R25E

T 25 N

ROSS PIT
Graded & 12" NAG in 1999
Backfill Highwalls
Cap
4.30 ac PVC/HDPE
14.61 ac Fabric

NORTH RUBY SADDLE TOPSOIL STOCKPILE
Utilize
12" Soil

RUBY SULFIDE STOCKPILE
Removed in 2000-2001
12" Soil

SOUTH RUBY SADDLE TOPSOIL STOCKPILE
Used in 2000

SHELL BUTTE

SOUTH RUBY WASTE ROCK DUMP
Dump Removed in 2000-2001
Cap
2.49 ac PVC/HDPE
5.17 ac Fabric

Excavate to Lower Road

NORTH ALABAMA PIT
Almost Total Backfill
Cap
3.10 ac PVC/HDPE
12.12 ac Fabric

COUNTY ROAD TO LANDUSKY

RUBY PIT
Backfilled to Free-draining in 2000-2001
22 ac Water Barrier

Notch Excav. 12" Soil

MINT PIT
Backfilled to Free-draining in 2000-2001
Cap
5.85 ac PVC/HDPE
4.71ac Fabric

1985-1986 LEACH PAD

85/86 PAD DRAINAGE NOTCH
Cut Notch & Use Excavated Material To Build 85/86 Dike Buttress
18" Soil
6" Ruby Tailings
24" NAG

Excavate for Fill

O.K. PIT
Grade to Direct Drainage
Use as Borrow Source
Reduce Slopes to 3H:1V
Cap Over Pit & Pad
10.36 ac PVC/HDPE
22.99 ac Fabric

Cover with 24" NAG+12" Soil

SOUTH ALABAMA PIT
Almost Total Backfill
Cap
19.89 ac Fabric

82 TOPSOIL STOCKPILE
Used in 2000

O.K. WASTE ROCK DUMP
Salvage Soil
Grade to 3H:1V
Cap
10.32 ac Fabric

85/86 DIKE
Fill to 2½:1
Cap
4.45 ac Fabric

SEEPAGE COLLECTION SYSTEM
No Action

BARREN POND
Backfill
12" Soil
Remove Structures

82 PAD SLOPE
Regrade
12" Soil
12" NAG

1982 LEACH PAD

1982 SULFIDE STOCKPILE
Removed & Regraded in 2000-2001
12" Soil
12" NAG

82 POND

WATER TREATMENT PLANT
Relocate to Goslin Flats

REFINERY
Remove

WHITCOMB MILL
Remove

RUBY GULCH CAPTURE POND
No Action

RUBY GULCH PUMPBACK
Plumb to WTP on Goslin Flats
Reclaim

Remove Tailings
Stream Restoration
Sediment Control
Road Construction
12" Soil

Remove Bldg
12" Soil
1 Acre

DEGERSTROM SHOP

WTP POND

89 DIKE
Additional Revegetation

1989 LEACH PAD
Reclaimed in 2000-2001

EAST TAILINGS STOCKPILE

WEST TAILINGS STOCKPILE

ALDER GULCH WASTE ROCK DUMP

Salvage Soil
Remove Entire Dump
12" NAG+ 12" Soil

1979-1981 LEACH PAD
Strip Soil
Cap
4.28 ac PVC/HDPE
10.89 ac Fabric

SLUDGE PIT
Backfill Sludge Pit
Regrade

1983 LEACH PAD
Reclaimed in 2000-2001

DEBRIS
Reclaimed in 2000-2001

1984 LEACH PAD
Reclaimed in 2000-2001

83 DIKE
Additional Revegetation

84 DIKE
Additional Revegetation

CARTER GULCH

CARTER GULCH SEEPAGE CAPTURE SYSTEM
Remove and Reclaim

CARTER BUTTE

ALDER SPUR SEEPAGE CAPTURE SYSTEM
Plumb to WTP on Goslin Flats
Reclaim

ALDER SPUR

ZORTMAN EMERGENCY GENERATOR
Relocate to Goslin Flats

LS-2 LIMESTONE QUARRY
Excavate 634,000 LCY of NAG
12" Soil
Reclaim 13.0 Acres

RUBY GULCH TAILINGS

ZORTMAN GUARD SHACK AND GATE
Remove Shack and Gate
12" Soil

0 200 400 600 800
Scale in Feet

SOURCE: Spectrum Engineering 2001

Alternative Z4
Caps are defined as:
- Water Barrier
  - Flat (<25% Slope)
    - 12" Soil
    - 36" NAG
    - PVC/HDPE Liner
  - Water Balance
  - Steep (>25% Slope)
    - 12" Soil
    - Geotextile Filter Fabric
    - 36" NAG

R25E

ALTERNATIVE Z4: RECLAMATION GOAL IS TO BACKFILL ALL PITS AND PARTIALLY BACKFILL THE HIGHWALLS. PITS ARE COVERED WITH GEOSYNTHETIC LINERS IN ASSOCIATION WITH THREE FEET OF NAG AND/OR TAILINGS AND ONE FOOT OF SOIL.

ZORTMAN MINE
ALTERNATIVE Z4

FIGURE 2.4-6