BRIDGE CODE	R.R BRIDGE NO	FED. ROAD DIST NO	STATE	PROJ NO	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
	199	8	N D	MG-1-010 (05) 917		16	

① Δ = 68° 05' 25" D = 10° 00' 00" L = 680.90' R = 573.69' T = 387.62'

④ Δ = 74° 47' D = 11° 44' T = 373.89' L = 637.36' R = 489.17'

⑤ D = 3° 00' 00" 2 - 210' Spirals Ts = 47° 52' Δc = 41° 34' Ts = 953.17' Lc = 1385.55' Es = 180.74'

③ Δ = 6° 21' 35" D = 8° 40' R = 661.74' T = 36.76' L = 73.38'

② Δ = 63° 14' Lt. D = 7° 00' T = 504.19 L = 903.33' R = 819.02

⑦ Δ = 12° 53' 08" D = 5° 00' 00" T = 129.44' L = 257.71' R = 1146.28'

⑧ Δ = 9° 49' 25" D = 3° 00' 00" T = 164.15' L = 327.45' R = 1910.08'

⑨ Δ = 38° 02' 35" D = 2° 00' 00" T = 987.68' L = 1902.16' R = 2864.93'

P.C.C. 8+75.86

8+69.86 West Leg - Future "9" T.O. = 8+78.62 East Leg

P.C. 8+02.48

P.T. 7+87.67

P.T. 7+79.69

45+99.23 Off. Loc. = 7+69.10 East Leg

End Shoofly 8 STA 16+44.94 Shoofly 8 = P.O.C. 6+79.26

P.T. 15+44.98

℄ West Leg

℄ Future East Leg

℄ Shoofly B

Off. Loc. ℄

S.T. 79+66.05 Back = Sta. 79+13.14 Ahead

P.F. Sta. 0-372.41

H.B. 80+06.75 Main Line = Sta. 0-456.91 West Leg

H.B. 80+26.5 84.2' Lead

80.32.50 - 52.25' - 84.50Ld

5° 12' 18"

MATCH LINE "A"

82+48.00 P.T. Orig. Loc.

End Shoofly C2 Sta. 3+75.27 Shoofly C2 = P.T. 80+71.73 Switching Lead = (14' Rt) Sta. 80+68.61 M.L.

℄ Switching Lead

℄ B.N. Railway Main Line

14.00'

End Shoofly A P.T. 80+19.17 Shoofly A = P.O.T. 79+71.75 Mainline

Sta. 0+00.00 Proposed U.S. 10 = P.O.T. 39+37.91 Off. Loc. ℄

90°

40

P.C. 0+89.91

P.C. 0+98.78

P.C. 10+74.00 P.F. Sta. 10+52.25

P.T. 75+72.54 Shoofly A = 9+60.40 Shoofly B

C.S. 72+91.83

℄ B.N. Railway Main Line

70

℄ Shoofly A

Begin Shoofly C1 = 0-00.00 Shoofly C1 = EE-59.64 Switching Lead

℄ Switching Lead D = 2° 00' 00"

65

MATCH LINE "B"

Sta. 0+00.00 West Leg = Sta. 76+06.05 Main Line

P.O.C. 2+56.12 ℄ U.S. # 10 = P.O.T. 0+28.13 ℄ West Leg

℄ Shoofly C

S.T. 73+81.83

D = 6° 30' 00"

℄ Shoofly C2

75

20'

PT. 0-34.43

C.S. 77+56.05

39.60' - 52.25' - 91.85Ld

P.C. 3+89.51

3+60'

End Shoofly C1 P.T. 6+74.38 Shoofly C1 = P.O.T. 75+66.41 Shoofly A

P.C. 78+19.17

P.C. 0+292.14

P.T. 35+51.5

5° 12' 18"

℄ Shoofly A

℄ Shoofly C2

MATCH LINE "A"

P.O.T. 77+39.70 Shoofly A = P.C. 0+00.00 Shoofly C2 Begin Shoofly C2

P.C. 37+53.1

P.C.C. 77+44.28

P.T. 39+39.0

P.T. 1+80.00

80

80

P.O.C. 3+53.04 ℄ U.S. # 10 = P.O.C. 74+93.92 Sw. Ld

P.O.C. 3+13.16 ℄ U.S. # 10 = P.O.T. 75+53.19 Shoofly "A"

℄ Proposed U.S. "10"

45

℄ Old U.S. "10"

P.O.C. 2+77.75 ℄ U.S. # 10 = P.O.C. 75+70.49 Main Line

P.I. "2" Sta. 5+94.10

40

P.I. "6" (Iron Pipe) Sta. 38+49.54

P.T. 9+93.24 Proposed U.S. "10" Sta. 46+29.49 Old U.S. "10"

15

P.I. "5"

6° 21' 35"

P.I. "4"

P.I. "3"

S.C. 70+50.50

C.S. 69+50.50 P.O.C. 69+50.50 Main Line

Shoofly A = Main Line

P.C. 1+50.31

Sta. 0+00 Future East Leg = Sta. 65+80.57 Main Line

20'

65

MATCH LINE "B"

S.C. 63+70.50

T.S. 61+60.50

Future H.B. 60+45 Lead 84.5'

1:11

60

#11 Spring Sw. Sta. 59+13.5 Lead 96.5'

58+42.12 P.C. Orig. Loc.

MATCH LINE "B"

℄ B.N. Railway Main Line

℄ Switching Lead

LEGEND

- Phase I
- Phase II
- Existing
- Future Proposed
- Shoofly Curve Data
- Existing Curve Data & Proposed U.S. 10

Ⓐ D = 4° 30' 00" Δ = 9° 00' 00" T = 100.23' L = 200.00' R = 1273.57'

Ⓑ Ts = 38° 52' 00" Ts = 725.88' Ts2 = 539.69' D1 = 3° 00' 00" D2 = 5° 00' 00" θ1 = 3° 09' 00" θ2 = 2° 15' 00" T = 292.28', Ts = 121.16' Lc1 = 580.00', Lc2 = 241.34' R = 1910.08', R2 = 1146.28' Δ1 = 1° 30' 00" Δ2 = 2° 30' 00" θ = 17° 24' 00" θ' = 12° 04' 00"

Ⓒ Δ = 9° 30' 59" D = 5° 30' 00" T = 143.76' L = 284.87' R = 881.95'

Ⓓ Δ = 54° 09' 44" D = 11° 30' 00" T = 255.18' L = 470.98' R = 499.06'

Ⓔ Δ = 9° 00' 00" D = 5° 00' 00" T = 90.21' L = 180.00' R = 1146.28'

Ⓕ

Ⓖ Δ = 35° 19' Lt. D = 19° 00' T = 96.44' L = 185.88' R = 302.94'

GEOMETRIC LAYOUT
Scale 1" = 50'

90' SPIRAL (WEST)

X = 1.5
Y = 89.99
P = 0.23
L.T. = 90.00'
S.T. = 30.01'
q = 44.99'
Sc = 2° 15' 00"

911.55'

P.I. "5" (3° M.L. Curve)

90° Spiral

47° 52'

220.23'

100' Spiral

Tsz

Ts

Ds

θz

θ'

Δ2

D1

θ

Begin Shoofly "A"

T1

Ts1

Rz

R1

Δ1

θ

210' Spiral

T.S. 61+60.50 Main Line

CURVE B DATA
SHOOFLY A
Scale 1" = 300'-0"

100' SPIRAL (MIDDLE)

X = 3.20'
Y = 99.93'
P = 0.15'
L.T. = 54.20'
S.T. = 45.86'
Sc = 1° 00' 00"

210' SPIRAL (EAST)

X = 3.85'
Y = 209.94'
P = 0.96'
L.T. = 140.02'
S.T. = 70.02'
q = 104.99'
Sc = 3° 09' 00"

QUANTITIES

GEOMETRIC LAYOUT

BURLINGTON NORTHERN, INC.
RAILWAY UNDERPASSES

U.S. HIGHWAY NO. 10
MORTON COUNTY

10-916.95-3