



Why Warranties?

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Public Act 79 of 1997 (effective July 28, 1997)

“Of the amounts appropriated for state trunk line projects, the department shall, where possible, secure warranties of not less than 5-year full replacement guarantee for contracted construction work.”

Why Warranties?

Public Act 175 of 2015 (effective April 1, 2016)

“Of the amounts appropriated for state trunk line projects, the department shall, 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...”

Warranty Type

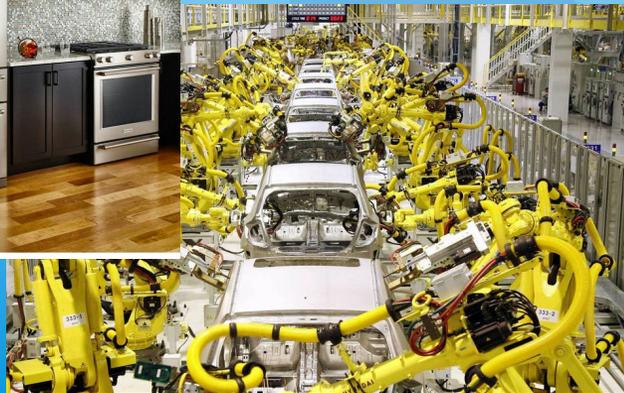
Common View of Warranties

- Manufacturer's Warranty



Pavement Warranties are Risk Transfer

- Materials and Workmanship Warranties
- Performance Warranties



Warranty Type

Materials and Workmanship Warranties

- New Construction
- Reconstruction
- Major Rehabilitation
- Hot Mix Asphalt (HMA) Overlay
- Cold Mill and HMA Overlay



Warranty Type

Performance Warranties

- Chip Seal
- Micro-surface
- Ultra-thin HMA Overlay
- HMA Crack Treatment
- Bridge Deck Epoxy Overlay
- Paver Placed Surface Seal
- Concrete Surface Coat
- Bridge Painting



Warranty Administration



What Makes a Warranty Record

Warranty Components

- Creation
- Administration
- Closeout

Warranty Creation

- Warranty need originates during project design and identified from use the statement in warranty frequently used special provisions

Warranty Creation

- Warranties are included in project design through the use statement in warranty frequently used special provisions
- **Warranty requirement is input into JobNet during project programming**

Warranty Creation

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- Warranty requirement is input into JobNet during project programming by region staff
- **The warranty administration database SWAD automatically detects and creates a warranty record when the project is awarded**

Warranty Creation

- Warranties are included in project design through the use statement in warranty frequently used special provisions
- Warranty requirement is input into JobNet during project programming by region staff
- The warranty administration database automatically detects and creates a warranty record when the project is awarded
- **Warranty record is populated with generic warranty & project level information**

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- Warranty requirement is input into JobNet during project programming by region staff
- The warranty administration database automatically detects and creates a warranty record when the project is awarded
- Warranty database is populated with generic warranty & project level information during record creation
- **Project work is completed, and a warranty acceptance date is signed by the Engineer and the contractor and input into SWAD**

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- Project work is completed, and a warranty acceptance date is signed by the Engineer and the contractor
- Project acceptance date is entered into the warranty database record
- **Warranty database auto-generates upcoming inspection dates and expiration date administration begins**

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- Warranty database autogenerates upcoming inspection dates and expiration date
- **Warranty database autogenerates and distributes reports of upcoming inspection needed and overdue**

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- Inspection dates are input into the database indicating satisfactory or unsatisfactory
- **The warranty expires at the specified date when final inspection shows warranty work is not needed.**

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- If it is a final inspection and satisfactory the warranty expires at the specified date.
- **Warranty status is changed from initial acceptance to closed**

Search Result Details

Warranty Number

6255

Warranty Type

Pavement

Warranty Start Date



Contract ID

82000-203511

Warranty Category

Materials and Workmanship

Warranty Expiration Date



Job#

203511,207122

Warranty Type Description

M&WPW for Multiple Course HMA Overlays on Concrete Paver

Warranty Contractor

Cadillac Asphalt, L.L.C.

Warranty Status

New

Save

Reset



Inspections

Segment #	Description	Const Yr	Accepted Date	Initiate Interim Insp	Interim Complete	Initiate Final Insp	Final Complete	Corrective Action	Conflict Resolution
6255-1					<input type="checkbox"/>		<input type="checkbox"/>	N/A	<input type="checkbox"/>

Add Segment

Contract Information | Warranted Items and Acceptance | Inspection Information | Notes

Location Description	Project Manager Zokvic, Amy	Construction Year
Region	Delivery Engineer Penzenstadler, Adam	Bonding Company Western Surety Company
TSC	TSC Manager	Bond Amount \$76,895.00
TSC Oversight Please Select	Prime Contractor Cadillac Asphalt, L.L.C.	Bond Number 30047188

What Makes a Warranty Record

Warranty Status
New

Save Reset

Inspections

Segment #	Description	Const Yr	Accepted Date	Initiate Interim Insp	Interim Complete
6255-1					<input type="checkbox"/>

Add Segment

Contract Information Warranted Items and Acceptance Inspection Information Notes

Warranty covers
 Roads Structure

Job ID	CS	PR	PR Mile Point Range	Add Milepoint Range	Road Route#	CS Mile Point Range	Work Description
203511				Add PR			
207122	82081	1595510	<input type="checkbox"/> 15.401-15.427	Add Milepoint Range	M-153 E	0-20.12	HMA Mill and O\
	82081	1596903	<input type="checkbox"/> 0-0.196	Add Milepoint Range	Edward N Hines	0-20.12	
	82081	1596904	<input type="checkbox"/> 0-0.246	Add Milepoint Range	Ford/Edward N I	0-20.12	
	82081	1924107	<input type="checkbox"/> 1.246-1.268	Add Milepoint Range	M-153 W	0-20.12	

Construction Year Segment Acceptance Segment Description

Search Result Details

Warranty Number

4791

Warranty Type

Pavement

Warranty Start Date

06/26/2020

Warranty Status

Initial Acceptance

Save

Reset

Contract ID

21022-113777

Warranty Category

Materials and Workmanship

Warranty Expiration Date

06/26/2025

Job#

113777,115866

Warranty Type Description

M&WPW for New/Reconstructed HMA Pavement Unbonded or

Warranty Contractor

Zenith Tech, Inc.

Inspections

Segment #	Description	Const Yr	Accepted Date	Initiate Interim Insp	Interim Complete	Initiate Final Insp	Final Complete	Corrective Action	Conflict Resolution
4791-1	US-2 at (B01) bridge over the Escanaba River	2019	06/26/2020	12/26/2022	<input checked="" type="checkbox"/>	12/26/2024	<input type="checkbox"/>	N/A	<input type="checkbox"/>

Add Segment

Contract Information		Warranted Items and Acceptance		Inspection Information		Notes		
Initiate Inspection	Insp Type	Insp Compl Date	Corr Act	Corr Act Status	Corr Act Compl Date	Corr Act Est Amt	Conf Res Needed	Conf Res Decision
12/26/2022	Interim - System Generated by SWAD	03/09/2023	N/A				<input type="checkbox"/>	
12/26/2024	Final		N/A				<input type="checkbox"/>	

Warranty Evaluation

Inspection Frequency

Time from Initial Pavement Acceptance	Inspection Requirements
30 months	first cursory inspection
54 months	second cursory inspection
54 months	detailed segment inspection*

*this inspection required only if the pavement condition appears to require warranty repair work due to findings in the second cursory inspection.

Warranty Evaluation



Warranty Evaluation

MDOT 1885 (02/13)

FOR USE WITH 12SP602(C)

Page 3 of 8

FIELD EVALUATION OF WARRANTY PERFORMANCE JPCP / JRCP (DETAIL INSPECTION - QUESTIONABLE SEGMENTS)

CONTRACTOR	INSPECTION DATE
CONTROL SECTION	INSPECTED BY
JOB NUMBER	REVIEWED BY
ROUTE	RESIDENT ENGINEER
INSPECTION LIMITS (DRIVING LANES)	

TRANSVERSE CRACKING (> 5 FEET)

(THRESHOLD LIMIT JPCP = 1, JRCP = 2)

SEGMENT NO.	LANE DESCRIPTION	DISTANCE FROM POB TO START OF SEGMENT (miles)	ESTIMATED TOTAL NUMBER OF DISTRESSES	COMMENTS
TC-1				
TC-2				
TC-3				
TC-4				
TC-5				
TC-6				
TC-7				
TC-8				
TC-9				
TC-10				
TC-11				

Warranty Evaluation

Table 1: Warranty Requirements

Condition Parameter	Threshold Limits Per Segment (Length = 528 feet)	Max. Defective Segments Per Driving Lane-Mile (a)
Transverse Crack	2	1
Longitudinal Crack	5% of segment length	1
Map Cracking	10% of segment area	1
Spalling	10% each slab (b) ≤ 2 slabs	1
Scaling	15% of the slab area < 1 slab	1
Corner Cracking	1	1
Joint Sealant Failure	10% joint length (c) ≤ 2 slabs	1
Shattered Slab	0	0

- a. The maximum allowable number of defective segments per driving lane, on the project, is determined by multiplying by the length of the specific driving lane in miles.
- b. Can be non-contiguous. 10% value applies to total perimeter (four sides) of the slab.
- c. Applies to all transverse and longitudinal joints on the perimeter of the slab. Non-contiguous lengths will be summed on a per slab basis.

Table 2: Recommended Corrective Action

Condition Parameter (g)	Recommended Action (a)
Longitudinal Cracking (b)	Retrofit load transfer
Transverse Cracking (b)	Retrofit load transfer
Corner Cracking	Full-depth, tied, concrete patch
Map Cracking	Remove and replace (c)
Spalling	Repair with epoxy or cement mortar (d)
Scaling	Diamond grind surface (e)
Joint Sealant Failure	Remove and replace seal material (f)
Shattered Slab	Remove and replace

a. If multiple condition parameters are present, the recommended action may be revised. Removal and replacement is required if multiple crack types are present.

b. The appropriate corrective treatment is dependent on the crack's location and depth. Full-depth Transverse cracks require retrofit load transfer (>90% load transfer efficiency) as a minimum. Full-depth/full-length Longitudinal cracks require slab removal and replacement, if outside influence of lane ties.

c. Dependent on cause. If cracking is entirely from "drying shrinkage", no corrective action is required.

d. Repair dependent on area and depth of spall. Use most current procedures and material mixtures recommended by Material's Technology Section, in the Construction Field Services Division.

e. Diamond grinding applies to entire slab surface area where scaling exists.

f. Replace with existing material type. Neoprene seals are removed and replaced full-width.

SWAD Access

Database Administrators

Statewide Warranty Engineer

Region Warranty Administrator

Region TSC User

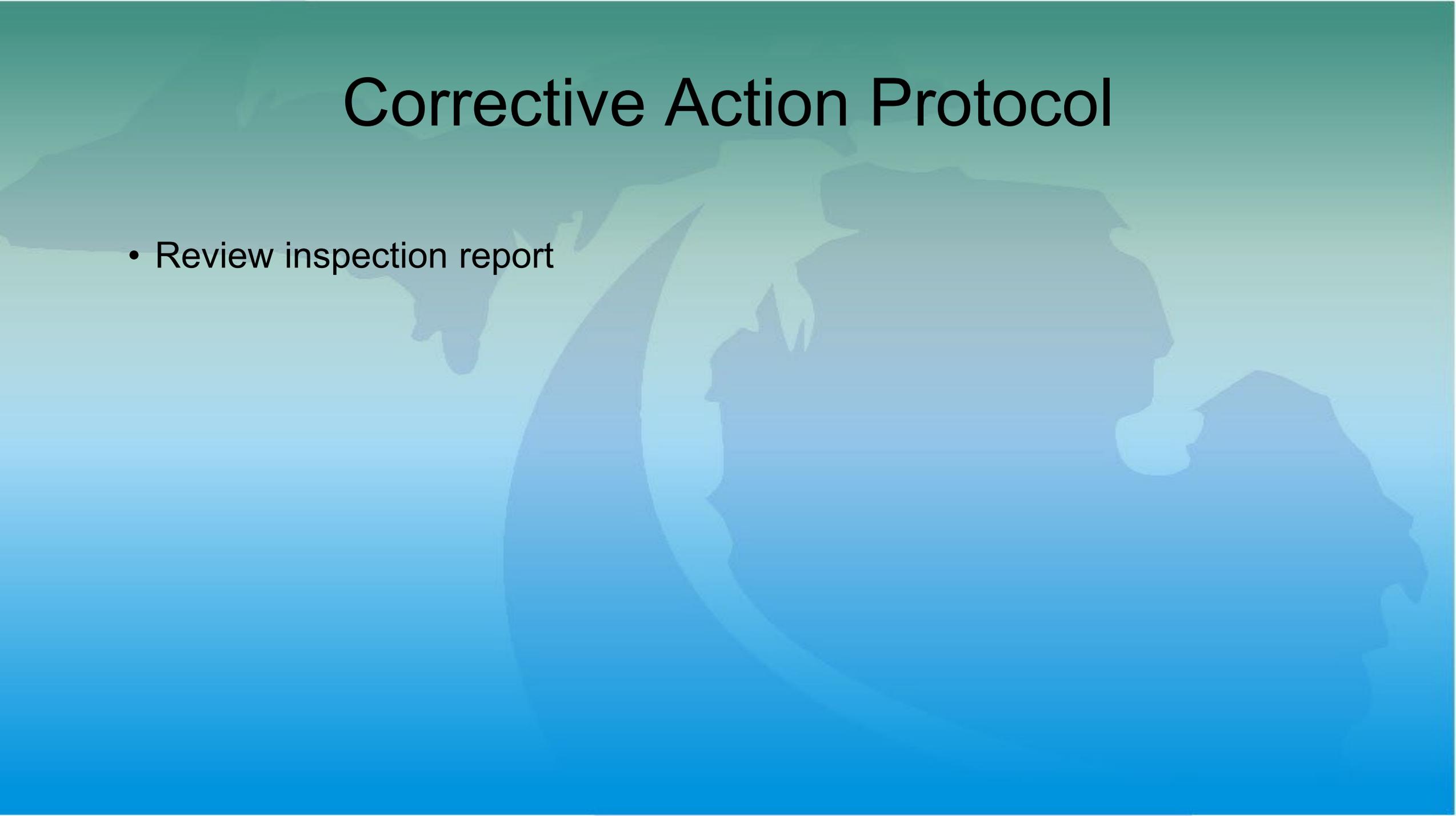
Consultant

Contractor

Corrective Action Protocol

- Review inspection report
- Submit 1st notice of CA needed
- Submit 2nd notice of CA needed
- Notify attorney general of intent to submit claim

Corrective Action Protocol



- Review inspection report

Corrective Action Protocol

- Review inspection report
- Submit 1st notice of CA needed
 - Response letter
 - Corrective action work plan with cost estimate
 - ROW permit
 - Lien bond

Corrective Action Protocol

- Review inspection report
- Submit 1st notice of CA needed
- Submit 2nd notice of CA needed

Corrective Action Protocol

- Review inspection report
- Submit 1st notice of CA needed
- Submit 2nd notice of CA needed
- **Notify attorney general of intent to submit claim**

Conflict Resolution Team (CRT)



The action of last resort

SWAD Access

CONTACT INFORMATION

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