

PAVEMENTS

ECONOMIC VALUE



**COST SAVINGS WITH IMPROVED
ENGINEERING AND SUSTAINABLE
TECHNOLOGY**

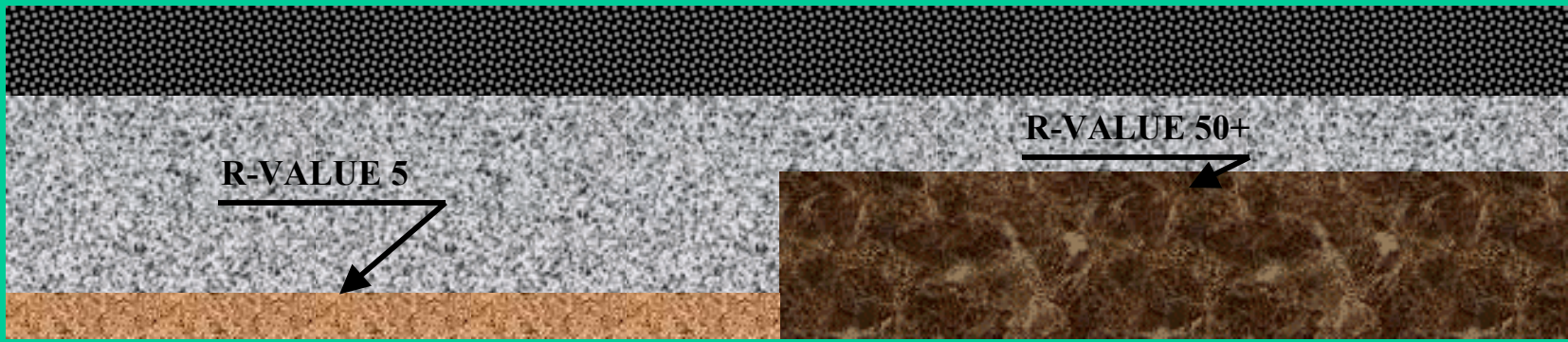
- ❖ Replaces imported aggregate base at a ratio of 1:1
- ❖ Substantially reduces cost of export/import practices
- ❖ Typical, up front construction cost savings 30%
- ❖ Life-cycle cost advantages – reduces maintenance cost due to subsurface distress
- ❖ Minimizes wear and tear of existing roads
- ❖ Predictable construction schedule

R-Value Section Reduction

SECTION COMPARISON BASED ON SUBGRADE R-VALUE

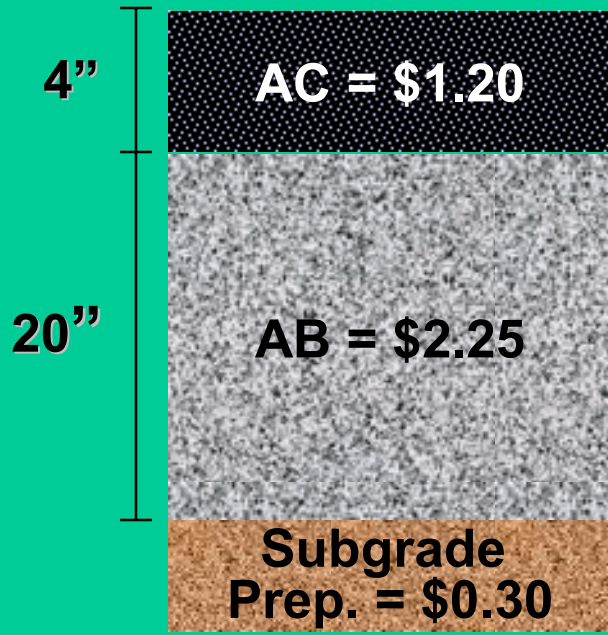
TRAFFIC INDEX 8

NON-TREATED SUBGRADE R-VALUE 5		TREATED SUBGRADE R-VALUE 50	
AC (THICKNESS)	4"	AC (THICKNESS)	4"
CLASS 2 AB	20"	CLASS 2 AB	7"
PREPARED SG	6"	TREATED SECTION	15"
AB REDUCTION	0	AB REDUCTION	13"



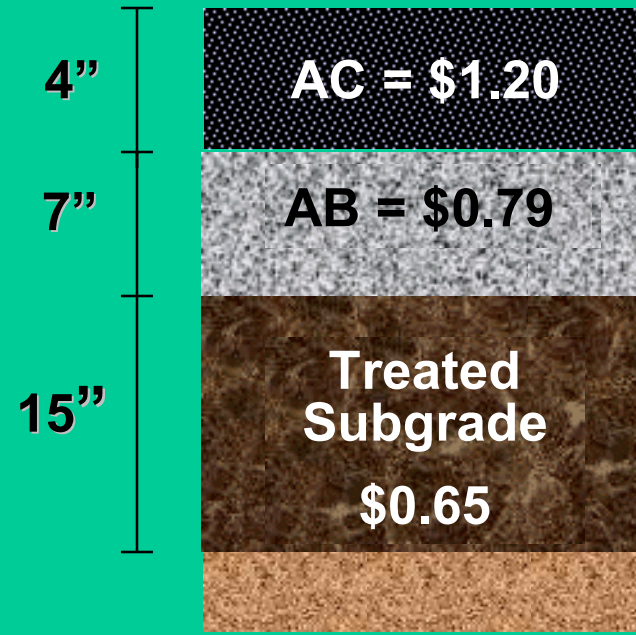
Cost Savings of 30% @ TI - 8

Aggregate Base Design



Total Cost = \$ 3.75/sf

Soil Stabilization Design



Total Cost = \$ 2.64/sf

***BASED ON 4% QUICKLIME @ 60,000 SF**

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ECONOMIC CONSIDERATIONS

Economic Consideration:

- Reduces the amount of grading required for Roadway Construction
- A cubic ft. of treatment replaces Transportation Cost at a ratio of 29:1
- For Export projects ratio at 40:1

12"

AB @ 145 PCF

Treated Section
@ 5 PCF

"Aggregate is low value and high weight," said Sharon Prager, a consultant for the industry. "If you don't obtain the supplies locally, the transportation costs can exceed the value of the aggregate." So the closer the quarries are to the construction sites, the fewer trucks on the freeway.

ARI News



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ECONOMICS



Highway Materials Costs Climb 22% in Past Two Years Posted March 30th, 2006

According to a study conducted by the American Road and Transportation Builders Association, highway materials prices have increased by 22 percent in the past two years. Sand, gravel and stone increased by 11 percent. Ready-mix concrete increased by 18 percent and asphalt paving mixes increased by 10 percent.

Subgrade Cost Model: Stabilization vs Aggregate Base Section

