

KERAJAAN MALAYSIA

**Pelaksanaan Syarat Perubahan Harga
(*Variation Of Price – VOP*) dan
Inisiatif Tambahan Kerajaan Pasca Pandemik
dalam Kontrak Kerja Kerajaan**

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PERJANJIAN TAMBAHAN

Lampiran G(DB)

PK 2.22 PELAKSANAAN SYARAT PERUBAHAN HARGA (*VARIATION OF PRICE – VOP*) DALAM KONTRAK KERJA DAN INISIATIF TAMBAHAN KERAJAAN PASCA PANDEMIK**1. Tujuan**

- 1.1 Kerajaan melalui Perutusan Khas YAB Perdana Menteri pada 28 Jun 2021 bagi Pakej Perlindungan Rakyat Dan Pemulihan Ekonomi (PEMULIH) telah bersetuju untuk melaksanakan Syarat bagi Perubahan Harga atau *Variation of Price* (VOP) dalam kontrak kerja berikutan peningkatan ketara kos beberapa bahan binaan demi memastikan projek Kerajaan tidak terjejas dan dapat disiapkan mengikut jadual.
- 1.2 Pekeliling Perbendaharaan (PP)/Perolehan Kerajaan (PK) 2.4 ini bertujuan untuk memaklumkan mengenai syarat dan kaedah pengiraan VOP dalam kontrak kerja Kerajaan.
- 1.3 PP/PK2.4 ini juga bertujuan untuk memaklumkan beberapa inisiatif tambahan bagi membantu kontraktor melaksanakan kontrak kerja Kerajaan pasca pandemik.
- 1.4 PP/PK2.4 adalah terpakai untuk projek kerja Kerajaan di bawah peruntukan pembangunan Kerajaan Persekutuan sahaja.

2. Latar Belakang

- 2.1 Kerajaan adalah responsif terhadap kenaikan harga bahan binaan di pasaran berikutan gangguan rantaian pasaran kesan ketidaktentuan ekonomi global dan ketegangan geopolitik antarabangsa.
- 2.2 Pemantauan berterusan dilaksanakan oleh Jabatan Kerja Raya (JKR) berdasarkan kepada Siaran Khas 1, 2 dan 3 yang dikeluarkan oleh Jabatan Perangkaan Malaysia (*Department of Statistics Malaysia-DOSM*). Dapatan menunjukkan terdapat kenaikan signifikan kepada Indeks Kos Bahan Binaan Bangunan dan Harga Unit Purata bagi bahan.
- 2.3 Berikutan itu, Kerajaan memutuskan untuk melaksanakan VOP dalam kontrak kerja Kerajaan yang dipelawa secara sebut harga/tender bagi memastikan perolehan projek Kerajaan tidak terjejas dan dapat disiapkan mengikut skop kerja.

2.3.1 Kerja-kerja Kejuruteraan Awam

Pelaksanaan perubahan harga diperluaskan kepada semua jenis bahan binaan seperti yang dikeluarkan dalam **Siaran Khas 1** oleh DOSM. Pengiraan perubahan harga adalah berasaskan kepada perubahan harga unit bagi sebelas (11) bahan binaan.

2.3.2 Kerja-kerja Binaan Bangunan

Pelaksanaan perubahan harga diperluaskan kepada lima belas (15) bahan binaan terpilih yang digunakan dalam lapan (8) kategori bangunan mengikut kawasan seperti yang dikeluarkan dalam **Siaran Khas 2** oleh DOSM. Pengiraan perubahan harga adalah berasaskan kepada perubahan Indeks Kos lima belas (15) Bahan Binaan Bangunan termasuk bar keluli.

2.3.3 Kerja-Kerja Mekanikal dan Elektrikal

Pengiraan perubahan harga adalah berasaskan kepada Indeks Kos Komponen mengikut tujuh (7) kategori komponen utama seperti yang dikeluarkan dalam **Siaran Khas 3** oleh DOSM.

3. Kaedah Pelaksanaan Syarat Perubahan Harga Bagi Kontrak Secara Konvensional

- 3.1 Syarat perubahan harga bagi kontrak secara konvensional dengan pelawaan secara sebut harga dan tender adalah termasuk Kerja-Kerja Binaan Bangunan, Kerja-Kerja Kejuruteraan Awam dan Kerja-Kerja Mekanikal dan Elektrikal yang masih dalam pembinaan pada **1 Januari 2021** dan diberikan kepada projek yang mana Surat Setuju Terima (SST) dikeluarkan sehingga **30 Jun 2022**. Pengiraan VOP adalah bermula pada 1 Januari 2021 sehingga tamat kontrak tertakluk kepada kelayakan tuntutan VOP untuk empat (4) item atau semua bahan seperti di perenggan 8 pekeliling ini (Simulasi Kenaan VOP).
- 3.2 Pelaksanaan VOP bagi kerja dipelawa secara sebut harga adalah tertakluk kepada perkara berikut:
 - (i) Perolehan sebut harga dengan had nilai dari RM500 ribu hingga RM800 ribu yang menggunakan SST bagi tempoh pembinaan melebihi tiga (3) bulan; dan
 - (ii) Projek yang telah siap dan dimuktamadkan akaun akhir sebelum atau pada 30 Jun 2022, VOP adalah tidak terpakai bagi projek tersebut.

3.3 Kerja-Kerja Binaan Bangunan

3.3.1 Kaedah pengiraan perubahan untuk kerja-kerja binaan bangunan bagi projek dalam pembinaan bermula dari 1 Januari 2021 sehingga 31 Disember 2021 adalah berasaskan kepada satu (1) senarai bahan binaan iaitu besi bertetulang manakala dari 1 Januari 2022 sehingga kontrak tamat adalah berasaskan kepada semua bahan binaan termasuk bar keluli tertakluk kepada perubahan Indeks Kos Bahan Binaan Bangunan. Maklumat terperinci dijelaskan dalam lampiran berikut:

- (i) bagi kontrak secara konvensional yang baharu seperti di **Lampiran A/BW/K-B**.
- (ii) bagi kontrak secara konvensional yang masih dalam pembinaan seperti di **Lampiran A/BW/K-L** bagi pelawaan secara tender dan **Lampiran SEBUT HARGA (Kerja-kerja Binaan Bangunan)** bagi pelawaan secara sebut harga.

3.3.2 Dalam menguruskan syarat perubahan harga ini, perkara-perkara berikut perlu dilaksanakan oleh Agensi:

- (i) memasukkan peruntukan khas kepada syarat-syarat kontrak ke dalam dokumen tender/kontrak seperti di **Lampiran A/BW/K-B** atau **Lampiran A/BW/K-L** bagi pelawaan secara tender dan **Lampiran SEBUT HARGA (Kerja-kerja Binaan Bangunan)** bagi pelawaan secara sebut harga, yang mana berkenaan, bagi tujuan penyeragaman;
- (ii) nilai yang diambilkira dalam pengiraan perubahan harga adalah nilai kerja pembina (*builder's work*) sahaja; dan
- (iii) kerja-kerja membaiki, mengubahsuai dan meroboh bangunan tidak layak diberi perubahan harga. Walau bagaimanapun bagi kerja-kerja ubahsuai yang melibatkan kerja sambungan yang menyerupai bangunan lengkap dengan asas, dinding dan bumbung dan jika jumlah nilainya merupakan sebahagian utama iaitu melebihi 50% daripada jumlah nilai kerja membaiki, kerja sambungan dan mengubahsuai sesebuah bangunan, maka semua kerja membaiki dan mengubahsuai adalah tertakluk kepada syarat perubahan harga ini. Kategori bagi kerja-kerja seperti ini hendaklah mengikut kategori jenis bangunan sambungan yang berkenaan.

3.4 Kerja-Kerja Kejuruteraan Awam

3.4.1 Kaedah pengiraan perubahan untuk kerja-kerja kejuruteraan awam bagi projek dalam pembinaan bermula dari 1 Januari 2021 sehingga 31 Disember 2021 adalah berasaskan kepada tiga (3) senarai bahan binaan iaitu besi bertetulang, *crushed aggregate (crusher run)* dan *(mild steel pipe)* (paip air dan paip pembentungan) manakala dari 1 Januari 2022 sehingga kontrak tamat adalah berasaskan kepada semua bahan binaan tertakluk kepada perubahan harga unit bahan binaan tertakluk kepada kuantiti maksimum yang ditetapkan. Maklumat terperinci dijelaskan dalam lampiran berikut:

- (i) bagi kontrak secara konvensional yang baharu seperti di **Lampiran B/CW/K-B** ;
- (ii) nilai yang diambilkira dalam pengiraan perubahan harga adalah nilai kerja pembina (*builder's work*) sahaja; dan
- (iii) bagi kontrak secara konvensional yang masih dalam pembinaan seperti di **Lampiran B/CW/K-L** bagi pelawaan secara tender dan **Lampiran SEBUT HARGA (Kerja-kerja Kejuruteraan Awam)** bagi pelawaan secara sebut harga.

3.4.2 Dalam menguruskan syarat perubahan harga ini Agensi hendaklah memasukkan peruntukan khas kepada syarat-syarat kontrak ke dalam dokumen tender/kontrak seperti di **Lampiran B/CW/K-B** atau **Lampiran B/CW/K-L** bagi pelawaan secara tender dan **Lampiran SEBUT HARGA (Kerja-kerja Kejuruteraan Awam)** bagi pelawaan secara sebut harga, yang mana berkenaan, bagi tujuan penyeragaman.

3.5 Kerja-kerja Mekanikal Dan Elektrikal (M&E)

3.5.1 Pelaksanaan perubahan harga untuk kerja-kerja M&E bagi projek dalam pembinaan bermula dari 1 Januari 2021 sehingga 31 Disember 2021 adalah berasaskan kepada satu (1) senarai bahan binaan iaitu *copper* manakala dari 1 Januari 2022 sehingga kontrak tamat adalah berasaskan kepada semua bahan binaan tertakluk kepada Indeks Kos Komponen. Maklumat terperinci dijelaskan dalam lampiran berikut:

- (i) bagi kontrak secara konvensional yang baharu seperti di **Lampiran C/ME/K-B**.
- (ii) bagi kontrak secara konvensional yang masih dalam pembinaan seperti di **Lampiran C/ME/K-L** bagi pelawaan secara tender dan

Lampiran SEBUT HARGA (Kerja-kerja Mekanikal dan Elektrik) bagi pelawaan secara sebut harga.

- 3.5.2 Indeks Kos Komponen ditetapkan seperti di **Appendix A kepada Lampiran C/ME/K-B dan Lampiran C/ME/K-L** bagi pelawaan secara tender dan **Appendix A kepada Lampiran SEBUT HARGA (Kerja-kerja Mekanikal dan Elektrik)** bagi pelawaan secara sebut harga.
- 3.5.3 Dalam menguruskan syarat perubahan harga ini Agensi hendaklah memasukkan peruntukan khas kepada syarat-syarat kontrak ke dalam dokumen tender/kontrak seperti di **Lampiran C/ME/K-B atau Lampiran C/ME/K-L** bagi pelawaan secara tender dan **Lampiran SEBUT HARGA (Kerja-kerja Mekanikal dan Elektrik)** bagi pelawaan secara sebut harga, yang mana berkenaan, bagi tujuan penyeragaman.

3.6 Perjanjian Tambahan

- 3.6.1 Bagi projek yang masih dalam pembinaan, Agensi hendaklah mengikat satu Perjanjian Tambahan (*Supplemental Contract*) dengan Kontraktor bagi mengambil kira pemakaian kaedah perubahan harga mulai 1 Januari 2021 dan hendaklah disempurnakan selewat-lewatnya 30 Jun 2023. Contoh Format Perjanjian Tambahan adalah seperti **Lampiran G(K)** bagi pelawaan secara tender dan **Lampiran SEBUT HARGA (Perjanjian Tambahan)** bagi pelawaan secara sebut harga.
- 3.6.2 Kontraktor perlu menandatangani semula Perjanjian Tambahan seperti yang disertakan di dalam **Pelaksanaan Syarat Perubahan Harga (Variation Of Price – VOP)** untuk penguatkuasaan VOP mengikut syarat-syarat terkini.

4. Kaedah Pelaksanaan Syarat Perubahan Harga Bagi Kontrak Secara Reka Dan Bina

- 4.1 Pelaksanaan Syarat Perubahan Harga Khas bagi kontrak secara reka dan bina hendaklah dibuat berdasarkan perkongsian risiko sama rata (50:50).
- 4.2 Syarat perubahan harga bagi kontrak secara reka dan bina adalah termasuk Kerja-Kerja Binaan Bangunan, Kerja-Kerja Kerjuruteraan Awam dan Kerja-Kerja Mekanikal dan Elektrikal yang masih dalam pembinaan pada **1 Januari 2021** dan diberikan kepada projek yang mana Surat Setuju Terima (SST) dikeluarkan sehingga 30 Jun 2022. Pengiraan VOP adalah bermula pada 1 Januari 2021 sehingga tamat kontrak tertakluk kepada

kelayakan tuntutan VOP untuk empat (4) item atau semua bahan seperti di perenggan 8 pekeling ini (Simulasi Kenaan VOP).

4.3 Kerja-Kerja Binaan Bangunan

4.3.1 Kaedah pengiraan perubahan untuk kerja-kerja binaan bangunan bagi projek dalam pembinaan bermula dari 1 Januari 2021 sehingga 31 Disember 2021 adalah berasaskan kepada satu (1) senarai bahan binaan iaitu besi bertetulang manakala dari 1 Januari 2022 sehingga kontrak tamat adalah berasaskan kepada semua bahan binaan termasuk bar keluli tertakluk kepada perubahan Indeks Kos lima belas (15) bahan Binaan Bangunan termasuk bar keluli. Maklumat terperinci dijelaskan dalam lampiran berikut:

- (i) bagi kontrak secara reka dan bina yang baru seperti di **Lampiran D/BW/DB-B** ;
- (ii) nilai yang diambilkira dalam pengiraan perubahan harga adalah nilai kerja pembina (*builder's work*) sahaja; dan
- (iii) bagi kontrak secara reka dan bina yang masih dalam pembinaan seperti di **Lampiran D/BW/DB-L** .

4.3.2 Dalam menguruskan syarat perubahan harga ini Agensi hendaklah memasukkan peruntukan khas kepada syarat-syarat kontrak ke dalam dokumen tender/kontrak seperti di **Lampiran D/BW/DB-B** atau **Lampiran D/BW/DB-L** , yang mana berkenaan, bagi tujuan penyeragaman.

4.4 Kerja-Kerja Kejuruteraan Awam

4.4.1 Kaedah pengiraan perubahan untuk kerja-kerja kejuruteraan awam bagi projek dalam pembinaan bermula dari 1 Januari 2021 sehingga 31 Disember 2021 adalah berasaskan kepada tiga (3) senarai bahan binaan iaitu besi bertetulang, *crushed aggregate (crusher run)* dan *mild steel pipe* (paip air dan paip pembentungan) manakala dari 1 Januari 2022 sehingga kontrak tamat adalah berasaskan kepada semua bahan binaan tertakluk kepada perubahan harga unit tertakluk kepada kuantiti maksimum yang ditetapkan. Maklumat terperinci dijelaskan dalam lampiran berikut:

- (i) bagi kontrak secara reka dan bina yang baharu seperti di **Lampiran E/CW/DB-B** ;
- (ii) nilai yang diambilkira dalam pengiraan perubahan harga adalah nilai kerja pembina (*builder's work*) sahaja; dan

- (iii) bagi kontrak secara reka dan bina yang masih dalam pembinaan seperti di **Lampiran E/CW/DB-L** .

4.4.2 Dalam menguruskan syarat perubahan harga ini Agensi hendaklah memasukkan peruntukan khas kepada syarat-syarat kontrak ke dalam dokumen tender/kontrak seperti di **Lampiran E/CW/DB-B** atau **Lampiran E/CW/DB-L** , yang mana berkenaan, bagi tujuan penyeragaman.

4.5 **Kerja-kerja Mekanikal Dan Elektrikal (M&E)**

4.5.1 Pelaksanaan perubahan harga untuk kerja-kerja M&E bagi projek dalam pembinaan bermula dari 1 Januari 2021 sehingga 31 Disember 2021 adalah berasaskan kepada satu (1) senarai bahan binaan iaitu *copper* manakala dari 1 Januari 2022 sehingga kontrak tamat adalah berasaskan kepada semua bahan binaan tertakluk kepada Indeks Kos Komponen. Maklumat terperinci dijelaskan dalam lampiran berikut:

- (i) bagi kontrak secara reka dan bina yang baharu seperti di **Lampiran F/ME/DB-B** .
- (ii) bagi kontrak secara reka dan bina yang masih dalam pembinaan seperti di **Lampiran F/ME/DB-L** .

4.5.2 Indeks Kos Komponen ditetapkan seperti di **Appendix A kepada Lampiran F/ME/DB-B** dan **Lampiran F/ME/DB-L** .

4.6 **Perjanjian Tambahan**

4.6.1 Bagi projek yang masih dalam pembinaan, Agensi hendaklah mengikat satu Perjanjian Tambahan (*Supplemental Contract*) dengan Kontraktor bagi mengambil kira pemakaian kaedah perubahan harga mulai 1 Januari 2021 dan hendaklah disempurnakan selewat-lewatnya 30 Jun 2023. Contoh Format Perjanjian Tambahan adalah seperti **Lampiran G(DB)** .

5. **Penetapan Indeks Kos/ Harga Unit Asas VOP**

5.1 Bagi projek dalam pembinaan, indeks kos/harga unit asas adalah seperti berikut:

5.1.1 **Bulan tender ditutup** bagi pelawaan tender/sebut harga yang ditutup pada/selepas 1 Januari 2021 atau bulan harga muktamad

dipersetujui oleh Jawatankuasa Rundingan Harga Agensi bagi pelawaan secara rundingan terus; dan

- 5.1.2 **Bulan Disember 2020** bagi kontrak yang masih dalam pembinaan pada 1 Januari 2021 dan pelawaan tender/sebut harga yang ditutup sebelum 1 Januari 2021 atau bulan harga muktamad dipersetujui oleh Jawatankuasa Rundingan Harga Agensi bagi pelawaan secara rundingan terus yang mana terkemudian.

6. Kemudahan Khas VOP

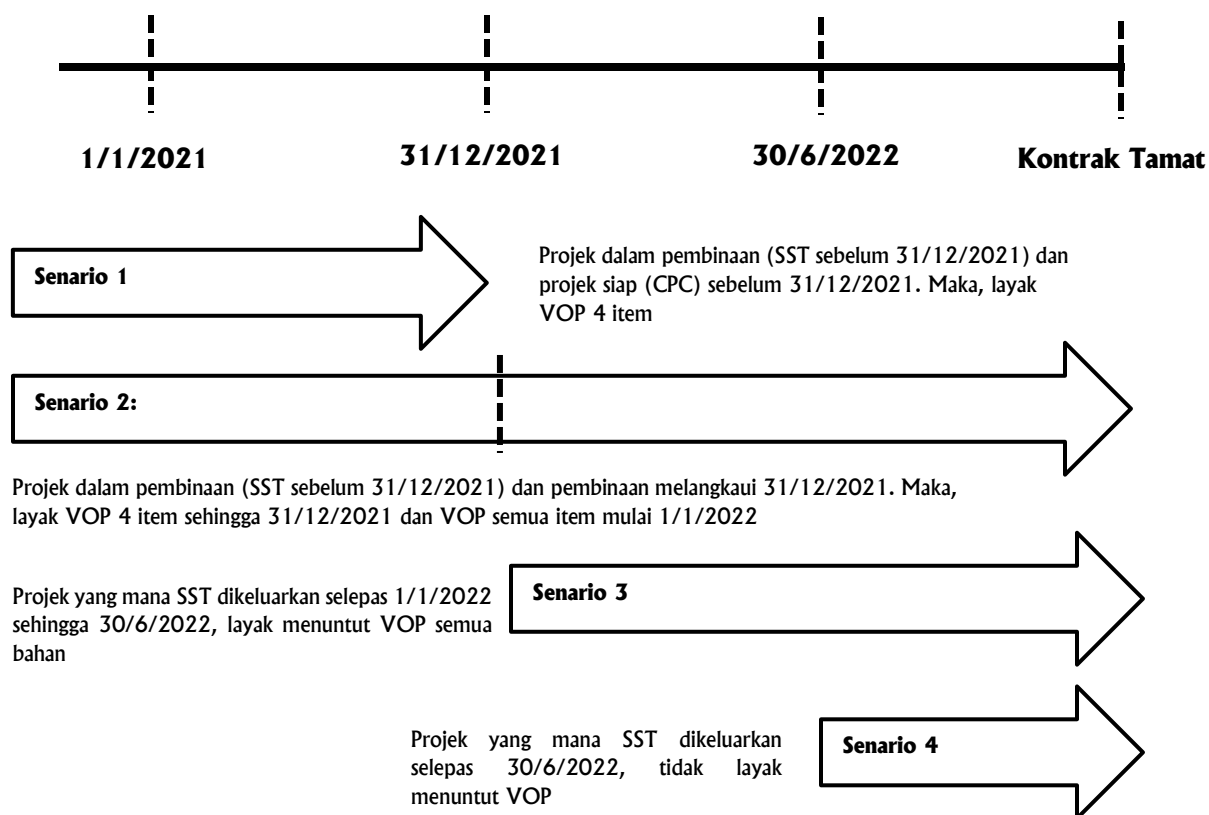
- 6.1 Bagi memastikan projek Kerajaan yang dilaksanakan tidak terjejas dan dapat disiapkan, Agensi hendaklah membuat bayaran kemajuan interim yang lebih kerap iaitu dua (2) kali sebulan mengikut nilai kerja sebenar.

7. Penamatan Bersama VOP

- 7.1 Jika sekiranya kontraktor masih tidak mampu untuk meneruskan projek walaupun syarat perubahan harga ini diberikan untuk menampung kenaikan harga bahan, maka kontrak boleh ditamatkan secara persetujuan bersama atas permintaan kontraktor. Kontraktor tidak akan dikenakan tindakan dengan syarat ia bukan berpunca daripada kelemahan pelaksanaan kontraktor. Namun begitu, 50% daripada nilai bon pelaksanaan hendaklah dirampas.
- 7.2 Bagi kontrak M&E lantikan secara sub-kontraktor dinamakan (*Nominated Sub Contractor*-NSC) yang sedang berjalan dalam peringkat pembinaan, sub-kontraktor masih berpeluang untuk meneruskan pelaksanaan perubahan harga bagi komponen M&E walaupun kontraktor utama tidak bersetuju dengan pelaksanaan perubahan harga ke atas bahan binaan bangunan. Bagi tujuan ini sub-kontraktor M&E perlu menandatangani perjanjian tambahan sebagai syarat yang ditetapkan, namun begitu NSC masih tertakluk kepada syarat-syarat kontrak utama sedia ada. Peraturan ini hanya tertakluk kepada NSC yang mana Kontraktor Utama bagi kontrak tersebut telah ditamatkan secara persetujuan bersama.
- 7.3 Tatacara pelaksanaan penamatan bersama hendaklah merujuk kepada perenggan 6(ii),PP/PK4.1.

8. Simulasi Kenaan VOP

8.1 Simulasi kenaan VOP adalah seperti berikut:



9. Inisiatif Tambahan Kerajaan Membantu Kontraktor Pasca Pandemik

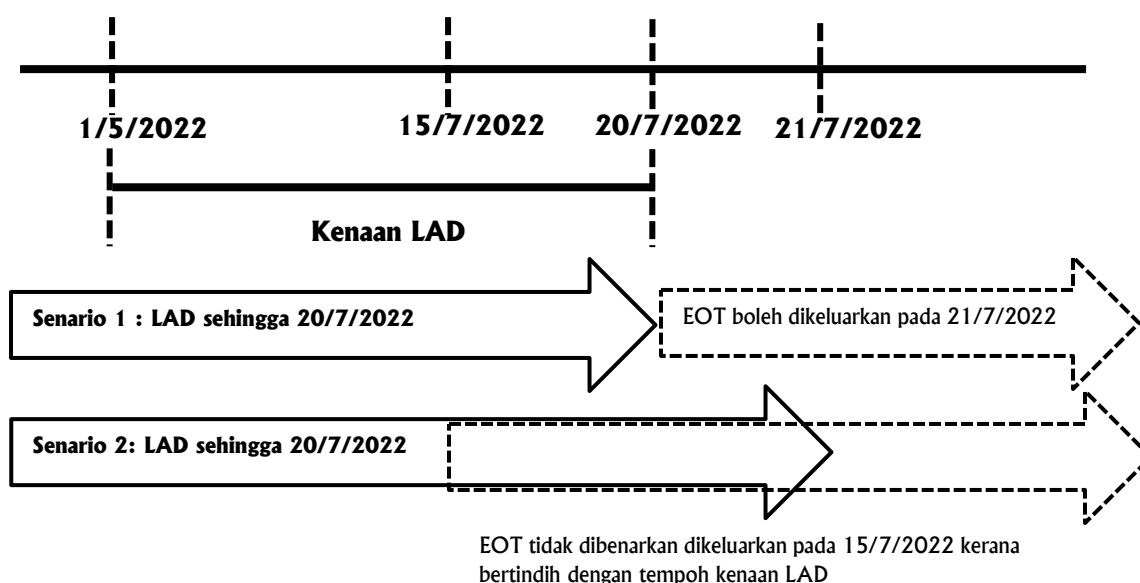
9.1 Selain VOP, Kerajaan bersetuju melaksanakan inisiatif tambahan bagi membantu kontraktor melaksanakan kontrak kerja di dalam ketidakpastian ekonomi seperti berikut:

9.2 **Pelanjutan Masa (EOT)** tertakluk kepada perkara di bawah:

9.2.1 Kontraktor diberikan lanjutan masa bagi tempoh maksimum enam (6) bulan tertakluk kepada pertimbangan Pegawai Penguasa/Pengarah Projek. Kontraktor hendaklah memohon EOT tersebut dan Pegawai Penguasa/Pengarah Projek hendaklah menimbang permohonan dan menentukan tempoh masa EOT yang bersesuaian dengan baki kerja dan tempoh penyiaian;

9.2.2 Dibenarkan bagi projek sudah mencapai 60% kemajuan kerja;

- 9.2.3 Keutamaan kepada projek berstatus sedang mengalami kelewatan dan berisiko dikategorikan sebagai projek sakit berdasarkan pertimbangan Pegawai Penguasa/Pengarah Projek;
- 9.2.4 Permohonan EOT oleh pihak kontraktor dibenarkan sehingga 31 Disember 2022 sahaja dan pemberian EOT boleh melangkaui tempoh 31 Disember 2022;
- 9.2.5 Namun yang demikian, pemberian EOT hendaklah tidak bertindih dengan tempoh Gantirugi Tertentu & Ditetapkan (LAD) yang telah dikenakan bagi mengelakkan Kerajaan perlu membayar semula kenaaan LAD tersebut kepada pihak kontraktor.
- 9.2.6 Bagi projek yang telah dikenakan LAD sebelum pemberian inisiatif EOT ini, pembayaran LAD masih perlu dibayar berdasarkan kontrak.
- 9.2.7 Pihak kontraktor dikehendaki untuk mengemukakan pindaan jadual pelaksanaan projek kepada Pegawai Penguasa/Pengarah Projek untuk disahkan dan pihak kontraktor dikehendaki menandatangani akujanji untuk mematuhi jadual pelaksanaan projek tersebut; dan
- 9.2.8 Pihak kontraktor tidak boleh menuntut apa-apa tuntutan kerugian dan perbelanjaan tambahan akibat lanjutan masa dan/atau apa-apa kerugian yang timbul daripada pelaksanaan projek ini.
- 9.2.9 Simulasi inisiatif pemberian EOT (dengan anggapan tarikh semasa adalah 21 Julai 2022) adalah seperti berikut:



9.3 **Pelepasan Bon/Wang Jaminan Pelaksanaan (WJP)** tertakluk kepada perkara di bawah:

- 9.3.1 Bon/wang jaminan pelaksanaan dipulangkan kepada kontraktor sehingga 50% dari jumlah keseluruhan tertakluk kemajuan projek di tapak bina mencapai 60%;
- 9.3.2 Pegawai Penguasa/Pengarah Projek boleh memulangkan bon/wang jaminan pelaksanaan sehingga 50% dengan penilaian dan pertimbangan bahawa pelaksanaan projek adalah memuaskan dan menepati kualiti ditetapkan;
- 9.3.3 Bagi kontraktor yang menggunakan bon pelaksanaan (bank gerenti), bon baharu yang telah dikurangkan hendaklah dikemukakan; dan
- 9.3.4 Bagi kontraktor yang menggunakan WJP, inisiatif ini tertakluk khusus untuk WJP yang telah memenuhi 5% daripada harga kontrak.

9.4 Kontraktor yang gagal melaksanakan projek pembangunan Kerajaan setelah pemberian inisiatif Kerajaan hendaklah disenaraihitam dan tidak dibenarkan menyertai pelawaan kerja Kerajaan bagi tempoh tiga (3) tahun tertakluk kepada peraturan tatatertib di bawah CIDB. Agensi hendaklah melaporkan kepada Kementerian Kerja Raya (KKR) dan setiap Agensi hendaklah merujuk data KKR semasa memuktamadkan pelawaan kerja Kerajaan.

9.5 KKR hendaklah menyediakan data kontraktor yang gagal memenuhi pelaksanaan projek setelah diberikan inisiatif Kerajaan dan dipaparkan di laman web KKR untuk rujukan semua Agensi.

10. **Agensi Yang Boleh Dihubungi**

10.1 Agensi yang memerlukan maklumat lanjut mengenai pekeliling ini boleh menghubungi agensi berkaitan seperti berikut:

10.1.1 **Nasihat Berkaitan Pekeliling Perbendaharaan**

Bahagian Perolehan Kerajaan, Kementerian Kewangan
Telefon : 03-8882 4476/3225
E-mel : dasar.bpk@treasury.gov.my

10.1.2 **Maklumat Terperinci Berkaitan VOP**

Cawangan Kontrak dan Ukur Bahan
Jabatan Kerja Raya Malaysia

- a) Khidmat nasihat hal-hal umum
Telefon: 03-2616 5009/5333/1430/5372
E-mel: bdat.ckub@jkr.gov.my
- b) Khidmat nasihat kaedah pengiraan
Telefon: 03-2614 1414/1435/03-2610 7731
E-mel: pwic@jkr.gov.my

11. **Tarikh Kuat Kuasa**

- 11.1 Pekeliling ini berkuat kuasa **sehingga 30 Jun 2023 sahaja** bagi memuktamadkan Perjanjian Tambahan. Namun yang demikian, pelaksanaan VOP bagi projek yang tertakluk VOP adalah sehingga kontrak tamat.
- 11.2 Sekiranya terdapat perbezaan arahan Kementerian Kewangan, peraturan dan tatacara perolehan dalam pekeling khusus lain, maka peraturan yang digariskan melalui pekeling ini adalah terpakai dan berkuat kuasa bagi tempoh yang ditetapkan oleh Kerajaan.

**SPECIAL PROVISIONS TO THE CONDITIONS OF CONTRACT
(VARIATION OF PRICE) FOR BUILDING WORKS**

**A. VARIATION IN PRICE OF 15 SELECTED MATERIALS
(VARIATION IN BUILDING COST MATERIALS INDICES)**

1. Adjustment (upwards and downwards) shall be made to the monthly interim payments and finally to the Contract Sum where there is variation in the Building Materials Cost Indices which are deemed to reflect any changes in the prices of the selected Materials described hereunder:

- (i) Cement;
- (ii) Steel;
- (iii) Bricks and wall;
- (iv) Glass;
- (v) Aggregates;
- (vi) Ceiling materials;
- (vii) Roofing materials;
- (viii) Timber;
- (ix) Plywood;
- (x) Sanitary fittings;
- (xi) Floor and wall tiles;
- (xii) Plumbing materials;
- (xiii) Steel and metal sections;
- (xiv) Sand; and
- (xv) Paints.

Any changes in the prices of Materials other than the above and the cost of plant shall be deemed to follow that of the above described Materials, but any changes in the cost of labour and the amount for profit and overheads shall not be reflected in the indices.

2. Reference Publication

The reference publication to determine the "Building Materials Cost Indices" of Materials specified in paragraph 1 shall be the **Special Release 2** published by the Department of Statistics for the month preceding the date of the month of interim valuation.

3. Base Indices

The "Base Indices" for the purposes of calculating variation of price for the Materials specified in paragraph 1 shall be the appropriate Building Materials Cost Index as stated in the **Special Release 2** published by the Department of Statistic for the month during which the tender closes and shall be inserted in **Appendix A** to this provision prior to the signing of the Contract.

4. Application of Adjustment

- (i) The adjustments shall only be applied to the "Effective Value of Works" (as defined hereunder) in respect of all materials used and plant employed. The "Effective Value of Works" shall mean the difference between:
 - a) The amount of all builder's works (including any site and external works) executed by the Contractor up to the date of the current monthly interim valuation less the amounts for "Preliminaries" items and any items based on actual costs or current prices and excluding any works dealt under Prime Cost Sums and Provisional Sums executed by others. Where the Mechanical and Electrical (M&E) works are executed by the Contractor, the value of the M&E works in respect of seven (7) main components shall also be excluded from the value builder's work; and
 - b) The amount calculated in accordance with (a) above up to the date of the preceding monthly interim valuation.
- (ii) Variation of price for M&E Works shall be in respect of (7) main components shall be dealt separately as detailed in the "Special Provisions to the Conditions of Contract (Variation of Price) for M&E Works".
- (iii) The amount in respect of all the materials used and plant employed are deemed to constitute a certain percentage of "Effective Value of Works". This percentage is referred to as "Recovery Factor" and is specified in **Appendix A** to this provision.

5. Variations in the Building Materials Cost Index

- (i) The Variation in the Building Materials Cost Index shall mean any increase or decrease in the "Current Index" (as defined under paragraph (ii) hereof) as compared to the Base Index (as defined under paragraph 3 above) for the relevant category or categories of building or works as stated in **Appendix A** to this provision.
- (ii) The Current Index shall mean the appropriate Building Materials Cost Index as stated in the **Special Release 2** issued by the Department of Statistics for the month preceding the date of the month of interim valuation.

Provided that in respect of Works executed outside the period permitted under the provisions of the Contract, the Current Index shall be the appropriate Building Materials Cost Index as stated in the **Special Release 2** issued by the Department of Statistics for either the final month of the period permitted under the provisions of the Contract, or the month preceding the date of the monthly interim valuation, whichever is the lower.

6. Calculation of Adjustment

The increase or decrease payable or deductible shall be calculated by multiplying the Effective Value of Works by a factor referred to as Fluctuation Factor which shall be ascertained from the product of the relevant Recovery Factor and the difference between the relevant Current Index and the Base Index, divided by the Base Index as follows:

$$\text{Fluctuation Factor} = \text{Recovery Factor} \times \frac{\text{Current Index} - \text{Base Index}}{\text{Base Index}}$$

Provided that:

- (i) (a) If the relevant Current Index had not been published by the date the interim payment certificate is to be issued, or
- (b) If the total amount of any monthly interim valuation (excluding any sums for increases or decreases under these provisions) is inadequate to justify the issue of an interim payment certificate, then the increase or decrease payable in respect of that monthly interim valuation shall be added to or deducted from the amount payable upon the issue by the Superintending Officer (S.O.) of

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the next interim payment certificate after all the relevant Current Indices have been published or when the total amount of the monthly interim valuation is adequate to justify the issue of the said certificate, as the case may be.

- (ii) The Fluctuation Factor for the Effective Value of Works in respect of site and external works shall be the simple average of the Fluctuation Factor of the relevant categories of buildings (excluding piling works) contained in the Contract.
- (iii) The Fluctuation Factor for the Effective Value of Works in respect of any balance due or to become due and payable to the Contractor after the payment for works executed up to the date the work is certified by the S.O. as being completed had been made, shall be the ratio of the aggregate total of all the previous increases and/or decreases and the corresponding cumulative total of all the previous Effective Value of Works as follows:

$$L = F \times \frac{M}{E}$$

Where:

- L = The value of increase or decrease payable or deductible in respect of the balance due or to become due and payable to the contractor;
- F = The amount of the balance due or to become due and payable to the contractor (excluding the value of L', and any works dealt under Prime Cost Sums, Provisional Sums. Where the Mechanical and Electrical (M&E) works in respect of seven (7) main components are executed by the Contractor, the value of the M&E works shall also be excluded) after deducting the amount in respect of Preliminaries and items based on actual costs or current prices;
- M = The aggregate total amount of increases or decreases payable under the above provisions in respect of all the previous interim payments made;
- E = The corresponding cumulative total of all the previous Effective Value of Works.

**LIST OF RELEVANT CATEGORIES OF BUILDINGS AND BASE INDICES
SUBJECTED TO PRICE VARIATION IN ACCORDANCE WITH THE
“SPECIAL PROVISIONS TO THE CONDITIONS OF CONTRACT
(VARIATION OF PRICE) FOR BUILDING WORKS”**

<p style="text-align: center;">Category Of Building (Irrelevant Categories shall be deleted)</p>	<p style="text-align: center;">Recovery Factor</p>	<p style="text-align: center;">Base Index (of Building Materials Cost in region _____ * for the month of _____**</p>
<p>i. Single Storey R.C. Building</p> <p>ii. 2-4 Storey R.C. Building (Flat Roof)</p> <p>iii. 2-4 Storey R.C. Building (Pitched Roof)</p> <p>iv. 5 Storey and Above R.C. Building (For Accomodation)</p> <p>v. 5 Storey and Above R.C. Building (For Office)</p> <p>vi. Timber Building</p> <p>vii. Timber Piling</p> <p>viii. R.C. Piling</p>	<p style="text-align: center;">0.60</p> <p style="text-align: center;">0.60</p> <p style="text-align: center;">0.60</p> <p style="text-align: center;">0.60</p> <p style="text-align: center;">0.60</p> <p style="text-align: center;">0.60</p> <p style="text-align: center;">0.60</p> <p style="text-align: center;">0.60</p>	

Notes:

* A – Pulau Pinang, Kedah, Perlis

* B – Perak

* C – Selangor, Wilayah Persekutuan Kuala Lumpur, Melaka dan Negeri Sembilan

* D – Johor

* E – Pahang

* F – Kelantan dan Terengganu

** The “Base Index” shall be the appropriate Building Materials Cost Index (with steel bars) as stated in the **Special Release 2** published by the Statistics Department for the month during which the tender closes and only need to be inserted prior to the signing of the Contract Document.

**SPECIAL PROVISIONS TO THE CONDITIONS OF CONTRACT
(VARIATION OF PRICE) FOR CIVIL ENGINEERING WORKS**

**A. VARIATION IN PRICE OF CIVIL ENGINEERING MATERIALS
(VARIATION IN UNIT PRICES)**

1. Adjustments (upwards and downwards) shall be made to the monthly interim payments and finally to the Contract Sum where there is variation in the Unit Prices in respect of selected “Materials” described hereunder:

- (i) Mild Steel Round Bars;
- (ii) High Tensile Deformed Bars;
- (iii) Cement;
- (iv) Bitumen Penetration;
- (v) Automotive Gas Oil;
- (vi) Sand;
- (vii) Aggregates;
- (viii) Premix Asphaltic Concrete;
- (ix) Fabric Reinforcement;
- (x) Guardrail; and
- (xi) Pipe (Water Pipe and Sewerage Pipe).

2. Reference Publication

The reference publication to determine the “Unit Prices” of Materials specified in paragraph 1 shall be the **Special Release 1** published by the Department of Statistics in the particular month in which the Materials are delivered to site for use.

3. Basic Unit Prices of Materials

The “Basic Unit Prices” for the purposes of calculating variation of price for the Materials specified in paragraph 1 shall be the appropriate Unit Prices of the Materials as stated in the **Special Release 1** published by the Department of Statistic for the month during which the tender closes and shall be inserted in the **Appendix A** to this provision prior to the signing of the Contract.

4. Variation in Price of Materials

- (i) Any adjustments will only be made where there is variation in price in respect of Materials specified in paragraph 1 and against which Basic Unit Prices are given in **Appendix A** to this provision.
- (ii) Where a Contractor has paid a higher or lower price for the Materials as compared to the Basic Unit Price specified in **Appendix A** to this provision, the Contract Sum shall be accordingly increased or decreased provided that such increase or decrease shall not exceed the difference between the Basic Unit Price specified in **Appendix A** to this provision and the Unit Price stated in the **Special Release 1** published by the Department of Statistics in the particular month in which the Materials are delivered to site for use.

5. Quantity of Materials Subject to Variation of Price

- (i) Quantities for the Materials specified in paragraph 1 shall be pre-ascertained by the S.O. at the time of tendering and inserted in **Appendix A** to this provision. The quantities so ascertained shall be the maximum quantities subject to price variation under this provision.
- (ii) The maximum quantities as fixed in **Appendix A** to this provision may be varied only when the original scope of works have been varied. The adjustment of the maximum quantities of the Materials shall be made proportionately to the variation of the scope of the work in which the relevant Materials so relate.

6. Works Not Included

- (i) This provision shall not apply to any of the Materials which have been used in works which shall have been rejected by the S.O. or which have been executed in places outside the limits of the site without the prior approval of the S.O.
- (ii) The Contractor shall keep accurate and complete records of all Materials or other items required for the replacement of works rejected by the S.O. The quantities of the Materials which have been used in works rejected by the S.O. shall be excluded from any claims for price variations under this provision.

7. Contract Period and Extension

This provision shall only apply to works done within the Contract Period and any extended period which had been allowed in accordance with the terms of the Contract.

8. Works Executed Outside the Period Permitted Under Contract

This provision shall not apply to works carried out by the Contractor outside the period permitted under the terms of Contract except in the following case:

Where the quantity of Materials used by the Contractor within the period permitted under the terms of Contract is less than that specified in **Appendix A** to this provision, adjustments shall be made to the Contract Sum in respect of the balance of the Materials where there is variation in price notwithstanding that the balance of Materials is used beyond the period permitted under the Contract provided that:

- (i) In the case of any increase in prices, adjustments will only be made if the increase does not exceed the Unit Price stated in the **Special Release 1** issued by the Department of Statistics in the final month of the period permitted under the Contract.
- (ii) In the case of any reduction in price, adjustments will be made in accordance with paragraph 4 (ii).

9. Notification and Documentary Evidence

- (i) The Contractor shall within a reasonable time give the S.O. written notice of any variation in the price of Materials.
- (ii) The S.O. may at any time call for invoices, receipts and such other documentary evidence as may be required. The Contractor shall not withhold any information or documentary evidence as required by the S.O.

**B. VARIATION IN PRICE OF PETROLEUM PRODUCTS
(BITUMEN AND AUTOMOTIVE GAS OIL-DIESEL)**

1. Adjustments (upwards and downwards) shall be made to the monthly interim payments and finally to the Contract Sum where there is variation in the Unit Prices in respect of selected “Materials” described hereunder:

- (i) Automotive Gas Oil (Diesel); and
- (ii) Bitumen.

2. Unit Prices of Material

The Unit Prices of Automotive Gas Oil (Diesel) and Bitumen for the purposes of calculating variation of prices shall be based on the following:

- (i) Government Control Price
The Unit Price for Bitumen 60/70 Penetration Grade shall be tied to the Government of Malaysia Controlled Prices as established by the Ministry of Finance (MOF) and Ministry of Domestic Trade and Consumer Affairs.
- (ii) Posted Price from SHELL MALAYSIA
The Unit Price of Automotive Gas Oil (Diesel) is based on the Posted Prices as obtained from SHELL MALAYSIA.

3. Reference Publication

The reference publication to determine the “Unit Prices” of Materials specified in paragraph 1 shall be the **Special Release 1** published by the Department of Statistics in the particular month in which the Materials are consumed or incorporated into the works.

4. Basic Unit Prices of Materials

The “Basic Unit Prices” for the purposes of calculating variation of price for the Materials specified in paragraph 1 shall be the appropriate Unit Prices of the Materials as stated in the **Special Release 1** published by the Department of Statistic for the month during which the tender closes and shall be inserted in the **Appendix A** to this provision prior to the signing of the Contract.

5. Variation In Prices of Materials

- (i) Any adjustments will only be made where there is variation in price in respect of Materials specified in paragraph 1 and against which Basic Unit Prices are given in **Appendix A** to this provision irrespective of the actual purchase prices of the Materials by the Contractor and whether the Materials are purchased locally or otherwise.
- (ii) When there is a variation in the Basic Unit Prices of the Materials, the amount payable at a particular month upon the issue of the monthly certificates of progress payment or the final certificate shall be increased or decreased by the amount based on the **ACTUAL** differences between the Basic Unit Prices and the Unit Prices of the Materials at a particular month.

6. Variation Must Be Greater Than Five Per Cent (5%)

Adjustment shall only be made to the Contract Sum when the variation (increase or decrease) in the Basic Unit Prices of the Materials is greater than 5%. Where the variation (increase or decrease) in prices is greater than 5% the full amount of the variation shall be added to or deducted from the Contract Sum.

7. Quantities of Materials Subject to Variation of Price

- (i) The Contractor shall submit together with his Tender an estimate of the total requirements of the Materials (diesel and bitumen) for the Contract and such estimate shall be supported by documentary evidence. The estimate of the quantities submitted by the Contractor shall be subject to verification and adjustment by the S.O. as may be necessary before the signing of the Contract. The quantities so ascertained shall be the maximum quantities subject to price variation under this provision. Provided that if the Contractor fails to submit such estimate or any documentary evidence in support thereof, the S.O. shall make a reasonable assessment of the quantities of the Materials for the Contract.
- (ii) The maximum quantities as fixed in **Appendix A** to this provision may be varied only when the original scope of works have been varied. The adjustment of the maximum quantities of the Materials shall be made proportionately to the variation of the scope of the work in which the relevant Materials so relate.

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- (iii) The Contractor shall submit to the S.O. monthly returns with documentary evidence on the quantities of the Materials consumed or incorporated into the works, as the case may be, during the particular month. Such quantities of the Materials shall be verified by the S.O. and shall be used as the basis of implementing this provision as described herein:

(a) Automotive Gas oil (Diesel)

At the end of each month the Contractor is required to submit documentary evidences of purchases and consumption of Automotive Gas Oil (Diesel) during the month. The Contractor shall keep records of the consumption of the Materials by individual item of plants which shall be verified and certified by the S.O. The quantities so certified shall be used as the basis for the application of this provision. The Contract Sum shall be increased or decreased by such amount derived by multiplying the quantities of the Materials so certified by the S.O. by the actual differences between the Basic Unit Prices and the Unit Prices of the Materials for that particular month. Provided always Automotive Gas Oil (Diesel) consumed outside the limit of the site shall not be included in the computation of the quantities except diesel used in the transportation of imported earth to the site for use in the works and disposal of unsuitable materials off site.

(b) Bitumen

The quantities of Bitumen used for the purposes of calculating variations in Basic Unit Prices of the Material shall be the quantities of the Materials incorporated into the works (except Bitumen used in Premix) during a particular month. Such quantities must be verified and certified by the S.O. The Contract Sum shall be increased or decreased by such amount derived by multiplying the quantities so certified by the S.O. by the actual difference between the Basic Unit Price and the Unit Price of the Material for that particular month.

- (c) Provided always that this provision shall only apply to such quantities of the Materials as are fixed in **Appendix A** to this provision or such adjusted amounts under paragraph 7 (ii) above and shall not apply to any quantity in excess thereof.

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(untuk digunakan bagi projek baharu)

- (d) Should the Contractor fail to submit such details of monthly returns or documentary evidence of the quantities of the Materials consumed and/or incorporated into the works, the S.O. reverses the right to make a reasonable assessment of the quantities of the Materials consumed and/or incorporated into the works for the particular month. Such quantities assessed by the S.O. shall be used as the basis of implementation of this provision as described herein.

8. Works Not Included

- (i) This provision shall not apply to any of the Materials which have been used in works which shall have been rejected by the S.O. or which have been executed in places outside the limits of the site without the prior approval of the S.O.
- (ii) The Contractor shall keep accurate and complete records of all Materials or other items required for the replacement of works rejected by the S.O. The quantities of the Materials which have been used in works rejected by the S.O. shall be excluded from any claims for price variations under this provision.

9. Contract Period and Extension

This provision shall only apply to works done within the Contract Period and any extended period which had been allowed in accordance with the terms of the Contract.

10. Works Executed Outside the Period Permitted Under Contract

This provision shall not apply to works carried out by the Contractor outside the period permitted under the terms of Contract except in the following case:

Where the quantity of Materials used by the Contractor within the period permitted under the terms of Contract is less than that specified in **Appendix A** to this provision, adjustments shall be made to the Contract Sum in respect of the balance of the Materials where there is variation in price notwithstanding that the balance of Materials is used beyond the period permitted under the Contract provided that:

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- (i) In the case of any increase in prices, adjustments will only be made if the increase does not exceed the Unit Price stated in the **Special Release 1** issued by the Department of Statistics in the final month of the period permitted under the Contract.
- (ii) In the case of any reduction in price, adjustments will be made in accordance with paragraph 5 and 6 above.

**LIST OF MATERIALS TOGETHER WITH QUANTITIES AND BASIC UNIT PRICES
SUBJECT TO PRICE VARIATION IN ACCORDANCE WITH THE “SPECIAL
PROVISIONS TO THE CONDITIONS OF CONTRACT
(VARIATION OF PRICE) FOR CIVIL ENGINEERING WORKS”**

Materials	Unit	Quantity	Basic Unit Price
1. Mild Steel Round Bars, BS 4449 - 10mm (3/8") - 12 mm (1/2") - 16mm (5/8") - 20mm – 25mm (3/4"-1") - 32 mm (1 1/4")	Metric Ton " " " "	* * * * *	
2. High Tensile Deformed Bars - 10mm (3/8") - 12 mm (1/2") - 16mm – 25 mm (5/8" - 1") - 32 mm (1 1/4")	Metric Ton " " " "	* * * * *	
3. Ordinary Portland BS 12	50 Kg. Bag	*	
4. Bitumen 60/70 Penetration Grade in Prime Coat, Tack Coat and Surface Coat	Metric Ton	*	
5. Automotive Gas Oil (Diesel)	Litre	*	
6. Sand - River sand - Mining sand	Metric Ton "	* *	
7. Aggregates - Granite - 10mm (3/8") - Granite - 20mm (3/4") - Granite - 40mm (1 1/2") - Crusher Aggregate (Crusher Run)	Metric Ton " " "	* * * *	
8.(A) Premix Asphaltic Concrete - AC 10 (Wearing Course) - AC 14 (Wearing Course) - AC 28 (Binder Course) - ACW 20 (Wearing Course)	Metric Ton " " "	* * * *	

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Appendix A
(untuk digunakan bagi projek baharu)

Materials	Unit	Quantity	Basic Unit Price
(B) Premix Bituminous Macadam			
- BMR40 (Bound Roadbase)	Metric Ton	*	
- BMR28 (Bound Roadbase)	"	*	
- BML10 (Levelling Course)	"	*	
- BMB28 (Binder Course)	"	*	
- BMB20 (Binder Course)	"	*	
- BMW14 (Wearing Course)	"	*	
- BMW20 (Wearing Course)	"	*	
9. Fabric Reinforcement			
- A4, MS145	Kg	*	
- A5, MS145	"	*	
- A6, MS145	"	*	
- A7, MS145	"	*	
- A8, MS145	"	*	
- A9, MS145	"	*	
- A10, MS145	"	*	
- B5, MS145	"	*	
- B6, MS145	"	*	
- B7, MS145	"	*	
- B8, MS145	"	*	
- B9, MS145	"	*	
- B10, MS145	"	*	
- B12, MS145	"	*	
- C5, MS145	"	*	
- C6, MS145	"	*	
- C7, MS145	"	*	
- C8, MS145	"	*	
- C9, MS145	"	*	
- C10, MS145	"	*	
- DA4, MS145	"	*	
- DA5, MS145	"	*	
- DA6, MS145	"	*	
- DA7, MS145	"	*	
- DA8, MS145	"	*	
- DA9, MS145	"	*	
- DA10, MS145	"	*	

LAMPIRAN B/CW/K-B
Appendix A
(untuk digunakan bagi projek baharu)

Materials	Unit	Quantity	Basic Unit Price
10. Guardrail			
(i) Single mounted			
- 1.95m Post Spacing	Metre	*	
- 3.80m Post Spacing	"	*	
(ii) Double mounted			
- 1.95m Post Spacing	"	*	
- 3.80m Post Spacing	"	*	
11. (A) Water Pipe			
- Mild Steel Pipe 300mm	Metre	*	
- Stainless Steel Pipe 25mm	"	*	
- Ductile Iron Pipe 300mm	"	*	
- High Density Polythylene (HDPE Pipe)			
- Compression Fitting Using For Jointing 25mm	"	*	
- Electrofusion Jointing 160mm	"	*	
- Butt Fussion 160mm	"	*	
11. (B) Sewerage Pipe			
- Mild Steel Pipe 300mm	Metre	*	
- Stainless Steel Pipe 250mm	"	*	
- Ductile Iron Pipe 300mm	"	*	
- High Density Polythylene (HDPE Pipe)			
- Profile Pipe 150mm	"	*	
- Solid Pipe 250mm	"	*	
- Vitrified Clay Pipe			
(i) Standard Pipe 225mm	"	*	
(ii) Jacking Pipe 225mm	"	*	
- Reinforced Pipe			
(i) Without Lining 900mm	"	*	
(ii) With Lining (High Alumina) 900mm	"	*	
(iii) With Lining (Sacrificial Lining) 900mm	"	*	

Refer
Appendix B

LAMPIRAN B/CW/K-B
Appendix A
(untuk digunakan bagi projek baharu)

Materials	Unit	Quantity	Basic Unit Price
11. (B) Sewerage Pipe (Cont'd) - ABS Pipe - Gravity 110mm - Force Main 225mm	Metre "	* *	} Refer Appendix B

* Quantities shall be pre-ascertained by the Superintending Officer at the time of tendering.

Notes:

1. The above quantities are intended for the purpose of price variation only and do not necessarily reflect the actual quantities required for the Contract. The Contractor shall ascertain himself the actual quantities required upon which his tender is deemed to have been based.
2. Price Variation shall be applied to the above quantities fixed or actual quantities used, whichever is the lesser.
3. The quantities of materials (subject to those listed above) used in precast concrete components shall be determined and included in the quantities for relevant materials above. The computation for price variation shall be considered when the completed precast components are delivered to site for use.
4. The "Basic Unit Prices" shall be the appropriate Unit Price as stated in the **Special Release 1** published by the Department of Statistics for the month during which the tender closes and only need to be inserted prior to the signing of the Contract Document.

**LIST OF CATEGORIES AND SIZES OF PIPES TOGETHER WITH QUANTITIES AND
BASIC UNIT PRICES VARIATION IN ACCORDANCE WITH THE
“SPECIAL PROVISIONS TO THE CONDITIONS OF CONTRACT
(VARIATION OF PRICE) FOR CIVIL ENGINEERING WORKS”**

Category and Size of Mild Steel Pipe	Quantity (M)	Unit Price For Basic Material	Adjustment Factor	Basic Unit Price
1. WATER PIPE				
A. Mild Steel Pipe				
1. 100 mm Ø	*			
2. 150 "	*			
3. 200 "	*			
4. 250 "	*			
5. 300 "	*			
6. 350 "	*			
7. 400 "	*			
8. 450 "	*			
9. 500 "	*			
10. 600 "	*			
11. 700 "	*			
12. 750 "	*			
13. 800 "	*			
14. 900 "	*			
15. 1000 "	*			
16. 1100 "	*			
17. 1150 "	*			
18. 1200 "	*			
19. 1300 "	*			
20. 1400 "	*			
21. 1500 "	*			
22. 1600 "	*			
23. 1700 "	*			
24. 1800 "	*			
25. 1900 "	*			
26. 2000 "	*			
27. 2100 "	*			
28. 2200 "	*			

LAMPIRAN B/CW/K-B
Appendix B
(untuk digunakan bagi projek baharu)

Category and Size of Mild Steel Pipe	Quantity (M)	Unit Price For Basic Material	Adjustment Factor	Basic Unit Price
1. WATER PIPE B. Stainless Steel Pipe 1. 13 mm Ø (½") 2. 20 " (¾") 3. 25 " (1") 4. 32 " (1 ¼") 5. 38 " (1 ½") 6. 50 " (2") 7. 63 " (2 ½") 8. 75 " (3") 9. 100 " (4")	 * * * * * * * * *			
C. Ductile Iron Pipe 1. 100 mm Ø 2. 150 " 3. 200 " 4. 250 " 5. 300 " 6. 350 " 7. 400 " 8. 450 " 9. 500 " 10. 600 " 11. 700 "	 * * * * * * * * * * *			
D. High Density Polythylene (HDPE) Pipe (i) Compression Fitting Using For Jointing 1. 20 mm Ø 2. 25 " 3. 32 " 4. 40 " 5. 50 " 6. 63 " 7. 75 " 8. 90 "	 * * * * * * * *			

LAMPIRAN B/CW/K-B
Appendix B
(untuk digunakan bagi projek baharu)

Category and Size of Mild Steel Pipe	Quantity (M)	Unit Price For Basic Material	Adjustment Factor	Basic Unit Price
1. WATER PIPE				
D. High Density Polythylene (HDPE) Pipe				
(ii) Electrofusion Jointing				
1. 110 mm Ø	*			
2. 125 "	*			
3. 140 "	*			
4. 160 "	*			
5. 180 "	*			
6. 200 "	*			
7. 225 "	*			
8. 250 "	*			
9. 280 "	*			
10. 315 "	*			
11. 355 "	*			
12. 400 "	*			
13. 450 "	*			
14. 500 "	*			
15. 560 "	*			
(iii) Butt Fussion				
1. 110 mm Ø	*			
2. 125 "	*			
3. 140 "	*			
4. 160 "	*			
5. 180 "	*			
6. 200 "	*			
7. 225 "	*			
8. 250 "	*			
9. 280 "	*			
10. 315 "	*			
11. 355 "	*			
12. 400 "	*			
13. 450 "	*			
14. 500 "	*			
15. 560 "	*			

LAMPIRAN B/CW/K-B
Appendix B
(untuk digunakan bagi projek baharu)

Category and Size of Mild Steel Pipe	Quantity (M)	Unit Price For Basic Material	Adjustment Factor	Basic Unit Price
2. SEWERAGE PIPE				
A. Mild Steel Pipe				
1. 100 mm Ø	*			
2. 150 "	*			
3. 200 "	*			
4. 250 "	*			
5. 300 "	*			
6. 350 "	*			
7. 400 "	*			
8. 450 "	*			
9. 500 "	*			
10. 600 "	*			
11. 700 "	*			
12. 750 "	*			
13. 800 "	*			
14. 900 "	*			
15. 1000 "	*			
16. 1100 "	*			
17. 1150 "	*			
18. 1200 "	*			
19. 1300 "	*			
20. 1400 "	*			
21. 1500 "	*			
22. 1600 "	*			
23. 1700 "	*			
24. 1800 "	*			
25. 1900 "	*			
26. 2000 "	*			
27. 2100 "	*			
28. 2200 "	*			
B. Ductile Iron Pipe				
1. 80 mm Ø	*			
2. 100 "	*			
3. 150 "	*			
4. 200 "	*			
5. 250 "	*			
6. 300 "	*			
7. 350 "	*			

LAMPIRAN B/CW/K-B
Appendix B
(untuk digunakan bagi projek baharu)

Category and Size of Mild Steel Pipe	Quantity (M)	Unit Price For Basic Material	Adjustment Factor	Basic Unit Price
2. SEWERAGE PIPE				
B. Ductile Iron Pipe				
(Cont'd)				
8. 400 "	*			
9. 450 "	*			
10. 600 "	*			
11. 700 "	*			
12. 800 "	*			
13. 1000 "	*			
14. 1200 "	*			
C. HDPE (Profile) Pipe				
1. 100 mm Ø	*			
2. 125 "	*			
3. 150 "	*			
4. 200 "	*			
5. 250 "	*			
6. 300 "	*			
7. 350 "	*			
8. 400 "	*			
9. 450 "	*			
10. 500 "	*			
11. 550 "	*			
12. 600 "	*			
13. 650 "	*			
14. 700 "	*			
15. 750 "	*			
16. 800 "	*			
17. 850 "	*			
18. 900 "	*			
19. 950 "	*			
20. 1000 "	*			
21. 1200 "	*			
22. 1400 "	*			
23. 1600 "	*			
24. 1800 "	*			
25. 2000 "	*			
26. 2100 "	*			
27. 2200 "	*			

LAMPIRAN B/CW/K-B
Appendix B
(untuk digunakan bagi projek baharu)

Category and Size of Mild Steel Pipe	Quantity (M)	Unit Price For Basic Material	Adjustment Factor	Basic Unit Price
2. SEWERAGE PIPE				
D. HDPE (Solid) Pipe				
1. 100 mm Ø	*			
2. 125 "	*			
3. 150 "	*			
4. 200 "	*			
5. 250 "	*			
6. 300 "	*			
7. 350 "	*			
8. 400 "	*			
9. 450 "	*			
10. 500 "	*			
11. 550 "	*			
12. 600 "	*			
13. 650 "	*			
14. 700 "	*			
15. 750 "	*			
16. 800 "	*			
17. 850 "	*			
18. 900 "	*			
19. 950 "	*			
20. 1000 "	*			
21. 1200 "	*			
22. 1400 "	*			
23. 1600 "	*			
24. 1800 "	*			
25. 2000 "	*			
26. 2100 "	*			
27. 2200 "	*			
E. Vitrified Clay Pipe				
(i) Vitrified Clay (Standard) Pipe				
1. 100 mm Ø	*			
2. 150 "	*			
3. 200 "	*			
4. 225 "	*			
5. 300 "	*			
6. 375 "	*			

LAMPIRAN B/CW/K-B
Appendix B
(untuk digunakan bagi projek baharu)

Category and Size of Mild Steel Pipe	Quantity (M)	Unit Price For Basic Material	Adjustment Factor	Basic Unit Price
2. SEWERAGE PIPE				
E. Vitrified Clay Pipe				
(i) Vitrified Clay (Standard) Pipe (Cont'd)				
7. 400 "	*			
8. 450 "	*			
9. 500 "	*			
10. 600 "	*			
11. 700 "	*			
12. 800 "	*			
(ii) Vitrified Clay (Jacking) Pipe				
1. 100 mm Ø	*			
2. 150 "	*			
3. 200 "	*			
4. 225 "	*			
5. 300 "	*			
6. 375 "	*			
7. 400 "	*			
8. 450 "	*			
9. 500 "	*			
10. 600 "	*			
11. 700 "	*			
12. 800 "	*			
F. Reinforced Concrete Pipe (RCP)				
(i) Without Lining				
1. 375 mm Ø	*			
2. 450 "	*			
3. 600 "	*			
4. 750 "	*			
5. 900 "	*			
6. 1050 "	*			
7. 1200 "	*			

LAMPIRAN B/CW/K-B
Appendix B
(untuk digunakan bagi projek baharu)

Category and Size of Mild Steel Pipe	Quantity (M)	Unit Price For Basic Material	Adjustment Factor	Basic Unit Price
2. SEWERAGE PIPE				
F. Reinforced Concrete Pipe (RCP)				
(i) Without Lining (Cont'd)				
8. 1350 "	*			
9. 1500 "	*			
10. 1650 "	*			
11. 1800 "	*			
(ii) With Lining (High Alumina)				
1. 375 mm Ø	*			
2. 450 "	*			
3. 600 "	*			
4. 750 "	*			
5. 900 "	*			
6. 1050 "	*			
7. 1200 "	*			
8. 1350 "	*			
9. 1500 "	*			
10. 1650 "	*			
11. 1800 "	*			
(iii) With Lining (Sacrificial Lining)				
1. 375 mm Ø	*			
2. 450 "	*			
3. 600 "	*			
4. 750 "	*			
5. 900 "	*			
6. 1050 "	*			
7. 1200 "	*			
8. 1350 "	*			
9. 1500 "	*			
10. 1650 "	*			
11. 1800 "	*			

LAMPIRAN B/CW/K-B
Appendix B
(untuk digunakan bagi projek baharu)

Category and Size of Mild Steel Pipe	Quantity (M)	Unit Price For Basic Material	Adjustment Factor	Basic Unit Price
2. SEWERAGE PIPE				
G. ABS Pipe				
(i) Gravity				
1. 90 mm Ø	*			
2. 110 "	*			
3. 150 "	*			
4. 225 "	*			
5. 315 "	*			
(ii) Force Main				
1. 15 mm Ø	*			
2. 20 "	*			
3. 25 "	*			
4. 32 "	*			
5. 40 "	*			
6. 50 "	*			
7. 65 "	*			
8. 80 "	*			
9. 100 "	*			
10. 150 "	*			
11. 200 "	*			
12. 225 "	*			
13. 250 "	*			
14. 280 "	*			
15. 315 "	*			
16. 355 "	*			
17. 400 "	*			
18. 450 "	*			
19. 500 "	*			
20. 630 "	*			

* Quantities shall be pre-ascertained by the Superintending Officer at the time of tendering.

Notes:

1. The above quantities are intended for the purpose of price variation only and do not necessarily reflect the actual quantities required for the Contract.
2. Price Variation shall be applied to the above quantities fixed or actual quantities used, whichever is the lesser.

LAMPIRAN B/CW/K-B
Appendix B
(untuk digunakan bagi projek baharu)

3. The “Basic Unit Price” for each material shall be based on the Unit Price of the “Selected Basic Material” for the relevant category of pipe as stated in the **Special Release 1 published** by the Department of Statistics for the month during which the tender closes multiplied by “Price Adjustment Factor” for the said material and only need to be inserted prior to the signing of the Contract Document.
4. Price Adjustment Factor shall be as stated in the **Special Release 1** published by the Department of Statistics.
5. The Basic Material is the most commonly used material for the relevant category of pipes in most projects.

**SPECIAL PROVISIONS TO THE CONDITIONS OF CONTRACT
(VARIATION OF PRICE) FOR MECHANICAL & ELECTRICAL WORKS**

1. This provision shall be applicable for Mechanical and Electrical Works carried out under the following arrangement:
 - (i) Direct contract;
 - (ii) Prime Cost Sum by Nominated Sub-contractor under the Main Contract; and
 - (iii) Packaged as part of Builder's Works under the Main Contract.

2. Adjustment (upwards and downwards) shall be made to the monthly interim payments and finally to the Contract Sum where there is variation in the Component Cost Indices in respect of seven (7) main Mechanical and Electrical (M&E) Components described hereunder:
 - (i) Copper Cables;
 - (ii) Switchgears;
 - (iii) Transformers;
 - (iv) Generators;
 - (v) Lightning Protection System and Earthing System;
 - (vi) Air Conditioning System; and
 - (vii) Motor (Pumpset).

3. Reference Publication

The reference publication to determine the "Component Cost Indices" of M&E Components specified in paragraph 2 shall be the **Special Release 3** published by the Department of Statistics for the month of installation.

4. Base Indices

The "Base Indices" for the purposes of calculating variation of price for the M&E Components specified in paragraph 2 shall be the appropriate Component Cost Index of the M&E Components as stated in the **Special Release 3** published by the Department of Statistic for the month during which the tender closes and shall be inserted in the **Appendix A** to this provision prior to the signing of the Contract.

5. Application of Adjustments

- (i) The adjustments shall only be applied to the "Effective Value of Work Done" (as defined hereunder) in respect of each M&E component installed on site. The "Effective Value of Work Done" shall mean the difference between:
 - (a) The amount of each relevant component installed on site by the Contractor up to the date of the current monthly interim valuation less the amount for any items based on actual costs or current prices; and
 - (b) The amount calculated in accordance with (a) above up to the date of the preceding monthly interim valuation.
- (ii) The total tendered price of each M&E component is the total price of the supply and installation as tendered by the Contractor. The "Recovery Factor" of each component is the percentage of the supply component price with respect to the tendered price. The Recovery Factor of the selected M&E component is specified in **Appendix A** to this provision.

6. Variations in Component Cost Index

- (i) The Variation in the Component Cost Index shall mean any increase or decrease in the "Current Index" (as defined under paragraph (ii) hereof) as compared to the Base Index (as defined under paragraph 4 above) for the relevant category or categories of M&E component as stated in **Appendix A** to this provision.
- (ii) The Current Index shall mean the appropriate Component Cost Index as stated in **Special Release 3** issued by the Department of Statistics for the month of installation.

Provided that in respect of Works executed outside the period permitted under the provisions of the Contract, the Current Index shall be the appropriate Component Cost Index as stated in the **Special Release 3** issued by the Department of Statistics for either the final month of the period permitted under the provisions of the Contract, or the month of the monthly interim valuation, whichever is the lower.

7. Calculation for Adjustments

The increase or decrease payable or deductible shall be calculated by multiplying the “Effective Value of Work Done” by a factor referred to as Fluctuation Factor which shall be ascertained from the product of the Recovery Factor of relevant M&E Component and the difference between the relevant Current Index and the Base Index, divided by the Base Index as follows:

$$\text{Fluctuation Factor} = \text{Recovery Factor} \times \frac{\text{Current Index} - \text{Base Index}}{\text{Base Index}}$$

Provided that:

- (i) (a) If the relevant Current Index had not been published by the date the interim payment certificate is to be issued, or

(b) If the total amount of any monthly interim valuation (excluding any sums for increases or decreases under this provision) is inadequate to justify the issue of an interim payment certificate, then the increase or decrease payable in respect of that monthly interim valuation shall be added to or deducted from the amount payable upon the issue by the Superintending Officer (S.O.) of the next interim payment certificate after all the relevant Current Indices have been published or when the total amount of the monthly interim valuation is adequate to justify the issue of the said certificate, as the case may be.
- (ii) The Fluctuation Factor for the Effective Value of Work Done in respect of any balance due or to become due and payable to the Contractor after the payment for each component installed up to the date certified by the S.O. as being completed had been made, shall be the ratio of the aggregate total of all the previous increases and/or decreases and the corresponding cumulative total of all the previous Effective Value of Work Done, as follows:

$$L = F \times \frac{M}{E}$$

LAMPIRAN C/ME/K-B
(untuk digunakan bagi projek baharu)

Where:

- L = The value of increase or decrease payable or deductible in respect of the balance due or to become due and payable to the contractor;
- F = The amount of the balance due or to become due and payable to the contractor excluding the value of L after deducting the amount in respect of items based on actual costs or current prices;
- M = The aggregate total amount of increases or decreases payable under the above provisions in respect of all the previous interim payments made;
- E = The corresponding cumulative total of all the previous Effective Value of Work Done.

**LIST OF RELEVANT COMPONENTS, RECOVERY FACTOR AND BASE INDICES
SUBJECTED TO PRICE VARIATION IN ACCORDANCE WITH THE
“SPECIAL PROVISIONS TO THE CONDITIONS OF CONTRACT
(VARIATION OF PRICE) FOR MECHANICAL & ELECTRICAL WORKS”**

Bil.	Category Of Components	Recovery Factor	Base Index (of Component in region _____* for the months of _____**
1.	COPPER CABLES i) Concealed/ Surface wiring using G.I. conduit (per unit point) ii) Cables in galvanized trunking (per meter run) iii) Cables laid underground (per meter run) a) 120 sq. mm and above b) Below 120 sq. mm iv) Cables on tray/ ladder (per meter run) a) 120 sq. mm and above b) Below 120 sq. mm v) Busduct	0.50 0.55 0.90 0.75 0.75 0.50 0.75	
2.	SWITCHGEARS i) HT Switchgears ii) LV Switchboards (Incomer breaker 600A and above) iii) LV Switchboards and Sub Switchboards (Incomer breaker below 600A) iv) TPN & SPN Distribution Boards (Incomer breaker 100A and below)	0.90 0.85 0.85 0.85	
3.	TRANSFORMERS i) Low Loss Cast Resin Transformer ii) Low Loss Hermetically Sealed (Oil filled) Transformer	0.80 0.80	

LAMPIRAN C/ME/K-B
Appendix A
(untuk digunakan bagi projek baharu)

Bil.	Category Of Components	Recovery Factor	Base Index (of Component in region _____* for the months of _____**
4.	GENERATORS i) Generator Ratings Above 500kVA ii) Generator Ratings 500kVA and below	0.85 0.75	
5.	LIGHTNING PROTECTION SYSTEM & EARTHING SYSTEM i) Lightning Protection System ii) Earthing system (a) Earthing System for Main Switchboards and Sub Switchboards (b) Earthing System for Distribution Boards	0.65 0.75 0.50	
6.	AIR CONDITIONING SYSTEM i) Water Cooled Chiller ii) Air Cooled Chiller iii) Water Cooled Package iv) Air Cooled Package v) Split Unit System (a) Wall Mounted (b) Ceiling Cassette/Mounted vi) VRV System (a) Indoor (b) Outdoor	0.75 0.90 0.70 0.75 0.75 0.90 0.85 0.95	
7.	MOTOR (PUMPSET) i) Condenser Water Pump ii) Chilled Water Pump iii) Hose Reel Pump	0.80 0.80 0.55	

LAMPIRAN C/ME/K-B
Appendix A
(untuk digunakan bagi projek baharu)

Notes:

- * Penisular Malaysia
- * Sabah
- * Sarawak

** The “Base Index” shall be the appropriate Component Cost Index as stated in the **Special Release 3** published by the Department of Statistics for the month during which the tender closes and only need to be inserted prior to the signing of the Contract Document.

**SPECIAL PROVISIONS TO THE CONDITIONS OF CONTRACT
(VARIATION OF PRICE) FOR BUILDING WORKS**

**A. VARIATION IN PRICE OF 15 SELECTED MATERIALS
(VARIATION IN BUILDING MATERIALS COST INDICES)**

1. Adjustments (upwards and downwards) shall be made to the monthly interim payments and finally to the Contract Sum where there is variation in the Building Materials Cost Indices which are deemed to reflect any changes in the prices of the selected Materials described hereunder:

- (i) Cement;
- (ii) Steel;
- (iii) Bricks and wall;
- (iv) Glass;
- (v) Aggregates;
- (vi) Ceiling materials;
- (vii) Roofing materials;
- (viii) Timber;
- (ix) Plywood;
- (x) Sanitary fittings;
- (xi) Floor and wall tiles;
- (xii) Plumbing materials;
- (xiii) Steel and metal sections;
- (xiv) Sand; and
- (xv) Paints.

Any changes in the prices of Materials other than the above and the cost of plant shall be deemed to follow that of the above described Materials, but any changes in the cost of labour and the amount for profit and overheads shall not be reflected in the indices.

2. Reference Publication

The reference publication to determine the "Building Materials Cost Indices" of Materials specified in paragraph 1 shall be the **Special Release 2** published by the Department of Statistics in the particular month in which the Materials are delivered to site for use.

LAMPIRAN A/BW/K-L
(untuk digunakan bagi projek yang sedang dalam pembinaan)

3. Basic Indices

The "Base Indices" for the purposes of calculating variation of price for the Materials specified in paragraph 1 shall be the appropriate Building Materials Cost Index as stated in the **Special Release 2** published by the Department of Statistic and shall be inserted in **Appendix A** to this provision.

The Base Indices shall be determined as follows based on:

- (i) The month during which tender closes (for tenders closed on and after 1st January 2021); or
- (ii) The month December 2020 (for tender closed before 1st January 2021)

4. Application of Adjustment

- (i) The adjustments shall only be applied to the "Effective Value of Works" (as defined hereunder) in respect of all materials used and plant employed **from 1st January 2022**. The "Effective Value of Works" shall mean the difference between:
 - a) The amount of all builder's works (including any site and external works) executed by the Contractor up to the date of the current monthly interim valuation less the amounts for "Preliminaries" items and any items based on actual costs or current prices and excluding any works dealt under Prime Cost Sums and Provisional Sums executed by others. Where the Mechanical and Electrical (M&E) works are executed by the Contractor, the value of the M&E works in respect of seven (7) main components shall also be excluded from the value builder's work; and
 - b) The amount calculated in accordance with (a) above up to the date of the preceding monthly interim valuation.
- (ii) Variation of price for M&E Works shall be in respect of (7) main components shall be dealt separately as detailed in the "Special Provisions to the Conditions of Contract (Variation of Price) for M&E Works".
- (iii) The amount in respect of all the materials used and plant employed are deemed to constitute a certain percentage of "Effective Value of Works". This percentage is referred to as "Recovery Factor" and is specified in **Appendix A** to this provision.

LAMPIRAN A/BW/K-L
(untuk digunakan bagi projek yang sedang dalam pembinaan)

5. Variations in the Building Materials Cost Index

- (i) The Variation in the Building Materials Cost Index shall mean any increase or decrease in the "Current Index" (as defined under paragraph (ii) hereof) as compared to the Base Index (as defined under paragraph 3 above) for the relevant category or categories of building or works as stated in **Appendix A** to this provision.
- (ii) The Current Index shall mean the appropriate Building Materials Cost Index as stated in the **Special Release 2** issued by the Department of Statistics for the month preceding the date of the month of interim valuation.

Provided that in respect of Works executed outside the period permitted under the provisions of the Contract, the Current Index shall be the appropriate Building Materials Cost Index as stated in the **Special Release 2** issued by the Department of Statistics for either the final month of the period permitted under the provisions of the Contract, or the month preceding the date of the monthly interim valuation, whichever is the lower.

6. Calculation of Adjustment

The increase or decrease payable or deductible shall be calculated by multiplying the Effective Value of Works by a factor referred to as Fluctuation Factor which shall be ascertained from the product of the relevant Recovery Factor and the difference between the relevant Current Index and the Base Index, divided by the Base Index as follows:

$$\text{Fluctuation Factor} = \text{Recovery Factor} \times \frac{\text{Current Index} - \text{Base Index}}{\text{Base Index}}$$

Provided that:

- (i) (a) If the relevant Current Index had not been published by the date the interim payment certificate is to be issued, or
- (b) If the total amount of any monthly interim valuation (excluding any sums for increases or decreases under these provisions) is inadequate to justify the issue of an interim payment certificate, then the increase or decrease payable in respect of that monthly

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interim valuation shall be added to or deducted from the amount payable upon the issue by the Superintending Officer (S.O.) of the next interim payment certificate after all the relevant Current Indices have been published or when the total amount of the monthly interim valuation is adequate to justify the issue of the said certificate, as the case may be.

- (ii) The Fluctuation Factor for the Effective Value of Works in respect of site and external works shall be the simple average of the Fluctuation Factor of the relevant categories of buildings (excluding piling works) contained in the Contract.
- (iii) The Fluctuation Factor for the Effective Value of Works in respect of any balance due or to become due and payable to the Contractor after the payment for works executed up to the date the work is certified by the S.O. as being completed had been made, shall be the ratio of the aggregate total of all the previous increases and/or decreases and the corresponding cumulative total of all the previous Effective Value of Works as follows:

$$L = F \times \frac{M}{E}$$

Where:

- L = The value of increase or decrease payable or deductible in respect of the balance due or to become due and payable to the contractor;
- F = The amount of the balance due or to become due and payable to the contractor (excluding the value of L', and any works dealt under Prime Cost Sums, Provisional Sums. Where the Mechanical and Electrical (M&E) works in respect of seven (7) main components are executed by the Contractor, the value of the M&E works shall also be excluded) after deducting the amount in respect of Preliminaries and items based on actual costs or current prices;
- M = The aggregate total amount of increases or decreases payable under the above provisions in respect of all the previous interim payments made;
- E = The corresponding cumulative total of all the previous Effective Value of Works.

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Appendix A
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**LIST OF RELEVANT CATEGORIES OF BUILDINGS AND BASE INDICES
SUBJECTED TO PRICE VARIATION IN ACCORDANCE WITH THE
“SPECIAL PROVISIONS TO THE CONDITIONS OF CONTRACT
(VARIATION OF PRICE) FOR BUILDING WORKS”**

Category Of Building (Irrelevant Categories shall be deleted)	Recovery Factor	Base Index (of Building Materials Cost in region _____ * for the month of _____ **
i. Single Storey R.C. Building	0.60	
ii. 2-4 Storey R.C. Building (Flat Roof)	0.60	
iii. 2-4 Storey R.C. Building (Pitched Roof)	0.60	
iv. 5 Storey and Above R.C. Building (For Accomodation)	0.60	
v. 5 Storey and Above R.C. Building (For Office)	0.60	
vi. Timber Building	0.60	
vii. Timber Piling	0.60	
viii. R.C. Piling	0.60	

Notes:

* A – Pulau Pinang, Kedah, Perlis

* B – Perak

* C – Selangor, Wilayah Persekutuan Kuala Lumpur, Melaka dan Negeri Sembilan

* D – Johor

* E – Pahang

* F – Kelantan dan Terengganu

** The “Base Index” shall be the appropriate Building Materials Cost Index (with steel bars) as stated in the **Special Release 2** published by the Statistics Department. The Base Index shall be determined as follows based on:-

- (i) The month during which tender closes (for tenders closed on and after 1st January 2021); or
- (ii) The month December 2020 (for tender closed before 1st January 2021)

**SPECIAL PROVISIONS TO THE CONDITIONS OF CONTRACT
(VARIATION OF PRICE) FOR CIVIL ENGINEERING WORKS**

**A. VARIATION IN PRICE OF CIVIL ENGINEERING MATERIALS
(VARIATION IN UNIT PRICES)**

1. Adjustments (upwards and downwards) shall be made to the monthly interim payments and finally to the Contract Sum where there is variation in the Unit Prices in respect of selected “Materials” described hereunder:

- (i) Mild Steel Round Bars;
- (ii) High Tensile Deformed Bars;
- (iii) Cement;
- (iv) Bitumen Penetration;
- (v) Automotive Gas Oil;
- (vi) Sand;
- (vii) Aggregates;
- (viii) Premix Asphaltic Concrete;
- (ix) Fabric Reinforcement;
- (x) Guardrail; and
- (xi) Pipe (Water Pipe and Sewerage Pipe).

2. Reference Publication

The reference publication to determine the “Unit Prices” of Materials specified in paragraph 1 shall be the **Special Release 1** published by the Department of Statistics in the particular month in which the Materials are delivered to site for use.

3. Basic Unit Prices of Materials

The “Basic Unit Prices” for the purposes of calculating variation of price for the Materials specified in paragraph 1 shall be the appropriate Unit Prices of the Materials as stated in the **Special Release 1** published by the Department of Statistic and shall be inserted in the **Appendix A** to this provision.

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The Basic Unit Price shall be determined as follows based on:

- (i) The month during which tender closes (for tenders closed on and after 1st January 2021); or
- (ii) The month December 2020 (for tender closed before 1st January 2021)

4. Variation in Price of Materials

- (i) Any adjustments will only be made where there is variation in price in respect of Materials specified in paragraph 1 and against which Basic Unit Prices are given in **Appendix A** to this provision.
- (ii) Where a Contractor has paid a higher or lower price for the Materials as compared to the Basic Unit Price specified in **Appendix A** to this provision, the Contract Sum shall be accordingly increased or decreased provided that such increase or decrease shall not exceed the difference between the Basic Unit Price specified in **Appendix A** to this provision and the Unit Price stated in the **Special Release 1** published by the Department of Statistics in the particular month in which the Materials are delivered to site for use.

5. Quantity of Materials Subject to Variation of Price

- (i) Quantities for the Materials specified in paragraph 1 shall be pre-ascertained by the S.O. based on **balance of work to be executed from 1st January 2022** and inserted in **Appendix A** to this provision. The quantities so ascertained shall be the maximum quantities subject to price variation under this provision.
- (ii) The maximum quantities as fixed in **Appendix A** to this provision may be varied only when the original scope of works have been varied. The adjustment of the maximum quantities of the Materials shall be made proportionately to the variation of the scope of the work in which the relevant Materials so relate.

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6. Works Not Included

- (i) This provision shall not apply to any of the Materials which have been used in works which shall have been rejected by the S.O. or which have been executed in places outside the limits of the site without the prior approval of the S.O.
- (ii) The Contractor shall keep accurate and complete records of all Materials or other items required for the replacement of works rejected by the S.O. The quantities of the Materials which have been used in works rejected by the S.O. shall be excluded from any claims for price variations under this provision.

7. Contract Period and Extension

This provision shall only apply to works done within the Contract Period and any extended period which had been allowed in accordance with the terms of the Contract.

8. Works Executed Outside the Period Permitted Under Contract

This provision shall not apply to works carried out by the Contractor outside the period permitted under the terms of Contract except in the following case:

Where the quantity of Materials used by the Contractor within the period permitted under the terms of Contract is less than that specified in **Appendix A** to this provision, adjustments shall be made to the Contract Sum in respect of the balance of the Materials where there is variation in price notwithstanding that the balance of Materials is used beyond the period permitted under the Contract provided that:

- (i) In the case of any increase in prices, adjustments will only be made if the increase does not exceed the Unit Price stated in the **Special Release 1** issued by the Department of Statistics in the final month of the period permitted under the Contract.
- (ii) In the case of any reduction in price, adjustments will be made in accordance with paragraph 4 (ii).

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9. Notification and Documentary Evidence

- (i) The Contractor shall within a reasonable time give the S.O. written notice of any variation in the price of Materials.
- (ii) The S.O. may at any time call for invoices, receipts and such other documentary evidence as may be required. The Contractor shall not withhold any information or documentary evidence as required by the S.O.

**B. VARIATION IN PRICE OF PETROLEUM PRODUCTS
(BITUMEN AND AUTOMOTIVE GAS OIL-DIESEL)**

1. Adjustments (upwards and downwards) shall be made to the monthly interim payments and finally to the Contract Sum where there is variation in the Unit Prices in respect of selected “Materials” described hereunder:

- (i) Automotive Gas Oil (Diesel); and
- (ii) Bitumen.

2. Unit Prices of Material

The Unit Prices of Automotive Gas Oil (Diesel) and Bitumen for the purposes of calculating variation of prices shall be based on the following:

- (i) Government Control Price
The Unit Price for Bitumen 60/70 Penetration Grade shall be tied to the Government of Malaysia Controlled Prices as established by the Ministry of Finance (MOF) and Ministry of Domestic Trade and Consumer Affairs.
- (ii) Posted Price from SHELL MALAYSIA
The Unit Price of Automotive Gas Oil (Diesel) is based on the Posted Prices as obtained from SHELL MALAYSIA.

3. Reference Publication

The reference publication to determine the “Unit Prices” of Materials specified in paragraph 1 shall be the **Special Release 1** published by the Department of Statistics in the particular month in which the Materials are consumed or incorporated into the works.

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4. Basic Unit Prices of Materials

The “Basic Unit Prices” for the purposes of calculating variation of price for the Materials specified in paragraph 1 shall be the appropriate Unit Prices of the Materials as stated in the **Special Release 1** published by the Department of Statistic and shall be inserted in the **Appendix A** to this provision.

The Basic Unit Price shall be determined as follows based on:

- (i) The month during which tender closes (for tenders closed on and after 1st January 2021); or
- (ii) The month December 2020 (for tender closed before 1st January 2021)

5. Variation In Prices of Materials

- (i) Any adjustments will only be made where there is variation in price in respect of Materials specified in paragraph 1 and against which Basic Unit Prices are given in **Appendix A** to this provision irrespective of the actual purchase prices of the Materials by the Contractor and whether the Materials are purchased locally or otherwise.
- (ii) When there is a variation in the Basic Unit Prices of the Materials, the amount payable at a particular month upon the issue of the monthly certificates of progress payment or the final certificate shall be increased or decreased by the amount based on the **ACTUAL** differences between the Basic Unit Prices and the Unit Prices of the Materials at a particular month.

6. Variation Must Be Greater Than Five Per Cent (5%)

Adjustment shall only be made to the Contract Sum when the variation (increase or decrease) in the Basic Unit Prices of the Materials is greater than 5%. Where the variation (increase or decrease) in prices is greater than 5% the full amount of the variation shall be added to or deducted from the Contract Sum.

7. Quantities of Materials Subject to Variation of Price

- (i) The Contractor shall submit together with his Tender an estimate of the total requirements of the Materials (diesel and bitumen) for the Contract and such

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estimate shall be supported by documentary evidence. The estimate of the quantities submitted by the Contractor shall be subject to verification and adjustment by the S.O. as may be necessary before the signing of the Contract. The quantities so ascertained shall be the maximum quantities subject to price variation under this provision. Provided that if the Contractor fails to submit such estimate or any documentary evidence in support thereof, the S.O. shall make a reasonable assessment of the quantities of the Materials for the Contract.

- (ii) The maximum quantities as fixed in **Appendix A** to this provision may be varied only when the original scope of works have been varied. The adjustment of the maximum quantities of the Materials shall be made proportionately to the variation of the scope of the work in which the relevant Materials so relate.
- (iii) The Contractor shall submit to the S.O. monthly returns with documentary evidence on the quantities of the Materials consumed or incorporated into the works, as the case may be, during the particular month. Such quantities of the Materials shall be verified by the S.O. and shall be used as the basis of implementing this provision as described herein:
 - (a) Automotive Gas oil (Diesel)

At the end of each month the Contractor is required to submit documentary evidences of purchases and consumption of Automotive Gas Oil (Diesel) during the month. The Contractor shall keep records of the consumption of the Materials by individual item of plants which shall be verified and certified by the S.O. The quantities so certified shall be used as the basis for the application of this provision. The Contract Sum shall be increased or decreased by such amount derived by multiplying the quantities of the Materials so certified by the S.O. by the actual differences between the Basic Unit Prices and the Unit Prices of the Materials for that particular month. Provided always Automotive Gas Oil (Diesel) consumed outside the limit of the site shall not be included in the computation of the quantities except diesel used in the transportation of imported earth to the site for use in the works and disposal of unsuitable materials off site.

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(b) Bitumen

The quantities of Bitumen used for the purposes of calculating variations in Basic Unit Prices of the Material shall be the quantities of the Materials incorporated into the works (except Bitumen used in Premix) during a particular month. Such quantities must be verified and certified by the S.O. The Contract Sum shall be increased or decreased by such amount derived by multiplying the quantities so certified by the S.O. by the actual difference between the Basic Unit Price and the Unit Price of the Material for that particular month.

- (c) Provided always that this provision shall only apply to such quantities of the Materials as are fixed in **Appendix A** to this provision or such adjusted amounts under paragraph 7 (ii) above and shall not apply to any quantity in excess thereof.
- (d) Should the Contractor fail to submit such details of monthly returns or documentary evidence of the quantities of the Materials consumed and/or incorporated into the works, the S.O. reverses the right to make a reasonable assessment of the quantities of the Materials consumed and/or incorporated into the works for the particular month. Such quantities assessed by the S.O. shall be used as the basis of implementation of this provision as described herein.

8. Works Not Included

- (i) This provision shall not apply to any of the Materials which have been used in works which shall have been rejected by the S.O. or which have been executed in places outside the limits of the site without the prior approval of the S.O.
- (ii) The Contractor shall keep accurate and complete records of all Materials or other items required for the replacement of works rejected by the S.O. The quantities of the Materials which have been used in works rejected by the S.O. shall be excluded from any claims for price variations under this provision.

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9. Contract Period and Extension

This provision shall only apply to works done within the Contract Period and any extended period which had been allowed in accordance with the terms of the Contract.

10. Works Executed Outside the Period Permitted Under Contract

This provision shall not apply to works carried out by the Contractor outside the period permitted under the terms of Contract except in the following case:

Where the quantity of Materials used by the Contractor within the period permitted under the terms of Contract is less than that specified in **Appendix A** to this provision, adjustments shall be made to the Contract Sum in respect of the balance of the Materials where there is variation in price notwithstanding that the balance of Materials is used beyond the period permitted under the Contract provided that:

- (i) In the case of any increase in prices, adjustments will only be made if the increase does not exceed the Unit Price stated in the **Special Release 1** issued by the Department of Statistics in the final month of the period permitted under the Contract.
- (ii) In the case of any reduction in price, adjustments will be made in accordance with paragraph 5 and 6 above.

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**LIST OF MATERIALS TOGETHER WITH QUANTITIES AND BASIC UNIT PRICES
TO PRICE VARIATION IN ACCORDANCE WITH THE
“SPECIAL PROVISIONS TO THE CONDITIONS OF CONTRACT
(VARIATION OF PRICE) FOR CIVIL ENGINEERING WORKS”**

Materials	Unit	Quantity	Basic Unit Price
1. Mild Steel Round Bars, BS 4449 <ul style="list-style-type: none"> - 10mm (3/8") - 12 mm (1/2") - 16mm (5/8") - 20mm – 25mm (3/4"-1") - 32 mm (1 1/4") 	Metric Ton " " " "	* * * * *	
2. High Tensile Deformed Bars <ul style="list-style-type: none"> - 10mm (3/8") - 12 mm (1/2") - 16mm – 25 mm (5/8" - 1") - 32 mm (1 1/4") 	Metric Ton " " " "	* * * * *	
3. Ordinary Portland BS 12	50 Kg. Bag	*	
4. Bitumen 60/70 Penetration Grade in Prime Coat, Tack Coat and Surface Coat	Metric Ton	*	
5. Automotive Gas Oil (Diesel)	Litre	*	
6. Sand <ul style="list-style-type: none"> - River sand - Mining sand 	Metric Ton "	* *	
7. Aggregates <ul style="list-style-type: none"> - Granite - 10mm (3/8") - Granite - 20mm (3/4") - Granite - 40mm (1 1/2") - Crusher Aggregate (Crusher Run) 	Metric Ton " " "	* * * *	
8.(A) Premix Asphaltic Concrete <ul style="list-style-type: none"> - AC 10 (Wearing Course) - AC 14 (Wearing Course) - AC 28 (Binder Course) - ACW 20 (Wearing Course) 	Metric Ton " " "	* * * *	

(untuk digunakan bagi projek yang sedang dalam pembinaan)

Materials	Unit	Quantity	Basic Unit Price
(B) Premix Bituminous Macadam	Metric Ton	*	
- BMR40 (Bound Roadbase)	"	*	
- BMR28 (Bound Roadbase)	"	*	
- BML10 (Levelling Course)	"	*	
- BMB28 (Binder Course)	"	*	
- BMB20 (Binder Course)	"	*	
- BMW14 (Wearing Course)	"	*	
- BMW20 (Wearing Course)	"	*	
9. Fabric Reinforcement	Kg	*	
- A4, MS145	"	*	
- A5, MS145	"	*	
- A6, MS145	"	*	
- A7, MS145	"	*	
- A8, MS145	"	*	
- A9, MS145	"	*	
- A10, MS145	"	*	
- B5, MS145	"	*	
- B6, MS145	"	*	
- B7, MS145	"	*	
- B8, MS145	"	*	
- B9, MS145	"	*	
- B10, MS145	"	*	
- B12, MS145	"	*	
- C5, MS145	"	*	
- C6, MS145	"	*	
- C7, MS145	"	*	
- C8, MS145	"	*	
- C9, MS145	"	*	
- C10, MS145	"	*	
- DA4, MS145	"	*	
- DA5, MS145	"	*	
- DA6, MS145	"	*	
- DA7, MS145	"	*	
- DA8, MS145	"	*	
- DA9, MS145	"	*	
- DA10, MS145	"	*	

(untuk digunakan bagi projek yang sedang dalam pembinaan)

Materials	Unit	Quantity	Basic Unit Price
10. Guardrail			
(i) Single mounted			
- 1.95m Post Spacing	Metre	*	
- 3.80m Post Spacing	"	*	
(ii) Double mounted			
- 1.95m Post Spacing	"	*	
- 3.80m Post Spacing	"	*	
11. (A) Water Pipe			
- Mild Steel Pipe 300mm	Metre	*	
- Stainless Steel Pipe 25mm	"	*	
- Ductile Iron Pipe 300mm	"	*	
- High Density Polythylene (HDPE Pipe)			
- Compression Fitting Using For Jointing 25mm	"	*	
- Electrofusion Jointing 160mm	"	*	
- Butt Fussion 160mm	"	*	
11. (B) Sewerage Pipe			
- Mild Steel Pipe 300mm	Metre	*	
- Stainless Steel Pipe 250mm	"	*	
- Ductile Iron Pipe 300mm	"	*	
- High Density Polythylene (HDPE Pipe)			
- Profile Pipe 150mm	"	*	
- Solid Pipe 250mm	"	*	
- Vitrified Clay Pipe			
(i) Standard Pipe 225mm	"	*	
(ii) Jacking Pipe 225mm	"	*	
- Reinforced Pipe			
(i) Without Lining 900mm	"	*	
(ii) With Lining (High Alumina) 900mm	"	*	
(iii) With Lining (Sacrificial Lining) 900mm	"	*	
			Refer Appendix B

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Appendix A
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Materials	Unit	Quantity	Basic Unit Price
11. (B) Sewerage Pipe (Cont'd) - ABS Pipe - Gravity 110mm - Force Main 225mm	Metre "	* *	} Refer Appendix B

* Quantities shall be pre-ascertained by the Superintending Officer based on **balance of work to be executed from 1st January 2022.**

Notes:

1. The above quantities are intended for the purpose of price variation only and do not necessarily reflect the actual quantities required for the Contract. The Contractor shall ascertain himself the actual quantities required upon which his tender is deemed to have been based.
2. Price Variation shall be applied to the above quantities fixed or actual quantities used, whichever is the lesser.
3. The quantities of materials (subject to those listed above) used in precast concrete components shall be determined and included in the quantities for relevant materials above. The computation for price variation shall be considered when the completed precast components are delivered to site for use.
4. The "Basic Unit Prices" shall be the appropriate Unit Price as stated in the **Special Release 1** published by the Department of Statistics. The Basic Unit Price shall be determined as follows based on:
 - a. The month during which tender closes (for tenders closed on and after 1st January 2021); or
 - b. The month December 2020 (for tender closed before 1st January 2021)

(untuk digunakan bagi projek yang sedang dalam pembinaan)

**LIST OF CATEGORIES AND SIZES OF PIPES TOGETHER WITH QUANTITIES
AND BASIC UNIT PRICES VARIATION IN ACCORDANCE WITH THE
“SPECIAL PROVISIONS TO THE CONDITIONS OF CONTRACT
(VARIATION OF PRICE) FOR CIVIL ENGINEERING WORKS”**

Category and Size of Mild Steel Pipe	Quantity (M)	Unit Price For Basic Material	Adjustment Factor	Basic Unit Price
1. WATER PIPE				
A. Mild Steel Pipe				
1. 100 mm Ø	*			
2. 150 "	*			
3. 200 "	*			
4. 250 "	*			
5. 300 "	*			
6. 350 "	*			
7. 400 "	*			
8. 450 "	*			
9. 500 "	*			
10. 600 "	*			
11. 700 "	*			
12. 750 "	*			
13. 800 "	*			
14. 900 "	*			
15. 1000 "	*			
16. 1100 "	*			
17. 1150 "	*			
18. 1200 "	*			
19. 1300 "	*			
20. 1400 "	*			
21. 1500 "	*			
22. 1600 "	*			
23. 1700 "	*			
24. 1800 "	*			
25. 1900 "	*			
26. 2000 "	*			
27. 2100 "	*			
28. 2200 "	*			

(untuk digunakan bagi projek yang sedang dalam pembinaan)

Category and Size of Mild Steel Pipe	Quantity (M)	Unit Price For Basic Material	Adjustment Factor	Basic Unit Price
1. WATER PIPE				
B. Stainless Steel Pipe				
1. 13 mm Ø (½")	*			
2. 20 " (¾")	*			
3. 25 " (1")	*			
4. 32 " (1 ¼")	*			
5. 38 " (1 ½")	*			
6. 50 " (2")	*			
7. 63 " (2 ½")	*			
8. 75 " (3")	*			
9. 100 " (4")	*			
C. Ductile Iron Pipe				
1. 100 mm Ø	*			
2. 150 "	*			
3. 200 "	*			
4. 250 "	*			
5. 300 "	*			
6. 350 "	*			
7. 400 "	*			
8. 450 "	*			
9. 500 "	*			
10. 600 "	*			
11. 700 "	*			
D. High Density Polyethylene (HDPE) Pipe				
(i) Compression Fitting Using For Jointing				
1. 20 mm Ø	*			
2. 25 "	*			
3. 32 "	*			
4. 40 "	*			
5. 50 "	*			
6. 63 "	*			
7. 75 "	*			
8. 90 "	*			

(untuk digunakan bagi projek yang sedang dalam pembinaan)

Category and Size of Mild Steel Pipe	Quantity (M)	Unit Price For Basic Material	Adjustment Factor	Basic Unit Price
1. WATER PIPE D. High Density Polythylene (HDPE) Pipe (ii) Electrofusion Jointing 1. 110 mm Ø * 2. 125 " * 3. 140 " * 4. 160 " * 5. 180 " * 6. 200 " * 7. 225 " * 8. 250 " * 9. 280 " * 10. 315 " * 11. 355 " * 12. 400 " * 13. 450 " * 14. 500 " * 15. 560 " * (iii) Butt Fussion 1. 110 mm Ø * 2. 125 " * 3. 140 " * 4. 160 " * 5. 180 " * 6. 200 " * 7. 225 " * 8. 250 " * 9. 280 " * 10. 315 " * 11. 355 " * 12. 400 " * 13. 450 " * 14. 500 " * 15. 560 " *				

(untuk digunakan bagi projek yang sedang dalam pembinaan)

Category and Size of Mild Steel Pipe	Quantity (M)	Unit Price For Basic Material	Adjustment Factor	Basic Unit Price
2. SEWERAGE PIPE				
A. Mild Steel Pipe				
1. 100 mm Ø	*			
2. 150 "	*			
3. 200 "	*			
4. 250 "	*			
5. 300 "	*			
6. 350 "	*			
7. 400 "	*			
8. 450 "	*			
9. 500 "	*			
10. 600 "	*			
11. 700 "	*			
12. 750 "	*			
13. 800 "	*			
14. 900 "	*			
15. 1000 "	*			
16. 1100 "	*			
17. 1150 "	*			
18. 1200 "	*			
19. 1300 "	*			
20. 1400 "	*			
21. 1500 "	*			
22. 1600 "	*			
23. 1700 "	*			
24. 1800 "	*			
25. 1900 "	*			
26. 2000 "	*			
27. 2100 "	*			
28. 2200 "	*			
B. Ductile Iron Pipe				
1. 80 mm Ø	*			
2. 100 "	*			
3. 150 "	*			
4. 200 "	*			
5. 250 "	*			
6. 300 "	*			
7. 350 "	*			

(untuk digunakan bagi projek yang sedang dalam pembinaan)

Category and Size of Mild Steel Pipe	Quantity (M)	Unit Price For Basic Material	Adjustment Factor	Basic Unit Price
2. SEWERAGE PIPE				
B. Ductile Iron Pipe (Cont'd)				
8. 400 "	*			
9. 450 "	*			
10. 600 "	*			
11. 700 "	*			
12. 800 "	*			
13. 1000 "	*			
14. 1200 "	*			
C. HDPE (Profile) Pipe				
1. 100 mm Ø	*			
2. 125 "	*			
3. 150 "	*			
4. 200 "	*			
5. 250 "	*			
6. 300 "	*			
7. 350 "	*			
8. 400 "	*			
9. 450 "	*			
10. 500 "	*			
11. 550 "	*			
12. 600 "	*			
13. 650 "	*			
14. 700 "	*			
15. 750 "	*			
16. 800 "	*			
17. 850 "	*			
18. 900 "	*			
19. 950 "	*			
20. 1000 "	*			
21. 1200 "	*			
22. 1400 "	*			
23. 1600 "	*			
24. 1800 "	*			
25. 2000 "	*			
26. 2100 "	*			
27. 2200 "	*			

(untuk digunakan bagi projek yang sedang dalam pembinaan)

Category and Size of Mild Steel Pipe	Quantity (M)	Unit Price For Basic Material	Adjustment Factor	Basic Unit Price
2. SEWERAGE PIPE				
D. HDPE (Solid) Pipe				
1. 100 mm Ø	*			
2. 125 "	*			
3. 150 "	*			
4. 200 "	*			
5. 250 "	*			
6. 300 "	*			
7. 350 "	*			
8. 400 "	*			
9. 450 "	*			
10. 500 "	*			
11. 550 "	*			
12. 600 "	*			
13. 650 "	*			
14. 700 "	*			
15. 750 "	*			
16. 800 "	*			
17. 850 "	*			
18. 900 "	*			
19. 950 "	*			
20. 1000 "	*			
21. 1200 "	*			
22. 1400 "	*			
23. 1600 "	*			
24. 1800 "	*			
25. 2000 "	*			
26. 2100 "	*			
27. 2200 "	*			
E. Vitrified Clay Pipe				
(i) Vitrified Clay (Standard) Pipe				
1. 100 mm Ø	*			
2. 150 "	*			
3. 200 "	*			
4. 225 "	*			
5. 300 "	*			
6. 375 "	*			

(untuk digunakan bagi projek yang sedang dalam pembinaan)

Category and Size of Mild Steel Pipe	Quantity (M)	Unit Price For Basic Material	Adjustment Factor	Basic Unit Price
2. SEWERAGE PIPE				
E. Vitrified Clay Pipe				
(i) Vitrified Clay (Standard) Pipe (Cont'd)				
7. 400 "	*			
8. 450 "	*			
9. 500 "	*			
10. 600 "	*			
11. 700 "	*			
12. 800 "	*			
(ii) Vitrified Clay (Jacking) Pipe				
1. 100 mm Ø	*			
2. 150 "	*			
3. 200 "	*			
4. 225 "	*			
5. 300 "	*			
6. 375 "	*			
7. 400 "	*			
8. 450 "	*			
9. 500 "	*			
10. 600 "	*			
11. 700 "	*			
12. 800 "	*			
F. Reinforced Concrete Pipe (RCP)				
(i) Without Lining				
1. 375 mm Ø	*			
2. 450 "	*			
3. 600 "	*			
4. 750 "	*			
5. 900 "	*			
6. 1050 "	*			
7. 1200 "	*			

(untuk digunakan bagi projek yang sedang dalam pembinaan)

Category and Size of Mild Steel Pipe	Quantity (M)	Unit Price For Basic Material	Adjustment Factor	Basic Unit Price
2. SEWERAGE PIPE				
F. Reinforced Concrete Pipe (RCP)				
(i) Without Lining (Cont'd)				
8. 1350 "	*			
9. 1500 "	*			
10. 1650 "	*			
11. 1800 "	*			
(ii) With Lining (High Alumina)				
1. 375 mm Ø	*			
2. 450 "	*			
3. 600 "	*			
4. 750 "	*			
5. 900 "	*			
6. 1050 "	*			
7. 1200 "	*			
8. 1350 "	*			
9. 1500 "	*			
10. 1650 "	*			
11. 1800 "	*			
(iii) With Lining (Sacrificial Lining)				
1. 375 mm Ø	*			
2. 450 "	*			
3. 600 "	*			
4. 750 "	*			
5. 900 "	*			
6. 1050 "	*			
7. 1200 "	*			
8. 1350 "	*			
9. 1500 "	*			
10. 1650 "	*			
11. 1800 "	*			

(untuk digunakan bagi projek yang sedang dalam pembinaan)

Category and Size of Mild Steel Pipe	Quantity (M)	Unit Price For Basic Material	Adjustment Factor	Basic Unit Price
2. SEWERAGE PIPE				
G. ABS Pipe				
(i) Gravity				
1. 90 mm Ø	*			
2. 110 "	*			
3. 150 "	*			
4. 225 "	*			
5. 315 "	*			
(ii) Force Main				
1. 15 mm Ø	*			
2. 20 "	*			
3. 25 "	*			
4. 32 "	*			
5. 40 "	*			
6. 50 "	*			
7. 65 "	*			
8. 80 "	*			
9. 100 "	*			
10. 150 "	*			
11. 200 "	*			
12. 225 "	*			
13. 250 "	*			
14. 280 "	*			
15. 315 "	*			
16. 355 "	*			
17. 400 "	*			
18. 450 "	*			
19. 500 "	*			
20. 630 "	*			

* Quantities shall be pre-ascertained by the Superintending Officer based on **balance of work to be executed from 1st January 2022.**

Notes:

1. The above quantities are intended for the purpose of price variation only and do not necessarily reflect the actual quantities required for the Contract.
2. Price Variation shall be applied to the above quantities fixed or actual quantities used, whichever is the lesser.

(untuk digunakan bagi projek yang sedang dalam pembinaan)

3. The “Basic Unit Prices” shall be the appropriate Unit Price as stated in the **Special Release 1** published by the Department of Statistics. The Basic Unit Price shall be determined as follows based on:
 - (i) The month during which tender closes (for tenders closed on and after 1st January 2021); or
 - (ii) The month December 2020 (for tender closed before 1st January 2021)
4. Price Adjustment Factor shall be as stated in the **Special Release 1** published by the Department of Statistics.
5. The Basic Material is the most commonly used material for the relevant category of pipes in most projects.

**SPECIAL PROVISIONS TO THE CONDITIONS OF CONTRACT
(VARIATION OF PRICE) FOR MECHANICAL & ELECTRICAL WORKS**

1. This provision shall be applicable for Mechanical and Electrical Works carried out under the following arrangement:
 - (i) Direct contract;
 - (ii) Prime Cost Sum by Nominated Sub-contractor under the Main Contract; and
 - (iii) Packaged as part of Builder's Works under the Main Contract.
2. Adjustment (upwards and downwards) shall be made to the monthly interim payments and finally to the Contract Sum where there is variation in the Component Cost Indices in respect of seven (7) main Mechanical and Electrical (M&E) Components described hereunder:
 - (i) Copper Cables;
 - (ii) Switchgears;
 - (iii) Transformers;
 - (iv) Generators;
 - (v) Lightning Protection System and Earthing System;
 - (vi) Air Conditioning System; and
 - (vii) Motor (Pumpset).
3. Reference Publication

The reference publication to determine the "Component Cost Indices" of M&E Components specified in paragraph 2 shall be the **Special Release 3** published by the Department of Statistics for the month of installation.
4. Base Indices

The "Base Indices" for the purposes of calculating variation of price for the M&E Components specified in paragraph 2 shall be the appropriate Component Cost Index of the M&E Components as stated in the **Special Release 3** published by the Department of Statistic and shall be inserted in the **Appendix A** to this provision prior to the signing of the Contract.

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(untuk digunakan bagi projek yang sedang dalam pembinaan)

The Base Index shall be determined as follows based on:-

- (i) The month during which tender closes (for tenders closed on and after 1st January 2021); or
- (ii) The month December 2020 (for tender closed before 1st January 2021)

5. Application of Adjustments

- (i) The adjustments shall only be applied to the "Effective Value of Work Done" (as defined hereunder) in respect of each M&E component installed on site **from 1st January 2022**. The "Effective Value of Work Done" shall mean the difference between:
 - (a) The amount of each relevant component installed on site by the Contractor up to the date of the current monthly interim valuation less the amount for any items based on actual costs or current prices; and
 - (b) The amount calculated in accordance with (a) above up to the date of the preceding monthly interim valuation.
- (ii) The total tendered price of each M&E component is the total price of the supply and installation as tendered by the Contractor. The "Recovery Factor" of each component is the percentage of the supply component price with respect to the tendered price. The Recovery Factor of the selected M&E component is specified in **Appendix A** to this provision.

6. Variations in Component Cost Index

- (i) The Variation in the Component Cost Index shall mean any increase or decrease in the "Current Index" (as defined under paragraph (ii) hereof) as compared to the Base Index (as defined under paragraph 4 above) for the relevant category or categories of M&E component as stated in **Appendix A** to this provision.
- (ii) The Current Index shall mean the appropriate Component Cost Index as stated in **Special Release 3** issued by the Department of Statistics for the month of installation.

LAMPIRAN C/ME/K-L
(untuk digunakan bagi projek yang sedang dalam pembinaan)

Provided that in respect of Works executed outside the period permitted under the provisions of the Contract, the Current Index shall be the appropriate Component Cost Index as stated in the **Special Release 3** issued by the Department of Statistics for either the final month of the period permitted under the provisions of the Contract, or the month of the monthly interim valuation, whichever is the lower.

7. Calculation for Adjustments

The increase or decrease payable or deductible shall be calculated by multiplying the “Effective Value of Work Done” by a factor referred to as Fluctuation Factor which shall be ascertained from the product of the Recovery Factor of relevant M&E Component and the difference between the relevant Current Index and the Base Index, divided by the Base Index as follows:

$$\text{Fluctuation Factor} = \text{Recovery Factor} \times \frac{\text{Current Index} - \text{Base Index}}{\text{Base Index}}$$

Provided that:

- (i) (a) If the relevant Current Index had not been published by the date the interim payment certificate is to be issued, or

(b) If the total amount of any monthly interim valuation (excluding any sums for increases or decreases under this provision) is inadequate to justify the issue of an interim payment certificate, then the increase or decrease payable in respect of that monthly interim valuation shall be added to or deducted from the amount payable upon the issue by the Superintending Officer (S.O.) of the next interim payment certificate after all the relevant Current Indices have been published or when the total amount of the monthly interim valuation is adequate to justify the issue of the said certificate, as the case may be.
- (ii) The Fluctuation Factor for the Effective Value of Work Done in respect of any balance due or to become due and payable to the Contractor after the payment for each component installed up to the date certified by the S.O. as being completed had been made, shall be the ratio of the aggregate total of all the previous increases and/or decreases and the corresponding cumulative total of all the previous Effective Value of Work Done, as follows:

LAMPIRAN C/ME/K-L
(untuk digunakan bagi projek yang sedang dalam pembinaan)

$$L = F \times \frac{M}{E}$$

Where:

- L = The value of increase or decrease payable or deductible in respect of the balance due or to become due and payable to the contractor;
- F = The amount of the balance due or to become due and payable to the contractor excluding the value of L after deducting the amount in respect of items based on actual costs or current prices;
- M = The aggregate total amount of increases or decreases payable under the above provisions in respect of all the previous interim payments made;
- E = The corresponding cumulative total of all the previous Effective Value of Work Done.

(untuk digunakan bagi projek yang sedang dalam pembinaan)

**LIST OF RELEVANT COMPONENTS, RECOVERY FACTOR AND BASE INDICES
SUBJECTED TO PRICE VARIATION IN ACCORDANCE WITH THE “SPECIAL
PROVISIONS TO THE CONDITIONS OF CONTRACT
(VARIATION OF PRICE) FOR MECHANICAL & ELECTRICAL WORKS”**

Bil.	Category Of Components	Recovery Factor	Base Index (of Component in region _____* for the months of _____**
1.	COPPER CABLES i) Concealed/ Surface wiring using G.I. conduit (per unit point) ii) Cables in galvanized trunking (per meter run) iii) Cables laid underground (per meter run) a) 120 sq. mm and above b) Below 120 sq. mm iv) Cables on tray/ ladder (per meter run) a) 120 sq. mm and above b) Below 120 sq. mm v) Busduct	0.50 0.55 0.90 0.75 0.75 0.50 0.75	
2.	SWITCHGEARS i) HT Switchgears ii) LV Switchboards (Incomer breaker 600A and above) iii) LV Switchboards and Sub Switchboards (Incomer breaker below 600A) iv) TPN & SPN Distribution Boards (Incomer breaker 100A and below)	0.90 0.85 0.85 0.85	
3.	TRANSFORMERS i) Low Loss Cast Resin Transformer ii) Low Loss Hermetically Sealed (Oil filled) Transformer	0.80 0.80	

(untuk digunakan bagi projek yang sedang dalam pembinaan)

Bil.	Category Of Components	Recovery Factor	Base Index (of Component in region _____* for the months of _____**
4.	GENERATORS i) Generator Ratings Above 500kVA ii) Generator Ratings 500kVA and below	0.85 0.75	
5.	LIGHTNING PROTECTION SYSTEM & EARTHING SYSTEM i) Lightning Protection System ii) Earthing system (a) Earthing System for Main Switchboards and Sub Switchboards (b) Earthing System for Distribution Boards	0.65 0.75 0.50	
6.	AIR CONDITIONING SYSTEM i) Water Cooled Chiller ii) Air Cooled Chiller iii) Water Cooled Package iv) Air Cooled Package v) Split Unit System (a) Wall Mounted (b) Ceiling Cassette/Mounted vi) VRV System (a) Indoor (b) Outdoor	0.75 0.90 0.70 0.75 0.75 0.90 0.85 0.95	
7.	MOTOR (PUMPSET) i) Condenser Water Pump ii) Chilled Water Pump iii) Hose Reel Pump	0.80 0.80 0.55	

Notes:

* Penisular Malaysia

* Sabah

* Sarawak

LAMPIRAN C/ME/K-L
Appendix A

(untuk digunakan bagi projek yang sedang dalam pembinaan)

** The “Base Index” shall be the appropriate Component Cost Index as stated in the **Special Release 3** published by the Department of Statistics. The Base Index shall be determined as follows based on:-

- (iii) The month during which tender closes (for tenders closed on and after 1st January 2021); or
- (iv) The month December 2020 (for tender closed before 1st January 2021)

SPECIAL PROVISIONS TO THE CONDITIONS OF CONTRACT
(VARIATION OF PRICE) FOR BUILDING WORKS

A. VARIATION IN PRICE OF 15 SELECTED MATERIALS
(VARIATION IN BUILDING MATERIALS COST INDICES)

1. Adjustments (upwards and downwards) shall be made to the monthly interim payments and finally to the Contract Sum where there is variation in the Building Materials Cost Indices which are deemed to reflect any changes in the prices of the selected Materials described hereunder:

- (i) Cement;
- (ii) Steel;
- (iii) Bricks and wall;
- (iv) Glass;
- (v) Aggregates;
- (vi) Ceiling materials;
- (vii) Roofing materials;
- (viii) Timber;
- (ix) Plywood;
- (x) Sanitary fittings;
- (xi) Floor and wall tiles;
- (xii) Plumbing materials;
- (xiii) Steel and metal sections;
- (xiv) Sand; and
- (xv) Paints.

Any changes in the prices of Materials other than the above and the cost of plant shall be deemed to follow that of the above described Materials, but any changes in the cost of labour and the amount for profit and overheads shall not be reflected in the indices.

2. Reference Publication

The reference publication to determine the "Building Materials Cost Indices" of Materials specified in paragraph 1 shall be the **Special Release 2** published by the Department of Statistics in the particular month in which the Materials are delivered to site for use.

3. Basic Indices

The “Base Indices” for the purposes of calculating variation of price for the Materials specified in paragraph 1 shall be the appropriate Building Materials Cost Index as stated in the **Special Release 2** published by the Department of Statistic and shall be inserted in **Appendix A** to this provision.

The Base Indices shall be determined as follows based on:

- (i) The month during which **Sebut Harga* closes (for **Sebut Harga* closed on and after 1st January 2021); or
- (ii) The month December 2020 (for **Sebut Harga* closed before 1st January 2021)

4. Application of Adjustment

- (i) The adjustments shall only be applied to the "Effective Value of Works" (as defined hereunder) in respect of all materials used and plant employed **from 1st January 2022**. The "Effective Value of Works" shall mean the difference between:
 - a) The amount of all builder's works (including any site and external works) executed by the Contractor up to the date of the current monthly interim valuation less the amounts for "Preliminaries" items and any items based on actual costs or current prices and excluding any works dealt under Prime Cost Sums and Provisional Sums executed by others. Where the Mechanical and Electrical (M&E) works are executed by the Contractor, the value of the M&E works in respect of seven (7) main components shall also be excluded from the value builder's work; and
 - b) The amount calculated in accordance with (a) above up to the date of the preceding monthly interim valuation.
- (i) Variation of price for M&E Works shall be in respect of (7) main components shall be dealt separately as detailed in the “Special Provisions to the Conditions of Contract (Variation of Price) for M&E Works”.

**Sebut Harga* as per item 7 in Pekeliling Perbendaharaan/Perolehan Kerajaan (PP/PK) 2.1

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- (ii) The amount in respect of all the materials used and plant employed are deemed to constitute a certain percentage of "Effective Value of Works". This percentage is referred to as "Recovery Factor" and is specified in **Appendix A** to this provision.

5. Variations in the Building Materials Cost Index

- (i) The Variation in the Building Materials Cost Index shall mean any increase or decrease in the "Current Index" (as defined under paragraph (ii) hereof) as compared to the Base Index (as defined under paragraph 3 above) for the relevant category or categories of building or works as stated in **Appendix A** to this provision.
- (ii) The Current Index shall mean the appropriate Building Materials Cost Index as stated in the **Special Release 2** issued by the Department of Statistics for the month preceding the date of the month of interim valuation.

Provided that in respect of Works executed outside the period permitted under the provisions of the Contract, the Current Index shall be the appropriate Building Materials Cost Index as stated in the **Special Release 2** issued by the Department of Statistics for either the final month of the period permitted under the provisions of the Contract, or the month preceding the date of the monthly interim valuation, whichever is the lower.

6. Calculation of Adjustment

The increase or decrease payable or deductible shall be calculated by multiplying the Effective Value of Works by a factor referred to as Fluctuation Factor which shall be ascertained from the product of the relevant Recovery Factor and the difference between the relevant Current Index and the Base Index, divided by the Base Index as follows:

$$\text{Fluctuation Factor} = \text{Recovery Factor} \times \frac{\text{Current Index} - \text{Base Index}}{\text{Base Index}}$$

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Provided that:

- (i) (a) If the relevant Current Index had not been published by the date the interim payment certificate is to be issued, or
- (b) If the total amount of any monthly interim valuation (excluding any sums for increases or decreases under these provisions) is inadequate to justify the issue of an interim payment certificate, then the increase or decrease payable in respect of that monthly interim valuation shall be added to or deducted from the amount payable upon the issue by the Superintending Officer (S.O.) of the next interim payment certificate after all the relevant Current Indices have been published or when the total amount of the monthly interim valuation is adequate to justify the issue of the said certificate, as the case may be.
- (ii) The Fluctuation Factor for the Effective Value of Works in respect of site and external works shall be the simple average of the Fluctuation Factor of the relevant categories of buildings (excluding piling works) contained in the Contract.
- (iii) The Fluctuation Factor for the Effective Value of Works in respect of any balance due or to become due and payable to the Contractor after the payment for works executed up to the date the work is certified by the S.O. as being completed had been made, shall be the ratio of the aggregate total of all the previous increases and/or decreases and the corresponding cumulative total of all the previous Effective Value of Works as follows:

$$L = F \times \frac{M}{E}$$

Where:

- L = The value of increase or decrease payable or deductible in respect of the balance due or to become due and payable to the contractor;
- F = The amount of the balance due or to become due and payable to the contractor (excluding the value of L', and any works dealt under Prime Cost Sums, Provisional Sums. Where the Mechanical and Electrical (M&E) works in respect of seven (7) main components are executed by the Contractor, the value of the M&E works shall also be excluded)

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- after deducting the amount in respect of Preliminaries and items based on actual costs or current prices;
- M = The aggregate total amount of increases or decreases payable under the above provisions in respect of all the previous interim payments made;
- E = The corresponding cumulative total of all the previous Effective Value of Works.

**LAMPIRAN SEBUT HARGA
(Kerja-kerja Binaan Bangunan)**

Appendix A

**LIST OF RELEVANT CATEGORIES OF BUILDINGS AND BASE INDICES
SUBJECTED TO PRICE VARIATION IN ACCORDANCE WITH THE
“SPECIAL PROVISIONS TO THE CONDITIONS OF CONTRACT
(VARIATION OF PRICE) FOR BUILDING WORKS”**

Category Of Building (Irrelevant Categories shall be deleted)	Recovery Factor	Base Index (of Building Materials Cost in region _____ * for the month of _____ **
i. Single Storey R.C. Building ii. 2-4 Storey R.C. Building (Flat Roof) iii. 2-4 Storey R.C. Building (Pitched Roof) iv. 5 Storey and Above R.C. Building (For Accomodation) v. 5 Storey and Above R.C. Building (For Office) vi. Timber Building vii. Timber Piling viii. R.C. Piling	0.60 0.60 0.60 0.60 0.60 0.60 0.60 0.60	

Notes:

* A – Pulau Pinang, Kedah, Perlis

* B – Perak

* C – Selangor, Wilayah Persekutuan Kuala Lumpur, Melaka dan Negeri Sembilan

* D – Johor

* E – Pahang

* F – Kelantan dan Terengganu

** The “Base Index” shall be the appropriate Building Materials Cost Index (with steel bars) as stated in the **Special Release 2** published by the Statistics Department. The Base Index shall be determined as follows based on:-

- (i) The month during which **Sebut Harga* closes (for **Sebut Harga* closed on and after 1st January 2021); or
- (ii) The month December 2020 (for **Sebut Harga* closed before 1st January 2021)

**SPECIAL PROVISIONS TO THE CONDITIONS OF CONTRACT
(VARIATION OF PRICE) FOR CIVIL ENGINEERING WORKS**

**A. VARIATION IN PRICE OF CIVIL ENGINEERING MATERIALS
(VARIATION IN UNIT PRICES)**

1. Adjustments (upwards and downwards) shall be made to the monthly interim payments and finally to the Contract Sum where there is variation in the Unit Prices in respect of selected “Materials” described hereunder:

- (i) Mild Steel Round Bars;
- (ii) High Tensile Deformed Bars;
- (iii) Cement;
- (iv) Bitumen Penetration;
- (v) Automotive Gas Oil;
- (vi) Sand;
- (vii) Aggregates;
- (viii) Premix Asphaltic Concrete;
- (ix) Fabric Reinforcement;
- (x) Guardrail; and
- (xi) Pipe (Water Pipe and Sewerage Pipe).

2. Reference Publication

The reference publication to determine the “Unit Prices” of Materials specified in paragraph 1 shall be the **Special Release 1** published by the Department of Statistics in the particular month in which the Materials are delivered to site for use.

3. Basic Unit Prices of Materials

The “Basic Unit Prices” for the purposes of calculating variation of price for the Materials specified in paragraph 1 shall be the appropriate Unit Prices of the Materials as stated in the **Special Release 1** published by the Department of Statistic and shall be inserted in the **Appendix A** to this provision.

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The Basic Unit Price shall be determined as follows based on:

- (i) The month during which **Sebut Harga* closes (for **Sebut Harga* closed on and after 1st January 2021); or
- (ii) The month December 2020 (for **Sebut Harga* closed before 1st January 2021)

4. Variation in Price of Materials

- (i) Any adjustments will only be made where there is variation in price in respect of Materials specified in paragraph 1 and against which Basic Unit Prices are given in **Appendix A** to this provision.
- (ii) Where a Contractor has paid a higher or lower price for the Materials as compared to the Basic Unit Price specified in **Appendix A** to this provision, the Contract Sum shall be accordingly increased or decreased provided that such increase or decrease shall not exceed the difference between the Basic Unit Price specified in **Appendix A** to this provision and the Unit Price stated in the **Special Release 1** published by the Department of Statistics in the particular month in which the Materials are delivered to site for use.

5. Quantity of Materials Subject to Variation of Price

- (i) Quantities for the Materials specified in paragraph 1 shall be pre-ascertained by the S.O. based on **balance of work to be executed from 1st January 2022** and inserted in **Appendix A** to this provision. The quantities so ascertained shall be the maximum quantities subject to price variation under this provision.
- (ii) The maximum quantities as fixed in **Appendix A** to this provision may be varied only when the original scope of works have been varied. The adjustment of the maximum quantities of the Materials shall be made proportionately to the variation of the scope of the work in which the relevant Materials so relate.

**Sebut Harga* as per item 7 in Pekeliling Perbendaharaan/Perolehan Kerajaan (PP/PK) 2.1

6. Works Not Included

- (i) This provision shall not apply to any of the Materials which have been used in works which shall have been rejected by the S.O. or which have been executed in places outside the limits of the site without the prior approval of the S.O.
- (ii) The Contractor shall keep accurate and complete records of all Materials or other items required for the replacement of works rejected by the S.O. The quantities of the Materials which have been used in works rejected by the S.O. shall be excluded from any claims for price variations under this provision.

7. Contract Period and Extension

This provision shall only apply to works done within the Contract Period and any extended period which had been allowed in accordance with the terms of the Contract.

8. Works Executed Outside the Period Permitted Under Contract

This provision shall not apply to works carried out by the Contractor outside the period permitted under the terms of Contract except in the following case:

Where the quantity of Materials used by the Contractor within the period permitted under the terms of Contract is less than that specified in **Appendix A** to this provision, adjustments shall be made to the Contract Sum in respect of the balance of the Materials where there is variation in price notwithstanding that the balance of Materials is used beyond the period permitted under the Contract provided that:

- (i) In the case of any increase in prices, adjustments will only be made if the increase does not exceed the Unit Price stated in the **Special Release 1** issued by the Department of Statistics in the final month of the period permitted under the Contract.
- (ii) In the case of any reduction in price, adjustments will be made in accordance with paragraph 4 (ii).

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9. Notification and Documentary Evidence

- (i) The Contractor shall within a reasonable time give the S.O. written notice of any variation in the price of Materials.
- (ii) The S.O. may at any time call for invoices, receipts and such other documentary evidence as may be required. The Contractor shall not withhold any information or documentary evidence as required by the S.O.

**B. VARIATION IN PRICE OF PETROLEUM PRODUCTS
(BITUMEN AND AUTOMOTIVE GAS OIL-DIESEL)**

1. Adjustments (upwards and downwards) shall be made to the monthly interim payments and finally to the Contract Sum where there is variation in the Unit Prices in respect of selected "Materials" described hereunder:

- (i) Automotive Gas Oil (Diesel); and
- (ii) Bitumen.

2. Unit Prices of Material

The Unit Prices of Automotive Gas Oil (Diesel) and Bitumen for the purposes of calculating variation of prices shall be based on the following:

- (i) Government Control Price
The Unit Price for Bitumen 60/70 Penetration Grade shall be tied to the Government of Malaysia Controlled Prices as established by the Ministry of Finance (MOF) and Ministry of Domestic Trade and Consumer Affairs.
- (ii) Posted Price from SHELL MALAYSIA
The Unit Price of Automotive Gas Oil (Diesel) is based on the Posted Prices as obtained from SHELL MALAYSIA.

3. Reference Publication

The reference publication to determine the "Unit Prices" of Materials specified in paragraph 1 shall be the **Special Release 1** published by the Department of Statistics in the particular month in which the Materials are consumed or incorporated into the works.

4. Basic Unit Prices of Materials

The “Basic Unit Prices” for the purposes of calculating variation of price for the Materials specified in paragraph 1 shall be the appropriate Unit Prices of the Materials as stated in the **Special Release 1** published by the Department of Statistic for the month during which the tender closes and shall be inserted in the **Appendix A** to this provision prior to the signing of the Contract.

5. Variation In Prices of Materials

- (i) Any adjustments will only be made where there is variation in price in respect of Materials specified in paragraph 1 and against which Basic Unit Prices are given in **Appendix A** to this provision irrespective of the actual purchase prices of the Materials by the Contractor and whether the Materials are purchased locally or otherwise.
- (ii) When there is a variation in the Basic Unit Prices of the Materials, the amount payable at a particular month upon the issue of the monthly certificates of progress payment or the final certificate shall be increased or decreased by the amount based on the **ACTUAL** differences between the Basic Unit Prices and the Unit Prices of the Materials at a particular month.

6. Variation Must Be Greater Than Five Per Cent (5%)

Adjustment shall only be made to the Contract Sum when the variation (increase or decrease) in the Basic Unit Prices of the Materials is greater than 5%. Where the variation (increase or decrease) in prices is greater than 5% the full amount of the variation shall be added to or deducted from the Contract Sum.

7. Quantities of Materials Subject to Variation of Price

- (i) The Contractor shall submit together with his Tender an estimate of the total requirements of the Materials (diesel and bitumen) for the Contract and such estimate shall be supported by documentary evidence. The estimate of the quantities submitted by the Contractor shall be subject to verification and adjustment by the S.O. as may be necessary before the signing of the Contract. The quantities so ascertained shall be the maximum quantities subject to price variation under this provision. Provided that if the Contractor fails to submit such estimate or any documentary evidence in support thereof,

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the S.O. shall make a reasonable assessment of the quantities of the Materials for the Contract.

- (ii) The maximum quantities as fixed in **Appendix A** to this provision may be varied only when the original scope of works have been varied. The adjustment of the maximum quantities of the Materials shall be made proportionately to the variation of the scope of the work in which the relevant Materials so relate.
- (iii) The Contractor shall submit to the S.O. monthly returns with documentary evidence on the quantities of the Materials consumed or incorporated into the works, as the case may be, during the particular month. Such quantities of the Materials shall be verified by the S.O. and shall be used as the basis of implementing this provision as described herein:

(a) Automotive Gas oil (Diesel)

At the end of each month the Contractor is required to submit documentary evidences of purchases and consumption of Automotive Gas Oil (Diesel) during the month. The Contractor shall keep records of the consumption of the Materials by individual item of plants which shall be verified and certified by the S.O. The quantities so certified shall be used as the basis for the application of this provision. The Contract Sum shall be increased or decreased by such amount derived by multiplying the quantities of the Materials so certified by the S.O. by the actual differences between the Basic Unit Prices and the Unit Prices of the Materials for that particular month. Provided always Automotive Gas Oil (Diesel) consumed outside the limit of the site shall not be included in the computation of the quantities except diesel used in the transportation of imported earth to the site for use in the works and disposal of unsuitable materials off site.

(b) Bitumen

The quantities of Bitumen used for the purposes of calculating variations in Basic Unit Prices of the Material shall be the quantities of the Materials incorporated into the works (except Bitumen used in Premix) during a particular month. Such quantities must be verified and certified by the S.O. The Contract Sum shall be increased or decreased by such amount derived by multiplying the quantities so certified by the S.O. by the actual

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difference between the Basic Unit Price and the Unit Price of the Material for that particular month.

- (c) Provided always that this provision shall only apply to such quantities of the Materials as are fixed in **Appendix A** to this provision or such adjusted amounts under paragraph 7 (ii) above and shall not apply to any quantity in excess thereof.
- (d) Should the Contractor fail to submit such details of monthly returns or documentary evidence of the quantities of the Materials consumed and/or incorporated into the works, the S.O. reverses the right to make a reasonable assessment of the quantities of the Materials consumed and/or incorporated into the works for the particular month. Such quantities assessed by the S.O. shall be used as the basis of implementation of this provision as described herein.

8. Works Not Included

- (i) This provision shall not apply to any of the Materials which have been used in works which shall have been rejected by the S.O. or which have been executed in places outside the limits of the site without the prior approval of the S.O.
- (ii) The Contractor shall keep accurate and complete records of all Materials or other items required for the replacement of works rejected by the S.O. The quantities of the Materials which have been used in works rejected by the S.O. shall be excluded from any claims for price variations under this provision.

9. Contract Period and Extension

This provision shall only apply to works done within the Contract Period and any extended period which had been allowed in accordance with the terms of the Contract.

10. Works Executed Outside the Period Permitted Under Contract

This provision shall not apply to works carried out by the Contractor outside the period permitted under the terms of Contract except in the following case:

Where the quantity of Materials used by the Contractor within the period permitted under the terms of Contract is less than that specified in **Appendix A** to this provision, adjustments shall be made to the Contract Sum in respect of the balance of the Materials where there is variation in price notwithstanding that the balance of Materials is used beyond the period permitted under the Contract provided that:

- (i) In the case of any increase in prices, adjustments will only be made if the increase does not exceed the Unit Price stated in the **Special Release 1** issued by the Department of Statistics in the final month of the period permitted under the Contract.
- (ii) In the case of any reduction in price, adjustments will be made in accordance with paragraph 5 and 6 above.

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Appendix A

**LIST OF MATERIALS TOGETHER WITH QUANTITIES AND BASIC UNIT PRICES
TO PRICE VARIATION IN ACCORDANCE WITH THE
“SPECIAL PROVISIONS TO THE CONDITIONS OF CONTRACT
(VARIATION OF PRICE) FOR CIVIL ENGINEERING WORKS”**

Materials	Unit	Quantity	Basic Unit Price
1. Mild Steel Round Bars, BS 4449 <ul style="list-style-type: none"> - 10mm (3/8") - 12 mm (1/2") - 16mm (5/8") - 20mm – 25mm (3/4"-1") - 32 mm (1 1/4") 	Metric Ton " " " "	* * * * *	
2. High Tensile Deformed Bars <ul style="list-style-type: none"> - 10mm (3/8") - 12 mm (1/2") - 16mm – 25 mm (5/8" - 1") - 32 mm (1 1/4") 	Metric Ton " " " "	* * * * *	
3. Ordinary Portland BS 12	50 Kg. Bag	*	
4. Bitumen 60/70 Penetration Grade in Prime Coat, Tack Coat and Surface Coat	Metric Ton	*	
5. Automotive Gas Oil (Diesel)	Litre	*	
6. Sand <ul style="list-style-type: none"> - River sand - Mining sand 	Metric Ton "	* *	
7. Aggregates <ul style="list-style-type: none"> - Granite - 10mm (3/8") - Granite - 20mm (3/4") - Granite - 40mm (1 1/2") - Crusher Aggregate (Crusher Run) 	Metric Ton " " "	* * * *	
8.(A) Premix Asphaltic Concrete <ul style="list-style-type: none"> - AC 10 (Wearing Course) - AC 14 (Wearing Course) - AC 28 (Binder Course) - ACW 20 (Wearing Course) 	Metric Ton " " "	* * * *	

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Materials	Unit	Quantity	Basic Unit Price
(B) Premix Bituminous Macadam			
- BMR40 (Bound Roadbase)	Metric Ton	*	
- BMR28 (Bound Roadbase)	"	*	
- BML10 (Levelling Course)	"	*	
- BMB28 (Binder Course)	"	*	
- BMB20 (Binder Course)	"	*	
- BMW14 (Wearing Course)	"	*	
- BMW20 (Wearing Course)	"	*	
9. Fabric Reinforcement			
- A4, MS145	Kg	*	
- A5, MS145	"	*	
- A6, MS145	"	*	
- A7, MS145	"	*	
- A8, MS145	"	*	
- A9, MS145	"	*	
- A10, MS145	"	*	
- B5, MS145	"	*	
- B6, MS145	"	*	
- B7, MS145	"	*	
- B8, MS145	"	*	
- B9, MS145	"	*	
- B10, MS145	"	*	
- B12, MS145	"	*	
- C5, MS145	"	*	
- C6, MS145	"	*	
- C7, MS145	"	*	
- C8, MS145	"	*	
- C9, MS145	"	*	
- C10, MS145	"	*	
- DA4, MS145	"	*	
- DA5, MS145	"	*	
- DA6, MS145	"	*	
- DA7, MS145	"	*	
- DA8, MS145	"	*	
- DA9, MS145	"	*	
- DA10, MS145	"	*	

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Materials	Unit	Quantity	Basic Unit Price
10. Guardrail			
(i) Single mounted			
- 1.95m Post Spacing	Metre	*	
- 3.80m Post Spacing	"	*	
(ii) Double mounted			
- 1.95m Post Spacing	"	*	
- 3.80m Post Spacing	"	*	
11. (A) Water Pipe			
- Mild Steel Pipe 300mm	Metre	*	
- Stainless Steel Pipe 25mm	"	*	
- Ductile Iron Pipe 300mm	"	*	
- High Density Polythylene (HDPE Pipe)			
- Compression Fitting Using For Jointing 25mm	"	*	
- Electrofusion Jointing 160mm	"	*	
- Butt Fussion 160mm	"	*	
11. (B) Sewerage Pipe			
- Mild Steel Pipe 300mm	Metre	*	
- Stainless Steel Pipe 250mm	"	*	
- Ductile Iron Pipe 300mm	"	*	
- High Density Polythylene (HDPE Pipe)			
- Profile Pipe 150mm	"	*	
- Solid Pipe 250mm	"	*	
- Vitrified Clay Pipe			
(i) Standard Pipe 225mm	"	*	
(ii) Jacking Pipe 225mm	"	*	
- Reinforced Pipe			
(i) Without Lining 900mm	"	*	
(ii) With Lining (High Alumina) 900mm	"	*	
(iii) With Lining (Sacrificial Lining) 900mm	"	*	

Refer
Appendix B

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Materials	Unit	Quantity	Basic Unit Price
11. (B) Sewerage Pipe (Cont'd) - ABS Pipe - Gravity 110mm - Force Main 225mm	Metre “	* *	} Refer Appendix B

* Quantities shall be pre-ascertained by the Superintending Officer based on **balance of work to be executed from 1st January 2022.**

Notes:

1. The above quantities are intended for the purpose of price variation only and do not necessarily reflect the actual quantities required for the Contract. The Contractor shall ascertain himself the actual quantities required upon which his **Sebut Harga* is deemed to have been based.
2. Price Variation shall be applied to the above quantities fixed or actual quantities used, whichever is the lesser.
3. The quantities of materials (subject to those listed above) used in precast concrete components shall be determined and included in the quantities for relevant materials above. The computation for price variation shall be considered when the completed precast components are delivered to site for use.
4. The “Basic Unit Prices” shall be the appropriate Unit Price as stated in the **Special Release 1** published by the Department of Statistics. The Basic Unit Price shall be determined as follows based on:
 - a. The month during which **Sebut Harga* closes (for **Sebut Harga* closed on and after 1st January 2021); or
 - b. The month December 2020 (for **Sebut Harga* closed before 1st January 2021)

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Appendix B

**LIST OF CATEGORIES AND SIZES OF PIPES TOGETHER WITH QUANTITIES
AND BASIC UNIT PRICES VARIATION IN ACCORDANCE WITH THE
“SPECIAL PROVISIONS TO THE CONDITIONS OF CONTRACT
(VARIATION OF PRICE) FOR CIVIL ENGINEERING WORKS”**

Category and Size of Mild Steel Pipe	Quantity (M)	Unit Price For Basic Material	Adjustment Factor	Basic Unit Price
1. WATER PIPE				
A. Mild Steel Pipe				
1. 100 mm Ø	*			
2. 150 "	*			
3. 200 "	*			
4. 250 "	*			
5. 300 "	*			
6. 350 "	*			
7. 400 "	*			
8. 450 "	*			
9. 500 "	*			
10. 600 "	*			
11. 700 "	*			
12. 750 "	*			
13. 800 "	*			
14. 900 "	*			
15. 1000 "	*			
16. 1100 "	*			
17. 1150 "	*			
18. 1200 "	*			
19. 1300 "	*			
20. 1400 "	*			
21. 1500 "	*			
22. 1600 "	*			
23. 1700 "	*			
24. 1800 "	*			
25. 1900 "	*			
26. 2000 "	*			
27. 2100 "	*			
28. 2200 "	*			

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Category and Size of Mild Steel Pipe	Quantity (M)	Unit Price For Basic Material	Adjustment Factor	Basic Unit Price
1. WATER PIPE B. Stainless Steel Pipe				
1. 13 mm Ø (½")	*			
2. 20 " (¾")	*			
3. 25 " (1")	*			
4. 32 " (1 ¼")	*			
5. 38 " (1 ½")	*			
6. 50 " (2")	*			
7. 63 " (2 ½")	*			
8. 75 " (3")	*			
9. 100 " (4")	*			
C. Ductile Iron Pipe				
1. 100 mm Ø	*			
2. 150 "	*			
3. 200 "	*			
4. 250 "	*			
5. 300 "	*			
6. 350 "	*			
7. 400 "	*			
8. 450 "	*			
9. 500 "	*			
10. 600 "	*			
11. 700 "	*			
D. High Density Polyethylene (HDPE) Pipe (i) Compression Fitting Using For Jointing				
1. 20 mm Ø	*			
2. 25 "	*			
3. 32 "	*			
4. 40 "	*			
5. 50 "	*			
6. 63 "	*			
7. 75 "	*			
8. 90 "	*			

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Category and Size of Mild Steel Pipe	Quantity (M)	Unit Price For Basic Material	Adjustment Factor	Basic Unit Price
1. WATER PIPE D. High Density Polythylene (HDPE) Pipe (ii) Electrofusion Jointing				
1. 110 mm Ø	*			
2. 125 "	*			
3. 140 "	*			
4. 160 "	*			
5. 180 "	*			
6. 200 "	*			
7. 225 "	*			
8. 250 "	*			
9. 280 "	*			
10. 315 "	*			
11. 355 "	*			
12. 400 "	*			
13. 450 "	*			
14. 500 "	*			
15. 560 "	*			
(iii) Butt Fussion				
1. 110 mm Ø	*			
2. 125 "	*			
3. 140 "	*			
4. 160 "	*			
5. 180 "	*			
6. 200 "	*			
7. 225 "	*			
8. 250 "	*			
9. 280 "	*			
10. 315 "	*			
11. 355 "	*			
12. 400 "	*			
13. 450 "	*			
14. 500 "	*			
15. 560 "	*			

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Category and Size of Mild Steel Pipe	Quantity (M)	Unit Price For Basic Material	Adjustment Factor	Basic Unit Price
2. SEWERAGE PIPE				
A. Mild Steel Pipe				
1. 100 mm Ø	*			
2. 150 "	*			
3. 200 "	*			
4. 250 "	*			
5. 300 "	*			
6. 350 "	*			
7. 400 "	*			
8. 450 "	*			
9. 500 "	*			
10. 600 "	*			
11. 700 "	*			
12. 750 "	*			
13. 800 "	*			
14. 900 "	*			
15. 1000 "	*			
16. 1100 "	*			
17. 1150 "	*			
18. 1200 "	*			
19. 1300 "	*			
20. 1400 "	*			
21. 1500 "	*			
22. 1600 "	*			
23. 1700 "	*			
24. 1800 "	*			
25. 1900 "	*			
26. 2000 "	*			
27. 2100 "	*			
28. 2200 "	*			
B. Ductile Iron Pipe				
1. 80 mm Ø	*			
2. 100 "	*			
3. 150 "	*			
4. 200 "	*			
5. 250 "	*			
6. 300 "	*			
7. 350 "	*			

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Category and Size of Mild Steel Pipe	Quantity (M)	Unit Price For Basic Material	Adjustment Factor	Basic Unit Price
2. SEWERAGE PIPE B. Ductile Iron Pipe (Cont'd)				
8. 400 "	*			
9. 450 "	*			
10. 600 "	*			
11. 700 "	*			
12. 800 "	*			
13. 1000 "	*			
14. 1200 "	*			
C. HDPE (Profile) Pipe				
1. 100 mm Ø	*			
2. 125 "	*			
3. 150 "	*			
4. 200 "	*			
5. 250 "	*			
6. 300 "	*			
7. 350 "	*			
8. 400 "	*			
9. 450 "	*			
10. 500 "	*			
11. 550 "	*			
12. 600 "	*			
13. 650 "	*			
14. 700 "	*			
15. 750 "	*			
16. 800 "	*			
17. 850 "	*			
18. 900 "	*			
19. 950 "	*			
20. 1000 "	*			
21. 1200 "	*			
22. 1400 "	*			
23. 1600 "	*			
24. 1800 "	*			
25. 2000 "	*			
26. 2100 "	*			
27. 2200 "	*			

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Category and Size of Mild Steel Pipe	Quantity (M)	Unit Price For Basic Material	Adjustment Factor	Basic Unit Price
2. SEWERAGE PIPE D. HDPE (Solid) Pipe				
1. 100 mm Ø	*			
2. 125 "	*			
3. 150 "	*			
4. 200 "	*			
5. 250 "	*			
6. 300 "	*			
7. 350 "	*			
8. 400 "	*			
9. 450 "	*			
10. 500 "	*			
11. 550 "	*			
12. 600 "	*			
13. 650 "	*			
14. 700 "	*			
15. 750 "	*			
16. 800 "	*			
17. 850 "	*			
18. 900 "	*			
19. 950 "	*			
20. 1000 "	*			
21. 1200 "	*			
22. 1400 "	*			
23. 1600 "	*			
24. 1800 "	*			
25. 2000 "	*			
26. 2100 "	*			
27. 2200 "	*			
E. Vitrified Clay Pipe (i) Vitrified Clay (Standard) Pipe				
1. 100 mm Ø	*			
2. 150 "	*			
3. 200 "	*			
4. 225 "	*			
5. 300 "	*			
6. 375 "	*			

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Category and Size of Mild Steel Pipe	Quantity (M)	Unit Price For Basic Material	Adjustment Factor	Basic Unit Price
2. SEWERAGE PIPE E. Vitrified Clay Pipe (i) Vitrified Clay (Standard) Pipe (Cont'd)				
7. 400 "	*			
8. 450 "	*			
9. 500 "	*			
10. 600 "	*			
11. 700 "	*			
12. 800 "	*			
(ii) Vitrified Clay (Jacking) Pipe				
1. 100 mm Ø	*			
2. 150 "	*			
3. 200 "	*			
4. 225 "	*			
5. 300 "	*			
6. 375 "	*			
7. 400 "	*			
8. 450 "	*			
9. 500 "	*			
10. 600 "	*			
11. 700 "	*			
12. 800 "	*			
F. Reinforced Concrete Pipe (RCP) (i) Without Lining				
1. 375 mm Ø	*			
2. 450 "	*			
3. 600 "	*			
4. 750 "	*			
5. 900 "	*			
6. 1050 "	*			
7. 1200 "	*			

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Category and Size of Mild Steel Pipe	Quantity (M)	Unit Price For Basic Material	Adjustment Factor	Basic Unit Price
2. SEWERAGE PIPE				
F. Reinforced Concrete Pipe (RCP)				
(i) Without Lining (Cont'd)				
8. 1350 "	*			
9. 1500 "	*			
10. 1650 "	*			
11. 1800 "	*			
(ii) With Lining (High Alumina)				
1. 375 mm Ø	*			
2. 450 "	*			
3. 600 "	*			
4. 750 "	*			
5. 900 "	*			
6. 1050 "	*			
7. 1200 "	*			
8. 1350 "	*			
9. 1500 "	*			
10. 1650 "	*			
11. 1800 "	*			
(iii) With Lining (Sacrificial Lining)				
1. 375 mm Ø	*			
2. 450 "	*			
3. 600 "	*			
4. 750 "	*			
5. 900 "	*			
6. 1050 "	*			
7. 1200 "	*			
8. 1350 "	*			
9. 1500 "	*			
10. 1650 "	*			
11. 1800 "	*			

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Category and Size of Mild Steel Pipe	Quantity (M)	Unit Price For Basic Material	Adjustment Factor	Basic Unit Price
2. SEWERAGE PIPE				
G. ABS Pipe				
(i) Gravity				
1. 90 mm Ø	*			
2. 110 "	*			
3. 150 "	*			
4. 225 "	*			
5. 315 "	*			
(ii) Force Main				
1. 15 mm Ø	*			
2. 20 "	*			
3. 25 "	*			
4. 32 "	*			
5. 40 "	*			
6. 50 "	*			
7. 65 "	*			
8. 80 "	*			
9. 100 "	*			
10. 150 "	*			
11. 200 "	*			
12. 225 "	*			
13. 250 "	*			
14. 280 "	*			
15. 315 "	*			
16. 355 "	*			
17. 400 "	*			
18. 450 "	*			
19. 500 "	*			
20. 630 "	*			

* Quantities shall be pre-ascertained by the Superintending Officer based on **balance of work to be executed from 1st January 2022.**

Notes:

1. The above quantities are intended for the purpose of price variation only and do not necessarily reflect the actual quantities required for the Contract.
2. Price Variation shall be applied to the above quantities fixed or actual quantities used, whichever is the lesser.

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3. The “Basic Unit Prices” shall be the appropriate Unit Price as stated in the **Special Release 1** published by the Department of Statistics. The Basic Unit Price shall be determined as follows based on:
 - (i) The month during which **Sebut Harga* closes (for **Sebut Harga* closed on and after 1st January 2021); or
 - (ii) The month December 2020 (for **Sebut Harga* closed before 1st January 2021)
4. Price Adjustment Factor shall be as stated in the **Special Release 1** published by the Department of Statistics.
5. The Basic Material is the most commonly used material for the relevant category of pipes in most projects.

**SPECIAL PROVISIONS TO THE CONDITIONS OF CONTRACT
(VARIATION OF PRICE) FOR MECHANICAL & ELECTRICAL WORKS**

1. This provision shall be applicable for Mechanical and Electrical Works carried out under the following arrangement:
 - (i) Direct contract;
 - (ii) Prime Cost Sum by Nominated Sub-contractor under the Main Contract; and
 - (iii) Packaged as part of Builder's Works under the Main Contract.

2. Adjustment (upwards and downwards) shall be made to the monthly interim payments and finally to the Contract Sum where there is variation in the Component Cost Indices in respect of seven (7) main Mechanical and Electrical (M&E) Components described hereunder:
 - (i) Copper Cables;
 - (ii) Switchgears;
 - (iii) Transformers;
 - (iv) Generators;
 - (v) Lightning Protection System and Earthing System;
 - (vi) Air Conditioning System; and
 - (vii) Motor (Pumpset).

3. Reference Publication

The reference publication to determine the "Component Cost Indices" of M&E Components specified in paragraph 2 shall be the **Special Release 3** published by the Department of Statistics for the month of installation.

4. Base Indices

The "Base Indices" for the purposes of calculating variation of price for the M&E Components specified in paragraph 2 shall be the appropriate Component Cost Index of the M&E Components as stated in the **Special Release 3** published by the Department of Statistic and shall be inserted in the **Appendix A** to this provision prior to the signing of the Contract.

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The Base Index shall be determined as follows based on:-

- (i) The month during which **Sebut Harga* closes (for **Sebut Harga* closed on and after 1st January 2021); or
- (ii) The month December 2020 (for **Sebut Harga* closed before 1st January 2021)

5. Application of Adjustments

- (i) The adjustments shall only be applied to the "Effective Value of Work Done" (as defined hereunder) in respect of each M&E component installed on site **from 1st January 2022**. The "Effective Value of Work Done" shall mean the difference between:
 - (a) The amount of each relevant component installed on site by the Contractor up to the date of the current monthly interim valuation less the amount for any items based on actual costs or current prices; and
 - (b) The amount calculated in accordance with (a) above up to the date of the preceding monthly interim valuation.
- (ii) The total quoted price of each M&E component is the total price of the supply and installation as quoted by the Contractor. The "Recovery Factor" of each component is the percentage of the supply component price with respect to the quoted price. The Recovery Factor of the selected M&E component is specified in **Appendix A** to this provision.

6. Variations in Component Cost Index

- (i) The Variation in the Component Cost Index shall mean any increase or decrease in the "Current Index" (as defined under paragraph (ii) hereof) as compared to the Base Index (as defined under paragraph 4 above) for the relevant category or categories of M&E component as stated in **Appendix A** to this provision.
- (ii) The Current Index shall mean the appropriate Component Cost Index as stated in **Special Release 3** issued by the Department of Statistics for the month of installation.

**Sebut Harga* as per item 7 in Pekeliling Perbendaharaan/Perolehan Kerajaan (PP/PK) 2.1

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Provided that in respect of Works executed outside the period permitted under the provisions of the Contract, the Current Index shall be the appropriate Component Cost Index as stated in the **Special Release 3** issued by the Department of Statistics for either the final month of the period permitted under the provisions of the Contract, or the month of the monthly interim valuation, whichever is the lower.

7. Calculation for Adjustments

The increase or decrease payable or deductible shall be calculated by multiplying the "Effective Value of Work Done" by a factor referred to as Fluctuation Factor which shall be ascertained from the product of the Recovery Factor of relevant M&E Component and the difference between the relevant Current Index and the Base Index, divided by the Base Index as follows:

$$\text{Fluctuation Factor} = \text{Recovery Factor} \times \frac{\text{Current Index} - \text{Base Index}}{\text{Base Index}}$$

Provided that:

- (i) (a) If the relevant Current Index had not been published by the date the interim payment certificate is to be issued, or

(b) If the total amount of any monthly interim valuation (excluding any sums for increases or decreases under this provision) is inadequate to justify the issue of an interim payment certificate, then the increase or decrease payable in respect of that monthly interim valuation shall be added to or deducted from the amount payable upon the issue by the Superintending Officer (S.O.) of the next interim payment certificate after all the relevant Current Indices have been published or when the total amount of the monthly interim valuation is adequate to justify the issue of the said certificate, as the case may be.
- (ii) The Fluctuation Factor for the Effective Value of Work Done in respect of any balance due or to become due and payable to the Contractor after the payment for each component installed up to the date certified by the S.O. as being completed had been made, shall be the ratio of the aggregate total of all the previous increases and/or decreases and the corresponding cumulative total of all the previous Effective Value of Work Done, as follows:

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$$L = F \times \frac{M}{E}$$

Where:

- L = The value of increase or decrease payable or deductible in respect of the balance due or to become due and payable to the contractor;
- F = The amount of the balance due or to become due and payable to the contractor excluding the value of L after deducting the amount in respect of items based on actual costs or current prices;
- M = The aggregate total amount of increases or decreases payable under the above provisions in respect of all the previous interim payments made;
- E = The corresponding cumulative total of all the previous Effective Value of Work Done.

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APPENDIX A

**LIST OF RELEVANT COMPONENTS, RECOVERY FACTOR AND BASE INDICES
SUBJECTED TO PRICE VARIATION IN ACCORDANCE WITH THE
“SPECIAL PROVISIONS TO THE CONDITIONS OF CONTRACT
(VARIATION OF PRICE) FOR MECHANICAL & ELECTRICAL WORKS”**

Bil.	Category Of Components	Recovery Factor	Base Index (of Component in region _____* for the months of _____**
1.	COPPER CABLES i) Concealed/ Surface wiring using G.I. conduit (per unit point) ii) Cables in galvanized trunking (per meter run) iii) Cables laid underground (per meter run) a) 120 sq. mm and above b) Below 120 sq. mm iv) Cables on tray/ ladder (per meter run) a) 120 sq. mm and above b) Below 120 sq. mm v) Busduct	0.50 0.55 0.90 0.75 0.75 0.50 0.75	
2.	SWITCHGEARS i) HT Switchgears ii) LV Switchboards (Incomer breaker 600A and above) iii) LV Switchboards and Sub Switchboards (Incomer breaker below 600A) iv) TPN & SPN Distribution Boards (Incomer breaker 100A and below)	0.90 0.85 0.85 0.85	
3.	TRANSFORMERS i) Low Loss Cast Resin Transformer ii) Low Loss Hermetically Sealed (Oil filled) Transformer	0.80 0.80	

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Bil.	Category Of Components	Recovery Factor	Base Index (of Component in region _____* for the months of _____**
4.	GENERATORS i) Generator Ratings Above 500kVA ii) Generator Ratings 500kVA and below	0.85 0.75	
5.	LIGHTNING PROTECTION SYSTEM & EARTHING SYSTEM i) Lightning Protection System ii) Earthing system (a) Earthing System for Main Switchboards and Sub Switchboards (b) Earthing System for Distribution Boards	0.65 0.75 0.50	
6.	AIR CONDITIONING SYSTEM i) Water Cooled Chiller ii) Air Cooled Chiller iii) Water Cooled Package iv) Air Cooled Package v) Split Unit System (a) Wall Mounted (b) Ceiling Cassette/Mounted vi) VRV System (a) Indoor (b) Outdoor	0.75 0.90 0.70 0.75 0.75 0.90 0.85 0.95	
7.	MOTOR (PUMPSET) i) Condenser Water Pump ii) Chilled Water Pump iii) Hose Reel Pump	0.80 0.80 0.55	

Notes:

* Penisular Malaysia

* Sabah

* Sarawak

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** The “Base Index” shall be the appropriate Component Cost Index as stated in the **Special Release 3** published by the Department of Statistics. The Base Index shall be determined as follows based on:-

- (iii) The month during which **Sebut Harga* closes (for **Sebut Harga* closed on and after 1st January 2021); or
- (iv) The month December 2020 (for **Sebut Harga* closed before 1st January 2021)

SPECIAL PROVISIONS TO THE CONDITIONS OF CONTRACT (VARIATION OF PRICE) FOR BUILDING WORKS (DESIGN & BUILD CONTRACTS)

A. EQUAL SHARING OF RISK

Adjustment (upwards and downwards) shall be made to the monthly interim payments and finally to the Contract Sum where there is variation in the prices of the selected Materials described hereunder and shall only be in respect of 50% of the actual amount so calculated (based on an equal sharing of risk 50:50 between the parties to the Contract).

**B. VARIATION IN PRICE OF 15 SELECTED MATERIALS
(VARIATION IN BUILDING MATERIALS COST INDICES)**

1. Adjustments (upwards and downwards) shall be made to the monthly interim payments and finally to the Contract Sum where there is variation in the Building Materials Cost Indices which are deemed to reflect any changes in the prices of the selected Materials described hereunder:

- (i) Cement;
- (ii) Steel;
- (iii) Bricks and wall;
- (iv) Glass;
- (v) Aggregates;
- (vi) Ceiling materials;
- (vii) Roofing materials;
- (viii) Timber;
- (ix) Plywood;
- (x) Sanitary fittings;
- (xi) Floor and wall tiles;
- (xii) Plumbing materials;
- (xiii) Steel and metal sections;
- (xiv) Sand; and
- (xv) Paints.

Any changes in the prices of Materials other than the above and the cost of plant shall be deemed to follow that of the above described Materials, but any changes in the cost of labour and the amount for profit and overheads shall not be reflected in the indices.

2. Reference Publication

The reference publication to determine the "Building Materials Cost Indices" of Materials specified in paragraph A and B.1 shall be the **Special Release 2** published by the Department of Statistics for the month preceding the date of the month of interim valuation.

3. Base Indices

The "Base Indices" for the purposes of calculating variation of price for the Materials specified in paragraph A and B.1 shall be the appropriate Building Materials Cost Index as stated in the **Special Release 2** published by the Department of Statistic for the month during which the tender closes and shall be inserted in **Appendix A** to this provision prior to the signing of the Contract.

4. Application of Adjustment

- (i) The adjustments shall only be applied to the "Effective Value of Works" (as defined hereunder) in respect of all materials used and plant employed. The "Effective Value of Works" shall mean the difference between:
 - a) The amount of all builder's works (including any site and external works) executed by the Contractor up to the date of the current monthly interim valuation less the amounts for "Preliminaries" items, "Design & Build/Turnkey Element" and any items based on actual costs or current prices and excluding any works dealt under Provisional Sums executed by others, Mechanical & Electrical Works for seven (7) main components and any specialised equipment; and
 - b) The amount calculated in accordance with (a) above up to the date of the preceding monthly interim valuation.
- (ii) Variation of price for M&E Works shall be in respect of (7) main components shall be dealt separately as detailed in the "Special Provisions to the Conditions of Contract (Variation of Price) for M&E Works".
- (iii) The amount in respect of all the materials used and plant employed are deemed to constitute a certain percentage of "Effective Value of Works". This percentage is referred to as "Recovery Factor" and is specified in **Appendix A** to this provision.

5. Variations in the Building Materials Cost Index

- (i) The Variation in the Building Materials Cost Index shall mean any increase or decrease in the "Current Index" (as defined under paragraph (ii) hereof) as compared to the Base Index (as defined under paragraph 3 above) for the relevant category or categories of building or works as stated in **Appendix A** to this provision.
- (ii) The Current Index shall mean the appropriate Building Materials Cost Index as stated in the **Special Release 2** issued by the Department of Statistics for the month preceding the date of the month of interim valuation.

Provided that in respect of Works executed outside the period permitted under the provisions of the Contract, the Current Index shall be the appropriate Building Materials Cost Index as stated in the **Special Release 2** issued by the Department of Statistics for either the final month of the period permitted under the provisions of the Contract, or the month preceding the date of the monthly interim valuation, whichever is the lower.

6. The increase or decrease payable or deductible shall be calculated by multiplying the Effective Value of Works by a factor referred to as Fluctuation Factor which shall be ascertained from the product of the relevant Recovery Factor and the difference between the relevant Current Index and the Base Index, divided by the Base Index as follows:

$$\text{Fluctuation Factor} = \text{Recovery Factor} \times \frac{\text{Current Index} - \text{Base Index}}{\text{Base Index}}$$

Provided that:

- (i) (a) If the relevant Current Index had not been published by the date the interim payment certificate is to be issued, or
- (b) If the total amount of any monthly interim valuation (excluding any sums for increases or decreases under this provision) is inadequate to justify the issue of an interim payment certificate, then the increase or decrease payable in respect of that monthly interim valuation shall be added to or deducted from the amount payable upon the issue by the Project Director (P.D.) of the next

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interim payment certificate after all the relevant Current Indices have been published or when the total amount of the monthly interim valuation is adequate to justify the issue of the said certificate, as the case may be.

- (ii) The Fluctuation Factor for the Effective Value of Works in respect of site and external works shall be the simple average of the Fluctuation Factor of the relevant categories of buildings (excluding piling works) contained in the Contract.
- (iii) The Fluctuation Factor for the Effective Value of Works in respect of any balance due or to become due and payable to the contractor after the payment for works executed up to the date the work is certified by the P.D. as being completed had been made, shall be the ratio of the aggregate total of all the previous increases and/or decreases and the corresponding cumulative total of all the previous Effective Value of Works as follows:

$$L = F \times \frac{M}{E}$$

Where:

- L = The value of increase or decrease payable or deductible in respect of the balance due or to become due and payable to the contractor;
- F = The amount of the balance due or to become due and payable to the contractor (excluding the value of L', and any works dealt under Provisional Sums and value of Mechanical and Electrical (M&E) works in respect of seven (7) main components and any specialised equipment) after deducting the amount in respect of the amounts for "Preliminaries" items, "Design & Build/Turnkey Element" and any items based on actual costs or current prices;
- M = The aggregate total amount of increases or decreases payable under the above provisions in respect of all the previous interim payments made;
- E = The corresponding cumulative total of all the previous Effective Value of Works.

**LIST OF RELEVANT CATEGORIES OF BUILDINGS AND BASE INDICES
SUBJECTED TO PRICE VARIATION IN ACCORDANCE WITH THE
“SPECIAL PROVISIONS TO THE CONDITIONS OF CONTRACT (VARIATION OF
PRICE) FOR BUILDING WORKS” (DESIGN AND BUILD CONTRACTS)**

<p style="text-align: center;">Category Of Building (Irrelevant Categories shall be deleted)</p>	<p style="text-align: center;">Recovery Factor</p>	<p style="text-align: center;">Base Index (of Building Materials Cost in region _____ * for the month of _____ **</p>
<p>i. Single Storey R.C. Building</p> <p>ii. 2-4 Storey R.C. Building (Flat Roof)</p> <p>iii. 2-4 Storey R.C. Building (Pitched Roof)</p> <p>iv. 5 Storey and Above R.C. Building (For Accomodation)</p> <p>v. 5 Storey and Above R.C. Building (For Office)</p> <p>vi. Timber Building</p> <p>vii. Timber Piling</p> <p>viii. R.C. Piling</p>	<p>0.60</p> <p>0.60</p> <p>0.60</p> <p>0.60</p> <p>0.60</p> <p>0.60</p> <p>0.60</p> <p>0.60</p>	

Notes:

* A – Pulau Pinang, Kedah, Perlis

* B – Perak

* C – Selangor, Wilayah Persekutuan Kuala Lumpur, Melaka dan Negeri Sembilan

* D – Johor

* E – Pahang

* F – Kelantan dan Terengganu

** The “Base Index” shall be the appropriate Building Materials Cost Index (with steel bars) as stated in the **Special Release 2** published by the Statistics Department for the month during which the tender closes and only need to be inserted prior to the signing of the Contract Document.

SPECIAL PROVISIONS TO THE CONDITIONS OF CONTRACT (VARIATION OF PRICE) FOR CIVIL ENGINEERING WORKS (DESIGN & BUILD CONTRACTS)

A. EQUAL SHARING OF RISK

Adjustment (upwards and downwards) shall be made to the monthly interim payments and finally to the Contract Sum where there is variation in the prices of the selected Materials described hereunder and shall only be in respect of 50% of the actual amount so calculated (based on an equal sharing of risk 50:50 between the parties to the Contract).

B. VARIATION IN PRICE OF CIVIL ENGINEERING MATERIALS (VARIATION IN UNIT PRICES)

1. Any adjustments will only be made where there is variation in the Unit Prices in respect of selected "Materials" described hereunder:

- (i) Mild Steel Round Bars;
- (ii) High Tensile Deformed Bars;
- (iii) Cement;
- (iv) Bitumen Penetration;
- (v) Automotive Gas Oil;
- (vi) Sand;
- (vii) Aggregates;
- (viii) Premix Asphaltic Concrete;
- (ix) Fabric Reinforcement;
- (x) Guardrail; and
- (xi) Pipe (Water Pipe and Sewerage Pipe).

2. Reference Publication

The reference publication to determine the "Unit Prices" of Materials specified in paragraph A and B.1 shall be the **Special Release 1** published by the Department of Statistics in the particular month in which the Materials are delivered to site for use.

3. Basic Unit Prices of Materials

The “Basic Unit Prices” for the purposes of calculating variation of price for the Materials specified in paragraph A and B.1 shall be the appropriate Unit Prices of the Materials as stated in the **Special Release 1** published by the Department of Statistics for the month during which the tender closes and shall be inserted in the **Appendix A** to this provision prior to the signing of the Contract.

4. Variation in Price of Materials

- (i) Any adjustments will only be made where there is variation in price in respect of Materials specified in paragraph A and B.1 and against which Basic Unit Prices are given in **Appendix A** to this provision.
- (ii) Where a Contractor has paid a higher or lower price for the Materials as compared to the Basic Unit Price specified in **Appendix A** to this provision, the Contract Sum shall be accordingly increased or decreased provided that such increase or decrease shall not exceed the difference between the Basic Unit Price specified in **Appendix A** to this provision and the Unit Price stated in the **Special Release 1** published by the Department of Statistics in the particular month in which the Materials are delivered to site for use.

5. Quantity of Materials Subject to Variation of Price

- (i) Quantities for the Materials specified in paragraph A and B.1 shall be estimated by the Contractor’s Consultant at the time of tendering and inserted in **Appendix A** to this provision. The estimate of the quantities submitted by the Contractor’s Consultant shall be supported by documentary evidence and subject to verification and adjustment by the P.D. before the signing of the Contract. The quantities so ascertained shall be the maximum quantities subject to price variation under this provision. Provided that if the Contractor fails to submit such estimate or any documentary evidence in support thereof, the P.D. shall make a reasonable assessment of the quantities of the Materials for the Contract.

- (ii) The maximum quantities as fixed in **Appendix A** to this provision may be varied only when the original scope of works have been varied. The adjustment of the maximum quantities of the Materials shall be made proportionately to the variation of the scope of the work in which the relevant Materials so relate.

6. Works Not Included

- (i) This provision shall not apply to any of the Materials which have been used in works which shall have been rejected by the P.D. or which have been executed in places outside the limits of the site without the prior approval of the P.D.
- (ii) The Contractor shall keep accurate and complete records of all Materials or other items required for the replacement of works rejected by the P.D. The quantities of the Materials which have been used in works rejected by the P.D. shall be excluded from any claims for price variations under this provision.

7. Contract Period and Extension

This provision shall only apply to works done within the Contract Period and any Extended Contract Period which had been allowed in accordance with terms of the Contract.

8. Works Executed Outside the Period Permitted Under Contract

This provision shall not apply to works carried out by the Contractor outside the period permitted under the terms of Contract except in the following case:

Where the quantity of Materials used by the Contractor within the period permitted under the terms of Contract is less than that specified in **Appendix A** to this provision, adjustments shall be made to the Contract Sum in respect of the balance of the Materials where there is variation in price notwithstanding that the balance of Materials is used beyond the period permitted under the Contract provided that:

- (i) In the case of any increase in prices, adjustments will only be made if the increase does not exceed the Unit Price stated in the **Special Release 1** issued by the Department of Statistics in the final month of the period permitted under the Contract.
- (ii) In the case of any reduction in price, adjustments will be made in accordance with paragraph B.4 (ii).

9. Notification and Documentary Evidence

- (i) The Contractor shall within a reasonable time give the P.D. written notice of any variation in the price of Materials.
- (ii) The P.D. may at any time call for invoices, receipts and such other documentary evidence as may be required. The Contractor shall not withhold any information or documentary evidence as required by the P.D.

**C. VARIATION IN PRICE OF PETROLEUM PRODUCTS
(BITUMEN AND AUTOMOTIVE GAS OIL-DIESEL)**

1. Adjustments (upwards and downwards) shall be made to the monthly interim payments and finally to the Contract Sum where there is variation in the Unit Prices in respect of selected "Materials" described hereunder:

- (i) Automotive Gas Oil (Diesel); and
- (ii) Bitumen.

2. Unit Prices of Material

The Unit Prices of Automotive Gas Oil (Diesel) and Bitumen for the purposes of calculating variation of prices shall be based on the following:

- (i) Government Control Price
The Unit Price for Bitumen 60/70 Penetration Grade shall be tied to the Government of Malaysia Controlled Prices as established by the Ministry of Finance (MOF) and Ministry of Domestic Trade and Consumer Affairs.

- (ii) Posted Price from SHELL MALAYSIA
The Unit Price of Automotive Gas Oil (Diesel) is based on the Posted Prices as obtained from SHELL MALAYSIA.

3. Reference Publication

The reference publication to determine the “Unit Prices” of Materials specified in paragraph 1 shall be the **Special Release 1** published by the Department of Statistics in the particular month in which the Materials are consumed or incorporated into the works.

4. Basic Unit Prices of Materials

The “Basic Unit Prices” for the purposes of calculating variation of price for the Materials specified in paragraph 1 shall be the appropriate Unit Prices of the Materials as stated in the **Special Release 1** published by the Department of Statistic for the month during which the tender closes and shall be inserted in the **Appendix A** to this provision prior to the signing of the Contract.

5. Variation In Prices of Materials

- (i) Any adjustments will only be made where there is variation in price in respect of Materials specified in paragraph 1 and against which Basic Unit Prices are given in **Appendix A** to this provision irrespective of the actual purchase prices of the Materials by the Contractor and whether the Materials are purchased locally or otherwise.
- (ii) When there is a variation in the Basic Unit Prices of the Materials, the amount payable at a particular month upon the issue of the monthly certificates of progress payment or the final certificate shall be increased or decreased by the amount based on the **ACTUAL** differences between the Basic Unit Prices and the Unit Prices of the Materials at a particular month.

6. Variation Must Be Greater Than Five Per Cent (5%)

Adjustment shall only be made to the Contract Sum when the variation (increase or decrease) in the Basic Unit Prices of the Materials is greater than 5%. Where the variation (increase or decrease) in prices is greater than 5% the full amount of the variation shall be added to or deducted from the Contract Sum.

7. Quantities of Materials Subject to Variation of Price

- (i) Quantities for the Materials specified in paragraph 1 shall be estimated by the Contractor's Consultant at the time of tendering and inserted in **Appendix A** to this provision. The estimate of the quantities submitted by the Contractor's Consultant shall be supported by documentary evidence and subject to verification and adjustment by the P.D. before the signing of the Contract. The quantities so ascertained shall be the maximum quantities subject to price variation under this provision. Provided that if the Contractor fails to submit such estimate or any documentary evidence in support thereof, the P.D. shall make a reasonable assessment of the quantities of the Materials for the Contract.
- (ii) The maximum quantities as fixed in **Appendix A** to this provision may be varied only when the original scope of works have been varied. The adjustment of the maximum quantities of the Materials shall be made proportionately to the variation of the scope of the work in which the relevant Materials so relate.
- (iii) The Contractor shall submit to the P.D. monthly returns with documentary evidence on the quantities of the Materials consumed or incorporated into the works, as the case may be, during the particular month. Such quantities of the Materials shall be verified by the P.D. and shall be used as the basis of implementing this provision as described herein:

(a) Automotive Gas oil (Diesel)

At the end of each month the Contractor is required to submit documentary evidences of purchases and consumption of Automotive Gas Oil (Diesel) during the month. The Contractor shall keep records of the consumption of the Materials by individual item of plants which shall be verified and certified by the P.D. The quantities so certified shall be used as the basis for the application of this provision. The Contract Sum shall be increased or decreased by such amount derived by multiplying the quantities of the Materials so certified by the P.D. by the actual differences between the Basic Unit Prices and the Unit Prices of the Materials for that particular month. Provided always Automotive Gas Oil (Diesel) consumed outside the limit of the site shall not be included in the computation of the quantities except diesoline used in the transportation

of imported earth to the site for use in the works and disposal of unsuitable materials off site.

(b) Bitumen

The quantities of Bitumen used for the purposes of calculating variations in Basic Unit Prices of the Material shall be the quantities of the Materials incorporated into the works (except Bitumen used in Premix) during a particular month. Such quantities must be verified and certified by the P.D.

The Contract Sum shall be increased or decreased by such amount derived by multiplying the quantities so certified by the P.D. by the actual difference between the Basic Unit Price and the Unit Price of the Material for that particular month.

(c) Provided always that this provision shall only apply to such quantities of the Materials as are fixed in **Appendix A** to this provision or such adjusted amounts under paragraph 7 (ii) above and shall not apply to any quantity in excess thereof.

(d) Should the Contractor fail to submit such details of monthly returns or documentary evidence of the quantities of the Materials consumed and/or incorporated into the works, the P.D. reverses the right to make a reasonable assessment of the quantities of the Materials consumed and/or incorporated into the works for the particular month. Such quantities assessed by the P.D. shall be used as the basis of implementation of this provision as described herein.

8. Works Not Included

(i) This provision shall not apply to any of the Materials which have been used in works which shall have been rejected by the P.D. or which have been executed in places outside the limits of the site without the prior approval of the P.D.

- (ii) The Contractor shall keep accurate and complete records of all Materials or other items required for the replacement of works rejected by the P.D. The quantities of the Materials which have been used in works rejected by the P.D. shall be excluded from any claims for price variations under this provision.

9. Contract Period and Extension

This provision shall only apply to works done within the Contract Period and any extended period which had been allowed in accordance with the terms of the Contract.

10. Works Executed Outside the Period Permitted Under Contract

This provision shall not apply to works carried out by the Contractor outside the period permitted under the terms of Contract except in the following case:

Where the quantity of Materials used by the Contractor within the period permitted under the terms of Contract is less than that specified in **Appendix A** to this provision, adjustments shall be made to the Contract Sum in respect of the balance of the Materials where there is variation in price notwithstanding that the balance of Materials is used beyond the period permitted under the Contract provided that:

- (i) In the case of any increase in prices, adjustments will only be made if the increase does not exceed the Unit Price stated in the **Special Release 1** issued by the Department of Statistics in the final month of the period permitted under the Contract.
- (ii) In the case of any reduction in price, adjustments will be made in accordance with paragraph 5 and 6 above.

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Appendix A
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**LIST OF MATERIALS TOGETHER WITH QUANTITIES AND BASIC UNIT PRICES
SUBJECT TO PRICE VARIATION IN ACCORDANCE WITH THE “SPECIAL
PROVISIONS TO THE CONDITIONS OF CONTRACT (VARIATION OF PRICE) FOR
CIVIL ENGINEERING WORKS” (DESIGN AND BUILD CONTRACTS)**

Materials	Unit	Quantity	Basic Unit Price
1. Mild Steel Round Bars, BS 4449 <ul style="list-style-type: none"> - 10mm (3/8") - 12 mm (1/2") - 16mm (5/8") - 20mm – 25mm (3/4"-1") - 32 mm (1 1/4") 	Metric Ton " " " "	* * * * *	
2. High Tensile Deformed Bars <ul style="list-style-type: none"> - 10mm (3/8") - 12 mm (1/2") - 16mm – 25 mm (5/8" - 1") - 32 mm (1 1/4") 	Metric Ton " " " "	* * * * *	
3. Ordinary Portland BS 12	50 Kg. Bag	*	
4. Bitumen 60/70 Penetration Grade in Prime Coat, Tack Coat and Surface Coat	Metric Ton	*	
5. Automotive Gas Oil (Diesel)	Litre	*	
6. Sand <ul style="list-style-type: none"> - River sand - Mining sand 	Metric Ton "	* *	
7. Aggregates <ul style="list-style-type: none"> - Granite - 10mm (3/8") - Granite - 20mm (3/4") - Granite - 40mm (1 1/2") - Crusher Aggregate (Crusher Run) 	Metric Ton " " "	* * * *	
8.(A) Premix Asphaltic Concrete <ul style="list-style-type: none"> - AC 10 (Wearing Course) - AC 14 (Wearing Course) - AC 28 (Binder Course) - ACW 20 (Wearing Course) 	Metric Ton " " "	* * * *	

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Materials	Unit	Quantity	Basic Unit Price
(B) Premix Bituminous Macadam	Metric Ton	*	
- BMR40 (Bound Roadbase)	"	*	
- BMR28 (Bound Roadbase)	"	*	
- BML10 (Levelling Course)	"	*	
- BMB28 (Binder Course)	"	*	
- BMB20 (Binder Course)	"	*	
- BMW14 (Wearing Course)	"	*	
- BMW20 (Wearing Course)	"	*	
9. Fabric Reinforcement	Kg	*	
- A4, MS145	"	*	
- A5, MS145	"	*	
- A6, MS145	"	*	
- A7, MS145	"	*	
- A8, MS145	"	*	
- A9, MS145	"	*	
- A10, MS145	"	*	
- B5, MS145	"	*	
- B6, MS145	"	*	
- B7, MS145	"	*	
- B8, MS145	"	*	
- B9, MS145	"	*	
- B10, MS145	"	*	
- B12, MS145	"	*	
- C5, MS145	"	*	
- C6, MS145	"	*	
- C7, MS145	"	*	
- C8, MS145	"	*	
- C9, MS145	"	*	
- C10, MS145	"	*	
- DA4, MS145	"	*	
- DA5, MS145	"	*	
- DA6, MS145	"	*	
- DA7, MS145	"	*	
- DA8, MS145	"	*	
- DA9, MS145	"	*	
- DA10, MS145	"	*	

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Materials	Unit	Quantity	Basic Unit Price
10. Guardrail (i) Single mounted - 1.95m Post Spacing - 3.80m Post Spacing (ii) Double mounted - 1.95m Post Spacing - 3.80m Post Spacing	Metre “ “ “	* * * *	
11. (A) Water Pipe - Mild Steel Pipe 300mm - Stainless Steel Pipe 25mm - Ductile Iron Pipe 300mm - High Density Polythylene (HDPE Pipe) - Compression Fitting Using For Jointing 25mm - Electrofusion Jointing 160mm - Butt Fussion 160mm 11. (B) Sewerage Pipe - Mild Steel Pipe 300mm - Stainless Steel Pipe 250mm - Ductile Iron Pipe 300mm - High Density Polythylene (HDPE Pipe) - Profile Pipe 150mm - Solid Pipe 250mm - Vitrified Clay Pipe (i) Standard Pipe 225mm (ii) Jacking Pipe 225mm - Reinforced Pipe (i) Without Lining 900mm (ii) With Lining (High Alumina) 900mm (iii) With Lining (Sacrificial Lining) 900mm	Metre “ “ “ “ “ Metre “ “ “ “ “ “ “ “ “	* * * * * * * * * * * * * * *	Refer Appendix B

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(untuk digunakan bagi projek baharu)

Materials	Unit	Quantity	Basic Unit Price
11. (B) Sewerage Pipe (Cont'd) - ABS Pipe - Gravity 110mm - Force Main 225mm	Metre “	* *	} Refer Appendix B

* These quantities shall be estimated by the Contractor's Consultant at the time of tendering. Such quantities shall be verified and adjusted by the Project Director before the signing of the Contract.

Notes:

1. The above quantities are intended for the purpose of price variation only and do not necessarily reflect the actual quantities required for the Contract.
2. Price Variation shall be applied to the above quantities fixed or actual quantities used, whichever is the lesser.
3. The quantities of materials (subject to those listed above) used in precast concrete components shall be determined and included in the quantities for relevant materials above. The computation for price variation shall be considered when the completed precast components are delivered to site for use.
4. The “Basic Unit Prices” shall be the appropriate Unit Price as stated in the **Special Release 1** published by the Statistics Department for the month during which the tender closes and only need to be inserted prior to the signing of the Contract Document.

**LIST OF CATEGORIES AND SIZES OF PIPES TOGETHER WITH QUANTITIES
AND BASIC UNIT PRICES VARIATION IN ACCORDANCE WITH THE
“SPECIAL PROVISIONS TO THE CONDITIONS OF CONTRACT
(VARIATION OF PRICE) FOR CIVIL ENGINEERING WORKS”**

Category and Size of Mild Steel Pipe	Quantity (M)	Unit Price For Basic Material	Adjustment Factor	Basic Unit Price
1. WATER PIPE				
A. Mild Steel Pipe				
1. 100 mm Ø	*			
2. 150 "	*			
3. 200 "	*			
4. 250 "	*			
5. 300 "	*			
6. 350 "	*			
7. 400 "	*			
8. 450 "	*			
9. 500 "	*			
10. 600 "	*			
11. 700 "	*			
12. 750 "	*			
13. 800 "	*			
14. 900 "	*			
15. 1000 "	*			
16. 1100 "	*			
17. 1150 "	*			
18. 1200 "	*			
19. 1300 "	*			
20. 1400 "	*			
21. 1500 "	*			
22. 1600 "	*			
23. 1700 "	*			
24. 1800 "	*			
25. 1900 "	*			
26. 2000 "	*			
27. 2100 "	*			
28. 2200 "	*			

LAMPIRAN E/CW/DB-B
Appendix B
(untuk digunakan bagi projek baharu)

Category and Size of Mild Steel Pipe	Quantity (M)	Unit Price For Basic Material	Adjustment Factor	Basic Unit Price
1. WATER PIPE B. Stainless Steel Pipe 1. 13 mm Ø (½") 2. 20 " (¾") 3. 25 " (1") 4. 32 " (1 ¼") 5. 38 " (1 ½") 6. 50 " (2") 7. 63 " (2 ½") 8. 75 " (3") 9. 100 " (4")	 * * * * * * * * *			
C. Ductile Iron Pipe 1. 100 mm Ø 2. 150 " 3. 200 " 4. 250 " 5. 300 " 6. 350 " 7. 400 " 8. 450 " 9. 500 " 10. 600 " 11. 700 "	 * * * * * * * * * * *			
D. High Density Polyethylene (HDPE) Pipe (i) Compression Fitting Using For Jointing 1. 20 mm Ø 2. 25 " 3. 32 " 4. 40 " 5. 50 " 6. 63 " 7. 75 " 8. 90 "	 * * * * * * * *			

LAMPIRAN E/CW/DB-B
Appendix B
(untuk digunakan bagi projek baharu)

Category and Size of Mild Steel Pipe	Quantity (M)	Unit Price For Basic Material	Adjustment Factor	Basic Unit Price
1. WATER PIPE				
D. High Density Polythylene (HDPE) Pipe				
(ii) Electrofusion Jointing				
1. 110 mm Ø	*			
2. 125 "	*			
3. 140 "	*			
4. 160 "	*			
5. 180 "	*			
6. 200 "	*			
7. 225 "	*			
8. 250 "	*			
9. 280 "	*			
10. 315 "	*			
11. 355 "	*			
12. 400 "	*			
13. 450 "	*			
14. 500 "	*			
15. 560 "	*			
(iii) Butt Fussion				
1. 110 mm Ø	*			
2. 125 "	*			
3. 140 "	*			
4. 160 "	*			
5. 180 "	*			
6. 200 "	*			
7. 225 "	*			
8. 250 "	*			
9. 280 "	*			
10. 315 "	*			
11. 355 "	*			
12. 400 "	*			
13. 450 "	*			
14. 500 "	*			
15. 560 "	*			

LAMPIRAN E/CW/DB-B
Appendix B
(untuk digunakan bagi projek baharu)

Category and Size of Mild Steel Pipe	Quantity (M)	Unit Price For Basic Material	Adjustment Factor	Basic Unit Price
2. SEWERAGE PIPE				
A. Mild Steel Pipe				
1. 100 mm Ø	*			
2. 150 "	*			
3. 200 "	*			
4. 250 "	*			
5. 300 "	*			
6. 350 "	*			
7. 400 "	*			
8. 450 "	*			
9. 500 "	*			
10. 600 "	*			
11. 700 "	*			
12. 750 "	*			
13. 800 "	*			
14. 900 "	*			
15. 1000 "	*			
16. 1100 "	*			
17. 1150 "	*			
18. 1200 "	*			
19. 1300 "	*			
20. 1400 "	*			
21. 1500 "	*			
22. 1600 "	*			
23. 1700 "	*			
24. 1800 "	*			
25. 1900 "	*			
26. 2000 "	*			
27. 2100 "	*			
28. 2200 "	*			
B. Ductile Iron Pipe				
1. 80 mm Ø	*			
2. 100 "	*			
3. 150 "	*			
4. 200 "	*			
5. 250 "	*			
6. 300 "	*			
7. 350 "	*			

LAMPIRAN E/CW/DB-B
Appendix B
(untuk digunakan bagi projek baharu)

Category and Size of Mild Steel Pipe	Quantity (M)	Unit Price For Basic Material	Adjustment Factor	Basic Unit Price
2. SEWERAGE PIPE				
B. Ductile Iron Pipe (Cont'd)				
8. 400 "	*			
9. 450 "	*			
10. 600 "	*			
11. 700 "	*			
12. 800 "	*			
13. 1000 "	*			
14. 1200 "	*			
C. HDPE (Profile) Pipe				
1. 100 mm Ø	*			
2. 125 "	*			
3. 150 "	*			
4. 200 "	*			
5. 250 "	*			
6. 300 "	*			
7. 350 "	*			
8. 400 "	*			
9. 450 "	*			
10. 500 "	*			
11. 550 "	*			
12. 600 "	*			
13. 650 "	*			
14. 700 "	*			
15. 750 "	*			
16. 800 "	*			
17. 850 "	*			
18. 900 "	*			
19. 950 "	*			
20. 1000 "	*			
21. 1200 "	*			
22. 1400 "	*			
23. 1600 "	*			
24. 1800 "	*			
25. 2000 "	*			
26. 2100 "	*			
27. 2200 "	*			

LAMPIRAN E/CW/DB-B
Appendix B
(untuk digunakan bagi projek baharu)

Category and Size of Mild Steel Pipe	Quantity (M)	Unit Price For Basic Material	Adjustment Factor	Basic Unit Price
2. SEWERAGE PIPE				
D. HDPE (Solid) Pipe				
1. 100 mm Ø	*			
2. 125 "	*			
3. 150 "	*			
4. 200 "	*			
5. 250 "	*			
6. 300 "	*			
7. 350 "	*			
8. 400 "	*			
9. 450 "	*			
10. 500 "	*			
11. 550 "	*			
12. 600 "	*			
13. 650 "	*			
14. 700 "	*			
15. 750 "	*			
16. 800 "	*			
17. 850 "	*			
18. 900 "	*			
19. 950 "	*			
20. 1000 "	*			
21. 1200 "	*			
22. 1400 "	*			
23. 1600 "	*			
24. 1800 "	*			
25. 2000 "	*			
26. 2100 "	*			
27. 2200 "	*			
E. Vitrified Clay Pipe				
(i) Vitrified Clay (Standard) Pipe				
1. 100 mm Ø	*			
2. 150 "	*			
3. 200 "	*			
4. 225 "	*			
5. 300 "	*			
6. 375 "	*			

LAMPIRAN E/CW/DB-B
Appendix B
(untuk digunakan bagi projek baharu)

Category and Size of Mild Steel Pipe	Quantity (M)	Unit Price For Basic Material	Adjustment Factor	Basic Unit Price
2. SEWERAGE PIPE				
E. Vitrified Clay Pipe				
(i) Vitrified Clay (Standard) Pipe (Cont'd)				
7. 400 "	*			
8. 450 "	*			
9. 500 "	*			
10. 600 "	*			
11. 700 "	*			
12. 800 "	*			
(ii) Vitrified Clay (Jacking) Pipe				
1. 100 mm Ø	*			
2. 150 "	*			
3. 200 "	*			
4. 225 "	*			
5. 300 "	*			
6. 375 "	*			
7. 400 "	*			
8. 450 "	*			
9. 500 "	*			
10. 600 "	*			
11. 700 "	*			
12. 800 "	*			
F. Reinforced Concrete Pipe (RCP)				
(i) Without Lining				
1. 375 mm Ø	*			
2. 450 "	*			
3. 600 "	*			
4. 750 "	*			
5. 900 "	*			
6. 1050 "	*			
7. 1200 "	*			

LAMPIRAN E/CW/DB-B
Appendix B
(untuk digunakan bagi projek baharu)

Category and Size of Mild Steel Pipe	Quantity (M)	Unit Price For Basic Material	Adjustment Factor	Basic Unit Price
2. SEWERAGE PIPE				
F. Reinforced Concrete Pipe (RCP)				
(i) Without Lining (Cont'd)				
8. 1350 "	*			
9. 1500 "	*			
10. 1650 "	*			
11. 1800 "	*			
(ii) With Lining (High Alumina)				
1. 375 mm Ø	*			
2. 450 "	*			
3. 600 "	*			
4. 750 "	*			
5. 900 "	*			
6. 1050 "	*			
7. 1200 "	*			
8. 1350 "	*			
9. 1500 "	*			
10. 1650 "	*			
11. 1800 "	*			
(iii) With Lining (Sacrificial Lining)				
1. 375 mm Ø	*			
2. 450 "	*			
3. 600 "	*			
4. 750 "	*			
5. 900 "	*			
6. 1050 "	*			
7. 1200 "	*			
8. 1350 "	*			
9. 1500 "	*			
10. 1650 "	*			
11. 1800 "	*			

LAMPIRAN E/CW/DB-B
Appendix B
(untuk digunakan bagi projek baharu)

Category and Size of Mild Steel Pipe	Quantity (M)	Unit Price For Basic Material	Adjustment Factor	Basic Unit Price
2. SEWERAGE PIPE				
G. ABS Pipe				
(i) Gravity				
1. 90 mm Ø	*			
2. 110 "	*			
3. 150 "	*			
4. 225 "	*			
5. 315 "	*			
(ii) Force Main				
1. 15 mm Ø	*			
2. 20 "	*			
3. 25 "	*			
4. 32 "	*			
5. 40 "	*			
6. 50 "	*			
7. 65 "	*			
8. 80 "	*			
9. 100 "	*			
10. 150 "	*			
11. 200 "	*			
12. 225 "	*			
13. 250 "	*			
14. 280 "	*			
15. 315 "	*			
16. 355 "	*			
17. 400 "	*			
18. 450 "	*			
19. 500 "	*			
20. 630 "	*			

* These quantities shall be estimated by the Contractor's Consultant at the time of tendering. Such quantities shall be verified and adjusted by the Project Director before the signing of the Contract.

Notes:

1. The above quantities are intended for the purpose of price variation only and do not necessarily reflect the actual quantities required for the Contract.
2. Price Variation shall be applied to the above quantities fixed or actual quantities used, whichever is the lesser.
3. The “Basic Unit Prices” shall be the appropriate Unit Price as stated in the **Special Release 1** published by the Statistics Department for the month during which the tender closes and only need to be inserted prior to the signing of the Contract Document.
4. Price Adjustment Factor shall be as stated in the **Special Release 1** published by the Department of Statistics.
5. The Basic Material is the most commonly used material for the relevant category of pipes in most projects.

**SPECIAL PROVISIONS TO THE CONDITIONS OF CONTRACT
(VARIATION OF PRICE) FOR MECHANICAL & ELECTRICAL WORKS
(DESIGN & BUILD CONTRACTS)**

1. This provision shall be applicable for Mechanical and Electrical Works carried out under the following arrangement:

- (i) Direct contract; and
- (ii) Packaged as part of Builder's Works under the Main Contract.

2. Equal Sharing Of Risk

Adjustment (upwards and downwards) shall be made to the monthly interim payments and finally to the Contract Sum where there is variation in the Component Cost Indices of "Copper Cables" in Mechanical and Electrical (M&E) Components and shall only be in respect of 50% of the actual amount so calculated (based on an equal sharing of risk 50:50 between the parties to the Contract).

3. Any adjustment shall be made where there is variation in the Component Cost Indices which are deemed to reflect any changes in the price of selected M&E Components which includes copper only described hereunder:

- (i) Copper Cables;
- (ii) Switchgears;
- (iii) Transformers;
- (iv) Generators;
- (v) Lightning Protection System and Earthing System;
- (vi) Air Conditioning System; and
- (vii) Motor (Pumpset).

4. Reference Publication

The reference publication to determine the "Component Cost Indices" of M&E Components specified in paragraph 2 and 3 shall be the **Special Release 3** published by the Department of Statistics for the month of installation.

5. Base Indices

The "Base Indices" for the purposes of calculating variation of price for the M&E Components specified in paragraph 2 and 3 shall be the appropriate Component Cost Index of the M&E Components as stated in the **Special Release 3** published by the Department of Statistic for the month during which the tender closes and shall be inserted in the **Appendix A** to this provision prior to the signing of the Contract.

6. Application of Adjustments

- (i) The adjustments shall only be applied to the "Effective Value of Work Done" (as defined hereunder) in respect of each M&E component installed on site. The "Effective Value of Work Done" shall mean the difference between:
 - (a) The amount of each relevant component installed on site by the Contractor up to the date of the current monthly interim valuation less the amount for any items based on actual costs or current prices; and
 - (b) The amount calculated in accordance with (a) above up to the date of the preceding monthly interim valuation.
- (ii) The total tendered price of each M&E component is the total price of the supply and installation as tendered by the Contractor. The "Recovery Factor" of each component is the percentage of the supply component price with respect to the tendered price. The Recovery Factor of the selected M&E component is specified in **Appendix A** to this provision.

7. Variations in Component Cost Index

- (i) The Variation in the Component Cost Index shall mean any increase or decrease in the "Current Index" (as defined under paragraph (ii) hereof) as compared to the Base Index (as defined under paragraph 5 above) for the relevant category or categories of M&E component as stated in **Appendix A** to this provision.
- (ii) The Current Index shall mean the appropriate Component Cost Index as stated in **Special Release 3** issued by the Department of Statistics for the month of installation.

Provided that in respect of Works executed outside the period permitted under the provisions of the Contract, the Current Index shall be the appropriate Component Cost Index as stated in the **Special Release 3** issued by the Department of Statistics for either the final month of the period permitted under the provisions of the Contract, or the month of the monthly interim valuation, whichever is the lower.

8. Calculation for Adjustments

The increase or decrease payable or deductible shall be calculated by multiplying the “Effective Value of Work Done” by a factor referred to as Fluctuation Factor which shall be ascertained from the product of the Recovery Factor of relevant M&E Component and the difference between the relevant Current Index and the Base Index, divided by the Base Index as follows:

$$\text{Fluctuation Factor} = \text{Recovery Factor} \times \frac{\text{Current Index} - \text{Base Index}}{\text{Base Index}}$$

Provided that:

- (i)
 - (a) If the relevant Current Index had not been published by the date the interim payment certificate is to be issued, or
 - (b) If the total amount of any monthly interim valuation (excluding any sums for increases or decreases under this provision) is inadequate to justify the issue of an interim payment certificate, then the increase or decrease payable in respect of that monthly interim valuation shall be added to or deducted from the amount payable upon the issue by the Project Director (P.D.) of the next interim payment certificate after all the relevant Current Indices have been published or when the total amount of the monthly interim valuation is adequate to justify the issue of the said certificate, as the case may be.
- (ii) The Fluctuation Factor for the Effective Value of Work Done in respect of any balance due or to become due and payable to the Contractor after the payment for each component installed up to the date certified by the P.D. as being completed had been made, shall be the ratio of the aggregate total of all the previous increases and/or decreases and the corresponding cumulative total of all the previous Effective Value of Work Done, as follows:

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(untuk digunakan bagi projek baharu)

$$L = F \times \frac{M}{E}$$

Where:

- L = The value of increase or decrease payable or deductible in respect of the balance due or to become due and payable to the contractor;
- F = The amount of the balance due or to become due and payable to the contractor excluding the value of L after deducting the amount in respect of items based on actual costs or current prices;
- M = The aggregate total amount of increases or decreases payable under the above provisions in respect of all the previous interim payments made;
- E = The corresponding cumulative total of all the previous Effective Value of Work Done.

**LIST OF RELEVANT COMPONENTS, RECOVERY FACTOR AND BASE INDICES
SUBJECTED TO PRICE VARIATION IN ACCORDANCE WITH THE “SPECIAL
PROVISIONS TO THE CONDITIONS OF CONTRACT (VARIATION OF PRICE) FOR
MECHANICAL & ELECTRICAL WORKS” (DESIGN & BUILD CONTRACTS)**

Bil.	Category Of Components	Recovery Factor	Base Index (of Component in region _____* for the months of _____**
1.	COPPER CABLES i) Concealed/ Surface wiring using G.I. conduit (per unit point) ii) Cables in galvanized trunking (per meter run) iii) Cables laid underground (per meter run) a) 120 sq. mm and above b) Below 120 sq. mm iv) Cables on tray/ ladder (per meter run) a) 120 sq. mm and above b) Below 120 sq. mm v) Busduct	0.50 0.55 0.90 0.75 0.75 0.50 0.75	
2.	SWITCHGEARS i) HT Switchgears ii) LV Switchboards (Incomer breaker 600A and above) iii) LV Switchboards and Sub Switchboards (Incomer breaker below 600A) iv) TPN & SPN Distribution Boards (Incomer breaker 100A and below)	0.90 0.85 0.85 0.85	
3.	TRANSFORMERS i) Low Loss Cast Resin Transformer ii) Low Loss Hermetically Sealed (Oil filled) Transformer	0.80 0.80	

LAMPIRAN F/ME/DB-B
Appendix A
(untuk digunakan bagi projek baharu)

Bil.	Category Of Components	Recovery Factor	Base Index (of Component in region _____* for the months of _____**
4.	GENERATORS i) Generator Ratings Above 500kVA ii) Generator Ratings 500kVA and below	0.85 0.75	
5.	LIGHTNING PROTECTION SYSTEM & EARTHING SYSTEM i) Lightning Protection System ii) Earthing system (a) Earthing System for Main Switchboards and Sub Switchboards (b) Earthing System for Distribution Boards	0.65 0.75 0.50	
6.	AIR CONDITIONING SYSTEM i) Water Cooled Chiller ii) Air Cooled Chiller iii) Water Cooled Package iv) Air Cooled Package v) Split Unit System (a) Wall Mounted (b) Ceiling Cassette/Mounted vi) VRV System (a) Indoor (b) Outdoor	0.75 0.90 0.70 0.75 0.75 0.90 0.85 0.95	
7.	MOTOR (PUMPSET) i) Condenser Water Pump ii) Chilled Water Pump iii) Hose Reel Pump	0.80 0.80 0.55	

Notes:

* Peninsular Malaysia

* Sabah

* Sarawak

** The “Base Index” shall be the appropriate Component Cost Index as stated in the **Special Release 3** published by the Department of Statistics for the month during which the tender closes and only need to be inserted prior to the signing of the Contract Document.

SPECIAL PROVISIONS TO THE CONDITIONS OF CONTRACT (VARIATION OF PRICE) FOR BUILDING WORKS (DESIGN & BUILD CONTRACTS)

A. EQUAL SHARING OF RISK

Adjustment (upwards and downwards) shall be made to the monthly interim payments and finally to the Contract Sum where there is variation in the prices of the selected Materials described hereunder and shall only be in respect of 50% of the actual amount so calculated (based on an equal sharing of risk 50:50 between the parties to the Contract).

**B. VARIATION IN PRICE OF 15 SELECTED MATERIALS
(VARIATION IN BUILDING MATERIALS COST INDICES)**

1. Adjustments (upwards and downwards) shall be made to the monthly interim payments and finally to the Contract Sum where there is variation in the Building Materials Cost Indices which are deemed to reflect any changes in the prices of the selected Materials described hereunder:

- (i) Cement;
- (ii) Steel;
- (iii) Bricks and wall;
- (iv) Glass;
- (v) Aggregates;
- (vi) Ceiling materials;
- (vii) Roofing materials;
- (viii) Timber;
- (ix) Plywood;
- (x) Sanitary fittings;
- (xi) Floor and wall tiles;
- (xii) Plumbing materials;
- (xiii) Steel and metal sections;
- (xiv) Sand; and
- (xv) Paints.

Any changes in the prices of Materials other than the above and the cost of plant shall be deemed to follow that of the above described Materials, but any changes in the cost of labour and the amount for profit and overheads shall not be reflected in the indices.

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2. Reference Publication

The reference publication to determine the “Building Materials Cost Indices” of Materials specified in paragraph A and B.1 shall be the **Special Release 2** published by the Department of Statistics in the particular month in which the Materials are delivered to site for use.

3. Basic Indices

The “Base Indices” for the purposes of calculating variation of price for the Materials specified in paragraph A and B.1 shall be the appropriate Building Materials Cost Index of the Materials as stated in the **Special Release 2** published by the Department of Statistic for the month during which the tender closes and shall be inserted in **Appendix A** to this provision.

The Base Indices shall be determined as follows based on:

- (i) The month during which tender closes (for tenders closed on and after 1st January 2021); or
- (ii) The month December 2020 (for tender closed before 1st January 2021)

4. Application of Adjustment

- (i) The adjustments shall only be applied to the "Effective Value of Works" (as defined hereunder) in respect of all materials used and plant employed **from 1st January 2022**. The "Effective Value of Works" shall mean the difference between:
 - a) The amount of all builder's works (including any site and external works) executed by the Contractor up to the date of the current monthly interim valuation less the amounts for "Preliminaries" items, “Design & Build/Turnkey Element” and any items based on actual costs or current prices and excluding any works dealt under Provisional Sums executed by others, Mechanical & Electrical Works for seven (7) main components and any specialised equipment; and
 - b) The amount calculated in accordance with (a) above up to the date of the preceding monthly interim valuation.

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- (ii) Variation of price for M&E Works shall be in respect of (7) main components shall be dealt separately as detailed in the “Special Provisions to the Conditions of Contract (Variation of Price) for M&E Works”.
- (iii) The amount in respect of all the materials used and plant employed are deemed to constitute a certain percentage of “Effective Value of Works”. This percentage is referred to as “Recovery Factor” and is specified in **Appendix A** to this provision.

5. Variations in the Building Materials Cost Index

- (i) The Variation in the Building Materials Cost Index shall mean any increase or decrease in the "Current Index" (as defined under paragraph (ii) hereof) as compared to the Base Index (as defined under paragraph 3 above) for the relevant category or categories of building or works as stated in **Appendix A** to this provision.
- (ii) The Current Index shall mean the appropriate Building Materials Cost Index as stated in the **Special Release 2** issued by the Department of Statistics for the month preceding the date of the month of interim valuation.

Provided that in respect of Works executed outside the period permitted under the provisions of the Contract, the Current Index shall be the appropriate Building Materials Cost Index as stated in the **Special Release 2** issued by the Department of Statistics for either the final month of the period permitted under the provisions of the Contract, or the month preceding the date of the monthly interim valuation, whichever is the lower.

6. Calculation of Adjustment

The increase or decrease payable or deductible shall be calculated by multiplying the Effective Value of Works by a factor referred to as Fluctuation Factor which shall be ascertained from the product of the relevant Recovery Factor and the difference between the relevant Current Index and the Base Index, divided by the Base Index as follows:

$$\text{Fluctuation Factor} = \text{Recovery Factor} \times \frac{\text{Current Index} - \text{Base Index}}{\text{Base Index}}$$

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Provided that:

- (i) (a) If the relevant Current Index had not been published by the date the interim payment certificate is to be issued, or
 - (b) If the total amount of any monthly interim valuation (excluding any sums for increases or decreases under this provision) is inadequate to justify the issue of an interim payment certificate, then the increase or decrease payable in respect of that monthly interim valuation shall be added to or deducted from the amount payable upon the issue by the Project Director (P.D.) of the next interim payment certificate after all the relevant Current Indices have been published or when the total amount of the monthly interim valuation is adequate to justify the issue of the said certificate, as the case may be.
- (ii) The Fluctuation Factor for the Effective Value of Works in respect of site and external works shall be the simple average of the Fluctuation Factor of the relevant categories of buildings (excluding piling works) contained in the Contract.
- (iii) The Fluctuation Factor for the Effective Value of Works in respect of any balance due or to become due and payable to the contractor after the payment for works executed up to the date the work is certified by the P.D. as being completed had been made, shall be the ratio of the aggregate total of all the previous increases and/or decreases and the corresponding cumulative total of all the previous Effective Value of Works as follows:

$$L = F \times \frac{M}{E}$$

Where:

- L = The value of increase or decrease payable or deductible in respect of the balance due or to become due and payable to the contractor;
- F = The amount of the balance due or to become due and payable to the contractor (excluding the value of L', and any works dealt under Provisional Sums and value of Mechanical and Electrical (M&E) works in respect of seven (7) main components and any specialised

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equipment) after deducting the amount in respect of the amounts for "Preliminaries" items, "Design & Build/Turnkey Element" and any items based on actual costs or current prices;

- M = The aggregate total amount of increases or decreases payable under the above provisions in respect of all the previous interim payments made;
- E = The corresponding cumulative total of all the previous Effective Value of Works.

LAMPIRAN E/CW/DB-L
Appendix A
(untuk digunakan bagi projek yang sedang dalam pembinaan)

**LIST OF RELEVANT CATEGORIES OF BUILDINGS AND BASE INDICES
SUBJECTED TO PRICE VARIATION IN ACCORDANCE WITH THE
“SPECIAL PROVISIONS TO THE CONDITIONS OF CONTRACT (VARIATION OF
PRICE) FOR BUILDING WORKS” (DESIGN AND BUILD CONTRACTS)**

Category Of Building (Irrelevant Categories shall be deleted)	Recovery Factor	Base Index (of Building Materials Cost in region <hr/> * for the month of <hr/> **
i. Single Storey R.C. Building	0.60	
ii. 2-4 Storey R.C. Building (Flat Roof)	0.60	
iii. 2-4 Storey R.C. Building (Pitched Roof)	0.60	
iv. 5 Storey and Above R.C. Building (For Accomodation)	0.60	
v. 5 Storey and Above R.C. Building (For Office)	0.60	
vi. Timber Building	0.60	
vii. Timber Piling	0.60	
viii. R.C. Piling	0.60	

Notes:

* A – Pulau Pinang, Kedah, Perlis

* B – Perak

* C – Selangor, Wilayah Persekutuan Kuala Lumpur, Melaka dan Negeri Sembilan

* D – Johor

* E – Pahang

* F – Kelantan dan Terengganu

** The “Base Index” shall be the appropriate Building Materials Cost Index (with steel bars) as stated in the **Special Release 2** published by the Statistics Department. The Base Index shall be determined as follows based on:-

- (i) The month during which tender closes (for tenders closed on and after 1st January 2021); or
- (ii) The month December 2020 (for tender closed before 1st January 2021)

SPECIAL PROVISIONS TO THE CONDITIONS OF CONTRACT (VARIATION OF PRICE) FOR CIVIL ENGINEERING WORKS (DESIGN & BUILD CONTRACTS)

A. EQUAL SHARING OF RISK

Adjustment (upwards and downwards) shall be made to the monthly interim payments and finally to the Contract Sum where there is variation in the prices of the selected Materials described hereunder and shall only be in respect of 50% of the actual amount so calculated (based on an equal sharing of risk 50:50 between the parties to the Contract).

**B. VARIATION IN PRICE OF CIVIL ENGINEERING MATERIALS
(VARIATION IN UNIT PRICES)**

1. Any adjustments will only be made where there is variation in the Unit Prices in respect of selected "Materials" described hereunder:

- (i) Mild Steel Round Bars;
- (ii) High Tensile Deformed Bars;
- (iii) Cement;
- (iv) Bitumen Penetration;
- (v) Automotive Gas Oil;
- (vi) Sand;
- (vii) Aggregates;
- (viii) Premix Asphaltic Concrete;
- (ix) Fabric Reinforcement;
- (x) Guardrail; and
- (xi) Pipe (Water Pipe and Sewerage Pipe).

2. Reference Publication

The reference publication to determine the "Unit Prices" of Materials specified in paragraph A and B.1 shall be the **Special Release 1** published by the Department of Statistics in the particular month in which the Materials are delivered to site for use.

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3. Basic Unit Prices of Materials

The “Basic Unit Prices” for the purposes of calculating variation of price for the Materials specified in paragraph A and B.1 shall be the appropriate Unit Prices of the Materials as stated in the **Special Release 1** published by the Department of Statistics for the month during which the tender closes and shall be inserted in the **Appendix A** to this provision.

The Basic Unit Price shall be determined as follows based on:

- (i) The month during which tender closes (for tenders closed on and after 1st January 2021); or
- (ii) The month December 2020 (for tender closed before 1st January 2021)

4. Variation in Price of Materials

- (i) Any adjustments will only be made where there is variation in price in respect of Materials specified in paragraph A and B.1 and against which Basic Unit Prices are given in **Appendix A** to this provision.
- (ii) Where a Contractor has paid a higher or lower price for the Materials as compared to the Basic Unit Price specified in **Appendix A** to this provision, the Contract Sum shall be accordingly increased or decreased provided that such increase or decrease shall not exceed the difference between the Basic Unit Price specified in **Appendix A** to this provision and the Unit Price stated in the **Special Release 1** published by the Department of Statistics in the particular month in which the Materials are delivered to site for use.

5. Quantity of Materials Subject to Variation of Price

- (i) Quantities for the Materials specified in paragraph A and B.1 shall be estimated by the Contractor’s Consultant based on **balance of work to be executed from 1st January 2022** and inserted in **Appendix A** to this provision. The estimate of the quantities submitted by the Contractor’s Consultant shall be supported by documentary evidence and subject to verification and adjustment by the P.D. The quantities so ascertained shall be the maximum quantities subject to price variation under this provision. Provided that if the Contractor fails to submit such estimate or any

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documentary evidence in support thereof, the P.D. shall make a reasonable assessment of the quantities of the Materials for the Contract.

- (ii) The maximum quantities as fixed in **Appendix A** to this provision may be varied only when the original scope of works have been varied. The adjustment of the maximum quantities of the Materials shall be made proportionately to the variation of the scope of the work in which the relevant Materials so relate.

6. Works Not Included

- (i) This provision shall not apply to any of the Materials which have been used in works which shall have been rejected by the P.D. or which have been executed in places outside the limits of the site without the prior approval of the P.D.
- (ii) The Contractor shall keep accurate and complete records of all Materials or other items required for the replacement of works rejected by the P.D. The quantities of the Materials which have been used in works rejected by the P.D. shall be excluded from any claims for price variations under this provision.

7. Contract Period and Extension

This provision shall only apply to works done within the Contract Period and any Extended Contract Period which had been allowed in accordance with terms of the Contract .

8. Works Executed Outside the Period Permitted Under Contract

This provision shall not apply to works carried out by the Contractor outside the period permitted under the terms of Contract except in the following case:

Where the quantity of Materials used by the Contractor within the period permitted under the terms of Contract is less than that specified in **Appendix A** to this provision, adjustments shall be made to the Contract Sum in respect of the balance of the Materials where there is variation in price notwithstanding that the balance of Materials is used beyond the period permitted under the Contract provided that:

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- (i) In the case of any increase in prices, adjustments will only be made if the increase does not exceed the Unit Price stated in the **Special Release 1** issued by the Department of Statistics in the final month of the period permitted under the Contract.
- (ii) In the case of any reduction in price, adjustments will be made in accordance with paragraph B.4 (ii).

9. Notification and Documentary Evidence

- (i) The Contractor shall within a reasonable time give the P.D. written notice of any variation in the price of Materials.
- (ii) The P.D. may at any time call for invoices, receipts and such other documentary evidence as may be required. The Contractor shall not withhold any information or documentary evidence as required by the P.D.

**C. VARIATION IN PRICE OF PETROLEUM PRODUCTS
(BITUMEN AND AUTOMOTIVE GAS OIL-DIESEL)**

- 1. Adjustments (upwards and downwards) shall be made to the monthly interim payments and finally to the Contract Sum where there is variation in the Unit Prices in respect of selected "Materials" described hereunder:
 - (i) Automotive Gas Oil (Diesel); and
 - (ii) Bitumen.

2. Unit Prices of Material

The Unit Prices of Automotive Gas Oil (Diesel) and Bitumen for the purposes of calculating variation of prices shall be based on the following:

- (i) Government Control Price
The Unit Price for Bitumen 60/70 Penetration Grade shall be tied to the Government of Malaysia Controlled Prices as established by the Ministry of Finance (MOF) and Ministry of Domestic Trade and Consumer Affairs.

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- (ii) Posted Price from SHELL MALAYSIA
The Unit Price of Automotive Gas Oil (Diesel) is based on the Posted Prices as obtained from SHELL MALAYSIA.

3. Reference Publication

The reference publication to determine the “Unit Prices” of Materials specified in paragraph 1 shall be the **Special Release 1** published by the Department of Statistics in the particular month in which the Materials are consumed or incorporated into the works.

4. Basic Unit Prices of Materials

The “Basic Unit Prices” for the purposes of calculating variation of price for the Materials specified in paragraph 1 shall be the appropriate Unit Prices of the Materials as stated in the **Special Release 1** published by the Department of Statistic for the month during which the tender closes and shall be inserted in the **Appendix A** to this provision prior to the signing of the Contract.

5. Variation In Prices of Materials

- (i) Any adjustments will only be made where there is variation in price in respect of Materials specified in paragraph 1 and against which Basic Unit Prices are given in **Appendix A** to this provision irrespective of the actual purchase prices of the Materials by the Contractor and whether the Materials are purchased locally or otherwise.
- (ii) When there is a variation in the Basic Unit Prices of the Materials, the amount payable at a particular month upon the issue of the monthly certificates of progress payment or the final certificate shall be increased or decreased by the amount based on the **ACTUAL** differences between the Basic Unit Prices and the Unit Prices of the Materials at a particular month.

6. Variation Must Be Greater Than Five Per Cent (5%)

Adjustment shall only be made to the Contract Sum when the variation (increase or decrease) in the Basic Unit Prices of the Materials is greater than 5%. Where the variation (increase or decrease) in prices is greater than 5% the full amount of the variation shall be added to or deducted from the Contract Sum.

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7. Quantities of Materials Subject to Variation of Price

- (i) Quantities for the Materials specified in paragraph 1 shall be estimated by the Contractor's Consultant based on **balance of work to be executed from 1st January 2022** and inserted in **Appendix A** to this provision. The estimate of the quantities submitted by the Contractor's Consultant shall be supported by documentary evidence and subject to verification and adjustment by the P.D. before the signing of the Contract. The quantities so ascertained shall be the maximum quantities subject to price variation under this provision. Provided that if the Contractor fails to submit such estimate or any documentary evidence in support thereof, the P.D. shall make a reasonable assessment of the quantities of the Materials for the Contract.
- (ii) The maximum quantities as fixed in **Appendix A** to this provision may be varied only when the original scope of works have been varied. The adjustment of the maximum quantities of the Materials shall be made proportionately to the variation of the scope of the work in which the relevant Materials so relate.
- (iii) The Contractor shall submit to the P.D. monthly returns with documentary evidence on the quantities of the Materials consumed or incorporated into the works, as the case may be, during the particular month. Such quantities of the Materials shall be verified by the P.D. and shall be used as the basis of implementing this provision as described herein:
 - (a) Automotive Gas oil (Diesel)

At the end of each month the Contractor is required to submit documentary evidences of purchases and consumption of Automotive Gas Oil (Diesel) during the month. The Contractor shall keep records of the consumption of the Materials by individual item of plants which shall be verified and certified by the P.D. The quantities so certified shall be used as the basis for the application of this provision. The Contract Sum shall be increased or decreased by such amount derived by multiplying the quantities of the Materials so certified by the P.D. by the actual differences between the Basic Unit Prices and the Unit Prices of the Materials for that particular month. Provided always Automotive Gas Oil (Diesel) consumed outside the limit of the site shall not be included in the computation of the quantities except diesoline used in the transportation

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of imported earth to the site for use in the works and disposal of unsuitable materials off site.

(b) Bitumen

The quantities of Bitumen used for the purposes of calculating variations in Basic Unit Prices of the Material shall be the quantities of the Materials incorporated into the works (except Bitumen used in Premix) during a particular month. Such quantities must be verified and certified by the P.D.

The Contract Sum shall be increased or decreased by such amount derived by multiplying the quantities so certified by the P.D. by the actual difference between the Basic Unit Price and the Unit Price of the Material for that particular month.

- (c) Provided always that this provision shall only apply to such quantities of the Materials as are fixed in **Appendix A** to this provision or such adjusted amounts under paragraph 7 (ii) above and shall not apply to any quantity in excess thereof.
- (d) Should the Contractor fail to submit such details of monthly returns or documentary evidence of the quantities of the Materials consumed and/or incorporated into the works, the P.D. reverses the right to make a reasonable assessment of the quantities of the Materials consumed and/or incorporated into the works for the particular month. Such quantities assessed by the P.D. shall be used as the basis of implementation of this provision as described herein.

8. Works Not Included

- (i) This provision shall not apply to any of the Materials which have been used in works which shall have been rejected by the P.D. or which have been executed in places outside the limits of the site without the prior approval of the P.D.
- (ii) The Contractor shall keep accurate and complete records of all Materials or other items required for the replacement of works rejected by the P.D. The quantities of the Materials which have been used in works rejected by the

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P.D. shall be excluded from any claims for price variations under this provision.

9. Contract Period and Extension

This provision shall only apply to works done within the Contract Period and any extended period which had been allowed in accordance with the terms of the Contract.

10. Works Executed Outside the Period Permitted Under Contract

This provision shall not apply to works carried out by the Contractor outside the period permitted under the terms of Contract except in the following case:

Where the quantity of Materials used by the Contractor within the period permitted under the terms of Contract is less than that specified in **Appendix A** to this provision, adjustments shall be made to the Contract Sum in respect of the balance of the Materials where there is variation in price notwithstanding that the balance of Materials is used beyond the period permitted under the Contract provided that:

- (i) In the case of any increase in prices, adjustments will only be made if the increase does not exceed the Unit Price stated in the **Special Release 1** issued by the Department of Statistics in the final month of the period permitted under the Contract.
- (ii) In the case of any reduction in price, adjustments will be made in accordance with paragraph 5 and 6 above.

(untuk digunakan bagi projek yang sedang dalam pembinaan)

**LIST OF MATERIALS TOGETHER WITH QUANTITIES AND BASIC UNIT PRICES
SUBJECT TO PRICE VARIATION IN ACCORDANCE WITH THE “SPECIAL
PROVISIONS TO THE CONDITIONS OF CONTRACT (VARIATION OF PRICE) FOR
CIVIL ENGINEERING WORKS” (DESIGN AND BUILD CONTRACTS)**

Materials	Unit	Quantity	Basic Unit Price
1. Mild Steel Round Bars, BS 4449 <ul style="list-style-type: none"> - 10mm (3/8") - 12 mm (1/2") - 16mm (5/8") - 20mm – 25mm (3/4"-1") - 32 mm (1 1/4") 	Metric Ton " " " "	* * * * *	
2. High Tensile Deformed Bars <ul style="list-style-type: none"> - 10mm (3/8") - 12 mm (1/2") - 16mm – 25 mm (5/8" - 1") - 32 mm (1 1/4") 	Metric Ton " " " "	* * * * *	
3. Ordinary Portland BS 12	50 Kg. Bag	*	
4. Bitumen 60/70 Penetration Grade in Prime Coat, Tack Coat and Surface Coat	Metric Ton	*	
5. Automotive Gas Oil (Diesel)	Litre	*	
6. Sand <ul style="list-style-type: none"> - River sand - Mining sand 	Metric Ton "	* *	
7. Aggregates <ul style="list-style-type: none"> - Granite - 10mm (3/8") - Granite - 20mm (3/4") - Granite - 40mm (1 1/2") - Crusher Aggregate (Crusher Run) 	Metric Ton " " "	* * * *	
8.(A) Premix Asphaltic Concrete <ul style="list-style-type: none"> - AC 10 (Wearing Course) - AC 14 (Wearing Course) - AC 28 (Binder Course) - ACW 20 (Wearing Course) 	Metric Ton " " "	* * * *	

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(untuk digunakan bagi projek yang sedang dalam pembinaan)

Materials	Unit	Quantity	Basic Unit Price
(B) Premix Bituminous Macadam	Metric Ton	*	
- BMR40 (Bound Roadbase)	"	*	
- BMR28 (Bound Roadbase)	"	*	
- BML10 (Levelling Course)	"	*	
- BMB28 (Binder Course)	"	*	
- BMB20 (Binder Course)	"	*	
- BMW14 (Wearing Course)	"	*	
- BMW20 (Wearing Course)	"	*	
9. Fabric Reinforcement	Kg	*	
- A4, MS145	"	*	
- A5, MS145	"	*	
- A6, MS145	"	*	
- A7, MS145	"	*	
- A8, MS145	"	*	
- A9, MS145	"	*	
- A10, MS145	"	*	
- B5, MS145	"	*	
- B6, MS145	"	*	
- B7, MS145	"	*	
- B8, MS145	"	*	
- B9, MS145	"	*	
- B10, MS145	"	*	
- B12, MS145	"	*	
- C5, MS145	"	*	
- C6, MS145	"	*	
- C7, MS145	"	*	
- C8, MS145	"	*	
- C9, MS145	"	*	
- C10, MS145	"	*	
- DA4, MS145	"	*	
- DA5, MS145	"	*	
- DA6, MS145	"	*	
- DA7, MS145	"	*	
- DA8, MS145	"	*	
- DA9, MS145	"	*	
- DA10, MS145	"	*	

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(untuk digunakan bagi projek yang sedang dalam pembinaan)

Materials	Unit	Quantity	Basic Unit Price
10. Guardrail (i) Single mounted - 1.95m Post Spacing - 3.80m Post Spacing (ii) Double mounted - 1.95m Post Spacing - 3.80m Post Spacing	Metre “ “ “	* * * *	
11. (A) Water Pipe - Mild Steel Pipe 300mm - Stainless Steel Pipe 25mm - Ductile Iron Pipe 300mm - High Density Polythylene (HDPE Pipe) - Compression Fitting Using For Jointing 25mm - Electrofusion Jointing 160mm - Butt Fussion 160mm 11. (B) Sewerage Pipe - Mild Steel Pipe 300mm - Stainless Steel Pipe 250mm - Ductile Iron Pipe 300mm - High Density Polythylene (HDPE Pipe) - Profile Pipe 150mm - Solid Pipe 250mm - Vitrified Clay Pipe (i) Standard Pipe 225mm (ii) Jacking Pipe 225mm - Reinforced Pipe (i) Without Lining 900mm (ii) With Lining (High Alumina) 900mm (iii) With Lining (Sacrificial Lining) 900mm	Metre “ “ “ “ “ Metre “ “ “ “ “ “ “ “ “	* * * * * * * * * * * * * * *	Refer Appendix B

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(untuk digunakan bagi projek yang sedang dalam pembinaan)

Materials	Unit	Quantity	Basic Unit Price
11. (B) Sewerage Pipe (Cont'd) - ABS Pipe - Gravity 110mm - Force Main 225mm	Metre “	* *	} Refer Appendix B

* These quantities shall be estimated by the Contractor's Consultant based on the **balance of work to be executed from 1st January 2022**. Such quantities shall be verified and adjusted by the Project Director.

Notes:

1. The above quantities are intended for the purpose of price variation only and do not necessarily reflect the actual quantities required for the Contract.
2. Price Variation shall be applied to the above quantities fixed or actual quantities used, whichever is the lesser.
3. The quantities of materials (subject to those listed above) used in precast concrete components shall be determined and included in the quantities for relevant materials above. The computation for price variation shall be considered when the completed precast components are delivered to site for use.
4. The Basic Unit Price shall mean the appropriate Unit Price as stated in the **Special Release 1** published by the Department of Statistics. The Basic Unit Price shall be determined as follows based on:
 - (i) The month during which tender closes (for tenders closed on and after 1st January 2021); or
 - (ii) The month December 2020 (for tender closed before 1st January 2021)

(untuk digunakan bagi projek yang sedang dalam pembinaan)

**LIST OF CATEGORIES AND SIZES OF PIPES TOGETHER WITH QUANTITIES
AND BASIC UNIT PRICES VARIATION IN ACCORDANCE WITH THE
“SPECIAL PROVISIONS TO THE CONDITIONS OF CONTRACT
(VARIATION OF PRICE) FOR CIVIL ENGINEERING WORKS”**

Category and Size of Mild Steel Pipe	Quantity (M)	Unit Price For Basic Material	Adjustment Factor	Basic Unit Price
1. WATER PIPE				
A. Mild Steel Pipe				
1. 100 mm Ø	*			
2. 150 "	*			
3. 200 "	*			
4. 250 "	*			
5. 300 "	*			
6. 350 "	*			
7. 400 "	*			
8. 450 "	*			
9. 500 "	*			
10. 600 "	*			
11. 700 "	*			
12. 750 "	*			
13. 800 "	*			
14. 900 "	*			
15. 1000 "	*			
16. 1100 "	*			
17. 1150 "	*			
18. 1200 "	*			
19. 1300 "	*			
20. 1400 "	*			
21. 1500 "	*			
22. 1600 "	*			
23. 1700 "	*			
24. 1800 "	*			
25. 1900 "	*			
26. 2000 "	*			
27. 2100 "	*			
28. 2200 "	*			

(untuk digunakan bagi projek yang sedang dalam pembinaan)

Category and Size of Mild Steel Pipe	Quantity (M)	Unit Price For Basic Material	Adjustment Factor	Basic Unit Price
1. WATER PIPE B. Stainless Steel Pipe 1. 13 mm Ø (½") 2. 20 " (¾") 3. 25 " (1") 4. 32 " (1 ¼") 5. 38 " (1 ½") 6. 50 " (2") 7. 63 " (2 ½") 8. 75 " (3") 9. 100 " (4")	* * * * * * * * *			
C. Ductile Iron Pipe 1. 100 mm Ø 2. 150 " 3. 200 " 4. 250 " 5. 300 " 6. 350 " 7. 400 " 8. 450 " 9. 500 " 10. 600 " 11. 700 "	* * * * * * * * * * *			
D. High Density Polyethylene (HDPE) Pipe (i) Compression Fitting Using For Jointing 1. 20 mm Ø 2. 25 " 3. 32 " 4. 40 " 5. 50 " 6. 63 " 7. 75 " 8. 90 "	* * * * * * * *			

(untuk digunakan bagi projek yang sedang dalam pembinaan)

Category and Size of Mild Steel Pipe	Quantity (M)	Unit Price For Basic Material	Adjustment Factor	Basic Unit Price
1. WATER PIPE				
D. High Density Polythylene (HDPE) Pipe				
(ii) Electrofusion Jointing				
1. 110 mm Ø	*			
2. 125 "	*			
3. 140 "	*			
4. 160 "	*			
5. 180 "	*			
6. 200 "	*			
7. 225 "	*			
8. 250 "	*			
9. 280 "	*			
10. 315 "	*			
11. 355 "	*			
12. 400 "	*			
13. 450 "	*			
14. 500 "	*			
15. 560 "	*			
(iii) Butt Fussion				
1. 110 mm Ø	*			
2. 125 "	*			
3. 140 "	*			
4. 160 "	*			
5. 180 "	*			
6. 200 "	*			
7. 225 "	*			
8. 250 "	*			
9. 280 "	*			
10. 315 "	*			
11. 355 "	*			
12. 400 "	*			
13. 450 "	*			
14. 500 "	*			
15. 560 "	*			

(untuk digunakan bagi projek yang sedang dalam pembinaan)

Category and Size of Mild Steel Pipe	Quantity (M)	Unit Price For Basic Material	Adjustment Factor	Basic Unit Price
2. SEWERAGE PIPE				
A. Mild Steel Pipe				
1. 100 mm Ø	*			
2. 150 "	*			
3. 200 "	*			
4. 250 "	*			
5. 300 "	*			
6. 350 "	*			
7. 400 "	*			
8. 450 "	*			
9. 500 "	*			
10. 600 "	*			
11. 700 "	*			
12. 750 "	*			
13. 800 "	*			
14. 900 "	*			
15. 1000 "	*			
16. 1100 "	*			
17. 1150 "	*			
18. 1200 "	*			
19. 1300 "	*			
20. 1400 "	*			
21. 1500 "	*			
22. 1600 "	*			
23. 1700 "	*			
24. 1800 "	*			
25. 1900 "	*			
26. 2000 "	*			
27. 2100 "	*			
28. 2200 "	*			
B. Ductile Iron Pipe				
1. 80 mm Ø	*			
2. 100 "	*			
3. 150 "	*			
4. 200 "	*			
5. 250 "	*			
6. 300 "	*			
7. 350 "	*			

(untuk digunakan bagi projek yang sedang dalam pembinaan)

Category and Size of Mild Steel Pipe	Quantity (M)	Unit Price For Basic Material	Adjustment Factor	Basic Unit Price
2. SEWERAGE PIPE				
B. Ductile Iron Pipe (Cont'd)				
8. 400 "	*			
9. 450 "	*			
10. 600 "	*			
11. 700 "	*			
12. 800 "	*			
13. 1000 "	*			
14. 1200 "	*			
C. HDPE (Profile) Pipe				
1. 100 mm Ø	*			
2. 125 "	*			
3. 150 "	*			
4. 200 "	*			
5. 250 "	*			
6. 300 "	*			
7. 350 "	*			
8. 400 "	*			
9. 450 "	*			
10. 500 "	*			
11. 550 "	*			
12. 600 "	*			
13. 650 "	*			
14. 700 "	*			
15. 750 "	*			
16. 800 "	*			
17. 850 "	*			
18. 900 "	*			
19. 950 "	*			
20. 1000 "	*			
21. 1200 "	*			
22. 1400 "	*			
23. 1600 "	*			
24. 1800 "	*			
25. 2000 "	*			
26. 2100 "	*			
27. 2200 "	*			

(untuk digunakan bagi projek yang sedang dalam pembinaan)

Category and Size of Mild Steel Pipe	Quantity (M)	Unit Price For Basic Material	Adjustment Factor	Basic Unit Price
2. SEWERAGE PIPE				
D. HDPE (Solid) Pipe				
1. 100 mm Ø	*			
2. 125 "	*			
3. 150 "	*			
4. 200 "	*			
5. 250 "	*			
6. 300 "	*			
7. 350 "	*			
8. 400 "	*			
9. 450 "	*			
10. 500 "	*			
11. 550 "	*			
12. 600 "	*			
13. 650 "	*			
14. 700 "	*			
15. 750 "	*			
16. 800 "	*			
17. 850 "	*			
18. 900 "	*			
19. 950 "	*			
20. 1000 "	*			
21. 1200 "	*			
22. 1400 "	*			
23. 1600 "	*			
24. 1800 "	*			
25. 2000 "	*			
26. 2100 "	*			
27. 2200 "	*			
E. Vitrified Clay Pipe				
(i) Vitrified Clay (Standard) Pipe				
1. 100 mm Ø	*			
2. 150 "	*			
3. 200 "	*			
4. 225 "	*			
5. 300 "	*			
6. 375 "	*			

(untuk digunakan bagi projek yang sedang dalam pembinaan)

Category and Size of Mild Steel Pipe	Quantity (M)	Unit Price For Basic Material	Adjustment Factor	Basic Unit Price
2. SEWERAGE PIPE				
E. Vitrified Clay Pipe				
(i) Vitrified Clay (Standard) Pipe (Cont'd)				
7. 400 "	*			
8. 450 "	*			
9. 500 "	*			
10. 600 "	*			
11. 700 "	*			
12. 800 "	*			
(ii) Vitrified Clay (Jacking) Pipe				
1. 100 mm Ø	*			
2. 150 "	*			
3. 200 "	*			
4. 225 "	*			
5. 300 "	*			
6. 375 "	*			
7. 400 "	*			
8. 450 "	*			
9. 500 "	*			
10. 600 "	*			
11. 700 "	*			
12. 800 "	*			
F. Reinforced Concrete Pipe (RCP)				
(i) Without Lining				
1. 375 mm Ø	*			
2. 450 "	*			
3. 600 "	*			
4. 750 "	*			
5. 900 "	*			
6. 1050 "	*			
7. 1200 "	*			

(untuk digunakan bagi projek yang sedang dalam pembinaan)

Category and Size of Mild Steel Pipe	Quantity (M)	Unit Price For Basic Material	Adjustment Factor	Basic Unit Price
2. SEWERAGE PIPE				
F. Reinforced Concrete Pipe (RCP)				
(i) Without Lining (Cont'd)				
8. 1350 "	*			
9. 1500 "	*			
10. 1650 "	*			
11. 1800 "	*			
(ii) With Lining (High Alumina)				
1. 375 mm Ø	*			
2. 450 "	*			
3. 600 "	*			
4. 750 "	*			
5. 900 "	*			
6. 1050 "	*			
7. 1200 "	*			
8. 1350 "	*			
9. 1500 "	*			
10. 1650 "	*			
11. 1800 "	*			
(iii) With Lining (Sacrificial Lining)				
1. 375 mm Ø	*			
2. 450 "	*			
3. 600 "	*			
4. 750 "	*			
5. 900 "	*			
6. 1050 "	*			
7. 1200 "	*			
8. 1350 "	*			
9. 1500 "	*			
10. 1650 "	*			
11. 1800 "	*			

(untuk digunakan bagi projek yang sedang dalam pembinaan)

Category and Size of Mild Steel Pipe	Quantity (M)	Unit Price For Basic Material	Adjustment Factor	Basic Unit Price
2. SEWERAGE PIPE				
G. ABS Pipe				
(i) Gravity				
1. 90 mm Ø	*			
2. 110 "	*			
3. 150 "	*			
4. 225 "	*			
5. 315 "	*			
(ii) Force Main				
1. 15 mm Ø	*			
2. 20 "	*			
3. 25 "	*			
4. 32 "	*			
5. 40 "	*			
6. 50 "	*			
7. 65 "	*			
8. 80 "	*			
9. 100 "	*			
10. 150 "	*			
11. 200 "	*			
12. 225 "	*			
13. 250 "	*			
14. 280 "	*			
15. 315 "	*			
16. 355 "	*			
17. 400 "	*			
18. 450 "	*			
19. 500 "	*			
20. 630 "	*			

* These quantities shall be estimated by the Contractor's Consultant based on the **balance of work to be executed from 1st January 2022**. Such quantities shall be verified and adjusted by the Project Director.

LAMPIRAN E/CW/DB-L
Appendix B

(untuk digunakan bagi projek yang sedang dalam pembinaan)

Notes:

1. The above quantities are intended for the purpose of price variation only and do not necessarily reflect the actual quantities required for the Contract.
2. Price Variation shall be applied to the above quantities fixed or actual quantities used, whichever is the lesser.
3. The “Basic Unit Prices” shall be the appropriate Unit Price as stated in the **Special Release 1** published by the Department of Statistics. The Basic Unit Price shall be determined as follows based on:
 - (i) The month during which tender closes (for tenders closed on and after 1st January 2021); or
 - (ii) The month December 2020 (for tender closed before 1st January 2021)
4. Price Adjustment Factor shall be as stated in the **Special Release 1** published by the Department of Statistics.
5. The Basic Material is the most commonly used material for the relevant category of pipes in most projects.

**SPECIAL PROVISIONS TO THE CONDITIONS OF CONTRACT
(VARIATION OF PRICE) FOR MECHANICAL & ELECTRICAL WORKS
(DESIGN & BUILD CONTRACTS)**

1. This provision shall be applicable for Mechanical and Electrical Works carried out under the following arrangement:

- (i) Direct contract; and
- (ii) Packaged as part of Builder's Works under the Main Contract.

2. Equal Sharing Of Risk

Adjustment (upwards and downwards) shall be made to the monthly interim payments and finally to the Contract Sum where there is variation in the Component Cost Indices of "Copper Cables" in Mechanical and Electrical (M&E) Components and shall only be in respect of 50% of the actual amount so calculated (based on an equal sharing of risk 50:50 between the parties to the Contract).

3. Any adjustment shall be made where there is variation in the Component Cost Indices which are deemed to reflect any changes in the price of selected M&E Components which includes copper only described hereunder:

- (i) Copper Cables;
- (ii) Switchgears;
- (iii) Transformers;
- (iv) Generators;
- (v) Lightning Protection System and Earthing System;
- (vi) Air Conditioning System; and
- (vii) Motor (Pumpset).

4. Reference Publication

The reference publication to determine the "Component Cost Indices" of M&E Components specified in paragraph 2 and 3 shall be the **Special Release 3** published by the Department of Statistics for the month of installation.

5. Base Indices

The "Base Indices" for the purposes of calculating variation of price for the M&E Components specified in paragraph 2 and 3 shall be the appropriate Component Cost Index of the M&E Components as stated in the **Special**

LAMPIRAN F/ME/DB-L
(untuk digunakan bagi projek yang sedang dalam pembinaan)

Release 3 published by the Department of Statistics and shall be inserted in the **Appendix A** to this provision.

The Base Index shall be determined as follows based on:-

- (v) The month during which tender closes (for tenders closed on and after 1st January 2021); or
- (vi) The month December 2020 (for tender closed before 1st January 2021)

6. Application of Adjustments

- (i) The adjustments shall only be applied to the "Effective Value of Work Done" (as defined hereunder) in respect of each M&E component installed on site **from 1st January 2022**. The "Effective Value of Work Done" shall mean the difference between:
 - (a) The amount of each relevant component installed on site by the Contractor up to the date of the current monthly interim valuation less the amount for any items based on actual costs or current prices; and
 - (b) The amount calculated in accordance with (a) above up to the date of the preceding monthly interim valuation.
- (ii) The total tendered price of each M&E component is the total price of the supply and installation as tendered by the Contractor. The "Recovery Factor" of each component is the percentage of the supply component price with respect to the tendered price. The Recovery Factor of the selected M&E component is specified in **Appendix A** to this provision.

7. Variations in Component Cost Index

- (i) The Variation in the Component Cost Index shall mean any increase or decrease in the "Current Index" (as defined under paragraph (ii) hereof) as compared to the Base Index (as defined under paragraph 4 above) for the relevant category or categories of M&E component as stated in **Appendix A** to this provision.
- (ii) The Current Index shall mean the appropriate Component Cost Index as stated in **Special Release 3** issued by the Department of Statistics for the month of delivery or installation whichever is earlier.

Provided that in respect of Works executed outside the period permitted under the provisions of the Contract, the Current Index shall be the appropriate

LAMPIRAN F/ME/DB-L
(untuk digunakan bagi projek yang sedang dalam pembinaan)

Component Cost Index as stated in the **Special Release 3** issued by the Department of Statistics for either the final month of the period permitted under the provisions of the Contract, or the month of the monthly interim valuation, whichever is the lower.

8. Calculation for Adjustments

The increase or decrease payable or deductible shall be calculated by multiplying the “Effective Value of Work Done” by a factor referred to as Fluctuation Factor which shall be ascertained from the product of the Recovery Factor of relevant M&E Component and the difference between the relevant Current Index and the Base Index, divided by the Base Index as follows:

$$\text{Fluctuation Factor} = \text{Recovery Factor} \times \frac{\text{Current Index} - \text{Base Index}}{\text{Base Index}}$$

Provided that:

- (i) (a) If the relevant Current Index had not been published by the date the interim payment certificate is to be issued, or

(b) If the total amount of any monthly interim valuation (excluding any sums for increases or decreases under this provision) is inadequate to justify the issue of an interim payment certificate, then the increase or decrease payable in respect of that monthly interim valuation shall be added to or deducted from the amount payable upon the issue by the Project Director (P.D.) of the next interim payment certificate after all the relevant Current Indices have been published or when the total amount of the monthly interim valuation is adequate to justify the issue of the said certificate, as the case may be.
- (ii) The Fluctuation Factor for the Effective Value of Work Done in respect of any balance due or to become due and payable to the Contractor after the payment for each component installed up to the date certified by the P.D. as being completed had been made, shall be the ratio of the aggregate total of all the previous increases and/or decreases and the corresponding cumulative total of all the previous Effective Value of Work Done, as follows:

$$L = F \times \frac{M}{E}$$

LAMPIRAN F/ME/DB-L
(untuk digunakan bagi projek yang sedang dalam pembinaan)

Where:

- L = The value of increase or decrease payable or deductible in respect of the balance due or to become due and payable to the contractor;
- F = The amount of the balance due or to become due and payable to the contractor excluding the value of L after deducting the amount in respect of items based on actual costs or current prices;
- M = The aggregate total amount of increases or decreases payable under the above provisions in respect of all the previous interim payments made;
- E = The corresponding cumulative total of all the previous Effective Value of Work Done.

(untuk digunakan bagi projek yang sedang dalam pembinaan)

**LIST OF RELEVANT COMPONENTS, RECOVERY FACTOR AND BASE INDICES
SUBJECTED TO PRICE VARIATION IN ACCORDANCE WITH THE “SPECIAL
PROVISIONS TO THE CONDITIONS OF CONTRACT (VARIATION OF PRICE) FOR
MECHANICAL & ELECTRICAL WORKS” (DESIGN & BUILD CONTRACTS)**

Bil.	Category Of Components	Recovery Factor	Base Index (of Component in region _____* for the months of _____**
1.	COPPER CABLES i) Concealed/ Surface wiring using G.I. conduit (per unit point) ii) Cables in galvanized trunking (per meter run) iii) Cables laid underground (per meter run) a) 120 sq. mm and above b) Below 120 sq. mm iv) Cables on tray/ ladder (per meter run) a) 120 sq. mm and above b) Below 120 sq. mm v) Busduct	0.50 0.55 0.90 0.75 0.75 0.50 0.75	
2.	SWITCHGEARS i) HT Switchgears ii) LV Switchboards (Incomer breaker 600A and above) iii) LV Switchboards and Sub Switchboards (Incomer breaker below 600A) iv) TPN & SPN Distribution Boards (Incomer breaker 100A and below)	0.90 0.85 0.85 0.85	
3.	TRANSFORMERS i) Low Loss Cast Resin Transformer ii) Low Loss Hermetically Sealed (Oil filled) Transformer	0.80 0.80	

(untuk digunakan bagi projek yang sedang dalam pembinaan)

Bil.	Category Of Components	Recovery Factor	Base Index (of Component in region _____* for the months of _____**
4.	GENERATORS i) Generator Ratings Above 500kVA ii) Generator Ratings 500kVA and below	0.85 0.75	
5.	LIGHTNING PROTECTION SYSTEM & EARTHING SYSTEM i) Lightning Protection System ii) Earthing system (a) Earthing System for Main Switchboards and Sub Switchboards (b) Earthing System for Distribution Boards	0.65 0.75 0.50	
6.	AIR CONDITIONING SYSTEM i) Water Cooled Chiller ii) Air Cooled Chiller iii) Water Cooled Package iv) Air Cooled Package v) Split Unit System (a) Wall Mounted (b) Ceiling Cassette/Mounted vi) VRV System (a) Indoor (b) Outdoor	0.75 0.90 0.70 0.75 0.75 0.90 0.85 0.95	
7.	MOTOR (PUMPSET) i) Condenser Water Pump ii) Chilled Water Pump iii) Hose Reel Pump	0.80 0.80 0.55	

LAMPIRAN F/ME/DB-L
Appendix A

(untuk digunakan bagi projek yang sedang dalam pembinaan)

Notes:

* Peninsular Malaysia

* Sabah

* Sarawak

** The “Base Index” shall be the appropriate Component Cost Index as stated in the **Special Release 3** published by the Department of Statistics. The Base Index shall be determined as follows based on:-

- (i) The month during which tender closes (for tenders closed on and after 1st January 2021); or
- (ii) The month December 2020 (for tender closed before 1st January 2021)

LAMPIRAN G(K)

(Contoh format Perjanjian Tambahan bagi Kontrak Konvensional)

Format Perjanjian Tambahan Pelaksanaan Perubahan Harga
(*Variation of Price-VOP*) bagi Kontrak Kerja Konvensional
(Berdasarkan Syarat-syarat Kontrak P.W.D. Form 203/203A (Rev.1/2010))

THIS SUPPLEMENTAL AGREEMENT is made on.....

BETWEEN

The **GOVERNMENT OF MALAYSIA** as represented by
.....and having its address at.....
.....
(hereinafter is referred to as the “**Government**”) of the one part;

AND

[.....**Company’s name**.....],(Company No.....),
a company incorporated in Malaysia under the Companies Act 2016 [Act 777] and having
its registered office at
.....
..... (hereinafter referred to as the “**Contractor**”) of the other part.

The Government and the Company shall individually be referred to as the “**Party**” and
collectively referred to as the “**Parties**”.

WHEREAS:

- A. Pursuant to Contract No.: dated..... (hereinafter referred to as the “**Principal Contract**”) entered into between the Parties, the Government has agreed for the Contractor to undertake the Works (as therein defined in the Principal Contract) subject to the terms and conditions therein contained.
- B. Subsequent thereto, vide the current applicable *Pekeliling Perbendaharaan Malaysia PK 2.4 – Pelaksanaan Syarat Perubahan Harga (Variation of Price – VOP) dalam Kontrak Kerja*, the Government has agreed for the implementation of Variation of Price in the Principal Contract due to the fluctuation of price of materials.

LAMPIRAN G(K)

(Contoh format Perjanjian Tambahan bagi Kontrak Konvensional)

- C. The Parties are now desirous of entering into this supplemental agreement (hereinafter referred to as this “**Supplemental Agreement**”) for the purpose of amending and varying the terms and conditions of the Principal Contract entered into between the Parties subject to the terms and conditions contained thereafter appearing.

NOW IT IS HEREBY AGREED AS FOLLOWS:

1. SUPPLEMENTAL AGREEMENT

- 1.1 The parties hereby agreed that this Supplemental Agreement shall be read as an integral part of the Principal Contract.
- 1.2 Save and subject to the following provisions and variations, the provisions in the Principal Contract shall remain the same and in full force and effect as between the Parties thereto.
- 1.3 In the event of any inconsistency between the provision in the Principal Contract and this Supplemental Agreement, the provisions of this Supplemental Agreement shall prevail to the extent of such inconsistency.

2. INTERPRETATION

The Parties hereby agree that save and except where the context otherwise requires, or unless this Supplemental Agreement otherwise provides, all words and expressions define in the Principal Contract shall have the same meaning when used or referred herein.

3. EFFECTIVE DATE

Notwithstanding the signing of any Supplemental Agreement or Agreements pertaining to Variation of Prices prior to this Supplemental Agreement, parties agreed that this Supplemental Agreement shall be deemed to have come into effect on 1 January 2022.

4. INSERTION OF A NEW CLAUSE

The Principal Contract is amended by inserting after Clause 29.0 (Adjustment of Contract Sum) a new Clause 30.0 (Fluctuation of Price) as follows:

“30.0 FLUCTUATION OF PRICE

30.1 In accordance with the Special Provisions to the Conditions of Contract for Fluctuation of Price as contained in Appendix 2 to the Conditions of Contract, the amount payable by the Government to the Contractor upon the issue by the S.O. of an Interim Certificate under clause 28 hereof shall be increased or decreased accordingly. The net total of any such increases or decreases shall be given effect to in determining the Contract Sum.

30.2 For the avoidance of doubt, this clause shall apply to Works done within the Contract Period and any extension of time granted under clause 43.”.

5. INSERTION OF A NEW APPENDIX

The Principal Contract is amended by inserting after “Appendix to the Conditions of Contract” new “Appendix 2 to the Conditions of Contract” which is annexed herewith and marked as Annexure.

6. LOSS AND EXPENSE

The Contractor hereby agrees with the Government that the Contractor is not entitled nor shall make any claim or demand for any payment, loss, damages, compensations or whatsoever against the Government pursuant to this Supplemental Agreement.

7. CONFIDENTIALITY

This Supplemental Agreement and all matters pertaining hereto shall be considered confidential matters and shall be not be disclosed to any third party without prior mutual agreement of the Parties unless the disclosure is required by law or any regulatory authorities.

8. COMPLIANCE WITH LAWS

The Contractor shall comply with all applicable laws and with all directions, orders, requirements and instructions given to the Contractor by any authority competent to do so under any applicable law.

9. AMENDMENT

This Supplemental Agreement shall not be amended, modified or varied unless such amendment, modification or variation shall be expressly agreed to in writing and signed by the Parties to this Supplemental Agreement or their duly authorized representative.

10. GOVERNING LAWS

This Supplemental Agreement shall be governed by and construed in accordance with the laws of Malaysia and the Parties irrevocably submit to the exclusive jurisdiction of the courts of Malaysia.

11. SEVERABILITY

If any provision of this Supplemental Agreement is held to be illegal or invalid or unenforceable under any laws or regulations effective and applicable during the term of this Supplemental Agreement, such provision shall be fully severable and this Supplemental Agreement shall be construed as if such illegal or invalid provisions had never comprised as part of this Supplemental Agreement and the remaining provisions of this Supplemental Agreement shall remain in full force and effect and shall not be affected by the illegal or invalid provision or by its severance from this Supplemental Agreement.

12. TIME

Time whenever mentioned shall be the essence of this Supplemental Agreement.

13. SUCCESSORS BOUND

This Supplemental Agreement shall be binding on the Parties hereto and their respective successors in title and permitted assigns.

14. COST AND STAMP DUTY

All costs and expenses incidental to the preparation and completion of this Supplemental Agreement including legal fees and stamp duties shall be borne and paid for by the Contractor.

LAMPIRAN G(K)

(Contoh format Perjanjian Tambahan bagi Kontrak Konvensional)

IN WITNESS WHEREOF the Parties hereto have executed this Supplemental Agreement on the day and year first above written.

SIGNED for and on behalf of)
)
THE GOVERNMENT OF MALAYSIA)
)

in the presence of:)
)

*⁴The Common Seal of)
)
)
(Co. No.:))

was hereunto affixed)
in the presence of:)

.....
Director
Name:
NRIC No.:

.....
Director/ Secretary
Name:
NRIC No.:

⁴ Applicable only if the Contractor is a company registered under the Companies Act 1965

LAMPIRAN G(DB)
(Contoh format Perjanjian Tambahan bagi Kontrak Reka dan Bina)

Format Perjanjian Tambahan Pelaksanaan Perubahan Harga
(*Variation of Price-VOP*) bagi Kontrak Kerja Reka Dan Bina
(Berdasarkan Syarat-syarat Kontrak PWD Form DB (Rev.1/2010))

THIS SUPPLEMENTAL AGREEMENT is made on.....

BETWEEN

The **GOVERNMENT OF MALAYSIA** as represented by
.....and having its address
at.....
.....
...(hereinafter is referred to as the “**Government**”) of the one part;

AND

[.....**Company’s** **name**], (Company
No.:.....), a company incorporated in Malaysia under the Companies Act 2016
[Act 777] and having its registered office at
.....
.....
...(hereinafter referred to as the “**Contractor**”) of the other part.

The Government and the Company shall individually be referred to as the “**Party**” and collectively referred to as the “**Parties**”.

WHEREAS:

- A. Pursuant to Contract No.: dated.....(hereinafter referred to as the “**Principal Contract**”) entered into between the Parties, the Government has agreed for the Contractor to undertake the Works (as therein defined in the Principal Contract) subject to the terms and conditions therein contained.
- B. Subsequent thereto, vide the current applicable *Pekeliling Perbendaharaan Malaysia PK 2.4 – Pelaksanaan Syarat Perubahan Harga (Variation of Price – VOP) dalam Kontrak Kerja*, the Government has agreed for the implementation of Variation of Price in the Principal Contract due to the fluctuation of price of materials.

LAMPIRAN G(DB)
(Contoh format Perjanjian Tambahan bagi Kontrak Reka dan Bina)

- C. The Parties are now desirous of entering into this supplemental agreement (hereinafter referred to as this “**Supplemental Agreement**”) for the purpose of amending and varying the terms and conditions of the Principal Contract entered into between the Parties subject to the terms and conditions contained thereafter appearing.

NOW IT IS HEREBY AGREED AS FOLLOWS:

1. SUPPLEMENTAL AGREEMENT

- 1.1 The parties hereby agreed that this Supplemental Agreement shall be read as an integral part of the Principal Contract.
- 1.2 Save and subject to the following provisions and variations, the provisions in the Principal Contract shall remain the same and in full force and effect as between the Parties thereto.
- 1.3 In the event of any inconsistency between the provision in the Principal Contract and this Supplemental Agreement, the provisions of this Supplemental Agreement shall prevail to the extent of such inconsistency.

2. INTERPRETATION

The Parties hereby agree that save and except where the context otherwise requires, or unless this Supplemental Agreement otherwise provides, all words and expressions define in the Principal Contract shall have the same meaning when used or referred herein.

3. EFFECTIVE DATE

Notwithstanding the signing of any Supplemental Agreement or Agreements pertaining to Variation of Prices prior to this Supplemental Agreement, parties agreed that this Supplemental Agreement shall be deemed to have come into effect on 1 January 2022.

4. INSERTION OF A NEW APPENDIX

The Principal Contract is amended by inserting after “Appendix to the Conditions of Contract” new “Appendix 2 to the Conditions of Contract” which is annexed herewith and marked as Annexure.

5. LOSS AND EXPENSE

The Contractor hereby agrees with the Government that the Contractor is not entitled nor shall make any claim or demand for any payment, loss, damages, compensations or whatsoever against the Government pursuant to this Supplemental Agreement.

6. CONFIDENTIALITY

This Supplemental Agreement and all matters pertaining hereto shall be considered confidential matters and shall be not be disclosed to any third party without prior mutual agreement of the Parties unless the disclosure is required by law or any regulatory authorities.

7. COMPLIANCE WITH LAWS

The Contractor shall comply with all applicable laws and with all directions, orders, requirements and instructions given to the Contractor by any authority competent to do so under any applicable law.

8. AMENDMENT

This Supplemental Agreement shall not be amended, modified or varied unless such amendment, modification or variation shall be expressly agreed to in writing and signed by the Parties to this Supplemental Agreement or their duly authorized representative.

9. GOVERNING LAWS

This Supplemental Agreement shall be governed by and construed in accordance with the laws of Malaysia and the Parties irrevocably submit to the exclusive jurisdiction of the courts of Malaysia.

10. SEVERABILITY

If any provision of this Supplemental Agreement is held to be illegal or invalid or unenforceable under any laws or regulations effective and applicable during the term of this Supplemental Agreement, such provision shall be fully severable and this Supplemental Agreement shall be construed as if such illegal or invalid provisions had never comprised as part of this Supplemental Agreement and the remaining provisions of this Supplemental Agreement shall remain in full force and effect and shall not be affected by the illegal or invalid provision or by its severance from this Supplemental Agreement.

11. TIME

Time whenever mentioned shall be the essence of this Supplemental Agreement.

12. SUCCESSORS BOUND

This Supplemental Agreement shall be binding on the Parties hereto and their respective successors in title and permitted assigns.

13. COST AND STAMP DUTY

All costs and expenses incidental to the preparation and completion of this Supplemental Agreement including legal fees and stamp duties shall be borne and paid for by the Contractor.

LAMPIRAN G(DB)

(Contoh format Perjanjian Tambahan bagi Kontrak Reka dan Bina)

IN WITNESS WHEREOF the Parties hereto have executed this Supplemental Agreement on the day and year first above written.

SIGNED for and on behalf of)
)
THE GOVERNMENT OF MALAYSIA)
)

in the presence of:)
)

*⁵The Common Seal of)
)
)
(Co. No.:))

was hereunto affixed)
in the presence of:)

.....
Director
Name:
NRIC No.:

.....
Director/ Secretary
Name:
NRIC No.:

⁵ Applicable only if the Contractor is a company registered under the Companies Act 1965

LAMPIRAN G(K)

(Contoh format Perjanjian Tambahan bagi Kontrak Konvensional)

Format Perjanjian Tambahan Pelaksanaan Perubahan Harga
(*Variation of Price-VOP*) bagi Kontrak Kerja Sebut Harga
(Berdasarkan Syarat-syarat Sebutharga)

THIS SUPPLEMENTAL AGREEMENT is made on.....

BETWEEN

The **GOVERNMENT OF MALAYSIA** as represented by
.....and having its address
at.....
.....
..... (hereinafter is referred to as the “**Government**”) of the one part;

AND

[.....**Company’s**
name.....], (Company No.:.....), a company incorporated
in Malaysia under the Companies Act 2016 [Act 777] and having its registered office
at
.....
..... (hereinafter referred to as the “**Contractor**”) of the other
part.

The Government and the Company shall individually be referred to as the “**Party**”
and collectively referred to as the “**Parties**”.

WHEREAS:

- A. Pursuant to Contract No.:
dated.....(hereinafter referred to as the “**Principal Contract**”) entered
into between the Parties, the Government has agreed for the Contractor to
undertake the Works (as therein defined in the Principal Contract) subject to the
terms and conditions therein contained.
- B. Subsequent thereto, vide the current applicable *Pekeliling Perbendaharaan
Malaysia PK 2.4 – Pelaksanaan Syarat Perubahan Harga (Variation of Price –
VOP) di dalam Kontrak Kerja*, the Government has agreed for the implementation
of Variation of Price in the Principal Contract due to the fluctuation of price of
materials.

LAMPIRAN G(K)

(Contoh format Perjanjian Tambahan bagi Kontrak Konvensional)

- C. The Parties are now desirous of entering into this supplemental agreement (hereinafter referred to as this “**Supplemental Agreement**”) for the purpose of amending and varying the terms and conditions of the Principal Contract entered into between the Parties subject to the terms and conditions contained thereafter appearing.

NOW IT IS HEREBY AGREED AS FOLLOWS:

1. SUPPLEMENTAL AGREEMENT

- 1.1 The parties hereby agreed that this Supplemental Agreement shall be read as an integral part of the Principal Contract.
- 1.2 Save and subject to the following provisions and variations, the provisions in the Principal Contract shall remain the same and in full force and effect as between the Parties thereto.
- 1.3 In the event of any inconsistency between the provision in the Principal Contract and this Supplemental Agreement, the provisions of this Supplemental Agreement shall prevail to the extent of such inconsistency.

2. INTERPRETATION

The Parties hereby agree that save and except where the context otherwise requires, or unless this Supplemental Agreement otherwise provides, all words and expressions define in the Principal Contract shall have the same meaning when used or referred herein.

3. EFFECTIVE DATE

Notwithstanding the signing of any Supplemental Agreement or Agreements pertaining to Variation of Prices prior to this Supplemental Agreement, parties agreed that this Supplemental Agreement shall be deemed to have come into effect on 1 January 2022.

4. INSERTION OF A NEW APPENDIX

The Principal Contract is amended by inserting after “Syarat-Syarat Sebut Harga Untuk Kerja ” the “Appendix Kepada Syarat-Syarat Sebut Harga ” which is annexed herewith and marked as Annexure.

5. LOSS AND EXPENSE

The Contractor hereby agrees with the Government that the Contractor is not entitled nor shall make any claim or demand for any payment, loss, damages, compensations or whatsoever against the Government pursuant to this Supplemental Agreement.

6. CONFIDENTIALITY

This Supplemental Agreement and all matters pertaining hereto shall be considered confidential matters and shall be not be disclosed to any third party without prior mutual agreement of the Parties unless the disclosure is required by law or any regulatory authorities.

7. COMPLIANCE WITH LAWS

The Contractor shall comply with all applicable laws and with all directions, orders, requirements and instructions given to the Contractor by any authority competent to do so under any applicable law.

8. AMENDMENT

This Supplemental Agreement shall not be amended, modified or varied unless such amendment, modification or variation shall be expressly agreed to in writing and signed by the Parties to this Supplemental Agreement or their duly authorized representative.

9. GOVERNING LAWS

This Supplemental Agreement shall be governed by and construed in accordance with the laws of Malaysia and the Parties irrevocably submit to the exclusive jurisdiction of the courts of Malaysia.

10. SEVERABILITY

If any provision of this Supplemental Agreement is held to be illegal or invalid or unenforceable under any laws or regulations effective and applicable during the term of this Supplemental Agreement, such provision shall be fully severable and this Supplemental Agreement shall be construed as if such illegal or invalid provisions had never comprised as part of this Supplemental Agreement and the remaining provisions of this Supplemental Agreement shall remain in full force and effect and shall not be affected by the illegal or invalid provision or by its severance from this Supplemental Agreement.

11. TIME

Time whenever mentioned shall be the essence of this Supplemental Agreement.

12. SUCCESSORS BOUND

This Supplemental Agreement shall be binding on the Parties hereto and their respective successors in title and permitted assigns.

13. COST AND STAMP DUTY

All costs and expenses incidental to the preparation and completion of this Supplemental Agreement including legal fees and stamp duties shall be borne and paid for by the Contractor.

LAMPIRAN G(K)

(Contoh format Perjanjian Tambahan bagi Kontrak Konvensional)

IN WITNESS WHEREOF the Parties hereto have executed this Supplemental Agreement on the day and year first above written.

SIGNED for and on behalf of)
)
THE GOVERNMENT OF MALAYSIA)
)

in the presence of:)
)

*⁶The Common Seal of)
)
)
(Co. No.:))

was hereunto affixed)
in the presence of:)

.....
Director	Director/ Secretary
Name:	Name:
NRIC No.:	NRIC No.:

⁶ Applicable only if the Contractor is a company registered under the Companies Act 1965