

GUIDELINES FOR DETERMINING APPROXIMATE ORIGINAL CONTOUR IN KENTUCKY

1. SURFACE CONFIGURATION

The reclaimed area shall closely resemble the general configuration of the land prior to mining. This does not mean that the post-mining contours must exactly match the pre-mining contours, or that post-mining slopes must be long and uninterrupted, if pre-mining slopes were. The general terrain, post-mining, will, however, be comparable to the pre-mining terrain. If the area was level or gently rolling prior to mining, it shall retain those features after mining. Rolls, dips, crests, and slopes need not be restored in their original locations. Level areas may be increased or terraces created, in accordance with existing regulations, through formation of shorter, steeper slopes, if the slopes are capable of supporting the post-mining land use and blend in with the surrounding terrain. During the permitting process, the permit applicant shall provide detailed cross-sections and contour maps clearly depicting the pre-mining and post-mining surface configurations.

In accordance with 405 KAR 16:190, Section 2(4)(a), the width of the individual terrace bench shall not exceed 20 feet, unless specifically approved as necessary for stability, erosion control, or roads included in the approved post-mining land use plan.

The spoil balance calculations in the permit application will also be used in determining the post-mining surface configuration.

2. SPOIL VOLUME

The permit application shall provide a justification for the balance of backfill and excess spoil material by describing the site-specific reasons for and means by which the proposed backfilling and grading plan will achieve the surface configuration. Approximately 80% of the bank volume of spoil must be returned to the mined area. Some flexibility in this percentage will be recognized for site-specific and engineering considerations, and for feasibility of the mining plan.

The proposed design location and size of the fills shall be justified in the permit application.

3. STABILITY

The spoil will be placed in the backfill area so that the out slopes of the backfill do not exceed a 2h:1v slope unless established in the permit application that the steeper slope backfill is necessary to reach the desired configuration, and that slope stability can be maintained. The final backfill configuration shall be designed and constructed so that the in-place spoil will be stable. The final configuration must include allowances for the approved design locations of post-mining features such as permanent water impoundments, roads, and drainage control facilities, including but not limited to diversions and terraces.

Fills shall have a stable final configuration, with out slopes not to exceed 2h:1v, and drainage control structures placed and sized as appropriate.

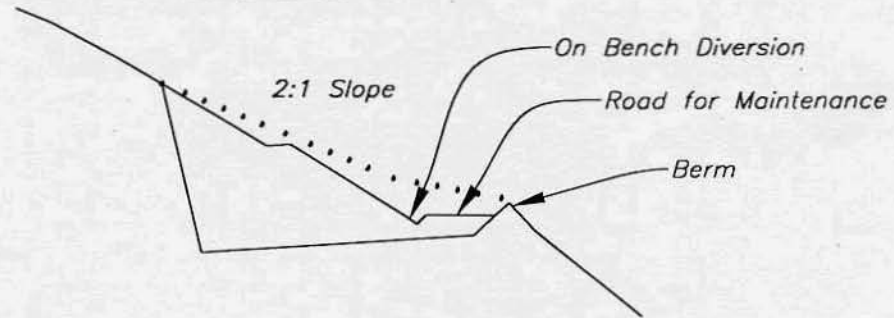
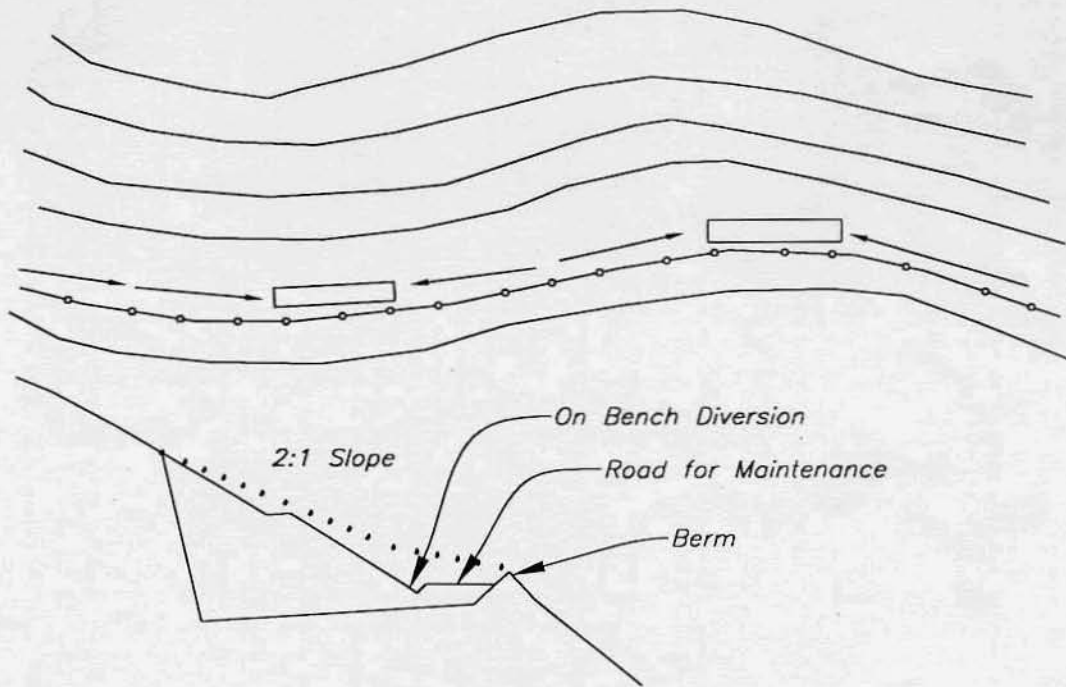
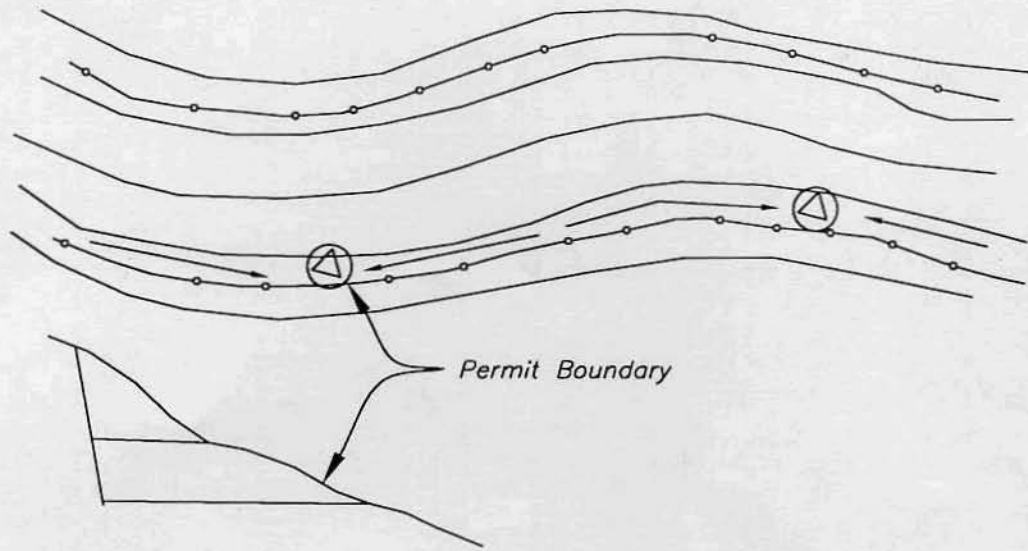
4. DRAINAGE CONTROLS

Establishing controlled drainage patterns is a major factor in the determination and construction of the final design configuration. Hollows and ridges below or above the mine areas have to be recognized and accounted for in the design and reestablishment of drainage for the backfill. The final drainage plan shall be incorporated into the final configuration so that the reclaimed area blends into and compliments the drainage pattern of the surrounding area. Water intercepted within or from the surrounding terrain shall flow through and from the reclaimed area in an unobstructed and controlled manner. The permit application review will consider the reestablishment of the approximate watershed acreages within the mine area, in order to reduce impacts to the hydrologic performance of the watershed.

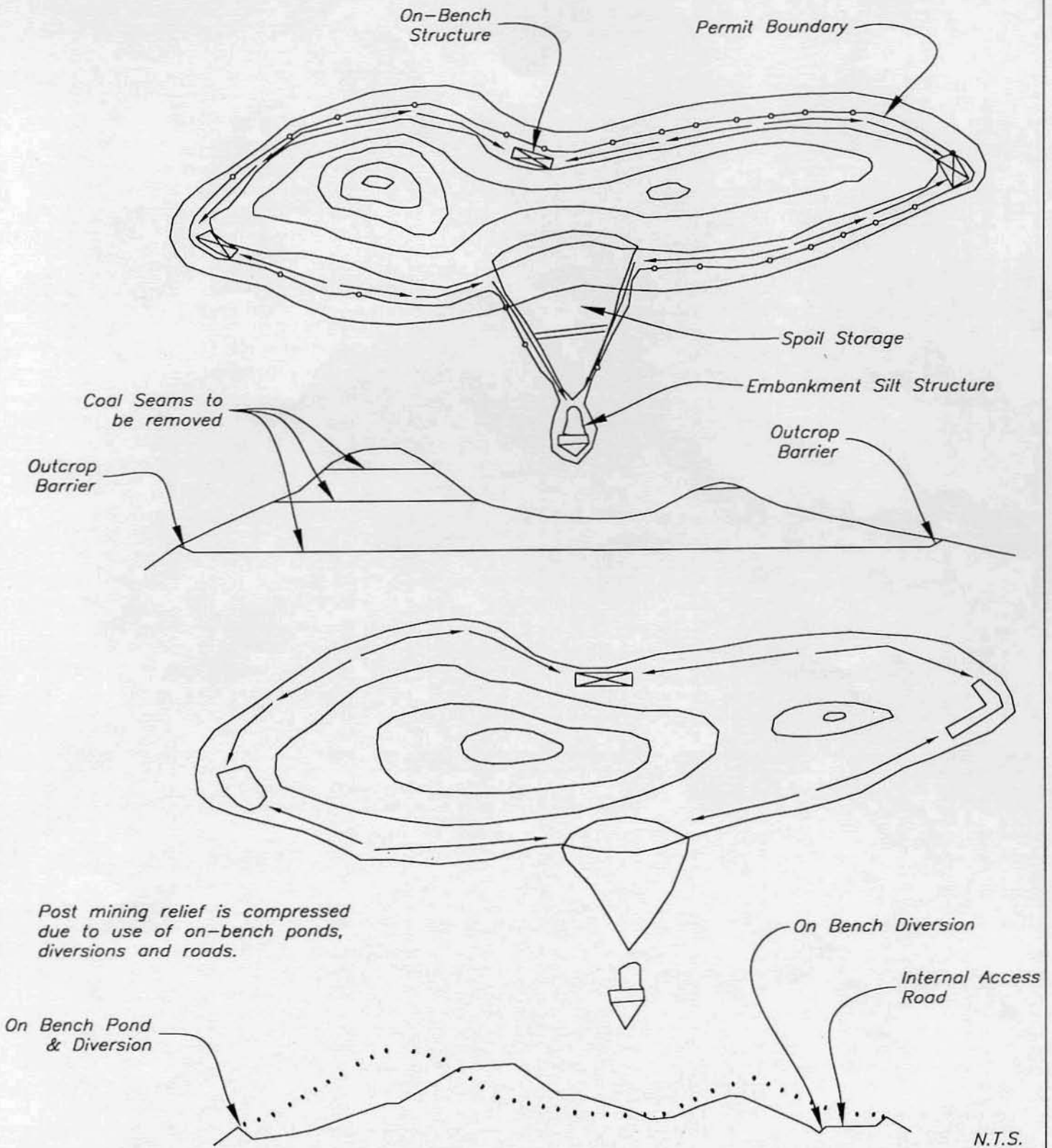
5. HIGHWALLS and SPOIL PILES

All highwalls, spoil piles, and depressions, except small depressions approved in accordance with 405 KAR 16:190, Section 2(5) or 18:190, Section 2(4), shall be eliminated in a manner which blends in with the surrounding terrain.

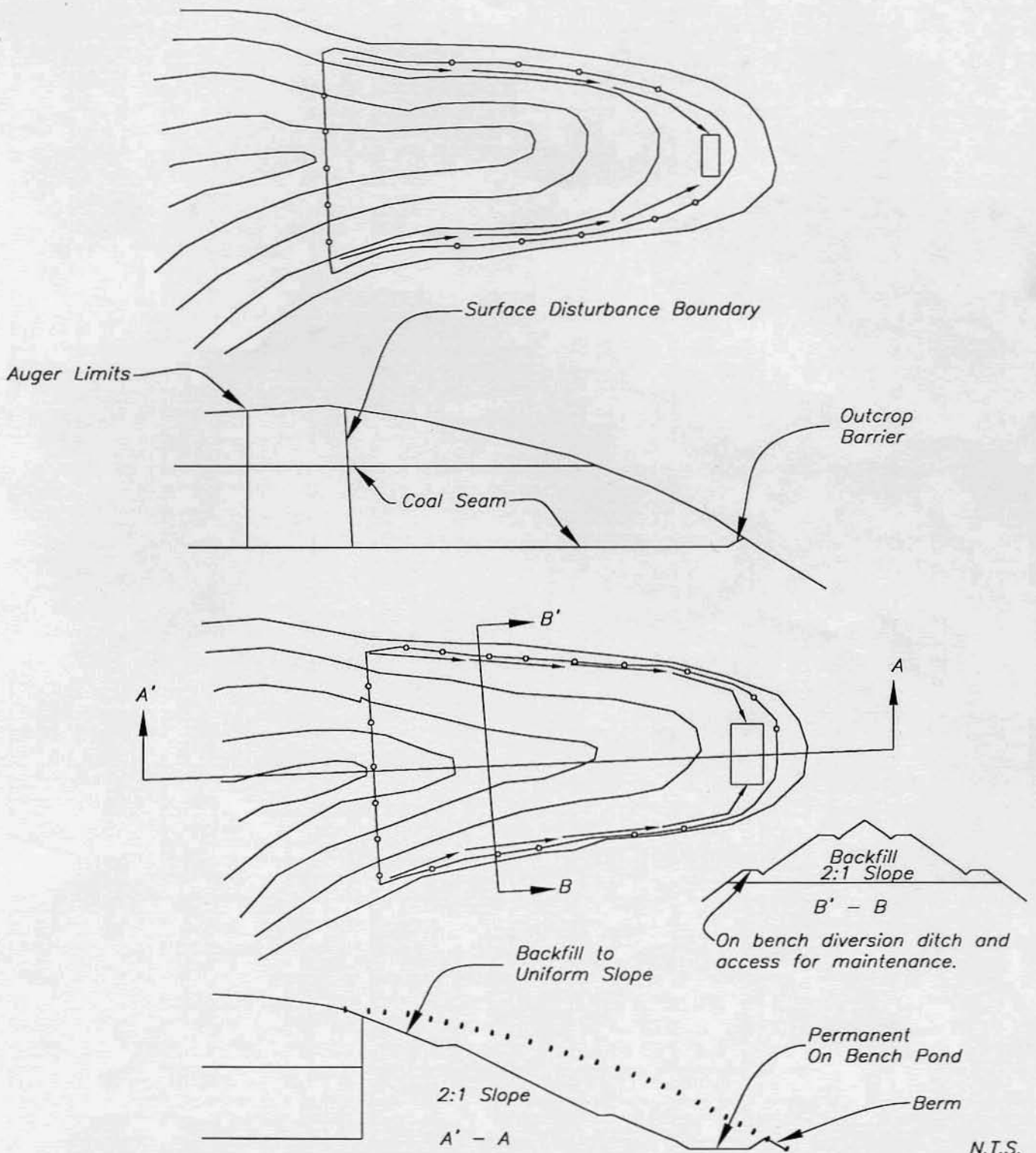
AOC Reclamation - Contour Strip



A.O.C. Reclamation - Area Mines



A.O.C. Reclamation - Point Removal



N.T.S.