

BAB 6

KESIMPULAN

Berdasarkan analisis data dan pembahasan yang telah dilakukan, dapat ditarik kesimpulan yang merupakan jawaban dari tujuan penelitian ini. Identifikasi resiko perlu dilakukan mulai dari awal proyek sehingga dapat menemukan resiko-resiko yang berpotensi akan terjadi serta menimbulkan dampak yang negatif terhadap proyek. Selanjutnya dengan penilaian resiko akan menemukan resiko yang menjadi prioritas utama untuk dikendalikan dalam proyek. Resiko keterlambatan penyelesaian aktivitas merupakan resiko utama yang memiliki *risk value* tertinggi atau mendapatkan prioritas utama untuk diatasi. Dalam proyek Vale, PERT menunjukkan bahwa aktivitas-aktivitas kritis sejumlah 62 serta semua aktivitas kurang memenuhi target sehingga proyek yang ditargetkan 156 hari akan mengalami keterlambatan. Jika pada awal proyek disadari akan terjadinya keterlambatan maka perusahaan dapat mengantisipasi hal tersebut. Metode PERT digunakan sebagai alat untuk mengelola resiko keterlambatan penyelesaian aktivitas terhadap pesanan *Power Control Room*.

Perusahaan disarankan untuk melakukan tahap-tahap dalam manajemen resiko, yaitu identifikasi resiko, penilaian resiko, dan pengendalian resiko. Manajemen resiko yang dilakukan sangatlah penting dalam meminimumkan resiko ketidakpastian proyek yang dihadapi perusahaan. Jika pada awal perencanaan proyek baru menemukan resiko proyek yang menjadi prioritas utama dengan identifikasi dan penilaian resiko. Resiko utama selanjutnya dikendalikan dengan alat manajemen resiko seperti PERT dalam pengendalian resiko. Maka perusahaan dapat mengelola resiko yang terjadi dalam proyek tersebut. Penerapan manajemen resiko pada proyek selanjutnya diharapkan dapat menjadi solusi masalah perusahaan dalam mengantisipasi keterlambatan pemenuhan pesanan.

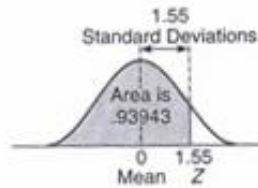
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Lampiran 1: Tabel Distribusi Normal Z

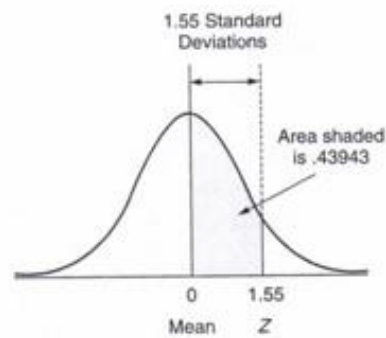
APPENDIX I NORMAL CURVE AREAS



To find the area under the normal curve, you can apply either Table I.1 or Table I.2. In Table I.1, you must know how many standard deviations that point is to the right of the mean. Then, the area under the normal curve can be read directly from the normal table. For example, the total area under the normal curve for a point that is 1.55 standard deviations to the right of the mean is .93943.

z	.00	.01	.02	.03	.04	.05	.06	.07	.08	.09
.0	.50000	.50399	.50798	.51197	.51595	.51994	.52392	.52790	.53188	.53586
.1	.53983	.54380	.54776	.55172	.55567	.55962	.56356	.56749	.57142	.57535
.2	.57926	.58317	.58706	.59095	.59483	.59871	.60257	.60642	.61026	.61409
.3	.61791	.62172	.62552	.62930	.63307	.63683	.64058	.64431	.64803	.65173
.4	.65542	.65910	.66276	.66640	.67003	.67364	.67724	.68082	.68439	.68793
.5	.69146	.69497	.69847	.70194	.70540	.70884	.71226	.71566	.71904	.72240
.6	.72575	.72907	.73237	.73565	.73891	.74215	.74537	.74857	.75175	.75490
.7	.75804	.76115	.76424	.76730	.77035	.77337	.77637	.77935	.78230	.78524
.8	.78814	.79103	.79389	.79673	.79955	.80234	.80511	.80785	.81057	.81327
.9	.81594	.81859	.82121	.82381	.82639	.82894	.83147	.83398	.83646	.83891
1.0	.84134	.84375	.84614	.84849	.85083	.85314	.85543	.85769	.85993	.86214
1.1	.86433	.86650	.86864	.87076	.87286	.87493	.87698	.87900	.88100	.88298
1.2	.88493	.88686	.88877	.89065	.89251	.89435	.89617	.89796	.89973	.90147
1.3	.90320	.90490	.90658	.90824	.90988	.91149	.91309	.91466	.91621	.91774
1.4	.91924	.92073	.92220	.92364	.92507	.92647	.92785	.92922	.93056	.93189
1.5	.93319	.93448	.93574	.93699	.93822	.93943	.94062	.94179	.94295	.94408
1.6	.94520	.94630	.94738	.94845	.94950	.95053	.95154	.95254	.95352	.95449
1.7	.95543	.95637	.95728	.95818	.95907	.95994	.96080	.96164	.96246	.96327
1.8	.96407	.96485	.96562	.96638	.96712	.96784	.96856	.96926	.96995	.97062
1.9	.97128	.97193	.97257	.97320	.97381	.97441	.97500	.97558	.97615	.97670
2.0	.97725	.97784	.97831	.97882	.97932	.97982	.98030	.98077	.98124	.98169
2.1	.98214	.98257	.98300	.98341	.98382	.98422	.98461	.98500	.98537	.98574
2.2	.98610	.98645	.98679	.98713	.98745	.98778	.98809	.98840	.98870	.98899
2.3	.98928	.98956	.98983	.99010	.99036	.99061	.99086	.99111	.99134	.99158
2.4	.99180	.99202	.99224	.99245	.99266	.99286	.99305	.99324	.99343	.99361
2.5	.99379	.99396	.99413	.99430	.99446	.99461	.99477	.99492	.99506	.99520
2.6	.99534	.99547	.99560	.99573	.99585	.99598	.99609	.99621	.99632	.99643
2.7	.99653	.99664	.99674	.99683	.99693	.99702	.99711	.99720	.99728	.99736
2.8	.99744	.99752	.99760	.99767	.99774	.99781	.99788	.99795	.99801	.99807
2.9	.99813	.99819	.99825	.99831	.99836	.99841	.99846	.99851	.99856	.99861
3.0	.99865	.99869	.99874	.99878	.99882	.99886	.99889	.99893	.99896	.99900
3.1	.99903	.99906	.99910	.99913	.99916	.99918	.99921	.99924	.99926	.99929
3.2	.99931	.99934	.99936	.99938	.99940	.99942	.99944	.99946	.99948	.99950
3.3	.99952	.99953	.99955	.99957	.99958	.99960	.99961	.99962	.99964	.99965
3.4	.99966	.99968	.99969	.99970	.99971	.99972	.99973	.99974	.99975	.99976
3.5	.99977	.99978	.99978	.99979	.99980	.99981	.99981	.99982	.99983	.99983
3.6	.99984	.99985	.99985	.99986	.99986	.99987	.99987	.99988	.99988	.99989
3.7	.99989	.99990	.99990	.99990	.99991	.99991	.99992	.99992	.99992	.99992
3.8	.99993	.99993	.99993	.99994	.99994	.99994	.99994	.99995	.99995	.99995
3.9	.99995	.99995	.99996	.99996	.99996	.99996	.99996	.99996	.99997	.99997

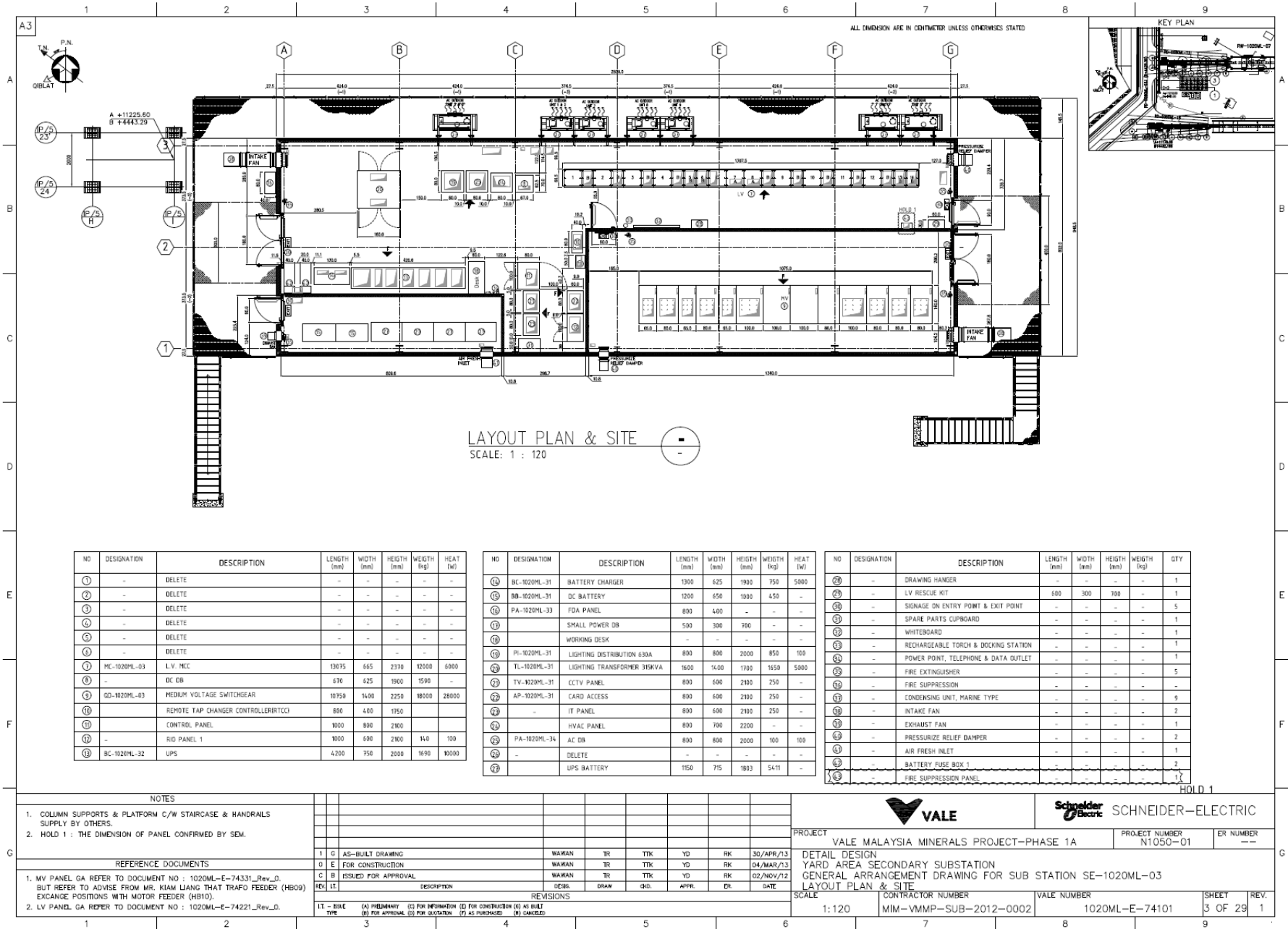
Lampiran 1: Tabel Distribusi Normal Z



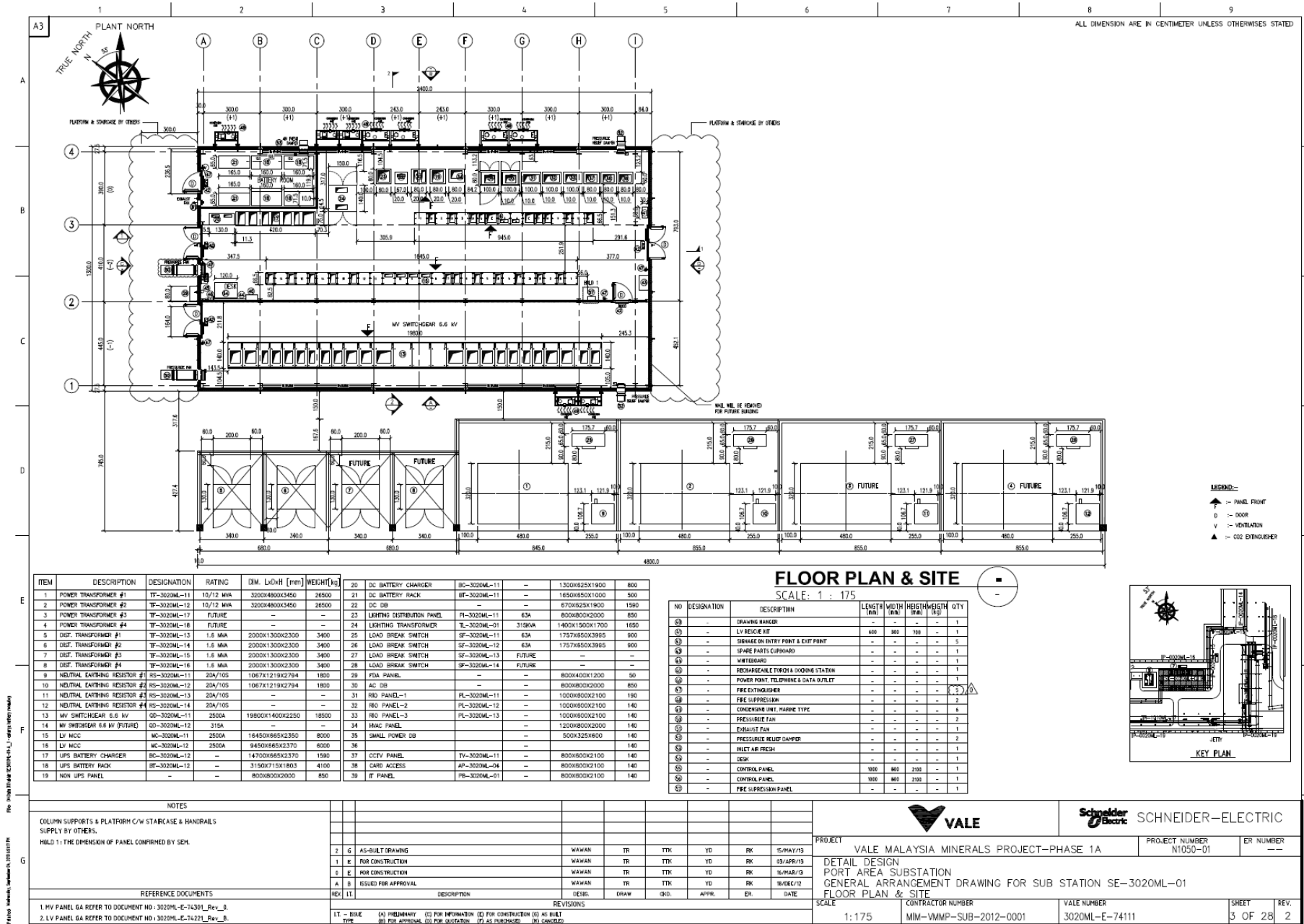
As an alternative to Table I.1, the numbers in Table I.2 represent the proportion of the total area away from the mean, μ , to one side. For example, the area between the mean and a point that is 1.55 standard deviations to its right is .43943.

TABLE I.2										
z	.00	.01	.02	.03	.04	.05	.06	.07	.08	.09
0.0	.00000	.00399	.00798	.01197	.01595	.01994	.02392	.02790	.03188	.03586
0.1	.03983	.04380	.04776	.05172	.05567	.05962	.06356	.06749	.07142	.07535
0.2	.07926	.08317	.08706	.09095	.09483	.09871	.10257	.10642	.11026	.11409
0.3	.11791	.12172	.12552	.12930	.13307	.13683	.14058	.14431	.14803	.15173
0.4	.15542	.15910	.16276	.16640	.17003	.17364	.17724	.18082	.18439	.18793
0.5	.19146	.19497	.19847	.20194	.20540	.20884	.21226	.21566	.21904	.22240
0.6	.22575	.22907	.23237	.23565	.23891	.24215	.24537	.24857	.25175	.25490
0.7	.25804	.26115	.26424	.26730	.27035	.27337	.27637	.27935	.28230	.28524
0.8	.28814	.29103	.29389	.29673	.29955	.30234	.30511	.30785	.31057	.31327
0.9	.31594	.31859	.32121	.32381	.32639	.32894	.33147	.33398	.33646	.33891
1.0	.34134	.34375	.34614	.34850	.35083	.35314	.35543	.35769	.35993	.36214
1.1	.36433	.36650	.36864	.37076	.37286	.37493	.37698	.37900	.38100	.38298
1.2	.38493	.38686	.38877	.39065	.39251	.39435	.39617	.39796	.39973	.40147
1.3	.40320	.40490	.40658	.40824	.40988	.41149	.41309	.41466	.41621	.41774
1.4	.41924	.42073	.42220	.42364	.42507	.42647	.42786	.42922	.43056	.43189
1.5	.43319	.43448	.43574	.43699	.43822	.43943	.44062	.44179	.44295	.44408
1.6	.44520	.44630	.44738	.44845	.44950	.45053	.45154	.45254	.45352	.45449
1.7	.45543	.45637	.45728	.45818	.45907	.45994	.46080	.46164	.46246	.46327
1.8	.46407	.46485	.46562	.46638	.46712	.46784	.46856	.46926	.46995	.47062
1.9	.47128	.47193	.47257	.47320	.47381	.47441	.47500	.47558	.47615	.47670
2.0	.47725	.47778	.47831	.47882	.47932	.47982	.48030	.48077	.48124	.48169
2.1	.48214	.48257	.48300	.48341	.48382	.48422	.48461	.48500	.48537	.48574
2.2	.48610	.48645	.48679	.48713	.48745	.48778	.48809	.48840	.48870	.48899
2.3	.48928	.48956	.48983	.49010	.49036	.49061	.49086	.49111	.49134	.49158
2.4	.49180	.49202	.49224	.49245	.49266	.49286	.49305	.49324	.49343	.49361
2.5	.49379	.49396	.49413	.49430	.49446	.49461	.49477	.49492	.49506	.49520
2.6	.49534	.49547	.49560	.49573	.49585	.49598	.49609	.49621	.49632	.49643
2.7	.49653	.49664	.49674	.49683	.49693	.49702	.49711	.49720	.49728	.49736
2.8	.49744	.49752	.49760	.49767	.49774	.49781	.49788	.49795	.49801	.49807
2.9	.49813	.49819	.49825	.49831	.49836	.49841	.49846	.49851	.49856	.49861
3.0	.49865	.49869	.49874	.49878	.49882	.49886	.49889	.49893	.49897	.49900
3.1	.49903	.49906	.49910	.49913	.49916	.49918	.49921	.49924	.49926	.49929

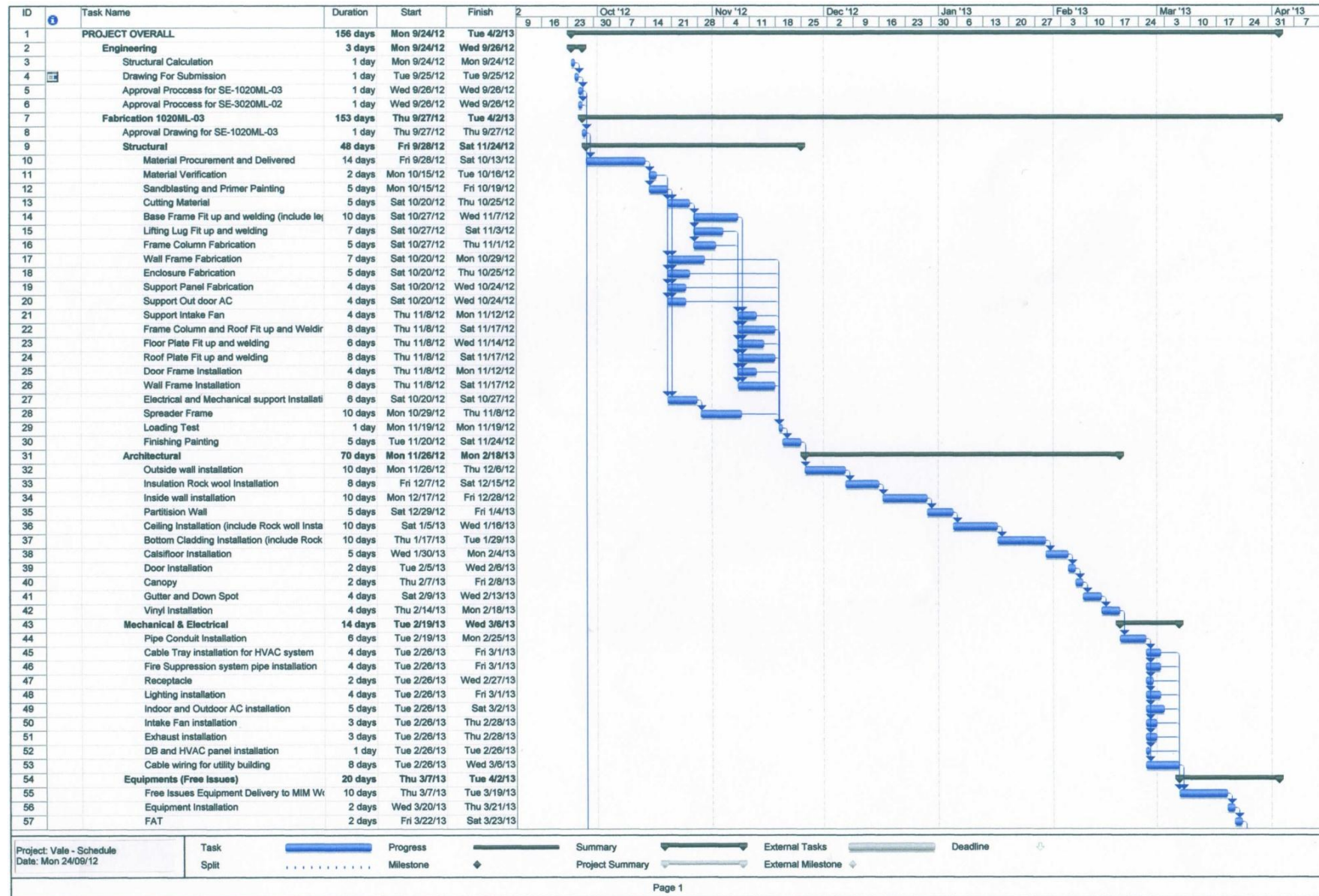
Lampiran 2: Desain Gambar serta part-list Proyek Vale



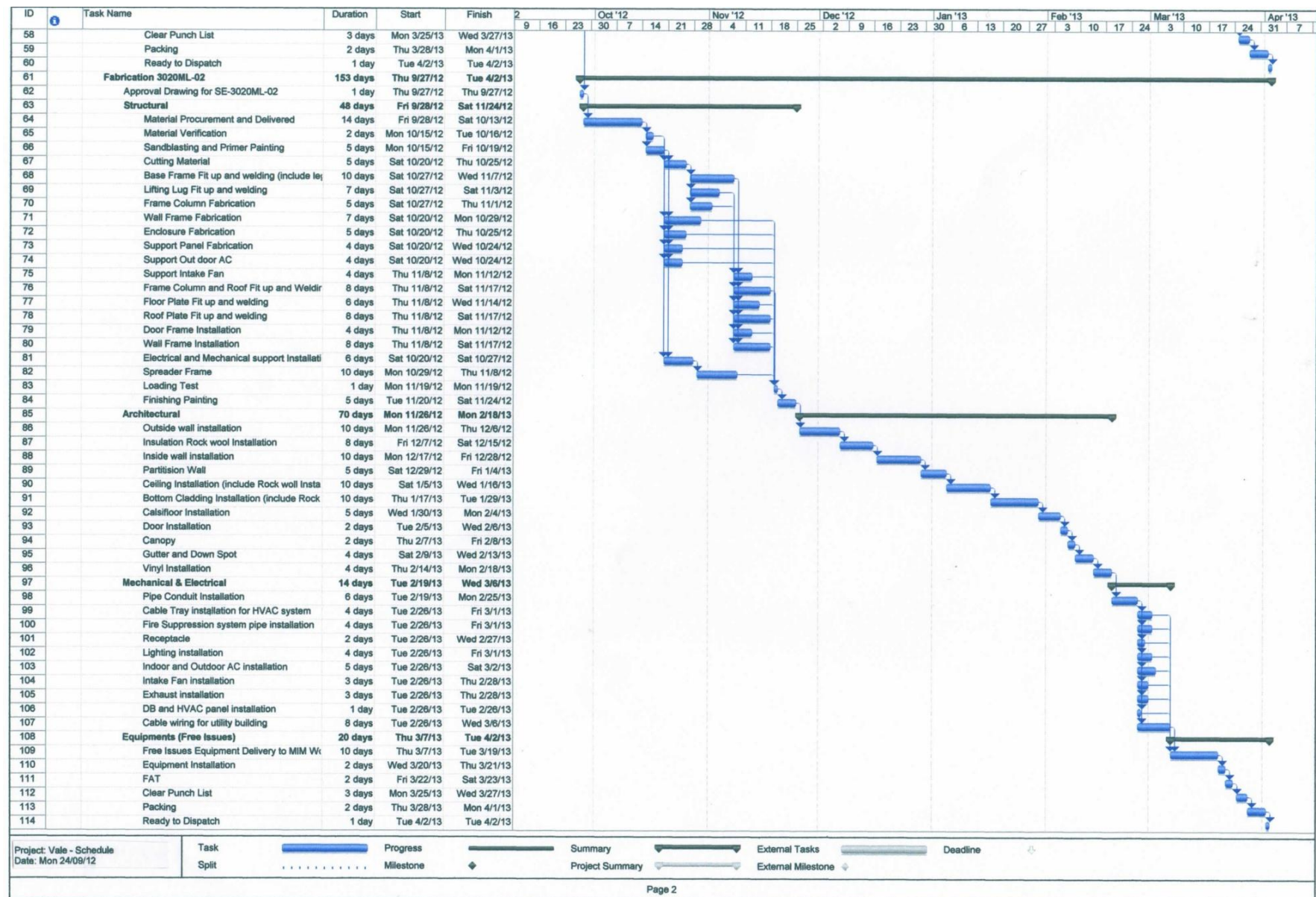
Lampiran 2: Desain Gambar serta part-list Proyek Vale



Lampiran 3: Jadwal Pengerjaan Awal Proyek Vale



Lampiran 3: Jadwal Pengerjaan Awal Proyek Vale



Lampiran 4: *Purchase Order* (PO) Proyek Vale

Schneider Electric Industries (M) Sdn Bhd
(378576-M)
No 11 Jalan U1/19, Seksyen U1
Hicom Glenmarie Industrial Park
40150 Shah Alam
Selangor, Malaysia
Tel : (603) 7883 6333 Fax: (603) 7803 9649

Purchase order

Doc. No. 4103 111503
Date 21.12.2012
Page 001 / 003

Vendor No. : 10015100
PT MULTIPANEL INTERMITRA MANDIRI
Kawasan Industri Jababeka II
Jl. Industri Utara 4 Blok SS No. 6C
CIKARANG, JAWA BARAT
INDONESIA
Cont. Person : AGUNG NUGROHO
Tel : 622189830092
Fax : 622189830795

Deliver to:
Sri Manung
Cont. Person : ALICE LAU SEE YUN
Purchasing Grp 101

Due date : 28.04.2014
Stat. Del Date : 28.04.2014
Payment Terms : 60 days
Incoterms : EXW EX-WORK
Project : E4010-12014 - VALE

Request By:Lai
ePR03522/2112/2012

Item	Material Description	Order Qty.	UOM	Price Price Unit	Amount In USD
00001	OTHERS Others Electrical product E-House SE-1020ML-03 - VARIATION ORDER Ref: 323/MIM-QUO/SEIM/X/CKG/12 10% Downpayment	1	Piece	/ 1 PC	
00002	OTHERS Others Electrical product E-House SE-1020ML-03 - VARIATION ORDER Ref: 323/MIM-QUO/SEIM/X/CKG/12 15% Design Approval	1	Piece	/ 1 PC	
00003	OTHERS Others Electrical product E-House SE-1020ML-03 - VARIATION ORDER Ref: 323/MIM-QUO/SEIM/X/CKG/12 25% Material at Yard	1	Piece	/ 1 PC	

Lampiran 4: Purchase Order (PO) Proyek Vale

Schneider Electric Industries (M) Sdn Bhd
(378576-M)
No 11 Jalan U1/19, Seksyen U1
Hicom Glenmarie Industrial Park
40150 Shah Alam
Selangor, Malaysia
Tel : (603) 7883 6333 Fax: (603) 7803 9649

Purchase order

Doc. No. 4103 111503
Date 21.12.2012
Page 002 / 003

Item	Material Description	Order Qty.	UOM	Price Price Unit	Amount In USD
00004	OTHERS Others Electrical product	1	Piece	/	
				1 PC	
	E-House SE-1020ML-03 - VARIATION ORDER Ref: 323/MIM-QUO/SEIM/X/CKG/12				
	40% Ready for Delivery (FAT + Shipping document available)				
00005	OTHERS Others Electrical product	1	Piece	/	
				1 PC	
	E-House SE-1020ML-03 - VARIATION ORDER Ref: 323/MIM-QUO/SEIM/X/CKG/12				
	10% Final Document approval				
00006	OTHERS Others Electrical product	1	Piece	/	
				1 PC	
	E-House SE-3020ML-02 - VARIATION ORDER Ref: 323/MIM-QUO/SEIM/X/CKG/12				
	10% Downpayment				
00007	OTHERS Others Electrical product	1	Piece	/	
				1 PC	
	E-House SE-3020ML-02 - VARIATION ORDER Ref: 323/MIM-QUO/SEIM/X/CKG/12				
	15% Design Approval				
00008	OTHERS Others Electrical product	1	Piece	/	
				1 PC	
	E-House SE-3020ML-02 - VARIATION ORDER Ref: 323/MIM-QUO/SEIM/X/CKG/12				
	25% Material at Yard				
00009	OTHERS Others Electrical product	1	Piece	/	
				1 PC	
	E-House SE-3020ML-02 - VARIATION ORDER Ref: 323/MIM-QUO/SEIM/X/CKG/12				

Lampiran 4: *Purchase Order* (PO) Proyek Vale

Schneider Electric Industries (M) Sdn Bhd
(378576-M)

No 11 Jalan U1/19, Seksyen U1

Hicom Glenmarie Industrial Park

40150 Shah Alam

Selangor, Malaysia

Tel : (603) 7883 6333 Fax: (603) 7803 9649

Purchase order

Doc. No. 4103 111503

Date 21.12.2012

Page 003 / 003

Item	Material Description	Order Qty.	UOM	Price Price Unit	Amount In USD
40% Ready for Delivery (FAT + Shipping document available)					
00010	OTHERS Others Electrical product	1	Piece	/	1 PC
E-House SE-3020ML-02 - VARIATION ORDER Ref: 323/MIM-QUO/SEIM/X/CKG/12					
10% Final Document approval					
All the Term & Conditions remain in the Services Agreement SEIM/VMMP/SA/004					
Total net value					

Lampiran 4: Purchase Order (PO) Proyek Vale



Schneider Electric Industries (M) Sdn Bhd
(378576-M)
No 11 Jalan U1/19, Seksyen U1
Hicom Glenmarie Industrial Park
40150 Shah Alam
Selangor, Malaysia
Tel : (603) 7883 6333 Fax: (603) 7803 9649

Purchase order

Doc. No. 4103 111505
Date 21.12.2012
Page 001 / 002

Vendor No. : 10015100
PT MULTIPANEL INTERMITRA MANDIRI
Kawasan Industri Jababeka II
Jl. Industri Utara 4 Blok SS No. 6C
CIKARANG, JAWA BARAT
INDONESIA
Cont. Person : AGUNG NUGROHO
Tel : 622189830092
Fax : 622189830795

Deliver to:
Sri Manjung
Cont. Person : ALICE LAU SEE YUN
Purchasing Grp 101

Due date : 31.05.2013
Stat. Del Date : 31.05.2013
Payment Terms : 60 days
Incoterms : EXW EX-WORK
Project : E4010-12014 - VALE

Request By:Lai
ePR03521/2012/2012

Item	Material Description	Order Qty.	UOM	Price Price Unit	Amount In USD
00001	OTHERS Others Electrical product E-House SE-3020ML-01 10% Downpayment	1	Piece	174,600.00 / 1 PC	174,600.00
00002	OTHERS Others Electrical product E-House SE-3020ML-01 15% Design Approval	1	Piece	261,900.00 / 1 PC	261,900.00
00003	OTHERS Others Electrical product E-House SE-3020ML-01 25% Material at Yard	1	Piece	436,500.00 / 1 PC	436,500.00

A.

Lampiran 4: Purchase Order (PO) Proyek Vale



Schneider Electric Industries (M) Sdn Bhd
(378576-M)
No 11 Jalan U1/19, Seksyen U1
Hiom Glenmarie Industrial Park
40150 Shah Alam
Selangor, Malaysia
Tel : (603) 7883 6333 Fax: (603) 7803 9649

Purchase order
Doc. No. 4103 111505
Date 21.12.2012
Page 002 / 002

Item	Material Description	Order Qty.	UOM	Price Price Unit	Amount In USD
00004	OTHERS Others Electrical product E-House SE-3020ML-01 40% Ready for Delivery (FAT + Shipping document available)	1	Piece	698,400.00 / 1 PC	698,400.00
00005	OTHERS Others Electrical product E-House SE-3020ML-01 10% Final Document approval	1	Piece	174,600.00 / 1 PC	174,600.00
Total net value					1,746,000.00

Vendor Acknowledgement
Sign / Stamp
Name: A. ADITYA W
Date: 28/12/12
ipanel Intermira Mandiri

Authorized Signature
Sign / Stamp
Name: A. Bama
Date: 28/12/12
8101113

Lampiran 5: Produk PCR Proyek Vale



1020ML-03



Lampiran 5: Produk PCR Proyek Vale



3020ML-02

