

## BAB VI

### KESIMPULAN DAN SARAN

#### 6.1. Kesimpulan

Berdasarkan hasil survei, perhitungan serta analisis menggunakan data yang diperoleh dari ruas Jalan Kaliurang Km 13,5 – Km 16, Yogyakarta maka dapat disimpulkan sebagai berikut:

- a. hasil pengamatan visual di lokasi penelitian menunjukkan beberapa jenis kerusakan yang terjadi. Terdapat 7 (tujuh) jenis kerusakan jalan yaitu retak kulit buaya (*alligator cracking*), tambalan (*patching*), lubang (*potholes*), cacat tepi perkerasan (*edge cracking*), retak memanjang dan melintang, amblas (*depression*), dan penurunan bahu pada jalan. Dari semua kerusakan yang terjadi, kerusakan paling tinggi adalah retak kulit buaya (*alligator cracking*) dengan luas kerusakan sebesar 5504,907 m<sup>2</sup> dengan presentase 94,026%; sedangkan jenis kerusakan paling rendah adalah amblas (*depression*) sebesar 5,168 m<sup>2</sup> dengan presentase 0,088%;
- b. nilai yang dihasilkan dari penggunaan metode *Pavement Condition Index (PCI)* rata rata pada ruas Jalan Kaliurang Km 13,5 – Km 16, Yogyakarta dengan total 25 unit segmen penelitian adalah 44,676 dengan kondisi sedang (*fair*). Dari total sebanyak 25 unit segmen penelitian, nilai *Pavement Condition Index (PCI)* terendah atau yang menunjukkan kerusakan paling parah terjadi pada segmen ke-25 yaitu STA 2+400 – STA 2+500 dengan nilai PCI yaitu 17,7 dengan kondisi sangat buruk (*very poor*),

- c. penanganan yang tepat untuk kondisi ruas Jalan Kaliurang Km 13,5 – Km 16, Yogyakarta adalah dilakukan rekonstruksi dengan cara pelapisan ulang (*overlay*),
- d. sesuai dengan hasil perhitungan berdasarkan data yang didapat maka untuk tebal lapis tambah (*overlay*) adalah 4 cm untuk umur rencana 10 tahun dimulai dari perencanaan awal tahun 2019 hingga tahun 2029.

## 6.2. Saran

Berdasarkan kesimpulan yang sudah ada maka terdapat beberapa saran yang penulis berikan berkaitan dengan penanganan serta pemeliharaan di ruas Jalan Kaliurang Km 13,5 – Km 16, Yogyakarta yaitu:

- a. dapat digunakan metode pengambilan data dan metode perhitungan lapis tambah (*overlay*) lainnya guna menjadi pembanding antara metode satu dengan metode lainnya,
- b. pemeliharaan ruas jalan sebaiknya dilakukan lebih dini sehingga tidak terjadi kerusakan lebih parah yang dapat menimbulkan resiko kecelakaan bagi pengguna jalan,
- c. diperlukan pengelolaan *data base* jalan secara lengkap dan berkala meliputi data kerusakan, data teknis jalan serta data lalu lintas yang mungkin diperlukan sebagai dasar kegiatan penanganan jalan selanjutnya.

## DAFTAR PUSTAKA

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# LAMPIRAN



PEMERINTAH DAERAH DAERAH ISTIMEWA YOGYAKARTA  
**BADAN KESATUAN BANGSA DAN POLITIK**  
 Jl. Jenderal Sudirman No 5 Yogyakarta – 55233  
 Telepon : (0274) 551136, 551275, Fax (0274) 551137

Yogyakarta, 15 Februari 2019

Kepada Yth. :

Nomor : 074/1720/Kesbangpol/2019  
 Perihal : Rekomendasi Penelitian

1. Kepala Dinas Perhubungan DIY
2. Kepala Dinas Pekerjaan Umum Perumahan dan Energi Sumber Daya Mineral DIY

di TEMPAT

Memperhatikan surat :

Dari : Dekan Fakultas Teknik Universitas Atma Jaya Yogyakarta  
 Nomor : 0507/XI/U/2019  
 Tanggal : 11 Februari 2019  
 Perihal : Permohonan Data dan Ijin Survey

Setelah mempelajari surat permohonan dan proposal yang diajukan, maka dapat diberikan surat rekomendasi tidak keberatan untuk melaksanakan riset/penelitian dalam rangka penyusunan skripsi dengan judul proposal : "EVALUASI KERUSAKAN JALAN DENGAN METODE PAVEMENT CONDITION INDEX (PCI) UNTUK MENUNJANG PENGAMBILAN KEPUTUSAN (STUDI KASUS: JALAN KALIURANG KM 13,5 – KM 16, YOGYAKARTA)" kepada:

Nama : CORNELIUS YANAR PATIH KRISNANDA  
 NIM : 150216185  
 No.HP/Identitas : 082177539003/1810010501960007  
 Prodi/Jurusan : Teknik Sipil  
 Fakultas : Fakultas Teknik Universitas Atma Jaya Yogyakarta  
 Lokasi Penelitian : - Jalan Kaliurang Km 13,5 – Km 16, Yogyakarta  
 - Dinas Perhubungan DIY  
 - Dinas Pekerjaan Umum Perumahan dan Energi Sumber Daya Mineral DIY

Waktu Penelitian : 15 Februari 2019 s.d 30 Juni 2019

Sehubungan dengan maksud tersebut, diharapkan agar pihak yang terkait dapat memberikan bantuan / fasilitas yang dibutuhkan.

Kepada yang bersangkutan diwajibkan:

1. Menghormati dan mentaati peraturan dan tata tertib yang berlaku di wilayah riset/penelitian;
2. Tidak dibenarkan melakukan riset/penelitian yang tidak sesuai atau tidak ada kaitannya dengan judul riset/penelitian dimaksud;
3. Menyerahkan hasil riset/penelitian kepada Badan Kesbangpol DIY selambat-lambatnya 6 bulan setelah penelitian dilaksanakan.
4. Surat rekomendasi ini dapat diperpanjang maksimal 2 (dua) kali dengan menunjukkan surat rekomendasi sebelumnya, paling lambat 7 (tujuh) hari kerja sebelum berakhirnya surat rekomendasi ini.

Rekomendasi Ijin Riset/Penelitian ini dinyatakan tidak berlaku, apabila ternyata pemegang tidak mentaati ketentuan tersebut di atas.

Demikian untuk menjadikan maklum.

KEPALA  
 BADAN KESBANGPOL DIY

AGUNG SUPRIYONO, SH  
 NIP. 19601026 199203 1 004

Tembusan disampaikan Kepada Yth :

1. Gubernur DIY (sebagai laporan)
2. Dekan Fakultas Teknik Universitas Atma Jaya Yogyakarta;
3. Yang bersangkutan.

## DOKUMENTASI HASIL SURVEI



Gambar L2.1. Kondisi di Lokasi Pengambilan Data



Gambar L2.2. Kondisi di Lokasi Pengambilan Data

## DOKUMENTASI HASIL SURVEI



Gambar L2.3. Proses Pengambilan Data



Gambar L2.4. Proses Pengambilan Data

As = L segmen x P segmen

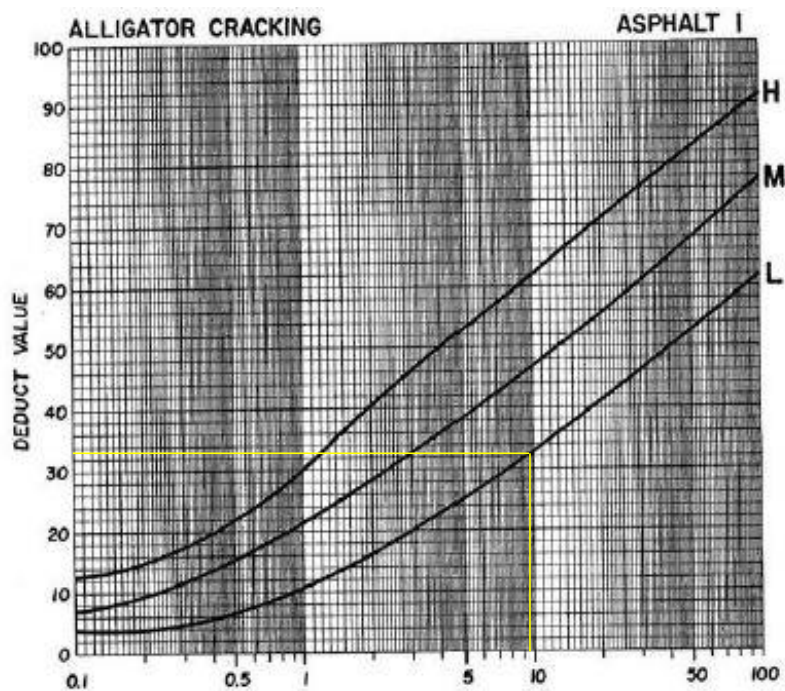
= 7 m x 100 m

= 700 m<sup>2</sup>

STA = 0+000 – 0+100

**Tabel L3.1.** Jenis Kerusakan Retak Kulit Buaya (*Alligator Cracking*) Segmen 1

<i>Low</i>			<i>Medium</i>			<i>High</i>		
Panjang	Lebar	Luas (m2)	Panjang	Lebar	Luas (m2)	Panjang	Lebar	Luas (m2)
6.8	0.9	6.12						
7.55	0.4	3.02						
3.2	0.37	1.184						
4.7	0.3	1.41						
7.2	0.5	3.6						
18.2	2.6	47.32						
4.15	0.92	3.818						
2.7	0.3	0.81						
Jumlah		67.282	Jumlah			Jumlah		
<i>Density</i>		9.6117	<i>Density</i>			<i>Density</i>		
<i>Deduct Value</i>		35	<i>Deduct Value</i>			<i>Deduct Value</i>		

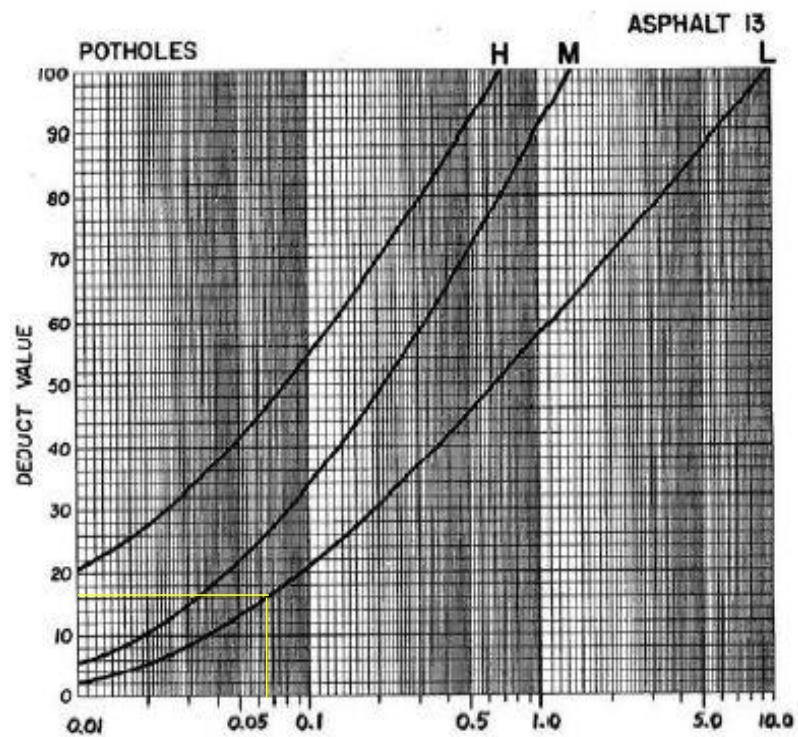


**Gambar L3.1.** Grafik *Deduct Value* Retak Kulit Buaya Segmen 1



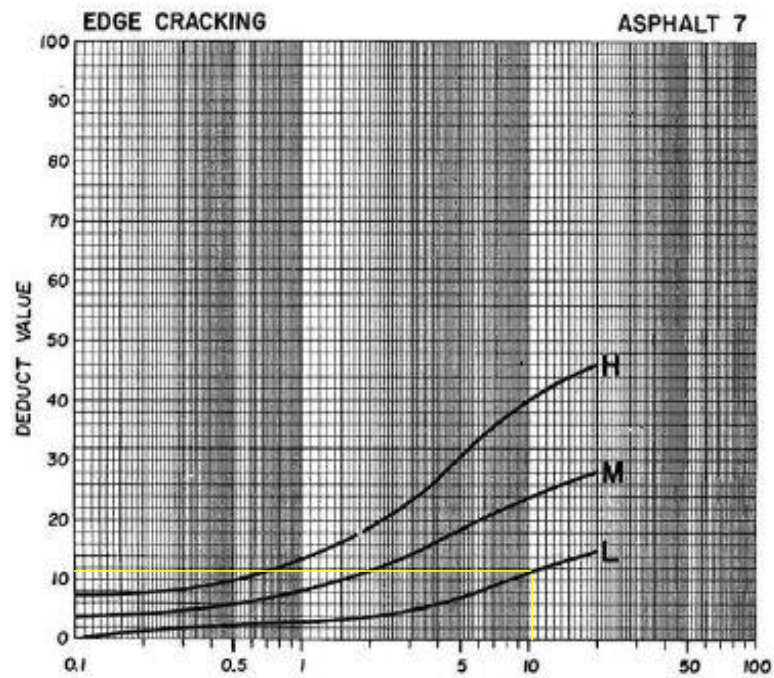
**Tabel L3.2.** Jenis Kerusakan Lubang (*Potholes*) Segmen 1

<i>Low</i>			<i>Medium</i>			<i>High</i>		
Panjang	Lebar	Luas (m <sup>2</sup> )	Panjang	Lebar	Luas (m <sup>2</sup> )	Panjang	Lebar	Luas (m <sup>2</sup> )
0.5	0.2	0.1						
0.53	0.37	0.1961						
0.51	0.32	0.1632						
Jumlah		0.4593	Jumlah			Jumlah		
<i>Density</i>		0.06561	<i>Density</i>			<i>Density</i>		
<i>Deduct Value</i>		15	<i>Deduct Value</i>			<i>Deduct Value</i>		

**Gambar L3.2.** Grafik *Deduct Value* Lubang Segmen 1

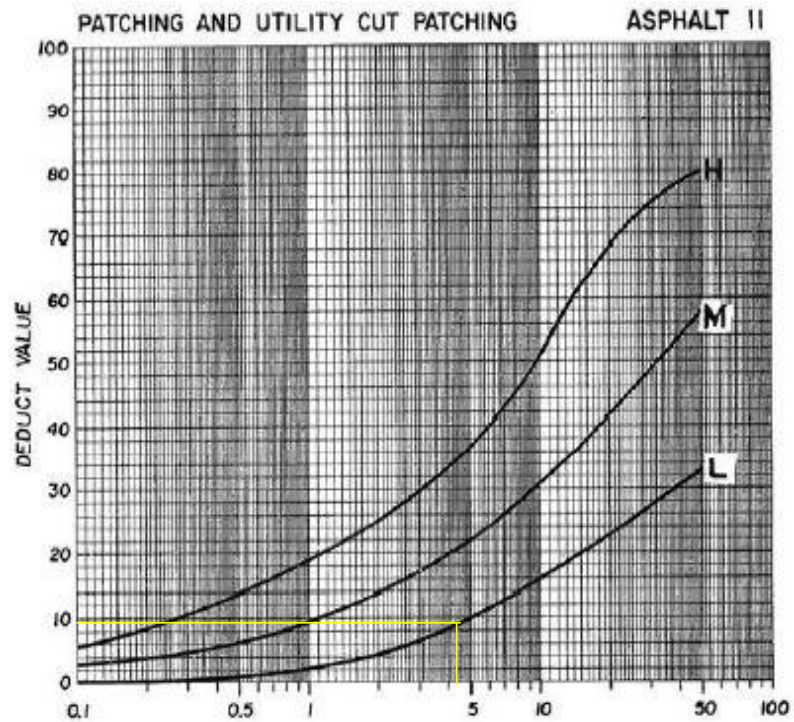
**Tabel L3.3.** Jenis Kerusakan Cacat Tepi Perkerasan (*Edge Cracking*) Segmen 1

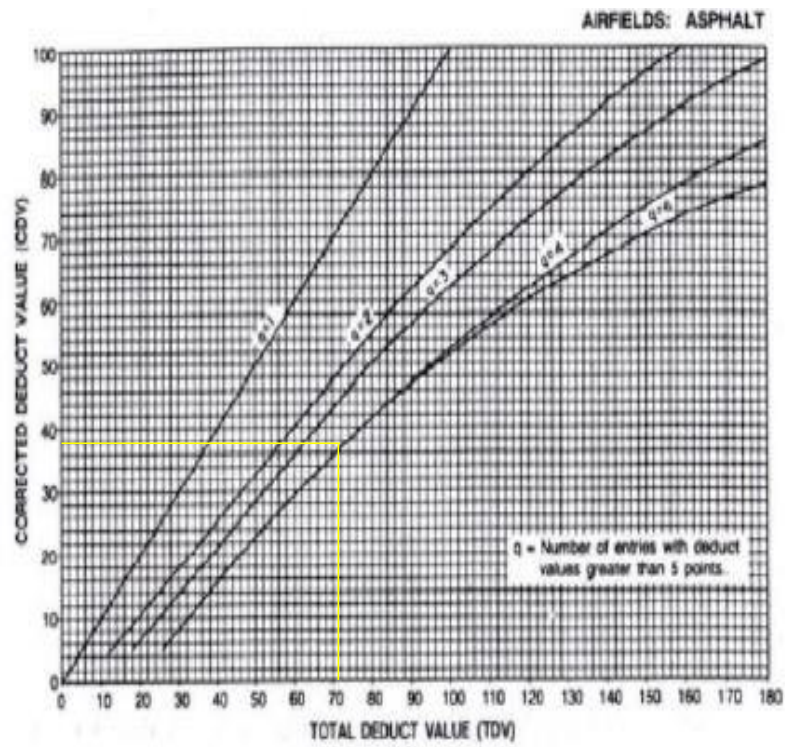
<i>Low</i>		<i>Medium</i>		<i>High</i>	
Panjang		Panjang		Panjang	
10.5					
Jumlah	10.5	Jumlah		Jumlah	
<i>Density</i>	10.5	<i>Density</i>		<i>Density</i>	
<i>Deduct Value</i>	11.8	<i>Deduct Value</i>		<i>Deduct Value</i>	

**Gambar L3.3.** Grafik *Deduct Value* Cacat tepi Perkerasan Segmen 1

**Tabel L3.4.** Jenis Kerusakan *Patching* (Tambalan) Segmen 1

<i>Low</i>			<i>Medium</i>			<i>High</i>		
Panjang	Lebar	Luas (m <sup>2</sup> )	Panjang	Lebar	Luas (m <sup>2</sup> )	Panjang	Lebar	Luas (m <sup>2</sup> )
2.3	1.5	3.45						
2.4	1.5	3.6						
9.5	2.5	23.75						
Jumlah		30.8	Jumlah			Jumlah		
<i>Density</i>		4.4	<i>Density</i>			<i>Density</i>		
<i>Deduct Value</i>		9.8	<i>Deduct Value</i>			<i>Deduct Value</i>		

**Gambar L3.4.** Grafik *Deduct Value Patching* Segmen 1



**Gambar L3.5.** Grafik *Total Deduct Value* Segmen 1

*Total Deduct Value* = 71.6

*Corrected Deduct Value* = 38

Nilai PCI Per Segmen = 100 - *Corrected Deduct Value*

= 62

As = L segmen x P segmen

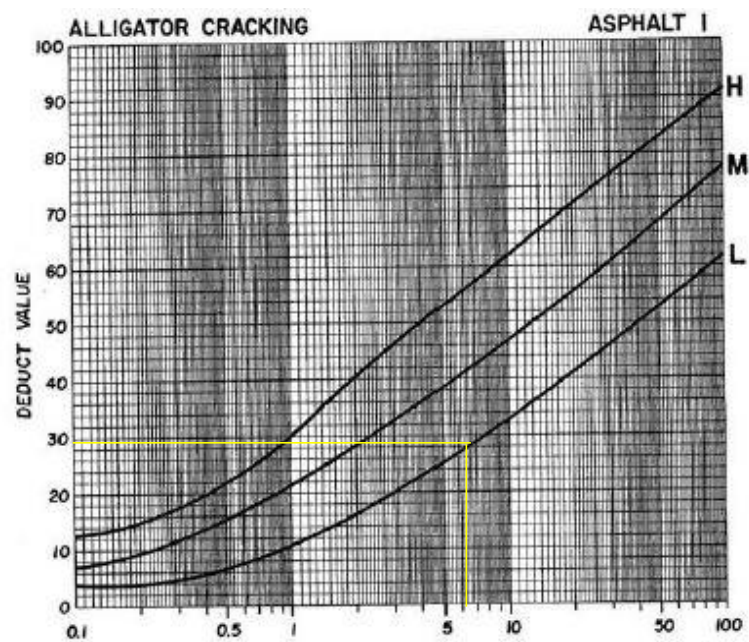
= 7 m x 100 m

= 700 m<sup>2</sup>

STA = 0+100 – 0+200

**Tabel L3.5.** Jenis Kerusakan Retak Kulit Buaya (*Alligator Cracking*) Segmen 2

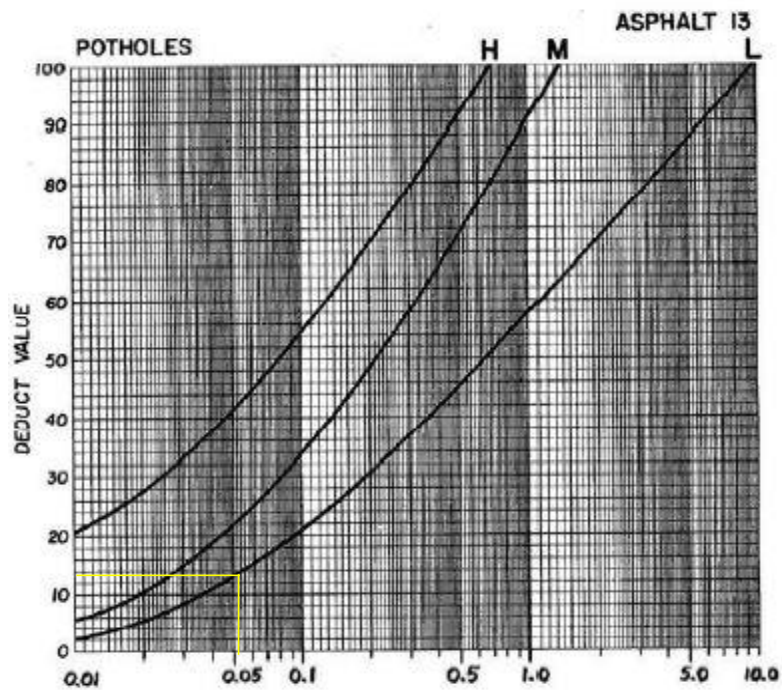
<i>Low</i>			<i>Medium</i>			<i>High</i>		
Panjang	Lebar	Luas (m <sup>2</sup> )	Panjang	Lebar	Luas (m <sup>2</sup> )	Panjang	Lebar	Luas (m <sup>2</sup> )
3.84	0.8	3.072						
5.18	1.22	6.3196						
6.93	0.8	5.544						
9.4	1.19	11.186						
17.86	0.93	16.6098						
Jumlah		42.7314	Jumlah			Jumlah		
<i>Density</i>		6.104486	<i>Density</i>			<i>Density</i>		
<i>Deduct Value</i>		29.8	<i>Deduct Value</i>			<i>Deduct Value</i>		



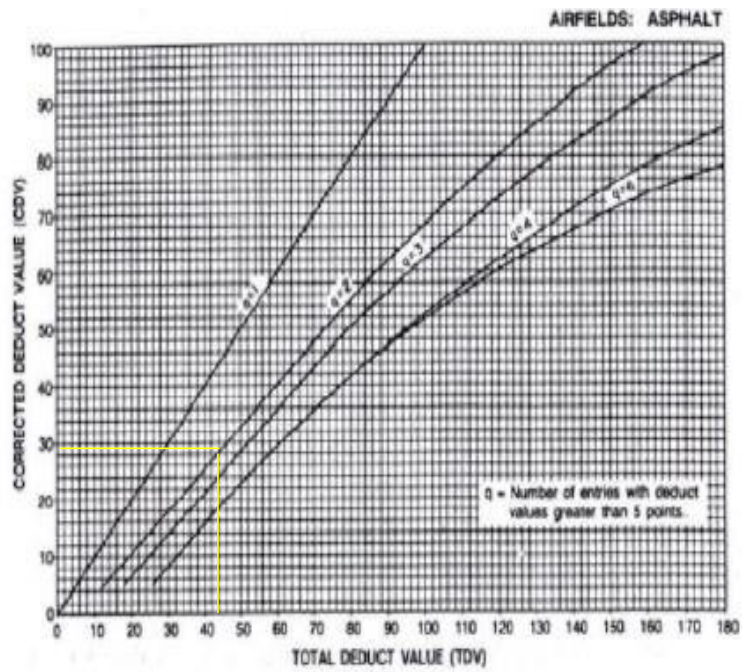
**Gambar L3.6.** Grafik *Deduct Value* Retak Kulit Buaya Segmen 2

**Tabel L3.6.** Jenis Kerusakan Lubang (*Potholes*) Segmen 2

<i>Low</i>			<i>Medium</i>			<i>High</i>		
Panjang	Lebar	Luas (m <sup>2</sup> )	Panjang	Lebar	Luas (m <sup>2</sup> )	Panjang	Lebar	Luas (m <sup>2</sup> )
0.91	0.45	0.4095						
Jumlah		0.4095	Jumlah			Jumlah		
<i>Density</i>		0.0585	<i>Density</i>			<i>Density</i>		
<i>Deduct Value</i>		13.8	<i>Deduct Value</i>			<i>Deduct Value</i>		



**Gambar L3.7.** Grafik *Deduct Value* Lubang Segmen 2



**Gambar L3.8.** Grafik *Total Deduct Value* Segmen 2

$$\text{Total Deduct Value} = 43.6$$

$$\text{Corrected Deduct Value} = 29$$

$$\text{Nilai PCI Per Segmen} = 100 - \text{Corrected Deduct Value}$$

$$= 71$$

As = L segmen x P segmen

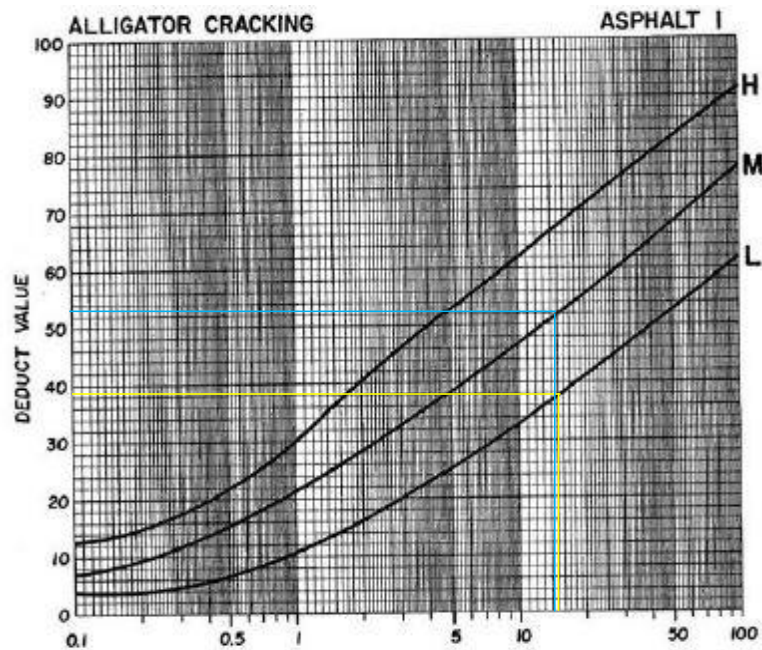
= 7 m x 100 m

= 700 m<sup>2</sup>

STA = 0+200 – 0+300

**Tabel L3.7.** Jenis Kerusakan Retak Kulit Buaya (*Alligator Cracking*) Segmen 3

<i>Low</i>			<i>Medium</i>			<i>High</i>		
Panjang	Lebar	Luas (m <sup>2</sup> )	Panjang	Lebar	Luas (m <sup>2</sup> )	Panjang	Lebar	Luas (m <sup>2</sup> )
8.8	2.5	22	32.6	3.1	101.06			
13.8	1.45	20.01						
10.5	2	21						
7.35	2.1	15.435						
7.4	2.3	17.02						
13	0.6	7.8						
Jumlah		103.265	Jumlah		101.06	Jumlah		
<i>Density</i>		14.75214	<i>Density</i>		14.43714	<i>Density</i>		
<i>Deduct Value</i>		39.5	<i>Deduct Value</i>		53.7	<i>Deduct Value</i>		

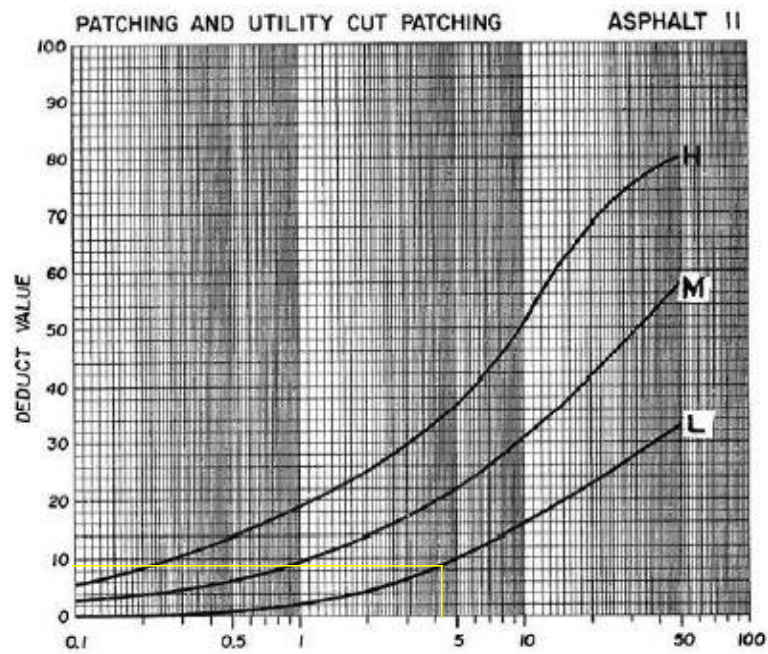


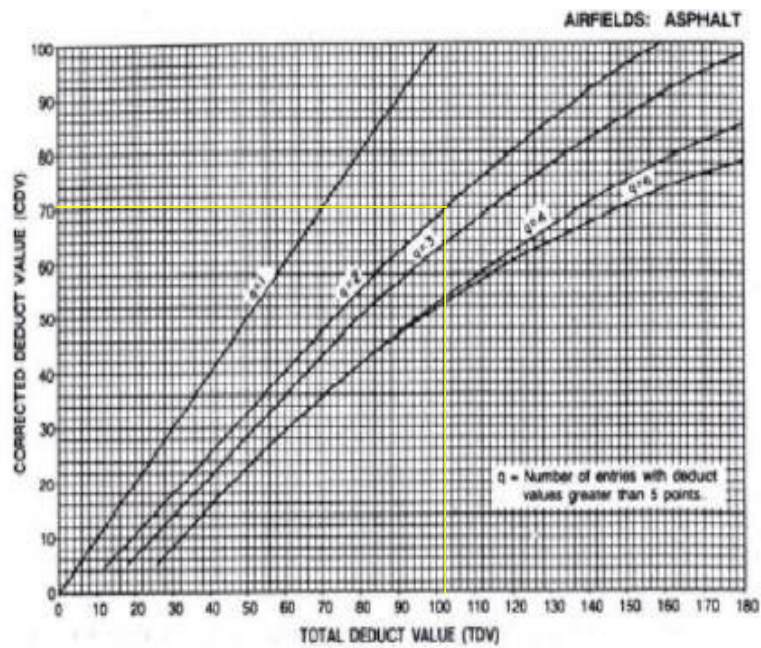
**Gambar L3.9.** Grafik *Deduct Value* Retak Kulit Buaya Segmen 3



**Tabel L3.8.** Jenis Kerusakan *Patching* (Tambalan) Segmen 3

<i>Low</i>			<i>Medium</i>			<i>High</i>		
Panjang	Lebar	Luas (m <sup>2</sup> )	Panjang	Lebar	Luas (m <sup>2</sup> )	Panjang	Lebar	Luas (m <sup>2</sup> )
11.1	2.7	29.97						
Jumlah		29.97	Jumlah			Jumlah		
<i>Density</i>		4.281429	<i>Density</i>			<i>Density</i>		
<i>Deduct Value</i>		8.9	<i>Deduct Value</i>			<i>Deduct Value</i>		

**Gambar L3.10.** Grafik *Deduct Value Patching* Segmen 3



**Gambar L3.11.** Grafik *Total Deduct Value* Segmen 3

$$\text{Total Deduct Value} = 102.1$$

$$\text{Corrected Deduct Value} = 70.8$$

$$\text{Nilai PCI Per Segmen} = 100 - \text{Corrected Deduct Value}$$

$$= 29.2$$

As = L segmen x P segmen

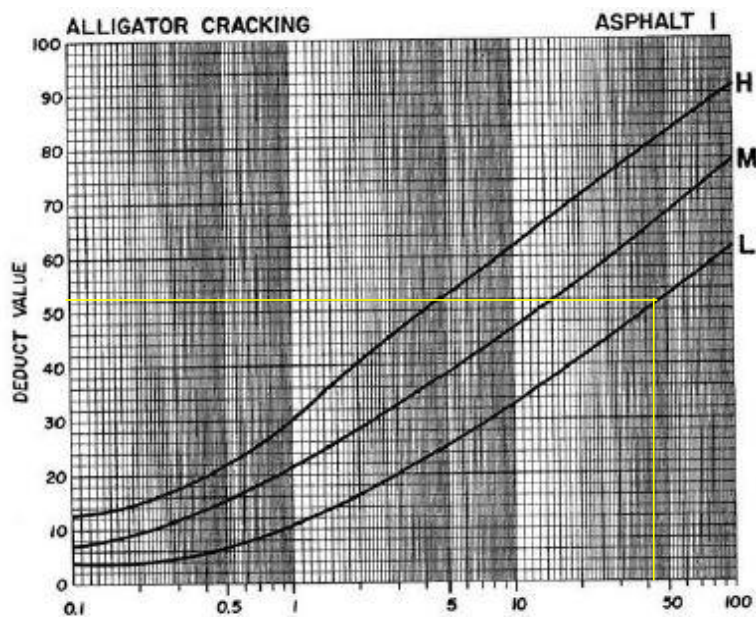
= 7 m x 100 m

= 700 m<sup>2</sup>

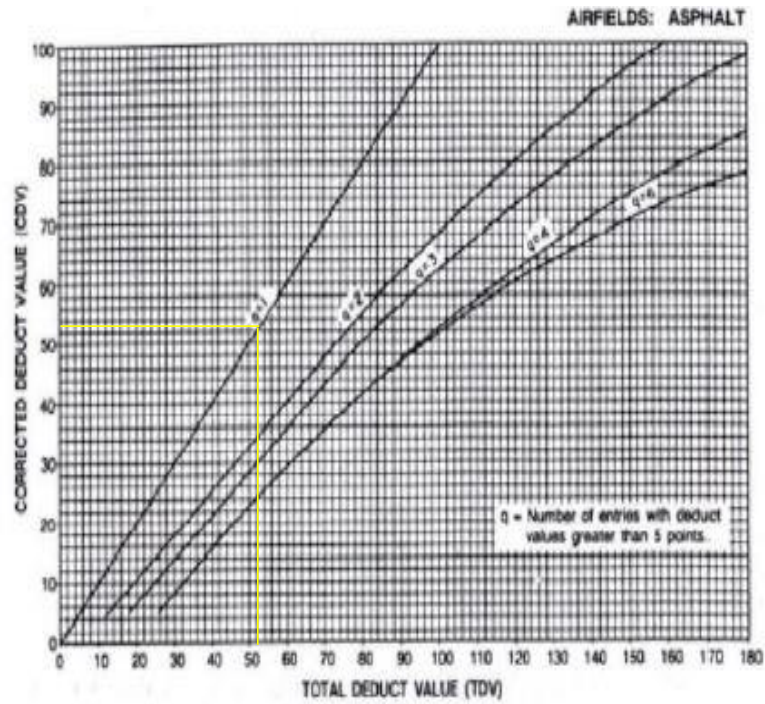
STA = 0+300 – 0+400

**Tabel L3.9.** Jenis Kerusakan Retak Kulit Buaya (*Alligator Cracking*) Segmen 4

<i>Low</i>			<i>Medium</i>			<i>High</i>		
Panjang	Lebar	Luas (m2)	Panjang	Lebar	Luas (m2)	Panjang	Lebar	Luas (m2)
13.4	4.7	62.98						
2.1	3.5	7.35						
14.8	1.9	28.12						
6.2	2.4	14.88						
16.1	1.5	24.15						
3.8	2.5	9.5						
3.1	3.1	9.61						
25.3	2.5	63.25						
33.2	2.5	83						
Jumlah		302.84	Jumlah			Jumlah		
<i>Density</i>		43.26286	<i>Density</i>			<i>Density</i>		
<i>Deduct Value</i>		52.3	<i>Deduct Value</i>			<i>Deduct Value</i>		



**Gambar L3.12.** Grafik Deduct Value Retak Kulit Buaya Segmen 4



**Gambar L3.13.** Grafik *Total Deduct Value* Segmen 4

$$\textit{Total Deduct Value} = 52.3$$

$$\textit{Corrected Deduct Value} = 53.8$$

$$\text{Nilai PCI Per Segmen} = 100 - \textit{Corrected Deduct Value}$$

$$= 46.2$$

As = L segmen x P segmen

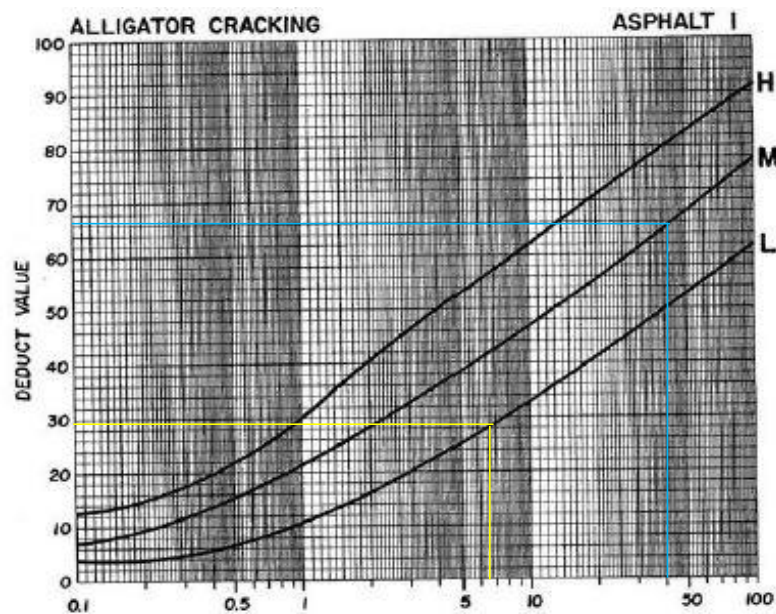
= 7 m x 100 m

= 700 m<sup>2</sup>

STA = 0+400 – 0+500

**Tabel L3.10.**Jenis Kerusakan Retak Kulit Buaya (*Alligator Cracking*) Segmen 5

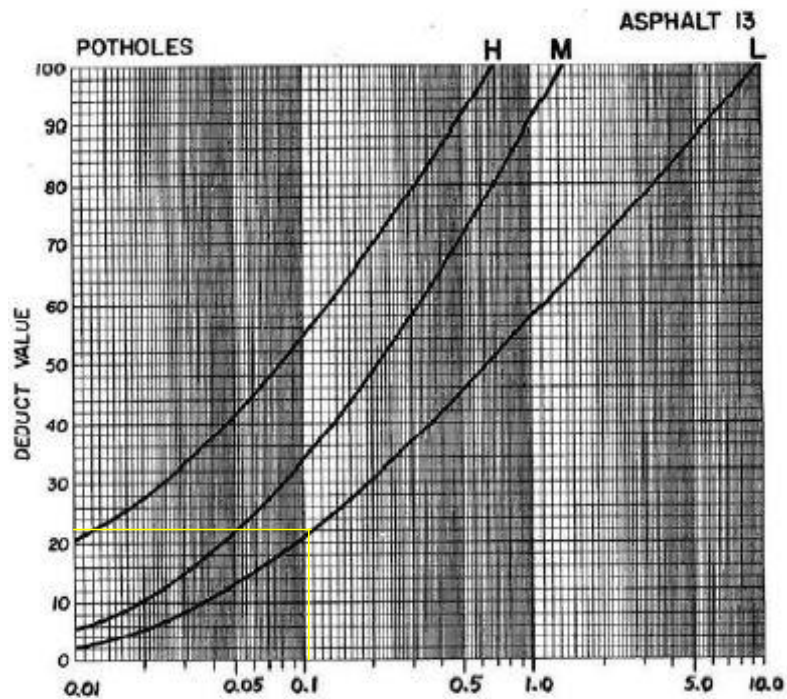
<i>Low</i>			<i>Medium</i>			<i>High</i>		
Panjang	Lebar	Luas (m <sup>2</sup> )	Panjang	Lebar	Luas (m <sup>2</sup> )	Panjang	Lebar	Luas (m <sup>2</sup> )
7.1	1.8	12.78	18	3.4	61.2			
7.49	1.8	13.482	15.6	2.7	42.12			
5.22	0.84	4.3848	24.6	1.5	36.9			
11.45	0.81	9.2745	24.8	0.54	13.392			
13.8	0.47	6.486	25.2	0.5	12.6			
			35.4	1.3	46.02			
			29.8	0.63	18.774			
			20.9	1.31	27.379			
			14.7	1.57	23.079			
Jumlah		46.4073	Jumlah		281.464	Jumlah		
<i>Density</i>		6.629614	<i>Density</i>		40.20914	<i>Density</i>		
<i>Deduct Value</i>		29.8	<i>Deduct Value</i>		66.3	<i>Deduct Value</i>		



**Gambar L3.14.** Grafik *Deduct Value* Retak Kulit Buaya Segmen 5

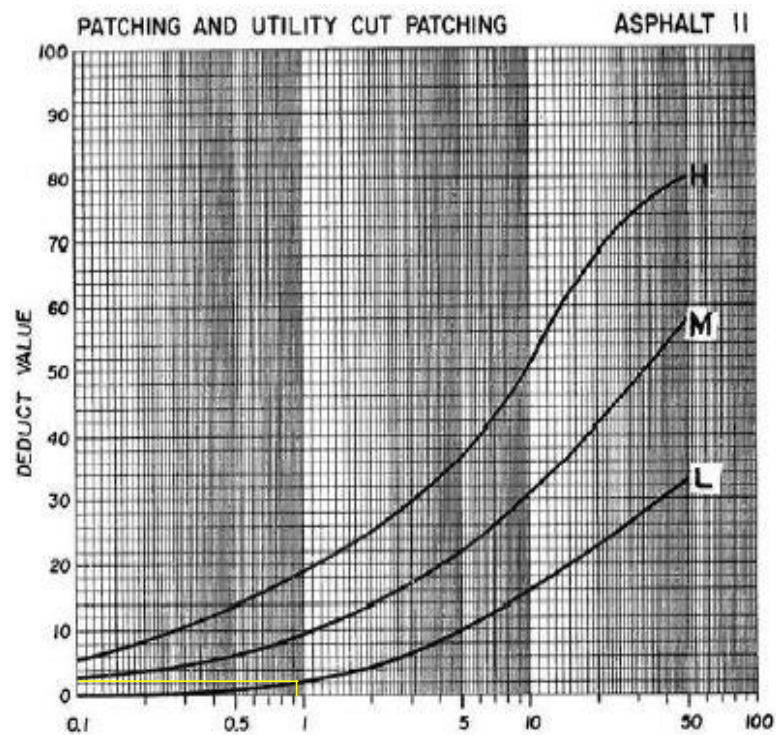
**Tabel L3.11.**Jenis Kerusakan Lubang (*Potholes*) Segmen 5

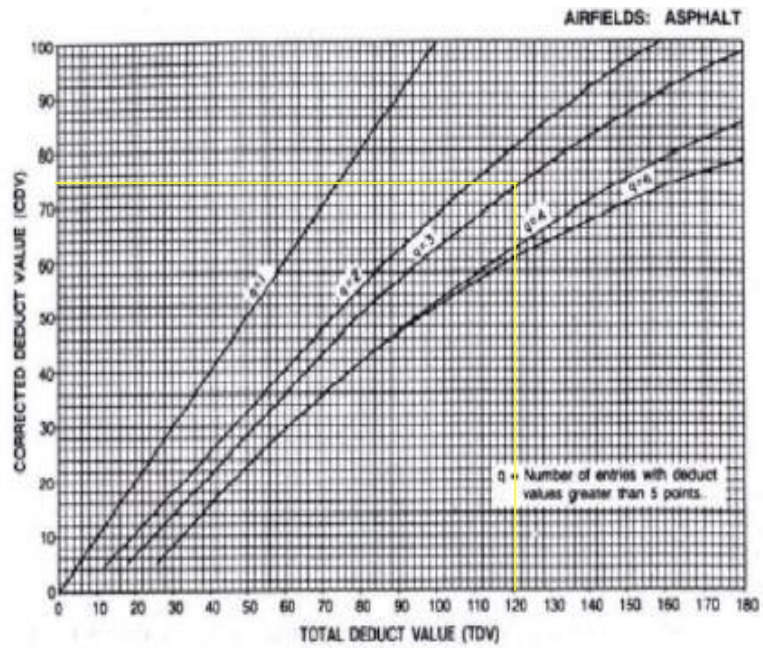
<i>Low</i>			<i>Medium</i>			<i>High</i>		
Panjang	Lebar	Luas (m <sup>2</sup> )	Panjang	Lebar	Luas (m <sup>2</sup> )	Panjang	Lebar	Luas (m <sup>2</sup> )
1	0.7	0.7						
2.6	0.72	1.872						
2.9	1.3	3.77						
Jumlah		6.342	Jumlah			Jumlah		
<i>Density</i>		0.906	<i>Density</i>			<i>Density</i>		
<i>Deduct Value</i>		2.3	<i>Deduct Value</i>			<i>Deduct Value</i>		

**Gambar L3.15.** Grafik *Deduct Value* Lubang Segmen 5

**Tabel L3.12.** Jenis Kerusakan *Patching* (Tambalan) Segmen 5

<i>Low</i>			<i>Medium</i>			<i>High</i>		
Panjang	Lebar	Luas (m2)	Panjang	Lebar	Luas (m2)	Panjang	Lebar	Luas (m2)
0.6	0.4	0.24						
0.84	0.22	0.1848						
0.34	0.27	0.0918						
0.65	0.15	0.0975						
0.76	0.46	0.3496						
Jumlah		0.9637	Jumlah			Jumlah		
<i>Density</i>		0.137671	<i>Density</i>			<i>Density</i>		
<i>Deduct Value</i>		22.1	<i>Deduct Value</i>			<i>Deduct Value</i>		

**Gambar L3.16.** Grafik *Deduct Value Patching* Segmen 5



**Gambar L3.17.** Grafik *Total Deduct Value* Segmen 5

$$\text{Total Deduct Value} = 120.5$$

$$\text{Corrected Deduct Value} = 74.5$$

$$\text{Nilai PCI Per Segmen} = 100 - \text{Corrected Deduct Value}$$

$$= 25.5$$

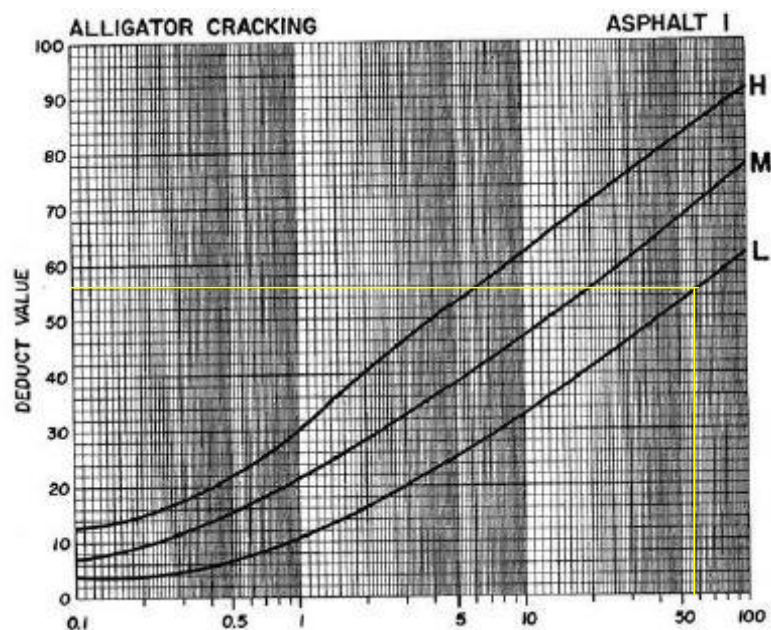


$$\begin{aligned} \text{As} &= L \text{ segmen} \times P \text{ segmen} \\ &= 7 \text{ m} \times 100 \text{ m} \\ &= 700 \text{ m}^2 \end{aligned}$$

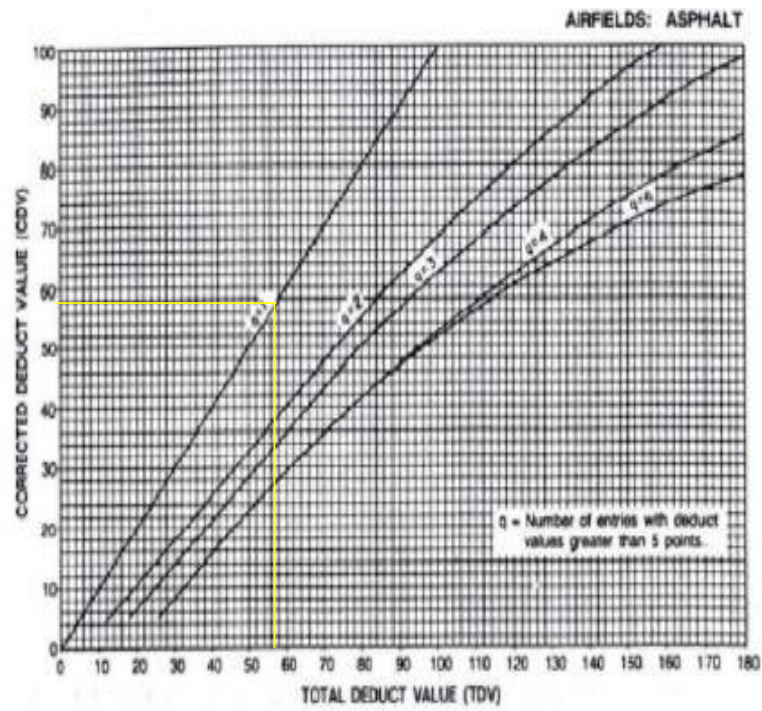
$$\text{STA} = 0+500 - 0+600$$

**Tabel L3.13.** Jenis Kerusakan Retak Kulit Buaya (*Alligator Cracking*) Segmen 6

<i>Low</i>			<i>Medium</i>			<i>High</i>		
Panjang	Lebar	Luas (m <sup>2</sup> )	Panjang	Lebar	Luas (m <sup>2</sup> )	Panjang	Lebar	Luas (m <sup>2</sup> )
14	4.3	60.2						
15.8	3.4	53.72						
34.6	2.8	96.88						
18.5	1.7	31.45						
19.6	2.4	47.04						
10.7	1.6	17.12						
10.8	1.6	17.28						
8.5	2.3	19.55						
23.6	2.9	68.44						
Jumlah		411.68	Jumlah			Jumlah		
<i>Density</i>		58.81143	<i>Density</i>			<i>Density</i>		
<i>Deduct Value</i>		56.2	<i>Deduct Value</i>			<i>Deduct Value</i>		



**Gambar L3.18.** Grafik *Deduct Value* Retak Kulit Buaya Segmen 6



**Gambar L3.19.** Grafik *Total Deduct Value* Segmen 6

*Total Deduct Value* = 56.2

*Corrected Deduct Value* = 57.8

Nilai PCI Per Segmen = 100 - *Corrected Deduct Value*

= 42.2

As = L segmen x P segmen

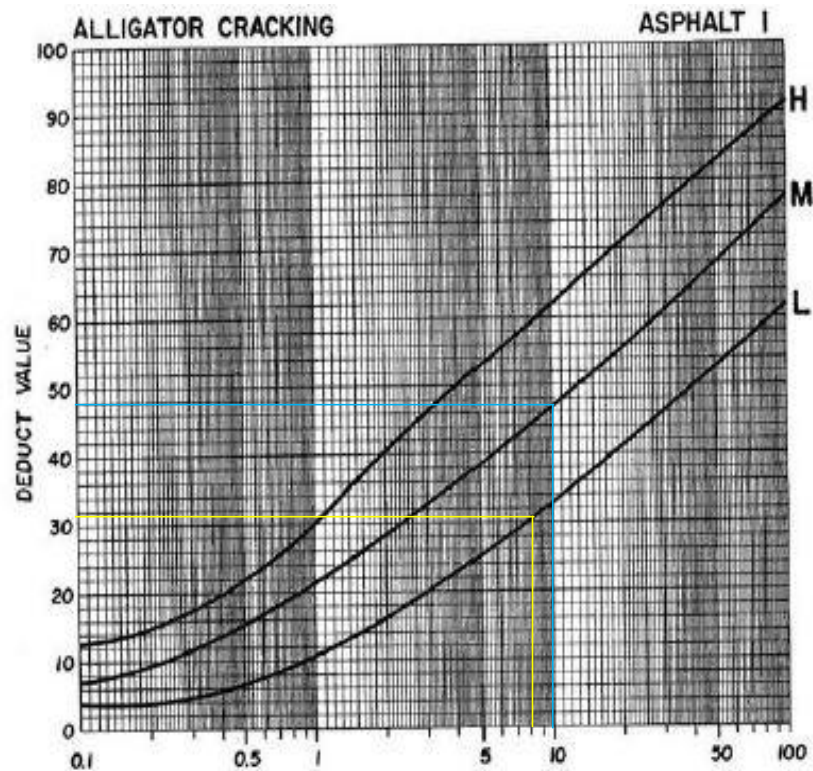
= 7 m x 100 m

= 700 m<sup>2</sup>

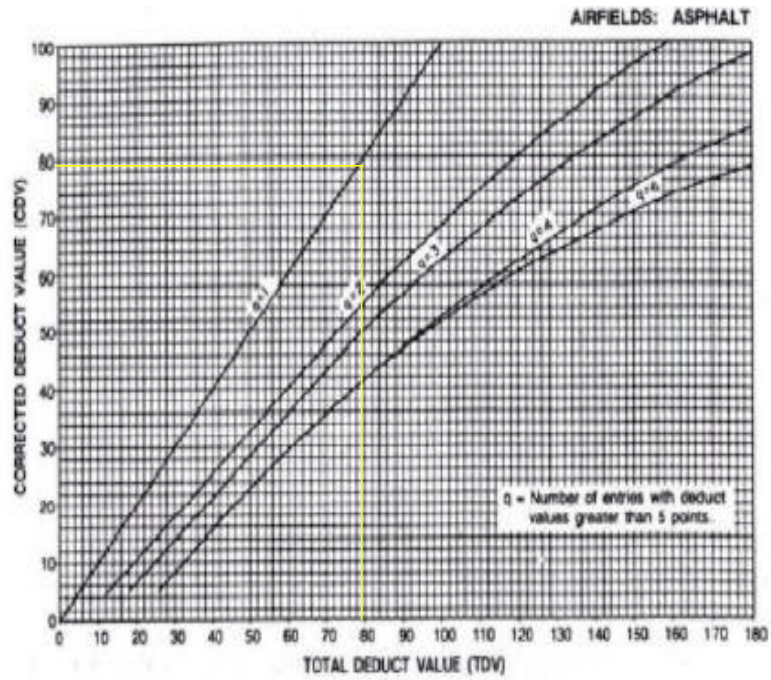
STA = 0+600 – 0+700

**Tabel L3.14.** Jenis Kerusakan Retak Kulit Buaya (*Alligator Cracking*) Segmen 7

<i>Low</i>			<i>Medium</i>			<i>High</i>		
Panjang	Lebar	Luas (m <sup>2</sup> )	Panjang	Lebar	Luas (m <sup>2</sup> )	Panjang	Lebar	Luas (m <sup>2</sup> )
26.3	0.67	17.621	84.27	0.83	69.9441			
22.9	1.7	38.93						
Jumlah		56.551	Jumlah		69.9441	Jumlah		
<i>Density</i>		8.078714	<i>Density</i>		9.992014	<i>Density</i>		
<i>Deduct Value</i>		31.8	<i>Deduct Value</i>		48	<i>Deduct Value</i>		



**Gambar L3.20.** Grafik *Deduct Value* Retak Kulit Buaya Segmen 7



**Gambar L3.21.** Grafik *Total Deduct Value* Segmen 7

*Total Deduct Value* = 79.8

*Corrected Deduct Value* = 79.8

Nilai PCI Per Segmen = 100 - *Corrected Deduct Value*

= 20.2

As = L segmen x P segmen

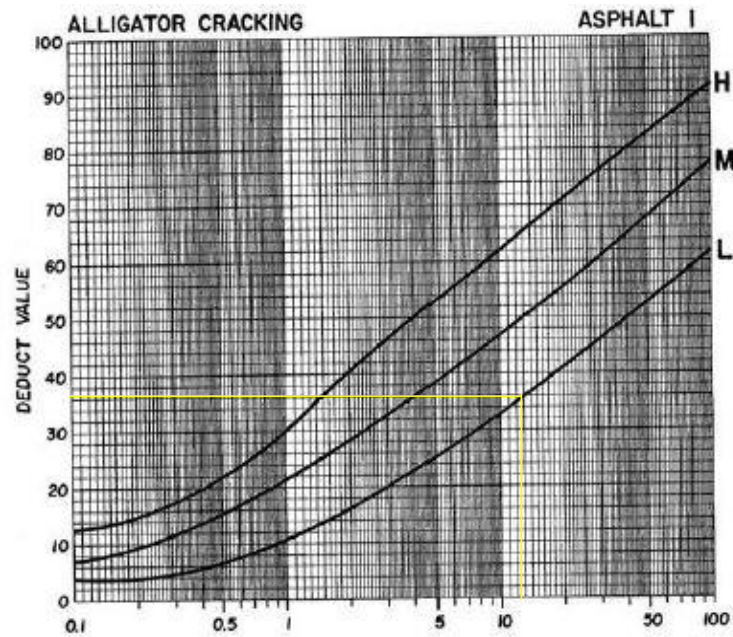
= 7 m x 100 m

= 700 m<sup>2</sup>

STA = 0+700 – 0+800

**Tabel L3.15.** Jenis Kerusakan Retak Kulit Buaya (*Alligator Cracking*) Segmen 8

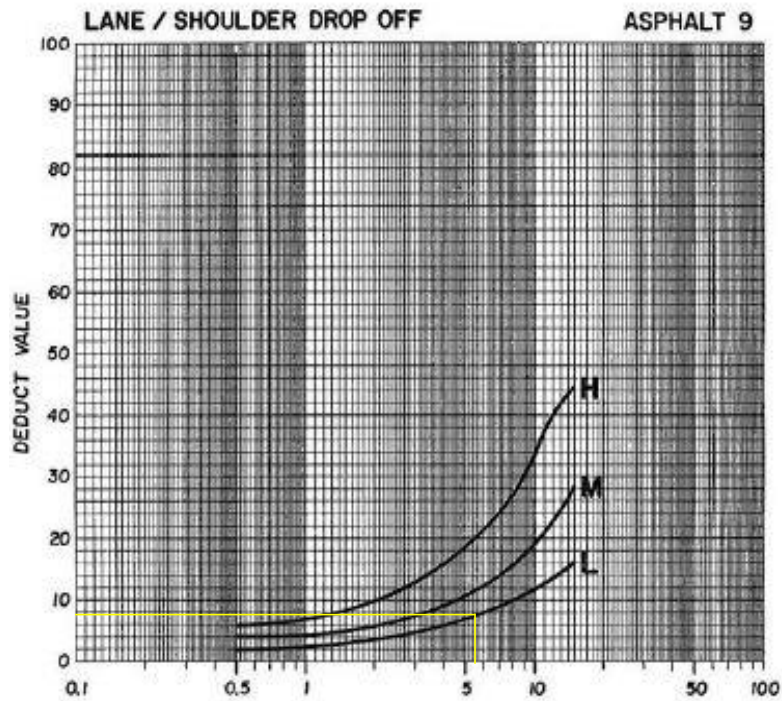
<i>Low</i>			<i>Medium</i>			<i>High</i>		
Panjang	Lebar	Luas (m <sup>2</sup> )	Panjang	Lebar	Luas (m <sup>2</sup> )	Panjang	Lebar	Luas (m <sup>2</sup> )
3.4	1.2	4.08						
9.3	1.09	10.137						
8	0.83	6.64						
12	1.83	21.96						
14	2	28						
8.4	0.73	6.132						
13.1	0.54	7.074						
Jumlah		84.023	Jumlah			Jumlah		
<i>Density</i>		12.00329	<i>Density</i>			<i>Density</i>		
<i>Deduct Value</i>		36.2	<i>Deduct Value</i>			<i>Deduct Value</i>		



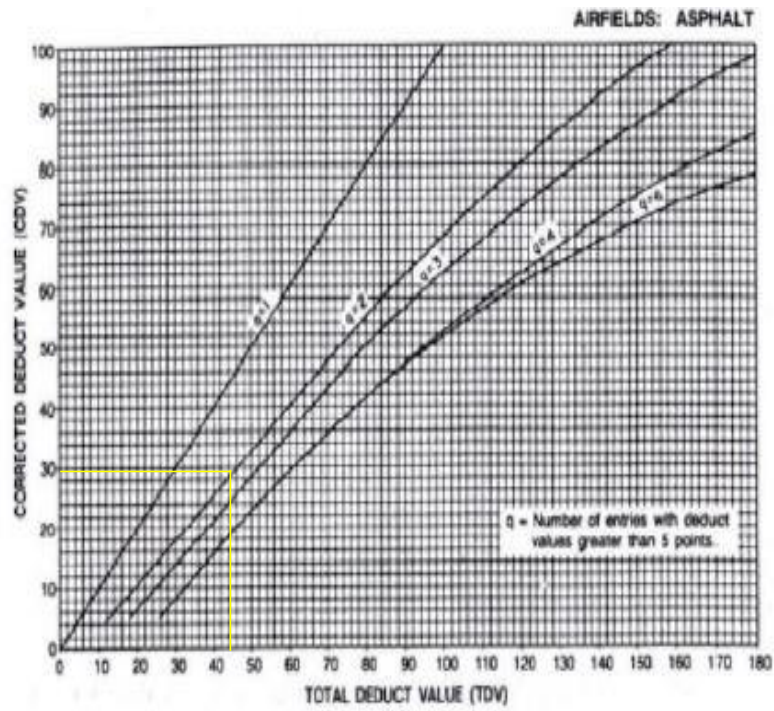
**Gambar L3.22.** Grafik *Deduct Value* Retak Kulit Buaya Segmen 8

**Tabel L3.16.** Jenis Kerusakan Penurunan Bahu (*Lane / Shoulder Off*) Segmen 8

<i>Low</i>		<i>Medium</i>		<i>High</i>	
Panjang		Panjang		Panjang	
5.3					
Jumlah	5.3	Jumlah		Jumlah	
<i>Density</i>	5.3	<i>Density</i>		<i>Density</i>	
<i>Deduct Value</i>	7.9	<i>Deduct Value</i>		<i>Deduct Value</i>	



**Gambar L3.23.** Grafik *Deduct Value* Penurunan Bahu Segmen 8



**Gambar L3.24.** Grafik *Total Deduct Value* Segmen 8

$$\text{Total Deduct Value} = 44.1$$

$$\text{Corrected Deduct Value} = 29.8$$

$$\text{Nilai PCI Per Segmen} = 100 - \text{Corrected Deduct Value}$$

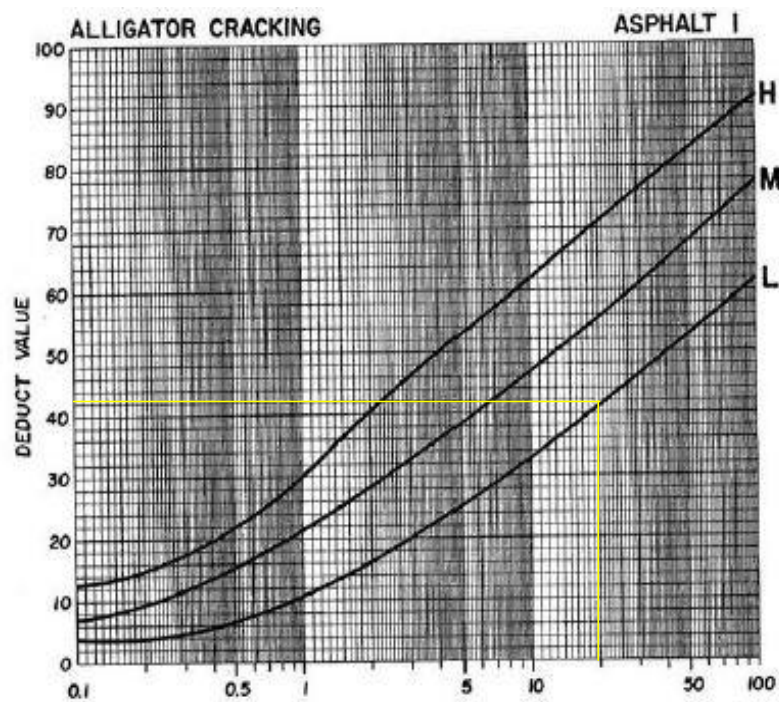
$$= 70.2$$

$$\begin{aligned} \text{As} &= L \text{ segmen} \times P \text{ segmen} \\ &= 7 \text{ m} \times 100 \text{ m} \\ &= 700 \text{ m}^2 \end{aligned}$$

$$\text{STA} = 0+800 - 0+900$$

**Tabel L3.17.** Jenis Kerusakan Retak Kulit Buaya (*Alligator Cracking*) Segmen 9

<i>Low</i>			<i>Medium</i>			<i>High</i>		
Panjang	Lebar	Luas (m <sup>2</sup> )	Panjang	Lebar	Luas (m <sup>2</sup> )	Panjang	Lebar	Luas (m <sup>2</sup> )
9.3	2.15	19.995						
21.5	3.2	68.8						
13.3	2.6	34.58						
9.7	1.2	11.64						
4.7	0.9	4.23						
Jumlah		139.245	Jumlah			Jumlah		
<i>Density</i>		19.89214	<i>Density</i>			<i>Density</i>		
<i>Deduct Value</i>		42.3	<i>Deduct Value</i>			<i>Deduct Value</i>		

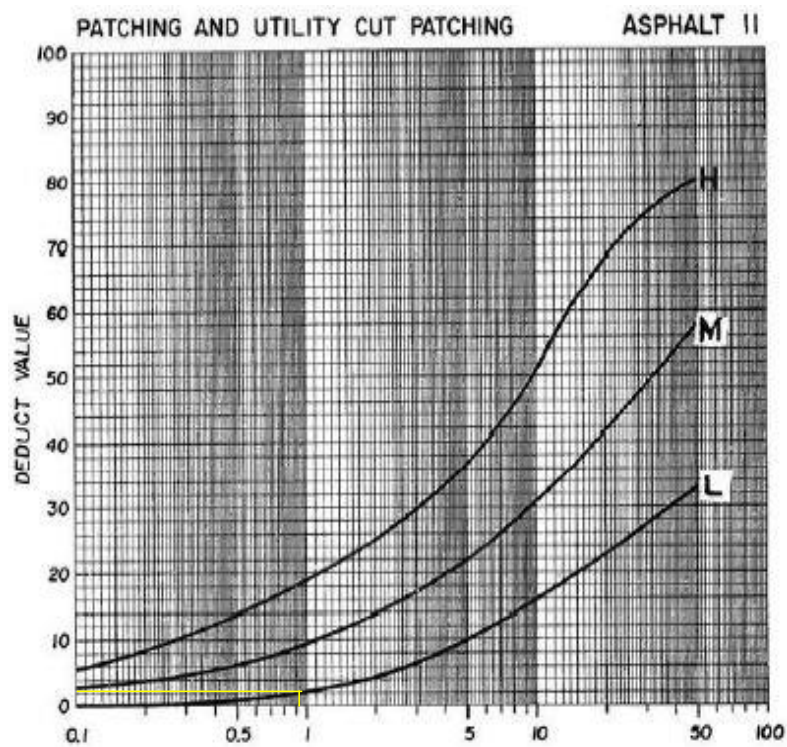


**Gambar L3.25.** Grafik *Deduct Value* Retak Kulit Buaya Segmen 9



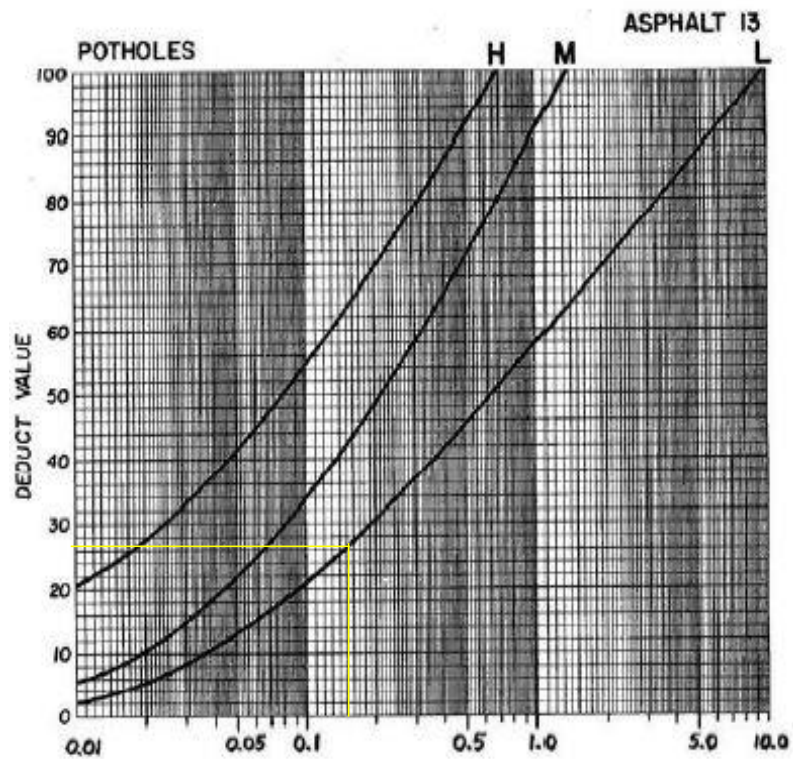
**Tabel L3.18.** Jenis Kerusakan Tambalan (*Patching*) Segmen 9

<i>Low</i>			<i>Medium</i>			<i>High</i>		
Panjang	Lebar	Luas (m2)	Panjang	Lebar	Luas (m2)	Panjang	Lebar	Luas (m2)
4.65	0.5	2.325						
0.8	0.6	0.48						
4.7	0.75	3.525						
Jumlah		6.33	Jumlah			Jumlah		
<i>Density</i>		0.904286	<i>Density</i>			<i>Density</i>		
<i>Deduct Value</i>		2	<i>Deduct Value</i>			<i>Deduct Value</i>		

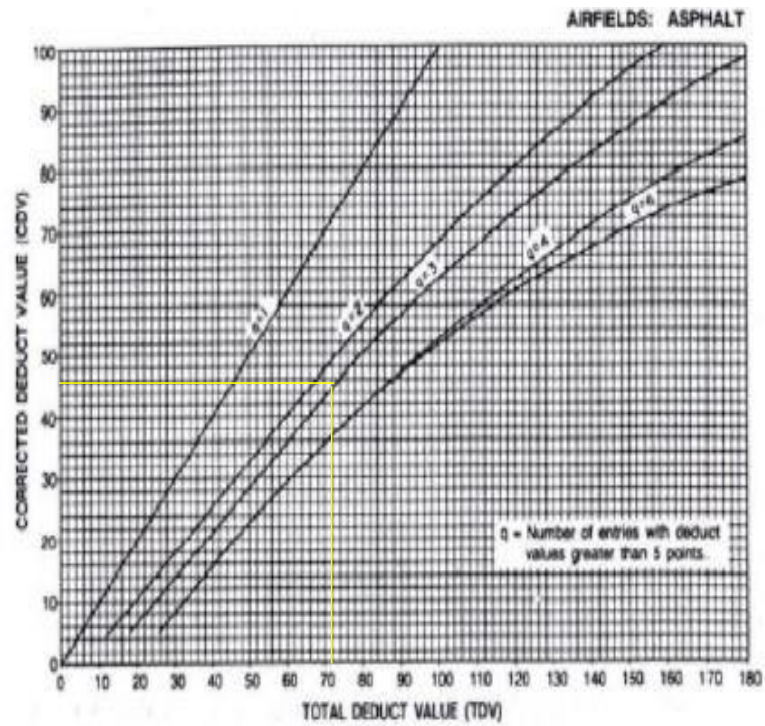
**Gambar L3.26.** Grafik *Deduct Value Patching* Segmen 9

**Tabel L3.19.**Jenis Kerusakan Lubang (*Potholes*) Segmen 9

<i>Low</i>			<i>Medium</i>			<i>High</i>		
Panjang	Lebar	Luas (m <sup>2</sup> )	Panjang	Lebar	Luas (m <sup>2</sup> )	Panjang	Lebar	Luas (m <sup>2</sup> )
1.2	0.9	1.08						
Jumlah		1.08	Jumlah			Jumlah		
<i>Density</i>		0.154286	<i>Density</i>			<i>Density</i>		
<i>Deduct Value</i>		27.5	<i>Deduct Value</i>			<i>Deduct Value</i>		



**Gambar L3.27.** Grafik *Deduct Value* Lubang Segmen 9



**Gambar L3.28.** Grafik *Total Deduct Value* Segmen 9

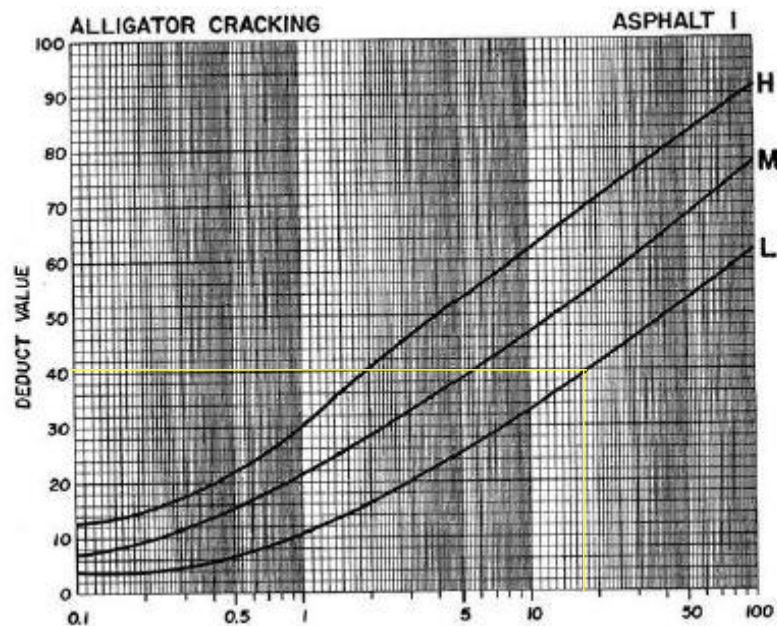
<i>Total Deduct Value</i>	=	71.8
<i>Corrected Deduct Value</i>	=	45.8
Nilai PCI Per Segmen	=	100 - <i>Corrected Deduct Value</i>
	=	54.2

$$\begin{aligned} \text{As} &= \text{L segmen} \times \text{P segmen} \\ &= 7 \text{ m} \times 100 \text{ m} \\ &= 700 \text{ m}^2 \end{aligned}$$

$$\text{STA} = 0+900 - 1+000$$

**Tabel L3.20.** Jenis Kerusakan Retak Kulit Buaya (*Alligator Cracking*) Segmen 10

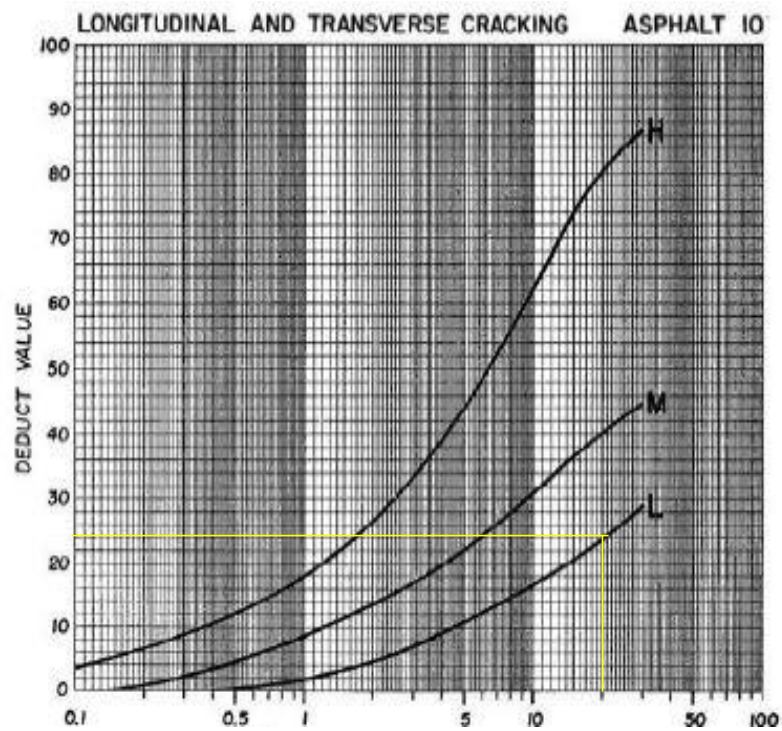
<i>Low</i>			<i>Medium</i>			<i>High</i>		
Panjang	Lebar	Luas (m <sup>2</sup> )	Panjang	Lebar	Luas (m <sup>2</sup> )	Panjang	Lebar	Luas (m <sup>2</sup> )
9.9	2.6	25.74						
15.3	1	15.3						
20.7	1.2	24.84						
22.15	1	22.15						
7.25	1	7.25						
22	1.3	28.6						
Jumlah		123.88	Jumlah			Jumlah		
<i>Density</i>		17.69714	<i>Density</i>			<i>Density</i>		
<i>Deduct Value</i>		40.6	<i>Deduct Value</i>			<i>Deduct Value</i>		



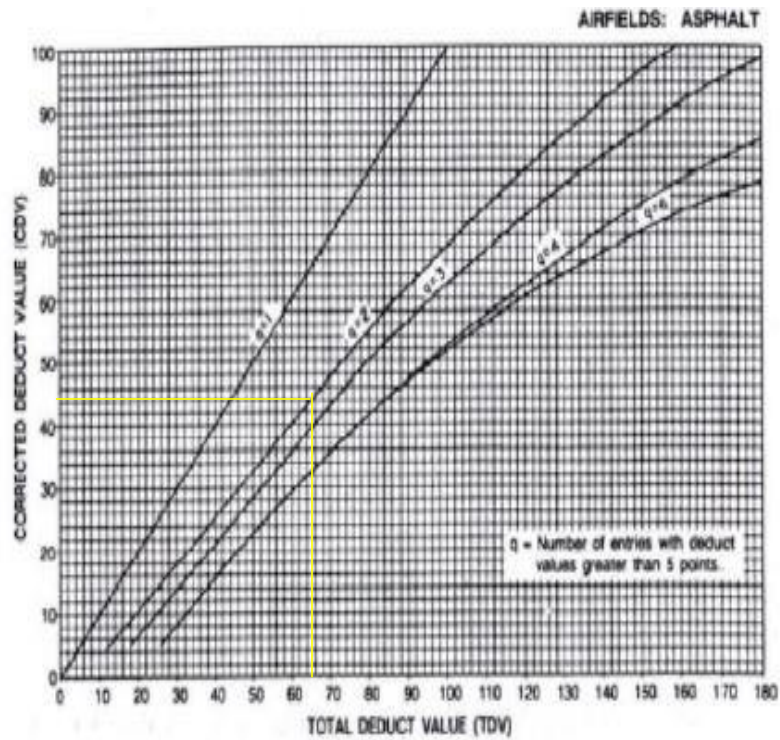
**Gambar L3.29.** Grafik *Deduct Value* Retak Kulit Buaya Segmen 10

**Tabel L3.21.**Jenis Kerusakan Retak Memanjang dan Melintang Segmen 10

<i>Low</i>		<i>Medium</i>		<i>High</i>	
Panjang		Panjang		Panjang	
3.9					
10.5					
6.1					
Jumlah	20.5	Jumlah		Jumlah	
<i>Density</i>	20.5	<i>Density</i>		<i>Density</i>	
<i>Deduct Value</i>	24.1	<i>Deduct Value</i>		<i>Deduct Value</i>	



**Gambar L3.30.** Grafik *Deduct Value* Retak Memanjang dan Melintang Segmen 10



**Gambar L3.31.** Grafik *Total Deduct Value* Segmen 10

$$\text{Total Deduct Value} = 64.7$$

$$\text{Corrected Deduct Value} = 44.2$$

$$\text{Nilai PCI Per Segmen} = 100 - \text{Corrected Deduct Value}$$

$$= 55.8$$

As = L segmen x P segmen

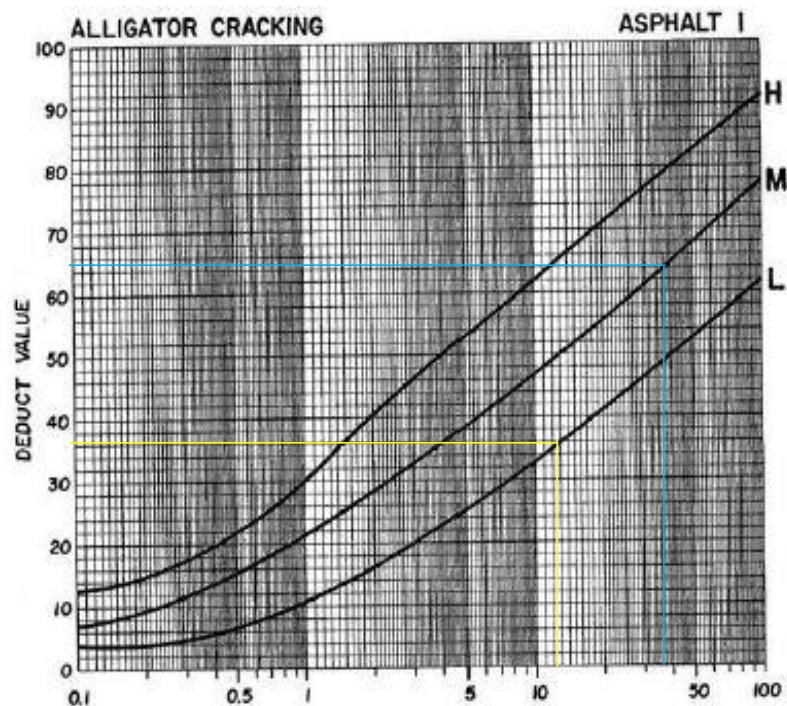
= 7 m x 100 m

= 700 m<sup>2</sup>

STA = 1+000 – 1+100

**Tabel L3.22.** Jenis Kerusakan Retak Kulit Buaya (*Alligator Cracking*) Segmen 11

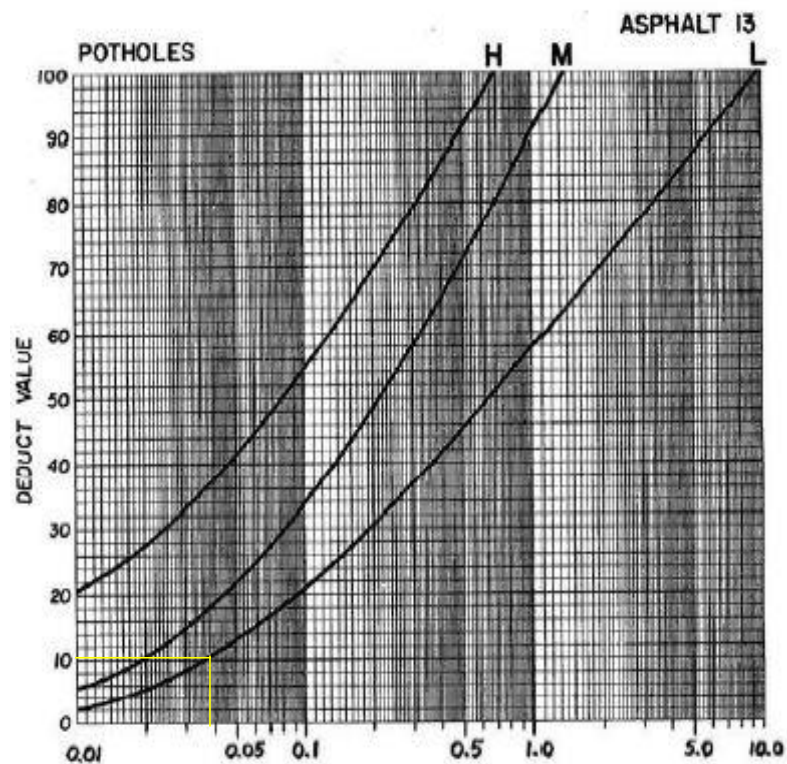
<i>Low</i>			<i>Medium</i>			<i>High</i>		
Panjang	Lebar	Luas (m <sup>2</sup> )	Panjang	Lebar	Luas (m <sup>2</sup> )	Panjang	Lebar	Luas (m <sup>2</sup> )
15	3.3	49.5	68.6	2.7	185.22			
13.2	2.9	38.28	36.1	1.9	68.59			
Jumlah		87.78	Jumlah		253.81	Jumlah		
<i>Density</i>		12.54	<i>Density</i>		36.25857	<i>Density</i>		
<i>Deduct Value</i>		36.2	<i>Deduct Value</i>		65.4	<i>Deduct Value</i>		



**Gambar L3.32.** Grafik *Deduct Value* Retak Kulit Buaya Segmen 11

**Tabel L3.23.** Jenis Kerusakan Lubang (*Potholes*) Segmen 11

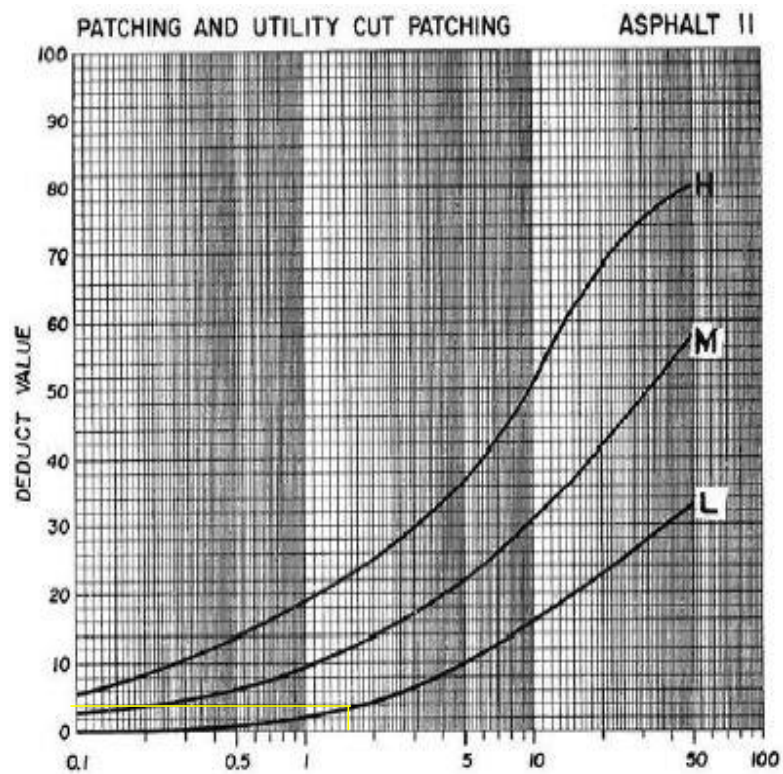
<i>Low</i>			<i>Medium</i>			<i>High</i>		
Panjang	Lebar	Luas (m <sup>2</sup> )	Panjang	Lebar	Luas (m <sup>2</sup> )	Panjang	Lebar	Luas (m <sup>2</sup> )
0.43	0.38	0.1634						
0.32	0.33	0.1056						
Jumlah		0.269	Jumlah			Jumlah		
<i>Density</i>		0.038429	<i>Density</i>			<i>Density</i>		
<i>Deduct Value</i>		10.3	<i>Deduct Value</i>			<i>Deduct Value</i>		

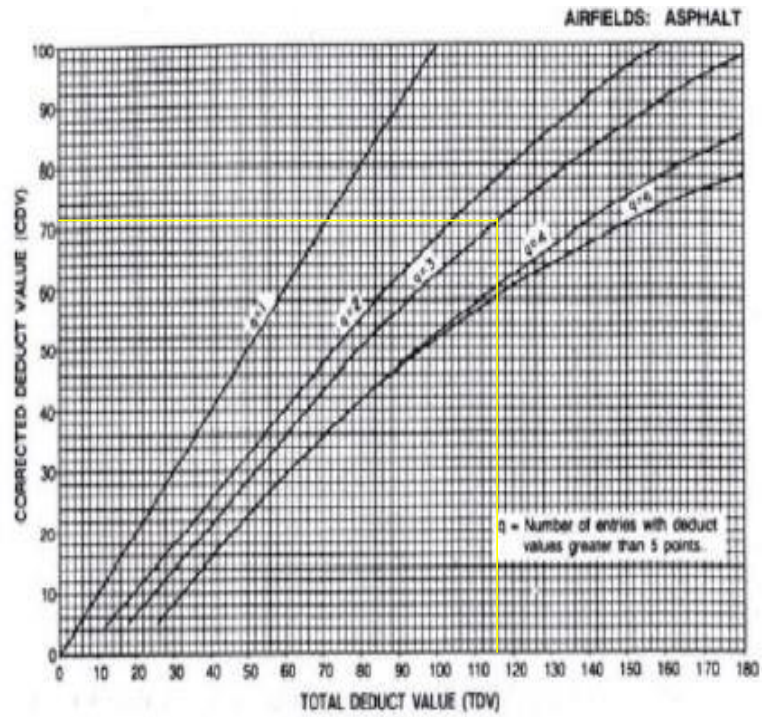
**Gambar L3.33.** Grafik *Deduct Value* Lubang Segmen 11



**Tabel L3.24.** Jenis Kerusakan Tambalan (*Patching*) Segmen 11

<i>Low</i>			<i>Medium</i>			<i>High</i>		
Panjang	Lebar	Luas (m <sup>2</sup> )	Panjang	Lebar	Luas (m <sup>2</sup> )	Panjang	Lebar	Luas (m <sup>2</sup> )
2.2	1.1	2.42						
6	1.4	8.4						
Jumlah		10.82	Jumlah			Jumlah		
<i>Density</i>		1.545714	<i>Density</i>			<i>Density</i>		
<i>Deduct Value</i>		4.1	<i>Deduct Value</i>			<i>Deduct Value</i>		

**Gambar L3.34.** Grafik *Deduct Value Patching* Segmen 11



**Gambar L3.35.** Grafik *Total Deduct Value* Segmen 11

*Total Deduct Value* = 116

*Corrected Deduct Value* = 72

Nilai PCI Per Segmen = 100 - *Corrected Deduct Value*

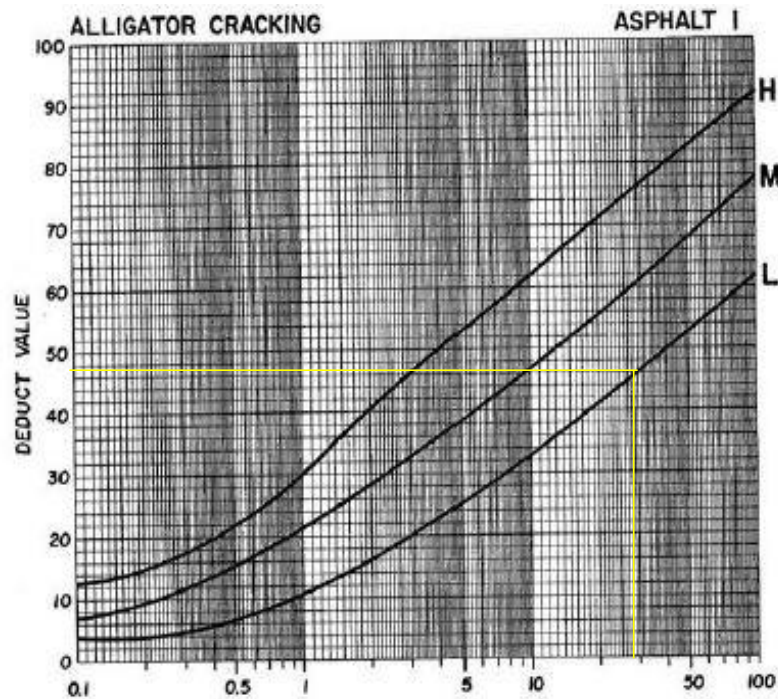
= 28

As = L segmen x P segmen  
 = 7 m x 100 m  
 = 700 m<sup>2</sup>

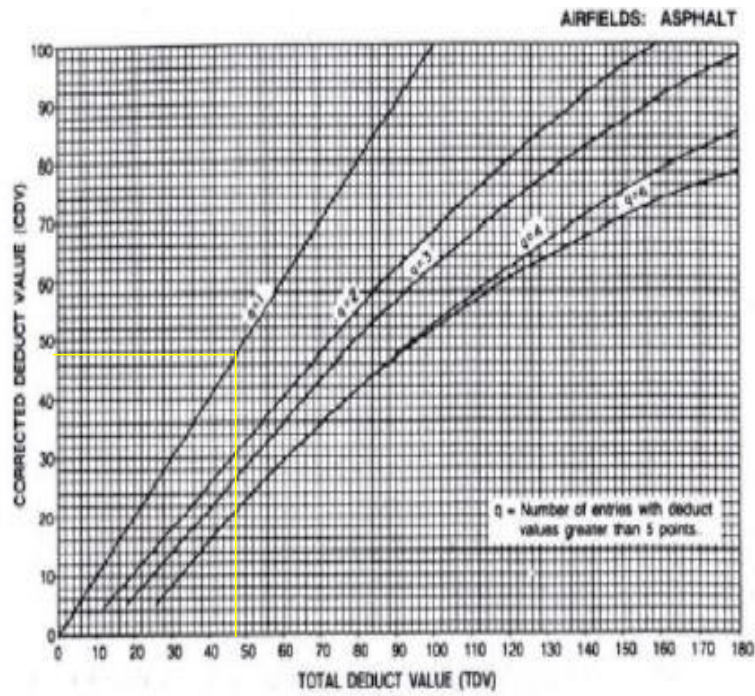
STA = 1+100 – 1+200

**Tabel L3.25.** Jenis Kerusakan Retak Kulit Buaya (*Alligator Cracking*) Segmen 12

<i>Low</i>			<i>Medium</i>			<i>High</i>		
Panjang	Lebar	Luas (m <sup>2</sup> )	Panjang	Lebar	Luas (m <sup>2</sup> )	Panjang	Lebar	Luas (m <sup>2</sup> )
50	1.39	69.5						
27.5	1.39	38.225						
50	1.14	57						
18	1.14	20.52						
13.1	1	13.1						
Jumlah		198.345	Jumlah			Jumlah		
<i>Density</i>		28.335	<i>Density</i>			<i>Density</i>		
<i>Deduct Value</i>		47.7	<i>Deduct Value</i>			<i>Deduct Value</i>		



**Gambar L3.36.** Grafik *Deduct Value* Retak Kulit Buaya Segmen 12



**Gambar L3.37.** Grafik *Total Deduct Value* Segmen 12

*Total Deduct Value* = 47.7

*Corrected Deduct Value* = 47.9

Nilai PCI Per Segmen = 100 - *Corrected Deduct Value*

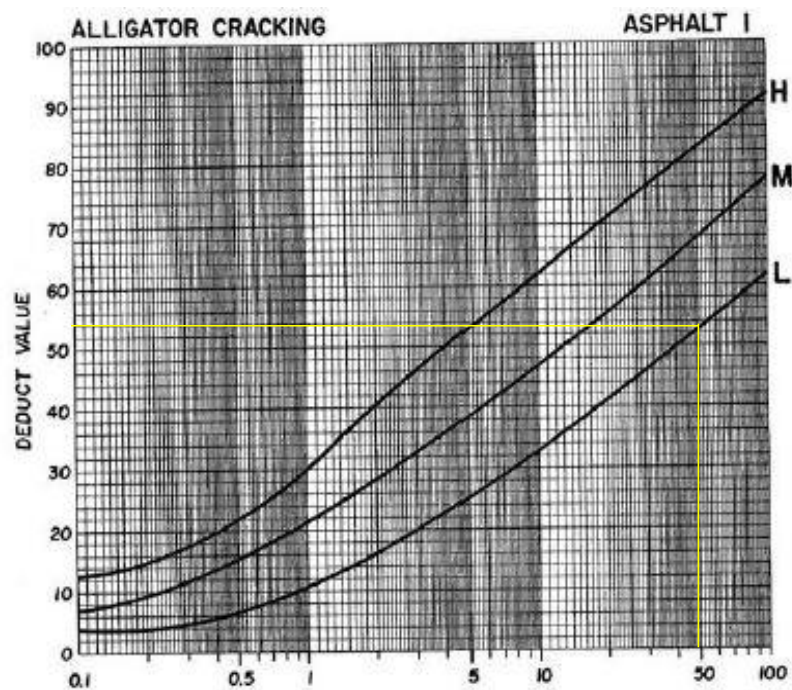
= 52.1

$$\begin{aligned} \text{As} &= L \text{ segmen} \times P \text{ segmen} \\ &= 7 \text{ m} \times 100 \text{ m} \\ &= 700 \text{ m}^2 \end{aligned}$$

$$\text{STA} = 1+200 - 1+300$$

**Tabel L3.26.** Jenis Kerusakan Retak Kulit Buaya (*Alligator Cracking*) Segmen 13

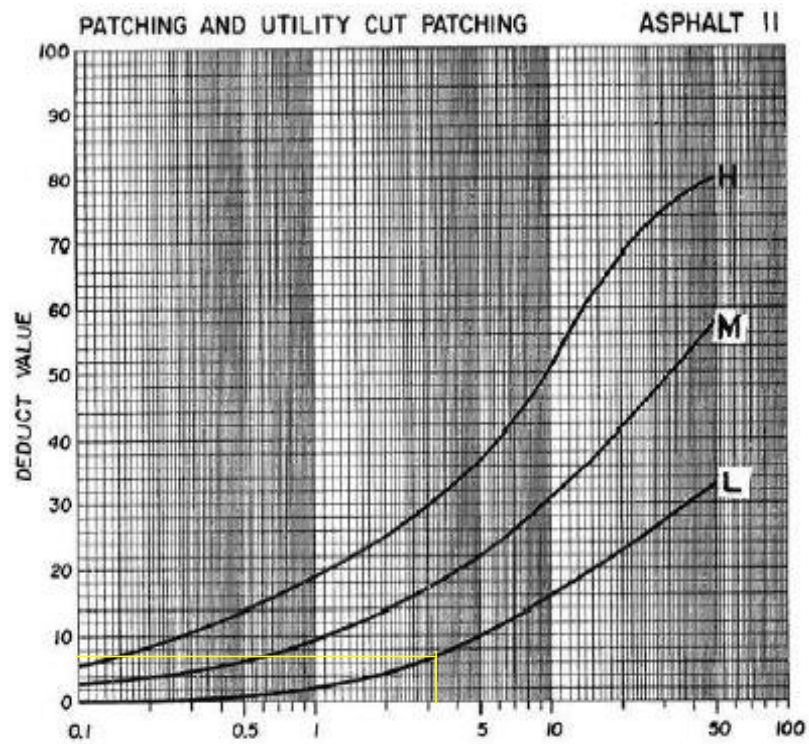
<i>Low</i>			<i>Medium</i>			<i>High</i>		
Panjang	Lebar	Luas (m <sup>2</sup> )	Panjang	Lebar	Luas (m <sup>2</sup> )	Panjang	Lebar	Luas (m <sup>2</sup> )
9.9	1.1	10.89						
29.7	1.6	47.52						
4.5	1.6	7.2						
43	2.6	111.8						
22.7	2.3	52.21						
26.5	2.3	60.95						
33.2	2.1	69.72						
Jumlah		360.29	Jumlah			Jumlah		
<i>Density</i>		51.47	<i>Density</i>			<i>Density</i>		
<i>Deduct Value</i>		54	<i>Deduct Value</i>			<i>Deduct Value</i>		

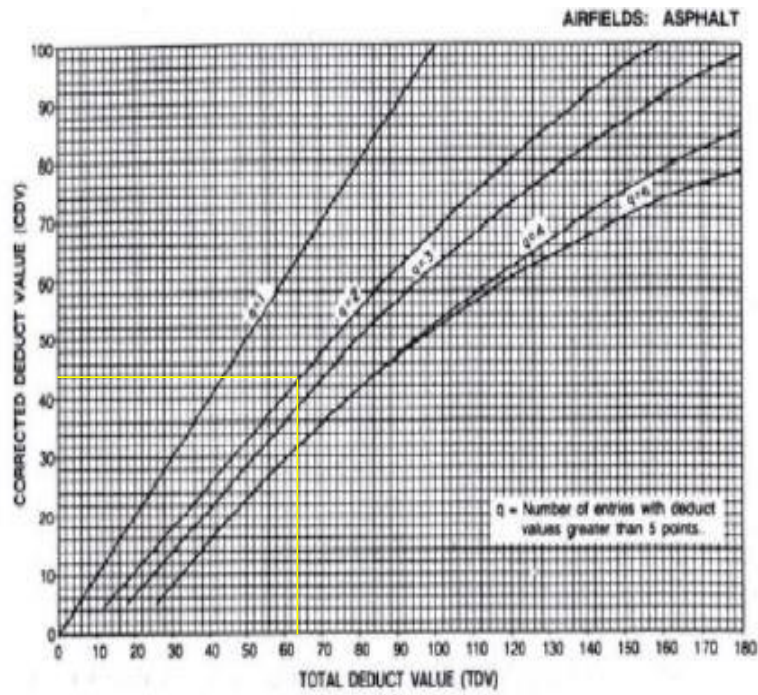


**Gambar L3.38.** Grafik *Deduct Value* Retak Kulit Buaya Segmen 13

**Tabel L3.27.** Jenis Kerusakan Tambalan (*Patching*) Segmen 13

<i>Low</i>			<i>Medium</i>			<i>High</i>		
Panjang	Lebar	Luas (m <sup>2</sup> )	Panjang	Lebar	Luas (m <sup>2</sup> )	Panjang	Lebar	Luas (m <sup>2</sup> )
3.5	1.2	4.2						
5.9	1.5	8.85						
6.8	1.4	9.52						
Jumlah		22.57	Jumlah			Jumlah		
<i>Density</i>		3.224286	<i>Density</i>			<i>Density</i>		
<i>Deduct Value</i>		7.8	<i>Deduct Value</i>			<i>Deduct Value</i>		

**Gambar L3.39.** Grafik *Deduct Value Patching* Segmen 13



**Gambar L3.40.** Grafik *Total Deduct Value* Segmen 13

*Total Deduct Value* = 61.8

*Corrected Deduct Value* = 43.7

Nilai PCI Per Segmen = 100 - *Corrected Deduct Value*

= 56.2

As = L segmen x P segmen

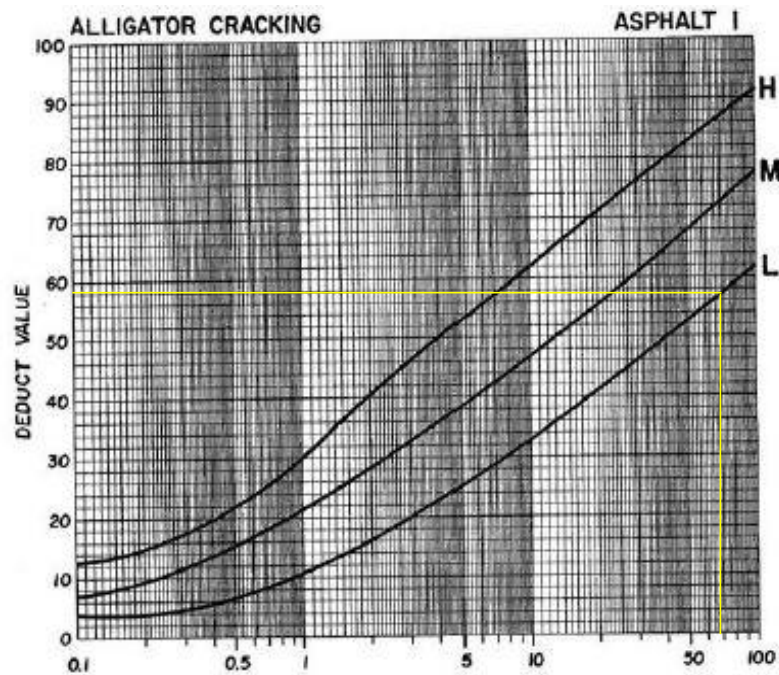
= 7 m x 100 m

= 700 m<sup>2</sup>

STA = 1+300 – 1+400

**Tabel L3.28.** Jenis Kerusakan Retak Kulit Buaya (*Alligator Cracking*) Segmen 14

<i>Low</i>			<i>Medium</i>			<i>High</i>		
Panjang	Lebar	Luas (m2)	Panjang	Lebar	Luas (m2)	Panjang	Lebar	Luas (m2)
24.3	2.4	58.32						
8.5	2.5	21.25						
40.3	2.6	104.78						
20.1	2.4	48.24						
83.4	3	250.2						
Jumlah		482.79	Jumlah			Jumlah		
<i>Density</i>		68.97	<i>Density</i>			<i>Density</i>		
<i>Deduct Value</i>		68.2	<i>Deduct Value</i>			<i>Deduct Value</i>		

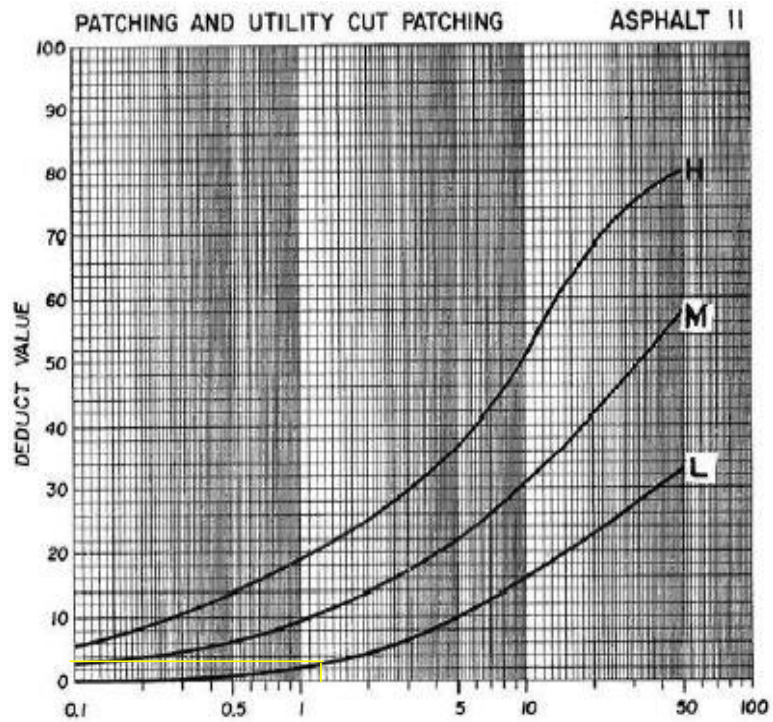


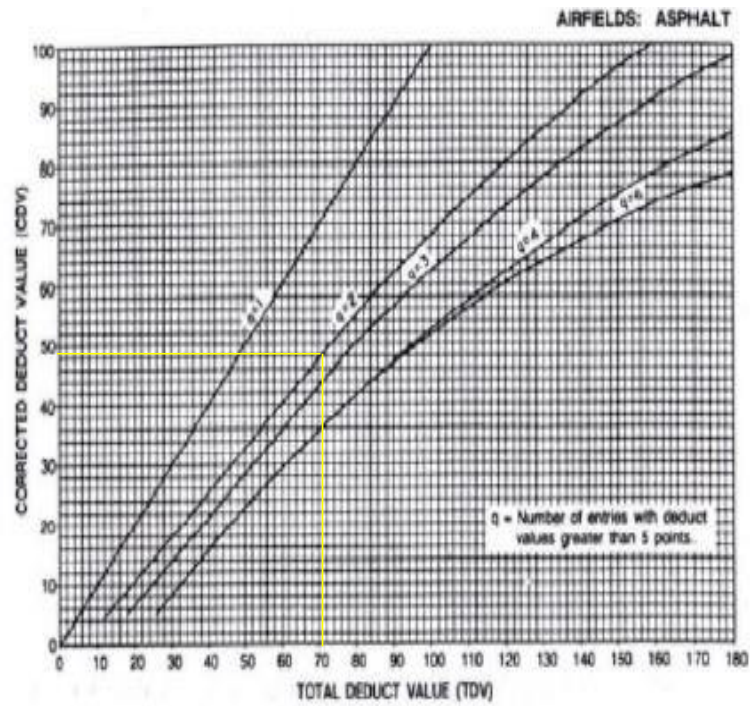
**Gambar L3.41.** Grafik *Deduct Value* Retak Kulit Buaya Segmen 14



**Tabel L3.29.** Jenis Kerusakan Tambalan (*Patching*) Segmen 14

<i>Low</i>			<i>Medium</i>			<i>High</i>		
Panjang	Lebar	Luas (m <sup>2</sup> )	Panjang	Lebar	Luas (m <sup>2</sup> )	Panjang	Lebar	Luas (m <sup>2</sup> )
5.2	1.7	8.84						
Jumlah		8.84	Jumlah			Jumlah		
<i>Density</i>		1.262857	<i>Density</i>			<i>Density</i>		
<i>Deduct Value</i>		2.3	<i>Deduct Value</i>			<i>Deduct Value</i>		

**Gambar L3.42.** Grafik *Deduct Value Patching* Segmen 14



**Gambar L3.43.** Grafik *Total Deduct Value* Segmen 14

$$\textit{Total Deduct Value} = 70.5$$

$$\textit{Corrected Deduct Value} = 48.3$$

$$\text{Nilai PCI Per Segmen} = 100 - \textit{Corrected Deduct Value}$$

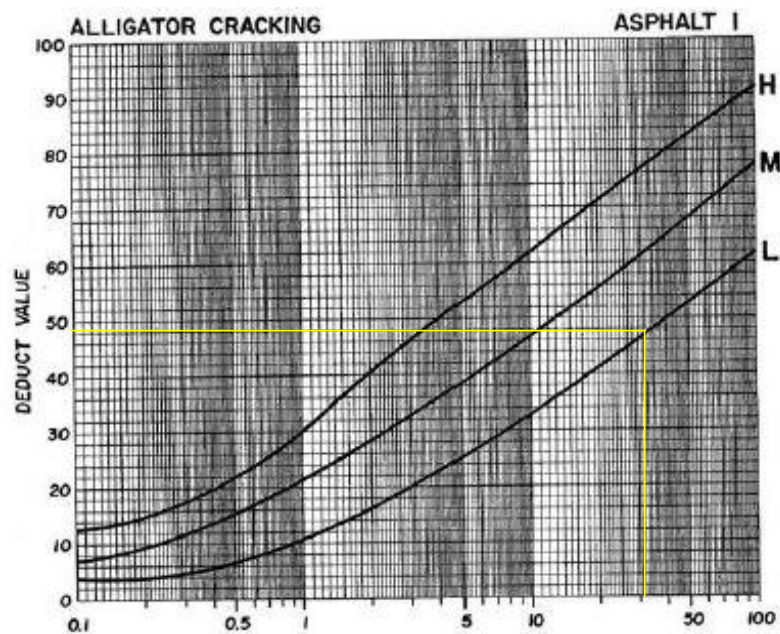
$$= 51.7$$

$$\begin{aligned} \text{As} &= L \text{ segmen} \times P \text{ segmen} \\ &= 7 \text{ m} \times 100 \text{ m} \\ &= 700 \text{ m}^2 \end{aligned}$$

$$\text{STA} = 1+400 - 1+500$$

**Tabel L3.30.** Jenis Kerusakan Retak Kulit Buaya (*Alligator Cracking*) Segmen 15

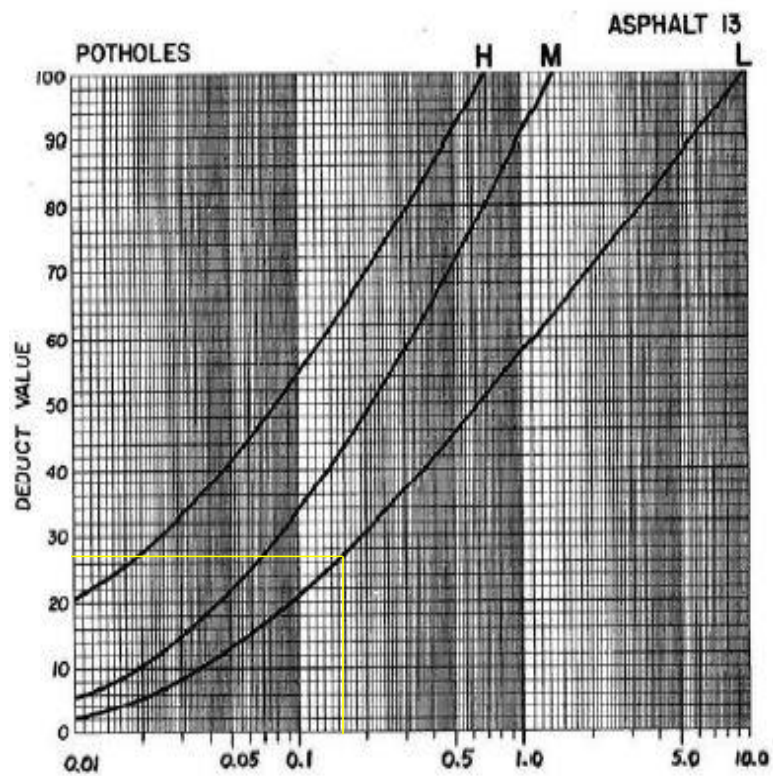
<i>Low</i>			<i>Medium</i>			<i>High</i>		
Panjang	Lebar	Luas (m <sup>2</sup> )	Panjang	Lebar	Luas (m <sup>2</sup> )	Panjang	Lebar	Luas (m <sup>2</sup> )
13.2	1.15	15.18						
12.6	1.3	16.38						
25.5	2.2	56.1						
26.3	1.7	44.71						
11.8	0.9	10.62						
15.6	0.8	12.48						
26.1	1.6	41.76						
18.5	1.2	22.2						
Jumlah		219.43	Jumlah			Jumlah		
<i>Density</i>		31.34714	<i>Density</i>			<i>Density</i>		
<i>Deduct Value</i>		48.4	<i>Deduct Value</i>			<i>Deduct Value</i>		

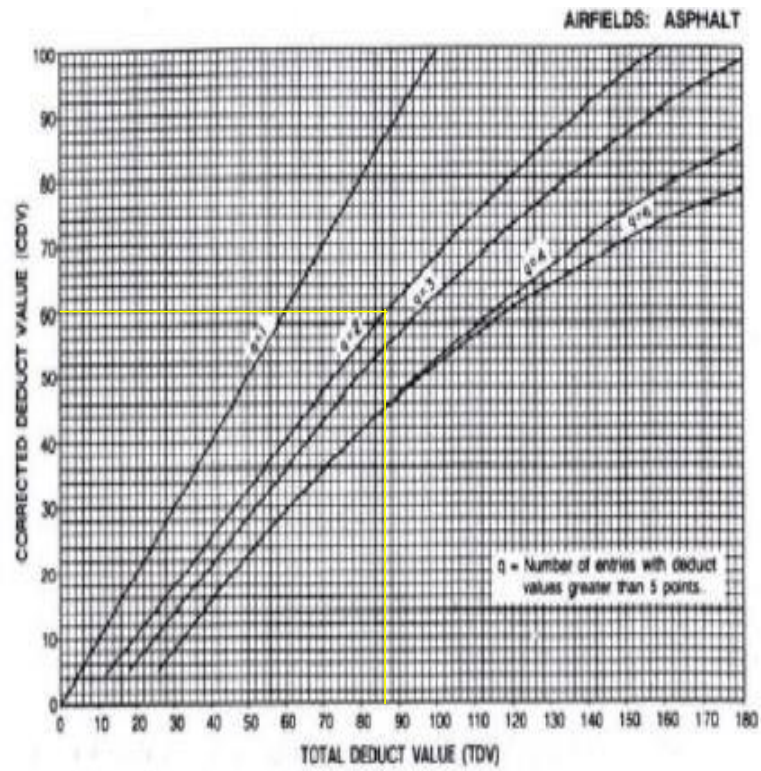


**Gambar L3.44.** Grafik *Deduct Value* Retak Kulit Buaya Segmen 15

**Tabel L3.31.**Jenis Kerusakan Lubang (*Potholes*) Segmen 15

<i>Low</i>			<i>Medium</i>			<i>High</i>		
Panjang	Lebar	Luas (m <sup>2</sup> )	Panjang	Lebar	Luas (m <sup>2</sup> )	Panjang	Lebar	Luas (m <sup>2</sup> )
1	0.5	0.5						
1.4	0.4	0.56						
Jumlah		1.06	Jumlah			Jumlah		
<i>Density</i>		0.151429	<i>Density</i>			<i>Density</i>		
<i>Deduct Value</i>		37.6	<i>Deduct Value</i>			<i>Deduct Value</i>		

**Gambar L3.45.** Grafik *Deduct Value* Lubang Segmen 15



**Gambar L3.46.** Grafik *Total Deduct Value* Segmen 15

$$\text{Total Deduct Value} = 86$$

$$\text{Corrected Deduct Value} = 60.2$$

$$\text{Nilai PCI Per Segmen} = 100 - \text{Corrected Deduct Value}$$

$$= 39.8$$

As = L segmen x P segmen

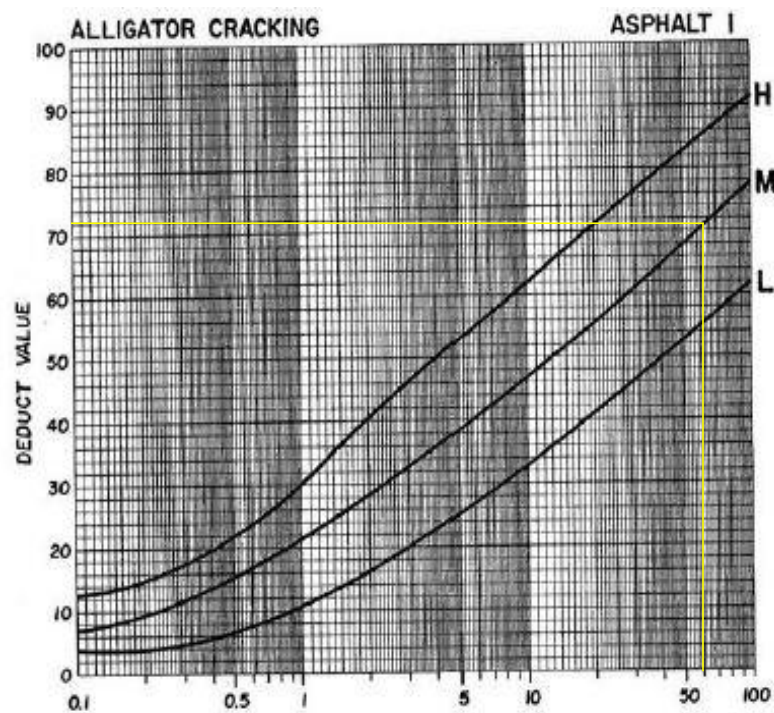
= 7 m x 100 m

= 700 m<sup>2</sup>

STA = 1+500 – 1+600

**Tabel L3.32.** Jenis Kerusakan Retak Kulit Buaya (*Alligator Cracking*) Segmen 16

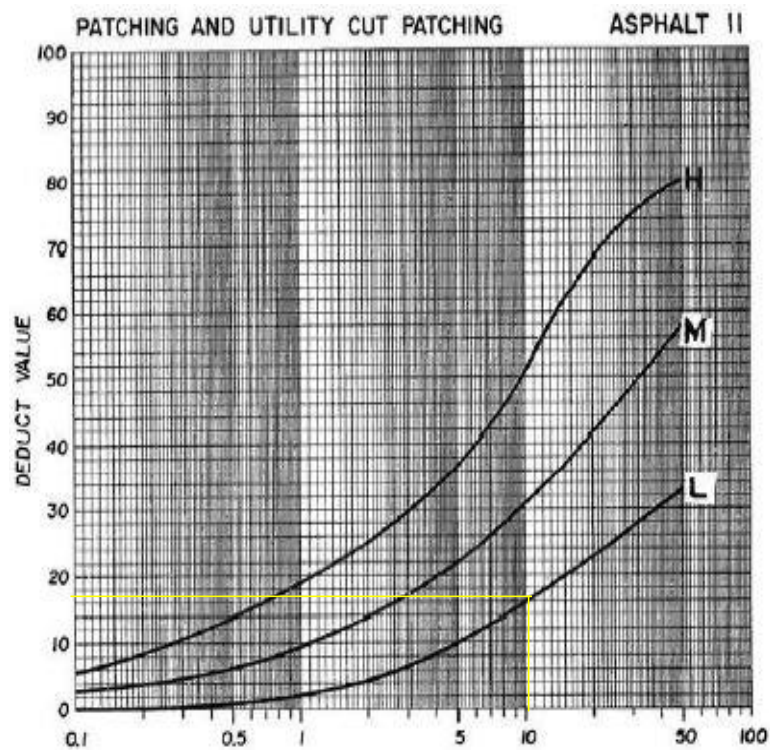
<i>Low</i>			<i>Medium</i>			<i>High</i>		
Panjang	Lebar	Luas (m <sup>2</sup> )	Panjang	Lebar	Luas (m <sup>2</sup> )	Panjang	Lebar	Luas (m <sup>2</sup> )
			80.9	3.2	258.88			
			21.9	2.6	56.94			
			59.2	2.9	171.68			
Jumlah			Jumlah			Jumlah		
			487.5					
<i>Density</i>			<i>Density</i>			<i>Density</i>		
			69.64286					
<i>Deduct Value</i>			<i>Deduct Value</i>			<i>Deduct Value</i>		
			72.2					



**Gambar L3.47.** Grafik *Deduct Value* Retak Kulit Buaya Segmen 16

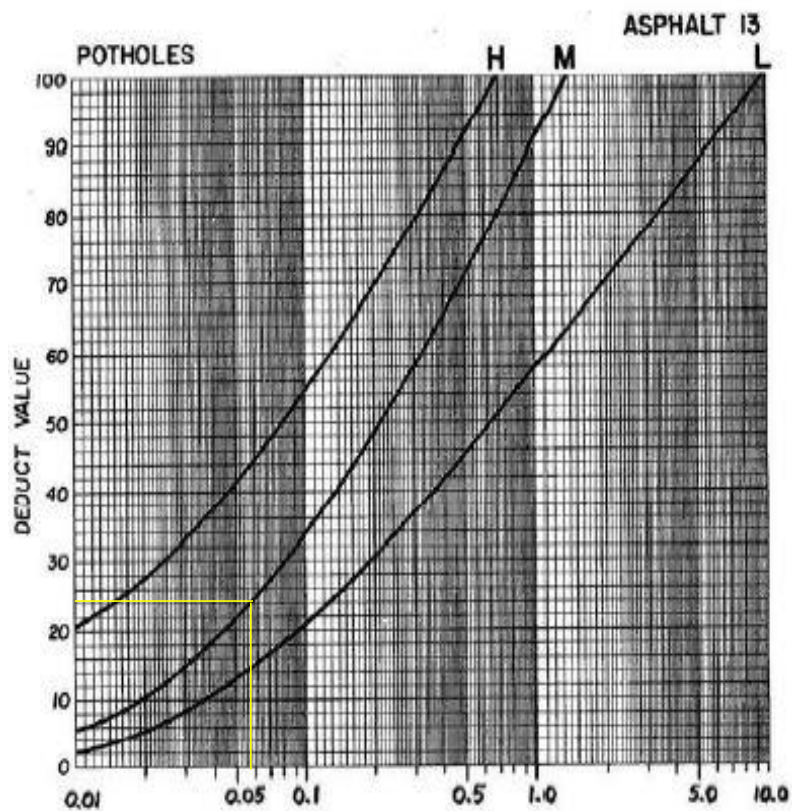
**Tabel L3.33.** Jenis Kerusakan Tambalan (*Patching*) Segmen 16

<i>Low</i>			<i>Medium</i>			<i>High</i>		
Panjang	Lebar	Luas (m <sup>2</sup> )	Panjang	Lebar	Luas (m <sup>2</sup> )	Panjang	Lebar	Luas (m <sup>2</sup> )
13.9	1.5	20.85						
10.9	1.9	20.71						
10.6	2.7	28.62						
Jumlah		70.18	Jumlah			Jumlah		
<i>Density</i>		10.02571	<i>Density</i>			<i>Density</i>		
<i>Deduct Value</i>		17.4	<i>Deduct Value</i>			<i>Deduct Value</i>		

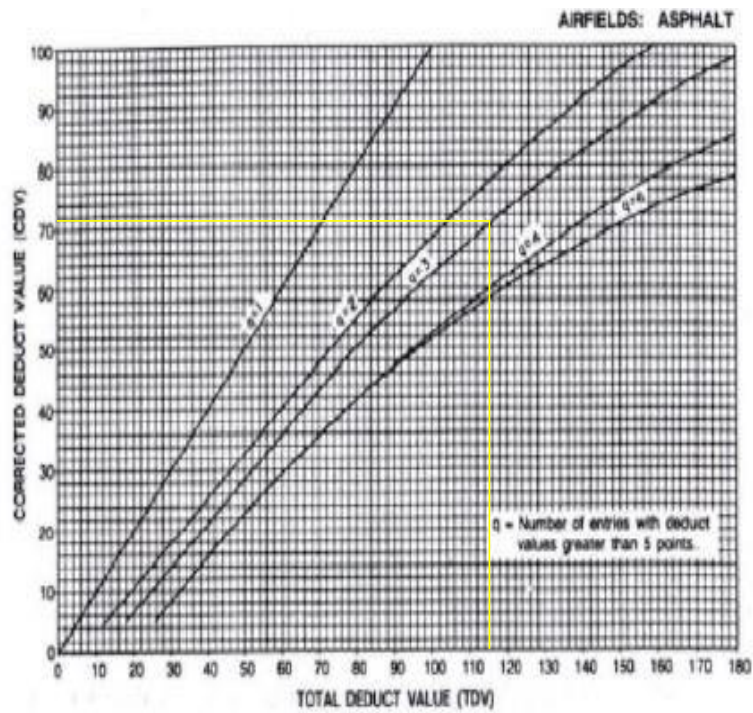
**Gambar L3.48.** Grafik *Deduct Value Patching* Segmen 16

**Tabel L3.34.** Jenis Kerusakan Lubang (*Potholes*) Segmen 16

<i>Low</i>			<i>Medium</i>			<i>High</i>		
Panjang	Lebar	Luas (m <sup>2</sup> )	Panjang	Lebar	Luas (m <sup>2</sup> )	Panjang	Lebar	Luas (m <sup>2</sup> )
			1	0.4	0.4			
Jumlah			Jumlah		0.4	Jumlah		
<i>Density</i>			<i>Density</i>		0.057143	<i>Density</i>		
<i>Deduct Value</i>			<i>Deduct Value</i>		24	<i>Deduct Value</i>		

**Gambar L3.49.** Grafik *Deduct Value* Lubang Segmen 16





**Gambar L3.50.** Grafik *Total Deduct Value* Segmen 16

$$\textit{Total Deduct Value} = 113.6$$

$$\textit{Corrected Deduct Value} = 71.9$$

$$\text{Nilai PCI Per Segmen} = 100 - \textit{Corrected Deduct Value}$$

$$= 28.1$$

As = L segmen x P segmen

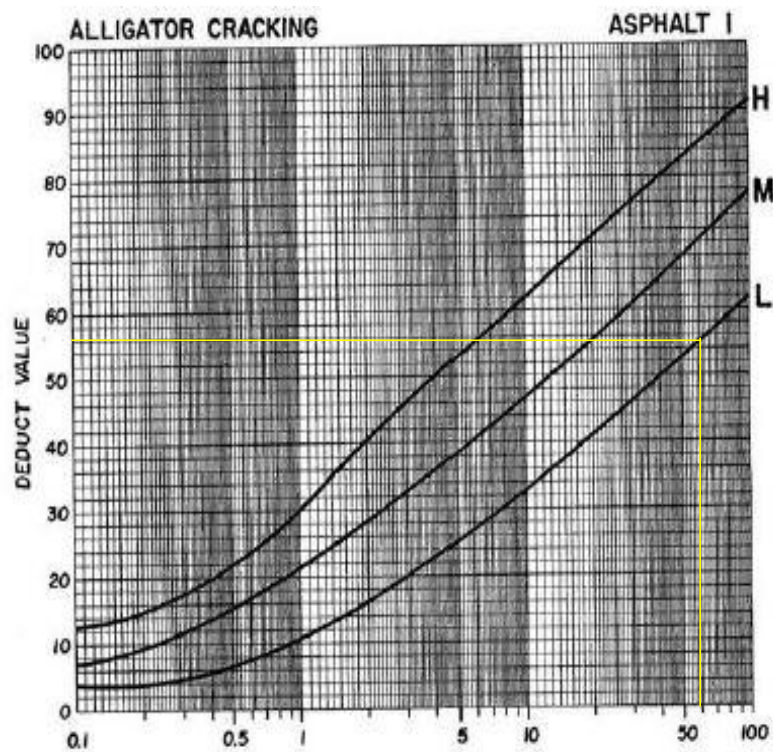
= 7 m x 100 m

= 700 m<sup>2</sup>

STA = 1+600 – 1+700

**Tabel L3.35.** Jenis Kerusakan Retak Kulit Buaya (*Alligator Cracking*) Segmen 17

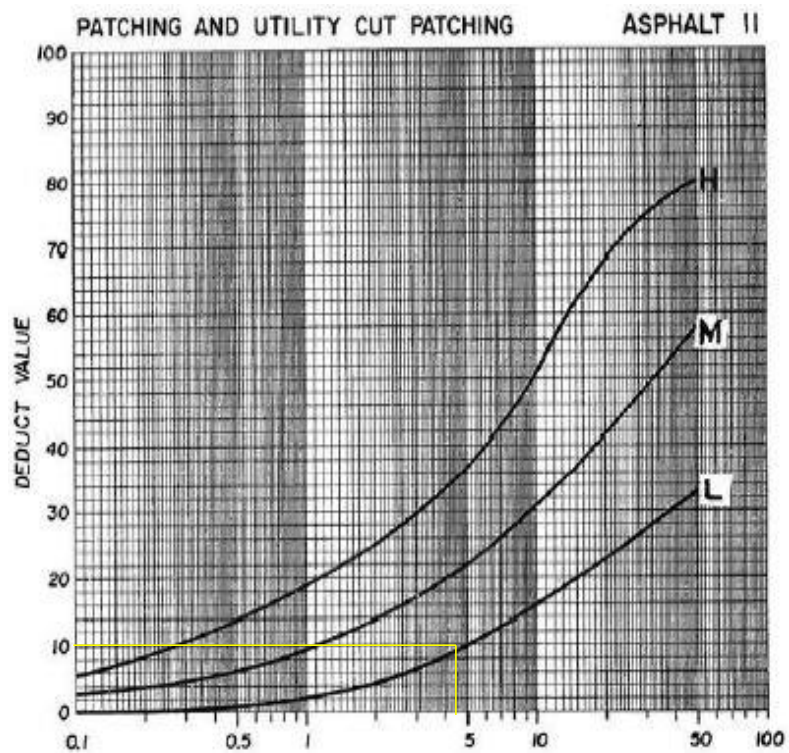
<i>Low</i>			<i>Medium</i>			<i>High</i>		
Panjang	Lebar	Luas (m <sup>2</sup> )	Panjang	Lebar	Luas (m <sup>2</sup> )	Panjang	Lebar	Luas (m <sup>2</sup> )
			20.9	2.9	60.61			
			27.8	3.2	88.96			
			6.3	2.3	14.49			
			41.2	4.1	168.92			
			20.8	4.1	85.28			
Jumlah			Jumlah		418.26	Jumlah		
<i>Density</i>			<i>Density</i>		59.75143	<i>Density</i>		
<i>Deduct Value</i>			<i>Deduct Value</i>		56.2	<i>Deduct Value</i>		



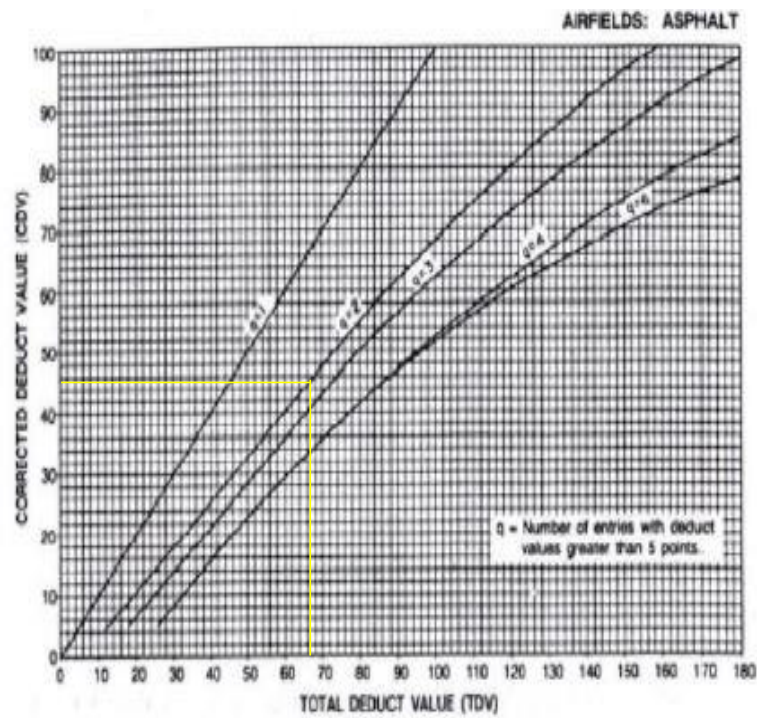
**Gambar L3.51.** Grafik *Deduct Value* Retak Kulit Buaya Segmen 17

**Tabel L3.36.** Jenis Kerusakan Tambalan (*Patching*) Segmen 17

<i>Low</i>			<i>Medium</i>			<i>High</i>		
Panjang	Lebar	Luas (m <sup>2</sup> )	Panjang	Lebar	Luas (m <sup>2</sup> )	Panjang	Lebar	Luas (m <sup>2</sup> )
2.7	1	2.7						
29	1	29						
Jumlah		31.7	Jumlah			Jumlah		
<i>Density</i>		4.528571	<i>Density</i>			<i>Density</i>		
<i>Deduct Value</i>		10	<i>Deduct Value</i>			<i>Deduct Value</i>		



**Gambar L3.52.** Grafik *Deduct Value Patching* Segmen 17



**Gambar L3.53.** Grafik Total Deduct Value Segmen 17

Total Deduct Value = 66.2

Corrected Deduct Value = 45.8

Nilai PCI Per Segmen = 100 - Corrected Deduct Value

= 54.2

As = L segmen x P segmen

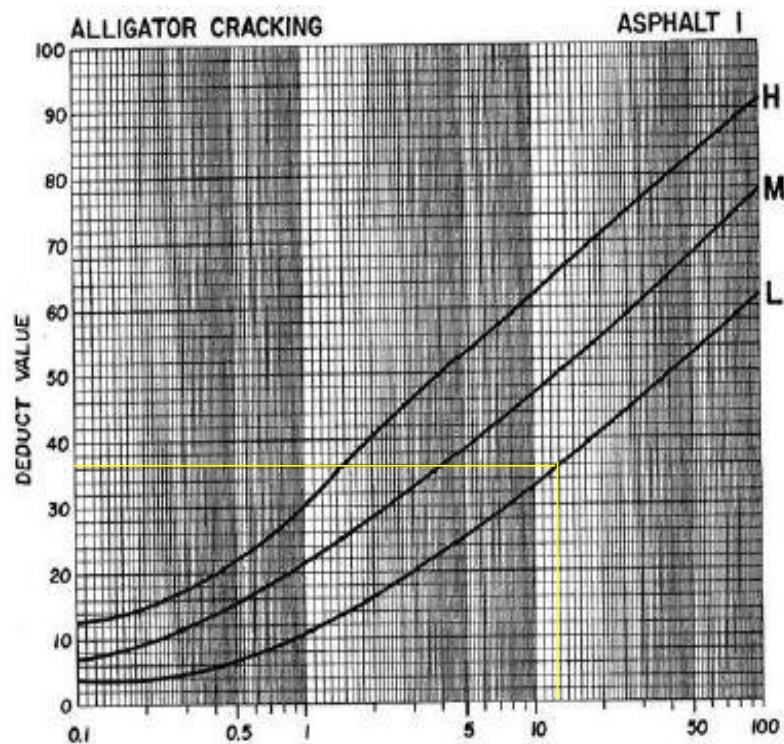
= 7 m x 100 m

= 700 m<sup>2</sup>

STA = 1+700 – 1+800

**Tabel L3.37.** Jenis Kerusakan Retak Kulit Buaya (*Alligator Cracking*) Segmen 18

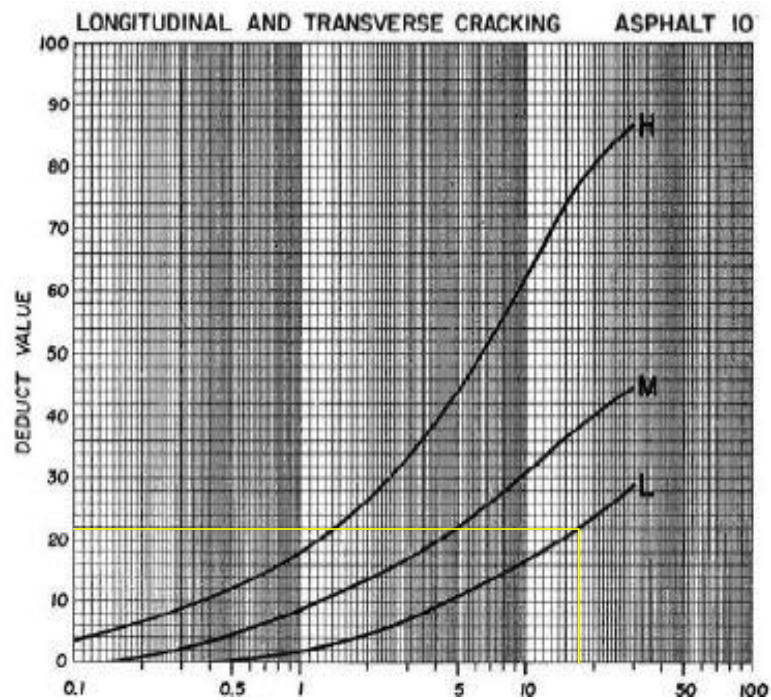
<i>Low</i>			<i>Medium</i>			<i>High</i>		
Panjang	Lebar	Luas (m <sup>2</sup> )	Panjang	Lebar	Luas (m <sup>2</sup> )	Panjang	Lebar	Luas (m <sup>2</sup> )
6.8	1.4	9.52						
4.7	3	14.1						
16.4	2.8	45.92						
16.7	1.15	19.205						
Jumlah		88.745	Jumlah			Jumlah		
<i>Density</i>		12.67786	<i>Density</i>			<i>Density</i>		
<i>Deduct Value</i>		36.2	<i>Deduct Value</i>			<i>Deduct Value</i>		

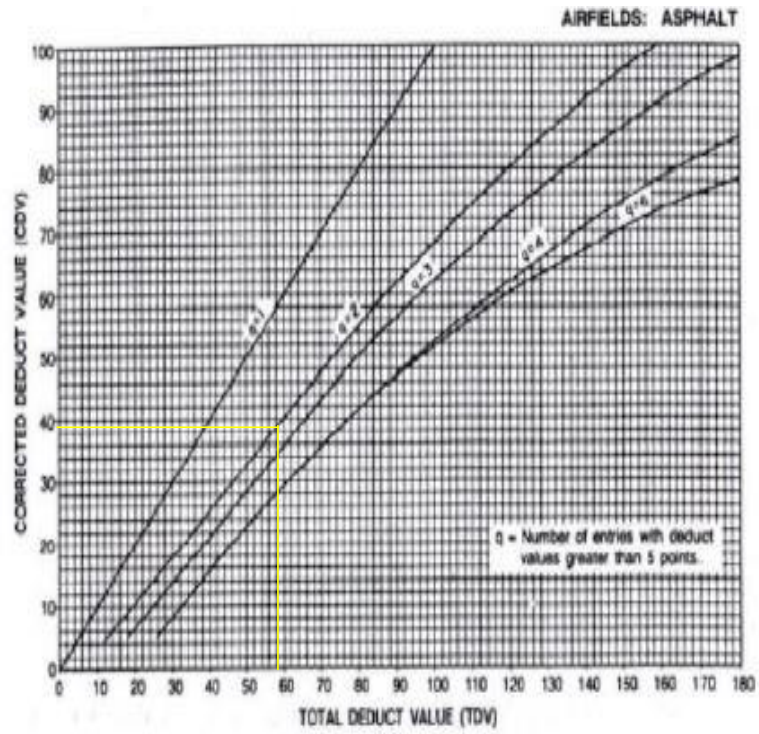


**Gambar L3.54.** Grafik *Deduct Value* Retak Kulit Buaya Segmen 18

**Tabel L3.38.**Jenis Kerusakan Retak Memanjang dan Melintang Segmen 18

<i>Low</i>		<i>Medium</i>		<i>High</i>	
Panjang		Panjang		Panjang	
4.1					
6.6					
6.5					
Jumlah	17.2	Jumlah		Jumlah	
<i>Density</i>	17.2	<i>Density</i>		<i>Density</i>	
<i>Deduct Value</i>	21.8	<i>Deduct Value</i>		<i>Deduct Value</i>	

**Gambar L3.55.** Grafik *Deduct Value* Retak Memanjang dan Melintang Segmen 18



**Gambar L3.56.** Grafik *Total Deduct Value* Segmen 18

*Total Deduct Value* = 58

*Corrected Deduct Value* = 38.9

Nilai PCI Per Segmen = 100 - *Corrected Deduct Value*

= 61.1

As = L segmen x P segmen

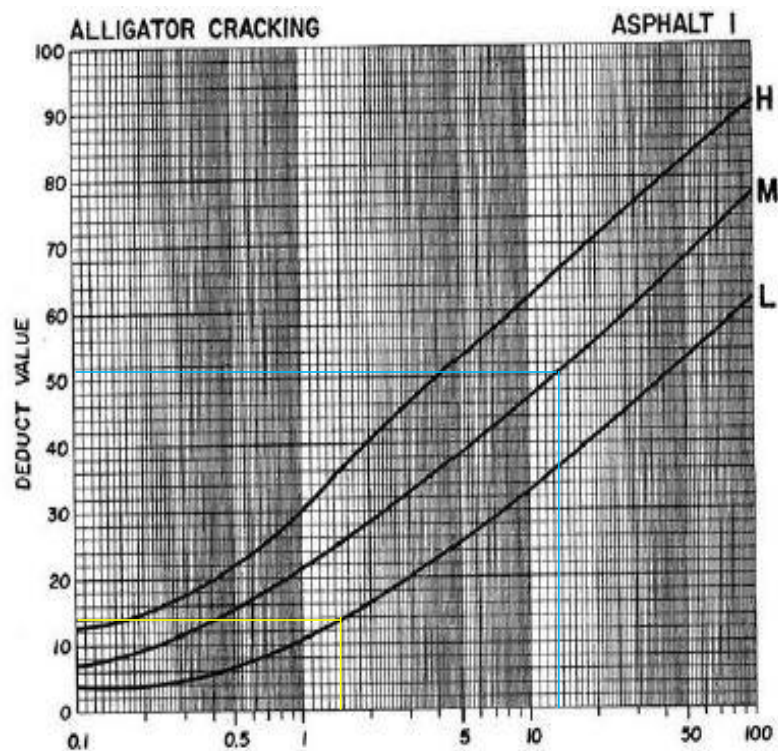
= 7 m x 100 m

= 700 m<sup>2</sup>

STA = 1+800 – 1+900

**Tabel L3.39.** Jenis Kerusakan Retak Kulit Buaya (*Alligator Cracking*) Segmen 19

<i>Low</i>			<i>Medium</i>			<i>High</i>		
Panjang	Lebar	Luas (m <sup>2</sup> )	Panjang	Lebar	Luas (m <sup>2</sup> )	Panjang	Lebar	Luas (m <sup>2</sup> )
8.6	0.6	5.16	18.1	1.5	27.15			
6.3	0.81	5.103	18.3	0.4	7.32			
			24.8	2.3	57.04			
Jumlah		10.263	Jumlah		91.51	Jumlah		
<i>Density</i>		1.466143	<i>Density</i>		13.07286	<i>Density</i>		
<i>Deduct Value</i>		14.1	<i>Deduct Value</i>		51.8	<i>Deduct Value</i>		

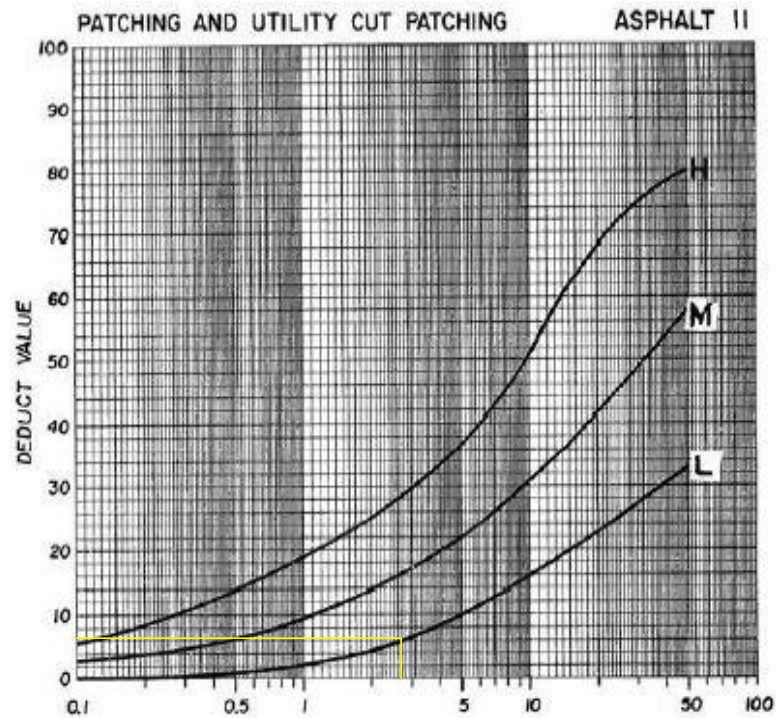


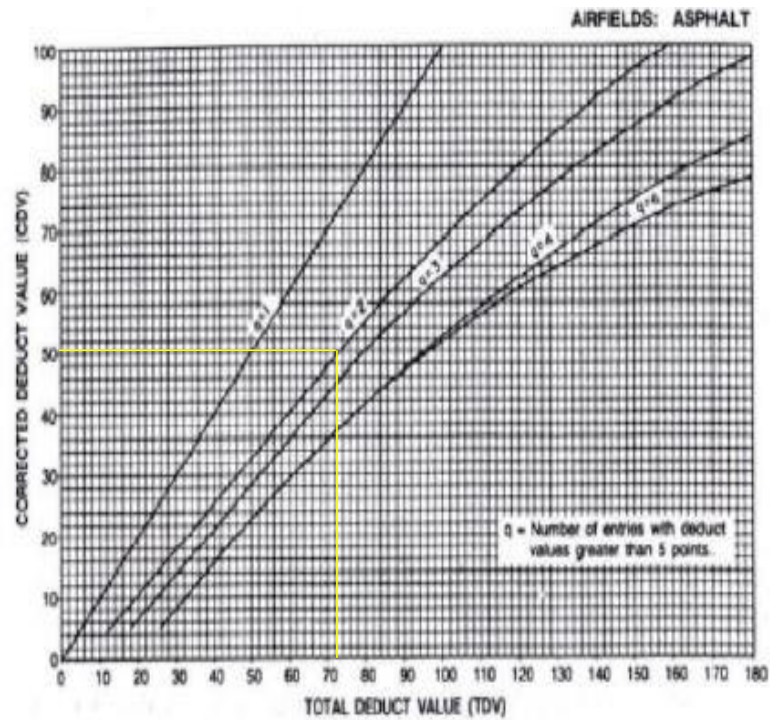
**Gambar L3.57.** Grafik *Deduct Value* Retak Kulit Buaya Segmen 19



**Tabel L3.40.** Jenis Kerusakan Tambalan (*Patching*) Segmen 19

<i>Low</i>			<i>Medium</i>			<i>High</i>		
Panjang	Lebar	Luas (m <sup>2</sup> )	Panjang	Lebar	Luas (m <sup>2</sup> )	Panjang	Lebar	Luas (m <sup>2</sup> )
3.4	3.1	10.54						
7.8	1.1	8.58						
Jumlah		19.12	Jumlah			Jumlah		
<i>Density</i>		2.731429	<i>Density</i>			<i>Density</i>		
<i>Deduct Value</i>		6.2	<i>Deduct Value</i>			<i>Deduct Value</i>		

**Gambar L3.58.** Grafik *Deduct Value Patching* Segmen 19



**Gambar L3.59.** Grafik Total Deduct Value Segmen 19

$$\text{Total Deduct Value} = 72.1$$

$$\text{Corrected Deduct Value} = 50.4$$

$$\text{Nilai PCI Per Segmen} = 100 - \text{Corrected Deduct Value}$$

$$= 49.6$$

As = L segmen x P segmen

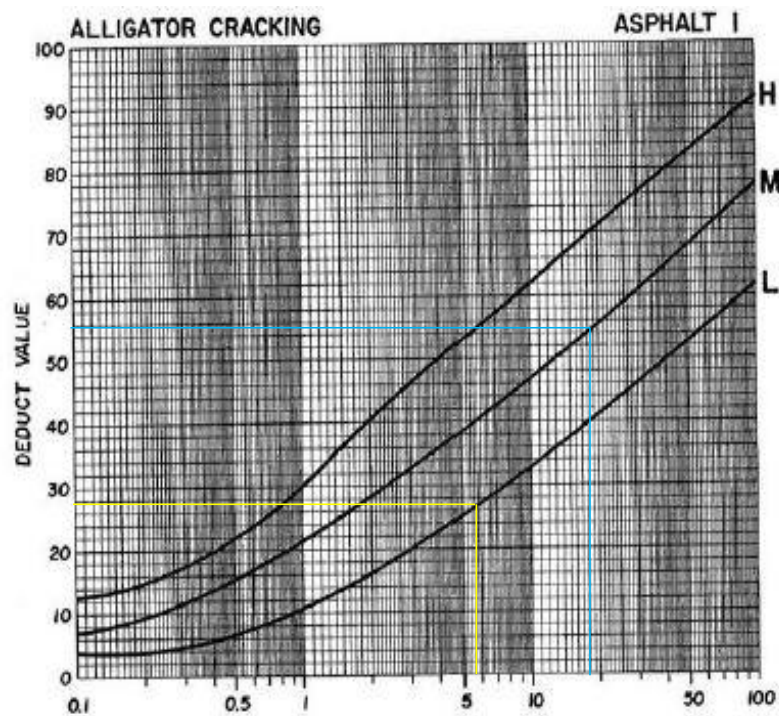
= 7 m x 100 m

= 700 m<sup>2</sup>

STA = 1+900 – 2+000

**Tabel L3.41.** Jenis Kerusakan Retak Kulit Buaya (*Alligator Cracking*) Segmen 20

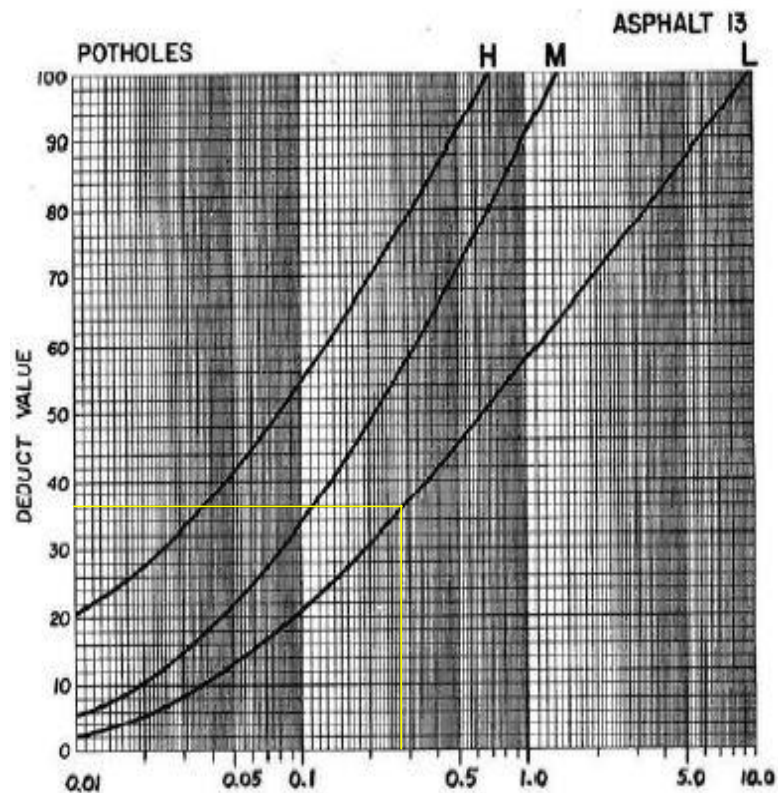
<i>Low</i>			<i>Medium</i>			<i>High</i>		
Panjang	Lebar	Luas (m <sup>2</sup> )	Panjang	Lebar	Luas (m <sup>2</sup> )	Panjang	Lebar	Luas (m <sup>2</sup> )
5	3.8	19	42.2	3	126.6			
8.8	2.3	20.24						
Jumlah		39.24	Jumlah		126.6	Jumlah		
<i>Density</i>		5.605714	<i>Density</i>		18.08571	<i>Density</i>		
<i>Deduct Value</i>		27.9	<i>Deduct Value</i>		55.8	<i>Deduct Value</i>		



**Gambar L3.60.** Grafik *Deduct Value* Retak Kulit Buaya Segmen 20

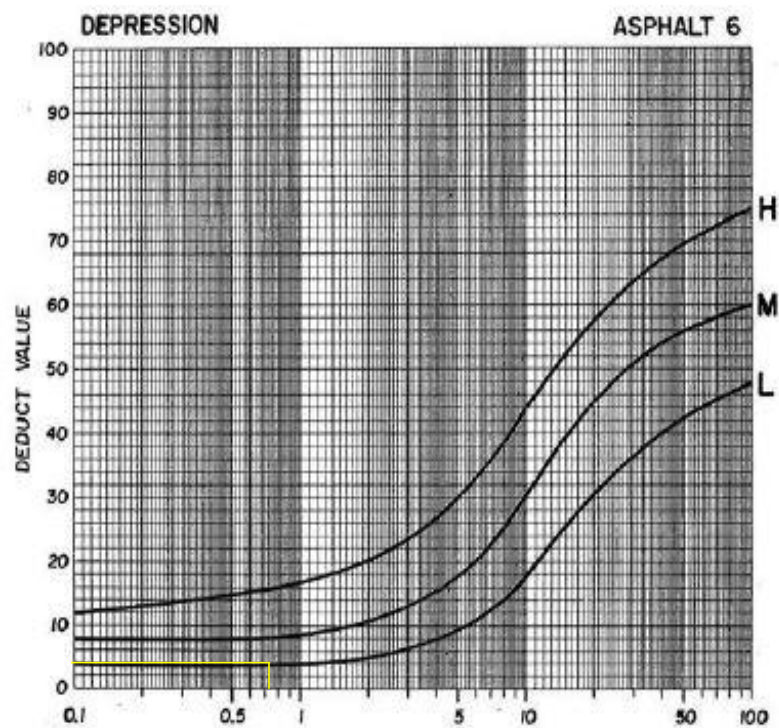
**Tabel L3.42.** Jenis Kerusakan Lubang (*Potholes*) Segmen 20

<i>Low</i>			<i>Medium</i>			<i>High</i>		
Panjang	Lebar	Luas (m <sup>2</sup> )	Panjang	Lebar	Luas (m <sup>2</sup> )	Panjang	Lebar	Luas (m <sup>2</sup> )
2.8	0.57	1.596						
1.17	0.26	0.3042						
0.3	0.15	0.045						
0.2	0.13	0.026						
Jumlah		1.9712	Jumlah			Jumlah		
<i>Density</i>		0.2816	<i>Density</i>			<i>Density</i>		
<i>Deduct Value</i>		36.1	<i>Deduct Value</i>			<i>Deduct Value</i>		

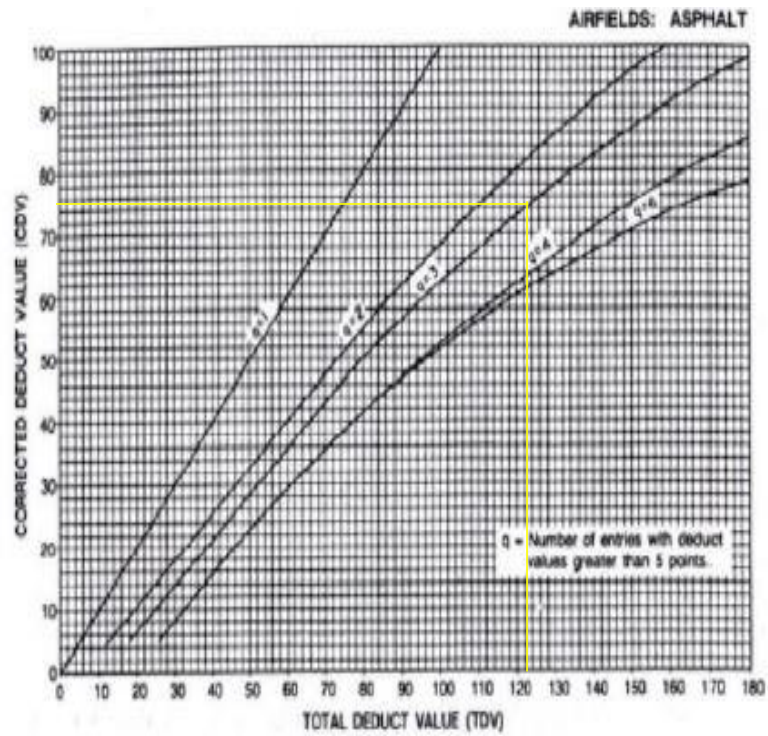
**Gambar L3.61.** Grafik *Deduct Value* Lubang Segmen 20

**Tabel L3.43.** Jenis Kerusakan Amblas (*Depression*) Segmen 20

<i>Low</i>			<i>Medium</i>			<i>High</i>		
Panjang	Lebar	Luas (m <sup>2</sup> )	Panjang	Lebar	Luas (m <sup>2</sup> )	Panjang	Lebar	Luas (m <sup>2</sup> )
6.8	0.76	5.168						
Jumlah		5.168	Jumlah			Jumlah		
<i>Density</i>		0.738286	<i>Density</i>			<i>Density</i>		
<i>Deduct Value</i>		3.9	<i>Deduct Value</i>			<i>Deduct Value</i>		



**Gambar L3.62.** Grafik *Deduct Value Depression* Segmen 20



**Gambar L3.63.** Grafik *Total Deduct Value* Segmen 20

$$\text{Total Deduct Value} = 123.7$$

$$\text{Corrected Deduct Value} = 75.6$$

$$\text{Nilai PCI Per Segmen} = 100 - \text{Corrected Deduct Value}$$

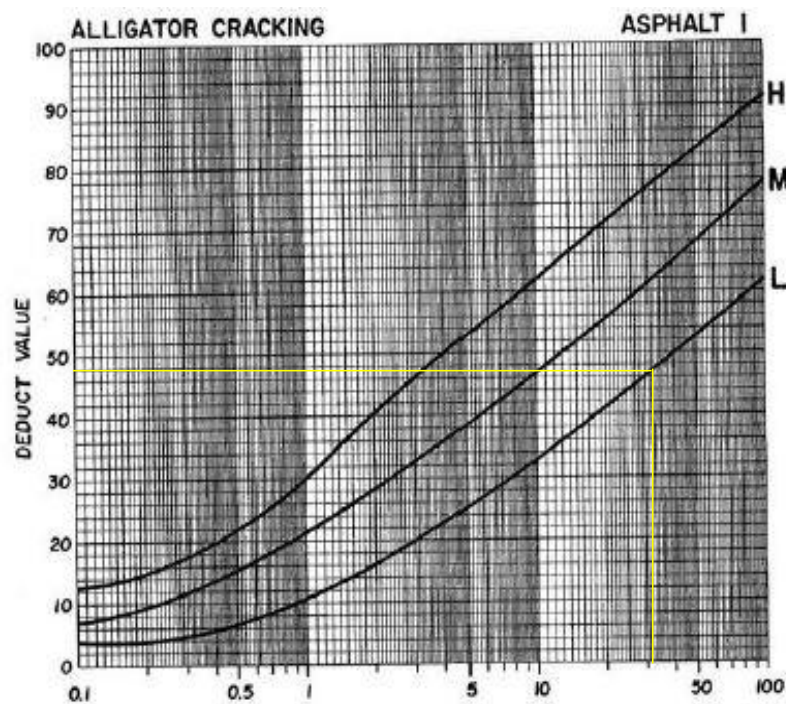
$$= 24.4$$

$$\begin{aligned} \text{As} &= L \text{ segmen} \times P \text{ segmen} \\ &= 7 \text{ m} \times 100 \text{ m} \\ &= 700 \text{ m}^2 \end{aligned}$$

$$\text{STA} = 2+000 - 2+100$$

**Tabel L3.44.** Jenis Kerusakan Retak Kulit Buaya (*Alligator Cracking*) Segmen 21

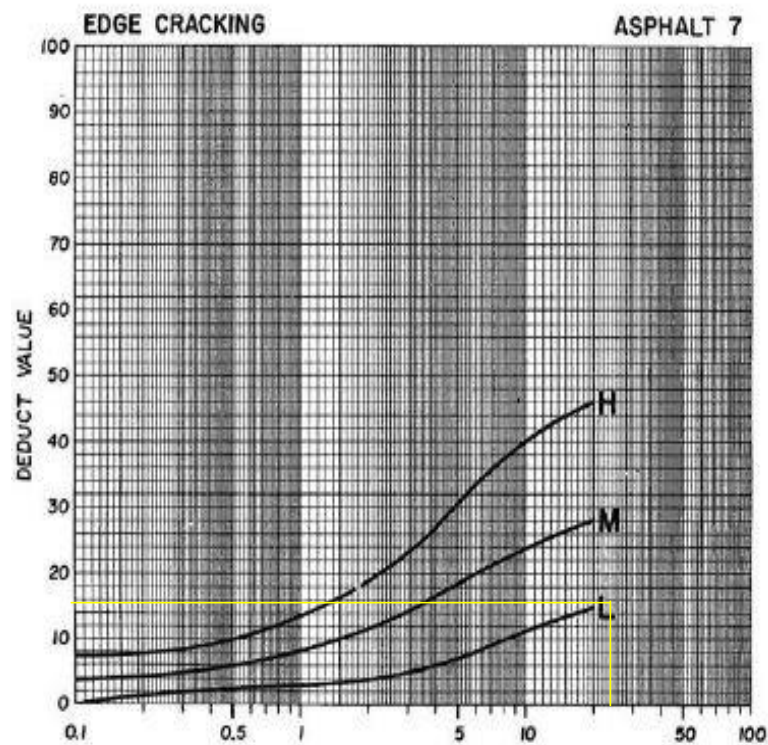
<i>Low</i>			<i>Medium</i>			<i>High</i>		
Panjang	Lebar	Luas (m <sup>2</sup> )	Panjang	Lebar	Luas (m <sup>2</sup> )	Panjang	Lebar	Luas (m <sup>2</sup> )
13.4	2.6	34.84						
28.2	1.2	33.84						
21.2	1.5	31.8						
22.1	1.9	41.99						
36.2	2.2	79.64						
Jumlah		222.11	Jumlah			Jumlah		
<i>Density</i>		31.73	<i>Density</i>			<i>Density</i>		
<i>Deduct Value</i>		48.1	<i>Deduct Value</i>			<i>Deduct Value</i>		



**Gambar L3.64.** Grafik *Deduct Value* Retak Kulit Buaya Segmen 21

**Tabel L3.45.** Jenis Kerusakan Cacat Tepi Perkerasan (*Edge Cracking*) Segmen 21

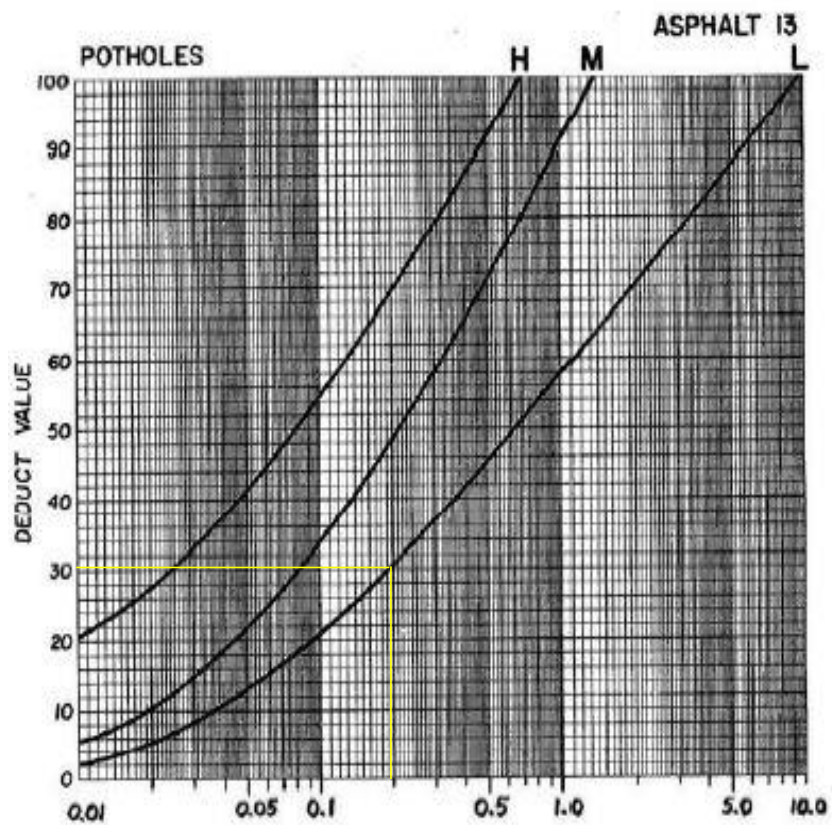
<i>Low</i>		<i>Medium</i>		<i>High</i>	
Panjang		Panjang		Panjang	
8.9					
9.3					
8					
Jumlah	26.2	Jumlah		Jumlah	
<i>Density</i>	26.2	<i>Density</i>		<i>Density</i>	
<i>Deduct Value</i>	15.7	<i>Deduct Value</i>		<i>Deduct Value</i>	

**Gambar L3.65.** Grafik *Deduct Value* Cacat Tepi Perkerasan Segmen 21

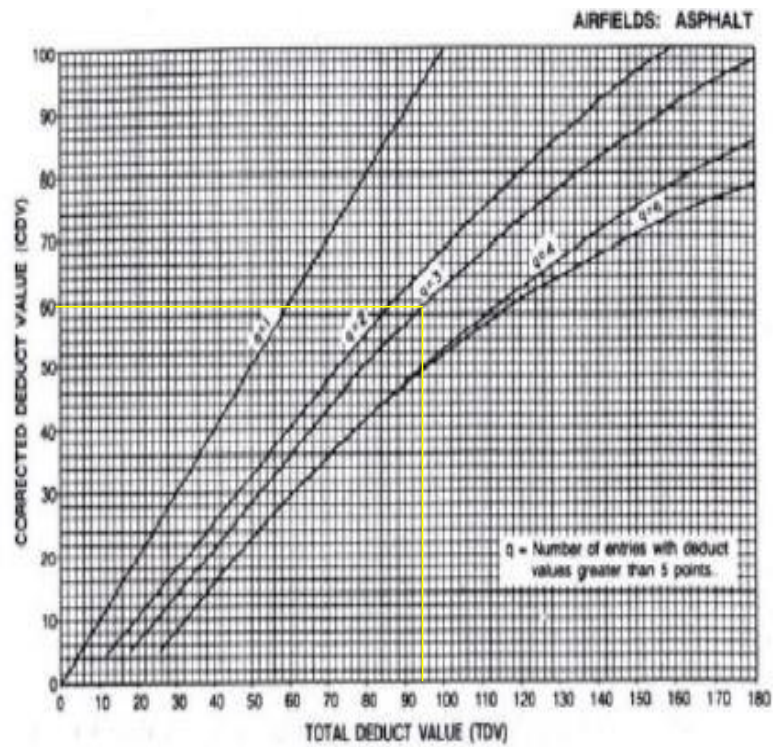


**Tabel L3.46.** Jenis Kerusakan Lubang (*Potholes*) Segmen 21

<i>Low</i>			<i>Medium</i>			<i>High</i>		
Panjang	Lebar	Luas (m <sup>2</sup> )	Panjang	Lebar	Luas (m <sup>2</sup> )	Panjang	Lebar	Luas (m <sup>2</sup> )
1.6	0.4	0.64						
1.5	0.5	0.75						
Jumlah		1.39	Jumlah			Jumlah		
<i>Density</i>		0.198571	<i>Density</i>			<i>Density</i>		
<i>Deduct Value</i>		30.2	<i>Deduct Value</i>			<i>Deduct Value</i>		



**Gambar L3.66.** Grafik *Deduct Value* Potholes Segmen 21



**Gambar L3.67.** Grafik Total Deduct Value Segmen 21

*Total Deduct Value* = 94

*Corrected Deduct Value* = 59.8

Nilai PCI Per Segmen = 100 - *Corrected Deduct Value*

= 40.2

As = L segmen x P segmen

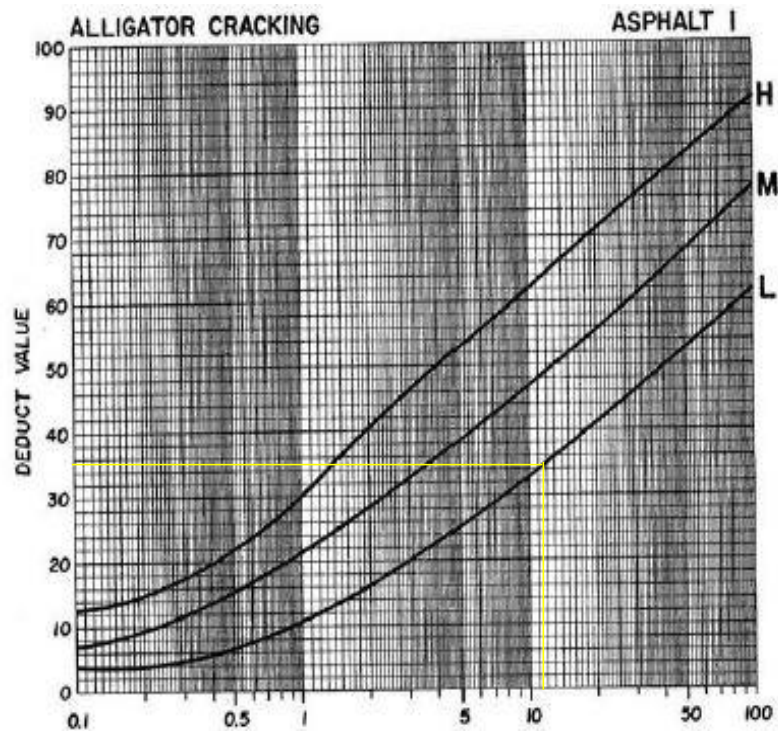
= 7 m x 100 m

= 700 m<sup>2</sup>

STA = 2+100 – 2+200

**Tabel L3.47.** Jenis Kerusakan Retak Kulit Buaya (*Alligator Cracking*) Segmen 22

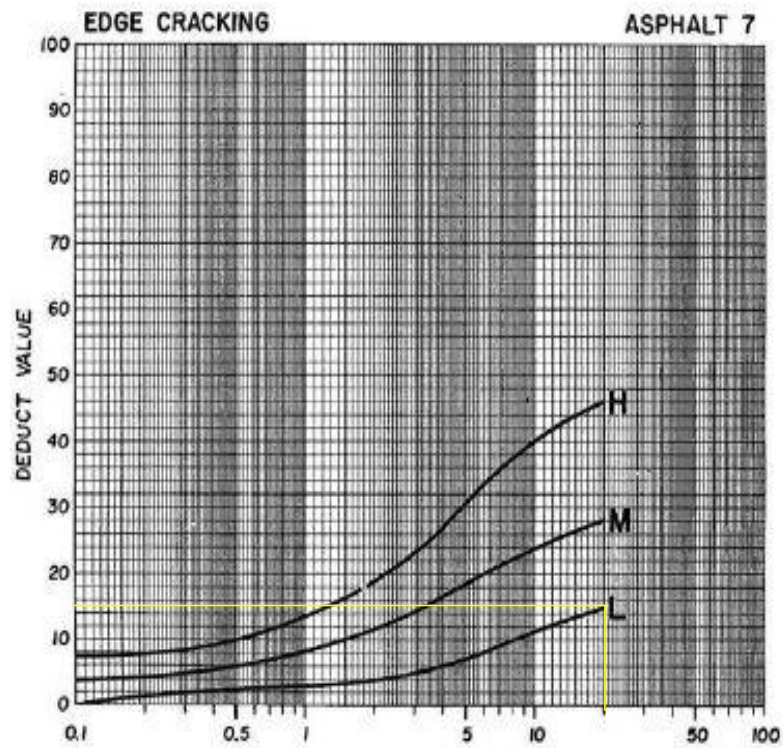
<i>Low</i>			<i>Medium</i>			<i>High</i>		
Panjang	Lebar	Luas (m <sup>2</sup> )	Panjang	Lebar	Luas (m <sup>2</sup> )	Panjang	Lebar	Luas (m <sup>2</sup> )
26.3	1.2	31.56						
19.9	0.5	9.95						
3.2	1.5	4.8						
27.3	1.3	35.49						
Jumlah		81.8	Jumlah			Jumlah		
<i>Density</i>		11.68571	<i>Density</i>			<i>Density</i>		
<i>Deduct Value</i>		34.8	<i>Deduct Value</i>			<i>Deduct Value</i>		

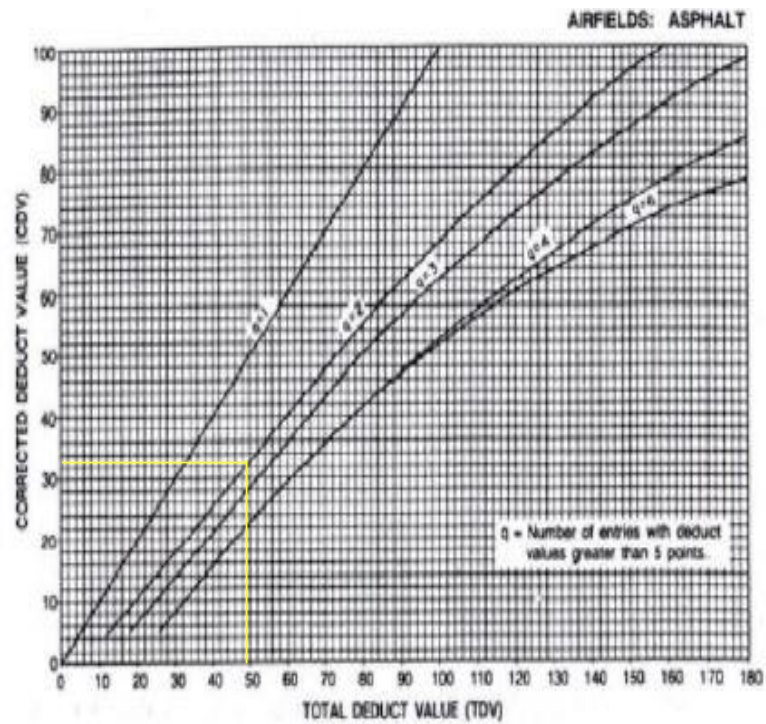


**Gambar L3.68.** Grafik *Deduct Value* Retak Kulit Buaya Segmen 22

**Tabel L3.48.** Jenis Kerusakan Cacat Tepi Perkerasan (*Edge Cracking*) Segmen 22

<i>Low</i>		<i>Medium</i>		<i>High</i>	
Panjang		Panjang		Panjang	
20.2					
Jumlah	20.2	Jumlah		Jumlah	
<i>Density</i>	20.2	<i>Density</i>		<i>Density</i>	
<i>Deduct Value</i>	14.6	<i>Deduct Value</i>		<i>Deduct Value</i>	

**Gambar L3.69.** Grafik *Deduct Value* Cacat Tepi Perkerasan Segmen 22



**Gambar L3.70.** Grafik Total Deduct Value Segmen 22

$$\text{Total Deduct Value} = 49.4$$

$$\text{Corrected Deduct Value} = 32.8$$

$$\text{Nilai PCI Per Segmen} = 100 - \text{Corrected Deduct Value}$$

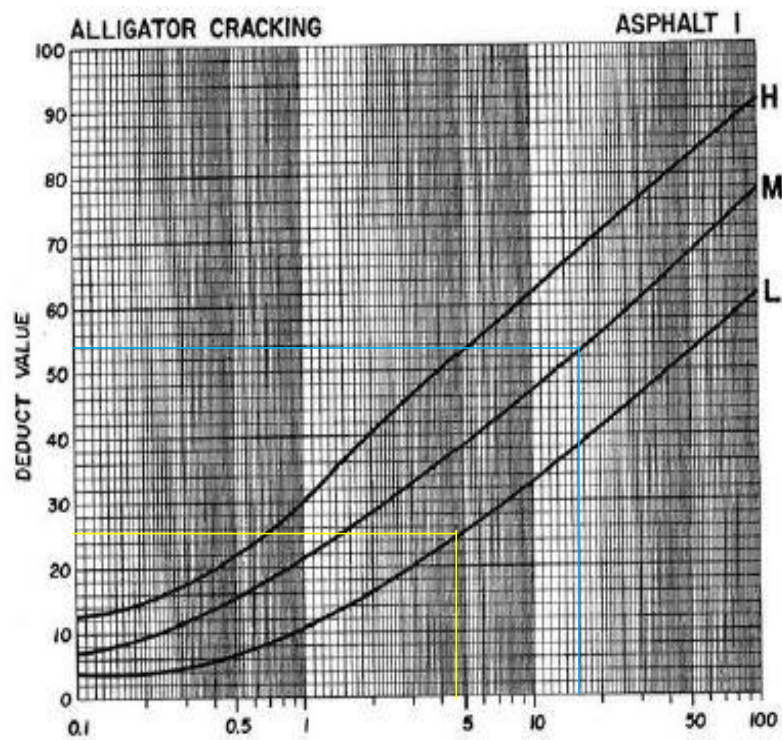
$$= 67.2$$

As = L segmen x P segmen  
 = 7 m x 100 m  
 = 700 m<sup>2</sup>

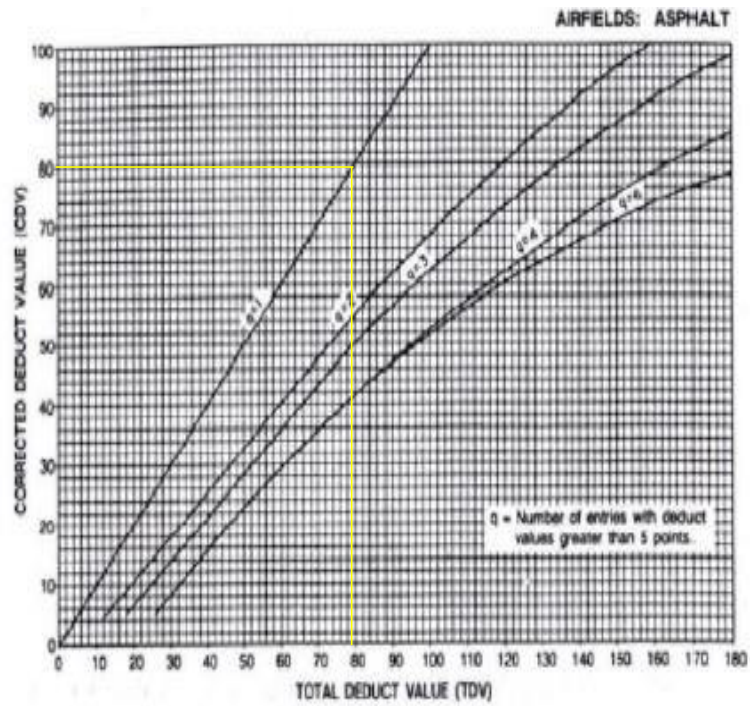
STA = 2+200 – 2+300

**Tabel L3.49.** Jenis Kerusakan Retak Kulit Buaya (*Alligator Cracking*) Segmen 23

<i>Low</i>			<i>Medium</i>			<i>High</i>		
Panjang	Lebar	Luas (m <sup>2</sup> )	Panjang	Lebar	Luas (m <sup>2</sup> )	Panjang	Lebar	Luas (m <sup>2</sup> )
24.8	0.47	11.656	26.7	2.8	74.76			
6.2	1.2	7.44						
16.1	0.83	13.363						
Jumlah		32.459	Jumlah		74.76	Jumlah		
<i>Density</i>		4.637	<i>Density</i>		10.68	<i>Density</i>		
<i>Deduct Value</i>		24.8	<i>Deduct Value</i>		54.2	<i>Deduct Value</i>		



**Gambar L3.71.** Grafik *Deduct Value* Retak Kulit Buaya Segmen 23



**Gambar L3.72.** Grafik *Total Deduct Value* Segmen 23

*Total Deduct Value* = 79

*Corrected Deduct Value* = 80.1

Nilai PCI Per Segmen = 100 - *Corrected Deduct Value*

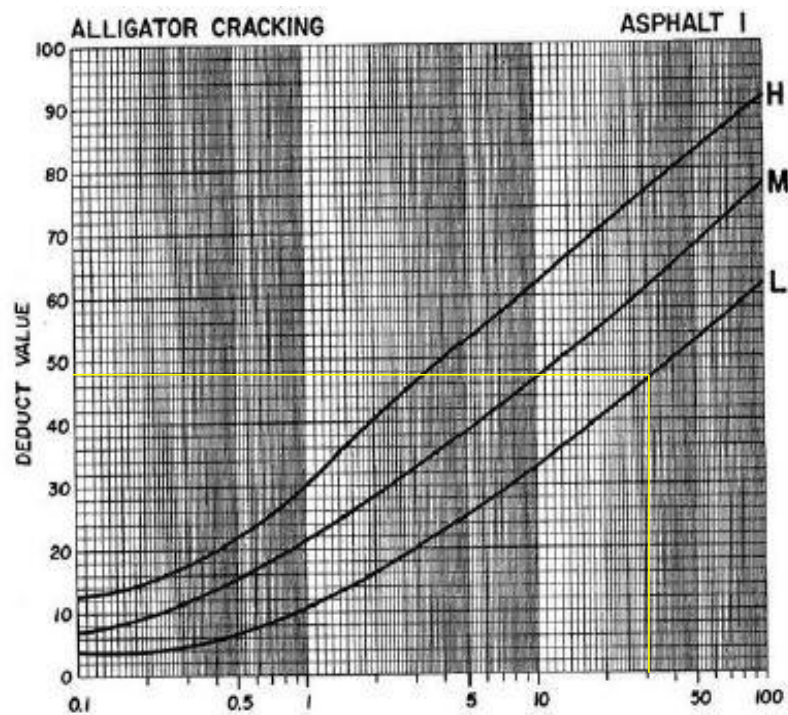
= 19.9

$$\begin{aligned} \text{As} &= L \text{ segmen} \times P \text{ segmen} \\ &= 7 \text{ m} \times 100 \text{ m} \\ &= 700 \text{ m}^2 \end{aligned}$$

$$\text{STA} = 2+300 - 2+400$$

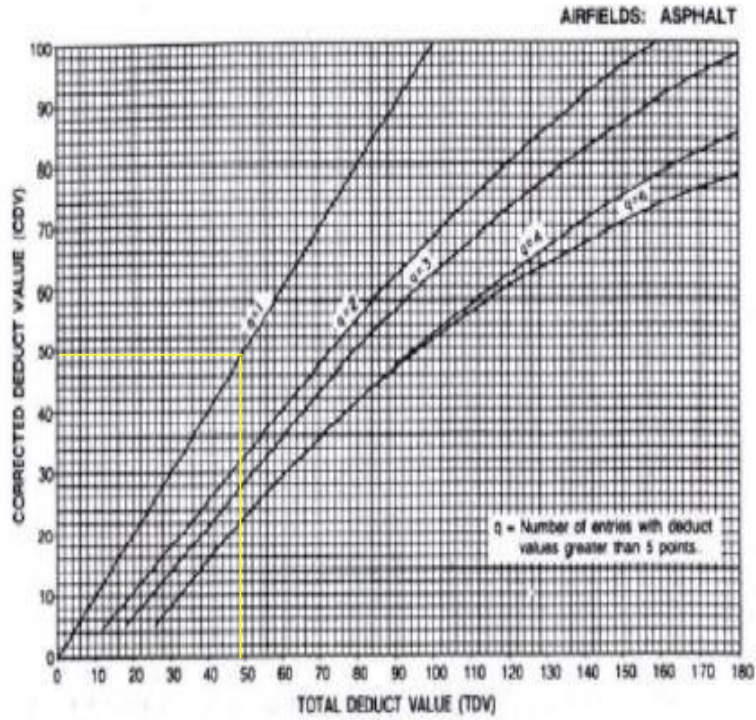
**Tabel L3.50.** Jenis Kerusakan Retak Kulit Buaya (*Alligator Cracking*) Segmen 24

<i>Low</i>			<i>Medium</i>			<i>High</i>		
Panjang	Lebar	Luas (m <sup>2</sup> )	Panjang	Lebar	Luas (m <sup>2</sup> )	Panjang	Lebar	Luas (m <sup>2</sup> )
3.1	0.8	2.48						
10.1	1.3	13.13						
8.8	0.55	4.84						
12.2	0.4	4.88						
35.4	2	70.8						
35	3.5	122.5						
Jumlah		218.63	Jumlah			Jumlah		
<i>Density</i>		31.23286	<i>Density</i>			<i>Density</i>		
<i>Deduct Value</i>		48.1	<i>Deduct Value</i>			<i>Deduct Value</i>		



**Gambar L3.73.** Grafik *Deduct Value* Retak Kulit Buaya Segmen 24





**Gambar L3.74.** Grafik *Total Deduct Value* Segmen 24

*Total Deduct Value* = 48.1

*Corrected Deduct Value* = 49.8

Nilai PCI Per Segmen = 100 - *Corrected Deduct Value*

= 50.2

As = L segmen x P segmen

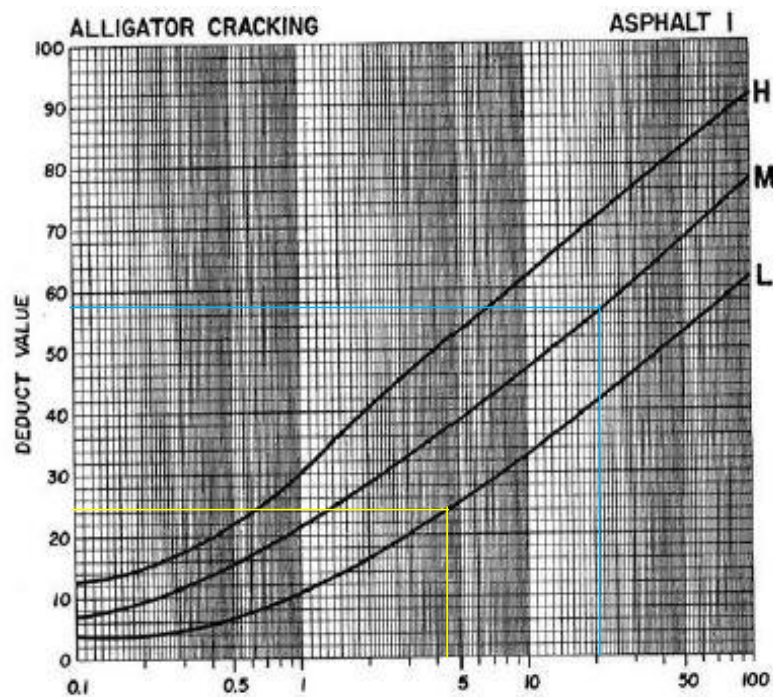
= 7 m x 100 m

= 700 m<sup>2</sup>

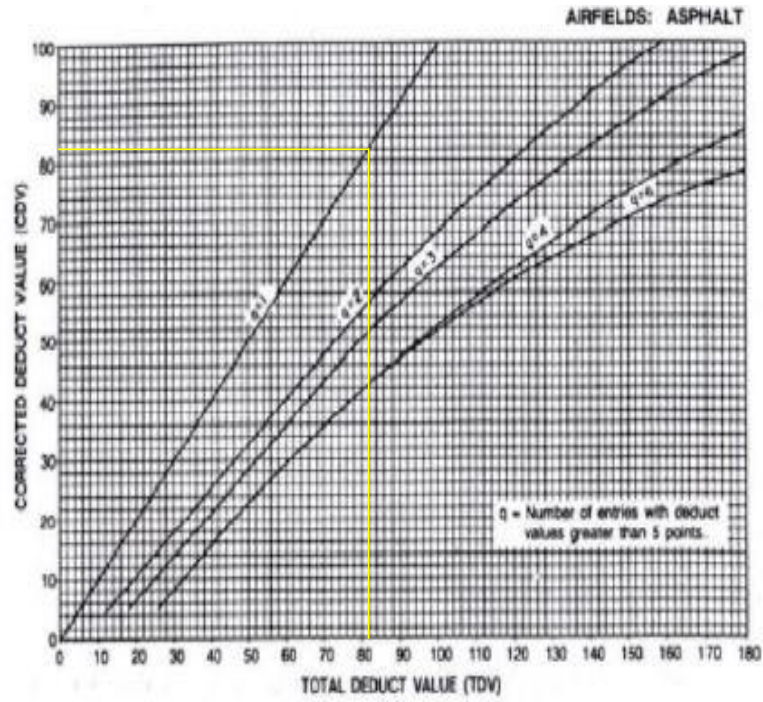
STA = 2+400 – 2+500

**Tabel L3.51.** Jenis Kerusakan Retak Kulit Buaya (*Alligator Cracking*) Segmen 25

<i>Low</i>			<i>Medium</i>			<i>High</i>		
Panjang	Lebar	Luas (m <sup>2</sup> )	Panjang	Lebar	Luas (m <sup>2</sup> )	Panjang	Lebar	Luas (m <sup>2</sup> )
10.6	0.34	3.604	16.1	2.4	38.64			
9.8	1.3	12.74	17.6	2.79	49.104			
9.7	1.52	14.744	19.8	3.1	61.38			
Jumlah		31.088	Jumlah		149.124	Jumlah		
<i>Density</i>		4.441143	<i>Density</i>		21.30343	<i>Density</i>		
<i>Deduct Value</i>		24.2	<i>Deduct Value</i>		57.8	<i>Deduct Value</i>		



**Gambar L3.75.** Grafik *Deduct Value* Retak Kulit Buaya Segmen 25



**Gambar L3.76.** Grafik *Total Deduct Value* Segmen 25

*Total Deduct Value* = 82

*Corrected Deduct Value* = 82.3

Nilai PCI Per Segmen = 100 - *Corrected Deduct Value*

= 17.7

REKAPITULASI HASIL SURVEI PERHITUNGAN LALU LINTAS  
 BIDANG BINA MARGA DINAS PEKERJAAN UMUM, PERUMAHAN DAN ENERGI SUMBER DAYA  
 MINERAL  
 TAHUN ANGGARAN 2018

Nama Ruas Jalan	Panjang Sesuai Mendagri dan Otda Km'	Titik Pengenal Pangkal Km.	Titik Pengenal Ujung Km.	Pembetulan	Lama Waktu Survei jam	GOLONGAN				
						1				
		Sepeda motor, sekuter, sepeda kumbang dan roda 3								
		0.5								
					Arah sesuai	Berlawanan	Jml. 2 arah	Rata-rata per jam	SMP per jam	
3	4	6	7	8	9					
								-		
<b>KABUPATEN SLEMAN</b>	<b>116.32</b>									
Yogyakarta - Pulowatu	11.300				40	39,690	53,952	93,642	2,341	1,171
Yogyakarta - Kaliurang	26.090				40	53,952	55,150	109,102	2,728	1,364
Yogyakarta - Kebonagung 1	15.600				40	65,603	67,625	133,228	3,331	1,665
Prambanan - Piyungan	10.300				16	8,305	9,005	17,310	1,082	541
Klangon - Tempel	22.480				16	4,116	4,018	8,134	508	254
Mlati - Cebongan	4.000				40	34,944	37,841	72,785	1,820	910
Cebongan - Seyegan	3.000				40	42,964	44,815	87,779	2,194	1,097
Seyegan - Balangan	5.000				16	6,315	6,545	12,860	804	402
Balangan - Kebonagung 2	5.250				16	5,595	5,084	10,679	667	334
Tangisan - Blaburan	0.900				16	5,795	5,855	11,650	728	364
Denggung - Wonorejo	2.500				40	25,107	24,902	50,009	1,250	625
Wonorejo - Tambakan	2.000				16	12,975	11,438	24,413	1,526	763
Besi - Jangkang	3.700				16	12,490	12,667	25,157	1,572	786
Jangkang - Koroulon	2.300				16	7,980	6,239	14,219	889	444



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 BIDANG BINA MARGA DINAS PEKERJAAN UMUM, PERUMAHAN DAN ENERGI SUMBER DAYA  
 MINERAL  
 TAHUN ANGGARAN 2018

		5a			5b			6						
		Bus kecil			Bus besar			Truk 2 sumbu						
		2.5			3			2.5						
Arah sesuai	Berlawanan	Jml. 2 arah	Rata-rata per jam	SMP per jam	Arah sesuai	Berlawanan	Jml. 2 arah	Rata-rata per jam	SMP per jam	Arah sesuai	Berlawanan	Jml. 2 arah	Rata-rata per jam	SMP per jam
13					14					15				
		-										-		
19	7	26	1	3	4	13	17	0.43	1.29	301	285	586	15	38
7	14	21	1	3	13	-	13	0.33	0.99	285	189	474	12	30
70	94	164	4	10	6	4	10	0.25	0.75	225	186	411	10	25
14	10	24	2	5	30	25	55	3	9	560	575	1,135	71	178
1	2	3	0.19	0.48	-	-	-	-	-	209	202	411	26	65
2	19	21	0.53	1.33	11	9	20	0.50	1.50	134	228	362	9	23
-	3	3	0.08	0.20	-	-	-	-	-	193	267	460	12	30
-	-	-	-	-	2	-	2	0.13	0.39	69	97	166	10	25
1	-	1	0.06	0.15	2	-	2	0.13	0.39	103	140	243	15	38
1	-	1	0.06	0.15	-	-	-	-	-	57	56	113	7	18
7	5	12	0.30	0.75	-	4	4	0.10	0.30	269	283	552	14	35
7	2	9	0.56	1.40	3	1	4	0.25	0.75	278	204	482	30	75
2	3	5	0.31	0.78	2	2	4	0.25	0.75	287	274	561	35	88
2	2	4	0.25	0.63	2	4	6	0.38	1.14	213	163	376	24	60
1	3	4	0.25	0.63	-	-	-	-	-	289	476	765	48	120

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 BIDANG BINA MARGA DINAS PEKERJAAN UMUM, PERUMAHAN DAN ENERGI SUMBER DAYA  
 MINERAL  
 TAHUN ANGGARAN 2018

		7a					7b					7c		
		Truk 3 sumbu					Truk Gandengan					Truk semi trailer		
		3					3					3		
Arah sesuai	Berlawanan	Jml. 2 arah	Rata-rata per jam	SMP per jam	Arah sesuai	Berlawanan	Jml. 2 arah	Rata-rata per jam	SMP per jam	Arah sesuai	Berlawanan	Jml. 2 arah	Rata-rata per jam	SMP per jam
16					17					18				
23	11	34	1	3	-	-	-	-	-	5	3	8	0.20	0.60
11	13	24	1	3	-	-	-	-	-	3	5	8	0.20	0.60
7	21	28	1	3	-	-	-	-	-	6	5	11	0.28	0.84
16	13	29	2	6	-	-	-	-	-	5	2	7	0.44	1.32
5	3	8	1	3	-	-	-	-	-	3	2	5	0.31	0.93
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	2	2	0.05	0.15	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6	5	11	0.28	1	-	-	-	-	-	3	2	-	-	-
2	-	2	0.13	0.39	-	-	-	-	-	3	6	9	0.56	1.68
4	-	4	0.25	1	-	-	-	-	-	-	1	1	0.06	0.18
2	2	4	0.25	1	-	-	-	-	-	-	-	-	-	-
21	9	30	2	6	-	-	-	-	-	1	-	1	0.06	0.18

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 BIDANG BINA MARGA DINAS PEKERJAAN UMUM, PERUMAHAN DAN ENERGI SUMBER DAYA  
 MINERAL  
 TAHUN ANGGARAN 2018

Arah sesuai	Berlawanan				Jumlah SMP/jam	LHR	KET.
		8					
		Kendaraan tidak bermotor					
		Jml. 2 arah	Rata-rata per jam	SMP per jam			
		0					
<b>19</b>					<b>21</b>		<b>22</b>
		-					
152	111	263	7	-	1,792	43,008	
111	254	365	9	-	2,047	49,128	
511	513	1,024	26	-	3,899	93,576	
30	60	90	6	-	1,058	25,392	
-	2	2	0.13	-	403	9,672	
357	524	881	22	-	1,227	29,448	
393	446	839	21	-	1,390	33,360	
134	128	262	16	-	533	12,792	
69	25	94	6	-	473	11,352	
24	31	55	3	-	456	10,944	
137	120	257	6	-	986	23,664	
55	32	87	5	-	1,308	31,392	
47	26	73	5	-	1,203	28,872	
38	12	50	3	-	678	16,272	
47	32	79	5	-	685	16,440	