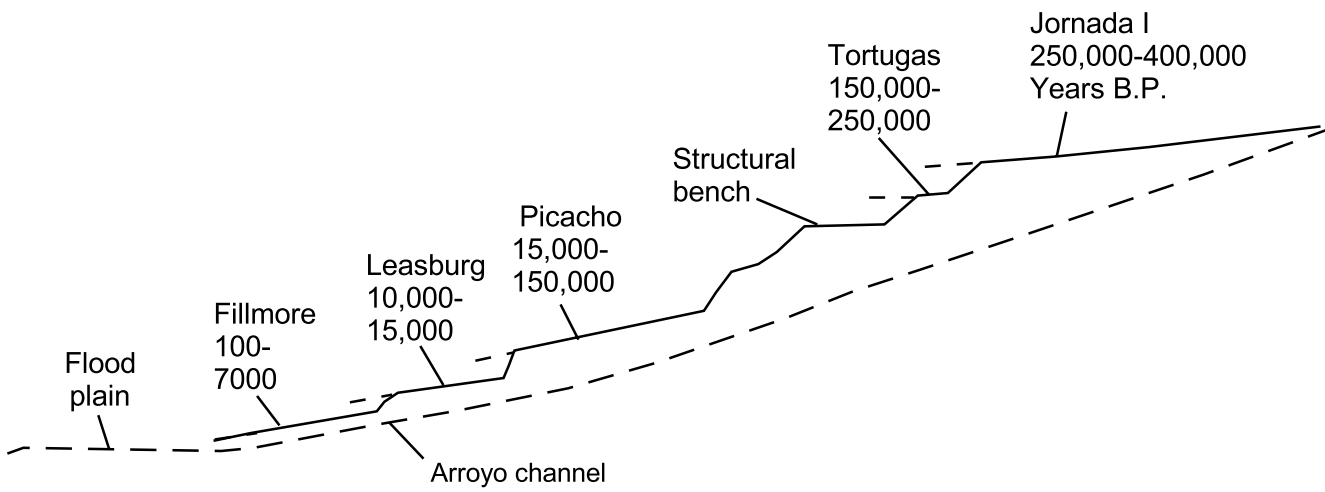
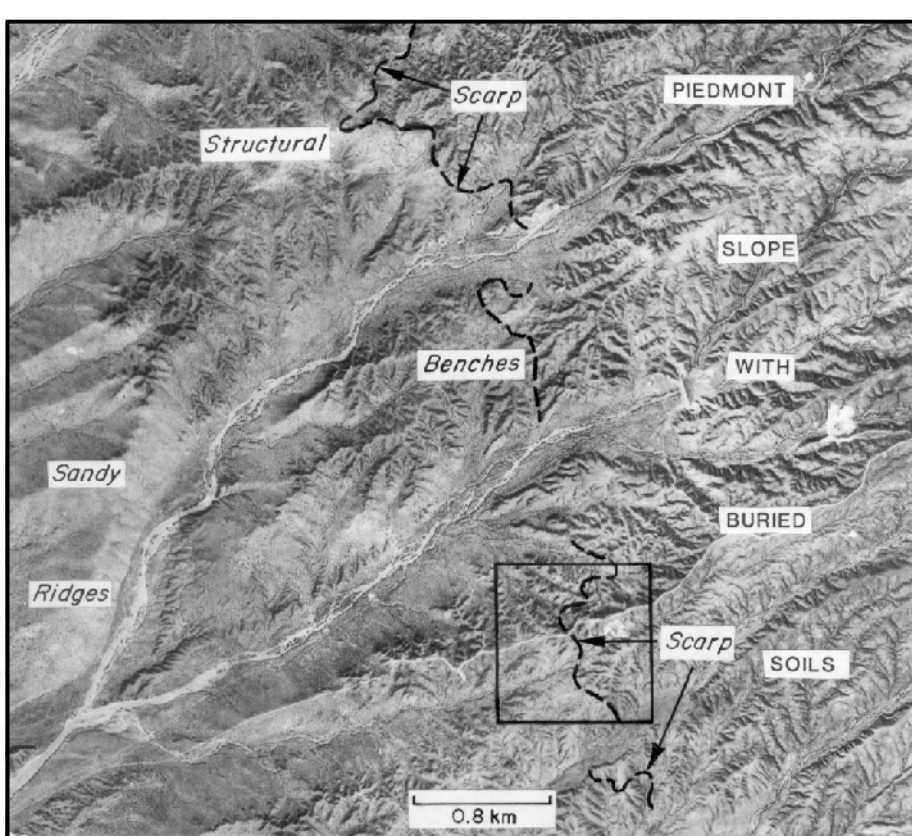


CONSTRUCTIONAL SURFACES VS STRUCTURAL BENCHES

The Stepped Sequence of Geomorphic Surfaces and A Structural Bench Along the Valley Border



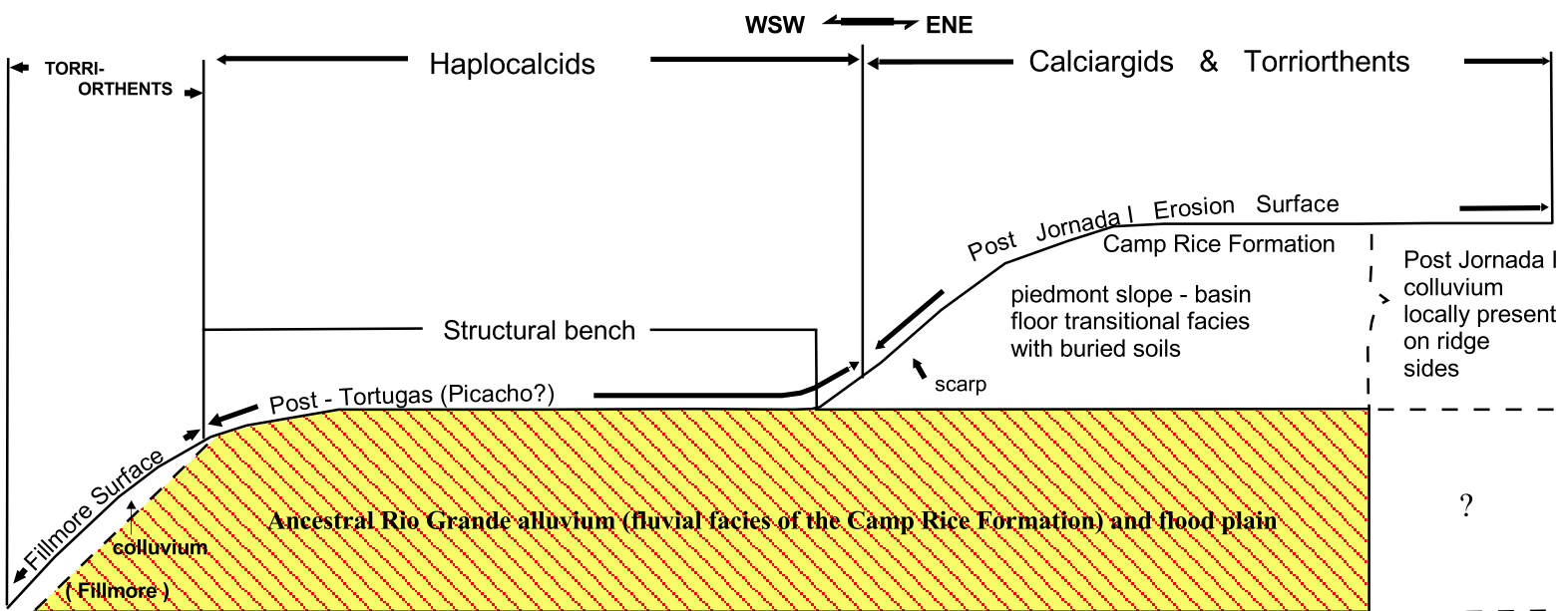
Generalized diagram showing the stepped sequence of geomorphic surfaces (constructional surfaces) and a structural bench (an erosional surface) in the vicinity of Tortugas Mountain. Picacho has been divided into late Picacho and Picacho (see chronology map).



Structural Benches and Exhumed Deposits of the Ancestral Rio Grande

The 1936 aerial photograph, at left, shows an area of structural benches, scarps, and piedmont slope sediments with buried soils. The sandy ridges at left are in sediments that stratigraphically underlie the gravelly sediments of the structural benches. The arrow in the square points to a cross section, below, across the scarp at lower left. The road in and left of the square is Foothills Road, formerly the Dump Road.

Formation of a Structural Bench



The cross section shows a structural bench on exhumed deposits of the Rio Grande, at left of scarp, and piedmont slope deposits and buried soils at right of scarp. Associated soils are identified at the great group level of soil classification. Post-Tortugas (Picacho?) is the estimated age of soils based on soil morphology.