary adjustment from any amounts due to him by Government. If however, he refuses or neglects to make the payment on demand or does not agree for effecting adjustment from any amounts due to him, Government shall be entitled to take action as in sub-para 67.1 hereinbefore. If as a result of such audit and technical examination any under payment is discovered, the amount of under payment shall be duly paid to the Contractor by Government.

67.7 Provided, that, nothing hereinbefore contained shall entitle the Government to recover any over payment in respect of any price agreed between the Accepting Officer or the Engineer–in-Charge and the Contractor under the circumstances specifically prescribed for such method of assessment and that the said right of the Government to adjust over-payment from any sum due or from any sum which may become due to the Contractor or from Security Deposit or Security Bond amount and adjust under payment, shall not extend beyond a period of two years from the date of payment of the undisputed portion of the Final Bill or in the case of a minus Bill, from the date, the net amount of the final bill is communicated to the Contractor.

67.8 All notices under this condition shall be given by the Engineer-in-Charge /Accepting officer.

68. Refund of Security Deposit.

68.1 The Security Deposit mentioned in Condition 22 above may be refunded to the Contractor after the satisfactory completion and issue of Completion Certificate and payment of the Final Bill provided there are no claims outstanding against the Contractor.

69. Issue of notices.

69.1 Subject as otherwise provided in this Contract, all notices to be given on behalf of the President of India and all other actions to be taken on his behalf may be given or taken on his behalf by the Accepting Officer/Engineer-in-Charge /Project Consultant-Engineer or any officer for the time being entrusted with the functions, duties and powers of the Accepting Officer/Engineer--in-Charge.

70. Arbitration.

70.1 In accordance with the Arbitration and Conciliation Act, 1996, all disputes, between the parties to the Contract (other than those for which the decision of the Accepting Officer or any other person is by the Contract expressed to be final and binding) shall, after written notice by either party to the Contract to the other of them, be referred to the sole arbitration of a serving officer having degree in engineering or equivalent or having passed final/ direct final examination of Sub Division II of Institution of Surveyors (India) recognised by the Govt. of India to be appointed by Addl. Secretary, Government of India, Ministry of Defence.
70.2 Unless both parties agree in writing such reference shall not take place until after the completion or alleged completion of the Work or termination or determination of the Contract under Condition Nos. 55 and 57 hereof.

70.3 Provided that in the event of abandonment of the Works or cancellation of the Contract under Condition 52, 53 or 54 hereof, such reference shall not take place until alternative arrangements have been finalized by the Government to get the Works completed by or through any other Contractor or Contractors or Agency or Agencies.

70.4 Provided always that commencement or continuance of any arbitration proceeding hereunder or otherwise shall not in any manner militate against the Government’s right of recovery from the contractor as provided in Condition 67 hereof.

70.5 If the Arbitrator so appointed resigns his appointment or vacates his office or is unable or unwilling to act due to any reason whatsoever, the authority appointing him may appoint a new Arbitrator to act in his place.

70.6 The Arbitrator shall be deemed to have entered on the reference on the date he issues notice to both the parties, asking them to submit to him their statement of the case and pleadings in defence.

70.7 The Arbitrator may proceed with the arbitration, exparte, if either party, inspite of a notice from the Arbitrator fails to take part in the proceedings.

70.8 The Arbitrator may, from time to time with the consent of the parties, enlarge, the time up to but not exceeding one year from the date of his entering on the reference, for making and publishing the award.

70.9 The Arbitrator shall give his award within a period of six months from the date of his entering on the reference or within the extended time as the case may be on all matters referred to him and shall indicate his findings, along with sums awarded, separately on each individual item of dispute.

70.10 The venue of Arbitration shall be such place or places as may be fixed by the Arbitrator in his sole discretion.

70.11 The award of the Arbitrator shall be final and binding on both parties to the Contract.

70.12 The Arbitrator shall give reasons for the award in each and every case irrespective of the value of the claims or counter claims.
71. JURISDICTION OF COURTS

71.1 Irrespective of the place of issue of Tenders, the place of acceptance of Tenders, the place of execution of Contract or the place of payment under the Contract, the Contract shall be deemed to have been made at the place from where the acceptance of Tenders has been issued and the work is executed/executable. The Courts of the place from where the acceptance of the Tender has been issued or the place where the work is executed/under execution shall alone have jurisdiction to decide any dispute arising out of or in respect of the Contract.

72. INSURANCE

72.1 Contractor’s liability and insurance

72.1.1 From commencement of completion of the works, the Contractor shall take full responsibility for the care thereof and for taking precautions to prevent loss or damage to the greatest extent possible and shall be liable for any damage or loss that may happen to the works or any part thereof from any cause whatsoever and shall at his own cost repair and make good the same so that at completion, the works shall be in good order and condition and in conformity in every respect with the requirements of the contract and instructions of the Engineer.

72.1.2 Without limiting his obligations and responsibilities under Condition 47 prior to the commencement of work, the Contractor shall insure in the joint name of the Government and the Contractor against all loss or damage from whatever cause for which he is responsible under the terms of the contract and in such manner that the Employer and the Contractor are covered during the period of construction of the works and that defects liability prior to the commencement of the damage caused by the Contractor in the course of any operation carried by him for the purposes of complying with his obligations on safety code.

72.1.2.1 The works and the temporary works to the full value of such works executed from time to time.

72.1.2.2 The materials constructional plant and other things brought to site by the Contractor to the full value of such materials, constructional plant and other things.

72.2 Damage to persons and property

72.2.1 The Contractor shall indemnify and keep indemnified the Government against all losses and claims for injuries or damage to any person or any property whatsoever which may arise out of or in consequence of the construction and maintenance of the works and against all claims, demands, proceedings, damages, costs, charges and expenses whatsoever in respect of or in relation thereto.
72.2.2 Before commencing the execution of the work, the Contractor shall without in any way limiting his obligations and responsibilities under the conditions, insure any damage, loss or injury which may occur to any property including that of the Government or to any person (including any employee of Govt.) by or arising out of carrying out of the contract.

72.2.3 Where a Government’s building or a part thereof is rented to the Contractor, he shall insure the entire building if the building or any part thereof is used by him for the purpose of storing or using materials of combustible nature. In case of doubt in the matter, the decision of the Engineer shall be final and binding on the Contractor.

72.2.4 All the aforesaid insurance policies shall provide that they shall not be cancelled till the Government has agreed to their cancellation.

72.2.5 The Contractor shall prove to the Engineer or his authorized representative form time to time that he has taken out all the insurance policies referred to above and has paid the necessary premium for keeping the policies alive till completion of work.

**72.3 Remedy on Contractors failure to insure**

72.3.1 If the Contractor and / or his sub-Contractors (if any) shall fail to effect and keep in force the insurance referred to above or any other insurance which he/they may be required to effect under terms of the contract then and in any such case Government required to effect under terms of the contract then and in any such case Government may without being bound to, effect and keep in force any such insurance and pay such premium or premiums as may be necessary for that purpose and form time to time deduct the amount so paid by the Government for any moneys due or which may become due to the Contractor or recover the same as a debt due from the Contractor Insurance to be taken with
CONTRACTOR’S LABOUR REGULATIONS

1. Short Title-

These regulations may be called “Contractor’s Labour Regulations.”

2. Definitions-

In these Regulations, unless otherwise expressed or indicated, the following words and expressions shall have the meaning hereby assigned to them respectively, that is to say:-

(a) “Labour” means workers employed by a Contractor directly or indirectly through a sub-contractor or other person or by an agent on his behalf, on a payment not exceeding Rs. 400 per month and will not include supervisory staff like overseers, etc.

(b) “Fair Wages” means wages whether for time or piece work notified at the time of inviting tenders for the Work.

(c) “Contractor” shall include every person whether a sub contractor or headman or agent, employing labour on the Work taken on Contract.

(d) “Wages” shall have the same meaning as defined in the payment of Wages Act and includes time and piece rate wage.

3. Display of Notices regarding Wages, etc.-

The Contractor shall-

(a) before he commences his Work on Contract, display and correctly maintain and continue to display and correctly maintain, in a clean and legible condition in conspicuous places on the Work, notices in English and in the local Indian Languages, spoken by the majority of the workers, giving the rate of wages which have been certified by the Engineer-in-Charge as fair wages and the hours of Work for which such wages are earned, and

(b) send a copy of such notices to the certifying officers.

4. Payment of Wages-

(a) Wages due to every worker shall be paid to him direct.

(b) All wages shall be paid in current coin or currency or in both.

5. Fixation of Wage Periods-

(a) The Contractor shall fix the wage period in respect of which the wages shall be payable.
(b) No wage period shall exceed one month.

(c) Wages of every workman employed on the Contract shall be paid before the expiry of seven days, after the last day of the wage period in respect of which the wages are payable.

(d) When 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 day on which his employment is terminated.

(e) All payments of wages shall be made on a working day except when the Work is completed before the expiry of the wage period, in which case final payment shall be made within 48 hours of the last working day. Note.- The term “working day” means a day on which the work on which the labour is employed is in progress.

6. **Wage Book and Wage Slips, etc.-**

   (a) The Contractor shall maintain a Wage Book of each worker in such form as may be convenient, but the same shall include the following particulars: -

   (i) Rate of daily or monthly wages,

   (ii) Nature of work on which employed.

   (iii) Total number of days worked during each wage period.

   (iv) Total amount payable for the work during each wage period.

   (v) All deductions made from the wages with an indication in each case of the ground for which the deduction is made.

   (vi) Wages actually paid for each wage period.

   (b) The Contractor shall also maintain a Wage Slip for each worker employed on the Work.

7. **Fines and Deductions which may be made from Wages: -**

   (a) The Wages of a worker shall be paid to him without any deductions of any kind except the following: -

   (i) Fines

   (ii) Deductions for absence from duty, i.e., from the place or 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.

   (iii) Deductions for damage to or loss of goods expressly entrusted to the employed person for custody or for loss of money for which he is required
to account, where such damage or loss is directly attributable to his neglect or default.

(iv) Any other deductions which the Central Government may from time to time allow.

(b) No fines 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 deduction.

(c) The total amount of fines which may be imposed in any one wage period on a worker shall not exceed an amount equal to three Paise in a rupee of the wages payable to him in respect of that wage period.

(d) No fine imposed on any worker shall be recovered from him by instalments or after the expiry of 60 days from the date on which it was imposed.

8. **Register of Fines, etc.** – (a) The contractor shall maintain a Register of Fines and of all deductions for damage or loss. Such register shall mention the reason for which fine was imposed or deduction for damage or loss was made. (b) The Contractor shall maintain a list, in English and in the local Indian language clearly defining acts and omissions for which penalty of fines can be imposed. He shall display such list and maintain it in a clean and legible condition in conspicuous places on the Work.

9. **Preservation of Registers**– The Wage Book, the Wage Slip and the Register of Fines and Deductions required to be maintained under these Regulations shall be preserved for 12 months after the date of last entry made in them.

10. **Powers of Labour Welfare officers to make investigation or enquiry**– The Labour Welfare Officer or any other person authorised by the Government of India on their behalf shall have power to make enquiries with a view to ascertaining and enforcing due and proper observances of the fair wage clauses and the provisions of these Regulations. He shall investigate into any complaint regarding the default made by the Contractor or sub-contractor in regard to such provisions.

11. **Report of Labour Welfare Officer**– The Labour Welfare Officer or other person authorised as aforesaid shall submit a report of the results of his investigation or enquiry to the Project Consultant-Engineer & DDG (PI) concerned, 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. In case an appeal is made by the Contractor under clause 12 of these Regulations, actual payment to labourers will be made by the DDG (PI) after the Regional Labour Commissioner has given his decision on such appeals.

12. **Appeal against the decision of Labour Welfare Officers**– Any person aggrieved by the decision and recommendation of the Labour Welfare Officer or other person so authorised may appeal against such decision to the Regional Labour Commissioner within 30 days from the date of decision, forwarding simultaneously a copy of his appeal to the Project Consultant-Engineer & DDG (PI) concerned but subject to such appeal, the decision of the Officer shall be final and binding upon the Contractor.
13. (a) A workman shall be entitled to be represented in any investigation or enquiry under these Regulations by-

(i) an officer of a registered trade union of which he is a member;

(ii) an officer of a federation of trade unions to which the trade union referred to in clause (i) is affiliated;

(iii) where the worker is not a member of any registered trade union, by an officer of a registered trade union connected with or by any other workman, employed in the industry in which the worker is employed.

(b) An employer shall be entitled to be represented in any investigation or enquiry under these regulations by –

(i) an officer of an association of employers of which he is a member;

(ii) an officer of a federation of associations of employers to which the association referred to in clause (i) is affiliated;

(iii) where the employer is not a member of any association of employers, by an officer of an association of employers connected with or by any other employer, engaged in the industry in which the employer is engaged. (c) No party shall be entitled to be represented by a legal practitioner in any investigation or enquiry under these Regulations.

14. Inspection of Registers- The Contractor shall allow inspection of the Wage Book, the Wage Slips and the Register of Fines and Deductions to any of his workers or to his agent at a convenient time and place after due notice is received or to the Labour Welfare Officer, or any other person authorised by the Government of India on his behalf.

15. Submission of Return – The Contractor shall submit periodical returns as may be specified from time to time.

16. Amendment-The Government of India, may from time to time, add to or amend these Regulations and on any questions as to the application, interpretation or effect of these Regulations the decision of the Chief Labour Commissioner or Depty. Chief Labour Commissioner to the Government of India or any other person authorised by the Government in that behalf shall be final.
GOVERNMENT SAFETY CODE

1. Suitable scaffolds should be provided for workmen for all Works that cannot safely be done from the ground or from solid construction except such short period Work as can be done safely from ladders. When a ladder is used an extra Mazdoor shall be engaged for holding the ladder and if the ladder is used for carrying materials as well suitable foot-holds and hand-holds shall be provided on the ladder and the ladder shall be given an inclination not steeper than ¼ to 1 (1/4 horizontal and 1 vertical).

2. Scaffolding or staging more than 3.5 Metres above the ground or floor, swung or suspended from an overhead support or erected with stationary support shall have a guard rail properly attached, bolted, braced and otherwise secured at least 1 Metre high above the floor or platform of such scaffolding or staging and extending along the entire length of the outside, and ends thereof with only such openings as may be necessary for the delivery of materials. Such scaffolding or staging shall be so fastened as to prevent it from swaying from the building or structure.

3. Working Platform, Gangways and Stairways should be so constructed that they should not sag unduly or unequally, and if the height of the Platform or the Gangway or the Stairway is more than 3.5 Metres above ground level or floor level they should be closely boarded, should have adequate width and should be suitably fenced, as described in (2) above.

4. Every opening in the floor of a building or in a working platform be provided with suitable means to prevent the fall of persons or materials by providing suitable fencing or railing whose minimum height shall be 1 Metre.

5. Safe means of access shall be provided to all working platforms and other working places. Every ladder shall be securely fixed. No portable single ladder shall be over 9 Metres in length while the width between side rails in rung ladder shall in no case be less than 30 cms. for ladder upto and including 3 Metres in length. For longer ladders this width should be increased at least 6 mm for each additional 30 cms. Uniform step spacing shall not exceed 30 cms. Adequate precautions shall be taken to prevent danger from electrical equipment. No materials on any of the Sites of Work shall be so stacked or placed as to cause danger or inconvenience to any person or the public. The Contractor shall also provide all necessary fencing and lights to protect the public from accident and shall be bound to bear the expenses of defence of every suit, action or other proceedings at law that may be brought by any person for injury sustained owing to neglect of the above precautions and to pay any damages and costs which may be awarded in any such suit, action or proceedings to any such person or which may with the consent of the Contractor be paid to compromise any claim by any such person.

6. Excavation and Trenching- All trenches 1.2 Metres or more in depth, shall be supplied with at least one ladder for each 30 Metres in length or fraction after thereof ladder shall be extended from bottom of the trench to at least 1 Metre above the surface of the ground. The sides of the trenches which are 1.5 Metres or more in depth shall be stepped back to give suitable slope or securely held by timber bracing, so as to avoid the danger of sides to collapse. The excavated materials shall not be placed within 1.5
Metres of the edge of the trench or half of the depth of the trench whichever is more. Cutting shall be done from top to bottom. Under no circumstances undermining or under cutting shall be done.

7. **Demolition**— Before any demolition work is commenced and also during the process of the work-

   (a) All roads and open areas adjacent to the Work Site shall either be closed or suitably protected;

   (b) No electric cable or apparatus which is liable to be a source of danger over a cable or apparatus used by the operator shall remain electrically charged;

   (c) All practical steps shall be taken to prevent danger to persons employed from risk or fire or explosion or flooding. No floor, roof or other part of the building shall be so over-loaded with debris or materials as to render it unsafe.

8. All necessary personal safety equipment as considered adequate by the Engineer-in-Charge should be kept available for the use of the persons employed on the Site and maintained in a condition suitable for immediate use; and the Contractor should take adequate steps to ensure proper use of equipment by those concerned.

   (a) Workers employed on mixing Asphaltic materials, Cement and lime mortars shall be provided with protective footwear and protective goggles.

   (b) Those engaged in white washing and mixing or stacking of cement bags or any materials which are injurious to the eyes shall be provided with protective goggles.

   (c) Those engaged in welding works shall be provided with Welder’s protective eye shields.

   (d) Stone breakers shall be provided with protective goggles and protective clothing and seated at sufficiently safe intervals.

   (e) When workers are employed in sewers and manholes, which are in use, the Contractor shall ensure that the manhole covers are opened and are ventilated at least for an hour before the workers are allowed to get into the manholes and the manholes so opened shall be cordoned off with suitable railing and provided with warning signals or boards to prevent accident to the Public.

   (f) The contractor shall not employ men below the age of 18 and women on the work of painting with products containing lead in any form. Whenever men above the age of 18 are employed on the Work of lead painting, the following precautions should be taken: -

      (i) No paint containing lead or lead products shall be used except in the form of paste or ready made paint.
(ii) Suitable face masks should be supplied for use by the workers when paint is applied in the form of spray or a surface having lead paint dry rubbed and scraped.

(iii) Overalls shall be supplied by the Contractors to the workmen and adequate facilities shall be provided to enable the working painters to wash during and at cessation of Work.

9. When the work is done near any place where there is risk of drowning, all necessary equipments should be provided and kept ready for use and all necessary steps taken for prompt rescue of any person in danger and adequate provision should be made for prompt first-aid treatment of all injuries likely to be sustained during the course of the Works.

10. Use of hoisting machines and tackle including their attachments, anchorage and supports shall conform to the following standard or conditions:

   (a) (i) These shall be of good mechanical construction, sound material and adequate strength and free from patent defect and shall be kept in good repairs and in good working order.

   (ii) Every rope used in hoisting or lowering materials or as a means of suspension shall be of durable quality and adequate strength and free from patent defects.

   (b) Every crane driver or hoisting appliance operator shall be properly qualified and no person under an age of 21 years should be in-charge of any hoisting machine including any scaffold winch or give signals to the operator.

   (c) In case of every hoisting machine and of every chain ring hook, shackle swivel and pulley block used in hoisting or lowering or as means of suspension the safe working load shall be ascertained by adequate means. Every hoisting machine and all gear referred to above shall be plainly marked with the safe working load. In case of hoisting machine having a variable safe working load, each safe working load of the conditions under which it is applicable shall be clearly indicated. No part of any machine or of any gear referred to above in this paragraph shall be loaded beyond the safe working load except for the purpose of testing.

   (d) In case of departmental machine, the safe working load shall be notified by the Electrical Engineer-in-Charge. As regards contractor’s machines the Contractor shall notify the safe working load of the machine to the Engineer-in-Charge whenever he brings any machinery to Site of Work and get it verified by the Electrical Engineer concerned.

11. Motor, Gearing, Transmission, Electric wiring and other dangerous parts of hoisting appliances should be provided with efficient safeguards, hoisting appliances should be provided with such means as will reduce to the minimum the risk of accidental descent of the load, adequate precautions should be taken to reduce to the minimum the risk of any part of a suspended load becoming accidentally displaced. When workers are employed on electrical installations which are already energised,
insulating mats, wearing apparel such as gloves, sleeves and boots as may be necessary should be provided. The workers should not wear any rings, watches and carry keys or other materials which are good conductors of electricity.

12. All scaffolds, ladders and other safety devices, mentioned or described herein shall be maintained in safe condition and no scaffold, ladder or equipment shall be altered or removed while it is in use. Adequate washing facilities shall be provided at or near places of work.

13. These safety provisions should be brought to the notice of all concerned by display on a Notice Board at a prominent place at the work spot. The persons responsible for compliance of the safety code shall be named therein by the Contractor.

14. To ensure effective enforcement of the rules and regulations relating to Safety precautions, the arrangements made by the Contractor shall be open to inspection by the Labour Officer, Engineer-in-Charge of the department or their representatives.

15. Notwithstanding the above clauses from (1) to (14) there is nothing in these to exempt the Contractor, to exclude the operations of any other Act or Rules in force in the Republic of India.
GOVT. MODEL RULES FOR THE PROTECTION OF HEALTH AND SANITARY
ARRANGEMENTS FOR WORKMEN EMPLOYED BY CONTRACTORS

1. Application

These rules shall apply to all the building and construction Works inside Karwar, Naval Base.

2. Definitions

(a) “Workplace” means a place at which on an average fifty or more workers are employed in connection with construction Work.

(b) “Large Workplace” means a place at which on an average, 500 or more workers are employed in connection with construction Work.

3. First-Aid

(a) At every workplace, there shall be maintained in readily accessible place first-aid appliances including an adequate supply of sterilized dressings and sterilized cotton wool. The appliances shall be kept in good order and in large work places; they shall be placed under the charge of a responsible person who shall be readily available during working hours.

(b) At large workplaces, where hospital facilities are not available within easy distance of the Works, First-aid posts shall be established and be run by a trained compounder.

(c) Where large workplaces are remote from regular hospitals, an indoor ward shall be provided with one bed for every 250 employees.

(d) Where large workplaces are situated in cities, towns or in their suburbs and no beds are considered necessary owing to the proximity of city or town hospitals, suitable transport shall be provided to facilitate removal of urgent cases to these hospitals. At other workplaces, some conveyance facilities such as a car shall be kept readily available to take injured person or persons suddenly taken seriously ill, to the nearest hospitals.

4. Accommodation of Labour-

The Contractor shall during the progress of the Works provide, erect and maintain at his own expense and to approved standards and scales all necessary temporary-

(a) living accommodation.

(b) Bazar.
5. **Drinking water**-

(a) In every workplace, there shall be provided and maintained at suitable places easily accessible to labour a sufficient supply of cold water fit for drinking.

(b) Where drinking water is obtained from an intermittent public water supply, each workplace shall be provided with storage where such drinking water shall be stored.

(c) Every water supply of storage shall be at a distance of not less than 15 Metres from any latrine, drain or other source of pollution. Where water has to be drawn from an existing well, which is within such proximity of latrine, drain or any other source of pollution, the well shall be properly chlorinated before water is drawn from it for drinking. All such wells shall be entirely closed in and be provided with a trap door, which shall be dust and water proof.

(d) A reliable pump shall be fitted to each covered well, the trap door shall be kept locked and opened only for cleaning or inspection which shall be done at least once a month.

6. **Washing and Bathing Places**-

(a) Adequate washing and bathing places shall be provided separately for men and women.

(b) Such places shall be kept in clean and drained condition.

7. **Scale of Accommodation in Latrine and Urinals**-

There shall be provided within the precinct of every workplace latrines and urinals in an accessible place and the accommodation, separately for each of them, shall not be less than the following scales:

<table>
<thead>
<tr>
<th>No. of Seats</th>
<th></th>
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<tbody>
<tr>
<td>(a) Where the number of persons does not exceed 50 . . . .</td>
<td>2</td>
</tr>
<tr>
<td>(b) Where the number of persons exceeds 50 but does not exceed 100 . .</td>
<td>3</td>
</tr>
<tr>
<td>(c) For every additional 100 . . . . . . . . . .</td>
<td>3 per 100</td>
</tr>
</tbody>
</table>

In particular cases the Engineer shall have the power to vary the scale, where necessary.

8. **Latrines and Urinals for Women**-

If women are employed, separate latrines and urinals screened from those for men and marked in the vernacular in conspicuous letters “FOR WOMEN ONLY” shall be provided on the scale laid in Rule 7. Those for men shall be similarly marked “FOR MEN ONLY”. A poster showing the figure of a man and woman shall also be exhibited at the entrance of latrines for each sex. There shall be adequate supply of water close to the latrines and urinals.
9. **Latrines and Urinals**-

Except in workplaces provided with water flushed latrines connected with a water borne sewage system all latrines shall be provided with receptacles on dry earth system which shall be cleaned at least four times Project Seabird daily and at least twice during working hours and kept in a strictly sanitary condition. The receptacle shall be tarred inside and outside at least once a year.

10. **Construction of Latrines**-

The inside walls shall be constructed of masonry or some suitable heat resisting non-absorbent material and shall be cement washed inside and outside at least once a year. The dates of cement washing shall be noted in a register maintained for this purpose and kept available for inspection.

11. **Disposal of Excreta**-

(a) Unless otherwise arranged for by the local sanitary authority, arrangements for proper disposal of excreta by incineration at the workplace shall be made by means of a suitable incinerator approved by the local Medical, Health and Cantonment Authorities. Alternatively excreta may be disposed off by putting a layer of night soil at the bottom of pucca tank prepared for the purpose and covering it with a 15 cms layer of waste or refuse and then covering it up with a layer of earth for a fortnight (when it will turn into manure).

(b) The Contractor shall at his own expense carry out all instructions issued to him by the Engineer-in-Charge to effect a proper disposal of soil and other conservancy work in respect of the Contractor's work people or employees on the Site. The Contractor will bear the cost of any charges levied by the Cantonment Authority for the execution of such Work on his behalf.

(c) Solid and hazardous waste management shall be as per Municipal Solid Waste (Management & Handling) Rules, 2000 and Hazardous Waste (Management & Handling) Rules, 2000 respectively. Bio-medical waste shall be treated as per Biomedical Waste (Management & Handling) Rules, 1998.

12. **Provision of shelters during rest.**- At every workplace there shall be provided free of cost four suitable sheds two for meals and two other for rest separately for men and women for the use of labour. The height of the shelter shall not be less than 3.5 Metres from the floor level to the lowest part of the roof.

13. **Creche**

(a) At every workplace, at which 50 or more women workers are ordinarily employed, there shall be provided two huts for the use of children under the age of 6 years, belonging to such women. One hut shall be used for infant's games and play, and the other as their bed room. The huts shall not be constructed on a lower standard than the following:

1. thatched roofs,
2. mud floors and walls,
(iii) plants spread over mud floor and covered with mattings.

(b) Where the number of women workers is more that 25 but less than 50, the Contractor shall provide at least one hut and one Dai to look after the children of women workers.

(c) The size of creche or creches shall vary according to the number of women workers.

(d) The creche or cheches shall be properly maintained and necessary equipment like toys, etc. shall be provided.

The huts shall be provided with suitable and sufficient openings for light and ventilation. There shall be adequate provision of sweepers to keep the places clean. There shall be two „dais” in attendance. Sanitary utensils shall be provided to the satisfaction of the local Medical, Health and Cantonment Authorities. The use of the huts shall be restricted to children, their attendants and mothers of the children.

14. **Canteen-** A cooked food canteen on a moderate scale shall be provided for the benefit of workers wherever it is considered expedient.

15. The planning, siting and erection of the above buildings shall be approved by the Engineer-in-Charge and the whole of such temporary accommodation shall at all times during the progress of the works be kept tidy and in a clean and sanitary condition to the entire satisfaction of the Engineer-in-Charge and at the Contractor’s expense. The Contractor shall conform generally to the sanitary requirements of the local Medical Health/Naval Authorities, MoEF stipulations and at all times shall adopt such precautions as may be necessary to prevent soil pollution of the Site. On completion of the Works the whole of such temporary buildings shall be cleared away, all rubbish burnt, excreta or other disposal pits or trenches filled in and effectively sealed off and the whole of site left clean and tidy to the entire satisfaction of the Engineer-in-Charge and at the Contractor’s expense.

16. **Fire Wood-** Cutting of trees for use as firewood is not permitted inside Naval Base, Karwar. Norms and guidelines of MoEF will be strictly followed for Tree cutting if unavoidable and prior permission of DDG (PI) would be mandatory.
SECTION III

SPECIAL CONDITIONS OF CONTRACT
1. GENERAL

The following Special Conditions shall be read in conjunction with General Conditions of Contracts. If any provision in these Special Conditions is at variance with that of the aforesaid documents, the former shall be deemed to take precedence there over.

2. EXECUTION OF WORK.

2.1 Along with the offer, the tenderer should submit a CPM indicating their programme of work. On award of contract, the contractor shall, within 15 days after the date of the Letter of Acceptance – Work order, submit to the Engineer for his consent a programme, in such form and detail as the Engineer shall reasonably prescribe, for the execution of the works. The contractor shall whenever required by the Engineer, also provide in writing for his information a detailed description of the arrangements and methods which the contractor proposes to adopt for the execution of the works. If at any time it should appear to the Engineer’s representative that the actual progress of the works does not conform to the programme to which consent has been given the contractor shall produce, at the request of the Engineer’s representative, a revised programme showing the modifications to such programme necessary to ensure completion of the works within the time for completion. The contractor shall submit to the Engineer within 15 days after the date of Letter of Acceptance and in any case prior to the commencement of the work, three copies of CPM which shall be based on this preliminary programme submitted with the tender. The CPM shall be updated by the contractor every month. The contractor shall submit to the Engineer on the first day of each week or such longer period as the Engineer may from time to time direct, a progress report in an approved form showing up-to-date total progress, progress achieved against planned progress, during the previous week and progress forecast for the following week for all important items in each section or portion of the works, in relation with the approved bar chart.

2.2 The Topography survey shall be carried out without hindrance to the movement of other activities of PSB. There is a topographical and feature survey data currently available, from the Project Seabird Phase I. The same will be given to the surveyor, as and when required. In addition to the topographical data from the Phase I works, the as-built drawings for all facilities constructed in Phase I will also be made available. The areas surveyed for the Phase I works will not be required to be re-surveyed, however, a surveyor will need to survey the as-built features and compare to the as-built drawings. This will identify any changes from the as-built drawing and any additional features.

2.3 The proposed survey for Phase IIA site will include establishing permanent/temporary control pillars and establishing new benchmarks in the
concrete base. These shall connect available nearest Great Trigonometrical Survey (GTS) benchmarking. The details of the topographic survey to be completed for Site C1 and Site C2 and the record requirements as specified here-in-after.

3. **CONTRACT PRICE**

3.1 The contractor is deemed to have satisfied himself before tendering as to the correctness and sufficiency of his tender for works and of the rates and prices quoted in the priced bill of Quantities and the schedule of rates and prices (if any) which rates and prices shall except insofar as they are otherwise provided in the contract, cover all his obligations under the contract apart from all matters and things necessary for the proper completion of the work. The rate quoted shall be inclusive of all taxes, levies, duties, cost of insurance etc. Apart from the cost of materials to be procured by the contractor and also labour, tools, plants, fuel, consumables, etc.

3.2 As per the Service Tax Act 2001, the major and minor Ports are exempted from levy of service tax vide notification No.19/2006 dated 25.04.2006 for the construction work taken part in the Port infrastructures. In case Service Tax is payable by the contractor, the amount of Service Tax will be reimbursed by the PSB only on production of documentary evidence

3.3. “Value Added Tax (VAT) will be applied to this contract as per provision of the act and will be recovered from the works bills as per the Karnataka Govt. VAT provision. Necessary certificate towards such “Tax deduction at source” will be issued by the PSB’s Account department.

3.4. If any temporary item of work is needed for the execution of the contract, the required details shall be submitted by the tenderer with the proposals and connected drawings along with the tender in Cover I. No payment shall be made for any temporary items of work. Before any Temporary works are commenced, the contractor shall submit sufficiently in advance to the Engineer or his representative for approval, his proposals for all temporary works including drawings and design calculations. The Engineer or his representative shall be at liberty to make any modifications to the temporary works in accordance with the conditions of the contract and the contractor shall carry out such modifications. In the event of the contractor considering that such modifications required by the Engineer or his representative will affect the security of the temporary works, or increase the contractor’s liability under the contract, he shall give notice in writing to the Engineer within seven days of receipt of such communication. The Engineer will thereupon consider the matter and communicate his decision, which shall be final and binding on the contractor. Notwithstanding the approval by the Engineer or his representative of any submitted design for any of the temporary works the contractor shall remain entirely responsible for such works in all respects.
3.5. The description of the item of work given in the schedule of quantities should be read along with the specifications, drawings and the conditions of contract.

3.6. It is to be expressly understood that the measured work is to be taken net (notwithstanding any custom or practice otherwise) according to the drawing or as may be directed from time to time by the Engineer or his representative and that the value of the work done will be calculated by the measurement of various items at the respective rates without additional charges for any necessary incidental or contingent work connected therewith as detailed in specifications and conditions of contract.

3.7. The quantities given under the Bill of Quantities are those upon which the approximate estimated cost of work are based but they are subject to alterations, omissions, deduction and additions and not necessarily show the actual quantities of work to be done and can be increased or decreased at the discretion of the Engineer. However, the consequent variation in the total contract value will be limited to 10% under normal circumstances. The rates quoted shall be firm for such variation. In case the variation results in the total contract value exceeding the prescribed percentage, the revision of rates, if any, shall be applicable only for that portion of contract carried out in excess of the permissible percentage.

3.8. Drains, pipes, cables, overhead wires and similar services encountered in the course of the work shall be guarded from injury by the contractor at his own cost, so that they may continue in full and uninterrupted use to the satisfaction of the Engineer or his representative thereof and the contractor shall not store materials or otherwise occupy any part of the site in a manner likely to hinder the operation of such services.

3.9. Should any damage be done by the contractor to any mains, pipes, cables or lines (whether above or below structure) whether or not shown in the drawing, the contractor must make good or bear the cost of making good the same without delay, to the satisfaction of the Engineer or his representative.

3.10. The Employer shall not be held liable for any damages or compensation payable under the law in respect or in consequence of any accident or injury to any workmen or other persons in the employment of the contractor or any subcontractor and the contractor shall indemnify and keep indemnified the Board Employer against all such damages and compensation and against all claims, demands, proceedings, costs, charges, expenses whatsoever in respect thereof or in relation thereto.
4. TERMS AND PAYMENTS

4.1 Retention Money:

4.1.1 As and by the way of retention money from every progressive on account bill of the contractor 10% of the value of work executed shall be deducted and kept as retention money until the total of the amount so deducted is 10% of the value of work. This amount so retained will be released at the time of Final Bill.

4.1.2 When the retention money deduction in cash from Contractor’s bill as above reaches a limit of Rupees Ten lakhs, the CONTRACTOR, if he so desires may convert the amount in Bank Guarantee as per prescribed format.

4.1.3 Any other amount outstanding at the completion of the works also can be converted into Bank Guarantee.

4.2 Performance Bank Guarantee (PBG):

4.2.1 The security deposit furnished by the CONTRACTOR will be subject to the terms and conditions of the contract and the Project Seabird/ Engineer shall not be liable for payment for any interest for the PBG or depreciation thereof.

4.2.2 If the CONTRACTOR shall duly and faithfully carry out the provisions of this Agreement and shall duly satisfy all claims properly chargeable against him hereunder, the PBG made by him in terms of the Agreement shall be returned to him in the manner detailed herein below.

4.2.3 Should the CONTRACTOR fail to perform the contract work in terms of the Agreement or fail to maintain the contract work during the maintenance guarantee period and if the Project Seabird incurs any expenditure or likely to incur any expenditure for completion of the work or rectification of defects, then the Project Seabird shall be entitled to deduct such sum or sums as may be necessary for such completion or rectification from the PBG made by the CONTRACTOR under this Agreement.

4.2.4 The PBG shall be released on satisfactory completion of work.

4.3 Progress Payments:

4.3.1 The Contractor after completion of Survey work in one Site may submit claim for payment on account of work done. The value of work shall be done by the way of progressive stage payment sitewise according to the satisfactory progress of work subject to the certification by the Engineer. Deductions will comprise of all advances, income tax at source etc. including Retention Money as stipulated above.
4.3.2 Blank.

4.3.3 All the progress payments shall be submitted in seven copies in prescribed printed computerized forms using any software as approved by ENGINEER (cost of forms to be borne by the CONTRACTOR) supported by detailed measurement of items of work. Measurement of work will be taken only for variable items of work and site deviation and shall be taken jointly and signed by contractor and Consultant.

4.3.4 The computerized final bill shall be submitted by the CONTRACTOR within 3 (three) months from the date of completion of the works accompanied by:

(a) Completion certificate issued by the ENGINEER /OWNER.

(b) Measurement Books/Registers in respect of variable scope of work and variation to fixed scope of work.

(c) No claim certificate by the CONTRACTOR.

(d) A copy of the drawings showing there on additions and alterations (to be shown in red) made during the execution of the work.

(e) Recovery statements in respect of Electric, Water, Income Tax at source etc.

(f) Statement for reconciliation of all the payments and recoveries made in progressive bills.

(g) Copies of variation statement and order of extension of time, if granted.

(h) Original guarantees furnished by CONTRACTOR’S suppliers for applicable item.

(j) Test Certificate for items and materials.

(k) Original purchase voucher of materials required for the work.

(l) Return all documents/drawings received from engineer/Project Seabird.
4.4 Payments due and payable by the Project Seabird shall generally be made within 60 (Sixty) days from the date of receipt by Engineer/Owner of complete, proper and presentable invoices documents supported by requisite details of measurements and Certificates.

4.5 All payments to the CONTRACTOR shall be made through E-payment, contractor shall furnish his Bank Account details for the same.

4.6 In case CONTRACTOR fails to submit computerized bill (for IPC and final), the certification and payment of bills may be inordinately delayed for which the CONTRACTOR shall be solely responsible.

5. ADMISSION TO SITE BY CONTRACTOR AND RESPONSIBILITY TO ASCERTAIN HIS OWN INFORMATION

a) The tenderer shall inspect and examine the site and its surroundings and shall satisfy himself before submitting his tender as to the nature of the site and movement of the traffic, the quantities and nature of work and equipment necessary for the completion of the works and the means of access to the site, the accommodation he may require and in general, shall himself obtain all necessary information as to risks, contingencies and other circumstances which may influence or affect his tender. No extra charges consequent to any wrong assumptions / assessment by the tenderer or otherwise shall be allowed. The tenderer shall take into account all these aspects before quoting their rates and shall not hold the PSB responsible for any details that might have been omitted to be mentioned in the tender schedule which may affect the pricing of the tender and any claim by the tenderer on this account will not be entertained by the PSB. In case any additional investigations are required to be done at site by the tenderer, he may do so at his own cost with the prior approval of the Engineer.

(b) The tenderers shall be deemed to have visited the site(s) and made themselves familiar with the working conditions, whether they actually inspect the site(s) or not.

6. SECURITY AND PASSES

6.1 The contractors shall employ his representatives, servants and workmen and verify their antecedents and loyalty before employing them for the works. He shall ensure that no person of doubtful antecedents and nationality is, in any way associated with work. If for reasons of technical collaboration or other consideration, the employment of any foreign national is unavoidable, the contractor shall furnish full particulars to this effect to the Accepting Officer.

6.2 The contractor shall, on demand by the Engineer, submit list of his agents, employees and work people concerned and shall satisfy the Engineer as to the
bonafide of such people. The contractor shall obtain and submit police verification of their staff/personnel for issuance of pass by the Naval authorities.

6.3 The Engineer/Station Commander, Karwar shall at his discretion have the right to issue passes as per rules and regulations of the installation area in force to control the admission of the contractor, his agents, employees and work people to the site of the work or any part thereof. Passes should be returned at any time on demand by the Engineer or the authorities concerned and in any case on completion of work.

6.4 The contractor and his agents, employees and work people shall observe all the rules promulgated by the authority controlling the installation/area in which the work is to be carried out e.g. prohibition of smoking and lighting, fire precaution, search of persons on entry and exit, keeping to specific routes, observing specified timing etc. Nothing extra shall be admissible for any man hours etc. lost on this account.

7. CONDITIONS OF WORKING IN RESTRICTED AREA

7.1 Work under this contract lies in Restricted Area.

7.2 Visit to the site before tendering. Permission to enter the restricted area at the time of submission of tenders can be obtained through the DDG (PI) Karwar. Tenderers are advised to send prior intimation to the DDG (PI) Karwar about the particulars of their agents, representatives etc, if any, dates and time of their proposed visits so that necessary arrangements may be made by DDG (PI) Karwar to secure admission. Whether a tenderer visits the site or not, he shall be deemed to have full knowledge of the restrictions on entering into/exit from and working within the Restricted Area.

7.3 Entry/Exit. The Contractor, his agent(s), representatives, workmen etc. and his materials, carts, trucks or other means of transports, etc. will be allowed to enter through and leave only from such gate or gates and at such times as the DDG(PI) Karwar or authorities incharge of the Restricted Areas may at their sole discretion permit to be used. The Contractor's authorized representative is required to be present at the place of entry and exit for the purpose of identifying his carts, trucks etc, to the personnel in charge of the security of Restricted Areas.

7.4 Identity Cards or Passes. The Contractor, his agents and representatives are required individually to be in possession of an identity card or pass duly verified by the Police Department. The identity card or pass will be examined by the security staff at the time of entry into or exit from the Restricted Area and also at any time or number of times inside the Restricted Area.
7.5 **Identity of Workmen.**

7.5.1 Every workman shall be in possession of an identity card. The identity card will be issued after thorough investigation of the antecedents of the labourers by the Officer In charge of the unit concerned in accordance with the standing rules and regulations of the units.

7.5.2 Contractor shall be responsible for the conduct and action of his workmen, agents and representative.

7.6 **Search.** Thorough search of all persons and transport shall be carried out at each gate and for as many times as a gate is used for entry or exit and may also be carried out at any time or any number of times at the work site with the Restricted Area.

7.7 **Female Searcher.** If the Contractor desires to employ female labour /staff on works to be carried out inside the area of Naval Base and a female searcher is not borne on the authorized strength of the Naval Base at the time of submission of the tender, he shall be deemed to have allowed in his tender for, pay and allowances etc. for a female searcher (Class IV Servant/Gp ‘D’ servant) calculated for the period female labour is employed by him inside the area. If more than one Contractor has/have to be employed in addition to the authorized strength of the Naval base the salary and allowances paid to the additional female searcher(s) shall be distributed on an equitable basis between the contractors employing female labour taking into consideration the value and period of completion of their contracts. The DDG(PI) Karwar decision in regard to the amount recoverable on this account from any Contractor shall be final and binding.

7.8 **Working Hours.**

7.9 The units controlling restricted area, usually, work during six days in the week and remain closed on the 7th day. The working hours available to Contractor’s labour and staff, however, may appreciably be reduced because of the time taken in security checks carried at the time of entry, exit and during working hours.

7.10 The exact working hours of the days and non-working days observed for the restricted area, where works are to be carried out shall be deemed to have been ascertained by the Contractor before submitting his tender. The tender’s attention is invited to the fact that the total number of working hours for a unit are prescribed in regulations and they cannot be increased by the DDG(PI) Karwar.

7.11 Contractor’s materials, transport, etc. shall normally be permitted to go out of the area between 9 AM to 5.30 PM only.
7.12 **Work on holidays.** The Contractor shall not carry out any work on gazette holidays, weekly holidays and other non-working days except when he is specially authorized in writing to do so by the DDG(PI) Karwar. The DDG(PI) Karwar may at his sole discretion declare any day as holiday or non-working day without assigning any reason for such declaration.

7.13 **Access to Restricted Area after Completion of Works.** After the works are completed and surplus stores etc. returned, the Contractor, his agents, representatives or workmen etc, may not be allowed to have access to the restricted area except for attending any rectification of defects pointed out to him.

7.14 **Fire Precautions.**

7.14.1 The Contractor, his agents, representatives, workmen etc. shall strictly observe the orders pertaining to fire precautions prevailing within the restricted area.

7.15.2 Motor transport vehicles, if any allowed by authorizes to enter the restricted area, must be fitted with serviceable Fire Extinguishers.

8. **MINIMUM WAGES PAYABLE**

8.1 Refer condition 58 of General Conditions of Contract (GCC). The contractor shall not pay wages lower than Minimum Wages for labour as fixed by the Government of India/State Government/Union Territory under minimum wages Act as amended from time to time or Contract Labour (Abolition and Regulation Act), whichever is higher.

8.2 The fair wages referred to in condition 58 of GCC will be deemed to be the same as the minimum wages payable as referred to above.

8.3 The contractor shall have no claim whatsoever, if on account of local factors and/or regulations, he is required to pay the wages in excess of minimum wages as described above during the execution of work.

9. **ROYALTIES**

9.1 Reference Condition 14 of General Conditions of Contracts

10. **LAND FOR TEMPORARY WORKSHOP, STORES ETC.**

10.1 “The contractor shall be allotted free of the charge the area as marked on the layout plan for the purpose of erection of temporary workshop, stores etc. No MoD land is available for accommodation of labour and canteen in restricted area for which the contractor shall make his own arrangement at his own expenses. However, land for accommodation of labour and canteen in unrestricted area may be allotted to him”.

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11. WATER

11.1 Water will not be arranged by Govt. Contractor shall make his own arrangements for all requirements of water. The contractor shall make his own arrangements for storing the water required for the works, labour & workmen etc at his own expense. Potable water shall be used to fulfill the requirements.

12. CO-OPERATION WITH OTHER AGENCIES

The contractor shall permit free access and generally afford reasonable facilities to other agencies or department workmen engaged by the Government to carry out their part of the work, if any under separate arrangements.

13. ELECTRIC SUPPLY

13.1 Construction Power supply required for the work will not be arranged by Govt. Contractor shall make his own arrangements for all requirements of Construction Power supply. The contractor shall make his own arrangements for the Construction Power supply required for the works, labour & workmen etc at his own expense.

14. NETWORK ANALYSIS

14.1 The time and progress chart to be prepared as per Condition 11 of General Conditions of Contracts shall consist of detailed network analysis and a time schedule. The critical path network will be drawn jointly by the Engineer and the contractor soon after acceptance of tender. The time scheduling of the activities will be done by the contractor so as to finish the work within the stipulated time. On completion of the time schedule a firm calendar date schedule will be prepared and submitted by the contractor to the Engineer who will approve it after due scrutiny. The schedule will be submitted in four copies within two weeks from the date of handing over the site.

14.2 During the currency of the work, the contractor is expected to adhere to the time schedule and this adherence will be a part of his / their performance under the contract. During the execution of the work, the contractor is expected to participate in the reviews and updating of the network undertaken by the Accepting officer/Engineer. These reviews may be undertaken at the discretion of the Accepting Officer/Engineer either as a periodical appraisal measure or when the quantum of work ordered on the contractor is substantially changed through deviation orders or amendments. Any revision of the time schedule as a result of the review will be submitted by the contractor to the Engineer within a week for his approval after due scrutiny.

14.3 The contractor shall adhere to the revised time schedule thereafter. In case of contractor disagreeing with revised schedule, the same will be referred to the Accepting Officer, whose decision shall be final, conclusive and binding. Accepting Officer’s approval to the revised schedule resulting in a completion
date beyond the stipulated date of completion shall not automatically amount to a
grant of extension of time. Extension of time of shall be considered and decided
by the appropriate authority mentioned in Condition 11 of GCC and separately.

14.4 Contractor shall mobilize and employ sufficient resources to achieve the
detailed schedule within the broad frame work of the accepted method of working
and safety. No additional payment will be made to contractor for any multiple
shifts through the time schedule is approved by the department.

15. **PERIOD FOR KEEPING THE TENDER OPEN**

15.1 The tender shall remain open for acceptance for a period of 180 (one
hundred eighty) days from the date on which the tenders are due to be
submitted.

16. **SECURITY OF CLASSIFIED DOCUMENTS**

16.1 Contractor's special attention is drawn to Condition 2-A and 3 of General
Conditions of Contracts. The contractor shall not communicate any classified
information regarding the work either to sub contractors others without prior
approval of the Engineer. The contractor shall also not make copies of the
design/drawings and other documents furnished to him in respect of the work,
and shall return all documents on completion of the works or either on
determination of the contract. The contractor shall along with the final bill, attach
a receipt of his having returned the classified documents as per condition 3 of the
General Condition of Contract.

17. **OFFICIAL SECRETS ACT**

17.1 The contractor shall be bound by the Official Secret Act-1923.

18. Blank

19. Blank

20. **DAMAGE TO EXISTING STRUCTURES**

20.1 Any damage done to the existing pavement and structures etc., during the
execution of the work shall be made good by the contractor at his own expense
and site of work left clean and tidy on completion. Rectification, reinstatement,
replacement, making good and touching up etc., shall be carried out to conform
to the materials and workmanship originally as provided and to the satisfaction of
the engineer.
21. RECORD OF PLANT/EQUIPMENT

21.1 The contractor shall furnish to the Engineer every morning distribution return of his plants/ equipments on the site of work stating the following particulars:-

(i) Particulars of plants/equipments, their make, manufacture, Model Number if any, Registration Number if any, capacity, year of manufacture and year of purchase etc.

(ii) Total Number (Quantity) on site of work.

(iii) Location, indication, Number, quantity at each location of site of works.

(iv) Purchase value on the date of purchase for the purpose of the condition, plant/equipment, shall be given. Vehicle Number i.e. trucks and lorries but neither the work man tools or any manually operated tools/equipment. The Engineer shall record the particulars supplied by the contractor in the work diary and sent the return to the engineer for record in his office.

22. VARIATION LIMIT

22.1 Deviations in the work may be ordered by Accepting officer/Project Consultant Engineer vide Condition 7 of General Condition of Contracts up to maximum of TEN Percent of the Contract Sum.

23. TESTING CHARGES

23.1 Testing charges of all specified in technical specifications to be carried out during execution of work departmentally in any laboratory/test house shall be borne by the contractor.

24. MES Standard Schedule of Rates (SSR):

24.1 MES Standard Schedule of Rates 2009 (Part I – Specifications) and 2010 (Part II – Rates) (here in after referred to as the “PROJECT SEABIRD Schedule”) shall from part of the Contract for valuation of deviations as specified in Condition 62 of GCC.

25. Labour License

25.1 Before engaging labour for execution of works at site the contractor through Engineer shall request DDG(PI) Project Seabird, Karwar for issue of Labour License (Form V-Certificate by Principal employer) to comply with Contract Labour (Regulation & Abolition) Act 1970 requirements. DDG(PI), Karwar shall issue Form V to Assistant Labour Commissioner, Mangalore/Udipi on the recommendations of Engineer"
26. **Photographic records**

26.1 The contractor shall if and in so far required by Engineer before commencing and during the progress of works, take photographs of such sites, erection works, machinery, plant etc., Negatives or the prints there from shall be untouched. The photographs shall be of size 5” by 8” and 12 Nos shall be supplied in three copies to Engineer.

26.2 The negatives/DVD are to remain the property of the Project Seabird to whom they shall in due course be handed over and the copy right and all rights of reproduction shall be reserved to the Engineer.

27. **Employment of Local Personnel**

27.1 The Contractor is encouraged to the extent practicable and reasonable to employer staff and labour from sources within Karnataka.

28. **Employment of persons of Project affected families**

28.1 The Contractor shall endeavour to provide employment to a maximum level of the Project affected families up to their skills.

29. **SITE CONDITIONS**

29.1 Karwar is the district Headquarters of North Kannada located nearly 270 km North of Mangalore and about 120 kms South of Goa. National Highway No. 17 connecting Mangalore and Goa passes through Karwar. Konkan Railway has a railway station at Karwar.

Maximum Temperature : 34.9 °C
Maximum Humidity : 90%
Altitude : Less than 5m with respect to sea level.
Atmosphere : Highly Corrosive due to seawater

29.2 **Location:**

The Project area is spread over a coastal area South and South East of Karwar Town, in North Kannada District, in the State of Karnataka.

The site is well connected by existing National Highway NH-17 and is approximately 5 km from Karwar Town. Approximately Geographical Coordinates of Project Seabird area can be taken as:

Latitude : 14°46' N
Longitude : 74°8' E
29.3 Topography:

The terrain in proximity to sea shore is flat only to a limited extent. Topography is highly undulating with elevations ranging from Mean Sea Level to approximately +50m. To the east of NH-17 high hills with peaks up to +200 m are seen. There is a hillock on the eastern fringe of the Project area having an elevation of 373.80m above MSL. This is the highest ground level in the Project area. The lowest level -0.30m above MSL of the Project is nallah bed level, which falls in the south – west fringe.

29.4 Climate:

The weather conditions at site are typically representative of Konkan region viz. heavy rains and extreme humidity.

Monsoon in this area starts around last week of May and continues up to middle of October. Normal annual rainfall for Karwar district varies between 2500 to 3500 mm. In the year 2001, first showers started on 25th May 2001. By end of September more than 2200 mm of rainfall was reported at Karwar. Most of the rainfall is from South-West monsoon.

Minimum Temperature is around 16 -18 °C in the months of November to February. Maximum temperature 35.3 °C in the months of March to June. However, the possibility of the ambient temperatures going as low as 11° C during winters exists.

During the monsoon period average – wind velocities vary between 30 to 60 kmph. In the period between June to September, Relative humidity varies from 60% to 90%. In the winter months, Relative humidity varies from 60% to 70%.

29.5 Blank

29.6 Regional Geology:

Parent rocks observed in Project Seabird area are Granite; Granite Gneiss and associates weathered varieties of these two rocks. Predominant soil types are silty sand, sandy silt. In some boreholes falling in agricultural land clayey-silt, silty clay were observed overlaying weathered rock formalities.

Geologically rocks around Karwar fall under Younger Gneiss complexes. Their geological age is 2500 million years to 2700 million years. This younger complex is composed mainly of granodiorite and granite types of rocks.

29.7 Seismicity:

Karwar falls under Zone III as per IS: 1893-1984. No recorded seismic history for Karwar is available in literature.

29.8 Quality of Materials:

All materials used and all equipment supplied and installed shall be new and the best of their respective kinds and shall be of the class most suitable for the
purpose for which they are intended. They shall confirm to specifications laid down in the Tender. The Tenderer shall, as far as possible make best of efforts to adhere to the preferred makes indicated elsewhere in this Tender. However, the Tenderer shall have the option to change the makes of the hardware/software, if any subject to unambiguously establishing the reasons for the change and confirming the time & cost benefits are being transferred to the Project in proportionate manner, where admissible.

29.9 Cleaning & Painting:

Metal parts of all the equipment shall be protected against corrosion of any kind. Surface of all equipment which are intended to be painted shall be thoroughly cleaned of rust & scale, immediately covered with requisite coats of relevant primer and painted with two coats of finished paint.

The metal enclosures shall be all weatherproof and dust proof and special care shall be taken to render all the equipment proof against entry of rats, lizards and other vermins.

29.10 Equipment Operating Conditions:

All hardware to be used for realization of the intended system as per tender, though mainly installed in air-conditioned spaces shall be capable of continuous operation in conditions as described below:-

(a) Tidal conditions:

The tides are diurnal and the average interval between high tide and low tide is about six and quarter hours. The mean tidal range is of the order of 0.32 m to 1.90 m at spring tides and 0.92 m to 1.64 m during Neap tides. There is no influence of floods.

(b) Wave conditions in the sea:

Normally the sea conditions are calm with ordinary waves of 0.46 m to 0.61m height. The dimension and frequency of the waves varies according to the seasons. Generally during South West monsoons period, the waves have a northerly trend at an angle of 30°out of parallelism with shore line and the Maximum height of waves during this period vary from 1.22m to 1.83m outside the harbor the wave period varies from 8 to 30 seconds. However, the highest significant wave height observed during July month was 4.6 m with mean wave period of 4.7 and 7 sec and mean wave direction varied between 217° to 251°.

(c) Swells:

During northeast monsoons period (October to January) the swells in the sea out side harbour vary from 0.91 m to 1.22 m during South West monsoon (April to June) from 0.61 m to 0.91 m. During cyclones which are
of short duration the swell goes over 1.5 m and for the rest of the period the conditions are calm.

(d) **Currents:**

During North East monsoon period the direction of the current is generally southerly with an average speed of 0.1 m/s with current speed upto 0.54 m/s. During south west monsoon period the current is generally in the northerly direction with an average speed of 0.08 m/s with current speed upto 0.3 m/s. For the rest of the period the direction of the current is variable with negligible velocity.

(e) **Temperature and relative humidity:**

The climates generally dry, particulars regarding humidity and temperature may be get from the meteorological department. The climate is Tropical with the maximum mean temperature at 33 °C. Relative humidity varies from 64% to 86%.

(f) **Influence of monsoon:**

The North East monsoon is generally more severe than the southwest monsoon and is accompanied by heavy rains and rough sea. However, there is no major disturbance during the monsoon period except during cyclones are anticipated, as the work is proposed to be carried out in the sheltered basin.
ANNEXURE –H

FORM OF PERFORMANCE BANK GURANTTEE
(To be stamped as per the stamp act)

To:

The Principal Controller
Defence Accounts (Navy),
Mumbai

( hereinafter referred to as the 'Government' )

Dear Sir (s),

1. WHEREAS (Name and Address of Contractor) -----------------------------------
   (hereinafter called the Contractor) has undertaken, in pursuance of LOA No, ____ dated ____ (Contract No. DGSB----- /------) of Project Seabird for Construction of ---------- at Karwar (hereinafter called "the Contract") AND WHEREAS as per terms of the said Contract that he is required to furnish a Bank Guarantee from an approved Bank for the sum of Rs.______ (Rupees __________________) as security for compliance with his obligations in accordance with the Contract.

2. We __________ (hereinafter referred to as "the Bank") at the request of __________ (Contractors) do hereby undertake to pay the Government an amount of not exceeding Rs. _______, against any loss or damage caused to or suffered or would be caused to or suffered by the Government by reason of any breach by the said Contractor of any of the terms or conditions contained in the said Agreement.

3. We __________, do hereby undertake to pay the amounts due and payable under this guarantee without any demur, merely on a demand from the Government stating that the amount claimed is due by way of loss or damage caused to or would be caused to or suffered by the Government by reason of breach by the said Contractor (s), of any of the terms or conditions contained in the said contract or by reason of the Contractor’ (s), failure to perform the said contract. Any such demand made on the bank shall be conclusive as regards the amount due and payable by the Bank under this guarantee. However, our liability under this guarantee shall be restricted to an amount not exceeding Rs. ______________

4. We, ________________ (the Bank) hereby, as primary obligor and not merely as surety unconditionally and irrevocably, undertake to pay to the Government any money so demanded notwithstanding any dispute or disputes raised by the Contractors(s)/ supplier(s) in any suit or proceeding pending before any Court or Tribunal relating thereto our liability under this present being absolute and unequivocal. The payment so made by us under this guarantee shall be a valid discharge of our liability for payment there under and the Contractor(s) / supplier(s) shall have no claim against us for making such payment.
5. We, ________________further agree that the guarantee herein contained shall remain in full force and effect during the period that would be taken for the performance of the said contract and that it shall continue to be enforceable till all the dues of the Government under or by virtue of the said Agreement have been fully paid and its claims satisfied or discharged or till The President of India acting through The Director General – Project Seabird. West Block – V, RK Puram, New Delhi-110066 certifies that the terms and conditions of the said Contract have been fully and properly carried out by the said Contractors'(s) and accordingly discharges this guarantee. Unless a demand or claim under this guarantee is made on us in writing on or before the ________________ we shall be discharged from all liability under this Guarantee thereafter.

6. We, ________________ further agree with Government that the Government shall have the fullest liberty without our consent and without affecting in any manner our obligations here under to vary any of the terms and conditions of the said Contract or to extend time of performance by the said Contractors'(s) from time to time or to postpone for any time or from time to time any of the powers exercisable by the Government against the said Contractors'(s) and to forbear or enforce any of the terms and conditions relating to the said Contract and we shall not be relieved from our liability by reason of any such variation, or extension being granted to the said Contract(s) or for forbearance, act or omission on the part of the Government or any indulgence by the Government to the said Contractors'(s) or by any such matter or thing whatsoever which under the law relating to sureties would but for this provision have effect of so relieving us.

7. This guarantee will not be discharged due to any change in the constitution of the bank or the Contractor.

8. We, ________________ lastly undertake not to revoke this guarantee during its currency except with the previous consent of the government in writing.

Dated the ________________ day of ________________, 2016

for __________________________

(indicate the name of the bank)

Bank Guarantee No. ______________

Bank’s Postal Address ______________

NOTE: The Bank Guarantee in original shall be accompanied with the Banker’s covering letter in their printed letterhead confirming that they are issuing the Bank Guarantee as per the request of the party for the prescribed amount.
SECTION IV

TECHNICAL SPECIFICATIONS AND SCOPE OF WORK INCLUDING DRAWINGS
Section IV

Contents

1 Introduction
   1.1 Project Background
   1.3 Area of Topographic Survey

2 Scope of Work
   2.1 Project Requirements
   2.2 Survey Consultant
   2.3 Equipment
   2.4 Applicable Standards Codes
   2.5 Safety Consideration
   2.6 Data Verification and Accuracy
   2.7 Documents
   2.8 Survey Procedure
   2.9 Topographic Survey DTM
1. Introduction

1.1 Project Background. The scope of Project Seabird Phase-IIA comprises as follows:-

(1.1.1) Dredging, reclamation and constructions of piers within sheltered Naval Harbour at Site A

(1.1.2) Transformation of present NSRY facilities into a Dockyard and Fleet Base Buildings at Site A

(1.1.3) Naval Air Station at Site C1

(1.1.4) Armament facilities at Site E

(1.1.5) Township at Sites A, B1, B2 and C2

(1.1.6) Other common facilities and miscellaneous works

1.2 To carry out planning and detailed design works, a detailed topographic survey of verified accuracy is needed. This document provides a detailed scope of work, specification and drawing for the topographic survey to be carried out on the site by the Contactor.

1.3 Area of Topographic Survey. The work packages mentioned under paragraph 1.1 are spread in various areas within the existing operational Sites and a green field site (Site C). The scope of works for the topographic survey will be limited to cover land areas only. The limits of the topographic survey are indicated on drawing numbers enclosed. For avoidance of doubt, the drawing forms part of this Topographic Survey Brief.

1.4 The area for which Topographic survey is required has been quantified in table at Annexure J here-in-after. The indicated area is inclusive of areas in which existing facilities/infrastructure has been built during Phase I and the same needs to be validated. The total area to be surveyed may involve flat, hilly and wetland including nullah/creek survey and is to be indicated accordingly.

1.5 Topographic Survey of different pocket shall be carried out one after another as per priority decided by DDG (PI). Survey of next pocket shall be started after completion of previous pocket.

02. Detailed Scope of Work

2.1 Project Requirements

2.1.1 Detailed topographic survey is required to be carried out to capture existing essential ground features and existing developments with reference to the Great Trigonometric Survey Datum (GTS datum). This will help the designers to determine the levels on which their respective structures will be constructed. Topographical and feature survey data currently available, from the Project Seabird Phase I is specified in Table 1 below which can be referred by Contractor in the office of DDG(PI), Karwar. In addition to this, the as built drawings for all facilities constructed in Phase 1 will also be made available for reference in the office of DDG(PI), Karwar. The areas surveyed for the Phase 1 works will not be required to be re surveyed, however, a surveyor will need
to survey the as built features and compare to the as built drawings. This will identify any changes from the as built drawing and any additional features.

**Table 1. Summary of existing and additional Survey requirements**

<table>
<thead>
<tr>
<th>Site</th>
<th>Details Available</th>
<th>Investigations required</th>
</tr>
</thead>
<tbody>
<tr>
<td>Site A</td>
<td>Part topographical survey for Site A is available at an approximate scale of 1:2500. Note: These maps are not currently converted to imperial distances/scales.</td>
<td>As built feature validation to as built drawings &amp; detailed Topographic survey of balance area.</td>
</tr>
<tr>
<td>Site B1</td>
<td>Part topographical survey for Site B is available at an approximate scale of 1:2500. Note: These maps are not currently converted to imperial distances/scales.</td>
<td>As built feature validation to as built drawings &amp; detailed Topographic survey of balance area.</td>
</tr>
<tr>
<td>Site B2</td>
<td>Part topographical survey for Site B is available at an approximate scale of 1:2500. Note: These maps are not currently converted to imperial distances/scales.</td>
<td>As built feature validation to as built drawings &amp; detailed Topographic survey of balance area.</td>
</tr>
<tr>
<td>Site C1</td>
<td>Topographical Map from Survey of India at the Scale 1:42000 &amp; 1:25000 are available.</td>
<td>Detailed Topographic Survey</td>
</tr>
<tr>
<td>Site C2</td>
<td>Topographical Map from Survey of India at the Scale 1:42000 &amp; 1:25000 are available.</td>
<td>As built feature validation to as built drawings &amp; detailed Topographic survey of balance area.</td>
</tr>
<tr>
<td>Site E</td>
<td>Part Topographical survey for Site E is available at scale of 1:2500.</td>
<td>As built features validation to as built drawings &amp; detailed Topographic survey of balance area.</td>
</tr>
<tr>
<td>Reclaimed Area at Site A</td>
<td>-</td>
<td>As built features validation to as built drawings &amp; detailed Topographic survey of balance area.</td>
</tr>
</tbody>
</table>
2.1.2 The details of the Topographic survey to be completed for all sites and the record requirements are detailed in Table 2 below:

**Table 2. Details of Topographic Survey – All sites.**

<table>
<thead>
<tr>
<th>Site</th>
<th>Facility</th>
<th>Type of Terrain</th>
<th>Map Scale</th>
<th>Grid Size</th>
<th>Contour Interval</th>
</tr>
</thead>
<tbody>
<tr>
<td>Site A</td>
<td>Naval officer’s Institutes (Baithkul) Officer’s Md Accommodation (Kamat Bay) Officer’s/PO’s single Accommodation (Binaga) Dockyard Sailors Single/MdAccommodation Anjadiv Island</td>
<td>Rolling</td>
<td>Rolling</td>
<td>Rolling</td>
<td>Rolling</td>
</tr>
<tr>
<td>Site B 1</td>
<td>Sailors MdAccommodation Kwada Bay Beach front including Environment Park Aligadda Hill</td>
<td>Rolling</td>
<td>Rolling</td>
<td>Rolling</td>
<td>Hilly</td>
</tr>
<tr>
<td>Site B 2</td>
<td>Civilian houses &amp; facilities</td>
<td>Rolling</td>
<td>1:1000</td>
<td>10mX10m</td>
<td>0.5m</td>
</tr>
<tr>
<td>Site C1</td>
<td>NAS and supporting facilities</td>
<td>Rolling</td>
<td>1:1000</td>
<td>10mX10m</td>
<td>0.5m</td>
</tr>
<tr>
<td>Site C2</td>
<td>Married sailor Accommodation. Single Sailor Accommodation. Railway siding and marshalling area DSC Accommodation Flyover Receiving station</td>
<td>Rolling</td>
<td>1:1000</td>
<td>10mX10m</td>
<td>0.5m</td>
</tr>
<tr>
<td>Site E</td>
<td>MTP Development NAD Development Common facilities</td>
<td>Rolling</td>
<td>1:1000</td>
<td>10mX10m</td>
<td>0.5m</td>
</tr>
</tbody>
</table>
2.1.3 Topographic maps for the area encompassing Project Seabird area are available from the Survey of India at scales of 1:42000 & 1:25000. These scales are considered insufficient for design and therefore a detailed topographic survey across all sites to be developed is recommended. During the topographical survey, the existing as built drawings for site A, B1, B2, site E and structures on reclaimed land at Site A will be made available and should be validated by the surveyor. Any discrepancy between the as built drawings and surveyed additional features should be picked up. The surveyor should also survey the overhead utilities and underground utilities and validate against the as built drawings. Existing Land Use (ELU) Maps are to be prepared post validation of the as built drawings. Unless specified otherwise, the scale to be used for undertaking the Topographic Survey will be as mentioned below:-

2.1.3.1 Total Project Area-1:10,000
2.1.3.2 Site Area- 1:5000
2.1.3.3 Construction Area-1:1000 – To be worked on Map.

2.1.4 The purpose of the overhead utility survey is to locate and verify and map all overhead utilities such as telephone poles, overhead power, and other towers passing through the project sites. The purpose of underground utility survey is to locate and validate the underground utility services to the as built drawings for Phase I. These services will include:-

(2.1.4.1) Water pipe line
(2.1.4.2) Sewer line
(2.1.4.3) OFC
(2.1.4.4) Telephone
(2.1.4.5) Electric Cable-HT and LT
(2.1.4.6) Gas pipe line and any other obstruction
(2.1.4.7) Fire Fighting Network

(2.1.5) The survey work would include:
(2.1.5.1) Differential Global Positioning System (DGPS) at 5km grid.
(2.1.5.2) Topographic survey true to ground realities using certified precision instruments including Total Stations and Auto Levels, bringing out data in digital form (x,y,z format) and developing digital terrain model (DTM).
(2.1.5.3) Horizontal and vertical control points/ Bench marks shall be marked either on permanent structures where ever possible, or on concrete pillars to be constructed to ensure permanent bench marks are available on approximately 500m grid within the site boundary. The permanent bench mark shall be constructed at locations out of works construction limit and locations shall be agreed with DDG (PI). Surveyor shall connect all these bench marks by horizontal and vertical traversing. The pillars shall be of granite stone of size 150 x 150 x 1200 mm high. The pillars shall be embedded in ground of which 700 mm shall remain above ground. Top of the pillar shall be painted with two coats of
red synthetic enamel paint over a coat of primer. The Reduced Level has to be marked on the pillars after levelling surveys.

(2.1.5.4) PCC Pair of Pillars (1000x1000x1200mm size) shall be constructed for DGPS survey on 5km grid. Locations of these pillars shall be agreed before commencing the works with Project Seabird along with permanent bench mark pillar locations. These pillars will have the steel plate arrangements. The horizontal face of bench mark pillars shall be levelled by spirit level. Reference marks with paint marks shall be made on pillars.

(2.1.5.5) Fixity of Bench Mark pillars and DGPS pillars shall be ensured by adequate ramming of soil by hand ramming around pillars.

(2.1.5.6) The surveyor shall also establish a level datum relationship between the land survey datum (vertical) and the existing Local Bench Mark (LBM) used by others as a datum reference for bathymetric survey and construction during Phase I at Sites A, B1, B2 and E. The Contractor has to obtain GPS Bench Marks from Survey of India to ensure the correctness of LBM.

(2.1.5.7) Collection of DTM data would begin from two known station points and close at a third known station but not the back sight station i.e. compulsory check shots would be taken at known points before changing the occupied station or stopping the survey work and detail of the same shall be submitted progressively in soft as well as in hard copy. The distance of the check shot shall be necessarily greater than the distances of individual data shots.

(2.1.5.8) Ground levels with coordinates shall be picked at 20m interval in flat terrain, 10m interval in rolling terrain and 5m interval on hill slopes to form a grid.

(2.1.5.9) Collection of longitudinal centreline points of roads would be 10m apart in straight sections. On the vertical and horizontal curves it has to be 5m apart. In Cross Section of existing road apart from Centre Lines and edges of the existing pavement, two intermediate points, paved shoulder (if any) demarcation, Shoulder Drop, Edge of Formation, Toe line and Points on existing Ditches have to be taken. Points on the natural surface will be taken 5m apart. Cross sections shall be collected generally at 20 m interval in straight sections and 10 m interval in curve sections. Reduced Level (RL) shall generally be collected up to 30m from the road centreline on either side. The cross section of road shall extend at least 10m beyond toe of cut/ fill section if this is beyond 30m from centreline.

(2.1.5.10) This survey would involve picking up of all surface features including but not limited to drain top, drain bottom, foot paths, roads, buildings and any other features within topographic survey work boundary. Vegetation types and extent are to be recorded. The survey specification outlining the requirements of what should be picked up as part of the survey and plotted on the survey plans is as follows:-
(i) Lot boundaries
(ii) Vegetation
(iii) Existing Structures
(iv) Drainage outlets with invert level
(v) Pipeline/cable crossing/other utilities or services under and on ground surface
(vi) Existing navigation marks
(vii) Existing shore protection works
(viii) Sunken barges/ vessels
(ix) Rocky outcrops
(x) Contours
(xi) Ground levels
(xii) Cross section of rivers/streams
(xiii) Creeks and Nallahs
(xiv) All structures over and around the waterway including bridges, culverts and formalised flood defences such as flood walls.
(xv) Long sections of natural levees
(xvi) Level of key road crossings

(2.1.5.11) Cross sections at Start and end points of all Culverts and Bridges shall also be taken including all culvert & bridge details like invert levels, coordinates of expansion joints / start and end of all existing structures also to be picked up.

(2.1.5.12) Detailed survey of streams, creeks and nullahs are required. The survey of the river/ stream course should extend up to the firm banks or up to the high flood level. Drawings will be required to show cross sections of rivers and streams. The streams and bridges to be surveyed, for each site are detailed in Table 3 below:

<table>
<thead>
<tr>
<th>Sl.No</th>
<th>Site</th>
<th>Stream</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Site A</td>
<td>- Manzel creek at 02 locations.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- one to the north of Site A accommodation facilities,</td>
</tr>
<tr>
<td></td>
<td></td>
<td>at the proposed bridge.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- At the existing pipe culvert.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- One to the south of STP on proposed perimeter road.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- At Kamat Bay.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Bridge sites on the way of Armament Wharf</td>
</tr>
<tr>
<td>2.</td>
<td>Site E</td>
<td>- BerdeNullah on the approach to Site E.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Bridges on HattikeriNullah at 02 locations.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- one to the north of Site E on proposed perimeter road.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- One to the south of MTP on proposed perimeter road.</td>
</tr>
</tbody>
</table>
(2.1.5.13) Cross section survey of the Kamat Bay/ Manzel Creeks and Berde/HattikeriNullahs shall be carried out at 100m interval. The cross section points shall be picked at 10m interval from waterline till a level of +3.0m GTS datum on each side of the river or as directed by Project Seabird. Additional points shall be picked at visible change of ground slope.

(2.1.5.14) Cross sections shall be taken perpendicular to the existing shore line at 10m interval within proposed harbour limit and 500m intervals beyond the harbour limits on south and north breakwater. Surveyor shall establish survey limits on site in discussion with Project Seabird.

2.2 Survey Consultant. The Contractor shall field qualified surveyor or civil engineers with minimum five years experience of carrying out similar works. The survey shall be checked for adequacy, coverage and correctness of the surveys and verified by the Contractor.

2.3 Equipment.

(2.3.1) Differential GPS equipment set (Dual Frequency)
(2.3.2) Electronic total stations with angular accuracy of 2” or better
(2.3.3) Auto Level having accuracy of ± 2.5 mm / km
(2.3.4) Other items like measuring tapes, ranging rods etc. as required


2.5 Safety Consideration. The Contractor shall be liable for safety and welfare of its staff as per Indian laws. The Contractor’s personnel will take all possible measures to ensure safety of themselves, other persons on or adjacent to site and Contractor’s machines. The instrument stations will be established outside travelled way to avoid conflict with moving traffic.

2.6 Data Verification and Accuracy. The Contractor shall verify the correctness and completeness of the survey data. The level of accuracy for all control points, benchmarks, ground levels, DTM levels and existing permanent features to be ensured shall be as follows:

(2.6.1) Better than 1:10,000 for all distance measurements
(2.6.2) The closing error for level measurements shall be within \( \sqrt{K \times 12} \) mm where \( K \) is the distance in km

2.7 Documents. All survey data will be compiled in CDs and also in hard copies in suitable sized papers. Original field books shall be submitted to Project Seabird along with survey drawings. Refer to Section 2.9.7 for submission requirements.
2.8 **Survey Procedure.**

2.8.1 **DGPS Control Stations.**

(2.8.1.1) A pair of indivisible DGPS control stations will be fixed at intervals of 5 km on M15 grade RCC PCC pillars (30cm x 30cm x 60cm size). After DGPS traverse is established, the same shall be verified with closed loop traversing for at least 2-3 loops (6-9 Km) in accordance with procedure mentioned below. If the DGPS and closed loop traversing match with each other within the prescribed accuracy levels i.e. 1:20000, no further closed loop traversing is required for remaining loops. In case it does not match, closed loop traverse shall be done for entire length at the Contractor's expense and it will be considered as incidental to the work of DGPS.

(2.8.1.2) After collection of data at site, those shall be processed to find latitude and longitude of the DGPS pillar and from those, rectangular coordinates shall be interpreted. DGPS co-ordinates of the calculated positions shall be based on the WGS 84 ellipsoid and shall be provided in local grid system and Universal Transverse Mercator Projection System and UTM zone. All time shall be given in local time zone.

(2.8.1.3) A minimum of five control stations of a permanent nature should be left at site, and should be clearly shown in the survey drawings.

2.8.2 **Fixing of Traverse Stations.** *Location of traverse stations shall be selected on the following basis:*

(2.8.2.1) It shall be located within the site boundary. These pillars shall be generally constructed in a location away from construction areas so that they remain undisturbed by the proposed development.

(2.8.2.2) It shall be triangulated properly with respect to existing permanent features (as far as possible).

(2.8.2.3) Traverse stations shall be located such that last station signal bottom and next station signal bottom are clearly visible from the occupied station. This distance can be decreased in case of horizontal and vertical curves

(2.8.2.4) Traverse will be done by Total Station having angular measurement accuracy of ± 2 sec. The instrument shall be calibrated at the start of the work. The Contractor shall submit the horizontal and vertical traverse survey to Project Seabird for approval. Detailed survey shall only start once horizontal and vertical traverse survey is approved by Project Seabird.
2.8.3 Location of Bench Marks. These shall be located generally at reference pillar locations at 500m intervals. Also, bench marks must be established on permanent structures, where possible. It shall be as per the specification provided under clause 2.1 above. It shall be located away from the construction areas so that these remain for future reference during construction. While carrying out traversing, BM pillars shall be connected. The BM pillars shall be properly indexed and reference shall be marked on it with red enamel paint.

2.8.4 Fixation of Bench Mark Levels.

(2.8.4.1) Closed circuit levelling shall run along the entire route. Maximum length of each loop shall not be more than 5 Km. The levelling for establishing bench marks is to be carried out as specified as under. All levelling are to be carried out from GTS Bench Mark with Auto Level having accuracy ±2.5 mm/km and closed against another GTS Bench Mark. In absence of GTS BM, to and fro DT levelling is to be adopted.

(2.8.4.2) Before starting the work, machine shall be calibrated. Intermittently during levelling, collimation is to be checked and adjusted whenever collimation error exceeds 1 mm.

(2.8.4.3) Two levelling staffs are to be used and fixed with circular bubble during levelling i.e. fore staff and back staff.

(2.8.4.4) Staff is to be held exactly vertically as far as possible on pillars or any other permanent structures and the fore and back staffs are to be placed exactly at the middle to nullify the collimation error.

(2.8.4.5) All three hair readings are to be recorded and mean of the three are to be averaged for calculation of rise and fall. All rises and falls are to be observed twice.

2.8.5 Setting up Instrument on Station. The Survey Engineer shall inspect all instruments to verify that no damage has occurred in transit, before starting the site work. The instrument shall be then set up as follows:

(2.8.5.1) Set up total station instrument over station and measure height of instrument
(2.8.5.2) Fill in top of Detail Survey Booking Sheet
(2.8.5.3) File name e.g. 2912PC.FC5
(2.8.5.4) Station number
(2.8.5.5) Height of Instrument
(2.8.5.6) Date
(2.8.5.7) Observer (Surveyor)
(2.8.5.8) Page number (Start each day on page 1)
(2.8.5.9) Start string number (add 1 to previous station or start at 01 for each new day)
(2.8.5.10) The Vertical Collimation shall be checked on the First station for each day in the following manner:

(2.8.5.10.1) In Face Left sight to a distant well-defined object and record the Vertical circle reading on the booking sheet
(2.8.5.10.2) In Face Right re sight the same object and again record the Vertical circle
(2.8.5.10.3) Add the two readings and subtract 360°
(2.8.5.10.4) This difference is Twice the Vertical Collimation Error
(2.8.5.10.5) This error shall be less than 20" to maintain the required vertical accuracy
(2.8.5.10.6) Check that the prism constant is correct for the prisms being used for the Traverse/Detail survey
(2.8.5.10.7) Place a mark about 10 m from the Station and measure the distance with the 30 metre steel tape
(2.8.5.10.8) Take a reading to the Prism at this point and ensure the horizontal distance is within 5 mm of the taped distance

2.8.6 Taking Traverse Readings.

(2.8.6.1) In Face left set 0°00’00” to Back sight station.
(2.8.6.2) If using a prism pole the chainman shall make sure that he uses an extra pole to brace the prism pole whilst taking the readings. The extra pole shall be held away from the line with the Total station to allow the Surveyor to be able to see the bottom of the Prism pole to set his bearing. Two sets of horizontal angles will be measured in face left and face right.
(2.8.6.3) All horizontal angles of offset points are to be measured in face left only.

2.8.7 Taking Detail Survey Readings.

(2.8.7.1) After traverse readings, read and record an angle to a reference object other than a station. This angle can be used to check instrument’s orientation if the instrument is disturbed.

(2.8.7.2) The survey shall extend to within 2 m of the previous survey or half way to the next station

(2.8.7.3) The entire topographical survey from a station shall proceed in one direction from left to right or right to left.

(2.8.7.4) The various aspects of survey Digital Terrain Modelling (DTM) are detailed next.
2.9 Topographic Survey

2.9.1 Survey

(2.9.1.1) Topographic survey DTM should be carried out with reference to traverse stations. The x, y and z co-ordinates for each station surveyed shall be recorded with respect to the values of traverse stations. All features shall be accurately picked up and properly coded as explained below. A sketch for surveyed points with respect to traverse station shall be prepared.

(2.9.1.2) The sketch shall include:

- Station positions (including Setup, Backsight, Foresight and Temporary stations)
- All surface features including but not limited to drain top, drain bottom, foot paths, etc. with string numbers
- Any additional information as felt necessary and as directed by Project Seabird
- Contractor shall record string numbers on the right of the sketch

(2.9.1.3) Any error found in the field shall be recorded on the booking sheet for correction. The following shall be recorded:

- Point number of error
- The actual error
- The correct entry

Sketches of relevant details shall be prepared at site during survey.

2.9.2 Coding

(2.9.2.1) Coding for feature is to be done as per the code used in the field booking sheet. A sample coding pattern has been included in Table 5. All survey procedure explained hereafter refers to this coding pattern. However depending on the equipment used, the coding may change. But adopted coding shall remain uniform for the entire survey work.

(2.9.2.2) The code used in the booking sheet is the descriptive part of the string, but to identify the particular detail a numeric value is also to be added along with it. The alphanumeric code is given for those items which are to be joined to draw the detail. For example buildings shall be joined as per following style:
(2.9.2.3) All the surveyed points having the string no BL01 will be joined together to draw the first building and all points having string number BL02 will be joined together to draw the second building, i.e. numeric part will indicate how to join the points to form the detail and descriptive part indicate what is the feature.

(2.9.2.4) Coding string pattern may change from software to software requirement e.g. some software may require only numeric string i.e. the descriptive part as well as for joining the details also require numeric value. Before proceeding to site, the Contractor shall finalise with Project Seabird string pattern and do the pattern as required for the software.

(2.9.2.5) Normally all heights observed are contour able. If for some unavoidable reason any height cannot be observed correctly then this is to be coded differently so that it is clear to Project Seabird that these points are not to be considered for contouring.

2.9.3 Guidelines for Typical Feature Surveys

(2.9.3.1) Existing Road

(2.9.3.1.1) Locate the following features on the road:
(2.9.3.1.2) Road Centre (Code CCxx)
(2.9.3.1.3) Carriageway Left (Code CLxx)
(2.9.3.1.4) Carriageway Right (Code CRxx)
(2.9.3.1.5) Sealed Shoulder (Code SSxx), where the seal has extended past the normal edge of road to include some of the shoulder (Code>)
(2.9.3.1.6) edge of Shoulder (Code ESxx)

(2.9.3.2) Topography

(2.9.3.2.1) Banks (code BBxx and TBxx)
(2.9.3.2.2) Banks shall be located opposite the chalk marks and any change of direction or grade where they run parallel to the road
(2.9.3.2.3) When the banks are not parallel to the road, take readings every 20 m or change of direction or grade
(2.9.3.2.4) When following a bank that changes direction often, keep the top and bottom readings next to each other to avoid the lines overlapping

(2.9.3.3) Canal (Code CAxx)

(2.9.3.3.1) Canal strings run along the top of the canal bank
(2.9.3.3.2) The locating of the string shall be the same as for top of banks
(2.9.3.3.3) The strings shall not cross the bridge readings

(2.9.3.4) Natural Surface points (Code NS)

(2.9.3.4.1) These points shall be located every 25 m or wherever distinguished change in elevation occurs to show high or low points

(2.9.3.5) Edge of Water Body/Pond (Code PDxx)

(2.9.3.5.1) Readings to be taken at edge of water to show outline as shown
(2.9.3.5.2) Few readings to be taken inside water body/pond to get idea about pond depth
(2.9.3.5.3) Water levels with date to be taken

(2.9.3.6) Edge of Ditch/Borrow Pit (Code Dxx)

(2.9.3.6.1) Readings to be taken to the edge of ditch and one reading to the bottom of the ditch
(2.9.3.6.2) Outline of rocks (Code RQxx)
(2.9.3.6.3) Readings to be taken at edge of rocks to show outline and one reading on the top of the rock

(2.9.3.7) Electricity and Telephone

(2.9.3.7.1) Electricity/Transformer/Telephone poles (Codes EP, TF and TP)
(2.9.3.7.2) Locate these features on the road side of the pole

(2.9.3.8) Structures

(2.9.3.8.1) Edge of Buildings (Code BLxx), locate corners of buildings closest to the road. pole shall be placed on the natural ground not on the building
(2.9.3.8.2) Fence line (Code FLxx), locate Fence line every 25 m or change in grade or direction
(2.9.3.8.3) Kilometers Post (Code KP_xxx) where xxx is the kilometre distance. locate the top centre of the post
(2.9.3.8.4) Religious structures (Code RSxxx), e.g. Temple, church, mosque etc. locate the outline of the structure

(2.9.3.9) Graves (Code GR)

(2.9.3.9.1) Take points near the edge of the grave on the ground (pole shall be placed on the ground not on the grave) which is nearest to mad
(2.9.3.9.2) Temporary House or Hut (Code THxx), locate the same as for Building (BL) string. TH Strings are Contourable and Breaklines
(2.9.3.9.3) Edge of Wall (code WAxx). locate edge of wall at ground level
(2.9.3.9.4) Bore Well (Code WB), locate centre of Bore Well pump
(2.9.3.9.5) Concrete Well (Code WCxx), locate a string of at least three points around the well so that a circle can be created
(2.9.3.9.6) Level Crossing/Railway Tracks: At level crossing cover the railway line at least 200 to 300 m on either side of road and rail track noting layout, level and physical features along with markings given by railway authorities around the area. Code (Rlxx), take points at the centre of Railway tracks and on the rails. Cross-section shall cover at least 20m on both sides [on the centreline of the railway track
(2.9.3.9.7) Trees (Code TRx) where x is the class of tree. Trees with girth upto 0.3 m need not be picked up. The trees shall be classified based on girth and ground coverage. e.g.: for a tree with perimeter 1.0m the code will be TR_G 1.0

(2.9.3.10) Cross-Sections.

(2.9.3.10.1) A base line shall be established along existing road. The cross-section levels shall be taken at 20m interval on the base line at 20m interval along straights and 10m interval along curves. It shall also include two intermediate points on pavement on either side of baseline, pavement
edges, shoulder edges, toes of embankment, change in slopes, side drains (to define the drain dimensions) and the existing ground to define the ground profile at the cross-section properly up to edge of site boundary. On ground steeper than 10% grade cross section points shall be picked up at lesser interval.

2.9.4 Cross-Sections of River/ at Bridges.

(2.9.4.1) Cross sections should be plotted to the horizontal scale of 1:1000 and vertical scale of 1:100. A longitudinal section should also be surveyed along the centreline of the bed/water level which should extend for approx. 1.0 km length. For each river/stream the cross sections will be performed at three locations, one at each bridge site, one upstream of the bridge and one downstream of the bridge. The IRC SP 13 (Design of Small Bridges and Culverts) details that the approximate distance upstream and downstream of the selected site of crossing, at which the cross sections should be taken can vary between 150m and 1600m, depending on the catchment area of the river. These cross sections are also required for the input into the flood studies and drainage design. Further details on structures over and around the waterways and long sections of natural levees are also to be surveyed for the flood study and drainage design.

(2.9.4.2) Minor Bridges

(2.9.4.2.1) At every Minor bridges and causeways (where existing bridge/causeway length is in between 6m to 60m) survey will be extended up to 300m on either side. The levels along the stream/drain up to 300m on both upstream side & downstream side at 10.0m interval (min. 30 levels on both u/s & d/s) will be taken. Usually it will take into account a bigger length for the flood level calculation in the main streams, principally in flat zones. The cross sections of the stream/drain for a width up to +3 spread on both sides at minimum 10m, 150m, 300m adjacent to structure on u/s and d/s are taken.

(2.9.4.2.2) A Contour Survey Plan of the Stream is to be prepared showing all topographical features and extending upstream and downstream of the bridge up to 150m and to a sufficient distance on either side to give a clear indication of the topographical features that might influence design of the bridge and its approaches.

(2.9.4.2.3) For structural calculations Ground Level and Formation Level at the abutment and pier location shall be taken. The levels are to be taken separately at the following locations shown in the sketch below. Total Four points at each abutment and pier locations shall be taken. If the bridge is under reconstruction in addition to the points taken by the above procedure Ground level on the side of widening shall be taken @10 meter
interval for a total length of 30 meter on either side of the proposed Bridge Centre Line.

(2.9.4.2.4) Span arrangements for the existing structure, invert level and bed level have to be measured by visual measurement or measuring instrument and shown in the drawings. The HFL can be recorded by local enquiry.

(2.9.4.3) Major Bridges

(2.9.4.3.1) At river cross section locations survey will be extended up to +3m level on either side. Points to be taken for bunds wherever available, edge of water and detailed survey on the bank for the strip specified earlier.

(2.9.4.3.2) A Contour Survey Plan of the Stream is to be prepared showing all topographical features and extending upstream and downstream of the bridge up to 500m and up to +3m level on either side to give a clear indication of the topographical features that might influence design of the bridge and its approaches.

(2.9.4.3.3) Span arrangements for the existing structure, invert level and bed level have to be measured by visual measurement or measuring instrument and shown in the drawings. The HFL can be recorded by local enquiry.

(2.9.4.4) Culverts :Culvert (Code CUXx)

(2.9.4.4.1) At every existing culvert the invert level shall be recorded against the culvert numbers and at the proposed culverts site the existing ground levels shall be given up to 30m on either side.

(2.9.4.4.2) For pipe culverts, the levels along the stream/drain up to 30m on both upstream side (u/s) and downstream (d/s) side at 10.0m interval (min. 4 levels on both u/s and d/s) will be taken. Thereafter, the cross sections of the stream/drain for a width of 20m (10m on each side
from centre of stream/drain) and at 10m adjacent to structure on u/s and d/s side will be taken.

(2.9.4.4.3) The thickness of the earths and pavement over the pipe at each extreme will be taken. Moreover, it is necessary to take the height of the existing road at these points. All the details of existing left carriageway and right carriageway like body wall, parapet wall/handrail, median details, FRL’s of both left side and right side road, wing wall details, clearance details of all overhead features/structures, utilities details if any, Service road structure details, any structures nearby like buildings, compound walls, temples, tomb stones etc., will be also taken. In case of urban drain the existing details of drain side walls on both u/s and d/s will be taken.

(2.9.4.4.4) In case of Slab Culvert the existing bottom level of left side of the left culvert and vice versa are taken. In case of defined stream/drain, at site the shape of the drain (bank edge points) up to 100m on both u/s and d/s will be taken. The thickness of the pavement over the slab at the four corners will be taken. Moreover, it is necessary to take the height of the existing road at these points.

(2.9.4.4.5) Where the culvert is across a defined water flow or over lined/unlined canal R.L of the stream shall be taken as shown in the sketch below. If the flow is in skew the levels shall be picked up in the skew direction. Where the flow direction is in normal to the road at the existing location but has skewed upstream or down stream within the ROW the sections shall be taken in the original flow direction with additional points to be taken in the normal direction within the ROW limit. Ground Level, Formation Level and Invert Level shall be picked up at each abutment and pier location. For pipe culvert the dia of pipe, head wall location is to be taken in addition.

(2.9.4.4.6) If there is any existing number marked on the culvert, it shall be indicated clearly.

![Diagram showing culvert details](image-url)
(2.9.4.4.7) In addition to above details survey detail shall include the R.L of the different sections of wing wall/return wall of all the structures as shown below in the sketch.

![Sketch of Wing Wall and Return Wall](image)

(2.9.4.4.8) If the road corridor has some additional features where on the existing road no structure present yet some canal/ drain which may be lined or unlined is in the process of construction, that may or may not effect the project road, details are to be recorded as per the above guidelines and shown in the Base plan.

(2.9.4.4.9) Span arrangements for the existing structure, invert level and bed level have to be measured by visual measurement or measuring instrument and shown in the drawings. The HFL can be recorded by local enquiry.

(2.9.4.5) Drains (Code BDxx and TDxx)

(2.9.4.5.1) Drains can generally be coded as Top and Bottom of Banks.

(2.9.4.5.2) Where a drain has near vertical sides keep the top of drain readings about 20 mm away from the edge to ensure the lines do not overlap.
(2.9.4.6) Temporary (TEMP) Stations (CODE- TS) Placing Stations

(2.9.4.6.1) Temp stations are placed between Traverse stations to locate additional survey not visible from the Traverse stations.

(2.9.4.6.2) Before reading to the Temp station check the angle to the reference object. This angle must be correct before placing any new stations.

(2.9.4.6.3) A final check reading shall be taken to the Backsight station after reading to the Temp station.

(2.9.4.6.4) Using Temp Station

(2.9.4.6.4.1) if only a few additional readings are being taken from the Temp station; previous booking sheet can be used, otherwise use a new sheet.

(2.9.4.6.4.2) take readings to additional detail.

(2.9.4.7) Daily Traverse / Topography Checklist

(2.9.4.7.1) At the end of daily survey, the data shall be checked.

(2.9.5) Survey Controls

(2.9.5.1) The entire topographic survey shall be carried out by Total Station having facility of transferring data to computer.

(2.9.5.2) All traverse stations shall be recorded with X, Y and Z coordinates and shall be checked to eliminate any error. However the Z values obtained from this shall be not be used for any survey work.

(2.9.5.3) The BMs shall be connected for X and Y co-ordinate by Total Stations with closing at intervals, In case of closing error being outside the permissible limit survey to be repeated for proper closing.

(2.9.5.4) Levels of all Temporary and Permanent BMs shall be obtained by Auto levels only. Levels shall be closed to eliminate any error. However
subsequent levelling from BMs for contouring purpose (detailing) may be carried out by Total Station.

(2.9.6) **Period of Survey**

(2.9.6.1) The field work shall be completed within the stipulated time.

(2.9.6.2) To agree required format and standards for submission of data and drawing a sample shall be submitted within a week’s time from the start of work, along with coding patterns and identification features for Project Seabird’s approval. All data must be supplied to Project Seabird every 15 days from the commencement of field work to the agreed standards and format.

(2.9.7) **Submission Pattern**

(2.9.7.1) All data shall be submitted in hard and soft copy (compact discs) in ASCII format compatible with design software.

(2.9.7.2) Three dimensional terrain model with contours at 1m interval shall be provided in AutoCAD 2008 DXF format in softcopy (compact disc)

(2.9.7.3) The survey drawings prepared from the data shall also be submitted in hard copy (plan and sections) and soft copies (compact discs) for design purposes at scale specified at para 2.1.3 above.

(2.9.7.4) All hard copies shall be submitted in AI sheets properly numbered and indexed with reference to index map included at the corner of each sheet.

(2.9.7.5) A soft copy of the nameplate adopted shall be submitted separately to enable the Client modify it to the standard format as would be used for other drawings to be prepared for the project.

(2.9.7.6) The drawings shall be fully legible in black and white print.

(2.9.7.7) All drawings shall be prepared in AutoCAD version 2008 only. A list of layer details shall be submitted separately.

(2.9.7.8) A detailed list of Bench Marks, GPS and Traverse points is to be submitted by the Contractor. Table

### Table 5: Survey Code List

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**Note:** The nomenclature of all building codes shall be as below:
Type of structure/ number of storeys/ use of structure
- P/I/R - Pucca/ number of storeys -II residential
- SP/I/C - Semi-Pucca number of storeys - I commercial
- IQI/C - Kutch/ number of storeys 1/ commercial etc.
LAND DETAILS REQUIRING TOPOGRAPHIC SURVEY-PROJECT SEABIRD

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<td>4</td>
<td>E</td>
<td>2530</td>
<td>2432</td>
</tr>
</tbody>
</table>

**Note:** Actual area of the survey and its limits will be indicated/confirmed on the ground by Project Seabird before commencement of Survey work.
**DRAWINGS**

Following drawings shall form part of the tender documents, which can be seen in the office of DDG(PI) Karwar/DG Project Seabird Delhi on any working day during working hours with prior appointment.

1. Naval land at Karwar.(enclosed)
2. Topographical Survey of sites A, B1, B2 & E
3. As built drawings of sites A, B1, B2 & E
4. Survey of India maps of site C1 & C2
5. Naval land at Site ‘E’ Karwar
Section V – Price Bid

Note:

1. No mobilization of personnel and instruments will be paid separately. This shall be built in the respective items.

2. The general survey shall be paid on the basis of area covered. This item shall cover the cost of field work, drawing office work and submission of drawings and reports in stipulated number of copies. No part payment shall be allowed.

3. Bushes, dense mixed jungle or any other obstruction coming in the way of survey work shall be removed only if absolutely essential after permission of the DDG (PI). Alternative suitable methods are to be adopted to clear such obstacles so that survey work can continue uninterrupted and as per the technical specifications. Cost towards such expenses shall be deemed to be included in the unit rate quoted by tenderer under respective item(s).

4. The contractor shall include in his rates clearing of bushes and obstructions for carrying out the survey work.

5. The contract rates are inclusive of all charges and expenses towards taxes, duties, fees, levies, etc. The Tenderer shall make his own arrangement for water, power, accommodation, transport and all other facilities for his personnel and bear all charges and expenses for the same.

6. The quantities given in Schedule of Quantities are estimated and provisional and are given to provide a common basis for tendering. The basis of payment shall be the actual quantities of work ordered and carried out, as measured by the contractor and verified by the Consultant Engineer and valued at the rates & prices tendered in the Schedule of Quantities.

7. Evaluation Criteria - The broad guidelines for evaluation of Bids will be as follows:

   (a) Only those Bids will be evaluated which are found to be fulfilling all the eligibility and qualifying requirements of the tender, both technically and commercially.

   (b) In respect of Two-Bid system, the technical Bids forwarded by the Bidders will be evaluated by Project Seabird / Project Consultant-Engineer with reference to the technical characteristics of the equipment as mentioned in the tender. The compliance of Technical Bids would be determined on the basis of the parameters specified in the tender. The Price Bids of only those Bidders will be opened whose Technical Bids would clear the technical evaluation.
(c) The Lowest Bid will be decided upon the all inclusive lowest price quoted by the particular Bidder as per the Price Format for Bill of Quantity given here-in-after. The ultimate cost would be the deciding factor for ranking of Bids.

(d) The Bidders are required to spell out the rates of Customs duty, Excise duty, VAT, Service Tax, etc in unambiguous terms; otherwise their offers will be loaded with the maximum rates of duties and taxes for the purpose of comparison of prices. If reimbursement of VAT/service tax is intended as extra, over the quoted prices, the Bidder must specifically say so. In the absence of any such stipulation it will be presumed that the prices quoted are firm and final and no claim on account of such duties will be entailed after the opening of tenders. If a Bidder chooses to quote a price inclusive of any duty and does not confirm inclusive of such duty so included is firm and final, he should clearly indicate the rate of such duty and quantum of excise duty included in the price. Failure to do so may result in ignoring of such offers summarily. If a Bidder is exempted from payment of VAT duty up to any value of supplies from them, they should clearly state that no excise duty will be charged by them up to the limit of exemption which they may have. If any concession is available in regard to rate/quantum of VAT, it should be brought out clearly. In respect of the Bidders who fail to comply with this requirement, their quoted prices shall be loaded with the quantum of VAT/service tax which is normally applicable on the item in question for the purpose of comparing their prices with other Bidders.

(e) If there is a discrepancy between the unit price and the total price that is obtained by multiplying the unit price and quantity, the unit price will prevail and the total price will be corrected. If there is a discrepancy between words and figures, the amount in words will prevail for calculation of price.

(f) The Lowest Acceptable Bid will be considered further for placement of contract / Work Order after complete clarification and price negotiations as decided by the Project Seabird/ Project Consultant Engineer.

(g) The description of items of work is outlined in Bill of Quantities (BOQ). These shall be read in conjunction with Invitation of tender (Section-I). GCC (Section II) Special Condition of contract (Section-III). Technical Specifications & scope of work including drawings (Section IV).
SECTION –V – PRICE BID (Contd…..)

BILL OF QUANTITIES

Price schedule for TOPOGRAPHY SURVEY FOR PROJECT SEABIRD, AT KARWAR (rates inclusive of all taxes & duties)

<table>
<thead>
<tr>
<th>Item NO.</th>
<th>DESCRIPTION OF ITEMS</th>
<th>UNIT</th>
<th>QTY (Acre)</th>
<th>RATE PER UNIT</th>
<th>AMOUNT</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Carrying out the detailed topographical ground / land survey work of complete site C (comprising C1 &amp; C2) as shown in tender drawings by triangulation, close traverse covering details of physical features (nallah, rivers, lake, pond, forest etc.) and other information such as roads, culverts, transmission, lines, telegraphs, telephones and electric poles, underground services, cross drainage works etc, including recording spot levels as per specification and direction of Engineer-in-Charge/Project Consultant including submission of all survey drgs, contour maps made in Auto cad in four sets and copy of all drgs in CD and the field book for following types of Land:</td>
<td>Per Acre</td>
<td>1540</td>
<td>Rs</td>
<td>Rs</td>
</tr>
<tr>
<td></td>
<td>(a) Plain</td>
<td></td>
<td></td>
<td>(Rupees ---------------)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(b) Hilly</td>
<td></td>
<td></td>
<td>(Rupees ---------------)</td>
<td></td>
</tr>
</tbody>
</table>

(Rupees ---------------------)

(Rupees ---------------------)

(Rupees ---------------------)

(Rupees ---------------------)
2. Carrying out the detailed topographical ground / land survey work in site A,B1,B2 & E as shown in tender drawings by triangulation, close traverse covering details of physical features (nallah, rivers, lake, pond, forest etc.) and other information such as roads, culverts, transmission, lines, telegraphs, telephones and electric poles, underground services, cross drainage works etc, including recording spot levels as per specification and direction of Engineer-in-Charge /Project Consultant including submission of all survey drgs, contour maps made in Auto cad in four sets and copy of all drgs in CD and the field book. For following types of Lands

<table>
<thead>
<tr>
<th>Type</th>
<th>Per Acre</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a) Plain</td>
<td>3120 Rs</td>
</tr>
<tr>
<td>(b) Hilly</td>
<td>1300 Rs</td>
</tr>
<tr>
<td>(c) Water Bodies</td>
<td>780 Rs</td>
</tr>
</tbody>
</table>
Carrying out the validation of existing Topographical survey data and as built features of Site A, B1, B2 & E and preparation of built drawings showing complete details all as specified and directed by Engineer-in-Charge/Project Consultant for following types of Land:

(a) Plain

(b) Hilly

(c) Water Bodies

<table>
<thead>
<tr>
<th>Description</th>
<th>Per Acre</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a) Plain</td>
<td>2280 Rs.</td>
</tr>
<tr>
<td>(b) Hilly</td>
<td>950 Rs.</td>
</tr>
<tr>
<td>(c) Water Bodies</td>
<td>570 Rs.</td>
</tr>
</tbody>
</table>

(Rupees -------------------
-------------)

(Rupees -------------------
-------------)

(Rupees -------------------
-------------)
<table>
<thead>
<tr>
<th></th>
<th>Description</th>
<th>Each</th>
<th>Rate (Rs)</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>Providing 150 mm x 150 mm x 1200 mm size cut stone granite pillars for grid station with 500mm below GL and 700 mm above ground (Top painted with Red colour) complete all as specified and directed by Engineer-in-Charge /Project Consultant.</td>
<td></td>
<td>200</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Providing 1000 x 1000 x 2000 mm size permanent pillars in PCC- 1:2:4 using 20 mm graded stone aggregate,1300mm below ground level and 700 above ground including fixing of MS plate 200 x 200 x 10mm thick all complete as specified and directed by Engineer-in-Charge /Project Consultant.</td>
<td></td>
<td>10</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Note: Area actually surveyed shall be measured & paid for.*

Signature of contractor