

SKRIPSI

**ANALISIS KELAYAKAN INVESTASI PADA PEMBANGUNAN
SUMITRA HOTEL SANUR, DENPASAR**



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KEMENTERIAN PENDIDIKAN, KEBUDAYAAN, RISET, DAN

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2

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LEMBAR PENGESAHAN SKRIPSI

**ANALISIS KELAYAKAN INVESTASI PADA PEMBANGUNAN
SUMITRA HOTEL SANUR, DENPASAR**

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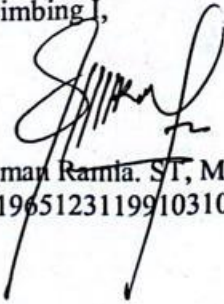
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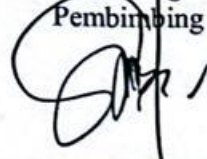
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Analisis Kelayakan Investasi Pada Pembangunan Sumitra hotel Sanur, Denpasar

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ABSTRAK

Bali terkenal dengan *City Branding "The Island of Gods"* sebagai identitas yang sangat erat terkait dengan kehidupan spiritual, keagamaan, dan kebudayaan yang kental di kalangan masyarakat Bali. Dari Bulan ke bulan kunjungan wisatawan ke Bali terus mengalami peningkatan, sehingga kebutuhan akan akomodasi seperti penginapan atau hotel juga meningkat. Salah satu hotel yang akan dibangun adalah Sumitra hotel Sanur, Denpasar. Hotel ini terletak di Jl. Tirta Empul, Desa Intaran, Kecamatan Denpasar Selatan, Kota Denpasar. Lokasi ini sangat strategis karena dekat dengan pantai Mertasari Sanur, sehingga investasi pada pembanguna Sumitra hotel Sanur ini sangat menjanjikan. Investasi seperti hotel merupakan keputusan yang beresiko, maka dari itu diperlukan analisis investasi kelayakan sebelum melakukan investasi.

Penelitian ini bertujuan untuk mengetahui kelayakan investasi pada pembangunan Sumitra hotel Sanur, yang ditinjau dari aspek finansial. Metode yang digunakan dalam penelitian ini yaitu metode *Net Present Value* (NPV), metode *Internal Rate of Return* (IRR), metode *Benefit Cost Ratio* (BCR), metode *Payback Period* (PBP) dan analisis sensitivitas.

Dari perhitungan yang telah dilakukan, analisis investasi pada pembangunan Sumitra hotel Sanur layak dari aspek finansial. Dari perhitungan yang telah dilakukan di dapat nilai NPV = 105.203.784.132, BCR=1,081, IRR=8,824, PBP didapatkan pada tahun ke-19, dan hasil analisis sensitivitas, investasi pada pembangunan Sumitra hotel Sanur Denpasar, yaitu investasi ini akan menjadi tidak layak saat biaya naik lebih dari 7,137% dengan manfaat tetap, manfaat turun lebih dari 5,797% dengan biaya tetap, dan Biaya naik disertai manfaat turun lebih besar dari 5,74%.

Kata kunci: Investasi, Sensitivitas, Finansial

***Investment Feasibility Analysis on the Construction of Sumitra hotel Sanur ,
Denpasar***

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ABSTRACT

Bali is famous for its City Branding "The Island of Gods" as an identity that is closely related to the spiritual, religious, and cultural life that is thick among the Balinese people. From month to month tourist visits to Bali continue to increase, so the need for accommodation such as lodging or hotels also increases. One of the hotels to be built is Sumitra hotel Sanur, Denpasar. The hotel is located on Jl. Tirta Empul, Intaran Village, South Denpasar District, Denpasar City. This location is very strategic because it is close to Mertasari Sanur beach, so investing in the construction of Sumitra hotel Sanur is very promising. Investments such as hotels are risky decisions, therefore an investment feasibility analysis is needed before making an investment.

This study aims to determine the feasibility of investment in the construction of Sumitra hotel Sanur, in terms of financial aspects. The methods used in this research are Net Present Value (NPV) method, Internal Rate of Return (IRR) method, Benefit Cost Ratio (BCR) method, Payback Period (PBP) method and sensitivity analysis.

From the calculations that have been carried out, the investment analysis in the construction of Sumitra hotel Sanur is feasible from a financial aspect. From the calculations that have been carried out, the NPV = 105.203.784.132, BCR=1,081, IRR=8,824, PBP is obtained in the 19th year, and the results of sensitivity analysis, investment in the construction of Sumitra hotel Sanur Denpasar; namely this investment will become unfeasible when costs increase by more than 7,137% with fixed benefits, benefits decrease by more than 5,797% with fixed costs, and costs increase with benefits decrease greater than 5,74%.

Keywords: Investment, Sensitivity, Financial

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Penelitian ini merupakan salah satu syarat untuk menyelesaikan Program Studi Manajemen Proyek Konstruksi. Disusunnya Tugas Akhir ini bertujuan untuk mengetahui bagaimana Analisa Kelayakan Investasi terhadap Pembangunan Sumitra Hotel

Pada penyusunan Tugas Akhir ini tentu saja penulis menerima banyak bantuan berupa saran, bimbingan dan dorongan dari berbagai pihak. Oleh karena itu, dalam kesempatan ini penulis mengucapkan banyak terima kasih kepada semua pihak yang membantu menyelesaikan Tugas Akhir ini, khususnya kepada:

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BAB I PENDAHULUAN

1.1 Latar belakang

Bali sangat populer dengan sebutan *City Branding "The Island of Gods"* sebagai identitas yang sangat erat terkait dengan kehidupan spiritual, keagamaan, dan kebudayaan yang kental di kalangan masyarakat Bali[1]. Dari Bulan ke bulan kunjungan wisatawan ke Bali terus mengalami peningkatan, Menurut laporan Badan Pusat Statistik Prov Bali, Angka Wisatawan luar Indonesia yang datang ke Bali pada Juni 2023 sebanyak 478.198, meningkat drastis sekitar 8,81% dibandingkan bulan Mei sebanyak 439.475 [2], dan diperkirakan akan terus bertambah dibulan kedepannya. Dengan bertambahnya jumlah pengunjung yang datang dan berlibur di Pulau Bali, meningkatkan kebutuhan akan akomodasi pariwisata di Bali. Salah satu wilayah yang memiliki destinasi wisata yaitu Sanur.

Sanur memiliki potensi besar untuk memanfaatkan kesempatan ini, khususnya dalam memenuhi kebutuhan akomodasi para wisatawan karena banyaknya destinasi wisata yang sudah terkenal sejak lama dan menjadikan daya tarik wisatawan yang akan berlibur ke Sanur Bali. Sanur memiliki destinasi wisata diantaranya wisata bahari dan wisata budaya. Wisata Bahari seperti *snorkling, swimming, sunbathing, kayaking, fishing*, dan Wisata budaya atau pariwisata budaya di kawasan ini meliputi sebuah festival tahunan bernama Sanur Village Festival (SVF), yang telah diadakan setiap tahun sejak tahun 2006, yang menjadikan daya tarik wisatawan memilih Sanur untuk berlibur[3]. Salah satu elemen krusial dalam infrastruktur pariwisata adalah keberadaan hotel sebagai penyedia akomodasi.

Opportunity investasi di sektor fasilitas pariwisata, seperti hotel, sangat mengalami pertumbuhan yang meningkat dan bertujuan untuk memenuhi kebutuhan akomodasi bagi wisatawan yang berkunjung ke Bali. Dilihat dari data yang dikeluarkan oleh Kantor Perwakilan Bank Indonesia Bali, Tampak bahwa pada tahun 2020, Penanaman Modal Dalam Negeri (PMDN) mencapai angka Rp

5.432,7 miliar, sementara Penanaman Modal Asing (PMA) mencapai 293,3 juta dolar AS. Hal ini mengindikasikan bahwa Bali terus menjadi tujuan memikat bagi investor [4]. Dengan meningkatnya investasi di sektor penginapan, khususnya Hotel, di Pulau Bali, persaingan dalam industri ini semakin ketat. Investor menggunakan kesempatan ini untuk melakukan investasi, yang memiliki bertujuan untuk mendapatkan berbagai manfaat di masa depan. Keuntungan tersebut dapat bersifat finansial, seperti *profit*, maupun *non finansial*, seperti menciptakan peluang pekerjaan baru bagi masyarakat. Investasi adalah tindakan menempatkan sejumlah uang saat ini dengan tujuan memperoleh keuntungan di masa mendatang [5].

Investasi dalam properti seperti hotel adalah pertimbangan yang beresiko, lantaran memakai modal yang tidak sedikit dan bermaksud untuk memperoleh pendapatan yang lebih di masa depan. Investasi melibatkan penempatan modal yang signifikan, sementara keuntungannya akan dirasakan di masa depan, Dengan demikian, pasti terdapat risiko investasi. Risiko berkaitan dengan suku bunga bank, di mana tingkat suku bunga yang tinggi atau rendah dapat mempengaruhi kelayakan sebuah investasi [6]. Untuk mengurangi risiko dan memperkirakan potensi keuntungan, perlu dilakukan studi kelayakan investasi.

Sumitra hotel Sanur terletak di Jl. Tirta Empul, Desa Intaran, Kecamatan Denpasar Selatan, Denpasar, Bali. Sanur adalah sebuah kelurahan yang berlokasi di Denpasar Selatan, Kota Denpasar. Perencanaan Pembangunan Sumitra hotel Sanur ini udah berlangsung dari tahun 2019 karena terdapat COVID 19 pembangunan Sumitra hotel Sanurini di hentikan. Oleh karena itu, analisis kelayakan investasi untuk pembangunan Sumitra hotel Sanur harus dilakukan secara teliti dan akurat agar tidak mengakibatkan kerugian di masa depan. Diharapkan bahwa penelitian ini akan memberikan gambaran yang lebih baik tentang analisis investasi dalam pembangunan Sumitra hotel Sanurdengan menggunakan teknik seperti *Net Present Value* (NPV), *Internal Rate of Return* (IRR), *Benefit Cost Ratio* (BCR), *Payback Period* (PBP), dan analisis sensitivitas.

1.2 Rumusan Masalah

Rumusan masalah dapat disimpulkan berikut ini setelah menguraikan latar belakang dan identifikasi masalah:

- 1 Seberapa besar kelayakan investasi bila dianalisis dengan metode *Net Present Value* (NPV), *Benefit Cost Ratio* (BCR), *Internal Rate of Return* (IRR) dan *Payback Period* (PBP) pada pembangunan Sumitra Hotel?
- 2 Berapa lama waktu yang dibutuhkan untuk mencapai titik impas? atau BEP (*Break Even Point*) pada pembangunan Sumitra Hotel?
- 3 Bagaimana kondisi sensitivitas pada pembangunan Sumitra Hotel?

1.3 Tujuan Penelitian

Tujuan penelitian ini, berdasarkan latar belakang dan identifikasi masalah sebelumnya, adalah:

- 1 untuk menentukan tingkat kelayakan investasi setelah melakukan analisis dengan metode *Net Present Value* (NPV), *Internal Rate of Return* (IRR), *Benefit Cost Ratio* (BCR) dan *Payback Period* (PBP) pada pembangunan Sumitra Hotel.
- 2 untuk mengetahui berapa lama waktu yang dibutuhkan untuk mencapai titik impas atau BEP (*Break Even Point*) pada pembangunan Sumitra Hotel.
- 3 Untuk mengetahui kondisi sensitif pembangunan Sumitra Hotel.

1.4 Manfaat Penelitian

Penelitian ini diharapkan memberikan manfaat teoritis dan praktis. Berikut adalah beberapa manfaat yang diharapkan:

1.4.1 Manfaat Bagi Mahasiswa

Diharapkan akan membantu mahasiswa memahami analisis kelayakan investasi.

1.4.2 Manfaat Bagi Perguruan Tinggi

Penelitian ini akan memberikan informasi tambahan tentang analisis kelayakan investasi kepada mahasiswa Politeknik Negeri Bali, terutama mahasiswa Jurusan Teknik Sipil.

1.4.3 Manfaat Bagi Penyedia Jasa

Diharapkan penelitian ini akan memberikan wawasan tentang analisis kelayakan investasi untuk proyek pembangunan hotel.

1.5 Batasan Masalah Penelitian

Berikut adalah batasan-batasan yang diteliti oleh peneliti:

1. Analisis kelayakan investasi untuk pembangunan Sumitra hotel Sanur ditinjau dari sudut pandang finansial.
2. Studi ini menggunakan tingkat sewa unit hotel harian dalam kondisi normal, bukan pandemi atau pesimis. Oleh karena itu, tingkat sewa unit hotel ditargetkan saat kondisi normal.
3. Tingkat hunian disesuaikan dengan wawancara dengan pihak manajemen
4. Gambar rencana yang ada digunakan sebagai referensi untuk desain dan jumlah unit hotel dalam penelitian ini.
5. Mengumpulkan data, terutama mengenai biaya konstruksi, dilakukan dari awal proyek hingga Juli 2024, untuk menghindari biaya tak terduga selama pelaksanaan proyek.
6. Semua dana atau modal berasal dari kas pemilik tanpa pinjaman
7. Suku bunga bersumber dari Bank Indonesia
8. Inflansi tahun berikutnya diperkirakan 5%
9. Tingkat pertumbuhan ekonomi dalam masa normal tidak pandemi/pesimis

BAB V

KESIMPULAN DAN SARAN

5.1 Kesimpulan

Berikut ini adalah kesimpulan penelitian yang dibuat oleh penulis:

1. Berdasarkan hasil perhitungan dengan metode *Net Present Value* (NPV), *Benefit Cost Ratio* (BCR), *Internal Rate of Return* (IRR), dan *Payback Period* (PBP), investasi dalam pembangunan Sumitra hotel Sanur dianggap layak. Dengan nilai NPV = 105.203.784.132, BCR = 1,081, IRR = 8,824%, dan PBP terjadi pada tahun ke-19.
2. BEP (Break Even Point) terjadi pada 19 tahun, 9 bulan, dan 24 hari.
3. Sensitivitas investasi untuk pembangunan Sumitra hotel Sanur sangat tinggi, sehingga investasi ini tidak layak jika biaya naik lebih dari 7,137% dengan manfaat tetap, manfaat turun lebih dari 5,979% dengan biaya tetap, dan biaya naik ditambah manfaat turun lebih dari 5,740%.

5.2 Saran

Saran yang dapat diberikan oleh peneliti melalui penelitian ini yaitu:

1. Disarankan untuk melakukan analisis investasi baik dalam kondisi normal maupun dalam situasi pesimis seperti pandemi.
2. Disarankan untuk mempertimbangkan variasi sumber dana, seperti pinjaman dari bank, untuk menghasilkan aliran kas yang beragam.
3. Penelitian selanjutnya diharapkan tidak hanya mempertimbangkan aspek keuangan dalam evaluasi investasi, tetapi juga memperluas cakupan untuk mencakup aspek-aspek sosial, budaya, lingkungan, dan pasar.

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LAMPIRAN

Lampiran 1 Daftar Peranyaan Wawancara (Interview) Ke Pihak Kontraktor Sumitra Sanur

Tanggal : 16 Juni 2024
Responden : 1 Made Novi Sugardana
Jabatan : Site Manager Civil

Daftar Pertanyaan :

- 1 Berapa luas tanah di lokasi tempat Sumitra Hotel akan dibangun?

Luas tanah yang akan dibangun yaitu 6.120 m^2

- 2 Dalam pembangunan Sumitra Hotel, apakah tanah atau lahan dibeli atau dengan sistem sewa, jika sewa berapa?

dengan sistem Sewa Rp. 250.000 m^2 untuk 1 tahun.

- 3 Berapa rencana umur ekonomis bangunan Sumitra Hotel ini?

Rencana umur ekonomis bangunan yaitu 35 tahun.


MADE NOVI SUGARDANA
SM.
PROY. SUMITRA PHASE 2
SJU-DPS-004-JUN24
NO. 1

Lampiran 2 Daftar Peranyaan Wawancara (Interview) Ke Pihak Kontraktor Sumitra Sanur

Tanggal : 16 Juni 2024

Responden : Ni Luh Merta

Jabatan : Admin

Daftar Pertanyaan :

- 1 Berapakah biaya yang dikeluarkan untuk mengurus perizinan dalam Pembangunan Hotel ini?

Biaya perizinan 1 bangunan Rp. 400.000.000
.....
Untuk 2 bangunan Rp. 800.000.000
.....

- 2 Biaya apa saja yang dikeluarkan saat pra konstruksi atau saat perencanaan Pembangunan Hotel ini?, dan berapa besar biayanya?

Tidak ada biaya pra konstruksi / saat perencanaan. Semua
.....
telah ditanggung oleh kontraktor
.....

- 3 Adakah biaya-biaya lain yang tidak tercantum dalam RAB yang dikeluarkan dalam Pembangunan hotel ini?, jika ada, apa saja? Dan berapa besar biayanya?

Biaya Furniture = Rp. 5.983.240.000
.....
.....



NI LUH MERTA

Lampiran 3 Daftar Peranyaan Wawancara (Interview) Ke Pihak Kontraktor Sumitra Sanur

Tanggal : 16 Juni 2024

Responden : I Eusti Ngurah Agung Indra P.

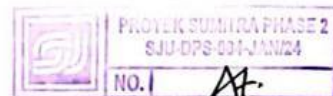
Jabatan : Site Manager MEP

Daftar Pertanyaan :

- 1 Berapa biaya yang dikeluarkan untuk pengadaan listrik dan air dalam Pembangunan hotel ini?

Biaya pengadaan listrik = Rp. 1.233.260.938

Biaya pengadaan Air = Rp. 424.461.800



ACUS INDRP.

Lampiran 4 Daftar Peranyaan Wawancara (Interview) Ke Pihak Hotel Sekitar Sumitra Sanur

Tanggal : 8 Juli 2024

Responden : Yudy Suardana

Jabatan : Manajer (Pramana Experience)

Daftar Pertanyaan :

1. Sejak kapan hotel ini mulai beroperasi?

1 November 2023

2. Berapa rate harga kamar hotel ini per malamnya?

1 bedroom = 7 juta / malam

2 bedroom = 14 juta / malam

3. Berapa tingkat hunian hotel ini saat kondisi normal?

Tingkat hunian 60% dalam kondisi normal

4. Adakah biaya-biaya retribusi yang diminta dari hotel ini? Jika ada, biaya apa saja dan berapa besar biayanya?

Iuran banjar Rp. 1.000.000 / bulan

5. Pajak apa saja yang dikenakan pada hotel ini?

PBB, PPH dan PHK

6. Berapa biaya yang anda keluarkan untuk mempromosikan hotel ini?

Biaya Website Rp. 55.000.000 / tahun

Biaya Promosi Rp. 20.000.000 / tahun

7. Biaya operasional apa saja yang anda keluarkan dalam hotel ini? Dan berapa besar biayanya?

Biaya gaji pegawai Rp. ± 100.000.000, biaya listrik Rp. ± 20.000.000 / bln

Pembelian perlengkapan ± 100.000.000


sumitra
BEAUTY-VILLAS

Kats.

Lampiran 5 Daftar Peranyaan Wawancara (Interview) Ke Pihak Sumitra Hotel Management

Tanggal : 8 Juli 2024

Responden : Yudy Suardana

Jabatan : Manajer (Pramana Experience)

Daftar Pertanyaan :

1. Berapa anggaran biaya untuk peralatan dan Furniture Sumitra hotel ini jika ingin disewakan?
Biaya Furniture sebesar Rp. 5.983.240.000 (Perhitungan terlampir.)
2. Pegawai apa saja yang perlu ada dalam pengoperasian Sumitra hotel dan berapa rata-rata gaji pegawai tersebut?
General Manager, HRD, Supervisor dan divisi Front office, Kitchen, Accounting, House keeping, Engineering, Security, Laundry, gardener (perhitungan terlampir)
3. Berapa biaya pembelian perlengkapan tahunan jika Sumitra hotel akan disewakan?
Biaya perlengkapan Rp. 6.929.352.000 / tahun
4. Berapa perkiraan biaya pemeliharaan pada Sumitra Hotel?
Biaya pemeliharaan 2% dari nilai konstruksi
5. Berapa perkiraan pengeluaran internet pada Sumitra hotel?
Biaya internet Rp. 5.500.000 / bulan
Biaya listrik Rp. 50.000.000 / bulan
6. Jika akan disewakan berapa perkiraan tarif sewa Sumitra hotel per malamnya?
Standar room = Rp. 1.500.000
Suite room = Rp. 3.560.000
Sky villa room = Rp. 9.000.000
Presidential suite room = Rp. 20.000.000



Lampiran 6 Proses bimbingan skripsi



POLITEKNIK NEGERI BALI

**KEMENTERIAN PENDIDIKAN, KEBUDAYAAN, RISET, DAN TEKNOLOGI
POLITEKNIK NEGERI BALI
JURUSAN TEKNIK SIPIL**

Jalan Kampus Bukit Jimbaran, Kuta Selatan, Kabupaten Badung, Bali – 80364

Telp. (0361) 701981 (hunting) Fax. 701128

Laman: www.pnb.ac.id Email: poltek@pnb.ac.id

**PROSES BIMBINGAN/ASISTENSI
SKRIPSI T.A 2023/2024**

Nama Mahasiswa : I Kadek Yupa Bejidana
NIM : 20151241065
Jurusan/Prodi : Teknik Sipil/D4 Manajemen Proyek Konstruksi
Judul : Analisis Kelayakan Ivestasi Pada Pembangunan Sumitra Hotel Sanur,
Denpasar

NO	HARI/TANGGAL	URAIAN	TANDA TANGAN
1	Senin / 27 Mei '24	- lanjutkan pengumpulan data - lanjutkan analisis	
2	Rabu / 12 Juni '24	- Analisa dilanjutkan - Data dilengkapi	
3.	Sabtu / 22 Juni '24	- lengkapi data - lanjutkan	

Pembimbing I,

I Nyoman Rania, ST, M.T.
NIP. 196512311991031017

Bukit Jimbaran,

Pembimbing II,

Ni Made Sintya Rani, S.T., M.T.
NIP.199001172019032012



POLITEKNIK NEGERI BALI

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PROSES BIMBINGAN/ASISTENSI
SKRIPSI T.A 2023/2024

Nama Mahasiswa : I Kadek Yupa Bejidana
NIM : 20151241065
Jurusan/Prodi : Teknik Sipil/D4 Manajemen Proyek Konstruksi
Judul : Analisis Kelayakan Ivestasi Pada Pembangunan Sumitra Hotel Sanur,
Denpasar

NO	HARI/TANGGAL	URAIAN	TANDA TANGAN
01	12/05 '24. Rabu.	Bab IV - Revisi semua koreksi - Lanjutkan Analisa selanjutnya.	
2	16/7 '24	- perbaiki saran - tambahkan tahun (35) - lanjutkan.	

Pembimbing I,

I Nyoman Ramia, ST, M.T.

NIP. 196512311991031017

Bukit Jimbaran,

Pembimbing II,

Ni Made Sintya Rani, S.T., M.T.

NIP.199001172019032012



POLITEKNIK NEGERI BALI

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PROSES BIMBINGAN/ASISTENSI
SKRIPSI T.A 2023/2024

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NIM : 20151241065
Jurusan/Prodi : Teknik Sipil/D4 Manajemen Proyek Konstruksi
Judul : Analisis Kelayakan Ivestasi Pada Pembangunan Sumitra Hotel Sanur,
Denpasar

NO	HARI/TANGGAL	URAIAN	TANDA TANGAN
	29/07 '24 Senin	→ perbaiki semua corekta → Pasat PPT persis ujin	
	29/7 '24	- perbaiki erran - lanjutkan PPT	

Pembimbing I,

I Nyoman Ramia, ST, M.T.

NIP. 196512311991031017

Bukit Jimbaran,

Pembimbing II,

Ni Made Sintya Rani, S.T., M.T.

NIP.199001172019032012





POLITEKNIK NEGERI BALI

KEMENTERIAN PENDIDIKAN, KEBUDAYAAN, RISET, DAN TEKNOLOGI
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JURUSAN TEKNIK SIPIL

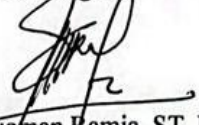
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Telp. (0361) 701981 (hunting) Fax. 701128
Laman: www.pnb.ac.id Email: poltek@pnb.ac.id

PROSES BIMBINGAN/ASISTENSI
SKRIPSI T.A 2023/2024

Nama Mahasiswa : I Kadek Yupa Bejidana
NIM : 20151241065
Jurusan/Prodi : Teknik Sipil/D4 Manajemen Proyek Konstruksi
Judul : Analisis Kelayakan Ivestasi Pada Pembangunan Sumitra Hotel Sanur,
Denpasar

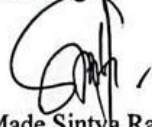
NO	HARI/TANGGAL	URAIAN	TANDA TANGAN
	Minggu / 4 / 8 ' 24	ACC	
	Senin 5 08 ' 24	Acc	

Pembimbing I,


Nyoman Ramia, ST, M.T.
NIP. 196512311991031017

Bukit Jimbaran,

Pembimbing II,


Ni Made Sintya Rani, S.T., M.T.
NIP. 199001172019032012

Lampiran 7 BOQ GB3

Project : Sumitra Hotel GB3
 Location : Jl. Tirta Empul, Intaran, Sanur, Denpasar

No	Description	Amount	
	Preliminaries	4.933.569.567	Rp
A	STRUCTURE		
I	PEKERJAAN TANAH	495.630.299	Rp
II	PEKERJAAN STRUKTUR BAWAH	993.507.988	Rp
III	PEKERJAAN STRUKTUR ATAS	7.264.097.881	Rp
IV	PEKERJAAN DINDING	1.640.441.936	Rp
V	PEKERJAAN ATAP	1.087.962.531	Rp
VI	PEKERJAAN LAIN-LAIN	351.549.129	Rp
B	DOOR AND WINDOW		
I	1ST FLOOR PLAN	1.131.111.800	Rp
II	2ND FLOOR PLAN	924.564.400	Rp
III	3RD FLOOR PLAN	888.495.900	Rp
IV	4TH FLOOR PLAN	141.971.600	Rp
V	TIMBER SCREEN	224.225.100	Rp
C	PEKERJAAN FINISHING		
I	BASEMENT	110.291.698	Rp
II	FIRST FLOOR	540.005.640	Rp
III	SECOND FLOOR	612.895.856	Rp
IV	THIRD FLOOR	711.979.646	Rp
V	FOURTH FLOOR	160.584.863	Rp
VI	ROOF FLOOR	35.266.557	Rp
VII	EXTERNAL	768.949.470	Rp
D	MEP		
I	ELECTRICAL WORKS	2.126.254.355	Rp
II	ELECTRONIC WORKS	1.142.831.790	Rp
III	AIR CONDITIONING WORK	6.106.362.091	Rp
IV	PLUMBING WORK	2.869.546.176	Rp
V	FIRE FIGHTING WORK	600.110.653	Rp
VI	CABLE TRAY AND LADDER WORK	351.919.024	Rp
VII	LIFT WORK	786.049.705	Rp
VII	SWIMMING POOL	489.699.773	Rp
E	EXTERNAL WORKS		
I	EXTERNAL	3.067.179.079	Rp
	Total estimate of cost	40.557.054.504	Rp
	Contractor fee 10% :	4.055.705.450	Rp
	Total estimate of cost & fee :	44.612.759.954	Rp
	Tax, PPN 10% :	Tax exempt	Rp
	PPH Pasal 4/2 (Final) 2.65% :	-1.182.238.139	Rp
	Grand total netto :	43.430.521.816	Rp

Lampiran 8 BOQ GB4

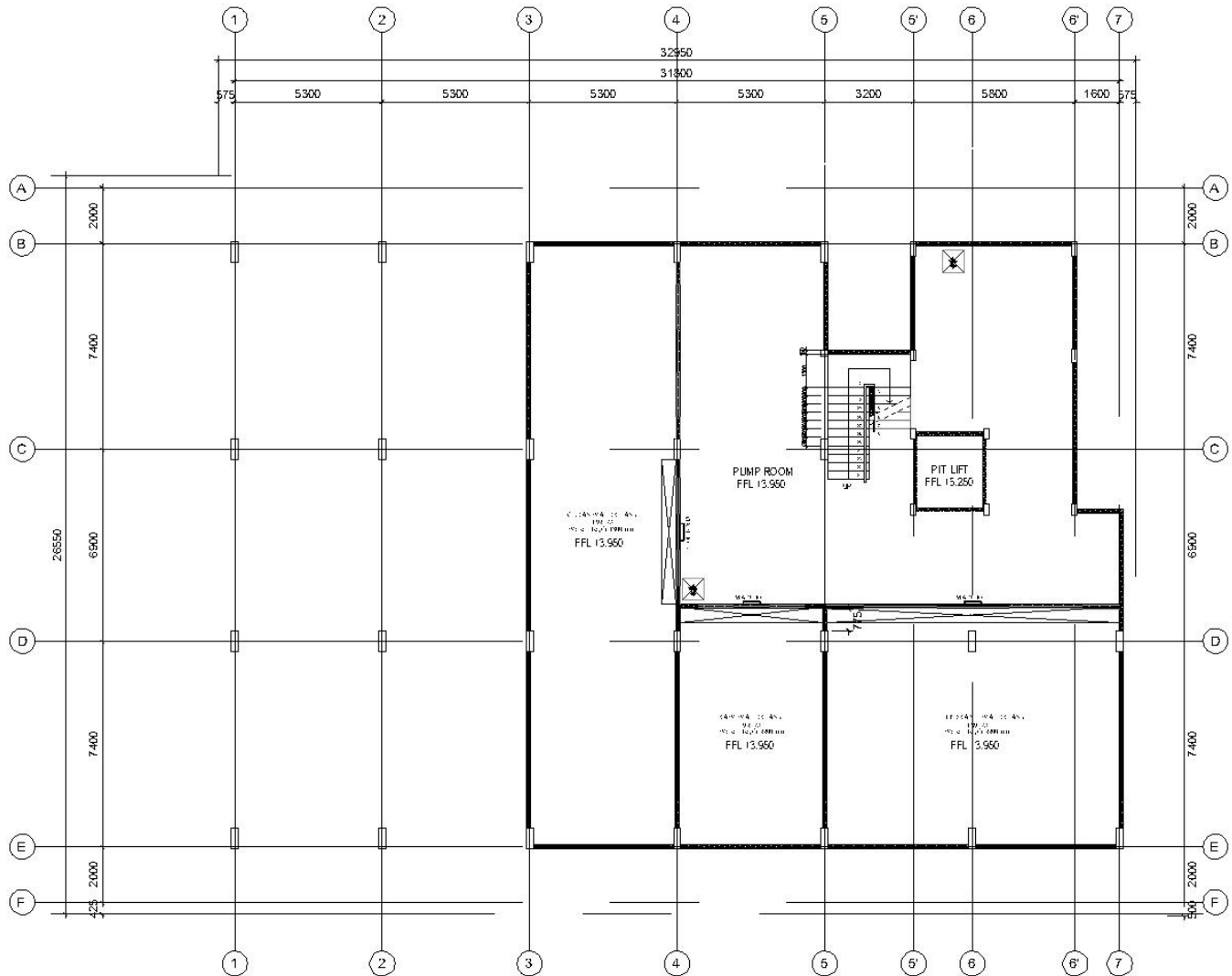
Project : Sumitra Hotel GB4
 Location : Jl. Tirta Empul, Intaran, Sanur, Denpasar

No	Description	Amount	
	Preliminaries		Rp
A	STRUCTURE		
I	PEKERJAAN TANAH	496.488.890	Rp
II	PEKERJAAN STRUKTUR BAWAH	994.660.754	Rp
III	PEKERJAAN STRUKTUR ATAS	7.343.622.613	Rp
IV	PEKERJAAN DINDING	1.739.875.396	Rp
V	PEKERJAAN ATAP	1.086.538.102	Rp
VI	PEKERJAAN LAIN-LAIN	351.549.129	Rp
B	DOOR AND WINDOW		
I	1ST FLOOR PLAN	1.131.111.800	Rp
II	2ND FLOOR PLAN	924.564.400	Rp
III	3RD FLOOR PLAN	888.495.900	Rp
IV	4TH FLOOR PLAN	141.971.600	Rp
V	TIMBER SCREEN	224.225.100	Rp
C	PEKERJAAN FINISHING		
I	BASEMENT	48.412.190	Rp
II	FIRST FLOOR	447.697.100	Rp
III	SECOND FLOOR	533.757.385	Rp
IV	THIRD FLOOR	457.158.620	Rp
V	FOURTH FLOOR	144.180.752	Rp
VI	ROOF FLOOR	35.266.557	Rp
VII	EXTERNAL	671.132.017	Rp
D	MEP		
I	ELECTRICAL WORKS	2.379.554.802	Rp
II	ELECTRONIC WORKS	1.098.131.307	Rp
III	AIR CONDITIONING WORK	6.154.076.691	Rp
IV	PLUMBING WORK	2.949.289.930	Rp
V	FIRE FIGHTING WORK	594.115.246	Rp
VI	CABLE TRAY AND LADDER WORK	351.919.024	Rp
VII	LIFT WORK	786.049.705	Rp
VII	SWIMMING POOL	489.699.773	Rp
E	EXTERNAL WORKS		
I	EXTERNAL		Rp
	Total estimate of cost	32.463.544.782	Rp
	Contractor fee 10% :	3.246.354.478	Rp
	Total estimate of cost & fee :	35.709.899.261	Rp
	Tax, PPN 10% :	Tax exempt	Rp
	PPH Pasal 4/2 (Final) 2.65% :	-946.312.330	Rp
	Grand total netto :	34.763.586.930	Rp

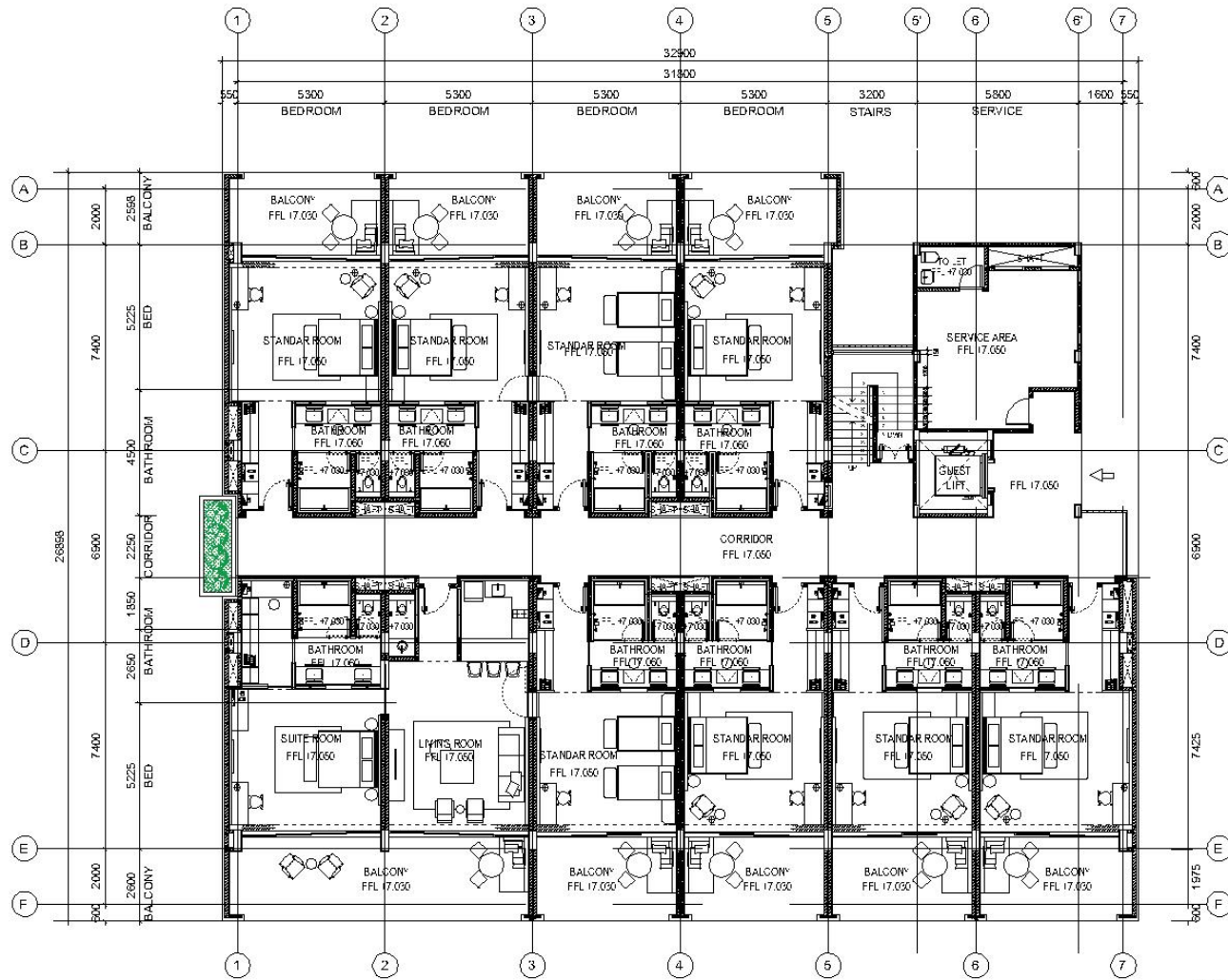
LAMPIRAN 9
GAMBAR LAY OUT



LAMPIRAN 10
GAMBAR GUES BLOK 3



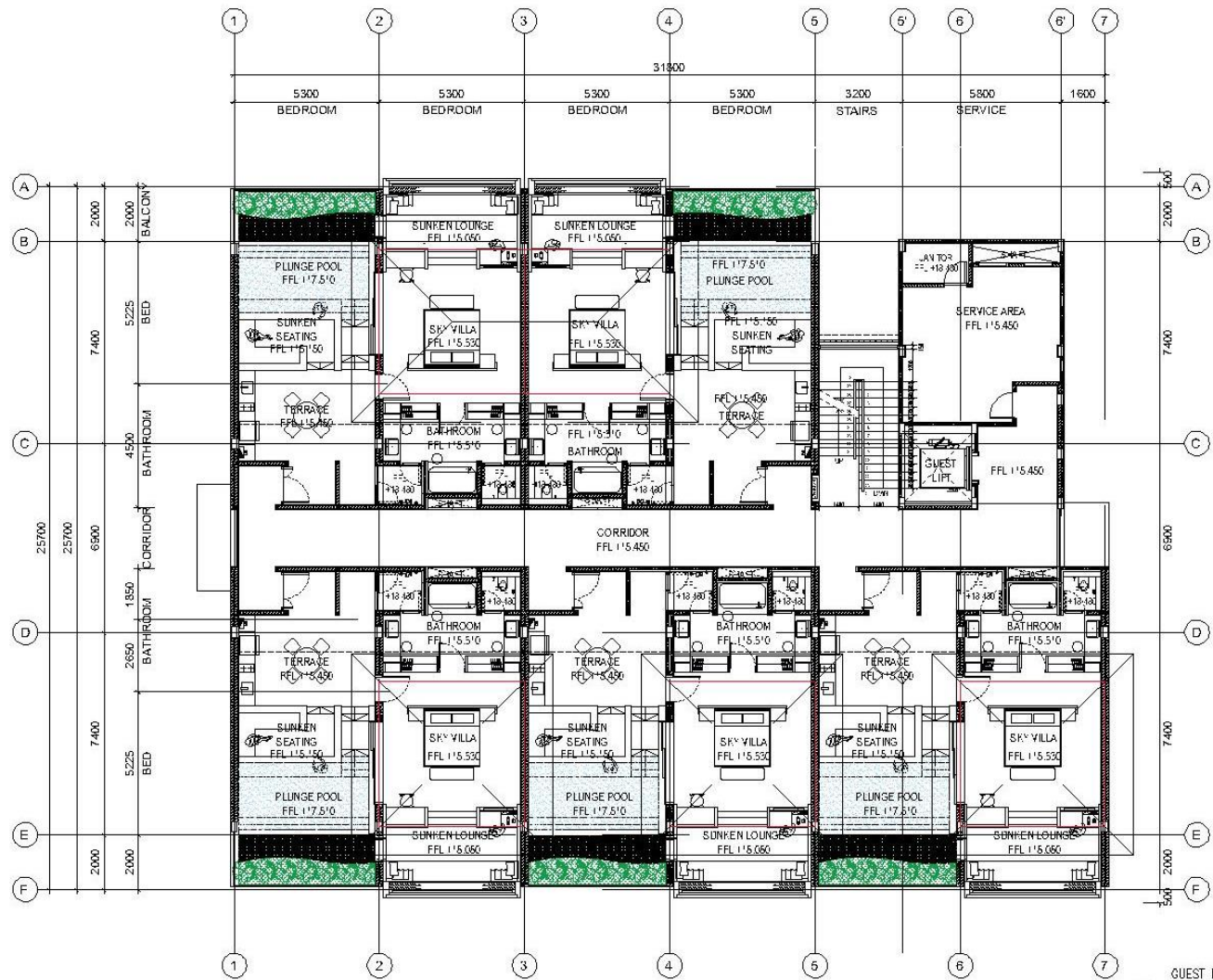
GUEST BLOCK 3
BASEMENT
 SKALA 1 : 150



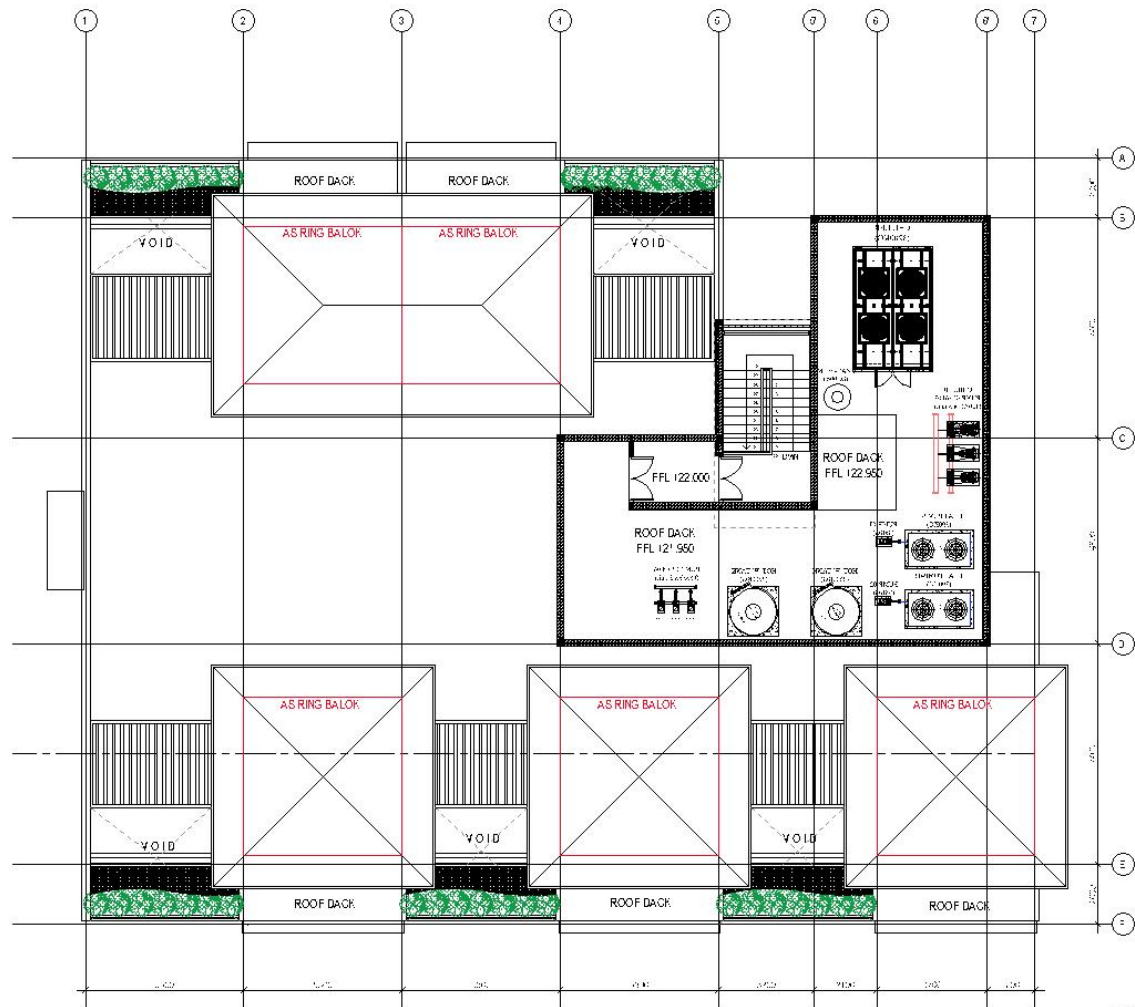
GUEST BLOCK 3
1ST FLOOR
SKALA 1 : 150



GUEST BLOCK 3
2ND FLOOR
SKALA 1 : 150

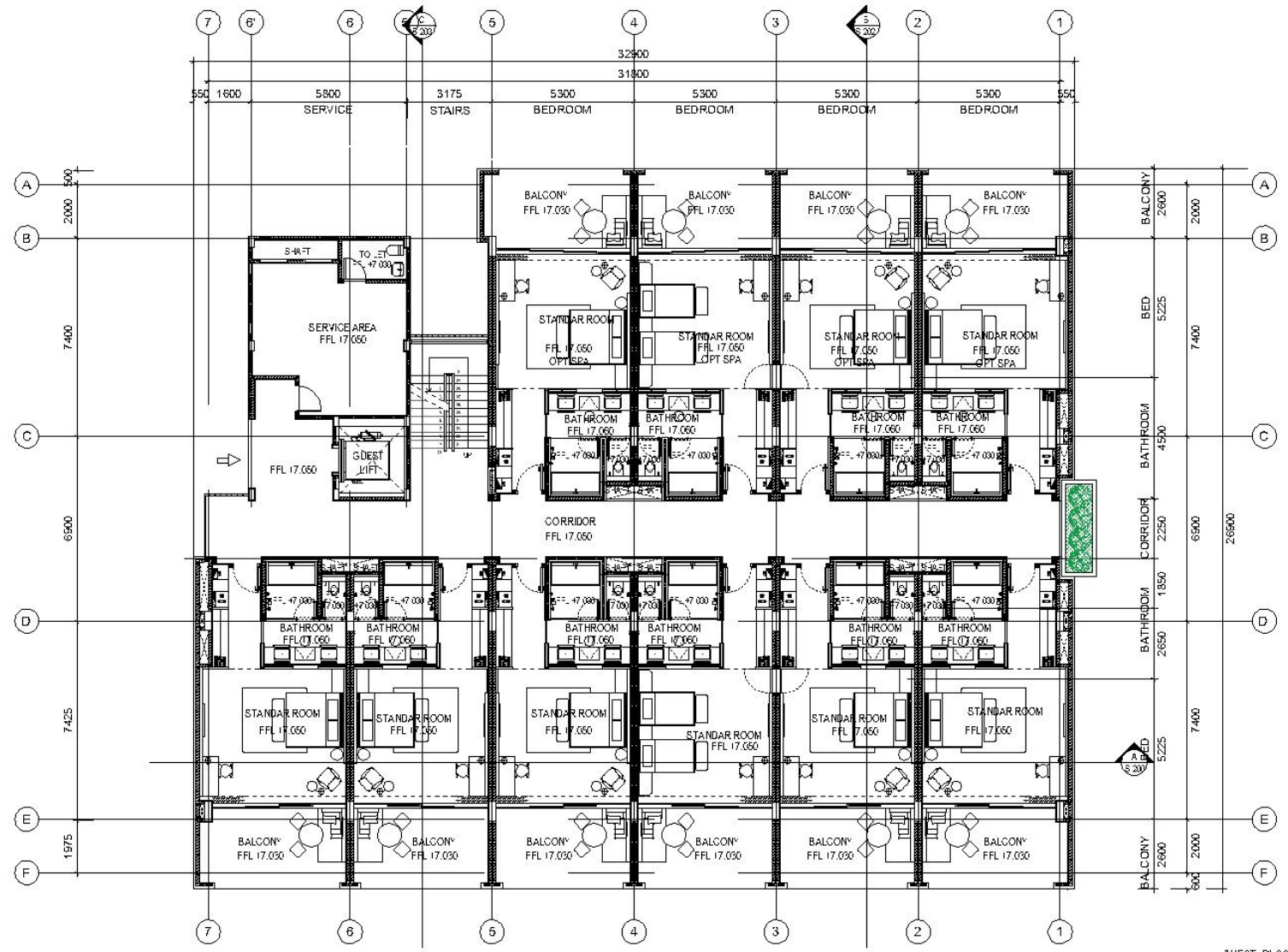


GUEST BLOCK 3
4TH FLOOR
SKALA 1 : 150

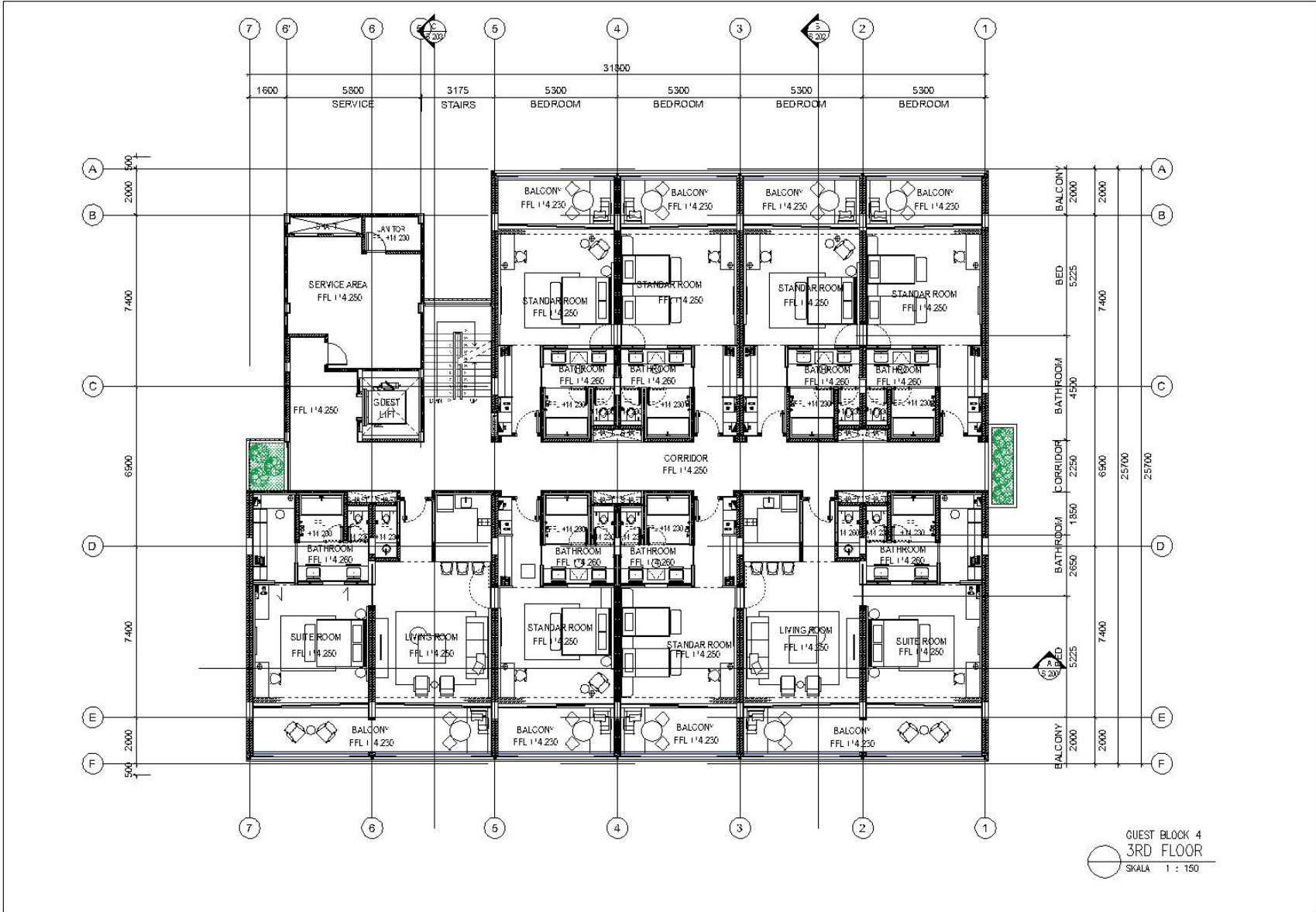


GUEST BLOCK 3
 ROOF FLOOR
 SKALA 1 : 150

LAMPIRAN 11
GAMBAR GUEST BLOK 4

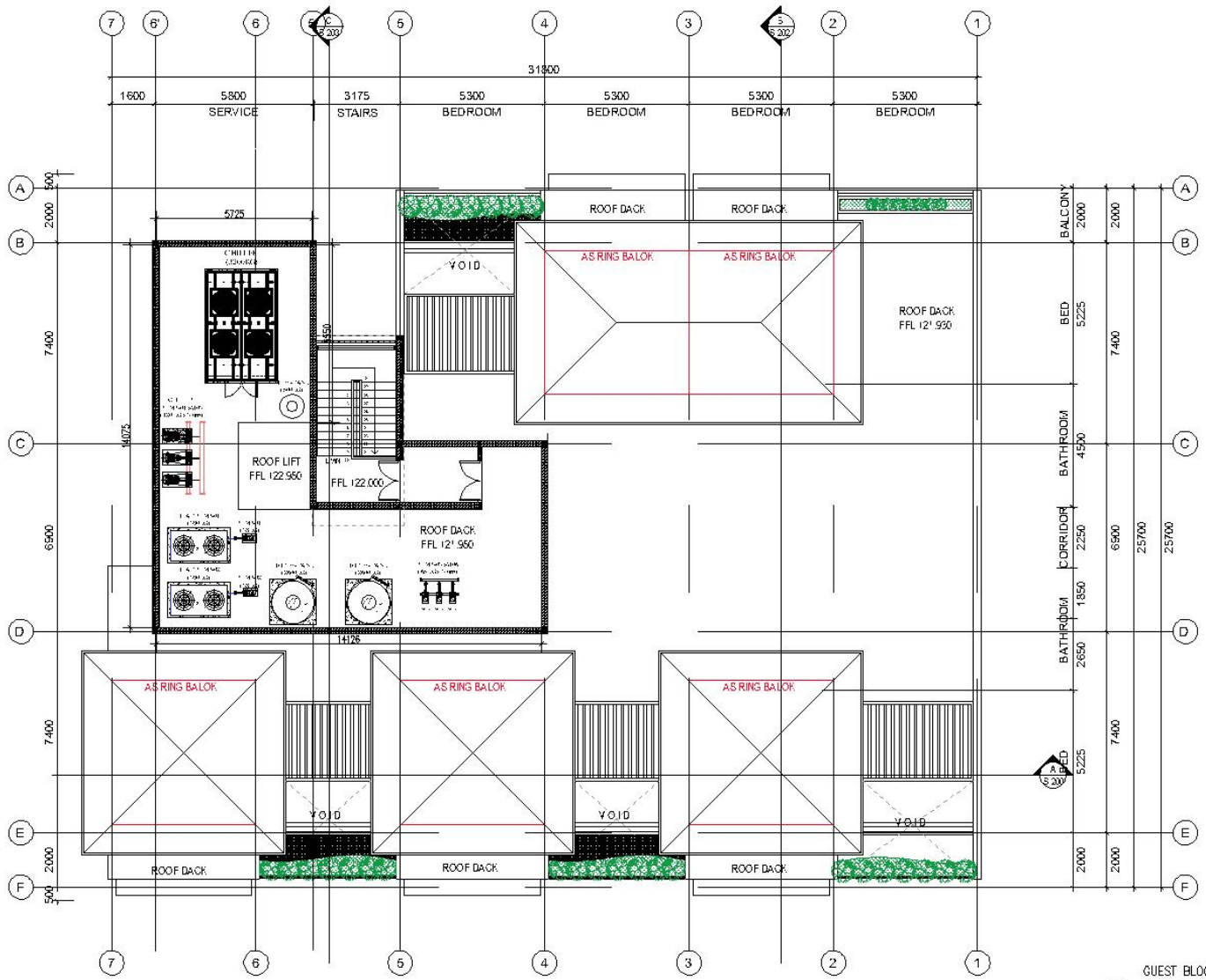


GUEST BLOCK 4
 1ST FLOOR
 SKALA 1 : 150





GUEST BLOCK 4
 4TH FLOOR
 SKALA 1 : 150




GUEST BLOCK 4
ROOF FLOOR
 SKALA 1 : 150

Lampiran 12 Biaya Furniture

No	Nama furniture	Gambar	Material/Spesifikasi	Harga	Jumlah	Harga Total
1	Dipan (Tempat tidur) dan aksesoris		Bingkirai wood, rotan	Rp 25.000.000,00	65	Rp 1.625.000.000,00
2	Kasur		King koil kasur springbad new world endorsed	Rp 19.000.000,00	65	Rp 1.235.000.000,00

3	Meja billiard		<p>Bed Solid Wood Frame Professional Tournament Pool Table For Competition</p>	<p>Rp 25.000.000,00</p>	<p>1</p>	<p>Rp 25.000.000,00</p>
4	TV		<p>Led Tv LG Smart Tv 43 Inch UHD 4K 2023 - 43UR8050</p>	<p>Rp 4.747.000,00</p>	<p>65</p>	<p>Rp 308.555.000,00</p>
5	Kulkas		<p>LG GN-B222SQIB Kulkas 2 Pintu 225L Smart Inverter Compressor</p>	<p>Rp 3.549.000,00</p>	<p>65</p>	<p>Rp 230.685.000,00</p>

6	Furniture bathroom		miror, stell, bengkirai wood	Rp 12.000.000,00	64	Rp 768.000.000,00
7	Lemari pakaian		ply wood, rotan	Rp 13.000.000,00	65	Rp 845.000.000,00
8	Sunbed		bengkirai wood	Rp 8.000.000,00	64	Rp 512.000.000,00

9	Meja belajar		bengkirai wood	Rp 3.000.000,00	64	Rp 192.000.000,00
10	Meja terrace		bengkirai wood, rotan	Rp 10.000.000,00	10	Rp 100.000.000,00

11	Alat Laundry		2 set dryer beko 8 kg, 2 set washer beko 8 kg, aplikasi kasir bilas outlet, Meja & rak Front Office ukuran 100, Setrika Uap Boiler Kapasitas 15 Liter + 2 meja, Set peralatan, advertising & chemichal starter	Rp 42.000.000,00	1	Rp 42.000.000,00
12	Alat Kebersihan		Floor Machine, Vacuum Cleaner, Carry Caddy, Toilet Towel Brush, Sarung Tangan, sapu, pengepelan, ember, trolley, tong sampah	Rp 100.000.000,00	1	Rp 100.000.000,00
TOTAL						Rp 5.983.240.000,00

LAMPIRAN 13

IRR

3%										
Tahun	Tahun ke	Biaya				Cost (Rp)	Benefit (Rp)	Faktor Bunga 3%	Present Value	
		Biaya Modal (Rp)	Biaya Tahunan (Rp)	Biaya Overhoal (Rp)	Biaya Pajak (Rp)				P/F	PWC (Rp)
2024	0	137.471.070.089				137.471.070.089		1	137.471.070.089	
2025	0									
2026	1		14.351.645.884		19.086.841.323	33.438.487.206	41.844.600.000	0,9709	32.465.427.229	40.626.922.140
2027	2		15.069.228.178		20.028.344.823	35.097.573.001	43.936.830.000	0,9426	33.082.972.310	41.414.855.958
2028	3		15.822.689.587		21.016.923.498	36.839.613.084	46.133.671.500	0,9151	33.711.929.934	42.216.922.790
2029	4		16.613.824.066		22.054.931.106	38.668.755.173	48.440.355.075	0,8885	34.357.188.971	43.039.255.484
2030	5		17.444.515.269	7.636.298.896	23.144.839.096	48.225.653.261	50.862.372.829	0,8626	41.599.448.503	43.873.882.802
2031	6		18.316.741.033		24.289.242.484	42.605.983.517	53.405.491.470	0,8375	35.682.511.196	44.727.099.106
2032	7		19.232.578.084		25.490.866.042	44.723.444.127	56.075.766.044	0,8131	36.364.632.420	45.595.205.370
2033	8		20.194.206.989		26.752.570.778	46.946.777.767	58.879.554.346	0,7894	37.059.786.369	46.479.520.201
2034	9		21.203.917.338		28.077.360.751	49.281.278.089	61.823.532.063	0,7664	37.769.171.528	47.381.554.973
2035	10		22.264.113.205	9.746.067.487	29.468.390.223	61.478.570.914	64.914.708.666	0,7441	45.746.204.617	48.303.034.719
2036	11		23.377.318.865		30.928.971.168	54.306.290.033	68.160.444.100	0,7224	39.230.863.920	49.239.104.818
2037	12		24.546.184.809		32.462.581.160	57.008.765.968	71.568.466.305	0,7014	39.985.948.450	50.198.122.266
2038	13		25.773.494.049		34.072.871.652	59.846.365.701	75.146.889.620	0,6810	40.755.375.042	51.175.031.831
2039	14		27.062.168.751		35.763.676.668	62.825.845.420	78.904.234.101	0,6611	41.534.166.407	52.163.589.164
2040	15		28.415.277.189	12.438.726.240	37.539.021.935	78.393.025.365	82.849.445.806	0,6419	50.320.482.982	53.181.059.263
2041	16		29.836.041.048		39.403.134.466	69.239.175.514	86.991.918.096	0,6232	43.149.854.181	54.213.363.358
2042	17		31.327.843.101		41.360.452.623	72.688.295.724	91.341.514.001	0,6050	43.976.418.913	55.261.615.971
2043	18		32.894.235.256		43.415.636.688	76.309.871.944	95.908.589.701	0,5874	44.824.418.780	56.336.705.590
2044	19		34.538.947.019		45.573.579.956	80.112.526.975	100.704.019.186	0,5703	45.688.174.134	57.431.502.142
2045	20		36.265.894.370	15.875.316.961	47.839.420.388	99.980.631.719	105.739.220.145	0,5537	55.359.275.783	58.547.806.195
2046	21		38.079.189.088		50.218.552.841	88.297.741.930	111.026.181.153	0,5375	47.460.036.287	59.676.572.370
2047	22		39.983.148.543		52.716.641.917	92.699.790.460	116.577.490.210	0,5219	48.380.020.641	60.841.792.141
2048	23		41.982.305.970		55.339.635.447	97.321.941.417	122.406.364.721	0,5067	49.313.027.716	62.023.305.004
2049	24		44.081.421.268		58.093.778.653	102.175.199.921	128.526.682.957	0,4919	50.259.980.841	63.222.275.346
2050	25		46.285.492.332	20.261.374.337	60.985.629.020	127.532.495.688	134.953.017.105	0,4776	60.909.519.941	64.453.560.969
2051	26		48.599.766.948		64.022.071.905	112.621.838.853	141.700.667.960	0,4637	52.222.746.676	65.706.599.733
2052	27		51.029.755.296		67.210.336.934	118.240.092.229	148.785.701.358	0,4502	53.231.689.522	66.983.322.751
2053	28		53.581.243.060		70.558.015.214	124.139.258.275	156.224.986.426	0,4371	54.261.269.792	68.285.941.567
2054	29		56.260.305.213		74.073.077.409	130.333.382.622	164.036.235.747	0,4243	55.300.454.247	69.600.574.828
2055	30		59.073.320.474	25.859.218.497	77.763.892.713	162.696.431.684	172.238.047.535	0,4120	67.030.929.854	70.962.075.584
2056	31		62.026.986.498		81.639.248.783	143.666.235.281	180.849.949.911	0,4000	57.466.494.112	72.339.979.964
2057	32		65.128.335.823		85.708.372.656	150.836.708.478	189.892.447.407	0,3883	58.569.893.902	73.735.237.328
2058	33		68.384.752.614		89.980.952.722	158.365.705.336	199.387.069.777	0,3770	59.703.870.912	75.168.925.306
2059	34		71.803.990.244		94.467.161.792	166.271.152.037	209.356.423.266	0,3660	60.855.241.645	76.624.450.915
2060	35		75.394.189.757	33.003.643.788	99.177.681.316	207.575.514.861	219.824.244.429	0,3554	73.772.337.981	78.125.536.470
									1.798.872.835.825	2.009.156.304.416
									NPV	210.283.468.591

4%										
Tahun	Tahun ke	Biaya				Cost (Rp)	Benefit (Rp)	Faktor Bunga 4%	Present Value	
		Biaya Modal (Rp)	Biaya Tahunan (Rp)	Biaya Overhoal (Rp)	Biaya Pajak (Rp)				P/F	PWC (Rp)
2024	0	137.471.070.089	0		0	137.471.070.089	0	1	137.471.070.089	
2025	0		0		0		0	1,0000	0	0
2026	1		14.351.645.884		19.086.841.323	33.438.487.206	41.844.600.000	0,9615	32.151.105.449	40.233.582.900
2027	2		15.069.228.178		20.028.344.823	35.097.573.001	43.936.830.000	0,9246	32.451.215.996	40.623.993.018
2028	3		15.822.689.587		21.016.923.498	36.839.613.084	46.133.671.500	0,8890	32.750.416.032	41.012.833.964
2029	4		16.613.824.066		22.054.931.106	38.668.755.173	48.440.355.075	0,8548	33.054.051.921	41.406.815.518
2030	5		17.444.515.269	7.636.298.896	23.144.839.096	48.225.653.261	50.862.372.829	0,8219	39.636.664.415	41.803.784.228
2031	6		18.316.741.033		24.289.242.484	42.605.983.517	53.405.491.470	0,7903	33.671.508.774	42.206.359.909
2032	7		19.232.578.084		25.490.866.042	44.723.444.127	56.075.766.044	0,7599	33.985.345.192	42.611.974.617
2033	8		20.194.206.989		26.752.570.778	46.946.777.767	58.879.554.346	0,7307	34.304.010.514	43.023.290.361
2034	9		21.203.917.338		28.077.360.751	49.281.278.089	61.823.532.063	0,7026	34.625.025.986	43.437.213.628
2035	10		22.264.113.205	9.746.067.487	29.468.390.223	61.478.570.914	64.914.708.666	0,6756	41.534.922.510	43.856.377.175
2036	11		23.377.318.865		30.928.971.168	54.306.290.033	68.160.444.100	0,6496	35.277.366.005	44.277.024.487
2037	12		24.546.184.809		32.462.581.160	57.008.765.968	71.568.466.305	0,6246	35.607.675.224	44.701.664.054
2038	13		25.773.494.049		34.072.871.652	59.846.365.701	75.146.889.620	0,6006	35.943.727.240	45.133.221.906
2039	14		27.062.168.751		35.763.676.668	62.825.845.420	78.904.234.101	0,5775	36.281.925.730	45.567.195.193
2040	15		28.415.277.189	12.438.726.240	37.539.021.935	78.393.025.365	82.849.445.806	0,5553	43.531.646.985	46.006.297.256
2041	16		29.836.041.048		39.403.134.466	69.239.175.514	86.991.918.096	0,5339	36.966.795.807	46.444.985.072
2042	17		31.327.843.101		41.360.452.623	72.688.295.724	91.341.514.001	0,5134	37.318.171.025	46.894.733.288
2043	18		32.894.235.256		43.415.636.688	76.309.871.944	95.908.589.701	0,4936	37.666.552.792	47.340.479.876
2044	19		34.538.947.019		45.573.579.956	80.112.526.975	100.704.019.186	0,4746	38.021.405.302	47.794.127.506
2045	20		36.265.894.370	15.875.316.961	47.839.420.388	99.980.631.719	105.739.220.145	0,4564	45.631.160.317	48.259.380.074
2046	21		38.079.189.088		50.218.552.841	88.297.741.930	111.026.181.153	0,4388	38.745.049.159	48.718.288.290
2047	22		39.983.148.543		52.716.641.917	92.699.790.460	116.577.490.210	0,4220	39.119.311.574	49.195.700.869
2048	23		41.982.305.970		55.339.635.447	97.321.941.417	122.406.364.721	0,4057	39.483.511.633	49.660.262.167
2049	24		44.081.421.268		58.093.778.653	102.175.199.921	128.526.682.957	0,3901	39.858.545.489	50.138.259.021
2050	25		46.285.492.332	20.261.374.337	60.985.629.020	127.532.495.688	134.953.017.105	0,3751	47.837.439.133	50.620.876.716
2051	26		48.599.766.948		64.022.071.905	112.621.838.853	141.700.667.960	0,3607	40.622.697.274	51.111.430.933
2052	27		51.029.755.296		67.210.336.934	118.240.092.229	148.785.701.358	0,3468	41.005.663.985	51.598.881.231
2053	28		53.581.243.060		70.558.015.214	124.139.258.275	156.224.986.426	0,3335	41.400.442.635	52.101.032.973
2054	29		56.260.305.213		74.073.077.409	130.333.382.622	164.036.235.747	0,3207	41.797.915.807	52.606.420.804
2055	30		59.073.320.474	25.859.218.497	77.763.892.713	162.696.431.684	172.238.047.535	0,3083	50.159.309.888	53.100.990.055
2056	31		62.026.986.498		81.639.248.783	143.666.235.281	180.849.949.911	0,2965	42.597.038.761	53.622.010.149
2057	32		65.128.335.823		85.708.372.656	150.836.708.478	189.892.447.407	0,2851	43.003.545.587	54.138.336.756
2058	33		68.384.752.614		89.980.952.722	158.365.705.336	199.387.069.777	0,2741	43.408.039.833	54.651.995.826
2059	34		71.803.990.244		94.467.161.792	166.271.152.037	209.356.423.266	0,2636	43.829.075.677	55.186.353.173
2060	35		75.394.189.757	33.003.643.788	99.177.681.316	207.575.514.861	219.824.244.429	0,2534	52.599.635.466	55.703.463.538
									1.513.348.985.204	1.664.789.636.529
								NPV		151.440.651.325

5%										
Tahun	Tahun ke	Biaya				Cost (Rp)	Benefit (Rp)	Faktor Bunga 5%	Present Value	
		Biaya Modal (Rp)	Biaya Tahunan (Rp)	Biaya Overhoal (Rp)	Biaya Pajak (Rp)				P/F	PWC (Rp)
2024	0	137.471.070.089	0		0	137.471.070.089	0	1	137.471.070.089	
2025	0									
2026	1		14.351.645.884		19.086.841.323	33.438.487.206	41.844.600.000	0,9524	31.846.815.215	39.852.797.040
2027	2		15.069.228.178		20.028.344.823	35.097.573.001	43.936.830.000	0,9070	31.833.498.711	39.850.704.810
2028	3		15.822.689.587		21.016.923.498	36.839.613.084	46.133.671.500	0,8638	31.822.057.782	39.850.265.442
2029	4		16.613.824.066		22.054.931.106	38.668.755.173	48.440.355.075	0,8227	31.812.784.880	39.851.880.120
2030	5		17.444.515.269	7.636.298.896	23.144.839.096	48.225.653.261	50.862.372.829	0,7835	37.784.799.330	39.850.669.111
2031	6		18.316.741.033		24.289.242.484	42.605.983.517	53.405.491.470	0,7462	31.792.584.900	39.851.177.735
2032	7		19.232.578.084		25.490.866.042	44.723.444.127	56.075.766.044	0,7107	31.784.951.741	39.853.046.927
2033	8		20.194.206.989		26.752.570.778	46.946.777.767	58.879.554.346	0,6768	31.773.579.193	39.849.682.381
2034	9		21.203.917.338		28.077.360.751	49.281.278.089	61.823.532.063	0,6446	31.766.711.856	39.851.448.768
2035	10		22.264.113.205	9.746.067.487	29.468.390.223	61.478.570.914	64.914.708.666	0,6139	37.741.694.684	39.851.139.650
2036	11		23.377.318.865		30.928.971.168	54.306.290.033	68.160.444.100	0,5847	31.752.887.782	39.853.411.665
2037	12		24.546.184.809		32.462.581.160	57.008.765.968	71.568.466.305	0,5568	31.742.480.891	39.849.322.038
2038	13		25.773.494.049		34.072.871.652	59.846.365.701	75.146.889.620	0,5303	31.736.527.731	39.850.395.565
2039	14		27.062.168.751		35.763.676.668	62.825.845.420	78.904.234.101	0,5051	31.733.334.521	39.854.528.644
2040	15		28.415.277.189	12.438.726.240	37.539.021.935	78.393.025.365	82.849.445.806	0,4810	37.707.045.200	39.850.583.433
2041	16		29.836.041.048		39.403.134.466	69.239.175.514	86.991.918.096	0,4581	31.718.466.303	39.850.997.680
2042	17		31.327.843.101		41.360.452.623	72.688.295.724	91.341.514.001	0,4363	31.713.903.424	39.852.302.559
2043	18		32.894.235.256		43.415.636.688	76.309.871.944	95.908.589.701	0,4155	31.706.751.793	39.850.019.021
2044	19		34.538.947.019		45.573.579.956	80.112.526.975	100.704.019.186	0,3957	31.700.526.924	39.848.580.392
2045	20		36.265.894.370	15.875.316.961	47.839.420.388	99.980.631.719	105.739.220.145	0,3769	37.682.700.095	39.853.112.073
2046	21		38.079.189.088		50.218.552.841	88.297.741.930	111.026.181.153	0,3589	31.690.059.579	39.847.296.416
2047	22		39.983.148.543		52.716.641.917	92.699.790.460	116.577.490.210	0,3418	31.684.788.379	39.846.186.154
2048	23		41.982.305.970		55.339.635.447	97.321.941.417	122.406.364.721	0,3256	31.688.024.125	39.855.512.353
2049	24		44.081.421.268		58.093.778.653	102.175.199.921	128.526.682.957	0,3101	31.684.529.496	39.856.124.385
2050	25		46.285.492.332	20.261.374.337	60.985.629.020	127.532.495.688	134.953.017.105	0,2953	37.660.345.977	39.851.625.951
2051	26		48.599.766.948		64.022.071.905	112.621.838.853	141.700.667.960	0,2812	31.669.261.085	39.846.227.830
2052	27		51.029.755.296		67.210.336.934	118.240.092.229	148.785.701.358	0,2678	31.664.696.699	39.844.810.824
2053	28		53.581.243.060		70.558.015.214	124.139.258.275	156.224.986.426	0,2551	31.667.924.786	39.852.994.037
2054	29		56.260.305.213		74.073.077.409	130.333.382.622	164.036.235.747	0,2429	31.657.978.639	39.844.401.663
2055	30		59.073.320.474	25.859.218.497	77.763.892.713	162.696.431.684	172.238.047.535	0,2314	37.647.954.292	39.855.884.199
2056	31		62.026.986.498		81.639.248.783	143.666.235.281	180.849.949.911	0,2204	31.664.038.256	39.859.328.960
2057	32		65.128.335.823		85.708.372.656	150.836.708.478	189.892.447.407	0,2099	31.660.625.110	39.858.424.711
2058	33		68.384.752.614		89.980.952.722	158.365.705.336	199.387.069.777	0,1999	31.657.304.497	39.857.475.248
2059	34		71.803.990.244		94.467.161.792	166.271.152.037	209.356.423.266	0,1904	31.658.027.348	39.861.462.990
2060	35		75.394.189.757	33.003.643.788	99.177.681.316	207.575.514.861	219.824.244.429	0,1813	37.633.440.844	39.854.135.515
									1.289.614.172.160	1.394.817.956.292
								NPV		105.203.784.132

6%										
Tahun	Tahun ke	Biaya				Cost (Rp)	Benefit (Rp)	Faktor Bunga 6%	Present Value	
		Biaya Modal (Rp)	Biaya Tahunan (Rp)	Biaya Overhoal (Rp)	Biaya Pajak (Rp)				P/F	PWC (Rp)
2024	0	137.471.070.089	0		0	137.471.070.089		1	137.471.070.089	
2025	0									
2026	1		14.351.645.884		19.086.841.323	33.438.487.206	41.844.600.000	0,9434	31.545.868.830	39.476.195.640
2027	2		15.069.228.178		20.028.344.823	35.097.573.001	43.936.830.000	0,8900	31.236.839.970	39.103.778.700
2028	3		15.822.689.587		21.016.923.498	36.839.613.084	46.133.671.500	0,8396	30.930.539.146	38.733.830.591
2029	4		16.613.824.066		22.054.931.106	38.668.755.173	48.440.355.075	0,7921	30.629.520.972	38.369.605.255
2030	5		17.444.515.269	7.636.298.896	23.144.839.096	48.225.653.261	50.862.372.829	0,7473	36.039.030.682	38.009.451.215
2031	6		18.316.741.033		24.289.242.484	42.605.983.517	53.405.491.470	0,7050	30.037.218.380	37.650.871.486
2032	7		19.232.578.084		25.490.866.042	44.723.444.127	56.075.766.044	0,6651	29.745.562.689	37.295.991.996
2033	8		20.194.206.989		26.752.570.778	46.946.777.767	58.879.554.346	0,6274	29.454.408.371	36.941.032.397
2034	9		21.203.917.338		28.077.360.751	49.281.278.089	61.823.532.063	0,5919	29.169.588.501	36.593.348.628
2035	10		22.264.113.205	9.746.067.487	29.468.390.223	61.478.570.914	64.914.708.666	0,5584	34.329.633.999	36.248.373.319
2036	11		23.377.318.865		30.928.971.168	54.306.290.033	68.160.444.100	0,5268	28.608.553.589	35.906.921.952
2037	12		24.546.184.809		32.462.581.160	57.008.765.968	71.568.466.305	0,4970	28.333.356.686	35.569.527.753
2038	13		25.773.494.049		34.072.871.652	59.846.365.701	75.146.889.620	0,4688	28.055.976.240	35.228.861.854
2039	14		27.062.168.751		35.763.676.668	62.825.845.420	78.904.234.101	0,4423	27.787.871.429	34.899.342.743
2040	15		28.415.277.189	12.438.726.240	37.539.021.935	78.393.025.365	82.849.445.806	0,4173	32.713.409.485	34.573.073.735
2041	16		29.836.041.048		39.403.134.466	69.239.175.514	86.991.918.096	0,3936	27.252.539.482	34.240.018.963
2042	17		31.327.843.101		41.360.452.623	72.688.295.724	91.341.514.001	0,3714	26.996.433.032	33.924.238.300
2043	18		32.894.235.256		43.415.636.688	76.309.871.944	95.908.589.701	0,3503	26.731.348.142	33.596.778.972
2044	19		34.538.947.019		45.573.579.956	80.112.526.975	100.704.019.186	0,3305	26.477.190.165	33.282.678.341
2045	20		36.265.894.370	15.875.316.961	47.839.420.388	99.980.631.719	105.739.220.145	0,3118	31.173.960.970	32.969.488.841
2046	21		38.079.189.088		50.218.552.841	88.297.741.930	111.026.181.153	0,2942	25.977.195.676	32.663.902.495
2047	22		39.983.148.543		52.716.641.917	92.699.790.460	116.577.490.210	0,2775	25.724.191.853	32.350.253.533
2048	23		41.982.305.970		55.339.635.447	97.321.941.417	122.406.364.721	0,2618	25.478.884.263	32.045.986.284
2049	24		44.081.421.268		58.093.778.653	102.175.199.921	128.526.682.957	0,2470	25.237.274.381	31.746.090.690
2050	25		46.285.492.332	20.261.374.337	60.985.629.020	127.532.495.688	134.953.017.105	0,2330	29.715.071.495	31.444.052.985
2051	26		48.599.766.948		64.022.071.905	112.621.838.853	141.700.667.960	0,2198	24.754.280.180	31.145.806.818
2052	27		51.029.755.296		67.210.336.934	118.240.092.229	148.785.701.358	0,2074	24.522.995.128	30.858.154.462
2053	28		53.581.243.060		70.558.015.214	124.139.258.275	156.224.986.426	0,1956	24.281.638.919	30.557.607.345
2054	29		56.260.305.213		74.073.077.409	130.333.382.622	164.036.235.747	0,1846	24.059.542.432	30.281.089.119
2055	30		59.073.320.474	25.859.218.497	77.763.892.713	162.696.431.684	172.238.047.535	0,1741	28.325.448.756	29.986.644.076
2056	31		62.026.986.498		81.639.248.783	143.666.235.281	180.849.949.911	0,1643	23.604.362.457	29.713.646.770
2057	32		65.128.335.823		85.708.372.656	150.836.708.478	189.892.447.407	0,1550	23.379.689.814	29.433.329.348
2058	33		68.384.752.614		89.980.952.722	158.365.705.336	199.387.069.777	0,1462	23.153.066.120	29.150.389.601
2059	34		71.803.990.244		94.467.161.792	166.271.152.037	209.356.423.266	0,1379	22.928.791.866	28.870.250.768
2060	35		75.394.189.757	33.003.643.788	99.177.681.316	207.575.514.861	219.824.244.429	0,1301	27.005.574.483	28.599.134.200
									1.112.867.928.673	1.181.459.749.177
									NPV	68.591.820.504

7%										
Tahun	Tahun ke	Biaya				Cost (Rp)	Benefit (Rp)	Faktor Bunga 7%	Present Value	
		Biaya Modal (Rp)	Biaya Tahunan (Rp)	Biaya Overhoal (Rp)	Biaya Pajak (Rp)				P/F	PWC (Rp)
2024	0	137.471.070.089	0		0	137.471.070.089		1	137.471.070.089	
2025	0									
2026	1		14.351.645.884		19.086.841.323	33.438.487.206	41.844.600.000	0,9346	31.251.610.143	39.107.963.160
2027	2		15.069.228.178		20.028.344.823	35.097.573.001	43.936.830.000	0,8734	30.654.220.259	38.374.427.322
2028	3		15.822.689.587		21.016.923.498	36.839.613.084	46.133.671.500	0,8163	30.072.176.161	37.658.916.045
2029	4		16.613.824.066		22.054.931.106	38.668.755.173	48.440.355.075	0,7629	29.500.393.321	36.955.146.887
2030	5		17.444.515.269	7.636.298.896	23.144.839.096	48.225.653.261	50.862.372.829	0,7130	34.384.890.775	36.264.871.827
2031	6		18.316.741.033		24.289.242.484	42.605.983.517	53.405.491.470	0,6663	28.388.366.817	35.584.078.967
2032	7		19.232.578.084		25.490.866.042	44.723.444.127	56.075.766.044	0,6227	27.849.288.658	34.918.379.515
2033	8		20.194.206.989		26.752.570.778	46.946.777.767	58.879.554.346	0,5820	27.323.024.660	34.267.900.629
2034	9		21.203.917.338		28.077.360.751	49.281.278.089	61.823.532.063	0,5439	26.804.087.153	33.625.819.089
2035	10		22.264.113.205	9.746.067.487	29.468.390.223	61.478.570.914	64.914.708.666	0,5083	31.249.557.596	32.996.146.415
2036	11		23.377.318.865		30.928.971.168	54.306.290.033	68.160.444.100	0,4751	25.800.918.395	32.383.026.992
2037	12		24.546.184.809		32.462.581.160	57.008.765.968	71.568.466.305	0,4440	25.311.892.090	31.776.399.039
2038	13		25.773.494.049		34.072.871.652	59.846.365.701	75.146.889.620	0,4150	24.836.241.766	31.185.959.192
2039	14		27.062.168.751		35.763.676.668	62.825.845.420	78.904.234.101	0,3878	24.363.862.854	30.599.061.984
2040	15		28.415.277.189	12.438.726.240	37.539.021.935	78.393.025.365	82.849.445.806	0,3624	28.409.632.392	30.024.639.160
2041	16		29.836.041.048		39.403.134.466	69.239.175.514	86.991.918.096	0,3387	23.451.308.747	29.464.162.659
2042	17		31.327.843.101		41.360.452.623	72.688.295.724	91.341.514.001	0,3166	23.013.114.426	28.918.723.333
2043	18		32.894.235.256		43.415.636.688	76.309.871.944	95.908.589.701	0,2959	22.580.091.108	28.379.351.693
2044	19		34.538.947.019		45.573.579.956	80.112.526.975	100.704.019.186	0,2765	22.151.113.709	27.844.661.305
2045	20		36.265.894.370	15.875.316.961	47.839.420.388	99.980.631.719	105.739.220.145	0,2584	25.834.995.236	27.323.014.486
2046	21		38.079.189.088		50.218.552.841	88.297.741.930	111.026.181.153	0,2415	21.323.904.676	26.812.822.748
2047	22		39.983.148.543		52.716.641.917	92.699.790.460	116.577.490.210	0,2257	20.922.342.707	26.311.539.540
2048	23		41.982.305.970		55.339.635.447	97.321.941.417	122.406.364.721	0,2109	20.525.197.445	25.815.502.320
2049	24		44.081.421.268		58.093.778.653	102.175.199.921	128.526.682.957	0,1971	20.138.731.905	25.332.609.211
2050	25		46.285.492.332	20.261.374.337	60.985.629.020	127.532.495.688	134.953.017.105	0,1842	23.491.485.706	24.858.345.751
2051	26		48.599.766.948		64.022.071.905	112.621.838.853	141.700.667.960	0,1722	19.393.480.650	24.400.855.023
2052	27		51.029.755.296		67.210.336.934	118.240.092.229	148.785.701.358	0,1609	19.024.830.840	23.939.619.348
2053	28		53.581.243.060		70.558.015.214	124.139.258.275	156.224.986.426	0,1504	18.670.544.445	23.496.237.958
2054	29		56.260.305.213		74.073.077.409	130.333.382.622	164.036.235.747	0,1406	18.324.873.597	23.063.494.746
2055	30		59.073.320.474	25.859.218.497	77.763.892.713	162.696.431.684	172.238.047.535	0,1314	21.378.311.123	22.632.079.446
2056	31		62.026.986.498		81.639.248.783	143.666.235.281	180.849.949.911	0,1228	17.642.213.692	22.208.373.849
2057	32		65.128.335.823		85.708.372.656	150.836.708.478	189.892.447.407	0,1147	17.300.970.462	21.780.663.718
2058	33		68.384.752.614		89.980.952.722	158.365.705.336	199.387.069.777	0,1072	16.976.803.612	21.374.293.880
2059	34		71.803.990.244		94.467.161.792	166.271.152.037	209.356.423.266	0,1002	16.660.369.434	20.977.513.611
2060	35		75.394.189.757	33.003.643.788	99.177.681.316	207.575.514.861	219.824.244.429	0,0937	19.449.825.742	20.597.531.703
									971.925.742.390	1.011.254.132.552
								NPV		39.328.390.162

8%										
Tahun	Tahun ke	Biaya				Cost (Rp)	Benefit (Rp)	Faktor Bunga 8%	Present Value	
		Biaya Modal (Rp)	Biaya Tahunan (Rp)	Biaya Overhoal (Rp)	Biaya Pajak (Rp)				P/F	PWC (Rp)
2024	0	137.471.070.089	0		0	137.471.070.089		1	137.471.070.089	
2025	0									
2026	1		14.351.645.884		19.086.841.323	33.438.487.206	41.844.600.000	0,9259	30.960.695.304	38.743.915.140
2027	2		15.069.228.178		20.028.344.823	35.097.573.001	43.936.830.000	0,8573	30.089.149.333	37.667.044.359
2028	3		15.822.689.587		21.016.923.498	36.839.613.084	46.133.671.500	0,7938	29.243.284.866	36.620.908.437
2029	4		16.613.824.066		22.054.931.106	38.668.755.173	48.440.355.075	0,7350	28.421.535.052	35.603.660.980
2030	5		17.444.515.269	7.636.298.896	23.144.839.096	48.225.653.261	50.862.372.829	0,6806	32.822.379.609	34.616.930.947
2031	6		18.316.741.033		24.289.242.484	42.605.983.517	53.405.491.470	0,6302	26.850.290.812	33.656.140.725
2032	7		19.232.578.084		25.490.866.042	44.723.444.127	56.075.766.044	0,5835	26.096.129.648	32.720.209.486
2033	8		20.194.206.989		26.752.570.778	46.946.777.767	58.879.554.346	0,5403	25.365.344.028	31.812.623.213
2034	9		21.203.917.338		28.077.360.751	49.281.278.089	61.823.532.063	0,5002	24.650.495.300	30.924.130.738
2035	10		22.264.113.205	9.746.067.487	29.468.390.223	61.478.570.914	64.914.708.666	0,4632	28.476.874.048	30.068.493.054
2036	11		23.377.318.865		30.928.971.168	54.306.290.033	68.160.444.100	0,4289	23.291.967.795	29.234.014.474
2037	12		24.546.184.809		32.462.581.160	57.008.765.968	71.568.466.305	0,3971	22.638.180.966	28.419.837.970
2038	13		25.773.494.049		34.072.871.652	59.846.365.701	75.146.889.620	0,3677	22.005.508.668	27.631.511.313
2039	14		27.062.168.751		35.763.676.668	62.825.845.420	78.904.234.101	0,3405	21.392.200.365	26.866.891.711
2040	15		28.415.277.189	12.438.726.240	37.539.021.935	78.393.025.365	82.849.445.806	0,3152	24.709.481.595	26.114.145.318
2041	16		29.836.041.048		39.403.134.466	69.239.175.514	86.991.918.096	0,2919	20.210.915.333	25.392.940.892
2042	17		31.327.843.101		41.360.452.623	72.688.295.724	91.341.514.001	0,2703	19.647.646.334	24.689.611.234
2043	18		32.894.235.256		43.415.636.688	76.309.871.944	95.908.589.701	0,2502	19.092.729.960	23.996.329.143
2044	19		34.538.947.019		45.573.579.956	80.112.526.975	100.704.019.186	0,2317	18.562.072.500	23.333.121.245
2045	20		36.265.894.370	15.875.316.961	47.839.420.388	99.980.631.719	105.739.220.145	0,2145	21.445.845.504	22.681.062.721
2046	21		38.079.189.088		50.218.552.841	88.297.741.930	111.026.181.153	0,1987	17.544.761.321	22.060.902.195
2047	22		39.983.148.543		52.716.641.917	92.699.790.460	116.577.490.210	0,1839	17.047.491.466	21.438.600.450
2048	23		41.982.305.970		55.339.635.447	97.321.941.417	122.406.364.721	0,1703	16.573.926.623	20.845.803.912
2049	24		44.081.421.268		58.093.778.653	102.175.199.921	128.526.682.957	0,1577	16.113.029.028	20.268.657.902
2050	25		46.285.492.332	20.261.374.337	60.985.629.020	127.532.495.688	134.953.017.105	0,1460	18.619.744.370	19.703.140.497
2051	26		48.599.766.948		64.022.071.905	112.621.838.853	141.700.667.960	0,1352	15.226.472.613	19.157.930.308
2052	27		51.029.755.296		67.210.336.934	118.240.092.229	148.785.701.358	0,1252	14.803.659.547	18.627.969.810
2053	28		53.581.243.060		70.558.015.214	124.139.258.275	156.224.986.426	0,1159	14.387.740.034	18.106.475.927
2054	29		56.260.305.213		74.073.077.409	130.333.382.622	164.036.235.747	0,1073	13.984.771.955	17.601.088.096
2055	30		59.073.320.474	25.859.218.497	77.763.892.713	162.696.431.684	172.238.047.535	0,0994	16.172.025.309	17.120.461.925
2056	31		62.026.986.498		81.639.248.783	143.666.235.281	180.849.949.911	0,0920	13.217.293.646	16.638.195.392
2057	32		65.128.335.823		85.708.372.656	150.836.708.478	189.892.447.407	0,0852	12.851.287.562	16.178.836.519
2058	33		68.384.752.614		89.980.952.722	158.365.705.336	199.387.069.777	0,0789	12.495.054.151	15.731.639.805
2059	34		71.803.990.244		94.467.161.792	166.271.152.037	209.356.423.266	0,0730	12.137.794.099	15.283.018.898
2060	35		75.394.189.757	33.003.643.788	99.177.681.316	207.575.514.861	219.824.244.429	0,0676	14.032.104.805	14.860.118.923
									858.650.953.641	874.416.363.662
									NPV	15.765.410.022

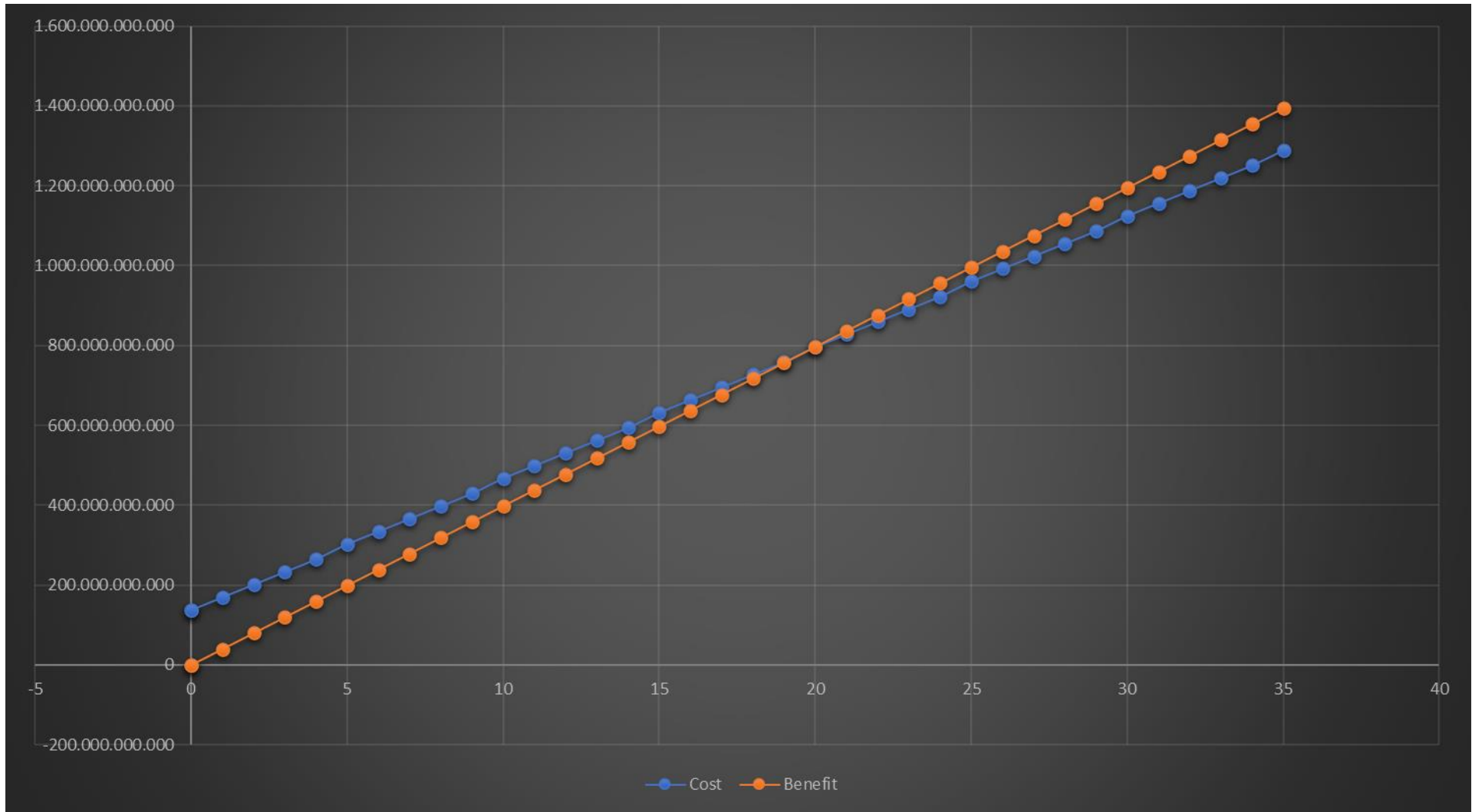
9%										
Tahun	Tahun ke	Biaya				Cost (Rp)	Benefit (Rp)	Faktor Bunga 9%	Present Value	
		Biaya Modal (Rp)	Biaya Tahunan (Rp)	Biaya Overhoal (Rp)	Biaya Pajak (Rp)				P/F	PWC (Rp)
2024	0	137.471.070.089	0		0	137.471.070.089		1	137.471.070.089	
2025	0									
2026	1		14.351.645.884		19.086.841.323	33.438.487.206	41.844.600.000	0,9174	30.676.468.163	38.388.236.040
2027	2		15.069.228.178		20.028.344.823	35.097.573.001	43.936.830.000	0,8417	29.541.627.195	36.981.629.811
2028	3		15.822.689.587		21.016.923.498	36.839.613.084	46.133.671.500	0,7722	28.447.549.224	35.624.421.132
2029	4		16.613.824.066		22.054.931.106	38.668.755.173	48.440.355.075	0,7084	27.392.946.164	34.315.147.535
2030	5		17.444.515.269	7.636.298.896	23.144.839.096	48.225.653.261	50.862.372.829	0,6499	31.341.852.054	33.055.456.101
2031	6		18.316.741.033		24.289.242.484	42.605.983.517	53.405.491.470	0,5963	25.405.947.971	31.845.694.564
2032	7		19.232.578.084		25.490.866.042	44.723.444.127	56.075.766.044	0,5470	24.463.723.937	30.673.444.026
2033	8		20.194.206.989		26.752.570.778	46.946.777.767	58.879.554.346	0,5019	23.562.587.761	29.551.648.326
2034	9		21.203.917.338		28.077.360.751	49.281.278.089	61.823.532.063	0,4604	22.689.100.432	28.463.554.162
2035	10		22.264.113.205	9.746.067.487	29.468.390.223	61.478.570.914	64.914.708.666	0,4224	25.968.548.354	27.419.972.941
2036	11		23.377.318.865		30.928.971.168	54.306.290.033	68.160.444.100	0,3875	21.043.687.388	26.412.172.089
2037	12		24.546.184.809		32.462.581.160	57.008.765.968	71.568.466.305	0,3555	20.266.616.302	25.442.589.771
2038	13		25.773.494.049		34.072.871.652	59.846.365.701	75.146.889.620	0,3262	19.521.884.492	24.512.915.394
2039	14		27.062.168.751		35.763.676.668	62.825.845.420	78.904.234.101	0,2992	18.797.492.950	23.608.146.843
2040	15		28.415.277.189	12.438.726.240	37.539.021.935	78.393.025.365	82.849.445.806	0,2745	21.518.885.463	22.742.172.874
2041	16		29.836.041.048		39.403.134.466	69.239.175.514	86.991.918.096	0,2519	17.441.348.312	21.913.264.168
2042	17		31.327.843.101		41.360.452.623	72.688.295.724	91.341.514.001	0,2311	16.798.265.142	21.109.023.886
2043	18		32.894.235.256		43.415.636.688	76.309.871.944	95.908.589.701	0,2120	16.177.692.852	20.332.621.017
2044	19		34.538.947.019		45.573.579.956	80.112.526.975	100.704.019.186	0,1945	15.581.886.497	19.586.931.732
2045	20		36.265.894.370	15.875.316.961	47.839.420.388	99.980.631.719	105.739.220.145	0,1784	17.836.544.699	18.863.876.874
2046	21		38.079.189.088		50.218.552.841	88.297.741.930	111.026.181.153	0,1637	14.454.340.354	18.174.985.855
2047	22		39.983.148.543		52.716.641.917	92.699.790.460	116.577.490.210	0,1502	13.923.508.527	17.509.939.030
2048	23		41.982.305.970		55.339.635.447	97.321.941.417	122.406.364.721	0,1378	13.410.963.527	16.867.597.059
2049	24		44.081.421.268		58.093.778.653	102.175.199.921	128.526.682.957	0,1264	12.914.945.270	16.245.772.726
2050	25		46.285.492.332	20.261.374.337	60.985.629.020	127.532.495.688	134.953.017.105	0,1160	14.793.769.500	15.654.549.984
2051	26		48.599.766.948		64.022.071.905	112.621.838.853	141.700.667.960	0,1064	11.982.963.654	15.076.951.071
2052	27		51.029.755.296		67.210.336.934	118.240.092.229	148.785.701.358	0,0976	11.540.233.002	14.521.484.453
2053	28		53.581.243.060		70.558.015.214	124.139.258.275	156.224.986.426	0,0895	11.110.463.616	13.982.136.285
2054	29		56.260.305.213		74.073.077.409	130.333.382.622	164.036.235.747	0,0822	10.713.404.052	13.483.778.578
2055	30		59.073.320.474	25.859.218.497	77.763.892.713	162.696.431.684	172.238.047.535	0,0754	12.267.310.949	12.986.748.784
2056	31		62.026.986.498		81.639.248.783	143.666.235.281	180.849.949.911	0,0691	9.927.336.858	12.496.731.539
2057	32		65.128.335.823		85.708.372.656	150.836.708.478	189.892.447.407	0,0634	9.563.047.318	12.039.181.166
2058	33		68.384.752.614		89.980.952.722	158.365.705.336	199.387.069.777	0,0582	9.216.884.051	11.604.327.461
2059	34		71.803.990.244		94.467.161.792	166.271.152.037	209.356.423.266	0,0534	8.878.879.519	11.179.633.002
2060	35		75.394.189.757	33.003.643.788	99.177.681.316	207.575.514.861	219.824.244.429	0,0490	10.171.200.228	10.771.387.977
									766.814.975.863	763.438.124.254
								NPV		-3.376.851.609

10%										
Tahun	Tahun ke	Biaya				Cost (Rp)	Benefit (Rp)	Faktor Bunga 10%	Present Value	
		Biaya Modal (Rp)	Biaya Tahunan (Rp)	Biaya Overhoal (Rp)	Biaya Pajak (Rp)				P/F	PWC (Rp)
2024	0	137.471.070.089	0		0	137.471.070.089		1	137.471.070.089	
2025	0									
2026	1		14.351.645.884		19.086.841.323	33.438.487.206	41.844.600.000	0,9091	30.398.928.719	38.040.925.860
2027	2		15.069.228.178		20.028.344.823	35.097.573.001	43.936.830.000	0,8264	29.004.634.328	36.309.396.312
2028	3		15.822.689.587		21.016.923.498	36.839.613.084	46.133.671.500	0,7513	27.677.601.310	34.660.227.398
2029	4		16.613.824.066		22.054.931.106	38.668.755.173	48.440.355.075	0,6830	26.410.759.783	33.084.762.516
2030	5		17.444.515.269	7.636.298.896	23.144.839.096	48.225.653.261	50.862.372.829	0,6209	29.943.308.110	31.580.447.289
2031	6		18.316.741.033		24.289.242.484	42.605.983.517	53.405.491.470	0,5645	24.051.077.695	30.147.399.935
2032	7		19.232.578.084		25.490.866.042	44.723.444.127	56.075.766.044	0,5132	22.952.071.526	28.778.083.134
2033	8		20.194.206.989		26.752.570.778	46.946.777.767	58.879.554.346	0,4665	21.900.671.828	27.467.312.102
2034	9		21.203.917.338		28.077.360.751	49.281.278.089	61.823.532.063	0,4241	20.900.190.038	26.219.359.948
2035	10		22.264.113.205	9.746.067.487	29.468.390.223	61.478.570.914	64.914.708.666	0,3855	23.699.989.087	25.024.620.191
2036	11		23.377.318.865		30.928.971.168	54.306.290.033	68.160.444.100	0,3505	19.034.354.657	23.890.235.657
2037	12		24.546.184.809		32.462.581.160	57.008.765.968	71.568.466.305	0,3186	18.162.992.838	22.801.713.365
2038	13		25.773.494.049		34.072.871.652	59.846.365.701	75.146.889.620	0,2897	17.337.492.143	21.770.053.923
2039	14		27.062.168.751		35.763.676.668	62.825.845.420	78.904.234.101	0,2633	16.542.045.099	20.775.484.839
2040	15		28.415.277.189	12.438.726.240	37.539.021.935	78.393.025.365	82.849.445.806	0,2394	18.767.290.272	19.834.157.326
2041	16		29.836.041.048		39.403.134.466	69.239.175.514	86.991.918.096	0,2176	15.066.444.592	18.929.441.378
2042	17		31.327.843.101		41.360.452.623	72.688.295.724	91.341.514.001	0,1978	14.377.744.894	18.067.351.469
2043	18		32.894.235.256		43.415.636.688	76.309.871.944	95.908.589.701	0,1799	13.728.145.963	17.253.955.287
2044	19		34.538.947.019		45.573.579.956	80.112.526.975	100.704.019.186	0,1635	13.098.398.160	16.465.107.137
2045	20		36.265.894.370	15.875.316.961	47.839.420.388	99.980.631.719	105.739.220.145	0,1486	14.857.121.873	15.712.848.114
2046	21		38.079.189.088		50.218.552.841	88.297.741.930	111.026.181.153	0,1351	11.929.024.935	14.999.637.074
2047	22		39.983.148.543		52.716.641.917	92.699.790.460	116.577.490.210	0,1228	11.383.534.268	14.315.715.798
2048	23		41.982.305.970		55.339.635.447	97.321.941.417	122.406.364.721	0,1117	10.870.860.856	13.672.790.939
2049	24		44.081.421.268		58.093.778.653	102.175.199.921	128.526.682.957	0,1015	10.370.782.792	13.045.458.320
2050	25		46.285.492.332	20.261.374.337	60.985.629.020	127.532.495.688	134.953.017.105	0,0923	11.771.249.352	12.456.163.479
2051	26		48.599.766.948		64.022.071.905	112.621.838.853	141.700.667.960	0,0839	9.448.972.280	11.888.686.042
2052	27		51.029.755.296		67.210.336.934	118.240.092.229	148.785.701.358	0,0763	9.021.719.037	11.352.349.014
2053	28		53.581.243.060		70.558.015.214	124.139.258.275	156.224.986.426	0,0693	8.602.850.598	10.826.391.559
2054	29		56.260.305.213		74.073.077.409	130.333.382.622	164.036.235.747	0,0630	8.211.003.105	10.334.282.852
2055	30		59.073.320.474	25.859.218.497	77.763.892.713	162.696.431.684	172.238.047.535	0,0573	9.322.505.535	9.869.240.124
2056	31		62.026.986.498		81.639.248.783	143.666.235.281	180.849.949.911	0,0521	7.485.010.858	9.422.282.390
2057	32		65.128.335.823		85.708.372.656	150.836.708.478	189.892.447.407	0,0474	7.149.659.982	9.000.902.007
2058	33		68.384.752.614		89.980.952.722	158.365.705.336	199.387.069.777	0,0431	6.825.561.900	8.593.582.707
2059	34		71.803.990.244		94.467.161.792	166.271.152.037	209.356.423.266	0,0391	6.501.202.045	8.185.836.150
2060	35		75.394.189.757	33.003.643.788	99.177.681.316	207.575.514.861	219.824.244.429	0,0356	7.389.688.329	7.825.743.102
									691.665.958.878	672.601.944.736
									NPV	-19.064.014.143

11%										
Tahun	Tahun ke	Biaya				Cost (Rp)	Benefit (Rp)	Faktor Bunga 11%	Present Value	
		Biaya Modal (Rp)	Biaya Tahunan (Rp)	Biaya Overhoal (Rp)	Biaya Pajak (Rp)				P/F	PWC (Rp)
2024	0	137.471.070.089	0		0	137.471.070.089		1	137.471.070.089	
2025	0									
2026	1		14.351.645.884		19.086.841.323	33.438.487.206	41.844.600.000	0,9009	30.124.733.124	37.697.800.140
2027	2		15.069.228.178		20.028.344.823	35.097.573.001	43.936.830.000	0,8116	28.485.190.247	35.659.131.228
2028	3		15.822.689.587		21.016.923.498	36.839.613.084	46.133.671.500	0,7312	26.937.125.087	33.732.940.601
2029	4		16.613.824.066		22.054.931.106	38.668.755.173	48.440.355.075	0,6587	25.471.109.032	31.907.661.888
2030	5		17.444.515.269	7.636.298.896	23.144.839.096	48.225.653.261	50.862.372.829	0,5935	28.621.925.210	30.186.818.274
2031	6		18.316.741.033		24.289.242.484	42.605.983.517	53.405.491.470	0,5346	22.777.158.788	28.550.575.740
2032	7		19.232.578.084		25.490.866.042	44.723.444.127	56.075.766.044	0,4817	21.543.283.036	27.011.696.503
2033	8		20.194.206.989		26.752.570.778	46.946.777.767	58.879.554.346	0,4339	20.370.206.873	25.547.838.631
2034	9		21.203.917.338		28.077.360.751	49.281.278.089	61.823.532.063	0,3909	19.264.051.605	24.166.818.683
2035	10		22.264.113.205	9.746.067.487	29.468.390.223	61.478.570.914	64.914.708.666	0,3522	21.652.752.676	22.862.960.392
2036	11		23.377.318.865		30.928.971.168	54.306.290.033	68.160.444.100	0,3173	17.231.385.827	21.627.308.913
2037	12		24.546.184.809		32.462.581.160	57.008.765.968	71.568.466.305	0,2858	16.293.105.314	20.454.267.670
2038	13		25.773.494.049		34.072.871.652	59.846.365.701	75.146.889.620	0,2575	15.410.439.168	19.350.324.077
2039	14		27.062.168.751		35.763.676.668	62.825.845.420	78.904.234.101	0,2320	14.575.596.137	18.305.782.311
2040	15		28.415.277.189	12.438.726.240	37.539.021.935	78.393.025.365	82.849.445.806	0,2090	16.384.142.301	17.315.534.173
2041	16		29.836.041.048		39.403.134.466	69.239.175.514	86.991.918.096	0,1883	13.037.736.749	16.380.578.178
2042	17		31.327.843.101		41.360.452.623	72.688.295.724	91.341.514.001	0,1696	12.327.934.955	15.491.520.775
2043	18		32.894.235.256		43.415.636.688	76.309.871.944	95.908.589.701	0,1528	11.660.148.433	14.654.832.506
2044	19		34.538.947.019		45.573.579.956	80.112.526.975	100.704.019.186	0,1377	11.031.494.964	13.866.943.442
2045	20		36.265.894.370	15.875.316.961	47.839.420.388	99.980.631.719	105.739.220.145	0,1240	12.397.598.333	13.111.663.298
2046	21		38.079.189.088		50.218.552.841	88.297.741.930	111.026.181.153	0,1117	9.862.857.774	12.401.624.435
2047	22		39.983.148.543		52.716.641.917	92.699.790.460	116.577.490.210	0,1007	9.334.868.899	11.739.353.264
2048	23		41.982.305.970		55.339.635.447	97.321.941.417	122.406.364.721	0,0907	8.827.100.087	11.102.257.280
2049	24		44.081.421.268		58.093.778.653	102.175.199.921	128.526.682.957	0,0817	8.347.713.834	10.500.629.998
2050	25		46.285.492.332	20.261.374.337	60.985.629.020	127.532.495.688	134.953.017.105	0,0736	9.386.391.683	9.932.542.059
2051	26		48.599.766.948		64.022.071.905	112.621.838.853	141.700.667.960	0,0663	7.466.827.916	9.394.754.286
2052	27		51.029.755.296		67.210.336.934	118.240.092.229	148.785.701.358	0,0597	7.058.933.506	8.882.506.371
2053	28		53.581.243.060		70.558.015.214	124.139.258.275	156.224.986.426	0,0538	6.678.692.095	8.404.904.270
2054	29		56.260.305.213		74.073.077.409	130.333.382.622	164.036.235.747	0,0485	6.321.169.057	7.955.757.434
2055	30		59.073.320.474	25.859.218.497	77.763.892.713	162.696.431.684	172.238.047.535	0,0437	7.109.834.065	7.526.802.677
2056	31		62.026.986.498		81.639.248.783	143.666.235.281	180.849.949.911	0,0394	5.660.449.670	7.125.488.027
2057	32		65.128.335.823		85.708.372.656	150.836.708.478	189.892.447.407	0,0355	5.354.703.151	6.741.181.883
2058	33		68.384.752.614		89.980.952.722	158.365.705.336	199.387.069.777	0,0319	5.051.866.000	6.360.447.526
2059	34		71.803.990.244		94.467.161.792	166.271.152.037	209.356.423.266	0,0288	4.788.609.179	6.029.464.990
2060	35		75.394.189.757	33.003.643.788	99.177.681.316	207.575.514.861	219.824.244.429	0,0259	5.376.205.835	5.693.447.931
									629.694.410.701	597.674.159.852
								NPV		-32.020.250.848

LAMPIRAN 14
BEP

Tahun	K	Biaya				Cost (Rp)	Benefit (Rp)	Faktor Bunga 5%	Present Value		PBP
		Biaya Modal (Rp)	Biaya Tahunan (Rp)	Biaya Overhoal (Rp)	Biaya Pajak (Rp)				P/F	Cost (Rp)	
2024	0	137.471.070.089				137.471.070.089		1	137.471.070.089		-137.471.070.089
2025	0		0		0	0	1,0000		0	0	0
2026	1		14.351.645.884		19.086.841.323	33.438.487.206	41.844.600.000	0,9524	31.846.815.215	39.852.797.040	-129.465.088.264
2027	2		15.069.228.178		20.028.344.823	35.097.573.001	43.936.830.000	0,9070	31.833.498.711	39.850.704.810	-121.447.882.166
2028	3		15.822.689.587		21.016.923.498	36.839.613.084	46.133.671.500	0,8638	31.822.057.782	39.850.265.442	-113.419.674.506
2029	4		16.613.824.066		22.054.931.106	38.668.755.173	48.440.355.075	0,8227	31.812.784.880	39.851.880.120	-105.380.579.267
2030	5		17.444.515.269	7.636.298.896	23.144.839.096	48.225.653.261	50.862.372.829	0,7835	37.784.799.330	39.850.669.111	-103.314.709.485
2031	6		18.316.741.033		24.289.242.484	42.605.983.517	53.405.491.470	0,7462	31.792.584.900	39.851.177.735	-95.256.116.651
2032	7		19.232.578.084		25.490.866.042	44.723.444.127	56.075.766.044	0,7107	31.784.951.741	39.853.046.927	-87.188.021.465
2033	8		20.194.206.989		26.752.570.778	46.946.777.767	58.879.554.346	0,6768	31.773.579.193	39.849.682.381	-79.111.918.276
2034	9		21.203.917.338		28.077.360.751	49.281.278.089	61.823.532.063	0,6446	31.766.711.856	39.851.448.768	-71.027.181.364
2035	10		22.264.113.205	9.746.067.487	29.468.390.223	61.478.570.914	64.914.708.666	0,6139	37.741.694.684	39.851.139.650	-68.917.736.398
2036	11		23.377.318.865		30.928.971.168	54.306.290.033	68.160.444.100	0,5847	31.752.887.782	39.853.411.665	-60.817.212.516
2037	12		24.546.184.809		32.462.581.160	57.008.765.968	71.568.466.305	0,5568	31.742.480.891	39.849.322.038	-52.710.371.368
2038	13		25.773.494.049		34.072.871.652	59.846.365.701	75.146.889.620	0,5303	31.736.527.731	39.850.395.565	-44.596.503.534
2039	14		27.062.168.751		35.763.676.668	62.825.845.420	78.904.234.101	0,5051	31.733.334.521	39.854.528.644	-36.475.309.411
2040	15		28.415.277.189	12.438.726.240	37.539.021.935	78.393.025.365	82.849.445.806	0,4810	37.707.045.200	39.850.583.433	-34.331.771.179
2041	16		29.836.041.048		39.403.134.466	69.239.175.514	86.991.918.096	0,4581	31.718.466.303	39.850.997.680	-26.199.239.802
2042	17		31.327.843.101		41.360.452.623	72.688.295.724	91.341.514.001	0,4363	31.713.903.424	39.852.302.559	-18.060.840.668
2043	18		32.894.235.256		43.415.636.688	76.309.871.944	95.908.589.701	0,4155	31.706.751.793	39.850.019.021	-9.917.573.440
2044	19		34.538.947.019		45.573.579.956	80.112.526.975	100.704.019.186	0,3957	31.700.526.924	39.848.580.392	-1.769.519.972
2045	20		36.265.894.370	15.875.316.961	47.839.420.388	99.980.631.719	105.739.220.145	0,3769	37.682.700.095	39.853.112.073	400.892.006
2046	21		38.079.189.088		50.218.552.841	88.297.741.930	111.026.181.153	0,3589	31.690.059.579	39.847.296.416	8.558.128.843
2047	22		39.983.148.543		52.716.641.917	92.699.790.460	116.577.490.210	0,3418	31.684.788.379	39.846.186.154	16.719.526.618
2048	23		41.982.305.970		55.339.635.447	97.321.941.417	122.406.364.721	0,3256	31.688.024.125	39.855.512.353	24.887.014.845
2049	24		44.081.421.268		58.093.778.653	102.175.199.921	128.526.682.957	0,3101	31.684.529.496	39.856.124.385	33.058.609.735
2050	25		46.285.492.332	20.261.374.337	60.985.629.020	127.532.495.688	134.953.017.105	0,2953	37.660.345.977	39.851.625.951	35.249.889.709
2051	26		48.599.766.948		64.022.071.905	112.621.838.853	141.700.667.960	0,2812	31.669.261.085	39.846.227.830	43.426.856.454
2052	27		51.029.755.296		67.210.336.934	118.240.092.229	148.785.701.358	0,2678	31.664.696.699	39.844.810.824	51.606.970.579
2053	28		53.581.243.060		70.558.015.214	124.139.258.275	156.224.986.426	0,2551	31.667.924.786	39.852.994.037	59.792.039.830
2054	29		56.260.305.213		74.073.077.409	130.333.382.622	164.036.235.747	0,2429	31.657.978.639	39.844.401.663	67.978.462.854
2055	30		59.073.320.474	25.859.218.497	77.763.892.713	162.696.431.684	172.238.047.535	0,2314	37.647.954.292	39.855.884.199	70.186.392.762
2056	31		62.026.986.498		81.639.248.783	143.666.235.281	180.849.949.911	0,2204	31.664.038.256	39.859.328.960	78.381.683.466
2057	32		65.128.335.823		85.708.372.656	150.836.708.478	189.892.447.407	0,2099	31.660.625.110	39.858.424.711	86.579.483.068
2058	33		68.384.752.614		89.980.952.722	158.365.705.336	199.387.069.777	0,1999	31.657.304.497	39.857.475.248	94.779.653.819
2059	34		71.803.990.244		94.467.161.792	166.271.152.037	209.356.423.266	0,1904	31.658.027.348	39.861.462.990	102.983.089.461
2060	35		75.394.189.757	33.003.643.788	99.177.681.316	207.575.514.861	219.824.244.429	0,1813	37.633.440.844	39.854.135.515	105.203.784.132
								NPV	1.125.340.736.105	1.195.527.128.867	140.372.785.524



LAMPIRAN 15

SENSITIVITAS

Cost naik, Manfaat tetap

5%										
Tahun	Tahun ke	Biaya				Cost (Rp)	Benefit (Rp)	Faktor Bunga 5%	Present Value	
		Biaya Modal (Rp)	Biaya Tahunan (Rp)	Biaya Overhoal (Rp)	Biaya Pajak (Rp)				P/F	Cost (Rp)
2024	0	137.471.070.089				137.471.070.089		1	137.471.070.089	
2025	0					0			0	0
2026	1		14.351.645.884		19.086.841.323	33.438.487.206	41.844.600.000	0,9524	31.846.815.215	39.852.797.040
2027	2		15.069.228.178		20.028.344.823	35.097.573.001	43.936.830.000	0,9070	31.833.498.711	39.850.704.810
2028	3		15.822.689.587		21.016.923.498	36.839.613.084	46.133.671.500	0,8638	31.822.057.782	39.850.265.442
2029	4		16.613.824.066		22.054.931.106	38.668.755.173	48.440.355.075	0,8227	31.812.784.880	39.851.880.120
2030	5		17.444.515.269	7.636.298.896	23.144.839.096	48.225.653.261	50.862.372.829	0,7835	37.784.799.330	39.850.669.111
2031	6		18.316.741.033		24.289.242.484	42.605.983.517	53.405.491.470	0,7462	31.792.584.900	39.851.177.735
2032	7		19.232.578.084		25.490.866.042	44.723.444.127	56.075.766.044	0,7107	31.784.951.741	39.853.046.927
2033	8		20.194.206.989		26.752.570.778	46.946.777.767	58.879.554.346	0,6768	31.773.579.193	39.849.682.381
2034	9		21.203.917.338		28.077.360.751	49.281.278.089	61.823.532.063	0,6446	31.766.711.856	39.851.448.768
2035	10		22.264.113.205	9.746.067.487	29.468.390.223	61.478.570.914	64.914.708.666	0,6139	37.741.694.684	39.851.139.650
2036	11		23.377.318.865		30.928.971.168	54.306.290.033	68.160.444.100	0,5847	31.752.887.782	39.853.411.665
2037	12		24.546.184.809		32.462.581.160	57.008.765.968	71.568.466.305	0,5568	31.742.480.891	39.849.322.038
2038	13		25.773.494.049		34.072.871.652	59.846.365.701	75.146.889.620	0,5303	31.736.527.731	39.850.395.565
2039	14		27.062.168.751		35.763.676.668	62.825.845.420	78.904.234.101	0,5051	31.733.334.521	39.854.528.644
2040	15		28.415.277.189	12.438.726.240	37.539.021.935	78.393.025.365	82.849.445.806	0,4810	37.707.045.200	39.850.583.433
2041	16		29.836.041.048		39.403.134.466	69.239.175.514	86.991.918.096	0,4581	31.718.466.303	39.850.997.680
2042	17		31.327.843.101		41.360.452.623	72.688.295.724	91.341.514.001	0,4363	31.713.903.424	39.852.302.559
2043	18		32.894.235.256		43.415.636.688	76.309.871.944	95.908.589.701	0,4155	31.706.751.793	39.850.019.021
2044	19		34.538.947.019		45.573.579.956	80.112.526.975	100.704.019.186	0,3957	31.700.526.924	39.848.580.392
2045	20		36.265.894.370	15.875.316.961	47.839.420.388	99.980.631.719	105.739.220.145	0,3769	37.682.700.095	39.853.112.073
2046	21		38.079.189.088		50.218.552.841	88.297.741.930	111.026.181.153	0,3589	31.690.059.579	39.847.296.416
2047	22		39.983.148.543		52.716.641.917	92.699.790.460	116.577.490.210	0,3418	31.684.788.379	39.846.186.154
2048	23		41.982.305.970		55.339.635.447	97.321.941.417	122.406.364.721	0,3256	31.688.024.125	39.855.512.353
2049	24		44.081.421.268		58.093.778.653	102.175.199.921	128.526.682.957	0,3101	31.684.529.496	39.856.124.385
2050	25		46.285.492.332	20.261.374.337	60.985.629.020	127.532.495.688	134.953.017.105	0,2953	37.660.345.977	39.851.625.951
2051	26		48.599.766.948		64.022.071.905	112.621.838.853	141.700.667.960	0,2812	31.669.261.085	39.846.227.830
2052	27		51.029.755.296		67.210.336.934	118.240.092.229	148.785.701.358	0,2678	31.664.696.699	39.844.810.824
2053	28		53.581.243.060		70.558.015.214	124.139.258.275	156.224.986.426	0,2551	31.667.924.786	39.852.994.037
2054	29		56.260.305.213		74.073.077.409	130.333.382.622	164.036.235.747	0,2429	31.657.978.639	39.844.401.663
2055	30		59.073.320.474	25.859.218.497	77.763.892.713	162.696.431.684	172.238.047.535	0,2314	37.647.954.292	39.855.884.199
2056	31		62.026.986.498		81.639.248.783	143.666.235.281	180.849.949.911	0,2204	31.664.038.256	39.859.328.960
2057	32		65.128.335.823		85.708.372.656	150.836.708.478	189.892.447.407	0,2099	31.660.625.110	39.858.424.711
2058	33		68.384.752.614		89.980.952.722	158.365.705.336	199.387.069.777	0,1999	31.657.304.497	39.857.475.248
2059	34		71.803.990.244		94.467.161.792	166.271.152.037	209.356.423.266	0,1904	31.658.027.348	39.861.462.990
2060	35		75.394.189.757	33.003.643.788	99.177.681.316	207.575.514.861	219.824.244.429	0,1813	37.633.440.844	39.854.135.515
									1.289.614.172.160	1.394.817.956.292
								NPV		105.203.784.132

6%										
Tahun	Tahun ke	Biaya				Cost (Rp)	Benefit (Rp)	Faktor Bunga 6%	Present Value	
		Biaya Modal (Rp)	Biaya Tahunan (Rp)	Biaya Overhoal (Rp)	Biaya Pajak (Rp)				P/F	Cost (Rp)
2024	0	145.719.334.294				145.719.334.294		1	145.719.334.294	
2025	0					0			0	0
2026	1		15.212.744.637		19.086.841.323	34.299.585.959	41.844.600.000	0,9434	32.358.229.394	39.476.195.640
2027	2		15.973.381.869		20.028.344.823	36.001.726.691	43.936.830.000	0,8900	32.041.536.755	39.103.778.700
2028	3		16.772.050.962		21.016.923.498	37.788.974.460	46.133.671.500	0,8396	31.727.622.956	38.733.830.591
2029	4		17.610.653.510		22.054.931.106	39.665.584.616	48.440.355.075	0,7921	31.419.109.575	38.369.605.255
2030	5		18.491.186.186	8.094.476.830	23.144.839.096	49.730.502.111	50.862.372.829	0,7473	37.163.604.228	38.009.451.215
2031	6		19.415.745.495		24.289.242.484	43.704.987.979	53.405.491.470	0,7050	30.812.016.525	37.650.871.486
2032	7		20.386.532.770		25.490.866.042	45.877.398.812	56.075.766.044	0,6651	30.513.057.950	37.295.991.996
2033	8		21.405.859.408		26.752.570.778	48.158.430.186	58.879.554.346	0,6274	30.214.599.099	36.941.032.397
2034	9		22.476.152.378		28.077.360.751	50.553.513.130	61.823.532.063	0,5919	29.922.624.421	36.593.348.628
2035	10		23.599.959.997	10.330.831.536	29.468.390.223	63.399.181.756	64.914.708.666	0,5584	35.402.103.092	36.248.373.319
2036	11		24.779.957.997		30.928.971.168	55.708.929.165	68.160.444.100	0,5268	29.347.463.884	35.906.921.952
2037	12		26.018.955.897		32.462.581.160	58.481.537.057	71.568.466.305	0,4970	29.065.323.917	35.569.527.753
2038	13		27.319.903.692		34.072.871.652	61.392.775.344	75.146.889.620	0,4688	28.780.933.081	35.228.861.854
2039	14		28.685.898.877		35.763.676.668	64.449.575.545	78.904.234.101	0,4423	28.506.047.263	34.899.342.743
2040	15		30.120.193.820	13.185.049.815	37.539.021.935	80.844.265.570	82.849.445.806	0,4173	33.736.312.022	34.573.073.735
2041	16		31.626.203.511		39.403.134.466	71.029.337.977	86.991.918.096	0,3936	27.957.147.428	34.240.018.963
2042	17		33.207.513.687		41.360.452.623	74.567.966.310	91.341.514.001	0,3714	27.694.542.688	33.924.238.300
2043	18		34.867.889.371		43.415.636.688	78.283.526.059	95.908.589.701	0,3503	27.422.719.179	33.596.778.972
2044	19		36.611.283.840		45.573.579.956	82.184.863.796	100.704.019.186	0,3305	27.162.097.485	33.282.678.341
2045	20		38.441.848.032	16.827.835.979	47.839.420.388	103.109.104.399	105.739.220.145	0,3118	32.149.418.752	32.969.488.841
2046	21		40.363.940.433		50.218.552.841	90.582.493.275	111.026.181.153	0,2942	26.649.369.521	32.663.902.495
2047	22		42.382.137.455		52.716.641.917	95.098.779.372	116.577.490.210	0,2775	26.389.911.276	32.350.253.533
2048	23		44.501.244.328		55.339.635.447	99.840.879.775	122.406.364.721	0,2618	26.138.342.325	32.045.986.284
2049	24		46.726.306.544		58.093.778.653	104.820.085.198	128.526.682.957	0,2470	25.890.561.044	31.746.090.690
2050	25		49.062.621.871	21.477.056.797	60.985.629.020	131.525.307.688	134.953.017.105	0,2330	30.645.396.691	31.444.052.985
2051	26		51.515.752.965		64.022.071.905	115.537.824.870	141.700.667.960	0,2198	25.395.213.906	31.145.806.818
2052	27		54.091.540.613		67.210.336.934	121.301.877.547	148.785.701.358	0,2074	25.158.009.403	30.858.154.462
2053	28		56.796.117.644		70.558.015.214	127.354.132.858	156.224.986.426	0,1956	24.910.468.387	30.557.607.345
2054	29		59.635.923.526		74.073.077.409	133.709.000.935	164.036.235.747	0,1846	24.682.681.573	30.281.089.119
2055	30		62.617.719.703	27.410.771.606	77.763.892.713	167.792.384.022	172.238.047.535	0,1741	29.212.654.058	29.986.644.076
2056	31		65.748.605.688		81.639.248.783	147.387.854.470	180.849.949.911	0,1643	24.215.824.489	29.713.646.770
2057	32		69.036.035.972		85.708.372.656	154.744.408.628	189.892.447.407	0,1550	23.985.383.337	29.433.329.348
2058	33		72.487.837.771		89.980.952.722	162.468.790.493	199.387.069.777	0,1462	23.752.937.170	29.150.389.601
2059	34		76.112.229.659		94.467.161.792	170.579.391.452	209.356.423.266	0,1379	23.522.898.081	28.870.250.768
2060	35		79.917.841.142	34.983.862.415	99.177.681.316	214.079.384.873	219.824.244.429	0,1301	27.851.727.972	28.599.134.200
									1.147.517.223.224	1.181.459.749.177
								NPV		33.942.525.953

7%										
Tahun	Tahun ke	Biaya				Cost (Rp)	Benefit (Rp)	Faktor Bunga 7%	Present Value	
		Biaya Modal (Rp)	Biaya Tahunan (Rp)	Biaya Overhoal (Rp)	Biaya Pajak (Rp)				P/F	Cost (Rp)
2024	0	147.094.044.995				147.094.044.995		1	147.094.044.995	
2025	0					0			0	0
2026	1		15.356.261.096		19.086.841.323	34.443.102.418	41.844.600.000	0,9346	32.190.523.520	39.107.963.160
2027	2		16.124.074.150		20.028.344.823	36.152.418.973	43.936.830.000	0,8734	31.575.522.731	38.374.427.322
2028	3		16.930.277.858		21.016.923.498	37.947.201.356	46.133.671.500	0,8163	30.976.300.467	37.658.916.045
2029	4		17.776.791.751		22.054.931.106	39.831.722.857	48.440.355.075	0,7629	30.387.621.368	36.955.146.887
2030	5		18.665.631.338	8.170.839.819	23.144.839.096	49.981.310.253	50.862.372.829	0,7130	35.636.674.210	36.264.871.827
2031	6		19.598.912.905		24.289.242.484	43.888.155.389	53.405.491.470	0,6663	29.242.677.936	35.584.078.967
2032	7		20.578.858.550		25.490.866.042	46.069.724.593	56.075.766.044	0,6227	28.687.617.504	34.918.379.515
2033	8		21.607.801.478		26.752.570.778	48.360.372.256	58.879.554.346	0,5820	28.145.736.653	34.267.900.629
2034	9		22.688.191.552		28.077.360.751	50.765.552.303	61.823.532.063	0,5439	27.611.383.898	33.625.819.089
2035	10		23.822.601.129	10.428.292.211	29.468.390.223	63.719.283.563	64.914.708.666	0,5083	32.388.511.835	32.996.146.415
2036	11		25.013.731.186		30.928.971.168	55.942.702.353	68.160.444.100	0,4751	26.578.377.888	32.383.026.992
2037	12		26.264.417.745		32.462.581.160	58.726.998.905	71.568.466.305	0,4440	26.074.787.514	31.776.399.039
2038	13		27.577.638.632		34.072.871.652	61.650.510.284	75.146.889.620	0,4150	25.584.961.768	31.185.959.192
2039	14		28.956.520.564		35.763.676.668	64.720.197.232	78.904.234.101	0,3878	25.098.492.487	30.599.061.984
2040	15		30.404.346.592	13.309.437.077	37.539.021.935	81.252.805.605	82.849.445.806	0,3624	29.446.016.751	30.024.639.160
2041	16		31.924.563.922		39.403.134.466	71.327.698.388	86.991.918.096	0,3387	24.158.691.444	29.464.162.659
2042	17		33.520.792.118		41.360.452.623	74.881.244.741	91.341.514.001	0,3166	23.707.402.085	28.918.723.333
2043	18		35.196.831.724		43.415.636.688	78.612.468.412	95.908.589.701	0,2959	23.261.429.403	28.379.351.693
2044	19		36.956.673.310		45.573.579.956	82.530.253.267	100.704.019.186	0,2765	22.819.615.028	27.844.661.305
2045	20		38.804.506.976	16.986.589.149	47.839.420.388	103.630.516.512	105.739.220.145	0,2584	26.778.125.467	27.323.014.486
2046	21		40.744.732.324		50.218.552.841	90.963.285.166	111.026.181.153	0,2415	21.967.633.368	26.812.822.748
2047	22		42.781.968.941		52.716.641.917	95.498.610.858	116.577.490.210	0,2257	21.554.036.471	26.311.539.540
2048	23		44.921.067.388		55.339.635.447	100.260.702.835	122.406.364.721	0,2109	21.144.982.228	25.815.502.320
2049	24		47.167.120.757		58.093.778.653	105.260.899.410	128.526.682.957	0,1971	20.746.923.274	25.332.609.211
2050	25		49.525.476.795	21.679.670.540	60.985.629.020	132.190.776.355	134.953.017.105	0,1842	24.349.541.005	24.858.345.751
2051	26		52.001.750.635		64.022.071.905	116.023.822.539	141.700.667.960	0,1722	19.979.302.241	24.400.855.023
2052	27		54.601.838.166		67.210.336.934	121.812.175.100	148.785.701.358	0,1609	19.599.578.974	23.939.619.348
2053	28		57.331.930.075		70.558.015.214	127.889.945.289	156.224.986.426	0,1504	19.234.647.771	23.496.237.958
2054	29		60.198.526.578		74.073.077.409	134.271.603.987	164.036.235.747	0,1406	18.878.587.521	23.063.494.746
2055	30		63.208.452.907	27.669.363.791	77.763.892.713	168.641.709.412	172.238.047.535	0,1314	22.159.520.617	22.632.079.446
2056	31		66.368.875.553		81.639.248.783	148.008.124.335	180.849.949.911	0,1228	18.175.397.668	22.208.373.849
2057	32		69.687.319.330		85.708.372.656	155.395.691.986	189.892.447.407	0,1147	17.823.885.871	21.780.663.718
2058	33		73.171.685.297		89.980.952.722	163.152.638.019	199.387.069.777	0,1072	17.489.962.796	21.374.293.880
2059	34		76.830.269.562		94.467.161.792	171.297.431.354	209.356.423.266	0,1002	17.164.002.622	20.977.513.611
2060	35		80.671.783.040	35.313.898.853	99.177.681.316	215.163.363.209	219.824.244.429	0,0937	20.160.807.133	20.597.531.703
									1.007.873.324.508	1.011.254.132.552
								NPV		3.380.808.044

8%										
Tahun	Tahun ke	Biaya				Cost (Rp)	Benefit (Rp)	Faktor Bunga 8%	Present Value	
		Biaya Modal (Rp)	Biaya Tahunan (Rp)	Biaya Overhoal (Rp)	Biaya Pajak (Rp)			P/F	Cost (Rp)	Benefit (Rp)
2024	0	148.468.755.696				148.468.755.696		1	148.468.755.696	
2025	0					0			0	0
2026	1		15.499.777.554		19.086.841.323	34.586.618.877	41.844.600.000	0,9259	32.023.750.418	38.743.915.140
2027	2		16.274.766.432		20.028.344.823	36.303.111.255	43.936.830.000	0,8573	31.122.657.279	37.667.044.359
2028	3		17.088.504.754		21.016.923.498	38.105.428.251	46.133.671.500	0,7938	30.248.088.946	36.620.908.437
2029	4		17.942.929.991		22.054.931.106	39.997.861.098	48.440.355.075	0,7350	29.398.427.907	35.603.660.980
2030	5		18.840.076.491	8.247.202.808	23.144.839.096	50.232.118.394	50.862.372.829	0,6806	34.187.979.779	34.616.930.947
2031	6		19.782.080.315		24.289.242.484	44.071.322.800	53.405.491.470	0,6302	27.773.747.628	33.656.140.725
2032	7		20.771.184.331		25.490.866.042	46.262.050.374	56.075.766.044	0,5835	26.993.906.393	32.720.209.486
2033	8		21.809.743.548		26.752.570.778	48.562.314.326	58.879.554.346	0,5403	26.238.218.430	31.812.623.213
2034	9		22.900.230.725		28.077.360.751	50.977.591.476	61.823.532.063	0,5002	25.498.991.256	30.924.130.738
2035	10		24.045.242.261	10.525.752.886	29.468.390.223	64.039.385.370	64.914.708.666	0,4632	29.663.043.303	30.068.493.054
2036	11		25.247.504.375		30.928.971.168	56.176.475.542	68.160.444.100	0,4289	24.094.090.360	29.234.014.474
2037	12		26.509.879.593		32.462.581.160	58.972.460.753	71.568.466.305	0,3971	23.417.964.165	28.419.837.970
2038	13		27.835.373.573		34.072.871.652	61.908.245.225	75.146.889.620	0,3677	22.763.661.769	27.631.511.313
2039	14		29.227.142.252		35.763.676.668	64.990.818.920	78.904.234.101	0,3405	22.129.373.842	26.866.891.711
2040	15		30.688.499.364	13.433.824.339	37.539.021.935	81.661.345.639	82.849.445.806	0,3152	25.739.656.145	26.114.145.318
2041	16		32.222.924.332		39.403.134.466	71.626.058.798	86.991.918.096	0,2919	20.907.646.563	25.392.940.892
2042	17		33.834.070.549		41.360.452.623	75.194.523.172	91.341.514.001	0,2703	20.325.079.613	24.689.611.234
2043	18		35.525.774.076		43.415.636.688	78.941.410.765	95.908.589.701	0,2502	19.751.140.973	23.996.329.143
2044	19		37.302.062.780		45.573.579.956	82.875.642.737	100.704.019.186	0,2317	19.202.286.422	23.333.121.245
2045	20		39.167.165.919	17.145.342.318	47.839.420.388	104.151.928.626	105.739.220.145	0,2145	22.340.588.690	22.681.062.721
2046	21		41.125.524.215		50.218.552.841	91.344.077.057	111.026.181.153	0,1987	18.150.068.111	22.060.902.195
2047	22		43.181.800.426		52.716.641.917	95.898.442.343	116.577.490.210	0,1839	17.635.723.547	21.438.600.450
2048	23		45.340.890.447		55.339.635.447	100.680.525.894	122.406.364.721	0,1703	17.145.893.560	20.845.803.912
2049	24		47.607.934.970		58.093.778.653	105.701.713.623	128.526.682.957	0,1577	16.669.160.238	20.268.657.902
2050	25		49.988.331.718	21.882.284.284	60.985.629.020	132.856.245.021	134.953.017.105	0,1460	19.397.011.773	19.703.140.497
2051	26		52.487.748.304		64.022.071.905	116.509.820.209	141.700.667.960	0,1352	15.752.127.692	19.157.930.308
2052	27		55.112.135.719		67.210.336.934	122.322.472.653	148.785.701.358	0,1252	15.314.773.576	18.627.969.810
2053	28		57.867.742.505		70.558.015.214	128.425.757.720	156.224.986.426	0,1159	14.884.545.320	18.106.475.927
2054	29		60.761.129.630		74.073.077.409	134.834.207.039	164.036.235.747	0,1073	14.467.710.415	17.601.088.096
2055	30		63.799.186.112	27.927.955.976	77.763.892.713	169.491.034.802	172.238.047.535	0,0994	16.847.408.859	17.120.461.925
2056	31		66.989.145.418		81.639.248.783	148.628.394.200	180.849.949.911	0,0920	13.673.812.266	16.638.195.392
2057	32		70.338.602.688		85.708.372.656	156.046.975.344	189.892.447.407	0,0852	13.295.202.299	16.178.836.519
2058	33		73.855.532.823		89.980.952.722	163.836.485.545	199.387.069.777	0,0789	12.926.698.710	15.731.639.805
2059	34		77.548.309.464		94.467.161.792	172.015.471.256	209.356.423.266	0,0730	12.557.129.402	15.283.018.898
2060	35		81.425.724.937	35.643.935.291	99.177.681.316	216.247.341.544	219.824.244.429	0,0676	14.618.320.288	14.860.118.923
									895.624.641.638	874.416.363.662
									NPV	-21.208.277.976

9%										
Tahun	Tahun ke	Biaya				Cost (Rp)	Benefit (Rp)	Faktor Bunga 9%	Present Value	
		Biaya Modal (Rp)	Biaya Tahunan (Rp)	Biaya Overhoal (Rp)	Biaya Pajak (Rp)				P/F	Cost (Rp)
2024	0	149.843.466.397				149.843.466.397		1	149.843.466.397	
2025	0					0			0	0
2026	1		15.643.294.013		19.086.841.323	34.730.135.336	41.844.600.000	0,9174	31.861.426.157	38.388.236.040
2027	2		16.425.458.714		20.028.344.823	36.453.803.537	43.936.830.000	0,8417	30.683.166.437	36.981.629.811
2028	3		17.246.731.650		21.016.923.498	38.263.655.147	46.133.671.500	0,7722	29.547.194.505	35.624.421.132
2029	4		18.109.068.232		22.054.931.106	40.163.999.338	48.440.355.075	0,7084	28.452.177.131	34.315.147.535
2030	5		19.014.521.644	8.323.565.797	23.144.839.096	50.482.926.536	50.862.372.829	0,6499	32.808.853.956	33.055.456.101
2031	6		19.965.247.726		24.289.242.484	44.254.490.210	53.405.491.470	0,5963	26.388.952.512	31.845.694.564
2032	7		20.963.510.112		25.490.866.042	46.454.376.154	56.075.766.044	0,5470	25.410.543.756	30.673.444.026
2033	8		22.011.685.618		26.752.570.778	48.764.256.396	58.879.554.346	0,5019	24.474.780.285	29.551.648.326
2034	9		23.112.269.899		28.077.360.751	51.189.630.650	61.823.532.063	0,4604	23.567.705.951	28.463.554.162
2035	10		24.267.883.394	10.623.213.561	29.468.390.223	64.359.487.177	64.914.708.666	0,4224	27.185.447.383	27.419.972.941
2036	11		25.481.277.563		30.928.971.168	56.410.248.731	68.160.444.100	0,3875	21.858.971.383	26.412.172.089
2037	12		26.755.341.441		32.462.581.160	59.217.922.601	71.568.466.305	0,3555	21.051.971.485	25.442.589.771
2038	13		28.093.108.513		34.072.871.652	62.165.980.165	75.146.889.620	0,3262	20.278.542.730	24.512.915.394
2039	14		29.497.763.939		35.763.676.668	65.261.440.607	78.904.234.101	0,2992	19.526.223.030	23.608.146.843
2040	15		30.972.652.136	13.558.211.602	37.539.021.935	82.069.885.673	82.849.445.806	0,2745	22.528.183.617	22.742.172.874
2041	16		32.521.284.743		39.403.134.466	71.924.419.209	86.991.918.096	0,2519	18.117.761.199	21.913.264.168
2042	17		34.147.348.980		41.360.452.623	75.507.801.603	91.341.514.001	0,2311	17.449.852.950	21.109.023.886
2043	18		35.854.716.429		43.415.636.688	79.270.353.117	95.908.589.701	0,2120	16.805.314.861	20.332.621.017
2044	19		37.647.452.250		45.573.579.956	83.221.032.207	100.704.019.186	0,1945	16.186.490.764	19.586.931.732
2045	20		39.529.824.863	17.304.095.488	47.839.420.388	104.673.340.739	105.739.220.145	0,1784	18.673.723.988	18.863.876.874
2046	21		41.506.316.106		50.218.552.841	91.724.868.948	111.026.181.153	0,1637	15.015.361.047	18.174.985.855
2047	22		43.581.631.911		52.716.641.917	96.298.273.829	116.577.490.210	0,1502	14.464.000.729	17.509.939.030
2048	23		45.760.713.507		55.339.635.447	101.100.348.954	122.406.364.721	0,1378	13.931.628.086	16.867.597.059
2049	24		48.048.749.182		58.093.778.653	106.142.527.836	128.526.682.957	0,1264	13.416.415.518	16.245.772.726
2050	25		50.451.186.641	22.084.898.027	60.985.629.020	133.521.713.688	134.953.017.105	0,1160	15.488.518.788	15.654.549.984
2051	26		52.973.745.974		64.022.071.905	116.995.817.878	141.700.667.960	0,1064	12.448.355.022	15.076.951.071
2052	27		55.622.433.272		67.210.336.934	122.832.770.206	148.785.701.358	0,0976	11.988.478.372	14.521.484.453
2053	28		58.403.554.936		70.558.015.214	128.961.570.150	156.224.986.426	0,0895	11.542.060.528	13.982.136.285
2054	29		61.323.732.683		74.073.077.409	135.396.810.092	164.036.235.747	0,0822	11.129.617.790	13.483.778.578
2055	30		64.389.919.317	28.186.548.161	77.763.892.713	170.340.360.191	172.238.047.535	0,0754	12.843.663.158	12.986.748.784
2056	31		67.609.415.283		81.639.248.783	149.248.664.065	180.849.949.911	0,0691	10.313.082.687	12.496.731.539
2057	32		70.989.886.047		85.708.372.656	156.698.258.702	189.892.447.407	0,0634	9.934.669.602	12.039.181.166
2058	33		74.539.380.349		89.980.952.722	164.520.333.071	199.387.069.777	0,0582	9.575.083.385	11.604.327.461
2059	34		78.266.349.366		94.467.161.792	172.733.511.159	209.356.423.266	0,0534	9.223.969.496	11.179.633.002
2060	35		82.179.666.835	35.973.971.729	99.177.681.316	217.331.319.880	219.824.244.429	0,0490	10.649.234.674	10.771.387.977
									804.664.889.360	763.438.124.254
								NPV		-41.226.765.106

10%										
Tahun	Tahun ke	Biaya				Cost (Rp)	Benefit (Rp)	Faktor Bunga 10%	Present Value	
		Biaya Modal (Rp)	Biaya Tahunan (Rp)	Biaya Overhoal (Rp)	Biaya Pajak (Rp)				P/F	Cost (Rp)
2024	0	151.218.177.098				151.218.177.098		1	151.218.177.098	
2025	0					0			0	0
2026	1		15.786.810.472		19.086.841.323	34.873.651.795	41.844.600.000	0,9091	31.703.636.847	38.040.925.860
2027	2		16.576.150.996		20.028.344.823	36.604.495.818	43.936.830.000	0,8264	30.249.955.344	36.309.396.312
2028	3		17.404.958.545		21.016.923.498	38.421.882.043	46.133.671.500	0,7513	28.866.359.979	34.660.227.398
2029	4		18.275.206.473		22.054.931.106	40.330.137.579	48.440.355.075	0,6830	27.545.483.967	33.084.762.516
2030	5		19.188.966.796	8.399.928.786	23.144.839.096	50.733.734.678	50.862.372.829	0,6209	31.500.575.861	31.580.447.289
2031	6		20.148.415.136		24.289.242.484	44.437.657.620	53.405.491.470	0,5645	25.085.057.727	30.147.399.935
2032	7		21.155.835.893		25.490.866.042	46.646.701.935	56.075.766.044	0,5132	23.939.087.433	28.778.083.134
2033	8		22.213.627.688		26.752.570.778	48.966.198.466	58.879.554.346	0,4665	22.842.731.584	27.467.312.102
2034	9		23.324.309.072		28.077.360.751	51.401.669.823	61.823.532.063	0,4241	21.799.448.172	26.219.359.948
2035	10		24.490.524.526	10.720.674.235	29.468.390.223	64.679.588.984	64.914.708.666	0,3855	24.933.981.553	25.024.620.191
2036	11		25.715.050.752		30.928.971.168	56.644.021.919	68.160.444.100	0,3505	19.853.729.683	23.890.235.657
2037	12		27.000.803.289		32.462.581.160	59.463.384.449	71.568.466.305	0,3186	18.945.034.286	22.801.713.365
2038	13		28.350.843.454		34.072.871.652	62.423.715.106	75.146.889.620	0,2897	18.084.150.266	21.770.053.923
2039	14		29.768.385.627		35.763.676.668	65.532.062.295	78.904.234.101	0,2633	17.254.592.002	20.775.484.839
2040	15		31.256.804.908	13.682.598.864	37.539.021.935	82.478.425.707	82.849.445.806	0,2394	19.745.335.114	19.834.157.326
2041	16		32.819.645.153		39.403.134.466	72.222.779.619	86.991.918.096	0,2176	15.715.676.845	18.929.441.378
2042	17		34.460.627.411		41.360.452.623	75.821.080.034	91.341.514.001	0,1978	14.997.409.631	18.067.351.469
2043	18		36.183.658.782		43.415.636.688	79.599.295.470	95.908.589.701	0,1799	14.319.913.255	17.253.955.287
2044	19		37.992.841.721		45.573.579.956	83.566.421.677	100.704.019.186	0,1635	13.663.109.944	16.465.107.137
2045	20		39.892.483.807	17.462.848.657	47.839.420.388	105.194.752.852	105.739.220.145	0,1486	15.631.940.274	15.712.848.114
2046	21		41.887.107.997		50.218.552.841	92.105.660.838	111.026.181.153	0,1351	12.443.474.779	14.999.637.074
2047	22		43.981.463.397		52.716.641.917	96.698.105.314	116.577.490.210	0,1228	11.874.527.333	14.315.715.798
2048	23		46.180.536.567		55.339.635.447	101.520.172.014	122.406.364.721	0,1117	11.339.803.214	13.672.790.939
2049	24		48.489.563.395		58.093.778.653	106.583.342.048	128.526.682.957	0,1015	10.818.209.218	13.045.458.320
2050	25		50.914.041.565	22.287.511.770	60.985.629.020	134.187.182.355	134.953.017.105	0,0923	12.385.476.931	12.456.163.479
2051	26		53.459.743.643		64.022.071.905	117.481.815.548	141.700.667.960	0,0839	9.856.724.324	11.888.686.042
2052	27		56.132.730.825		67.210.336.934	123.343.067.759	148.785.701.358	0,0763	9.411.076.070	11.352.349.014
2053	28		58.939.367.366		70.558.015.214	129.497.382.581	156.224.986.426	0,0693	8.974.168.613	10.826.391.559
2054	29		61.886.335.735		74.073.077.409	135.959.413.144	164.036.235.747	0,0630	8.565.443.028	10.334.282.852
2055	30		64.980.652.521	28.445.140.346	77.763.892.713	171.189.685.581	172.238.047.535	0,0573	9.809.168.984	9.869.240.124
2056	31		68.229.685.148		81.639.248.783	149.868.933.930	180.849.949.911	0,0521	7.808.171.458	9.422.282.390
2057	32		71.641.169.405		85.708.372.656	157.349.542.061	189.892.447.407	0,0474	7.458.368.294	9.000.902.007
2058	33		75.223.227.875		89.980.952.722	165.204.180.598	199.387.069.777	0,0431	7.120.300.184	8.593.582.707
2059	34		78.984.389.269		94.467.161.792	173.451.551.061	209.356.423.266	0,0391	6.781.955.646	8.185.836.150
2060	35		82.933.608.732	36.304.008.167	99.177.681.316	218.415.298.215	219.824.244.429	0,0356	7.775.584.616	7.825.743.102
									730.317.839.557	672.601.944.736
									NPV	-57.715.894.821

LAMPIRAN 16
SENSITIVITAS

Cost tetap, Manfaat turun

5%										
Tahun	Tahun ke	Biaya				Cost (Rp)	Benefit (Rp)	Faktor Bunga 5%	Present Value	
		Biaya Modal (Rp)	Biaya Tahunan (Rp)	Biaya Overhoal (Rp)	Biaya Pajak (Rp)				P/F	Cost (Rp)
2024	0	137.471.070.089				137.471.070.089		1	137.471.070.089	
2025	0					0			0	0
2026	1		14.351.645.884		19.086.841.323	33.438.487.206	41.844.600.000	0,9524	31.846.815.215	39.852.797.040
2027	2		15.069.228.178		20.028.344.823	35.097.573.001	43.936.830.000	0,9070	31.833.498.711	39.850.704.810
2028	3		15.822.689.587		21.016.923.498	36.839.613.084	46.133.671.500	0,8638	31.822.057.782	39.850.265.442
2029	4		16.613.824.066		22.054.931.106	38.668.755.173	48.440.355.075	0,8227	31.812.784.880	39.851.880.120
2030	5		17.444.515.269	7.636.298.896	23.144.839.096	48.225.653.261	50.862.372.829	0,7835	37.784.799.330	39.850.669.111
2031	6		18.316.741.033		24.289.242.484	42.605.983.517	53.405.491.470	0,7462	31.792.584.900	39.851.177.735
2032	7		19.232.578.084		25.490.866.042	44.723.444.127	56.075.766.044	0,7107	31.784.951.741	39.853.046.927
2033	8		20.194.206.989		26.752.570.778	46.946.777.767	58.879.554.346	0,6768	31.773.579.193	39.849.682.381
2034	9		21.203.917.338		28.077.360.751	49.281.278.089	61.823.532.063	0,6446	31.766.711.856	39.851.448.768
2035	10		22.264.113.205	9.746.067.487	29.468.390.223	61.478.570.914	64.914.708.666	0,6139	37.741.694.684	39.851.139.650
2036	11		23.377.318.865		30.928.971.168	54.306.290.033	68.160.444.100	0,5847	31.752.887.782	39.853.411.665
2037	12		24.546.184.809		32.462.581.160	57.008.765.968	71.568.466.305	0,5568	31.742.480.891	39.849.322.038
2038	13		25.773.494.049		34.072.871.652	59.846.365.701	75.146.889.620	0,5303	31.736.527.731	39.850.395.565
2039	14		27.062.168.751		35.763.676.668	62.825.845.420	78.904.234.101	0,5051	31.733.334.521	39.854.528.644
2040	15		28.415.277.189	12.438.726.240	37.539.021.935	78.393.025.365	82.849.445.806	0,4810	37.707.045.200	39.850.583.433
2041	16		29.836.041.048		39.403.134.466	69.239.175.514	86.991.918.096	0,4581	31.718.466.303	39.850.997.680
2042	17		31.327.843.101		41.360.452.623	72.688.295.724	91.341.514.001	0,4363	31.713.903.424	39.852.302.559
2043	18		32.894.235.256		43.415.636.688	76.309.871.944	95.908.589.701	0,4155	31.706.751.793	39.850.019.021
2044	19		34.538.947.019		45.573.579.956	80.112.526.975	100.704.019.186	0,3957	31.700.526.924	39.848.580.392
2045	20		36.265.894.370	15.875.316.961	47.839.420.388	99.980.631.719	105.739.220.145	0,3769	37.682.700.095	39.853.112.073
2046	21		38.079.189.088		50.218.552.841	88.297.741.930	111.026.181.153	0,3589	31.690.059.579	39.847.296.416
2047	22		39.983.148.543		52.716.641.917	92.699.790.460	116.577.490.210	0,3418	31.684.788.379	39.846.186.154
2048	23		41.982.305.970		55.339.635.447	97.321.941.417	122.406.364.721	0,3256	31.688.024.125	39.855.512.353
2049	24		44.081.421.268		58.093.778.653	102.175.199.921	128.526.682.957	0,3101	31.684.529.496	39.856.124.385
2050	25		46.285.492.332	20.261.374.337	60.985.629.020	127.532.495.688	134.953.017.105	0,2953	37.660.345.977	39.851.625.951
2051	26		48.599.766.948		64.022.071.905	112.621.838.853	141.700.667.960	0,2812	31.669.261.085	39.846.227.830
2052	27		51.029.755.296		67.210.336.934	118.240.092.229	148.785.701.358	0,2678	31.664.696.699	39.844.810.824
2053	28		53.581.243.060		70.558.015.214	124.139.258.275	156.224.986.426	0,2551	31.667.924.786	39.852.994.037
2054	29		56.260.305.213		74.073.077.409	130.333.382.622	164.036.235.747	0,2429	31.657.978.639	39.844.401.663
2055	30		59.073.320.474	25.859.218.497	77.763.892.713	162.696.431.684	172.238.047.535	0,2314	37.647.954.292	39.855.884.199
2056	31		62.026.986.498		81.639.248.783	143.666.235.281	180.849.949.911	0,2204	31.664.038.256	39.859.328.960
2057	32		65.128.335.823		85.708.372.656	150.836.708.478	189.892.447.407	0,2099	31.660.625.110	39.858.424.711
2058	33		68.384.752.614		89.980.952.722	158.365.705.336	199.387.069.777	0,1999	31.657.304.497	39.857.475.248
2059	34		71.803.990.244		94.467.161.792	166.271.152.037	209.356.423.266	0,1904	31.658.027.348	39.861.462.990
2060	35		75.394.189.757	33.003.643.788	99.177.681.316	207.575.514.861	219.824.244.429	0,1813	37.633.440.844	39.854.135.515
									1.289.614.172.160	1.394.817.956.292
								NPV		105.203.784.132

6%										
Tahun	Tahun ke	Biaya				Cost (Rp)	Benefit (Rp)	Faktor Bunga 6%	Present Value	
		Biaya Modal (Rp)	Biaya Tahunan (Rp)	Biaya Overhoal (Rp)	Biaya Pajak (Rp)				P/F	Cost (Rp)
2024	0	137.471.070.089				137.471.070.089		1	137.471.070.089	
2025	0					0			0	0
2026	1		14.351.645.884		19.086.841.323	33.438.487.206	39.333.924.000	0,9434	31.545.868.830	37.107.623.902
2027	2		15.069.228.178		20.028.344.823	35.097.573.001	41.300.620.200	0,8900	31.236.839.970	36.757.551.978
2028	3		15.822.689.587		21.016.923.498	36.839.613.084	43.365.651.210	0,8396	30.930.539.146	36.409.800.756
2029	4		16.613.824.066		22.054.931.106	38.668.755.173	45.533.933.771	0,7921	30.629.520.972	36.067.428.940
2030	5		17.444.515.269	7.636.298.896	23.144.839.096	48.225.653.261	47.810.630.459	0,7473	36.039.030.682	35.728.884.142
2031	6		18.316.741.033		24.289.242.484	42.605.983.517	50.201.161.982	0,7050	30.037.218.380	35.391.819.197
2032	7		19.232.578.084		25.490.866.042	44.723.444.127	52.711.220.081	0,6651	29.745.562.689	35.058.232.476
2033	8		20.194.206.989		26.752.570.778	46.946.777.767	55.346.781.085	0,6274	29.454.408.371	34.724.570.453
2034	9		21.203.917.338		28.077.360.751	49.281.278.089	58.114.120.139	0,5919	29.169.588.501	34.397.747.711
2035	10		22.264.113.205	9.746.067.487	29.468.390.223	61.478.570.914	61.019.826.146	0,5584	34.329.633.999	34.073.470.920
2036	11		23.377.318.865		30.928.971.168	54.306.290.033	64.070.817.454	0,5268	28.608.553.589	33.752.506.635
2037	12		24.546.184.809		32.462.581.160	57.008.765.968	67.274.358.326	0,4970	28.333.356.686	33.435.356.088
2038	13		25.773.494.049		34.072.871.652	59.846.365.701	70.638.076.243	0,4688	28.055.976.240	33.115.130.143
2039	14		27.062.168.751		35.763.676.668	62.825.845.420	74.169.980.055	0,4423	27.787.871.429	32.805.382.178
2040	15		28.415.277.189	12.438.726.240	37.539.021.935	78.393.025.365	77.878.479.058	0,4173	32.713.409.485	32.498.689.311
2041	16		29.836.041.048		39.403.134.466	69.239.175.514	81.772.403.010	0,3936	27.252.539.482	32.185.617.825
2042	17		31.327.843.101		41.360.452.623	72.688.295.724	85.861.023.161	0,3714	26.996.433.032	31.888.784.002
2043	18		32.894.235.256		43.415.636.688	76.309.871.944	90.154.074.319	0,3503	26.731.348.142	31.580.972.234
2044	19		34.538.947.019		45.573.579.956	80.112.526.975	94.661.778.035	0,3305	26.477.190.165	31.285.717.641
2045	20		36.265.894.370	15.875.316.961	47.839.420.388	99.980.631.719	99.394.866.937	0,3118	31.173.960.970	30.991.319.511
2046	21		38.079.189.088		50.218.552.841	88.297.741.930	104.364.610.284	0,2942	25.977.195.676	30.704.068.345
2047	22		39.983.148.543		52.716.641.917	92.699.790.460	109.582.840.798	0,2775	25.724.191.853	30.409.238.321
2048	23		41.982.305.970		55.339.635.447	97.321.941.417	115.061.982.838	0,2618	25.478.884.263	30.123.227.107
2049	24		44.081.421.268		58.093.778.653	102.175.199.921	120.815.081.979	0,2470	25.237.274.381	29.841.325.249
2050	25		46.285.492.332	20.261.374.337	60.985.629.020	127.532.495.688	126.855.836.078	0,2330	29.715.071.495	29.557.409.806
2051	26		48.599.766.948		64.022.071.905	112.621.838.853	133.198.627.882	0,2198	24.754.280.180	29.277.058.409
2052	27		51.029.755.296		67.210.336.934	118.240.092.229	139.858.559.276	0,2074	24.522.995.128	29.006.665.194
2053	28		53.581.243.060		70.558.015.214	124.139.258.275	146.851.487.240	0,1956	24.281.638.919	28.724.150.904
2054	29		56.260.305.213		74.073.077.409	130.333.382.622	154.194.061.602	0,1846	24.059.542.432	28.464.223.772
2055	30		59.073.320.474	25.859.218.497	77.763.892.713	162.696.431.684	161.903.764.682	0,1741	28.325.448.756	28.187.445.431
2056	31		62.026.986.498		81.639.248.783	143.666.235.281	169.998.952.917	0,1643	23.604.362.457	27.930.827.964
2057	32		65.128.335.823		85.708.372.656	150.836.708.478	178.498.900.562	0,1550	23.379.689.814	27.667.329.587
2058	33		68.384.752.614		89.980.952.722	158.365.705.336	187.423.845.591	0,1462	23.153.066.120	27.401.366.225
2059	34		71.803.990.244		94.467.161.792	166.271.152.037	196.795.037.870	0,1379	22.928.791.866	27.138.035.722
2060	35		75.394.189.757	33.003.643.788	99.177.681.316	207.575.514.861	206.634.789.764	0,1301	27.005.574.483	26.883.186.148
									1.112.867.928.673	1.110.572.164.226
								NPV		-2.295.764.447

7%										
Tahun	Tahun ke	Biaya				Cost (Rp)	Benefit (Rp)	Faktor Bunga 7%	Present Value	
		Biaya Modal (Rp)	Biaya Tahunan (Rp)	Biaya Overhoal (Rp)	Biaya Pajak (Rp)				P/F	Cost (Rp)
2024	0	137.471.070.089				137.471.070.089		1	137.471.070.089	
2025	0					0			0	0
2026	1		14.351.645.884		19.086.841.323	33.438.487.206	39.333.924.000	0,9346	31.251.610.143	36.761.485.370
2027	2		15.069.228.178		20.028.344.823	35.097.573.001	41.300.620.200	0,8734	30.654.220.259	36.071.961.683
2028	3		15.822.689.587		21.016.923.498	36.839.613.084	43.365.651.210	0,8163	30.072.176.161	35.399.381.083
2029	4		16.613.824.066		22.054.931.106	38.668.755.173	45.533.933.771	0,7629	29.500.393.321	34.737.838.074
2030	5		17.444.515.269	7.636.298.896	23.144.839.096	48.225.653.261	47.810.630.459	0,7130	34.384.890.775	34.088.979.517
2031	6		18.316.741.033		24.289.242.484	42.605.983.517	50.201.161.982	0,6663	28.388.366.817	33.449.034.229
2032	7		19.232.578.084		25.490.866.042	44.723.444.127	52.711.220.081	0,6227	27.849.288.658	32.823.276.744
2033	8		20.194.206.989		26.752.570.778	46.946.777.767	55.346.781.085	0,5820	27.323.024.660	32.211.826.592
2034	9		21.203.917.338		28.077.360.751	49.281.278.089	58.114.120.139	0,5439	26.804.087.153	31.608.269.944
2035	10		22.264.113.205	9.746.067.487	29.468.390.223	61.478.570.914	61.019.826.146	0,5083	31.249.557.596	31.016.377.630
2036	11		23.377.318.865		30.928.971.168	54.306.290.033	64.070.817.454	0,4751	25.800.918.395	30.440.045.372
2037	12		24.546.184.809		32.462.581.160	57.008.765.968	67.274.358.326	0,4440	25.311.892.090	29.869.815.097
2038	13		25.773.494.049		34.072.871.652	59.846.365.701	70.638.076.243	0,4150	24.836.241.766	29.314.801.641
2039	14		27.062.168.751		35.763.676.668	62.825.845.420	74.169.980.055	0,3878	24.363.862.854	28.763.118.265
2040	15		28.415.277.189	12.438.726.240	37.539.021.935	78.393.025.365	77.878.479.058	0,3624	28.409.632.392	28.223.160.810
2041	16		29.836.041.048		39.403.134.466	69.239.175.514	81.772.403.010	0,3387	23.451.308.747	27.696.312.900
2042	17		31.327.843.101		41.360.452.623	72.688.295.724	85.861.023.161	0,3166	23.013.114.426	27.183.599.933
2043	18		32.894.235.256		43.415.636.688	76.309.871.944	90.154.074.319	0,2959	22.580.091.108	26.676.590.591
2044	19		34.538.947.019		45.573.579.956	80.112.526.975	94.661.778.035	0,2765	22.151.113.709	26.173.981.627
2045	20		36.265.894.370	15.875.316.961	47.839.420.388	99.980.631.719	99.394.866.937	0,2584	25.834.995.236	25.683.633.616
2046	21		38.079.189.088		50.218.552.841	88.297.741.930	104.364.610.284	0,2415	21.323.904.676	25.204.053.383
2047	22		39.983.148.543		52.716.641.917	92.699.790.460	109.582.840.798	0,2257	20.922.342.707	24.732.847.168
2048	23		41.982.305.970		55.339.635.447	97.321.941.417	115.061.982.838	0,2109	20.525.197.445	24.266.572.180
2049	24		44.081.421.268		58.093.778.653	102.175.199.921	120.815.081.979	0,1971	20.138.731.905	23.812.652.658
2050	25		46.285.492.332	20.261.374.337	60.985.629.020	127.532.495.688	126.855.836.078	0,1842	23.491.485.706	23.366.845.006
2051	26		48.599.766.948		64.022.071.905	112.621.838.853	133.198.627.882	0,1722	19.393.480.650	22.936.803.721
2052	27		51.029.755.296		67.210.336.934	118.240.092.229	139.858.559.276	0,1609	19.024.830.840	22.503.242.188
2053	28		53.581.243.060		70.558.015.214	124.139.258.275	146.851.487.240	0,1504	18.670.544.445	22.086.463.681
2054	29		56.260.305.213		74.073.077.409	130.333.382.622	154.194.061.602	0,1406	18.324.873.597	21.679.685.061
2055	30		59.073.320.474	25.859.218.497	77.763.892.713	162.696.431.684	161.903.764.682	0,1314	21.378.311.123	21.274.154.679
2056	31		62.026.986.498		81.639.248.783	143.666.235.281	169.998.952.917	0,1228	17.642.213.692	20.875.871.418
2057	32		65.128.335.823		85.708.372.656	150.836.708.478	178.498.900.562	0,1147	17.300.970.462	20.473.823.895
2058	33		68.384.752.614		89.980.952.722	158.365.705.336	187.423.845.591	0,1072	16.976.803.612	20.091.836.247
2059	34		71.803.990.244		94.467.161.792	166.271.152.037	196.795.037.870	0,1002	16.660.369.434	19.718.862.795
2060	35		75.394.189.757	33.003.643.788	99.177.681.316	207.575.514.861	206.634.789.764	0,0937	19.449.825.742	19.361.679.801
									971.925.742.390	950.578.884.599
								NPV		-21.346.857.791

8%										
Tahun	Tahun ke	Biaya				Cost (Rp)	Benefit (Rp)	Faktor Bunga 8%	Present Value	
		Biaya Modal (Rp)	Biaya Tahunan (Rp)	Biaya Overhoal (Rp)	Biaya Pajak (Rp)				P/F	Cost (Rp)
2024	0	137.471.070.089				137.471.070.089		1	137.471.070.089	
2025	0					0			0	0
2026	1		14.351.645.884		19.086.841.323	33.438.487.206	39.333.924.000	0,9259	30.960.695.304	36.419.280.232
2027	2		15.069.228.178		20.028.344.823	35.097.573.001	41.300.620.200	0,8573	30.089.149.333	35.407.021.697
2028	3		15.822.689.587		21.016.923.498	36.839.613.084	43.365.651.210	0,7938	29.243.284.866	34.423.653.930
2029	4		16.613.824.066		22.054.931.106	38.668.755.173	45.533.933.771	0,7350	28.421.535.052	33.467.441.321
2030	5		17.444.515.269	7.636.298.896	23.144.839.096	48.225.653.261	47.810.630.459	0,6806	32.822.379.609	32.539.915.090
2031	6		18.316.741.033		24.289.242.484	42.605.983.517	50.201.161.982	0,6302	26.850.290.812	31.636.772.281
2032	7		19.232.578.084		25.490.866.042	44.723.444.127	52.711.220.081	0,5835	26.096.129.648	30.756.996.917
2033	8		20.194.206.989		26.752.570.778	46.946.777.767	55.346.781.085	0,5403	25.365.344.028	29.903.865.820
2034	9		21.203.917.338		28.077.360.751	49.281.278.089	58.114.120.139	0,5002	24.650.495.300	29.068.682.894
2035	10		22.264.113.205	9.746.067.487	29.468.390.223	61.478.570.914	61.019.826.146	0,4632	28.476.874.048	28.264.383.471
2036	11		23.377.318.865		30.928.971.168	54.306.290.033	64.070.817.454	0,4289	23.291.967.795	27.479.973.606
2037	12		24.546.184.809		32.462.581.160	57.008.765.968	67.274.358.326	0,3971	22.638.180.966	26.714.647.691
2038	13		25.773.494.049		34.072.871.652	59.846.365.701	70.638.076.243	0,3677	22.005.508.668	25.973.620.634
2039	14		27.062.168.751		35.763.676.668	62.825.845.420	74.169.980.055	0,3405	21.392.200.365	25.254.878.209
2040	15		28.415.277.189	12.438.726.240	37.539.021.935	78.393.025.365	77.878.479.058	0,3152	24.709.481.595	24.547.296.599
2041	16		29.836.041.048		39.403.134.466	69.239.175.514	81.772.403.010	0,2919	20.210.915.333	23.869.364.439
2042	17		31.327.843.101		41.360.452.623	72.688.295.724	85.861.023.161	0,2703	19.647.646.334	23.208.234.560
2043	18		32.894.235.256		43.415.636.688	76.309.871.944	90.154.074.319	0,2502	19.092.729.960	22.556.549.395
2044	19		34.538.947.019		45.573.579.956	80.112.526.975	94.661.778.035	0,2317	18.562.072.500	21.933.133.971
2045	20		36.265.894.370	15.875.316.961	47.839.420.388	99.980.631.719	99.394.866.937	0,2145	21.445.845.504	21.320.198.958
2046	21		38.079.189.088		50.218.552.841	88.297.741.930	104.364.610.284	0,1987	17.544.761.321	20.737.248.063
2047	22		39.983.148.543		52.716.641.917	92.699.790.460	109.582.840.798	0,1839	17.047.491.466	20.152.284.423
2048	23		41.982.305.970		55.339.635.447	97.321.941.417	115.061.982.838	0,1703	16.573.926.623	19.595.055.677
2049	24		44.081.421.268		58.093.778.653	102.175.199.921	120.815.081.979	0,1577	16.113.029.028	19.052.538.428
2050	25		46.285.492.332	20.261.374.337	60.985.629.020	127.532.495.688	126.855.836.078	0,1460	18.619.744.370	18.520.952.067
2051	26		48.599.766.948		64.022.071.905	112.621.838.853	133.198.627.882	0,1352	15.226.472.613	18.008.454.490
2052	27		51.029.755.296		67.210.336.934	118.240.092.229	139.858.559.276	0,1252	14.803.659.547	17.510.291.621
2053	28		53.581.243.060		70.558.015.214	124.139.258.275	146.851.487.240	0,1159	14.387.740.034	17.020.087.371
2054	29		56.260.305.213		74.073.077.409	130.333.382.622	154.194.061.602	0,1073	13.984.771.955	16.545.022.810
2055	30		59.073.320.474	25.859.218.497	77.763.892.713	162.696.431.684	161.903.764.682	0,0994	16.172.025.309	16.093.234.209
2056	31		62.026.986.498		81.639.248.783	143.666.235.281	169.998.952.917	0,0920	13.217.293.646	15.639.903.668
2057	32		65.128.335.823		85.708.372.656	150.836.708.478	178.498.900.562	0,0852	12.851.287.562	15.208.106.328
2058	33		68.384.752.614		89.980.952.722	158.365.705.336	187.423.845.591	0,0789	12.495.054.151	14.787.741.417
2059	34		71.803.990.244		94.467.161.792	166.271.152.037	196.795.037.870	0,0730	12.137.794.099	14.366.037.765
2060	35		75.394.189.757	33.003.643.788	99.177.681.316	207.575.514.861	206.634.789.764	0,0676	14.032.104.805	13.968.511.788
									858.650.953.641	821.951.381.843
								NPV		-36.699.571.798

9%										
Tahun	Tahun ke	Biaya				Cost (Rp)	Benefit (Rp)	Faktor Bunga 9%	Present Value	
		Biaya Modal (Rp)	Biaya Tahunan (Rp)	Biaya Overhoal (Rp)	Biaya Pajak (Rp)				P/F	Cost (Rp)
2024	0	137.471.070.089				137.471.070.089		1	137.471.070.089	
2025	0					0			0	0
2026	1		14.351.645.884		19.086.841.323	33.438.487.206	39.333.924.000	0,9174	30.676.468.163	36.084.941.878
2027	2		15.069.228.178		20.028.344.823	35.097.573.001	41.300.620.200	0,8417	29.541.627.195	34.762.732.022
2028	3		15.822.689.587		21.016.923.498	36.839.613.084	43.365.651.210	0,7722	28.447.549.224	33.486.955.864
2029	4		16.613.824.066		22.054.931.106	38.668.755.173	45.533.933.771	0,7084	27.392.946.164	32.256.238.683
2030	5		17.444.515.269	7.636.298.896	23.144.839.096	48.225.653.261	47.810.630.459	0,6499	31.341.852.054	31.072.128.735
2031	6		18.316.741.033		24.289.242.484	42.605.983.517	50.201.161.982	0,5963	25.405.947.971	29.934.952.890
2032	7		19.232.578.084		25.490.866.042	44.723.444.127	52.711.220.081	0,5470	24.463.723.937	28.833.037.384
2033	8		20.194.206.989		26.752.570.778	46.946.777.767	55.346.781.085	0,5019	23.562.587.761	27.778.549.427
2034	9		21.203.917.338		28.077.360.751	49.281.278.089	58.114.120.139	0,4604	22.689.100.432	26.755.740.912
2035	10		22.264.113.205	9.746.067.487	29.468.390.223	61.478.570.914	61.019.826.146	0,4224	25.968.548.354	25.774.774.564
2036	11		23.377.318.865		30.928.971.168	54.306.290.033	64.070.817.454	0,3875	21.043.687.388	24.827.441.763
2037	12		24.546.184.809		32.462.581.160	57.008.765.968	67.274.358.326	0,3555	20.266.616.302	23.916.034.385
2038	13		25.773.494.049		34.072.871.652	59.846.365.701	70.638.076.243	0,3262	19.521.884.492	23.042.140.470
2039	14		27.062.168.751		35.763.676.668	62.825.845.420	74.169.980.055	0,2992	18.797.492.950	22.191.658.032
2040	15		28.415.277.189	12.438.726.240	37.539.021.935	78.393.025.365	77.878.479.058	0,2745	21.518.885.463	21.377.642.501
2041	16		29.836.041.048		39.403.134.466	69.239.175.514	81.772.403.010	0,2519	17.441.348.312	20.598.468.318
2042	17		31.327.843.101		41.360.452.623	72.688.295.724	85.861.023.161	0,2311	16.798.265.142	19.842.482.452
2043	18		32.894.235.256		43.415.636.688	76.309.871.944	90.154.074.319	0,2120	16.177.692.852	19.112.663.756
2044	19		34.538.947.019		45.573.579.956	80.112.526.975	94.661.778.035	0,1945	15.581.886.497	18.411.715.828
2045	20		36.265.894.370	15.875.316.961	47.839.420.388	99.980.631.719	99.394.866.937	0,1784	17.836.544.699	17.732.044.262
2046	21		38.079.189.088		50.218.552.841	88.297.741.930	104.364.610.284	0,1637	14.454.340.354	17.084.486.703
2047	22		39.983.148.543		52.716.641.917	92.699.790.460	109.582.840.798	0,1502	13.923.508.527	16.459.342.688
2048	23		41.982.305.970		55.339.635.447	97.321.941.417	115.061.982.838	0,1378	13.410.963.527	15.855.541.235
2049	24		44.081.421.268		58.093.778.653	102.175.199.921	120.815.081.979	0,1264	12.914.945.270	15.271.026.362
2050	25		46.285.492.332	20.261.374.337	60.985.629.020	127.532.495.688	126.855.836.078	0,1160	14.793.769.500	14.715.276.985
2051	26		48.599.766.948		64.022.071.905	112.621.838.853	133.198.627.882	0,1064	11.982.963.654	14.172.334.007
2052	27		51.029.755.296		67.210.336.934	118.240.092.229	139.858.559.276	0,0976	11.540.233.002	13.650.195.385
2053	28		53.581.243.060		70.558.015.214	124.139.258.275	146.851.487.240	0,0895	11.110.463.616	13.143.208.108
2054	29		56.260.305.213		74.073.077.409	130.333.382.622	154.194.061.602	0,0822	10.713.404.052	12.674.751.864
2055	30		59.073.320.474	25.859.218.497	77.763.892.713	162.696.431.684	161.903.764.682	0,0754	12.267.310.949	12.207.543.857
2056	31		62.026.986.498		81.639.248.783	143.666.235.281	169.998.952.917	0,0691	9.927.336.858	11.746.927.647
2057	32		65.128.335.823		85.708.372.656	150.836.708.478	178.498.900.562	0,0634	9.563.047.318	11.316.830.296
2058	33		68.384.752.614		89.980.952.722	158.365.705.336	187.423.845.591	0,0582	9.216.884.051	10.908.067.813
2059	34		71.803.990.244		94.467.161.792	166.271.152.037	196.795.037.870	0,0534	8.878.879.519	10.508.855.022
2060	35		75.394.189.757	33.003.643.788	99.177.681.316	207.575.514.861	206.634.789.764	0,0490	10.171.200.228	10.125.104.698
									766.814.975.863	717.631.836.799
								NPV		-49.183.139.064

10%										
Tahun	Tahun ke	Biaya				Cost (Rp)	Benefit (Rp)	Faktor Bunga 10%	Present Value	
		Biaya Modal (Rp)	Biaya Tahunan (Rp)	Biaya Overhoal (Rp)	Biaya Pajak (Rp)				P/F	Cost (Rp)
2024	0	137.471.070.089				137.471.070.089		1	137.471.070.089	
2025	0					0			0	0
2026	1		14.351.645.884		19.086.841.323	33.438.487.206	39.333.924.000	0,9091	30.398.928.719	35.758.470.308
2027	2		15.069.228.178		20.028.344.823	35.097.573.001	41.300.620.200	0,8264	29.004.634.328	34.130.832.533
2028	3		15.822.689.587		21.016.923.498	36.839.613.084	43.365.651.210	0,7513	27.677.601.310	32.580.613.754
2029	4		16.613.824.066		22.054.931.106	38.668.755.173	45.533.933.771	0,6830	26.410.759.783	31.099.676.765
2030	5		17.444.515.269	7.636.298.896	23.144.839.096	48.225.653.261	47.810.630.459	0,6209	29.943.308.110	29.685.620.452
2031	6		18.316.741.033		24.289.242.484	42.605.983.517	50.201.161.982	0,5645	24.051.077.695	28.338.555.939
2032	7		19.232.578.084		25.490.866.042	44.723.444.127	52.711.220.081	0,5132	22.952.071.526	27.051.398.146
2033	8		20.194.206.989		26.752.570.778	46.946.777.767	55.346.781.085	0,4665	21.900.671.828	25.819.273.376
2034	9		21.203.917.338		28.077.360.751	49.281.278.089	58.114.120.139	0,4241	20.900.190.038	24.646.198.351
2035	10		22.264.113.205	9.746.067.487	29.468.390.223	61.478.570.914	61.019.826.146	0,3855	23.699.989.087	23.523.142.979
2036	11		23.377.318.865		30.928.971.168	54.306.290.033	64.070.817.454	0,3505	19.034.354.657	22.456.821.518
2037	12		24.546.184.809		32.462.581.160	57.008.765.968	67.274.358.326	0,3186	18.162.992.838	21.433.610.563
2038	13		25.773.494.049		34.072.871.652	59.846.365.701	70.638.076.243	0,2897	17.337.492.143	20.463.850.688
2039	14		27.062.168.751		35.763.676.668	62.825.845.420	74.169.980.055	0,2633	16.542.045.099	19.528.955.748
2040	15		28.415.277.189	12.438.726.240	37.539.021.935	78.393.025.365	77.878.479.058	0,2394	18.767.290.272	18.644.107.886
2041	16		29.836.041.048		39.403.134.466	69.239.175.514	81.772.403.010	0,2176	15.066.444.592	17.793.674.895
2042	17		31.327.843.101		41.360.452.623	72.688.295.724	85.861.023.161	0,1978	14.377.744.894	16.983.310.381
2043	18		32.894.235.256		43.415.636.688	76.309.871.944	90.154.074.319	0,1799	13.728.145.963	16.218.717.970
2044	19		34.538.947.019		45.573.579.956	80.112.526.975	94.661.778.035	0,1635	13.098.398.160	15.477.200.709
2045	20		36.265.894.370	15.875.316.961	47.839.420.388	99.980.631.719	99.394.866.937	0,1486	14.857.121.873	14.770.077.227
2046	21		38.079.189.088		50.218.552.841	88.297.741.930	104.364.610.284	0,1351	11.929.024.935	14.099.658.849
2047	22		39.983.148.543		52.716.641.917	92.699.790.460	109.582.840.798	0,1228	11.383.534.268	13.456.772.850
2048	23		41.982.305.970		55.339.635.447	97.321.941.417	115.061.982.838	0,1117	10.870.860.856	12.852.423.483
2049	24		44.081.421.268		58.093.778.653	102.175.199.921	120.815.081.979	0,1015	10.370.782.792	12.262.730.821
2050	25		46.285.492.332	20.261.374.337	60.985.629.020	127.532.495.688	126.855.836.078	0,0923	11.771.249.352	11.708.793.670
2051	26		48.599.766.948		64.022.071.905	112.621.838.853	133.198.627.882	0,0839	9.448.972.280	11.175.364.879
2052	27		51.029.755.296		67.210.336.934	118.240.092.229	139.858.559.276	0,0763	9.021.719.037	10.671.208.073
2053	28		53.581.243.060		70.558.015.214	124.139.258.275	146.851.487.240	0,0693	8.602.850.598	10.176.808.066
2054	29		56.260.305.213		74.073.077.409	130.333.382.622	154.194.061.602	0,0630	8.211.003.105	9.714.225.881
2055	30		59.073.320.474	25.859.218.497	77.763.892.713	162.696.431.684	161.903.764.682	0,0573	9.322.505.535	9.277.085.716
2056	31		62.026.986.498		81.639.248.783	143.666.235.281	169.998.952.917	0,0521	7.485.010.858	8.856.945.447
2057	32		65.128.335.823		85.708.372.656	150.836.708.478	178.498.900.562	0,0474	7.149.659.982	8.460.847.887
2058	33		68.384.752.614		89.980.952.722	158.365.705.336	187.423.845.591	0,0431	6.825.561.900	8.077.967.745
2059	34		71.803.990.244		94.467.161.792	166.271.152.037	196.795.037.870	0,0391	6.501.202.045	7.694.685.981
2060	35		75.394.189.757	33.003.643.788	99.177.681.316	207.575.514.861	206.634.789.764	0,0356	7.389.688.329	7.356.198.516
									691.665.958.878	632.245.828.052
								NPV		-59.420.130.827

LAMPIRAN 16
SENSITIVITAS

Cost turun, Manfaat turun

Tahun	Tahun ke	Biaya				Cost (Rp)	Benefit (Rp)	Faktor Bunga 5%	Present Value	
		Biaya Modal (Rp)	Biaya Tahunan (Rp)	Biaya Overhoal (Rp)	Biaya Pajak (Rp)				P/F	Cost (Rp)
2024	0	137.471.070.089				137.471.070.089		1	137.471.070.089	
2025	0					0			0	0
2026	1		14.351.645.884		19.086.841.323	33.438.487.206	41.844.600.000	0,9524	31.846.815.215	39.852.797.040
2027	2		15.069.228.178		20.028.344.823	35.097.573.001	43.936.830.000	0,9070	31.833.498.711	39.850.704.810
2028	3		15.822.689.587		21.016.923.498	36.839.613.084	46.133.671.500	0,8638	31.822.057.782	39.850.265.442
2029	4		16.613.824.066		22.054.931.106	38.668.755.173	48.440.355.075	0,8227	31.812.784.880	39.851.880.120
2030	5		17.444.515.269	7.636.298.896	23.144.839.096	48.225.653.261	50.862.372.829	0,7835	37.784.799.330	39.850.669.111
2031	6		18.316.741.033		24.289.242.484	42.605.983.517	53.405.491.470	0,7462	31.792.584.900	39.851.177.735
2032	7		19.232.578.084		25.490.866.042	44.723.444.127	56.075.766.044	0,7107	31.784.951.741	39.853.046.927
2033	8		20.194.206.989		26.752.570.778	46.946.777.767	58.879.554.346	0,6768	31.773.579.193	39.849.682.381
2034	9		21.203.917.338		28.077.360.751	49.281.278.089	61.823.532.063	0,6446	31.766.711.856	39.851.448.768
2035	10		22.264.113.205	9.746.067.487	29.468.390.223	61.478.570.914	64.914.708.666	0,6139	37.741.694.684	39.851.139.650
2036	11		23.377.318.865		30.928.971.168	54.306.290.033	68.160.444.100	0,5847	31.752.887.782	39.853.411.665
2037	12		24.546.184.809		32.462.581.160	57.008.765.968	71.568.466.305	0,5568	31.742.480.891	39.849.322.038
2038	13		25.773.494.049		34.072.871.652	59.846.365.701	75.146.889.620	0,5303	31.736.527.731	39.850.395.565
2039	14		27.062.168.751		35.763.676.668	62.825.845.420	78.904.234.101	0,5051	31.733.334.521	39.854.528.644
2040	15		28.415.277.189	12.438.726.240	37.539.021.935	78.393.025.365	82.849.445.806	0,4810	37.707.045.200	39.850.583.433
2041	16		29.836.041.048		39.403.134.466	69.239.175.514	86.991.918.096	0,4581	31.718.466.303	39.850.997.680
2042	17		31.327.843.101		41.360.452.623	72.688.295.724	91.341.514.001	0,4363	31.713.903.424	39.852.302.559
2043	18		32.894.235.256		43.415.636.688	76.309.871.944	95.908.589.701	0,4155	31.706.751.793	39.850.019.021
2044	19		34.538.947.019		45.573.579.956	80.112.526.975	100.704.019.186	0,3957	31.700.526.924	39.848.580.392
2045	20		36.265.894.370	15.875.316.961	47.839.420.388	99.980.631.719	105.739.220.145	0,3769	37.682.700.095	39.853.112.073
2046	21		38.079.189.088		50.218.552.841	88.297.741.930	111.026.181.153	0,3589	31.690.059.579	39.847.296.416
2047	22		39.983.148.543		52.716.641.917	92.699.790.460	116.577.490.210	0,3418	31.684.788.379	39.846.186.154
2048	23		41.982.305.970		55.339.635.447	97.321.941.417	122.406.364.721	0,3256	31.688.024.125	39.855.512.353
2049	24		44.081.421.268		58.093.778.653	102.175.199.921	128.526.682.957	0,3101	31.684.529.496	39.856.124.385
2050	25		46.285.492.332	20.261.374.337	60.985.629.020	127.532.495.688	134.953.017.105	0,2953	37.660.345.977	39.851.625.951
2051	26		48.599.766.948		64.022.071.905	112.621.838.853	141.700.667.960	0,2812	31.669.261.085	39.846.227.830
2052	27		51.029.755.296		67.210.336.934	118.240.092.229	148.785.701.358	0,2678	31.664.696.699	39.844.810.824
2053	28		53.581.243.060		70.558.015.214	124.139.258.275	156.224.986.426	0,2551	31.667.924.786	39.852.994.037
2054	29		56.260.305.213		74.073.077.409	130.333.382.622	164.036.235.747	0,2429	31.657.978.639	39.844.401.663
2055	30		59.073.320.474	25.859.218.497	77.763.892.713	162.696.431.684	172.238.047.535	0,2314	37.647.954.292	39.855.884.199
2056	31		62.026.986.498		81.639.248.783	143.666.235.281	180.849.949.911	0,2204	31.664.038.256	39.859.328.960
2057	32		65.128.335.823		85.708.372.656	150.836.708.478	189.892.447.407	0,2099	31.660.625.110	39.858.424.711
2058	33		68.384.752.614		89.980.952.722	158.365.705.336	199.387.069.777	0,1999	31.657.304.497	39.857.475.248
2059	34		71.803.990.244		94.467.161.792	166.271.152.037	209.356.423.266	0,1904	31.658.027.348	39.861.462.990
2060	35		75.394.189.757	33.003.643.788	99.177.681.316	207.575.514.861	219.824.244.429	0,1813	37.633.440.844	39.854.135.515
									1.289.614.172.160	1.394.817.956.292
								NPV		105.203.784.132

6%										
Tahun	Tahun ke	Biaya				Cost (Rp)	Benefit (Rp)	Faktor Bunga 6%	Present Value	
		Biaya Modal (Rp)	Biaya Tahunan (Rp)	Biaya Overhoal (Rp)	Biaya Pajak (Rp)				P/F	Cost (Rp)
2024	0	145.719.334.294				145.719.334.294		1	145.719.334.294	
2025	0					0			0	0
2026	1		15.212.744.637		19.086.841.323	34.299.585.959	39.333.924.000	0,9434	32.358.229.394	37.107.623.902
2027	2		15.973.381.869		20.028.344.823	36.001.726.691	41.300.620.200	0,8900	32.041.536.755	36.757.551.978
2028	3		16.772.050.962		21.016.923.498	37.788.974.460	43.365.651.210	0,8396	31.727.622.956	36.409.800.756
2029	4		17.610.653.510		22.054.931.106	39.665.584.616	45.533.933.771	0,7921	31.419.109.575	36.067.428.940
2030	5		18.491.186.186	8.094.476.830	23.144.839.096	49.730.502.111	47.810.630.459	0,7473	37.163.604.228	35.728.884.142
2031	6		19.415.745.495		24.289.242.484	43.704.987.979	50.201.161.982	0,7050	30.812.016.525	35.391.819.197
2032	7		20.386.532.770		25.490.866.042	45.877.398.812	52.711.220.081	0,6651	30.513.057.950	35.058.232.476
2033	8		21.405.859.408		26.752.570.778	48.158.430.186	55.346.781.085	0,6274	30.214.599.099	34.724.570.453
2034	9		22.476.152.378		28.077.360.751	50.553.513.130	58.114.120.139	0,5919	29.922.624.421	34.397.747.711
2035	10		23.599.959.997	10.330.831.536	29.468.390.223	63.399.181.756	61.019.826.146	0,5584	35.402.103.092	34.073.470.920
2036	11		24.779.957.997		30.928.971.168	55.708.929.165	64.070.817.454	0,5268	29.347.463.884	33.752.506.635
2037	12		26.018.955.897		32.462.581.160	58.481.537.057	67.274.358.326	0,4970	29.065.323.917	33.435.356.088
2038	13		27.319.903.692		34.072.871.652	61.392.775.344	70.638.076.243	0,4688	28.780.933.081	33.115.130.143
2039	14		28.685.898.877		35.763.676.668	64.449.575.545	74.169.980.055	0,4423	28.506.047.263	32.805.382.178
2040	15		30.120.193.820	13.185.049.815	37.539.021.935	80.844.265.570	77.878.479.058	0,4173	33.736.312.022	32.498.689.311
2041	16		31.626.203.511		39.403.134.466	71.029.337.977	81.772.403.010	0,3936	27.957.147.428	32.185.617.825
2042	17		33.207.513.687		41.360.452.623	74.567.966.310	85.861.023.161	0,3714	27.694.542.688	31.888.784.002
2043	18		34.867.889.371		43.415.636.688	78.283.526.059	90.154.074.319	0,3503	27.422.719.179	31.580.972.234
2044	19		36.611.283.840		45.573.579.956	82.184.863.796	94.661.778.035	0,3305	27.162.097.485	31.285.717.641
2045	20		38.441.848.032	16.827.835.979	47.839.420.388	103.109.104.399	99.394.866.937	0,3118	32.149.418.752	30.991.319.511
2046	21		40.363.940.433		50.218.552.841	90.582.493.275	104.364.610.284	0,2942	26.649.369.521	30.704.068.345
2047	22		42.382.137.455		52.716.641.917	95.098.779.372	109.582.840.798	0,2775	26.389.911.276	30.409.238.321
2048	23		44.501.244.328		55.339.635.447	99.840.879.775	115.061.982.838	0,2618	26.138.342.325	30.123.227.107
2049	24		46.726.306.544		58.093.778.653	104.820.085.198	120.815.081.979	0,2470	25.890.561.044	29.841.325.249
2050	25		49.062.621.871	21.477.056.797	60.985.629.020	131.525.307.688	126.855.836.078	0,2330	30.645.396.691	29.557.409.806
2051	26		51.515.752.965		64.022.071.905	115.537.824.870	133.198.627.882	0,2198	25.395.213.906	29.277.058.409
2052	27		54.091.540.613		67.210.336.934	121.301.877.547	139.858.559.276	0,2074	25.158.009.403	29.006.665.194
2053	28		56.796.117.644		70.558.015.214	127.354.132.858	146.851.487.240	0,1956	24.910.468.387	28.724.150.904
2054	29		59.635.923.526		74.073.077.409	133.709.000.935	154.194.061.602	0,1846	24.682.681.573	28.464.223.772
2055	30		62.617.719.703	27.410.771.606	77.763.892.713	167.792.384.022	161.903.764.682	0,1741	29.212.654.058	28.187.445.431
2056	31		65.748.605.688		81.639.248.783	147.387.854.470	169.998.952.917	0,1643	24.215.824.489	27.930.827.964
2057	32		69.036.035.972		85.708.372.656	154.744.408.628	178.498.900.562	0,1550	23.985.383.337	27.667.329.587
2058	33		72.487.837.771		89.980.952.722	162.468.790.493	187.423.845.591	0,1462	23.752.937.170	27.401.366.225
2059	34		76.112.229.659		94.467.161.792	170.579.391.452	196.795.037.870	0,1379	23.522.898.081	27.138.035.722
2060	35		79.917.841.142	34.983.862.415	99.177.681.316	214.079.384.873	206.634.789.764	0,1301	27.851.727.972	26.883.186.148
									1.147.517.223.224	1.110.572.164.226
								NPV		-36.945.058.998

7%										
Tahun	Tahun ke	Biaya				Cost (Rp)	Benefit (Rp)	Faktor Bunga 7%	Present Value	
		Biaya Modal (Rp)	Biaya Tahunan (Rp)	Biaya Overhoal (Rp)	Biaya Pajak (Rp)				P/F	Cost (Rp)
2024	0	147.094.044.995				147.094.044.995		1	147.094.044.995	
2025	0					0			0	0
2026	1		15.356.261.096		19.086.841.323	34.443.102.418	39.333.924.000	0,9346	32.190.523.520	36.761.485.370
2027	2		16.124.074.150		20.028.344.823	36.152.418.973	41.300.620.200	0,8734	31.575.522.731	36.071.961.683
2028	3		16.930.277.858		21.016.923.498	37.947.201.356	43.365.651.210	0,8163	30.976.300.467	35.399.381.083
2029	4		17.776.791.751		22.054.931.106	39.831.722.857	45.533.933.771	0,7629	30.387.621.368	34.737.838.074
2030	5		18.665.631.338	8.170.839.819	23.144.839.096	49.981.310.253	47.810.630.459	0,7130	35.636.674.210	34.088.979.517
2031	6		19.598.912.905		24.289.242.484	43.888.155.389	50.201.161.982	0,6663	29.242.677.936	33.449.034.229
2032	7		20.578.858.550		25.490.866.042	46.069.724.593	52.711.220.081	0,6227	28.687.617.504	32.823.276.744
2033	8		21.607.801.478		26.752.570.778	48.360.372.256	55.346.781.085	0,5820	28.145.736.653	32.211.826.592
2034	9		22.688.191.552		28.077.360.751	50.765.552.303	58.114.120.139	0,5439	27.611.383.898	31.608.269.944
2035	10		23.822.601.129	10.428.292.211	29.468.390.223	63.719.283.563	61.019.826.146	0,5083	32.388.511.835	31.016.377.630
2036	11		25.013.731.186		30.928.971.168	55.942.702.353	64.070.817.454	0,4751	26.578.377.888	30.440.045.372
2037	12		26.264.417.745		32.462.581.160	58.726.998.905	67.274.358.326	0,4440	26.074.787.514	29.869.815.097
2038	13		27.577.638.632		34.072.871.652	61.650.510.284	70.638.076.243	0,4150	25.584.961.768	29.314.801.641
2039	14		28.956.520.564		35.763.676.668	64.720.197.232	74.169.980.055	0,3878	25.098.492.487	28.763.118.265
2040	15		30.404.346.592	13.309.437.077	37.539.021.935	81.252.805.605	77.878.479.058	0,3624	29.446.016.751	28.223.160.810
2041	16		31.924.563.922		39.403.134.466	71.327.698.388	81.772.403.010	0,3387	24.158.691.444	27.696.312.900
2042	17		33.520.792.118		41.360.452.623	74.881.244.741	85.861.023.161	0,3166	23.707.402.085	27.183.599.933
2043	18		35.196.831.724		43.415.636.688	78.612.468.412	90.154.074.319	0,2959	23.261.429.403	26.676.590.591
2044	19		36.956.673.310		45.573.579.956	82.530.253.267	94.661.778.035	0,2765	22.819.615.028	26.173.981.627
2045	20		38.804.506.976	16.986.589.149	47.839.420.388	103.630.516.512	99.394.866.937	0,2584	26.778.125.467	25.683.633.616
2046	21		40.744.732.324		50.218.552.841	90.963.285.166	104.364.610.284	0,2415	21.967.633.368	25.204.053.383
2047	22		42.781.968.941		52.716.641.917	95.498.610.858	109.582.840.798	0,2257	21.554.036.471	24.732.847.168
2048	23		44.921.067.388		55.339.635.447	100.260.702.835	115.061.982.838	0,2109	21.144.982.228	24.266.572.180
2049	24		47.167.120.757		58.093.778.653	105.260.899.410	120.815.081.979	0,1971	20.746.923.274	23.812.652.658
2050	25		49.525.476.795	21.679.670.540	60.985.629.020	132.190.776.355	126.855.836.078	0,1842	24.349.541.005	23.366.845.006
2051	26		52.001.750.635		64.022.071.905	116.023.822.539	133.198.627.882	0,1722	19.979.302.241	22.936.803.721
2052	27		54.601.838.166		67.210.336.934	121.812.175.100	139.858.559.276	0,1609	19.599.578.974	22.503.242.188
2053	28		57.331.930.075		70.558.015.214	127.889.945.289	146.851.487.240	0,1504	19.234.647.771	22.086.463.681
2054	29		60.198.526.578		74.073.077.409	134.271.603.987	154.194.061.602	0,1406	18.878.587.521	21.679.685.061
2055	30		63.208.452.907	27.669.363.791	77.763.892.713	168.641.709.412	161.903.764.682	0,1314	22.159.520.617	21.274.154.679
2056	31		66.368.875.553		81.639.248.783	148.008.124.335	169.998.952.917	0,1228	18.175.397.668	20.875.871.418
2057	32		69.687.319.330		85.708.372.656	155.395.691.986	178.498.900.562	0,1147	17.823.885.871	20.473.823.895
2058	33		73.171.685.297		89.980.952.722	163.152.638.019	187.423.845.591	0,1072	17.489.962.796	20.091.836.247
2059	34		76.830.269.562		94.467.161.792	171.297.431.354	196.795.037.870	0,1002	17.164.002.622	19.718.862.795
2060	35		80.671.783.040	35.313.898.853	99.177.681.316	215.163.363.209	206.634.789.764	0,0937	20.160.807.133	19.361.679.801
									1.007.873.324.508	950.578.884.599
								NPV		-57.294.439.909

8%										
Tahun	Tahun ke	Biaya				Cost (Rp)	Benefit (Rp)	Faktor Bunga 8%	Present Value	
		Biaya Modal (Rp)	Biaya Tahunan (Rp)	Biaya Overhoal (Rp)	Biaya Pajak (Rp)				P/F	Cost (Rp)
2024	0	149.128.616.833				149.128.616.833		1	149.128.616.833	
2025	0					0			0	0
2026	1		15.499.777.554		19.086.841.323	34.586.618.877	39.333.924.000	0,9259	32.023.750.418	36.419.280.232
2027	2		16.274.766.432		20.028.344.823	36.303.111.255	41.300.620.200	0,8573	31.122.657.279	35.407.021.697
2028	3		17.088.504.754		21.016.923.498	38.105.428.251	43.365.651.210	0,7938	30.248.088.946	34.423.653.930
2029	4		17.942.929.991		22.054.931.106	39.997.861.098	45.533.933.771	0,7350	29.398.427.907	33.467.441.321
2030	5		18.840.076.491	8.247.202.808	23.144.839.096	50.232.118.394	47.810.630.459	0,6806	34.187.979.779	32.539.915.090
2031	6		19.782.080.315		24.289.242.484	44.071.322.800	50.201.161.982	0,6302	27.773.747.628	31.636.772.281
2032	7		20.771.184.331		25.490.866.042	46.262.050.374	52.711.220.081	0,5835	26.993.906.393	30.756.996.917
2033	8		21.809.743.548		26.752.570.778	48.562.314.326	55.346.781.085	0,5403	26.238.218.430	29.903.865.820
2034	9		22.900.230.725		28.077.360.751	50.977.591.476	58.114.120.139	0,5002	25.498.991.256	29.068.682.894
2035	10		24.045.242.261	10.525.752.886	29.468.390.223	64.039.385.370	61.019.826.146	0,4632	29.663.043.303	28.264.383.471
2036	11		25.247.504.375		30.928.971.168	56.176.475.542	64.070.817.454	0,4289	24.094.090.360	27.479.973.606
2037	12		26.509.879.593		32.462.581.160	58.972.460.753	67.274.358.326	0,3971	23.417.964.165	26.714.647.691
2038	13		27.835.373.573		34.072.871.652	61.908.245.225	70.638.076.243	0,3677	22.763.661.769	25.973.620.634
2039	14		29.227.142.252		35.763.676.668	64.990.818.920	74.169.980.055	0,3405	22.129.373.842	25.254.878.209
2040	15		30.688.499.364	13.433.824.339	37.539.021.935	81.661.345.639	77.878.479.058	0,3152	25.739.656.145	24.547.296.599
2041	16		32.222.924.332		39.403.134.466	71.626.058.798	81.772.403.010	0,2919	20.907.646.563	23.869.364.439
2042	17		33.834.070.549		41.360.452.623	75.194.523.172	85.861.023.161	0,2703	20.325.079.613	23.208.234.560
2043	18		35.525.774.076		43.415.636.688	78.941.410.765	90.154.074.319	0,2502	19.751.140.973	22.556.549.395
2044	19		37.302.062.780		45.573.579.956	82.875.642.737	94.661.778.035	0,2317	19.202.286.422	21.933.133.971
2045	20		39.167.165.919	17.145.342.318	47.839.420.388	104.151.928.626	99.394.866.937	0,2145	22.340.588.690	21.320.198.958
2046	21		41.125.524.215		50.218.552.841	91.344.077.057	104.364.610.284	0,1987	18.150.068.111	20.737.248.063
2047	22		43.181.800.426		52.716.641.917	95.898.442.343	109.582.840.798	0,1839	17.635.723.547	20.152.284.423
2048	23		45.340.890.447		55.339.635.447	100.680.525.894	115.061.982.838	0,1703	17.145.893.560	19.595.055.677
2049	24		47.607.934.970		58.093.778.653	105.701.713.623	120.815.081.979	0,1577	16.669.160.238	19.052.538.428
2050	25		49.988.331.718	21.882.284.284	60.985.629.020	132.856.245.021	126.855.836.078	0,1460	19.397.011.773	18.520.952.067
2051	26		52.487.748.304		64.022.071.905	116.509.820.209	133.198.627.882	0,1352	15.752.127.692	18.008.454.490
2052	27		55.112.135.719		67.210.336.934	122.322.472.653	139.858.559.276	0,1252	15.314.773.576	17.510.291.621
2053	28		57.867.742.505		70.558.015.214	128.425.757.720	146.851.487.240	0,1159	14.884.545.320	17.020.087.371
2054	29		60.761.129.630		74.073.077.409	134.834.207.039	154.194.061.602	0,1073	14.467.710.415	16.545.022.810
2055	30		63.799.186.112	27.927.955.976	77.763.892.713	169.491.034.802	161.903.764.682	0,0994	16.847.408.859	16.093.234.209
2056	31		66.989.145.418		81.639.248.783	148.628.394.200	169.998.952.917	0,0920	13.673.812.266	15.639.903.668
2057	32		70.338.602.688		85.708.372.656	156.046.975.344	178.498.900.562	0,0852	13.295.202.299	15.208.106.328
2058	33		73.855.532.823		89.980.952.722	163.836.485.545	187.423.845.591	0,0789	12.926.698.710	14.787.741.417
2059	34		77.548.309.464		94.467.161.792	172.015.471.256	196.795.037.870	0,0730	12.557.129.402	14.366.037.765
2060	35		81.425.724.937	35.643.935.291	99.177.681.316	216.247.341.544	206.634.789.764	0,0676	14.618.320.288	13.968.511.788
									896.284.502.774	821.951.381.843
								NPV		-74.333.120.932