Concrete Paving Field Inspection Inspector’s Workshop

National Concrete Pavement Technology Center

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PCC Paving Field Inspection

- Why are we here?
- How do we achieve quality for PCC paving?
- Got a project….Now what?
- What is concrete?
- **What kinds of equipment are used?**
  - What happens before you start paving?
  - What happens when you’re finally paving?
  - What is the inspector’s role?
  - What about all of the other road building stuff?
- What paperwork?
WHAT KIND OF EQUIPMENT WILL BE USED?
Equipment

- Subgrade/Base Prep
- Transport Vehicles
- Placement and Consolidation
- Finishing
- Texturing
- Microtexture
- Macrotexture
- Curing
- Sawing
- Sealing
Equipment

Motor Patrol
Equipment

Subgrade Trimmer
Equipment

Roller
Equipment

Stringline
Stringless Paving
Stringless Paving
Stringless Paver
Equipment

Transport
Equipment

Transport
Equipment

Transport
Equipment

Transport
Equipment

Placing & Consolidating
Equipment

Placing & Consolidating
Extrusion Envelope

Excess Concrete Movement

Concrete Head

Strike Off

Vibrator

Tamper

Profile Pan

Fluidized Concrete Side Form Resistance Batter

Profile Pan Batter - Compression-Paver Uplift
Equipment

Placing & Consolidating
Real Time smoothness device (GSI)
Equipment

Finishing
Equipment

Texture
Equipment

Texture
Equipment

Curing
Equipment

Curing
Equipment

Sawing
Sawing Window

Too Early: Raveling
Sawing Window
Too Late: Cracking

Concrete Strength

Restraint Stress Equals Concrete Strength

Minimum Strength to Avert Excessive Saw Cut Raveling

Time
Equipment

Sawing
Equipment

Sawing
Equipment

Sealing
Equipment

Sealing
Equipment

Sealing
And finally, the backfill

- Hauling equipment allowed on the pavement after opening strength has been met
- Protect pavement edges from damage (stay away):
  - loaded trucks
  - motor graders
  - rollers
All Kinds of Equipment . . . .