

County Road Improvements Plan

Project timeline as determined by the County Board

Dated **April 11, 2007**

The department recommends the following improvements in the order listed

Improvements based on ADT (Ranked by ADT)

1) County Road 107 / 103 (improvement) 2.5 miles

- The improvement consists of an upgrade of CR 107 from CSAH 25 to CR 103 2.5 miles and CR 103 from CR 107 .5 mile East to TH 169. To upgrade from a gravel surface to bituminous surface. County Road 107 has an **ADT of 385** cars per day, according to the 2002 count. Proposed improvements are: Spot sub-grade corrections and minor grade widening, placement of an 8" of aggregate base, and placement of two lifts of bituminous, one 2" base lift and one 1-1/2 " wear. The section would consist of 2 – 12' bituminous surfaced lanes, together with 4.0' wide aggregate shoulders

Approximately 7200 tons of bituminous @ \$40.00 per ton	\$288,000
Approximately 13,200 CY of gravel base@ \$13 CY	\$171,600
Approximately 1900 CY of gravel shouldering@ \$13 CY	\$24,700
Spot sub-grade corrections and widening Lump Sum	\$270,000

Price Per Mile to construct	\$301,720
Total Estimated Cost	\$754,300

2) County Road 106 (improvement) 2.5 miles

- The improvement consists of an upgrade of CR 106 from a gravel surface to bituminous surface. County Road 106 has an **ADT of 360** cars per day, according to the 2002 count. Proposed improvements are: Shoulder widening and ditching, placement of an 8" of aggregate base, and placement of two lifts of bituminous, one 2" base lift and one 1-1/2 " wear. The section would consist of 2 – 12' bituminous surfaced lanes, together with 4.0' wide aggregate shoulders

- Approximately 7750 tons of bituminous @ \$40.00 per ton \$310,000
- Approximately 13,200 CY of gravel base@ \$13 CY \$171,600
- Approximately 2200 CY of gravel shouldering@ \$13 CY \$28,600
- Shoulder Widening and Ditching Lump Sum \$250,000

- Price Per Mile to construct **\$304,080**

- Total Estimated Cost **\$760,200**

3) County Road 101 (improvement) 4.0 miles

- The improvement consists of an upgrade of CR 101 from a gravel surface to bituminous surface. County Road 101 has an **ADT of 250** cars per day, according to the 2002 count. Proposed improvements are: Shoulder widening and ditching, placement of an 8" of aggregate base, and placement of two lifts of bituminous, one 2" base lift and one 1-1/2" wear. The section would consist of 2 – 12' bituminous surfaced lanes, together with 4.0' wide aggregate shoulders

- Approximately 12,000 tons of bituminous @ \$40.00 per ton \$480,000
- Approximately 22,000 CY of gravel base@ \$13 CY \$286,000
- Approximately 3000 CY of gravel shouldering@ \$13 CY \$39,000
- Shoulder Widening and Ditching Lump Sum \$600,000

- Price Per Mile to construct **\$351,250**

- Total Estimated Cost **\$1,405,000**

4) County Road 137 (improvement) 2.0 miles (north 2 miles)

The improvement consists of an upgrade of CR 137 from a gravel surface to bituminous surface. With the assumption that the southern 1 mile segment has been completed by 2007. The improvement consists of a re-grade of the roadway to conform to AASHTO standards with the placement of an 8" of aggregate base and of two lifts of bituminous, one 2" base and one 1-1/2" wear, with a total top surface width of 24.0', and 4.0' wide gravel shoulders. County Road 137 has an **ADT of 190** cars per day, according to the 2002 count.

- Approximately 6000 tons of bituminous @ \$40.00 per ton \$240,000
- Approximately 13,000 CY of gravel base@ \$13 CY \$169,000
- Approximately 1700 CY of gravel shouldering@ \$13 CY \$22,100
- Grading Lump Sum \$650,000

- Price Per Mile to construct **\$540,550**

- Total Estimated Cost **\$1,081,100**

OTHER POSSIBLE PROJECT FOR CONSIDERATION

Possible Improvements based on (Greater than normal truck usage)

- County Road 108 1.0 miles
 - The improvement consists of an upgrade of CR 108 from a gravel surface to bituminous surface. County Road 108 has an **ADT of 115** cars per day, according to the 2002 count.

The high truck usage is from the gravel pit located 3/4 mile west of TH 169. Proposed improvements are: Shoulder widening and ditching, placement of an 8" of aggregate base, and placement of two lifts of bituminous, one 2" base lift and one 1-1/2 " wear. The section would consist of 2 – 12' bituminous surfaced lanes, together with 4.0' wide aggregate shoulders

- Approximately 3100 tons of bituminous @ \$40.00 per ton \$124,000
- Approximately 5,280 CY of gravel base@ \$13 CY \$68,640
- Approximately 880 CY of gravel shouldering@ \$13 CY \$11,440
- Shoulder Widening and Ditching Lump Sum \$100,000

- Price Per Mile to construct **\$304,080**
- Total Estimated Cost **\$304,080**

- County Road 132 3.0 miles

- The improvement consists of an upgrade of CR 132 from a gravel surface to bituminous surface. County Road 132 has an **ADT of 135** cars per day, according to the 2002 count. The high truck usage is from the saw mill located near the north County line. Proposed improvements are: Full re-grading with fabric areas, placement of an 8" of aggregate base, and placement of two lifts of bituminous, one 2" base lift and one 1-1/2 " wear. The section would consist of 2 – 12' bituminous surfaced lanes, together with 4.0' wide aggregate shoulders

- Approximately 9,300 tons of bituminous @ \$40.00 per ton \$372,000
- Approximately 15,840 CY of gravel base@ \$13 CY \$205,920
- Approximately 2640 CY of gravel shouldering@ \$13 CY \$34,320
- Full Re-Grading Lump Sum \$600,000

- Price Per Mile to construct **\$404,080**
- Total Estimated Cost **\$1,212,240**

- County Road 149 1.0 miles

- The improvement consists of an upgrade of CR 149 from a gravel surface to bituminous surface. County Road 149 has an **ADT of 120** cars per day, according to the 2002 count. The high truck usage is from the gravel pit located 1/4 mile west of the north end of County Road 149. Proposed improvements are: Shoulder widening and ditching, placement of an 8" of aggregate base, and placement of two lifts of bituminous, one 2" base lift and one 1-1/2 " wear. The section would consist of 2 – 12' bituminous surfaced lanes, together with 4.0' wide aggregate shoulders

- Approximately 3100 tons of bituminous @ \$40.00 per ton \$124,000
- Approximately 5,280 CY of gravel base@ \$13 CY \$68,640
- Approximately 880 CY of gravel shouldering@ \$13 CY \$11,440
- Shoulder Widening and Ditching Lump Sum \$100,000

- Price Per Mile to construct **\$304,080**
- Total Estimated Cost **\$304,080**

- County Road 151 1.0 miles

- The improvement consists of an upgrade of CR 151 from a gravel surface to bituminous surface. County Road 151 has an **ADT of 70** cars per day, according to the 2002 count.

The high truck usage is from the gravel pit located ½ mile north of CSAH 11. Proposed improvements are: Shoulder widening and ditching, placement of an 6" of aggregate base, and placement of two lifts of bituminous, one 2" base lift and one 1-1/2 " wear. The section would consist of 2 – 12' bituminous surfaced lanes, together with 4.0' wide aggregate shoulders

- Approximately 3100 tons of bituminous @ \$40.00 per ton \$124,000
- Approximately 4000 CY of gravel base@ \$13 CY \$52,000
- Approximately 880 CY of gravel shouldering@ \$13 CY \$11,440
- Shoulder Widening and Ditching Lump Sum \$100,000

- Price Per Mile to construct **\$287,440**

- Total Estimated Cost **\$287,440**

Prospective Improvements based public complaint

- County Road 112 2.0 miles
 - The improvement consists of an upgrade of CR 112 from a gravel surface to bituminous surface. County Road 112 has an **ADT of 100** cars per day, according to the 2002 count. There have been dust complaints for the segment 1 mile south of CSAH 9. Proposed improvements are: Shoulder widening, ditching and vertical curve correction, placement of an 8" of aggregate base, and placement of two lifts of bituminous, one 2" base lift and one 1-1/2 " wear. The section would consist of 2 – 12' bituminous surfaced lanes, together with 4.0' wide aggregate shoulders

 - Approximately 5700 tons of bituminous @ \$40.00 per ton \$228,000
 - Approximately 5,280 CY of gravel base@ \$13 CY \$143,000
 - Approximately 1500 CY of gravel shouldering@ \$13 CY \$19,500
 - Shoulder Widening and Ditching Vert. curve correction Lump Sum \$300,000

 - Price Per Mile to construct **\$345,250**

 - Total Estimated Cost **\$690,500**

- County Road 131 2.0 miles
 - The improvement consists of an upgrade of CR 131 from a gravel surface to bituminous surface. County Road 131 has an **ADT of 90** cars per day, according to the 2002 count. There have been dust complaints for the segment 1 mile west of TH 47. Proposed improvements are: Shoulder widening and ditching, placement of an 8" of aggregate base, and placement of two lifts of bituminous, one 2" base lift and one 1-1/2 " wear. The section would consist of 2 – 12' bituminous surfaced lanes, together with 4.0' wide aggregate shoulders

 - Approximately 6200 tons of bituminous @ \$40.00 per ton \$248,000
 - Approximately 10,560 CY of gravel base@ \$13 CY \$137,280
 - Approximately 1760 CY of gravel shouldering@ \$13 CY \$22,880
 - Shoulder Widening and Ditching Lump Sum \$200,000

 - Price Per Mile to construct **\$304,080**

 - Total Estimated Cost **\$608,160**

- County Road 140 1.0 miles

- The improvement consists of an upgrade of CR 140 from a gravel surface to bituminous surface. County Road 140 has an **ADT of 50** cars per day, according to the 2002 count. There has been an increase in development of new homes on the segment from CSAH 18 1 mile west. Proposed improvements are: Shoulder widening, ditching and vertical curve correction, placement of an 8" of aggregate base, and placement of two lifts of bituminous, one 2" base lift and one 1-1/2 " wear. The section would consist of 2 – 12' bituminous surfaced lanes, together with 4.0' wide aggregate shoulders
- Approximately 3100 tons of bituminous @ \$40.00 per ton \$124,000
 Approximately 5,280 CY of gravel base@ \$13 CY \$68,640
 Approximately 880 CY of gravel shouldering@ \$13 CY \$11,440
 Shoulder Widening and Ditching Vert. curve correction Lump Sum \$150,000
- Price Per Mile to construct **\$354,080**
- Total Estimated Cost **\$354,080**
- County Road 144 1.5 miles
 - The improvement consists of an upgrade of CR 144 from a gravel surface to bituminous surface. County Road 144 has an **ADT of 140** cars per day, according to the 2002 count. Proposed improvements are: Shoulder widening and ditching, placement of an 6" of aggregate base, and placement of two lifts of bituminous, one 2" base lift and one 1-1/2 " wear. The section would consist of 2 – 12' bituminous surfaced lanes, together with 4.0' wide aggregate shoulders
 - Approximately 4700 tons of bituminous @ \$40.00 per ton \$188,000
 Approximately 6000 CY of gravel base@ \$13 CY \$78,000
 Approximately 1300 CY of gravel shouldering@ \$13 CY \$16,900
 Shoulder Widening and Ditching Lump Sum \$150,000
 - Price Per Mile to construct **\$288,600**
 - Total Estimated Cost **\$432,900**

County Road 107 / 103

- Total Estimated Cost **\$754,300**

County Road 106

- Total Estimated Cost **\$760,200**

County Road 101

- Total Estimated Cost **\$1,405,000**

County Road 137

- Total Estimated Cost **\$1,081,100**

Subtotal ADT PROJECTS \$4,000,600

County Road 108	
• Total Estimated Cost	\$304,080
County Road 132	
• Total Estimated Cost	\$1,212,240
County Road 149	
• Total Estimated Cost	\$304,080
County Road 151	
• Total Estimated Cost	\$287,440
County Road 112	
• Total Estimated Cost	\$690,500
County Road 131	
• Total Estimated Cost	\$608,160
County Road 140	
• Total Estimated Cost	\$354,080
County Road 144	
• Total Estimated Cost	\$432,900

Subtotal OTHER POSSIBLE PROJECTS \$4,193,480

GRAND TOTAL \$ 8,194,080