2003 Prall Evaluation of Anchorage Pavement

Plus Ride 1986
Prall Abrasion Value: 14, 16

Mix Type: SMA (PG 64-28)
Prall Abrasion Value: 32
Rut Index = 2.5
Total Mix Cost: $61.35 per ton

Mix Type: SMA (PG 64-28)
Prall Abrasion Value: 23
Rut Index = 2.5
Total Mix Cost: $61.35 per ton

Mix Type: SMA (PG 58-28)
Prall Abrasion Value: 30
Rut Index = 3.8
Total Mix Cost: $53.49 per ton

Mix Type: Super Pave Dense Graded
Asphalt Cement: PG 58-28
Prall Abrasion Value: 26
Rut Index = 2.6
Total Mix Cost: $41.52 per ton
Principle Parties

- US Army Corps of Engineers
  - Project Manager: Dr. Mollie TeVrucht
    Mollie.L.TeVrucht@poa02.usace.army.mil
    Tel: (907) 753-2695
- Jacobs Engineering: Project Manager
- Alaska Test Lab: Mix Design & Quality Control
- Kiewit Pacific: General Contractor
- Western Stabilization: Foamed Asphalt Subcontractor
- Alaska DOT&PF
- Alaska Department Environmental Conservation
Remediation Option
Soil Contaminated by Asphalatic & Diesel Range Compounds

- Barge to Super Fund Disposal Site
- Thermal Remediation
- Hot Mix From Asphalt Plant – ATB
- Cold Asphalt Emulsion Mix - ATB
- Cement Treatment – ATB
- Foamed/Expanded Asphalt Mix – ATB

Issues

- Kodiak Weather
- Cure Time
- Effect on Traffic
- Contaminated Runoff
Excavating contaminated material at the ADA site.
Thunderbird screening plant used to screen oversize materials from contaminated soils.
Crushing & Blending
QTY: Asphalt Concrete  8,900 Mg (Est. 2.371 Mg/m³)
Foam ATB  28,400 Mg (Est. 2.045 Mg/m³)
AC  1,091 Mg @ 4% Mix Wt
Lime  546 Mg @ 2% Mix Wt
Lay Down & Compaction
PROJECT NO.  ER:  1910-029
PLATE NO.  E:  1

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<tr>
<th>SYMBOL</th>
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<td>ALASKA STOCKPILE SOIL</td>
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U.S. STANDARD SIEVE SIZE

GRAIN SIZE DISTRIBUTION

GRAIN SIZE IN MILLIMETERS

SOULDES  COBBLES  GRAVEL  SAND  SILT  CLAY
COARSE  FINE  COARSE  MEDIUM  FINE
Mix Design Factors

- Leachability of DRO/RRO, BETX
- Unconfined Compressive Strength
- Dielectric Permittivity – Mechanical Suction
- Submerged Soak – Unconfined Compressive Strength 7d, 14d, 28d
- Submerged Soak + Freeze Thaw Cycles
- Minimum Split Tensile Strength of 100 kPa
- Field Density 98% of Test Strip
- Monitor in Place Moisture