



**CONTRACT NO:**

**JUA - 22/007/PL/TU/P PRECISE LEVELING  
JALAN TUTONG - BELAIT, KAMPUNG LILAS,  
KAMPUNG SUNGAI PAKU, KAMPUNG TELESAL  
DAN KAMPUNG TELAMBA FROM 2009BM058  
TO 2008BM028**

**PRECISE LEVELING JALAN TUTONG - BELAIT, KAMPUNG LILAS, KAMPUNG SUNGAI PAKU,  
KAMPUNG TELESAL DAN KAMPUNG TELAMBA FROM 2009BM058 TO 2008BM028**

**SCHEDULE TO SPECIFICATION**

1. Precise leveling from 2009BM058 to 2008BM028 Jalan Tutong - Belait, Kampung Lilas, Kampung Sungai Paku, Kampung Telesai and kampong Telamba as shown on the Annex Diagram A is approximate 7.4km.
2. To facilitate topographic and engineering surveys work.
3. Precise levelling shall begin and end on previously established benchmarks as approved by Surveyor General. The list of known Benchmarks are as follows: -
  - 2009BM058
  - 2009BM059
  - 2009BM060
  - 2008BM029
  - 2008BM028
4. Check collimation error to determine if the error is within accepted limits using Two-Peg test. Level is assumed to be in adjustment if error is less than 0.00005 ( $< \approx 0.00005$ ). Result should be printed out and submitted to Survey Department for validation purposes.
5. All lines are to be levelled independently in both forward and backward direction.
6. All observations must start and end at initial benchmarks of level lines to ensure observations are all within the allowable misclosure.
7. In order that the results of the control levelling may be as widely useful as possible, particularly regarding mapping the elevation of suitable adjacent to the level line will be determined. These points, which are to be known as 'Intermediate Marks' will normally be road intersections, decks of bridges, etc.

8. Any establishment of 'Intermediate Marks' shall be approved by Surveyor General.
9. The maximum length of sight shall not be more than 40meter. Due to the slope of the ground or to shimmer the length of sight may often be shorter than this. Total distance of work is normally 1.5km but may vary due to suitability of the area.
10. Two backward and two foresight observations shall be taken. Differences between observations shall not exceed 0.04572cm. the difference in length between backsight and corresponding foresight shall not exceed 1.2m.
11. Acceptable precise digital level and leveling bar-corded invar staff shall be used. The staff is to be set always on staff set up pin. These pins are different length for hard and soft ground and have rounded tops. A ring is attached to the pin to facilitate lifting and carrying. The staff shall be erected vertically by using plate bubble attached on the staff.
12. Read out from the instrument shall be set to five (5) decimal places.
13. All observation shall be booked in a field note produced by Survey Department (Borang Ukur 059) and recorded digitally. As a checking procedure, the digitally recorded observation shall be printed out and submitted to Survey Department.
14. Clear diagrams shall be drawn digitally, sufficient offset or ties to permanent features nearest from benchmark for future location. It is essential that all record data are made in the field note at the time of measurement.
15. Digital photo of the Benchmark stations shall be taken.
16. Diagrams and photos shall be in JPEG format. Please refer to the existing Borang Ukur 081 for the diagram requirements.
17. The locality Map shall be produced at a suitable scale. The format of locality Map (but not limited to) as shown on the Annex Diagram B. the locality Map shall be in A3 size.

18. All relevant forms can be obtained digitally from Geodetic Section.
19. Height closes within an allowable error of  $\pm 3 \sqrt{k}$  mm where k is the distance in kilometer.
20. Any **control marks** running along the leveling route shall be connected.
21. Any matters arise which are not in this specification shall be referred to Geodetic Section of Survey Department.

#### **NOTICE TO CONTRACTOR**

22. The job must be completed in 4 weeks
23. The validity of the tender/ quotation for the survey works is twelve (12) months. All tender / quotation document shall be stamp and sign by the Licensed Land Surveyor.
24. The Surveyor General will authorize the contractor to commence work, once the contract document is signed.
25. Time completion of works

For,

“..... a penalty of one hundred dollars (\$100.00) shall be levied against the contractor for each week or part thereof .....”

Substitute and read as,

“ ..... a penalty of (15% of contract price divided by the contract duration in weeks) or two thousands five hundred dollars (\$2,500.00), whichever is the greater, shall be levied against the contractor for each week or part thereof .....”

26. Payment shall be based upon:
  - i. Control Survey (section 4) – rate per kilometer.
  - ii. Monthly progress payments shall be made based upon the Surveyor General's certification of work done as portion of the whole.

iii. No mobilization fee shall be payable.

27. That I/We have not colluded with any other company (ies) or any other person or entity in submitting the Tender Proposal for the above mentioned project. We understand that tender collusion is an offence under **Section 11, Competition Order 2015** and can be liable to a financial penalty of maximum 10 percent or such other percentage of business turnover for each year of infringement for a period, up to a maximum of 3 years.

***Borang Sebutharga***

**JABATAN UKUR  
KEMENTERIAN PEMBANGUNAN  
BANDAR SERI BEGAWAN BB3510  
NEGARA BRUNEI DARUSSALAM**

Bilangan Tawaran : JUA/22/007/PL/TU/P  
Tajuk Tawaran : PRECISE LEVELING JALAN TUTONG - BELAIT, KAMPUNG LILAS,  
KAMPUNG SUNGAI PAKU DAN KAMPUNG TELESAI FROM  
2009BM058 TO 2008BM029

Tarikh tutup : 09 Mei 2022 bersamaan 18 Syawal 1443.

Nama Syarikat/  
Alamat : \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

COP SYARIKAT :

Tandatangan : \_\_\_\_\_

Tarikh : \_\_\_\_\_

Sukacita dimaklumkan bahawa Syarikat berkesanggupan untuk membekal tawaran tersebut diatas dengan harga sekilometer \_\_\_\_\_

Dalam tempoh \_\_\_\_\_(minggu).

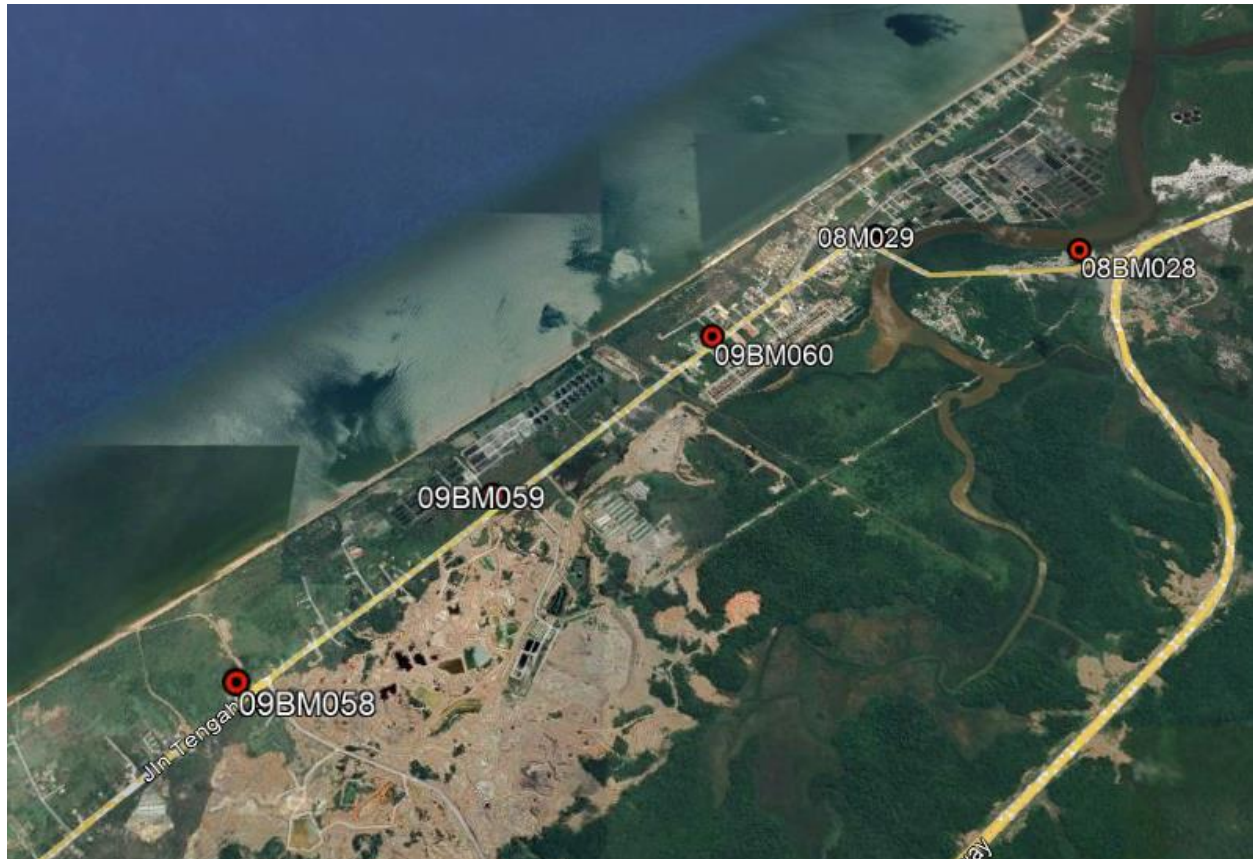


Table 1 Route from 2009BM058 to 2008BM029 approx 7.4Km.

22 Stesen geodetik sejalan dengan batu benchmark :-

- |           |           |           |
|-----------|-----------|-----------|
| - 17GS292 | - 17GS284 | - BMS.14  |
| - 17GS291 | - 17GS283 | - 16GS179 |
| - 17GS290 | - 17GS282 | - 17GS278 |
| - 17GS289 | - 17GS281 | - 17GS277 |
| - 17GS288 | - 16GS174 | - 17GS276 |
| - 17GS287 | - 02GS024 | - 17GS275 |
| - 17GS286 | - 17GS280 |           |
| - 17GS285 | - 17GS279 |           |