



# Defective Project Designs: Are Contractors Responsible?

What the Law Says about When Contractors are Entitled to Protection from Design Defects.

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# Introduction

- Olson Construction Law, P.C.
  - 40+ years of experience focusing solely on construction law.
  - Almost entirely highway heavy construction.
- Clients: Contractors
  - Work proactively to help clients avoid lawyers.
  - Get issues settled as early as possible to maximize your return on investment.
- Located in Lakeville, MN
- Clients all over the Midwest.

# Today's Topic: Warranty of Design

- Case Study
- What is it?
- Why Do We Care?
  - Under-designed projects.
  - Who pays for repairs?
- What the law says.
  - Who is responsible?
  - When does it apply?

# Case Study Example

- \$7m Concrete Overlay Project.
- 12 foot joint spacing; 6" depth
- Half-width Paving Required; Tie Bars Connecting Lanes
- Paved in late summer; Significant temperature fluctuations.
  
- Cracks form on second lane.
- DOT not sure why cracking occurred, BUT:
  - ...Relies on disclaimer in Special Provisions.
- Independent Engineer finds contractor did nothing wrong.
- DOT says pavement was placed according to spec.
  
- DOT requires contractor to replace cracked panels (\$500k+).
- Client files claim for extra costs; Denied.

# So, what is contractor's recourse?

(Hint: what is this presentation about?)

# Warranty of Design: What is it?

- Generally speaking, the implied warranty protects contractors when issues arise on projects which are in actuality caused not by workmanship but by the project design itself.
- Theory goes that if Contractor doesn't have input into design, AND Owner requires Contractor to follow the design, AND Contractor builds the job according to plans and specs, why should contractor be responsible (PAY) for resulting issues?
- Implied Warranty of Design is not written in your contract!
  - Created by the courts to protect contractors out of considerations of equity and fairness.

# Warranty of Design: Why do we Care?

FIRST: Who pays for repairs?

- If Contractor's workmanship is defective, contractor pays for repairs.
- If design is defective, Contractor pays for repairs as well?
  - Our experience is that this is very often the case.
    - Contractor notified of issue of project, is ordered to repair.
    - Contractors understandably don't want to fight. (Time/Money).

# Warranty of Design: Why do we care?

SECOND: Our experience indicates that many concrete paving projects arrive at bid phase under-designed.

- Owners limit the financial cost of project design.
- Engineers cut and paste from other projects rather than designing for project specific needs.
- Projects often end up with design issues.



# Warranty of Design: *Spearin*

- *Why review this with you???*
- *Spearin*. US Supreme Court case (1918).
  - *Dry dock in Brooklyn Navy Yard.*
  - *Contractor required to relocate sewer.*
  - *Contractor followed plans, but sewer backed up.*
  - *Contract – like all contracts – says contractor is responsible for all work and materials supplied to the project.*
    - *Owner requires contractor to repair damages at its own expense.*
- *Owner Argument: You are responsible for all work and materials!*
- *Contractor Argument: We did exactly what you asked us to do!*

# *Spearin*, continued.

- Supreme Court says:
- Contract which requires specific character, dimensions and locations *creates a warranty* that, if contractor follows that contract, the project should be adequate.
- If the contractor is bound to build according to plans and specifications ***prepared by owner***, contractor should not be responsible for consequences of defects in the plans and specifications.
- Contractor is not required to investigate, at his [cost], whether the Owner's plans would prove adequate.
- Implied warranty is born.

# Warranty of Design: Minnesota

- Redwood County attendees???
  - Contractors hired by County to dig a ditch (39,700 ft!).
    - Ditch filled up with silt. Plans provided specific requirements.
- Minnesota's warranty (1922):
  - [W]here [a contractor] makes a contract to perform a given undertaking in accordance with prescribed plans and specifications . . . he is not permitted to vary from the prescribed plans and specifications even if he deems them improper and insufficient;
  - *Therefore he cannot be held to guarantee that work required by the plans will be free from defects, or withstand the action of the elements, or accomplish the purpose intended.*
  - *Where the contract specifies what he is to do and the manner and method of doing it, and he does the work specified in the manner specified, **his engagement is fulfilled** and he remains liable only for defects resulting from improper workmanship or other fault on his part.*

# When is Warranty Available?

- So, when does it apply?
  - *Where the contract specifies what he is to do... and he does the work specified in the manner specified, **his engagement is fulfilled**. He remains liable only for defects resulting from improper workmanship...*
- Simple, right?
  - Not so fast...
  - Remember: Only where the contract specifies what he is to do
    - Design v. Performance Contracts...

# Design v. Performance Specs.

- Implied warranty only applies to contracts which are “design” specifications.
- Design: Precise measurements, tolerances, materials, in process and finish testing, quality control, inspection requirements. **Contractor has limited discretion.**
- Performance: Operational characteristics for the project. Design, measurement, and other specifics not stated and not important, so long as performance specification is met. Contractor has general discretion and election as to detail.

# What the Law Says: Design v. Performance

- Design Specification or Performance Example:
  - Redwood County: Ditch specifications.
    - Didn't say dig a ditch, make sure it doesn't silt in.
- Gave specific direction on HOW to build the project, not just that it wanted a ditch.

# What the Law Says: Design v. Performance

- What if Contract Contains Both?
  - Mixed Specification
- Not completely clear, but law seems to indicate: Look at the *contract as a whole*.
  - Other courts have said, what Specification caused the issue.
- Either way, real question is: How much discretion the specifications give the contractor in its work.

# Check in: Case Study.

- Our Argument:
- Our work was done according to plan.
- In actuality, the DOT Specs, caused the cracking. The DOT Specs are a design specification
  - (We didn't have discretion to change plans).
- Why are Specs *design* specs?
  - Let's take a look...



# Check in: Case Study

- Remember the Issues: Panel Size, Tie Bars, Half Width Pave.
- PLANS gave specific direction as to:
  - Width and Length of Overlay Joint Spacing. (No discretion).
  - Size, spacing, and location of tie bars.
  - Half-width Pave
- Road Map Analogy.

# Check in: Case Study

- **SPECS** said things like (in the General Section):
  - **Engineer may reject nonconforming work!**
  - “As shown in the plans” – common refrain.
  - Concrete **shall** be spread to required depth. Joints **shall** be cut...
    - Shall...

# Check in: Case Study

- **DOT retained control over this project. CONTRACT SAYS:**
- Potential error in plans, Contractor required to notify Engineer, who will make interpretations to fulfill intent of plans.
- Engineer will decide all questions regarding – quality of materials, manner of performance of work, interpretation of plans...Engineer's decisions shall be final.
- Does Contractor have discretion?

# Comparison

- Where does MN DOT Spec Book fall?

# Design or Performance: 2018 MN Standard Specifications.

- Contractor **shall** construct and complete the Project in every detail as described in the Contract.
- Engineer will decide all questions regarding...
- Engineer may suspend the work if...
- Contractor **shall** perform all work in conformance with requirements of the Contract.
- The Department will consider all work that does not meet the Contract requirements to be **unacceptable**.

# Section 2301: Pavement Construction

- Specific Aggregate Testing Requirements.
- Water : Cement Ratio
- Slipform Construction Requirements.
- Placing Concrete Requirements.
- Placing Pavement Reinforcement.
- Lots of Tests.
  - Vibration Monitoring.
  - Air Content
  - MIT-SCAN-T2 Testing Device
  - Pavement Texture Depth.
  - Thickness Evaluation.
- Joint Sawing as Shown on Plans.

# Section 2301: Pavement Construction

- BUT...
- Use paver designed to spread, consolidate, screed and float-finish with minimum hand finishing.
- Use of admixtures are *at the Contractor's discretion*.
  - Water reducing, Retarding, etc.
- Regulate progress of equipment to fully, but not excessively, vibrate the concrete.
- Coordinate operations to provide uniform progress of paver.

# Tricky Issue

- Tolerances/Discretion.
  - Minimum/Maximum, +/-, shall not exceed, etc.
- Owner may argue tolerances provide “discretion.”
- Contractor argues tolerances restrains discretion.
- **MN Mix Design.** Table 2301-4. – *is this giving options or taking them away?*
  - Max. W/C Ratio, Range of Cementitious Content (lbs/yd<sup>3</sup>).
  - Gradations (+/-5%).



# Tricky Issue 2

- Disclaimer of Warranties.
- Owners are using Special Provisions to insert “disclaimer” of implied warranty of design.
- “Any random cracking which occurs shall be responsibility of Contractor.”
- Not so fast...must “clearly alert contractor that design may contain substantive flaws.”
  - Can’t make Contractor follow design/limit discretion, but then say he is responsible for the design.
  - Contractor has agreed he has “examined the site,” “reviewed the plans,” “assumes responsibility for the work” does not overcome warranty of design.

# Contractor Perspective

## Practical Impact – How to Use Effectively.

- Follow notice provisions of Contract.
  - Alert Owner/Engineer to issues.
  - Document.
  - You are not allowed to deviate.
  - Don't "make it work" without communication w/ Egr.
- Request Specific Reasoning for Repair/Replacement.
- Think ROI.
  - What will repair cost you?
  - What will disagreement cost you?

## MNDOT – Standard Specifications for Construction, 2018: Procedure for Changes\*

### Changes & Contract Revisions

#### Extra Work (§ 1402.5)

1. If Contractor is required to perform any extra work, then . . .
2. **STOP WORK.** Notify the Engineer in accordance with § 1403, "Notification for Contract Revisions."

#### Differing Site Conditions (§ 1402.2)

1. If Contractor encounters subsurface or latent physical conditions that *differ materially from those indicated in the Contract, or unknown physical conditions of an unusual nature, that differ materially from those ordinarily encountered and generally recognized as inherent in the Work* provided for in the Contract, and
2. *These conditions cause an increase or decrease in the cost or time* required for the performance of any Work under the Contract then . . .
3. **STOP WORK.** Promptly notify the Engineer in writing of the specific differing conditions before they are disturbed and before the affected work is performed.
4. If the Engineer fails to properly adjust the Contract, comply with § 1403, "Notification for Contract Revisions."

#### Significant Changes to the Work (§ 1402.3)

1. If the Engineer orders a change or alteration of the work; and
2. If the character of the work as altered *differ materially in kind or nature* from that involved or included in the original proposed construction, or . . .
3. If a major contract item of work is *increased in excess of 125 percent or decreased below 75 percent* of the original Contract quantity, then . . .
4. **STOP WORK.** Promptly notify the Engineer in writing of the specific significant changes to the character of work
5. If the Engineer fails to properly adjust the contract, comply with § 1403, "Notification for Contract Revisions."

#### Suspension of Work (§ 1402.4)

1. If the performance of all or any portion of the work is *suspended or delayed by the Engineer in writing for an unreasonable period of time* (not originally anticipated, customary, or inherent to the construction industry) and . . .
2. If the Contractor believes that it is entitled to *additional compensation and/or contract time* as a result of such suspension or delay, then . . .
3. Submit to the Engineer in writing a request for adjustment, setting forth the reasons and support for such adjustment, *no later than 7 calendar days after receipt of notice to resume work.*
4. If the Engineer fails to properly adjust the contract, comply with § 1403, "Notification for Contract Revisions."

#### Eliminated Items (§ 1402.6)

1. If the Department *eliminates any Contract Items* from the Contract, then . . .
2. The Department will reimburse the Contractor for all costs incurred before notification that are not the result of unauthorized Work. See § 1905, "Compensation for Eliminated Items."
3. If Department fails to properly reimburse, notify the Engineer in accordance with § 1403.

### Notification for Contract Revisions (§ 1403)

NOTE: Failure to provide notice as specified in 1403, "Notification for Contract Revisions" constitutes a waiver of the Contractor's entitlement to compensation or a time extension.

#### First Notice, By Contractor (§ 1403.2)

1. If any contract revision appears necessary, then . . .
2. **Stop Work.** Immediately notify the Engineer in writing. The Contractor *shall not start or continue with a Contract Item for which a Contract revision may be necessary* without authorization from the Engineer.

#### Written Notice, By Contractor (§ 1403.3)

1. If the Contractor *disagrees with the Engineer's response* or the Engineer *does not respond* to the first notice, then . . .
2. Within 5 business days of first notice if Engineer has not responded or within 5 business days of receiving the Engineer's response to the first notice, provide a written notice that includes:
  - A. A *description of the situation;*
  - B. *The time and date* the situation was first identified;
  - C. *The location of the situation,* if appropriate;
  - D. A *clear explanation* of why the situation represents a Contract revision, including appropriate references to the pertinent portions of the Contract or law;
  - E. A *statement of the revisions deemed necessary* in the Contract Unit Price(s), delivery schedule(s), phasing, time, etc. (may rely on estimates);
  - F. An *estimate of the time by which the Engineer must respond* to minimize cost or delay; and;
  - G. *Anything else* that will help achieve timely resolution.

#### Written Acknowledgment, By Engineer (§ 1403.4)

The Engineer should provide a written acknowledgment of receipt of the Contractor's written notice under §1403.3.

#### Final Written Response, By Engineer (§ 1403.5)

1. Within 10 business days of receiving the Contractor's written notice, the Engineer will provide a written response that includes one of the following:
  - A. Confirmation of the need for a contract revision. The Contractor shall *pursue time extensions in accordance with 1806, "Determination and Extension of Contract Time," and compensation in accordance with 1904, "Compensation for Contract Revisions,"* or
  - B. Denial of the request for a contract revision, or
  - C. A request for additional information, which specifies *what is needed and by when.* The Engineer will respond within 10 business days of receiving the additional requested information.

#### Contractor's Recourse (§ 1403.6)

1. If the Contractor *disagrees with the Engineer's final written response* or the Engineer's response is *untimely*, then . . .
2. The Contractor shall give the Engineer written notice of the intent to pursue a claim within 5 business days of receiving the Engineer's final written response and then pursue a claim in accordance with 1517, "Claims for Compensation Adjustment."

### Claims for Compensation Adjustment (§ 1517)

#### Notification (§ 1517.1)

The Contractor shall notify the Engineer in writing of any intent to file a claim for compensation or time extension within 5 business days of the Engineer's denial under 1403.5 or as soon as Contractor is aware of a claim.

#### Claims Submittals (§ 1517.2)

The Claim, when submitted, must include the following:

##### A. Entitlement

The Department requires that the Contractor *establish entitlement* for all claims before the Department will consider impact and cost. The Contractor shall submit the following to the Engineer to determine entitlement:

1. A *detailed factual statement* of the claim providing a *description of the claim issues and all relevant facts*, including the events, dates, locations, and a description of what Work was affected and how this Work was affected by the claim.
2. A *narrative* that identifies *all of the specific Contract provisions* that support the claim, *why they support the claim, and how the details of the factual statement* in item (1) above establish entitlement based on the referenced Contract provisions.
3. *All pertinent documents, electronic files, and the substance of any oral communications* related to the information provided in item (1) and (2) above.

##### B. Impact and Cost

If the Department determines that the Contractor has *established entitlement*, the Contractor shall submit the following to the Department to determine impact and cost:

1. If a *delay is alleged*, submit a *narrative, all documentation* (including applicable project schedules substantiating the delay), *and a schedule analysis* in accordance with 1806.1, "Determination and Extension of Contract Time, General."
2. If *additional costs are alleged*, submit a *narrative and all documentation that substantiates the claimed costs.* The Contractor shall submit cost documentation for the claim submittal in a format that allows the Department to perform an audit under the authority of 1721, "Audits."

#### Required Certification of Claims (§ 1517.3)

The Contractor shall include with the Claim a fully executed certification attesting to the following:

1. The claim is made in good faith, based on documented fact and the value is not knowingly overstated, and
2. Supportive data is true, accurate, and complete to the Contractor's best knowledge and belief.

#### Review of Claim Submittals (§ 1517.4)

All claim submittals filed will be subject to review by the Department at any time following the filing of the claim submittal. The Contractor and Department shall exhaust the claim process reflected in this section (1517) before seeking compensation or extension of the Contract Time by filing an action in the courts of this State. The Contractor, Subcontractor(s), or Supplier(s) shall cooperate with the Department and shall provide the Department access to the following relevant documents, including, but not limited to all of the documents and information listed under § 1517.4.

\*NOTE: Required procedures may be modified by Supplemental Specifications, Special Provisions, or Addendum. Only the Engineer may approve extra work or exceptions to the above procedures (See, e.g., §§ 1402.1, 1501)

NOTICE: THIS FLOWCHART DOES NOT CREATE AN ATTORNEY-CLIENT RELATIONSHIP AND IS NOT INTENDED AS LEGAL ADVICE. CONTACT A LICENSED ATTORNEY TO UNDERSTAND YOUR RIGHTS.

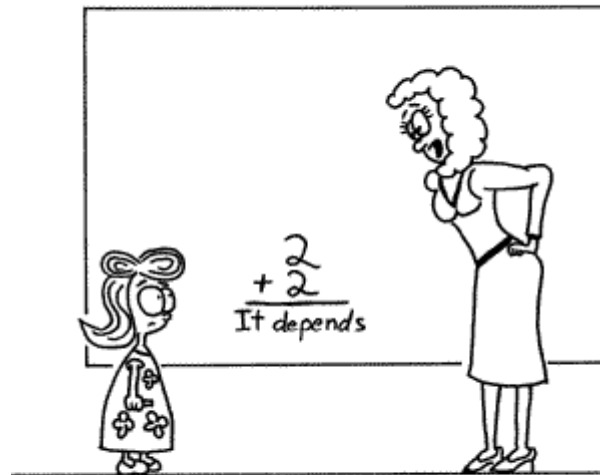
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# Questions?

# Thank you!

Stu's Views

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"Suzie, this is math, not the law."

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