



SERVICE LEVEL COMMITMENT (SLC)

PERMOHONAN BEKALAN ELEKTRIK PROJEK KERAJAAN

**ELECTRICITY SUPPLY APPLICATION GUIDE
(GOVERNMENT DEVELOPMENT PROJECT - SUPPLY SYSTEM FOR 11KV AND BELOW)**

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1.0 Introduction

Tenaga Nasional Berhad (“TNB”) is a company incorporated in Malaysia and is primarily involved in generating, transmitting, distributing, buying and selling electricity to end users and involved in other electricity or energy-related business.

The Government of Malaysia (“the Government”) is involved in the Government development projects in Malaysia in which TNB is required to supply electricity within the Prescribed Supply Area (as herein defined) in accordance with the provisions of the Electricity Supply Act 1990.

This Electricity Supply Application Guide (Government Development Project - Supply System for 11KV and below) (herein after referred to as “Guide”) sets the standard operating and management procedure which are in accordance with ESAH (as herein defined) for the purpose of electricity supply application to all government Project in Peninsular Malaysia.

2.0 Definitions

In this Guide unless the context otherwise requires, the capitalised terms are defined as follows:

“Approved Technical Review (Ulasan Teknikal)” means an approved technical specifications and requirements including design of electricity infrastructure to be issued by TNB upon receiving complete Submission by the Government requesting for supplying of electricity;

“Completion Date” means the day upon which TNB certifies in writing that the electricity supply is ready to be connected and supplied to the Premises within the Prescribed Supply Area;

“Connection Charges” means the fee as set out in paragraph 5.0, payable by the Government to TNB for the carrying out and completion of the Works as connection charges including any other charges, under the Electricity Supply Act and as may be prescribed under the statement of Connection Charges, as required by TNB to supply electricity from an external source into the Prescribed Supply Area and to the respective consumers within the Prescribed Supply Area;

“Electricity Supply Act” means the Electricity Supply Act 1990 (Act 447);

“ESAH” means the latest version of Electricity Supply Application Handbook;

“Explanatory Statement” means an explanatory statement by TNB specifying the calculation and explanation of the Connection Charges more particularly referred to in paragraph 5.0;

“Governmental Agency” means any government or any governmental, semi governmental, administrative, fiscal or judicial body, department, commission, authority, tribunal, agency or entity;

“Party” means either TNB or the Government;

“Project” means a government development project developed by the Government for the public purpose and not having any commercial value which includes school, hospital, the Government’s building and any project under Program Perumahan Rakyat (“PPR”) developed by Ministry of Housing and Local Government;

“Premises” means building constructed or to be constructed by the Government’s Contractor, in relation to the Project within Prescribed Supply Area, which shall be ready for connection of electricity supply by TNB;

“Prescribed Supply Area” means the area of the Project;

“Pre-Consultation Submission (Pra-Rundingan Permohonan Bekalan)” means the submission as per Annexure 1(a) - Service Level Commitment Form by the Government or the Government’s consultant or agent requesting for consultation for the supply of electricity to and within the Prescribed Supply Area, and containing the initial relevant data and information required by TNB as provided in Annexure 1(b) – Details of Pre-Consultation Submission for the purpose of pre design approval, and as amended from time to time with the mutual consent of the Parties hereto;

“Site(s)” means that piece or those pieces of land set aside for the Sub-Station(s) and all related infrastructures for the purpose of supplying electricity;

“Sub-Station(s)” means the sub-stations built, or to be built in accordance with the specifications set out by TNB and agreed by the Parties as per Annexure 2 – Sub-station(s) Design in which the Sub-Station(s) Design shall be subjected to any revision or latest conditions including but not limited to specifications or drawing requirements available as imposed by TNB and the Annexure 2 – Sub-station(s) Design does not apply to Wilayah Persekutuan Putrajaya;

“Submission” means the submission by the Government or the Government’s consultant or agent requesting for the supply of electricity to and within the Prescribed Supply Area, containing all complete and accurate information and relevant data required by TNB (as provided in Annexure 3 – Details of Supply Application Submission);

“Supply Required Date” means the meter installation date, which in any event shall be a date after the Completion Date;

“Working Day” means a day that the state government or the federal government departments (in the state or federal territory in which the Project is situated) are open for business; and

“Works” means the design, construction and completion of any and all such works necessary undertaken or to be undertaken deem fit by TNB to provide reliable and adequate supply of electricity to the Premises in accordance with the Submission.

3.0 Application Process

3.1 Pre-Consultation Submission (Pra-Rundingan Permohonan Bekalan)

- a) Prior to Submission of supply application, the Government or the Government's consultant or agentis required to submit to TNB a request for a Pre-Consultation Submission (Pra-Rundingan Permohonan Bekalan) in which the request shall contain the following:
- (i) project title;
 - (ii) location of Project;
 - (iii) numbers of building or type of Premises;
 - (iv) approximate Maximum Demand (MD) required;
 - (v) cable route within the development;
 - (vi) Service Level Commitment Form as per **Annexure 1(a)**;
 - (vii) all documents required as per **Annexure 1(b)** – Details of Pre-Consultation Submission; and
 - (viii) proposed type of Sub-station(s) as per **Annexure 2 –Sub-station(s) Design.**
- b) TNB will acknowledge receipt within seven (7) Working Days upon receiving the request and notify in writing within thirty (30) days approving or rejecting the request. TNB will provide reasons for and/or request for modifications or furnish further information should TNB rejects the request and the Government may submit a new request there after.
- c) Upon completion of the Pre-Consultation Submission (Pra-Rundingan Permohonan Bekalan), TNB will issue a letter of approval which shall not include any tapping point or source of electricity supply and limited only for:
- (i) the type of Sub-station(s) (inclusive of technical specification in development boundary); and
 - (ii) the supply scheme
- d) The approval letter may be used by the Government for any necessary action including the tendering process. For avoidance of doubt, the approval letter shall be valid for a period of three (3) years only.

3.2 Supply Application Process

- a) The Government shall submit the supply application via myTNB portal at **<https://www.mytnb.com.my/>**.
- b) An application number shall be generated by the system and assigned to the Government, after which the Government shall submit a formal Submission as provided in **Annexure 3 - Details of Supply Application Submission.**
- c) The Submission shall be submitted within two (2) years from the issue of the Pre-Consultation Submission (Pra-Rundingan Permohonan Bekalan) approval letter but at least six(6) months prior to the Supply Required Date.

- d) Upon receiving the Submission, TNB will—
- (i) acknowledge in writing within seven (7) Working Days from the receipt of the Submission and notify the Government whether the Submission is completed or whether TNB requires further information;
 - (ii) examine the design and review all related information submitted such as design of Sub-station(s), cable trenching size and the incoming of the cable, location and size of the manhole and other requirements and reply in writing within thirty (30) days after receipt of the Submission either approving or rejecting the Submission with reasons and/or request modifications or further information;
 - (iii) arrange for joint meeting with the Government or consultant or agent of the Government to review and finalise on the maximum demand, supply scheme and any related technical design, if required;and
 - (iv) issue an Approved Technical Review (Ulasan Teknikal) as per approved Pre-Consultation Submission and therefore, the Government must ensure that the Submission is in line with the approved Pre-Consultation Submission.
- e) The Approved Technical Review (Ulasan Teknikal) will be referred to for the purpose of supply of electricity under this Guide and shall not be varied except for any safety issues and/or other unforesee able circumstances. The Approved Technical Review (UlasanTeknikal) may be reviewed and varied accordingly with consent from the Parties.
- f) For avoidance of doubt, the Approved Technical Review (Ulasan Teknikal) shall be valid for a period of two (2) years only.
- g) Each Party is obliged to elect a representative for the purpose of the Submission and any changes in the Parties representative shall be promptly notified to the other Party.

4.0 Government Obligations

- 4.1 TNB will commence the Works to provide with the supply of electricity subject to the fulfilment of the following conditions precedent:
- a) the Government has paid to TNB or has issued Indent (Inden Kerajaan) for the Connection Charges as per paragraph 5.0 including all related additional Connection Charges, whichever is applicable;
 - b) the Government has completed the construction of the Sub-Station(s), if applicable as per Approved Technical Review (Ulasan Teknikal) and handed over the Sub-Station(s) to TNB together with all required documents under **Annexure 4—Pre-Inspection Acceptance Test (PIAT)**;

- c) the Government has provided TNB with electricity supply infrastructures (Site(s) readiness) including but not limited to utility incoming cable trench equipped with piping system for the protection and routing of electrical wiring and cables (if applicable) in accordance with TNB's specifications and requirements as stipulated under the Approved Technical Review (Ulasan Teknikal) together with reasonable route access; and
 - d) the Government has provided TNB with unimpeded and legally enforceable right to access the Site(s) to commence the Works.
- 4.2 Any correspondences from TNB shall be reverted to within fourteen (14) Working Days from the receipt of the correspondence.
 - 4.3 The Government shall request in writing any variation related to TNB's supply conditions including but not limited to Maximum Demand (MD), supply scheme and number of buildings for TNB's Approval.
 - 4.4 The Government shall notify in writing to TNB of any approved of extension of time (EOT) for planning work purposes. TNB shall not be liable or responsible for any delay to supply electricity due to failure of the Government to provide written EOT notification to TNB.
 - 4.5 The Government shall request in writing to TNB for clarification and/or confirmation of any delay and/or variation allegedly caused by TNB, resulting in delay of the Project including but not limited to delay in processing and approving the Government's supply application, delay in completing the Works as well as all other related delays to which TNB shall revert accordingly within fourteen(14) Working Days after the receipt of such request.
 - 4.6 The Government shall submit a meter application for move in process within seven(7) days from the date of notification by TNB via email together with the update as per **Annexure 5 – Project Status Update Form**.

5.0 Connection Charges

- 5.1 TNB shall, within thirty (30) days from the Approved Technical Review (Ulasan Teknikal) date or such other date mutually agreed by both Parties, notify the Government in writing of the particulars and cost breakdown of the Connection Charges and all other related charges, if any, payable by the Government to TNB.
- 5.2 The Government shall also pay to TNB any additional Connection Charges that is required to be paid taking into account any additional Connection Charges (not factored into the calculation of the original Connection Charges) that are imposed on and required to be paid by TNB, by any Governmental Agency having the jurisdiction to impose such charges. TNB shall as soon as reasonably practicable after becoming aware of such additional Connection Charges imposed, inform the Government in writing of the additional Connection Charges payable by the Government to TNB, together with an updated breakdown of the particulars of the additional Connection Charges.

- 5.3 In the event the Government requests for an Explanatory Statement, TNB shall within fourteen (14) Working Days from the date of receipt of such notice, provide to the Government with the Explanatory Statement.
- 5.4 The Government shall issue Indent (Inden Kerajaan) to TNB for the Connection Charges and additional Connection Charges, if any, not less than four(4) months prior to the Supply Required Date. For additional Connection Charges that are imposed less than four(4) months prior to the Supply Required Date, the Government shall issue Indent (Inden Kerajaan) within fourteen(14) Working Days from the date of the Government being informed in writing of such additional Connection Charges.
- 5.5 The Government shall fulfil Indent (Inden Kerajaan) claims by TNB within thirty (30) days from the date the document is returned to the Government together with certificate of completion (Akuan Kerja Siap) and the Government shall promptly notify TNB once the payment is cleared.

6.0 Sub-station(s)

6.1 Land for the purpose of installation and/or construction of Sub-Station(s)

The following paragraphs shall apply where Sub-Station(s) is or are required to be built for the purposes of supply of electricity to the Prescribed Supply Area. The Government shall provide, set aside, or procure the lands within the Prescribed Supply Area for TNB installations and/or construction of Sub-Station(s), to bear all cost and expenses related and undertake as follows—

- a) for separate land title with the express condition for electrical Sub-station(s) site or industry, the land shall be transferred to TNB with nominal consideration;
- b) in the event the separate land title cannot be issued, the land shall be leased to TNB for a period of thirty (30) years with nominal consideration in accordance with TNB's terms and conditions with an option for TNB to renew the lease for a further thirty (30) years with the same terms and conditions or for the maximum period as provided in the National Land Code 1965;
- c) if the land status is a State land, the Government shall allow TNB to procure the land via alienation process as provided under the National Land Code 1965; or
- d) other type(s) of land not mentioned above shall use any other related instrument(s) for security of tenure applicable. The Government shall allow TNB to have access and right to enter the land to carry out Works and maintenance.

6.2 Design and construction of Sub-Station(s)

- a) The Government shall refer to **Annexure 2 – Sub-station(s) Design** for available design of Sub-station(s).

- b) Prior to the finalization of the tender drawings by the Government, the Government shall request for a meeting with TNB to ensure that the design and setting out of Sub-station(s) as well as all related infrastructure are as per TNB approved or latest conditions, specifications and drawing requirements. Any changes or additions or reductions from the approved conditions, specifications and drawings shall be agreed in writing and signed by Parties before the tender drawings are amended and used for the Government tendering purposes. Any changes thereafter to the design and setting out of the Sub-station(s) as well as any related infrastructure shall not be permitted.
- c) TNB will provide and discuss with the Government all relevant information and requirements on the layout and design of the Sub-station(s) during the meeting for technical review as mentioned in paragraph 3.2 (d)(iii) to determine the handover date of the Site(s) and Sub-station(s) to TNB together with Certificate of Practical Completion (CPC).

6.3 Sub-station(s) Readiness

- a) The Government shall no later than four (4) months prior to the agreed Supply Required Date complete the Sub-Station(s) on the Site(s) and make the same ready for handover to TNB and shall grant full access to TNB and its authorised agent(s) to the site(s), the built Sub-station(s) and all related infrastructure/ installation(s) to enable TNB and its authorised agent(s) carry out and complete all necessary works before the agreed Completion Date.
- b) The Government and its agents, consultants, contractors and subcontractors as well as TNB shall, for the handover described above, agree to establish a list of defects which is due to the workmanship or materials of the built Sub-station(s) and related infrastructure/ installations which have been constructed and completed not in accordance with the plans/ specification as approved by the relevant Governmental Agencies and TNB as per paragraph 3.0 above. Any defect within defects liability period shall be rectified, repaired and make good by the Government.

7.0 Access

The Government, the Government's consultant or agent shall ensure that the authorised employees, contractors, sub-contractors, agents and/or representatives of TNB shall be permitted to have free access in the Prescribed Supply Area at any reasonable time to carry out the Works provided that such rights conferred under this paragraph shall not unreasonably interfere with the other works being carried out.

8.0 TNB Obligations

8.1 TNB will–

- a) commence the Works no later than three (3) months prior to the Supply Required Date, provided that the Prescribed Supply Area is ready and accessible

and the Government having fulfilled all conditions precedent in accordance with paragraph 4.0 and all related permit for the works has been approved by the relevant authorities;

- b) ensure that the Works are carried out in accordance with the accepted utility practices as well as in compliance with all requirements that may be imposed under any law or by any Governmental Agency; and
- c) inform the Government once the Sub-station(s) is or are ready for supply of electricity and at the same time returning Indent (Inden Kerajaan) attached with certificate of completion (Akuan Kerja Siap) for payment purposes by the Government.

8.2 For individual meter for load below 100A, TNB will install the meter and connect the electricity supply to Government's Premises within three (3) Working Days subject to the fulfilment of the following:

- a) the Government's Premises is ready for supply of electricity connection and meter installation;
- b) complete the meter application submission for move in process via myTNB portal (<https://www.mytnb.com.my/>) once notified by TNB; and
- c) payment of security deposit for meter installation (if applicable).

8.3 TNB shall allow access to the Government and its representatives for defect inspection if required.

9.0 Others

9.1 TNB shall obtain the approvals, permits, license, authorisations, consents, commitment and right of way on, over and/or under any adjoining or neighbouring land, road, installation and infrastructure (including road and railway crossings, gas and water pipeline, TNB's installations and other utilities installation).

9.2 Security deposit for the work permit shall be borne by TNB and shall not be included in the calculation of the Connection Charges.

10.0 Amendments and Additions

This Guide is subject to further amendment, variation, revocation, cancellation, substitution or waiver of, or addition or supplement to, if required from time to time.

11.0 Effective Date

This Guide will be effective on [.....] until further notice.

ANNEXURE 1(a) - SERVICE LEVEL COMMITMENT FORM

(PROJEK PEMBANGUNAN KERAJAAN MALAYSIA)

BAHAGIAN A (UNTUK DIISI OLEH PEMOHON)

Nama Projek : (Nyatakan nama projek yang memerlukan bekalan)

Negeri :

No. Projek :

No. Rujukan :

Alamat Surat Menyura :

BAHAGIAN B (UNTUK DIISI OLEH PEMOHON)

Senarai Semak Teknikal Pra-Rundingan Permohonan Bekalan (Rujuk Lampiran 1)	:	Kami mengesahkan bahawa semua senarai semak teknikal bagi pra-rundingan permohonan bekalan di Lampiran 1 adalah lengkap dan teratur.
Maklumat Pemohon	:	(Masukkan Agensi Kerajaan Yang Terlibat. Cth; JKR)
Nama Wakil Kerajaan dan Jawatan	:	
No. Telefon Wakil Kerajaan	:	
Tandatangan Wakil Kerajaan	:	
Maklumat Perunding	:	(Masukkan nama syarikat Perunding)
Nama Perunding dan Jawatan	:	
No. Telefon Perunding	:	
Tandatangan Perunding	:	
Maklumat Pemaju	:	(Masukkan nama syarikat Pemaju)
Nama Pemaju dan Jawatan	:	
No. Telefon Pemaju	:	
Tandatangan Pemaju	:	

Wakil yang dinyatakan di atas akan mewakili pemohon bagi apa-apa urusan berkaitan permohonan ini. Sebarang perubahan maklumat perlu dimaklumkan secara bertulis kepada TNB bagi melancarkan proses permohonan ini.

BAHAGIAN C (UNTUK KEGUNAAN PEJABAT TNB)

1. Pra-rundingan permohonan bekalan elektrik projek di atas telah didaftarkan di pejabat Tenaga Nasional Berhad ("TNB") dengan nombor rujukan
(*Isikan nombor rujukan TNB)
2. Permohonan ini akan diproses berdasarkan tatacara dalam Electricity Supply Application Guide (Government Development Project - Supply System For 11kV and Below).
3. Pihak TNB mengalu-alukan kesudian pihak tuan bekerjasama dengan pihak TNB. Dengan kerjasama ini, diharapkan bekalan elektrik dapat diberikan pada masa yang dipersestujui bersama dan seterusnya meningkatkan mutu perkhidmatan TNB.
4. Pihak TNB, Kerajaan dan Perunding yang dilantik pihak Kerajaan akan diwakili oleh wakil yang dinamakan bagi apa-apa urusan berkaitan permohonan ini. Sebarang perubahan maklumat wakli yang dinamakan perlu dimaklumkan secara bertulis oleh pihak-pihak bagi melancarkan proses permohonan ini.

Wakil TNB :

Nama :

Jawatan :

Alamat :

No. Telefon :

(Bahagian ini sengaja dibiarkan kosong)

ANNEXURE 1(b)

Electricity Pre Consultation Submission Checklist For Government Project

ELECTRICITY SUPPLY APPLICATION EXCEEDING 100A CHECKLIST

NO	FORM/ DOCUMENT	INFORMATION REQUIRED	STAGE 1
A	1. Basic Information	Address of Installation	Y / N
		Name & Address of Owner / Governmental Agency	Y / N
		Name & Address of Consultant Engineer	Y / N
		Type of Premise	Y / N
		Voltage Level (275kV, 132 kV, 33 kV, 22 kV, 11 kV, 0.4kV)	Y / N
		Supply Scheme (Overhead or Underground; Public Distribution License)	Y / N
		Total Load Required (kW)	Y / N
		Supply Required Date (SRD)	Y / N
	2. Plan & Drawings (refer to latest ESAH)	Site plan with Proposed Sub-Station Sites	Y / N
		Location plan on meter panel / room (to determine meter location)	Y / N
		Layout Plan of Sub-station Building (Proposed type of Sub-station(s) as per Annexure 2 — Sub-station(s) Design)	Y / N
		Location & Layout Plan of Main Switch Room	Y / N
	B	Load Details	
C	Metering Details		Y / N

**LUKISAN PIAWAI
PENCAWANG ELEKTRIK SINGLE CHAMBER
(STAND ALONE)**

**SLC/PE(SA)/AR/.....
(Bil. Lukisan : 3 nos)**



JABATAN KERJA RAYA MALAYSIA

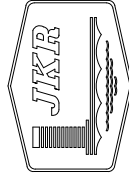
CAWANGAN ARKITEK
IBU PEJABAT JKR MALAYSIA
KUALA LUMPUR.

LUKISAN PIAWAI
PENCAWANG ELEKTRIK SINGLE CHAMBER
(STAND ALONE)

	TAJUK LUKISAN	NO. LUKISAN
1.	PELAN LANTAI PELAN PEMBALIKAN SILING, PELAN BUMBUNG, KERATAN A-A (BILIK SWITCHGEAR DAN BILIK ALATUBAH)	SLC/PE(SA)/AR/01[03]
2.	PANDANGAN HADAPAN, PANDANGAN BELAKANG, PANDANGAN SISI KANAN, PANDANGAN SISI KIRI, KERATAN A-A DAN KERATAN B-B	SLC/PE(SA)/AR/02[03]
3.	DETAIL A – DETAIL J	SLC/PE(SA)/AR/03[03]

**LUKISAN PIAWAI
PENCAWANG ELEKTRIK BERSENDIRIAN
(SINGLE CHAMBER STAND ALONE)**

**SLC/PE(SA)/CS/.....
(Bil. Lukisan : 08 nos)**



CAWANGAN KEJURUTERAAN AWAM DAN STRUKTUR
BAHAGIAN PEMBANGUNAN DAN PENYELIDIKAN
IBU PEJABAT JKR MALAYSIA
KUALA LUMPUR.

JABATAN KERJA RAYA MALAYSIA

20 OKTOBER 2020

LUKISAN PIAWAI PENCAWANG ELEKTRIK BERSENDIRIAN (SINGLE CHAMBER STAND ALONE)

ANNEXURE 2	
Lukisan Piawai ini dibaca bersama Service Level Agreement (SLA) dan terpaat untuk semua Projek IKT.	
Dipersektujui bersama	
P. LIM CHEE CHING PENGAHA KANAN CAWANGAN PERANCANGAN AWAM & STRUKTUR	HAPPEET NGH TAGGAR PRINCIPAL ENGINEER (PROJECT DESIGN) NETWORK DIVISION
CAWANGAN KEURUTERAN AWAM & STRUKTUR	
PENGARAH KHIDMAT BERSEKUTU:	
P. BUDDEZAHAN BINAB. ISMAIL	
JURUTERA AWAM PENGUASA KANAN:	
P. HANICAH BINTI ARSADAN	
JURUTERA AWAM KANAN:	
P. WAN RIZANA BINTI WAN MUHAMMAD	
DIREKTOREKUT:	
KHAIRIL ANUAR BIN MOHAMMAD	
DISEKAL:	
P. NORAZAR BINTI ISMAIL	
DILUKIS:	
RAHMAH BINTI YUS	
MAMA LUKISAN:	
LUKISAN PIAWAI PENCAWANG ELEKTRIK BERSENDIRIAN (SINGLE CHAMBER STAND ALONE)	
TALUK LUKISAN:	
SENARAI LUKISAN:	
NO. LUKISAN:	
SKALA:	
TARIKH:	
20 Ogos 2020	
Bil. P. Pindatan	
Tandatangan	

TAJUK LUKISAN	NO. LUKISAN
1. PELAN PUNCA BEBAN KHIDMAT TIANG, PELAN PUNCA RASUK ARAS BAWAH DAN PELAN PUNCA RASUK ARAS BUMBUNG	SLC/PE(SA)/CS/01[08]
2. BUTIRAN RASUK ARAS BAWAH (HELAIAN 1/2)	SLC/PE(SA)/CS/02[08]
3. BUTIRAN RASUK ARAS BAWAH (HELAIAN 2/2)	SLC/PE(SA)/CS/03[08]
4. BUTIRAN RASUK ARAS BUMBUNG DAN RASUK PENGIKAT	SLC/PE(SA)/CS/04[08]
5. PELAN PUNCA PAKAP ARAS BAWAH DAN ARAS BUMBUNG	SLC/PE(SA)/CS/05[08]
6. KERATAN PAKAP ARAS BAWAH DAN ARAS BUMBUNG, BUTIRAN TIPIKAL TALANG KONKRIT	SLC/PE(SA)/CS/06[08]
7. JADUAL BUTIRAN TIANG, LANDAS ANGKAT, PEPARIT KABEL DAN PAKAP APRON	SLC/PE(SA)/CS/07[08]
8. BUTIRAN TIPIKAL FEEDER PILLAR MANHOLE DAN MANHOLE	SLC/PE(SA)/CS/08[08]

*Lukisan ini perlu dibaca bersekali dengan Lukisan Piawai Nota Am Struktur.

1. JKR/CKAS/P-NA/STR/30/PEL 14/01[05]
2. JKR/CKAS/P-NA/STR/30/PEL 14/02[05]
3. JKR/CKAS/P-NA/STR/30/PEL 14/03[05]
4. JKR/CKAS/P-NA/STR/30/PEL 14/04[05]
5. JKR/CKAS/P-NA/STR/30/PEL 14/05[05]

ANNEXURE 2

Lulusan Purna Injibaka kejuruteraan Service Level 1
 Graduate Engineer (SCE) dan teraka untuk semua
 projek dan tugas



Dipenerajui bersama

M. G. LIM CHEE CHING
 HARRIET NGIH TAGOR
 PRINCIPAL ENGINEER
 (ELECTRICAL & NETWORK)
 KEJURUTERAAN AWAM
 & STRUKTUR
 NETWORK DIVISION

COMMISSION

KEJURUTERAAN AWAM & STRUKTUR

PENGARAH PADAM KAWASANTUK:

Y. SUDIRMAN BIN AB. RAHUL

KEJURUTERAAN AWAM PENGUSULAN:

P. HANZAH BINI ARGASON

KEJURUTERAAN AWAM:

P. WAN RIZAM BINI WAN MUHAMMAD

DIREKTORENK:

KEHULU ANWAR BIN MOHAMMED

SEKUTAM:

P. NURFARIZAH BINI ISMAIL

ZULUIS:

RAHMAH BINI YAS

MAWA LUJUSAN:

USMAN BINI HANU

PENGAWANSALATAN BERSEKUTAN
 (SINGLE CHAMBER STAND-ALONE)

TALUK LUJUSAN:

BUKURAN RASUK ARAS BAWAH (RELEWAN 1/2)

NO. UJIAN:

SC/PS/SM/SC/02/08

SEKUTAM:

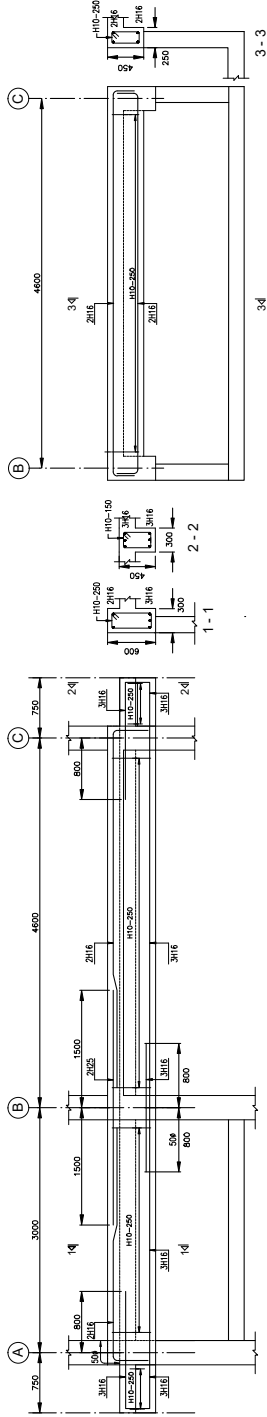
1. 25 (A1)

TARIKH:

20 OKTOBER 2009

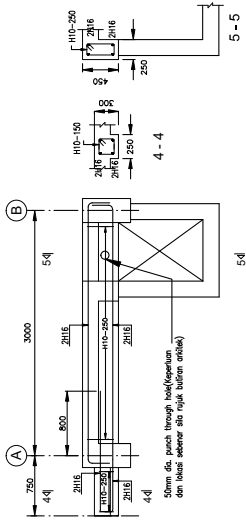
BT | Pindam

Tandatangan

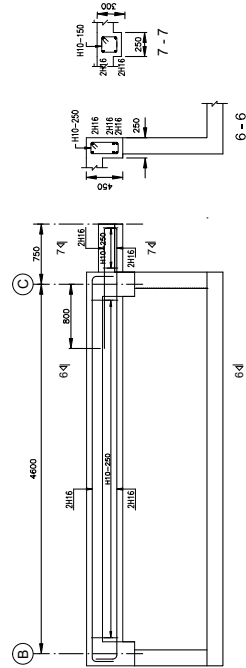


**RASUK ARAS BAWAH : 1/A-C & 2/A-C (300x450-600-450)
 BERTETULANG SAMA**

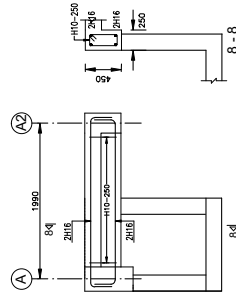
RASUK ARAS BAWAH : 1a/B-C (250x450)



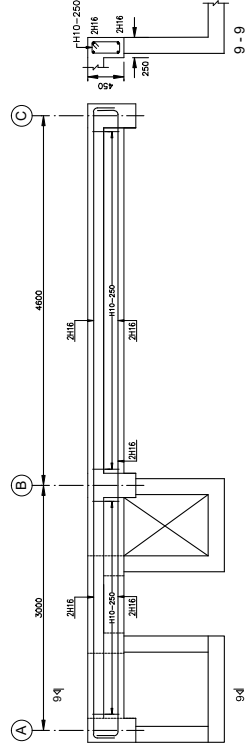
RASUK ARAS BAWAH : 1d/A-B (250x300-450)



RASUK ARAS BAWAH : 1c/B-C (250x450-300)



RASUK ARAS BAWAH : 1e/A-A2 (250x450)



RASUK ARAS BAWAH : 1f/A-C (250x450)

ANNEXURE 2

Uthmaniyah Power Station
 Uthmaniyah Power Station
 Commitment to Safety, Quality & Environment



Diperseksi bersama

H. DR. LIM CHAI CHING
 HANPREET SINGH TAGGAR
 PRINCIPAL ENGINEER
 (STRUCTURAL)
 DESIGN DIVISION
 NETWORK DIVISION

CONVIANSAN
 REJENI UTAMA AWAM & STRUKTUR

PENGARAH KIDMAT REKABENTUK :
 H. BACHICHAZAN BIN AB. MALIK

JURUTERA AWAM PENGELOMPOK KAJIAN :
 H. HANIDAH BINTI IRGASOON

JURUTERA AWAM KAJIAN :
 P. NUR FIZAH BINTI WAN MURHAMMAD

DIREKTORUTUK :
 KHARULL ANJAR BIN MOHAMMAD

DISEMAK :
 H. MOHD. AZIDU BINTI ISMAIL

DUIKURS :
 RAHMATI BINTI YAS

MAMA LUISAN :
 LUISAN RAHAT
 PENCAKUPAN ELEKTRIK BERSEKUTUAN
 (SINGLE CHAMBER STAND ALONE)

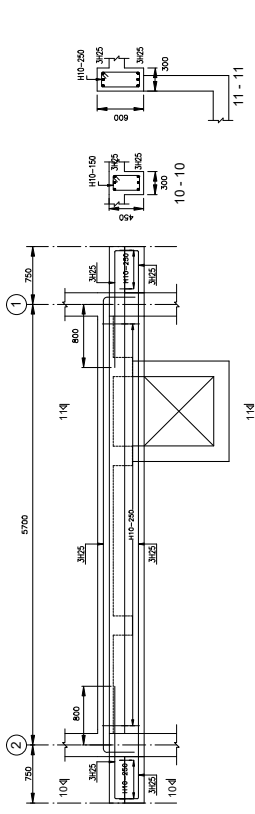
TAJUK LUKSARAN :
 BUFRAN BASUK ARAS BAWAH (HEJAZAN 7/7)

NO. LUKSARAN :
 SUC/PEPA/CK/03/18

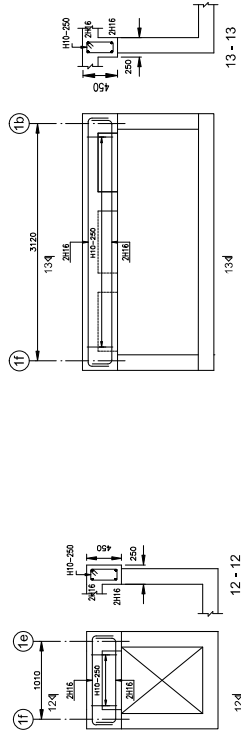
SKALA :
 1 : 25 (A-B)

TARIKH :
 20 OCTOBER 2020

BT / Revisi :
 Tidak Diterapkan

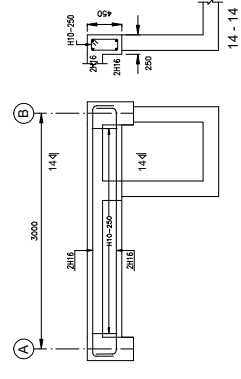


RASUK ARAS BAWAH : C/2-1, A/2-1 & B/2-1 (300x450-600-450)
 BERTETUTULANG SAMA



RASUK ARAS BAWAH : A2/1f-1b (250x450)

RASUK ARAS BAWAH : A1/1f-1e (250x450)



RASUK ARAS BAWAH : 1b/A-B (250x450)

ANNEXURE 2

Likha Ramesh Percheswaran Srinivasan
 Chartered Structural Engineer
 Commitment SAC (C) dan terapan untuk semua
 projek lengkap



Diperiapkan bersama

W. D. LIM CHIA CHING
 HARRISET SINGH TAGGAR
 PRINCIPAL ENGINEER
 (STRUCTURAL DESIGN)
 & STRUKTUR

CWANGAN

KEURUTAN AWAM & STRUKTUR

REKAHAYATAN BERASBENTUK:

F. RAJESWARAN RAJABALAKRISHNAN
 JURUTERA AWAM PERANCUSA KAWAN:
F. HANZHA BINTI ARGALDAN

JURUTERA AWAM KAWAN:
F. WAN RIZANA BINTI WAN MUHAMMAD

BERASBENTUK:
HAFIZUDDIN BIN MUSAHELLED

JOSEMAN:
F. NORAFIZA BINTI ISMAIL

DULUKS:
BAHIAH BINTI YAS

MAWA LUKSAN:
LUKSAN PAWAI
PERKAWANG ELEKTRIK BERSEKUTUAN
(PUNJIC CHANGERS STAND ALONE)

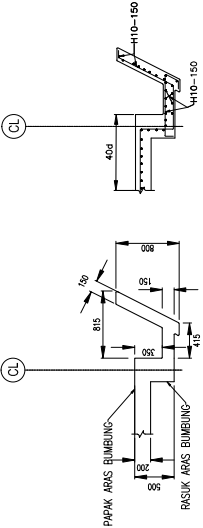
TALUK LUKSAN:
KERATAN PAPAN ARAS BAWAH
KEBATAN PAPAN ARAS BUMBUNG
BUTIRAN TIPIKAL TALANG KONKRIT

NO. LUKSAN:
 S/L7/PS/SA/CS/06/08

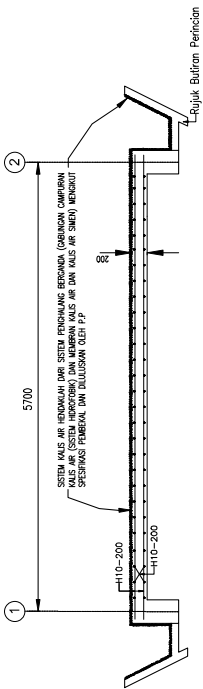
SKALA:
 1:25 (A)

TARIKH:
 20 OKTOBER 2008

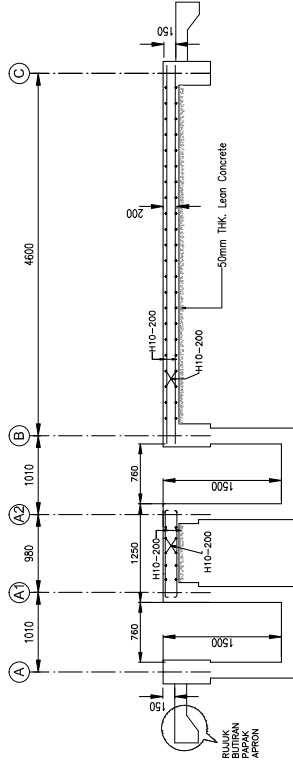
BAI | **Proses** | **Revisi/Perbetulkan**



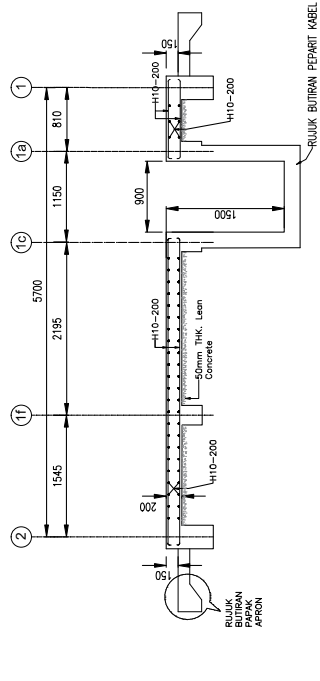
BUTIRAN TIPIKAL
PERINCIAN TALANG KONKRIT



KERATAN C-C (PAPAN ARAS BUMBUNG)



KERATAN A-A (PAPAN ARAS BAWAH)

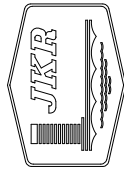


KERATAN B-B (PAPAN ARAS BAWAH)

NOTA :
 Penutup konkrit untuk talang konkrit adalah 25mm.

LUKISAN PIAWAI PENCAWANG ELEKTRIK SINGLE CHAMBER (STAND ALONE)

SLC/PE(SA)/EL/.....
(Bil. Lukisan : 3 nos)









CAWANGAN KEJURUTERAAN ELEKTRIK
IBU PEJABAT JKR MALAYSIA
KUALA LUMPUR.

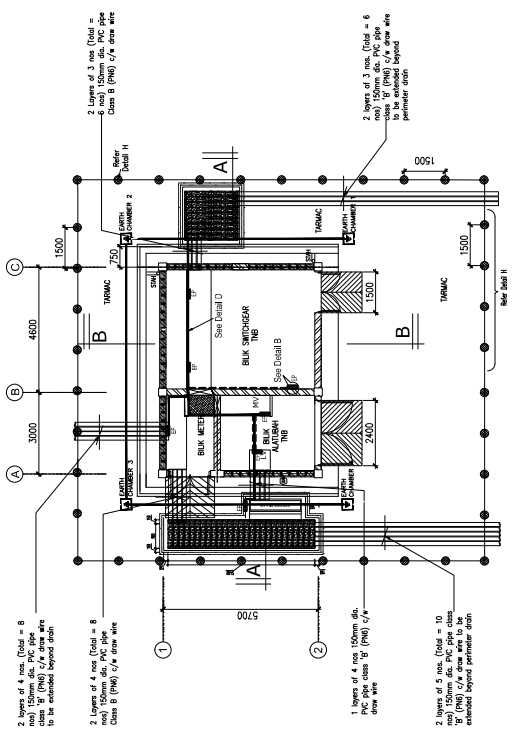
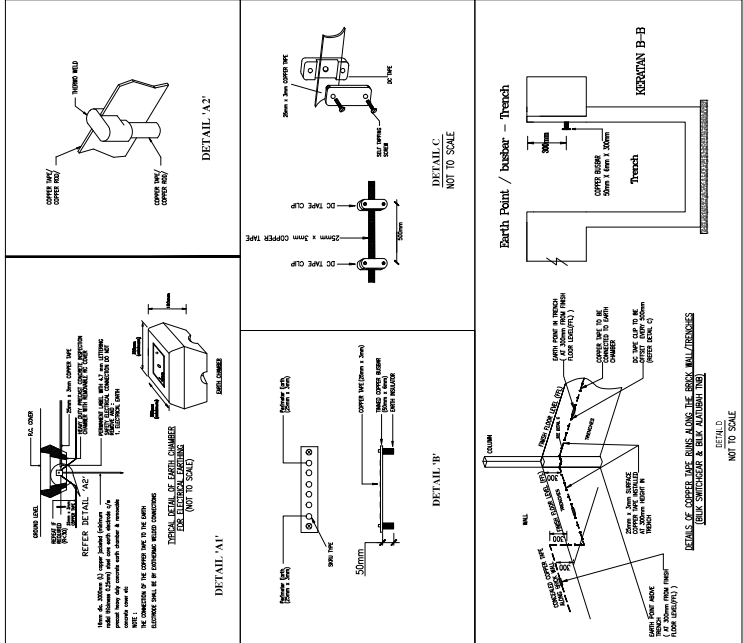
JABATAN KERJA RAYA MALAYSIA

13 OGOS 2020

LUKISAN PIAWAI PENCAWANG ELEKTRIK SINGLE CHAMBER (STAND ALONE)





TAJUK LUKISAN	NO. LUKISAN
1. PELAN SUSUNATUR LAMPU, SOKET, LEGEND, GAMBARAJAH PENDAWAAN SKEMATIK DAN GAMBARAJAH PERINCIAN PAPAN AGHAN (DB)	SLC/PE(SA)/EL/01[03]
2. PELAN PERINCIAN SISTEM PEMBUMIHAN DAN PETUNJUK	SLC/PE(SA)/EL/02[03]
3. GAMBARAJAH PERINCIAN PELAN BUMBUNG DAN PANDANGAN BAGI SISTEM PERLINDUNGAN KILAT DAN PETUNJUK	SLC/PE(SA)/EL/03[03]





ANNEXURE 2 Lantikan Pwaji ini dibaca bersama Service Level Commitment (SLC) dan terpalak untuk semua projek kerajang	
 	
Dipersejajui bersama  Pegawai Projek (Pegawai) Operasi Pengiraan Elektrik (PE) & Jurutera Elektrik (JE) Bahagian Distribusi Network Tenaga Nasional Berhad Malaysia	
CAWANGAN KEURUTERAAN ELEKTRIK PENGARAH PERUMPTING REABENTUK :  I. HUSNAIN MUSTAFA JURUTERA ELEKTRIK PENGUKUSA KAWAN :  I. SITI NOR BINTI JURUTERA ELEKTRIK PENGUKUSA :  I. HAROL BIN ABRAHIM JURUTERA ELEKTRIK	
DIREKABENTUK SUBJAK : I. HAROL BIN ABRAHIM SAJUK : MOHD MASRUDDIN BIN JAMIL NAMA LIKARAN : PENCAWANG ELEKTRIK SINGLE CHAMBER (STANDALONE) TUKUL LUKISAN : - PELAN PERINCANGAN SISTEM PAMALAMAN DAMP PETUNJUK	
NO. LUKISAN : SLC/PESES/SES.03 (03) SKALA : 1 : 75 (A 1) TARIKAN : 13 AGOS 2020	
EE	PUNJARAN
PRODUKSI/AM	

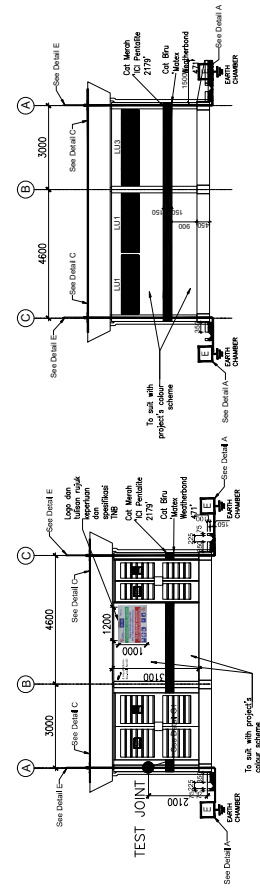
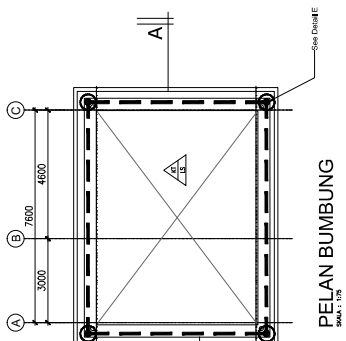
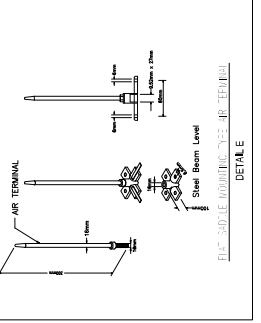
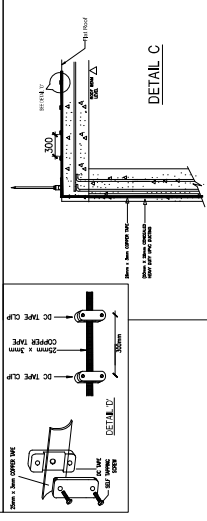
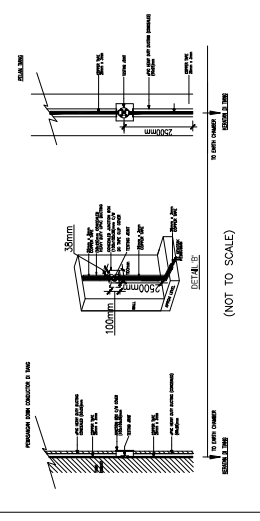
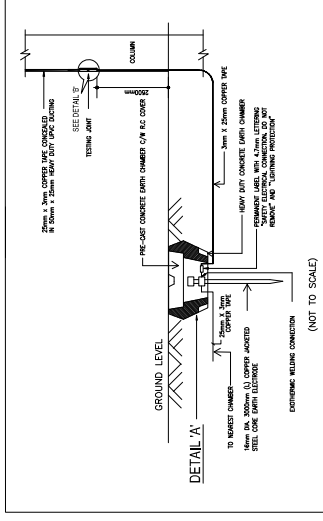


PELAN LANTAI




LEGEND

SYMBOL	DESCRIPTION	QUANTITY
	EARTH CHAMBER (300mm x 300mm x 180mm)	4
	EARTH POINT TMS (50mm x 40mm x 30mm)	7
	25mm x 3mm COPPER TAPE (SURFACE IN TRENCHES)	-
	25mm x 3mm COPPER TAPE (CONCEALED ON THE WALL)	LS

ANNEXURE Z	
Lukisan Peralini dibaca bersama Service Level Commitment (SLC) dan terpakai untuk semua projek kerajaan	
	
Dipersetujui bersama	
	
Ir. HAZZAN BIN SHAMER P. 03-73512110 (Operasional) Operasi, Pemeliharaan & Penyelenggaraan (M&O) Unit, Jabatan Kerja Raya Malaysia Tenaga Nasional Berhad	Ir. HUSIN BIN MUSTAFA JURUTERA ELEKTRIK PENJAJASA KANAN : Ir. SITI NOR BINTI HASAN JURUTERA ELEKTRIK PENJAJASA : Ir. HAIROL BIN ABRAHIM JURUTERA ELEKTRIK :
CAWANGAN KEURUTERAAN ELEKTRIK	
PENGARAH PERUNDING REKABENTUK :	
DIREKABENTUK	
DISEKAI :	
ZULUH :	
NAMA LUKISAN :	
PENCAWANG ELEKTRIK SINGLE CHAMBER (STANDALONE)	
TRUK LUKISAN :	
GAMBARAN PERINCASAN PELAKSANAAN BANGUNAN DAN PANDANGAN BAGI SISTEM PERUNDINGAN KEAT DAN SETERUJUT.	
NO. LUKISAN :	
SLC/PRESKRIPSI (S)	
SKALA :	1 : 25 (A1)
TARIKH :	13 OKTOS 2020
BL	PERUMAH
	TANDAIAN

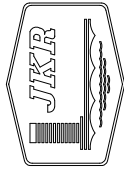


LEGEND

SYMBOL	DESCRIPTION	QUANTITY
	EARTH CHAMBER (300mm x 300mm x 180mm)	4
	500mm AIR ROD FINAL	4
	25mm x 3mm COPPER TAPE	—

**LUKISAN PIAWAI
PENCAWANG ELEKTRIK SINGLE CHAMBER
(ATTACHED)**

**SLC/PE(SC)/AR/.....
(Bil. Lukisan : 3 nos)**








CAWANGAN ARKITEK
IBU PEJABAT JKR MALAYSIA
KUALA LUMPUR.

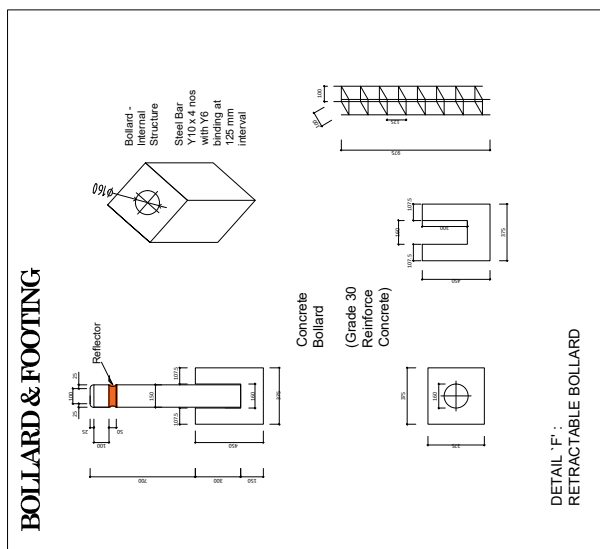
JABATAN KERJA RAYA MALAYSIA

13 OGOS 2020

LUKISAN PIAWAI
PENCAWANG ELEKTRIK SINGLE CHAMBER
(ATTACHED)

TAJUK LUKISAN	NO. LUKISAN
1. PELAN LANTAI, PELAN PEMBALKAN SILING DAN PELAN BUMBUNG	SLC/PE(SC)/AR/01[03]
2. KERATAN A-A, KERATAN B-B, PANDANGAN HADAPAN, PANDANGAN BELAKANG, PANDANGAN SISI KANAN DAN PANDANGAN SISI KIRI	SLC/PE(SC)/AR/02[03]
3. DETAIL A - DETAIL F	SLC/PE(SC)/AR/03[03]

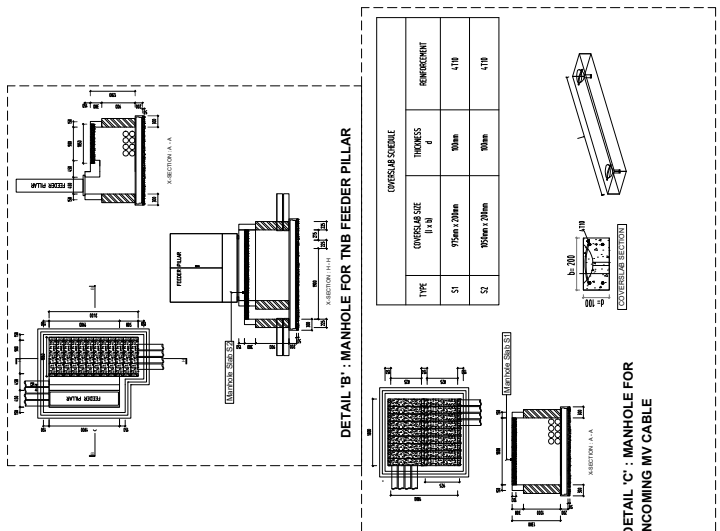
ANNEXURE 2		 	
Utkon Pweti ini dibuat bersama Service Level Commitment (SLC) dan terpakai untuk semua projek kerajaan.			
Dipertajuti bersama			
 DATUK HAJI AMAN MOHD. SAUJI AMAN BIN ROSA (Jen. Pw. 1st Class)		 Chief (Joint Planning & Reporting) Division Communications & Information Management Ministry of Home Affairs, Malaysia	
CAWANGAN ARKITEK			
PENGANTAI BANGUN BEKABENTUK & MULTIMEDIA			
A. I. IBRAHIM BIN EK ARKITEK PENGASASAMA		 M. NALZA BINI MOHD. HASSAN ARKITEK	
HALAJU AMAN BIN MOHD. MONITIZAR			
DOKUMEN :			
HALAJU AMAN BIN MOHD. MONITIZAR			
DELUS :			
MOHAMMADA			
MARI USMAN			
PENCAWANG ELEKTRIK SINGLE CHAMBER (ATTACHED)			
TARIK USMAN			
- DETAIL A - DETAIL F			
KELUSKAN :			
SLC/PE(SC)/AR03 (03)			
SKALA :			
1 : 75 (A1)			
TARIKH :			
13.08.2020			
RI		PINDAAN	
RI		TANDA BANGUN	



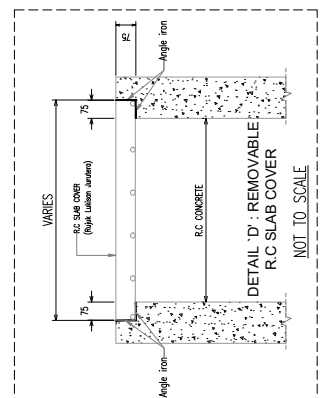
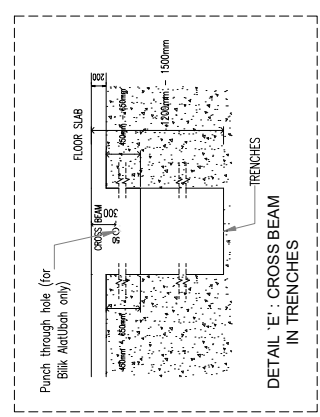
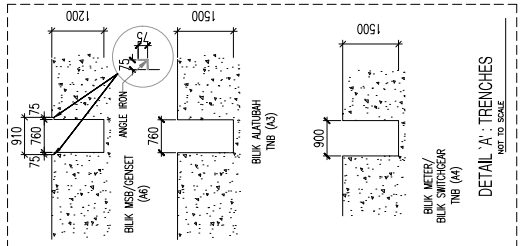
DETAIL 'F': RETRACTABLE BOLLARD

NOTA (SINGKATAN) :

- PE(SC) = PENCAWANG ELEKTRIK BERSAMBUNG (SINGLE CHAMBER)
- PE(DC) = PENCAWANG ELEKTRIK BERSAMBUNG (DOUBLE CHAMBER)
- PE(SA) = PENCAWANG ELEKTRIK BERSENDIRIAN (SINGLE CHAMBER STAND ALONE)
- SSU(SA) = STESEN SUIS UTAMA BERSENDIRIAN
- SSU(A) = STESEN SUIS UTAMA 1 RUANG + BILIK METER
- SSU(B) = STESEN SUIS UTAMA 1 DENGAN BILIK METER TANPA BILIK TRANSFORMER
- CS = COMPACT SUB



DETAIL 'C' : MANHOLE FOR INCOMING MV CABLE



**LUKISAN PIAWAI
PENCAWANG TNB (SINGLE CHAMBER)
BILIK MSB DAN BILIK GENSET**

**SLC/PE(SC)/CS/....
(Bil. Lukisan : 13 nos)**



CAWANGAN KEJURUTERAAN AWAM DAN STRUKTUR
BAHAGIAN PEMBANGUNAN DAN PENYELIDIKAN
IBU PEJABAT JKR MALAYSIA
KUALA LUMPUR.



JABATAN KERJA RAYA MALAYSIA

20 OKTOBER 2020

LUKISAN PIAWAI PENCAWANG TNB (SINGLE CHAMBER) BILIK MSB DAN BILIK GENSET




ANNEXURE 2

Lukisan Piawai ini dibina berdasarkan Service Level Agreement (SLA) dan terpasang untuk semua projek tenaga api.

Dipersejajal bersama:





H. LIM CHAI CHING PENGAHAR KANAN (PRODUCT DESIGN) CAWANGAN AMAN AWAM & STRUKTUR	HARRIET SAGHI TAGGAR PRINCIPAL ENGINEER (PRODUCT DESIGN) NETWORK DIVISION
---	--

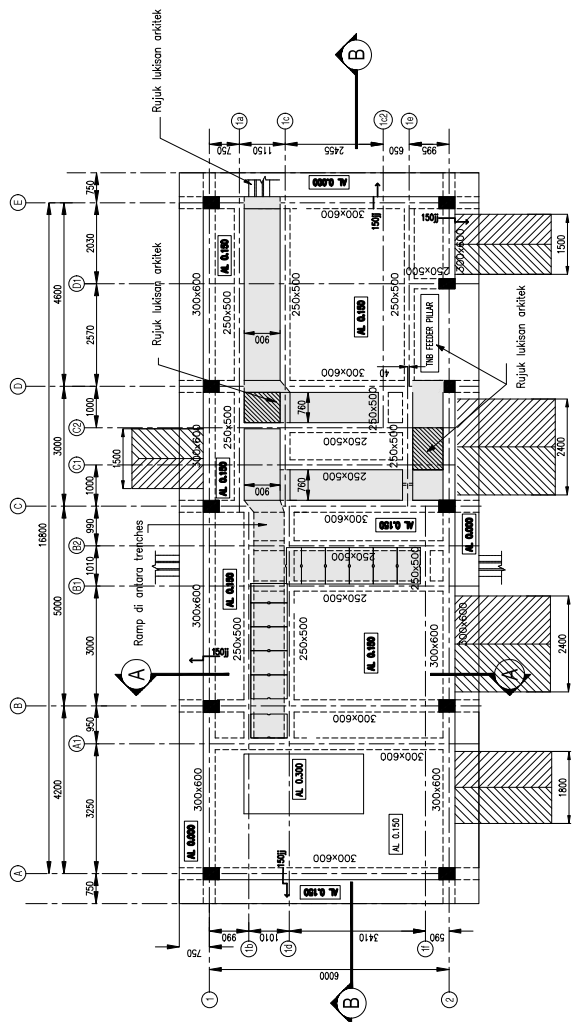
PENGARAH KIDMAT REKABENTUK: H. BAGOZEMAN BIN B. RAHUL JURUTERA AWAM PENGUSAHA KANAN: H. HANIZAH BINTI ABDUL JURUTERA AWAM KANAN: H. WAN RIZWA BINTI WAN MUHAMMAD	CAWANGAN REJUTERAN AWAM & STRUKTUR   
DISEKUTUKAN: SITI HADIHAH BINTI ZAHARA H. WAN RIZWA BINTI WAN MUHAMMAD DISEKUTUKAN: H. WAN RIZWA BINTI WAN MUHAMMAD	DULUKS: RAHMAH BINTI YAS NAMA LUKISAN: LUKISAN PIAWAI PENCAWANG TNB (SINGLE CHAMBER) BILIK MSB DAN BILIK GENSET
TAJUK LUKISAN: SENARAI LUKISAN	NO. LUKISAN: SKALA: TARIKH: 20/07/2023

TAJUK LUKISAN	NO. LUKISAN
1. PELAN PUNCA BEBAN KHIDMAT TIANG	SLC/PE(SC)/CS/01[13]
2. PELAN PUNCA RASUK ARAS BAWAH	SLC/PE(SC)/CS/02[13]
3. PELAN PUNCA RASUK ARAS BUMBUNG	SLC/PE(SC)/CS/03[13]
4. BUTIRAN RASUK ARAS BAWAH (1/3)	SLC/PE(SC)/CS/04[13]
5. BUTIRAN RASUK ARAS BAWAH (2/3)	SLC/PE(SC)/CS/05[13]
6. BUTIRAN RASUK ARAS BAWAH (3/3)	SLC/PE(SC)/CS/06[13]
7. BUTIRAN RASUK ARAS BUMBUNG	SLC/PE(SC)/CS/07[13]
8. PELAN PUNCA PAPAN ARAS BAWAH (BOTTOM AND TOP REINFORCEMENT)	SLC/PE(SC)/CS/08[13]
9. PELAN PUNCA PAPAN ARAS BUMBUNG (BOTTOM AND TOP REINFORCEMENT)	SLC/PE(SC)/CS/09[13]
10. KERATAN PAPAN ARAS BAWAH	SLC/PE(SC)/CS/10[13]
11. KERATAN PAPAN ARAS BUMBUNG DAN TALANG KONKRIT	SLC/PE(SC)/CS/11[13]
12. JADUAL BUTIRAN TIANG, LANDAS ANGGAT, PEPARIT KABEL DAN PAPAN APRON	SLC/PE(SC)/CS/12[13]
13. BUTIRAN LURANG TNB LV BOARD, LURANG TNB MV CABLE,	SLC/PE(SC)/CS/13[13]

*Lukisan ini perlu dibaca bersekali dengan Lukisan Piawai Nota Am Struktur.

1. JKR/CKAS/P-NA/STR/30/PEL 14/01[05]
2. JKR/CKAS/P-NA/STR/30/PEL 14/02[05]
3. JKR/CKAS/P-NA/STR/30/PEL 14/03[05]
4. JKR/CKAS/P-NA/STR/30/PEL 14/04[05]
5. JKR/CKAS/P-NA/STR/30/PEL 14/05[05]


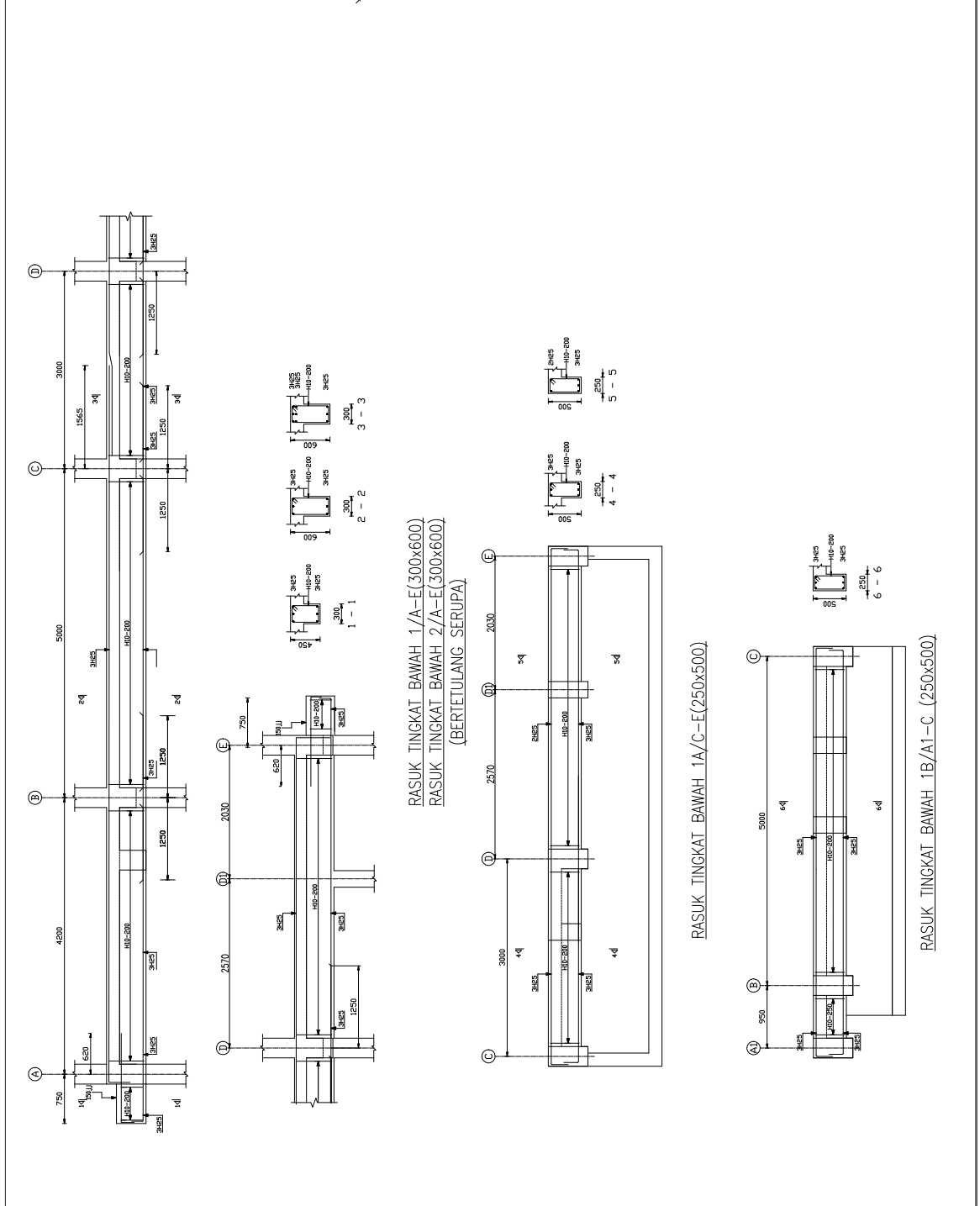
ANNEXURE 2	
Lukasari Pegawai Injenes bersama Service Level Lukasari Pegawai Injenes dan Service Level projek keraja.	
	
Dipersekutikan bersama	
 PENGARAH KANAN (PROJECT DESIGN) CAWANGAN ANAMA & STRUKTUR	 HARPREET SINGH TAGGAR PRINCIPAL ENGINEER (PROJECT DESIGN) NETWORK DIVISION
CAWANGAN KEURUTERAAN ANAMA & STRUKTUR	
FENGGARAH HINDAT REKABERTUK:	
P. RAHMOZZAMAN BIN AB. RAHUL	
JURUTERA AWAM PENGUSAHA AMAN :	
P. HANZAH BINTI JAGSODAN	
JURUTERA AWAM KANAN:	
P. WAN PEZANA BINTI WAN MUHAMMAD	
DREKABERTUK:	
SITI MADDAH BINTI ZAHAN	
DSEMAK:	
P. WAN PEZANA BINTI WAN MUHAMMAD	
DILUKS:	
PAHALAH BINTI YAS	
NAMA LUKSARAN:	
LUKSARAN PAVNA PENGAWANG TMB ESKLE CHAMBER BULI MASA DAN BULI GENSET	
TAKUK LUKSARAN:	
PELAN PUNCA RASUK ARAS BAWAH	
NO. LUKSARAN:	
SLCPESC(CS/0213)	
SKALA:	
1: 50 (A1)	
16/06/2020	
20/07/2020	
Elit	Prধান
Tandatangan	

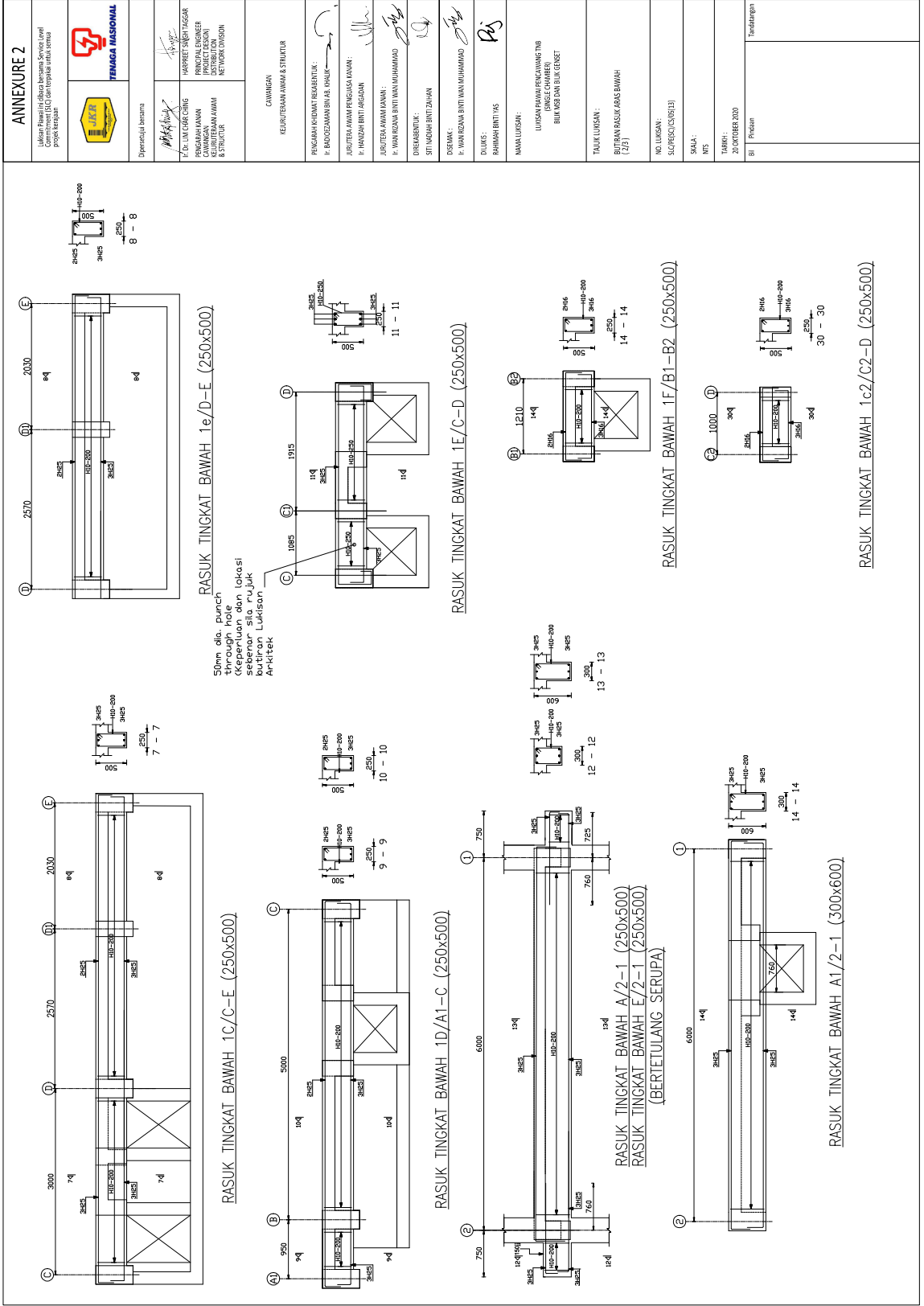


PELAN PUNCA RASUK ARAS BAWAH

NOTA:



1. Keluasan semua papak aras bawah adalah 200mm.

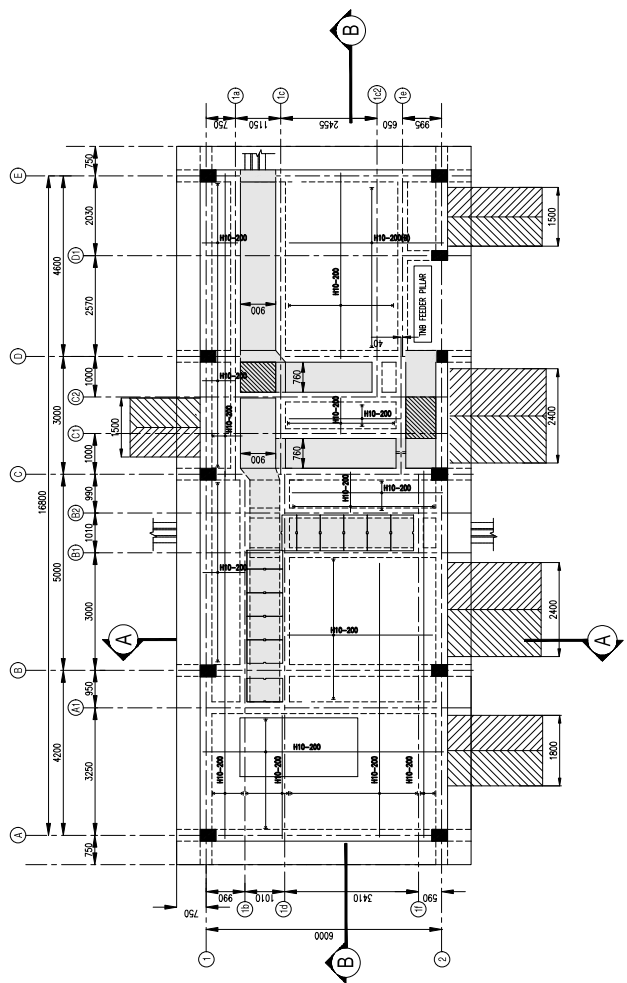
<p>ANNEXURE 2</p> <p>Lulusan Papan ini dibuat berdasarkan Service Level Project (SLP) dan terdapat uraian, semua proyek terdapat.</p>		<p>Dipersebutkan bernama:</p> <p><i>[Signature]</i></p> <p>F. D. SUKOR GING MANAJER PROJEK CAWANGAN KEURUTERAN AWAM & STRUKTUR PT. MANGA RASIONAL</p>	<p>CAWANGAN KEURUTERAN AWAM & STRUKTUR</p>	<p>PENGARAH KEMAJAAN REJABERTUK: P. BARDISZAHARA BIN AB. KHALIK</p>	<p>JABUTERA AWAM PENGUSUSAN: P. HADIS BINTI JAGSON</p>	<p>ABUTERA AWAM KAWAN: P. WAH RUANA BINTI WAH MAHAMAD</p>	<p>DIREKABERTUK: SITI NADIAH BINTI ZAHAN</p>	<p>SEKORANG: P. HANA REZANS BINTI WAH MAHAMAD</p>	<p>DUKUNS: RAHMADH BINTI TAS</p>	<p>MAWA LUOSAN: LUOSAN BAWAH PENGUSUSAN TMS SINGE KAMBERS BUKA M&B DAN BUKA GERSET</p>	<p>TAUKU LUOSAN: BUTIRAN BASKI ARAS BAWAH (1/5)</p>	<p>NO. LUKSAN: SLC/PRESTI/CS/KR/13</p>	<p>SKALA: MTS TARIKH: 20 OKTOBER 2020</p>	<p>BT / Pindatan</p>	
 <p style="text-align: center;">RASUK TINGKAT BAWAH 1/A-E (300x600) RASUK TINGKAT BAWAH 2/A-E (300x600) (BERTELULANG SERUPA)</p> <p style="text-align: center;">RASUK TINGKAT BAWAH 1A/C-E (250x500)</p> <p style="text-align: center;">RASUK TINGKAT BAWAH 1B/A1-C (250x500)</p>															



ANNEXURE 2

<p>Ukuran: Papan 10 di dalam bersama Service Level 1000 x 1000 mm (untuk setiap unit utama) Proyek: Kelayan</p>	
<p>Dipersebutkan bersama</p>	<p>PT. JAYA MARGA NASIONAL</p>
<p>DR. LIM CHOK CHING PRINCIPAL ENGINEER (PROJECT DESIGN) CAWANGAN 8.5 STRUKTUR</p>	<p>HARPREET SINGH FAGGA PRINCIPAL ENGINEER (PROJECT DESIGN) CAWANGAN 8.5 STRUKTUR</p>
<p>CIWAHANG KEAJAIBAN ANAMA & STRUKTUR</p>	<p>P. BALOGZAMANA SIVAS. RAHMAN ARKITEK I. HANZAH BINTI JAGJARAN I. WANIZAM BINTI WAN MUHAMMAD I. WANIZAM BINTI WAN MUHAMMAD SITI MEGAH BINTI ZAHARA DOREAK : I. WANIZAM BINTI WAN MUHAMMAD DOLUS : RAMADAN BINTI HAS NAMA LUISAN: LUISAN BAWA PERCAMAHS TING (BIRGE CHAMBER) BUN MUDAN BUKU GETET TALUK LUISAN : BUTIRAN RASUK ARAS BAWAH (2/3) NO. LUISAN : SUPREMO/CIWAHANG/13 SKALA : MTS TARIKH : 20/07/2020 SITI Faridrah Tandatangani</p>

ANNEXURE 2 Luksan Pwaha ind dibaca bersama Service Level Agreement dan terpaat untuk semua projek keajaian.	 PERMAGA NASIONAL	Dipersekutujui bersama  P. DE LUKS CHAR CHING PRINCIPAL ENGINEER PENGALIHAN KAWAN KEHUBUNGAN AWAM & STRUKTUR NETWORK DIVISION	CAWANGAN KEHUBUNGAN AWAM & STRUKTUR
DIBERAK: P. WAN FIZAZAH BINTI WAN MUHAMMAD DIUKS: P. HANZAH BINTI ARSIDAN RABIMAH BINTI HAS NAMA LUKSAN: LUKSAN PUNCA PERKAWANG TMB (SINGLE CHAMBER) BULK MBS DAN BULK GENSET		TALUK LUKSAN: PELAN PUNCA PAPA KAWAN BAWAH (BOTTOM AND TOP REINFORCEMENT)	
NO. LUKSAN: SUC/PE/CS/SR/131 SKALA: 1:50 (A1) TARikh: 20 OKTOBER 2020 Bil. Pindan		Indefinisi	



PELAN PUNCA PAPA KAWAN BAWAH (BOTTOM AND TOP REINFORCEMENT)

ANNEXURE 2

Uphara Fibres Ltd. offers various services and Committed ISO and top quality work on time project completion



Dipersebutkan bersama

T. D. LIM CHAR CHING
 PROJECT ENGINEER
 (PROJECT DESIGN)
 CHAWAN
 DAN ANWAR AHMAD
 NETWORK DIVISION

FENGARAH KAWAN
 PROJECT ENGINEER
 (PROJECT DESIGN)
 CHAWAN
 DAN ANWAR AHMAD
 NETWORK DIVISION

CAWANGAN
 KELUTERANAN AWAM & STRUKTUR

REKAHAYATAN RESEBENTUK
 I. BOGCEZAMAN BAYAR, HUALU

JURUTERA AWAM PENGUASA KAWAN
 I. HONDAR BINTI, ARADAN

JURUTERA AWAM LAINAN
 I. WAN REZANA SITI WAN MUMAHMAD

DIRESEBENTUK
 SITI HENDAR BINTI, ZAMAN

OSALAMK
 I. WAN REZANA SITI WAN MUMAHMAD

DULUKS
 RAHMAT BINTI YAS

MAAM LUKSAN
 LUKSAN BAWA PANGKAWANG TMS
 (SINGLE CHAMBER)
 BUKANIS DAN BUKI GENSET

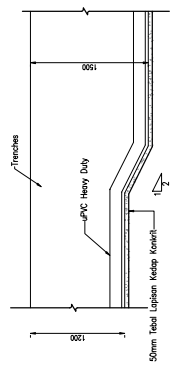
TALUK LUKSAN
 ADUAL BUTIRAN TIANG LANDAS
 ANGAT PEPARIT KABEL
 DAN PENUTUP KONKRIT

NO. LUKSAN
 SUCPERS/03/21/03

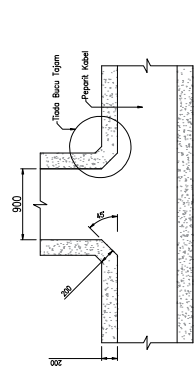
SKALA
 1:25

TARIKH
 20 OKTOBER 2020

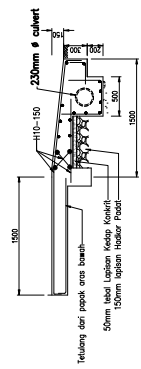
NO. PROJEK
 TMS/000000



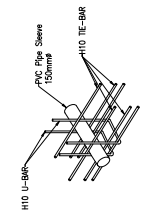
BUTIRAN TIPIKAL PANDANGAN KERATAN PEPARIT KABEL BERBEZA KEDALAMAN
 (skala : 1/15)



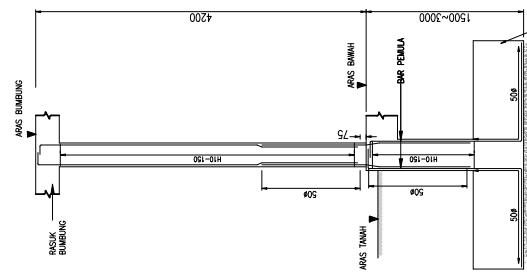
BUTIRAN TIPIKAL PANDANGAN PELAN 'TJADA BUCU TAJAM' PADA PEPARIT KABEL



BUTIRAN TIPIKAL LANDAS ANGGAT



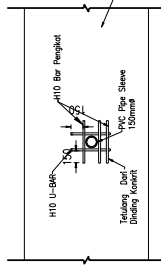
BUTIRAN TIPIKAL BUKAAN PADA PEPARIT KABEL DAN LURANG KONKRIT UNTUK PVC PIPE SLEEVE



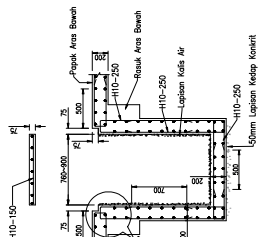
BUTIRAN TIANG

JENIS	C1	C2
ARAS BUMBUNG KE		
ARAS BAWAH		
TETULANG UTAMA PENGGALAT	6/4/5 H10-150 300 X 400	4/4/0 H10-150 250 X 300
PANGGAL TIANG		
TETULANG UTAMA PENGGALAT	6/4/5 H10-150 300 X 400	4/4/0 H10-150 250 X 300

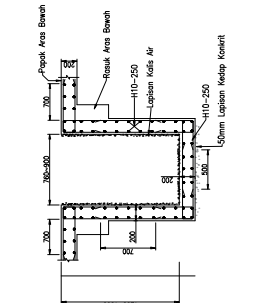
JADUAL BUTIRAN TIANG



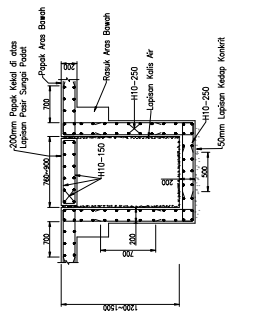
PANDANGAN KERATAN



BUTIRAN TIPIKAL PEPARIT KABEL DENGAN PENUTUP KONKRIT



BUTIRAN TIPIKAL PEPARIT KABEL TANPA PENUTUP KONKRIT



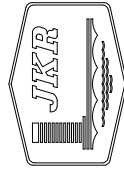
BUTIRAN TIPIKAL PEPARIT KABEL DENGAN PAPAN KEKAL

LUKISAN PIAWAI
PENCAWANG ELEKTRIK SINGLE CHAMBER
(ATTACHED)

TAJUK LUKISAN	NO. LUKISAN
1. PELAN SUSUNATUR LAMPU, SOKET, LEGEND, GAMBARAJAH PENDAWAAN SKEMATIK DAN GAMBARAJAH PERINCIAN PAPAN AGIHAN (DB)	SLC/PE(SC)/EL/01[04]
2. GAMBARAJAH PERINCIAN PELAN BUMBUNG DAN PANDANGAN BAGI SISTEM PERLINDUNGAN KILAT UNTUK BILIK SWITCHGEAR DAN BILIK ALAT UBAH TNB	SLC/PE(SC)/EL/02[04]
3. GAMBARAJAH PERINCIAN SISTEM PEMBUMIHAN UNTUK BILIK SWITCHGEAR DAN BILIK ALAT UBAH TNB	SLC/PE(SC)/EL/03[04]
4. PELAN PERINCIAN SISTEM PEMBUMIHAN DAN PETUNJUK UNTUK BILIK MSB DAN BILIK GENSET	SLC/PE(SC)/EL/04[04]

**LUKISAN PIAWAI
PENCAWANG ELEKTRIK SINGLE CHAMBER
(ATTACHED)**

**SLC/PE(SC)/EL/.....
(Bil. Lukisan : 4 nos)**



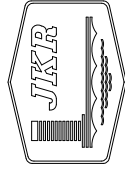
CAWANGAN KEJURUTERAAN ELEKTRIK
IBU PEJABAT JKR MALAYSIA
KUALA LUMPUR.

JABATAN KERJA RAYA MALAYSIA

13 0605 2020

**LUKISAN PIAWAI
PENCAWANG ELEKTRIK DOUBLE CHAMBER
(ATTACHED)**

**SLC/PE(DC)/AR/.....
(Bil. Lukisan : 3 nos)**



CAWANGAN ARKITEK
IBU PEJABAT JKR MALAYSIA
KUALA LUMPUR.

JABATAN KERJA RAYA MALAYSIA

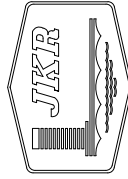
13 0605 2020

LUKISAN PIAWAI
PENCAWANG ELEKTRIK DOUBLE CHAMBER
(ATTACHED)

TAJUK LUKISAN	NO. LUKISAN
1. PELAN LANTAI, PELAN PEMBALIKAN SILING DAN PELAN BUMBUNG	SLC/PE(DC)/AR/01[03]
2. KERATAN A-A, KERATAN B-B, PANDANGAN HADAPAN, PANDANGAN BELAKANG, PANDANGAN SISI KANAN DAN PANDANGAN SISI KIRI	SLC/PE(DC)/AR/02[03]
3. DETAIL A – DETAIL F	SLC/PE(DC)/AR/03[03]

**LUKISAN PIAWAI
PENCAWANG TNB
(DOUBLE CHAMBER)
BILIK MSB DAN BILIK GENSET**

**SLC/PE (DC)/CS/...
(Bil. Lukisan : 11 nos)**



CAWANGAN KEJURUTERAAN AWAM DAN STRUKTUR
BAHAGIAN PEMBANGUNAN DAN PENYELIDIKAN
IBU PEJABAT JKR MALAYSIA
KUALA LUMPUR.

JABATAN KERJA RAYA MALAYSIA

20 OKTOBER 2020

ANNEXURE 2

Lukisan Piawai in dibaca bersama Service Level Agreement (SLA) dan terpasang untuk semua projek baru.



Dipersejajal bersama

M. D. LIM CHAI CHING
PENKARANGAN KAWAN
CAWANGAN ALATAN AWAM
& STRUKTUR

HARRIET SUEH TAGGAR
PROJECT ENGINEER
(PRODUCT DESIGN)
NETWORK DIVISION

CAWANGAN
KEKURITERAN AWAM & STRUKTUR

PRONGRAN KHIDMAT REBENTUK :
 P. BUDICZAMAN BIN AB. RAHUL
 JURUTERA AWAM PRONGRAN KAWAN :
 P. HANIZAH BINTI JAGSAM
 JURUTERA AWAM KAWAN :
 P. WAN RIZAM BINTI WAN MUHAMMAD
 DIBENBENTUK :
 P. NORFAZAH BINTI ISMAIL
 DISEMAK :
 P. WAN RIZAM BINTI WAN MUHAMMAD
 DULUIS :
 RAHMAT BINTI YAS
 NAMA LUKISAN :
 LUKISAN PIAWAI PENCAWANG TNB
(DOUBLE CHAMBER)
 BILIK MSB DAN BILIK GENSET

TARIK LUKISAN :
 SENARAI LUKISAN

NO. LUKISAN :

SKALA :

TARIKH :
 30/05/2020
 BIL | Pindasan | Tandatangani

LUKISAN PIAWAI PENCAWANG TNB (DOUBLE CHAMBER) BILIK MSB DAN BILIK GENSET

TARIK LUKISAN		NO. LUKISAN
1.	PELAN PUNCA BEBAN KHIDMAT TIANG	SLC/PE (DC)/CS/01 [11]
2.	PELAN PUNCA RASUK ARAS BAWAH	SLC/PE (DC)/CS/02 [11]
3.	BUTIRAN RASUK ARAS BAWAH [1/2]	SLC/PE (DC)/CS/03 [11]
4.	BUTIRAN RASUK ARAS BAWAH [2/2]	SLC/PE (DC)/CS/04 [11]
5.	PELAN PUNCA RASUK ARAS BUMBUNG	SLC/PE (DC)/CS/05 [11]
6.	BUTIRAN RASUK ARAS BUMBUNG, TIPIKAL RASUK PENGIKAT	SLC/PE (DC)/CS/06 [11]
7.	PELAN PUNCA PAKAP ARAS BAWAH & BUMBUNG (TOP & BOTTOM REINFORCEMENT)	SLC/PE (DC)/CS/07 [11]
8.	BUTIRAN PAKAP ARAS BAWAH	SLC/PE (DC)/CS/08 [11]
9.	BUTIRAN PAKAP ARAS BUMBUNG DAN BUTIRAN PERINCIAN TALANG KONKRIT	SLC/PE (DC)/CS/09 [11]
10.	JADUAL BUTIRAN TIANG, LANDAS ANGGAT, PEPARIT KABEL DAN PAKAP APRON	SLC/PE (DC)/CS/10 [11]
11.	BUTIRAN MANHOLE TNB LV BOARD, MANHOLE TNB MV CABLE,	SLC/PE (DC)/CS/11 [11]

*Lukisan ini perlu dibaca bersekali dengan Lukisan Piawai Nota Am Struktur.

1. JKR/CKAS/P-NA/STR/30/PEL 14/01[05]
2. JKR/CKAS/P-NA/STR/30/PEL 14/02[05]
3. JKR/CKAS/P-NA/STR/30/PEL 14/03[05]
4. JKR/CKAS/P-NA/STR/30/PEL 14/04[05]
5. JKR/CKAS/P-NA/STR/30/PEL 14/05[05]

ANNEXURE 2

Malay Peninsula Urban Water Supply Sdn Bhd
 Company (SU) dan pejabat projek utama



Dipersiapkan bersama

HARVEET SINGH TAGGAR
 P. D. LIM CHENG CHING
 P. S. MOHAMMAD
 CAWANGAN KEJURUTERAAN AWAM & STRUKTUR

HARVEET SINGH TAGGAR
 P. D. LIM CHENG CHING
 P. S. MOHAMMAD
 CAWANGAN KEJURUTERAAN AWAM & STRUKTUR

REKOR TERBARU AWAM & STRUKTUR

REKOR TERBARU AWAM & STRUKTUR

REKOR TERBARU AWAM & STRUKTUR

REKOR TERBARU AWAM & STRUKTUR

REKOR TERBARU AWAM & STRUKTUR

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REKOR TERBARU AWAM & STRUKTUR

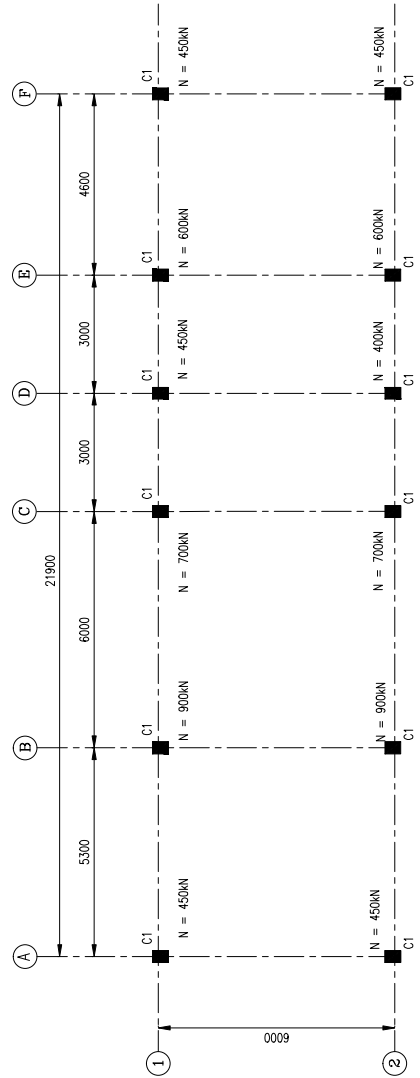
REKOR TERBARU AWAM & STRUKTUR

REKOR TERBARU AWAM & STRUKTUR

REKOR TERBARU AWAM & STRUKTUR

REKOR TERBARU AWAM & STRUKTUR

REKOR TERBARU AWAM & STRUKTUR



PELAN PUNCA BEBAN KHIDMAT TIANG

NOTA:

1. Beban Khidmat Tiang (N) yang ditunjukkan adalah dalam unit kN.
2. Semua pangkai tiang adalah konkrit tuang in-situ dengan saiz 300mm x 400mm seperti dinyatakan di dalam Jadual Butiran Tiang.



TAJUK LUKSAN :
 PELAN PUNCA BEBAN KHIDMAT TIANG

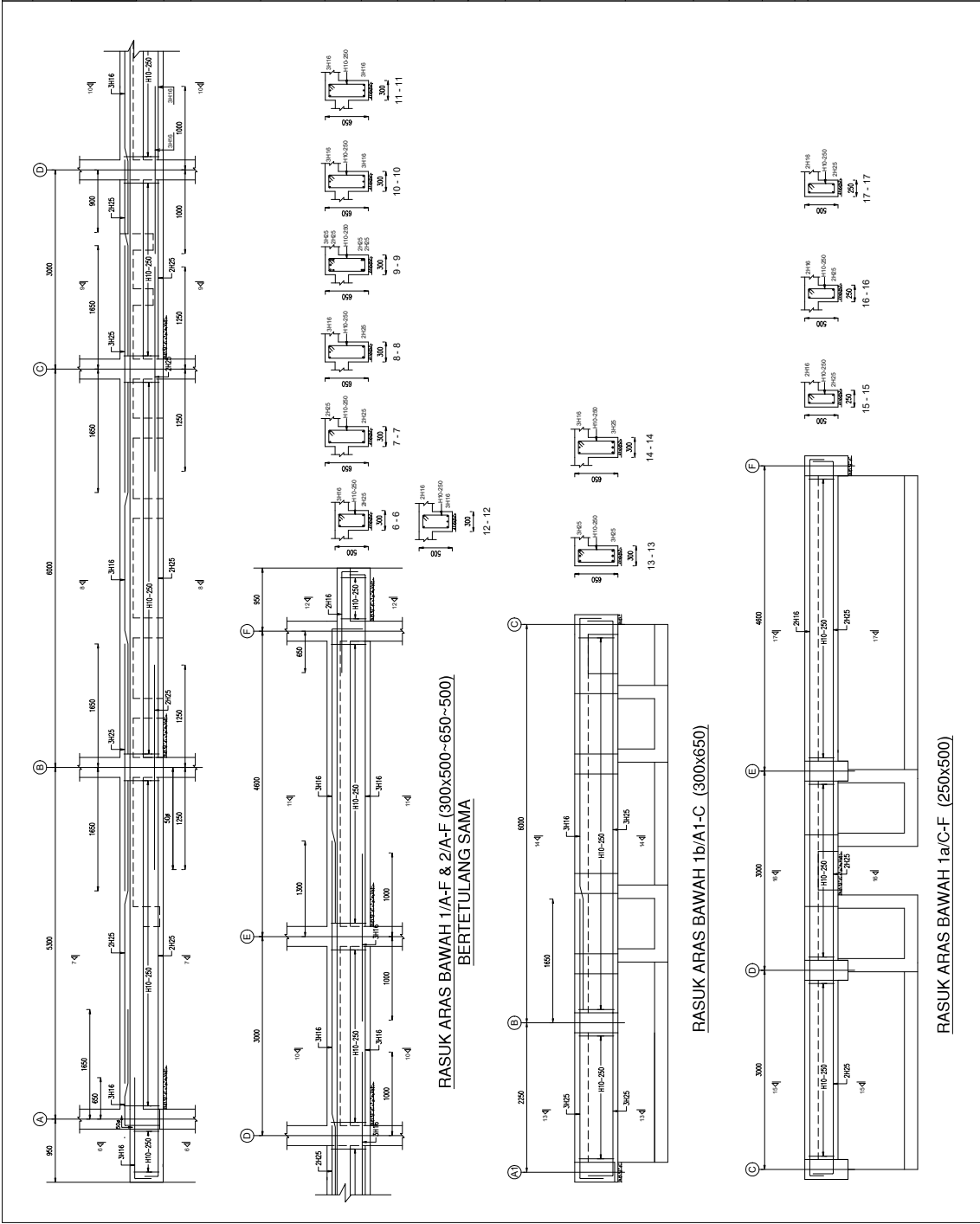
NO. LUKSAN :
 SLCP/EDU/CS/01/11

SKALA :
 1 : 50 (A1)

TARIKH :
 20/07/2009/2020

BT | Pindaan | Tandas

ANNEXURE 2	
Jabatan Pelajaran di bawah Kementerian Pendidikan dan Kebudayaan Direktorat Jendral Pendidikan Dasar dan Menengah	
	
Direktorat Jendral Pendidikan Dasar dan Menengah	
I. E. LIM CHAI CHING PRINCIPAL ENGINEER (STRUCTURE) PENYELARASAN AWAM & STRUKTUR	HAPRIET SITI FATMA PRINCIPAL ENGINEER (STRUCTURE) PENYELARASAN AWAM & STRUKTUR
CAWANGAN KELANTAN AWAM & STRUKTUR	
PENGARAH HUKUMAT KEASBUTIK : H. BADOZAMANI BIN AS. HAJALI	
JURUTERA AWAM PENGUJUSA AMAN : H. HANIZAH BINTI ARGANI	
JURUTERA AWAM KAWAN : H. HANIFAZA BINTI WAN HUSAMUDDIN	
DIREKASBUTIK : H. NORFAZLA BINTI ISMAIL	
DESAMAK : H. WAN HAZARA BINTI WAN HUSAMUDDIN	
DEKUS : RANJAH BINTI WIS	
MAJLIS LUKSAN : LUKSAN BAHALU PENGANGKUT TIB (DORABLE CHARGER) BUKANGSAM BUK GENET	
TALUK LUKSAN : BUTIRAN RASUK ARAS BAWAH (1/2)	
NO. LUKSAN : SC/PED/03/01/11	
SKALA : 1/15	
TARIKH : 20 OCTOBER 2020	
SR : Perbaikan	

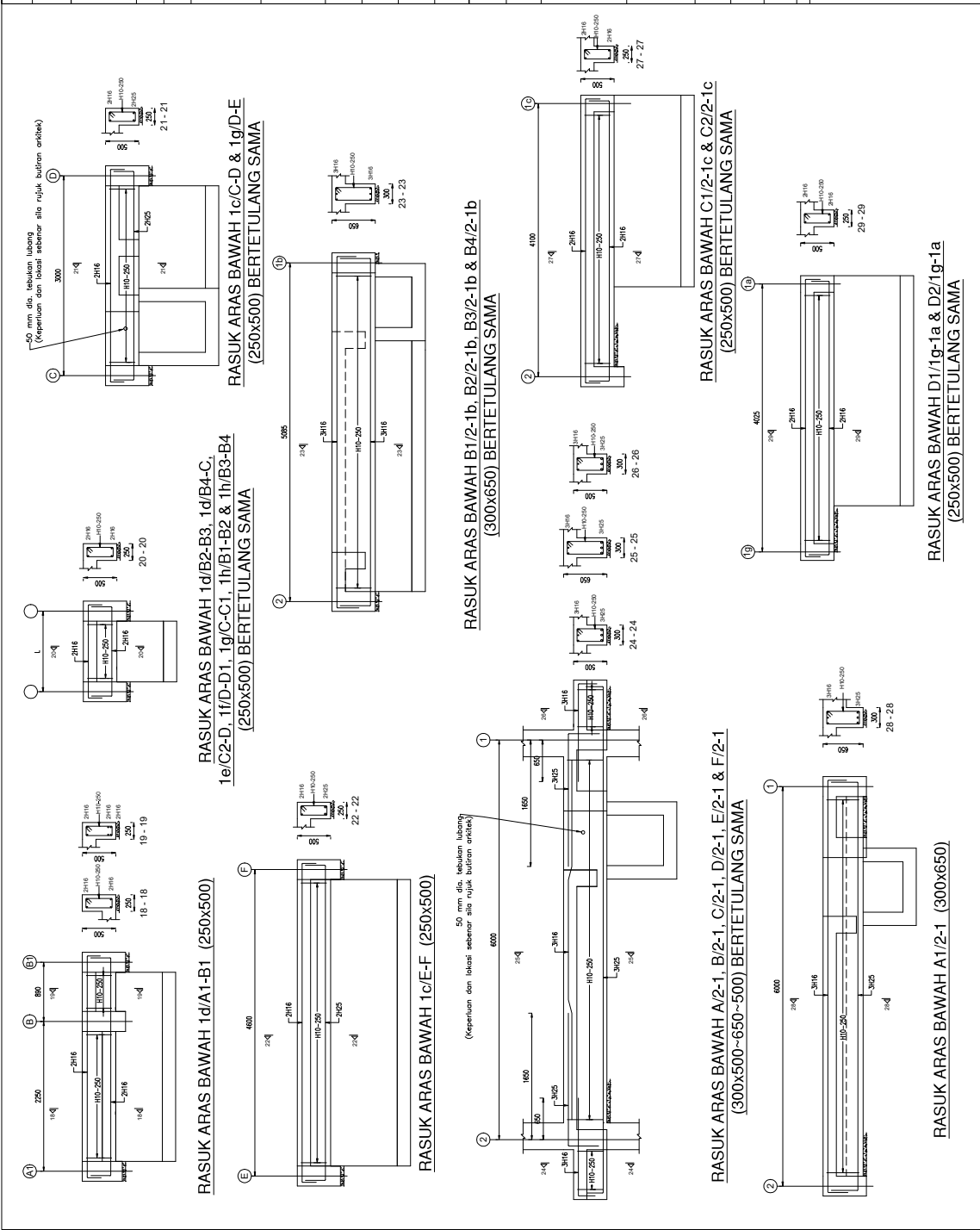






**RASUK ARAS BAWAH 1/A-F & 2/A-F (300x500-650-500)
BERTETULANG SAMAM**

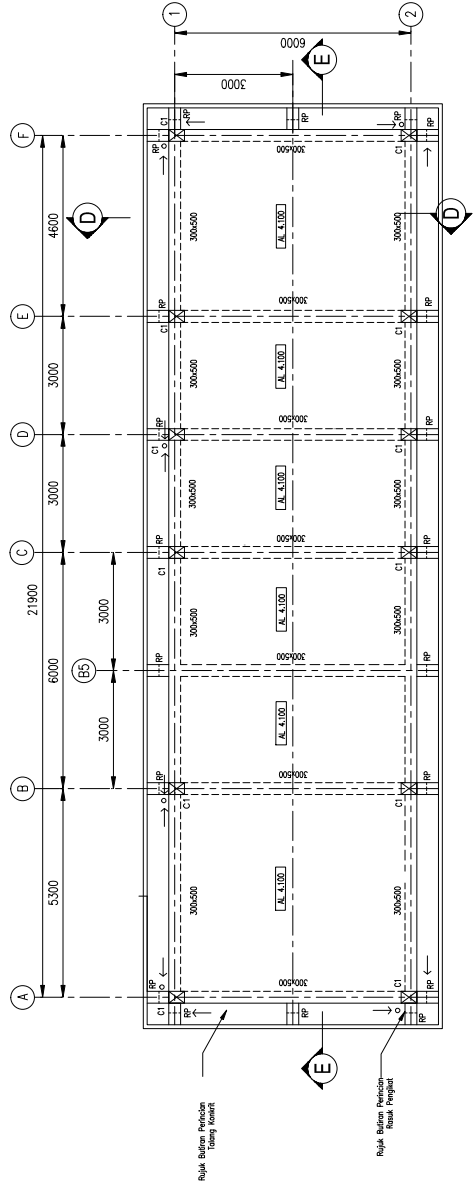
RASUK ARAS BAWAH 1b/A1-C (300x650)

RASUK ARAS BAWAH 1a/C-F (250x500)

ANNEXURE 2	
Laksana Penerimaan Pekerjaan Struktur Beton Bertulang Commitment SUC dan terapani untuk semua proyek bangunan	
Diperoleh dari: <i>[Signature]</i>	
E. DR. LIM CHAI CHING PENGARAH AWAM KEBUDIDHAJARAN DAN KEKAWAHLAN AWAM & STRUKTUR	PROFESOR SENIOR PENGARAH AWAM KEBUDIDHAJARAN DAN KEKAWAHLAN AWAM & STRUKTUR
CAWANGAN KEKAWAHLAN AWAM & STRUKTUR	
PENGARAH KHIDMAT TEKNIKAL: P. BADGEZAMAN BIN AB. JHALIL	
JURUTERA AWAM PENGUKUAS KAWAM: P. HANICH BINTI PASAGANI	
INSURTER AWAM KAWAM: P. AMY RIZANA BINTI WAN MURAHMAD	
DIREKTOR: P. INDIRAGANI BINTI ISMAIL	
DIBAWAI: P. HAN RIZANA BINTI WAN MURAHMAD	
DILUKIS: RAHMAH BINTI MAS	
MAMA LUKSANA: LUKSANA RAYAN PANGKALING TRIS (DOUBLE CHAMBER) BUNKUS DAN BUNG GEBET	
TALUK LUKSANA: RITZAN BASUK ARAS BAWAH (2)	
NO. LUKSANA: SUC/PED/COM/111	
SALAH: M/S	
TARIKH: 20 OKTOBER 2020	
SRI Pradana	
Tandatangan	





ANNEXURE 2	
Lukisan ini akan dibina bersama Service Level projek berkaitan.	
	
Dipersetujui bersama	
 PENGARAH KAWAN & STRUKTUR	 HARPREET SINGH TAGGAR PRINCIPAL ENGINEER (STRUCTURE) DISTRIBUTION NETWORK DIVISION
CAWANGAN KEURUTERAAN AWAM & STRUKTUR	
PENGARAH KHIDMAT PESERTA: P. BALDIZAMAN BIN AB KHALIL	
JURUTERA AWAM PENGUSAHA KAMI: P. HANJIDH BINTI ARGUDAN	
IBRITERA AWAM KAMI: P. WAN RIQANA BINTI WAN MUHAMMAD	
DIREKTORIA: P. NORFAZLA BINTI ISMAIL	
DISEMAK: P. WAN RIQANA BINTI WAN MUHAMMAD	
DILUKES: R. HIBAH BINTI YAS	
NAMA LUKASAN: LUKASAN RUMAH PENGUSANG TIB (DOUBLE CHAMBER) BUKIT KAS DAN BUKIT GENSET	
TARIKH LUKASAN: PELAN PUNCA RASUK ARAS BUMBUNG	
NO. LUKASAN: SC/PE/CI/CS/05/11	
SKALA: 1:50 (A1)	
TARIKH: 21.01.2022.2022	
By	Tandatangan

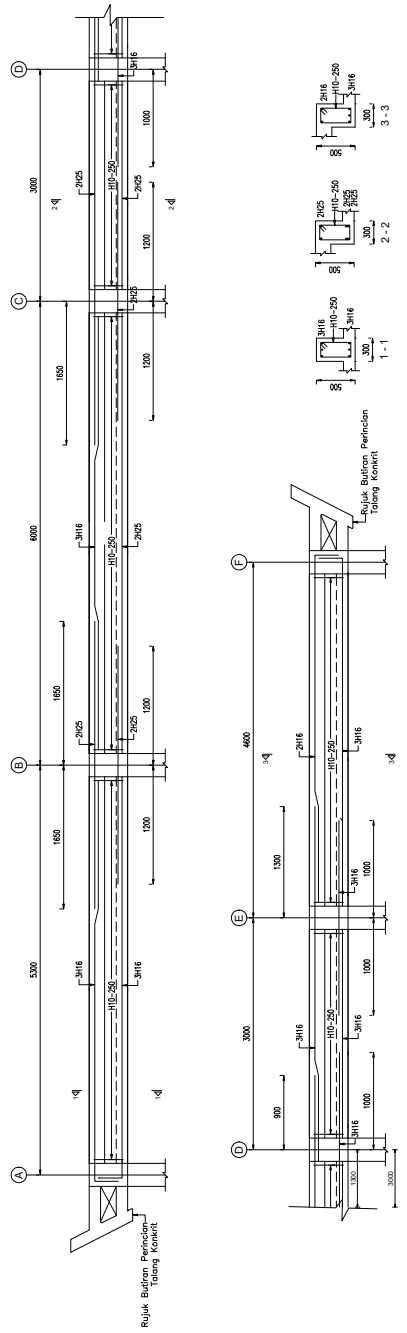


PELAN PUNCA RASUK ARAS BUMBUNG

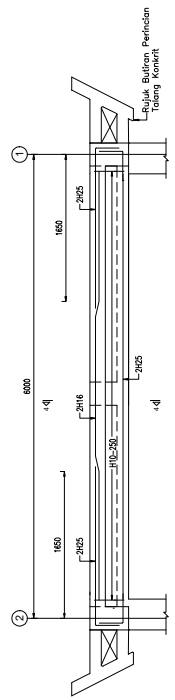
NOTA:

1. Ketebalan semua papak bumbung adalah 200mm.
2. Rekabentuk dan pemasangan Sistem 'Kekuda Bumbung 'Cold Formed' hendaklah merujuk kepada pembekal sistem yang diluluskan oleh JKR.
3. RP adalah rasuk pengikat dengan saiz 300mm x 150mm.
4. Penutup konkrit untuk tulang konkrit dan rasuk pengikat adalah 25mm.

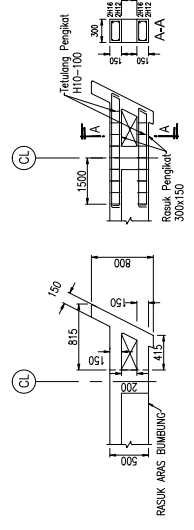
ANNEXURE 2	
Luasan Pihak Atas dan Berapa Sertifikat Level Cetak (1:50), dan Berapa Sertifikat Level cetak kerabat	
	
Dipersebutkan berama  E. D. LIM CHIA CHING PRINCIPAL ENGINEER PENGARAH KAWAN CAWANGAN (DESIGN) KEJUTERAAN AWAM & STRUKTUR	
CAWANGAN KEJUTERAAN AWAM & STRUKTUR	
PENGARAH KIDAT REASBENTUK : H. BADEZZAN BIN ABU PALIL	
JURUTERA AWAM FERGUSA KAWAN : H. HANIZAH BINTI ARGADAN	
JURUTERA AWAM KAWAN : H. WAN RIZANA BINTI WANI MUHAMMAD	
DISEKREBENTUK : H. MOFARIZAH BINTI ISMAIL	
DISEKRE : H. WAN RIZANA BINTI WANI MUHAMMAD	
DULUK : BANIHAN BINTI HAS	
NAMA LUARAN : LUARAN PAVAN PENGAWANG TIB BUK KASS DAN BALU GANSET	
TAJUK LUARAN : BUTIRAN RASUK AWAS SUMBER BUTIRAN TIPIKAL PERINCIAN RASUK PENGIKAT	
NO. LUARAN : SLC/PED/CS/06/11	
SKALA : R/S	
TARIKH : 20 OKTOBER 2020	
No. Prediaan : Tandaslang	



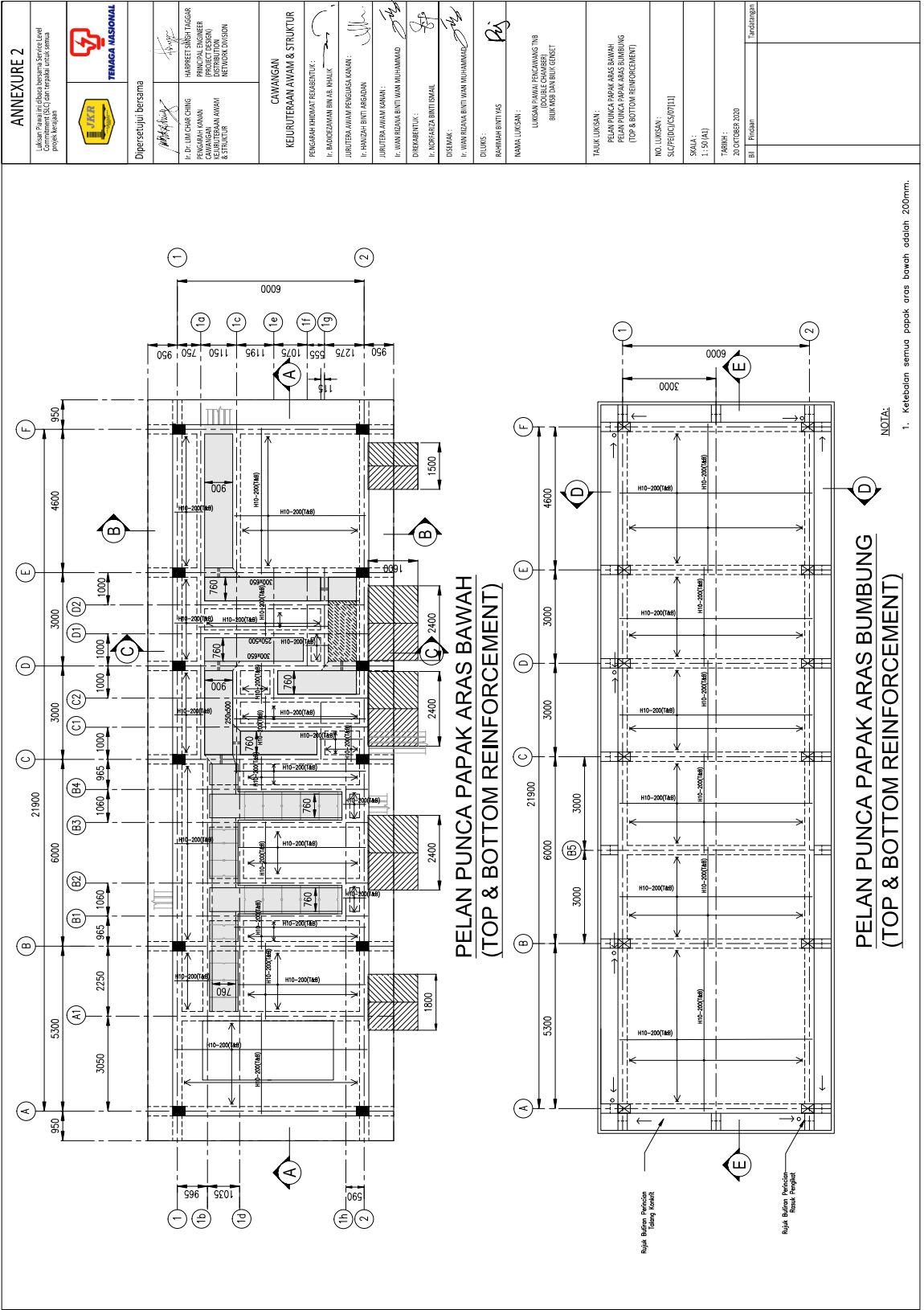
RASUK ARAS BUMBUNG 1/A-F & 2/A-F (300x500) BERTETULANG SAMA



RASUK ARAS BUMBUNG A/2-1, B/2-1, B5/2-1, C/2-1, D/2-1, E/2-1 & F/2-1 (300x500) BERTETULANG SAMA











**BUTIRAN TIPIKAL
 PERINCIAN RASUK PENGIKAT**

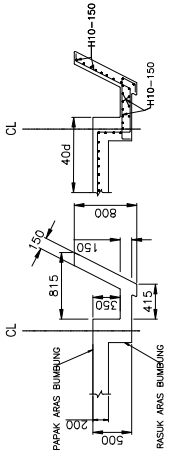


**PELAN PUNCA PAPAN ARAS BAWAH
(TOP & BOTTOM REINFORCEMENT)**

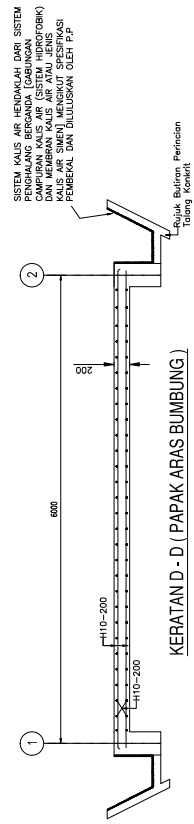
NOTA:
1. ketebalan semua papan aras bawah adalah 200mm.

ANNEXURE 2	
Lukisan Papan ini dibaca bersama Service Level Commitment (SLC) dan terdapat dalam semua projek projek.	
Dipersetujui bersama	
I: DR. LIM CHAR CHING PRINCIPAL ENGINEER KEJURUTERAAN AWAM & STRUKTUR	I: HAREET SIREH NAGGAR PRINCIPAL ENGINEER KEJURUTERAAN AWAM & STRUKTUR
CAWANGAN KEJURUTERAAN AWAM & STRUKTUR	
PENGARAH HIDAYAT/PEMBANTU: I: BACHRIEMAN BINA A. KHAIK I: HANZHI BINI ARDIAN	
JURUTERA AWAM PEGAS KAWAN: I: HANZHI BINI ARDIAN	
JURUTERA AWAM KAWAN: I: WAN RIJAZA BINTI WAN MUSAHAMAD	
DIREKTOREL: I: NOPARAZA BINTI ISMAIL	
DISEKAM: I: WAN RIJAZA BINTI WAN MUSAHAMAD	
DULUKS: RAHIMAH BINTI YUS	
NAMA LUKSIAN: LUKSIAN PAMAH PERCANGAS TMB (DOUBLE CHAMBER) BIMBUNG BANTULI GENET	
TALUK LUKSIAN: PELAN PUNCA PAPAN ARAS BAWAH PELAN PUNCA PAPAN ARAS BUMBUNG (TOP & BOTTOM REINFORCEMENT)	
NO. LUKSIAN: SLCP/DCI(CS/0711)	
SKALA: 1:30 (A1)	
TARIKH: 20 OKTOBER 2020	
BT	Phisican
Bachrieman	

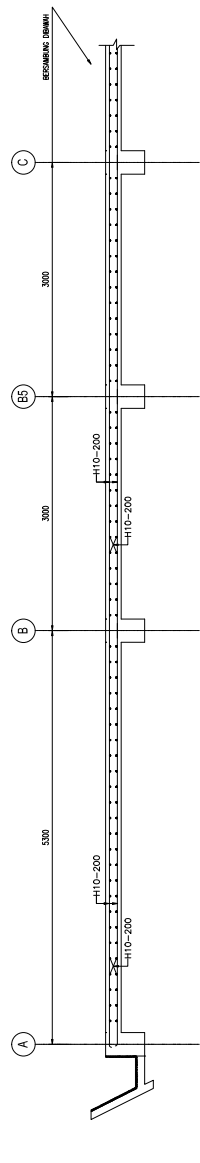
ANNEXURE 2 Laporan Pemuaian (to obtain the approval for the level of project completion)	
	
Dipersefusi bernama:	
K. D. LIM GUAN CHING PRINCIPAL ENGINEER CIVIL/MECHANICAL/ANALYSIS & STRUCTURE	HARBREET SINGH TAGGAR PROJECT DESIGN NETWORK DIVISION
CAWANGAN KEJURUTERAAN AWAM & STRUKTUR	
PENGASAH ARAH PERSEKUTUAN: K. BAGCISEVAN SIVA R. PALAK	
JURUTERA AWAM PRONGSAKANN: P. HANIZAH BINI ARAGDAN	
JURUTERA AWAM KAWAN: P. WAN RIZANA BINI WAN MUHAMMAD	
DISCREETOR: P. NORHAZIRA BINI ISMAIL	
DISEMAK: P. WAN RIZANA BINI WAN MUHAMMAD	
BILIKS: BAHAMAH BINTI YAS	
MAJLIS LUKSAN: LUKSAN PAKAR PRONGSAKANN (DOUBLE CHAMBER) BUKIT MELAK DAN TUALI GEBET	
TALK LUKSAN: BUTIRAN PAKAR ARAS BUMBUNG BUTIRAN TIPKAL PERINCANGAN TALANG KONKRET	
NO. LUKSAN: SK/PRO/DC/S/WH/11	
SOKA: M/S	
TARHIB: 30 OKTOBER 2020	
Bilik: Perisian	Tandatangani



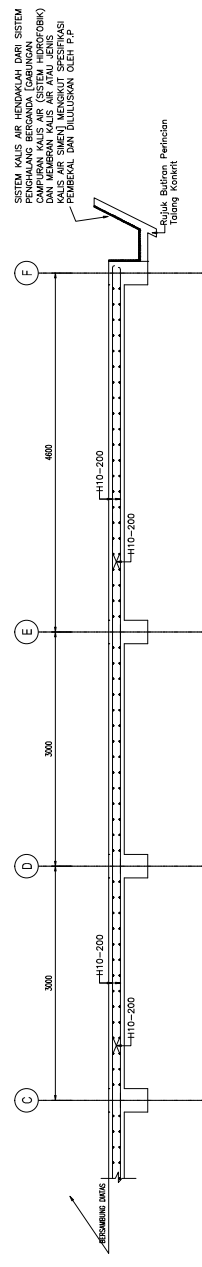
BUTIRAN TIPKAL PERINCANGAN TALANG KONKRET



KERATAN D - D (PAPAK ARAS BUMBUNG)




KERATAN B - B (PAPAK ARAS BUMBUNG)

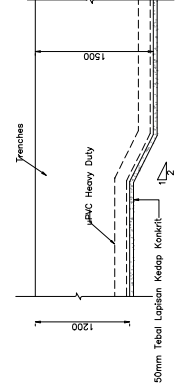


KERATAN E - E (PAPAK ARAS BUMBUNG)

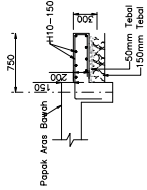
SISTEM KALIS AIR HENDAKLAH DARI SISTEM PENHALANG BERGANDA (GABUNGAN DARI WATIRAN KALIS AIR (SISTEM HODOFORK) DAN WATIRAN KALIS AIR (SISTEM HODOFORK) KALIS AIR SIMEN) MENGIKUT SPESIFIKASI PEMBEKAL DAN DILUKSANKAN OLEH P.P

SISTEM KALIS AIR HENDAKLAH DARI SISTEM PENHALANG BERGANDA (GABUNGAN DARI WATIRAN KALIS AIR (SISTEM HODOFORK) DAN WATIRAN KALIS AIR (SISTEM HODOFORK) KALIS AIR SIMEN) MENGIKUT SPESIFIKASI PEMBEKAL DAN DILUKSANKAN OLEH P.P

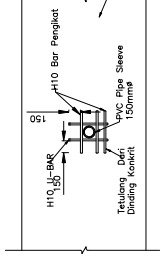
ANNEXURE 2	
 TEMAJA NASIONAL	Badan Penyelenggara Monev Sekolah Commission SMC dan tanggapan untuk semua aspek kerajinan
Diperetujui bernama E. DR. LIMY CHAN CHING PENGARANG KAWAN CAWANGAN ANJARAN & STRUKTUR	HARPREET SINGH TAGGAR (PROJECT DESIGNER) ANJARAN NETWORK DIVISION
CAWANGAN KEJURUTERAAN ANJARAN & STRUKTUR	
PROGRAM KEMAMATAN REASERTIFIKASI: P. BADICIZANAN BINA RE. FAKAL	
JURUTERA ANJARAN PENGUSUSA KAWAN: P. HANZAH BINTI ARGADAN	
JURUTERA ANJARAN KAWAN: P. WAN RIZANA BINTI WAN MUHAMMAD	
DISKRIBERTUK: P. NOR-ROZAH BINTI ISMAIL	
DISEMAK: P. WAN RIZANA BINTI WAN MUHAMMAD	
DILLIUS: BAHAMAH BINTI YAS	
NAMA LUKSAN: LUKSANA PERAWA PENGANGKANG TUB (DOUBLE CHAMBER) BUKA USI DAN BUKI GESEET	
TALK LUKSAN: ADJUAL BUTIRAN TIANG LANDAS ANGKAT PEPARIT KABEL DAN PAPAN APRON	
NO. LUKSAN: SAC/PEDEG/CSA/RI/11	
SKALA: NTS	
TARIKH: 20 OKTOBER 2020	
BI / Prodan Tandi/peadp	



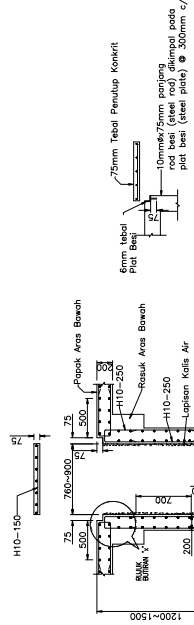
BUTIRAN TIPIKAL PANDANGAN KERATAN PEPARIT KABEL BERBEZA KEDALAMAN
(skala : NTS)



BUTIRAN TIPIKAL PAPAN APRON

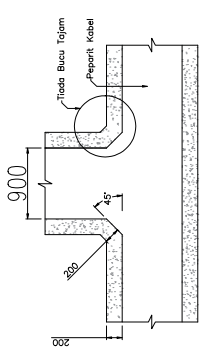


PANDANGAN KERATAN

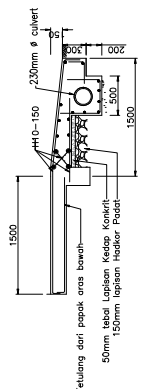


BUTIRAN X

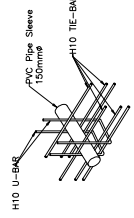
BUTIRAN TIPIKAL PEPARIT KABEL DENGAN PENUTUP KONKRIT



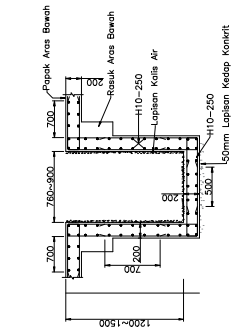
BUTIRAN TIPIKAL PANDANGAN PELAN 'TIADA BUCU TAJAM' PADA PEPARIT KABEL



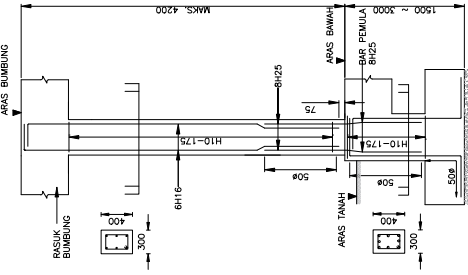
BUTIRAN TIPIKAL LANDAS ANGKAT



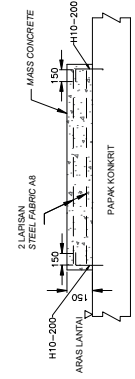
BUTIRAN TIPIKAL BUKAAN PADA PEPARIT KABEL DAN LURANG KONKRIT UNTUK PVC PIPE SLEEVE



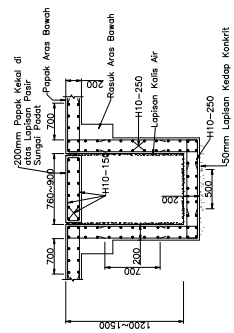
BUTIRAN TIPIKAL PEPARIT KABEL TANPA PENUTUP KONKRIT



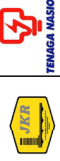

BUTIRAN TIANG C1

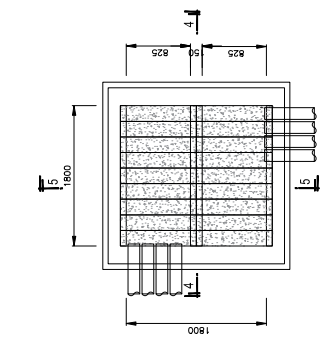


BUTIRAN TIPIKAL PLINTH SLAB UNTUK PERALATAN M&E

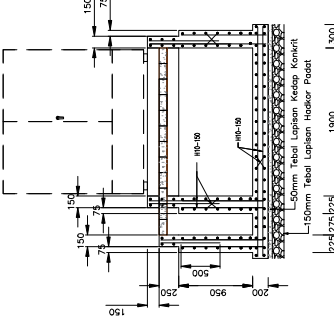


BUTIRAN TIPIKAL PEPARIT KABEL DENGAN PERMANENT SLAB

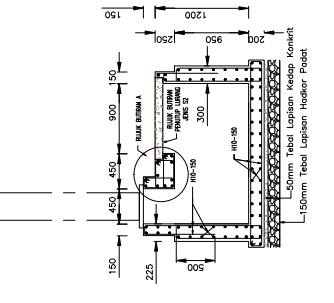
ANNEXURE 2 Laporan Pemula (Initial Report) Service Level Agreement (SLA) dan Spesifikasi untuk Persekitaran projek kerjasama		Disenaraikan bersama 	DR. JIM CHAR CHING PRINCIPAL ENGINEER CAWANGAN PERANCANGAN AWAM & STRUKTUR	HARISET SANGIT TASSAR PROJECT DESIGN NETWORK DIVISION
PERAGAN AMBAT ESCALATOR: P. SARDISMAN BIN RAHUL				
JURUTERA AWAM PERGLASA KAMU: P. HANIZAH BINTI ARDADANI				
JURUTERA AWAM KAWAN: P. WAN RIZWAN BINI WAN MUHAMMAD				
CRESIDENT: P. NORAZLEEN BINTI ISMAIL				
DISENAIK: P. WAN RIZWAN BINI WAN MUHAMMAD				
BILIKS: BAHARAH BINTI YAS				
MAJLIS LUKSANS: LUKSANS PERAWA PENGAWANG TMB (DOUBLE CHAMBER) BUNGKUS BANGSAK GEBET				
TAJUK LUKSANS: BUTIRAN MAMMULE TMB LV BOARD BUTIRAN MAMMULE TMB MV CABLE				
NO. LUKSANS: SK/PERDOK/SK/1111				
SKALA: 1/15				
TARIKH: 30 OCTOBER 2020				
Bilik: Perancang				



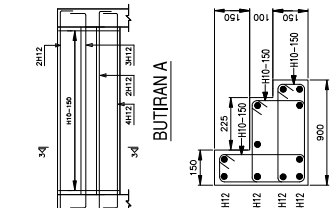
PANDANGAN PELAN



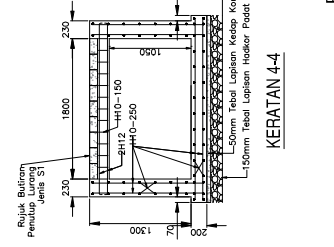
KERATAN 1-1



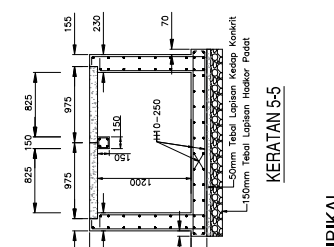
KERATAN 2-2



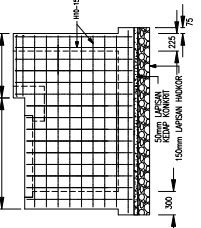
KERATAN 3-3



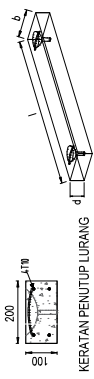
KERATAN 4-4



KERATAN 5-5



PANDANGAN PELAN



BUTIRAN PENUTUP LURANG

Butiran Penutup Lurang			
Jenis	Saiz Penutup (ixb)	Ketebalan, d	Tetulang
S1	975mm x 200mm	100mm	4T10
S2	1050mm x 200mm	100mm	4T10

BUTIRAN TIPIKAL LURANG TMB LV BOARD

BUTIRAN TIPIKAL LURANG TMB MV CABLE

**LUKISAN PIAWAI
PENCAWANG ELEKTRIK DOUBLE CHAMBER
(ATTACHED)**

**SLC/PE(DC)/EL/.....
(Bil. Lukisan : 4 nos)**



CAWANGAN KEJURUTERAAN ELEKTRIK
IBU PEJABAT JKR MALAYSIA
KUALA LUMPUR.

JABATAN KERJA RAYA MALAYSIA

13 0605 2020

LUKISAN PIAWAI
PENCAWANG ELEKTRIK DOUBLE CHAMBER
(ATTACHED)

TAJUK LUKISAN	NO. LUKISAN
1. PELAN SUSUNATUR LAMPU, SOKET, LEGEND, GAMBARAJAH PENDAWAIAN SKEMATIK DAN GAMBARAJAH PERINCIAN PAPAN AGIHAN (DB)	SLC/PE(DC)/EL/01[04]
2. GAMBARAJAH PERINCIAN PELAN BUMBUNG DAN PANDANGAN BAGI SISTEM PERLINDUNGAN KILAT UNTUK BILIK SWITCHGEAR DAN BILIK ALAT UBAH TNB	SLC/PE(DC)/EL/02[04]
3. GAMBARAJAH PERINCIAN SISTEM PEMBUMIHAN UNTUK BILIK SWITCHGEAR DAN BILIK ALAT UBAH TNB	SLC/PE(DC)/EL/03[04]
4. PELAN PERINCIAN SISTEM PEMBUMIHAN DAN PETUNJUK UNTUK BILIK MSB DAN BILIK GENSET	SLC/PE(DC)/EL/04[04]

ANNEXURE 2
 Ujibatan Pihak Berkuasa Bersemas Services Level Commitment (SLC) dan terpaikan untuk semua projek kerajaan



Dipersetujui bersama
 H. MAMPAK (MAMPAK)
 Pegawai Penguat Tindakan
 Jabatan Penguat Tindakan
 Jabatan Penguat Tindakan
 Jabatan Penguat Tindakan

CAWANGAN KEJURUTERAAN ELEKTRIK
PENGARAH PERUNDING REKABENTUK:
 I. HUSAINI MUSTAFA

JURUTERA ELEKTRIK BANGUNSA (KAMU):
 I. SITI NOR BINTI PUSPASA

JURUTERA ELEKTRIK PENGUSAHA:
 I. HAIROL BIN AB RAHIM

DIREKABENTUK:
 MOHD NASHIDUDIN BIN JAMAL

REKABENTUK:
 MOHD NASHIDUDIN BIN JAMAL

REKABENTUK:
 MOHD NASHIDUDIN BIN JAMAL

REKABENTUK:
 MOHD NASHIDUDIN BIN JAMAL

REKABENTUK:
 MOHD NASHIDUDIN BIN JAMAL

REKABENTUK:
 MOHD NASHIDUDIN BIN JAMAL

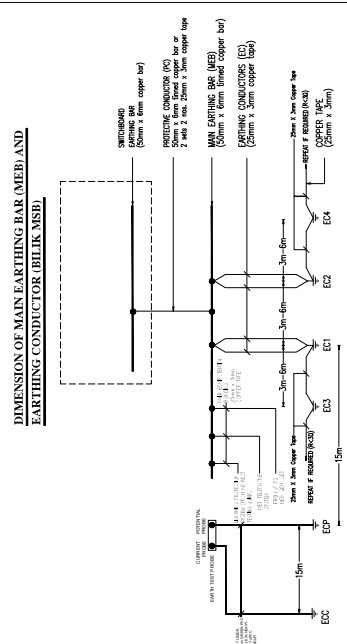
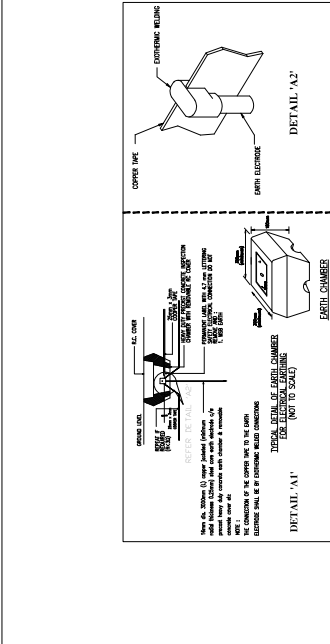
REKABENTUK:
 MOHD NASHIDUDIN BIN JAMAL

REKABENTUK:
 MOHD NASHIDUDIN BIN JAMAL

REKABENTUK:
 MOHD NASHIDUDIN BIN JAMAL

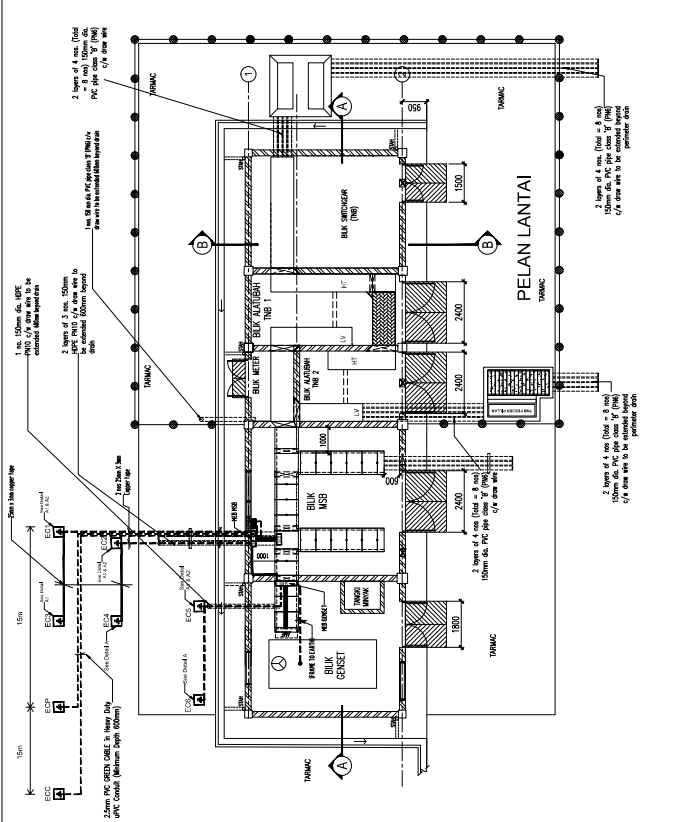
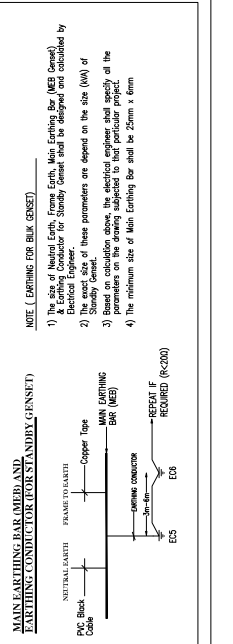
REKABENTUK:
 MOHD NASHIDUDIN BIN JAMAL

REKABENTUK:
 MOHD NASHIDUDIN BIN JAMAL



NOTE (EARTHING FOR BLIK GENSET)

- The size of Neutral Earth, Frame Earth, Main Earthing Bar (MEB) General Earthing Conductor for Standby Genset shall be designed and calculated by the designer.
- The exact size of these parameters are depend on the size (MVA) of Standby Genset.
- Standby Genset shall show the electrical equipment shall project, all the parameters on the drawing subjected to local particular project.
- The minimum size of Main Earthing Bar shall be 25mm x 6mm



SYMBOL	DESCRIPTION	QUANTITY	BLIK MSED	BLIK GENSET
EP	EARTH CHAMBER (300mm x 300mm x 180mm)	6	EP 1 - EP 4	EP 5 - EP 6
MEB	MAIN EARTHING BAR (25mm x 6mm Tinned COPPER BAR)	2		
ESB	SWITCHBOARD EARTHING BAR	1		
---	PROTECTIVE CONDUCTOR (2.5 x 7mm 2.5mm x 3mm COPPER TAPE)	---		
---	25mm PVC GROUND CABLE (2.5 x 7mm 2.5mm x 3mm COPPER TAPE)	---		
---	25mm PVC GROUND CABLE (2.5 x 7mm 2.5mm x 3mm COPPER TAPE)	---		

LEGEND

1. 15mm dia. MEB (1) Copper jacketed (minimum radial thickness 0.25mm) sheet one with electrode of 1/4" exact heavy duty concrete earth chamber & removable concrete cover etc

2. The connection of the 2.5mm sq green pvc cable to the earth electrode shall be by clamp

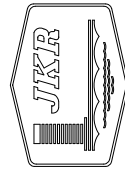
ESZ/EEP

1) 6mm dia. x 1500mm (1) Copper jacketed (minimum radial thickness 0.25mm) sheet one with electrode of 1/4" exact heavy duty concrete earth chamber & removable concrete cover etc

2) The connection of the 2.5mm sq green pvc cable to the earth electrode shall be by clamp

LUKISAN PIAWAI STESEN SUIS SATU RUANG

SLC/SSU(SA)/AR/.....
(Bil. Lukisan : 3 nos)






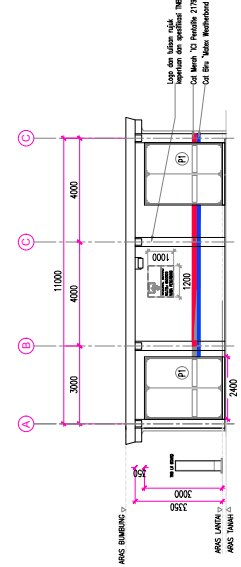
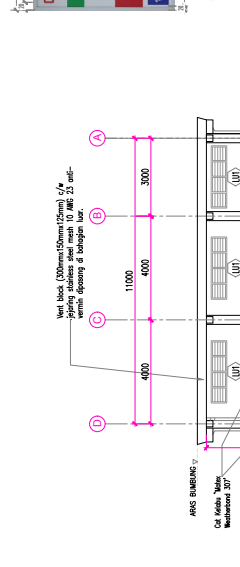
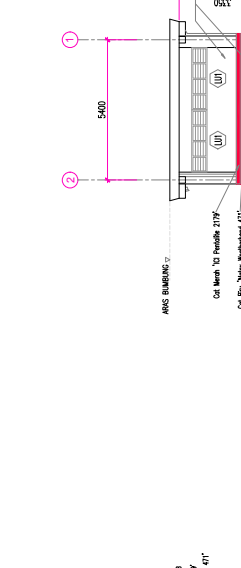
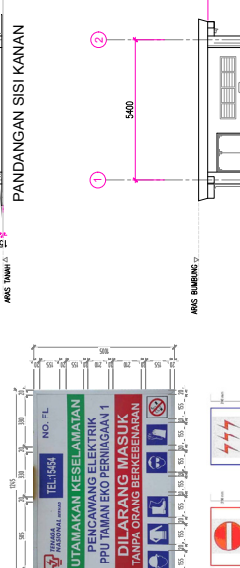
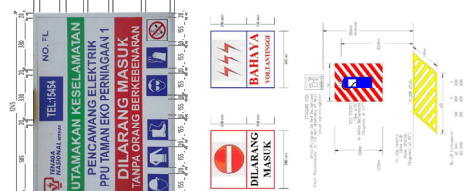
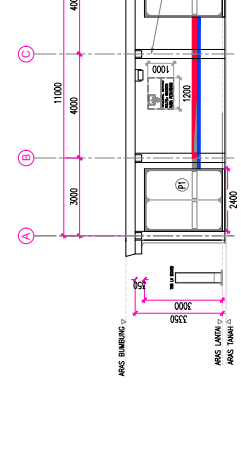
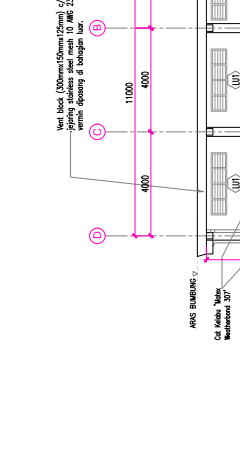
CAWANGAN ARKITEK
IBU PEJABAT JKR MALAYSIA
KUALA LUMPUR.

JABATAN KERJA RAYA MALAYSIA

13 OGOS 2020

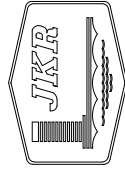
LUKISAN PIAWAI STESEN SUIS SATU RUANG

TAJUK LUKISAN		NO. LUKISAN
1.	PELAN LANTAI, PELAN PEMBALKAN SILING DAN PELAN BUMBUNG	SLC/SSU(SA)/AR/01[03]
2.	PANDANGAN HADAPAN, BELAKANG, SISI KIRI, SISI KANAN, KERATAN AA DAN BB	SLC/SSU(SA)/AR/02[03]
3.	BUTIRAN BOLLARD, BUTIRAN MANHOLE MV CABLE, BUTIRAN TRENCHES	SLC/SSU(SA)/R/03[03]

<p>ANEXURE 2</p> <p>Lukisan Pawai ini dibaca bersama Service Level Commitment (SLC) dan terlekat untuk semua projek A.Keajaiban</p>	 	<p>Dipersetujui bersama</p>  <p>M. S. M. Yusoff MAMUK & MAMUK GROUP Sdn Bhd Berhad Head Office: 11, Jalan Puncak Murni, Seksyen 13, Taman Puncak Murni, 47100 Puncak Alam, Selangor Darul Ehsan, Malaysia Tel: 03-6394 1000 Fax: 03-6394 1001 E-mail: mamuk@mamukgroup.com</p>	<p>CAWANGAN ARKITEK</p>	<p>PENGARAH BINA: TEKAR BERTUK & MULTIMEDIA:</p>	<p>A. W. BR. AMAN BIN MOHD MONITOR ARKITEK PERGALISALAHAN:</p>	<p>M. N. A. B. N. M. MOHD HASSAN ARKITEK:</p>	<p>HALAMAT: AMAN BIN MOHD MONITOR</p>	<p>SERAJAK:</p>	<p>HALAMAT: AMAN BIN MOHD MONITOR</p>	<p>TELIS: SCS/SH/SA/AN/02/03</p>	<p>NO. LUKSIAN:</p>	<p>SK/CS/SH/SA/AN/02/03</p>	<p>SKALA:</p>	<p>1:75 (A1)</p>	<p>13 LOCOS 2020</p>	<p>PROJEK:</p>	<p>TAMBAHAN</p>	<p>REVISION</p>	
<div style="display: flex; flex-wrap: wrap;"> <div style="width: 50%;">  <p>PANDANGAN HADAPAN</p> </div> <div style="width: 50%;">  <p>PANDANGAN BELAKANG</p> </div> <div style="width: 50%;">  <p>PANDANGAN SISI KIRI</p> </div> <div style="width: 50%;">  <p>PANDANGAN SISI KANAN</p> </div> <div style="width: 100%; text-align: center;">  </div> <div style="width: 50%;">  <p>KERATAN A-A</p> </div> <div style="width: 50%;">  <p>KERATAN B-B</p> </div> </div>																			

LUKISAN PIAWAI STESEN SUIS SATU RUANG

SLC/SSU(SA)/CS/.....
(Bil. Lukisan : 6 nos)



CAWANGAN KEJUJUTERAAN AWAM DAN STRUKTUR
BAHAGIAN PEMBANGUNAN DAN PENYELIDIKAN
IBU PEJABAT JKR MALAYSIA
KUALA LUMPUR.

JABATAN KERJA RAYA MALAYSIA

20 OKTOBER 2020

ANNEXURE 2

Lukisan Piawai ini dibawa bersama Service Level Agreement (SLA) dan terpasang untuk semua projek yang relevan.



LUKISAN PIAWAI
STESEN SUIS SATU RUANG

Dipersebutkan bersama
M. D. LIM CHAI CHING
PENKARAH KAWAN
CAWANGAN KAWAN AWAM
& STRUKTUR
HARPREET SINGH TAGGAR
PRINCIPAL ENGINEER
(PROJECT DESIGN)
NETWORK DIVISION

CAWANGAN
KEJURUTERAAN AWAM & STRUKTUR

PENGKARAH KHIDMAT REBAHENTUK:

P. BADRUZZAMAN BIN B. ISMAIL

JURUTERA AWAM PENKARAJA KAWAN:

E. NORA AZEZA BINTI MUHAMMAD

JURUTERA AWAM KAWAN:

P. WAN RIZANA BINTI WAN MUHAMMAD

DIREKTORENKUTUK:

SHAHRI BIN WAT

DOSENKUTUK:

E. NORFAZLA BINTI ISMAIL

DULUNKUTUK:

SHAHRI BIN WAT

NAMA LUKISAN:

LUKISAN PIAWAI
STESEN SUIS SATU RUANG

TAJUK LUKISAN:

SENARAI LUKISAN

NO. LUKISAN:

SKALA:

TARIKH:




30/07/2023

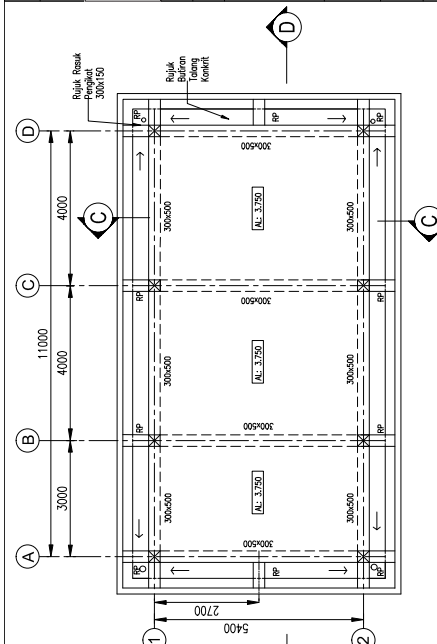
BI | Pindatan

*Lukisan ini perlu dibawa bersekali dengan Lukisan Piawai Nota Am Struktur.

- JKR/CKAS/P-NA/STR/30/PEL 14/01[05]
- JKR/CKAS/P-NA/STR/30/PEL 14/02[05]
- JKR/CKAS/P-NA/STR/30/PEL 14/03[05]
- JKR/CKAS/P-NA/STR/30/PEL 14/04[05]
- JKR/CKAS/P-NA/STR/30/PEL 14/05[05]

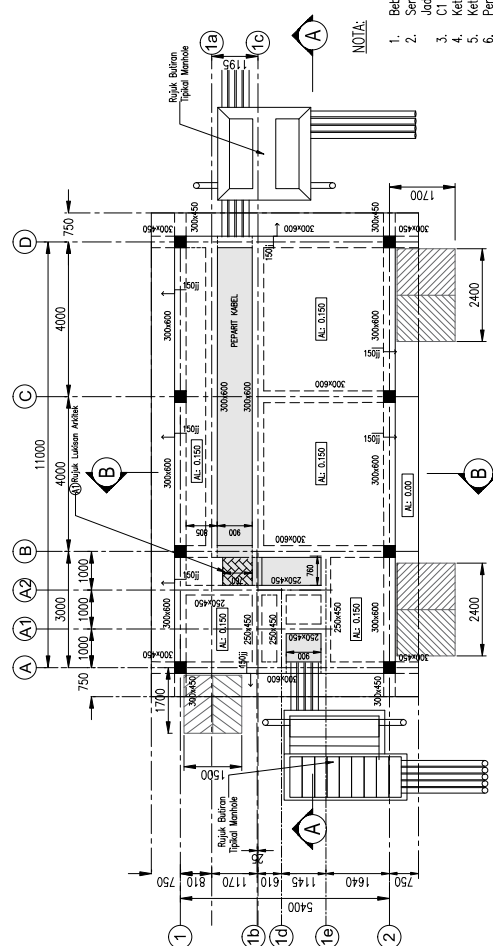
TAJUK LUKISAN	NO. LUKISAN
1. PELAN PUNCA BEBAN KHIDMAT TIANG, PELAN PUNCA RASUK ARAS BAWAH, PELAN PUNCA RASUK ARAS BUMBUNG	SLC/SSU(SA)/CS/01[06]
2. BUTIRAN RASUK ARAS BAWAH	SLC/SSU(SA)/CS/02[06]
3. BUTIRAN RASUK ARAS BUMBUNG DAN BUTIRAN PERINCIAN RASUK PENGIKAT	SLC/SSU(SA)/CS/03[06]
4. KERATAN PAKAP ARAS BAWAH, KERATAN PAKAP ARAS BUMBUNG DAN TALANG KONKRIT	SLC/SSU(SA)/CS/04[06]
5. BUTIRAN TIPIKAL TIANG, BUTIRAN LANDAS ANGGAT, PEPARIT KABEL DAN PAKAP APRON	SLC/SSU(SA)/CS/05[06]
6. BUTIRAN MANHOLE TNB LV BOARD, BUTIRAN MANHOLE TNB MW CABLE	SLC/SSU(SA)/CS/06[06]

ANNEXURE 2
Uraian Pekerjaan dan Bilangan Pokok Kerja Gambaran SAC dan Spesifikasi untuk semua projek keramat.
 
Diperatujui beracara  H. DR. IMY CHAI PENG HARIHART OBIAT TANGGA PENGARAH KAWAN CAWANGAN PERANCANGAN AWAM & STRUKTUR NETWORK DIVISION
COWANGAN KEURUTERAN AWAM & STRUKTUR H. BUDISZAHAN BINAS. PANGIL H. JUPITERA ANAM PENGKAS KAWAN : H. NOR AZZAH BINTI MUHAMMAD H. WAN RIZWAN BINTI WAN MUHAMMAD DOKUMENTIK : SHARHE BIN HAIT DESMAK : H. MOHDARIZ BINTI ISMAIL DILUKIS : SHARHE BIN HAIT NAMA LUKSANY : LUKSANY PAWAH STEENYUSUSATI RUMAH
TAJUK LUKSANY : PELAN PUNCA BEBAN KHIDMAT TIANG, PELAN PUNCA ARAS BAWAH, PELAN PUNCA RASUK ARAS BUMBUNG
NO. LUKSANY : SCS03(SA)(S10)096
SKALA : 1 : 50 (A)
TARIKAH : 20 OCTOBER 2020
Bil. Pindai : Tundar@engr



PELAN PUNCA BEBAN KHIDMAT TIANG

PELAN PUNCA RASUK ARAS BUMBUNG



PELAN PUNCA RASUK ARAS BAWAH

NOTA:

1. Bekan Khidmat Tiang (N) yang ditunjukkan adalah dalam unit kN.
2. Semua lunggu adalah dengan saiz 300mm x 300mm seperti dinyatakan di dalam C1.
3. C1 Tiang dengan saiz 300mm x 300mm.
4. Ketejolan semua papak bumbung adalah 200mm.
5. Ketejolan semua papak bumbung adalah 200mm.
6. Penutup kengkang untuk talang bumbung dan besi pengikat adalah 25mm.
7. Rp adalah Besak Pengikat dengan saiz 300x150.
8. Bekabentuk dan pemasangan Sistem Keluasan Bumbung 'Prefabricated Cold Formed' atau 'Prefabricated Timber' hendaklah merujuk kepada pembekal sistem yang diuluskan oleh JKR.

ANNEXURE 2

Lukisan Papan ini dibekas bersama Service Level Certificate (SLC) dan terpasang untuk semua projek terpasang.



Diperuntukan bersejarah

E. D. LIM CHAI CHING
 HANPREET SINGH TAGGAR
 PENYASAPAN KAWAN
 KEJUTANAN LUBANG
 KEJUTANAN AWAM
 & STRUKTUR
 NETWORK DIVISION

CAMUKAN
 KEJUTANAN AWAM & STRUKTUR

PENGARAH-KHIDMAT PERABETTIK:
 H. BAOGEZAMAN BIN AB. KHALIK

ARBITERA AWAM PENGUSAHA KAWAN:
 H. NOR AZIZAN BINI MUHAMMAD

ARBITERA AWAM KAWAN:
 H. WAN IZAZAN BINI WAN MUHAMMAD

INSURANSI PERABETTIK:
 SHARHE BINI HAIT

DOSMAK:
 H. NORFAZLA BINI ISMAIL

DUIKUS:
 SHARHE BINI HAIT

NAMA LUKSAN:
 LUKSAS PAVAR
 STEREN 3015 SIA/10/04/05

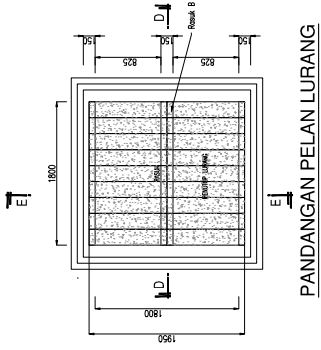
TALUK LUKSAN:
 BUTIRAN MANHOLE TNB BOARD
 BUTIRAN MANHOLE TNB MV CABLE

NO. LUKSAN:
 SCS2/SJ/SVC/SVR/003

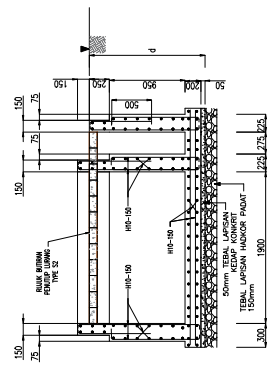
SKALA:
 1: 25 (A-I)

TARIKH:
 20/10/2020

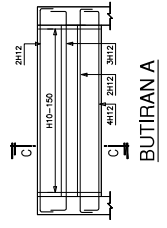
Tempat:
 Tradingsing



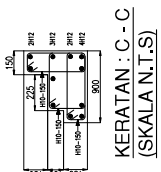
PANDANGAN PELAN LURANG



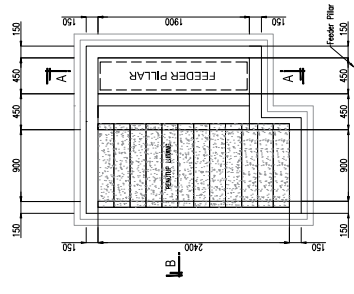
KERATAN : A - A



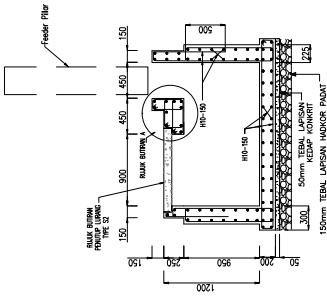
KERATAN : D - D



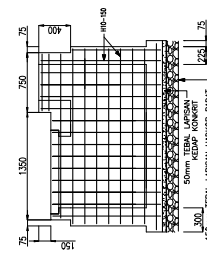
**KERATAN : C - C
 (SKALA N.T.S)**



PANDANGAN PELAN



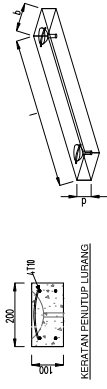
KERATAN : B - B



KERATAN : E - E

**BUTIRAN LURANG UNTUK
 INCOMING MV CABLE**

BUTIRAN PENUTUP LURANG		
JENIS	SAIZ PENUTUP (l x b)	KETEBALAN, d
S1	975mm x 200mm	100mm
S2	1050mm x 200mm	100mm
		4T10
		4T10



BUTIRAN PENUTUP LURANG

NOTA :

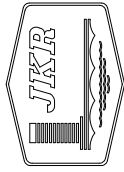
1. Penutup konkrit untuk lurang rasuk adalah 25mm.
2. Keupayaan gelas tanah minimum adalah 50 kN/m² pada ketidaman d.

BUTIRAN LURANG UNTUK TNB BOARD

BUTIRAN DINDING LURANG

LUKISAN PIAWAI STESEN SUIS SATU RUANG

SLC/SSU(SA)/EL/.....
(Bil. Lukisan : 3 nos)



CAWANGAN KEJURUTERAAN ELEKTRIK
IBU PEJABAT JKR MALAYSIA
KUALA LUMPUR.

JABATAN KERJA RAYA MALAYSIA

13 OGOS 2020

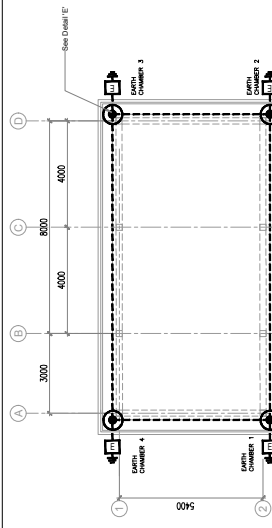
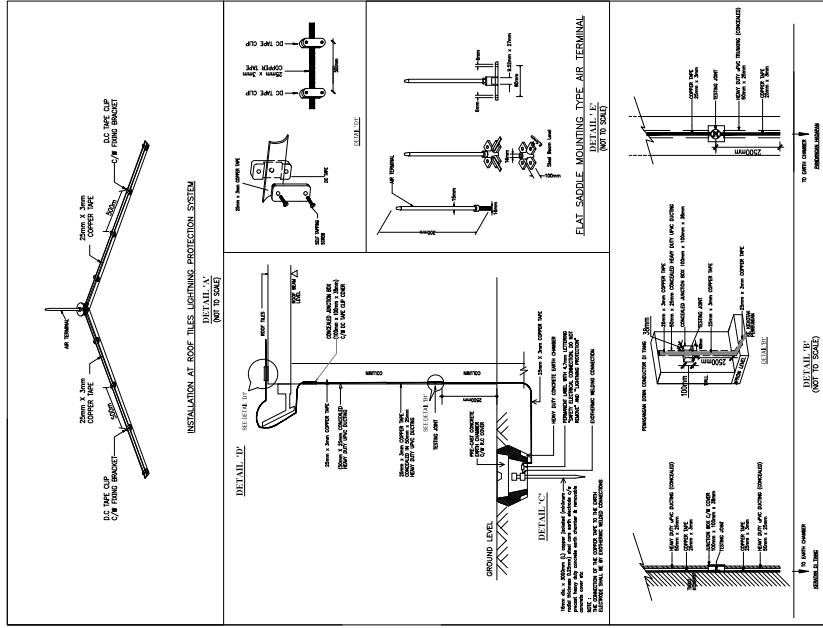
LUKISAN PIAWAI STESEN SUIS SATU

TAJUK LUKISAN	NO. LUKISAN
1. PELAN SUSUNATUR LAMPU, SOKET, PETUNJUK DAN GAMBARAJAH PENDAWAAN SKEMATIK	SLC/SSU(SA)/EL/01[03]
2. GAMBARAJAH PERINCIAN PELAN BUMBUNG DAN PANDANGAN BAGI SISTEM PERLINDUNGAN KILAT	SLC/SSU(SA)/EL/02[03]
3. GAMBARAJAH PERINCIAN SISTEM PEMBUMIAN	SLC/SSU(SA)/EL/03[03]

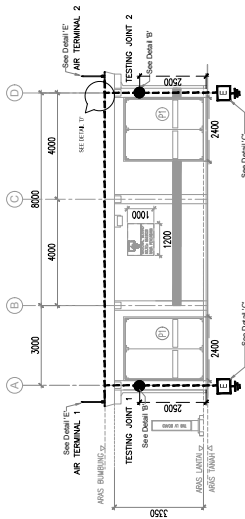
ANNEXURE 2	
Lukisan Pawai ini dibaca bersama Service Level Commitment (SLC) dan terpelaki untuk semua projek kerajinan	
Dipersenjajui bersama	
IC: HANIFF BIN AB HAMID Projek Engineer Electrical Kementerian Kerja Raya Projek: NAWAZAR BAND	IC: MOHD YUSRIZAN BIN MOHD YUSOFF Lead Engineer Electrical Kementerian Kerja Raya Projek: NAWAZAR BAND
CAWANGAN KEJURUTERAAN ELEKTRIK	
PENGARAH PERUNDING REKABENTUK: 	
IC: HANIFF BIN AB HAMID	
JURUTERA ELEKTRIK PENGUASA KANAN:	
IC: STUJAN BINTI HASSAN	
JURUTERA ELEKTRIK PENGUASA:	
IC: HANIFF BIN AB HAMID	
JURUTERA ELEKTRIK:	
DIREKABENTUK	
DISEMAK:	
IC: HANIFF BIN AB HAMID	
DILUKIS:	
MOHD YUSRIZAN BIN MOHD YUSOFF	
NAMA LUKISAN:	
STESEN SUIS SAKU RUJANG	
TALUK LUKISAN:	
CUBA BILAH PERINGKAP PELALU BILANGAN PANDANGAN BAGI SISTEM PERALAMANAN RAKAT	
NO. LUKISAN:	S.C/SU/SA/RI/02 (03)
SKALA:	1: 75 (A1)
TARIKH:	13 OGOS 2020
BT:	Projek
Terbilang	

LEGEND

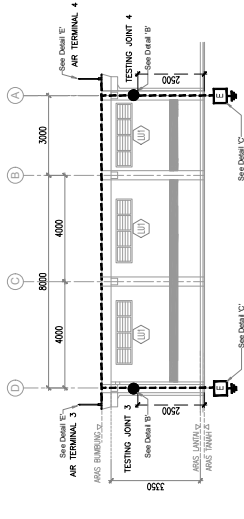
SYMBOL	DESCRIPTION	QUANTITY
	EARTH CHAMBER (500mm x 300mm x 100mm)	4
	TESTING JOINT	4
	LAMP BULB	4



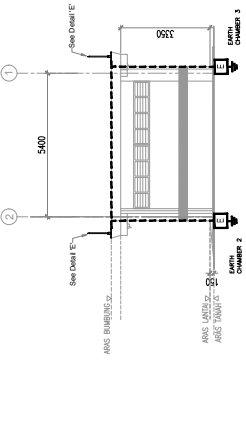
PELAN BUMBUNG



PANDANGAN HADAPAN



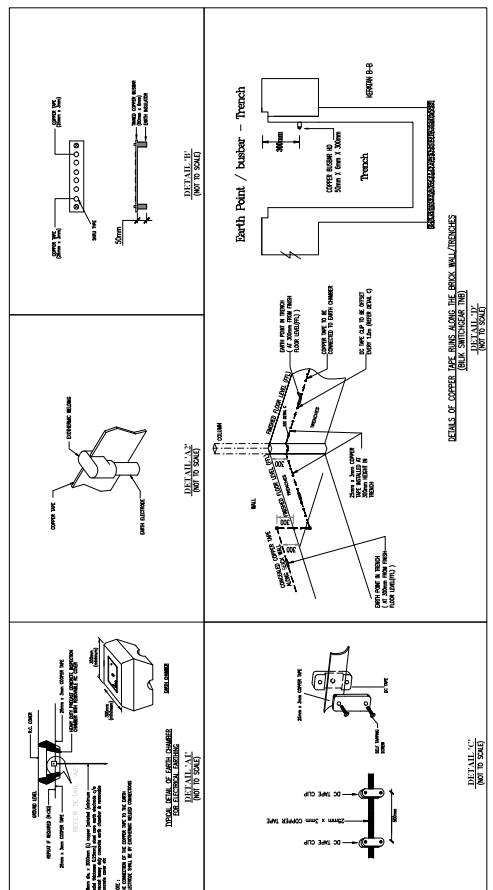
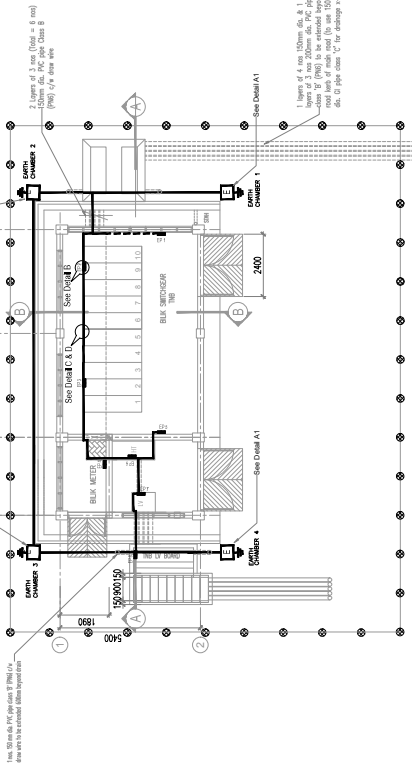
PANDANGAN BELAKANG



PANDANGAN SISI KANAN

LEGEND

SYMBOL	DESCRIPTION	QUANTITY
	100mm x 100mm x 100mm CONCRETE CUBE	4
	100mm x 100mm x 100mm CONCRETE CUBE	8
	20mm x 20mm x 20mm CONCRETE CUBE	LUMP SUM
	20mm x 20mm x 20mm CONCRETE CUBE	LUMP SUM



ANNEXURE 2

Udara Pwani Industries Bersema Services
Level Commitment (LSC) dan terapan untuk
semua projek kerajaan

JAKR
Jabatan Kerja Raya
Kementerian Kerja Raya

TEMAGA NASIONAL

Diperestujui bersama

PROJEK
KAWANGAN KEURUTERAAN ELEKTRIK
PENGARAH PERUBINGAN REKABENTUK

AWAN
I. HUSIN BIN MUSTAFA
JURUTERA ELEKTRIK PENGUSAHA KANAN

AWAN
I. SITI NORHANI HASSAN
JURUTERA ELEKTRIK PENGUSAHA

AWAN
I. HANIFF BIN AB HAMID
JURUTERA ELEKTRIK

DIREKABENTUK

DISEMAK
I. HANIFF BIN AB HAMID

DILUKIS
MOHD YUSREIZANIE BIN MOHD YUSOFF

MAMA LUKSASAN
S TESEN SUI S S U ATU R U A N G

TAULUK LUKSASAN
- GAMBARAN/HAH PERINCIAH SISTEM
PENGARAH

NO. LUKSASAN
S/C/S/S/S/A/EL/03 (03)

SKALA
1 : 75 (A-1)

TARIKH
13.06.2020

Bil | Pnuzen | Insidrajain

LUKISAN PIAWAI STESEN SUIK SATU RUANG DENGAN BILIK JANGKA (HT CT METER)

SLC/SSU(A)/AR/.....
(Bil. Lukisan : 3 nos)



CAWANGAN ARKITEK
IBU PEJABAT JKR MALAYSIA
KUALA LUMPUR.

JABATAN KERJA RAYA MALAYSIA

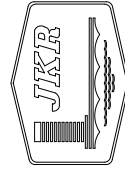
13 OGOS 2020

LUKISAN PIAWAI
 STESEN SUIS SATU RUANG DENGAN BILIK JANGKA
 (HT CT METER)

TAJUK LUKISAN	NO. LUKISAN
1. PELAN LANTAI, PELAN PEMBALKAN SILING DAN PELAN BUMBUNG	SLC/SSU(A)/AR/01[03]
2. PANDANGAN HADAPAN, BELAKANG, SISI KIRI, SISI KANAN, KERATAN AA DAN BB	SLC/SSU(A)/AR/02[03]
3. BUTIRAN BOLLARD, BUTIRAN MANHOLE MV CABLE, BUTIRAN TRENCHES	SLC/SSU(A)/R/03[03]

**LUKISAN PIAWAI
STESEN SUIS SATU RUANG DENGAN BILIK JANGKA
(HT CT METER)**

**SLC/SSU(A)/CS/.....
(Bil. Lukisan : 11 nos)**



CAWANGAN KEJURUTERAAN AWAM DAN STRUKTUR
BAHAGIAN PEMBANGUNAN DAN PENYELIDIKAN
IBU PEJABAT JKR MALAYSIA
KUALA LUMPUR.

JABATAN KERJA RAYA MALAYSIA

20 OKTOBER 2020

LUKISAN PIAWAI STESEN SUIS SATU RUANG DENGAN BILIK JANGKA (HT CT METER)

ANNEXURE 2

Lukisan Piawai ini dibaca bersama Service Level Commitment (SLC) dan terdapat untuk semua projek keajaian.



TAJUK NASIONAL

Dipersekitari bersama

E. DR. LIM CHAI CHING
PENYAHAB KAWAN & STRUKTUR
HAPPAET SINOH TAGGAR
PRINCIPAL ENGINEER
(PROJECT DESIGN)
NETWORK DIVISION

CAWANGAN
KEURUTERAAN AIRAH & STRUKTUR

PENGARAH KUDAWAT KEABSENTIKAN:

E. BUDIZAMAN BIN AB. HALIK

JURUTERA AWAM PENGLUSA KAWAN:

E. NOR-IZANA BINTI MUHAMMAD

JURUTERA AWAM KAWAN:

E. WAN RIZANA BINTI WAN MUHAMMAD

DIREKTOREK:

E. MAHDIR BIN MASHARIF

DISEMAK:

E. WAN RIZANA BINTI WAN MUHAMMAD

DULUKS:

BAHAWA BINTI YAS

NAMA LUKISAN:

LUKISAN PAVAI
STESEN SUIS SATU RUANG
DENGAN BILIK JANGKA
(HT CT METER)

TAJUK LUKISAN:

SEWARA LUKISAN

NO. LUKISAN:

SKALA:

TARIKH:

20 OKTOBER 2020


BT | Pindasan

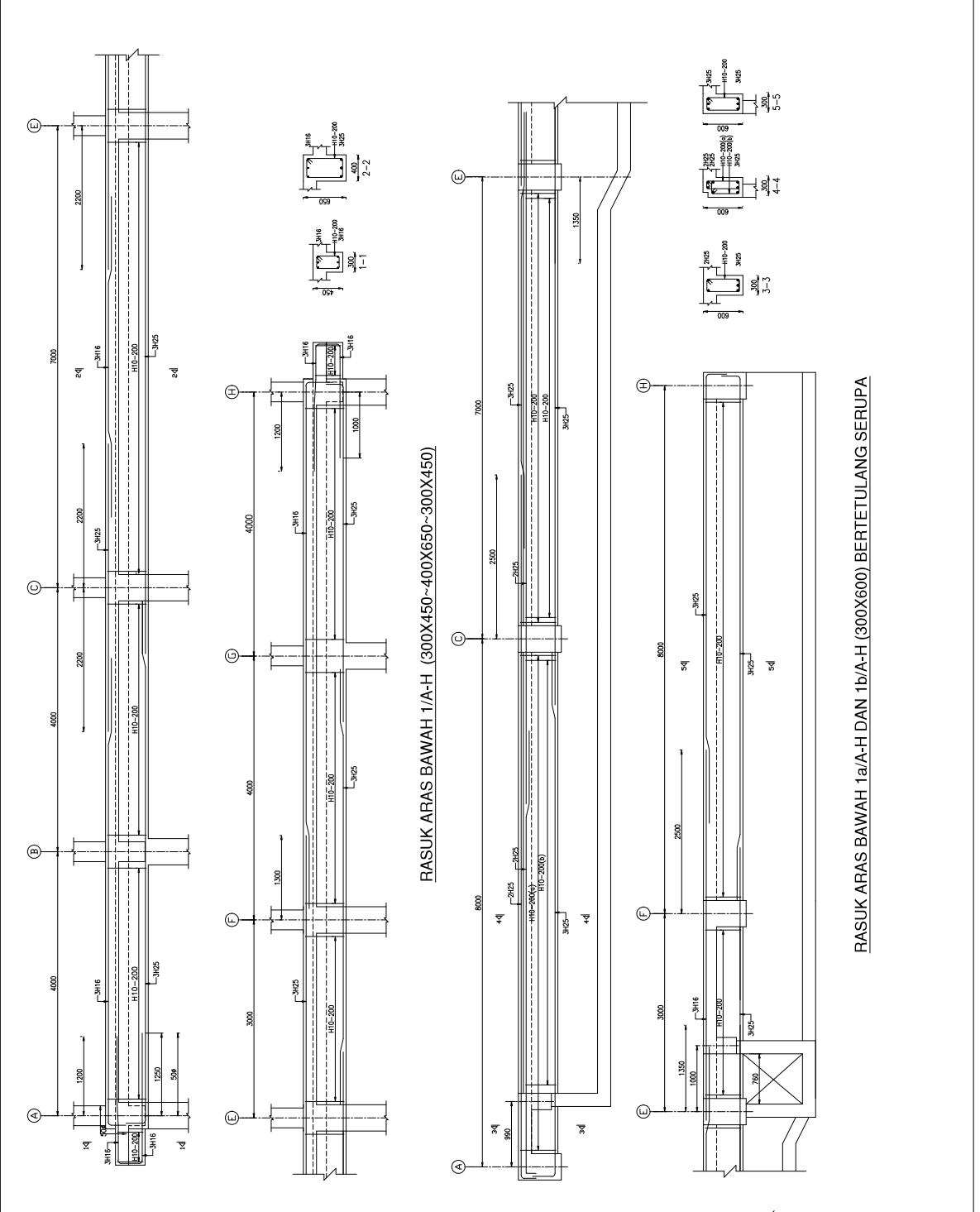
Trandatangan

TAJUK LUKISAN	NO. LUKISAN
1. PELAN PUNCA BEBAN KHYDMAT TIANG	SLC/SSU(A)/CS/01[11]
2. PELAN PUNCA RASUK ARAS BAWAH	SLC/SSU(A)/CS/02[11]
3. BUTIRAN RASUK ARAS BAWAH [1/3]	SLC/SSU(A)/CS/03[11]
4. BUTIRAN RASUK ARAS BAWAH [2/3]	SLC/SSU(A)/CS/04[11]
5. BUTIRAN RASUK ARAS BAWAH [3/3]	SLC/SSU(A)/CS/05[11]
6. PELAN PUNCA RASUK ARAS BUMBUNG	SLC/SSU(A)/CS/06[11]
7. BUTIRAN RASUK ARAS BUMBUNG, TIPIKAL RASUK PENGIKAT	SLC/SSU(A)/CS/07[11]
8. PAPA K ARAS BAWAH	SLC/SSU(A)/CS/08[11]
9. PAPA K ARAS BUMBUNG DAN TALANG KONKRIT	SLC/SSU(A)/CS/09[11]
10. JADUAL BUTIRAN TIANG, LANDAS ANGGAT, PEPARIT KABEL DAN PAPA K APRON	SLC/SSU(A)/CS/10[11]
11. BUTIRAN MANHOLE TNB LV BOARD DAN MANHOLE TNB MV CABLE	SLC/SSU(A)/CS/11[11]





*Lukisan ini perlu dibaca bersekali dengan Lukisan Piawai Nota Am Struktur.

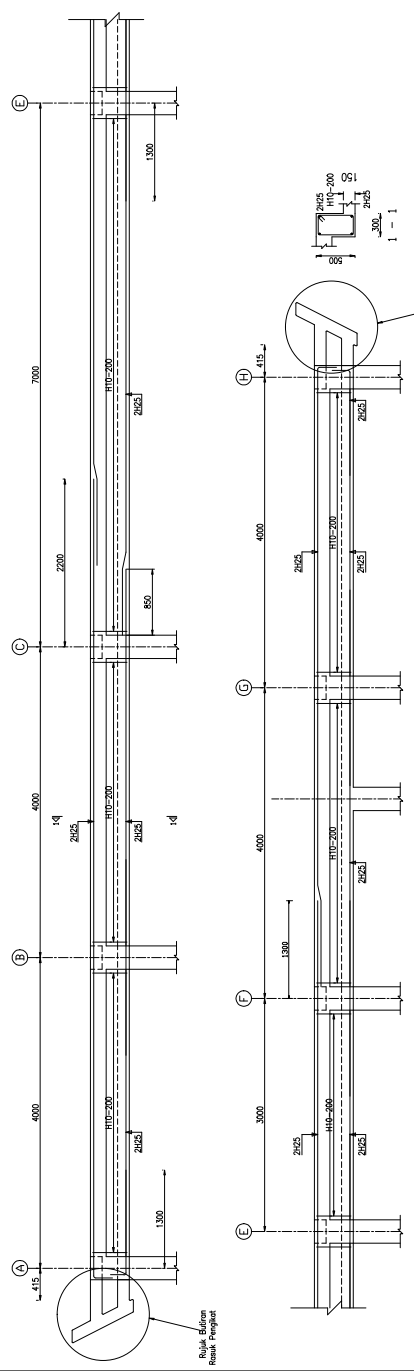
- JKR/CKAS/P-NA/STR/30/PEL 14/01[05]
- JKR/CKAS/P-NA/STR/30/PEL 14/02[05]
- JKR/CKAS/P-NA/STR/30/PEL 14/03[05]
- JKR/CKAS/P-NA/STR/30/PEL 14/04[05]
- JKR/CKAS/P-NA/STR/30/PEL 14/05[05]

<p>ANNEXURE 2</p> <p>Lukisan Perancah ini dibaca bersama Service Level Profile (SLP) dan terapan untuk semua profil kerangka.</p> 	
<p>Dipentulkan di: <i>[Signature]</i></p> <p>P. DE'ULIY CHIR CHING PROJECT ENGINEER KEHUTERAAN AWAM & STRUKTUR</p>	<p>Dipentulkan di: <i>[Signature]</i></p> <p>HARPREET SINGH TAGGAR PROJECT ENGINEER KEHUTERAAN AWAM & STRUKTUR</p>
<p>CAMPAKAN KEHUTERAAN AWAM & STRUKTUR</p>	
<p>PENGARAH KEMUKAT REKABENTUK: 1. BACHIGZAMANY BIN AB. WALUK 2. BACHIGZAMANY BIN AB. WALUK</p>	
<p>JURUTERA AWAM PENGULASA KAMAN: 1. NOR AZHAN BINI MUHAMMAD 2. NOR AZHAN BINI MUHAMMAD</p>	
<p>JURUTERA AWAM KAMAN: 1. WAN REZAM BINI WAN MUHAMMAD 2. WAN REZAM BINI WAN MUHAMMAD</p>	
<p>DISEKUTUKAN: 1. HANAGOR BINI HASBIAT 2. HANAGOR BINI HASBIAT</p>	
<p>DISEMAK: 1. WAN REZAM BINI WAN MUHAMMAD 2. WAN REZAM BINI WAN MUHAMMAD</p>	
<p>DOLUS: 1. RAHMAT BINI WAS 2. RAHMAT BINI WAS</p>	
<p>NAMA LUKSAN: LUKSAN PERAWAI STESER SUS SATU RUANG BERKUALITI BERKUALITI (11.11 METER)</p>	
<p>TALUK LUKSAN: BUTIRAN RASUK ARAS BAWAH (1/3)</p>	
<p>NO. LUKSAN: SACSJUAN(CS)011</p>	
<p>SKALA: 1:25</p>	
<p>TARIKH: 20/0CTOBER 2020</p>	
<p>BT Prinsip Terdahului</p>	

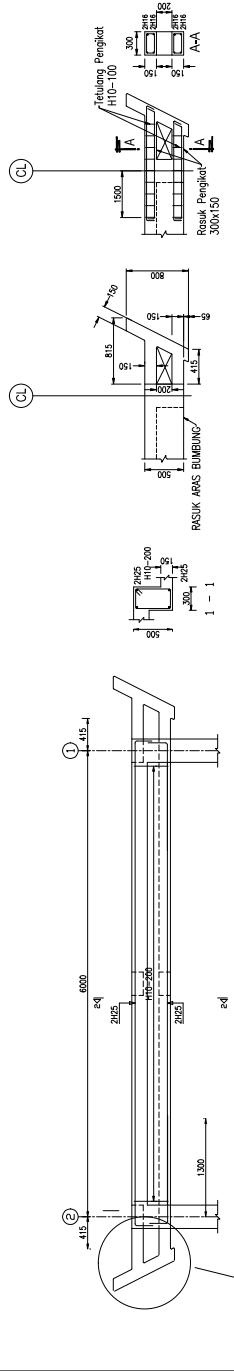


RASUK ARAS BAWAH 1a/A-H DAN 1b/A-H (300X600) BERTETULANG SERUPA

ANNEXURE 2 Laporan Rancangan dan Dokumentasi Service Level Civil Engineering (S/L) dan Pengiraan Struktur projek Kerjasama	 	Dipersempulkan bersama 	 P. D. LIM CHAI KING HARKRETEK ENGINEERING PRINCIPAL ENGINEER PROJECT DESIGN CAWANGAN PERANCANGAN AWAM & STRUKTUR NETWORK DIVISION	CAWANGAN KELURUTERAMAN AWAM & STRUKTUR
				PENGASASAN HADAPAN BEBASSENTRI: P. BADICZAMAN BIN ABU HALIM
JURUTERA AWAM PERGASAKANNAN: P. NOR AZDHA BINTI MUHAMMAD				
JURUTERA AWAM KANAN: P. WAN RIZWAN BINTI WAN MUHAMMAD				
DIPERASSENTRI: P. MANAGER SUKMASUAT				
DISEMAK: P. WAN RIZWAN BINTI WAN MUHAMMAD				
DILUKIS: SARAH BINTI YAS				
NAMA LUKISAN: LUKISAN PAVILAN DENGAN RASUK BANGKANG DENGAN BUKI KANGKA (H/T 1/2000)				
TAJUK LUKISAN: BUTIRAN RASUK BANGKANG BUTIRAN TIPKAL PERINCIAN RASUK PENGIKAT				
NO. LUKISAN: KCS2024/CS20711				
SKALA: 1: 25				
TARIKH: 20 OKTOBER 2020				
Bil Pindatan Tandatangani				



RASUK BUMBUNG 1/A-H DAN 2/A-H (300X500) BERTETULANG SERUPA



RASUK BUMBUNG A/2-1, B/2-1, C/2-1, D/2-1, E/2-1, F/2-1, G/2-1 DAN H/2-1 BERTETULANG SERUPA

BUTIRAN TIPKAL PERINCIAN RASUK PENGIKAT

ANNEXURE 2

Ikhtisar Rancangan dan Spesifikasi Struktur
 Commitment SUD dan terdapat uraian utama
 proyek kerangka



Dipersembahkan bersama

P. DR. LIM CHAI CHING
 HARRIET SINIG TAGOR
 PRINCIPAL ENGINEER
 (STRUCTURAL)
 KEJUTERAAN AWAM
 & STRUKTUR
 NETWORK DIVISION

CWINGSAN
 KEJUTERAAN AWAM & STRUKTUR

PENGARAH KEMAJUAN REKABENTUK :
 P. RAJDEZANAN SIBAS KHALIC

JURUTERA AWAM PERGUSUSA KAWAN :
 P. NIK AZHAH BINTI MUHAMMAD

JURUTERA AWAM KAWAN :
 P. WAN SZANA BINTI WAN MUHAMMAD

REKABENTUK :
 P. MAHADEVI MANSUR

DSEMAK :
 P. WAN SZANA BINTI WAN MUHAMMAD

DULIAS :
 RAHMAD BINI YAS

NAAM LUKSAN :
 LUKSAN PERAWAI
 STESIA SUD SATU RUANG
 BANGUNAN BERKAWAN
 110 CT METER

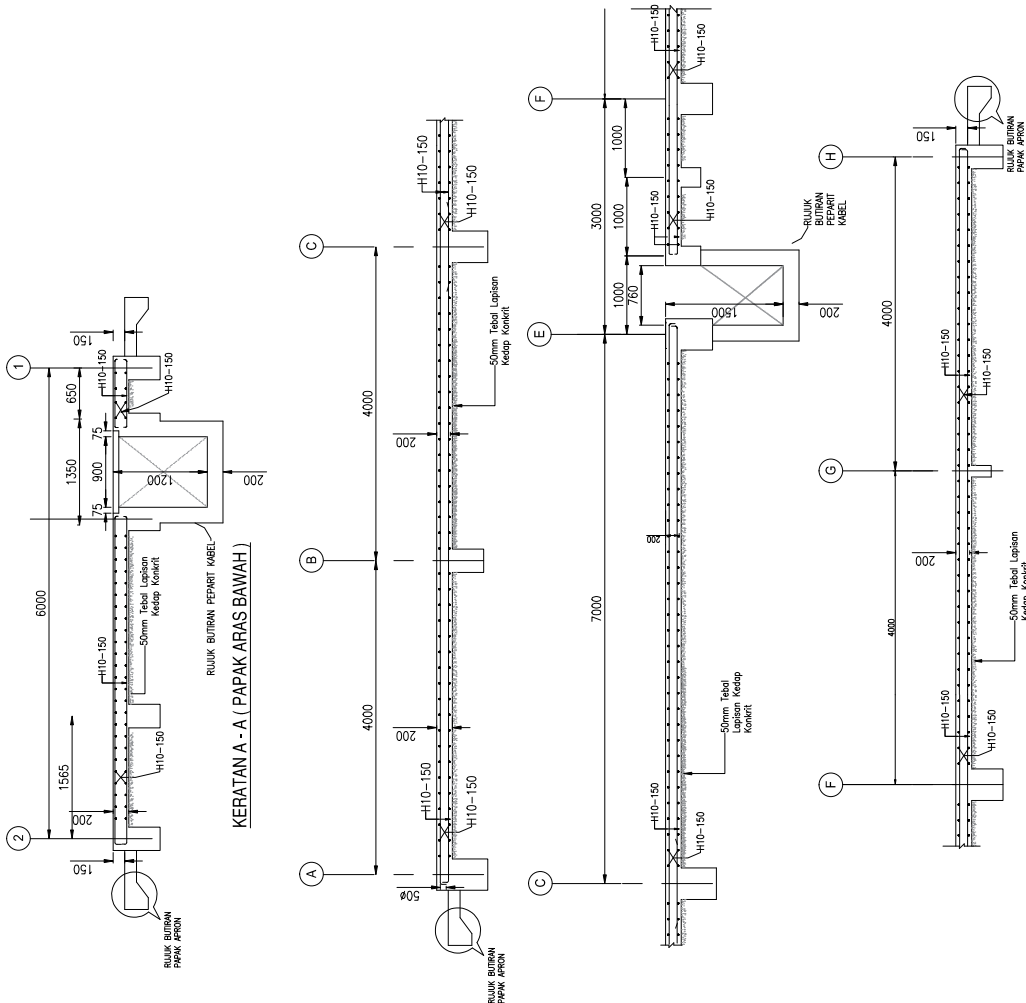
TAHLIK LUKSAN :
 PAPAN ARAS BAWAH

NO. LUKSAN :
 SCS0204/1(C)08(11)

SKALA :
 1 : 25

TARIKH :
 20 OKTOBER 2007

88 | Projek | Tandas



KERATAN B - B (PAPAK ARAS BAWAH)

ANNEXURE 2

Uji dan Pelebaran Jalan Tol Sumatera Service Level Cawang dan ITC/ICD dan Upaya Pemertanian prifat kerjakan



Diperoleh langsung

PT. CV. LIMA CANG CHENG
 PENGANGKUTAN KAWAN
 CAWANGAN SUMATERA JALAN TOL
 & STRUKTUR

HARPREET SINGH TAGGAR
 PRINCIPAL ENGINEER
 (PROJECT DESIGN)
 NETWORK DIVISION

CAWANGAN
 KELUARITERAPAN AWAM & STRUKTUR

PENGANGKUTAN KAWAN

PT. INDOPRIMA BINA BANGUNAN

JURUTERA AWAM ENCIJALISA KAWAN

H. NOR AZIZAH BINTI WUHAMMAD

JURUTERA AWAM KAWAN

H. WAN REZANA BINTI WAN MUHAMMAD

DIREKTOR/UTK

PT. MAHARINI BINA WASHAT

DISKAM

H. WAN REZANA BINTI WAN MUHAMMAD

DILUAS

BAHARU BINTI YAS

MAWA LUKSAN

LUKSAN PAWAI

STEERN SUS SATU RUANG

USUNG KAWAN

BUKANGA

(HT CUTWEED)

TAJUK LUKSAN :

PAPAK ARAS BUMBUNG DAN

BUTIRAN TIPIKAL TALANG KONKRIT

NO. LUKSAN :

SLC/SJL/KA/CP/11

SKALA :

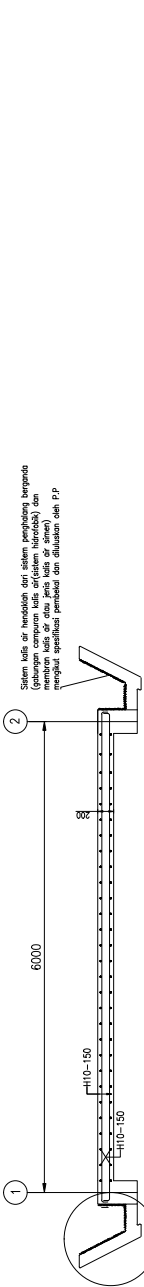
1 : 25

TARIKH :

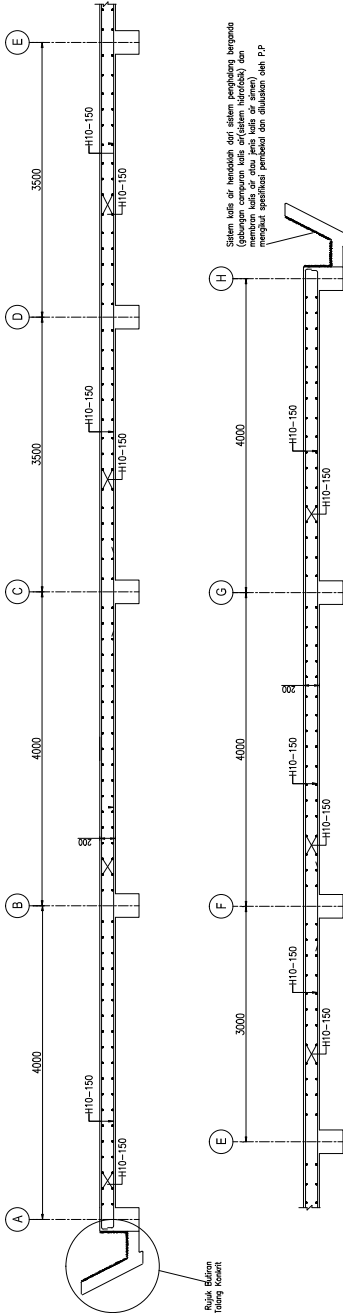
20 OCTOBER 2020

BB / Perisian

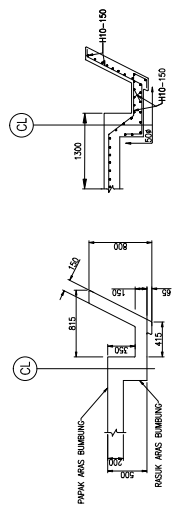
Transdagan



KERATAN C - C (PAPAK ARAS BUMBUNG)



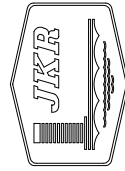
KERATAN D - D (PAPAK ARAS BUMBUNG)



**BUTIRAN TIPIKAL
 PERINCIAN TALANG KONKRIT**

LUKISAN PIAWAI STESEN SUIS SATU RUANG DENGAN BILIK JANGKA (HT CT METER)

SLC/SSU(A)/EL/.....
(Bil. Lukisan : 4 nos)



CAWANGAN KEJURUTERAAN ELEKTRIK
IBU PEJABAT JKR MALAYSIA
KUALA LUMPUR.

JABATAN KERJA RAYA MALAYSIA

13 OGOS 2020

LUKISAN PIAWAI
 STESEN SUIS SATU RUANG DENGAN BILIK JANGKA
 (HT CT METER)

TAJUK LUKISAN	NO. LUKISAN
1. PELAN SUSUNATUR LAMPU, SOKET, PETUNJUK DAN GAMBARAJAH PENDAWAIAAN SKEMATIK	SLC/SSU(A)/EL/01[04]
2. GAMBARAJAH PERINCIAN PELAN BUMBUNG DAN PANDANGAN BAGI SISTEM PERLINDUNGAN KILAT UNTUK BILIK SWITCHGEAR DAN BILIK ALAT UBAH TNB	SLC/SSU(A)/EL/02[04]
3. GAMBARAJAH PERINCIAN SISTEM PEMBUMIAH UNTUK BILIK SWITCHGEAR DAN BILIK ALATUBAH TNB	SLC/SSU(SA)/EL/03[04]
4. GAMBARAJAH PERINCIAN SISTEM PEMBUMIAH UNTUK BILIK SWITCHGEAR DAN BILIK ALATUBAH PENGGUNA	SLC/SSU(SA)/EL/04[04]

ANNEXURE 2

Lukisan Papan in-ubaca bersama Service Engineering dan Terpakai untuk semua projek semakan.

Dipersejuti bersama

ENGR. HANIFF BIN AB HAMID
 Projek Penguasa Kawanan & Jurutera Elektrik
 Jabatan Kerja Raya Malaysia
 10250, Kuala Lumpur

CAWANGAN KEURUTERAAN ELEKTRIK

PENGARAH PERUNDING REKABENTUK:

IR. HUSIN BIN MUSTAFA

JURUTERA ELEKTRIK PENGUSAHA KAWANAN:

IR. SITI NORHAJATI HASSAN

JURUTERA ELEKTRIK PENGUSAHA:

IR. HANIFF BIN AB HAMID

JURUTERA ELEKTRIK:

IR. HANIFF BIN AB HAMID

DIREKABENTUK

DISEMAK:
IR. HANIFF BIN AB HAMID

DILUKIS:
MOHD YUSRIZAN BIN MOHD YUSOFF

NAMA LUKISAN:
STESBEN SUSISU SATU RUANG DENGAN BUKU JANGKA (HT CT METER).

TAUK LUKISAN:

- GAMBARAN PERENCANAAN PELAN BANGUNAN DAN PANGKAWAN RANGSIS SISTEM PERENCANAAN KAWANAN RANGSIS TERUTAMA PANGKAWAN DAN LUKISAN TMS

NO. LUKISAN:
SL/CASSU(A)/EL/02 (04)

SKALA:
1:75 (A:1)

TARIKH:
13 Ogos 2020

BT Pridhan Tandapan

SYMBOL	DESCRIPTION	QUANTITY
⬮	40mm CHANNEL (30mm x 30mm x 3mm)	4
⬮	40mm CHANNEL (30mm x 30mm x 3mm) (3 corners on terminal)	2
●	STEEL JOINT	4
---	20mm x 3mm COPPER TAPE	LUMP SUM

NOTE:
 Sistem pantufangan jenis di bangunan perlu mematuhi Peraturan MS EC 83:2005 Protection Against Lightning seperti yang di maksudkan dalam Amdan Survei Tenaga Bersepadu Bilangan 4 Tahun 2019.

LEGEND

INSTALLATION AT ROOF TILES LIGHTNING PROTECTION SYSTEM

DETAIL 'A'
 20mm x 3mm COPPER TAPE
 40mm CHANNEL (30mm x 30mm x 3mm)
 BRASS SUPPORT ROD (HT BT 20mm x 3mm)
 50mm x 50mm x 3mm (HT BT 20mm x 3mm)

DETAIL 'B'
 20mm x 3mm COPPER TAPE
 40mm CHANNEL (30mm x 30mm x 3mm)
 BRASS SUPPORT ROD (HT BT 20mm x 3mm)
 50mm x 50mm x 3mm (HT BT 20mm x 3mm)

DETAIL 'C'
 20mm x 3mm COPPER TAPE
 40mm CHANNEL (30mm x 30mm x 3mm)
 BRASS SUPPORT ROD (HT BT 20mm x 3mm)
 50mm x 50mm x 3mm (HT BT 20mm x 3mm)

DETAIL 'D'
 20mm x 3mm COPPER TAPE
 40mm CHANNEL (30mm x 30mm x 3mm)
 BRASS SUPPORT ROD (HT BT 20mm x 3mm)
 50mm x 50mm x 3mm (HT BT 20mm x 3mm)

DETAIL 'E'
 20mm x 3mm COPPER TAPE
 40mm CHANNEL (30mm x 30mm x 3mm)
 BRASS SUPPORT ROD (HT BT 20mm x 3mm)
 50mm x 50mm x 3mm (HT BT 20mm x 3mm)

DETAIL 'F'
 20mm x 3mm COPPER TAPE
 40mm CHANNEL (30mm x 30mm x 3mm)
 BRASS SUPPORT ROD (HT BT 20mm x 3mm)
 50mm x 50mm x 3mm (HT BT 20mm x 3mm)

DETAIL 'G'
 20mm x 3mm COPPER TAPE
 40mm CHANNEL (30mm x 30mm x 3mm)
 BRASS SUPPORT ROD (HT BT 20mm x 3mm)
 50mm x 50mm x 3mm (HT BT 20mm x 3mm)

DETAIL 'H'
 20mm x 3mm COPPER TAPE
 40mm CHANNEL (30mm x 30mm x 3mm)
 BRASS SUPPORT ROD (HT BT 20mm x 3mm)
 50mm x 50mm x 3mm (HT BT 20mm x 3mm)

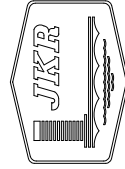
PANDANGAN HADAPAN

PANDANGAN BELAKANG

PANDANGAN SISI KANAN

**LUKISAN PIAWAI
STESEN SUIS SATU RUANG DENGAN BILIK JANGKA
(HT CT METER) TANPA BILIK TRANSFORMER**

**SLC/SSU(B)/AR/.....
(Bil. Lukisan : 3 nos)**



CAWANGAN ARKITEK
IBU PEJABAT JKR MALAYSIA
KUALA LUMPUR.

JABATAN KERJA RAYA MALAYSIA

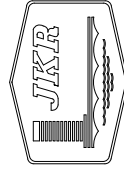
13 OGOS 2020

LUKISAN PIAWAI
 STESEN SUIS SATU RUANG DENGAN BILIK JANGKA
 (HT CT METER) TANPA BILIK TRANSFORMER

TAJUK LUKISAN	NO. LUKISAN
1. PELAN LANTAI, PELAN PEMBALKAN SILING DAN PELAN BUMBUNG	SLC/SSU(B)/AR/01[03]
2. PANDANGAN HADAPAN, BELAKANG, SISI KIRI, SISI KANAN, KERATAN AA DAN BB	SLC/SSU(B)/AR/02[03]
3. BUTIRAN BOLLARD, BUTIRAN MANHOLE MV CABLE, BUTIRAN TRENCHES	SLC/SSU(B)/R/03[03]

**LUKISAN PIAWAI
STESEN SUIS SATU RUANG DENGAN BILIK
JANGKA (HT CT METER)
TANPA BILIK TRANSFORMER**

**SLC/SSU(B)/CS/.....
(Bil. Lukisan : 10 nos)**



CAWANGAN KEJURUTERAAN AWAM DAN STRUKTUR
BAHAGIAN PEMBANGUNAN DAN PENYELIDIKAN
IBU PEJABAT JKR MALAYSIA
KUALA LUMPUR.


JABATAN KERJA RAYA MALAYSIA

20 OKTOBER 2020

LUKISAN PIAWAI STESEN SUIS SATU RUANG DENGAN BILIK JANGKA (HT CT METER) TANPA BILIK TRANSFORMER

ANNEXURE 2

Lukisan Piawai ini dibaca bersama Service Level Commitment, S/LC dan terdapat untuk semua projek terdapat.



Dipersebutkan bersama

HAJRIET SIBONGI TEGGAR
PRINCIPAL ENGINEER
PROJECT DESIGN
CONSTRUCTION AND
NETWORK DIVISION

CHAWANGAN
KELOMPOK TEKNIKAL & STRUKTURAL

PENGARAH KHRIDAT TEKNEBENTUK:

P. BACHISZAMAN BIN ABU ISMAIL

LURUTERANA MANA PRINGASA KAMAN:
P. NOR SUZAH BINTI MUHAMMAD

LURUTERANA MANA:
P. WAN BIZAN BINTI WAN MUHAMMAD

DIREKTOREBENTUK:
AHMAD EL AEFY BIN MOHD SARI

DOSYER:
P. NORFARZA BINTI ISMAIL

DULUS:
RAMADAN BINTI YAS

NAMA LUKISAN:
LUKISAN PIAWAI STESEN SATU RUANG DENGAN BILIK JANGKA (HT CT METER) TANPA BILIK TRANSFORMER

TALUK LUKISAN:
SEMARAU LUKISAN

NO. LUKISAN:

SKALA:

TARIKH:
20 OKTOBER 2020

BI | Prinsipal Tandatangan

NO.	TAJUK LUKISAN	NO. LUKISAN
1.	PELAN PUNCA BEBAN KHRIDMAT TIANG	SLC/SSU(B)/CS/01[10]
2.	PELAN PUNCA RASUK ARAS BAWAH	SLC/SSU(B)/CS/02[10]
3.	PELAN PUNCA RASUK ARAS BUMBUNG	SLC/SSU(B)/CS/03[10]
4.	BUTIRAN RASUK ARAS BAWAH 1 (2)	SLC/SSU(B)/CS/04[10]
5.	BUTIRAN RASUK ARAS BAWAH 2 (2)	SLC/SSU(B)/CS/05[10]
6.	BUTIRAN RASUK ARAS BUMBUNG DAN BUTIRAN TIPIKAL PERINCIAN RASUK PENGIKAT	SLC/SSU(B)/CS/06[10]
7.	KERATAN PAKAP ARAS BAWAH	SLC/SSU(B)/CS/07[10]
8.	KERATAN PAKAP ARAS BUMBUNG DAN BUTIRAN TIPIKAL PERICIAN TALANG KONKRIT	SLC/SSU(B)/CS/08[10]
9.	BUTIRAN TIANG, LANDAS ANGKAT, PEPARIT KABEL DAN PAKAP APRON	SLC/SSU(B)/CS/09[10]
10.	BUTIRAN LURANG TNB MV CABLE	SLC/SSU(B)/CS/10[10]

*Lukisan ini perlu dibaca bersekali dengan Lukisan Piawai Nota Am Struktur.

- JKR/CKAS/P-NA/STR/30/PEL 14/01[05]
- JKR/CKAS/P-NA/STR/30/PEL 14/02[05]
- JKR/CKAS/P-NA/STR/30/PEL 14/03[05]
- JKR/CKAS/P-NA/STR/30/PEL 14/04[05]
- JKR/CKAS/P-NA/STR/30/PEL 14/05[05]

ANNEXURE 2

Uraian Pelan Punca Beban Khidmat Tiang
 Catatan: Saiz C1 dan C2 mengikut standard
 profil kersang.



Dipersektujui bersama

H. P. IDRIS CHAI CHING
 HARRIS CHAI CHING
 PRINCIPAL ENGINEER
 (PROJECT DESIGN)
 DISTRIBUTION
 NETWORK DIVISION

CALANGAN
 KESURUTERANGAN AWAM & STRUKTUR

PENGARAH KHIDMAT TEKAWENTUK:

JURUTERA AWAM PENGUKUSA KAWAN:
 H. NUR AZHA BINTI MUHAMMAD

JURUTERA AWAM KAWAN:
 H. WAN RIZAM BINTI WAN MUHAMMAD

DIBERAMBIK:
 AHMAD ELAFY BIN MOHD SAHRI

DIBINA:
 BAHARAH BINTI ISMAIL
 H. NUR FARZA BINTI ISMAIL

DILUKIS:
 BAHARAH BINTI ISMAIL

NAMA LUKISAN:
 LUKISAN PUNCA BEBAN KHIDMAT TIANG
 DENGAN BILANGAN (HIT C1) (METER)
 TANPA BELUKAR/FORMER.

TALIK LUKISAN:

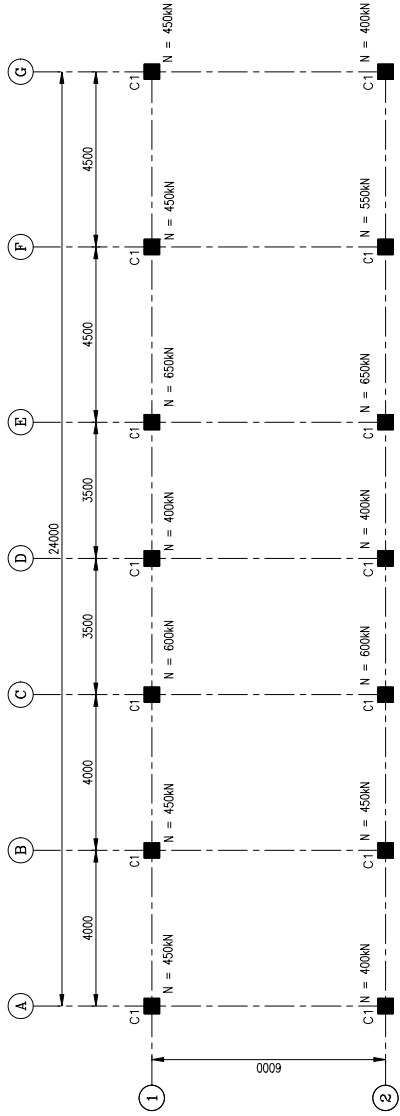
PELAN PUNCA BEBAN KHIDMAT TIANG

NO. LUKISAN:
 SCS/SP/CS/PT/100

SKALA:
 1:50

TARIKH:
 20 OKTOBER 2020

Bilangan
 Terdapat



PELAN PUNCA BEBAN KHIDMAT TIANG

NOTA:

- Beban Khidmat Tiang (N) yang ditunjukkan adalah dalam unit kilonewton (kN).
- Saiz semua tunggal adalah 400mm x 400mm.
- C1 adalah tiang bersaiz 400mm x 400mm.

ANNEXURE 2

Luluskan Penerimaan dan Pelaksanaan Pekerjaan
Commitment S/C dan terdapat untuk semua
proyek konstruksi



Dipersebutkan bersama

P. D. LIM CHAI CHING
MANAJER PROJEK
KEKURUTERAN AWAM & STRUKTUR

HARPREET SINGH TANGAR
MANAJER PROJEK
DISTRIBUSI & NETWORK DIVISION

CIKAVANGAN
KEKURUTERAN AWAM & STRUKTUR

PENGARAH KHIDMAT REKA-BENTUK:
H. RAJUREZAMAN BIN AB. ISMAIL

JURUTERA AWAM PENGUSAHA KAMAH:
H. MOZA AZHAN BINI MUHAMMAD

JURUTERA AWAM KAWAN:
H. WAN PEZMAN BINTI WAN MUHAMMAD

DIREKTOR:
AHMAD EL HFFI BIN AHMAD SAFFI

DORBAK:
H. MOHDARIZAH BINTI ABAIL

DOLUKS:
BAHARAH BINTI YAS

NAMA LUKSIAN:
LUKSIAN RAWAL STEERY SURI SAU RUANG
DIPANGKAL LANGKAT (P1 C1) METER
TAMPA BUK TRANSFORMER

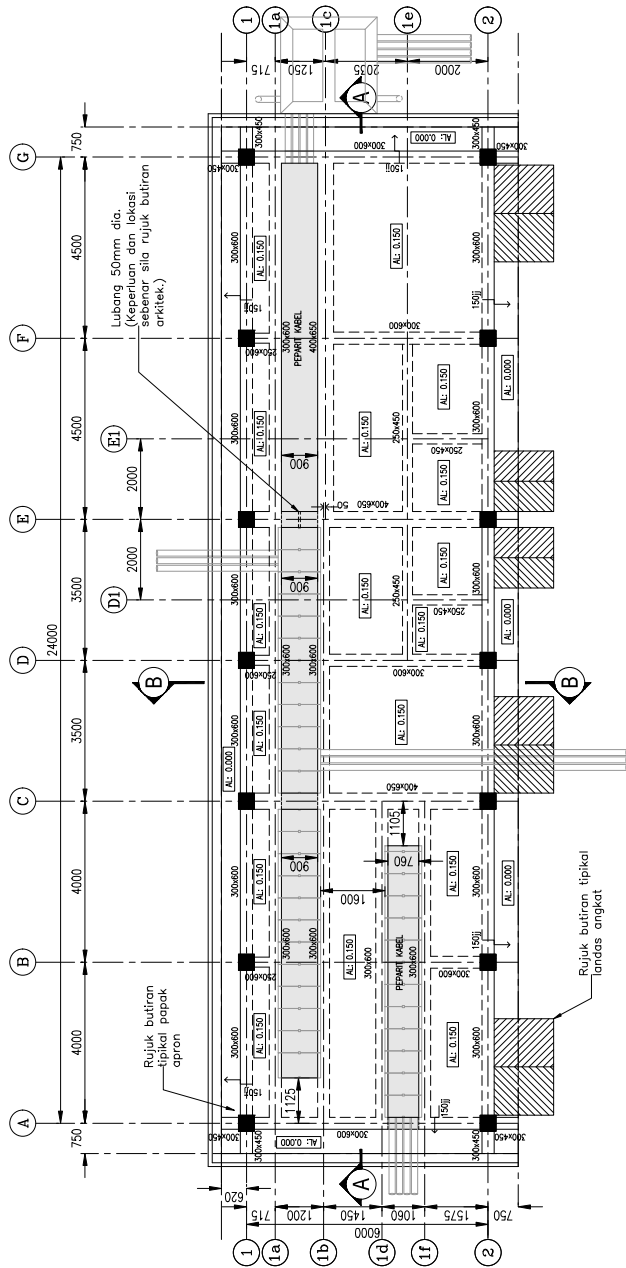
TALUK LUKSIAN:
PELAN PUNCA RASUK ARAS BAWAH

NO. LUKSIAN:
S/C/CS/18/CS/02/101

SKALA:
1:50

TARIKH:
20 OKTOBER 2020

BT / Pridaan / Tandatangan



PELAN PUNCA RASUK ARAS BAWAH

NOTA:

1. Ketebalan semua papak aras bawah adalah 200mm.

ANNEXURE 2

Likasa Pte Ltd is a Chartered Business Service Provider
in the field of Engineering and Construction
Project Management



TEMAGA NASIONAL

Diperuntukan oleh:

[Signature]
DR. IMY CHAI CHING
 HARRIET KNIGHT, REGAR
 PRINCIPAL ENGINEER
 (PROJECT DESIGN)
 CAMERON TRANSMISSION
 & STRUCTURE NETWORK DIVISION

CAMERON
 KEUBERTAHAN AWAM & STRUKTUR

PEKERJA HUBUNGAN PERSEKUTUAN:
 P. SUDHARMA SIVAR, IUSULU

JURUTERA AWAM FENGLASA KAWAN:
 P. NOR AZAH BINTI MUHAMMAD

JURUTERA AWAM KAWAN:
 P. WAN RIZANA BINTI WAN MUHAMMAD

DIREKTOR TEKNIK:
 AHMAD EL APTI BIN WAHID SAHRI

DESAINER:
 P. NORAFIZA BINTI ISMAIL

DULUKES:
 RAMLI BIN HAS

MAM LUKSIAN:
 LUKSIAN FAWAZ STEEN BUS SATU/BIANG
 DENGAN BILUK JANGKA (HT CT METER)
 TAPAN BUK TRANSFORMER

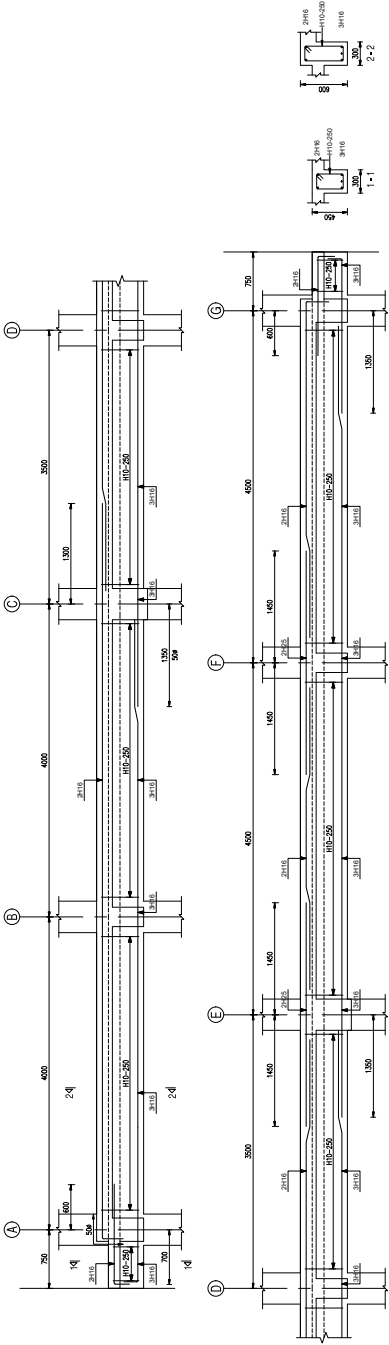
TAJUK LUKSIAN:
 BUTIRAN RASUK ARAS BAWAH [J2]

NO. LUKSIAN:
 SUSS/BIK/CS/01/01

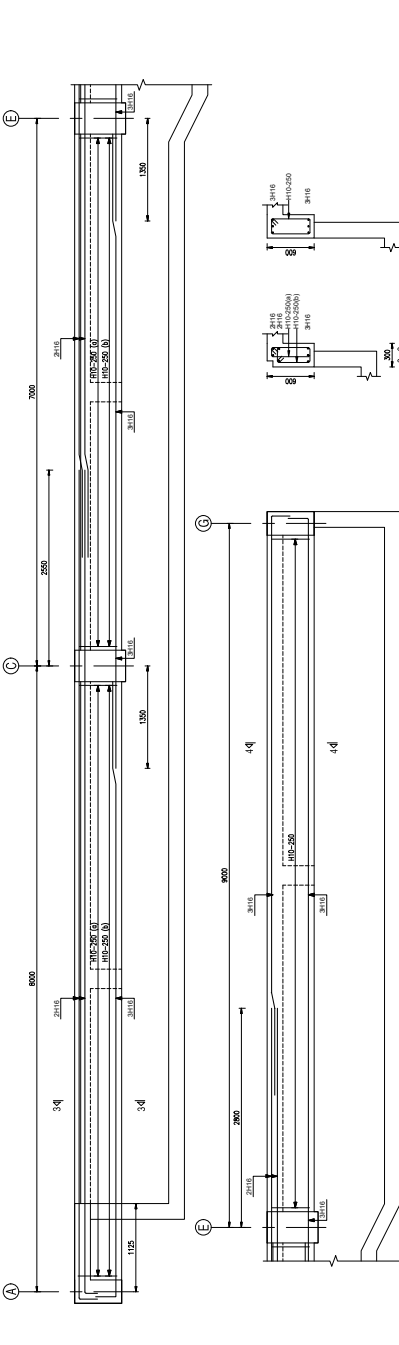
SKALA:
 1:25

TARIKH:
 20 OKTOBER 2020

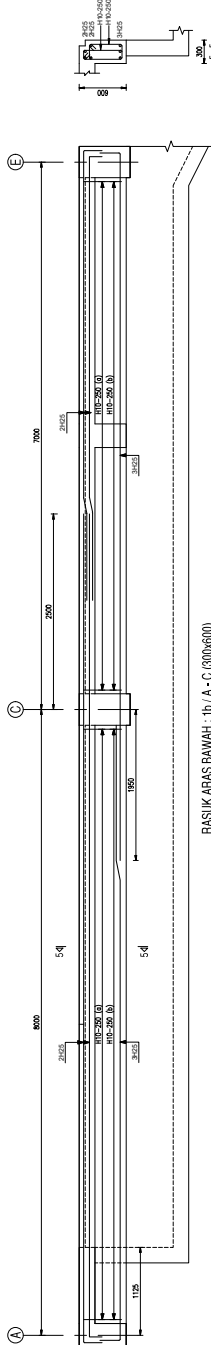
80
 Tindakan




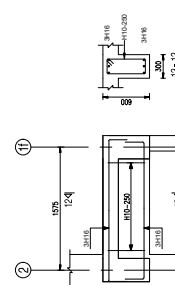
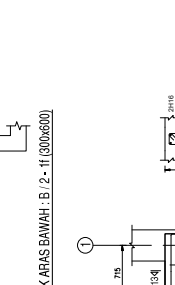
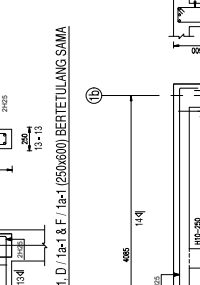
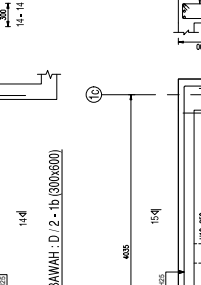
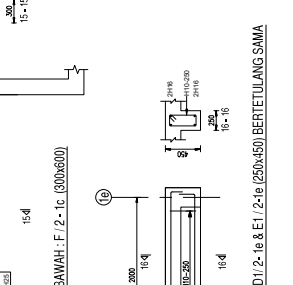
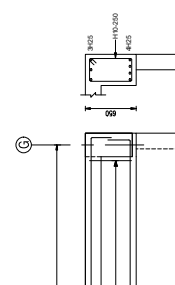
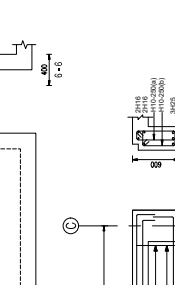
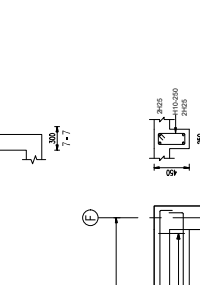
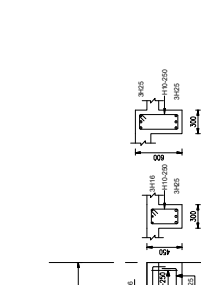
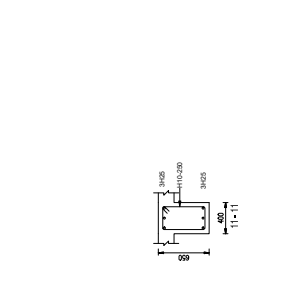
RASUK ARAS BAWAH : 1 / A-G & 2 / A-G (300x450-600-450) BERTETULANG SAMA



RASUK ARAS BAWAH : 1a / A - C (300x600)



RASUK ARAS BAWAH : 1b / A - C (300x600)

<p>ANNEXURE 2</p>	<p>Layanan Penerimaan dan Pemberian Service Level (SLA) dan Laporan Kinerja (KPI) sebagai acuan dalam proyek kerangka</p>		<p>Dipertanggung jawabkan</p>	<p><i>[Signature]</i></p>	<p>DR. LIM CHIAH CHANG PRINCIPAL ENGINEER (PROJECT DESIGN) CHAWANG KAWAN CONSULTANTS Sdn Bhd & STRUKTUR</p>	<p>HARPREET KAGH TAGGAR PROJECT MANAGER (PROJECT DESIGN) CHAWANG KAWAN CONSULTANTS Sdn Bhd & STRUKTUR</p>	<p>CHAWANG KEINGINERAN AWAM & STRUKTUR</p>	<p>PERAGAH KUDUK REASERTIK: II. BACHSENAN BIN NG MALLE</p>	<p>JURUTERA AWAM FENGUASA KAWAN: II. NOR AZHA BINTI MUHAMMAD</p>	<p>JURUTERA AWAM KAWAN: II. WAN RIZAM BINTI WAN MUHAMMAD</p>	<p>DREASERTIK: ANGG E. KIFFI BIN MOHD SAFRI</p>	<p>DSELMAN: II. NORFAZLA BINTI SWALI</p>	<p>DOLIKS: BAHARU BINTI WAS</p>	<p>NAMA LUKSAN: LUKSAN PAMASTEEN SUK SUKU ALIANG DENGAN BUK LUKSAN 10 CM (METER) TANPA SISA TRANSDUKSI</p>	<p>TAJUK LUKSAN: BUTIRAN RASUK ARAS BAWAH [2/2]</p>	<p>NO. LUKSAN: SCSUS(B) (05/06/20)</p>	<p>SKALA: 1:25</p>	<p>TAMBAH: 20 OCTOBER 2020</p>	<p>Siti Pratiwi Transkripsi</p>
 <p>RASUK ARAS BAWAH: B/2 - 1f (300x600)</p>	 <p>RASUK ARAS BAWAH: B/1b - 1, D/1b - 1 & F/1b - 1 (250x450) BERTIETULANG SAMA</p>	 <p>RASUK ARAS BAWAH: D/2 - 1b (300x600)</p>	 <p>RASUK ARAS BAWAH: F/2 - 1c (300x600)</p>	 <p>RASUK ARAS BAWAH: D/1/2 - 1e & E/1/2 - 1e (250x450) BERTIETULANG SAMA</p>															
 <p>RASUK ARAS BAWAH: 1c - E-G (400x650)</p>	 <p>RASUK ARAS BAWAH: 1d - A-C & 1f - A-C (300x600) BERTIETULANG SAMA</p>	 <p>RASUK ARAS BAWAH: 1e - D - F (250x450)</p>	 <p>RASUK ARAS BAWAH: A/2 - 1 & G/2 - 1 (300x450-600-450) BERTIETULANG SAMA</p>	 <p>RASUK ARAS BAWAH: C/2 - 1 & E/2 - 1 (400x650) BERTIETULANG SAMA</p>															

ANNEXURE 2

Ukuran Final/As Built/Revised/Service/As Built
 Commitment (BSC) dan tercapai untuk semua
 projek tenaga



Dipersekitarinya

[Signature]
 I. D. LUKA CHAIKING
 PENYAHAI KAWAN
 CAWANGAN
 & STRUKTUR

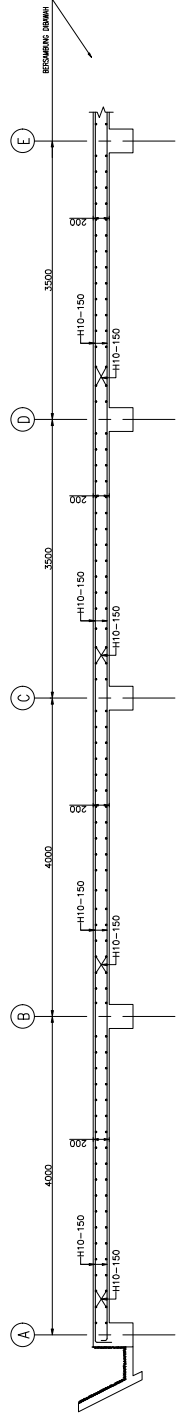
[Signature]
 HARRISZULNIZAT TAZGAR
 PRINCIPAL ENGINEER
 PROJECT DESIGN
 NETWORK DIVISION

CAWANGAN
 KEHUBUNGAN AWAM & STRUKTUR

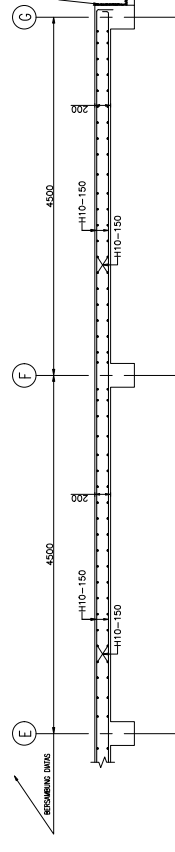
PEGAWAI HUBUNGAN KESEKUTUAN:
 I. SAUDJOMAN BIN ABU INAIK
 I. NOR AZHAR BINI SUKAIMING
 JURUTERA AWAM KAWAN:
 I. WAN RIZANA BINI WAN MUHAMMAD
 DREKABENTUK:
 AHMAD EL AFIY BIN MOHD SAFFI
 DREKAM:
 I. NORFAZIZ BINTI ISMAIL
 DULUS:
 RAHMAR BINTI YAS
 NAMA LUKSANY:
 LUKSANA RAYAN STEVEN SUSATI BUNUNG
 DESAIN BUKU JANGKA JHT (CT WATER)
 TANPA BUKU TRANSFORMER

NO. LUKSANY:
 SAC/SS/BJ/CT/08/01
 SKALA:
 1:25
 TARIKH:
 20 OKTOBER 2020
 BIL. Pindai

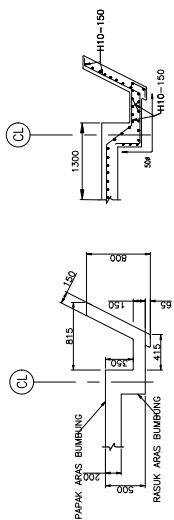
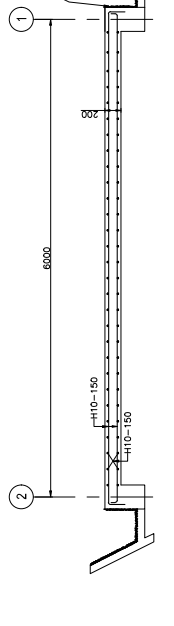
Terdapat	Terdapat
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Sistem kelis air hendaklah daripada sistem pengalangan berganda (gabungan pemrosesan kimia (pH) dan membran kalis air atau jenis kelis air simen) mengikut spesifikasi pembekek dan diluluskan oleh P.P.



Sistem kelis air hendaklah daripada sistem pengalangan berganda (gabungan pemrosesan kimia (pH) dan membran kalis air atau jenis kelis air simen) mengikut spesifikasi pembekek dan diluluskan oleh P.P.



BUTIRAN TIPIKAL PERINCIAN TALANG KONKRIT

ANNEXURE 2

Malayan Peninsula Electrical Services Sdn Bhd
 100, Jalan Pagar Utama 1, Seksyen 10, Taman Pagar Utama,
 Projek Kajang



Dipersejajuti bersama

I. D. LIM CHAI CHING
 PRINCIPAL ENGINEER
 (ELECTRICAL & NETWORKING)
 & STRUKTUR

MARRETT SINH TAGGAR
 PRINCIPAL ENGINEER
 (ELECTRICAL & NETWORKING)
 NETWORK DIVISION

CAWANGAN
 KEHUBUNGAN AWAM & STRUKTUR

PRIGASAH HODIYAT REKABENTUK:
 I. BACHIDZAMAN BIN ABU MALIK

JURUTERA AWAM PERINGKAT KAWAM:
 I. INFIRAZAH BINTI MUHAMMAD

JURUTERA AWAM KAWAM:
 I. YAP PEK HAN BINTI YAP MUSAHAMMAD

DIREKORAN REKABENTUK:
 AHMAD EL ANFFY BIN MOHD SAEB

DISEMAK:
 I. INFIRAZAH BINTI ISMAIL

REVIJES:
 RAHMAT BINTI YAS

NAMA LUKISAN:
 LUKISAN PERALATAN BUS SETU BUNG
 DENGAN BILU LANGKAH ITI ET METERN
 TANPA BILU TRANSFORMER

TAJUK LUKISAN:
 BUTIRAN LURANG TNB MV CABLE

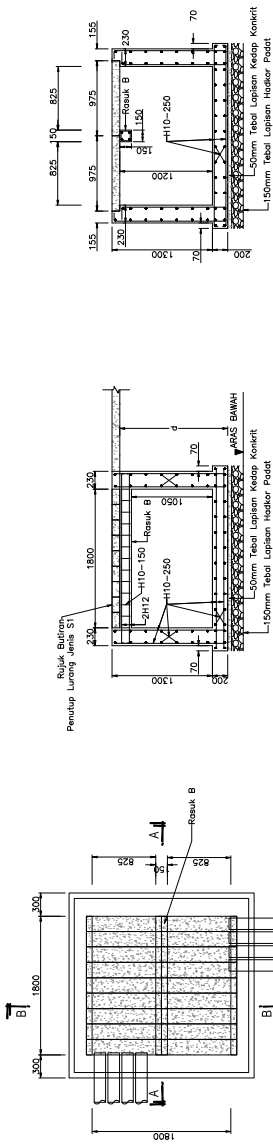
NO. LUKISAN:
 SK/CS/110/03/01/01

SJALIA:
 NTS

TARIKH:
 20 OKTOBER 2020

BT / Tindakan

Tindakan



Keratan D-D

BUTIRAN TIPIKAL LURANG TNB MV CABLE

NOTA:

- Keupayaan Gelas Tanah Minimum adalah 50kN/m² pada kedalaman d.



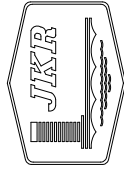
Keratan Penutup Lurang

Butiran Penutup Lurang			
Jenis	Saiz Penutup (l x b)	Ketebalan, d	Telulang
S1	975mm x 200mm	100mm	4H10

BUTIRAN PENUTUP LURANG

**LUKISAN PIAWAI
STESEN SUIS SATU RUANG DENGAN BILIK JANGKA
(HT CT METER) TANPA BILIK TRANSFORMER**

**SLC/SSU(B)/EL/.....
(Bil. Lukisan : 4 nos)**




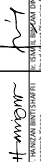
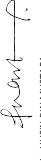
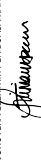
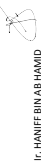

CAWANGAN KEJURUTERAAN ELEKTRIK
IBU PEJABAT JKR MALAYSIA
KUALA LUMPUR.





JABATAN KERJA RAYA MALAYSIA

13 OGOS 2020

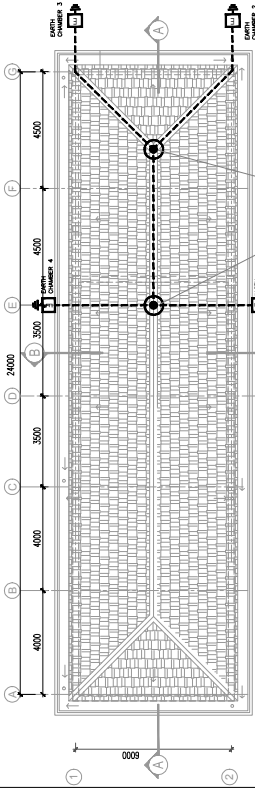
LUKISAN PIAWAI
 STESEN SUIS SATU RUANG DENGAN BILIK JANGKA
 (HT CT METER) TANPA BILIK TRANSFORMER

TAJUK LUKISAN	NO. LUKISAN
1. PELAN SUSUNATUR LAMPU, SOKET, LEGEND DAN GAMBARAJAH PENDAWAIAN SKEMATIK	SLC/SSU(B)/EL/01[04]
2. GAMBARAJAH PERINCIAN PELAN BUMBUNG DAN PANDANGAN BAGI SISTEM PERLINDUNGAN KILAT UNTUK BILIK SWITCHGEAR TNB	SLC/SSU(B)/EL/02[04]
3. GAMBARAJAH PERINCIAN SISTEM PEMBUMIHAN UNTUK BILIK SWITCHGEAR TNB	SLC/SSU(B)/EL/03[04]
4. GAMBARAJAH PERINCIAN SISTEM PEMBUMIHAN UNTUK BILIK SWITCHGEAR DAN BILIK ALATUBAH PENGGUNA	SLC/SSU(B)/EL/04[04]

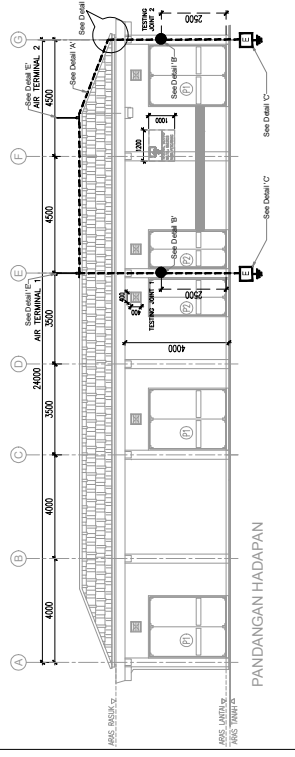
ANNEXURE 2 Lukisan Rawa ini dibaca bersama Service Level Commitment (SLC) dan terpalaki untuk semua projek kejurangan.	
	TEGANG NASIONAL IPER
Dipersejului bersama 	
I. SITI MOHD BINTI HASSAN Pegawai Teknikal (Pengawasan & Operasi) Jabatan Kejurangan Sistem Tenaga Bahagian Pengurusan Sistem Tenaga Tenaga Nasional Berhad	
CAWANGAN KEJURUTERAAN ELEKTRIK PENGARAH PERUNDING REKABENTUK 	
I. HUSEIN BIN MUSTAFA JURUTERA ELEKTRIK PENGUASA KANAN : 	
I. SITI MOHD BINTI HASSAN JURUTERA ELEKTRIK PENGUASA : 	
I. HANIFF BIN AB HAMID JURUTERA ELEKTRIK :	
DIREKABENTUK DISEMAK : I. HANIFF BIN AB HAMID DILUKS : 	
MOHD YUSBEANE BIN MOHD YUSOFF NAMA LUKSAN : STESER SUSU DENGAN BELK JANGKA (HT C) TIETENT AMPAL BELK TRANSFORMER TALIUK LUKSAN : GAMBARAN PERENCANAAN PELAKSANAAN DAN PANDANGAN SISI KANAN SISTEM PERUNDINGAN RELAT UJIAN 13 OGOS 2020	
NO. LUKSAN : S-CROSSU (B)/EL/02 (04) SKALA : 1:75 (A3) TARIKH : 13 OGOS 2020 EE : Prochai	

SYMBOL	DESCRIPTION	QUANTITY
	CABLE CHANNEL (200mm x 300mm x 100mm)	4
	Heavy DUTY TRAY x 200mm (L) COVER AIR TERMINAL	2
	TESTING JOINT	4
	20mm x 3mm COVER TYPE	LEPAS DIMA

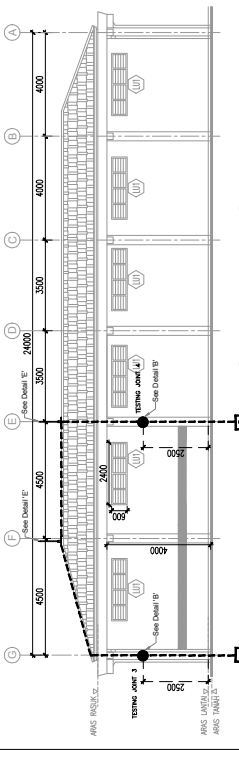
NOTE:
 1. Semua lukisan ini adalah berdasarkan kepada lukisan MS EC 42332-Prevision System Upgrade report yang di submittasikan
 dalam Petikan Semula Projek Tenaga Selat, 4 Tahun, 2018



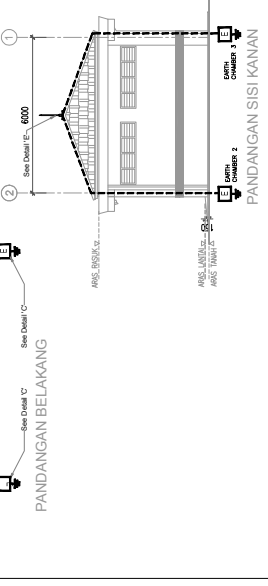
PELAN BUMBUNG



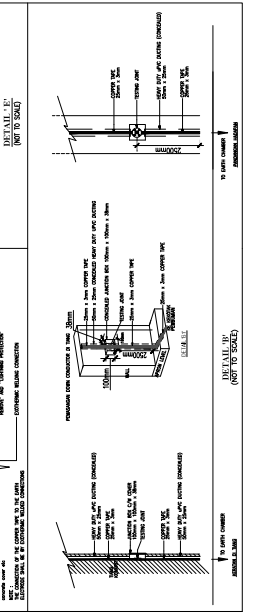
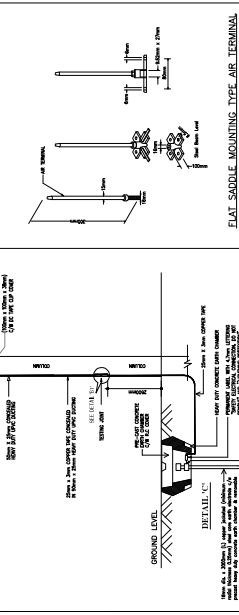
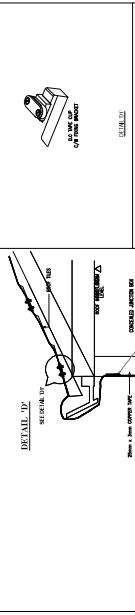
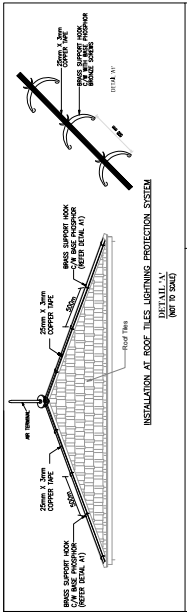
PANDANGAN HADAPAN



PANDANGAN BELAKANG



PANDANGAN SISI KANAN



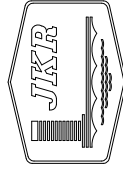
LUKISAN PIAWAI COMPACT SUB (CSU)

SLC/CS/.....

(Bil. Lukisan : 2 nos)

SLC/CS/M/.....

(Bil. Lukisan : 2 nos)



CAWANGAN KEJURUTERAAN ELEKTRIK
IBU PEJABAT JKR MALAYSIA
KUALA LUMPUR.

JABATAN KERJA RAYA MALAYSIA

13 0605 2020

LUKISAN PIAWAI COMPACT SUB (CSU)

	TAJUK LUKISAN	NO. LUKISAN
1.	CSU PLINTH DETAILS EARTH DETAILS, BOLLARD & KURB PAPAN TANDA PIAWAI	SLC/CS/01[02]
2.	CSU PLINTH PRECAST – REINFORCEMENT DETAILS	SLC/CS/02[02]
3.	CSU WITH METER PANEL PLINTH DETAILS EARTH DETAILS, BOLLARD & KURB PAPAN TANDA PIAWAI	SLC/CS/M/01[02]
4.	CSU PLINTH PRECAST – REINFORCEMENT DETAILS	SLC/CS/M/02[02]

ANNEXURE 2

Lukisan Peralai ini dibaca bersama Service Level Commitment (SLC) dan terpakai untuk semua projek kerajaan



Dijersetujui bersama

H. M. Yusoff

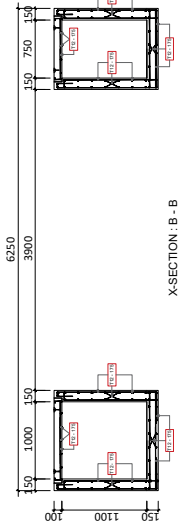
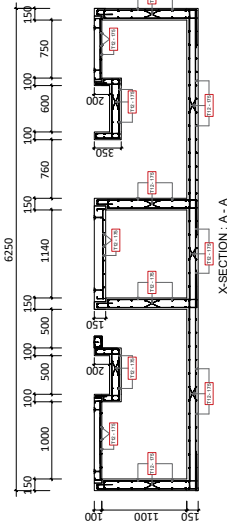
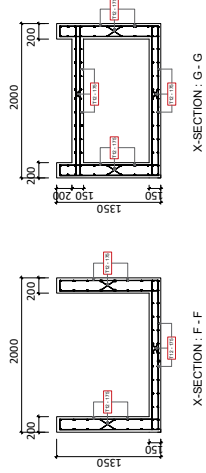
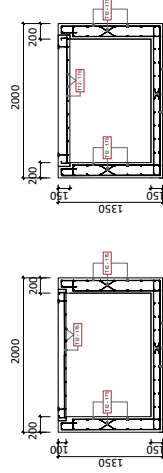
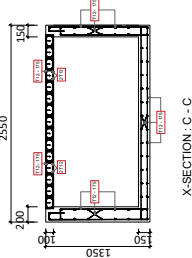
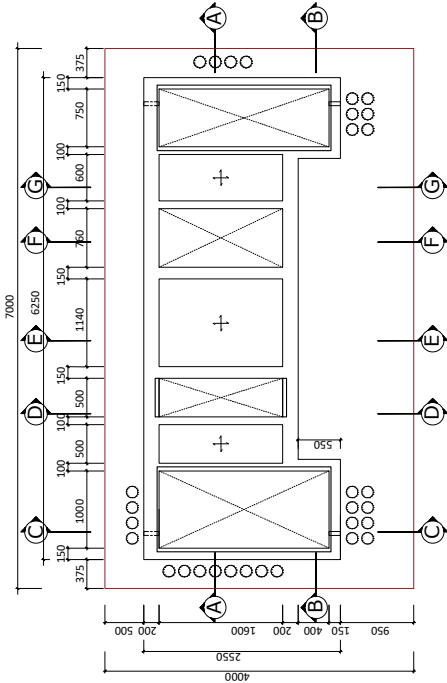
Dr. HANNA BINTI SHAFIQI
Pengarah Binaan
Struktur & Kejuruteraan
Sistem & Perisian
Bahagian Distribusi Network
Temaga Nasional Berhad

[Signature]

Dr. KHALID BIN MOHAMMAD
Operasi
Struktur & Kejuruteraan
Bahagian Distribusi Network
Temaga Nasional Berhad

NOTES:

1. All precast CSU plinths shall be design in accordance to the guidance in BS 8110
2. All dimensions are in millimeters unless stated otherwise
3. Concrete cube strength shall be min. 30 MPa
4. Main reinforcement is high tensile steel bar in accordance to BS 3339 and BS 4461
5. Minimum cover to reinforcement: 30mm
6. Plinth designed to support loading of 7000 kg



NO. LUKISAN :

SLC/CSU/02

SKALA :

NOT TO SCALE

TARIKH :

13.06.2020

BL :

PRJ001

PRJ001

PRJ001

PRJ001

PRJ001

PRJ001

PRJ001

PRJ001

PRJ001

ANNEXURE 2

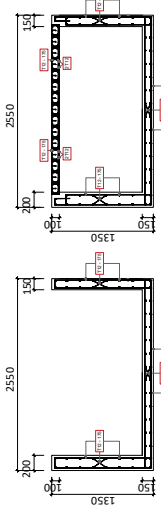
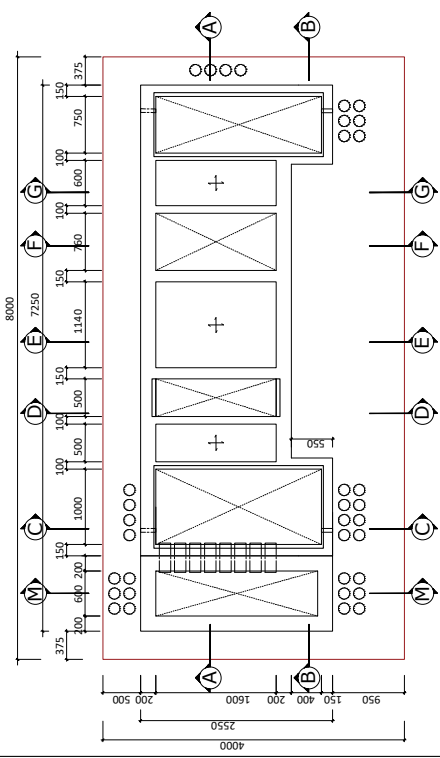
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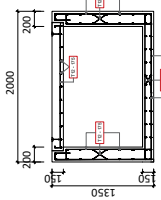
Dipersejajuti bersama

PKS
 K. SIVAKUMARAN
 Head of Civil Planning & Operation
 Engineering Department
 Kuala Lumpur City Centre
 Bilangan Distribusi dan Network
 Tenaga Nasional Berhad

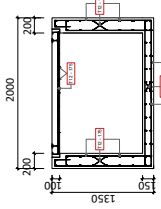
- NOTES:**
1. All precast CSU plinths shall be design in accordance to the guidance in BS 8110
 2. All dimensions are in millimeters unless stated otherwise
 3. Concrete cube strength shall be min. 30 MPa
 4. Main reinforcement is high tensile steel bar in accordance to BS 3339 and BS 4461
 5. Minimum cover to reinforcement: 30mm
 6. Plinth designed to support loading of 7000 kg



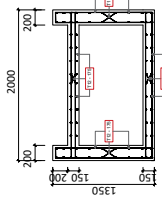
X-SECTION : C - C



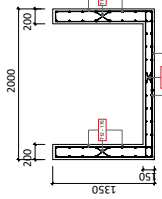
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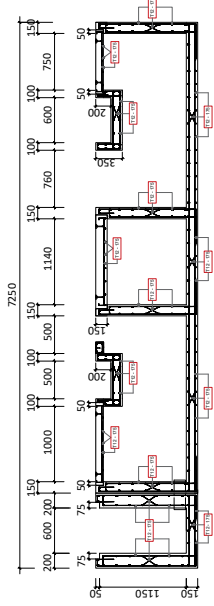
X-SECTION : D - D



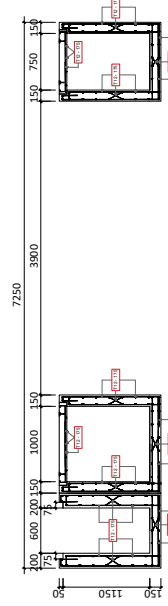
X-SECTION : G - G



X-SECTION : F - F



X-SECTION : A - A



X-SECTION : B - B

NO. LURUSAN:	COMPACT SUB (CSU)
TAJUK LURUSAN:	- CSU PLINTH PRECAST - REINFORCEMENT DETAILS
NO. LURUSAN:	
SKALA:	1:30 (S/M/02) (02)
TARIKH:	NOT TO SCALE
RE:	13 AGOS 2020
TAMBAHAN:	

LUKISAN PIAWAI NOTA AM STRUKTUR

JKR/CKAS/P-NA/STR/30/PEL 14.....
(Bil. Lukisan : 05 nos)



CAWANGAN KEJURUTERAAN AWAM DAN STRUKTUR
BAHAGIAN PEMBANGUNAN DAN PENYELIDIKAN
IBU PEJABAT JKR MALAYSIA
KUALA LUMPUR.

JABATAN KERJA RAYA MALAYSIA

20 OKTOBER 2020

ANNEXURE 3

Electricity Supply Application Submission Checklist for Government Project

ELECTRICITY SUPPLY APPLICATION EXCEEDING 100A CHECKLIST (1/2)

NO	FORM/ DOCUMENT	INFORMATION REQUIRED	STAGE 1	STAGE 2
A	1. Basic Information	Address of Installation	Y / N	
		Name & Address of Owner / Governmental Agency	Y / N	
		Name & Address of Consultant Engineer	Y / N	
		Type of Premise	Y / N	
		Voltage Level (275kV, 132 kV, 33 kV, 22 kV, 11 kV, 0.4kV)	Y / N	
		Supply Scheme (Overhead or Underground; Public Distribution License)	Y / N	
		Total Load Required (kW)	Y / N	
		Supply Required Date (SRD)	Y / N	
		Latest site photo	Y / N	
	2. Plan & Drawings (refer to latest ESAH)	Latest Development Order Plan approved by local authority	Y / N / NA	
		Site plan & contour plan with Proposed Sub-Station Sites (Top view & Side-Section Plan)	Y / N	
		Location plan on meter panel / room or front elevation of building requiring supply (to determine meter location)	Y / N	
		Layout Plan of Sub-station Building (Proposed type of Sub-station(s) as per Annexure2—Sub-station(s) Design)	Y / N	
		Location & Layout Plan of Main Switch Room	Y / N	
		Single Line Diagram / Schematic of Installation	Y / N	
Storage Device / CD for all the above plans (JUPEM standard map with Coordinates System – UTM WGS84)		Y / N		
B	Load Details	Y / N		
C	Metering Details	Y / N		
D	Load Profile & Consumption	Y / N		
E	Motor Loads	Y / N		
F	Capacitor Bank Installation	Y / N		
G	Power Quality Compliance Declaration Form	Y / N		
H	Fire Fighting Documentation for attached substation	Y / N		
I	Service Request (SR) / Service Notification (SN) Number Online Supply Application through myTNB portal (https://www.mytnb.com.my/)	Y / N		

ANNEXURE 3

Electricity Supply Application Submission Checklist for Government Project

ELECTRICITY SUPPLY APPLICATION EXCEEDING 100A CHECKLIST (2/2)

NO	FORM/ DOCUMENT	INFORMATION REQUIRED	STAGE 1	STAGE 2
J	Substation Land (A) Tanah Berhakmilik Atas Nama Pesuruhjaya Tanah Persekutuan (PTP) / Warta Untuk Kegunaan PTP atau Kementerian Jabatan Pengguna (KJP) / Diambil Balik Untuk Kegunaan KJP (Borang K) / Dalam Proses Pewartaan Untuk Kegunaan PTP/KJP	Surat Kebenaran Memasuki dan Menduduki Tapak yang dikeluarkan oleh Bahagian Harta Tanah Persekutuan (BHTP) beserta:		Y / N
		15 salinan Pre-Com Plan PE (Endorsed By Licensed Surveyors) yang menunjukkan kedudukan & keluasan keseluruhan tanah dan kedudukan & keluasan tapak PE beserta talian/kabel dengan 'bearing', 'distance' & 'connection point'.		Y / N
		1 salinan hakmilik / carian rasmi hakmilik / salinan warta / salinan Borang K, Akta Pengambilan Tanah (APT) 1960		Y / N
	Substation Land (B) Pemegang Pajak Tanah PTP & Selain Dari (A)	Surat Akujanji & Tanggungrugi perolehan Tanah Tapak Pemasangan Elektrik yang ditandatangani oleh Pemilik/Pemaju/Pemegang Pajakan Berdaftar		Y / N
		15 salinan Pre-Com Plan PE (Endorsed By Licensed Surveyors) yang menunjukkan kedudukan & keluasan keseluruhan tanah dan kedudukan & keluasan tapak PE beserta talian/kabel dengan 'bearing', 'distance' & 'connection point'.		Y / N
		1 salinan hakmilik / carian rasmi hakmilik		Y / N
		Jaminan Bank / Bank Guarantee		Y / N
K	MV & HV Metering	Preliminary metering information sheet		Y / N

ANNEXURE 4
Pre-Inspection Acceptance Test (PIAT) Checklist For Government Project

1.1 MAKLUMAT PROJEK

NO RUJUKAN :
 TARIKH :
 PROJEK :

1.2 KEPUTUSAN PEMERIKSAAN

No.	Keterangan	Keputusan		
		Lulus	Lulus Bersyarat	Gagal
A	Dokumen			
B	Biliksuis			
C	Bilik Alatubah Tx1			
D	Bilik Alatubah Tx2			
E	Perkara-perkara lain berkaitan			
F	Perkara-perkara diperlukan sebelum			
G	Sivil - Pintu, Tingkap & Dinding			
H	Sivil - Lantai & Trench			
I	Sivil - Kerja-Kerja Cat			
J	Sivil - Bangunan Luar Pencawang			

KEPUTUSAN PEMBUMIHAN : OHM

Pengujian perlu dibuat dan disahkan oleh Jurutera Perkhidmatan Elektrik

1.3 KEPUTUSAN KESELURUHAN

<input type="checkbox"/> LULUS	<input type="checkbox"/> LULUS BERSYARAT	<input type="checkbox"/> GAGAL
ULASAN :		
<u>DIPERIKSA OLEH</u> NAMA : _____ TANDATANGAN : _____		

1.4 PENGESAHAN (TNB)

UNIT / JABATAN	NAMA	NO. TEL / HP	TANDATANGAN
Asset Development (EPI)			
Asset Development (SPI)			
Asset Planning & Performance - Supply 11kV			
Operation & Maintenance - ME			
Metering			
ICT			

1.5 PENGESAHAN (PERUNDING / PEMAJU)

SYARIKAT	NAMA	NO. TEL / HP	TANDATANGAN

ANNEXURE 4

Pre-Inspection Acceptance Test (PIAT) Checklist For Government Project

A	Senarai Dokumen (Diserah kepada unit Perancang TNB sebelum PIAT Sivil dijalankan kecuali perkara 2 & 7)	ADA	TIADA	TIDAK BERKAITAN
	Perkara			
1	Surat Penyerahan Pencawang Elektrik (Cover Letter)			
2	Surat Jaminan Bangunan Pencawang (minimum 1 tahun dari tarikh penyerahan pencawang)			
3	Pelan Bangunan dan Kerja Tanah dengan Perakuan C&S Professional Engineer			
4	i. Laporan Makmal <i>Coring Test</i> untuk Jalan Masuk Pencawang & Bahagian Depan Bangunan Pencawang ii. Laporan <i>Soil Investigation</i> (SI) untuk Tapak Pencawang iii. Laporan Kekuatan Mampatan Konkrit			
5	Gambar pembetulan (sekiranya ada ulasan senarai semak penyerahan bangunan pencawang sebelum ini)			
6	(A) Tanah Berhakmilik Atas Nama Pesuruhjaya Tanah Persekutuan (PTP) / Warta Untuk Kegunaan PTP atau Kementerian Jabatan Pengguna (KJP) / Diambil Balik Untuk Kegunaan KJP (Borang K) / Dalam Proses Pewartaan Untuk Kegunaan PTP/KJP			
	i. Surat Kebenaran Memasuki dan Menduduki Tapak yang dikeluarkan oleh Bahagian Harta Tanah Persekutuan (BHTP) beserta:			
	ii. 15 salinan Pre-Com Plan PE (Endorsed By Licensed Surveyors) yang menunjukkan kedudukan & keluasan keseluruhan tanah dan kedudukan & keluasan tapak PE beserta talian/kabel dengan 'bearing', 'distance' & 'connection point'.			
	iii. 1 salinan hakmilik / carian rasmi hakmilik / salinan warta / salinan Borang K, Akta Pengambilan Tanah (APT) 1960			
	(B) Pemegang Pajak Tanah PTP & Selain Dari 6(A)			
	i. Surat Akujanji & Tanggungrugi perolehan Tanah Tapak Pemasangan Elektrik yang ditandatangani oleh Pemilik/Pemaju/Pemegang Pajakan Berdaftar			
	ii. 15 salinan Pre-Com Plan PE (Endorsed By Licensed Surveyors) yang menunjukkan kedudukan & keluasan keseluruhan tanah dan kedudukan & keluasan tapak PE beserta talian/kabel dengan 'bearing', 'distance' & 'connection point'.			
	iii. 1 salinan hakmilik / carian rasmi hakmilik			
	iv. Jaminan Bank / Bank Guarantee			

A	Senarai Dokumen (Diserah kepada unit Perancang TNB sebelum PIAT Sivil dijalankan kecuali perkara 2 & 7)	ADA	TIADA	TIDAK BERKAITAN
	Perkara			
7	Surat Jaminan <i>Waterproofing</i> (minimum 5 tahun dari tarikh penyerahan pencawang) Water proofing: i. 1 lapis <i>Water Proofing Membrane</i> ii. Cements mortar topping / Rendered iii. Bumbung mesti <i>Fully Weather Proof</i> dengan 2 lapisan 20 mm <i>Mastic Asphalt</i> iv. Ujian <i>Water Pounding</i> perlu dilaksanakan dengan disaksikan oleh Pegawai TNB			
8	Earthing Test Result $<3\Omega$ i. Kaedah pengujian mengikut piawai IEEE Standard 81 ii. Salinan sijil bagi alat pengujian yang masih dalam tempoh sahlaku calibration. iii. Keputusan ujian earth resistance disahkan oleh Jurutera Perkhidmatan. (ST Service Engineer) - gambar semasa pengujian dan keputusan pengujian dilampirkan			
9	Bagi Pencawang Jenis <i>Attached Building</i> : i. Senarai Semak Penerimaan Sistem Pencegah Kebakaran ii. Salinan Surat Pengesahan Bahan Sistem Pemadam Kebakaran telah dimajukan			
10	Salinan Resit Cas Sambungan Pengguna (CSP)			
11	Surat Akujanji oleh pemaju i. Menjaga keselamatan pemasangan dan pencawang TNB ii. Sebarang kecurian / kehilangan pemasangan pada pencawang TNB adalah di bawah tanggungjawab pemaju sehingga pencawang dimulatugas			
Pengesahan oleh pegawai TNB & Cop:		Tarikh:		

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ANNEXURE 4

Pre-Inspection Acceptance Test (PIAT) Checklist For Government Project (Rujuk Annexure 2 Service Level Commitment)				
B	SIVIL STRUKTUR BANGUNAN	LULUS	GAGAL	TIDAK BERKAITAN
	Kerja-kerja / Perkara			
1	<p>Kegagalan Struktur – contoh retak, mendapan seperti yang disyorkan oleh Jurutera Profesional C&S</p> <p>Note: 1. Lantai & Trench PE mesti diperbuat daripada <i>Reinforced Concrete</i> (RC) yang boleh menampung berat tidak kurang daripada 5ton/m² untuk Bilik Alatubah; 1 ton/m² untuk Bilik Suis & Bilik Meter dan diikat kepada <i>Structural Beam</i> pencawang. 2. <i>Slope Protection</i> yang diperakui oleh Jurutera Profesional C&S (contoh : <i>Retaining wall</i>) wajib disediakan bagi kawasan tapak yang di tambak / cerun bukit. 3. Tapak PE perlu diratakan dan sama aras dengan jalan utama dan jarak minima dari <i>Slope Protection</i> (bagi kawasan bercerun) ke pagar PE tidak kurang daripada 3 meter.</p>			
2	<p>Konkrit Apron sebahagian daripada struktur bangunan & diikat kepada struktur bangunan</p> <p>a) Pemeriksaan Visual (tiada retakan atau mendapan)</p>			
3	<p>Ramp Depan Pintu Pencawang (15^o slope)</p> <p>a) Pemeriksaan Visual (<i>Ramp Grooved Line V-shape</i>)</p> <p>b) Garis demarcation hitam dan kuning disediakan</p>			
4	<p>Sekiranya Pencawang berada di kawasan lapang, Rod Udara Penangkap Kilat (Air Terminal Rod) perlu disediakan & disambung ke pembumian utama melalui 25 x 3mm copper strip dikonkritkan bersama dengan Tiang Konkrit Bangunan, termasuk terminal ujian di 4 penjuru PE pada aras ketinggian 2500mm dari aras apron/lantai.</p>			

C	LUAR BANGUNAN PE	LULUS	GAGAL	TIDAK BERKAITAN
1	<p>Bollard</p> <p>Memasang bollard (jenis pre-cast) di sempadan tanah/tapak pencawang elektrik dengan jarak maximum 1500mm antara bollard</p>			
2	<p>Maximum 11W (or less than 11W) Self Ballasted Double Capped Weatherproof T8 LED Tube (Frosted Type, Length 600mm) Wall Mounted Luminaire Above Door Level Height C/W Photoelectric Control Unit (PECU), Weatherproof Casing (IP650 And 20A SPN Contactor Including All Necessary Accessories</p> <p>1. Stand-Alone PE Single Chamber: 5 nos 2. Attached Building PE Single Chamber: 5 nos 3. Attached Building PE Double Chamber: 6 nos 4. Stand Alone SSU with Single Chamber: 7 nos 5. Attached SSU: 6 nos 6. Attached SSU with Single Chamber: 7 nos</p>			
3	<p>Perkarangan PE & Laluan Masuk 4m lebar berturap ke pencawang boleh dimasuki oleh lori 16 tan</p>			
4	<p>Premix: - 150mm Sand Blanket - 150mm Crusher-run with layer of Bituminous Prime Coat (on top) - 50mm Binder Course Asphaltic Concrete with layer of Bituminous Tack Coat (on top) - 50mm Wearing Course Asphaltic Concrete. Coring Test: Coring test perlu dilaksanakan sebelum PIAT dan laporan perlu diserahkan semasa PIAT.</p>			
5	<p>Paip laluan kabel VT/VR bermula dari luar kawasan pencawang: 1. Melepasi longkang sekiranya bahu jalan ≥ 1 meter 2. Melepasi 'road kerb' sekiranya < 1 meter 3. Paip tidak boleh berada di atas "Moonsoon Drain"</p>			

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6	Manhole untuk kabel HT dan LV. Spesifikasi manhole seperti dalam Buku Panduan Piawai Rekabentuk Pencawang Elektrik			
7	Tiada peparit yang terbuka di hadapan pintu pagar			
8	Door hasp (penyangkut kunci) pintu pagar di luar pagar			
9	Lubang pada door hasp pintu pagar berukuran garispusat 24mm - 32mm			
10	Door latch sekurang-kurangnya 600mm pada bahagian bawah pagar			
11	Parit/longkang 1. Saiz Longkang - 225mm dia. (Half round) 2. Bersih dari sampah sarap & air tidak bertakung			
12	Sistem peparitan di sekeliling pencawang di sambung ke peparitan utama pembangunan			
13	Papan tanda/signage dibekalkan/dipasang di dinding pencawang			

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D	PINTU, LOUVERS DAN DINDING	BILIK TRANSFORMER 1		BILIK SUIS		BILIK TRANSFORMER 2	
		LULUS	GAGAL	LULUS	GAGAL	LULUS	GAGAL
1	<p>Saiz pintu ikut spesifikasi: (as per SGP TNB)</p> <p><u>Switchgear room:</u> PE Stand Alone: 1500mm (W) x 3000mm (H) F.R.P COMPOSITE DOOR WITH ANTI VERMIN Netting MESH 10 SWG 23 ' STAINLESS STEEL perlu dipasang pada bahagian dalam pintu. PE Attached: 1500mm (W) x 3000mm (H) F.R.P COMPOSITE DOOR (FULL SOLID)</p> <p><u>Transformer room:</u> PE Stand Alone: 2400mm (W) x 3000mm (H) F.R.P COMPOSITE DOOR WITH ANTI VERMIN Netting MESH 10 SWG 23 ' STAINLESS STEEL perlu dipasang pada bahagian dalam pintu. PE Attached: 2400mm (W) x 3000mm (H) F.R.P Composite Door (FULL SOLID)</p>						
2	<p>Lubang pada 'door hasp' dari jenis 'MS Steel' berukuran garispusat 24mm - 32mm dan diikat menggunakan double 'Bolt & Nut' bergarispusat 10mm. Perlu ada pelindung kunci (<i>padlock cover</i>) dengan ketebalan min 3mm dengan saiz yang bersesuaian untuk memudahkan keluar/masuk kunci (<i>padlock</i>)</p>						
3	<p>Sediakan Tanda Nama "Bilik Suis" & "Bilik Alatubah" , saiz papan tanda nama 3 inci tinggi dan dipasang di atas pintu.(Tulisan Putih latarbelakang Hitam) Sediakan papan tanda "AWAS", "BAHAYA" & "Dilarang Masuk" pada pintu alatubah, alatsuis dan 4 muka pagar</p>						
4	Meja gantung 1 1/2 kaki X 2 kaki untuk buku lawatan						
5	Dinding pemisah (230mm) antara Bilik Alatsuis & Alatubah dengan ketinggian 2100mm						
6	Netting MESH 10 SWG 23 ' STAINLESS STEEL perlu dipasang pada bahagian luar tingkap (batu angin) dan boleh dibuka untuk senggaraan.						

E	LANTAI & TRENCH	BILIK TRANSFORMER 1		BILIK SUIS		BILIK TRANSFORMER 2	
		LULUS	GAGAL	LULUS	GAGAL	LULUS	GAGAL
1	Lantai perlu dirata dan dilicinkan (smooth rendered) dan dicat dengan 1 lapisan cat Epoxy Green Paint (Copon EA-4 Evergreen or equivalent)						
2	Dasar dan dinding peparit hendaklah licin. (smooth rendered)						
3	Bucu dinding peparit tidak tajam. (no sharp edges)						
4	Peparitan kabel bersih & tiada sampah sarap, lumpur, air etc. Lubang paip perlu ditutup dengan polystyrene bagi mencegah kemasukan air						
5	Transformer Plinth selebar 1250mm						
7	Peparit (trench) kabel lebar 900mm, dengan kedalaman 1500mm						
8	Tebing antara trench ke dinding belakang switchgear 760mm						
9	Tiada peparit yang terbuka di hadapan pintu masuk						

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F	KERJA - KERJA CAT	BILIK TRANSFORMER 1		BILIK SUIS		BILIK TRANSFORMER 2	
		LULUS	GAGAL	LULUS	GAGAL	LULUS	GAGAL
1	<p>Dinding dalam Pencawang dicat dengan cat I.C.I.White Maxlite or equivalent</p> <p>Dinding luar Pencawang (Stand-alone) dicat dengan cat I.C.I. Weather Shield or equivalent.</p> <p>1. Jalur korporat TNB 900mm dari aras lantai 2. Jalur bawah (Biru: kod 11326) 150mm tebal 3. Jalur atas (merah: kod 14238) 150mm tebal 4. Latar belakang dinding berwarna kelabu TNB kod 10397 atau MENGIKUT WARNA BERSESUAIAN DENGAN WARNA PEMBANGUNAN SEKELILINGNYA (Arahan NP A01/2016)</p> <p>Dinding luar Pencawang (Attach) dicat dengan cat I.C.I. Weather Shield or equivalent dengan Jalur Korporat pada pintu sahaja.</p>						

G	BILIKSUIS	LULUS	GAGAL	TIDAK BERKAITAN
	Kerja-kerja / Perkara			
1	Main DB satu fasa 63A lengkap dengan RCD, fuse switch dan MCB			
2	<p>Punca LV ke DB diambil dari Peti Pembekal (Feeder Pillar)</p> <p>Nota: Bagi Pencawang Elektrik Tanpa alatubah/feeder pillar, pendawaian punca LV ke DB perlu disediakan oleh pengguna dari Essential Switchboard pengguna atau dari punca bekalan LV TNB sediaada dari luar</p>			
3	<p>1 Gang 13A 3 Pin Switched Socket Outlet Metalclad Type (1450mm above Finished Floor Level)</p> <p>1. Stand-Alone PE Single Chamber: 3 nos 2. Attached Building PE Single Chamber: 5 nos 3. Attached Building PE Double Chamber: 5 nos 4. Stand Alone SSU with Single Chamber: 5 nos 5. Attached SSU: 5 nos 6. Attached SSU with Single Chamber: 5 nos</p>			
4	<p>Maximum 20W (or less than 20W) Self Ballasted Double Capped T8 LED Tube (Frosted Type, Length 1200mm)</p> <p>i. Ceiling Mounted Luminaire Bare Channel Type with Suspension Rod (2700mm FFL Height Including All Necessary Accessories) a. PE - 2 nos b. SSU - 3 nos</p> <p>ii. Wall Mounted Luminaire Bare Channel Type Including All Necessary Accessories a. PE - 2 nos b. SSU - 3 nos</p>			
6	<p>Satu (min) suis punca lampu untuk 'internal lighting'</p> <p>Satu (min) suis punca lampu untuk 'external lighting'</p>			
7	Sekurangnyanya 2 bilangan lampu kecemasan disediakan.			
8	Pendawaian elektrik dalam keadaan baik (PVC Piping berwarna oren, Switch, DB, Exhaust Fan, Soket Kuasa, Photocell dan Contactor 20 A).			
9	<p>1. Ujian atas lampu 2. Ujian atas Photocell 3. Ujian pelantikan (RCD) 4. Ujian pencahayaan (min 400 lux) 5. Ujian lampu kecemasan</p>			

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10	Earthing Terminal 300mm x 50mm x 6mm Copper Bar termasuk lima lubang dgn Brass bolt & nut 3/8"x1". i. 300mm bawah aras lantai PE di dinding trench: a. Dalam trench bilik suis untuk perkakasuis (2 nos) b. Di dalam trench Feeder Pillar untuk setiap Feeder Pillar (1 nos) ii. Di tepi dinding untuk Bateri Charger/RTU Scada dll (1 nos)			
11	Earth Bonding menggunakan copper tape 25mm X 3mm dipasang di dalam Trench, 300mm bawah dari aras lantai PE; Untuk sambungan pbumian ke Bilik Meter dan Battery Charger (yang tiada Trench), Earth Bonding dipasang embeded di dinding PE, 300mm atas dari aras lantai PE .			
12	Kesemua sistem pbumian dalam PE disambung ke Earthing Rod			
13	Ventilation System - 300mm Diameter Exhaust Fan C/W Auto Shutter (To Be Connected With Clean Agent System), Thermostat Control (300mm below Soffit Slab) 1. Pencawang Jenis Attached Building Single Chamber 2 nos 2. Pencawang Jenis Attached Double Chamber 3 nos 3. SSU Jenis Attached 2 nos			
14	1 unit pemadam api mudah-alih jenis CO2 (2kg) dengan demarcation dan papan tanda/signage disediakan.			

H	BILIK ALATUBAH TX 1	LULUS	GAGAL	TIDAK BERKAITAN
	Kerja-kerja / Perkara			
1	1 bilangan 'socket outlet ' 13A disediakan.			
2	Maximum 20W (or less than 20W) Self Ballasted Double Capped T8 LED Tube (Frosted Type, Length 1200mm) i. 1 nos Ceiling Mounted Luminaire Bare Channel Type with Suspension Rod (2700mm FFL Height Including All Necessary Accessories) ii. 1 nos Wall Mounted Luminaire Bare Channel Type Including All Necessary Accessories			
3	1 bilangan suis punca lampu			
4	1 bilangan lampu kecemasan disediakan.			
5	Pendawaian elektrik dalam keadaan baik (PVC Piping berwarna oren, Switch, Soket Kuasa, lampu kecemasan)			
6	1. Ujian atas lampu 2. Ujian pelantikan (RCD) 3. Ujian pencahayaan (min 400 lux) 4. Ujian lampu kecemasan			
7	Earthing Terminal 300mm x 50mm x 6mm Copper Bar termasuk lima lubang dgn Brass bolt & nut 3/8"x1". 300mm bawah aras lantai PE di dinding trench. Dalam trench ada 1 nos setiap satu dalam LV dan HV trench.			
8	Earth Bonding menggunakan copper tape 25mm X 3mm dipasang 300mm dari aras lantai PE di dalam trench.			
9	Kesemua sistem pbumian dalam PE disambung ke Earthing Rod			
10	1 bilangan pemadam api mudah-alih jenis ABC 9kg dengan demarcation dan papan tanda/signage disediakan			

I	BILIK ALATUBAH TX 2	LULUS	GAGAL	TIDAK BERKAITAN
	Kerja-kerja / Perkara			
1	1 bilangan 'socket outlet ' 13A disediakan.			

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2	Maximum 20W (or less than 20W) Self Ballasted Double Capped T8 LED Tube (Frosted Type, Length 1200mm) i. 1 nos Ceiling Mounted Luminaire Bare Channel Type with Suspension Rod (2700mm FFL Height Including All Necessary Accessories) ii. 1 nos Wall Mounted Luminaire Bare Channel Type Including All Necessary Accessories			
3	1 bilangan suis punca lampu			
4	1 bilangan lampu kecemasan disediakan.			
5	Pendawaian elektrik dalam keadaan baik (PVC Piping berwarna oren, Switch, Soket Kuasa, lampu kecemasan)			
6	1. Ujian atas lampu 2. Ujian pelantikan (RCD) 3. Ujian pencahayaan (min 400 lux) 4. Ujian lampu kecemasan			
7	Earthing Terminal 300mm x 50mm x 6mm Copper Bar termasuk lima lubang dgn Brass bolt & nut 3/8"x1". 300mm bawah aras lantai PE di dinding trench. Dalam trench ada 1 nos setiap satu dalam LV dan HV trench.			
8	Earth Bonding menggunakan copper tape 25mm X 3mm dipasang 300mm dari aras lantai PE di dalam trench.			
9	Kesemua sistem pbumian dalam PE disambung ke Earthing Rod			
10	1 bilangan pemadam api mudah-alih jenis ABC 9kg dengan demarcation dan papan tanda/signage disediakan			

J	MANHOLE / MANHOLE FEEDER PILLAR	LULUS	GAGAL	TIDAK BERKAITAN
	Kerja-kerja / Perkara			
1	Manhole mengikut size dan spesifikasi TNB			
2	i. Manhole Slab mengikut spesifikasi TNB ii. Kekuatan setiap Slab Manhole boleh menampung beban minima 100kg			

K	Dokumen yang perlu ada semasa PIAT	LULUS	GAGAL	TIDAK BERKAITAN
1	Pelan susunatur Pencawang yang disahkan oleh TNB			
2	Rajah skematik pendawaian elektrik (termasuk rajah skematik Automatic Ventilation)			
3	Pelan susunan (layout) pbumian & bonding yang disahkan TNB			
5	Ujian Pbumian < 3 ohms			
6	Layout Plan untuk Automatic Fire System jenis clean agent (berikan nama agen/ gas) untuk Pencawang Jenis Attached Building kepada bangunan berpenghuni atau genset			
7	Jalan masuk mesti tiada halangan untuk masuk ke pencawang TNB			

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2	"Through hole" 100mm disediakan di kakilima			
3	LV/MV LPC - Bilik Jangka (saiz bergantung kepada bilangan jangka) disediakan			

M	Perkara diperlukan sebelum Mulatugas	LULUS	GAGAL	TIDAK BERKAITAN
1	Dinding dan lantai pencawang perlu dibaiki semula setelah kerja-kerja pemasangan peralatan TNB siap.			
2	TNB Logo to Details- Mengikut Lampiran I: Rekabentuk Piawai Papan Tanda Pencawang			
3	Earth Chamber hendaklah dari jenis konkrit siap dipasang.			
4	Dua kelip hendaklah diikat pada copper strip di copper rod			
5	Tanda pengesahan Bomba hendaklah terlekat pada silinder CO2 dan ABC mudah alih. (tarikh pengesahan bomba < 1 bulan)			

O	Perkara diperlukan pada hari mulatugas (PIAT elektrik)	LULUS	GAGAL	TIDAK BERKAITAN
1	Sistem pemadam api automatik dari jenis-jenis clean agent mesti di mulatugas pada hari mulatugas pencawang.			
2	Kunci panel pemadam api automatik diterima.			

ANNEXURE 5 – Borang Pemakluman Status Projek



PEMAKLUMAN STATUS PROJEK / NOTIFICATION OF PROJECT STATUS

myTNB No.	:	PRJ-XXX-XXX-XXXX
Service Request	:	400XXXXXXXX
Service Notification	:	011XXXXXXXXXX
Project No.	:	
Site Address	:	123, Jalan ABC, Kuala Lumpur

Pelanggan yang dihormati,

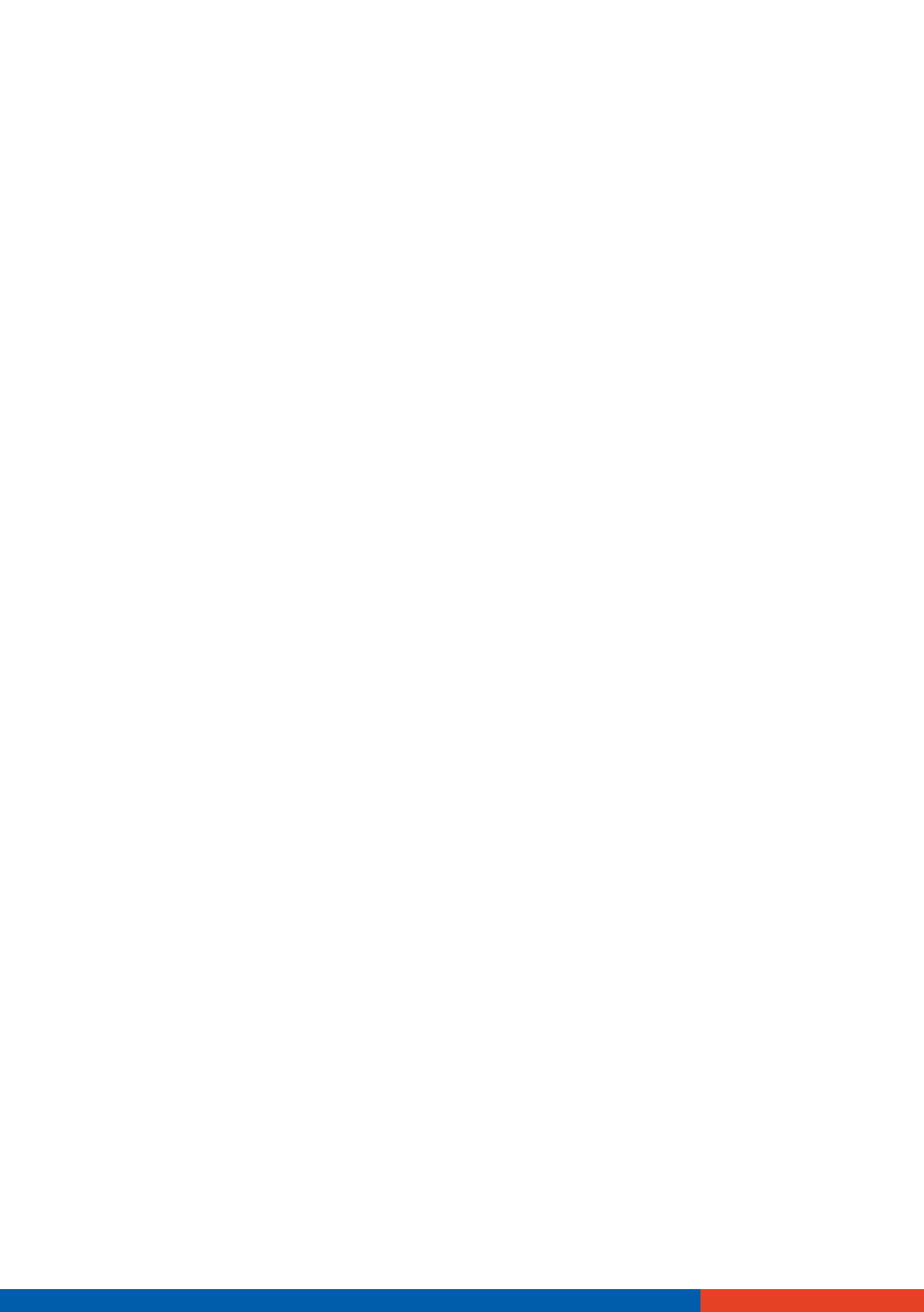
Sukacita dimaklumkan bahawa kerja-kerja pemasangan infrastruktur telah siap dan sedia untuk pemasangan meter. Sehubungan dengan itu, bagi tujuan peny-aluran bekalan elektrik ke premis berkaitan pihak tuan diminta untuk memajukan permohonan pemasangan jangka TNB melalui sistem [myTNB Self Service Portal](#) dan seterusnya menjelaskan pembayaran deposit selepas menerima invoice daripada pihak TNB.

Terima kasih.

Dear valued customer,

We are pleased to inform you that the installation work has completed and ready for meter installation. For electrical connection to the related premises, please submit the application for TNB meter installation via [myTNB Self Service Portal](#) and make payment for the deposit amount upon receiving the invoice from TNB.

Thank you.





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