

Anlagen**Verzeichnis der Abbildungen**

| | |
|---|----|
| Abbildung 1: Signallageplan und Signalprogramm Willy-Brandt-Ring / Karl-Carstens-Ring ... | 2 |
| Abbildung 2: Signallageplan und Signalprogramm Willy-Brandt-Ring / Reuterstraße | 5 |
| Abbildung 3: Signallageplan und Signalprogramm Willy-Brandt-Ring / Mülheimer Str. | 9 |
| Abbildung 4: Signallageplan und Signalprogramm Mülheimer Str. / Am Dhünnberg | 13 |

Verzeichnis der Tabellen

| | |
|---|----|
| Tabelle 1: Leistungsfähigkeitsberechnung Analyse (K1)..... | 3 |
| Tabelle 2: Leistungsfähigkeitsberechnung Prognose (K1) | 4 |
| Tabelle 3: Leistungsfähigkeitsberechnung Analyse (K2)..... | 6 |
| Tabelle 4: Leistungsfähigkeitsberechnung Prognose (K2) | 7 |
| Tabelle 5: Leistungsfähigkeitsberechnung Analyse (K3)..... | 10 |
| Tabelle 6: Leistungsfähigkeitsberechnung Prognose (K3) | 11 |
| Tabelle 7: Leistungsfähigkeitsberechnung Prognose (K3) (modifiziert)..... | 12 |
| Tabelle 8: Leistungsfähigkeitsberechnung Analyse (K4)..... | 14 |
| Tabelle 9: Leistungsfähigkeitsberechnung Prognose (K4) | 15 |
| Tabelle 10: Leistungsfähigkeitsberechnung Analyse (K5)..... | 16 |
| Tabelle 11: Leistungsfähigkeitsberechnung Prognose (K5) | 16 |

Anlage 1

Knotenpunkt Willy-Brandt-Ring / Karl-Carstens-Ring

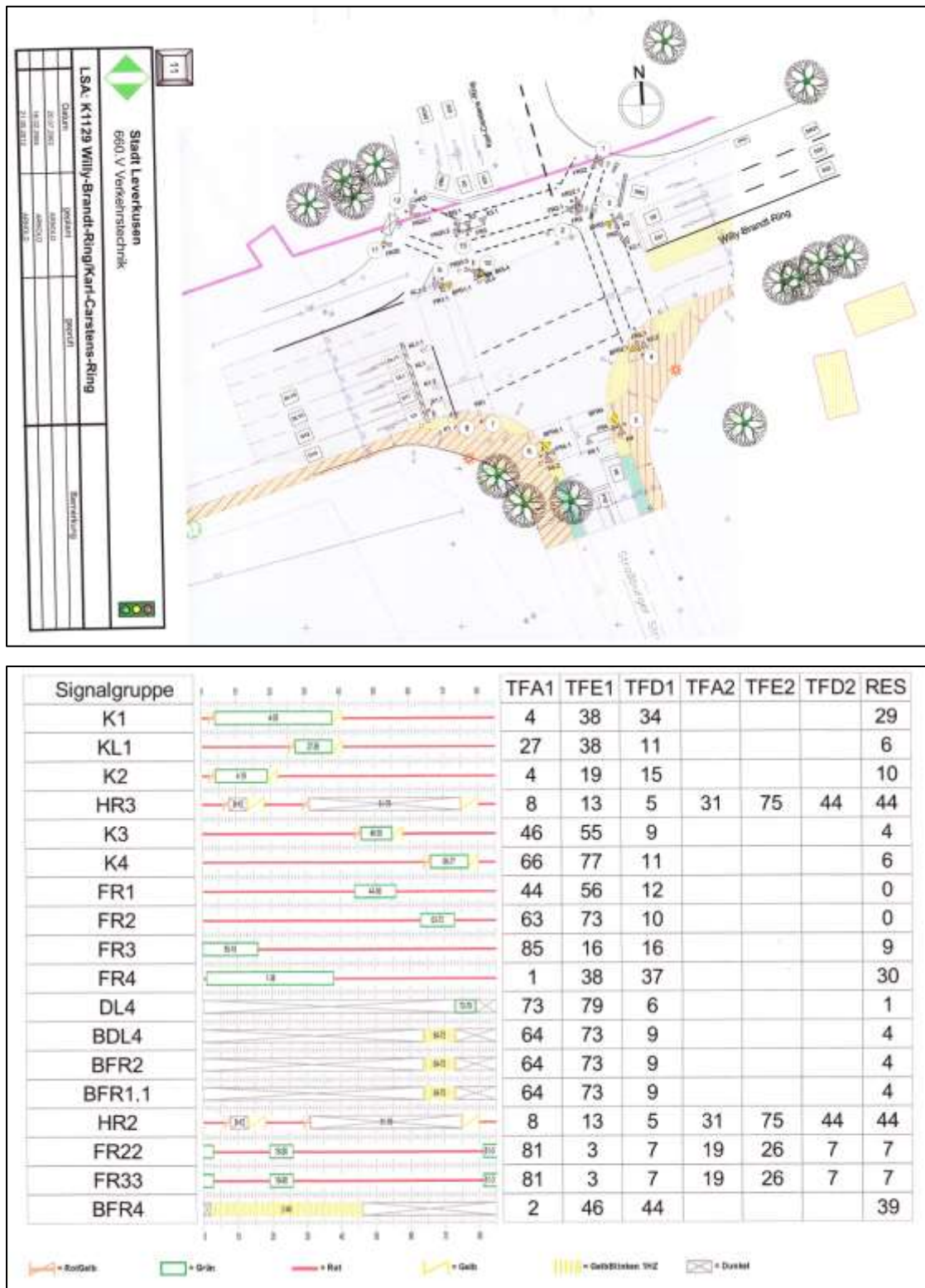


Abbildung 1: Signallageplan und Signalprogramm Willy-Brandt-Ring / Karl-Carstens-Ring

| Formblatt 3 | | Knotenpunkt mit Lichtsignalanlage | | | | | | | | | | | | | | | | | | | | |
|---|-----------|--|--------------------------------|-----|--------|------|----------------|----------------|----------------|--------|--------|-----------------|----------------|-------|-----|-----------------|-------------------|-------------|------------------|-------------|-------|---|
| | | a) Nachweis der Verkehrsqualität im Kraftfahrzeugverkehr | | | | | | | | | | | | | | | | | | | | |
| Projekt: REWE Reuterstraße | | | | | | | | | | | | | | | | | | | | | | |
| Stadt: Leverkusen | | | | | | | | | | | | | | | | | | | | | | |
| Knotenpunkt: Willy-Brandt-Ring / Karl-Carstens-Ring | | | | | | | | | | | | | | | | | | | | | | |
| Zeitabschnitt: Analyse-Abendspitze | | | | | | | | | | | | | | | | | | | | | | |
| Bearbeiter: Richling | | | | | | | | | | | | | | | | | | | | | | |
| t _u = 85 [s] | | | | | | | | | | | | | | | | | | | | | | |
| Nr. | Bez. | t _F | t _F /t _u | T = | q | m | q _S | t _B | n _C | C | g | N _{GE} | η _H | H | S | N _{RE} | I _{Stau} | w | QSV | | | |
| | | [s] | [-] | [s] | [Fz/h] | [Fz] | [Fz/h] | [s/Fz] | [Fz] | [Fz/h] | [-] | [Fz] | [Fz] | [%] | [%] | [Fz] | [m] | [s] | [-] | | | |
| 1 | KL1.1/KL1 | 11 | 0,1294 | 74 | 221 | 5,2 | 2000 | 1,80 | 6,1 | 259 | 0,8539 | 2,77 | 5,2 | 100,0 | 95 | 11,9 | 75 | 74,7 | E | | | |
| 2 | K1.2/K1.1 | 34 | 0,4000 | 51 | 569 | 13,4 | 2000 | 1,80 | 18,9 | 800 | 0,7113 | 0,70 | 11,5 | 85,9 | 95 | 13,8 | 85 | 24,5 | B | | | |
| 3 | K4.1 | 11 | 0,1294 | 74 | 80 | 1,9 | 2000 | 1,80 | 6,1 | 259 | 0,3091 | 0,00 | 1,7 | 90,7 | 95 | 3,8 | 25 | 33,6 | B | | | |
| 4 | K4.1 | 11 | 0,1294 | 74 | 107 | 2,5 | 2000 | 1,80 | 6,1 | 259 | 0,4134 | 0,00 | 2,3 | 92,0 | 95 | 4,7 | 30 | 34,0 | B | | | |
| 5 | K2.1/K2 | 15 | 0,1765 | 70 | 325 | 7,7 | 2000 | 1,80 | 8,3 | 353 | 0,9208 | 4,28 | 7,7 | 100,0 | 95 | 16,1 | 100 | 78,1 | E | | | |
| 6 | HR2 | 49 | 0,5765 | 36 | 235 | 5,5 | 2000 | 1,80 | 27,2 | 1153 | 0,2038 | 0,00 | 2,7 | 48,0 | 95 | 4,9 | 35 | 8,6 | A | | | |
| 7 | K3/K3.1 | 9 | 0,1059 | 76 | 197 | 4,7 | 2000 | 1,80 | 5,0 | 212 | 0,9303 | 4,35 | 4,7 | 100,0 | 95 | 13,4 | 85 | 111,6 | F | | | |
| 8 | HR3 | 49 | 0,5765 | 36 | 361 | 8,5 | 2000 | 1,80 | 27,2 | 1153 | 0,3131 | 0,00 | 4,4 | 51,7 | 95 | 6,8 | 45 | 9,3 | A | | | |
| 9 | | | | | | | | | | | | | | | | | | | | | | |
| 10 | | | | | | | | | | | | | | | | | | | | | | |
| 11 | | | | | | | | | | | | | | | | | | | | | | |
| 12 | | | | | | | | | | | | | | | | | | | | | | |
| 13 | | | | | | | | | | | | | | | | | | | | | | |
| 14 | | | | | | | | | | | | | | | | | | | | | | |
| 15 | | | | | | | | | | | | | | | | | | | | | | |
| 16 | | | | | | | | | | | | | | | | | | | | | | |
| 17 | | | | | | | | | | | | | | | | | | | | | | |
| 18 | | | | | | | | | | | | | | | | | | | | | | |
| 19 | | | | | | | | | | | | | | | | | | | | | | |
| 20 | | | | | | | | | | | | | | | | | | | | | | |
| Knotensummen: | | | | | | | | | | | | | | | | | q _k = | 2095 [Fz/h] | C _k = | 4447 [Fz/h] | | |
| Gewichtete Mittelwerte: | | | | | | | | | | | | | | | | | g = | 0,6233 [-] | w = | 42,7 [s] | QSV = | C |

Tabelle 1: Leistungsfähigkeitsberechnung Analyse (K1)

| Formblatt 3 | | Knotenpunkt mit Lichtsignalanlage | | | | | | | | | | | | | | | | | | | | |
|---|-----------|--|------------------------------------|------------------|-------------|------------------|----------------|----------------|----------------|------|--------|-----------------|----------------|-------|----|-----------------|-------------------|-------|-----|--------------------|-------|------|
| | | a) Nachweis der Verkehrsqualität im Kraftfahrzeugverkehr | | | | | | | | | | | | | | | | | | | | |
| Projekt: REWE Reuterstraße | | | | | | | | | | | | | | | | | | | | | | |
| Stadt: Leverkusen | | | | | | | | | | | | | | | | | | | | | | |
| Knotenpunkt: Willy-Brandt-Ring / Karl-Carstens-Ring | | | | | | | | | | | | | | | | | | | | | | |
| Zeitabschnitt: Prognose-Abendspitze | | | | | | | | | | | | | | | | | | | | | | |
| Bearbeiter: Richling | | | | | | | | | | | | | | | | | | | | | | |
| Nr. | Bez. | t _u = | | T = | q | m | q _s | t _B | n _C | C | g | N _{GE} | η _H | H | S | N _{RE} | I _{Stau} | w | QSV | | | |
| | | t _F [s] | t _F /t _u [-] | | | | | | | | | | | | | | | | | t _s [s] | [Fz] | [Fz] |
| 1 | KL1.1/KL1 | 11 | 0,1294 | 74 | 221 | 5,2 | 2000 | 1,80 | 6,1 | 259 | 0,8539 | 2,77 | 5,2 | 100,0 | 95 | 11,9 | 75 | 74,7 | E | | | |
| 2 | K1.2/K1.1 | 34 | 0,4000 | 51 | 581 | 13,7 | 2000 | 1,80 | 18,9 | 800 | 0,7263 | 0,87 | 12,0 | 87,2 | 95 | 14,2 | 90 | 25,5 | B | | | |
| 3 | K4.1 | 11 | 0,1294 | 74 | 80 | 1,9 | 2000 | 1,80 | 6,1 | 259 | 0,3091 | 0,00 | 1,7 | 90,7 | 95 | 3,8 | 25 | 33,6 | B | | | |
| 4 | K4.1 | 11 | 0,1294 | 74 | 107 | 2,5 | 2000 | 1,80 | 6,1 | 259 | 0,4134 | 0,00 | 2,3 | 92,0 | 95 | 4,7 | 30 | 34,0 | B | | | |
| 5 | K2.1/K2 | 15 | 0,1765 | 70 | 336 | 7,9 | 2000 | 1,80 | 8,3 | 353 | 0,9520 | 5,87 | 7,9 | 100,0 | 95 | 18,2 | 110 | 94,5 | E | | | |
| 6 | HR2 | 49 | 0,5765 | 36 | 252 | 6,0 | 2000 | 1,80 | 27,2 | 1153 | 0,2186 | 0,00 | 2,9 | 48,5 | 95 | 5,2 | 35 | 8,7 | A | | | |
| 7 | K3/K3.1 | 9 | 0,1059 | 76 | 206 | 4,9 | 2000 | 1,80 | 5,0 | 212 | 0,9728 | 5,63 | 4,9 | 100,0 | 95 | 14,3 | 90 | 133,5 | F | | | |
| 8 | HR3 | 49 | 0,5765 | 36 | 361 | 8,5 | 2000 | 1,80 | 27,2 | 1153 | 0,3131 | 0,00 | 4,4 | 51,7 | 95 | 6,8 | 45 | 9,3 | A | | | |
| 9 | | | | | | | | | | | | | | | | | | | | | | |
| 10 | | | | | | | | | | | | | | | | | | | | | | |
| 11 | | | | | | | | | | | | | | | | | | | | | | |
| 12 | | | | | | | | | | | | | | | | | | | | | | |
| 13 | | | | | | | | | | | | | | | | | | | | | | |
| 14 | | | | | | | | | | | | | | | | | | | | | | |
| 15 | | | | | | | | | | | | | | | | | | | | | | |
| 16 | | | | | | | | | | | | | | | | | | | | | | |
| 17 | | | | | | | | | | | | | | | | | | | | | | |
| 18 | | | | | | | | | | | | | | | | | | | | | | |
| 19 | | | | | | | | | | | | | | | | | | | | | | |
| 20 | | | | | | | | | | | | | | | | | | | | | | |
| Knotensummen: | | | | q _k = | 2144 [Fz/h] | C _k = | 4447 [Fz/h] | | | | | | | | | | | | | | QSV = | C |
| Gewichtete Mittelwerte: | | | | g = | 0,6381 [-] | w = | 47,8 [s] | | | | | | | | | | | | | | QSV = | C |

Tabelle 2: Leistungsfähigkeitsberechnung Prognose (K1)

Anlage 2

Knotenpunkt Willy-Brandt-Ring / Reuterstraße

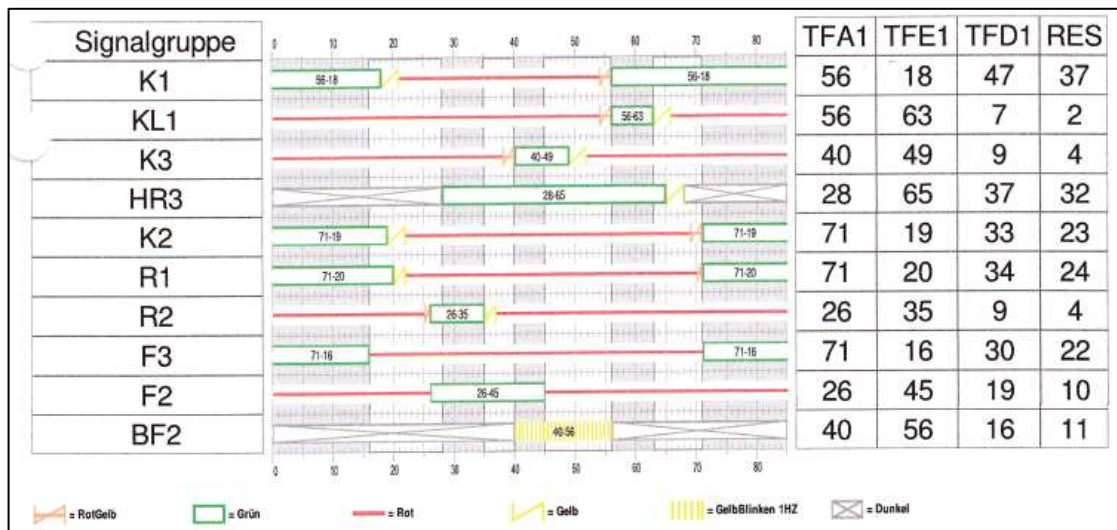
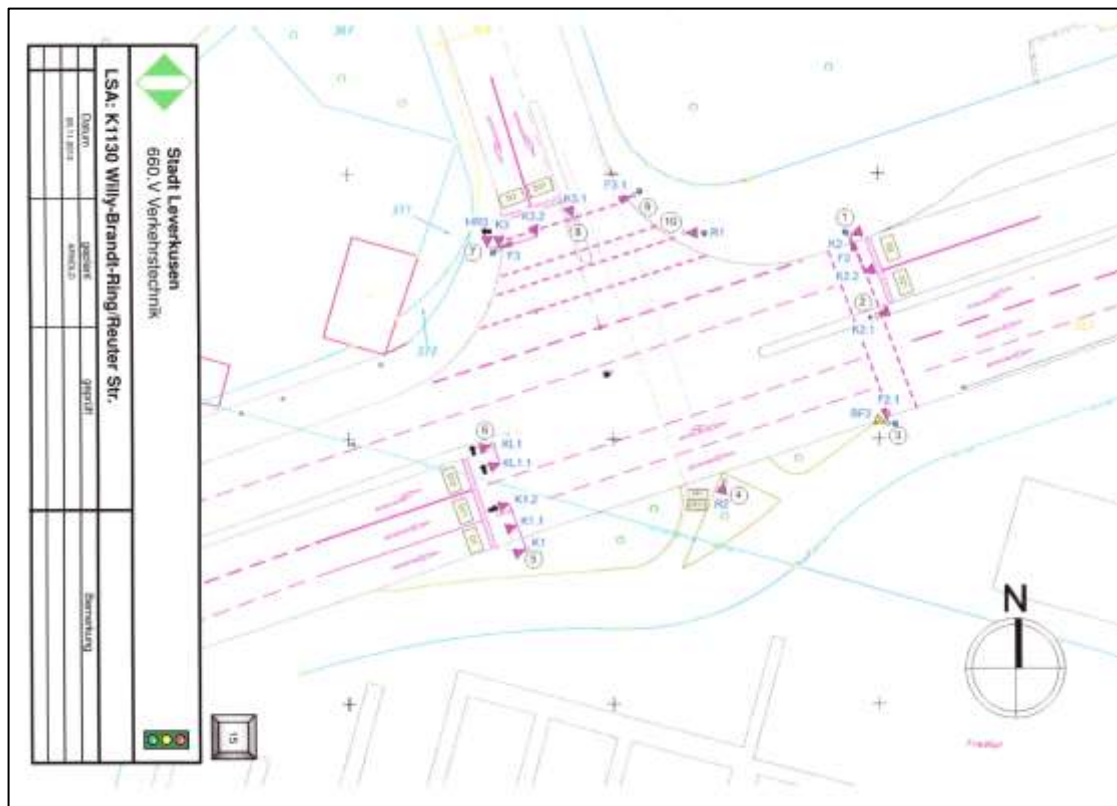


Abbildung 2: Signallageplan und Signalprogramm Willy-Brandt-Ring / Reuterstraße

| Formblatt 3 | | Knotenpunkt mit Lichtsignalanlage | | | | | | | | | | | | | | | | | |
|---|------|---|--------------------------------|-----|--------|------|----------------|----------------|----------------|--------|--------|-----------------|----------------|------|-----|-----------------|-------------------|------|-----|
| | | a) Nachweis der Verkehrsqualität im Kraftfahrzeugverkehr | | | | | | | | | | | | | | | | | |
| Projekt: REWE Reuterstraße | | | | | | | | | | | | | | | | | | | |
| Stadt: Leverkusen | | | | | | | | | | | | | | | | | | | |
| Knotenpunkt: Willy-Brandt-Ring / Reuterstraße | | | | | | | | | | | | | | | | | | | |
| Zeitabschnitt: Analyse-Abendspitze | | | | | | | | | | | | | | | | | | | |
| Bearbeiter: Richling | | | | | | | | | | | | | | | | | | | |
| t _u = 85 [s] | | | | | | | | | | | | | | | | | | | |
| Nr. | Bez. | t _F | t _F /t _u | T = | q | m | q _S | t _B | n _C | C | g | N _{GE} | η _H | H | S | N _{RE} | I _{Stau} | w | QSV |
| | | [s] | [-] | [s] | [Fz/h] | [Fz] | [Fz/h] | [s/Fz] | [Fz] | [Fz/h] | [-] | [Fz] | [%] | [Fz] | [%] | [Fz] | [m] | [s] | [-] |
| 1 | K1L | 7 | 0,0824 | 78 | 19 | 0,4 | 2000 | 1,80 | 3,9 | 165 | 0,1154 | 0,00 | 0,4 | 92,6 | 95 | 1,5 | 10 | 36,1 | C |
| 2 | K1 | 47 | 0,5529 | 38 | 647 | 15,3 | 2000 | 1,80 | 26,1 | 1106 | 0,5851 | 0,00 | 10,1 | 66,1 | 95 | 11,2 | 70 | 12,6 | A |
| 3 | K2 | 33 | 0,3882 | 52 | 453 | 10,7 | 2000 | 1,80 | 18,3 | 776 | 0,5834 | 0,00 | 8,5 | 79,1 | 95 | 10,9 | 70 | 20,6 | B |
| 4 | K3L | 9 | 0,1059 | 76 | 38 | 0,9 | 2000 | 1,80 | 5,0 | 212 | 0,1794 | 0,00 | 0,8 | 91,1 | 95 | 2,3 | 15 | 34,6 | B |
| 5 | K3R | 9 | 0,1059 | 76 | 29 | 0,7 | 2000 | 1,80 | 5,0 | 212 | 0,1369 | 0,00 | 0,6 | 90,7 | 95 | 1,9 | 15 | 34,5 | B |
| 6 | | | | | | | | | | | | | | | | | | | |
| 7 | | | | | | | | | | | | | | | | | | | |
| 8 | | | | | | | | | | | | | | | | | | | |
| 9 | | | | | | | | | | | | | | | | | | | |
| 10 | | | | | | | | | | | | | | | | | | | |
| 11 | | | | | | | | | | | | | | | | | | | |
| 12 | | | | | | | | | | | | | | | | | | | |
| 13 | | | | | | | | | | | | | | | | | | | |
| 14 | | | | | | | | | | | | | | | | | | | |
| 15 | | | | | | | | | | | | | | | | | | | |
| 16 | | | | | | | | | | | | | | | | | | | |
| 17 | | | | | | | | | | | | | | | | | | | |
| 18 | | | | | | | | | | | | | | | | | | | |
| 19 | | | | | | | | | | | | | | | | | | | |
| 20 | | | | | | | | | | | | | | | | | | | |
| Knotensummen: | | q _k = 1186 [Fz/h] C _k = 2471 [Fz/h] | | | | | | | | | | | | | | | | | |
| Gewichtete Mittelwerte: | | g = 0,5529 [-] w = 17,2 [s] QSV = A | | | | | | | | | | | | | | | | | |

Tabelle 3: Leistungsfähigkeitsberechnung Analyse (K2)

Anlage 3

Knotenpunkt Willy-Brandt-Ring / Mülheimer Straße



| Signalgruppe | | TFA1 | TFE1 | TFD1 | RES |
|--------------|--|------|------|------|-----|
| K1 | | 55 | 79 | 24 | 16 |
| KL1 | | 55 | 62 | 7 | 2 |
| K4 | | 36 | 47 | 11 | 5 |
| KL2 | | 85 | 6 | 6 | 1 |
| HR4 | | 55 | 65 | 10 | 5 |
| K2 | | 71 | 6 | 20 | 12 |
| KL3 | | 12 | 27 | 15 | 10 |
| K3 | | 12 | 27 | 15 | 9 |
| FR1.1/FR2.3 | | 36 | 49 | 13 | 3 |
| FR1/FR2.2 | | 36 | 49 | 13 | 3 |
| FR33/FR4.1 | | 71 | 9 | 23 | 13 |
| FR3.2/FR4 | | 71 | 9 | 23 | 13 |
| FR1.3/FR2.1 | | 12 | 52 | 40 | 28 |
| FR1.2/FR2 | | 12 | 52 | 40 | 28 |
| RES1 | | 0 | 0 | 0 | |
| FR3/FR3.1 | | 55 | 77 | 22 | 12 |
| BFR2.3 | | 36 | 53 | 17 | 12 |
| BFR3.3 | | 71 | 14 | 28 | 23 |
| BFR1.2 | | 36 | 53 | 17 | 12 |
| RES2 | | 0 | 0 | 0 | |

Abbildung 3: Signallageplan und Signalprogramm Willy-Brandt-Ring / Mülheimer Str.

| Formblatt 3 | | Knotenpunkt mit Lichtsignalanlage | | | | | | | | | | | | | | | | | | | | |
|---|--------|--|--------------------------------|-----|--------|------|----------------|----------------|----------------|--------|--------|-----------------|----------------|-------|-----|-----------------|-------------------|-------------|------------------|-------------|-------|---|
| | | a) Nachweis der Verkehrsqualität im Kraftfahrzeugverkehr | | | | | | | | | | | | | | | | | | | | |
| Projekt: REWE Reuterstraße | | | | | | | | | | | | | | | | | | | | | | |
| Stadt: Leverkusen | | | | | | | | | | | | | | | | | | | | | | |
| Knotenpunkt: Willy-Brandt-Ring / Mülheimer Straße | | | | | | | | | | | | | | | | | | | | | | |
| Zeitabschnitt: Analyse-Abendspitze | | | | | | | | | | | | | | | | | | | | | | |
| Bearbeiter: Richling | | | | | | | | | | | | | | | | | | | | | | |
| t _u = 85 [s] | | | | | | | | | | | | | | | | | | | | | | |
| Nr. | Bez. | t _F | t _F /t _u | T = | q | m | q _S | t _B | n _C | C | g | N _{GE} | η _H | H | S | N _{RE} | I _{Stau} | w | QSV | | | |
| | | [s] | [-] | [s] | [Fz/h] | [Fz] | [Fz/h] | [s/Fz] | [Fz] | [Fz/h] | [-] | [Fz] | [Fz] | [%] | [%] | [Fz] | [m] | [s] | [-] | | | |
| 1 | KL1 | 7 | 0,0824 | 78 | 133 | 3,1 | 2000 | 1,80 | 3,9 | 165 | 0,8075 | 2,24 | 3,1 | 100,0 | 95 | 9,0 | 55 | 87,4 | E | | | |
| 2 | K1 | 24 | 0,2824 | 61 | 725 | 17,1 | 2000 | 1,80 | 13,3 | 565 | 1,2839 | 80,15 | 17,1 | 100,0 | 95 | 22,5 | 140 | 545,3 | F | | | |
| 3 | KL3 | 15 | 0,1765 | 70 | 179 | 4,2 | 2000 | 1,80 | 8,3 | 353 | 0,5072 | 0,00 | 3,8 | 90,4 | 95 | 6,6 | 45 | 31,7 | B | | | |
| 4 | K3 | 15 | 0,1765 | 70 | 348 | 8,2 | 2000 | 1,80 | 8,3 | 353 | 0,9860 | 7,61 | 8,2 | 100,0 | 95 | 18,2 | 110 | 112,5 | F | | | |
| 5 | K2L | 6 | 0,0706 | 79 | 25 | 0,6 | 2000 | 1,80 | 3,3 | 141 | 0,1771 | 0,00 | 0,6 | 94,1 | 95 | 1,8 | 15 | 37,2 | C | | | |
| 6 | K2 | 20 | 0,2353 | 65 | 257 | 6,1 | 2000 | 1,80 | 11,1 | 471 | 0,5461 | 0,00 | 5,3 | 87,7 | 95 | 8,3 | 55 | 28,5 | B | | | |
| 7 | K4 (L) | 11 | 0,1294 | 74 | 95 | 2,2 | 2000 | 1,80 | 6,1 | 259 | 0,3670 | 0,00 | 2,1 | 91,4 | 95 | 4,3 | 30 | 33,8 | B | | | |
| 8 | K4 | 11 | 0,1294 | 74 | 261 | 6,2 | 2000 | 1,80 | 6,1 | 259 | 1,0084 | 7,94 | 6,2 | 100,0 | 95 | 15,7 | 95 | 147,5 | F | | | |
| 9 | K4 (R) | 11 | 0,1294 | 74 | 133 | 3,1 | 2000 | 1,80 | 6,1 | 259 | 0,5139 | 0,00 | 2,9 | 93,3 | 95 | 5,5 | 35 | 34,5 | B | | | |
| 10 | | | | | | | | | | | | | | | | | | | | | | |
| 11 | | | | | | | | | | | | | | | | | | | | | | |
| 12 | | | | | | | | | | | | | | | | | | | | | | |
| 13 | | | | | | | | | | | | | | | | | | | | | | |
| 14 | | | | | | | | | | | | | | | | | | | | | | |
| 15 | | | | | | | | | | | | | | | | | | | | | | |
| 16 | | | | | | | | | | | | | | | | | | | | | | |
| 17 | | | | | | | | | | | | | | | | | | | | | | |
| 18 | | | | | | | | | | | | | | | | | | | | | | |
| 19 | | | | | | | | | | | | | | | | | | | | | | |
| 20 | | | | | | | | | | | | | | | | | | | | | | |
| Knotensummen: | | | | | | | | | | | | | | | | | q _k = | 2156 [Fz/h] | C _k = | 2824 [Fz/h] | | |
| Gewichtete Mittelwerte: | | | | | | | | | | | | | | | | | g = | 0,9199 [-] | w = | 234,8 [s] | QSV = | F |

Tabelle 5: Leistungsfähigkeitsberechnung Analyse (K3)

| Formblatt 3 | | Knotenpunkt mit Lichtsignalanlage | | | | | | | | | | | | | | | | | | |
|---|--------|--|------------------------------------|-----|------------------|-------------|----------------|------------------|----------------|-----|--------|-----------------|----------------|-------|----|-----------------|-------------------|-------|-----|--------------------|
| | | a) Nachweis der Verkehrsqualität im Kraftfahrzeugverkehr | | | | | | | | | | | | | | | | | | |
| Projekt: REWE Reuterstraße | | | | | | | | | | | | | | | | | | | | |
| Stadt: Leverkusen | | | | | | | | | | | | | | | | | | | | |
| Knotenpunkt: Willy-Brandt-Ring / Mülheimer Straße | | | | | | | | | | | | | | | | | | | | |
| Zeitabschnitt: Prognose-Abendspitze | | | | | | | | | | | | | | | | | | | | |
| Bearbeiter: Richling | | | | | | | | | | | | | | | | | | | | |
| Nr. | Bez. | t _u = | | T = | q | m | q _s | t _B | n _C | C | g | N _{GE} | n _H | H | S | N _{RE} | I _{Stau} | w | QSV | |
| | | t _F [s] | t _F /t _u [-] | | | | | | | | | | | | | | | | | t _s [s] |
| 1 | KL1 | 7 | 0,0824 | 78 | 145 | 3,4 | 2000 | 1,80 | 3,9 | 165 | 0,8804 | 3,26 | 3,4 | 100,0 | 95 | 10,7 | 65 | 109,8 | F | |
| 2 | K1 | 24 | 0,2824 | 61 | 742 | 17,5 | 2000 | 1,80 | 13,3 | 565 | 1,3140 | 88,65 | 17,5 | 100,0 | 95 | 22,5 | 140 | 599,9 | F | |
| 3 | KL3 | 15 | 0,1765 | 70 | 191 | 4,5 | 2000 | 1,80 | 8,3 | 353 | 0,5412 | 0,00 | 4,1 | 91,0 | 95 | 7,0 | 45 | 31,9 | B | |
| 4 | K3 | 15 | 0,1765 | 70 | 348 | 8,2 | 2000 | 1,80 | 8,3 | 353 | 0,9860 | 7,61 | 8,2 | 100,0 | 95 | 18,2 | 110 | 112,5 | F | |
| 5 | K2L | 6 | 0,0706 | 79 | 25 | 0,6 | 2000 | 1,80 | 3,3 | 141 | 0,1771 | 0,00 | 0,6 | 94,1 | 95 | 1,8 | 15 | 37,2 | C | |
| 6 | K2 | 20 | 0,2353 | 65 | 266 | 6,3 | 2000 | 1,80 | 11,1 | 471 | 0,5653 | 0,00 | 5,5 | 88,2 | 95 | 8,5 | 55 | 28,7 | B | |
| 7 | K4 (L) | 11 | 0,1294 | 74 | 95 | 2,2 | 2000 | 1,80 | 6,1 | 259 | 0,3670 | 0,00 | 2,1 | 91,4 | 95 | 4,3 | 30 | 33,8 | B | |
| 8 | K4 | 11 | 0,1294 | 74 | 261 | 6,2 | 2000 | 1,80 | 6,1 | 259 | 1,0084 | 7,94 | 6,2 | 100,0 | 95 | 15,7 | 95 | 147,5 | F | |
| 9 | K4 (R) | 11 | 0,1294 | 74 | 133 | 3,1 | 2000 | 1,80 | 6,1 | 259 | 0,5139 | 0,00 | 2,9 | 93,3 | 95 | 5,5 | 35 | 34,5 | B | |
| 10 | | | | | | | | | | | | | | | | | | | | |
| 11 | | | | | | | | | | | | | | | | | | | | |
| 12 | | | | | | | | | | | | | | | | | | | | |
| 13 | | | | | | | | | | | | | | | | | | | | |
| 14 | | | | | | | | | | | | | | | | | | | | |
| 15 | | | | | | | | | | | | | | | | | | | | |
| 16 | | | | | | | | | | | | | | | | | | | | |
| 17 | | | | | | | | | | | | | | | | | | | | |
| 18 | | | | | | | | | | | | | | | | | | | | |
| 19 | | | | | | | | | | | | | | | | | | | | |
| 20 | | | | | | | | | | | | | | | | | | | | |
| Knotensummen: | | | | | q _k = | 2206 [Fz/h] | | C _k = | 2824 [Fz/h] | | | | | | | | | | | |
| Gewichtete Mittelwerte: | | | | | g = | 0,9385 [-] | | w = | 254,4 [s] | | | | | | | | | | | QSV = F |

Tabelle 6: Leistungsfähigkeitsberechnung Prognose (K3)

| Formblatt 3 | | Knotenpunkt mit Lichtsignalanlage | | | | | | | | | | | | | | | | | | | |
|---|--------|--|------------------------------------|-----|------------------|-------------|------------------|----------------|----------------|-----|--------|-----------------|----------------|-------|----|-----------------|-------------------|-------|-----|--------------------|--------|
| | | a) Nachweis der Verkehrsqualität im Kraftfahrzeugverkehr | | | | | | | | | | | | | | | | | | | |
| Projekt: REWE Reuterstraße | | | | | | | | | | | | | | | | | | | | | |
| Stadt: Leverkusen | | | | | | | | | | | | | | | | | | | | | |
| Knotenpunkt: Willy-Brandt-Ring / Mülheimer Straße | | | | | | | | | | | | | | | | | | | | | |
| Zeitabschnitt: Prognose-Abendspitze | | | | | | | | | | | | | | | | | | | | | |
| Bearbeiter: Richling | | | | | | | | | | | | | | | | | | | | | |
| Nr. | Bez. | t _u = | | T = | q | m | q _s | t _B | n _C | C | g | N _{GE} | η _H | H | S | N _{RE} | I _{Stau} | w | QSV | | |
| | | t _F [s] | t _F /t _u [-] | | | | | | | | | | | | | | | | | t _s [s] | [Fz/h] |
| 1 | KL1 | 8 | 0,0941 | 77 | 145 | 3,4 | 2000 | 1,80 | 4,4 | 188 | 0,7703 | 1,70 | 3,4 | 100,0 | 95 | 8,5 | 55 | 70,1 | E | | |
| 2 | K1 | 25 | 0,2941 | 60 | 742 | 17,5 | 2000 | 1,80 | 13,9 | 588 | 1,2614 | 76,88 | 17,5 | 100,0 | 95 | 22,9 | 140 | 504,2 | F | | |
| 3 | KL3 | 15 | 0,1765 | 70 | 191 | 4,5 | 2000 | 1,80 | 8,3 | 353 | 0,5412 | 0,00 | 4,1 | 91,0 | 95 | 7,0 | 45 | 31,9 | B | | |
| 4 | K3 | 15 | 0,1765 | 70 | 348 | 8,2 | 2000 | 1,80 | 8,3 | 353 | 0,9860 | 7,61 | 8,2 | 100,0 | 95 | 18,2 | 110 | 112,5 | F | | |
| 5 | K2L | 6 | 0,0706 | 79 | 25 | 0,6 | 2000 | 1,80 | 3,3 | 141 | 0,1771 | 0,00 | 0,6 | 94,1 | 95 | 1,8 | 15 | 37,2 | C | | |
| 6 | K2 | 19 | 0,2235 | 66 | 266 | 6,3 | 2000 | 1,80 | 10,6 | 447 | 0,5950 | 0,00 | 5,6 | 89,6 | 95 | 8,6 | 55 | 29,6 | B | | |
| 7 | K4 (L) | 11 | 0,1294 | 74 | 95 | 2,2 | 2000 | 1,80 | 6,1 | 259 | 0,3670 | 0,00 | 2,1 | 91,4 | 95 | 4,3 | 30 | 33,8 | B | | |
| 8 | K4 | 11 | 0,1294 | 74 | 261 | 6,2 | 2000 | 1,80 | 6,1 | 259 | 1,0084 | 7,94 | 6,2 | 100,0 | 95 | 15,7 | 95 | 147,5 | F | | |
| 9 | K4 (R) | 11 | 0,1294 | 74 | 133 | 3,1 | 2000 | 1,80 | 6,1 | 259 | 0,5139 | 0,00 | 2,9 | 93,3 | 95 | 5,5 | 35 | 34,5 | B | | |
| 10 | | | | | | | | | | | | | | | | | | | | | |
| 11 | | | | | | | | | | | | | | | | | | | | | |
| 12 | | | | | | | | | | | | | | | | | | | | | |
| 13 | | | | | | | | | | | | | | | | | | | | | |
| 14 | | | | | | | | | | | | | | | | | | | | | |
| 15 | | | | | | | | | | | | | | | | | | | | | |
| 16 | | | | | | | | | | | | | | | | | | | | | |
| 17 | | | | | | | | | | | | | | | | | | | | | |
| 18 | | | | | | | | | | | | | | | | | | | | | |
| 19 | | | | | | | | | | | | | | | | | | | | | |
| 20 | | | | | | | | | | | | | | | | | | | | | |
| Knotensummen: | | | | | q _k = | 2206 [Fz/h] | C _k = | 2847 [Fz/h] | | | | | | | | | | | | QSV = | F |
| Gewichtete Mittelwerte: | | | | | g = | 0,9172 [-] | w = | 219,7 [s] | | | | | | | | | | | | QSV = | F |

Tabelle 7: Leistungsfähigkeitsberechnung Prognose (K3) (modifiziert)

Anlage 4

Knotenpunkt Mülheimer Straße / Am Dhünberg

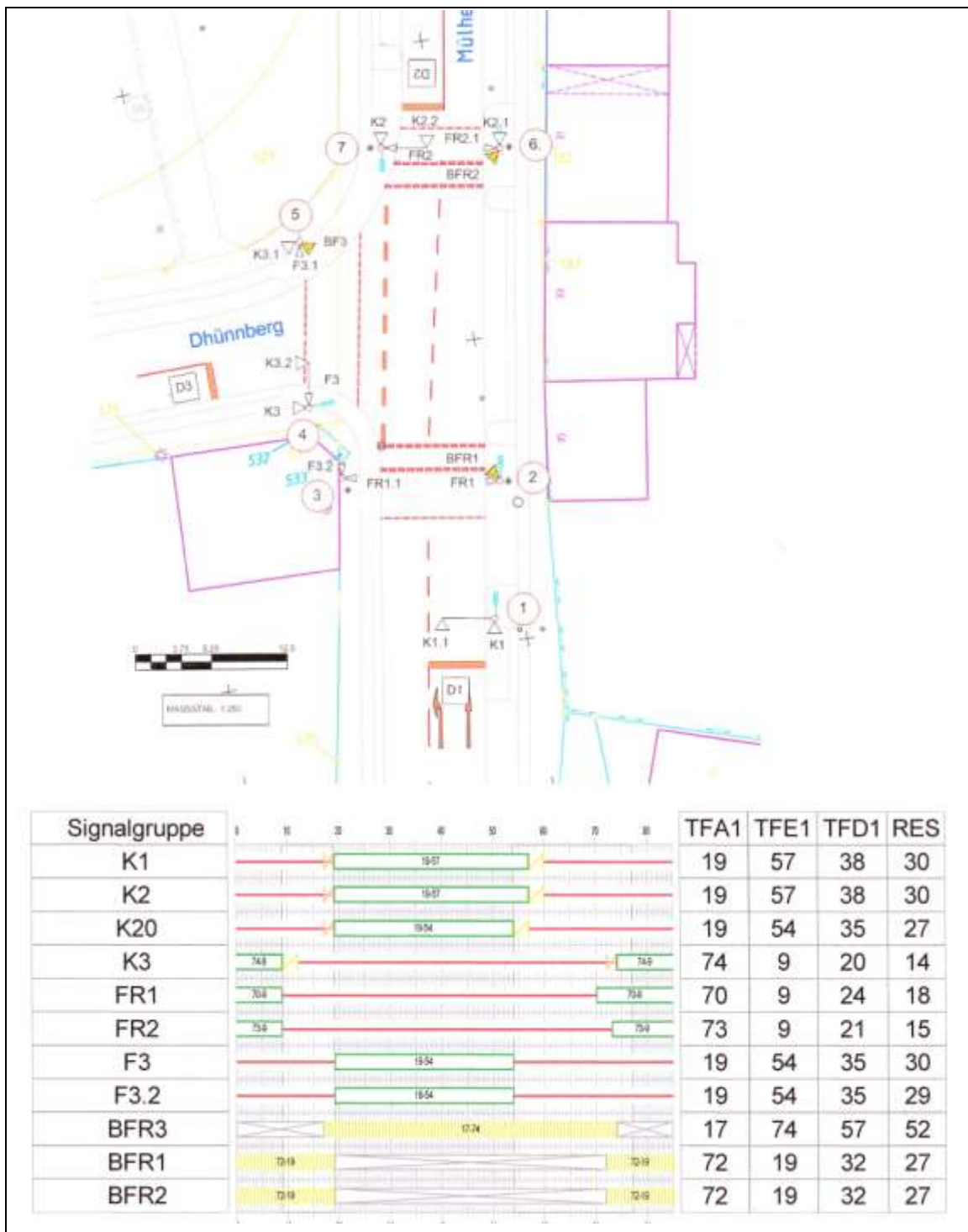


Abbildung 4: Signallageplan und Signalprogramm Mülheimer Str. / Am Dhünberg

| Formblatt 3 | | Knotenpunkt mit Lichtsignalanlage | | | | | | | | | | | | | | | | | | | |
|---|------|--|-------------|-----------|-------------|--------|------|--------|--------|-------|--------|------|----------|-------|-----|------|----------|------------|-----|-------|-----|
| | | a) Nachweis der Verkehrsqualität im Kraftfahrzeugverkehr | | | | | | | | | | | | | | | | | | | |
| Projekt: REWE Reuterstraße | | | | | | | | | | | | | | | | | | | | | |
| Stadt: Leverkusen | | | | | | | | | | | | | | | | | | | | | |
| Knotenpunkt: Mülheimer Straße / Dhünnwald | | | | | | | | | | | | | | | | | | | | | |
| Zeitabschnitt: Analyse-Abendspitze | | | | | | | | | | | | | | | | | | | | | |
| Bearbeiter: Richling | | | | | | | | | | | | | | | | | | | | | |
| Nr. | Bez. | $t_u =$ | t_f | t_f/t_u | $T =$ | q | m | q_s | t_B | n_C | C | g | N_{GE} | n_H | H | S | N_{RE} | I_{Stau} | w | QSV | |
| | | [s] | [s] | [-] | [s] | [Fz/h] | [Fz] | [Fz/h] | [s/Fz] | [Fz] | [Fz/h] | [-] | [Fz] | [Fz] | [%] | [%] | [%] | [Fz] | [m] | [s] | [-] |
| 1 | K1 | 38 | 0,4471 | 47 | 577 | 13,6 | 2000 | 1,80 | 21,1 | 894 | 0,6453 | 0,00 | 10,6 | 77,7 | 95 | 12,2 | 75 | 18,3 | A | | |
| 2 | K2 | 38 | 0,4471 | 47 | 578 | 13,6 | 2000 | 1,80 | 21,1 | 894 | 0,6464 | 0,00 | 10,6 | 77,8 | 95 | 12,2 | 75 | 18,3 | A | | |
| 3 | K3 | 20 | 0,2353 | 65 | 255 | 6,0 | 2000 | 1,80 | 11,1 | 471 | 0,5419 | 0,00 | 5,3 | 87,6 | 95 | 8,2 | 50 | 28,5 | B | | |
| 4 | | | | | | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | | | | | |
| 6 | | | | | | | | | | | | | | | | | | | | | |
| 7 | | | | | | | | | | | | | | | | | | | | | |
| 8 | | | | | | | | | | | | | | | | | | | | | |
| 9 | | | | | | | | | | | | | | | | | | | | | |
| 10 | | | | | | | | | | | | | | | | | | | | | |
| 11 | | | | | | | | | | | | | | | | | | | | | |
| 12 | | | | | | | | | | | | | | | | | | | | | |
| 13 | | | | | | | | | | | | | | | | | | | | | |
| 14 | | | | | | | | | | | | | | | | | | | | | |
| 15 | | | | | | | | | | | | | | | | | | | | | |
| 16 | | | | | | | | | | | | | | | | | | | | | |
| 17 | | | | | | | | | | | | | | | | | | | | | |
| 18 | | | | | | | | | | | | | | | | | | | | | |
| 19 | | | | | | | | | | | | | | | | | | | | | |
| 20 | | | | | | | | | | | | | | | | | | | | | |
| Knotensummen: | | $q_k =$ | 1410 [Fz/h] | $C_k =$ | 2259 [Fz/h] | | | | | | | | | | | | | | | | |
| Gewichtete Mittelwerte: | | $g =$ | 0,6271 [-] | $w =$ | 20,1 [s] | | | | | | | | | | | | | | | | |
| | | $QSV = B$ | | | | | | | | | | | | | | | | | | | |

Tabelle 8: Leistungsfähigkeitsberechnung Analyse (K4)

| Formblatt 3 | | Knotenpunkt mit Lichtsignalanlage | | | | | | | | | | | | | | | | | | | |
|---|------|--|--------------------------------|------------------|-------------|------------------|----------------|----------------|----------------|--------|--------|-----------------|----------------|------|------|-----------------|-------------------|------|-----|--|--|
| | | a) Nachweis der Verkehrsqualität im Kraftfahrzeugverkehr | | | | | | | | | | | | | | | | | | | |
| Projekt: REWE Reuterstraße | | | | | | | | | | | | | | | | | | | | | |
| Stadt: Leverkusen | | | | | | | | | | | | | | | | | | | | | |
| Knotenpunkt: Mülheimer Straße / Dhünnwald | | | | | | | | | | | | | | | | | | | | | |
| Zeitabschnitt: Prognose-Abendspitze | | | | | | | | | | | | | | | | | | | | | |
| Bearbeiter: Richling | | | | | | | | | | | | | | | | | | | | | |
| t _u = 85 [s] | | | | | | | | | | | | | | | | | | | | | |
| Nr. | Bez. | t _F | t _F /t _u | T = | q | m | q _S | t _B | n _C | C | g | N _{GE} | η _H | H | S | N _{RE} | I _{Stau} | w | QSV | | |
| | | [s] | [-] | [s] | [Fz/h] | [Fz] | [Fz/h] | [s/Fz] | [Fz] | [Fz/h] | [-] | [Fz] | [%] | [%] | [Fz] | [m] | [s] | [-] | | | |
| 1 | K1 | 38 | 0,4471 | 47 | 589 | 13,9 | 2000 | 1,80 | 21,1 | 894 | 0,6588 | 0,10 | 10,9 | 78,7 | 95 | 12,5 | 80 | 18,8 | A | | |
| 2 | K2 | 38 | 0,4471 | 47 | 590 | 13,9 | 2000 | 1,80 | 21,1 | 894 | 0,6599 | 0,11 | 11,0 | 78,8 | 95 | 12,5 | 80 | 18,9 | A | | |
| 3 | K3 | 20 | 0,2353 | 65 | 255 | 6,0 | 2000 | 1,80 | 11,1 | 471 | 0,5419 | 0,00 | 5,3 | 87,6 | 95 | 8,2 | 50 | 28,5 | B | | |
| 4 | | | | | | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | | | | | |
| 6 | | | | | | | | | | | | | | | | | | | | | |
| 7 | | | | | | | | | | | | | | | | | | | | | |
| 8 | | | | | | | | | | | | | | | | | | | | | |
| 9 | | | | | | | | | | | | | | | | | | | | | |
| 10 | | | | | | | | | | | | | | | | | | | | | |
| 11 | | | | | | | | | | | | | | | | | | | | | |
| 12 | | | | | | | | | | | | | | | | | | | | | |
| 13 | | | | | | | | | | | | | | | | | | | | | |
| 14 | | | | | | | | | | | | | | | | | | | | | |
| 15 | | | | | | | | | | | | | | | | | | | | | |
| 16 | | | | | | | | | | | | | | | | | | | | | |
| 17 | | | | | | | | | | | | | | | | | | | | | |
| 18 | | | | | | | | | | | | | | | | | | | | | |
| 19 | | | | | | | | | | | | | | | | | | | | | |
| 20 | | | | | | | | | | | | | | | | | | | | | |
| Knotensummen: | | | | q _k = | 1434 [Fz/h] | C _k = | 2259 [Fz/h] | | | | | | | | | | | | | | |
| Gewichtete Mittelwerte: | | | | g = | 0,6384 [-] | w = | 20,6 [s] | QSV = B | | | | | | | | | | | | | |

Tabelle 9: Leistungsfähigkeitsberechnung Prognose (K4)

Anlage 5

Einmündung Reuterstraße / Reuterstraße

| Qualität der Einzel- und Mischströme | | | | | | | | | |
|--------------------------------------|---|-----------------------------|---------------------------------|--|-----------------------------------|----------------------------|------------------|------------------|-------------------|
| Strom | Verkehrsstärke q_{PE} [Pkw-E/h] | Kapazität C [Pkw-E/h] | Sättigungs- grad g [-] | Kapazitäts- reserve R [Pkw-E/h] | mittlere Wartezeit w [s] | Qualitäts- stufe QSV | Stauraubemessung | | |
| | | | | | | | S [%] | N_S [Pkw-E] | I_{STAU} [m] |
| 2 + 3 | 60 | 1800 | 0,03 | 1740 | 0,0 | A | | | |
| 4 + 6 | 20 | 1179 | 0,02 | 1159 | 3,1 | A | 95 | 1 | 6 |
| 7 + 8 | 67 | 1700 | 0,04 | 1633 | 2,2 | A | 95 | 1 | 6 |
| | | | | | | | | | |
| | | | | | | | | | |

Legende: Strom 2+3, Zufahrt vom Willy-Brandt-Ring
 Strom 4+6, Zufahrt aus Reuterstraße (von Osten)
 Strom 7+8, Zufahrt Reuterstraße

Tabelle 10: Leistungsfähigkeitsberechnung Analyse (K5)

| Qualität der Einzel- und Mischströme | | | | | | | | | |
|--------------------------------------|---|-----------------------------|---------------------------------|--|-----------------------------------|----------------------------|------------------|------------------|-------------------|
| Strom | Verkehrsstärke q_{PE} [Pkw-E/h] | Kapazität C [Pkw-E/h] | Sättigungs- grad g [-] | Kapazitäts- reserve R [Pkw-E/h] | mittlere Wartezeit w [s] | Qualitäts- stufe QSV | Stauraubemessung | | |
| | | | | | | | S [%] | N_S [Pkw-E] | I_{STAU} [m] |
| 2 + 3 | 168 | 1800 | 0,09 | 1632 | 0,0 | A | | | |
| 4 + 6 | 152 | 864 | 0,18 | 712 | 5,1 | A | 95 | 1 | 6 |
| 7 + 8 | 94 | 1465 | 0,06 | 1371 | 2,6 | A | 95 | 1 | 6 |
| | | | | | | | | | |
| | | | | | | | | | |

Legende: Strom 2+3, Zufahrt vom Willy-Brandt-Ring
 Strom 4+6, Zufahrt aus Reuterstraße (von Osten)
 Strom 7+8, Zufahrt Reuterstraße

Tabelle 11: Leistungsfähigkeitsberechnung Prognose (K5)