

Four Famous Historic Landslides of the Pittsburgh Area

Jim Hamel, Ph.D., P.E., P.G.

Hamel Geotechnical Consultants

Monroeville, Pennsylvania

Pittsburgh Area has long been noted for Landslides

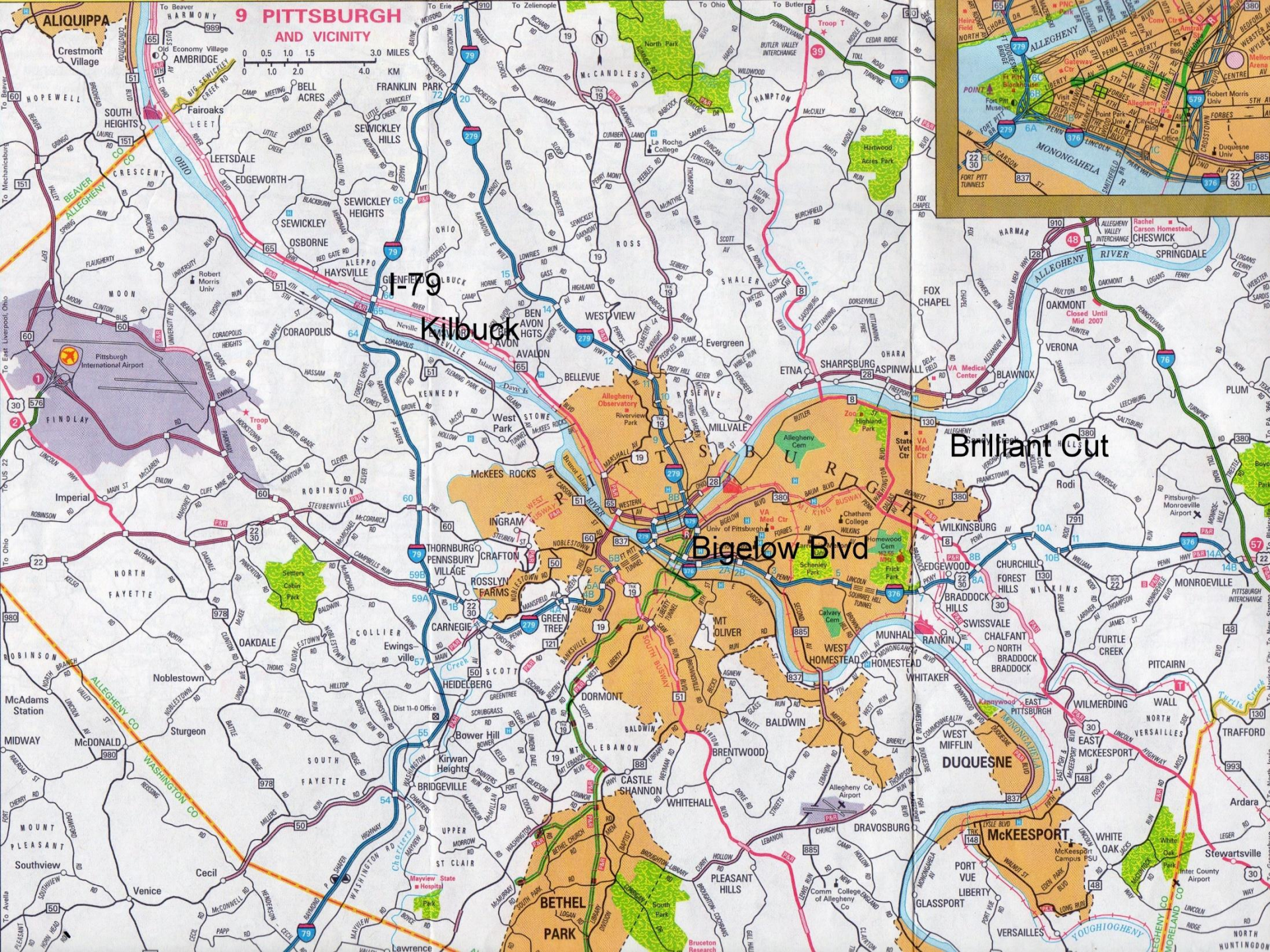
Results from Geology, Topography, Climate, History

Flat-lying, interbedded, strong and weak sedimentary rocks have been acted upon by Erosion, Stress Relief, Weathering, Creep, and Sliding to produce masses of

Marginally Stable Colluvium

These are often reactivated by heavy precipitation and by human activity, e.g., fill loading, toe excavation, surface and subsurface drainage changes

Also have Appalachian heritage of **Fill on Slopes**



19 PITTSBURGH AND VICINITY

0 0.5 1.0 1.5 3.0 MILES
0 1.0 2.0 4.0 KM

Kilbuck

Bigelow Blvd

Brilliant Cut

DUQUESNE

BETHEL PARK

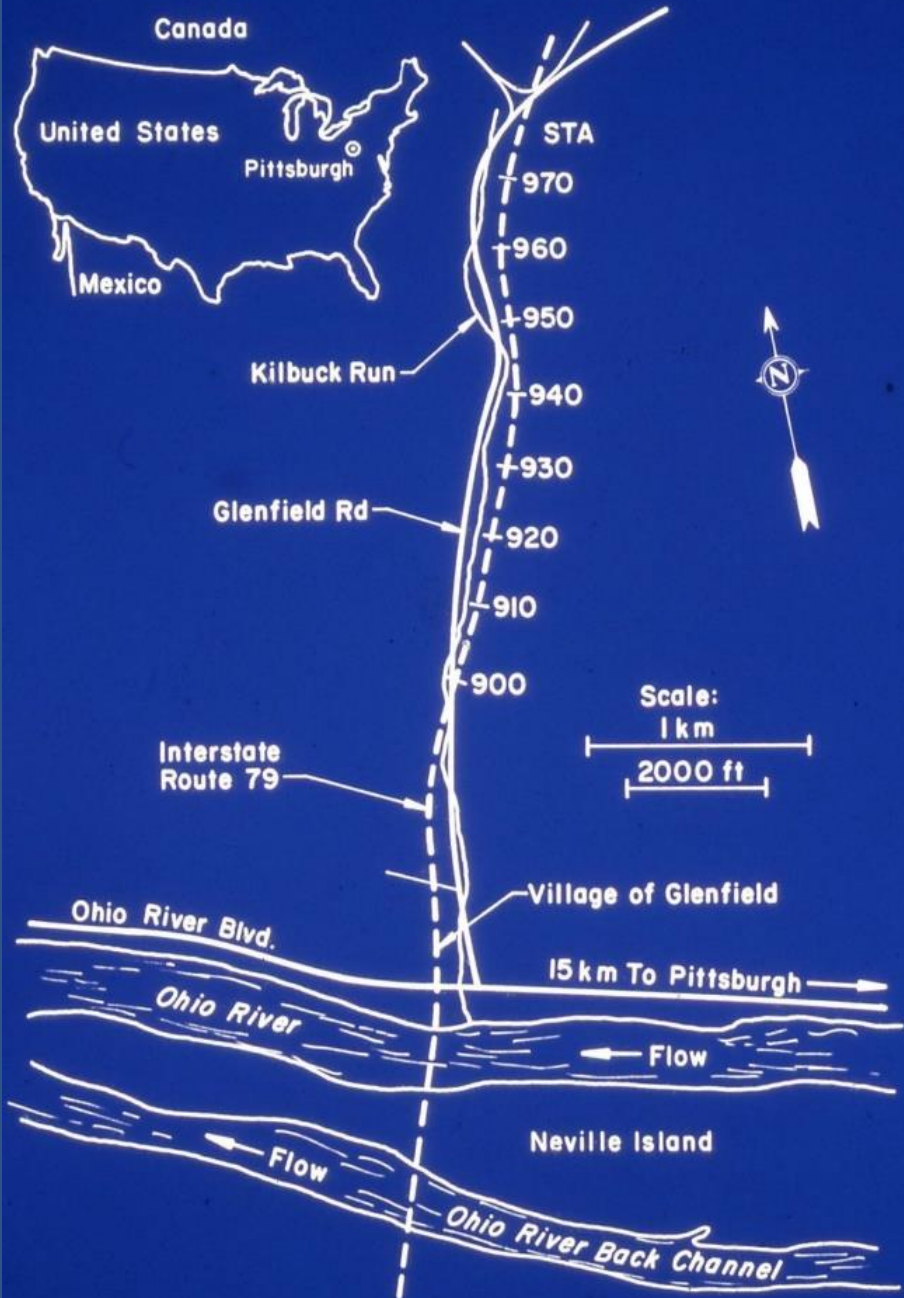
McKEESPORT

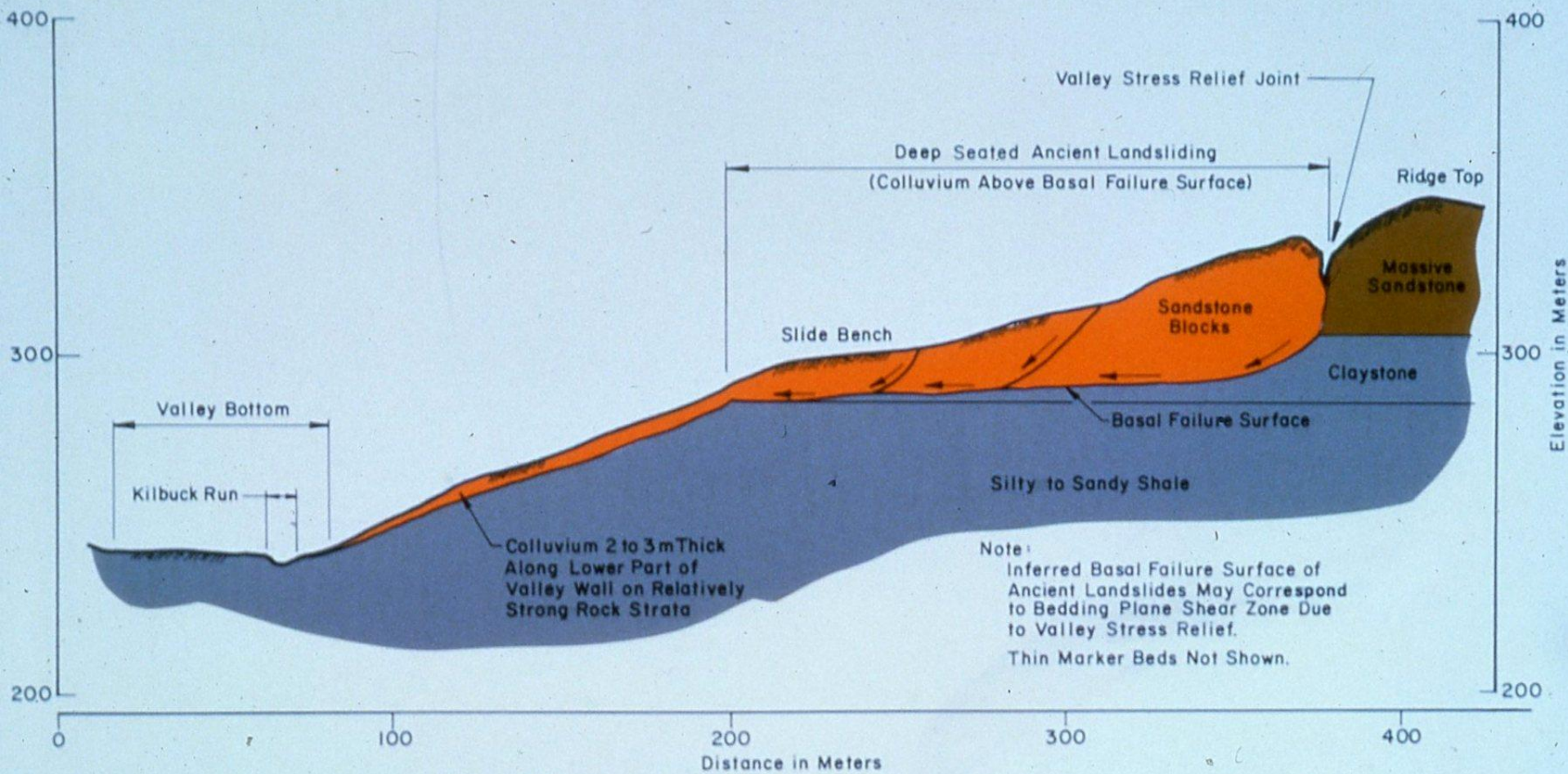
GLASSPORT

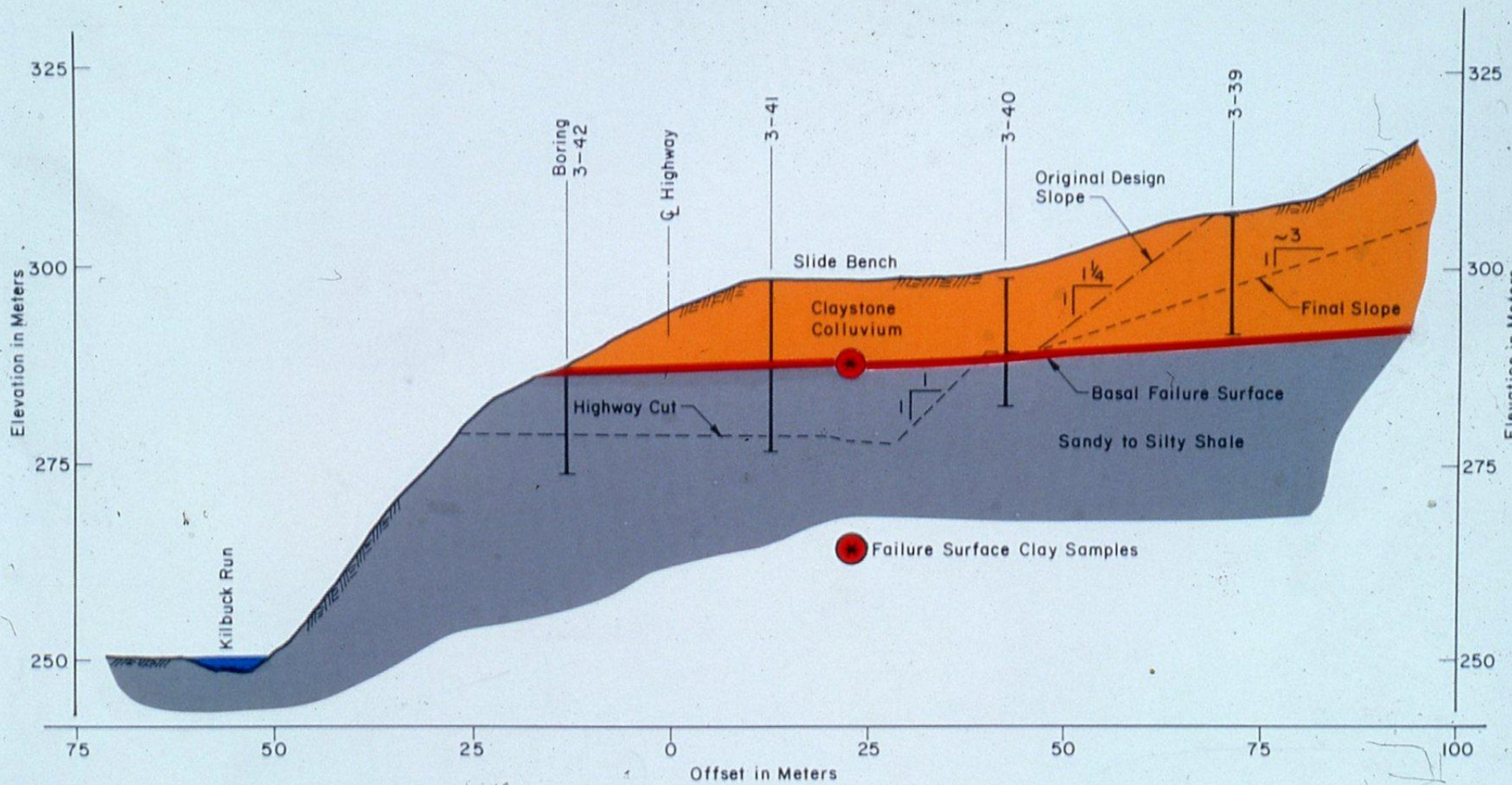
Stewartsville

Versailles

Way









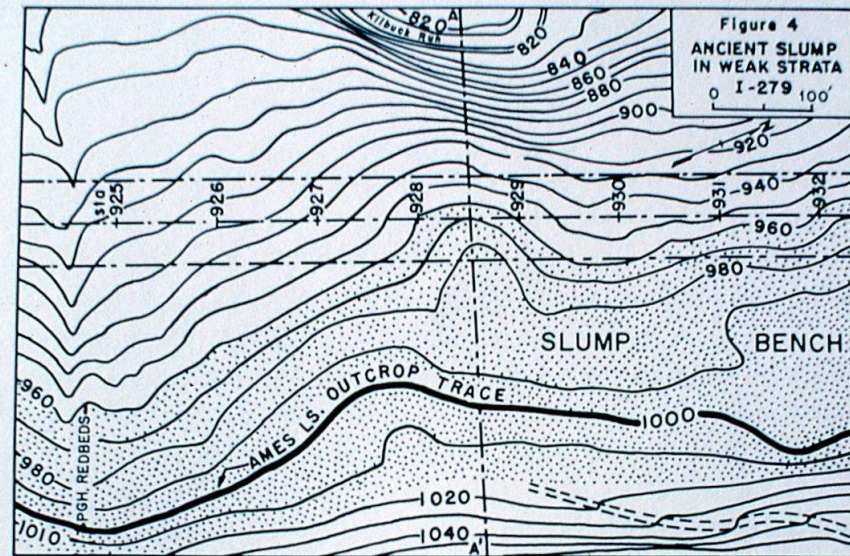


FIGURE 4-4.

From Flint and Hamel (1971)

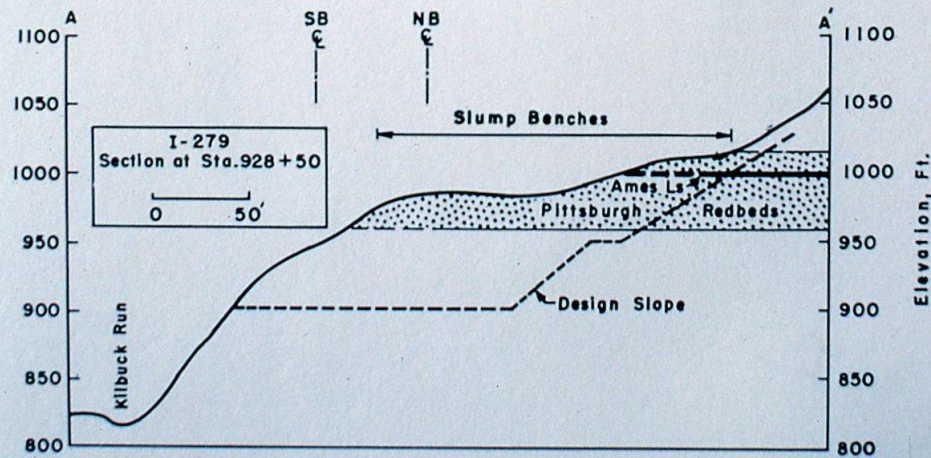
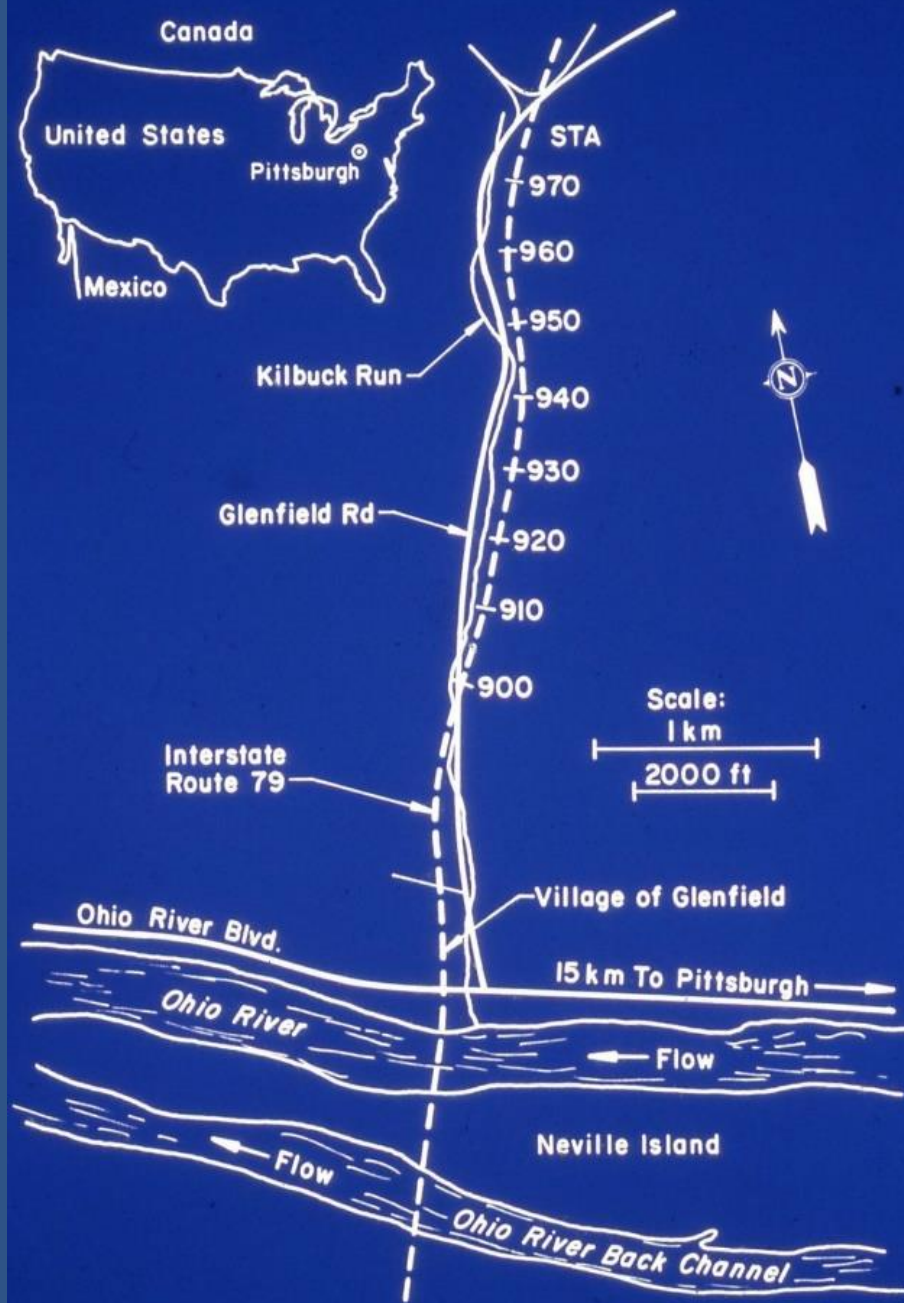


FIGURE 4-5. Ancient slump benches in weak strata that were undercut







The Kilbuck Slide should never have occurred.

As George Santayana said:

Those who cannot remember the past
are condemned to repeat it.