

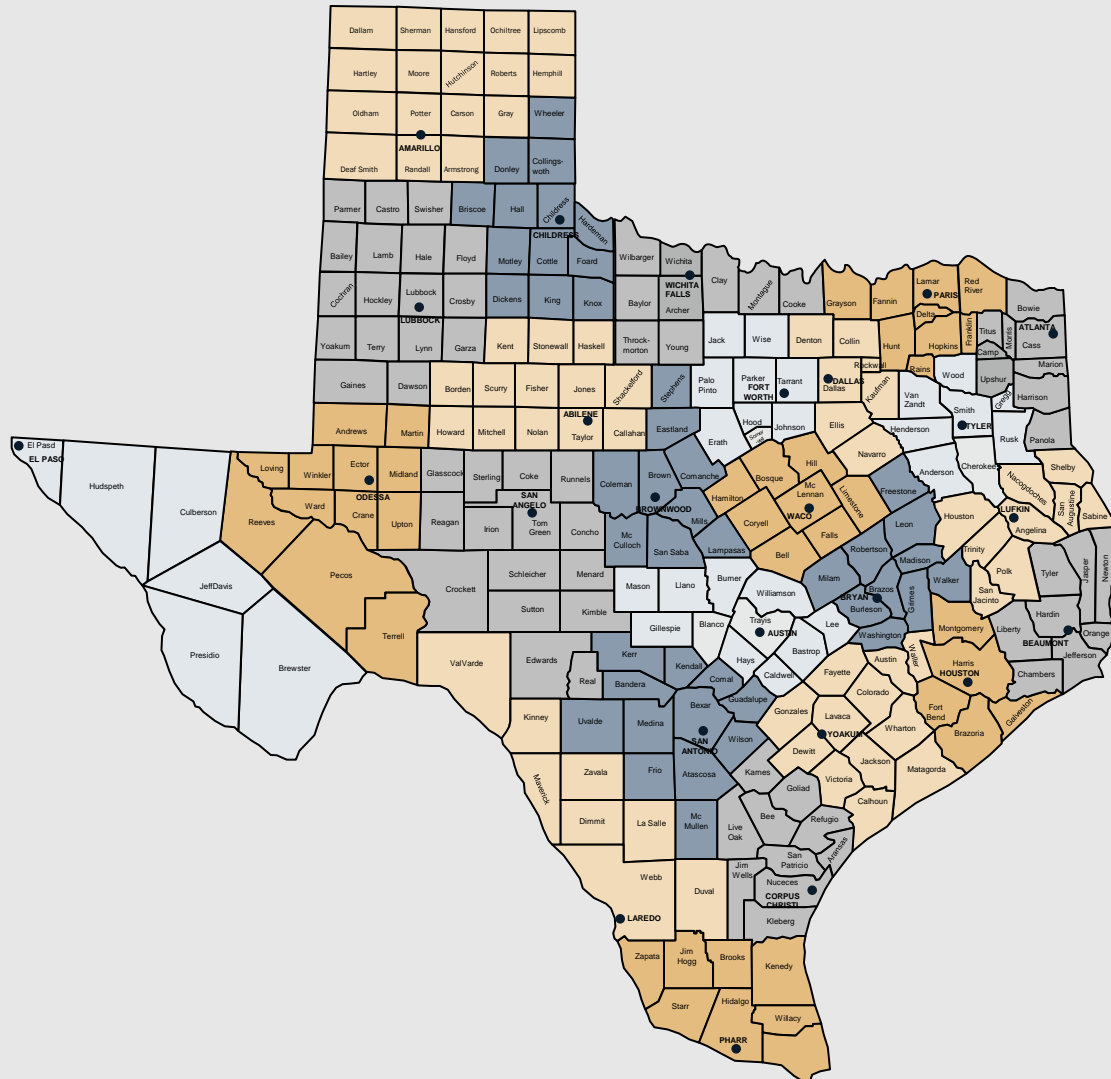


USE OF LOCAL MATERIALS

Cost Savings Benefits and Design Adjustments

TALK TEXT CRASH

TxDOT Districts



Existing Local Base Supplies

- Gravel Base
- Shell Base
- Caliche Base

GRAVEL BASE

- High or Low PI
- Very durable
- At one time was the main base supply for our area
- Mostly pit run
- No crushers involved
- Commercial Construction Producers

SHELL BASE

- Comprised of oyster shells
- Low PI
- No known source available
- Utilized during Rehab type projects
- Makes a stable sub-base
- Performs very well when stabilized
- Cement stabilized

CALICHE BASE

- Supplies are limited
- Performs very well when stabilized
- Quality very dependent on area where produced
- Limited supplies due to Energy Sector development

Pet-Coke By-Product

- Produced from Petroleum coke (Petcoke) being burned at electric generating plant
- Derived from oil refinery coker units
- High content of lime
- Light weight
- Lower costs

PETCOKE COMBUSTION BY-PRODUCT



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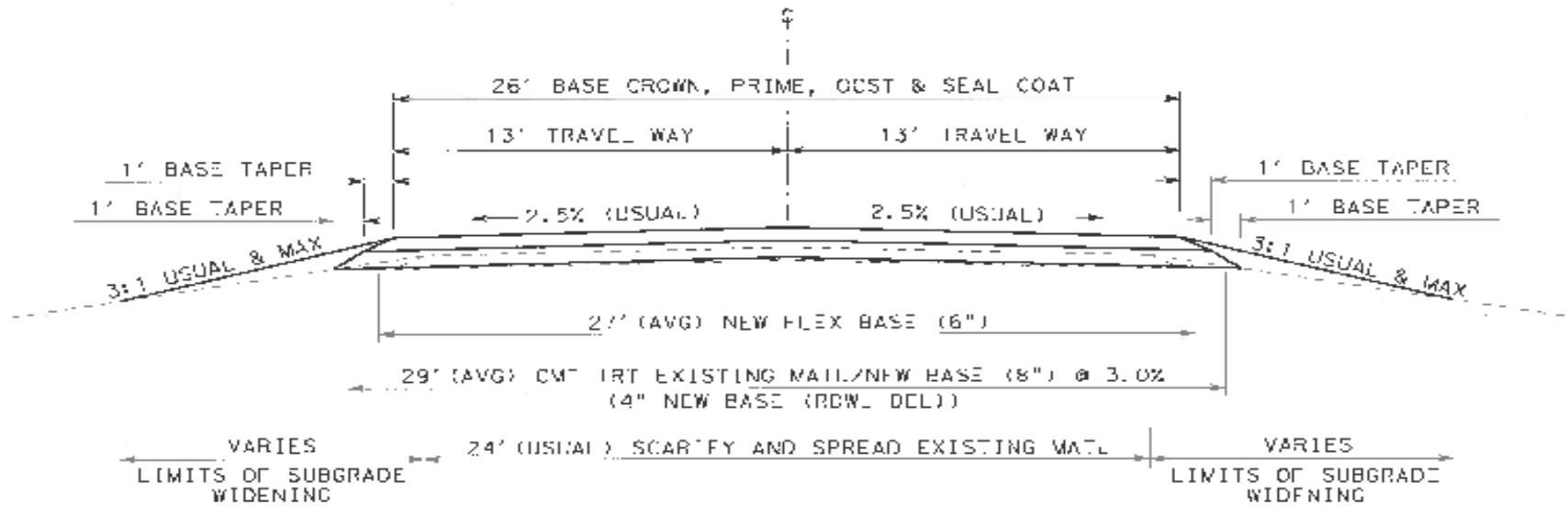
PETCOKE COMBUSTION BY-PRODUCT



UTILIZING EXSTING BASE MATERIALS

- Most roadways built with local materials
- Incorporate existing base materials into rehab base layer
- Less or no new material needed

Typical Section



PROPOSED TYPICAL SECTION

UTILIZING EXSTING BASE MATERIALS

- US 183 Goliad County
 - Cement treat travel lanes
 - No additional base added
 - 8" existing base stabilized
 - 6% cement at 8"
 - Two section
 - Two course surface treatment
 - 1-1/2" ACP overlay
- Cracking issues

RECYCLED ASPHALT PAVEMENT (RAP)

- Utilizing RAP for base material
- Add small percentage of flex base
- Stabilizing with cement
- Minimal material costs
- No hauling costs (mill and dump into widening)
- Cracking issues

River Gravel

- Bituminous Aggregate
- Concrete Aggregate
- Limited use Seal Coat Aggregate
- Only locally produced material used

SUMMARY

- Local producers meet adjusted specifications
- Make adjustments to incorporate local materials
- Cost Savings
 - Hauling Costs
 - Construction time reduced
- Low volume roadways
- Commercial industry competition
- Existing materials stabilized

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