

# STADT JENA

Ausbau der Osttangente Jena

Genehmigungsplanung -  
Planfeststellungsverfahren

Unterlage 16.3 Lichtsignalanlagen

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Knebelstraße

U 16.4.2

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Eisenbahndamm

U 16.4.3

K427 Am Anger/ Wiesenstraße/ Lutherplatz

U 16.4.4

K610 Käthe-Kollwitz-Straße/ Am Anger

# ■ TECHNISCHER BERICHT

|               |              |
|---------------|--------------|
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Auftraggeber:

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vertreten durch  
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Projekt:

**Ausbau der Osttangente**

**K427**  
**Am Anger/ Wiesenstraße/  
Lutherplatz**

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**16.4.3 Fachplanung LSA -  
Genehmigungsplanung**

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## **1. Vorbemerkungen**

Im Zuge des vierstreifigen Ausbaus der Osttangente in Jena wird der Knotenpunkt Am Anger/ Wiesenstraße/ Lutherplatz (K 427) erneuert und die Lichtsignalanlage neu errichtet.

## **2. Verwendete Unterlagen**

Die Erarbeitung der vorliegenden Entwurfs- und Genehmigungsplanung basiert auf folgenden Grundlagen:

- Lageplan, iproplan vom 30.05.2022
- Verkehrsprognose 2030 Planfall 1 vom 23.05.2018/ 19.08.2021: Knotenstrombelastungen Kfz und Lkw
- RiLSA 2015
- Technische Anforderungen an Lichtsignalanlagen, Kommunalservice Jena, Stand 13.11.2018
- Handbuch für die Bemessung von Straßenverkehrsanlagen (HBS) 2015
- Geltende DIN-Vorschriften und Richtlinien
- Straßenverkehrsordnung / Verwaltungsvorschrift zur Straßenverkehrsordnung

## **3. Erläuterungen zum Signallageplan**

### **3.1 Allgemeines**

Der Knotenpunkt Am Anger/ Wiesenstraße/ Lutherplatz ist vierarmig angelegt.

Die nördliche Zufahrt Am Anger ist mit einem Linksabbiegefahrstreifen, einem Geradeausfahrstreifen und einem Mischfahrstreifen gerade/rechts ausgestattet. Die Linksabbieger werden spursignalisiert. Geradeausfahrer und Rechtsabbieger werden mittels Vollscheibe signalisiert.

In der Zufahrt Wiesenstraße befinden sich zwei Linksabbiegestreifen, ein Geradeausfahrstreifen sowie ein Mischfahrstreifen gerade/rechts. Die Linksabbieger werden spursignalisiert, die Signalisierung der Geradeausfahrer und Rechtsabbieger erfolgt mittels Vollscheibe.

Die südliche Zufahrt Am Anger ist mit einem Linksabbiegefahrstreifen, zwei Geradeausfahrstreifen und einem Rechtsabbiegefahrstreifen ausgestattet. Die Signalisierung der Linksabbieger erfolgt mittels Spursignalisierung, der restliche Verkehr wird mittels Vollscheibe signalisiert.

In der Zufahrt Lutherplatz ist ein Linksabbiegefahrstreifen, zwei Geradeausfahrstreifen und ein Rechtsabbiegefahrstreifen angelegt. Die Linksabbieger werden spursignalisiert, Geradeausverkehr und Rechtsabbieger werden mittels Vollscheibe signalisiert.

In allen Zufahrten sind Radwege angelegt. Die nördliche Zufahrt Am Anger ist mit einem Radsignal ausgestattet. In beiden Zufahrten Am Anger sowie in der Zufahrt Lutherplatz befinden sich Radsignale für indirektes Linksabbiegen.

Über alle Knotenarme führen zweigeteilte Fußgängerfurten.

Alle Furten sollen mit Signalen für Blinde und Sehbehinderte ausgerüstet werden. Es werden Vibrations- und Tonsignalgeber (Orientierungs- und Freigabeton) vorgesehen.

### **3.2 Erfassungseinrichtungen**

Die Freigabezeitbemessung erfolgt in allen Zufahrten mittels Induktionsschleifen.

Die Anforderung der Linksabbieger der Hauptrichtung sowie die Anforderung des Verkehrs aus den Nebenrichtungen wird über Induktionsschleifen realisiert.

Für die Anforderung der linksabbiegenden Radfahrer aus den Zufahrten Am Anger sind Wärmebildkameras vorgesehen.

Die Radfahrer aus den Zufahrten Lutherplatz und Wiesenstraße fordern ihre Freigabe mittels Induktionsschleifen an.

Die Fußgänger im Zuge der Hauptrichtung erhalten in jedem Umlauf zyklisch ihre Freigabe. Fußgänger über die Hauptrichtung fordern ihre Freigabe mittels Tastern an.

Alle Fußgängerfurten werden mit Tastern für Blinde/Sehbehinderte ausgestattet. Die Freigabe für Blinde/Sehbehinderte erfolgt nur auf Anforderung zeitgleich mit der Freigabe für die Sehenden.

## **4. Verkehrstechnik**

Die LSA wird als koordiniert-verkehrsabhängige Anlage betrieben. Als Rückfallebene stehen vier Festzeitprogramme zur Verfügung.

### **Signalzeitenpläne der Rückfallebene**

|       |                |                                |
|-------|----------------|--------------------------------|
| SZP 1 | FZS, TU = 70 s | (Verkehrsschwache Zeit)        |
| SZP 2 | FZS, TU = 90 s | (Spitzenverkehr Stadteinwärts) |
| SZP 3 | FZS, TU = 90 s | (Spitzenverkehr stadteinwärts) |
| SZP 4 | FZS, TU = 90 s | (durchschnittlicher Verkehr)   |

### **Zwischenzeiten**

Die Zwischenzeiten wurden für die Entwurfsplanung nur überschlägig bestimmt und sind im Rahmen der Ausführungsplanung vollumfänglich neu zu berechnen.

## **5. Verkehrsablauf**

Die LSA Am Anger/ Wiesenstraße/ Lutherplatz wird in Dauergrünstellung für die Hauptrichtung betrieben. Die Linksabbieger der Hauptrichtung erhalten, ebenso wie die Nebenrichtungen, nur auf Anforderung ihre Freigabe.

## 5.1 Phasenfolge

- Phase 1: Freigabe des Kfz-Verkehrs Am Anger Nord und Süd gerade/rechts (K1, K5)  
Freigabe des Radverkehrs Am Anger Nord und Süd (R1, R5)  
Freigabe des parallelen Fußgängers/Blinde/Sehbehinderte (F3, FTV3, F4, FTV4, F7, FTV7, F8, FTV8)
- Phase 2: Freigabe des Kfz-Verkehrs Am Anger Süd (K1, K2)  
Freigabe des Radverkehrs Am Anger Süd (R1)  
Freigabe des parallelen Fußgängers/Blinde/Sehbehinderte (F2, FTV2, F3, FTV3, F5, FTV5, F7, FTV7, F8, FTV8)
- Phase 3: Freigabe des Kfz-Verkehrs Lutherplatz (K3) und Wiesenstraße (K7)  
Freigabe des Radverkehrs Lutherplatz (R3) und Wiesenstraße (R7)  
Freigabe des parallelen Fußgängers/Blinde/Sehbehinderte (F1, FTV1, F2, FTV2, F5, FTV5, F6, FTV6)
- Phase 4: Freigabe des Kfz-Verkehrs Wiesenstraße (K7, K8)  
Freigabe des Radverkehrs Wiesenstraße (R7)  
Freigabe des parallelen Fußgängers/Blinde/Sehbehinderte (F1, FTV1, F3, FTV3, F5, FTV5, F6, FTV6, F8, FTV8)
- Phase 5: Freigabe des Kfz-Verkehrs Lutherplatz links (K4) und Wiesenstraße links (K8)  
Freigabe des parallelen Fußgängers/Blinde/Sehbehinderte (F1, FTV1, F4, FTV4, F5, FTV5, F8, FTV8)
- Phase 6: Freigabe des Kfz-Verkehrs Am Anger Nord (K5, K6)  
Freigabe des Radverkehrs Am Anger Nord (R5)  
Freigabe des parallelen Fußgängers/Blinde/Sehbehinderte (F1, FTV1, F3, FTV3, F4, FTV4, F6, FTV6, F7, FTV7)

Die Phasen 2, 3, 4, 5 und 6 werden nur auf Anforderung geschaltet. Bei Störung des verkehrsabhängigen Betriebes werden Ersatzprogramme in Festzeit geschaltet, die die Phasenfolge 1 – 2 – 3 – 5 – 6 – 1 abbilden.

Die Signale für Blinde/Sehbehinderte werden in allen Furten sowohl in der Festzeitsteuerung als auch in der verkehrsabhängigen Steuerung nur auf Anforderung bedient. Der Freigabebeginn der akustischen Signale erfolgt grundsätzlich gleichzeitig mit dem Freigabebeginn der optischen. Ein Zuschalten der akustischen Freigabe in ein bestehendes Grün ist nicht zulässig.

## 5.2 Koordinierung

Die sich im Ausbaubereich befindenden vier LSA K413 (Am Eisenbahndamm/ Fischergasse/ Knebelstraße), K417 (Am Anger/ Steinweg/ Am Eisenbahndamm), 427 (Am Anger/ Wiesenstraße/ Lutherplatz) und 610 (Käthe-Kollwitz-Straße/ Am Anger) werden koordiniert betrieben.

### **SZP 2 Frühspitzenstunde Tu = 90 s stadtauswärts**



- durchgehendes Koordinierungsband für den Kfz-Verkehr von Stadtrodaer Straße bis Käthe-Kollwitz-Straße mit einer Breite von ca. 14 s
- Grünvorlauf von 6 s für koordinierten Pulk an Querschnitt Steinweg, ca. 2 s an Querschnitt Wiesenstraße, ca. 24 s am Querschnitt Käthe-Kollwitz-Straße

#### **stadteinwärts**

- durchgehendes Koordinierungsband für den Kfz-Verkehr von Käthe-Kollwitz-Straße bis Steinweg mit einer Breite von ca. 18 s
- An Knotenpunkt 413 ist bedingt durch die Freigabezeit von 17 s für K8 nur eine eingeschränkte Koordinierung möglich. Der Grünvorlauf für koordinierten Pulk von ca. 9 s am Querschnitt Fischergasse, Abbruch des Pulks nach 8 s Grünzeit
- Grünvorlauf für koordinierten Pulk von ca. 3 s am Querschnitt Lutherplatz K427
- Grünvorlauf für koordinierten Pulk von ca. 13 s am Querschnitt Steinweg K417

Das Koordinierungsmaß  $k$  gemäß HBS 2015 beschreibt den mittleren Anteil von Fahrzeugen im koordinierten Verkehrsstrom die ohne Halt den Knotenpunkt passieren können. Für den SZP 2 beträgt das Koordinierungsmaß 87,5 %. Dies entspricht einer guten Qualität der Koordinierung.

#### **SZP 3 Nachmittagsspitzenstunde Tu = 90 s**

##### **stadtauswärts**

- durchgehendes Koordinierungsband für den Kfz-Verkehr von Stadtrodaer Straße bis Käthe-Kollwitz-Straße mit einer Breite von ca. 15 s
- Grünvorlauf von 12 s für koordinierten Pulk an Querschnitt Steinweg, 3 s an Querschnitt Wiesenstraße, ca. 21 s am Querschnitt Käthe-Kollwitz-Straße

##### **stadteinwärts**

- durchgehendes Koordinierungsband für den Kfz-Verkehr von Käthe-Kollwitz-Straße bis Steinweg mit einer Breite von ca. 21 s
- An Knotenpunkt 413 ist keine durchgehende Koordinierung in Richtung Stadtrodaer Straße möglich. Die Kfz aus Richtung 417 fahren auf Rot bei K8 auf.
- Grünvorlauf für koordinierten Pulk von ca. 20 s am Querschnitt Lutherplatz K427
- Grünvorlauf für koordinierten Pulk von ca. 23 s am Querschnitt Steinweg K417

Das Koordinierungsmaß  $k$  gemäß HBS 2015 beschreibt den mittleren Anteil von Fahrzeugen im koordinierten Verkehrsstrom die ohne Halt den Knotenpunkt passieren können. Für den SZP 3 beträgt das Koordinierungsmaß 87,0 %. Dies entspricht einer guten Qualität der Koordinierung.

## 6. Dimensionierungsverkehrsmengen und Verkehrsqualität

Grundlage der Leistungsfähigkeitsnachweise ist die Verkehrsbelastung, die für das Jahr 2030 prognostiziert wird (Prognose 2030 P1). Die Prognose beruht auf dem Verkehrsmodell der Stadt Jena. Durch den AG übergeben wurden die Verkehrsbelastungen in Kfz/h für die Vormittagsspitze von 07:00 Uhr bis 08:00 Uhr und die Nachmittagsspitze von 16:00 bis 17:00 Uhr. Außerdem steht für die 2 Zeitbereiche der Schwerverkehrsanteil zur Verfügung.

Für die Verkehrsbelastung der Früh- und Nachmittagsspitzenstunde für den Planfall 1 der Prognose 2030 wurde der Nachweis nach HBS 2015 geführt.

Folgende, die Verkehrsqualität bestimmende Grenzwerte der mittleren Wartezeit werden nach HBS 2015 für lichtsignalgeregelter Knotenpunkte festgelegt:

|          |                                                                |
|----------|----------------------------------------------------------------|
| Stufe A: | mittlere Wartezeit $\leq 20$ s                                 |
| Stufe B: | mittlere Wartezeit $\leq 35$ s                                 |
| Stufe C: | mittlere Wartezeit $\leq 50$ s                                 |
| Stufe D: | mittlere Wartezeit $\leq 70$ s                                 |
| Stufe E: | mittlere Wartezeit $> 70$ s                                    |
| Stufe F: | mittlere Wartezeit – (Verkehrsstärke liegt über der Kapazität) |

Es ergibt sich folgende Verkehrsqualität im Kfz-Verkehr für das Festzeitprogramm:

Prognose 2030 P1, Frühspitze:

|                                |       |
|--------------------------------|-------|
| SZP 2 einwärts (FS), TU = 90 s | QSV D |
|--------------------------------|-------|

Prognose 2030 P1, Nachmittagsspitze:

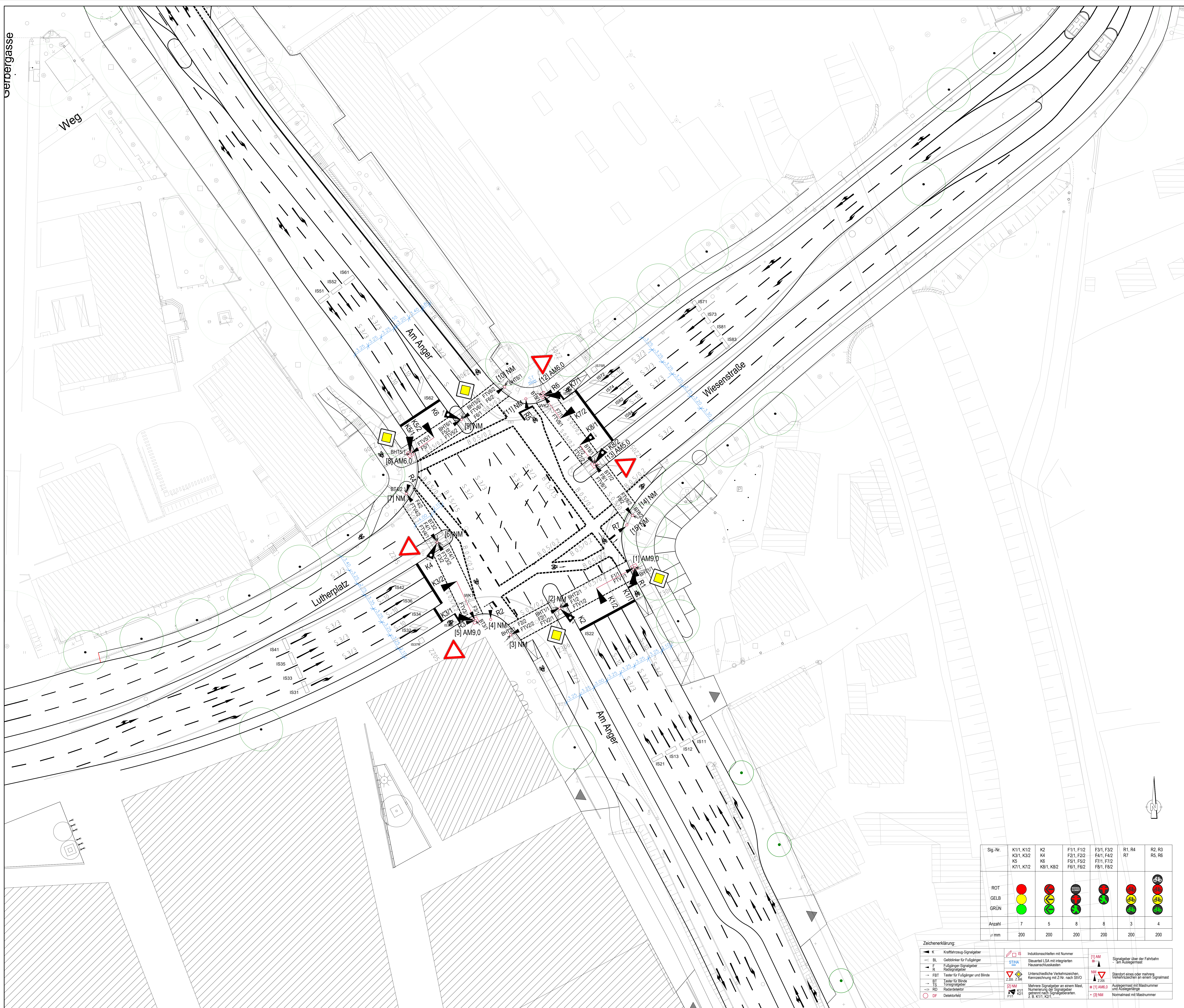
|                                |       |
|--------------------------------|-------|
| SZP 3 auswärts (NS), TU = 90 s | QSV C |
|--------------------------------|-------|

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| Category (Group)  | 1                          | 2                          | 3                           | 4                     | 5                    | 6                    | 7                       | 8                     | 9                   | 10                      | 11                    | 12                        | 13                      | 14                    | 15                      | 16                       | 17                  | 18                        | 19                      | 20                  | 21                     | 22                    | 23                       | 24                  | 25                      | 26                   | 27                      | 28                 | 29                    | 30                    | 31                 | 32                  | 33                   | 34                | 35                    | 36                      | 37                  | 38                   | 39                | 40                    | 41                      | 42                  | 43                   | 44                | 45                    | 46                      | 47                  | 48                   | 49                | 50                    | 51                      | 52                  | 53                   | 54                | 55                    | 56                      | 57                  | 58                   | 59                | 60                    | 61                      | 62                  | 63                   | 64                | 65                    | 66                      | 67                  | 68                   | 69                | 70                    | 71                      | 72                  | 73                   | 74                | 75                    | 76                      | 77                  | 78                   | 79                | 80                    | 81                      | 82                  | 83                   | 84                | 85                    | 86                      | 87                  | 88                   | 89                | 90                    | 91                      | 92                  | 93                   | 94                | 95                    | 96                      | 97                  | 98                   | 99                | 100                    | 101                      | 102                  | 103                   | 104                | 105                    | 106                      | 107                  | 108                   | 109                | 110                    | 111                      | 112                  | 113                   | 114                | 115                    | 116                      | 117                  | 118                   | 119                | 120                    | 121                      | 122                  | 123                   | 124                | 125                    | 126                      | 127                  | 128                   | 129                | 130                    | 131                      | 132                  | 133                   | 134                | 135                    | 136                      | 137                  | 138                   | 139                | 140                    | 141                      | 142                  | 143                   | 144                | 145                    | 146                      | 147                  | 148                   | 149                | 150                    | 151                      | 152                  | 153                   | 154                | 155                    | 156                      | 157                  | 158                   | 159                | 160                    | 161                      | 162                  | 163                   | 164                | 165                    | 166                      | 167                  | 168                   | 169                | 170                    | 171                      | 172                  | 173                   | 174                | 175                    | 176                      | 177                  | 178                   | 179                | 180                    | 181                      | 182                  | 183                   | 184                | 185                    | 186                      | 187                  | 188                   | 189                | 190                    | 191                      | 192                  | 193                   | 194                | 195                    | 196                      | 197                  | 198                   | 199                | 200                    | 201                      | 202                  | 203                   | 204                | 205                    | 206                      | 207                  | 208                   | 209                | 210                    | 211                      | 212                  | 213                   | 214                | 215                    | 216                      | 217                  | 218                   | 219                | 220                    | 221                      | 222                  | 223                   | 224                | 225                    | 226                      | 227                  | 228                   | 229                | 230                    | 231                      | 232                  | 233                   | 234                | 235                    | 236                      | 237                  | 238                   | 239                | 240                    | 241                      | 242                  | 243                   | 244                | 245                    | 246                      | 247                  | 248                   | 249                | 250                    | 251                      | 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392 | 393 | 394 | 395 | 396 | 397 | 398 | 399 | 400 | 401 | 402 | 403 | 404 | 405 | 406 | 407 | 408 | 409 | 410 | 411 | 412 | 413 | 414 | 415 | 416 | 417 | 418 | 419 | 420 | 421 | 422 | 423 | 424 | 425 | 426 | 427 | 428 | 429 | 430 | 431 | 432 | 433 | 434 | 435 | 436 | 437 | 438 | 439 | 440 | 441 | 442 | 443 | 444 | 445 | 446 | 447 | 448 | 449 | 450 | 451 | 452 | 453 | 454 | 455 | 456 | 457 | 458 | 459 | 460 | 461 | 462 | 463 | 464 | 465 | 466 | 467 | 468 | 469 | 470 | 471 | 472 | 473 | 474 | 475 | 476 | 477 | 478 | 479 | 480 | 481 | 482 | 483 | 484 | 485 | 486 | 487 | 488 | 489 | 490 | 491 | 492 | 493 | 494 | 495 | 496 | 497 | 498 | 499 | 500 | 501 | 502 | 503 | 504 | 505 | 506 | 507 | 508 | 509 | 510 | 511 | 512 | 513 | 514 | 515 | 516 | 517 | 518 | 519 | 520 | 521 | 522 | 523 | 524 | 525 | 526 | 527 | 528 | 529 | 530 | 531 | 532 | 533 | 534 | 535 | 536 | 537 | 538 | 539 | 540 | 541 | 542 | 543 | 544 | 545 | 546 | 547 | 548 | 549 | 550 | 551 | 552 | 553 | 554 | 555 | 556 | 557 | 558 | 559 | 560 | 561 | 562 | 563 | 564 | 565 | 566 | 567 | 568 | 569 | 570 | 571 | 572 | 573 | 574 | 575 | 576 | 577 | 578 | 579 | 580 | 581 | 582 | 583 | 584 | 585 | 586 | 587 | 588 | 589 | 590 | 591 | 592 | 593 | 594 | 595 | 596 | 597 | 598 | 599 | 600 | 601 | 602 | 603 | 604 | 605 | 606 | 607 | 608 | 609 | 610 | 611 | 612 | 613 | 614 | 615 | 616 | 617 | 618 | 619 | 620 | 621 | 622 | 623 | 624 | 625 | 626 | 627 | 628 | 629 | 630 | 631 | 632 | 633 | 634 | 635 | 636 | 637 | 638 | 639 | 640 | 641 | 642 | 643 | 644 | 645 | 646 | 647 | 648 | 649 | 650 | 651 | 652 | 653 | 654 | 655 | 656 | 657 | 658 | 659 | 660 | 661 | 662 | 663 | 664 | 665 | 666 | 667 | 668 | 669 | 670 | 671 | 672 | 673 | 674 | 675 | 676 | 677 | 678 | 679 | 680 | 681 | 682 | 683 | 684 | 685 | 686 | 687 | 688 | 689 | 690 | 691 | 692 | 693 | 694 | 695 | 696 | 697 | 698 | 699 | 700 | 701 | 702 | 703 | 704 | 705 | 706 | 707 | 708 | 709 | 710 | 711 | 712 | 713 | 714 | 715 | 716 | 717 | 718 | 719 | 720 | 721 | 722 | 723 | 724 | 725 | 726 | 727 | 728 | 729 | 730 | 731 | 732 | 733 | 734 | 735 | 736 | 737 | 738 | 739 | 740 | 741 | 742 | 743 | 744 | 745 | 746 | 747 | 748 | 749 | 750 | 751 | 752 | 753 | 754 | 755 | 756 | 757 | 758 | 759 | 760 | 761 | 762 | 763 | 764 | 765 | 766 | 767 | 768 | 769 | 770 | 771 | 772 | 773 | 774 | 775 | 776 | 777 | 778 | 779 | 780 | 781 | 782 | 783 | 784 | 785 | 786 | 787 | 788 | 789 | 790 | 791 | 792 | 793 | 794 | 795 | 796 | 797 | 798 | 799 | 800 | 801 | 802 | 803 | 804 | 805 | 806 | 807 | 808 | 809 | 810 | 811 | 812 | 813 | 814 | 815 | 816 | 817 | 818 | 819 | 820 | 821 | 822 | 823 | 824 | 825 | 826 | 827 | 828 | 829 | 830 | 831 | 832 | 833 | 834 | 835 | 836 | 837 | 838 | 839 | 840 | 841 | 842 | 843 | 844 | 845 | 846 | 847 | 848 | 849 | 850 | 851 | 852 | 853 | 854 | 855 | 856 | 857 | 858 | 859 | 860 | 861 | 862 | 863 | 864 | 865 | 866 | 867 | 868 | 869 | 870 | 871 | 872 | 873 | 874 | 875 | 876 | 877 | 878 | 879 | 880 | 881 | 882 | 883 | 884 | 885 | 886 | 887 | 888 | 889 | 890 | 891 | 892 | 893 | 894 | 895 | 896 | 897 | 898 | 899 | 900 | 901 | 902 | 903 | 904 | 905 | 906 | 907 | 908 | 909 | 910 | 911 | 912 | 913 | 914 | 915 | 916 | 917 | 918 | 919 | 920 | 921 | 922 | 923 | 924 | 925 | 926 | 927 | 928 | 929 | 930 | 931 | 932 | 933 | 934 | 935 | 936 | 937 | 938 | 939 | 940 | 941 | 942 | 943 | 944 | 945 | 946 | 947 | 948 | 949 | 950 | 951 | 952 | 953 | 954 | 955 | 956 | 957 | 958 | 959 | 960 | 961 | 962 | 963 | 964 | 965 | 966 | 967 | 968 | 969 | 970 | 971 | 972 | 973 | 974 | 975 | 976 | 977 | 978 | 979 | 980 | 981 | 982 | 983 | 984 | 985 | 986 | 987 | 988 | 989 | 990 | 991 | 992 | 993 | 994 | 995 | 996 | 997 | 998 | 999 | 1000 |
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| 1. <b>General</b> | 1.1. <b>Identification</b> | 1.2. <b>Classification</b> | 1.3. <b>Characteristics</b> | 1.4. <b>Structure</b> | 1.5. <b>Function</b> | 1.6. <b>Location</b> | 1.7. <b>Development</b> | 1.8. <b>Evolution</b> | 1.9. <b>Ecology</b> | 1.10. <b>Physiology</b> | 1.11. <b>Behavior</b> | 1.12. <b>Reproduction</b> | 1.13. <b>Life Cycle</b> | 1.14. <b>Survival</b> | 1.15. <b>Adaptation</b> | 1.16. <b>Interaction</b> | 1.17. <b>Impact</b> | 1.18. <b>Conservation</b> | 1.19. <b>Management</b> | 1.20. <b>Policy</b> | 1.21. <b>Education</b> | 1.22. <b>Research</b> | 1.23. <b>Application</b> | 1.24. <b>Future</b> | 1.25. <b>Conclusion</b> | 1.26. <b>Summary</b> | 1.27. <b>References</b> | 1.28. <b>Index</b> | 1.29. <b>Glossary</b> | 1.30. <b>Appendix</b> | 1.31. <b>Notes</b> | 1.32. <b>Tables</b> | 1.33. <b>Figures</b> | 1.34. <b>Maps</b> | 1.35. <b>Diagrams</b> | 1.36. <b>Flowcharts</b> | 1.37. <b>Tables</b> | 1.38. <b>Figures</b> | 1.39. <b>Maps</b> | 1.40. <b>Diagrams</b> | 1.41. <b>Flowcharts</b> | 1.42. <b>Tables</b> | 1.43. <b>Figures</b> | 1.44. <b>Maps</b> | 1.45. <b>Diagrams</b> | 1.46. <b>Flowcharts</b> | 1.47. <b>Tables</b> | 1.48. <b>Figures</b> | 1.49. <b>Maps</b> | 1.50. <b>Diagrams</b> | 1.51. <b>Flowcharts</b> | 1.52. <b>Tables</b> | 1.53. <b>Figures</b> | 1.54. <b>Maps</b> | 1.55. <b>Diagrams</b> | 1.56. <b>Flowcharts</b> | 1.57. <b>Tables</b> | 1.58. <b>Figures</b> | 1.59. <b>Maps</b> | 1.60. <b>Diagrams</b> | 1.61. <b>Flowcharts</b> | 1.62. <b>Tables</b> | 1.63. <b>Figures</b> | 1.64. <b>Maps</b> | 1.65. <b>Diagrams</b> | 1.66. <b>Flowcharts</b> | 1.67. <b>Tables</b> | 1.68. <b>Figures</b> | 1.69. <b>Maps</b> | 1.70. <b>Diagrams</b> | 1.71. <b>Flowcharts</b> | 1.72. <b>Tables</b> | 1.73. <b>Figures</b> | 1.74. <b>Maps</b> | 1.75. <b>Diagrams</b> | 1.76. <b>Flowcharts</b> | 1.77. <b>Tables</b> | 1.78. <b>Figures</b> | 1.79. <b>Maps</b> | 1.80. <b>Diagrams</b> | 1.81. <b>Flowcharts</b> | 1.82. <b>Tables</b> | 1.83. <b>Figures</b> | 1.84. 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<b>Maps</b> | 1.210. <b>Diagrams</b> | 1.211. <b>Flowcharts</b> | 1.212. <b>Tables</b> | 1.213. <b>Figures</b> | 1.214. <b>Maps</b> | 1.215. <b>Diagrams</b> | 1.216. <b>Flowcharts</b> | 1.217. <b>Tables</b> | 1.218. <b>Figures</b> | 1.219. <b>Maps</b> | 1.220. <b>Diagrams</b> | 1.221. <b>Flowcharts</b> | 1.222. <b>Tables</b> | 1.223. <b>Figures</b> | 1.224. <b>Maps</b> | 1.225. <b>Diagrams</b> | 1.226. <b>Flowcharts</b> | 1.227. <b>Tables</b> | 1.228. <b>Figures</b> | 1.229. <b>Maps</b> | 1.230. <b>Diagrams</b> | 1.231. <b>Flowcharts</b> | 1.232. <b>Tables</b> | 1.233. <b>Figures</b> | 1.234. <b>Maps</b> | 1.235. <b>Diagrams</b> | 1.236. <b>Flowcharts</b> | 1.237. <b>Tables</b> | 1.238. <b>Figures</b> | 1.239. <b>Maps</b> | 1.240. <b>Diagrams</b> | 1.241. <b>Flowcharts</b> | 1.242. <b>Tables</b> | 1.243. <b>Figures</b> | 1.244. <b>Maps</b> | 1.245. <b>Diagrams</b> | 1.246. <b>Flowcharts</b> | 1.247. <b>Tables</b> | 1.248. <b>Figures</b> | 1.249. <b>Maps</b> | 1.250. <b>Diagrams</b> | 1.251. <b>Flowcharts</b> | 1.252. <b>Tables</b> | 1.253. <b>Figures</b> | 1.254. <b>Maps</b> | 1.255. <b>Diagrams</b> | 1.256. <b>Flowcharts</b> | 1.257. <b>Tables</b> | 1.258. <b>Figures</b> | 1.259. <b>Maps</b> | 1.260. <b>Diagrams</b> |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     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| <u>Kartengrundlage:</u><br>Stadtgrundkarte vom 28.02.2019<br>Stadt Jena, Team GeoInformation<br>Liegenschaftskarte vom 04.03.2019<br>Stadt Jena, Team GeoInformation<br>Entwurfsvermessung vom 11.02.2019<br>Stadt Jena, Team GeoInformation | Lagestatus ETRS89 Z32<br>Höhenstatus DHHN 2016 |
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| gez.                                                                                                                                                                   | 06.12.2022                                                                            | Steppat                                                                                                                                                                                                                                                                                                                                                                             |  |       |      |      |            |         |        |            |          |       |            |       |
| beorb.                                                                                                                                                                 | 06.12.2022                                                                            | Rötschke                                                                                                                                                                                                                                                                                                                                                                            |  |       |      |      |            |         |        |            |          |       |            |       |
| gepr.                                                                                                                                                                  | 06.12.2022                                                                            | Cyrix                                                                                                                                                                                                                                                                                                                                                                               |  |       |      |      |            |         |        |            |          |       |            |       |

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|------------|------------|---------|
| bearbeitet | 13.08.2021 | Sil     |
| gezeichnet | 13.08.2021 | Kübler  |
| geprüft    | 13.08.2021 | Sonntag |

|     |                  |       |         |
|-----|------------------|-------|---------|
|     |                  |       |         |
|     |                  |       |         |
|     |                  |       |         |
| Nr. | Art der Änderung | Datum | Zeichen |

# Planfeststellung

|                                                                                       |                                                                                                                                      |                                                                                             |
|---------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|
|  | Stadt Jena<br>Eigenbetrieb Kommunal-service Jena<br>Gewerkschaftsbereich Tiefbau und Stadtbaum<br>Lobschneider Straße 56, 07149 Jena | Unterlage / Blatt-Nr.: <b>16.4.3 / 1</b><br><b>Planung LSA</b><br>Lage- und Ausrüstungsplan |
|                                                                                       | PROJIS-Nr.:                                                                                                                          | Maßstab: 1:250                                                                              |
| <b>Osttangente Jena</b><br><b>LSA K427 Am Anger</b>                                   |                                                                                                                                      |                                                                                             |
| aufgestellt:                                                                          |                                                                                                                                      |                                                                                             |
| ....., den                                                                            |                                                                                                                                      |                                                                                             |

| Sig.-Nr. | K1, K11, K12, K3, K5<br>K711, K712 | K2<br>K4<br>K6<br>K811, K812 | F1/1, F12<br>F2/1, F22<br>F5/1, F52<br>F6/1, F62 | F3/1, F32<br>F4/1, F42<br>F7/1, F72<br>F8/1, F82 | R1, R4<br>R7 | R2, R3<br>R5, R6 |
|----------|------------------------------------|------------------------------|--------------------------------------------------|--------------------------------------------------|--------------|------------------|
| ROT      |                                    |                              |                                                  |                                                  |              |                  |
| GELB     |                                    |                              |                                                  |                                                  |              |                  |
| GRÜN     |                                    |                              |                                                  |                                                  |              |                  |
| Anzahl   | 7                                  | 5                            | 8                                                | 8                                                | 3            | 4                |
| ø mm     | 200                                | 200                          | 200                                              | 200                                              | 200          | 200              |

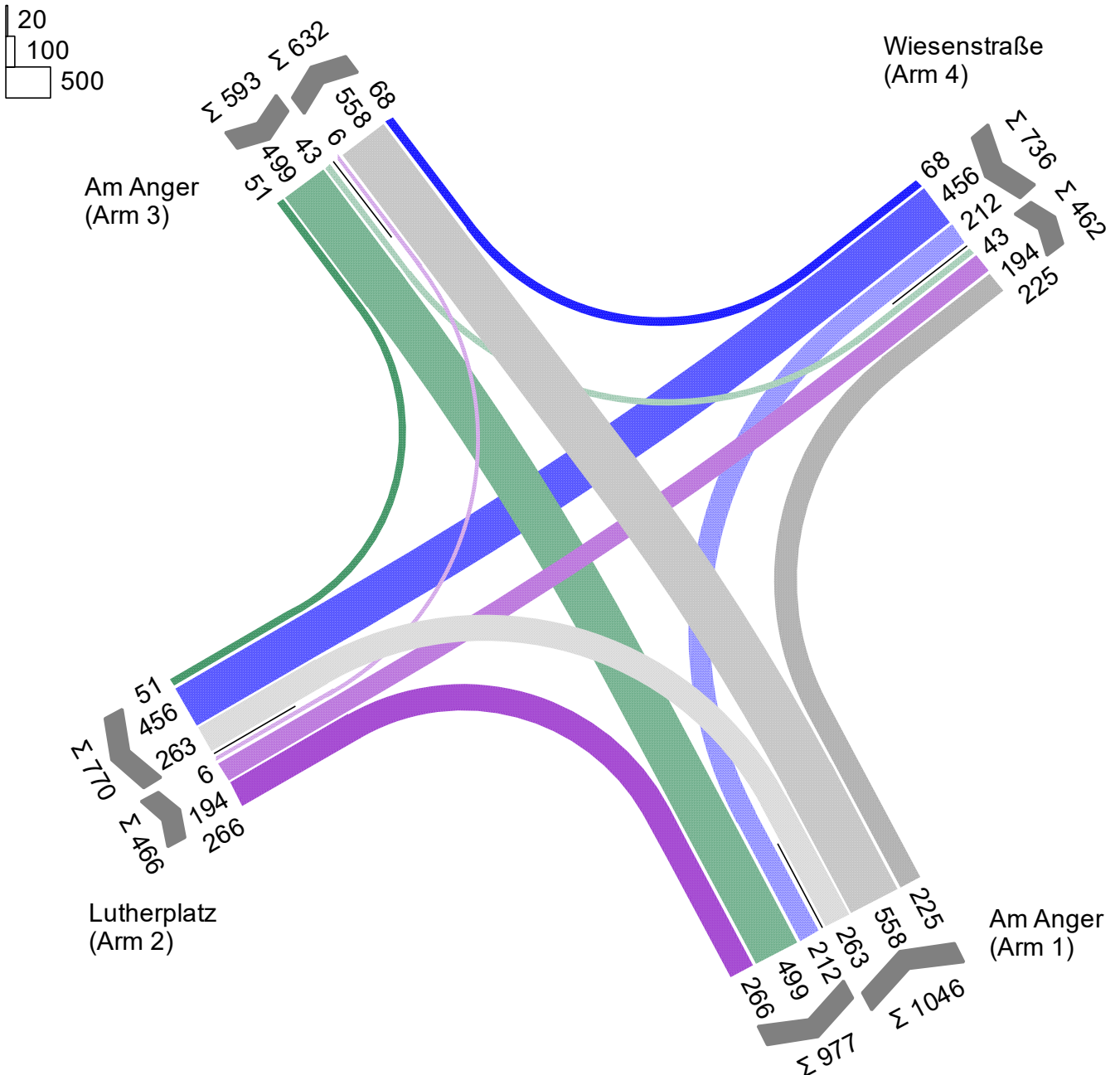
| Zeichenerklärung:                                                                     |                                     |                                                                                       |                                                                     |
|---------------------------------------------------------------------------------------|-------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------|
|  | K Kraftfahrzeug-Signalfarbe         |  | Induktionsschleifen mit Nummer                                      |
|  | BL Gelbkeil für Fußgänger           |  | Staukreis L&M integrierten Hausen/Lischke                           |
|  | F Fußgänger-Signalfarbe             |  | Staukreis Lischke                                                   |
|  | FBT Taster für Fußgänger und Blinde |  | Unterschiedliche Verkehrszeichen, Kennzeichnung mit Z-Nr. nach StVO |
|  | T Taster für Blinde                 |  | 2.355 - 2.356                                                       |
|  | TS Taster für Blinden               |  | 2.355 - 2.356                                                       |
|  | R Radverkehr                        |  | 2.355 - 2.356                                                       |
|  | D Delektrofeld                      |  | 2.355 - 2.356                                                       |
|  | K Kraftfahrzeug-Signalfarbe         |  | 2.355 - 2.356                                                       |
|  | F Fußgänger-Signalfarbe             |  | 2.355 - 2.356                                                       |
|  | FBT Taster für Fußgänger und Blinde |  | 2.355 - 2.356                                                       |
|  | T Taster für Blinde                 |  | 2.355 - 2.356                                                       |
|  | TS Taster für Blinden               |  | 2.355 - 2.356                                                       |
|  | R Radverkehr                        |  | 2.355 - 2.356                                                       |
|  | D Delektrofeld                      |  | 2.355 - 2.356                                                       |
|  | K Kraftfahrzeug-Signalfarbe         |  | 2.355 - 2.356                                                       |
|  | F Fußgänger-Signalfarbe             |  | 2.355 - 2.356                                                       |
|  | FBT Taster für Fußgänger und Blinde |  | 2.355 - 2.356                                                       |
|  | T Taster für Blinde                 |  | 2.355 - 2.356                                                       |
|  | TS Taster für Blinden               |  | 2.355 - 2.356                                                       |
|  | R Radverkehr                        |  | 2.355 - 2.356                                                       |
|  | D Delektrofeld                      |  | 2.355 - 2.356                                                       |
|  | K Kraftfahrzeug-Signalfarbe         |  | 2.355 - 2.356                                                       |
|  | F Fußgänger-Signalfarbe             |  | 2.355 - 2.356                                                       |
|  | FBT Taster für Fußgänger und Blinde |  | 2.355 - 2.356                                                       |
|  | T Taster für Blinde                 |  | 2.355 - 2.356                                                       |
|  | TS Taster für Blinden               |  | 2.355 - 2.356                                                       |
|  | R Radverkehr                        |  | 2.355 - 2.356                                                       |
|  | D Delektrofeld                      |  | 2.355 - 2.356                                                       |
|  | K Kraftfahrzeug-Signalfarbe         |  | 2.355 - 2.356                                                       |
|  | F Fußgänger-Signalfarbe             |  | 2.355 - 2.356                                                       |
|  | FBT Taster für Fußgänger und Blinde |  | 2.355 - 2.356                                                       |
|  | T Taster für Blinde                 |  | 2.355 - 2.356                                                       |
|  | TS Taster für Blinden               |  | 2.355 - 2.356                                                       |
|  | R Radverkehr                        |  | 2.355 - 2.356                                                       |
|  | D Delektrofeld                      |  | 2.355 - 2.356                                                       |
|  | K Kraftfahrzeug-Signalfarbe         |  | 2.355 - 2.356                                                       |
|  | F Fußgänger-Signalfarbe             |  | 2.355 - 2.356                                                       |
|  | FBT Taster für Fußgänger und Blinde |  | 2.355 - 2.356                                                       |
|  | T Taster für Blinde                 |  | 2.355 - 2.356                                                       |
|  | TS Taster für Blinden               |  | 2.355 - 2.356                                                       |
|  | R Radverkehr                        |  | 2.355 - 2.356                                                       |
|  | D Delektrofeld                      |  | 2.355 - 2.356                                                       |
|  | K Kraftfahrzeug-Signalfarbe         |  | 2.355 - 2.356                                                       |
|  | F Fußgänger-Signalfarbe             |  | 2.355 - 2.356                                                       |
|  | FBT Taster für Fußgänger und Blinde |  | 2.355 - 2.356                                                       |
|  | T Taster für Blinde                 |  | 2.355 - 2.356                                                       |
|  | TS Taster für Blinden               |  | 2.355 - 2.356                                                       |
|  | R Radverkehr                        |  | 2.355 - 2.356                                                       |
|  | D Delektrofeld                      |  | 2.355 - 2.356                                                       |
|  | K Kraftfahrzeug-Signalfarbe         |  | 2.355 - 2.356                                                       |
|  | F Fußgänger-Signalfarbe             |  | 2.355 - 2.356                                                       |
|  | FBT Taster für Fußgänger und Blinde |  | 2.355 - 2.356                                                       |
|  | T Taster für Blinde                 |  | 2.355 - 2.356                                                       |
|  | TS Taster für Blinden               |  | 2.355 - 2.356                                                       |
|  | R Radverkehr                        |  | 2.355 - 2.356                                                       |
|  | D Delektrofeld                      |  | 2.355 - 2.356                                                       |
|  | K Kraftfahrzeug-Signalfarbe         |  | 2.355 - 2.356                                                       |
|  | F Fußgänger-Signalfarbe             |  | 2.355 - 2.356                                                       |
|  | FBT Taster für Fußgänger und Blinde |  | 2.355 - 2.356                                                       |
|  | T Taster für Blinde                 |  | 2.355 - 2.356                                                       |
|  | TS Taster für Blinden               |  | 2.355 - 2.356                                                       |
|  | R Radverkehr                        |  | 2.355 - 2.356                                                       |
|  | D Delektrofeld                      |  | 2.355 - 2.356                                                       |
|  | K Kraftfahrzeug-Signalfarbe         |  | 2.355 - 2.356                                                       |
|  | F Fußgänger-Signalfarbe             |  | 2.355 - 2.356                                                       |
|  | FBT Taster für Fußgänger und Blinde |  | 2.355 - 2.356                                                       |
|  | T Taster für Blinde                 |  | 2.355 - 2.356                                                       |
|  | TS Taster für Blinden               |  | 2.355 - 2.356                                                       |
|  | R Radverkehr                        |  | 2.355 - 2.356                                                       |
|  | D Delektrofeld                      |  | 2.355 - 2.356                                                       |
|  | K Kraftfahrzeug-Signalfarbe         |  | 2.355 - 2.356                                                       |
|  | F Fußgänger-Signalfarbe             |  | 2.355 - 2.356                                                       |
|  | FBT Taster für Fußgänger und Blinde |  | 2.355 - 2.356                                                       |
|  | T Taster für Blinde                 |  | 2.355 - 2.356                                                       |
|  | TS Taster für Blinden               |  | 2.355 - 2.356                                                       |
|  | R Radverkehr                        |  | 2.355 - 2.356                                                       |
|  | D Delektrofeld                      |  | 2.355 - 2.356                                                       |
|  | K Kraftfahrzeug-Signalfarbe         |  | 2.355 - 2.356                                                       |
|  | F Fußgänger-Signalfarbe             |  | 2.355 - 2.356                                                       |
|  | FBT Taster für Fußgänger und Blinde |  | 2.355 - 2.356                                                       |
|  | T Taster für Blinde                 |  | 2.355 - 2.356                                                       |
|  | TS Taster für Blinden               |  | 2.355 - 2.356                                                       |
|  | R Radverkehr                        |  | 2.355 - 2.356                                                       |
|  | D Delektrofeld                      |  | 2.355 - 2.356                                                       |
|  | K Kraftfahrzeug-Signalfarbe         |  | 2.355 - 2.356                                                       |
|  | F Fußgänger-Signalfarbe             |  | 2.355 - 2.356                                                       |
|  | FBT Taster für Fußgänger und Blinde |  | 2.355 - 2.356                                                       |
|  | T Taster für Blinde                 |  | 2.355 - 2.356                                                       |
|  | TS Taster für Blinden               |  | 2.355 - 2.356                                                       |
|  | R Radverkehr                        |  | 2.355 - 2.356                                                       |
|  | D Delektrofeld                      |  | 2.355 - 2.356                                                       |
|  | K Kraftfahrzeug-Signalfarbe         |  | 2.355 - 2.356                                                       |
|  | F Fußgänger-Signalfarbe             |  | 2.355 - 2.356                                                       |
|  | FBT Taster für Fußgänger und Blinde |  | 2.355 - 2.356                                                       |
|  | T Taster für Blinde                 |  | 2.355 - 2.356                                                       |
|  | TS Taster für Blinden               |  | 2.355 - 2.356                                                       |
|  | R Radverkehr                        |  | 2.355 - 2.356                                                       |
|  | D Delektrofeld                      |  | 2.355 - 2.356                                                       |
|  | K Kraftfahrzeug-Signalfarbe         |  | 2.355 - 2.356                                                       |
|  | F Fußgänger-Signalfarbe             |  | 2.355 - 2.356                                                       |
|  | FBT Taster für Fußgänger und Blinde |  | 2.355 - 2.356                                                       |
|  | T Taster für Blinde                 |  | 2.355 - 2.356                                                       |
|  | TS Taster für Blinden               |  | 2.355 - 2.356                                                       |
|  | R Radverkehr                        |  | 2.355 - 2.356                                                       |
|  | D Delektrofeld                      |  | 2.355 - 2.356                                                       |
|  | K Kraftfahrzeug-Signalfarbe         |  | 2.355 - 2.356                                                       |
|  | F Fußgänger-Signalfarbe             |  | 2.355 - 2.356                                                       |
|  | FBT Taster für Fußgänger und Blinde |  | 2.355 - 2.356                                                       |
|  | T Taster für Blinde                 |  | 2.355 - 2.356                                                       |
|  | TS Taster für Blinden               |  | 2.355 - 2.356                                                       |
|  | R Radverkehr                        |  | 2.355 - 2.356                                                       |
|  | D Delektrofeld                      |  | 2.355 - 2.356                                                       |
|  | K Kraftfahrzeug-Signalfarbe         |  | 2.355 - 2.356                                                       |
|  | F Fußgänger-Signalfarbe             |  | 2.355 - 2.356                                                       |
|  | FBT Taster für Fußgänger und Blinde |  | 2.355 - 2.356                                                       |
|  | T Taster für Blinde                 |  | 2.355 - 2.356                                                       |
|  | TS Taster für Blinden               |  | 2.355 - 2.356                                                       |
|  | R Radverkehr                        |  | 2.355 - 2.356                                                       |
|  | D Delektrofeld                      |  | 2.355 - 2.356                                                       |
|  | K Kraftfahrzeug-Signalfarbe         |  | 2.355 - 2.356                                                       |
|  | F Fußgänger-Signalfarbe             |  | 2.355 - 2.356                                                       |
|                                                                                       |                                     |                                                                                       |                                                                     |



**Prognose P1 2030, Vormittag**

in Kfz/h

| von\nach | 1   | 2   | 3   | 4   |
|----------|-----|-----|-----|-----|
| 1        |     | 263 | 558 | 225 |
| 2        | 266 |     | 6   | 194 |
| 3        | 499 | 51  |     | 43  |
| 4        | 212 | 456 | 68  |     |

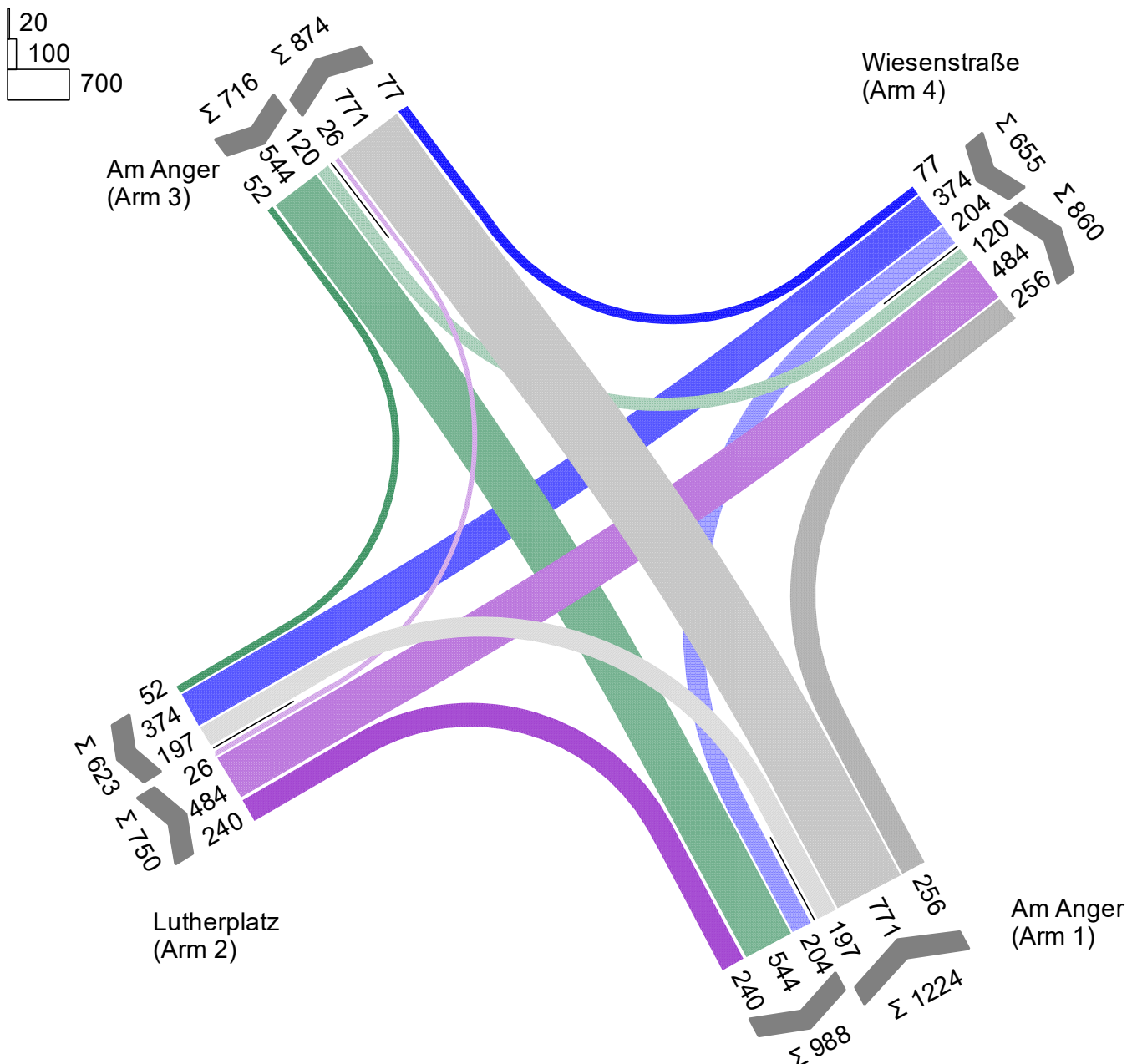


|             |                                                 |             |       |       |            |
|-------------|-------------------------------------------------|-------------|-------|-------|------------|
| Projekt     | Ausbau Osttangente Jena                         |             |       |       |            |
| Knotenpunkt | K2: Am Anger/Wiesenstraße/Lutherplatz - K 427 - |             |       |       |            |
| Auftragsnr. | P501311                                         | Variante    | PlaFe | Datum | 14.07.2022 |
| Bearbeiter  | Cyriax                                          | Abzeichnung |       | Blatt | 2.1        |

## Prognose P1 2030, Nachmittag

in Kfz/h

| von\nach | 1   | 2   | 3   | 4   |
|----------|-----|-----|-----|-----|
| 1        |     | 197 | 771 | 256 |
| 2        | 240 |     | 26  | 484 |
| 3        | 544 | 52  |     | 120 |
| 4        | 204 | 374 | 77  |     |



|             |                                                 |             |       |       |            |
|-------------|-------------------------------------------------|-------------|-------|-------|------------|
| Projekt     | Ausbau Osttangente Jena                         |             |       |       |            |
| Knotenpunkt | K2: Am Anger/Wiesenstraße/Lutherplatz - K 427 - |             |       |       |            |
| Auftragsnr. | P501311                                         | Variante    | PlaFe | Datum | 14.07.2022 |
| Bearbeiter  | Cyriax                                          | Abzeichnung |       | Blatt | 2.2        |

## Signalgruppen

**BERNARD**  
GRUPPE

LISA

|    | Name | Typ                | ID-Nr. | Signalisierte Ströme  | Progressiv | Teil-knoten | Symbol                                                                               | tf <sub>min</sub> | tf <sub>max</sub> | ts <sub>min</sub> | ts <sub>max</sub> | Anwurf     | Abwurf  | Vmax<br>[km/h] | Dunkel/Aus =<br>Freigabe | Farbbild<br>Aus<br>Gelb-Blk | Verkehrsart | Bemerkung |
|----|------|--------------------|--------|-----------------------|------------|-------------|--------------------------------------------------------------------------------------|-------------------|-------------------|-------------------|-------------------|------------|---------|----------------|--------------------------|-----------------------------|-------------|-----------|
| 1  | K1   | KFZ 3-begr., 3s Ge | 1      | Arm 1 -> 3,4          | -          | TK 1        |    | 5                 | -                 | 1                 | -                 | RotGelb 1s | Gelb 3s | 50             | -                        | Dunkel                      | Kfz;Rad     |           |
| 2  | K2   | KFZ 3-begr., 3s Ge | 2      | Arm 1 -> 2            | -          | TK 1        |    | 5                 | -                 | 1                 | -                 | RotGelb 1s | Gelb 3s | 50             | -                        | GelbBlk                     | Kfz         |           |
| 3  | K3   | KFZ 3-begr., 3s Ge | 3      | Arm 2 -> 1,4          | -          | TK 1        |    | 5                 | -                 | 1                 | -                 | RotGelb 1s | Gelb 3s | 50             | -                        | GelbBlk                     | Kfz;Rad     |           |
| 4  | K4   | KFZ 3-begr., 3s Ge | 4      | Arm 2 -> 3            | -          | TK 1        |    | 5                 | -                 | 1                 | -                 | RotGelb 1s | Gelb 3s | 50             | -                        | GelbBlk                     | Kfz         |           |
| 5  | K5   | KFZ 3-begr., 3s Ge | 5      | Arm 3 -> 1,2          | -          | TK 1        |    | 5                 | -                 | 1                 | -                 | RotGelb 1s | Gelb 3s | 50             | -                        | Dunkel                      | Kfz         |           |
| 6  | K6   | KFZ 3-begr., 3s Ge | 6      | Arm 3 -> 4            | -          | TK 1        |    | 5                 | -                 | 1                 | -                 | RotGelb 1s | Gelb 3s | 50             | -                        | GelbBlk                     | Kfz         |           |
| 7  | K7   | KFZ 3-begr., 3s Ge | 7      | Arm 4 -> 2,3          | -          | TK 1        |    | 5                 | -                 | 1                 | -                 | RotGelb 1s | Gelb 3s | 50             | -                        | GelbBlk                     | Kfz;Rad     |           |
| 8  | K8   | KFZ 3-begr., 3s Ge | 8      | Arm 4 -> 1            | -          | TK 1        |    | 5                 | -                 | 1                 | -                 | RotGelb 1s | Gelb 3s | 50             | -                        | GelbBlk                     | Kfz         |           |
| 9  | R1   | RAD 3-begr.        | 9      | Arm 1 -> 3            | -          | TK 1        |    | 5                 | -                 | -                 | -                 | RotGelb 1s | Gelb 2s | -              | -                        | Dunkel                      | Rad         |           |
| 10 | R3   | RAD 3-begr.        | 10     | Arm 2 -> 4            | -          | TK 1        |    | 5                 | -                 | -                 | -                 | RotGelb 1s | Gelb 2s | -              | -                        | Dunkel                      | Rad         |           |
| 11 | R5   | RAD 3-begr.        | 11     | Arm 3 -> 1            | -          | TK 1        |    | 5                 | -                 | -                 | -                 | RotGelb 1s | Gelb 2s | -              | -                        | Dunkel                      | Rad         |           |
| 12 | R7   | RAD 3-begr.        | 12     | Arm 4 -> 2            | -          | TK 1        |   | 5                 | -                 | -                 | -                 | RotGelb 1s | Gelb 2s | -              | -                        | Dunkel                      | Rad         |           |
| 13 | F1   | FG 2-begr.         | 13     | Arm 1 (quer.): Furt 1 | -          | TK 1        |  | 5                 | -                 | 4                 | -                 | -          | -       | -              | -                        | Dunkel                      | Fußg.       |           |
| 14 | F2   | FG 2-begr.         | 14     | Arm 1 (quer.): Furt 2 | -          | TK 1        |  | 5                 | -                 | 4                 | -                 | -          | -       | -              | -                        | Dunkel                      | Fußg.       |           |
| 15 | F3   | FG 2-begr.         | 15     | Arm 2 (quer.): Furt 1 | -          | TK 1        |  | 5                 | -                 | 4                 | -                 | -          | -       | -              | -                        | Dunkel                      | Fußg.       |           |
| 16 | F4   | FG 2-begr.         | 16     | Arm 2 (quer.): Furt 2 | -          | TK 1        |  | 5                 | -                 | 4                 | -                 | -          | -       | -              | -                        | Dunkel                      | Fußg.       |           |
| 17 | F5   | FG 2-begr.         | 17     | Arm 3 (quer.): Furt 1 | -          | TK 1        |  | 5                 | -                 | 4                 | -                 | -          | -       | -              | -                        | Dunkel                      | Fußg.       |           |
| 18 | F6   | FG 2-begr.         | 18     | Arm 3 (quer.): Furt 2 | -          | TK 1        |  | 5                 | -                 | 4                 | -                 | -          | -       | -              | -                        | Dunkel                      | Fußg.       |           |
| 19 | F7   | FG 2-begr.         | 19     | Arm 4 (quer.): Furt 1 | -          | TK 1        |  | 5                 | -                 | 4                 | -                 | -          | -       | -              | -                        | Dunkel                      | Fußg.       |           |
| 20 | F8   | FG 2-begr.         | 20     | Arm 4 (quer.): Furt 2 | -          | TK 1        |  | 5                 | -                 | 4                 | -                 | -          | -       | -              | -                        | Dunkel                      | Fußg.       |           |

|             |                                                 |  |  |  |  |  |  |             |  |       |  |  |  |  |       |            |  |  |
|-------------|-------------------------------------------------|--|--|--|--|--|--|-------------|--|-------|--|--|--|--|-------|------------|--|--|
| Projekt     | Ausbau Osttangente Jena                         |  |  |  |  |  |  |             |  |       |  |  |  |  |       |            |  |  |
| Knotenpunkt | K2: Am Anger/Wiesenstraße/Lutherplatz - K 427 - |  |  |  |  |  |  |             |  |       |  |  |  |  |       |            |  |  |
| Auftragsnr. | P501311                                         |  |  |  |  |  |  | Variante    |  | PlaFe |  |  |  |  | Datum | 14.07.2022 |  |  |
| Bearbeiter  | Cyriax                                          |  |  |  |  |  |  | Abzeichnung |  |       |  |  |  |  | Blatt | 3          |  |  |

# Zwischenzeitenberechnung

**BERNARD**  
GRUPPE

LISA

|   | Räumend |       |           | Einführend |       |           | Räumend               |                    |                      |                      |                       |                    |                                    | Einführend         |                      |                      |                       |                    |                         |                              | Zwischenzeit |     | Info          |                 |        |           |   |
|---|---------|-------|-----------|------------|-------|-----------|-----------------------|--------------------|----------------------|----------------------|-----------------------|--------------------|------------------------------------|--------------------|----------------------|----------------------|-----------------------|--------------------|-------------------------|------------------------------|--------------|-----|---------------|-----------------|--------|-----------|---|
|   | SGR     | Strom | Teilstrom | SGR        | Strom | Teilstrom | L <sub>frag</sub> [m] | s <sub>0</sub> [m] | v <sub>0</sub> [m/s] | v <sub>r</sub> [m/s] | a <sub>r</sub> [m/s²] | t <sub>u</sub> [s] | t <sub>u</sub> +t <sub>r</sub> [s] | s <sub>0</sub> [m] | v <sub>0</sub> [m/s] | v <sub>r</sub> [m/s] | a <sub>r</sub> [m/s²] | t <sub>e</sub> [s] | t <sub>e</sub> Ber. [s] | T <sub>zwischenlag</sub> [s] | Emalg. [s]   | Rad | Rad maßgebend | Schnittpunkt ID | Schutz | Bemerkung |   |
| 1 | K1      | 1 (G) | FS 1, Rad | K3         | 2 (G) | FS 1, Rad | -                     | 15,0               | -                    | 4,0                  | -                     | 1,0                | 4,8                                | 34,0               | -                    | 5,0                  | -                     | 6,8                | -2,0                    | -                            | 4            | X   | -             | 42314           | -      | -         |   |
|   |         |       | FS 1, Rad |            |       | FS 3, Kfz | -                     | 19,0               | -                    | 4,0                  | -                     | 1,0                | 5,8                                | 34,5               | -                    | 11,1                 | -                     | 3,1                | 2,7                     | -                            |              |     |               | 42296           |        |           |   |
|   |         |       | FS 1, Rad |            |       | FS 4, Kfz | -                     | 22,5               | -                    | 4,0                  | -                     | 1,0                | 6,6                                | 34,5               | -                    | 11,1                 | -                     | 3,1                | 3,5                     | -                            |              |     |               | 42297           |        |           |   |
|   |         |       | FS 3, Kfz |            |       | FS 1, Rad | 6,0                   | 17,0               | -                    | 10,0                 | -                     | 3,0                | 5,3                                | 29,0               | -                    | 5,0                  | -                     | 5,8                | -0,5                    | -                            |              |     |               | 7255            |        |           |   |
|   |         |       | FS 3, Kfz |            |       | FS 3, Kfz | 6,0                   | 21,5               | -                    | 10,0                 | -                     | 3,0                | 5,8                                | 30,5               | -                    | 11,1                 | -                     | 2,7                | 3,1                     | -                            |              |     |               | 6096            |        |           |   |
|   |         |       | FS 3, Kfz |            |       | FS 4, Kfz | 6,0                   | 24,5               | -                    | 10,0                 | -                     | 3,0                | 6,1                                | 31,0               | -                    | 11,1                 | -                     | 2,8                | 3,3                     | -                            |              |     |               | 6111            |        |           |   |
|   |         |       | FS 4, Kfz |            |       | FS 1, Rad | 6,0                   | 16,5               | -                    | 10,0                 | -                     | 3,0                | 5,3                                | 26,0               | -                    | 5,0                  | -                     | 5,2                | 0,1                     | -                            |              |     |               | 7256            |        |           |   |
|   |         |       | FS 4, Kfz |            |       | FS 3, Kfz | 6,0                   | 21,5               | -                    | 10,0                 | -                     | 3,0                | 5,8                                | 27,5               | -                    | 11,1                 | -                     | 2,5                | 3,3                     | -                            |              |     |               | 6097            |        |           |   |
|   |         | 1 (R) | FS 4, Kfz |            | 2 (G) | FS 4, Kfz | 6,0                   | 24,5               | -                    | 10,0                 | -                     | 3,0                | 6,1                                | 27,5               | -                    | 11,1                 | -                     | 2,5                | 3,6                     | -                            |              |     |               | 6112            |        |           |   |
|   |         |       | FS 1, Rad |            |       | FS 1, Rad | -                     | 15,0               | -                    | 4,0                  | -                     | 1,0                | 4,8                                | 38,0               | -                    | 5,0                  | -                     | 7,6                | -2,8                    | -                            |              |     |               | 7253            |        |           |   |
|   |         |       | FS 2, Kfz |            |       | FS 1, Rad | 6,0                   | 18,5               | -                    | 7,0                  | -                     | 2,0                | 5,5                                | 34,5               | -                    | 5,0                  | -                     | 6,9                | -1,4                    | -                            |              |     |               | 7251            |        |           |   |
|   |         |       | FS 3, Kfz |            |       | FS 3, Kfz | 6,0                   | 23,5               | -                    | 7,0                  | -                     | 2,0                | 6,2                                | 39,0               | -                    | 11,1                 | -                     | 3,5                | 2,7                     | -                            |              |     |               | 6095            |        |           |   |
|   |         |       | FS 2, Kfz |            |       | FS 4, Kfz | 6,0                   | 26,0               | -                    | 7,0                  | -                     | 2,0                | 6,6                                | 40,0               | -                    | 11,1                 | -                     | 3,6                | 3,0                     | -                            |              |     |               | 6108            |        |           |   |
|   |         |       | FS 3, Kfz |            |       | FS 5, Kfz | 6,0                   | 42,5               | -                    | 10,0                 | -                     | 3,0                | 7,9                                | 34,5               | -                    | 11,1                 | -                     | 3,1                | 4,8                     | -                            |              |     |               | 6124            |        |           |   |
|   |         |       | FS 4, Kfz |            |       | FS 5, Kfz | 6,0                   | 39,5               | -                    | 10,0                 | -                     | 3,0                | 7,6                                | 30,0               | -                    | 11,1                 | -                     | 2,7                | 4,9                     | -                            |              |     |               | 6141            |        |           |   |
|   |         |       | FS 1, Rad |            |       | FS 3, Kfz | -                     | 23,5               | -                    | 4,0                  | -                     | 1,0                | 6,9                                | 37,0               | -                    | 11,1                 | -                     | 3,3                | 3,6                     | -                            |              |     |               | 42299           |        |           |   |
| 2 | K1      | 1 (G) | FS 3, Kfz | K4         | 2 (L) | FS 3, Kfz | 6,0                   | 27,5               | -                    | 10,0                 | -                     | 3,0                | 6,4                                | 33,0               | -                    | 11,1                 | -                     | 3,0                | 3,4                     | -                            | 5            | -   | -             | 6530            | -      | -         |   |
|   |         |       | FS 4, Kfz |            |       | FS 3, Kfz | 6,0                   | 29,5               | -                    | 10,0                 | -                     | 3,0                | 6,6                                | 29,5               | -                    | 11,1                 | -                     | 2,7                | 3,9                     | -                            |              |     |               | 6531            |        |           |   |
| 3 | K1      | 1 (G) | FS 2, Kfz | K6         | 3 (L) | FS 3, Kfz | 6,0                   | 26,0               | -                    | 7,0                  | -                     | 2,0                | 6,6                                | 43,0               | -                    | 11,1                 | -                     | 3,9                | 2,7                     | -                            | 4            | X   | -             | 6527            | -      | -         |   |
|   |         |       | FS 2, Kfz |            |       | FS 1, Rad | -                     | 42,5               | -                    | 4,0                  | -                     | 1,0                | 11,6                               | 10,5               | -                    | 5,0                  | -                     | 2,1                | 9,5                     | -                            |              |     |               | 42317           |        |           |   |
| 4 | K1      | 1 (G) | FS 1, Rad | K7         | 4 (G) | FS 2, Kfz | -                     | 38,5               | -                    | 4,0                  | -                     | 1,0                | 10,6                               | 13,5               | -                    | 11,1                 | -                     | 1,2                | 9,4                     | -                            | 11           | X   | X             | 42305           | -      | -         |   |
|   |         |       | FS 1, Rad |            |       | FS 3, Kfz | -                     | 35,0               | -                    | 4,0                  | -                     | 1,0                | 9,8                                | 13,5               | -                    | 11,1                 | -                     | 1,2                | 8,6                     | -                            |              |     |               | 42304           |        |           |   |
|   |         |       | FS 3, Kfz |            |       | FS 1, Rad | 6,0                   | 45,0               | -                    | 10,0                 | -                     | 3,0                | 8,1                                | 13,5               | -                    | 5,0                  | -                     | 2,7                | 5,4                     | -                            |              |     |               | 39526           |        |           |   |
|   |         |       | FS 3, Kfz |            |       | FS 2, Kfz | 6,0                   | 40,5               | -                    | 10,0                 | -                     | 3,0                | 7,7                                | 16,5               | -                    | 11,1                 | -                     | 1,5                | 6,2                     | -                            |              |     |               | 7107            |        |           |   |
|   |         |       | FS 3, Kfz |            |       | FS 3, Kfz | 6,0                   | 37,0               | -                    | 10,0                 | -                     | 3,0                | 7,3                                | 16,5               | -                    | 11,1                 | -                     | 1,5                | 5,8                     | -                            |              |     |               | 7083            |        |           |   |
|   |         |       | FS 4, Kfz |            |       | FS 1, Rad | 6,0                   | 45,5               | -                    | 10,0                 | -                     | 3,0                | 8,2                                | 16,5               | -                    | 5,0                  | -                     | 3,3                | 4,9                     | -                            |              |     |               | 39527           |        |           |   |
|   |         |       | FS 4, Kfz |            |       | FS 2, Kfz | 6,0                   | 40,5               | -                    | 10,0                 | -                     | 3,0                | 7,7                                | 19,5               | -                    | 11,1                 | -                     | 1,8                | 5,9                     | -                            |              |     |               | 7108            |        |           |   |
|   |         |       | FS 4, Kfz |            |       | FS 3, Kfz | 6,0                   | 36,5               | -                    | 10,0                 | -                     | 3,0                | 7,3                                | 19,5               | -                    | 11,1                 | -                     | 1,8                | 5,5                     | -                            |              |     |               | 7084            |        |           |   |
|   |         | 1 (G) | FS 1, Rad | K8         | 4 (R) | FS 1, Rad | -                     | 44,0               | -                    | 4,0                  | -                     | 1,0                | 12,0                               | 10,0               | -                    | 5,0                  | -                     | 2,0                | 10,0                    | -                            | 8            | X   | X             | 42310           | -      | -         |   |
|   |         |       | FS 1, Rad |            |       | FS 2, Kfz | -                     | 44,5               | -                    | 4,0                  | -                     | 1,0                | 12,1                               | 15,5               | -                    | 11,1                 | -                     | 1,4                | 10,7                    | -                            |              |     |               | 42307           |        |           |   |
|   |         |       | FS 3, Kfz |            |       | FS 2, Kfz | 6,0                   | 47,5               | -                    | 10,0                 | -                     | 3,0                | 8,4                                | 17,5               | -                    | 11,1                 | -                     | 1,6                | 6,8                     | -                            |              |     |               | 7184            |        |           |   |
|   |         |       | FS 4, Kfz |            |       | FS 2, Kfz | 6,0                   | 47,0               | -                    | 10,0                 | -                     | 3,0                | 8,3                                | 20,5               | -                    | 11,1                 | -                     | 1,8                | 6,5                     | -                            |              |     |               | 7136            |        |           |   |
|   |         |       | FS 1, Rad |            |       | FS 4, Kfz | -                     | 32,0               | -                    | 4,0                  | -                     | 1,0                | 9,0                                | 13,5               | -                    | 11,1                 | -                     | 1,2                | 7,8                     | -                            |              |     |               | 42303           |        |           |   |
|   |         |       | FS 1, Rad |            |       | FS 5, Kfz | -                     | 28,5               | -                    | 4,0                  | -                     | 1,0                | 8,1                                | 13,5               | -                    | 11,1                 | -                     | 1,2                | 6,9                     | -                            |              |     |               | 42300           |        |           |   |
|   |         |       | FS 1, Rad |            |       | FS 5, Kfz | -                     | 28,5               | -                    | 4,0                  | -                     | 1,0                | 8,1                                | 13,5               | -                    | 11,1                 | -                     | 1,2                | 6,9                     | -                            |              |     |               | 42301           |        |           |   |
|   |         |       | FS 3, Kfz |            |       | FS 4, Kfz | 6,0                   | 33,5               | -                    | 10,0                 | -                     | 3,0                | 7,0                                | 16,5               | -                    | 11,1                 | -                     | 1,5                | 5,5                     | -                            |              |     |               | 7048            |        |           |   |
| 5 | K1      | 1 (G) | FS 3, Kfz | K8         | 4 (L) | FS 5, Kfz | 6,0                   | 30,0               | -                    | 10,0                 | -                     | 3,0                | 6,6                                | 17,0               | -                    | 11,1                 | -                     | 1,5                | 5,1                     | -                            | 8            | X   | X             | 6947            | -      | -         |   |
|   |         |       | FS 3, Kfz |            |       | FS 5, Kfz | 6,0                   | 30,0               | -                    | 10,0                 | -                     | 3,0                | 6,6                                | 17,0               | -                    | 11,1                 | -                     | 1,5                | 5,1                     | -                            |              |     |               | 6980            |        |           |   |
|   |         |       | FS 4, Kfz |            |       | FS 4, Kfz | 6,0                   | 32,0               | -                    | 10,0                 | -                     | 3,0                | 6,8                                | 20,0               | -                    | 11,1                 | -                     | 1,8                | 5,0                     | -                            |              |     |               | 7049            |        |           |   |
|   |         |       | FS 4, Kfz |            |       | FS 5, Kfz | 6,0                   | 28,5               | -                    | 10,0                 | -                     | 3,0                | 6,5                                | 20,5               | -                    | 11,1                 | -                     | 1,8                | 4,7                     | -                            |              |     |               | 6981            |        |           |   |
|   |         | 1 (G) | FS 1, Rad |            | 2 (G) | FS 6, Rad | -                     | 15,0               | -                    | 4,0                  | -                     | 1,0                | 4,8                                | 26,0               | -                    | 5,0                  | -                     | 5,2                | -0,4                    | -                            |              |     |               | 45137           |        |           |   |
|   |         |       | FS 3, Kfz |            |       | FS 6, Rad | 6,0                   | 16,5               | -                    | 10,0                 | -                     | 3,0                | 5,3                                | 21,0               | -                    | 5,0                  | -                     | 4,2                | 1,1                     | -                            |              |     | 3             | X               | -      | 45122     | - |
|   |         |       | FS 4, Kfz |            |       | FS 6, Rad | 6,0                   | 16,0               | -                    | 10,0                 | -                     | 3,0                | 5,2                                | 18,0               | -                    | 5,0                  | -                     | 3,6                | 1,6                     | -                            |              |     |               | 45123           |        |           |   |
|   |         |       | FS 1, Rad |            |       | FS 6, Rad | -                     | 15,0               | -                    | 4,0                  | -                     | 1,0                | 4,8                                | 30,0               | -                    | 5,0                  | -                     | 6,0                | -1,2                    | -                            |              |     |               | 45121           |        |           |   |
|   |         |       | FS 2, Kfz |            |       | FS 6, Rad | 6,0                   | 18,5               | -                    | 7,0                  | -                     | 2,0                | 5,5                                | 26,5               | -                    | 5,0                  | -                     | 5,3                | 0,2                     | -                            |              |     |               | 45120           |        |           |   |
|   |         |       | FS 1, Rad |            |       | FS 6, Rad | -                     | 42,5               | -                    | 4,0                  | -                     | 1,0                | 11,6                               | 0,0                | -                    | 5,0                  | -                     | 0,0                | 11,6                    | -                            |              |     | 8             | X               | -      | 42315     | - |
|   |         |       | FS 3, Kfz |            |       | FS 6, Rad | 6,0                   | 45,5               | -                    | 10,0                 | -                     | 3,0                | 8,2                                | 4,5                | -                    | 5,0                  | -                     | 0,9                | 7,3                     | -                            |              |     |               | 24669           |        |           |   |
|   |         |       | FS 4, Kfz |            |       | FS 6, Rad | 6,0                   | 45,5               | -                    | 10,0                 | -                     | 3,0                | 8,2                                | 7,5                | -                    | 5,0                  | -                     | 1,5                | 6,7                     | -                            |              |     |               | 24670           |        |           |   |
| 8 | K1      | 1 (G) | FS 1, Rad | F1         | 1 (Q) | Fußg.     | -                     | 3,5                | -                    | 4,0                  | -                     | 1,0                | 1,9                                | 0,0                | -                    | 1,5                  | -                     | 0,0                | 1,9                     | -                            | 5            | X   | -             | 42318           | -      | -         |   |
|   |         |       | FS 3, Kfz |            |       | Fußg.     | 6,0                   | 6,5                | -                    | 10,0                 | -                     | 3,0                | 4,3                                | 0,0                | -                    | 1,5                  | -                     | 0,0                | 4,3                     | -                            |              |     |               | 6022            |        |           |   |
|   |         |       | FS 4, Kfz |            |       | Fußg.     | 6,0                   |                    |                      |                      |                       |                    |                                    |                    |                      |                      |                       |                    |                         |                              |              |     |               |                 |        |           |   |

# Zwischenzeitenberechnung

**BERNARD**  
GRUPPE

LISA

|    | Räumend |       |           | Einführend |       |           | Räumend               |                    |                      |                      |                       |                    |                                    | Einführend         |                      |                      |                       |                    |                       |                           | Zwischenzeit |     |               | Info            |        |           |  |  |
|----|---------|-------|-----------|------------|-------|-----------|-----------------------|--------------------|----------------------|----------------------|-----------------------|--------------------|------------------------------------|--------------------|----------------------|----------------------|-----------------------|--------------------|-----------------------|---------------------------|--------------|-----|---------------|-----------------|--------|-----------|--|--|
|    | SGR     | Strom | Teilstrom | SGR        | Strom | Teilstrom | L <sub>frag</sub> [m] | s <sub>0</sub> [m] | v <sub>0</sub> [m/s] | v <sub>r</sub> [m/s] | a <sub>r</sub> [m/s²] | t <sub>u</sub> [s] | t <sub>u</sub> +t <sub>v</sub> [s] | s <sub>0</sub> [m] | v <sub>0</sub> [m/s] | v <sub>e</sub> [m/s] | a <sub>e</sub> [m/s²] | t <sub>e</sub> [s] | t <sub>e</sub> Be [s] | T <sub>zwischen</sub> [s] | tmäßig [s]   | Rad | Rad maßgebend | Schnittpunkt ID | Schutz | Bemerkung |  |  |
| 19 | K3      | 2 (G) | FS 1, Rad | K1         | 1 (G) | FS 1, Rad | -                     | 34,5               | -                    | 4,0                  | -                     | 1,0                | 9,6                                | 14,5               | -                    | 5,0                  | -                     | 2,9                | 6,7                   | -                         | 10           | X   | X             | 42314           | -      |           |  |  |
|    |         |       | FS 1, Rad |            |       | FS 3, Kfz | -                     | 29,5               | -                    | 4,0                  | -                     | 1,0                | 8,4                                | 16,5               | -                    | 11,1                 | -                     | 1,5                | 6,9                   | -                         |              |     |               | 7255            |        |           |  |  |
|    |         |       | FS 1, Rad |            |       | FS 4, Kfz | -                     | 26,5               | -                    | 4,0                  | -                     | 1,0                | 7,6                                | 16,0               | -                    | 11,1                 | -                     | 1,4                | 6,2                   | -                         |              |     |               | 7256            |        |           |  |  |
|    |         |       | FS 3, Kfz |            |       | FS 1, Rad | 6,0                   | 35,0               | -                    | 10,0                 | -                     | 3,0                | 7,1                                | 18,5               | -                    | 5,0                  | -                     | 3,7                | 3,4                   | -                         |              |     |               | 42296           |        |           |  |  |
|    |         |       | FS 3, Kfz |            |       | FS 3, Kfz | 6,0                   | 31,0               | -                    | 10,0                 | -                     | 3,0                | 6,7                                | 21,0               | -                    | 11,1                 | -                     | 1,9                | 4,8                   | -                         |              |     |               | 6096            |        |           |  |  |
|    |         |       | FS 3, Kfz |            |       | FS 4, Kfz | 6,0                   | 28,0               | -                    | 10,0                 | -                     | 3,0                | 6,4                                | 21,0               | -                    | 11,1                 | -                     | 1,9                | 4,5                   | -                         |              |     |               | 6097            |        |           |  |  |
|    |         |       | FS 4, Kfz |            |       | FS 1, Rad | 6,0                   | 35,0               | -                    | 10,0                 | -                     | 3,0                | 7,1                                | 22,0               | -                    | 5,0                  | -                     | 4,4                | 2,7                   | -                         |              |     |               | 42297           |        |           |  |  |
|    |         |       | FS 4, Kfz |            |       | FS 3, Kfz | 6,0                   | 31,5               | -                    | 10,0                 | -                     | 3,0                | 6,8                                | 24,0               | -                    | 11,1                 | -                     | 2,2                | 4,6                   | -                         |              |     |               | 6111            |        |           |  |  |
|    |         | 2 (G) | FS 4, Kfz |            | 1 (R) | FS 4, Kfz | 6,0                   | 28,0               | -                    | 10,0                 | -                     | 3,0                | 6,4                                | 24,0               | -                    | 11,1                 | -                     | 2,2                | 4,2                   | -                         |              |     | X             | X               | 6112   |           |  |  |
|    |         |       | FS 1, Rad |            |       | FS 1, Rad | -                     | 38,5               | -                    | 4,0                  | -                     | 1,0                | 10,6                               | 14,5               | -                    | 5,0                  | -                     | 2,9                | 7,7                   | -                         |              |     |               | 7253            |        |           |  |  |
|    |         |       | FS 1, Rad |            |       | FS 2, Kfz | -                     | 39,5               | -                    | 4,0                  | -                     | 1,0                | 10,9                               | 20,5               | -                    | 11,1                 | -                     | 1,8                | 9,1                   | -                         |              |     |               | 7250            |        |           |  |  |
|    |         |       | FS 3, Kfz |            |       | FS 2, Kfz | 6,0                   | 43,0               | -                    | 10,0                 | -                     | 3,0                | 7,9                                | 23,5               | -                    | 11,1                 | -                     | 2,1                | 5,8                   | -                         |              |     |               | 6092            |        |           |  |  |
|    |         |       | FS 4, Kfz |            |       | FS 2, Kfz | 6,0                   | 40,5               | -                    | 10,0                 | -                     | 3,0                | 7,7                                | 25,5               | -                    | 11,1                 | -                     | 2,3                | 5,4                   | -                         |              |     |               | 6108            |        |           |  |  |
|    |         |       | FS 1, Rad |            |       | FS 5, Kfz | -                     | 23,0               | -                    | 4,0                  | -                     | 1,0                | 6,8                                | 16,0               | -                    | 11,1                 | -                     | 1,4                | 5,4                   | -                         |              |     |               | 7257            |        |           |  |  |
|    |         |       | FS 1, Rad |            |       | FS 5, Kfz | -                     | 23,0               | -                    | 4,0                  | -                     | 1,0                | 6,8                                | 16,0               | -                    | 11,1                 | -                     | 1,4                | 5,4                   | -                         |              |     |               | 7258            |        |           |  |  |
|    |         |       | FS 3, Kfz |            |       | FS 5, Kfz | 6,0                   | 24,5               | -                    | 10,0                 | -                     | 3,0                | 6,1                                | 21,0               | -                    | 11,1                 | -                     | 1,9                | 4,2                   | -                         |              |     | X             | X               | 6099   |           |  |  |
| 20 | K3      | 2 (G) | FS 3, Kfz | K2         | 1 (L) | FS 5, Kfz | 6,0                   | 24,5               | -                    | 10,0                 | -                     | 3,0                | 6,1                                | 21,0               | -                    | 11,1                 | -                     | 1,9                | 4,2                   | -                         |              |     |               | 6098            |        |           |  |  |
|    |         |       | FS 4, Kfz |            |       | FS 5, Kfz | 6,0                   | 23,5               | -                    | 10,0                 | -                     | 3,0                | 6,0                                | 24,0               | -                    | 11,1                 | -                     | 2,2                | 3,8                   | -                         |              |     |               | 6114            |        |           |  |  |
|    |         |       | FS 4, Kfz |            |       | FS 5, Kfz | 6,0                   | 24,0               | -                    | 10,0                 | -                     | 3,0                | 6,0                                | 24,0               | -                    | 11,1                 | -                     | 2,2                | 3,8                   | -                         |              |     |               | 6113            |        |           |  |  |
|    |         |       | FS 2, Kfz |            |       | FS 1, Kfz | 6,0                   | 18,0               | -                    | 7,0                  | -                     | 2,0                | 5,4                                | 42,5               | -                    | 11,1                 | -                     | 3,8                | 1,6                   | -                         |              |     | -             | -               | 6387   |           |  |  |
|    |         |       | FS 2, Kfz |            |       | FS 2, Kfz | 6,0                   | 20,5               | -                    | 7,0                  | -                     | 2,0                | 5,8                                | 44,0               | -                    | 11,1                 | -                     | 4,0                | 1,8                   | -                         |              |     |               | 6462            |        |           |  |  |
|    |         |       | FS 1, Rad |            |       | FS 1, Kfz | -                     | 13,5               | -                    | 4,0                  | -                     | 1,0                | 4,4                                | 40,0               | -                    | 11,1                 | -                     | 3,6                | 0,8                   | -                         |              |     |               | 7259            |        |           |  |  |
|    |         |       | FS 1, Rad |            |       | FS 2, Kfz | -                     | 17,0               | -                    | 4,0                  | -                     | 1,0                | 5,3                                | 40,0               | -                    | 11,1                 | -                     | 3,6                | 1,7                   | -                         |              |     |               | 7260            |        |           |  |  |
|    |         |       | FS 3, Kfz |            |       | FS 1, Kfz | 6,0                   | 15,0               | -                    | 10,0                 | -                     | 3,0                | 5,1                                | 34,5               | -                    | 11,1                 | -                     | 3,1                | 2,0                   | -                         |              |     | X             | -               | 6388   |           |  |  |
| 21 | K3      | 2 (G) | FS 3, Kfz | K5         | 3 (G) | FS 2, Kfz | 6,0                   | 18,5               | -                    | 10,0                 | -                     | 3,0                | 5,5                                | 34,5               | -                    | 11,1                 | -                     | 3,1                | 2,4                   | -                         |              |     |               | 6465            |        |           |  |  |
|    |         |       | FS 4, Kfz |            |       | FS 1, Kfz | 6,0                   | 15,0               | -                    | 10,0                 | -                     | 3,0                | 5,1                                | 31,5               | -                    | 11,1                 | -                     | 2,8                | 2,3                   | -                         |              |     |               | 6389            |        |           |  |  |
|    |         |       | FS 4, Kfz |            |       | FS 2, Kfz | 6,0                   | 18,5               | -                    | 10,0                 | -                     | 3,0                | 5,5                                | 31,5               | -                    | 11,1                 | -                     | 2,8                | 2,7                   | -                         |              |     |               | 6466            |        |           |  |  |
|    |         |       | FS 2, Kfz |            |       | FS 3, Kfz | 6,0                   | 35,5               | -                    | 10,0                 | -                     | 3,0                | 7,2                                | 39,5               | -                    | 11,1                 | -                     | 3,6                | 3,6                   | -                         |              |     |               | 6490            |        |           |  |  |
| 22 | K3      | 2 (G) | FS 4, Kfz | K6         | 3 (L) | FS 3, Kfz | 6,0                   | 33,5               | -                    | 10,0                 | -                     | 3,0                | 7,0                                | 36,5               | -                    | 11,1                 | -                     | 3,3                | 3,7                   | -                         |              |     | -             | -               | 6494   |           |  |  |
|    |         |       | FS 4, Kfz |            |       | FS 3, Kfz | 6,0                   | 33,0               | -                    | 10,0                 | -                     | 3,0                | 6,9                                | 35,0               | -                    | 11,1                 | -                     | 3,2                | 3,7                   | -                         |              |     |               | 6536            |        |           |  |  |
|    |         |       | FS 2, Kfz |            |       | FS 4, Kfz | 6,0                   | 20,5               | -                    | 7,0                  | -                     | 2,0                | 5,8                                | 42,0               | -                    | 11,1                 | -                     | 3,8                | 2,0                   | -                         |              |     | -             | -               | 7021   |           |  |  |
|    |         |       | FS 2, Kfz |            |       | FS 5, Kfz | 6,0                   | 20,5               | -                    | 7,0                  | -                     | 2,0                | 5,8                                | 40,0               | -                    | 11,1                 | -                     | 3,6                | 2,2                   | -                         |              |     |               | 6953            |        |           |  |  |
| 23 | K3      | 2 (G) | FS 1, Rad | K8         | 4 (L) | FS 4, Kfz | -                     | 17,5               | -                    | 4,0                  | -                     | 1,0                | 5,4                                | 38,0               | -                    | 11,1                 | -                     | 3,4                | 2,0                   | -                         |              |     | X             | -               | 7264   |           |  |  |
|    |         |       | FS 1, Rad |            |       | FS 5, Kfz | -                     | 17,5               | -                    | 4,0                  | -                     | 1,0                | 5,4                                | 36,0               | -                    | 11,1                 | -                     | 3,2                | 2,2                   | -                         |              |     |               | 7262            |        |           |  |  |
|    |         |       | FS 3, Kfz |            |       | FS 4, Kfz | 6,0                   | 20,5               | -                    | 10,0                 | -                     | 3,0                | 5,7                                | 32,0               | -                    | 11,1                 | -                     | 2,9                | 2,8                   | -                         |              |     |               | 7024            |        |           |  |  |
|    |         |       | FS 3, Kfz |            |       | FS 5, Kfz | 6,0                   | 21,5               | -                    | 10,0                 | -                     | 3,0                | 5,8                                | 30,0               | -                    | 11,1                 | -                     | 2,7                | 3,1                   | -                         |              |     |               | 6956            |        |           |  |  |
|    |         |       | FS 4, Kfz |            |       | FS 4, Kfz | 6,0                   | 22,5               | -                    | 10,0                 | -                     | 3,0                | 5,9                                | 28,5               | -                    | 11,1                 | -                     | 2,6                | 3,3                   | -                         |              |     |               | 7025            |        |           |  |  |
|    |         |       | FS 4, Kfz |            |       | FS 5, Kfz | 6,0                   | 24,0               | -                    | 10,0                 | -                     | 3,0                | 6,0                                | 26,0               | -                    | 11,1                 | -                     | 2,3                | 3,7                   | -                         |              |     |               | 6957            |        |           |  |  |
|    |         |       | FS 1, Rad |            |       | FS 6, Rad | -                     | 36,0               | -                    | 4,0                  | -                     | 1,0                | 10,0                               | 4,0                | -                    | 5,0                  | -                     | 0,8                | 9,2                   | -                         |              |     | X             | -               | 52967  |           |  |  |
|    |         |       | FS 3, Kfz |            |       | FS 6, Rad | 6,0                   | 36,5               | -                    | 10,0                 | -                     | 3,0                | 7,3                                | 8,0                | -                    | 5,0                  | -                     | 1,6                | 5,7                   | -                         |              |     |               | 52950           |        |           |  |  |
| 24 | K3      | 2 (G) | FS 4, Kfz |            |       | FS 6, Rad | 6,0                   | 36,5               | -                    | 10,0                 | -                     | 3,0                | 7,3                                | 11,0               | -                    | 5,0                  | -                     | 2,2                | 5,1                   | -                         |              |     |               | 52951           |        |           |  |  |
|    |         |       | FS 1, Rad | R5         | 3 (G) | FS 4, Rad | -                     | 8,5                | -                    | 4,0                  | -                     | 1,0                | 3,1                                | 30,5               | -                    | 5,0                  | -                     | 6,1                | -3,0                  | -                         |              |     | X             | -               | 28921  |           |  |  |
| 25 | K3      | 2 (R) | FS 2, Kfz |            |       | FS 4, Rad | 6,0                   | 12,5               | -                    | 7,0                  | -                     | 2,0                | 4,6                                | 27,5               | -                    | 5,0                  | -                     | 5,5                | -0,9                  | -                         |              |     |               | 28918           |        |           |  |  |
|    |         |       | FS 1, Rad |            |       | FS 4, Rad | -                     | 9,5                | -                    | 4,0                  | -                     | 1,0                | 3,4                                | 28,5               | -                    | 5,0                  | -                     | 5,7                | -2,3                  | -                         |              |     |               | 28931           |        |           |  |  |
|    |         | 2 (G) | FS 3, Kfz |            | 3 (G) | FS 4, Rad | 6,0                   | 10,0               | -                    | 10,0                 | -                     | 3,0                | 4,6                                | 22,5               | -                    | 5,0                  | -                     | 4,5                | 0,1                   | -                         |              |     | X             | -               | 28924  |           |  |  |
|    |         |       | FS 4, Kfz |            |       | FS 4, Rad | 6,0                   | 10,0               | -                    | 10,0                 | -                     | 3,0                | 4,6                                | 19,5               | -                    | 5,0                  | -                     | 3,9                | 0,7                   | -                         |              |     |               | 28925           |        |           |  |  |
| 26 | K3      | 2 (R) | FS 1, Rad | F3         | 2 (Q) | Fußg.     | -                     | 3,5                | -                    | 4,0                  | -                     | 1,0                | 1,9                                | 0,0                | -                    | 1,5                  | -                     | 0,0                | 1,9                   | -                         |              |     | X             | -               | 6079   |           |  |  |
|    |         |       | FS 2, Kfz |            |       | Fußg.     | 6,0                   | 7,0                | -                    | 7,0                  | -                     | 2,0                | 4,0                                | 0,0                | -                    | 1,5                  | -                     | 0,0                | 4,0                   | -                         |              |     |               | 6066            |        |           |  |  |
|    |         |       | FS 2, Kfz |            |       | Fußg.     | 6,0                   | 5,0                | -                    | 7,0                  | -                     | 2,0                | 4,0                                | 0,0                | -                    | 1,5                  | -                     | 0,0                | 4,0                   | -                         |              |     |               | 6067            |        |           |  |  |
|    |         |       | FS 2, Kfz |            |       | Fußg.     | 6,0                   | 7,0                | -                    | 7,0                  | -                     | 2,0                | 4,0                                | 0,0                | -                    | 1,5                  | -                     | 0,0                | 4,0                   | -                         |              |     |               | 6059            |        |           |  |  |
|    |         | 2 (G) | FS 2, Kfz |            |       | Fußg.     | 6,0                   |                    |                      |                      |                       |                    |                                    |                    |                      |                      |                       |                    |                       |                           |              |     |               |                 |        |           |  |  |



# Zwischenzeitenberechnung

**BERNARD**  
GRUPPE

LISA

|    | Räumend |       |           | Einfahrend |       |           | Räumend               |                    |                      |                      |                       |                    |                                    | Einfahrend         |                      |                      |                       | Zwischenzeit       |                        |                            | Info       |     |               |                 |        |           |  |
|----|---------|-------|-----------|------------|-------|-----------|-----------------------|--------------------|----------------------|----------------------|-----------------------|--------------------|------------------------------------|--------------------|----------------------|----------------------|-----------------------|--------------------|------------------------|----------------------------|------------|-----|---------------|-----------------|--------|-----------|--|
|    | SGR     | Strom | Teilstrom | SGR        | Strom | Teilstrom | L <sub>frag</sub> [m] | s <sub>0</sub> [m] | v <sub>0</sub> [m/s] | v <sub>r</sub> [m/s] | a <sub>r</sub> [m/s²] | t <sub>u</sub> [s] | t <sub>u</sub> +t <sub>r</sub> [s] | s <sub>0</sub> [m] | v <sub>0</sub> [m/s] | v <sub>r</sub> [m/s] | a <sub>r</sub> [m/s²] | t <sub>e</sub> [s] | t <sub>r</sub> Ber [s] | T <sub>Zwischlag</sub> [s] | Emalg. [s] | Rad | Rad maßgebend | Schnittpunkt ID | Schutz | Bemerkung |  |
| 39 | K5      | 3 (G) | FS 2, Kfz | K4         | 2 (L) | FS 3, Kfz | 6,0                   | 35,0               | -                    | 10,0                 | -                     | 3,0                | 7,1                                | 18,0               | -                    | 11,1                 | -                     | 1,6                | 5,5                    | -                          | -          | -   | -             | -               | 6465   | -         |  |
|    |         |       | FS 2, Kfz |            |       | FS 4, Kfz | 6,0                   | 32,0               | -                    | 10,0                 | -                     | 3,0                | 6,8                                | 18,0               | -                    | 11,1                 | -                     | 1,6                | 5,2                    | -                          | -          | -   | -             | -               | 6466   | -         |  |
|    |         |       | FS 1, Kfz |            |       | FS 5, Kfz | 6,0                   | 27,5               | -                    | 10,0                 | -                     | 3,0                | 6,4                                | 14,5               | -                    | 11,1                 | -                     | 1,3                | 5,1                    | -                          | -          | -   | -             | -               | 6390   | -         |  |
|    |         |       | FS 1, Kfz |            |       | FS 5, Kfz | 6,0                   | 27,5               | -                    | 10,0                 | -                     | 3,0                | 6,4                                | 14,5               | -                    | 11,1                 | -                     | 1,3                | 5,1                    | -                          | -          | -   | -             | -               | 6391   | -         |  |
|    |         |       | FS 2, Kfz |            |       | FS 5, Kfz | 6,0                   | 26,0               | -                    | 10,0                 | -                     | 3,0                | 6,2                                | 18,0               | -                    | 11,1                 | -                     | 1,6                | 4,6                    | -                          | -          | -   | -             | -               | 6467   | -         |  |
|    |         |       | FS 2, Kfz |            |       | FS 5, Kfz | 6,0                   | 26,0               | -                    | 10,0                 | -                     | 3,0                | 6,2                                | 18,0               | -                    | 11,1                 | -                     | 1,6                | 4,6                    | -                          | -          | -   | -             | -               | 6468   | -         |  |
| 40 | K5      | 3 (G) | FS 1, Kfz | K7         | 4 (G) | FS 1, Rad | 6,0                   | 10,0               | -                    | 10,0                 | -                     | 3,0                | 4,6                                | 29,5               | -                    | 5,0                  | -                     | 5,9                | -1,3                   | -                          | -          | -   | -             | -               | 39531  | -         |  |
|    |         |       | FS 1, Kfz |            |       | FS 2, Kfz | 6,0                   | 17,0               | -                    | 10,0                 | -                     | 3,0                | 5,3                                | 32,5               | -                    | 11,1                 | -                     | 2,9                | 2,4                    | -                          | -          | -   | -             | -               | 7121   | -         |  |
|    |         |       | FS 1, Kfz |            |       | FS 3, Kfz | 6,0                   | 21,5               | -                    | 10,0                 | -                     | 3,0                | 5,8                                | 32,5               | -                    | 11,1                 | -                     | 2,9                | 2,9                    | -                          | -          | -   | -             | -               | 7093   | -         |  |
|    |         |       | FS 2, Kfz |            |       | FS 1, Rad | 6,0                   | 10,5               | -                    | 10,0                 | -                     | 3,0                | 4,7                                | 26,0               | -                    | 5,0                  | -                     | 5,2                | -0,5                   | -                          | -          | -   | -             | -               | 39532  | -         |  |
|    |         |       | FS 2, Kfz |            |       | FS 2, Kfz | 6,0                   | 17,0               | -                    | 10,0                 | -                     | 3,0                | 5,3                                | 29,5               | -                    | 11,1                 | -                     | 2,7                | 2,6                    | -                          | -          | -   | -             | -               | 7122   | -         |  |
|    |         |       | FS 2, Kfz |            |       | FS 3, Kfz | 6,0                   | 21,5               | -                    | 10,0                 | -                     | 3,0                | 5,8                                | 29,5               | -                    | 11,1                 | -                     | 2,7                | 3,1                    | -                          | -          | -   | -             | -               | 7094   | -         |  |
|    |         | 3 (R) | FS 1, Kfz |            | 4 (G) | FS 1, Rad | 6,0                   | 10,0               | -                    | 7,0                  | -                     | 2,0                | 4,3                                | 31,0               | -                    | 5,0                  | -                     | 6,2                | -1,9                   | -                          | -          | -   | -             | -               | 39530  | -         |  |
|    |         |       | FS 1, Kfz |            |       | FS 2, Kfz | 6,0                   | 17,5               | -                    | 7,0                  | -                     | 2,0                | 5,4                                | 38,0               | -                    | 11,1                 | -                     | 3,4                | 2,0                    | -                          | -          | -   | -             | -               | 7118   | -         |  |
|    |         |       | FS 1, Kfz |            |       | FS 4, Kfz | 6,0                   | 35,0               | -                    | 10,0                 | -                     | 3,0                | 7,1                                | 36,0               | -                    | 11,1                 | -                     | 3,2                | 3,9                    | -                          | -          | -   | -             | -               | 7061   | -         |  |
|    |         |       | FS 1, Kfz |            |       | FS 5, Kfz | 6,0                   | 40,0               | -                    | 10,0                 | -                     | 3,0                | 7,6                                | 37,0               | -                    | 11,1                 | -                     | 3,3                | 4,3                    | -                          | -          | -   | -             | -               | 6993   | -         |  |
| 41 | K5      | 3 (G) | FS 4, Kfz | K8         | 4 (L) | FS 4, Kfz | 6,0                   | 35,5               | -                    | 10,0                 | -                     | 3,0                | 7,2                                | 33,0               | -                    | 11,1                 | -                     | 3,0                | 4,2                    | -                          | -          | -   | -             | -               | 7027   | -         |  |
|    |         |       | FS 2, Kfz |            |       | FS 5, Kfz | 6,0                   | 37,0               | -                    | 10,0                 | -                     | 3,0                | 7,3                                | 32,5               | -                    | 11,1                 | -                     | 2,9                | 4,4                    | -                          | -          | -   | -             | -               | 6959   | -         |  |
|    |         |       | FS 1, Kfz |            |       | FS 6, Rad | 6,0                   | 42,5               | -                    | 10,0                 | -                     | 3,0                | 7,9                                | 5,0                | -                    | 5,0                  | -                     | 1,0                | 6,9                    | -                          | -          | -   | -             | -               | 45128  | -         |  |
| 42 | K5      | 3 (G) | FS 1, Kfz | R3         | 2 (G) | FS 6, Rad | 6,0                   | 42,0               | -                    | 10,0                 | -                     | 3,0                | 7,8                                | 8,5                | -                    | 5,0                  | -                     | 1,7                | 6,1                    | -                          | -          | -   | -             | -               | 45129  | -         |  |
| 43 | K5      | 3 (G) | FS 1, Kfz | R7         | 4 (G) | FS 6, Rad | 6,0                   | 10,0               | -                    | 10,0                 | -                     | 3,0                | 4,6                                | 20,5               | -                    | 5,0                  | -                     | 4,1                | 0,5                    | -                          | -          | -   | -             | -               | 24674  | -         |  |
|    |         | 3 (R) | FS 1, Kfz |            | 4 (G) | FS 6, Rad | 6,0                   | 10,5               | -                    | 10,0                 | -                     | 3,0                | 4,7                                | 17,0               | -                    | 5,0                  | -                     | 3,4                | 1,3                    | -                          | -          | -   | -             | -               | 24675  | -         |  |
| 44 | K5      | 3 (G) | FS 1, Kfz | F2         | 1 (Q) | Fußg.     | 6,0                   | 49,5               | -                    | 10,0                 | -                     | 3,0                | 8,6                                | 0,0                | -                    | 1,5                  | -                     | 0,0                | 8,6                    | -                          | -          | -   | -             | -               | 6395   | -         |  |
|    |         |       | FS 2, Kfz |            |       | Fußg.     | 6,0                   | 50,0               | -                    | 10,0                 | -                     | 3,0                | 8,6                                | 0,0                | -                    | 1,5                  | -                     | 0,0                | 8,6                    | -                          | -          | -   | -             | -               | 6472   | -         |  |
| 45 | K5      | 3 (G) | FS 1, Kfz | F5         | 3 (Q) | Fußg.     | 6,0                   | 6,5                | -                    | 10,0                 | -                     | 3,0                | 4,3                                | 0,0                | -                    | 1,5                  | -                     | 0,0                | 4,3                    | -                          | -          | -   | -             | -               | 6392   | -         |  |
|    |         | 3 (R) | FS 2, Kfz |            |       | Fußg.     | 6,0                   | 6,5                | -                    | 10,0                 | -                     | 3,0                | 4,3                                | 0,0                | -                    | 1,5                  | -                     | 0,0                | 4,3                    | -                          | -          | -   | -             | -               | 6469   | -         |  |
|    |         |       | FS 1, Kfz |            | 3 (Q) | Fußg.     | 6,0                   | 6,5                | -                    | 7,0                  | -                     | 2,0                | 4,0                                | 0,0                | -                    | 1,5                  | -                     | 0,0                | 4,0                    | -                          | -          | -   | -             | -               | 6251   | -         |  |
|    |         |       | FS 1, Kfz |            |       | Fußg.     | 6,0                   | 4,5                | -                    | 7,0                  | -                     | 2,0                | 4,0                                | 0,0                | -                    | 1,5                  | -                     | 0,0                | 4,0                    | -                          | -          | -   | -             | -               | 6252   | -         |  |
| 46 | K6      | 3 (L) | FS 3, Kfz | K1         | 1 (G) | FS 1, Rad | 6,0                   | 39,0               | -                    | 7,0                  | -                     | 2,0                | 8,4                                | 21,0               | -                    | 5,0                  | -                     | 4,2                | 4,2                    | -                          | -          | -   | -             | -               | 42298  | -         |  |
|    |         |       | FS 3, Kfz |            |       | FS 3, Kfz | 6,0                   | 35,0               | -                    | 7,0                  | -                     | 2,0                | 7,9                                | 25,5               | -                    | 11,1                 | -                     | 2,3                | 5,6                    | -                          | -          | -   | -             | -               | 6481   | -         |  |
|    |         | 3 (L) | FS 3, Kfz |            | 1 (R) | FS 4, Kfz | 6,0                   | 31,0               | -                    | 7,0                  | -                     | 2,0                | 7,3                                | 27,5               | -                    | 11,1                 | -                     | 2,5                | 4,8                    | -                          | -          | -   | -             | -               | 6482   | -         |  |
|    |         |       | FS 3, Kfz |            |       | FS 2, Kfz | 6,0                   | 47,5               | -                    | 7,0                  | -                     | 2,0                | 9,6                                | 24,0               | -                    | 11,1                 | -                     | 2,2                | 7,4                    | -                          | -          | -   | -             | -               | 6477   | -         |  |
| 47 | K6      | 3 (L) | FS 3, Kfz | K3         | 2 (G) | FS 3, Kfz | 6,0                   | 40,0               | -                    | 7,0                  | -                     | 2,0                | 8,6                                | 35,0               | -                    | 11,1                 | -                     | 3,2                | 5,4                    | -                          | -          | -   | -             | -               | 6490   | -         |  |
|    |         |       | FS 3, Kfz |            |       | FS 4, Kfz | 6,0                   | 37,0               | -                    | 7,0                  | -                     | 2,0                | 8,1                                | 33,0               | -                    | 11,1                 | -                     | 3,0                | 5,1                    | -                          | -          | -   | -             | -               | 6494   | -         |  |
|    |         |       | FS 3, Kfz |            |       | FS 5, Kfz | 6,0                   | 23,0               | -                    | 7,0                  | -                     | 2,0                | 6,1                                | 24,0               | -                    | 11,1                 | -                     | 2,2                | 3,9                    | -                          | -          | -   | -             | -               | 6495   | -         |  |
| 48 | K6      | 3 (L) | FS 3, Kfz | K4         | 2 (L) | FS 5, Kfz | 6,0                   | 23,0               | -                    | 7,0                  | -                     | 2,0                | 6,1                                | 24,5               | -                    | 11,1                 | -                     | 2,2                | 3,9                    | -                          | -          | -   | -             | -               | 6540   | -         |  |
|    |         |       | FS 3, Kfz |            |       | FS 5, Kfz | 6,0                   | 22,5               | -                    | 7,0                  | -                     | 2,0                | 6,1                                | 24,5               | -                    | 11,1                 | -                     | 2,2                | 3,9                    | -                          | -          | -   | -             | -               | 6496   | -         |  |
|    |         |       | FS 3, Kfz |            |       | FS 1, Rad | 6,0                   | 11,0               | -                    | 7,0                  | -                     | 2,0                | 4,4                                | 23,0               | -                    | 5,0                  | -                     | 4,6                | -0,2                   | -                          | -          | -   | -             | -               | 39533  | -         |  |
| 49 | K6      | 3 (L) | FS 3, Kfz | K7         | 4 (G) | FS 1, Rad | 6,0                   | 11,0               | -                    | 7,0                  | -                     | 2,0                | 4,4                                | 23,0               | -                    | 5,0                  | -                     | 4,6                | -0,2                   | -                          | -          | -   | -             | -               | 39534  | -         |  |
|    |         |       | FS 3, Kfz |            |       | FS 2, Kfz | 6,0                   | 17,0               | -                    | 7,0                  | -                     | 2,0                | 5,3                                | 26,0               | -                    | 11,1                 | -                     | 2,3                | 3,0                    | -                          | -          | -   | -             | -               | 7124   | -         |  |
|    |         |       | FS 3, Kfz |            |       | FS 2, Kfz | 6,0                   | 17,0               | -                    | 7,0                  | -                     | 2,0                | 5,3                                | 26,0               | -                    | 11,1                 | -                     | 2,3                | 3,0                    | -                          | -          | -   | -             | -               | 7123   | -         |  |
|    |         |       | FS 3, Kfz |            |       | FS 3, Kfz | 6,0                   | 21,0               | -                    | 7,0                  | -                     | 2,0                | 5,9                                | 25,0               | -                    | 11,1                 | -                     | 2,3                | 3,6                    | -                          | -          | -   | -             | -               | 7095   | -         |  |
|    |         |       | FS 3, Kfz |            |       | FS 3, Kfz | 6,0                   | 21,5               | -                    | 7,0                  | -                     | 2,0                | 5,9                                | 25,0               | -                    | 11,1                 | -                     | 2,3                | 3,6                    | -                          | -          | -   | -             | -               | 7096   | -         |  |
|    |         |       | FS 3, Kfz |            |       | FS 4, Kfz | 6,0                   | 29,0               | -                    | 7,0                  | -                     | 2,0                | 7,0                                | 21,5               | -                    | 11,1                 | -                     | 1,9                | 5,1                    | -                          | -          | -   | -             | -               | 7030   | -         |  |
|    |         |       | FS 3, Kfz |            |       | FS 5, Kfz | 6,0                   | 31,0               | -                    | 7,0                  | -                     | 2,0                | 7,3                                | 19,5               | -                    | 11,1                 | -                     | 1,8                | 5,5                    | -                          | -          | -   | -             | -               | 6962   | -         |  |
|    |         |       | FS 3, Kfz |            |       | FS 5, Kfz | 6,0                   | 31,0               | -                    | 7,0                  | -                     | 2,0                | 7,3                                | 19,5               | -                    | 11,1                 | -                     | 1,8                | 5,5                    | -                          | -          | -   | -             | -               | 6997   | -         |  |
| 50 | K6      | 3 (L) | FS 3, Kfz | K8         | 4 (L) | FS 5, Kfz | 6,0                   | 31,0               | -                    | 7,0                  | -                     | 2,0                | 7,3                                | 20,5               | -                    | 11,1                 | -                     | 1,8                | 5,5                    | -                          | -          | -   | -             | -               | 6961   | -         |  |
| 51 | K6      | 3 (L) | FS 3, Kfz | R1         | 1 (G) | FS 6, Rad | 6,0                   | 40,5               | -                    | 7,0                  | -                     | 2,0                | 8,6                                | 10,0               | -                    | 5,0                  | -                     | 2,0                | 6,6                    | -                          | -          | -   | -             | -               | 52952  | -         |  |
| 52 | K6      | 3 (L) | FS 3, Kfz | R7         | 4 (G) | FS 6, Rad | 6,0                   | 11,0               | -                    | 7,0                  | -                     | 2,0                | 4,4                                | 14,0               | -                    | 5,0                  | -                     | 2,8                | 1,6                    | -                          | -          | -   | -             | -               | 24676  | -         |  |
|    |         |       | FS 3, Kfz |            |       | FS 6, Rad | 6,0                   | 11,0               | -                    | 7,0                  | -                     | 2,0                | 4,4                                | 14,0               | -                    | 5,0                  | -                     | 2,8                | 1,6                    | -                          | -          | -   | -             | -               | 24677  | -         |  |
| 53 | K6      | 3 (L) | FS 3, Kfz | F5         | 3 (Q) | Fußg.     | 6,0                   | 6,5                | -                    | 7,0                  | -                     | 2,0                | 4,0                                | 0,0                | -                    | 1,5                  | -                     | 0,0                | 4,0                    | -                          | -          | -   | -             | -               | 6497   | -         |  |
|    |         |       | FS 3, Kfz |            |       | Fußg.     | 6,0                   | 4,5                | -                    | 7,0                  | -                     | 2,0                | 4,0                                | 0,0                | -                    | 1,5                  | -                     | 0,0                | 4,0                    | -                          | -          | -   | -             | -               | 6498   | -         |  |
|    |         |       | FS 3, Kfz |            |       | Fußg.     | 6,0                   | 6,5                | -                    | 7,0                  | -                     | 2,0                | 4,0                                | 0,0                | -                    | 1,5                  | -                     | 0,0                | 4,0                    | -                          | -          | -   | -             | -               | 6542   | -         |  |
|    |         |       | FS 3, Kfz |            |       | Fußg.     | 6,0                   | 4,5                | -                    | 7,0                  | -                     | 2,0                |                                    |                    |                      |                      |                       |                    |                        |                            |            |     |               |                 |        |           |  |

# Zwischenzeitenberechnung

**BERNARD**  
GRUPPE

LISA

|    | Räumend |       |           | Einfahrend |       |           | Räumend               |                    |                      |                      |                       |                    |                                    | Einfahrend         |                      |                      |                       |                    |                        |                            | Zwischenzeit |     | Info          |                 |        |           |   |  |
|----|---------|-------|-----------|------------|-------|-----------|-----------------------|--------------------|----------------------|----------------------|-----------------------|--------------------|------------------------------------|--------------------|----------------------|----------------------|-----------------------|--------------------|------------------------|----------------------------|--------------|-----|---------------|-----------------|--------|-----------|---|--|
|    | SGR     | Strom | Teilstrom | SGR        | Strom | Teilstrom | L <sub>frag</sub> [m] | s <sub>0</sub> [m] | v <sub>0</sub> [m/s] | v <sub>r</sub> [m/s] | a <sub>r</sub> [m/s²] | t <sub>u</sub> [s] | t <sub>u</sub> +t <sub>r</sub> [s] | s <sub>e</sub> [m] | v <sub>e</sub> [m/s] | v <sub>e</sub> [m/s] | a <sub>e</sub> [m/s²] | t <sub>e</sub> [s] | t <sub>e</sub> Ber [s] | T <sub>Zwischlag</sub> [s] | Emalg. [s]   | Rad | Rad maßgebend | Schnittpunkt ID | Schutz | Bemerkung |   |  |
| 60 | K7      | 4 (G) | FS 3, Kfz | R1         | 1 (G) | FS 3, Kfz | 6,0                   | 25,5               | -                    | 10,0                 | -                     | 3,0                | 6,2                                | 20,5               | -                    | 11,1                 | -                     | 1,8                | 4,4                    | -                          | -            | 3   | X             | -               | 7095   | -         |   |  |
|    |         |       | FS 1, Rad |            |       | FS 6, Rad | -                     | 11,0               | -                    | 4,0                  | -                     | 1,0                | 3,8                                | 31,0               | -                    | 5,0                  | -                     | 6,2                | -2,4                   | -                          | -            |     |               |                 | 52969  | -         |   |  |
|    |         |       | FS 2, Kfz |            |       | FS 6, Rad | 6,0                   | 14,0               | -                    | 10,0                 | -                     | 3,0                | 5,0                                | 27,0               | -                    | 5,0                  | -                     | 5,4                | -0,4                   | -                          | -            |     |               |                 | 52959  | -         |   |  |
|    |         | 4 (R) | FS 3, Kfz | R5         | 1 (G) | FS 6, Rad | 6,0                   | 13,5               | -                    | 10,0                 | -                     | 3,0                | 5,0                                | 24,0               | -                    | 5,0                  | -                     | 4,8                | 0,2                    | -                          | -            | 7   | -             | -               | 52958  | -         |   |  |
|    |         |       | FS 1, Rad |            |       | FS 6, Rad | -                     | 10,0               | -                    | 4,0                  | -                     | 1,0                | 3,5                                | 32,5               | -                    | 5,0                  | -                     | 6,5                | -3,0                   | -                          | -            |     |               |                 | 52964  | -         |   |  |
|    |         |       | FS 2, Kfz |            |       | FS 6, Rad | 6,0                   | 14,5               | -                    | 7,0                  | -                     | 2,0                | 4,9                                | 30,0               | -                    | 5,0                  | -                     | 6,0                | -1,1                   | -                          | -            |     |               |                 | 52960  | -         |   |  |
| 61 | K7      | 4 (G) | FS 2, Kfz | F4         | 3 (G) | FS 4, Rad | 6,0                   | 38,5               | -                    | 10,0                 | -                     | 3,0                | 7,5                                | 5,0                | -                    | 5,0                  | -                     | 1,0                | 6,5                    | -                          | -            | 8   | -             | -               | 28930  | -         |   |  |
|    |         |       | FS 3, Kfz |            |       | FS 4, Rad | 6,0                   | 39,0               | -                    | 10,0                 | -                     | 3,0                | 7,5                                | 9,5                | -                    | 5,0                  | -                     | 1,9                | 5,6                    | -                          | -            |     |               |                 | 28929  | -         |   |  |
| 62 | K7      | 4 (G) | FS 2, Kfz | F7         | 2 (Q) | Fußg.     | 6,0                   | 41,5               | -                    | 10,0                 | -                     | 3,0                | 7,8                                | 0,0                | -                    | 1,5                  | -                     | 0,0                | 7,8                    | -                          | -            | 5   | X             | -               | 7126   | -         |   |  |
|    |         |       | FS 3, Kfz |            |       | Fußg.     | 6,0                   | 42,0               | -                    | 10,0                 | -                     | 3,0                | 7,8                                | 0,0                | -                    | 1,5                  | -                     | 0,0                | 7,8                    | -                          | -            |     |               |                 | 7099   | -         |   |  |
| 63 | K7      | 4 (G) | FS 1, Rad | 4 (Q)      | 4 (Q) | Fußg.     | -                     | 3,5                | -                    | 4,0                  | -                     | 1,0                | 1,9                                | 0,0                | -                    | 1,5                  | -                     | 0,0                | 1,9                    | -                          | -            | 5   | X             | -               | 39537  | -         |   |  |
|    |         |       | FS 2, Kfz |            |       | Fußg.     | 6,0                   | 6,5                | -                    | 10,0                 | -                     | 3,0                | 4,3                                | 0,0                | -                    | 1,5                  | -                     | 0,0                | 4,3                    | -                          | -            |     |               |                 | 7130   | -         |   |  |
|    |         |       | FS 3, Kfz |            |       | Fußg.     | 6,0                   | 6,5                | -                    | 10,0                 | -                     | 3,0                | 4,3                                | 0,0                | -                    | 1,5                  | -                     | 0,0                | 4,3                    | -                          | -            |     |               |                 | 7101   | -         |   |  |
|    |         | 4 (R) | FS 1, Rad | 4 (Q)      | 4 (Q) | Fußg.     | -                     | 3,5                | -                    | 4,0                  | -                     | 1,0                | 1,9                                | 0,0                | -                    | 1,5                  | -                     | 0,0                | 1,9                    | -                          | -            | 5   | X             | -               | 7236   | -         |   |  |
|    |         |       | FS 2, Kfz |            |       | Fußg.     | 6,0                   | 6,5                | -                    | 7,0                  | -                     | 2,0                | 4,0                                | 0,0                | -                    | 1,5                  | -                     | 0,0                | 4,0                    | -                          | -            |     |               |                 | 7200   | -         |   |  |
|    |         |       | FS 2, Kfz |            |       | Fußg.     | 6,0                   | 4,5                | -                    | 7,0                  | -                     | 2,0                | 4,0                                | 0,0                | -                    | 1,5                  | -                     | 0,0                | 4,0                    | -                          | -            |     |               |                 | 7201   | -         |   |  |
|    |         |       | FS 2, Kfz |            |       | Fußg.     | 6,0                   | 6,5                | -                    | 7,0                  | -                     | 2,0                | 4,0                                | 0,0                | -                    | 1,5                  | -                     | 0,0                | 4,0                    | -                          | -            |     |               |                 | 7154   | -         |   |  |
|    |         |       | FS 2, Kfz |            |       | Fußg.     | 6,0                   | 4,5                | -                    | 7,0                  | -                     | 2,0                | 4,0                                | 0,0                | -                    | 1,5                  | -                     | 0,0                | 4,0                    | -                          | -            |     |               |                 | 7155   | -         |   |  |
|    |         |       | FS 4, Kfz |            |       | FS 1, Rad | 6,0                   | 14,0               | -                    | 7,0                  | -                     | 2,0                | 4,9                                | 30,5               | -                    | 5,0                  | -                     | 6,1                | -1,2                   | -                          | -            |     |               |                 | 42302  | -         |   |  |
|    |         |       | FS 3, Kfz |            |       | FS 3, Kfz | 6,0                   | 17,5               | -                    | 7,0                  | -                     | 2,0                | 5,4                                | 32,0               | -                    | 11,1                 | -                     | 2,9                | 2,5                    | -                          | -            |     |               |                 | 7015   | -         |   |  |
|    |         |       | FS 4, Kfz |            |       | FS 4, Kfz | 6,0                   | 21,0               | -                    | 7,0                  | -                     | 2,0                | 5,9                                | 30,0               | -                    | 11,1                 | -                     | 2,7                | 3,2                    | -                          | -            |     |               |                 | 7016   | -         |   |  |
|    |         |       | FS 5, Kfz |            |       | FS 1, Rad | 6,0                   | 14,0               | -                    | 7,0                  | -                     | 2,0                | 4,9                                | 28,0               | -                    | 5,0                  | -                     | 5,6                | -0,7                   | -                          | -            |     |               |                 | 42300  | -         |   |  |
|    |         |       | FS 5, Kfz |            |       | FS 1, Rad | 6,0                   | 14,0               | -                    | 7,0                  | -                     | 2,0                | 4,9                                | 28,0               | -                    | 5,0                  | -                     | 5,6                | -0,7                   | -                          | -            |     |               |                 | 42301  | -         |   |  |
| 64 | K8      | 4 (L) | FS 5, Kfz | K1         | 1 (G) | FS 3, Kfz | 6,0                   | 17,5               | -                    | 7,0                  | -                     | 2,0                | 5,4                                | 29,5               | -                    | 11,1                 | -                     | 2,7                | 2,7                    | -                          | -            | 4   | -             | -               | 6947   | -         |   |  |
|    |         |       | FS 3, Kfz |            |       | FS 3, Kfz | 6,0                   | 17,5               | -                    | 7,0                  | -                     | 2,0                | 5,4                                | 29,5               | -                    | 11,1                 | -                     | 2,7                | 2,7                    | -                          | -            |     |               |                 | 6980   | -         |   |  |
|    |         |       | FS 5, Kfz |            |       | FS 4, Kfz | 6,0                   | 21,0               | -                    | 7,0                  | -                     | 2,0                | 5,9                                | 27,5               | -                    | 11,1                 | -                     | 2,5                | 3,4                    | -                          | -            |     |               |                 | 6948   | -         |   |  |
|    |         |       | FS 5, Kfz |            |       | FS 4, Kfz | 6,0                   | 21,0               | -                    | 7,0                  | -                     | 2,0                | 5,9                                | 28,0               | -                    | 11,1                 | -                     | 2,5                | 3,4                    | -                          | -            |     |               |                 | 6981   | -         |   |  |
|    |         |       | FS 4, Kfz |            |       | FS 5, Kfz | 6,0                   | 28,0               | -                    | 7,0                  | -                     | 2,0                | 6,9                                | 25,0               | -                    | 11,1                 | -                     | 2,3                | 4,6                    | -                          | -            |     |               |                 | 7018   | -         |   |  |
|    |         |       | FS 5, Kfz |            |       | FS 5, Kfz | 6,0                   | 27,0               | -                    | 7,0                  | -                     | 2,0                | 6,7                                | 23,5               | -                    | 11,1                 | -                     | 2,1                | 4,6                    | -                          | -            |     |               |                 | 6950   | -         |   |  |
|    |         | 4 (L) | FS 4, Kfz |            | 2 (R) | FS 2, Kfz | 6,0                   | 45,5               | -                    | 7,0                  | -                     | 2,0                | 9,4                                | 16,5               | -                    | 11,1                 | -                     | 1,5                | 7,9                    | -                          | -            |     | 8             | -               | -      | 7054      | - |  |
|    |         |       | FS 5, Kfz |            |       | FS 2, Kfz | 6,0                   | 43,0               | -                    | 7,0                  | -                     | 2,0                | 9,0                                | 17,5               | -                    | 11,1                 | -                     | 1,6                | 7,4                    | -                          | -            |     |               |                 | 6986   | -         |   |  |
|    |         |       | FS 4, Kfz |            | 2 (G) | FS 1, Rad | 6,0                   | 41,5               | -                    | 7,0                  | -                     | 2,0                | 8,8                                | 13,5               | -                    | 5,0                  | -                     | 2,7                | 6,1                    | -                          | -            |     |               |                 | 7265   | -         |   |  |
|    |         |       | FS 3, Kfz |            |       | FS 3, Kfz | 6,0                   | 36,0               | -                    | 7,0                  | -                     | 2,0                | 8,0                                | 16,5               | -                    | 11,1                 | -                     | 1,5                | 6,5                    | -                          | -            |     |               |                 | 7058   | -         |   |  |
|    |         | 4 (L) | FS 4, Kfz |            |       | FS 4, Kfz | 6,0                   | 32,0               | -                    | 7,0                  | -                     | 2,0                | 7,4                                | 19,0               | -                    | 11,1                 | -                     | 1,7                | 5,7                    | -                          | -            |     |               |                 | 7059   | -         |   |  |
|    |         |       | FS 5, Kfz |            |       | FS 1, Rad | 6,0                   | 38,0               | -                    | 7,0                  | -                     | 2,0                | 8,3                                | 15,0               | -                    | 5,0                  | -                     | 3,0                | 5,3                    | -                          | -            |     |               |                 | 7263   | -         |   |  |
|    |         |       | FS 5, Kfz |            |       | FS 3, Kfz | 6,0                   | 31,5               | -                    | 7,0                  | -                     | 2,0                | 7,4                                | 19,5               | -                    | 11,1                 | -                     | 1,8                | 5,6                    | -                          | -            |     |               |                 | 6990   | -         |   |  |
|    |         |       | FS 5, Kfz |            |       | FS 4, Kfz | 6,0                   | 27,5               | -                    | 7,0                  | -                     | 2,0                | 6,8                                | 22,5               | -                    | 11,1                 | -                     | 2,0                | 4,8                    | -                          | -            |     |               |                 | 6991   | -         |   |  |
|    |         | 4 (L) | FS 4, Kfz |            | 3 (G) | FS 1, Kfz | 6,0                   | 36,5               | -                    | 7,0                  | -                     | 2,0                | 8,1                                | 34,5               | -                    | 11,1                 | -                     | 3,1                | 5,0                    | -                          | -            |     | 5             | -               | -      | 7061      | - |  |
|    |         |       | FS 4, Kfz |            |       | FS 2, Kfz | 6,0                   | 33,5               | -                    | 7,0                  | -                     | 2,0                | 7,6                                | 32,5               | -                    | 11,1                 | -                     | 2,9                | 4,7                    | -                          | -            |     |               |                 | 7063   | -         |   |  |
| 65 | K8      | 4 (L) | FS 5, Kfz | K2         | 1 (L) | FS 5, Kfz | 6,0                   | 27,0               | -                    | 7,0                  | -                     | 2,0                | 6,7                                | 23,5               | -                    | 11,1                 | -                     | 2,1                | 4,6                    | -                          | -            | 5   | -             | -               | 6950   | -         |   |  |
|    |         |       | FS 4, Kfz |            |       | FS 2, Kfz | 6,0                   | 45,5               | -                    | 7,0                  | -                     | 2,0                | 9,4                                | 16,5               | -                    | 11,1                 | -                     | 1,5                | 7,9                    | -                          | -            |     |               |                 | 7054   | -         |   |  |
|    |         |       | FS 5, Kfz |            |       | FS 2, Kfz | 6,0                   | 43,0               | -                    | 7,0                  | -                     | 2,0                | 9,0                                | 17,5               | -                    | 11,1                 | -                     | 1,6                | 7,4                    | -                          | -            |     |               |                 | 6986   | -         |   |  |
|    |         |       | FS 4, Kfz |            |       | FS 1, Rad | 6,0                   | 41,5               | -                    | 7,0                  | -                     | 2,0                | 8,8                                | 13,5               | -                    | 5,0                  | -                     | 2,7                | 6,1                    | -                          | -            |     |               |                 | 7265   | -         |   |  |
| 66 | K8      | 4 (L) | FS 3, Kfz | K3         | 2 (G) | FS 3, Kfz | 6,0                   | 36,0               | -                    | 7,0                  | -                     | 2,0                | 8,0                                | 16,5               | -                    | 11,1                 | -                     | 1,5                | 6,5                    | -                          | -            | 8   | -             | -               | 7058   | -         |   |  |
|    |         |       | FS 4, Kfz |            |       | FS 4, Kfz | 6,0                   | 32,0               | -                    | 7,0                  | -                     | 2,0                | 7,4                                | 19,0               | -                    | 11,1                 | -                     | 1,7                | 5,7                    | -                          | -            |     |               |                 | 7059   | -         |   |  |
|    |         |       | FS 5, Kfz |            |       | FS 1, Rad | 6,0                   | 38,0               | -                    | 7,0                  | -                     | 2,0                | 8,3                                | 15,0               | -                    | 5,0                  | -                     | 3,0                | 5,3                    | -                          | -            |     |               |                 | 7263   | -         |   |  |
|    |         |       | FS 5, Kfz |            |       | FS 3, Kfz | 6,0                   | 31,5               | -                    | 7,0                  | -                     | 2,0                | 7,4                                | 19,5               | -                    | 11,1                 | -                     | 1,8                | 5,6                    | -                          | -            |     |               |                 | 6990   | -         |   |  |
|    |         |       | FS 5, Kfz |            |       | FS 4, Kfz | 6,0                   | 27,5               | -                    | 7,0                  | -                     | 2,0                | 6,8                                | 22,5               | -                    | 11,1                 | -                     | 2,0                | 4,8                    | -                          | -            |     |               |                 | 6991   | -         |   |  |
|    |         |       | FS 4, Kfz |            |       | FS 1, Kfz | 6,0                   | 36,5               | -                    | 7,0                  | -                     | 2,0                | 8,1                                | 34,5               | -                    | 11,1                 | -                     | 3,1                | 5,0                    | -                          | -            |     |               |                 | 7061   | -         |   |  |
| 67 | K8      | 4 (L) | FS 4, Kfz | K5         | 3 (G) | FS 2, Kfz | 6,0                   | 33,5               | -                    | 7,0                  | -                     | 2,0                | 7,6                                | 32,5               | -                    | 11,1                 | -                     | 2,9                | 4,7                    | -                          | -            | 5   | -             | -               | 7063   | -         |   |  |
|    |         |       | FS 5, Kfz |            |       | FS 1, Kfz | 6,0                   | 37,5               | -                    | 7,0                  | -                     | 2,0                | 8,2                                | 39,5               | -                    | 11,1                 | -                     | 3,6                | 4,6                    | -                          | -            |     |               |                 |        |           |   |  |

# Zwischenzeitenberechnung

**BERNARD**  
GRUPPE

LISA

|    | Räumend |       |           | Einführend |       |           | Räumend               |                    |                      |                      |                       |                    |                                    | Einführend         |                      |                      |                       | Zwischenzeit       |                         |                           |            | Info |               |                 |        |           |
|----|---------|-------|-----------|------------|-------|-----------|-----------------------|--------------------|----------------------|----------------------|-----------------------|--------------------|------------------------------------|--------------------|----------------------|----------------------|-----------------------|--------------------|-------------------------|---------------------------|------------|------|---------------|-----------------|--------|-----------|
|    | SGR     | Strom | Teilstrom | SGR        | Strom | Teilstrom | L <sub>frag</sub> [m] | s <sub>0</sub> [m] | v <sub>0</sub> [m/s] | v <sub>r</sub> [m/s] | a <sub>r</sub> [m/s²] | t <sub>u</sub> [s] | t <sub>u</sub> +t <sub>r</sub> [s] | s <sub>e</sub> [m] | v <sub>e</sub> [m/s] | v <sub>r</sub> [m/s] | a <sub>r</sub> [m/s²] | t <sub>e</sub> [s] | t <sub>e</sub> Ber. [s] | T <sub>Zuschlag</sub> [s] | Emalg. [s] | Rad  | Rad maßgebend | Schnittpunkt ID | Schutz | Bemerkung |
| 83 | R5      | 3 (G) | FS 4, Rad | K3         | 2 (R) | FS 1, Rad | -                     | 31,0               | -                    | 4,0                  | -                     | 1,0                | 8,8                                | 8,0                | -                    | 5,0                  | -                     | 1,6                | 7,2                     | -                         | 8          | X    | X             | 28921           | -      |           |
|    |         |       | FS 4, Rad |            |       | FS 2, Kfz | -                     | 30,0               | -                    | 4,0                  | -                     | 1,0                | 8,5                                | 13,0               | -                    | 11,1                 | -                     | 1,2                | 7,3                     | -                         |            |      |               | 28917           |        |           |
|    |         | 3 (G) | FS 4, Rad |            | 2 (G) | FS 1, Rad | -                     | 29,0               | -                    | 4,0                  | -                     | 1,0                | 8,3                                | 9,0                | -                    | 5,0                  | -                     | 1,8                | 6,5                     | -                         |            |      |               | 28931           |        |           |
|    |         |       | FS 4, Rad |            |       | FS 3, Kfz | -                     | 23,0               | -                    | 4,0                  | -                     | 1,0                | 6,8                                | 9,5                | -                    | 11,1                 | -                     | 0,9                | 5,9                     | -                         |            |      |               | 28924           |        |           |
| 84 | R5      | 3 (G) | FS 4, Rad | K4         | 2 (L) | FS 4, Kfz | -                     | 20,0               | -                    | 4,0                  | -                     | 1,0                | 6,0                                | 9,5                | -                    | 11,1                 | -                     | 0,9                | 5,1                     | -                         | 5          | X    | X             | 28925           | -      |           |
|    |         |       | FS 5, Kfz |            |       | FS 5, Kfz | -                     | 16,5               | -                    | 4,0                  | -                     | 1,0                | 5,1                                | 9,0                | -                    | 11,1                 | -                     | 0,8                | 4,3                     | -                         |            |      |               | 28926           |        |           |
|    |         |       | FS 4, Rad |            |       | FS 5, Kfz | -                     | 16,5               | -                    | 4,0                  | -                     | 1,0                | 5,1                                | 9,0                | -                    | 11,1                 | -                     | 0,8                | 4,3                     | -                         |            |      |               | 28927           |        |           |
|    |         |       | FS 4, Rad |            |       | FS 2, Kfz | -                     | 5,5                | -                    | 4,0                  | -                     | 1,0                | 2,4                                | 38,0               | -                    | 11,1                 | -                     | 3,4                | -1,0                    | -                         |            |      |               | 28930           |        |           |
| 85 | R5      | 3 (G) | FS 4, Rad | K7         | 4 (G) | FS 3, Kfz | -                     | 10,0               | -                    | 4,0                  | -                     | 1,0                | 3,5                                | 38,5               | -                    | 11,1                 | -                     | 3,5                | 0,0                     | -                         | 2          | X    | -             | 28929           | -      |           |
|    |         |       | FS 6, Rad |            |       | FS 1, Rad | -                     | 2,0                | -                    | 4,0                  | -                     | 1,0                | 1,5                                | 42,0               | -                    | 5,0                  | -                     | 8,4                | -6,9                    | -                         |            |      |               | 42315           |        |           |
|    |         |       | FS 6, Rad |            |       | FS 3, Kfz | -                     | 5,0                | -                    | 4,0                  | -                     | 1,0                | 2,3                                | 45,0               | -                    | 11,1                 | -                     | 4,1                | -1,8                    | -                         |            |      |               | 24669           |        |           |
|    |         |       | FS 6, Rad |            |       | FS 4, Kfz | -                     | 8,0                | -                    | 4,0                  | -                     | 1,0                | 3,0                                | 45,0               | -                    | 11,1                 | -                     | 4,1                | -1,1                    | -                         |            |      |               | 24670           |        |           |
| 86 | R7      | 4 (G) | FS 6, Rad | K1         | 1 (G) | FS 5, Kfz | -                     | 8,0                | -                    | 4,0                  | -                     | 1,0                | 3,0                                | 36,0               | -                    | 11,1                 | -                     | 3,2                | -0,2                    | -                         | 2          | X    | -             | 24672           | -      |           |
|    |         |       | FS 6, Rad |            |       | FS 1, Kfz | -                     | 21,0               | -                    | 4,0                  | -                     | 1,0                | 6,3                                | 9,5                | -                    | 11,1                 | -                     | 0,9                | 5,4                     | -                         |            |      |               | 24674           |        |           |
|    |         |       | FS 6, Rad |            |       | FS 2, Kfz | -                     | 17,5               | -                    | 4,0                  | -                     | 1,0                | 5,4                                | 10,0               | -                    | 11,1                 | -                     | 0,9                | 4,5                     | -                         |            |      |               | 24675           |        |           |
|    |         |       | FS 6, Rad |            |       | FS 1, Kfz | -                     | 22,0               | -                    | 4,0                  | -                     | 1,0                | 6,5                                | 9,5                | -                    | 11,1                 | -                     | 0,9                | 5,6                     | -                         |            |      |               | 24673           |        |           |
| 87 | R7      | 4 (G) | FS 6, Rad | K4         | 2 (L) | FS 3, Kfz | -                     | 14,5               | -                    | 4,0                  | -                     | 1,0                | 4,6                                | 10,5               | -                    | 11,1                 | -                     | 0,9                | 3,7                     | -                         | 6          | X    | X             | 24676           | -      |           |
|    |         |       | FS 6, Rad |            |       | FS 3, Kfz | -                     | 14,5               | -                    | 4,0                  | -                     | 1,0                | 4,6                                | 10,5               | -                    | 11,1                 | -                     | 0,9                | 3,7                     | -                         |            |      |               | 24677           |        |           |
|    |         |       | FS 6, Rad |            |       | FS 1, Rad | -                     | 15,0               | -                    | 1,2                  | -                     | -                  | 12,5                               | 0,0                | -                    | 5,0                  | -                     | 0,0                | 12,5                    | -                         |            |      |               | 42319           |        |           |
|    |         |       | FS 6, Rad |            |       | FS 3, Kfz | -                     | 15,0               | -                    | 1,2                  | -                     | -                  | 12,5                               | 0,0                | -                    | 11,1                 | -                     | 0,0                | 12,5                    | -                         |            |      |               | 6023            |        |           |
| 88 | R7      | 4 (G) | FS 6, Rad | K5         | 3 (G) | FS 4, Rad | -                     | 15,0               | -                    | 1,2                  | -                     | -                  | 12,5                               | 0,0                | -                    | 11,1                 | -                     | 0,0                | 12,5                    | -                         | 13         | -    | -             | 6029            | -      |           |
|    |         |       | FS 6, Rad |            |       | FS 1, Rad | -                     | 15,0               | -                    | 1,2                  | -                     | -                  | 12,5                               | 0,0                | -                    | 5,0                  | -                     | 0,0                | 12,5                    | -                         |            |      |               | 6009            |        |           |
|    |         |       | FS 6, Rad |            |       | FS 2, Kfz | -                     | 15,0               | -                    | 1,2                  | -                     | -                  | 12,5                               | 0,0                | -                    | 11,1                 | -                     | 0,0                | 12,5                    | -                         |            |      |               | 5999            |        |           |
|    |         |       | FS 6, Rad |            |       | FS 2, Kfz | -                     | 15,0               | -                    | 1,2                  | -                     | -                  | 12,5                               | 0,0                | -                    | 11,1                 | -                     | 0,0                | 12,5                    | -                         |            |      |               | 5989            |        |           |
| 89 | R7      | 4 (G) | FS 6, Rad | K6         | 3 (L) | FS 5, Kfz | -                     | 15,0               | -                    | 1,2                  | -                     | -                  | 12,5                               | 0,0                | -                    | 11,1                 | -                     | 0,0                | 12,5                    | -                         | 13         | -    | -             | 6037            | -      |           |
|    |         |       | FS 6, Rad |            |       | FS 5, Kfz | -                     | 15,0               | -                    | 1,2                  | -                     | -                  | 12,5                               | 0,0                | -                    | 11,1                 | -                     | 0,0                | 12,5                    | -                         |            |      |               | 6047            |        |           |
|    |         |       | FS 6, Rad |            |       | FS 1, Kfz | -                     | 9,0                | -                    | 1,2                  | -                     | -                  | 7,5                                | 47,0               | -                    | 11,1                 | -                     | 4,2                | 3,3                     | -                         |            |      |               | 53176           |        |           |
|    |         |       | FS 6, Rad |            |       | FS 2, Kfz | -                     | 9,0                | -                    | 1,2                  | -                     | -                  | 7,5                                | 47,5               | -                    | 11,1                 | -                     | 4,3                | 3,2                     | -                         |            |      |               | 53178           |        |           |
| 90 | F1      | 1 (Q) | Fußg.     | K2         | 1 (L) | FS 4, Kfz | -                     | 9,0                | -                    | 1,2                  | -                     | -                  | 7,5                                | 45,5               | -                    | 11,1                 | -                     | 4,1                | 3,4                     | -                         | 4          | -    | -             | 53188           | -      |           |
|    |         |       | Fußg.     |            |       | FS 5, Kfz | -                     | 9,0                | -                    | 1,2                  | -                     | -                  | 7,5                                | 43,5               | -                    | 11,1                 | -                     | 3,9                | 3,6                     | -                         |            |      |               | 53184           |        |           |
|    |         |       | Fußg.     |            |       | FS 1, Rad | -                     | 15,5               | -                    | 1,2                  | -                     | -                  | 12,9                               | 0,0                | -                    | 5,0                  | -                     | 0,0                | 12,9                    | -                         |            |      |               | 6078            |        |           |
|    |         |       | Fußg.     |            |       | FS 2, Kfz | -                     | 15,5               | -                    | 1,2                  | -                     | -                  | 12,9                               | 0,0                | -                    | 11,1                 | -                     | 0,0                | 12,9                    | -                         |            |      |               | 6067            |        |           |
| 91 | F1      | 1 (Q) | Fußg.     | K5         | 3 (G) | FS 2, Kfz | -                     | 15,5               | -                    | 1,2                  | -                     | -                  | 12,9                               | 0,0                | -                    | 11,1                 | -                     | 0,0                | 12,9                    | -                         | 13         | -    | -             | 6058            | -      |           |
|    |         |       | Fußg.     |            |       | FS 1, Rad | -                     | 15,5               | -                    | 1,2                  | -                     | -                  | 12,9                               | 0,0                | -                    | 5,0                  | -                     | 0,0                | 12,9                    | -                         |            |      |               | 7267            |        |           |
|    |         |       | Fußg.     |            |       | FS 3, Kfz | -                     | 15,5               | -                    | 1,2                  | -                     | -                  | 12,9                               | 0,0                | -                    | 11,1                 | -                     | 0,0                | 12,9                    | -                         |            |      |               | 6101            |        |           |
|    |         |       | Fußg.     |            |       | FS 4, Kfz | -                     | 15,5               | -                    | 1,2                  | -                     | -                  | 12,9                               | 0,0                | -                    | 11,1                 | -                     | 0,0                | 12,9                    | -                         |            |      |               | 6116            |        |           |
| 92 | F2      | 1 (Q) | Fußg.     | K8         | 4 (L) | FS 5, Kfz | -                     | 15,5               | -                    | 1,2                  | -                     | -                  | 12,9                               | 0,0                | -                    | 11,1                 | -                     | 0,0                | 12,9                    | -                         | 13         | -    | -             | 6132            | -      |           |
|    |         |       | Fußg.     |            |       | FS 5, Kfz | -                     | 15,5               | -                    | 1,2                  | -                     | -                  | 12,9                               | 0,0                | -                    | 11,1                 | -                     | 0,0                | 12,9                    | -                         |            |      |               | 6149            |        |           |
|    |         |       | Fußg.     |            |       | FS 1, Rad | -                     | 15,5               | -                    | 1,2                  | -                     | -                  | 12,9                               | 0,0                | -                    | 5,0                  | -                     | 0,0                | 12,9                    | -                         |            |      |               | 39536           |        |           |
|    |         |       | Fußg.     |            |       | FS 2, Kfz | -                     | 15,5               | -                    | 1,2                  | -                     | -                  | 12,9                               | 0,0                | -                    | 11,1                 | -                     | 0,0                | 12,9                    | -                         |            |      |               | 7129            |        |           |
| 93 | F2      | 1 (Q) | Fußg.     | K7         | 4 (G) | FS 3, Kfz | -                     | 15,5               | -                    | 1,2                  | -                     | -                  | 12,9                               | 0,0                | -                    | 11,1                 | -                     | 0,0                | 12,9                    | -                         | 5          | -    | -             | 7102            | -      |           |
|    |         |       | Fußg.     |            |       | FS 1, Rad | -                     | 15,5               | -                    | 1,2                  | -                     | -                  | 12,9                               | 0,0                | -                    | 5,0                  | -                     | 0,0                | 12,9                    | -                         |            |      |               | 7235            |        |           |
|    |         |       | Fußg.     |            |       | FS 2, Kfz | -                     | 15,5               | -                    | 1,2                  | -                     | -                  | 12,9                               | 0,0                | -                    | 11,1                 | -                     | 0,0                | 12,9                    | -                         |            |      |               | 7201            |        |           |
|    |         |       | Fußg.     |            |       | FS 2, Kfz | -                     | 15,5               | -                    | 1,2                  | -                     | -                  | 12,9                               | 0,0                | -                    | 11,1                 | -                     | 0,0                | 12,9                    | -                         |            |      |               | 7155            |        |           |
| 94 | F3      | 2 (Q) | Fußg.     | K3         | 2 (R) | FS 4, Kfz | -                     | 15,5               | -                    | 1,2                  | -                     | -                  | 12,9                               | 0,0                | -                    | 11,1                 | -                     | 0,0                | 12,9                    | -                         | 9          | -    | -             | 7033            | -      |           |
|    |         |       | Fußg.     |            |       | FS 1, Rad | -                     | 15,5               | -                    | 1,2                  | -                     | -                  | 12,9                               | 0,0                | -                    | 5,0                  | -                     | 0,0                | 12,9                    | -                         |            |      |               | 7068            |        |           |
|    |         |       | Fußg.     |            |       | FS 3, Kfz | -                     | 15,5               | -                    | 1,2                  | -                     | -                  | 12,9                               | 0,0                | -                    | 11,1                 | -                     | 0,0                | 12,9                    | -                         |            |      |               | 6965            |        |           |
|    |         |       | Fußg.     |            |       | FS 4, Kfz | -                     | 15,5               | -                    | 1,2                  | -                     | -                  | 12,9                               | 0,0                | -                    | 11,1                 | -                     | 0,0                | 12,9                    | -                         |            |      |               | 7000            |        |           |
| 95 | F3      | 2 (Q) | Fußg.     | K4         | 2 (L) | FS 5, Kfz | -                     | 15,5               | -                    | 1,2                  | -                     | -                  | 12,9                               | 0,0                | -                    | 11,1                 | -                     | 0,0                | 12,9                    | -                         | 13         | -    | -             | 53202           | -      |           |
|    |         |       | Fußg.     |            |       | FS 1, Rad | -                     | 15,5               | -                    | 1,2                  | -                     | -                  | 12,9                               | 0,0                | -                    | 5,0                  | -                     | 0,0                | 12,9                    | -                         |            |      |               | 6103            |        |           |

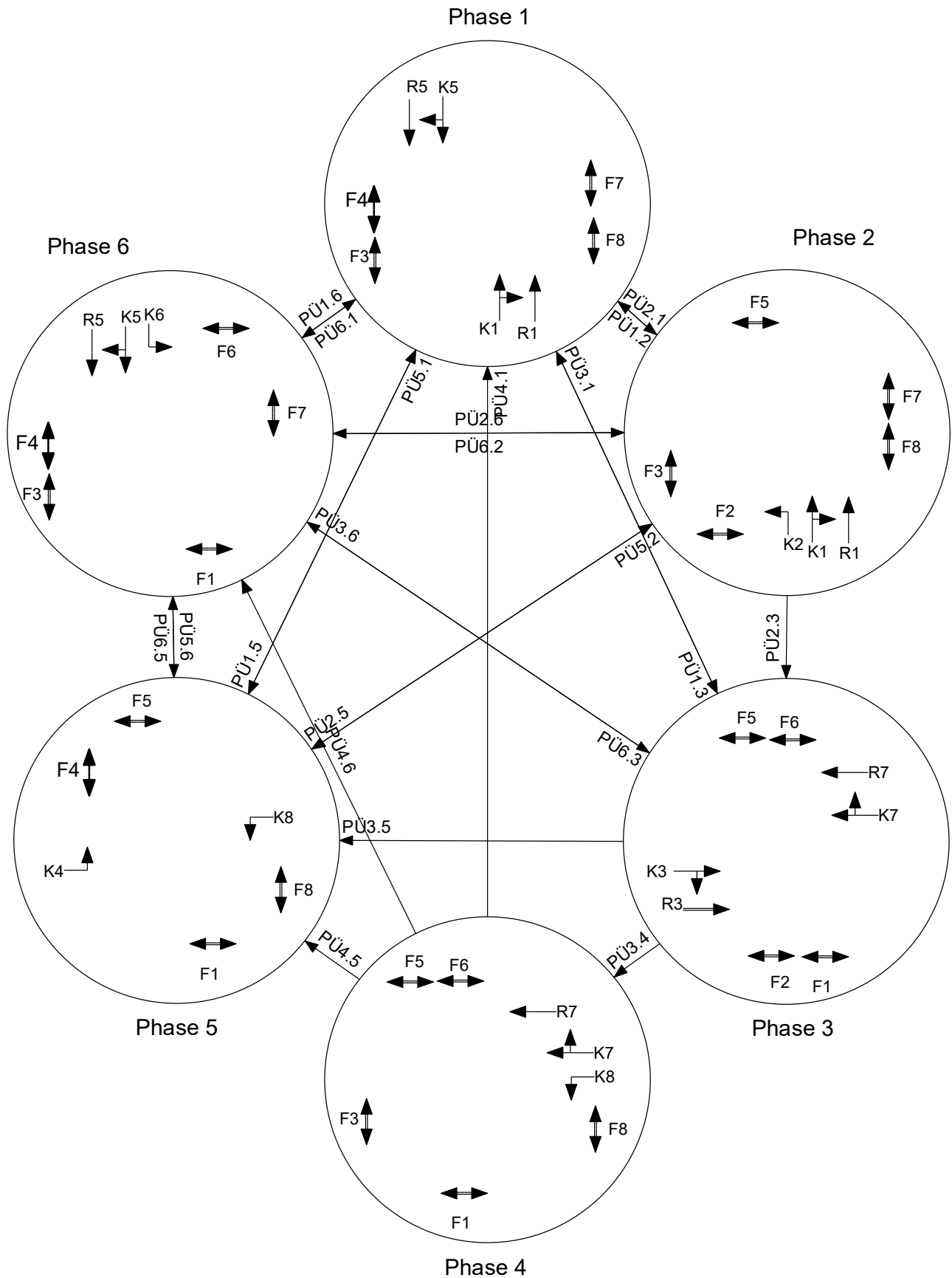


# Zwischenzeitenmatrix ZZM

LISA

|           |    | EINFAHREND |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
|-----------|----|------------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
|           |    | K1         | K2 | K3 | K4 | K5 | K6 | K7 | K8 | R1 | R3 | R5 | R7 | F1 | F2 | F3 | F4 | F5 | F6 | F7 | F8 |    |
| RÄUMEND   | K1 | ↕          | ■  | -  | 4  | 5  | -  | 4  | 11 | 8  | -  | 3  | -  | 8  | 5  | -  | -  | -  | -  | 9  | -  | -  |
|           | K2 | ↶          | -  | ■  | 5  | 6  | 8  | -  | 6  | 5  | -  | 3  | 9  | -  | 4  | -  | -  | 10 | -  | -  | -  | -  |
|           | K3 | ↕          | 10 | 6  | ■  | -  | 3  | 4  | -  | 4  | 6  | -  | 3  | -  | -  | -  | 5  | -  | -  | -  | -  | 8  |
|           | K4 | ↶          | 5  | 3  | -  | ■  | 4  | 5  | 7  | -  | -  | -  | 3  | 8  | -  | -  | 4  | -  | -  | 10 | -  | -  |
|           | K5 | ↕          | -  | 4  | 7  | 6  | ■  | -  | 4  | 5  | -  | 7  | -  | 3  | -  | 9  | -  | -  | 5  | -  | -  | -  |
|           | K6 | ↶          | 8  | -  | 6  | 4  | -  | ■  | 4  | 6  | 7  | -  | -  | 3  | -  | -  | -  | -  | 4  | -  | -  | 10 |
|           | K7 | ↶          | 3  | 4  | -  | 4  | 8  | 6  | ■  | -  | 3  | -  | 7  | -  | -  | -  | -  | 8  | -  | -  | 5  | -  |
|           | K8 | ↶          | 4  | 5  | 8  | -  | 5  | 4  | -  | ■  | 3  | 9  | -  | -  | -  | 11 | -  | -  | -  | -  | 4  | -  |
|           | R1 | ↕          | -  | -  | 2  | -  | -  | 2  | 8  | 6  | ■  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  |
|           | R3 | →          | 8  | 4  | -  | -  | 2  | -  | -  | 2  | -  | ■  | -  | -  | -  | -  | -  | -  | -  | -  | -  | 10 |
|           | R5 | ↓          | -  | 2  | 8  | 5  | -  | -  | 2  | -  | -  | -  | ■  | -  | -  | -  | -  | -  | -  | -  | -  | -  |
|           | R7 | ↶          | 2  | -  | -  | 2  | 6  | 4  | -  | -  | -  | -  | -  | ■  | -  | -  | -  | -  | -  | -  | -  | -  |
|           | F1 | ↔          | 13 | 13 | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | ■  | -  | -  | -  | -  | -  | -  | -  |
|           | F2 | ↔          | -  | -  | -  | -  | 4  | -  | -  | 4  | -  | -  | -  | -  | -  | ■  | -  | -  | -  | -  | -  | -  |
|           | F3 | ↕          | -  | -  | 13 | 13 | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | ■  | -  | -  | -  | -  | -  |
|           | F4 | ↕          | -  | 4  | -  | -  | -  | -  | 5  | -  | -  | -  | -  | -  | -  | -  | -  | ■  | -  | -  | -  | -  |
|           | F5 | ↔          | -  | -  | -  | -  | 9  | 9  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | ■  | -  | -  | -  |
|           | F6 | ↔          | 4  | -  | -  | 4  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | ■  | -  | -  |
| F7        | ↕  | -          | -  | -  | -  | -  | -  | 13 | 13 | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | ■  | -  |    |
| F8        | ↕  | -          | -  | 6  | -  | -  | 5  | -  | -  | -  | 3  | -  | -  | -  | -  | -  | -  | -  | -  | -  | ■  |    |
| min. Frei |    | 5          | 5  | 5  | 5  | 5  | 5  | 5  | 5  | 5  | 5  | 5  | 5  | 5  | 5  | 5  | 5  | 5  | 5  | 5  | 5  | 5  |

|             |                                                 |             |       |       |            |  |
|-------------|-------------------------------------------------|-------------|-------|-------|------------|--|
| Projekt     | Ausbau Osttangente Jena                         |             |       |       |            |  |
| Knotenpunkt | K2: Am Anger/Wiesenstraße/Lutherplatz - K 427 - |             |       |       |            |  |
| Auftragsnr. | P501311                                         | Variante    | PlaFe | Datum | 14.07.2022 |  |
| Bearbeiter  | Cyriax                                          | Abzeichnung |       | Blatt | 5          |  |

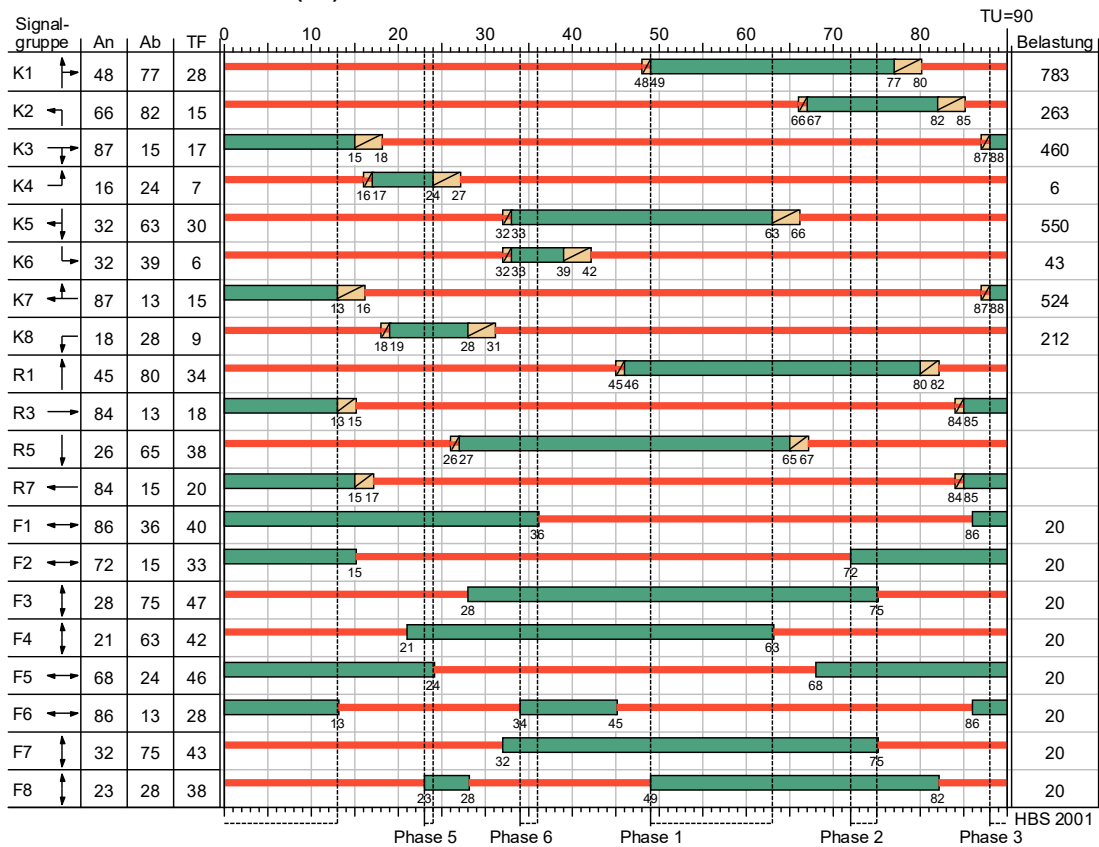


|             |                                                 |             |       |       |            |
|-------------|-------------------------------------------------|-------------|-------|-------|------------|
| Projekt     | Ausbau Osttangente Jena                         |             |       |       |            |
| Knotenpunkt | K2: Am Anger/Wiesenstraße/Lutherplatz - K 427 - |             |       |       |            |
| Auftragsnr. | P501311                                         | Variante    | PlaFe | Datum | 14.07.2022 |
| Bearbeiter  | Cyriax                                          | Abzeichnung |       | Blatt | 6          |

# Signalzeitenplan SZP 2 einwärts (FS)

LISA

## SZP 2 einwärts (FS)

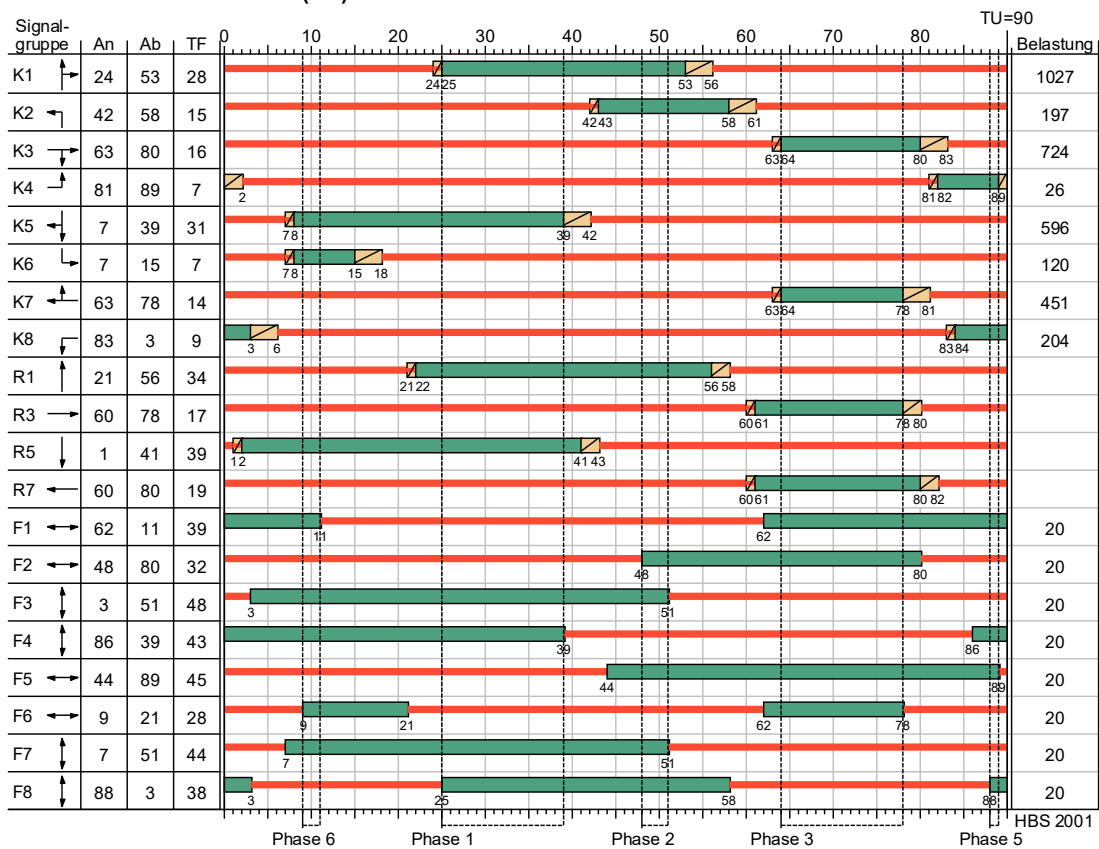


|             |                                                 |             |       |       |            |
|-------------|-------------------------------------------------|-------------|-------|-------|------------|
| Projekt     | Ausbau Osttangente Jena                         |             |       |       |            |
| Knotenpunkt | K2: Am Anger/Wiesenstraße/Lutherplatz - K 427 - |             |       |       |            |
| Auftragsnr. | P501311                                         | Variante    | PlaFe | Datum | 14.07.2022 |
| Bearbeiter  | Cyriax                                          | Abzeichnung |       | Blatt | 7.1        |

# Signalzeitenplan SZP 3 auswärts (NS)

LISA

## SZP 3 auswärts (NS)



|             |                                                 |             |       |       |            |
|-------------|-------------------------------------------------|-------------|-------|-------|------------|
| Projekt     | Ausbau Osttangente Jena                         |             |       |       |            |
| Knotenpunkt | K2: Am Anger/Wiesenstraße/Lutherplatz - K 427 - |             |       |       |            |
| Auftragsnr. | P501311                                         | Variante    | PlaFe | Datum | 14.07.2022 |
| Bearbeiter  | Cyriax                                          | Abzeichnung |       | Blatt | 7.2        |



**MIV - SZP 2 einwärts (FS) (TU=90) - Prognose P1 2030, Vormittag**

| Zuf                     | Fstr.Nr. | Symbol | SGR | t <sub>f</sub><br>[s]                              | t <sub>A</sub><br>[s] | t <sub>S</sub><br>[s] | f <sub>A</sub><br>[-] | q<br>[Kfz/h] | m<br>[Kfz/U] | t <sub>B</sub><br>[s/Kfz] | q <sub>S</sub><br>[Kfz/h] | C<br>[Kfz/h] | n <sub>C</sub><br>[Kfz/U] | N <sub>GE</sub><br>[Kfz] | N <sub>MS</sub><br>[Kfz] | N <sub>MS,95</sub><br>[Kfz] | L <sub>x</sub><br>[m] | LK<br>[m] | N <sub>MS,95&gt;n<sub>K</sub></sub><br>[-] | x     | t <sub>w</sub><br>[s] | QSV<br>[-] | Bemerkung |
|-------------------------|----------|--------|-----|----------------------------------------------------|-----------------------|-----------------------|-----------------------|--------------|--------------|---------------------------|---------------------------|--------------|---------------------------|--------------------------|--------------------------|-----------------------------|-----------------------|-----------|--------------------------------------------|-------|-----------------------|------------|-----------|
| 1                       | 5        |        | K2  | 15                                                 | 16                    | 75                    | 0,178                 | 263          | 6,575        | 1,852                     | 1944                      | 346          | 9                         | 2,243                    | 8,493                    | 13,422                      | 82,867                |           | -                                          | 0,760 | 58,501                | D          |           |
|                         | 4        |        | K1  | 28                                                 | 29                    | 62                    | 0,322                 | 279          | 6,975        | 1,917                     | 1878                      | 605          | 15                        | 0,511                    | 6,064                    | 10,229                      | 65,363                |           | -                                          | 0,461 | 27,333                | B          |           |
|                         | 3        |        | K1  | 28                                                 | 29                    | 62                    | 0,322                 | 279          | 6,975        | 1,917                     | 1878                      | 605          | 15                        | 0,511                    | 6,064                    | 10,229                      | 65,363                |           | -                                          | 0,461 | 27,333                | B          |           |
|                         | 2        |        | K1  | 28                                                 | 29                    | 62                    | 0,322                 | 225          | 5,625        | 1,895                     | 1900                      | 570          | 14                        | 0,383                    | 4,850                    | 8,575                       | 54,177                |           | -                                          | 0,395 | 27,433                | B          |           |
| 2                       | 5        |        | K4  | 7                                                  | 8                     | 83                    | 0,089                 | 6            | 0,150        | 1,800                     | 2000                      | 178          | 4                         | 0,019                    | 0,156                    | 0,824                       | 4,944                 |           | -                                          | 0,034 | 37,844                | C          |           |
|                         | 4        |        | K3  | 17                                                 | 18                    | 73                    | 0,200                 | 97           | 2,425        | 1,967                     | 1830                      | 369          | 9                         | 0,203                    | 2,251                    | 4,788                       | 31,400                |           | -                                          | 0,263 | 32,379                | B          |           |
|                         | 3        |        | K3  | 17                                                 | 18                    | 73                    | 0,200                 | 97           | 2,425        | 1,967                     | 1830                      | 369          | 9                         | 0,203                    | 2,251                    | 4,788                       | 31,400                |           | -                                          | 0,263 | 32,379                | B          |           |
|                         | 2        |        | K3  | 17                                                 | 18                    | 73                    | 0,200                 | 266          | 6,650        | 1,870                     | 1925                      | 385          | 10                        | 1,500                    | 7,673                    | 12,358                      | 77,040                |           | -                                          | 0,691 | 47,444                | C          |           |
| 3                       | 1        |        | K5  | 30                                                 | 31                    | 60                    | 0,344                 | 275          | 6,875        | 1,858                     | 1938                      | 667          | 17                        | 0,413                    | 5,668                    | 9,694                       | 60,083                |           | -                                          | 0,412 | 24,792                | B          |           |
|                         | 2        |        | K5  | 30                                                 | 31                    | 60                    | 0,344                 | 275          | 6,875        | 1,859                     | 1937                      | 666          | 17                        | 0,415                    | 5,672                    | 9,700                       | 60,121                |           | -                                          | 0,413 | 24,815                | B          |           |
|                         | 3        |        | K6  | 6                                                  | 7                     | 84                    | 0,078                 | 43           | 1,075        | 1,863                     | 1932                      | 151          | 4                         | 0,227                    | 1,241                    | 3,125                       | 19,406                |           | -                                          | 0,285 | 44,535                | C          |           |
| 4                       | 2        |        | K7  | 15                                                 | 16                    | 75                    | 0,178                 | 263          | 6,575        | 1,872                     | 1923                      | 343          | 9                         | 2,345                    | 8,604                    | 13,565                      | 85,134                |           | -                                          | 0,767 | 59,825                | D          |           |
|                         | 3        |        | K7  | 15                                                 | 16                    | 75                    | 0,178                 | 261          | 6,525        | 1,872                     | 1923                      | 341          | 9                         | 2,313                    | 8,522                    | 13,459                      | 83,984                |           | -                                          | 0,765 | 59,618                | D          |           |
|                         | 4        |        | K8  | 9                                                  | 10                    | 81                    | 0,111                 | 106          | 2,650        | 2,029                     | 1774                      | 197          | 5                         | 0,704                    | 3,209                    | 6,239                       | 42,188                |           | -                                          | 0,538 | 50,688                | D          |           |
|                         | 5        |        | K8  | 9                                                  | 10                    | 81                    | 0,111                 | 106          | 2,650        | 2,029                     | 1774                      | 197          | 5                         | 0,704                    | 3,209                    | 6,239                       | 42,188                |           | -                                          | 0,538 | 50,688                | D          |           |
| Knotenpunktsummen:      |          |        |     |                                                    |                       |                       |                       | 2841         |              |                           |                           | 5989         |                           |                          |                          |                             |                       |           |                                            |       |                       |            |           |
| Gewichtete Mittelwerte: |          |        |     |                                                    |                       |                       |                       |              |              |                           |                           |              |                           |                          |                          |                             |                       |           |                                            | 0,541 | 39,963                |            |           |
|                         |          |        |     | TU = 90 s T = 3600 s Instationsaritätsfaktor = 1,1 |                       |                       |                       |              |              |                           |                           |              |                           |                          |                          |                             |                       |           |                                            |       |                       |            |           |

|                                     |                                                                                           |         |
|-------------------------------------|-------------------------------------------------------------------------------------------|---------|
| Zuf                                 | Zufahrt                                                                                   | [-]     |
| Fstr.Nr.                            | Fahrstreifen-Nummer                                                                       | [-]     |
| Symbol                              | Fahrstreifen-Symbol                                                                       | [-]     |
| SGR                                 | Signalgruppe                                                                              | [-]     |
| t <sub>f</sub>                      | Freigabezeit                                                                              | [s]     |
| t <sub>A</sub>                      | Abflusszeit                                                                               | [s]     |
| t <sub>S</sub>                      | Sperrzeit                                                                                 | [s]     |
| f <sub>A</sub>                      | Abflusszeitanteil                                                                         | [-]     |
| q                                   | Belastung                                                                                 | [Kfz/h] |
| m                                   | Mittlere Anzahl eintreffender Kfz pro Umlauf                                              | [Kfz/U] |
| t <sub>B</sub>                      | Mittlerer Zeitbedarfswert                                                                 | [s/Kfz] |
| q <sub>S</sub>                      | Sättigungsverkehrsstärke                                                                  | [Kfz/h] |
| C                                   | Kapazität des Fahrstreifens                                                               | [Kfz/h] |
| n <sub>C</sub>                      | Abflusskapazität pro Umlauf                                                               | [Kfz/U] |
| N <sub>GE</sub>                     | Mittlere Rückstaulänge bei Freigabeende                                                   | [Kfz]   |
| N <sub>MS</sub>                     | Mittlere Rückstaulänge bei Maximalstau                                                    | [Kfz]   |
| N <sub>MS,95</sub>                  | Rückstau bei Maximalstau, der mit einer stat. Sicherheit von 95% nicht überschritten wird | [Kfz]   |
| L <sub>x</sub>                      | Erforderliche Stauraumlänge                                                               | [m]     |
| LK                                  | Länge des kurzen Aufstellstreifens                                                        | [m]     |
| N <sub>MS,95&gt;n<sub>K</sub></sub> | Kurzer Aufstellstreifen vorhanden                                                         | [-]     |
| x                                   | Auslastungsgrad                                                                           | [-]     |
| t <sub>w</sub>                      | Mittlere Wartezeit                                                                        | [s]     |
| QSV                                 | Qualitätsstufe des Verkehrsablaufs                                                        | [-]     |

|             |                                                 |             |       |       |            |
|-------------|-------------------------------------------------|-------------|-------|-------|------------|
| Projekt     | Ausbau Osttangente Jena                         |             |       |       |            |
| Knotenpunkt | K2: Am Anger/Wiesenstraße/Lutherplatz - K 427 - |             |       |       |            |
| Auftragsnr. | P501311                                         | Variante    | PlaFe | Datum | 14.07.2022 |
| Bearbeiter  | Cyriax                                          | Abzeichnung |       | Blatt | 8.1        |

**Fußgängerverkehr - SZP 2 einwärts (FS) (TU=90)**

| Zuf | Querung        | SGR    | Typ           | Progressiv | ts 1<br>[s] | tw 1, Insel<br>[s] | ts 2<br>[s] | tw 2, Insel<br>[s] | tw max<br>[s] | QSV | Bemerkung |
|-----|----------------|--------|---------------|------------|-------------|--------------------|-------------|--------------------|---------------|-----|-----------|
| 1   | Furt 1, Furt 2 | F1, F2 | Geteilte Furt | -          | 50          | 0,000              | 57          | 5,721              | 62,721        | D   |           |
| 2   | Furt 1, Furt 2 | F3, F4 | Geteilte Furt | -          | 43          | 0,000              | 48          | 0,000              | 48,000        | C   |           |
| 3   | Furt 1, Furt 2 | F5, F6 | Geteilte Furt | -          | 44          | 8,671              | 21          | 25,765             | 52,671        | C   |           |
| 4   | Furt 1, Furt 2 | F7, F8 | Geteilte Furt | -          | 47          | 3,481              | 31          | 0,000              | 50,481        | C   |           |

|             |                                    |     |
|-------------|------------------------------------|-----|
| Zuf         | Zufahrt                            | [-] |
| Fstr.Nr.    | Fahrstreifen-Nummer                | [-] |
| Symbol      | Fahrstreifen-Symbol                | [-] |
| Progressiv  | Progressiv                         | [-] |
| ts 1        | Sperrzeit 1                        | [s] |
| tw 1, Insel | Wartezeit auf der Verkehrsinsel 1  | [s] |
| ts 2        | Sperrzeit 2                        | [s] |
| tw 2, Insel | Wartezeit auf der Verkehrsinsel 2  | [s] |
| tw max      | Max. Wartezeit                     | [s] |
| QSV         | Qualitätsstufe des Verkehrsablaufs | [-] |

|             |                                                 |             |       |       |            |  |
|-------------|-------------------------------------------------|-------------|-------|-------|------------|--|
| Projekt     | Ausbau Osttangente Jena                         |             |       |       |            |  |
| Knotenpunkt | K2: Am Anger/Wiesenstraße/Lutherplatz - K 427 - |             |       |       |            |  |
| Auftragsnr. | P501311                                         | Variante    | PlaFe | Datum | 14.07.2022 |  |
| Bearbeiter  | Cyriax                                          | Abzeichnung |       | Blatt | 8.1        |  |

**MIV - SZP 3 auswärts (NS) (TU=90) - Prognose P1 2030, Nachmittag**

| Zuf                     | Fstr.Nr. | Symbol | SGR | t <sub>f</sub><br>[s]                                  | t <sub>A</sub><br>[s] | t <sub>S</sub><br>[s] | f <sub>A</sub><br>[-] | q<br>[Kfz/h] | m<br>[Kfz/U] | t <sub>B</sub><br>[s/Kfz] | q <sub>S</sub><br>[Kfz/h] | C<br>[Kfz/h] | n <sub>C</sub><br>[Kfz/U] | N <sub>GE</sub><br>[Kfz] | N <sub>MS</sub><br>[Kfz] | N <sub>MS,95</sub><br>[Kfz] | L <sub>x</sub><br>[m] | LK<br>[m] | N <sub>MS,95&gt;n<sub>K</sub></sub><br>[-] | x     | t <sub>w</sub><br>[s] | QSV<br>[-] | Bemerkung |
|-------------------------|----------|--------|-----|--------------------------------------------------------|-----------------------|-----------------------|-----------------------|--------------|--------------|---------------------------|---------------------------|--------------|---------------------------|--------------------------|--------------------------|-----------------------------|-----------------------|-----------|--------------------------------------------|-------|-----------------------|------------|-----------|
| 1                       | 5        |        | K2  | 15                                                     | 16                    | 75                    | 0,178                 | 197          | 4,925        | 1,854                     | 1942                      | 346          | 9                         | 0,819                    | 5,324                    | 9,226                       | 57,017                |           | -                                          | 0,569 | 42,353                | C          |           |
|                         | 4        |        | K1  | 28                                                     | 29                    | 62                    | 0,322                 | 386          | 9,650        | 1,870                     | 1925                      | 620          | 16                        | 1,069                    | 9,254                    | 14,399                      | 89,763                |           | -                                          | 0,623 | 32,084                | B          |           |
|                         | 3        |        | K1  | 28                                                     | 29                    | 62                    | 0,322                 | 385          | 9,625        | 1,870                     | 1925                      | 620          | 16                        | 1,058                    | 9,215                    | 14,349                      | 89,452                |           | -                                          | 0,621 | 31,999                | B          |           |
|                         | 2        |        | K1  | 28                                                     | 29                    | 62                    | 0,322                 | 256          | 6,400        | 1,906                     | 1889                      | 566          | 14                        | 0,492                    | 5,675                    | 9,704                       | 61,659                |           | -                                          | 0,452 | 28,638                | B          |           |
| 2                       | 5        |        | K4  | 7                                                      | 8                     | 83                    | 0,089                 | 26           | 0,650        | 1,800                     | 2000                      | 178          | 4                         | 0,095                    | 0,695                    | 2,105                       | 12,630                |           | -                                          | 0,146 | 39,759                | C          |           |
|                         | 4        |        | K3  | 16                                                     | 17                    | 74                    | 0,189                 | 242          | 6,050        | 1,856                     | 1940                      | 367          | 9                         | 1,263                    | 6,868                    | 11,300                      | 69,902                |           | -                                          | 0,659 | 46,197                | C          |           |
|                         | 3        |        | K3  | 16                                                     | 17                    | 74                    | 0,189                 | 242          | 6,050        | 1,856                     | 1940                      | 367          | 9                         | 1,263                    | 6,868                    | 11,300                      | 69,902                |           | -                                          | 0,659 | 46,197                | C          |           |
|                         | 2        |        | K3  | 16                                                     | 17                    | 74                    | 0,189                 | 240          | 6,000        | 1,868                     | 1927                      | 364          | 9                         | 1,263                    | 6,821                    | 11,238                      | 69,990                |           | -                                          | 0,659 | 46,299                | C          |           |
| 3                       | 1        |        | K5  | 31                                                     | 32                    | 59                    | 0,356                 | 298          | 7,450        | 1,854                     | 1942                      | 690          | 17                        | 0,451                    | 6,121                    | 10,305                      | 63,685                |           | -                                          | 0,432 | 24,408                | B          |           |
|                         | 2        |        | K5  | 31                                                     | 32                    | 59                    | 0,356                 | 298          | 7,450        | 1,863                     | 1932                      | 690          | 17                        | 0,451                    | 6,121                    | 10,305                      | 63,994                |           | -                                          | 0,432 | 24,408                | B          |           |
|                         | 3        |        | K6  | 7                                                      | 8                     | 83                    | 0,089                 | 120          | 3,000        | 1,845                     | 1951                      | 174          | 4                         | 1,411                    | 4,323                    | 7,839                       | 48,210                |           | -                                          | 0,690 | 68,983                | D          |           |
| 4                       | 2        |        | K7  | 14                                                     | 15                    | 76                    | 0,167                 | 226          | 5,650        | 1,859                     | 1936                      | 322          | 8                         | 1,578                    | 6,909                    | 11,354                      | 70,849                |           | -                                          | 0,702 | 53,014                | D          |           |
|                         | 3        |        | K7  | 14                                                     | 15                    | 76                    | 0,167                 | 225          | 5,625        | 1,885                     | 1910                      | 320          | 8                         | 1,586                    | 6,895                    | 11,336                      | 71,213                |           | -                                          | 0,703 | 53,221                | D          |           |
|                         | 4        |        | K8  | 9                                                      | 10                    | 81                    | 0,111                 | 102          | 2,550        | 2,012                     | 1789                      | 200          | 5                         | 0,624                    | 3,027                    | 5,969                       | 40,040                |           | -                                          | 0,510 | 48,931                | C          |           |
|                         | 5        |        | K8  | 9                                                      | 10                    | 81                    | 0,111                 | 102          | 2,550        | 2,012                     | 1789                      | 200          | 5                         | 0,624                    | 3,027                    | 5,969                       | 40,040                |           | -                                          | 0,510 | 48,931                | C          |           |
| Knotenpunktssummen:     |          |        |     |                                                        |                       |                       |                       | 3345         |              |                           |                           | 6024         |                           |                          |                          |                             |                       |           |                                            |       |                       |            |           |
| Gewichtete Mittelwerte: |          |        |     |                                                        |                       |                       |                       |              |              |                           |                           |              |                           |                          |                          |                             |                       |           |                                            | 0,583 | 39,356                |            |           |
|                         |          |        |     | TU = 90 s   T = 3600 s   Instationsaritätsfaktor = 1,1 |                       |                       |                       |              |              |                           |                           |              |                           |                          |                          |                             |                       |           |                                            |       |                       |            |           |

|                                     |                                                                                           |         |
|-------------------------------------|-------------------------------------------------------------------------------------------|---------|
| Zuf                                 | Zufahrt                                                                                   | [-]     |
| Fstr.Nr.                            | Fahrstreifen-Nummer                                                                       | [-]     |
| Symbol                              | Fahrstreifen-Symbol                                                                       | [-]     |
| SGR                                 | Signalgruppe                                                                              | [-]     |
| t <sub>f</sub>                      | Freigabezeit                                                                              | [s]     |
| t <sub>A</sub>                      | Abflusszeit                                                                               | [s]     |
| t <sub>S</sub>                      | Sperrzeit                                                                                 | [s]     |
| f <sub>A</sub>                      | Abflusszeitanteil                                                                         | [-]     |
| q                                   | Belastung                                                                                 | [Kfz/h] |
| m                                   | Mittlere Anzahl eintreffender Kfz pro Umlauf                                              | [Kfz/U] |
| t <sub>B</sub>                      | Mittlerer Zeitbedarfswert                                                                 | [s/Kfz] |
| q <sub>S</sub>                      | Sättigungsverkehrsstärke                                                                  | [Kfz/h] |
| C                                   | Kapazität des Fahrstreifens                                                               | [Kfz/h] |
| n <sub>C</sub>                      | Abflusskapazität pro Umlauf                                                               | [Kfz/U] |
| N <sub>GE</sub>                     | Mittlere Rückstaulänge bei Freigabeende                                                   | [Kfz]   |
| N <sub>MS</sub>                     | Mittlere Rückstaulänge bei Maximalstau                                                    | [Kfz]   |
| N <sub>MS,95</sub>                  | Rückstau bei Maximalstau, der mit einer stat. Sicherheit von 95% nicht überschritten wird | [Kfz]   |
| L <sub>x</sub>                      | Erforderliche Stauraumlänge                                                               | [m]     |
| LK                                  | Länge des kurzen Aufstellstreifens                                                        | [m]     |
| N <sub>MS,95&gt;n<sub>K</sub></sub> | Kurzer Aufstellstreifen vorhanden                                                         | [-]     |
| x                                   | Auslastungsgrad                                                                           | [-]     |
| t <sub>w</sub>                      | Mittlere Wartezeit                                                                        | [s]     |
| QSV                                 | Qualitätsstufe des Verkehrsablaufs                                                        | [-]     |

|             |                                                 |             |       |       |            |
|-------------|-------------------------------------------------|-------------|-------|-------|------------|
| Projekt     | Ausbau Osttangente Jena                         |             |       |       |            |
| Knotenpunkt | K2: Am Anger/Wiesenstraße/Lutherplatz - K 427 - |             |       |       |            |
| Auftragsnr. | P501311                                         | Variante    | PlaFe | Datum | 14.07.2022 |
| Bearbeiter  | Cyriax                                          | Abzeichnung |       | Blatt | 8.2        |

**Fußgängerverkehr - SZP 3 auswärts (NS) (TU=90)**

| Zuf | Querung        | SGR    | Typ           | Progressiv | ts 1<br>[s] | tw 1, Insel<br>[s] | ts 2<br>[s] | tw 2, Insel<br>[s] | tw max<br>[s] | QSV | Bemerkung |
|-----|----------------|--------|---------------|------------|-------------|--------------------|-------------|--------------------|---------------|-----|-----------|
| 1   | Furt 1, Furt 2 | F1, F2 | Geteilte Furt | -          | 51          | 0,000              | 58          | 5,721              | 63,721        | D   |           |
| 2   | Furt 1, Furt 2 | F3, F4 | Geteilte Furt | -          | 42          | 0,000              | 47          | 0,000              | 47,000        | C   |           |
| 3   | Furt 1, Furt 2 | F5, F6 | Geteilte Furt | -          | 45          | 8,671              | 21          | 26,765             | 53,671        | C   |           |
| 4   | Furt 1, Furt 2 | F7, F8 | Geteilte Furt | -          | 46          | 4,481              | 22          | 0,000              | 50,481        | C   |           |

|             |                                    |     |
|-------------|------------------------------------|-----|
| Zuf         | Zufahrt                            | [-] |
| Fstr.Nr.    | Fahrstreifen-Nummer                | [-] |
| Symbol      | Fahrstreifen-Symbol                | [-] |
| Progressiv  | Progressiv                         | [-] |
| ts 1        | Sperrzeit 1                        | [s] |
| tw 1, Insel | Wartezeit auf der Verkehrsinsel 1  | [s] |
| ts 2        | Sperrzeit 2                        | [s] |
| tw 2, Insel | Wartezeit auf der Verkehrsinsel 2  | [s] |
| tw max      | Max. Wartezeit                     | [s] |
| QSV         | Qualitätsstufe des Verkehrsablaufs | [-] |

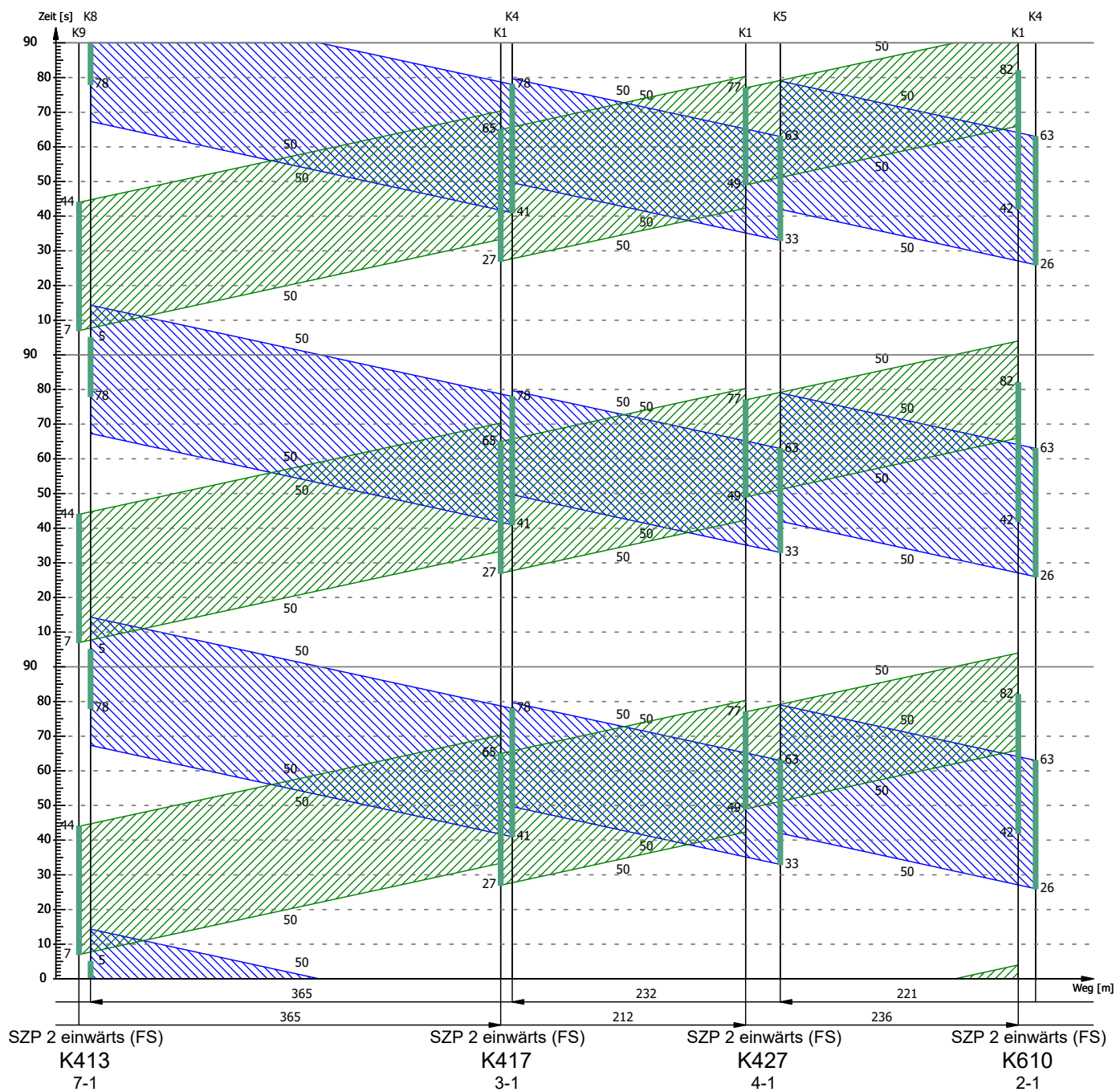
|             |                                                 |             |       |       |            |  |
|-------------|-------------------------------------------------|-------------|-------|-------|------------|--|
| Projekt     | Ausbau Osttangente Jena                         |             |       |       |            |  |
| Knotenpunkt | K2: Am Anger/Wiesenstraße/Lutherplatz - K 427 - |             |       |       |            |  |
| Auftragsnr. | P501311                                         | Variante    | PlaFe | Datum | 14.07.2022 |  |
| Bearbeiter  | Cyriax                                          | Abzeichnung |       | Blatt | 8.2        |  |



# Zeit-Weg-Diagramm SZP2

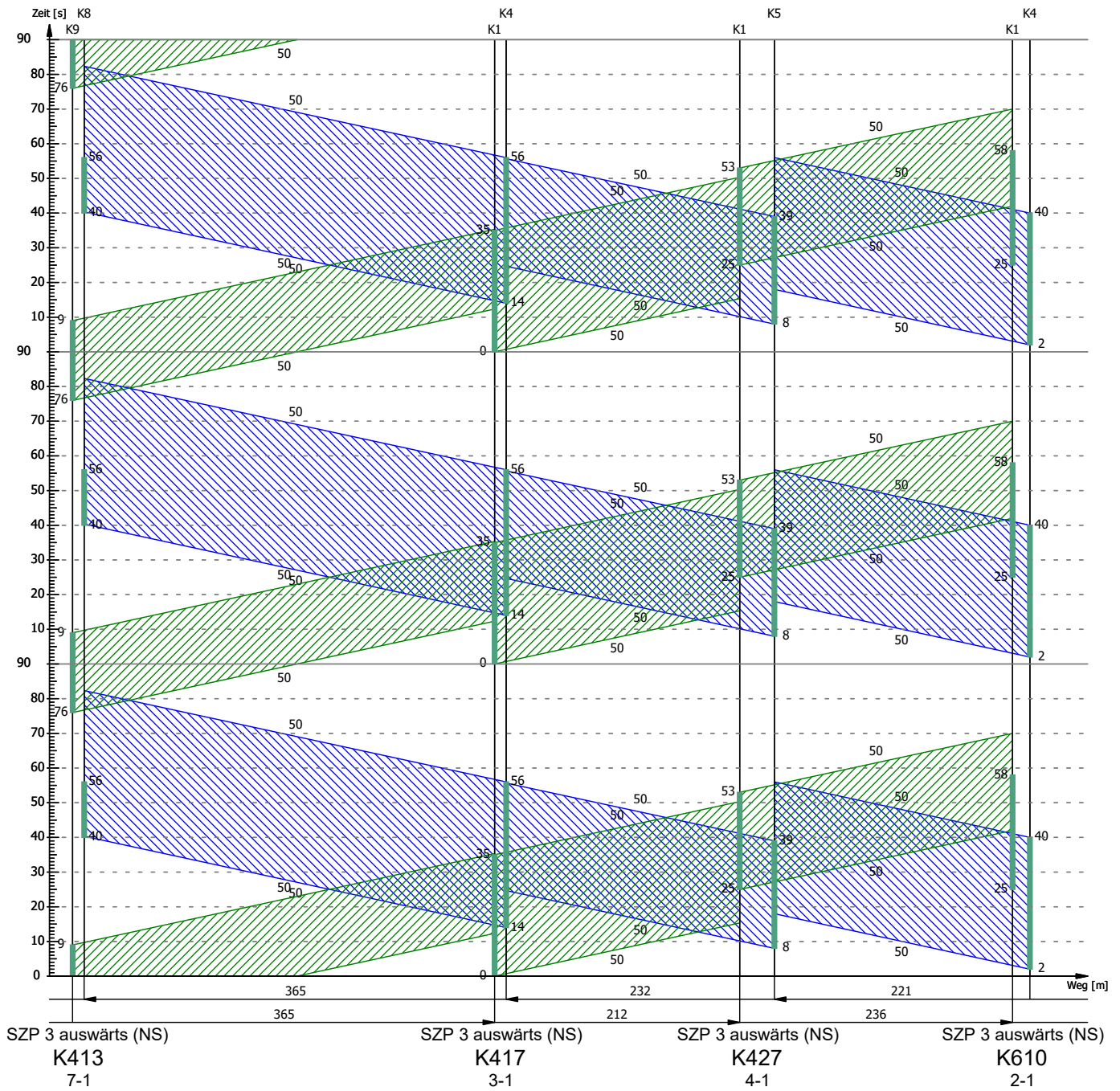
**BERNARD**  
GRUPPE

LISA



|               |                                |        |             |       |            |       |     |
|---------------|--------------------------------|--------|-------------|-------|------------|-------|-----|
| Koordinierung | Osttangente - Osttangente Jena |        |             |       |            |       |     |
| Variante      | 1-1                            |        |             |       |            |       |     |
| Bearbeiter    | Cyriax                         | Status | Bearbeitung | Datum | 15.07.2022 | Blatt | 9.1 |

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|               |                                |        |             |       |            |       |     |
|---------------|--------------------------------|--------|-------------|-------|------------|-------|-----|
| Koordinierung | Osttangente - Osttangente Jena |        |             |       |            |       |     |
| Variante      | 1-1                            |        |             |       |            |       |     |
| Bearbeiter    | Cyriax                         | Status | Bearbeitung | Datum | 15.07.2022 | Blatt | 9.2 |