MTO Contract 2012-5135
Algonquin Park
SP12.5 WMA
SP19.0 WMA
• Project Description
• Hwy 60 From west gate, easterly for 25 km to Cache Lake
• Culvert replacements, frost heave treatments
• Pulverize
• 50 mm lift of SP19.0 WMA 26,000 t
• 40 mm lift of SP12.5 WMA 30,000 t
• Constraints of 8 km of granular grade allowed
• MTO Northeastern Region, Huntsville office
• Contract Administrator: Jewell Engineering
• Gradework and Paving: Fowler Construction
• Paving in July, September and October
• 19.0 WMA mix and 12.5 WMA mix
• Fowler Madill Coarse and Fine aggregate
• 15 % RAP
• Both mixes were fine graded
• McAsphalt PG 58-34 Asphalt Cement
• Evotherm 3G Warm mix additive
• Adhere LOF anti-stripping additive
• Huntsville Asphalt Plant
• 53 km to west limit of contract
• Mix discharge at plant was 130° C to 140°C
• Continuous mix drum plant with rotary drum mixer where RAP and asphalt cement are added
• Plant operator experienced no difference from conventional hotmix
• Mix was transported to jobsite with live-bottom trailers
• Paving equipment
• Roadtec SB2500 MTV
• Caterpillar 1055 spreader
• Bomag BW174 double steel Vibratory
• Bomag BW24RH Rubber tire
• Amman 3 tonne finish roller
• Mix temperature behind spreader 115-130° C
• Crew found mixes to be very friendly for workability
• Great compaction results
• Warm mix allowed more time to achieve compaction
• Some SP12.5 WMA was placed in July with 30° C weather and October with 7° C
• No roller pickup or marking were evident
• QC testing of compaction behind the rolling operation using a thin lift gauge
• SP19.0 compaction consistently between 92.5 and 94.5 %
• SP12.5 compaction consistently between 92% and 94.5 %
• Achieved ERS bonus on all lots for SP12.5 and SP19.0
• Smoothness
• Pulverize and pave
• Some Granular A added for crossfall correction
• 90 mm of Superpave
• Achieved full bonus for smoothness
• Couple of areas of localized roughness (deduction)
• Conclusions
• No issues with this WMA technology
• Contractor friendly
• Asphalt Plant friendly
Thank You!