OPERA MINNESOTA LOCAL ROAD RESEARCH BOARD

TOWN OF FRANKLIN, PROJECT NO. 2019
OTTASEAL SURFACE OVER GRANITE BASE

OCTOBER. 2019

TOWN OF FRANKLIN WRIGHT COUNTY

2018

OTTASEAL PROJECT

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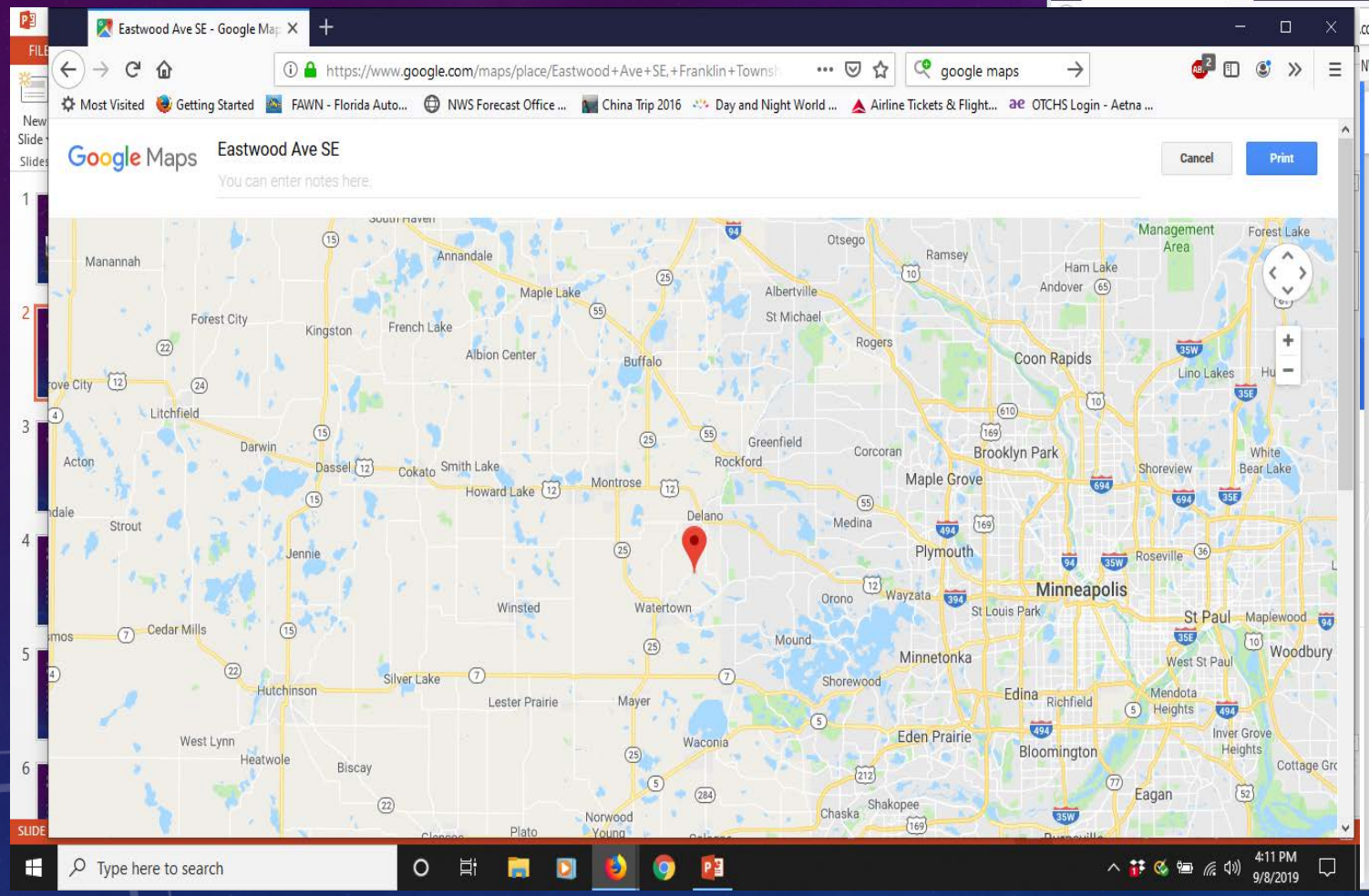
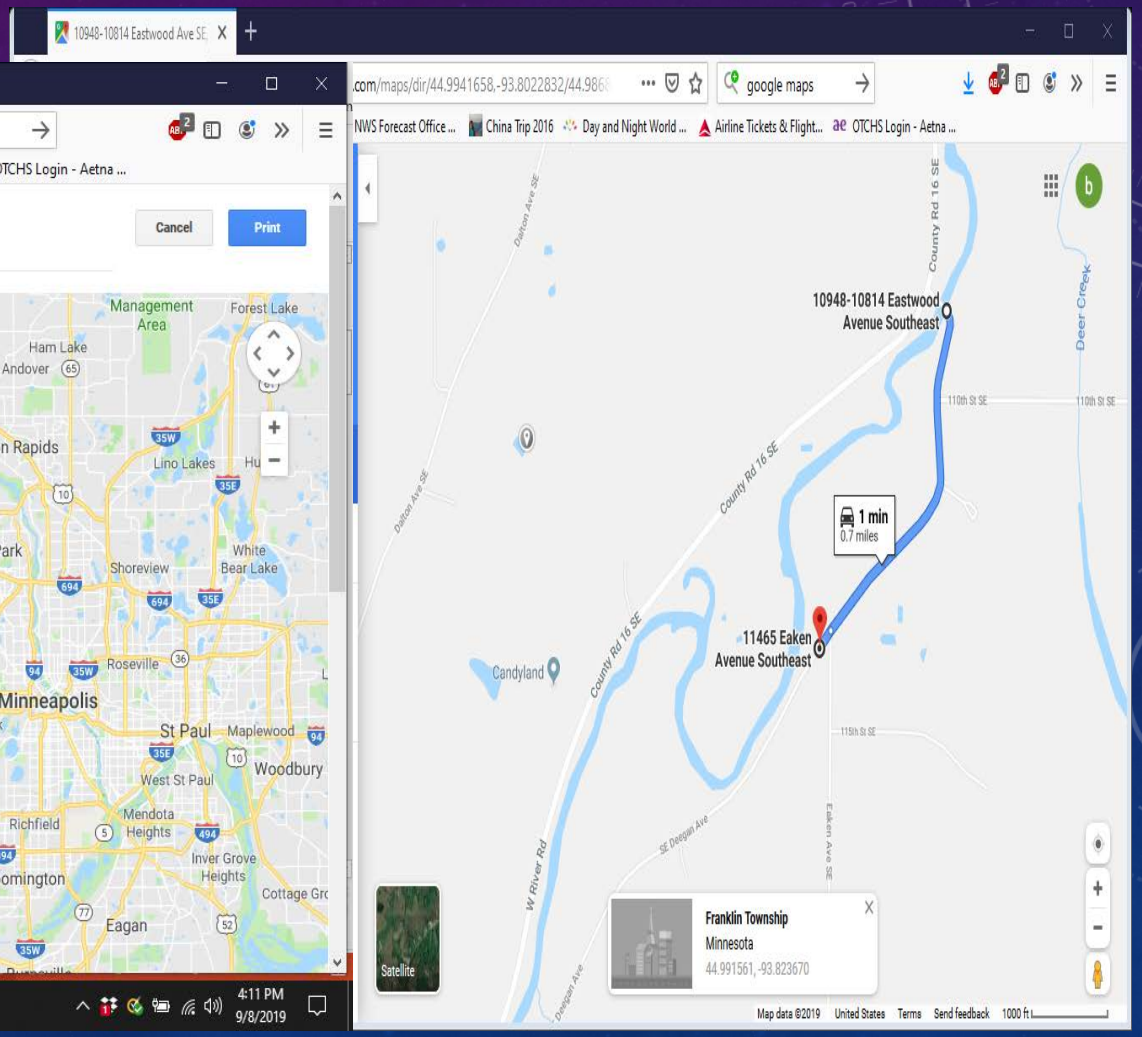
TOWN OF FRANKLIN—EXURBAN TWP WEST OF TWIN CITIES





TOWN OF FRANKLIN FACTS AND FIGURES

- +/- 2000 residents
- +/- 70 miles of total roads
- +/- 60 miles granite/gravel roads
- 8 miles bituminous paved roads
- 1 mile double chip-seal roads
- 0.7 mile Ottaseal road (over granite base)

TOWN OF FRANKLIN FACTS AND FIGURES

- 2 Full Time maintenance staff
- 1 Clerk/Treasurer
- 1 Deputy Clerk/Treasurer
- 3 Elected Supervisors
- $950,000 annual levy

TOWN OF FRANKLIN ISSUES

- Resident complaints about dust and washboard roads
- Cost, Inconvenience and Temporary nature of dust control
- Very high cost of “paving” roads
- High traffic counts on many roads

TOWN OF FRANKLIN
HIGH TRAFFIC COUNTS

- County Line Rd—gravel shared with Independence (469 vehicles per day (VPD))
- Brighton Ave—Former Double Chip Seal Road, worn out, ground up (564 VPD)
- Farmington Ave (should be a County Road)—Bituminous connector Road (2,017 VPD)
- 110th Street(should be a County Road)—Gravel connector Road (766 VPD)
- Eastwood Ave-- subject Road for Ottaseal trial (202 VPD)
- (Note—a short portion of high traffic 110th Street was also part of the Ottaseal trial)

TOWN OF FRANKLIN—WHY OTTASEAL?

- Residents request to “do something” about poor roadway
- Lower initial cost than normal bituminous road
- Lower maintenance cost than a gravel road (once installed) {assumption}
- Good granite base to experiment to see if this could be a Township-wide alternative
- Ideal location as it would connect two paved roads

- ?

TOWN OF FRANKLIN—WHY OTTASEAL?

- Decision made to experiment with Ottaseal
- Residents offered to contribute $20,000 {not an assessment—voluntary}
- Sought quotes from various suppliers
- Bid awarded to Allied Paving in amount of $64,000

TOWN OF FRANKLIN
COSTS ON OTTASEAL ROAD PROJECT

- Preliminary site work (grading and compacting) 12 hours = $1302
- Material and application costs = $64,185
- Repair costs (due to 2 very large frost boils) = $2,063
- Total out of pocket costs after year one = $67,550
- {Earlier granite applications are not included as they were not part of the project, simply part of prior routine maintenance}

TOWN OF FRANKLIN
COST COMPARISON TO OTTASEAL ROAD

- {Used ¾ mile adjacent gravel road (110 St) as comparison}
- 25 hours grading $108.50 per hour = $2,713
- Annual summer dust control costs @ $0.80 per gallon= $1,720
- Prorata costs of granite (reapplied about every 4 years) {$29,539/ 4} =$7,385
- Total comparable costs for year one = $11,818

TOWN OF FRANKLIN
COST COMPARISON SUMMARY

- ¾ mile gravel road annual costs = $11,818
- ¾ mile Ottaseal annual costs assuming 10 year life and no further maintenance = $6,755
- ¾ mile Ottaseal annual costs assuming 5 year life and no further maintenance = $13,510

Ottaseal, with a five year life, will be only slightly higher cost than a similar length of adjacent road. From a practical point, some interim maintenance steps (seal coating) could extend the life of the Ottaseal experiment to, hopefully, 10 years.

TOWN OF FRANKLIN
1ST YEAR CONCLUSION ON OTTASEAL ROAD TRIAL

- Road is holding up, but not very “pretty”—not smooth like bituminous
- Very hard 2018-19 winter with massive frost boils, even with good base
- Some issues with vandalism when road was first put down
- Some issues with heavy XCEL tree trimming equipment damaging the road
- Better than gravel, still holding up after one year, but . . . How long will it last?

TOWN OF FRANKLIN—CONTRACTOR EQUIPMENT USED

TOWN OF FRANKLIN—TOWNSHIP EQUIPMENT USED

TOWN OF FRANKLIN—SOME PHOTOS OF PROJECT