

ROADS

- 1) **Main Haul/Access Road**
This road provides access to the site from the Town of Clear Creek and will remain following reclamation work. The iron gate at the mine entrance will remain so Jack Otani can lock the site to prevent unauthorized entrance. The sign at the entrance should be removed or re-identified as to now belonging to Jack Otani.
- 2) **Improved Access Road**
This road was improved during mining activities to provide access not only up Mud Creek but also to the upper portal bench. This road will remain following reclamation activities to serve as continuing access up Mud Creek.
- 3) **Existing Mud Creek Road**
This road is the original Mud Creek road which exists now in its original condition. It will remain.
- 4) **Portal Access Road**
This road provided access from the lower bench to the mine entries. It will be re-constructed, scarified, mulched, and seeded as part of reclamation activities.
- 5) **Exploration Road**
This road was constructed for some previous exploration by drilling work. It has been reclaimed. No additional work is necessary.
- 6) **General Access Road**
This road provides access to the substation, powerline transformer pole, culinary and fire protection water storage tanks, and for some former exploration work. This road will remain following reclamation activities. The road surface will be scarified and the culinary re-established.
- 7) **Substation Access Road**
Although the substation will be removed and sold, the powerline and main transformer pole will remain for future use by Jack Otani. Therefore, the substation access road will be left in place.
- 8) **North Access Road to Development Waste Pile**
This road will not be needed for postmining use. It will be scarified, mulched, and seeded as part of reclamation activities.
- 9) **Exploration Road**
This road was constructed for some previous exploration work. It has been reclaimed. No additional work is necessary.
- 10) **Access Road to Water Tanks**
This road provides access to the culinary and fire protection water storage tanks. It will remain following reclamation activities for future use by Jack Otani.

CULVERTS

- 11) **Culvert A - 8" Diameter CSP** This culvert will be removed.
- 12) **Culvert B - 8" Diameter CSP** This culvert will remain in place following reclamation activities. It will allow for continued access into the lower bench area.
- 13) **Culvert C - 8" Diameter CSP** This culvert will remain in place following reclamation activities. It will allow for continued access into the lower bench area.
- 14) **Culvert D - 24" Diameter CMP** This culvert is used to route water from undisturbed watershed east of site beneath the mine development waste pile and lower bench into Mud Creek. The portion of this culvert underneath the mine development waste pile will be removed, and the drainage channel re-established. The part of the culvert beneath the lower bench area will remain for future drainage control. An appropriate "headwall" and riprap will be used at this new culvert entrance for erosion control.
- 15) **Culvert E - 8" Diameter CMP** This culvert is used to route water from Road 17 and 18 and a small portion of the surface of the mine development waste pile into the ditch which diverts runoff into the existing sediment pond structures. This culvert will be removed during reclamation activities as it will have no future use.
- 16) **Culvert F - 8" Diameter CMP** This culvert is used to route water from the portal bench area into the ditch at the base of the slope which diverts runoff into the existing sediment pond structures. This culvert will be removed during reclamation work as it will have no future use.

DRAINAGE CONTROL

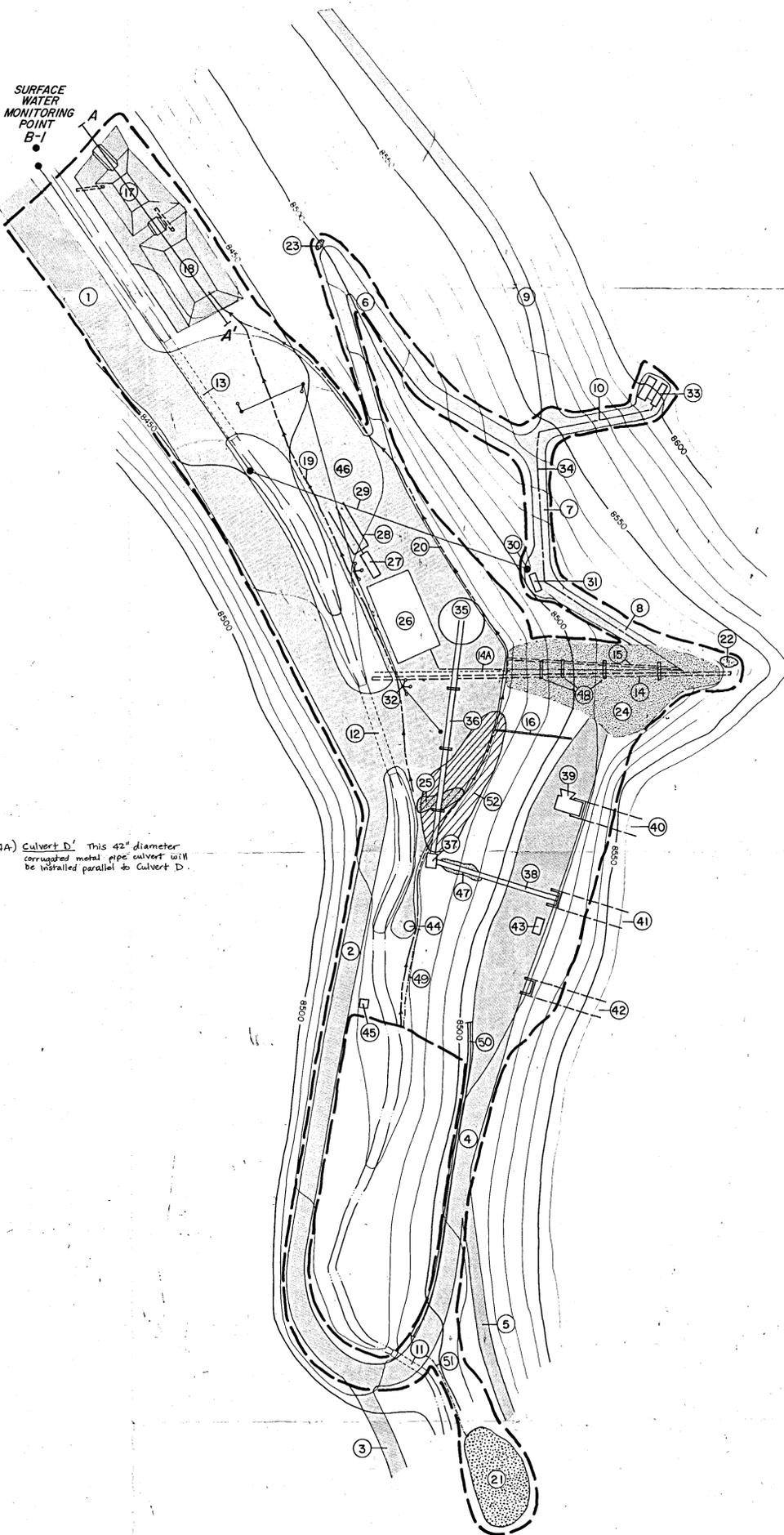
- 17) **Lower Sediment Pond Cell**
This structure will remain following reclamation activities for future sediment control. The NPDES permit for this structure will be vacated. A riprap energy dissipator will be installed downstream of the emergency spillway to this pond.
- 18) **Upper Sediment Pond Cell**
This structure will remain following reclamation activities for future sediment control. The emergency spillway to this pond will be reconstructed.
- 19) **Berm A**
This small berm is used to route runoff from the lower bench area into the sediment pond structures. It will be reconstructed during reclamation activities.
- 20) **Ditch B**
This small ditch is used to route runoff from disturbed slopes east of the lower bench area into the sediment pond structures. It will be reconstructed during reclamation activities.

TOPSOIL

- 21) **Topsoil Stockpile A**
This topsoil stockpile contains approximately 240 cubic yards of topsoil which will be used in the reclamation activities.
- 22) **Topsoil Stockpile B**
This topsoil stockpile contains approximately 40 cubic yards of topsoil which will be used in the reclamation activities.
- 23) **Topsoil Stockpile C**
This topsoil stockpile contains approximately 10 cubic yards of topsoil which will be used in the reclamation activities.

DEVELOPMENT WASTE

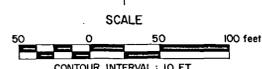
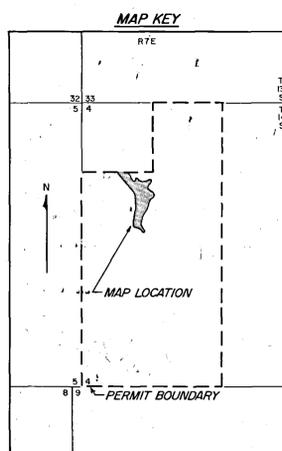
- 24) **Mine Development Waste Pile**
This pile contains approximately 4,000 cubic yards of mine development waste which was removed from the underground mine during operations. This material will be used to seal the underground entries on the portal bench.



14A) Culvert D' This 42" diameter corrugated metal pipe culvert will be installed parallel to Culvert D.

LEGEND

- DISTURBED AREA BOUNDARY
- ▨ ROADS & BENCH AREAS
- ▩ MINE DEVELOPMENT WASTE
- ▧ TOPSOIL STOCKPILE
- ▦ SEDIMENT POND STRUCTURE



- 25) **Small Development Waste Pile**
This pile contains approximately 200 cubic yards of mine development waste. This material will be placed on the portal bench with the remainder of the mine development waste.
- STRUCTURES
- 26) **Office, Bath House & Shop**
This structure will remain after reclamation activities for use by Jack Otani.
 - 27) **Septic Tank**
This structure will remain for future use.
 - 28) **Leach Field**
The leach field will be left in place for use after reclamation activities.
 - 29) **Powerline**
The powerline will remain after reclamation activities to provide electric power for Jack Otani.
 - 30) **Main Transformer Pole**
This pole was installed to serve as the main transformer pole for the site. It will remain for future use.
 - 32) **Light Poles**
The numerous light poles located around the lower bench area will remain following reclamation activities.
 - 33) **Culinary and Fire Protection Water Storage Tanks**
These tanks are buried and will remain for future use by Jack Otani.
 - 34) **Water Main 4" PVC - Class 160**
The water main is a buried line that runs from the water storage tanks to the office, bath house, and shop. This line will remain after reclamation.
 - 35) **Loading Bin**
This structure will be removed from the site.
 - 40) **Exhaust/Fan Entry**
Once the fan and associated structures are removed, then the exhaust/fan entry can be closed. The entry will be permanently sealed by backfilling underground development waste and overburden material into and over the opening to prevent future access into the old workings.
 - 41) **Belt Entry**
This entry has caved since cessation of mining in 1982. No access is possible into the underground workings. The entry will be permanently sealed by placing underground development waste and overburden material over the caved entry to prevent access into the old workings.
 - 42) **Intake Entry**
This entry has caved since cessation of mining in 1982. No access is possible into the underground workings. The entry will be permanently sealed by placing underground development waste and overburden material over the caved entry to prevent access into the old workings.
 - 45) **Water Well**
The water well will remain for long-term use by Jack Otani.
- MISCELLANEOUS
- 46) **General Housekeeping on Lower Bench Area**
Support items such as cinder blocks, roof bolts, aluminum piping, conveyor idlers, wood wedges, etc. will be left for use by Jack Otani or sold if possible.
 - 47) **A Small Amount of Mine Development Waste on Portal Outslope Underneath Conveyor**
This small amount of material should be removed from underneath the conveyor. Hand methods would be most appropriate for removal of this material.
 - 48) Straw bale dikes as needed
 - 49) Sediment Fence will be installed if, during subsequent inspections, the USDM staff deems it necessary to protect the hydrologic balance.
 - 50) Straw bale dike
 - 51) Sediment Fence
 - 52) Alternate waste disposal location

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OCT 29 1986

DIVISION OF
OIL GAS & MINING
REVISED 10/86, DJK

NORTH AMERICAN EQUITIES, n.v.

RECLAMATION PLAN

Scale: 1" = 50'	Date: MAY 1985	Design By: AWC	Drawn By: KRL
A C Z INC. ENGINEERING AND ENVIRONMENTAL DIVISION STEAMBOAT SPRING, CONNECTICUT			Drawing Number: MAP 7