PHASE-II

ADDITIONAL CONDITIONS OF CONTRACT

FOR

SURVEY & SOIL INVESTIGATION

OF

BORDER OUT POST BUILDINGS

&

ACCESS / APPROACH ROAD

AT

VARIOUS LOCATIONS

NEAR

INDO BANGLADESH BORDER

IN

MIZORAM

AND

TRIPURA
ADDITIONAL CONDITIONS OF CONTRACT
(Surveying & soil investigation in Mizoram & Tripura)

1.0 INTRODUCTION

Construction of road cum fencing along Indo-Bangladesh Border (IBB) in Tripura / Mizoram sector is a project of Govt. of India, Ministry of Home Affairs, and Engineering Projects (India) Ltd. (A Govt. of India Enterprise) has been nominated as Executing Agency for the project.

There are 4 (four) different locations in Tripura & 49 (forty nine) different locations in Mizoram where detailed topographical survey, contour survey and soil investigation are required to be carried out for construction of Border outposts along Indo Bangladesh Border.

2.0 SCOPE OF WORK

The scope of services of Consultant shall be detailed topographical survey, contour survey & soil investigation for construction of Border Out Posts at following locations.

1. Tripura

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Name of BOP</th>
<th>District</th>
<th>BP Reference</th>
<th>Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Tripura(S)</td>
<td>Sarsaima</td>
<td>2161/2S-2163/7S</td>
<td>Coy</td>
</tr>
<tr>
<td>2.</td>
<td></td>
<td>Sabroom</td>
<td>2214/3RI-2216/1RI</td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td></td>
<td>Nutan Basti</td>
<td>2220/1RI-2221/1RI</td>
<td>PI</td>
</tr>
<tr>
<td>4.</td>
<td>Dhalai</td>
<td>Pattachera</td>
<td>2267/10S-2267/17S</td>
<td></td>
</tr>
</tbody>
</table>
2. **Mizoram**

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Name of BOP</th>
<th>District</th>
<th>BP Reference</th>
<th>Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>New Amchurimukh</td>
<td></td>
<td>2301/M</td>
<td>PI</td>
</tr>
<tr>
<td>2.</td>
<td>Badal Chhara</td>
<td></td>
<td>BSF to inform BP reference</td>
<td>Coy</td>
</tr>
<tr>
<td>3.</td>
<td>Rajiv Nagar</td>
<td></td>
<td>2301/M</td>
<td>PI</td>
</tr>
<tr>
<td>4.</td>
<td>New Tuipuibari</td>
<td></td>
<td>2302/M</td>
<td>PI</td>
</tr>
<tr>
<td>5.</td>
<td>Kadamtoli</td>
<td></td>
<td>BSF to inform BP reference</td>
<td>Coy</td>
</tr>
<tr>
<td>6.</td>
<td>Ajachhara</td>
<td></td>
<td>2304/M</td>
<td>PI</td>
</tr>
<tr>
<td>7.</td>
<td>Devachhara</td>
<td></td>
<td>BSF to inform BP reference</td>
<td>Coy</td>
</tr>
<tr>
<td>8.</td>
<td>New Andermanik</td>
<td></td>
<td>2305/M</td>
<td>PI</td>
</tr>
<tr>
<td>9.</td>
<td>Pansuri</td>
<td></td>
<td>BSF to inform BP reference</td>
<td>Coy</td>
</tr>
<tr>
<td>10.</td>
<td>Dhanpara</td>
<td>Mamit</td>
<td>2306/M</td>
<td>PI</td>
</tr>
<tr>
<td>11.</td>
<td>Selinlui</td>
<td></td>
<td>BSF to inform BP reference</td>
<td>Coy</td>
</tr>
<tr>
<td>12.</td>
<td>Zaruma Lui</td>
<td></td>
<td>2307/M</td>
<td>PI</td>
</tr>
<tr>
<td>13.</td>
<td>Tuilan Pui</td>
<td></td>
<td>BSF to inform BP reference</td>
<td>Coy</td>
</tr>
<tr>
<td>14.</td>
<td>Nokata</td>
<td></td>
<td>2308/M</td>
<td>PI</td>
</tr>
<tr>
<td>15.</td>
<td>Himawng Lui</td>
<td></td>
<td>2309/M</td>
<td>PI</td>
</tr>
<tr>
<td>16.</td>
<td>New Keislam</td>
<td></td>
<td>2310/M</td>
<td>Coy</td>
</tr>
<tr>
<td>17.</td>
<td>Fangfar</td>
<td></td>
<td>2311/M</td>
<td>PI</td>
</tr>
<tr>
<td>18.</td>
<td>Kawli Lui</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>19.</td>
<td>Cheng Lui</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>20.</td>
<td>Alvapui</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>21.</td>
<td>Silsuri</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>22.</td>
<td>Selam Suri</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>23.</td>
<td>Indraram</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>24.</td>
<td>Lakshmi Chhara</td>
<td></td>
<td>BSF to inform BP reference</td>
<td>Coy</td>
</tr>
<tr>
<td>25.</td>
<td>Baidhyaba Chhara</td>
<td></td>
<td>2314/M</td>
<td>PI</td>
</tr>
<tr>
<td>26.</td>
<td>Nabhamchhara</td>
<td></td>
<td>2315/M</td>
<td>PI</td>
</tr>
<tr>
<td>27.</td>
<td>Tripura Chhara</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>28.</td>
<td>New Marpara</td>
<td></td>
<td>2316/M</td>
<td>PI</td>
</tr>
</tbody>
</table>
2.1 Surveying work:

Scope of work generally includes not limited to the following:-

(i) Carrying out Topographical survey of total area showing all permanent & general features and detailed contour survey as per IRC / MOST / BRO standard by taking spot levels of the plot of land at 2M interval or less, clearance of jungles and cutting of trees etc. of entire area of each BOP and any other field works necessary for completion of this work, preparation, submission of drawings in required number including incorporating the comments of EPI for approval of client / EPI.

(ii) Supply & fixing of permanent benchmark / reference pillars / grid pillars with coordinates and levels at different locations as per instruction of Engineer-in-charge.
In case of access / approach road from existing road, topographical survey as per relevant IRC / MOST / BRO standard including preparation of drawings shall also be included in the scope of work.

All description, notes & symbol etc. to be indicated in the legend of the drawing shall be identical as shown in the drawing.

(iii) Depiction of location of different type of existing buildings /structures on respective survey drawings of individual BOP. Distinct marking and numbering alongwith dimensions and disposition of locations of the individual buildings and structures of each BOP to be constructed as per enclosed layout plan drawing are to be made on topographical drawing, after topographical survey and based on survey / available topographical datas and interaction / approval of EPI/client/BSF.

Area / boundary of building shall carry spot levels at an interval of 2M or less and accordingly, contours shall be drawn. In case of retaining wall is required, the locations of provision of retaining wall shall be marked and incorporated on the topographical survey drawing in consultation with Engineer–in charge/client/BSF.

(iv) Description and symbol to be indicated in the legend shall be exactly as per drawing.

2.2 Terms & Conditions

a) The party shall mobilize to each site in accordance with the priority fixed by EPI within 10 days from date of giving go ahead / issue of LOI.
If the survey/executing agency, do not mobilize at site as desired or make any delay in carrying out the work, EPI reserves the right to cancel the order. No payment / compensation shall be admissible for the mobilization made / part work done by the executing agency.

b) The work in all respect at all locations in Tripura shall be carried out within 21 days while that in Mizoram within 49 days, from date of LOI, using modern survey equipment / instruments, preferably, with total station.

c) The survey/executing agency shall bear all kinds of expenses including those towards transportation of the equipment, and others, mobilization of manpower, lodging, boarding and local conveyance etc. and nothing extra shall be admissible on this account.

d) The rates are inclusive of all taxes and duties including VAT, etc. and shall remain firm for entire period of completion of work in all respect as per the order including extension of time, if any, given by EPI.

e) The survey map / drawing shall be prepared based on field data using computer programme such as Auto CAD, Mx Road.

f) One hard copy of drawing is to be submitted for approval prior to submission of 5 sets of coloured hard copy & one set of soft copy in form of CD/Pen drive. In case of any comments of EPI / BSF on the drawing, the same shall be resubmitted after incorporating of the comments of EPI / BSF.

g) High flood level ascertained by local observations, duly supplemented by local enquiries is to be clearly mentioned on the drawing.
h) In case of approach / access road, survey reference pillars visible and distinctly marked with co-ordinate and levels shall be installed at an interval of 100M / as per instruction of Engineer-in-charge and shall also be shown in drawings for future reference. Fixing of permanent Bench mark at a suitable interval minimum one number in every 100M including marking of alignment in the ground shall be done. The size of BM pillar should be made of PCC (1:2:4) and size 15 CM x 15 CM x 50 CM per KM will also to be fixed. The alignment pillar will be embedded in ground.

i) In case of approach / access road, survey Drg. for strip plan, longitudinal & cross sections shall be presented in following standard scales:

1. Key plan (in separate sheet)  1:10000
2. Plan                        1:2000
3. L-Section Vertical –Scale   1:200
   Horizontal Scale            1: 1000
4. Cross-Section Vertical-Scale 1:200
   Horizontal-Scale            1: 1000

2.3 Bill of quantities : Refer Annexure-I

2.4 Soil Investigation:– Scope
Mobilization of men, equipments of each site for carrying out the field investigation, making bore holes, conducting standard penetration test, collecting samples of soil for further analysis in the laboratory and determines the safe bearing capacities of soil as described in schedule of work / BOQ or as directed by Engineer in charge giving complete details of investigations, tests & recommendations. All calculations shall be based on relevant IS Codes with proper references.

a) Recommendation of bearing capacity.

b) Plotting of compiled soil profile for the site
c) Suitability of excavated material for back filling as back fill may be used for landscaping etc.

2.5 Terms and conditions

a) The location of boreholes shall be given by EPI’s Engineer on ground. The boreholes shall be numbered also. The analysis report should be given as per the corresponding serial number of borehole.

b) The party shall mobilize to each site in accordance with the priority fixed by EPI within 10 days from date of giving go ahead / issue of LOI. If the party do not mobilize as desired or delayed in carrying out the work, EPI reserves the right to cancel the order. No payment / compensation shall be admissible for the mobilization / part work done.

c) The total work of all locations shall be finished in 60 days and your rates shall remain firm till completion of work.

2.6 Bill of quantities – Refer Annexure-II

3.0 TIME SCHEDULE & COMPLETION TIME:

The agency shall mobilize separate team (s) simultaneously for each state i.e. in Mizoram & Tripura. In Tripura, the entire scope of work including mobilization & submission of reports etc shall be completed within 30 days, while in Mizoram the entire scope of work shall be completed within 60 days. The date of start of the contract shall be reckoned from the date of issue of Letter of Intent/Work Order.
Broadly the time schedule should be prepared considering the following parameters and there should not be target variation.

i) Mobilization to site - Within 10 days from the date of work order / LOI.

ii) Field work
- Tripura: Within 21 (twenty-one) days from the date of work order/LOI.
- Mizoram: Within 49 (forty nine) days from the date of work order/LOI.

iii) Submission of soil Investigation report / Drawings
- Tripura: Within 21 (twenty-one) days from the date of work order/LOI.
- Mizoram: Within 49 (forty nine) days from the date of work order/LOI.

iv) Total scope of work
- Tripura: Within 30 (thirty) days from the date of work order/LOI.
- Mizoram: Within 60(sixty) days from the date of work order/LOI.

4.0 SECURITY DEPOSIT CUM PERFORMANCE GUARANTEE:

"Within 10(ten) days from the date of issue of letter of Intent or within such extended time as may be granted by EPI in writing, the Contractor shall submit to EPI a Security Deposit cum Performance Bank Guarantee in the form appended, from any Nationalized bank / Scheduled Bank equivalent to 5% (five percent only) of the Contract
value for the due and proper execution of the contract. This bank guarantee shall remain valid up to 90(ninety) days after the end of defects liability period.

In case the Contractor fails to submit the Security Deposit cum Performance Guarantee of the requisite amount within the stipulated period or extended period, letter of intent will stand withdrawn and EMD of Contractor shall be forfeited.

5.0 PAYMENT ON ACCOUNT

<table>
<thead>
<tr>
<th></th>
<th>On submission of Topographical survey drawings &amp; soil investigation report for 1st checking by EPI to its satisfaction.</th>
<th>25%</th>
</tr>
</thead>
<tbody>
<tr>
<td>i)</td>
<td>On submission of all Topographical survey drawings and soil investigation report to the satisfaction of EPI.</td>
<td>50%</td>
</tr>
<tr>
<td>ii</td>
<td>On final approval of Topographical survey by competent authority &amp; submission of Soil investigation report.</td>
<td>25%</td>
</tr>
</tbody>
</table>

6.0 ANTI MALARIA MEASURES

The Agency shall at his own expenses make necessary arrangement for undertaking anti-malaria measures as prescribed by Local Health Authorities or as directed by Engineer-in-charge.

7.0 SECURITY & SAFETY

i) The site is located near Indo-Bangladesh Border (IBB) wherein the movement of personnel is limited and regulated by security agencies. The Agency has to work as per the permission given
by these Security agencies from time to time and Agency must check before quoting for this job, the working hours, restrictions in working and safety of their manpower, plant & equipment. The Agency shall mobilize and organize his resources accordingly to complete the work within stipulated time. The Agency shall have no claim on MHA / EPI or any other agency / department for any loss of man hours / machinery due to these restrictions / regulations and blockage of road due to land slides or any local bandh / agitation.

ii) A general security cover shall be provided by BSF / State Police and payment of security charges, if any demanded by BSF / State Police authorities shall be borne by the survey agency. The Agency shall make his own arrangements for security and safety of his manpower, plant & equipment, materials, etc. Nothing extra shall be admissible on account of this and no compensation shall be paid by MHA / EPI in case the Agency’s personnel suffer body injury, loss of life or any damages caused to the plant and machinery of the Agency.

8.0 OTHER TERMS & CONDITIONS

i) BSF personnel shall be available during site survey works. However, EPI do not take any responsibility whatsoever for any untoward incidents / mishaps.

ii) Working timing shall be regulated in consultation with BSF, EPI and Agency.

iii) Agency shall make his own arrangement for accommodation, office storage etc. including watch and ward and electricity. The Agency shall make their own arrangement for transportation of their survey team and instruments etc.
iv) All payments as per statutory body rules whether from center or state shall be absorbed by Survey Agency including EPF, Medical, inner permit pass etc. of their workmen.

v) The work may decrease / increase to extent of ± (Plus minus) 25%. In case the work increases or decreases more than ± (Plus minus) 25%, Engineer-in-charge shall inform the actual quantity to be executed at site to Project Head and decision of Project Head shall be final. However, the quoted rates shall remain firm and no claim on this account shall be entertained by EPI.

vi) Rate mentioned in the tender documents is inclusive of all transportation cost of men, material, equipments etc. and transportation cost shall be borne by the Survey Agency.

9.0 **HANDING OVER OF SITE**

As indicated by Border Security Force, the users of Border Out Post, the land of all BOP are either already acquired or in the process of acquisition. Handing over of site for all BOPs may not be possible in one go due to either deficiencies of total area of land required for construction or due to delay in land acquisition process. Therefore, the site may be handed over in parts progressively in phases to the contractor/agency. The contractor/agency shall take up the survey and soil investigation activities on such released fronts in parts/phase without any reservation whatsoever. However, in case of any delay in handing over of the site to the contractor/agency, Owner/EPI shall only consider suitable extension of time for the execution of the work. It should be clearly understood that the Owner/EPI shall not consider any other compensation whatsoever towards idleness of contractor’s labourer, equipments etc.