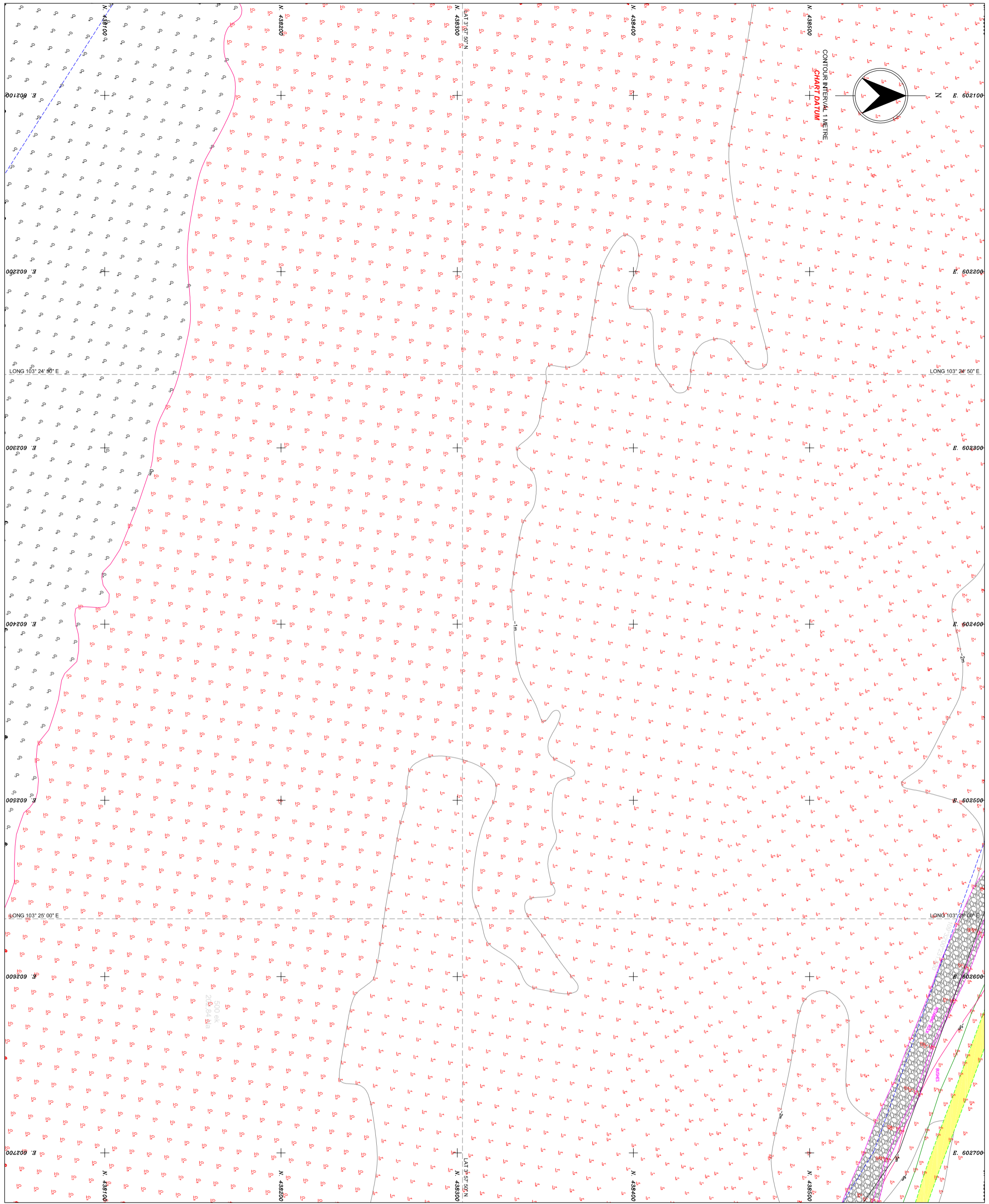


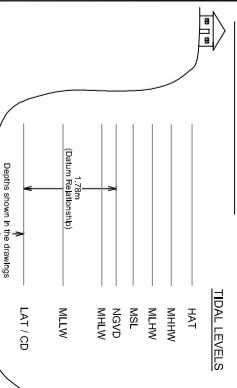
CONTour INTERVAL 1 METRE
CHART DATUM



- LEGEND / NOTES :**
- All measurements are in metres.
 - Coordinates is in MRSO.
 - All levels are based on Bench Mark No. BM 0031 (RL: 3.84m NGVD) (RL: 5.65m CD).
 - Chart Datum at Tanjung Gelang is 1.70m Below Mean Survey Datum (MSD).
 - Mean Sea Level (MSL) is 0.14.
 - Land Survey Datum (MSD) is 0.00.
 - Mean Higher Low Water (MHLW) is -0.21.
 - Mean Lower Low Water (MLLW) is -1.26.
 - Lower Astronomical Tide (LAT) @ Chart Datum (CD) is -1.78.
 - Depth soundings are below Chart Datum (CD).

TIDAL LEVELS AT TAKUNG GELANG
(Adapted from Royal Malaysian Navy Tide Table 2016)

NSVD (m)	LAT (CD) (m)
Highest Astronomical Tide (HAT)	3.84
Mean Higher High Water (MHHW)	3.34
Mean Lower High Water (MLHW)	2.28
Mean Sea Level (MSL)	1.82
Land Survey Datum (MSD)	1.78
Mean Higher Low Water (MHLW)	1.57
Mean Lower Low Water (MLLW)	0.50
Lower Astronomical Tide (LAT) @ Chart Datum (CD)	0.00



GEODETTIC INFORMATION :

Geoidetic Data

- Spheroid : Malayan Revised Everest
- Semi Major Axis : 6 377 304.063 metres
- Semi Minor Axis : 6 356 103.029 metres
- Eccentricity Squared : 0.006 637 846 6302
- Reciprocal Flattening (1/f) : 300 801.7
- Origin of Meridian of Reference : Pulau Pinang State Capital
- Projection : G. Sphum
- Origin of Meridian : 102° 28' 10.24 E
- Longitude of Origin (GM) : N 05° 42' 29.50 N
- Latitude of Origin : 0 m
- Falset Easting : 0 m
- Falset Northing : 0 m

CLIENT :

Muhibbah Engineering (M) Bhd
Lot 586 & 579, 2nd Mile
Jalan Bera Tiga Lama
41300 Klang
Selangor Darul Ehsan

**MUHIBBAH KUANTAN
MARITIME HUB**
PROJECT TITLE:

**HYDROGRAPHIC AND
TOPOGRAPHIC SURVEY
- CHART DATUM -**

DRAWING TITLE:

Drawn By: Mastura
Checked By: Sharifzle / Hafid

Scale: 1 : 1000
Horizontal
Vertical

Supervisor's Drawing No.: JPWS/16/PHG/533/008/8
Client's Drawing No.: 22nd August 2016

REVISION	DATE	REPORT NO.	918/2016

Chartered & Licensed Land Surveyors:

**JURUKUR PERUNDING
SERVICES Sdn. Bhd.**

7 TAMAN MANDARIN DAMAI 3
TAMAN MANDARIN PERKAMPUNG
47100 PUCHONG, SELANGOR DARUL EHSAN
Tel: (603) 2261 2261 Fax: (603) 2822 2999
Email: info@jps.com.my