Jamaica Avenue Roundabouts

City of Cottage Grove
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A life cycle cost comparison showed concrete to be more cost effective than bituminous.

Bituminous Rutting and Surface Deformation
- Excessive braking and turning in a roundabout

Bituminous Maintenance Requirements
- More frequent maintenance for bituminous
- Maintenance is more challenging in a roundabout
Curb and Catch Basin Damage
Catch Basin Damage

North Roundabout
Surmountable Casting

NOTE: ALL DIMENSIONS SHOWN ARE IN ENGLISH AND [METRIC]
COMPONENT NOS.: FRAME 3501-2000; GRATE 3501-3000
MATERIAL: CAST GRAY IRON ASTM A-48, CLASS 350
FINISH: NO PAINT
WEIGHT: FRAME 204#, GRATE 184# WAS NF-T914

SECTION VIEW SHOWING
GRATE RIBS THRU ROLL SECTION

SECTION VIEW SHOWING
GRATE RIBS THRU VANE SECTION

FISH LOGO w/ 3/4" [19mm] LETTERS
Concrete Jointing Plans
WisDOT Jointing Plan

**Legend**
- **Doweled Joint**
- **Tied Joint**
- **Expansion Joint**
- **Potential Doweled Expansion Joint**
- **Truck Apron**
- **Central Island**
- **Utility Structures**

**General Notes**
- Maximum joint spacing is in accordance with the table shown on SE 128th Sheet "A".
- Use an expansion joint filler meeting the requirements of Standard Specification 450.
- Do not dowel or tie the truck apron transverse joints.

**Isolated Circle Joint Layout for Roundabouts**

**Pinwheel Joint Layout for Roundabouts**
Pavement Markings
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- Original Install – Epoxy
- 2010 – 3M Stamark Tape - Did not perform well
- 2011/2012 – Preform Thermoplastic (PreMark)
  - Ground-in markings
  - Retro numbers lower, but high light levels exist within the roundabout
  - Currently in good condition
- Avoid linear planting
- Be aware of plant density
Irrigation
Other Considerations

Need to educate employees about traffic control and safety when working in a roundabout

Density of plant materials – Annual maintenance issue
Questions