





































- Overall Cost Phase III Landfill Expansion = \$31M
- Box Culverts \$300K each
  - Est. Base culvert cost = \$150K
  - 3 Total Installed = Added cost \$450K = 1.5% of total project
  - Benefits:
    - ✓ Reduced maintenance over life of landfill 50+ years
    - ✓ Enhanced safety
    - ✓ Easier to pull pump piping out



- Overall Cost Phase III Landfill Expansion = \$31M
- Pump Stations \$472K each =
  - Est. Base pump station cost = \$200K
  - 3 Total Installed = Added cost \$750K = 2.5% of total project
  - Benefits:
    - ✓ Larger area for improved working space
    - ✓ Easier removal of pumps and disconnection of piping
    - ✓ Cleaner working area, less sediment and erosion



- Overall Cost Phase III Landfill Expansion = \$31M
- Stormwater Down Drain Connections Est. \$25K each
  - Est. Base cost = \$0 (not installed before)
  - 22 Total Installed = \$550K = 1.8% of total project
  - Benefits:
    - ✓ No road crossings for down drain pipes
    - ✓ Improved access
    - ✓ Pre-planned and prepared discharge points with discharge erosion control pre-built into ditch slopes



- Overall Cost Phase III Landfill Expansion = \$31M
- Upgrade Rain Tarp Material = \$1.15M (40-mil LLDPE)
  - Est. Scrim Material = \$575,000 (20-mil)
  - 43 Acres Total Installed = \$575,000 added cost = 1.9% of total project
  - Benefits:
    - Enhanced durability
    - ✓ Better resistance to wind uplift and tearing
    - ✓ Stronger fusion/extrusion welds compared to sewn seams
    - ✓ Resistant to animal/bird damage



- Overall Cost Phase III Landfill Expansion = \$31M
- Total Added Cost Over Base Options:
  - ➤ Box Culverts = \$450K
  - Pump Stations = \$750K
  - ➤ Down Drains = \$550K
  - ➤ Rain Tarp = \$575K

Total = \$2.325M = 7.5% of overall project budget

Safe and Time Saving Features will accumulate over life of life to exceed the value......AND.....

# Phase III Landfill Improvements



.....Happy Operators are Priceless!!!!

Questions?

