

Program sygnalizacji

Ul. Rybnicka – rys. nr 2, 3

Para strumieni (1,2)

d = 180 m – długość odcinka pasa wyłączzonego z ruchu

$$t_m^{\min}(1,2) = t_z + t_e(1,2) - t_d(1,2)$$

$$t_e(1,2) = \frac{S_e(1,2) + l_p}{v_e(1)}$$

$$t_d(1,2) = \frac{S_d(1,2)}{v_d(2)} + 1$$

$$v_d = 40[km/h] = 11,11 [m/s]$$

$$v_e = 40[km/h] = 11,11 [m/s]$$

$$S_e = (5 + 180) [m]$$

$$l_p = 9 [m]$$

$$t_z = 3 [s]$$

$$t_e(1,2) = \frac{5 + 180 + 9}{11,11} = \frac{194}{11,11} [s]$$

$$t_d = 0 [s]$$

$$t_m^{\min}(1,2) = 3 + 18 = 21 [s]$$

Para strumieni (2,1)

d = 180 m – długość odcinka pasa wyłączzonego z ruchu

$$t_m^{\min}(2,1) = t_z + t_e(2,1) - t_d(2,1)$$

$$t_e(2,1) = \frac{S_e(2,1) + l_p}{v_e(2)}$$

$$t_d(2,1) = \frac{S_d(2,1)}{v_d(1)} + 1$$

$$v_d = 40[km/h] = 11,11 [m/s]$$

$$v_e = 40[km/h] = 11,11 [m/s]$$

$$S_e = (15 + 180) [m]$$

$$l_p = 9 [m]$$

$$t_z = 3 [s]$$

$$t_e(2,1) = \frac{5 + 180 + 9}{11,11} = \frac{194}{11,11} [s]$$

$$t_d = 0 \text{ [s]}$$

$$t_m^{\min}(2,1) = 3 + 18 = 21 \text{ [s]}$$

Program sygnalizacji świetlnej

$$t_m^{\min}(1,2) = 21 \text{ [s]}$$

$$t_m^{\min}(2,1) = 21 \text{ [s]}$$

$$G = 30 \text{ [s]}$$

ul. Rybnicka – rys. nr 4, 5, 6, 7

Para strumieni (1,2)

d = 400 m – długość odcinka pasa wyłączzonego z ruchu

$$t_m^{\min}(1,2) = t_z + t_e(1,2) - t_d(1,2)$$

$$t_e(1,2) = \frac{S_e(1,2) + l_p}{v_e(1)}$$

$$t_d(1,2) = \frac{S_d(1,2)}{v_d(2)} + 1$$

$$v_d = 40[km/h] = 11,11 \text{ [m/s]}$$

$$v_e = 40[km/h] = 11,11 \text{ [m/s]}$$

$$S_e = (5 + 400) \text{ [m]}$$

$$l_p = 9 \text{ [m]}$$

$$t_z = 3 \text{ [s]}$$

$$t_e(1,2) = \frac{5 + 400 + 9}{11,11} = \frac{414}{11,11} \text{ [s]}$$

$$t_d = 0 \text{ [s]}$$

$$t_m^{\min}(1,2) = 3 + 38 = 41 \text{ [s]}$$

Para strumieni (2,1)

d = 400 m – długość odcinka pasa wyłączzonego z ruchu

$$t_m^{\min}(2,1) = t_z + t_e(2,1) - t_d(2,1)$$

$$t_e(2,1) = \frac{S_e(2,1) + l_p}{v_e(2)}$$

$$t_d(2,1) = \frac{S_d(2,1)}{v_d(1)} + 1$$

$$v_d = 40[km/h] = 11,11 [m/s]$$

$$v_e = 40[km/h] = 11,11 [m/s]$$

$$S_e = (15 + 400) [m]$$

$$l_p = 9 [m]$$

$$t_z = 3 [s]$$

$$t_e(2,1) = \frac{5 + 400 + 9}{11,11} = \frac{414}{11,11} [s]$$

$$t_d = 0 [s]$$

$$t_m^{\min}(2,1) = 3 + 38 = 41 [s]$$

Program sygnalizacji świetlnej

$$t_m^{\min}(1,2) = 41 [s]$$

$$t_m^{\min}(2,1) = 41 [s]$$

$$G = 30 [s]$$