

National Road Research Alliance Geotechnical Team November Meeting

**Terry Beaudry
Reclamation/Grading Engineer**

Agenda

1. Welcome and Introductions
2. General NRRRA Update
3. Update Ongoing Research Projects
4. Lessons Learned DOTs Members Initiative
5. Feedback on Best Practices for Geotextile Wrapping of Granular Backfill of Integral Abutments
6. Questions/Requests

General NRRA Update

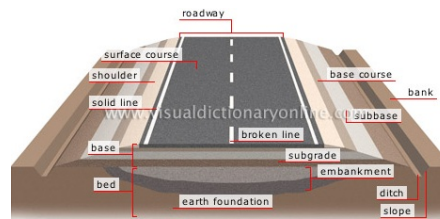
- Phase II Membership
- Phase II Research Ideas
 - Expect a *Research Call* in February 2021
- Previous RPO available in NRRA YouTube channel:
 - <https://www.youtube.com/playlist?list=PLhkRICZI75wIPxYDgl9kQruzdUd7gFDU8>
- Stay tuned for upcoming Webinar by PennDOT on “*Use of Geosynthetics in Pavement Foundation*” - Kerry Petrasic
 - Tuesday November 17, TBD time

Lessons Learned DOTs Members Initiative

Kevin Kliethermes, FHWA

- What is your State DOT's typical section for designing of a new roadway? reconstruction roadway?

- Base
- Subbase
- Subgrade?



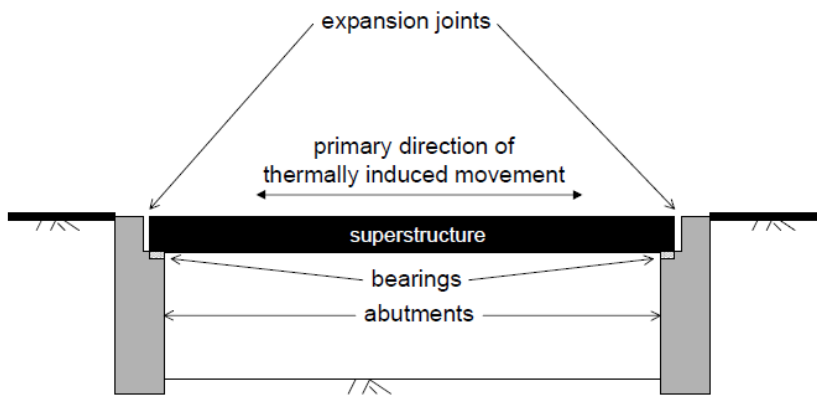
- What is causing grading and base issues in your state today, during construction this year?
- Does your state have a different typical G&B section for Bituminous than Concrete?
- What does you state use for soil stabilization? Cement? Lime?

Best Practices for Geotextile Wrapping of Granular Backfill of Integral Abutments

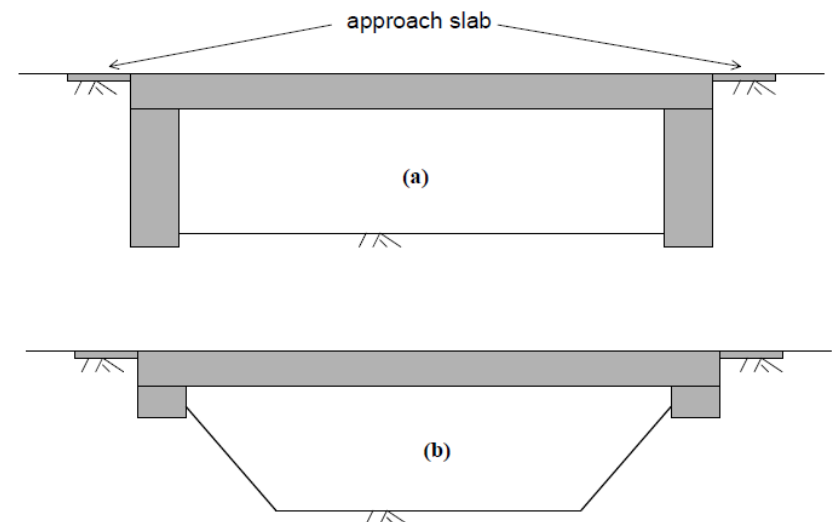
Integral Abutment Bridges (IABs) are *jointless bridges* in which superstructure is cast monolithically with substructure

- => Eliminating expansion joints
- => Reduces corrosion of bridge elements (leaking joints)
- => Cost effective (short and long-term)
- => Standard single span bridge of choice by majority DOTs

Conventional

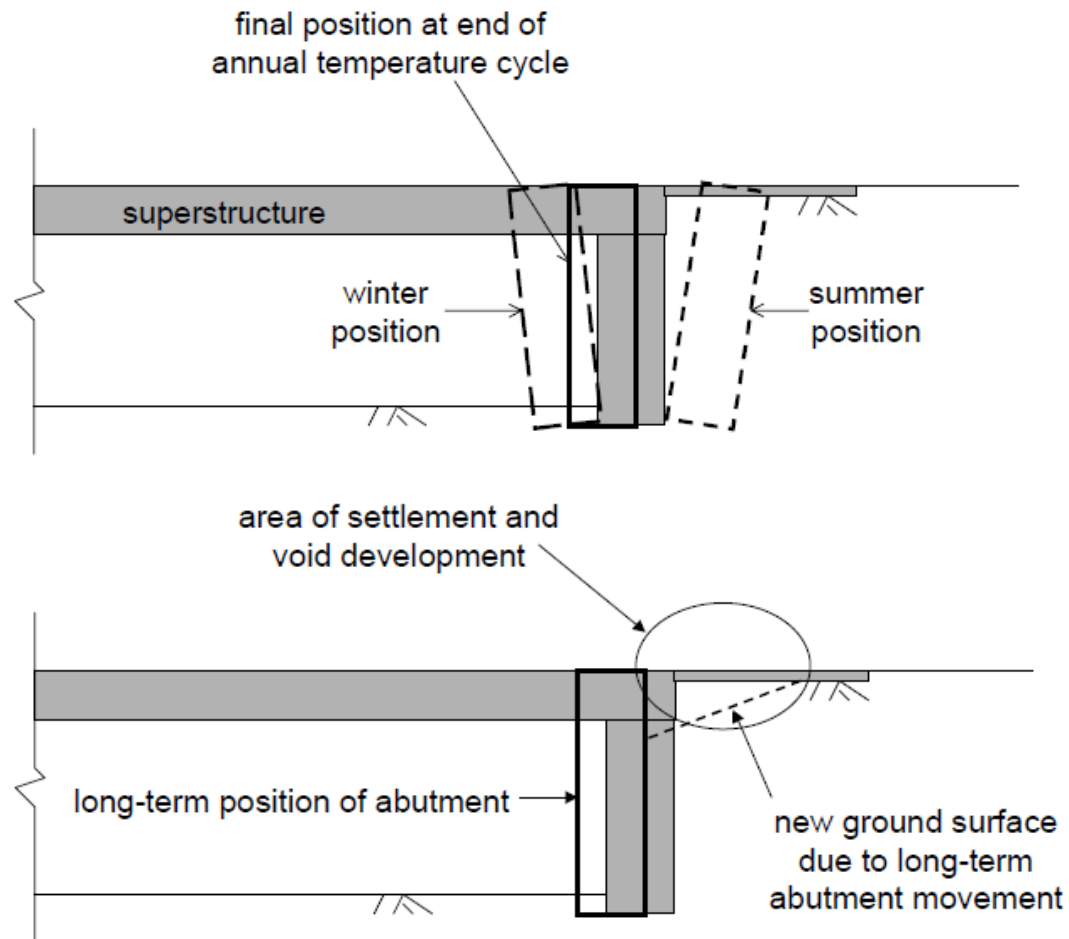


IAB



Best Practices for Geotextile Wrapping of Granular Backfill of Integral Abutments

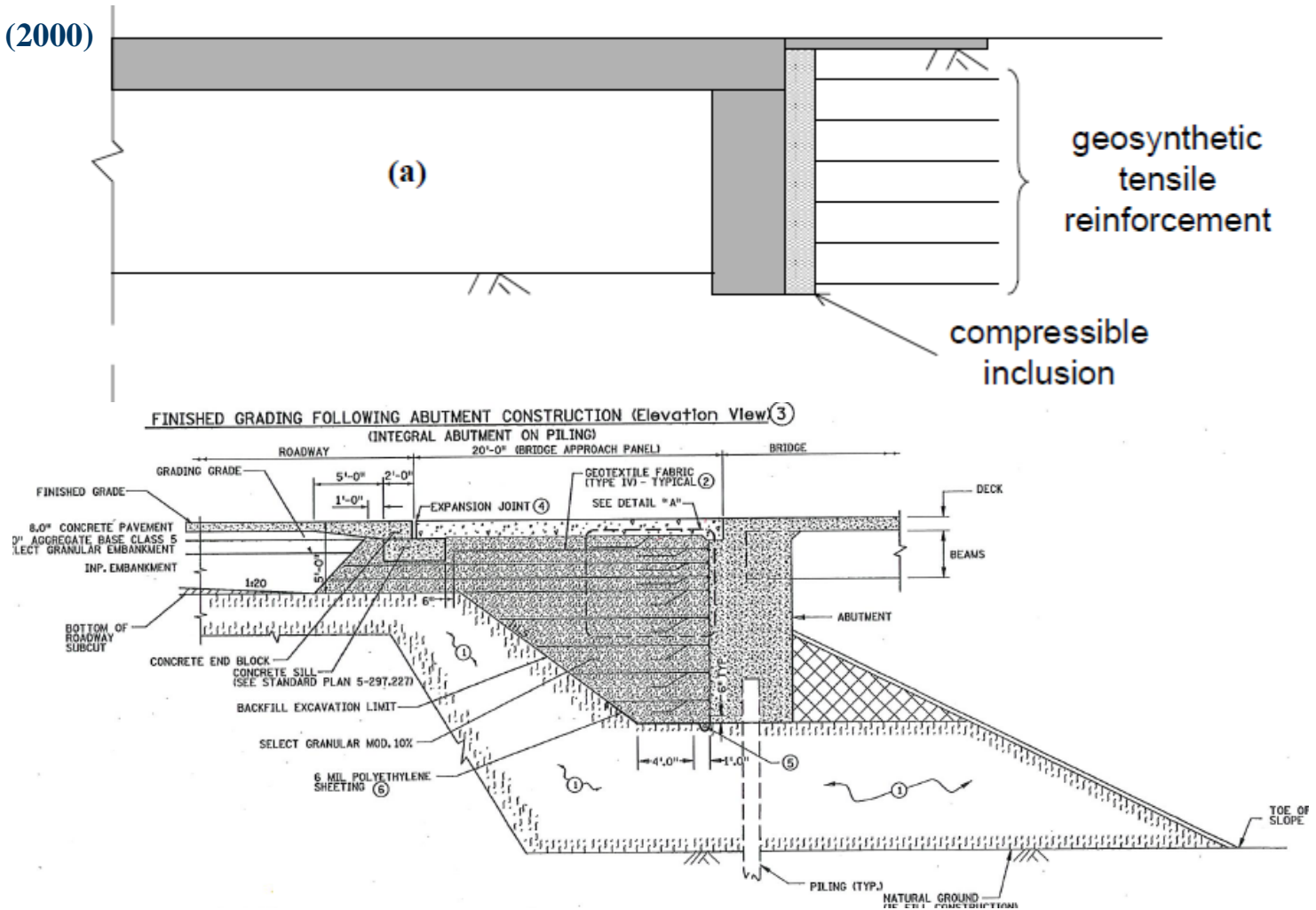
Identified Issues – Thermally Induced Movement



Best Practices for Geotextile Wrapping of Granular Backfill of Integral Abutments

Alternatives / Solutions

*Horvath (2000)



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6. **Questions/Requests**