REMT

REQUEST FOR INFORMATION

PROJECT	:	CADANGAN PEMBINAAN BALAI BOMBA DAN PENYELAMAT BEAUFORT SABAH						
ISSUED TO	:	KIA				ISSUED DATE	: 25.3.2021	
ATTENTION	:	NUR IZWAN RAHIM				RF Info No.	: RF Info/BOMBA/ 08	
DESIGNATION	:	PRINCIPAL						
C.C	:							
This RFI will Constitute	:		Variation Oder		Time Extension	/	N/A	PIC Siganture

INFORMATION REQUIRED :

1. main building
   - detail as per drawing attach.
   * Refer attach drawing.

Date Required :

ISSUED BY
Name : RONNY BIN LESA
SITE AGENT
REMT UTAMA SDN. BHD.
Designation :

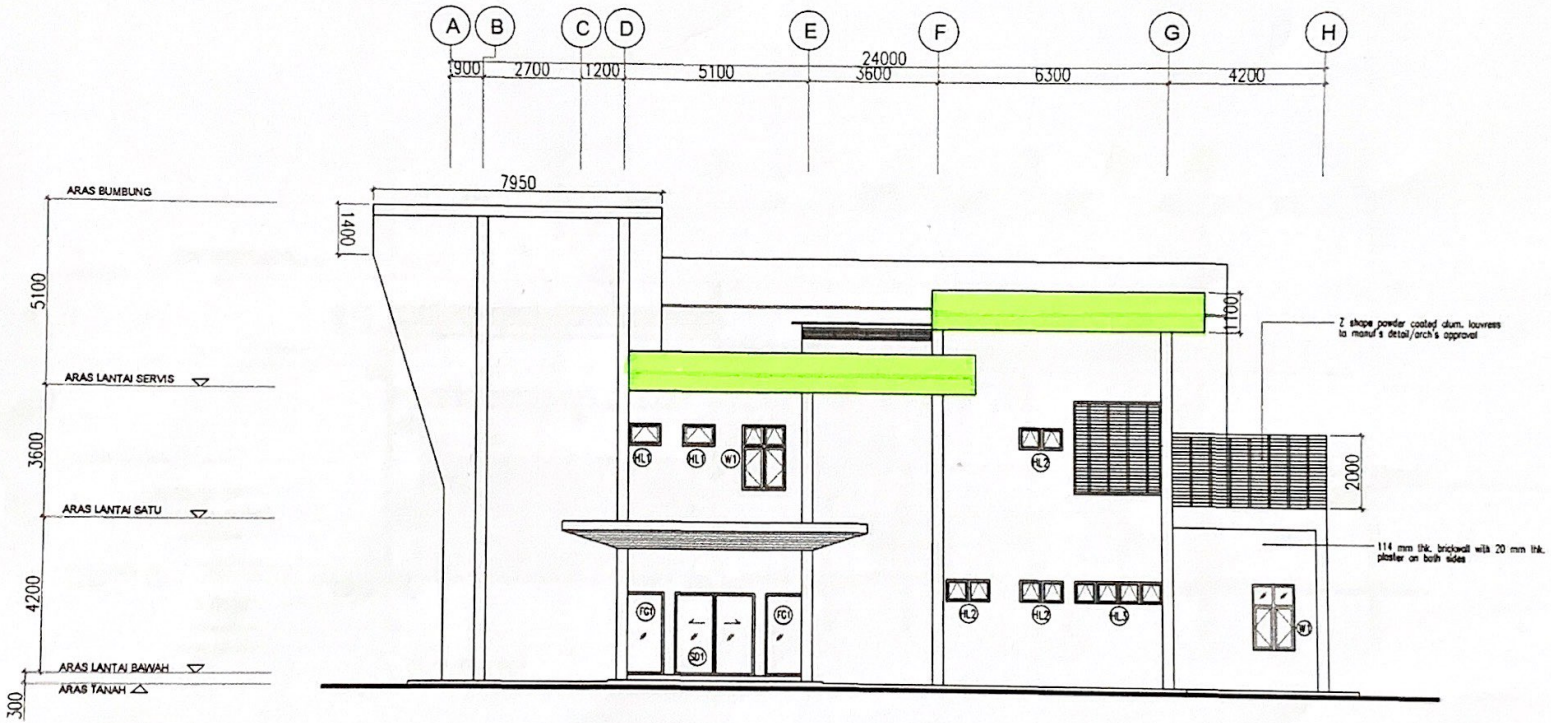
Acknowledgement of Receipt :
Name : SYAHRIL MOHD ARIFFIN
INSPECTOR OF WORK
COWAM PPM 315
BFM W12782
Date :

ATTACHMENT/RESPONSE :

C.C :

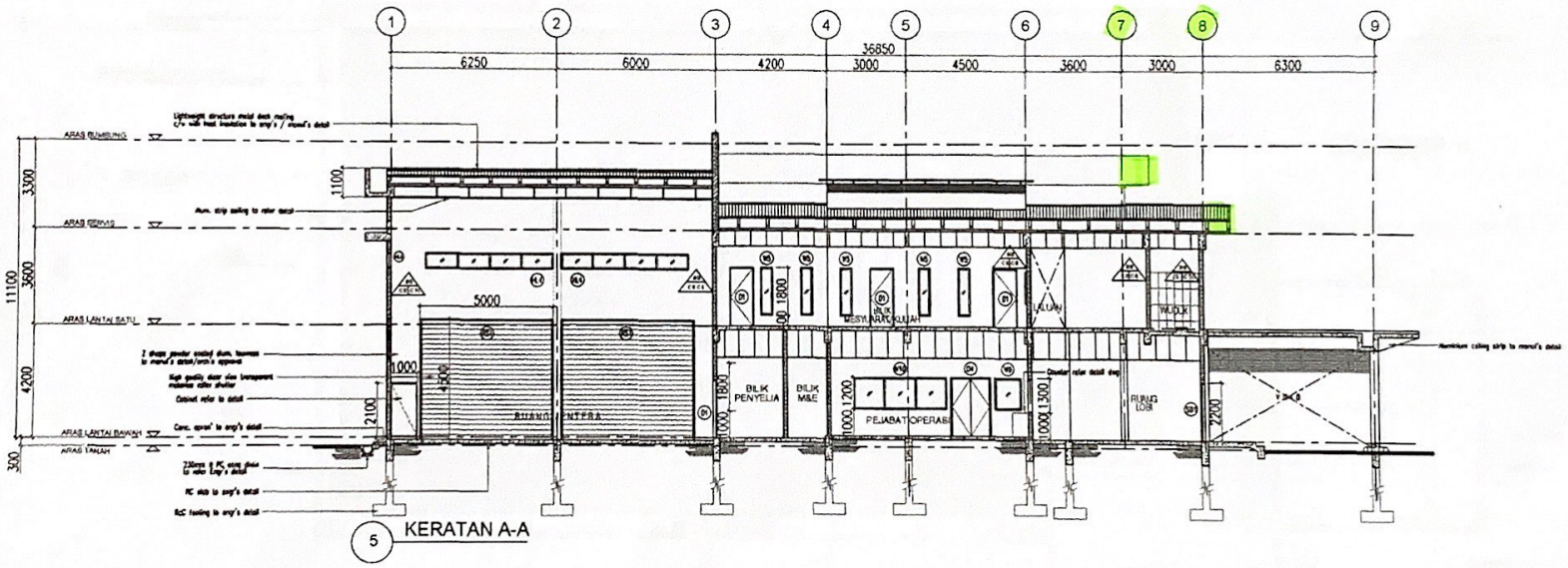
Signature :
Name :
Position :
Date :

Company Stamp

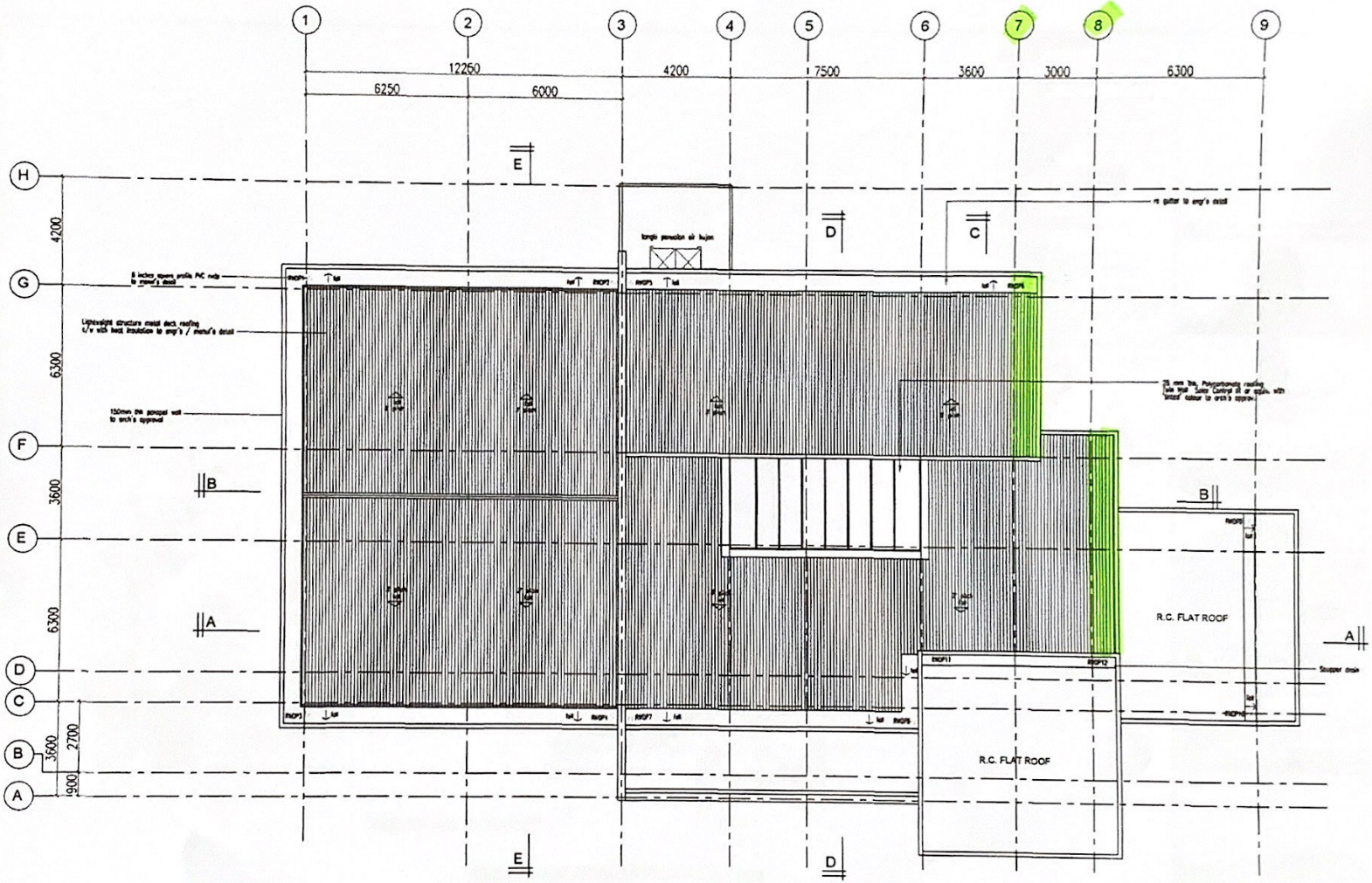


12 PANDANGAN SISI KANAN

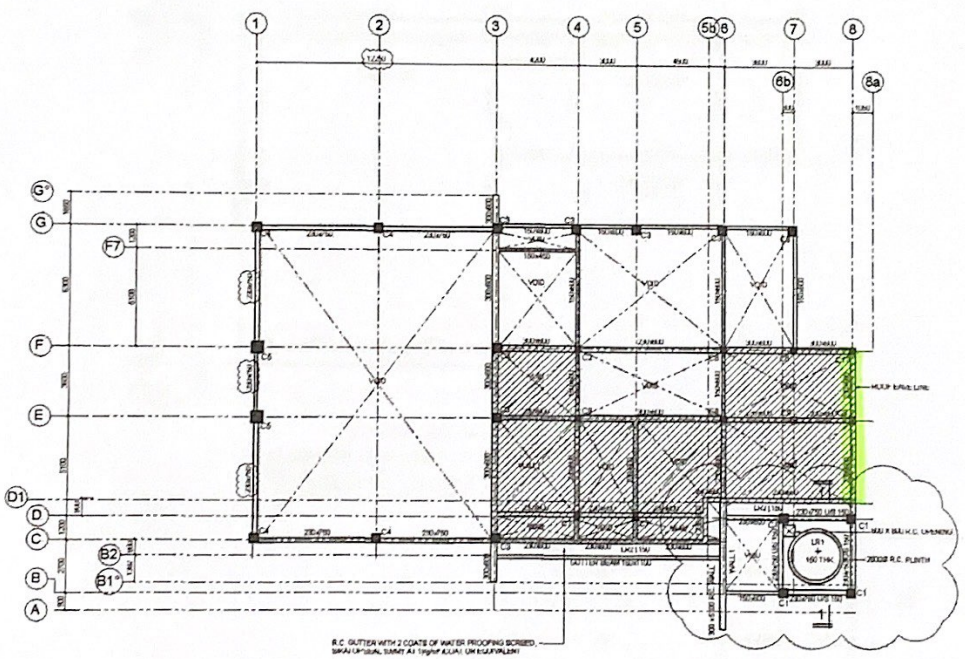
SYAHRIL MOHD ARIFFIN
INSPECTOR OF WORK
COWAM PPM 315
BEM W12782


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2
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6
7
8
9
36850
6250
6000
4200
3000
4500
3600
3000
6300
ARAS BUMBUNG
ARAS KEROS
ARAS LANTAI SATU
ARAS LANTAI BAWAH
ARAS TANAH
11100
3300
3600
4200
300
1100
5000
1000
4000
2100
1800
1200
1300
2200
BILIK PENYELIA
BILIK MSE
PEJABAT OPERASI
LALUAN
TANGGA
RUANG LOBI
RUANG ENTRI

5 KERATAN A-A



PELAN BUMBUNG
SKALA 1:100



PELAN ARAS BUMBUNG - LOWER ROOF (+17.80m)
SCALE 1:100

CONCRETE NOTES

A. CONCRETE

(a) All concrete shall be generally Grade 30 unless otherwise specified.

(b) Slab thickness does not include floor finishes.

(c) Joints and beams must be placed consecutively unless otherwise stated.

(d) Starter bars of 20mm dia. shall be provided at 1,000mm c/c for reinforcement exceeding one layer in depth.

(e) During construction, care shall be taken to maintain the structure in a stable condition and to ensure that no part shall be overstressed under construction activities.

(f) Fine and coarse aggregates shall comply with EN 12620 and EN 013, nominal coarse aggregates size shall be 20mm unless otherwise stated.

(g) All exposed edges to be chamfered 25mm x 20mm unless otherwise indicated.

(h) The maximum concrete slump shall be determined during trial mixes and shall be approved by the engineer.

(i) All concrete shall be compacted using mechanical vibrators in accordance with the specification for concrete works.

(j) The minimum clear cover to main reinforcement shall be as follows:

50mm for works below ground
25mm for columns, beams and slabs above ground

B. REINFORCING STEEL

(i) Steel for reinforcement shall be supplied to BS 4449 and are identified by the following symbols:
R - Mild steel bar characteristic strength 250 N/mm²
T - High yield T grade deformed bars, characteristic strength 500 N/mm²

(ii) Steel fabric shall comply with EN 10080 and BS4483.

(iii) Bending of reinforcement shall be accordance with EN 1992

(iv) Laps other than those shown in the drawings shall be made only with the approval of the engineer. Hot approval may not be given in area of high reinforcement stress and/or congestion of reinforcement.

(v) All lap length shall comply with the requirements of BS 8666. Splices shall be staggered wherever possible.

(vi) Anchorage and minimum lap length for Type 2 deformed yield bars

Diameter	Lap Length	Tension Anchorage
T10	400	400
T12	480	480
T16	640	640
T20	800	800
T25	1000	1000
T32	1,280	1,280

(vii) Cranking of column bars shall not exceed a slope 1:10. Lap lengths are to be increased by a factor of 1.4 where the clear distance between adjacent laps or less than the greater of 75mm or 6 x the size of the largest bar.

KEMENTERIAN PERUMAHAN DAN KERAJAAN TEMPATAN

JABATAN BOMBA DAN PENYELAMAT MALAYSIA

KEMENTERIAN PERUMAHAN DAN KERAJAAN TEMPATAN

TAJUK PROJEK:
CADANGAN PEMBINAAN PROJEK BALAI BOMBA DAN PENYELAMAT BEAUFORT BERSERTA KEMUDAHAN TAMBAHAN MENARA LATIHAN, SETOR LOGISTIK, KOLAM AIR, PADANG KAWAD, RUMAH SAMPAH DAN PENCAWANG ELEKTRIK, GESB DI ATAS LOT NO 116031227, JALAN KOMPLEKS SUKAN, DAERAH BEAUFORT, 89800 PEKAN BEAUFORT, SABAH.
UNTUK, TETUAN:
JABATAN BOMBA DAN PENYELAMAT MALAYSIA

AKTIF FA KONSULT SDN BHD
LOT 17 & 18, 2ND FLOOR, BLOCK C, UNIAN HIJAU PHASE 3, JALAN CAWAN, 88628 KOTA KINABALU.
T/FAX : 088-238736
e-MAIL : aktifa88@yahoo.com
aktifa88@gmail.com

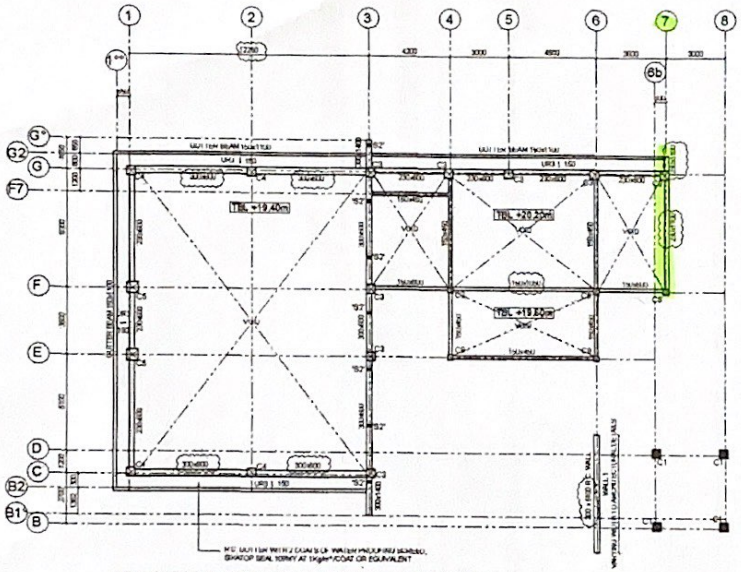
I hereby certify that the works have been designed by me in accordance with good engineering practice and that I have full responsibility for the design and proper performance of the works.

ENGINEER'S SIGNATURE

BALAI BOMBA
PELAN ARAS BUMBUNG
- LOWER ROOF (+17.80m)

DRAWING	PEL
DRAWN	SAF
CHECKED	ABP 2024
SCALE	1:100
DWG NUMBER	AF-ABP/2024/ARCH/PEL/01

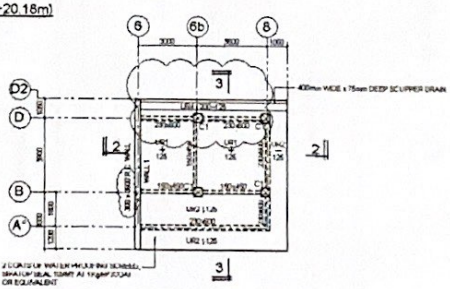
PRELIMINARY / SUBMISSION / CONSTRUCTION
INFORMATION / TENDER / AS-BUILT (Other)



PELAN ARAS BUMBUNG (ARAS +19.40m, +19.60m & +20.18m)

SCALE 1:100

NOTES: (a) ALL LEVELS SHALL BE REFERRED TO ARCHITECTURAL DRAWING
(b) 'S2' DENOTES 300x125 R.C. STIFFENER WITH REINFORCEMENT



PELAN ARAS BUMBUNG - UPPER ROOF (ARAS +22.9m)

SCALE 1:100

LEGENDS

TBL +X.XXm TOP OF BEAM LEVEL

CONCRETE NOTES

A. WORKMANSHIP

(i) All concrete shall be generally Grade 30 unless otherwise specified.

(ii) Slab thickness does not include floor finishes.

(iii) Slabs and beams must be placed monolithically unless otherwise stated.

(iv) Spacer bars of 25mm dia. shall be provided at 1200mm c/c for reinforcement exceeding one layer in beam.

(v) During construction, care shall be taken to maintain the effective d & stable condition, and to ensure that no part shall be overstressed under construction activities.

(vi) Fine and coarse aggregates shall comply with EN 12620 and EN 4031, nominal coarse aggregates size shall be 20mm, unless otherwise stated.

(vii) All exposed edges to be chamfered 20mm x 20mm unless otherwise stipulated.

(viii) The maximum concrete slump shall be determined during trial mixes and shall be approved by the engineer.

(ix) All concrete shall be compacted using mechanical vibrators in accordance with the specification for concrete works.

(x) The minimum clear cover to main reinforcement shall be as follows:

50mm for works below ground
25mm for columns, beams and slabs above ground

B. REINFORCEMENT DETAILS

(i) ITEM 6 reinforcement reference to MS 13392 are satisfied by the following symbols:
R - Mild steel bar characteristic strength 250 N/mm²
T - High yield / ribbed bars, characteristic strength 460 N/mm²

(ii) Steel fabric shall comply with EN 10080 and BS4483.

(iii) Bending of reinforcement shall be accordance with EN 1992.

(iv) Laps other than those shown in the drawings shall be made only with the approval of the engineer. This approval may not be given in area of high reinforcement unless end/or compaction of reinforcement.

(v) All lap length shall comply with the requirements of EN 1992.

Splices shall be staggered wherever possible.

(vi) Anchorage and minimum lap length for Type 2 deformed yield bars

Diameter	Lap Length	Tension Anchorage
T10	400	400
T12	480	480
T16	640	640
T20	800	800
T25	1000	1000
T32	1280	1280

(vii) Coupling of concrete bars shall not exceed a slope 1:10. Where lengths are to be increased by a factor of 1.4 where the clear distance between adjacent bars is less than the greater of 75mm or 8 x the size of the largest bar.

STRUCTURAL STEELWORK

1. All structural steelwork to be carried out in accordance with the drawing, specification, the latest be BS5950 and Malaysia steel local code of practices where applicable.
2. All structural details shown are to be read in conjunction with the architectural drawings respectively.
3. All rolled steel section shall be new stock and to be 43C grade 43 or equivalent unless otherwise stated.
4. Manufacturer's mill test certificates for all structural steel used to be submitted to the engineer.
   Any structural steel test (in compliance with be 43B2) required by the engineer are able to be conducted by the relevant authorities at any one of the approved testing institution and all expenses incurred be borne by the contractor.
5. No fabricated steelworks are to be delivered to site unless inspected and approved by the engineer's or his representatives.
6. Before painting of steel, all surfaces to be painted shall be dry and thoroughly cleaned from all loose scales, rust, mill dust by mechanical wire brushing.
7. All steel surfaces to be enclosed or embedded in concrete are to be left unpainted but must be cleaned of oil, grease, dirt or any other foreign matter.
8. All weld are to be 5mm fillet weld (i.e.= all round fillet weld) unless otherwise stated.
9. All welding works to be carried out by certified WELDERS ONLY.
10. All welds subject to x-ray tests or other form of non test (at contractor's expense) are to be carried out by relevant authorities or other such approved institution.
    The contractor shall remedy all defective and rejected weld and bear the cost of additional x-ray test on the rectified weld and another 2 additional x-ray tests on the other weld.
11. All bolts used are to be free from loose mill scale, rust, grease, dirt and painting and are to be assembled dry.
12. All high strength friction grip bolts (N.A / S.C) and its energy to be 4395 and its 3294 preloadmeter, and all black bolts, screws and nuts to be 4190, bolts to comply with its 4190.
13. The contractor is to submit shop drawings to the engineer for review prior to fabrication showing all details or fabricated items, including method of erection, fixing and anchorage.
    Reviewing of all shop drawings by engineer does not in any way relieve the contractor of his responsibilities of all dimensions and job conditions.
14. The contractor shall be responsible for all temporary works e.g. erection aids, erection and overall structure stability of the steelwork construction.
    The contractor shall submit method statements clearly defining the proper workmanship procedure in the steelwork erection.

KEMENTERIAN PERUMAHAN DAN KERAJAAN TEMPATAN

JABATAN BOMBA DAN PENYELAMAT MALAYSIA

KEMENTERIAN PERUMAHAN DAN KERAJAAN TEMPATAN

CADANGAN PEMBINAAN PROJEK BALAI BOMBA DAN PENYELAMAT BEAUFORT BERSERTA KEMUDAHAN TAMBAHAN MENARA LATIHAN, SEKTOR LOGISTIK, KOLAM AIR, PADANG KAWAD, RUMAH SAMPAH DAN PENCAWANG ELEKTRIK SESB DI ATAS LOT HO 176291,227 ,JALAN KOMPLEKS SUKAN, DAERAH BEAUFORT, 89809 PEKAN BEAUFORT, SABAH UNTUK TETUAN JABATAN BOMBA DAN PENYELAMAT MALAYSIA

AKTIF FA KONSULT SDN BHD
CONSULTING CIVIL & STRUCTURAL ENGINEERS
PROJECT MANAGERS
LOT 17 & 19, 2ND FLOOR, BLOCK C,
LORONG HAJJA FATIMAH 2
JALAN UNDAN 88450 KOTA KINABALU
TEL : 088-236199
FAX : 088-236198
E-MAIL : aktif.ef@yahoo.com
aktif.ef@gmail.com

I hereby certify that the works have been designed by me in accordance with good engineering practice and that I take full responsibility for the design and proper performance of the same.

ENGINEER'S SIGNATURE

BALAI BOMBA
PELAN ARAS BUMBUNG
- UPPER ROOF

DRAWING	PEL
DRAWN BY	Kasey
DATE	SEPT 2018
SCALE	1:100
REF. DRAWING	PEL

PRELIMINARY / SUBMISSION / CONSTRUCTION
INFORMATION / TENDER / AS-BUILT DWG