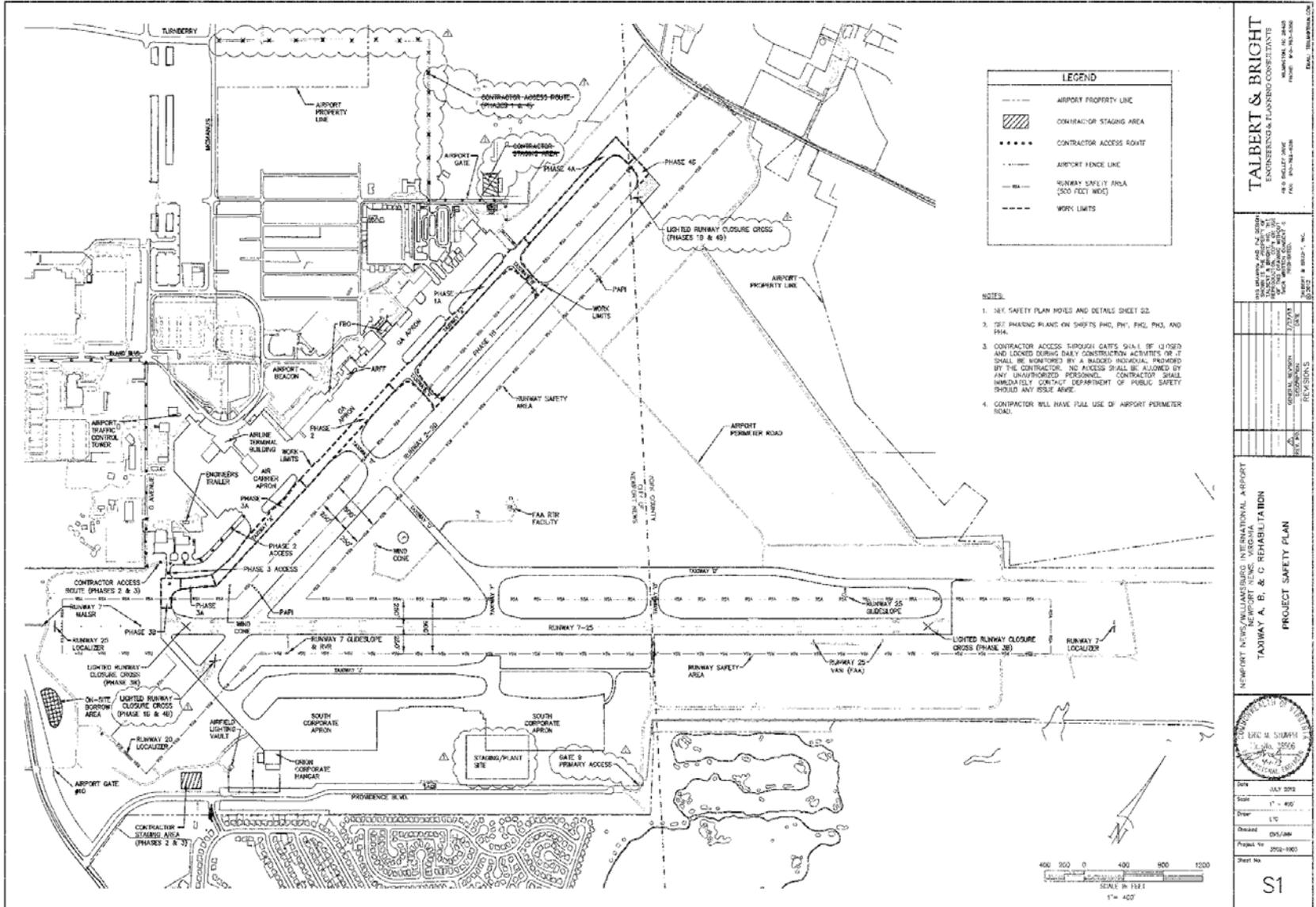


Concrete Paving at the Williamsburg/Newport News International Airport



Robert R. Long, Jr.
American Concrete Pavement Association
Mid-Atlantic Chapter
2015 Virginia Concrete Conference
Richmond, VA
March 6, 2015

Williamsburg/Newport News International Airport



New Taxiway

- Subgrade prep – soil moisture conditioning (17 lbs./SY)
- 8" of lime stabilization – P-155 (45 lbs./SY)
- 6" of cement treated aggregate – P-304
- 17.5" concrete pavement – P-501

New Taxiway

- Slabs jointed at 20' X 20'
- Doweled in both directions
- 5,000' long by 50' wide
- Reconstructed in 3 phases

Demolition of the Old Pavement















Difficult Subgrade.....







Soft Spots



Buried Treasures???





Subgrade Prep



Soil Drying – Quick Lime



Bringing in Additional Subgrade Material



Traditional Edgedrains on Both Sides of the Pavement





8" of Lime Stabilization (P-155)





Density Check in P-155



06/09/2013 16:12

Proof Rolling (Subgrade & P-155)



6" of Cement Treated Aggregate (P-304)











Curing the P-304





Setting Stringline

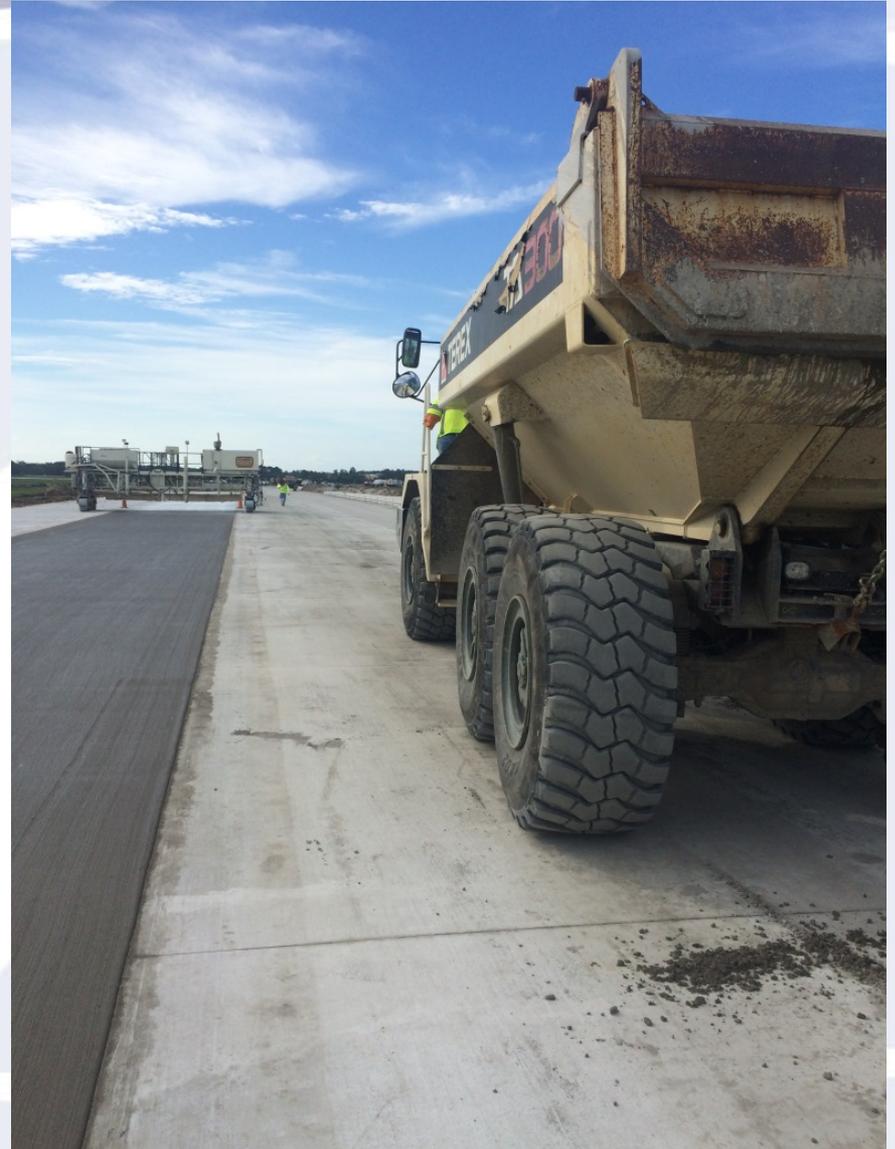




Onsite Batch Plant



Concrete Delivery









17.5" slab



Alternate Lane Paving



Access for Fill-in Pours







Oops - Late Discovery



Another Soft Spot



Hand Pours



Header Paving



Long Days





Finished Taxiway





Not Your Typical Highway Markings!











All Materials for this presentation
provided by:

TALBERT & BRIGHT
Engineering Planning Consultants

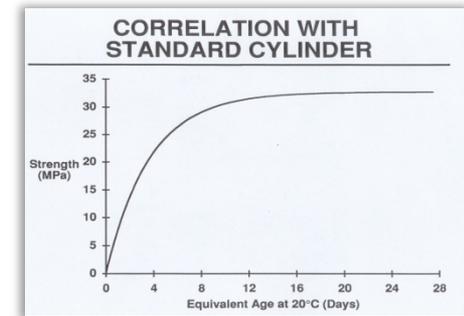
Concrete Overlays for Airfield Pavements – A Long-Life Rehabilitation Alternative & An Accepted Practice



Gary L. Mitchell, P.E.
Vice President – Airports and Pavement Technology
American Concrete Pavement Association

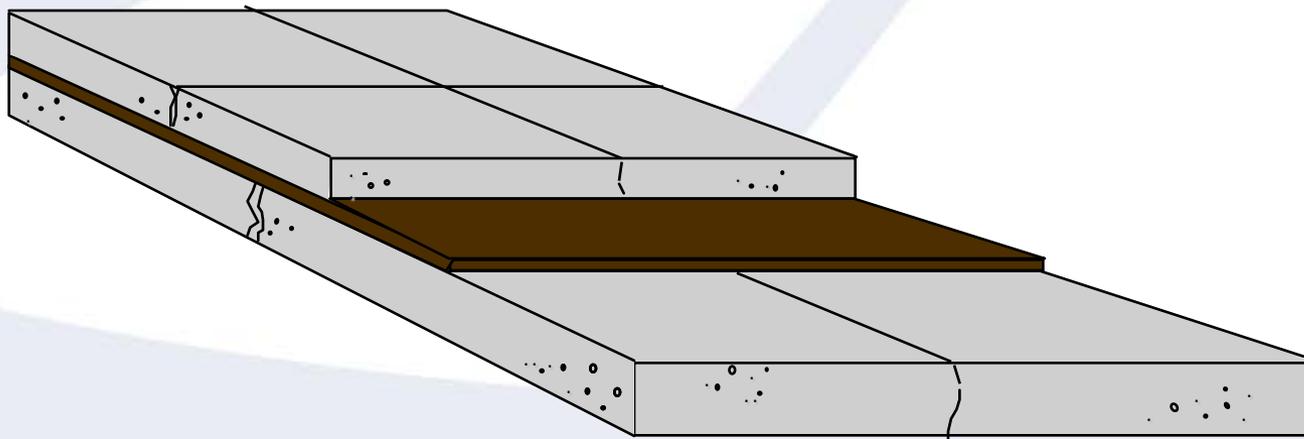
Benefits of Concrete Overlays

- No need to remove existing pavement
- Few pre-overlay repairs
- Placed using normal construction practices
- Accelerated construction practices can be used
- Can be open to traffic quickly

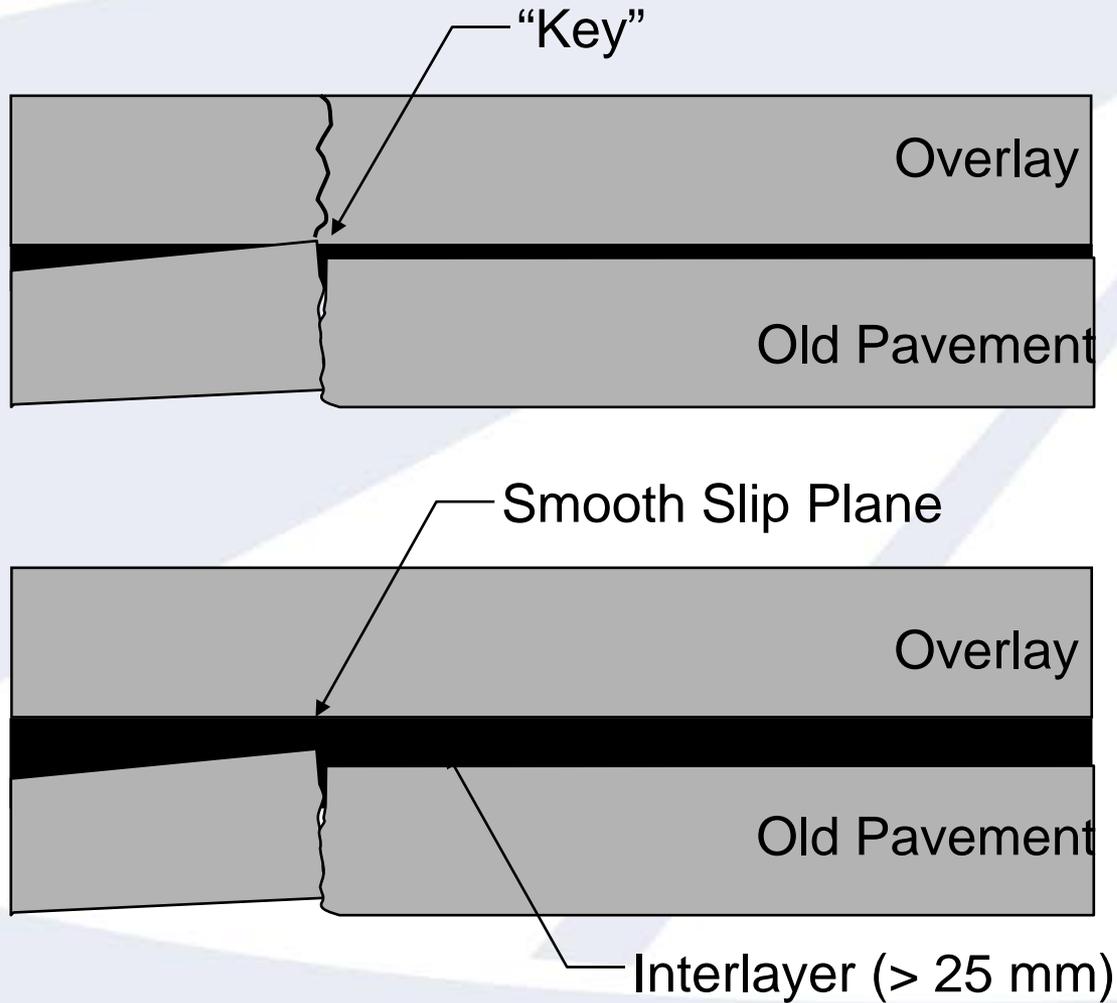


Unbonded Overlay

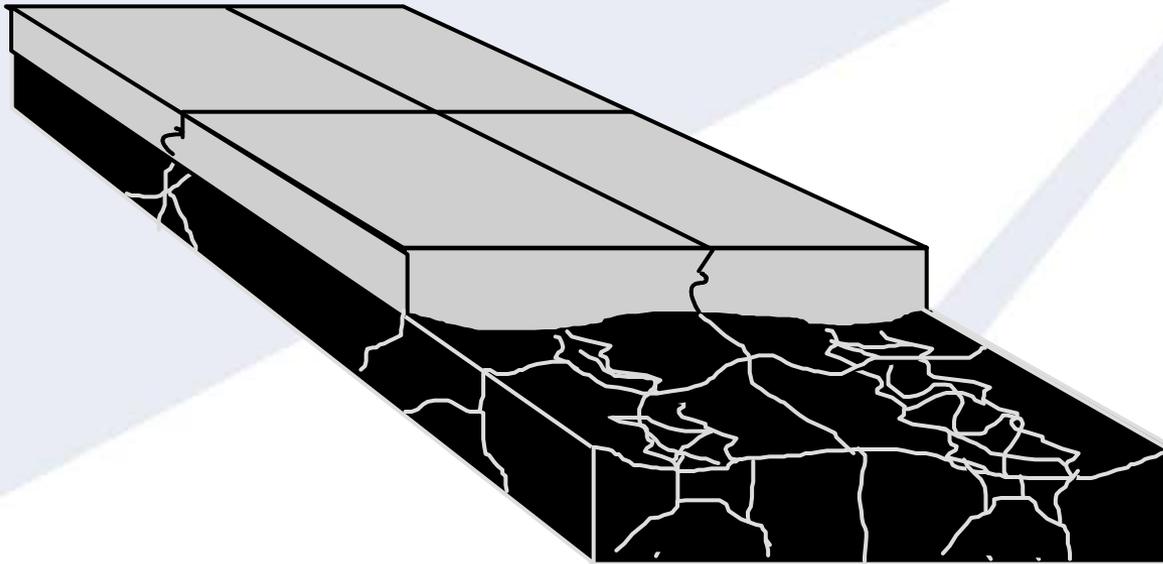
- Consists of thick concrete layer on top of an existing concrete pavement
- Uses a “separation interlayer” to separate new overlay and existing concrete



Unbonded - Separation Interlayer



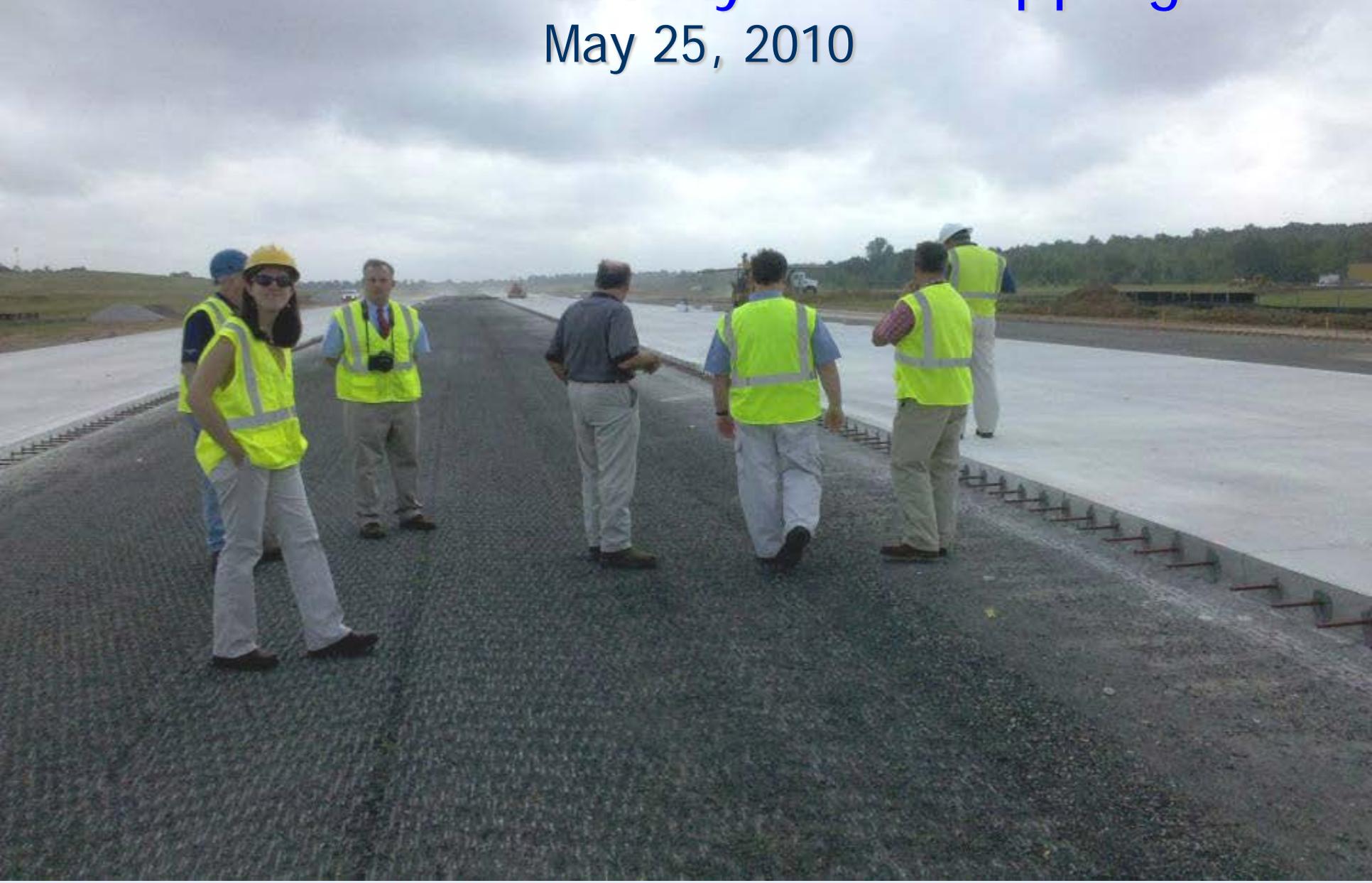
Unbonded - Whitetopping





Lancaster County Whitetopping

May 25, 2010



Berkeley County Whitetopping March, 2011



THANK YOU!
Questions?



www.acpa.org