HFB Enterprise, LLC

SUPERSLURRY™

Reclaim – Recycle - Reuse

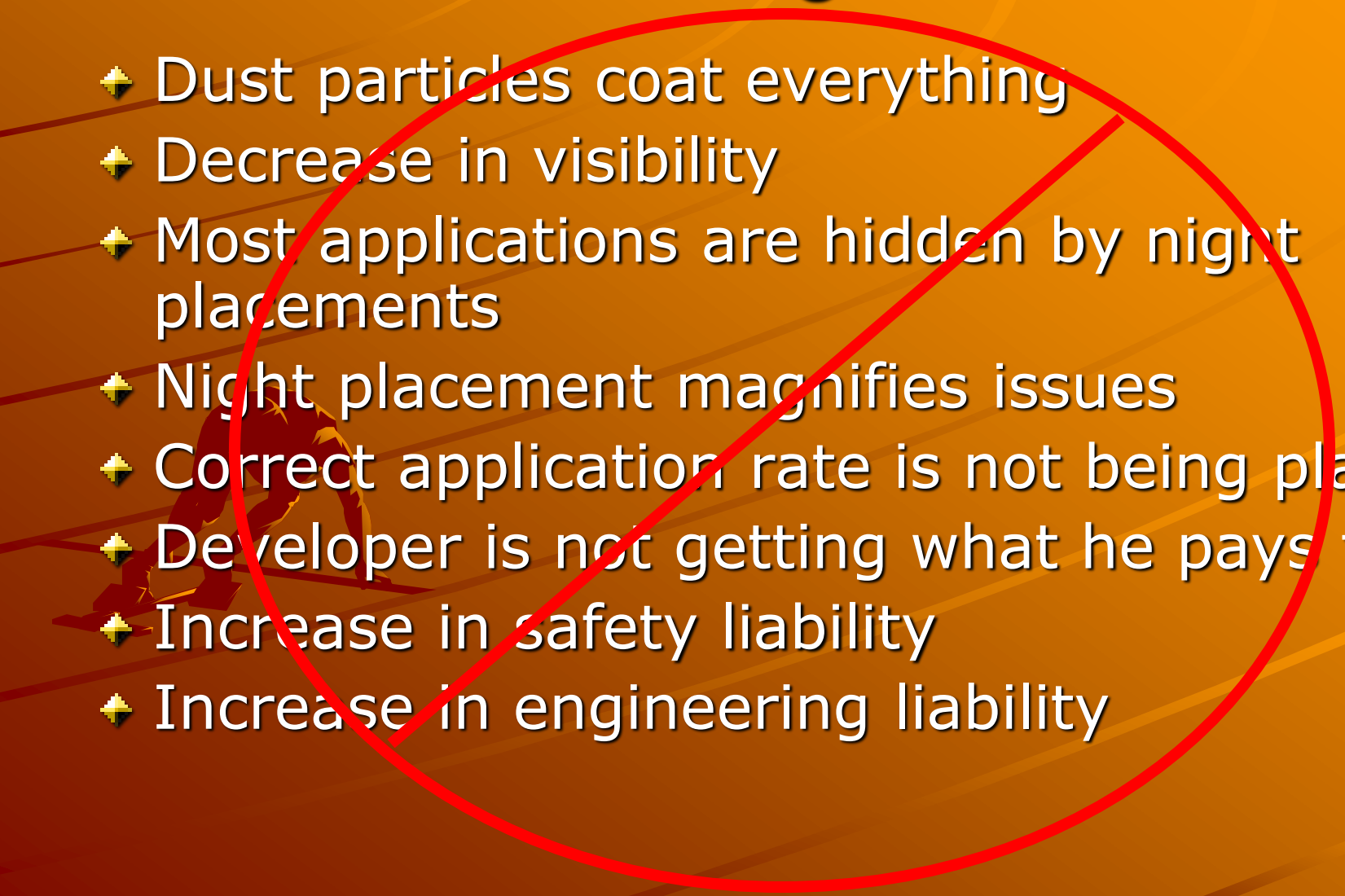
Leave the competition in the Dust

www.hfbco.com

Why SuperSlurry?

What's wrong with dust?

- Dust particles coat everything
- Decrease in visibility
- Most applications are hidden by night placements
- Night placement magnifies issues
- Correct application rate is not being placed
- Developer is not getting what he pays for
- Increase in safety liability
- Increase in engineering liability



WHAT IS SUPERSLURRY?

- SuperSlurry is a homogeneous liquefied cement copolymer that becomes thixotropic during static mixing and remains in various degrees of thixotropy until mechanical particle separation occurs.

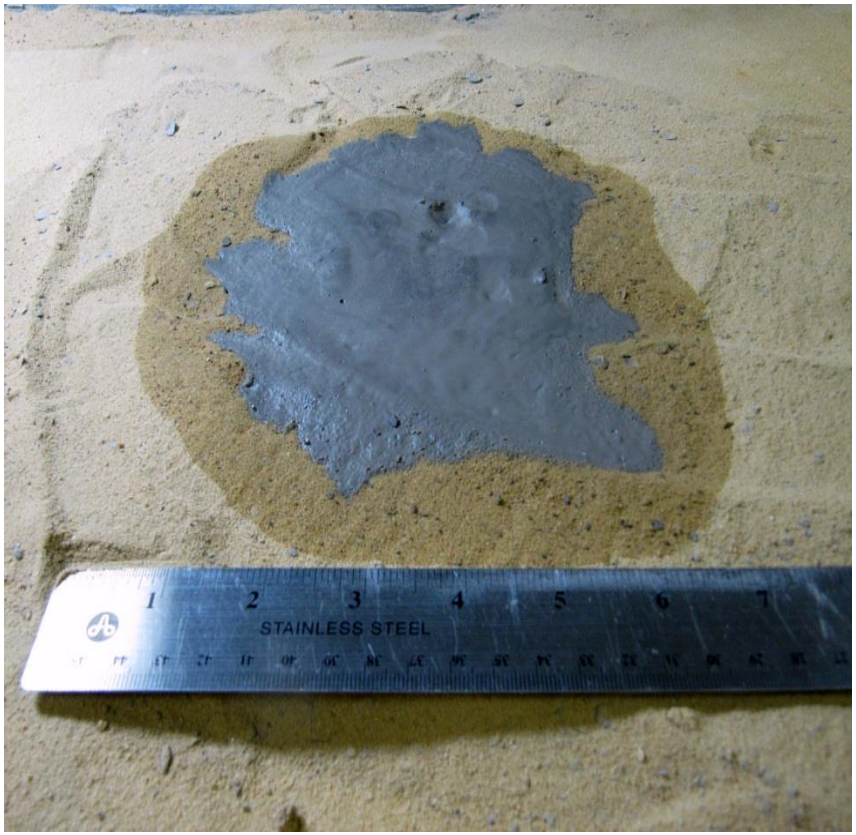
DEFINITION SIMPLIFIED

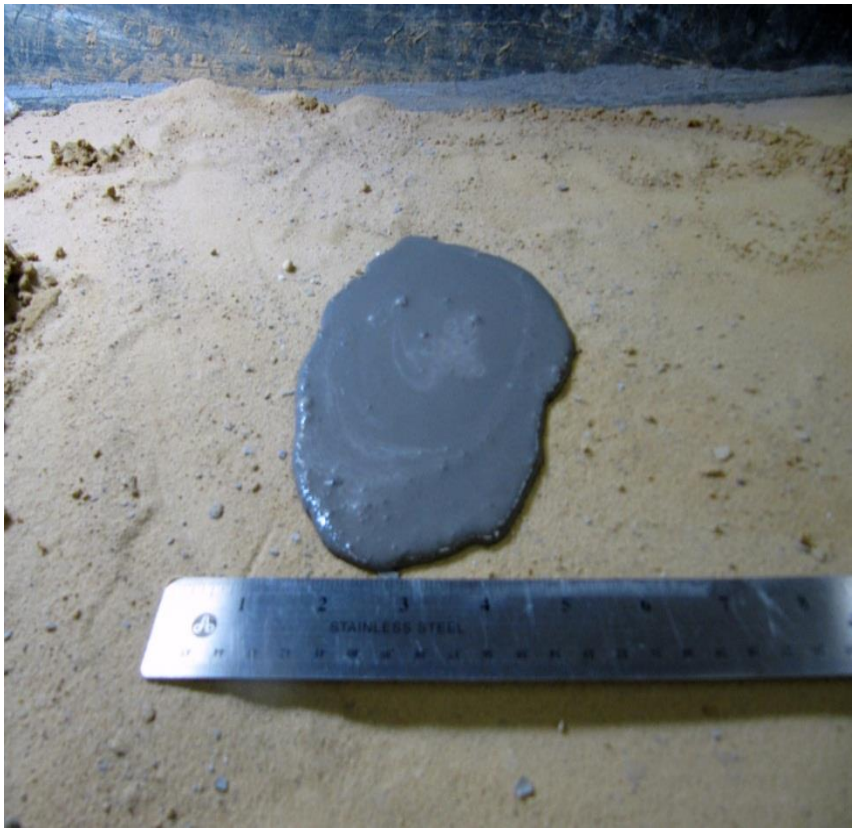
SuperSlurry is a Transport/Placement system specifically designed for cementitious material

What makes SuperSlurry unique?

- ✓ ≥60% Material 40% Water
- ✓ Hydration time doesn't begin until job-site mixing operation
- ✓ Greater travel time
- ✓ Lower viscosity
- ✓ No mechanical mixing
- ✓ More control spread
- ✓ Greater suspension of solids
- ✓ Superior particle distribution
- ✓ Improved cement efficiency

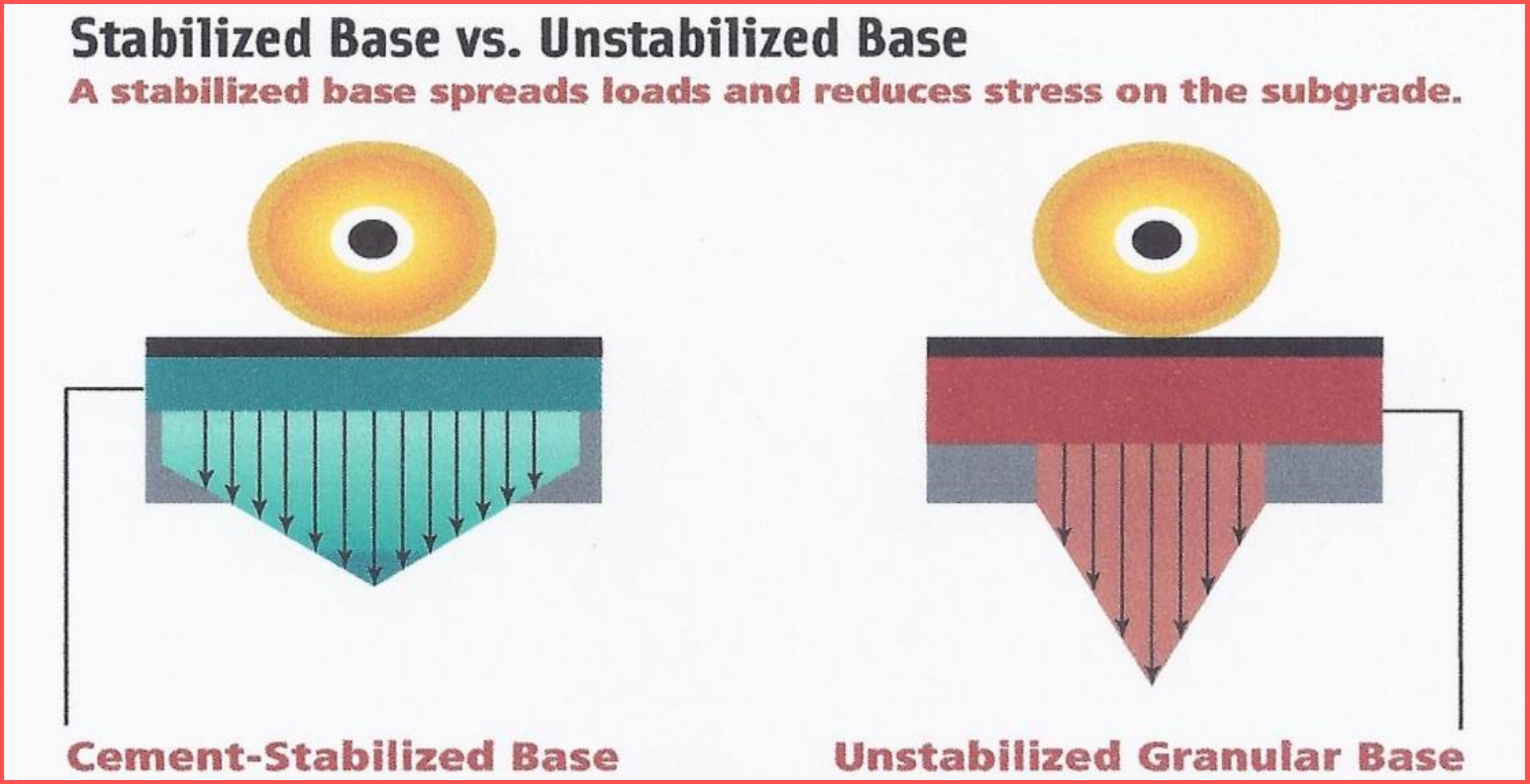
Common Slurry vs SuperSlurry



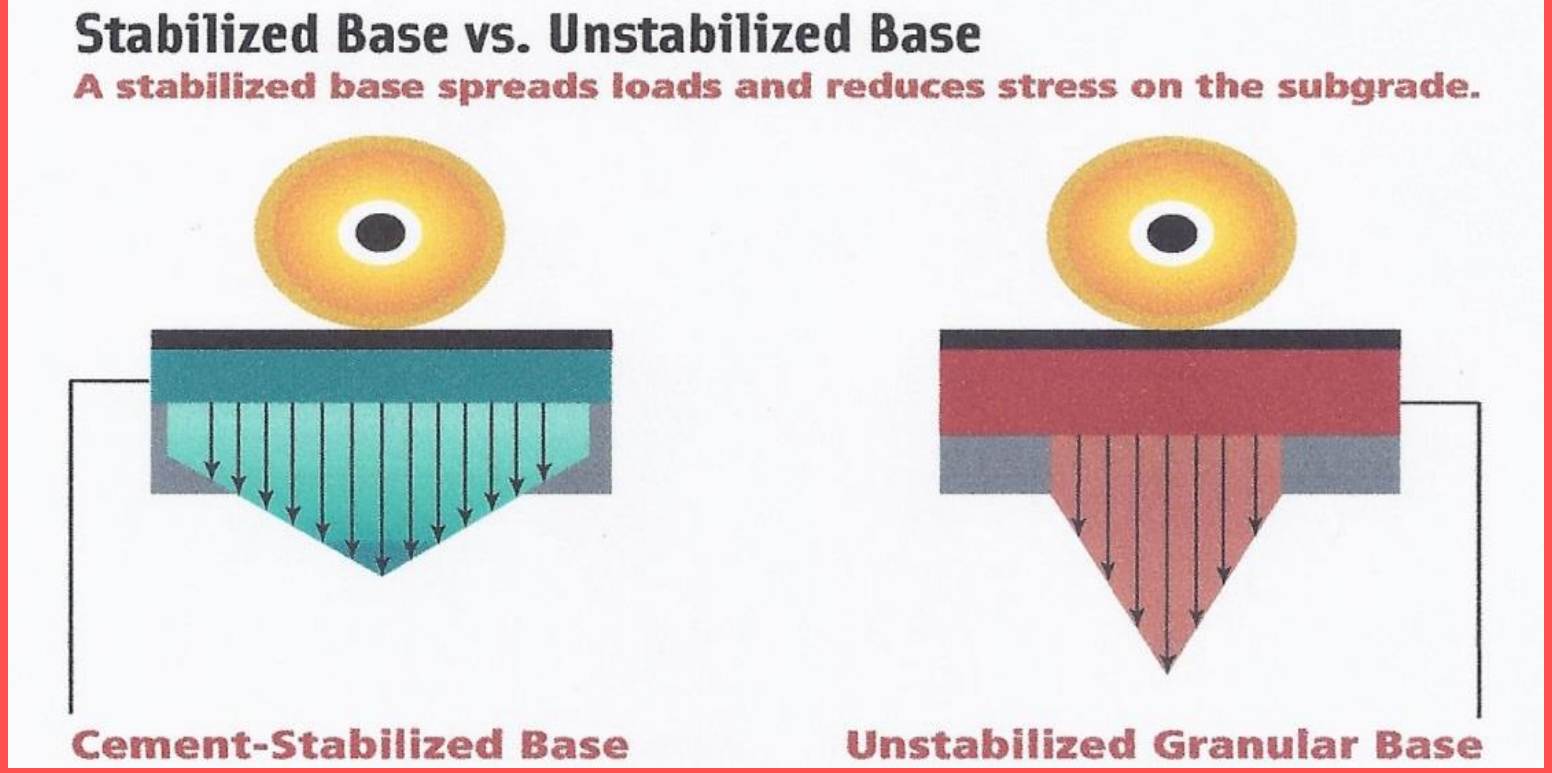


Note: Robust Viscosity….Remains at Point of Placement
SUPERSLURRY™

The RIGHT Choice…The RIGHT Way
SUPERSLURRY™



- Provides a stiffer and stronger base than an unbound granular base, delaying the onset of surface distresses such as fatigue
  - Unbounded rock base structural # is .11/inch vs. cement stabilization which is .19/inch
- Soil-cement base requires less thickness than a granular base due to the strong uniform support provided by the slab-like characteristics and beam strength that are unmatched by granular bases that can fail when aggregate interlock is lost
- The wide variety of in-situ soils and manufactured aggregates that can be used with soil-cement base, eliminating the need for hauling select materials



- Reduction of rutting due to the resistance of consolidation and movement of the soil-cement base layer
- Increased moisture resistance keeps water out and maintains strength when wet, reducing potential for pumping of subgrade soils
- Resistance to damage from freeze/thaw cycles
- Continued strength gain as it ages

Super Slurry
Stabilized
Un-Stabilized

Super Slurry Stabilized

ENVIRONMENTAL/COST IMPACT

Cost Type	Unit Cost	Super Slurry	Amount	CTB	Amount	Un-bonded Flex base	Amount
N0x emissions		7.30		376.88		852.46	
(in pounds)							
Fuel Consumed		772.50		1284.64		4324.17	
(in gallons)							
Truck Miles		253.33		13,086.21		29,599.14	
TOTAL			$38,508.25		$70,678.47		$110,147.50

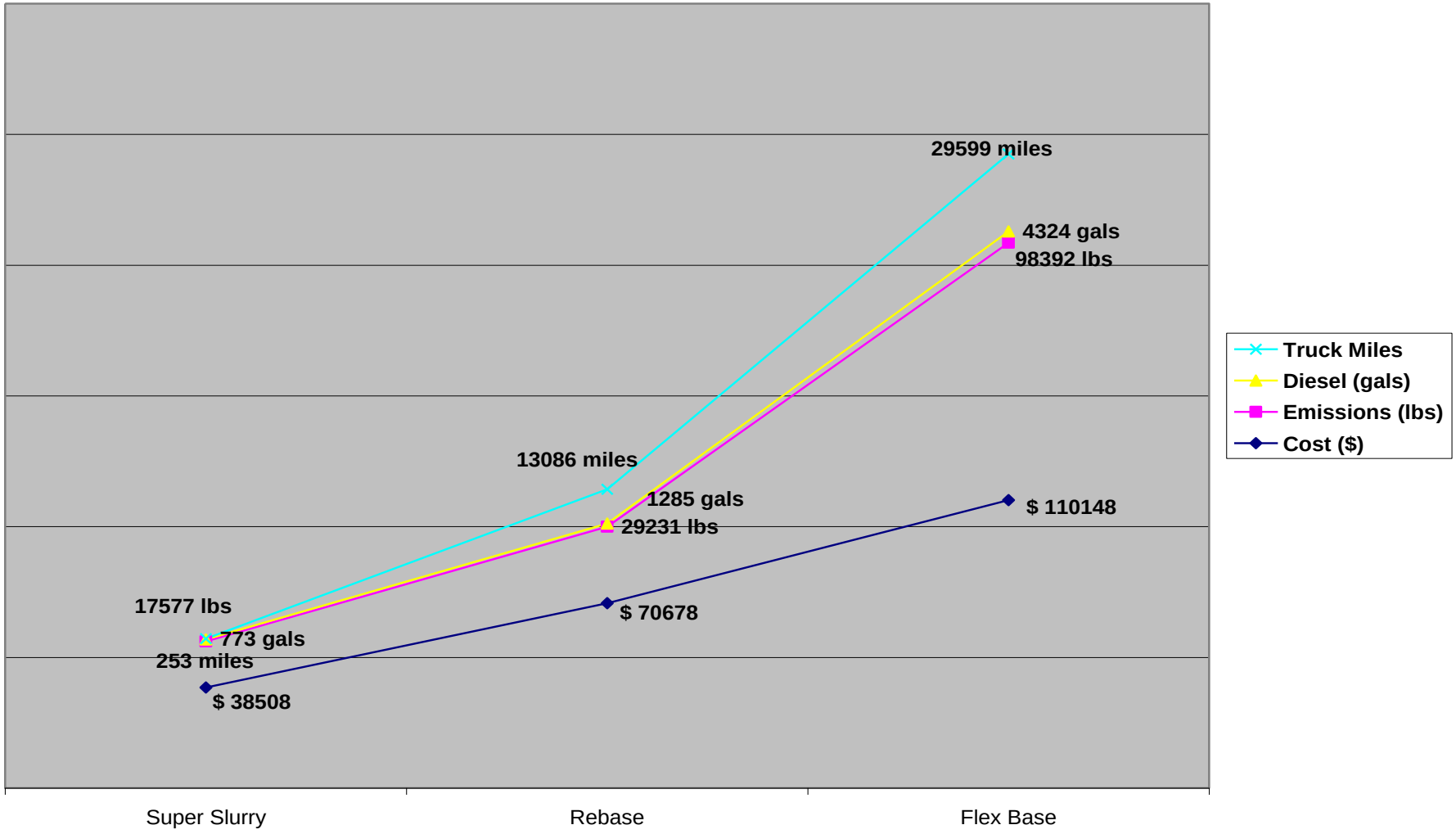
*To replace 1 mile of street 20' wide, 6" depth,(6% cement except for flex base which is un-bonded)

10 miles from plant, 20 miles from landfill, 67 miles from Bridgeport Stone

Truck emission of N0x as EPA standards is =1.802 tons per 125,000 miles, average fuel 5 MPG

Cost Type	Unit Cost	Super Slurry	Amount	CTB	Amount	Un-bonded Flexbase	Amount
MILLING COST							
Labor	$ 20.00	152.60	$ 3,052.00	152.60	$ 3,052.00	152.60	$ 3,052.00
Fuel	$ 2.50	272.50	$ 681.25	272.50	$ 681.25	272.5	$ 681.25
TOTAL			**$ 3,733.25**		**$ 3,733.25**		**$ 3,733.25**
HAUL OFF COST							
Fuel	$ 3.10	0	$ -	272.5	$ 844.75	272.5	$ 844.75
Labor	$ 20.00	0	$ -	272.5	$ 5,450.00	272.5	$ 5,450.00
Tires	$ 0.12	0	$ -	10900.00	$ 1,253.50	10900.00	$ 1,253.50
TOTAL			**$ -**		**$ 7,548.25**		**$ 7,548.25**
Front End Loader							
Fuel	$ 2.50	0	$ -	250.00	$ 625.00	250.00	$ 625.00
Labor	$ 20.00	0	$ -	19.55	$ 391.00	19.55	$ 391.00
TOTAL			**$ -**		**$ 1,016.00**		**$ 1,016.00**
PLACEMENT							
Tandem Trucks							
Labor	$ 20.00	0	$ -	139.64	$ 2,792.80	0	$ -
Fuel	$ 3.10	0	$ -	139.64	$ 432.88	0	$ -
Tires	$ 0.12	0	$ -	5585.72	$ 670.29	0	$ -
TOTAL			**$ -**		**$ 3,895.97**		**$ -**
Motor Grader							
Fuel	$ 2.50	250	$ 625.00	250	$ 625.00	250	$ 625.00
Labor	$ 20.00	40	$ 800.00	40	$ 800.00	40	$ 800.00
TOTAL			**$ 1,425.00**		**$ 1,425.00**		**$ 1,425.00**
Roller							
Fuel	$ 2.50	100	$ 250.00	100	$ 250.00	100	$ 250.00
Labor	$ 20.00	40	$ 800.00	40	$ 800.00	40	$ 800.00
TOTAL			**$ 1,050.00**		**$ 1,050.00**		**$ 1,050.00**
Flex Base							
Flex Base	$ 25.00	0	0	0	0	3815.00	**$ 95,375.00**
Rebase	$ 14.00	0	0	3715.00	**$ 52,010.00**	0	0
Super Slurry	$ 170.00	190	**$ 32,300.00**	0	0	0	0
N0x emissions (in pounds)		**7.30**		**376.88**		**852.46**	
Fuel Consumed (in gallons)		**772.50**		**1284.64**		**4324.17**	

Environmental Impact Chart



SuperSlurry Trucks Loading @ 1 dry Ton/Minute

OVERSIZE LOAD

Process Flow Control Touch Screen Computer

Portable Plant

First Generation SuperSlurry Plant

SuperSlurry Portable Plant
ANDALE

8’ – 10” – or 12’ Hinged Even Spreader Bar Gravity Discharge
Controlled From Inside the Truck Cab By the Driver

1st GENERATION GPS CONTROLLED SELF-LOADING DISTRIBUTION CART

Transferring 30 tons of SuperSlurry From Transport Tanker to Application Vehicle is a Clean/Easy 5 minute operation

KANSAS

SuperSlurry vs. Common Slurry

- Twice as much product
- One load covers twice the area
- Expedites the project
- Easy clean up
- Easier to obtain compactive effort
- No mechanical mixing
- No segregation with SuperSlurry product
- Flows more evenly
- Unmatched consistence

Standard Placement Procedures

SUPER SLURRY
RSLURRY
uper Truck Capacity of Up To 32 Wet Tons

Mixing

TEREX-CMI
R400
WARNING

Compaction

- ✓Smooth Drum Roller
- ✓Wacker Packer
- ✓Rubber Tire Roller
- ✓Sheep Foot Roller

New Dallas Cowboy Stadium in Arlington Texas

Cut to Grade

SUPERSLURRY™

HFB

Our Evolution is THE Solution to…

- Construction fuel consumption
- Construction equipment emissions
- Construction labor cost
- Transportation cost
- Construction time-lines
- Traffic delays
- Project fugitive dust
- Transporting of water
- Disproportionate cement distribution
- Material mixing time
- Achieving densities
- Equipment clean up
- Natural Resource Conservation

Join the ***Green*** construction ***Revolution*** with the SuperSlurry®

Solution*…….”Sustainable is Attainable”*

LEED the Way to a DUST Free Construction Project

HFB

SUPERSLURRY™