

TOOLBOX TIMES

Keeping up with Joe
Gallagher Asphalt Edition

What is Happening Beneath Your Road?

FROST HEAVING

Thank you, **Brian Keierleber**, for sharing this article with me.

What is Frost Heaving?

Frost Heaving is the result of freezing and thawing of water along the frost line in your subgrade. This freezing and thawing results in frost action, which impacts your surface and can cause surface damage due to heaving... See the diagram below.

Why do we care?

In an ideal world, we are designing for Frost Heaving.

If we design for Frost Action and imminent heaving we can protect the binder and surface of our roadway from moisture infiltration.

Plan Ahead!

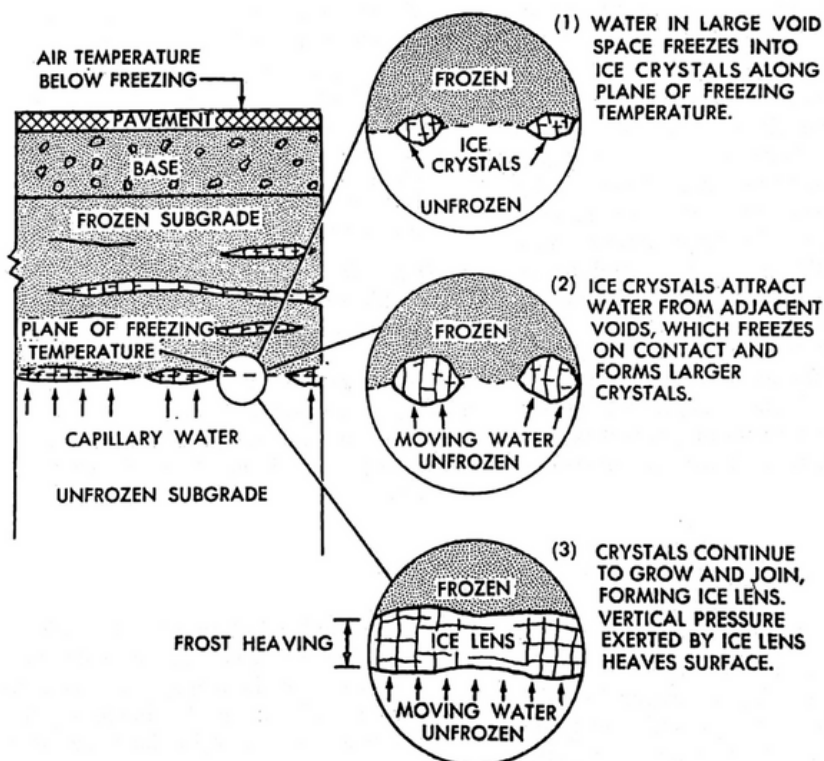


Figure 2-15. Formation of ice lenses at frost line.

Hot In-Place Highs

Since our Newsletter has grown, here are some reminders of Hot In-Place Recycling highlights:

- Discounted price to fix roadways
- Less community traffic due to less trucks and no cure time for process
- Extended Road life due to crack repair from heat transfer
- Sustainable Process - 28% Carbon Emission Reduction
- One contractor - less coordination

Valentine's Day Word Search!!

C	S	F	L	O	W	E	R	S	O	L	D
C	N	L	L	M	H	C	O	L	K	U	U
J	A	R	R	O	W	A	O	F	I	R	S
F	W	R	A	T	V	R	O	L	S	I	V
V	F	Y	D	T	L	E	N	A	S	C	A
B	E	J	U	S	F	O	C	K	E	K	L
L	B	B	M	N	T	H	U	G	S	O	E
E	R	D	G	S	K	H	I	N	G	T	N
C	U	P	I	D	S	E	E	T	S	E	T
F	A	E	F	Z	E	C	T	A	R	I	I
D	R	C	T	N	F	O	V	L	R	K	N
H	Y	S	C	H	O	C	O	L	A	T	E

FLOWERS

GIFT

CARDS

KISSES

CHOCOLATE

HUGS

HEART

ARROW

VALENTINE

LOVE

CUPID

FEBRUARY

Joe's Corner

Overall Record: 3-5

**This is going to get tricky during
basketball season... Let's go
Cyclones!**

**CYCLONES OVER CINCY TOMORROW
(02/13)**

Quote of the Month

**"The man who is swimming against the
stream knows the strength of it" -
Woodrow Wilson**

Trivia

**Q: "Deglutition" is the
scientific term for what
bodily function?**

A: Email Joe for Answer

**Q: Voltaire claimed what
3 words DID NOT
accurately describe this
political entity?**

A: Email Joe for Answer

**Q: What nation has the
longest national anthem
with 158 stanzas?**

A: Email Joe For Answer

February Facts

**On this date in 1809
Abraham Lincoln was
born!! Happy Birthday,
Honest Abe!!**


**On this date in 1818 Chile
declared their
Independence from Spain.**

**On this date in 1855
Michigan State University
was established.**

Industry Spotlight - NACE President, Jeff Blue



Who is Jeff Blue?

- Jeff has been a roadway professional for over 35 years
- Jeff is the County Engineer for Champaign County, IL
- Jeff is a champion of Pavement Preservation and has utilized all different disciplines of Preservation to help his community
- Jeff is a HUGE Illinois Fan 
- Jeff is a heck of a dude and a great family man - make sure to say “hi” to Jeff when you ALL go to the NACE Conference!

What is NACE?

- NACE is the **National Association of Engineers**
- Jeff Blue is the current President of NACE
- NACE is an incredible resource for engineers across the nation to collaborate, learn about ways to benefit their community, and express lessons learned in both a FUN and educational way
- Check it out below!

<https://www.countyengineers.org/>