

ASPHALT

THE SMOOTH QUIET RIDE



2018 Local Roads Workshop

Local Agency Warranties

March 2018



MICHIGAN RIDES ON US

Asphalt.

Presentation Outline



- **Legislation and Program Development**
- Special Provisions and Warranty Process Details
- Types of Warranties
- What is a Materials and Workmanship Warranty
- Legal Considerations
- Summary – Industry Position

Local Agency Warranty Program



2015 Funding Bill – Act No. 175 – Public Acts of 2015

Sec. 12 –

“(22) Of the amounts appropriated for a county primary or local road system under this section, where possible, a county road commission shall secure pavement warranties for full replacement or appropriate repair for contracted construction work on pavement projects whose cost exceeds \$2,000,000.00 and projects for new construction or reconstruction undertaken after the effective date of the amendatory act that added this subsection, if allowed by the federal highway administration and the department.”

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2015 Funding Bill – Act No. 175 – Public Acts of 2015

Sec. 12 – (22)

a county primary or local road system (city streets, too)

where possible, secure pavement warranties for full replacement or appropriate repair for contracted construction work

on pavement projects whose cost exceeds \$2,000,000.00 and projects for new construction or reconstruction .

Local Agency Warranty Program



2015 Funding Bill – Act No. 175 – Public Acts of 2015
Sec. 12 – (22)

\$2,000,000 Project Cost ?

VS

\$2,000,000 Pavement Cost ?

Local Agency Warranty Program



Program Development

County Road Association (CRA) Warranty Committee
(Michigan Municipal League (MML) also involved)

LA Warranty Program Submitted to MDOT for Approval
Warranty Special Provisions and Guidance Document drafted

Meetings with Industry - Review / comments on Special
Provisions

Local Agency Warranty Program



Program Development – Current Status

LA Warranty Program Submitted to MDOT for Approval

Significant work / discussion / interaction between CRA and MDOT

Program not approved yet

\$ 2M Project Threshold and other “program Items”

Implementation deadline – 1 year after program approval by MDOT



Local Agency Warranty Program

Program Development – Current Status

Warranty Special Provisions:

Meetings with Industry - Review / comments on Special Provisions

Last Meeting was August 24, 2017

Updated Special Provisions have not been distributed
(waiting for MDOT Program Approval)

Unresolved Industry Concerns?

Guidelines for Local Agency Warranty Program –
Current version has not been shared with Industry

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Special Provisions

Industry Requests:

Statewide Uniformity

One set of SPs' used by all Local Agencies

Materials and Workmanship Warranty

Closely Follow MDOTs Warranty Special provisions

(Contractors and Surety Companies very familiar with the MDOT system)

Consistency of language and terminology thru all documents

Adequate time for industry review of proposed Special Provisions and discussions with CRA Warranty Committee

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Current Status - Documents:

SPECIAL PROVISION FOR HOT MIX ASPHALT and CONCRETE PAVEMENT WARRANTY - “Boilerplate” – applies to all projects. (definitions, rights and responsibilities, warranty administration processes)

SPECIAL PROVISION FOR WARRANTY WORK REQUIREMENTS FOR HOT MIX ASPHALT PAVEMENTS - HMA distress conditions, thresholds, corrective actions

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Current Status - Documents :

SPECIAL PROVISION FOR WARRANTY WORK REQUIREMENTS FOR JOINTED PLAIN CONCRETE PAVEMENT – Concrete distress conditions, thresholds, corrective actions

SPECIAL PROVISION FOR PAVEMENT WARRANTY INFORMATION – Project specific info: warranty(s) required, location, associated pay items/ quantities

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HMA Warranty Condition Parameters (Distresses that are monitored)

Transverse Cracking

Open Joints & Long. Cracking

De-bonding

Raveling

Flushing

Rutting

Alligator or block cracking

Local Agency Warranty Program



Warranty Details

Table 1: Warranty Requirements

Condition Parameter	NEW CONSTRUCTION / RECONSTRUCTION		OVER AGGREGATE BASE WITHOUT BASE OR DRAINAGE IMPROVEMENTS		SINGLE COURSE & MULTIPLE COURSE OVERLAY (a)	
	Threshold Limits Per Segment (Segment Length = 528 feet = 1/10 mile)	Max. Defective Segments Per Driving Lane-Mile	Threshold Limits Per Segment (Segment Length = 528 feet = 1/10 mile)	Max. Defective Segments Per Driving Lane-Mile	Threshold Limits Per Segment (Segment Length = 528 feet = 1/10 mile)	Max. Defective Segments Per Driving Lane-Mile (c)
Warranty period	5 years		3 years		1 year	
Transverse Cracking	3(b)	1	3(b)	2 (d)	3(b)	3 (d)
Open Joints & Long. cracking	10% of Segment length	1	25% of Segment length	2 (d)	25% of Segment length	3 (d)
De-bonding	5% of Segment length	1	5% of Segment length	1	5% of Segment length	1
Raveling	8% of Segment length	1	8% of Segment length	1	8% of Segment length	1
Flushing	5% of Segment length	1	5% of Segment length	1	5% of Segment length	1
Rutting (e, f, g)	Ave. rut depth = 3/8 inch	1 (e)	Ave. rut depth = 3/8 inch	1 (e)	Ave. rut depth = 3/8 inch	1 (e,f)
Alligator cracking (h)	Any amount	0 (none allowed)	Any amount	0 (none allowed)	Any amount	0 (none allowed)

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Warranty Process Details:

Local Agency monitors the pavement

Identifies and documents pavement distresses

If distress thresholds are exceeded, notifies the contractor

Local Agency and contractor conduct a Joint Field Investigation

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Warranty Process Details:

Purpose of Joint Field Investigation

Determine the cause(s) of the pavement defects

Determine if the causes are a result of defects in materials and/ or workmanship

Assign responsibility

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Warranty Process Details:

Outcome of Joint Field Investigation

If cause is defects in materials and/ or workmanship, contractor makes the repair

If not materials and/ or workmanship, contractor not responsible for repairs.

Note : could be a combination of M & W , design ,or other factors

If no agreement as to cause(s), A CRT may be used

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Conflict Resolution Team (CRT)

Decides disputes between the Agency and the Contractor
“regarding application or fulfillment of the warranty requirements.”

The CRT comprised of three voting members:

- One Agency representative.

- One Contractor representative.

- One third party representative

(mutually selected by the Agency and the Contractor).

The CRT decides the need for a forensic investigation, its scope and the party to conduct the investigation.

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Types of Warranties – Two Broad Categories

Materials and Workmanship Warranty

Performance Warranty

Local Agency Warranty Program



Types of Warranties – Two Broad Categories

Materials and Workmanship Warranty

The Local Agency Warranty is a Materials and Workmanship Warranty

Performance Warranty

Local Agency Warranty Program



Types of Warranties – MDOT “definitions”

Materials and Workmanship Pavement Warranty

“The Materials and Workmanship Pavement Warranty warrants the Department against defects in materials and workmanship.”

“The Contractor is responsible for correcting defects in the pavement caused by elements within the Contractor’s control (i.e., the materials supplied and the workmanship), during the warranty period.”

(MDOT’s current “definition” of M & W warranty -from M & W warranty special provision 12SP-500A-04, dated 6/13/17)

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Types of Warranties – MDOT “definitions”

Materials and Workmanship Pavement Warranty(Cont.)

“The Materials and Workmanship Pavement Warranty warrants the Department against defects in materials and workmanship.”

“The Contractor: (1) Must warrant to the Department that the warranted work will be free of defects in materials and workmanship.”

(MDOT’s current “definition” of M & W warranty -from M & W warranty special provision 12SP-500A-04, dated 6/13/17)

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Types of Warranties – MDOT “definitions”

Pavement Performance Warranty

“The pavement performance warranty assures and protects the Department from specific defects found in the pavement.”

“The Contractor: 1. Must warrant to the Department that the warranted work will be free of defects as measured by the performance parameters and specified threshold values for each.”

Source: Special Provision for Pavement Performance Warranty 12SP-500B dated, 12/07/12

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Other Considerations: Warranty administration

“GENERAL GUIDELINES FOR LOCAL AGENCY WARRANTIES”
document

Reporting Requirements

Project tracking, warranty inspections

Interim and Final Inspections

Release of Warranty Bond

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Warranty Administration

Also, from Sec. 12 (22)

“A county road commission shall include a list of all warranties that were secured under this subsection and indicate whether any of those warranties were redeemed with the report required under section 14(3), and shall also list all pavement projects whose cost exceeds \$2,000,000.00 for which a warranty was not secured. The list shall include, but is not limited to, all of the following information:

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Warranty Administration

The list shall include, but is not limited to, all of the following information:

1. The type of project.
2. The cost or estimated cost of the project.
3. The expected lifespan of the project.
4. Whether or not the project met or is currently meeting its expected lifespan.
5. If the project failed to meet or is not meeting its expected lifespan, the cause of the failure and the cost to replace or repair the project.
6. The entity responsible for paying the cost of replacing or repairing the project.

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What is a Materials and Workmanship Warranty?

MDOT and Industry have different Interpretations
(2018)

“materials supplied” is a key issue.

Need to look at the history of warranty development
in Michigan

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What is a Materials and Workmanship Warranty?

History:

Language from the original M & W warranty special provision (Five Year Warranty for Superpave E10, E30, and E50 Bituminous Mixtures, 12-22-98):

7.0 Rights and Responsibilities of the Contractor:

“The Contractor shall unconditionally warrant to the Department that the bituminous pavement shall be free of defects in materials and workmanship as defined by the warranty requirements as set forth above, for a period of 5 years.”

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What is a Materials and Workmanship Warranty?

Industry understanding / MDOT agreement in 1998:

Under the Materials and Workmanship Warranty, the contractor is warranting that they are supplying the materials and workmanship, in accordance with Department specifications.

Therefore, if the contractor constructs a pavement, which meets material specifications and workmanship standards, and there is a subsequent failure that would require warranty work, the contractor would not be responsible for correcting the deficiency.

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What is a Materials and Workmanship Warranty?

Look at original vs current warranty SP language

1998: “The Contractor shall unconditionally warrant to the Department that the bituminous pavement shall be free of defects in materials and workmanship as defined by the warranty requirements as set forth above, for a period of 5 years.”

Current (2017): “The Contractor is responsible for correcting defects in the pavement caused by elements within the Contractor’s control (i.e., **the materials supplied** and the workmanship), during the warranty period.”

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“the Materials Supplied”

Based on the current language and a 2012 CRT process, our understanding of MDOT’s interpretation is :

- 1.The contractor is responsible for the performance risk of all “material choices”.**
- 2. The contractor may be responsible for repairs even if the mix meets specifications.**

Resolution of APAM vs MDOT Interpretation?

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Legal Considerations of MDOT's M & W Warranty

Types of specifications

Case law

Local Agency Warranty Program



Legal Considerations of MDOT's M & W Warranty

Traditional Project Delivery System (i.e. design, bid, build)

The Owner is responsible for designing the project and specifying the materials supplied for the project

The Contractor is responsible for constructing the project in accordance with the owner's design and specifications.

This is the system under which the material and workmanship warranties were developed and continue to be used today.

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Responsibility for pavement performance ultimately depends on the type of specification used.

There are two broad types of specifications:

Design Specifications – detail the material to be used by the contractor and the method or manner in which the work is performed.

Performance Specifications – state the results to be achieved but require the contractor to determine how to achieve those results.

Source : CONSTRUCTION CLAIMS DESKBOOK, § 8.7

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Government's Implied Warranty of Adequacy of Designs (the Spearin Doctrine)

United States v. Spearin (248 U.S. 132), is a 1918 United States Supreme Court decision:

Held that a contractor will not be liable to an owner for loss or damage that results solely from defects in the plan, design, or specifications provided to the contractor.

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Government's Implied Warranty of Adequacy of Designs (the Spearin Doctrine)

Effectively, **Spearin** created a doctrine whereby the owner impliedly warrants that the plans and specifications, if followed, will result in a functioning system.

Spearin holds that if a contractor is required to build according to plans and specifications prepared by the owner (or the owner's representative), then the contractor will not be responsible for the consequences of defects in the plan.

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The *Spearin* doctrine and its reasoning have been adopted in Michigan.

L.W. Kinnear, Inc. v. City of Lincoln Park, 260 Mich. 250; 244 N.W. 463 (1932)

The Michigan Supreme Court adopted the doctrine and held that where damages are incurred due to faulty designs and specifications, the government is responsible; but where improper installation or poor workmanship caused the problems, the contractor is responsible.

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Summary / Industry Position



Local Agency Pavement Warranty (draft SP, dated 7-24-17)

“The Pavement Warranty assures and protects the Local Agency (Agency) from specific defects in pavements due to materials and workmanship.”

“Under the Pavement Warranty special provisions the Contractor is responsible for correcting defects in the pavement caused by elements within the Contractor’s control (i.e., the materials and workmanship), during the warranty period.”

“The Agency is responsible for the pavement design. Therefore, the Contractor assumes no responsibility for design related defects.”

Summary / Industry Position



Materials and Workmanship Warranty - Summary

Definition:

“The Pavement Warranty assures and protects the Local Agency (Agency) from specific defects in pavements due to materials and workmanship.”

“Under the Pavement Warranty special provisions the Contractor is responsible for correcting defects in the pavement caused by elements within the Contractor’s control (i.e., the materials and workmanship), during the warranty period.”

Summary / Industry Position



Materials and Workmanship Warranty - Summary

Industry position:

The contractor shall warrant that the pavement will be free of defects in materials and workmanship for the warranty period. This means that the contractor will supply materials and workmanship which meet the project specifications.

Summary / Industry Position



Materials and Workmanship Warranty - Summary

How corrective action is triggered:

Agency will monitor the pavement for certain distress types, distress thresholds and number of defective 1/10-mile segments. If allowable values are exceeded, a joint investigation will be done to determine what caused the failure and who will pay for repairs.

Summary / Industry Position



Materials and Workmanship Warranty Summary

How corrective action is triggered:

Industry position - Exceeding the pavement distress thresholds does not automatically trigger corrective action. Rather, it initiates an investigation to determine assignment of cause and who will pay for the warranty repairs.

(If Agency and the contractor cannot agree on assignment of cause, a Conflict Resolution Team (CRT) may be convened.)

Summary / Industry Position



Materials and Workmanship Warranty- Summary

Design Specifications – degree of control

Contractor is responsible for only what we control.

Contractors don't control the fix selection, the design of the selected fix, or the specifications for the project.

Contractors build what the owner specifies.

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Questions?