#### Office of the Auditor General Bureau du vérificateur général

Brian Bigger Auditor General Vérificateur général

705.671.2489 ext./poste 4402 brian.bigger@greatersudbury.ca



City of Greater Sudbury Ville du Grand Sudbury P.O. Box 5000 / CP 5000 Station A / Succursale A 200 rue Brady Street Sudbury ON P3A 5P3

> greatersudbury.ca grandsudbury.ca

# Audit Follow Up Report

September 23, 2013

To: Pre Audit Sub Committee

From: Brian Bigger, Auditor General

Re: Roads - Impact Of Changes To Road Design

Audit Report Released	August 2012
Original # Of Recommendations	13
# Of Action Plans Previously Completed	0
# Of Action Plans Now Closed	11
# Of Action Plans On Next Follow Up	2
Status As Of June 30, 2013	On Track

Recommendation and Summary Of Progress	Self-assessed
(Note: Self assessment conducted by Roads Division)	Status

#### Recommendation 1

The City should improve policies, procedures and reports supporting accountability for rejection of inferior products and enhanced follow-up on warranty issues.

Partially Implemented

# Original Management Response

Will formulate reporting procedure for test results. This can be completed within six months (March 2013).

#### Actions Taken, Results and /or Actions Planned

All test results are reported to the Chief Field Inspector for distribution. As a result of discussions at the annual contractor's meeting there was subsequent committees comprised of staff and contractors formed to address a variety of issues, including developing a formal procedure for warranty issues.

## Recommendation 2

The City should further investigate rejectable materials from previous and current projects, and establish appropriate remedies where warranty provisions allow.

Fully or Substantially Implemented

# Original Management Response

Will monitor and continue to monitor areas already identified and determine corrective measures. This has been implemented.

## Actions Taken, Results and /or Actions Planned

Staff continue to monitor areas already identified and determine corrective measures. A formal warranty procedure is being developed by a committee comprised of staff and contractors.

## Recommendation 3

The City should require asphalt suppliers to provide their quality control test results in accordance with OPS to Construction Services (as they become available) for all asphalt supplied to the City. Any deficiencies in the quality of the asphalt should be made known to management immediately so that corrective action can be taken if deemed necessary.

Fully or Substantially Implemented

## Original Management Response

Asphalt suppliers will provide their quality controls results to Construction Services as per Ontario Provincial Standard Specification 310 Construction Specification for Hot Mix Asphalt Table 6 Sampling & Testing Frequency of Hot Mix Asphalt. This will be introduced starting January 1, 2013 and will become a standard for all future contracts. Contractors will be informed at the Annual Contractors Meeting.

## Actions Taken, Results and /or Actions Planned

At the Annual Contractors meeting held on March 26 2013, the Asphalt Producers were informed that when requested by the City, all asphalt quality controls were to be submitted. This also conforms to the present Ontario Provincial Standard Specification.

## Recommendation 4

The City lab should immediately begin testing gradation and asphalt cement content according to the job mix formula as specified under OPSS 310 – Construction Specification for Hot Mix Asphalt.

Fully or Substantially Implemented

#### Original Management Response

Our laboratory started testing the gradation and asphalt cement content of the job mix formula in June 2012. To be consistent, this had been implemented as of July 2012.

## Actions Taken, Results and /or Actions Planned

As previously stated, the City laboratory started testing the gradation and asphalt mix formula in accordance to Ontario Provincial Standard Specification 310 in July 2012.

#### Recommendation 5

Costs and quantities related to major items used in change orders should be identified and tracked separately under the change order item in progress payments.

Fully or Substantially Implemented

## Original Management Response

This was performed in the past when requested by the Project Manager since 2009.

#### Actions Taken, Results and /or Actions Planned

This has now has become a common procedure when processing monthly progress payments. This procedure was instituted immediately following the Auditor Report of August 2012.

## Recommendation 6

The City's current standard and tolerances to achieve a three percent cross fall on new construction, reconstruction or when grinding is done during a resurfacing or rehabilitation process, should be clearly stated in the contract.

Fully or Substantially Implemented

# Original Management Response

Will state or indicate 3% cross fall and tolerances in standard drawings & specifications effective January 1, 2013. Contractors will also be made aware of this standard and tolerance at the Annual Contractors Meeting.

#### Actions Taken, Results and /or Actions Planned

The contracts indicate the cross fall required as of January 1, 2013.

#### Recommendation 7

The City should improve policies, procedures and reports supporting accountability for rejection of incorrect cross fall as specified in the contract and/or drawings in order to comply with City standards.

Partially Implemented

# Original Management Response

Will research policies and procedures of the Ministry of Transportation and other municipalities in Ontario. Time frame may be 12 to 18 months.

### Actions Taken, Results and /or Actions Planned

Research is ongoing and on schedule.

#### Recommendation 8

The City should communicate their willingness to accept RAP in the job mix formula for local roads in accordance with OPSS standards.

Fully or Substantially Implemented

# Original Management Response

Will communicate our willingness and encouragement to local asphalt suppliers to use RAP in the production of hot mix asphalt. Will communicate this to contractors at the Annual Contractors Meeting.

## Actions Taken, Results and /or Actions Planned

At the Annual Contractors Meeting held on March 26 2013, the Contractors were encouraged to examine the feasibility of using recycled asphalt pavement in the production of hot mix asphalt. Contractors were also reminded that RAP is permissible as per the OPSS.

#### Recommendation 9

The City should communicate their willingness to accept RAP mixed with Granular A and Granular B Type I in accordance with OPSS standards.

Fully or Substantially Implemented

## Original Management Response

Will communicate our willingness and encouragement to local aggregate suppliers to use RAP in the production of granular products. This will be communicated to contractors at the Annual Contractors Meeting.

#### Actions Taken, Results and /or Actions Planned

At the Annual Contractors Meeting held on March 26 2013, the Contractors were encouraged to examine the feasibility of using recycled asphalt pavement in the production of granular material. Contractors were also reminded that RAP is permissible as per the OPSS.

## **Recommendation 10**

The City should continue to identify further opportunities for cost savings where road work is planned so that the asphalt removed from one road can be used on other nearby City use(s). The objective is to minimize trucking costs while recycling the greatest volume of RAP possible (in its highest and best use) to the advantage of the City.

Fully or Substantially Implemented

# Original Management Response

Have performed this recommendation in the past and will continue to do so. Will continue to monitor best practices and other uses. (i.e. shouldering around guiderails, washouts, etc.).

#### Actions Taken, Results and /or Actions Planned

Staff continues to perform this recommendation as per past practice.

## Recommendation 11

The City should continue to work with other interest groups and other Departments that could use the City's RAP in their nearby projects.

Fully or Substantially Implemented

# Original Management Response

Have performed this recommendation in the past and will continue to do so. By January 2013, establish a request process where a master list will be created and maintained.

#### Actions Taken, Results and /or Actions Planned

Staff have communicated with other city departments on the available use of recycled asphalt pavement and a master list is maintained by the Manager of Engineering. At the present time, two locations have been submitted for the possible use of recycled asphalt pavement.

### Recommendation 12

Ownership and disposition of RAP should be clearly stated in the contract documents.

Fully or Substantially Implemented

#### Original Management Response

Will include appropriate clauses in contract specifications for all future contracts starting January 1, 2013.

#### Actions Taken, Results and /or Actions Planned

The appropriate contract specifications have been included in all contracts starting in January 1, 2013.

#### Recommendation 13

If alternate City uses are not identified for the RAP, they should be directed to go to the contractor.

Fully or Substantially Implemented

## Original Management Response

Have performed this recommendation in the past and will continue to do so as contractors become better equipped to handle large volumes of RAP.

#### Actions Taken, Results and /or Actions Planned

Staff continues to perform this recommendation as per past practice.

Brian Bigger, CGA, CRMA

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Auditor General for the City of Greater Sudbury