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**LAMPIRAN**

## Lampiran 1 Koefisien Kekasaran Manning

Tabel 2.1 Koefisien Kekasaran Manning

|  |  |  |  |
| --- | --- | --- | --- |
| Tipe Saluran | Kondisi | | |
| Baik | Cukup | Buruk |
| a. Saluran buatan : |  |  |  |
| 1. Saluran tanah, lurus beraturan | 0,020 | 0,023 | 0,025 |
| 2. Saluran tanah, digali biasanya | 0,028 | 0,030 | 0,025 |
| 3. Saluran batuan, tidak lurus & tidak beraturan | 0,040 | 0,045 | 0,045 |
| 4. Saluran batuan, lurus beraturan | 0,030 | **0,035** | 0,035 |
| 5. Saluran batuan, vegetasi pada sisinya | 0,030 | 0,035 | 0,040 |
| 6. Dasar tanah, sisi batuan koral | 0,030 | 0,030 | 0,040 |
| 7. Saluran berliku-liku kecepatan rendah | 0,025 | 0,028 | 0,030 |
| b. Saluran alam : |  |  |  |
| 1. Bersih, lurus, tetapi tanpa pasir & tanpa celah | 0,028 | 0,030 | 0,033 |
| 2. Berliku, bersih, tetapi berpasir & berlubang | 0,035 | 0,040 | 0,045 |
| 3. Idem 2, tidak dalam, kurang beraturan. | 0,045 | 0,050 | 0,065 |
| 4. Aliran lambat, banyak tanaman & lubang dalam | 0,060 | 0,070 | 0,080 |
| 5. Tumbuh tinggi & padat | 0,100 | 0,125 | 0,150 |
| c. Saluran dilapisi : |  |  |  |
| 1. Batu kosong tanpa adukan | 0,030 | 0,033 | 0,035 |
| 2. Idem 1, dengan adukan semen | 0,020 | 0,025 | 0,030 |
| 3. Lapisan beton sangat halus | 0,011 | 0,012 | 0,013 |
| 4. Lapisan beton biasa dengan tulangan baja | 0,014 | 0,014 | 0,015 |
| 5. Idem 4, tetapi tulangan kayu | 0,016 | 0,016 | 0,018 |

**Lampiran 2** Nilai k untuk Distribusi *Log Pearson* III

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Koef. Cs | Interval kejadian (periode ulang) | | | | | | | | | | | |
| 1,0101 | 1,2500 | 2 | 5 | | 10 | 25 | | | | 50 | 100 |
| Persentase perluang terlampaui | | | | | | | | | | | |
| 99 | 80 | 50 | 20 | | 10 | | | 4 | | 2 | 1 |
| 3,0 | -0,667 | -0,636 | -0,396 | 0,420 | | 1,180 | | | 2,278 | | 3,152 | 4,051 |
| 2,8 | -0,714 | -0,666 | -0,384 | 0,460 | | 1,210 | | | 2,275 | | 3,114 | 3,973 |
| 2,6 | -0,769 | -0,696 | -0,368 | 0,499 | | 1,238 | | | 2,267 | | 3,071 | 2,889 |
| 2,4 | -0,832 | -0,725 | -0,351 | 0,537 | | 1,262 | | | 2,256 | | 3,023 | 3,800 |
| 2,2 | -0,905 | -0,752 | -0,330 | 0,574 | | 1,284 | | | 2,240 | | 2,970 | 3,705 |
| 2,0 | -0,990 | -0,777 | -0,307 | 0,609 | | 1,302 | | | 2,219 | | 2,892 | 3,605 |
| 1,8 | -1,087 | -0,799 | -0,282 | 0,643 | | 1,318 | | | 2,193 | | 2,848 | 3,499 |
| 1,6 | -1,197 | -0,817 | -0,254 | 0,675 | | 1,329 | | | 2,163 | | 2,780 | 3,388 |
| 1,4 | -1,318 | -0,832 | -0,225 | 0,705 | | 1,337 | | | 2,128 | | 2,706 | 3,271 |
| 1,2 | -1,449 | -0,844 | -0,195 | 0,732 | | 1,340 | | | 2,087 | | 2,626 | 3,149 |
| 1,0 | -1,588 | -0,852 | -0,164 | 0,758 | | 1,340 | | | 2,043 | | 2,542 | 3,022 |
| 0,8 | -1,733 | -0,856 | -0,132 | 0,780 | | 1,336 | | | 1,993 | | 2,453 | 2,891 |
| 0,6 | -1,880 | -0,857 | -0,099 | 0,800 | | 1,328 | | | 1,939 | | 2,359 | 2,755 |
| 0,4 | -2,029 | -0,855 | -0,066 | 0,816 | | 1,317 | | | 1,880 | | 2,261 | 2,615 |
| 0,2 | -2,178 | -0,850 | -0,033 | 0,830 | | 1,301 | | | 1,818 | | 2,159 | 2,472 |
| **0,0** | -2,326 | -0,842 | **0,000** | **0,842** | **1,282** | | | **1,751** | | **2,051** | | 2,326 |
| -0,2 | -2,472 | -0,830 | 0,033 | 0,850 | 1,258 | | | 1,680 | | 1,945 | | 2,178 |
| -0,4 | -2,615 | -0,816 | 0,066 | 0,855 | 1,231 | | | 1,606 | | 1,834 | | 2,029 |
| -0,6 | -2,755 | -0,800 | 0,099 | 0,857 | 1,200 | | | 1,528 | | 1,720 | | 1,880 |
| -0,8 | -2,891 | -0,780 | 0,132 | 0,856 | 1,166 | | | 1,448 | | 1,606 | | 1,733 |
| -1,0 | -3,022 | -0,758 | 0,164 | 0,852 | 1,128 | | | 1,366 | | 1,492 | | 1,588 |
| -1,2 | -2,149 | -0,732 | 0,195 | 0,844 | 1,086 | | | 1,282 | | 1,379 | | 1,449 |
| -1,4 | -2,271 | -0,705 | 0,225 | 0,832 | 1,041 | | | 1,198 | | 1,270 | | 1,318 |
| -1,6 | -2,388 | -0,675 | 0,254 | 0,817 | 0,994 | | | 1,116 | | 1,166 | | 1,197 |
| -1,8 | -3,499 | -0,643 | 0,282 | 0,799 | 0,945 | | | 1,035 | | 1,069 | | 1,087 |
| -2,0 | -3,605 | -0,609 | 0,307 | 0,777 | 0,895 | | | 0,959 | | 0,980 | | 0,990 |
| -2,2 | -3,705 | -0,574 | 0,330 | 0,752 | 0,844 | | | 0,888 | | 0,900 | | 0,905 |
| -2,4 | -3,800 | -0,537 | 0,351 | 0,725 | 0,795 | | | 0,823 | | 0,830 | | 0,832 |
| -2,6 | -3,889 | -0,490 | 0,368 | 0,696 | 0,747 | | | 0,764 | | 0,768 | | 0,769 |
| -2,8 | -3,973 | -0,469 | 0,384 | 0,666 | 0,702 | | | 0,712 | | 0,714 | | 0,714 |
| -3,0 | -7,051 | -0,420 | 0,396 | 0,636 | 0,660 | | | 0,666 | | 0,666 | | 0,667 |

**Lampiran 3** Tabel *Reduce Mean* (Yn)

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **n** | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| 10 | **0,4952** | 0,4996 | 0,5035 | 0,5070 | 0,5100 | 0,5128 | 0,5157 | 0,5181 | 0,5202 | 0,5220 |
| 20 | 0,5236 | 0,5252 | 0,5268 | 0,5283 | 0,5296 | 0,5309 | 0,5320 | 0,5332 | 0,5343 | 0,5353 |
| 30 | 0,5362 | 0,5371 | 0,5380 | 0,5388 | 0,5396 | 0,5402 | 0,5410 | 0,5418 | 0,5424 | 0,5430 |
| 40 | 0,5436 | 0,5442 | 0,5448 | 0,5453 | 0,5458 | 0,5463 | 0,5468 | 0,5473 | 0,5477 | 0,5481 |
| 50 | 0,5485 | 0,5489 | 0,5493 | 0,5497 | 0,5501 | 0,5504 | 0,5508 | 0,5511 | 0,5515 | 0,5518 |
| 60 | 0,5521 | 0,5524 | 0,5527 | 0,5530 | 0,5533 | 0,5535 | 0,5538 | 0,5540 | 0,5543 | 0,5545 |
| 70 | 0,5548 | 0,5550 | 0,5552 | 0,5555 | 0,5557 | 0,5559 | 0,5561 | 0,5563 | 0,5565 | 0,5567 |
| 80 | 0,5569 | 0,5570 | 0,5572 | 0,5574 | 0,5576 | 0,5578 | 0,5580 | 0,5581 | 0,5583 | 0,5585 |
| 90 | 0,5586 | 0,5587 | 0,5589 | 0,5591 | 0,5592 | 0,5593 | 0,5595 | 0,5596 | 0,5598 | 0,5599 |
| 100 | 0,5600 | 0,5602 | 0,5603 | 0,5604 | 0,5606 | 0,5607 | 0,5608 | 0,5609 | 0,5610 | 0,5611 |

**Lampiran 4** Tabel *Reduce Standard Deviation* (Sn)

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **n** | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| 10 | **0,9496** | 0,9676 | 0,9833 | 0,9971 | 1,0095 | 1,0206 | 1,0316 | 1,0411 | 1,0493 | 1,0565 |
| 20 | 1,0628 | 1,0696 | 1,0754 | 1,0811 | 1,0864 | 1,0915 | 1,0961 | 1,1004 | 1,1047 | 1,1086 |
| 30 | 1,1124 | 1,1159 | 1,1193 | 1,1226 | 1,1255 | 1,1285 | 1,1313 | 1,1339 | 1,1363 | 1,1388 |
| 40 | 1,1413 | 1,1436 | 1,1458 | 1,1480 | 1,1499 | 1,1519 | 1,1538 | 1,1557 | 1,1574 | 1,1590 |
| 50 | 1,1607 | 1,1623 | 1,1638 | 1,1658 | 1,1667 | 1,1681 | 1,1696 | 1,1708 | 1,1721 | 1,1734 |
| 60 | 1,1747 | 1,1759 | 1,1770 | 1,1782 | 1,1793 | 1,1803 | 1,1814 | 1,1824 | 1,1834 | 1,1844 |
| 70 | 1,1854 | 1,1863 | 1,1873 | 1,1881 | 1,1890 | 1,1898 | 1,1906 | 1,1915 | 1,1923 | 1,1930 |
| 80 | 1,1938 | 1,1945 | 1,1953 | 1,1959 | 1,1967 | 1,1973 | 1,1980 | 1,1987 | 1,1994 | 1,2001 |
| 90 | 1,2007 | 1,2013 | 1,2020 | 1,2026 | 1,2032 | 1,2038 | 1,2044 | 1,2049 | 1,2055 | 1,2060 |
| 100 | 1,2065 | 1,2069 | 1,2073 | 1,2077 | 1,2081 | 1,2084 | 1,2087 | 1,2090 | 1,2093 | 1,2096 |

**Lampiran 5** Nilai *reduced variate* (Y T) sebagai fungsi periode ulang

|  |  |  |
| --- | --- | --- |
| **No** | **Periode ulang, T (tahun)** | ***Reduced variate* (*Y T* )** |
| 1 | 2 | **0,3668** |
| 2 | 5 | **1,5004** |
| 3 | 10 | **2,251** |
| 4 | 20 | **2,9709** |
| 5 | 25 | **3,1993** |
| 6 | 50 | **3,9028** |
| 7 | 75 | 4,3117 |
| 8 | 100 | 4,6012 |
| 9 | 200 | 5,2969 |
| 10 | 250 | 5,5206 |
| 11 | 500 | 6,2149 |
| 12 | 1000 | 6,9087 |
| 13 | 5000 | 8,5188 |
| 14 | 10000 | 9,2121 |

**Lampiran 6** Tabel nilai kritis distribusi *chi-square*

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **df** | **0,1** | **0,05** | **0,025** | **0,001** | **0,005** |
| **1** | 2,705543 | 3,841459 | **5,023886** | 6,634897 | 7,879439 |
| **2** | 4,605170 | 5,991465 | 7,377759 | 9,210340 | 10,596635 |
| **3** | 6,251389 | 7,814728 | 9,348404 | 11,344867 | 12,838156 |
| **4** | 7,779440 | 9,487729 | 11,143287 | 13,276704 | 14,860259 |
| **5** | 9,236357 | 11,070498 | 12,832502 | 15,086272 | 16,749602 |
| **6** | 10,644641 | 12,591587 | 14,449375 | 16,811894 | 18,547584 |
| **7** | 12,017037 | 14,067140 | 16,012764 | 18,475307 | 20,277740 |
| **8** | 13,361566 | 15,507313 | 17,534546 | 20,090235 | 21,954955 |
| **9** | 14,683657 | 16,918978 | 19,022768 | 21,665994 | 23,589351 |
| **10** | 15,987179 | 18,307038 | 20,483177 | 23,209251 | 25,188180 |
| **11** | 17,275009 | 19,675138 | 21,920049 | 24,724970 | 26,756849 |
| **12** | 18,549348 | 21,026070 | 23,336664 | 26,216967 | 28,299519 |
| **13** | 19,811929 | 22,362032 | 24,735605 | 27,688250 | 29,819471 |
| **14** | 21,064144 | 23,684791 | 26,118948 | 29,141238 | 31,319350 |
| **15** | 22,307130 | 24,995790 | 27,488393 | 30,577914 | 32,801321 |
| **16** | 23,541829 | 26,296228 | 28,845351 | 31,999927 | 34,267187 |
| **17** | 24,769035 | 27,587112 | 30,191009 | 33,408664 | 35,718466 |
| **18** | 25,989423 | 28,869299 | 31,526378 | 34,805306 | 37,156451 |
| **19** | 27,203571 | 30,143527 | 32,852327 | 36,190869 | 38,582257 |
| **20** | 28,411981 | 31,410433 | 34,169607 | 37,566235 | 39,996846 |
| **21** | 29,615089 | 32,670573 | 35,478876 | 38,932173 | 41,401065 |
| **22** | 30,813282 | 33,924438 | 36,780712 | 40,289360 | 42,795655 |
| **23** | 32,006900 | 35,172462 | 38,075627 | 41,638398 | 44,181275 |
| **24** | 33,196244 | 36,415029 | 39,364077 | 42,979820 | 45,558512 |
| **25** | 34,381587 | 37,652484 | 40,646469 | 44,314105 | 46,927890 |
| **26** | 35,563171 | 38,885139 | 41,923170 | 45,641683 | 48,289882 |
| **27** | 36,741217 | 40,113272 | 43,194511 | 46,962942 | 49,644915 |
| **28** | 37,915923 | 41,337138 | 44,460792 | 48,278236 | 50,993376 |
| **29** | 39,087470 | 42,556968 | 45,722286 | 49,587884 | 52,335618 |
| **30** | 40,256024 | 43,772972 | 46,979242 | 50,892181 | 53,671962 |
| **31** | 41,421736 | 44,985343 | 48,231890 | 52,191395 | 55,002704 |
| **32** | 42,584745 | 46,194260 | 49,480438 | 53,485772 | 56,328115 |
| **33** | 43,745180 | 47,399884 | 50,725080 | 54,775540 | 57,648445 |
| **34** | 44,903158 | 48,602367 | 51,965995 | 56,060909 | 58,963926 |
| **35** | 46,058788 | 49,801850 | 53,203349 | 57,342073 | 60,274771 |

**Lampiran 7** Foto Penelitian di Kelurahan Debong Wetan

|  |  |
| --- | --- |
| Gambar | Keterangan |
|  | Mengukur lebar drainase |
|  | Mengukur tinggi drainase |
|  | Mengukur Luas drainase |
| Gambar | Keterangan |
|  | Kondisi drainase saat banjir |
|  | Kondisi drainase terdapat sampah |
|  | Mengukur lebar drinase saat banjir |

|  |  |
| --- | --- |
| Gambar | Keterangan |
|  | Kondisi drainase saat banjir |
|  | Kondisi drainase rusak |
|  | Kondisi desa debong wetan belum ada drainase |

**Lampiran 8** *Back Up*/Perhitungan Volume Pekerjaan

Kegiatan : Pembangunan Drainase

Drainase Desa : Debong Wetan

|  |  |  |  |
| --- | --- | --- | --- |
| No | Gambar/Sket | Uraian Perhitungan | Volume |
| 1 | Galian Tanah  Panjang = 200 m | V = P x L x T  V = 200 x 0.30 x 0.40 | 24 m3 |
| 2 | Pasang Batu Belah  Panjang = 200 m | V = L x T x P  V = 0.15 x 0.15 x 200    Jumlah | 4,5 m3  24 m3  28,5 m3 |
| 3 | Plesteran  Panjang = 200 m | V = (0,15+0,10) x 200 x 2 | 100 m3 |
| 4 | Pasangan Batu Kosong  Panjang = 200 m | V = P x L x Tebal  V = 200 x 0.30 x 0.15 | 9 m3 |
| 5 | Urugan Pasir  Panjang = 200 m | V = P x L x T  V = 200 x 0.30 x 0.05 | 3 m3 |

**Lampiran 9** Daftar Harga Satuan Tenaga dan Bahan

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | KEGIATAN | | : Pembangunan Drainase | | | |
|  | PEKERJAAN | | : Perencanaan Drainase | | | |
|  | LOKASI | | : Desa Debong Wetan Kec. Dukuhturi, Kab. Tegal | | | |
|  | TAHUN ANGGARAN | | : 2023 | |  | |
| **DAFTAR HARGA SATUAN TENAGA** | | | | | |
| **NO** | **URAIAN** | **SATUAN** | | **HARGA SATUAN (Rp.)** | |
| 1 | Pekerja | HOK | | 80.000,00 | |
| 2 | Mandor | HOK | | 105.000,00 | |
| 3 | Tukang | HOK | | 100.000,00 | |
| 4 | Kepala Tukang | HOK | | 105.000,00 | |
|  |  |  | |  | |
| **DAFTAR HARGA SATUAN BAHAN** | | | | | |
| **NO** | **URAIAN** | **SAT.** | | **HARGA SAT. (Rp.)** | |
| 1 | Semen (50 Kg) | zak | | 80.000 | |
| 2 | Pasir Beton | m3 | | 120.000 | |
| 3 | Pasir Urug | m3 | | 150.000 | |
| 4 | Batu Belah 10/15 | m3 | | 250.000 | |

**Lampiran 10** Analisa

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **KEBUTUHAN TENAGA UNTUK PEKERJAAN GALIAN** | | | | | |
| **NO** | **URAIAN** | **SATUAN** | **KOEFESIEN** | **VOLUME** | **JUMLAH TENAGA (HOK)** |
| 1 | Pekerja | HOK | 0,750 | 24 | 18 |
| 2 | Mandor | HOK | 0,025 | 24 | 0,6 |
| Analisa SNI 2835-2008 | |  |  |  |  |
|  |  |  |  |  |  |
| **ANALISA PEKERJAAN URUGAN PASIR** | | | | | |
| **NO** | **URAIAN** | **SATUAN** | **KOEFESIEN** | **VOLUME** | **JUMLAH TENAGA (HOK)** |
| 1 | Pekerja | HOK | 0,300 | 3 | 0,900 |
| 2 | Tukang | HOK | 0,150 | 3 | 0,450 |
| 3 | Kepala Tukang | HOK | 0,015 | 3 | 0,045 |
| 4 | Mandor | HOK | 0,015 | 3 | 0,045 |
| 5 | Pasir Urug | m3 | 0,432 | 3 | 1,296 |
| **ANALISA PEKERJAAN PASANGAN BATU BELAH** | | | | | |
| **NO** | **URAIAN** | **SATUAN** | **KOEFESIEN** | **VOLUME GALIAN** | **JUMLAH TENAGA (HOK)** |
| 1 | Pekerja | HOK | 1,500 | 28,5 | 42,750 |
| 2 | Tukang | HOK | 0,750 | 28,5 | 21,375 |
| 3 | Kepala Tukang | HOK | 0,075 | 28,5 | 2,1375 |
| 4 | Mandor | HOK | 0,075 | 28,5 | 2,1375 |
| 5 | Semen (Kg) | Zak | 3,260 | 28,5 | 92,910 |
| 6 | Pasir Beton | m3 | 0,520 | 28,5 | 14,820 |
| 7 | Batu belah | m3 | 1,200 | 28,5 | 34,200 |
| **ANALISA PEKERJAAN PASANGAN BATU KOSONG** | | | | | |
| **NO** | **URAIAN** | **SATUAN** | **KOEFESIEN** | **VOLUME GALIAN** | **JUMLAH TENAGA (HOK)** |
| 1 | Pekerja | HOK | 1,500 | 9 | 13,50 |
| 2 | Tukang | HOK | 0,750 | 9 | 6,750 |
| 3 | Kepala Tukang | HOK | 0,075 | 9 | 0,675 |
| 4 | Mandor | HOK | 0,075 | 9 | 0,675 |
| 5 | Semen (Kg) | Zak | 3,260 | 9 | 29,34 |
| 6 | Pasir Beton | m3 | 0,520 | 9 | 4,680 |
| 7 | Batu kosong | m3 | 1,200 | 9 | 10,80 |
|  |  |  |  |  |  |
| **ANALISA PEKERJAAN PLESTERAN** | | | | | |
| **NO** | **URAIAN** | **SATUAN** | **KOEFESIEN** | **VOLUME** | **JUMLAH TENAGA (HOK)** |
| 1 | Pekerja | HOK | 0,300 | 100 | 30,00 |
| 2 | Tukang | HOK | 0,150 | 100 | 15,000 |
| 3 | Kepala Tukang | HOK | 0,015 | 100 | 1,500 |
| 4 | Mandor | HOK | 0,015 | 100 | 1,50 |
| 5 | Semen (Kg) | Zak | 3,260 | 100 | 326,0 |
| 6 | Pasir Beton | m3 | 0,520 | 100 | 52,00 |
| 7 | Batu kosong | m3 | 1,200 | 100 | 120,0 |
|  |  |  |  |  |  |

**Lampiran 11** Rencana Anggaran Biaya (RAB)

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **RENCANA ANGGARAN BIAYA (RAB)** | | | | | |
| **NO** | **BAHAN** | **SATUAN** | **VOLUME** | **HARGA SATUAN (Rp.)** | **JUMLAH HARGA**  **(Rp)** |
|  | UPAH | | | |  |
| 1 | Pekerja | HOK | 105 | Rp 80.000 | Rp 8.412.000 |
| 2 | Mandor | HOK | 5 | Rp 105.000 | Rp 520.538 |
| 3 | Tukang | HOK | 44 | Rp 100.000 | Rp 4.357.500 |
| 4 | Kepala Tukang | HOK | 4 | Rp 105.000 | Rp 457.538 |
|  | JUMLAH BIAYA UPAH | | | | Rp 13.747.575 |
|  | BAHAN | | | |  |
| 1 | Semen (50 Kg) | zak | 448,25 | Rp 80.000 | Rp 35.860.000 |
| 2 | Pasir Beton | m3 | 71,5 | Rp 120.000 | Rp 8.580.000 |
| 3 | Pasir Urug | m3 | 1,296 | Rp 150.000 | Rp 194.400 |
| 4 | Batu Belah 10/15 | m3 | 34,2 | Rp 250.000 | Rp 8.550.000 |
| 5 | Batu Kosong | m3 | 10,80 | Rp 190.000 | Rp 2.052.000 |
|  | JUMLAH BIAYA BAHAN | | | | Rp 55.236.400 |
| **TOTAL BIAYA SALURAN DRAINASE** | | | | | Rp 68.983.975 |
| **PEMBULATAN** | | | | | **Rp 68.984.000** |

**Lampiran 12** Data Curah Hujan 2013



**Lampiran 13** Data Curah Hujan 2014



**Lampiran 14** Data Curah Hujan 2015 **Lampiran 15** Data Curah Hujan 2016

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**Lampiran 16** Data Curah Hujan 2017

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**Lampiran 17** Data Curah Hujan 2018

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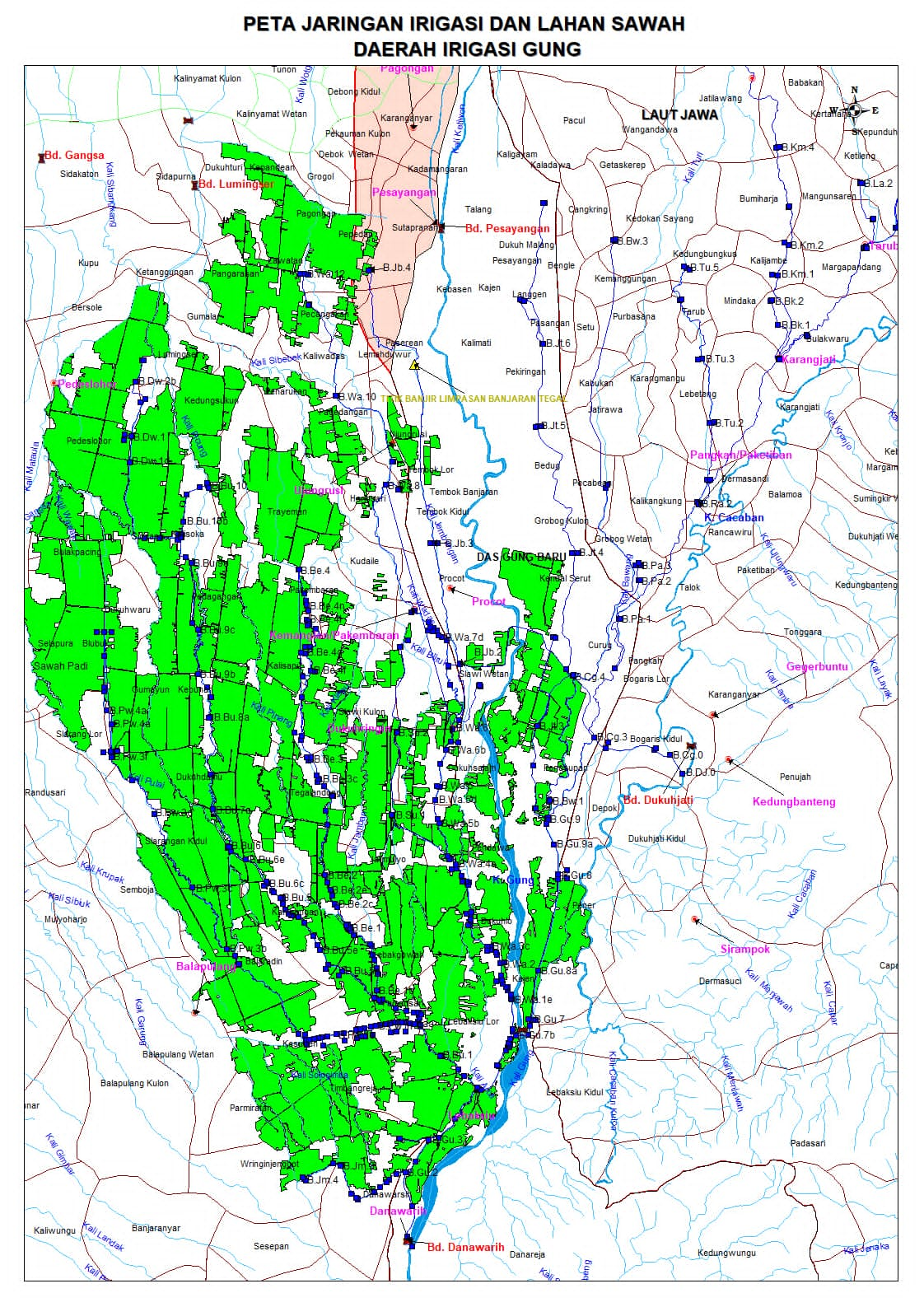
**Lampiran 18** Data Curah Hujan 2019

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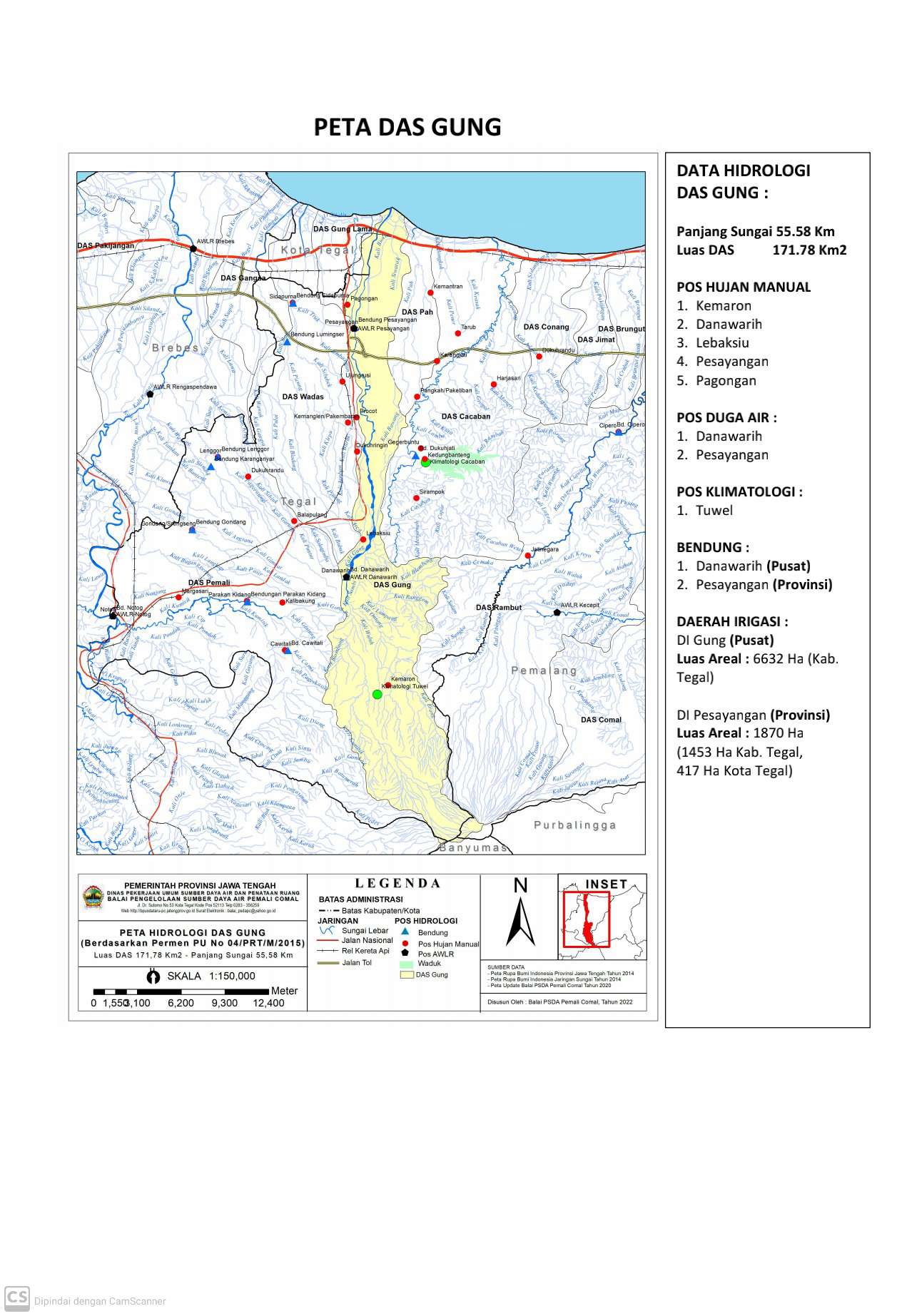
**Lampiran 19** Data Curah Hujan 2020** Lampiran 20** Data Curah Hujan 2021 dan 2022

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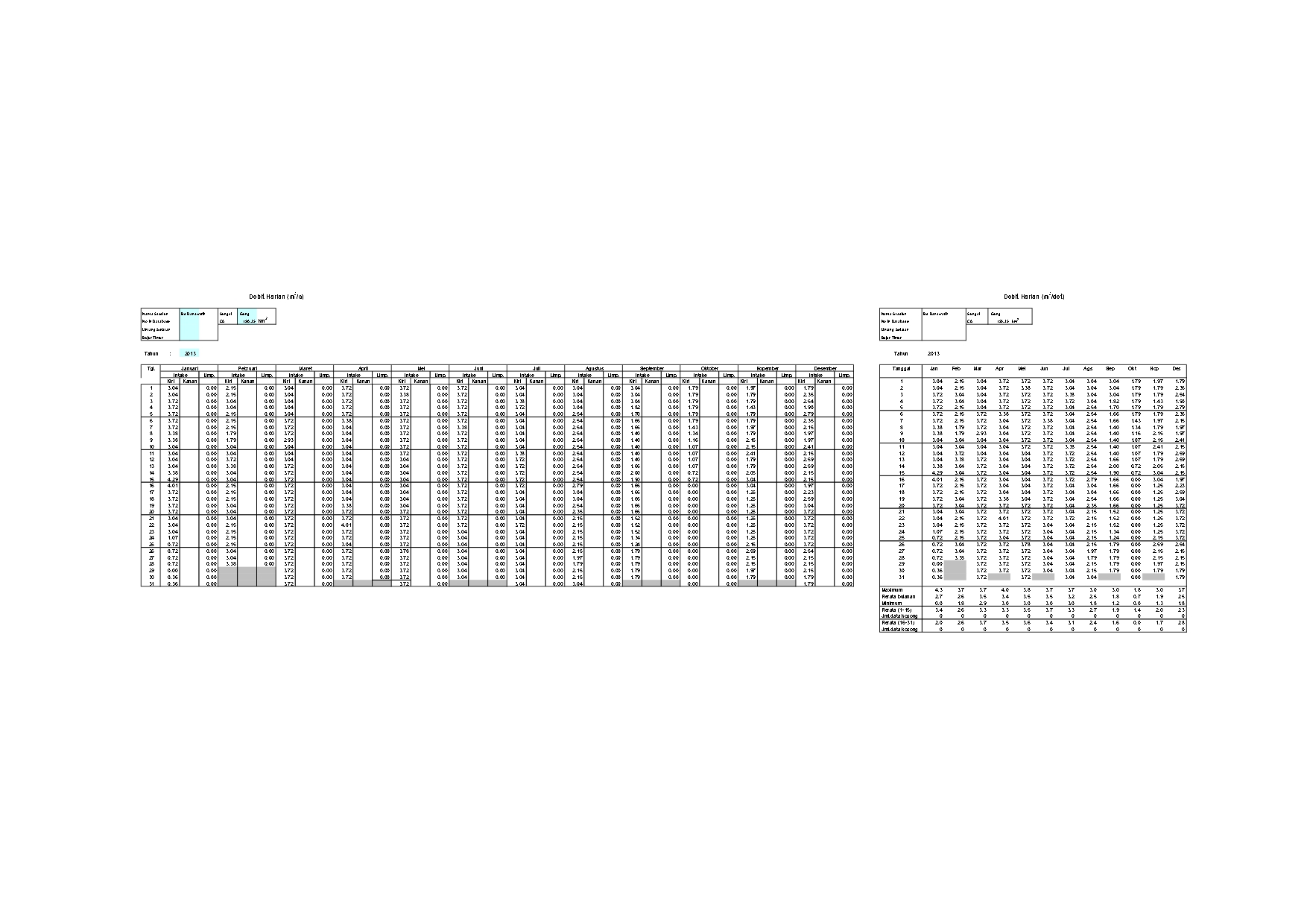
**Lampiran 21 Peta Jaringan irigasi dan lahan sawah**

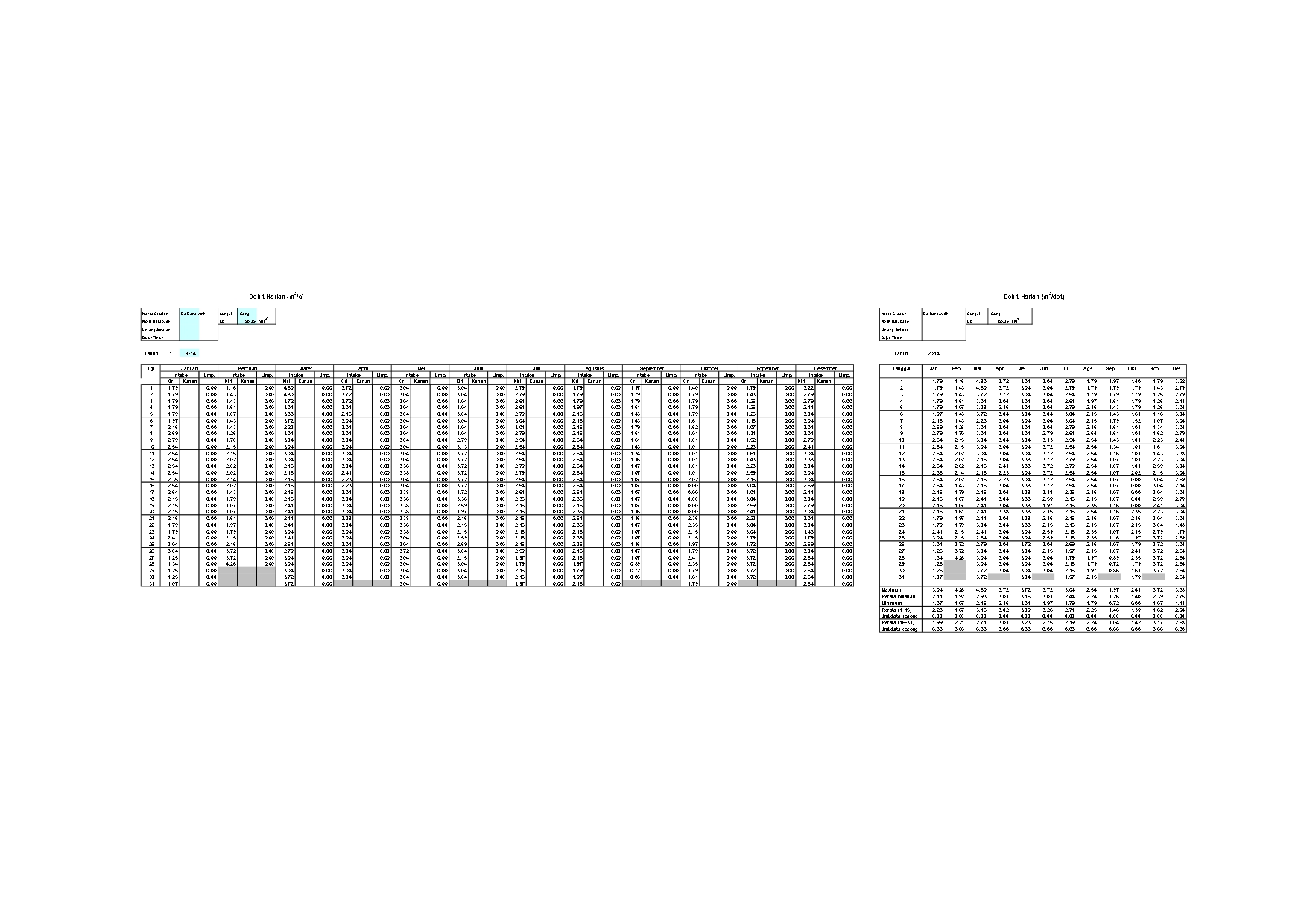


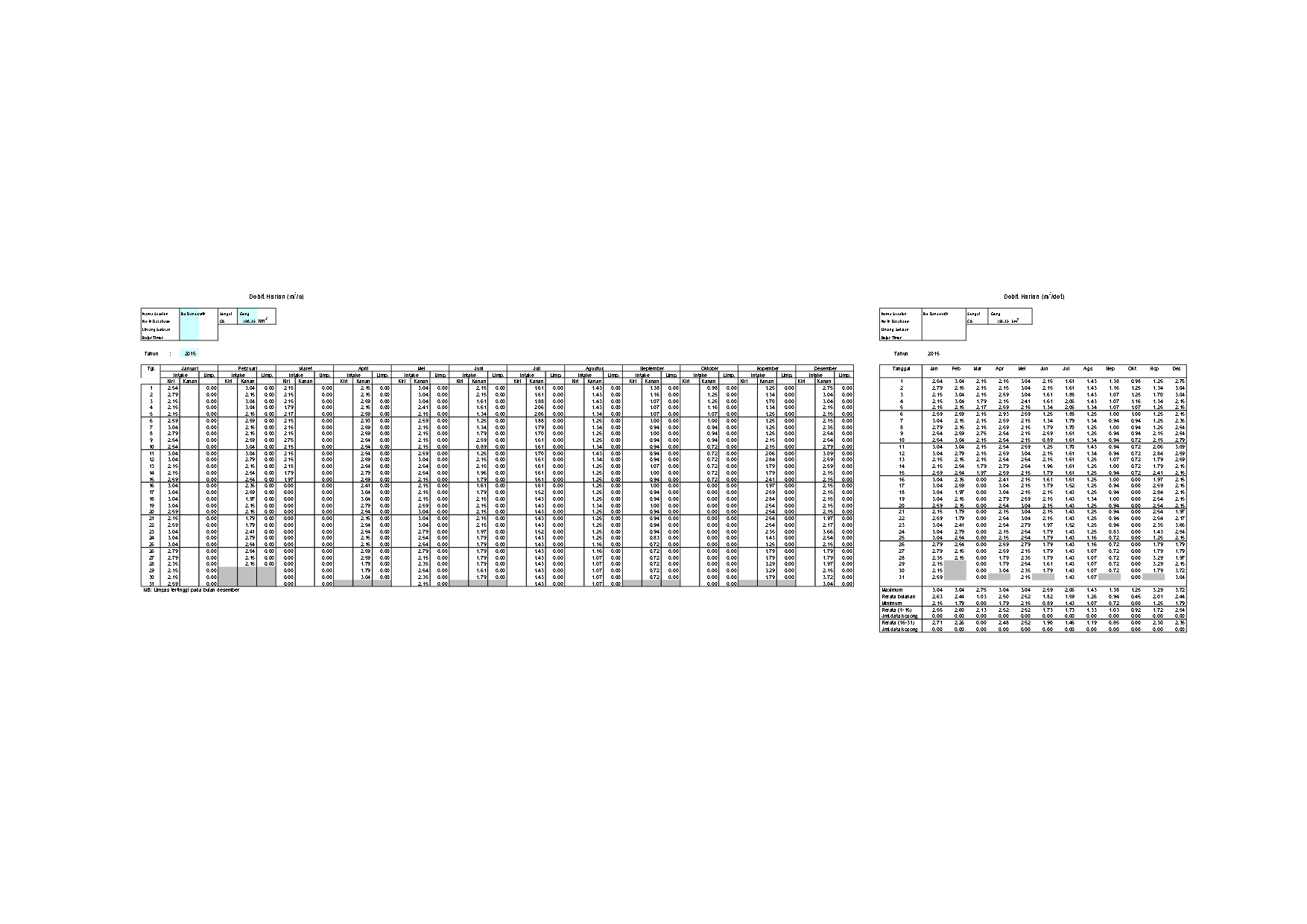
**Lampiran 22 Peta DAS Gung**

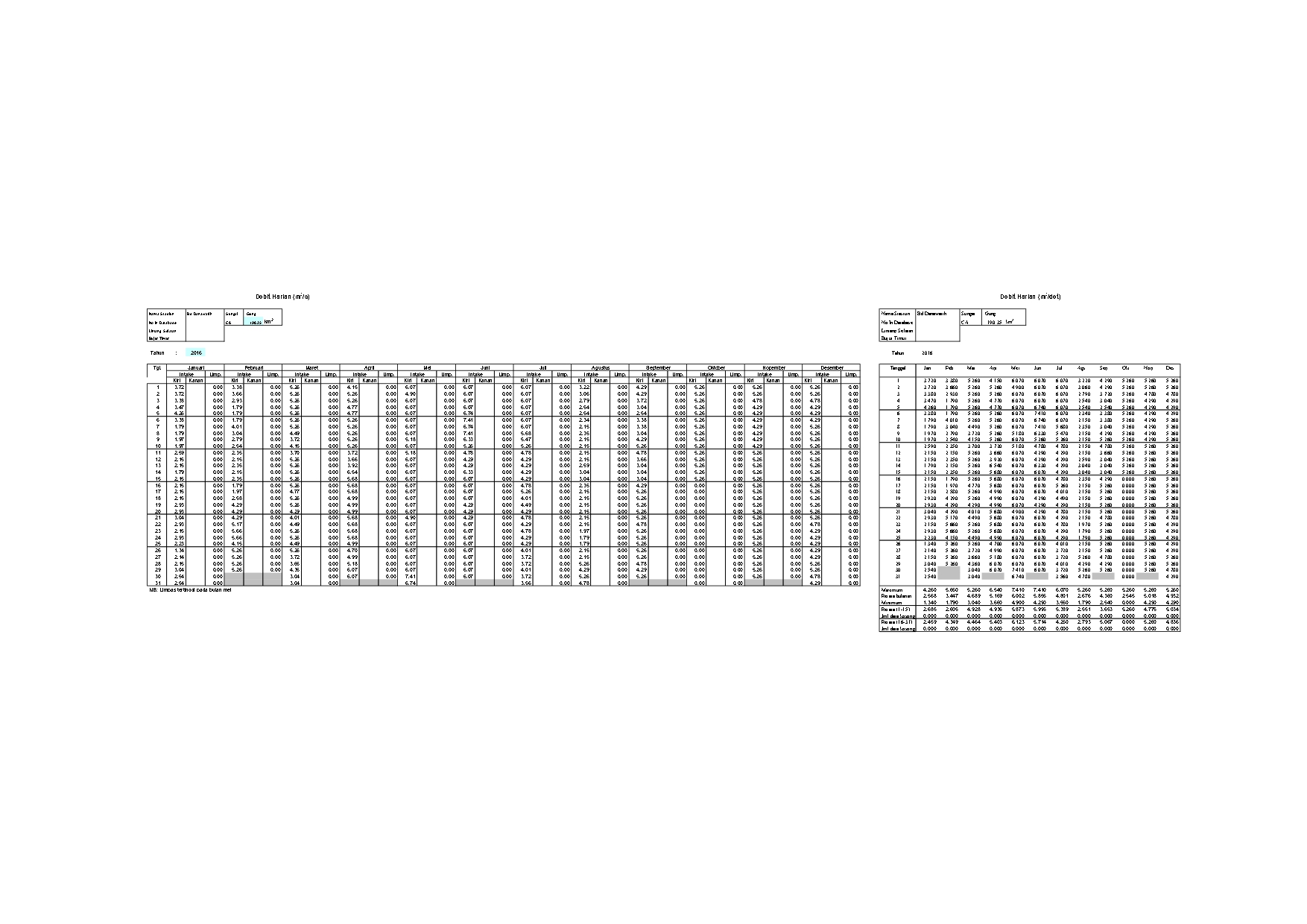


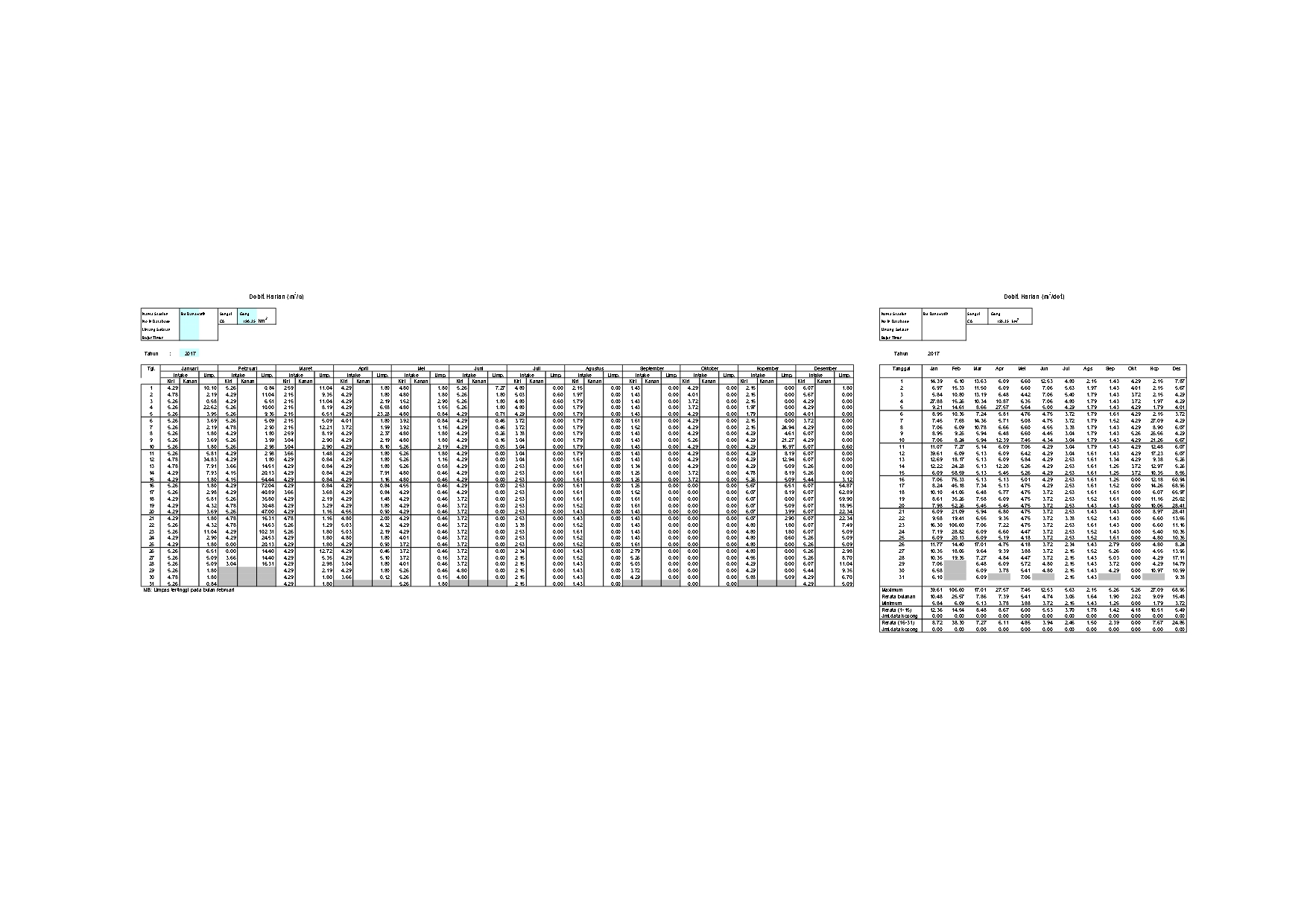
**Lampiran 23 Bd Danawarih**

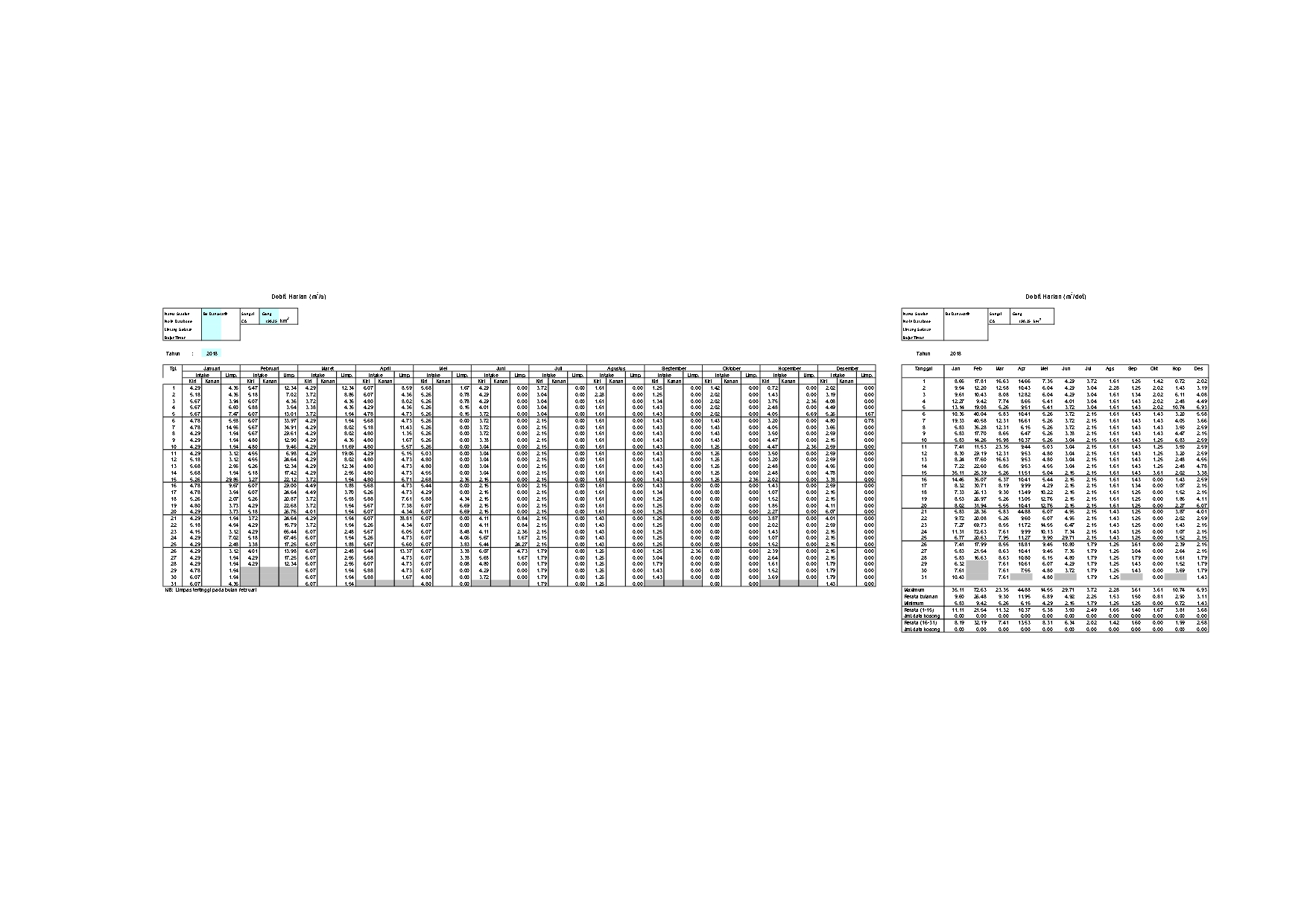
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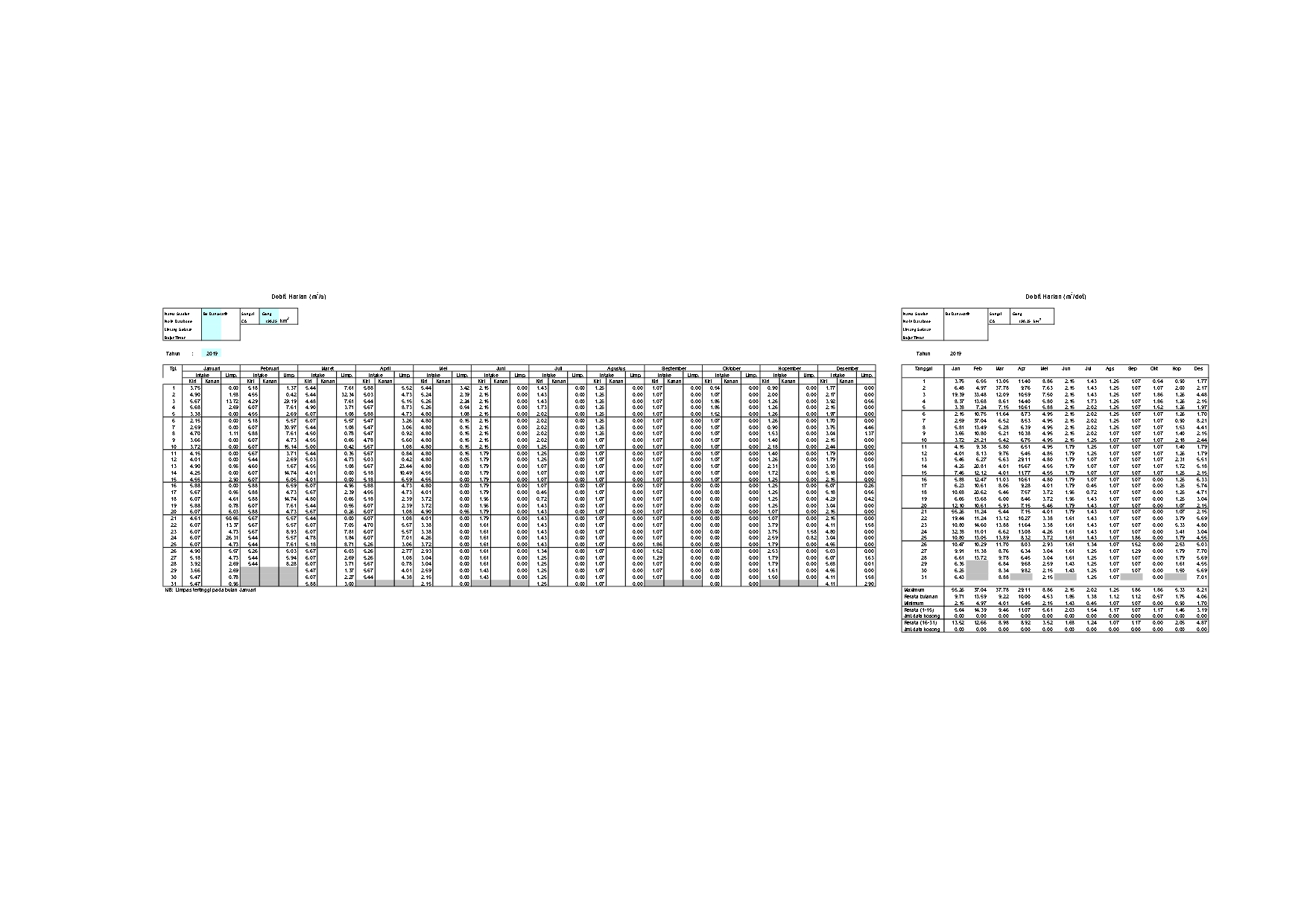
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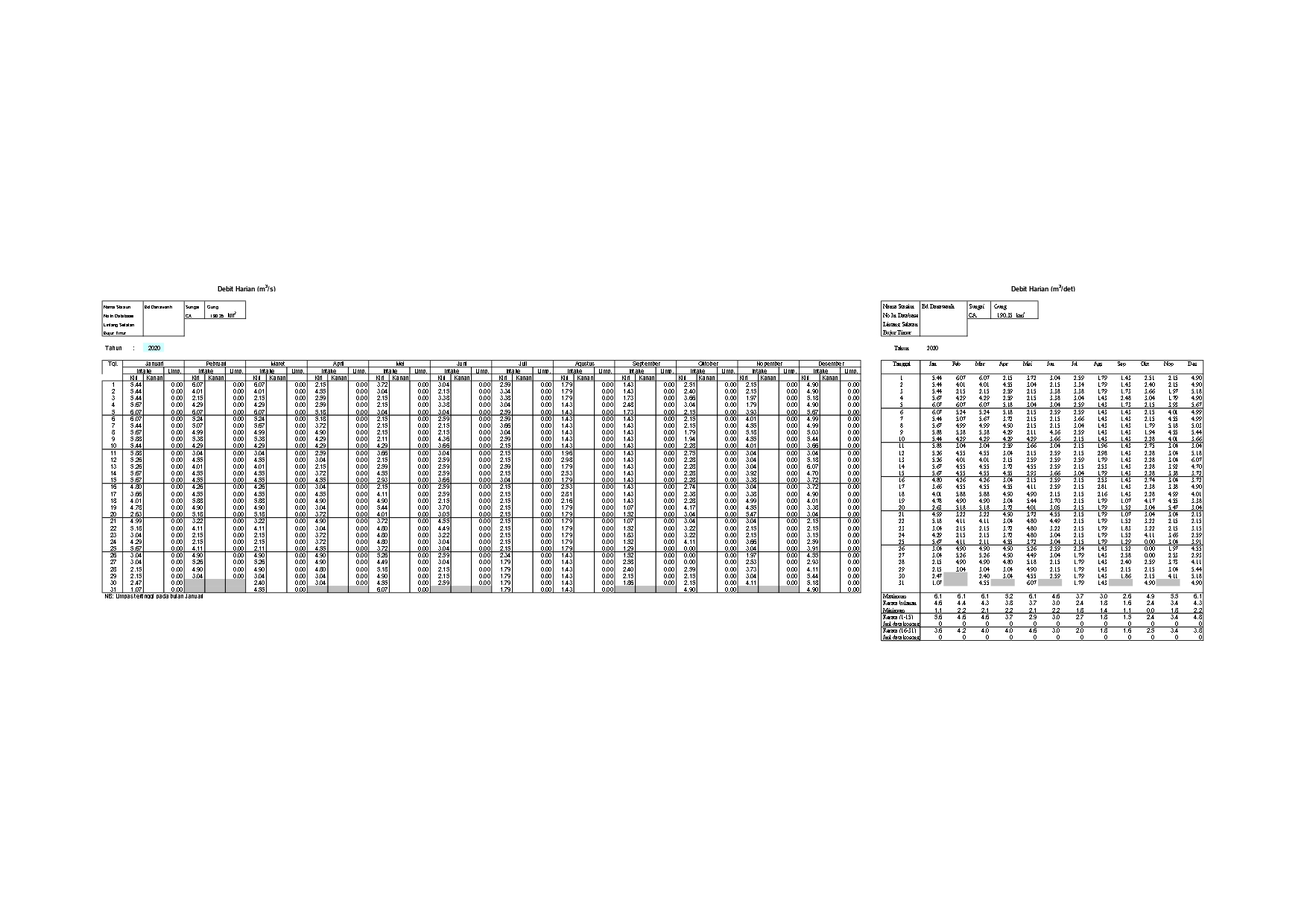
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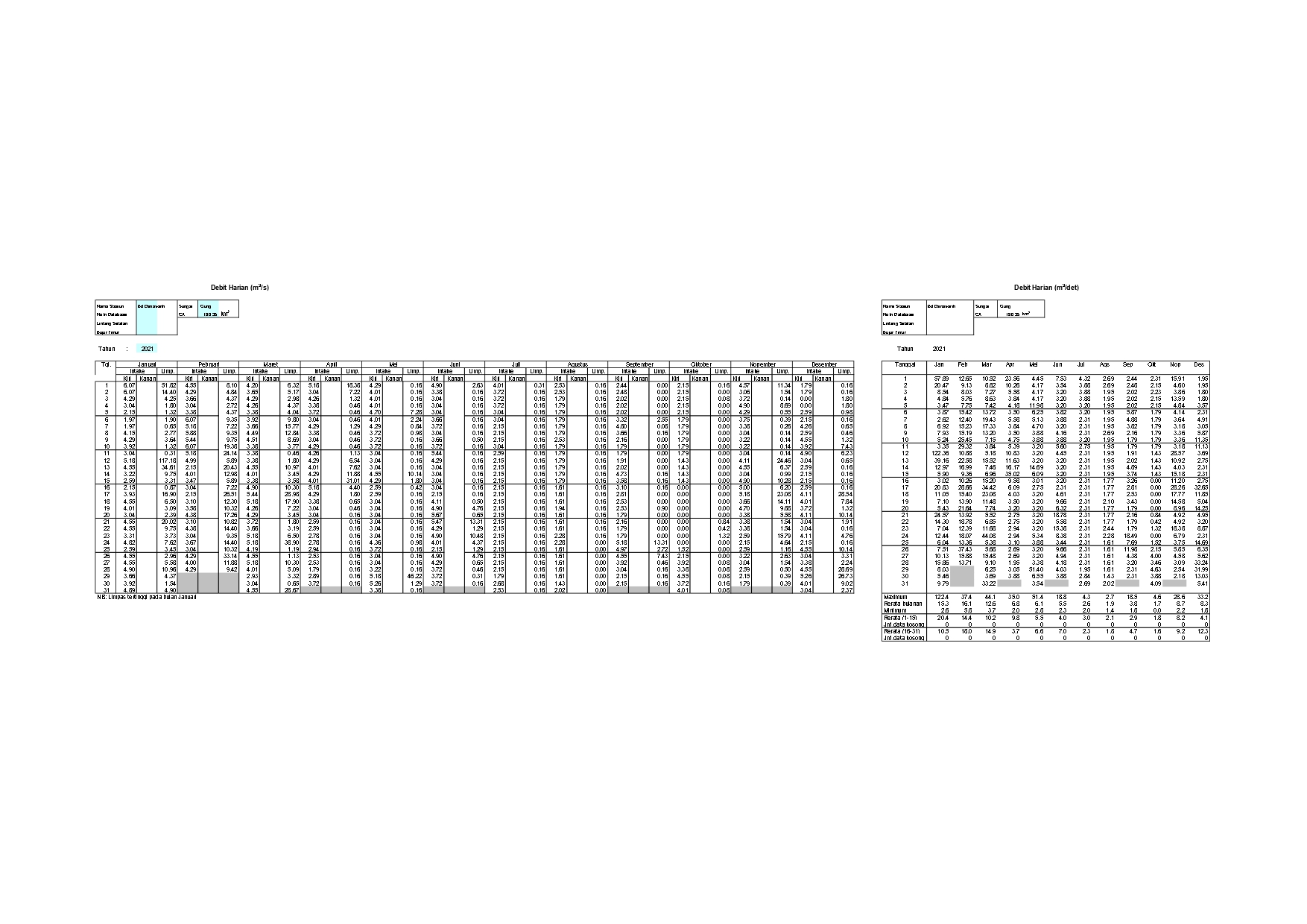
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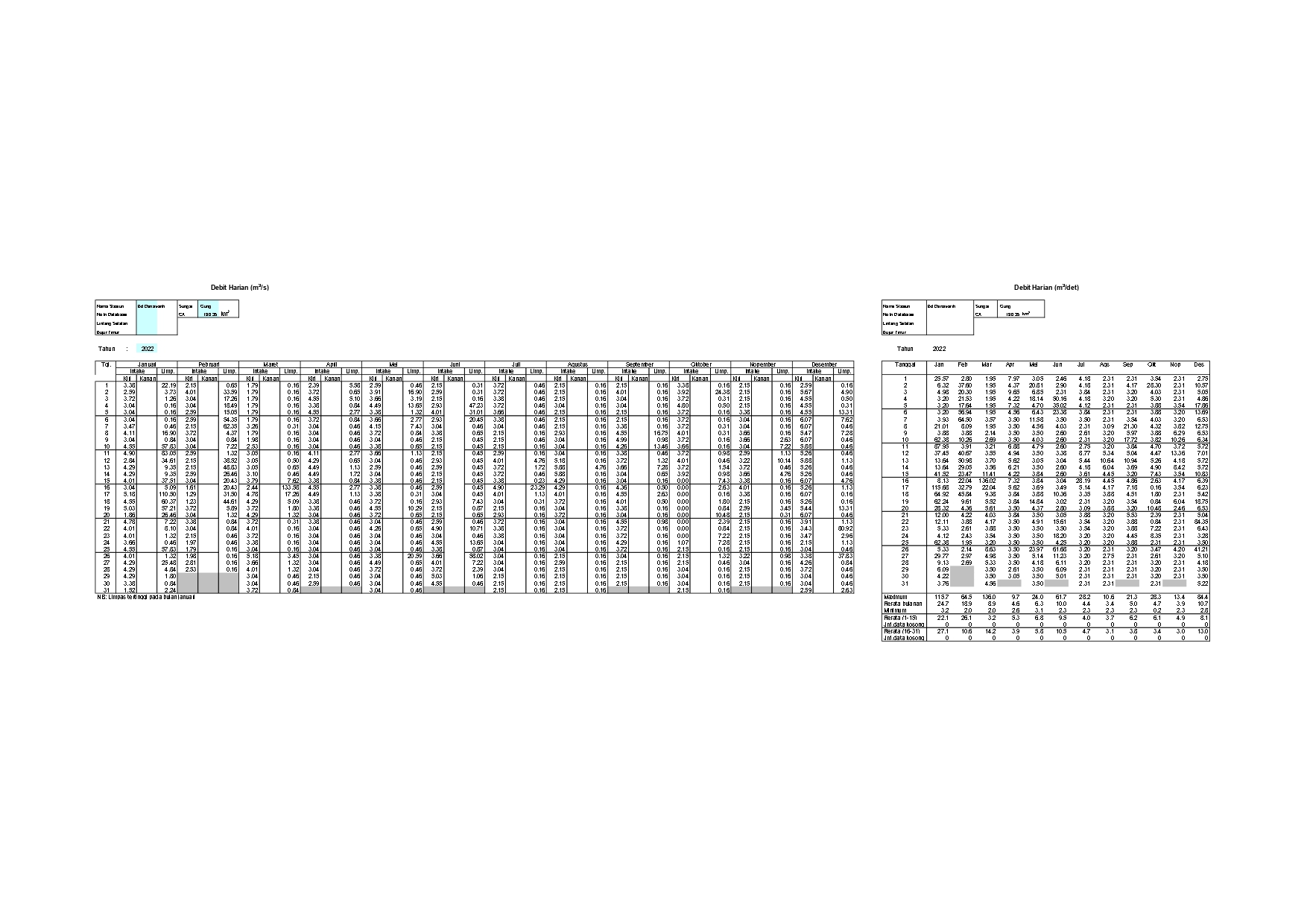
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