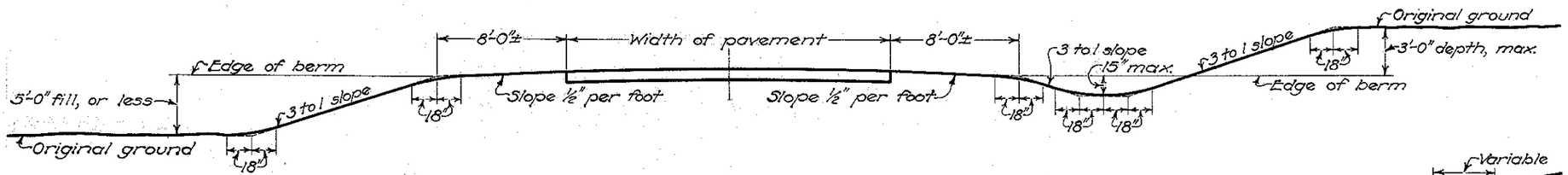
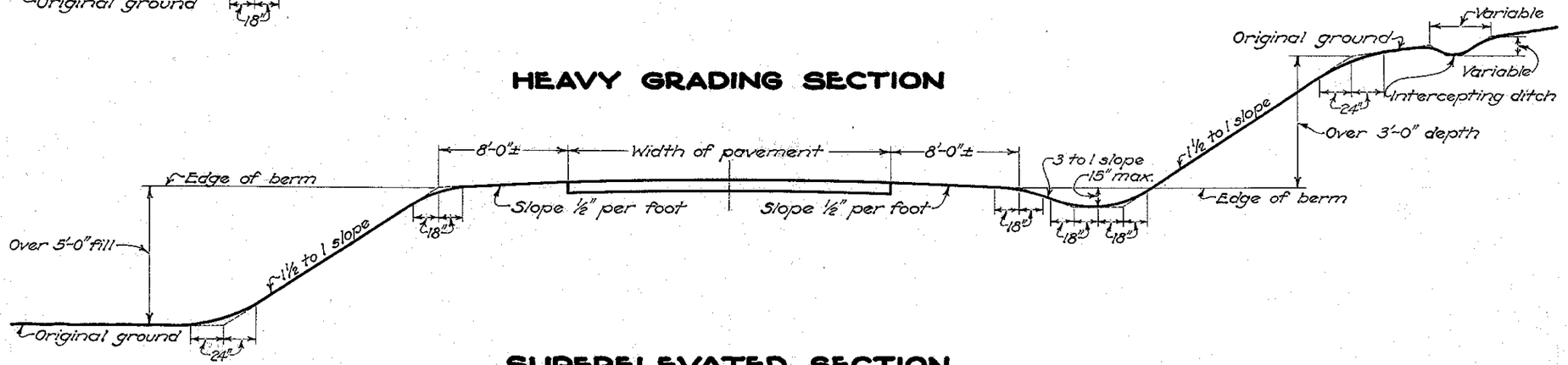
SHOULDERS SLOPES AND DITCHES

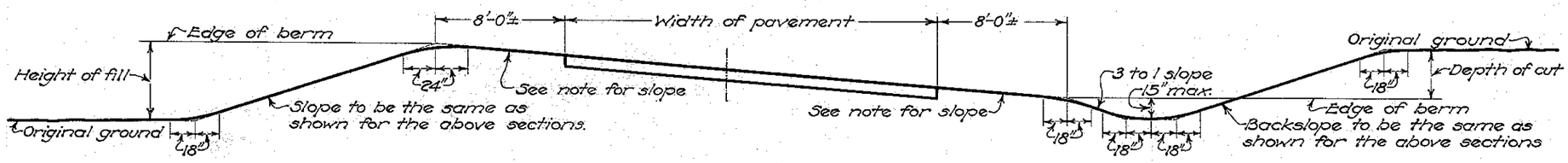
NORMAL SECTION



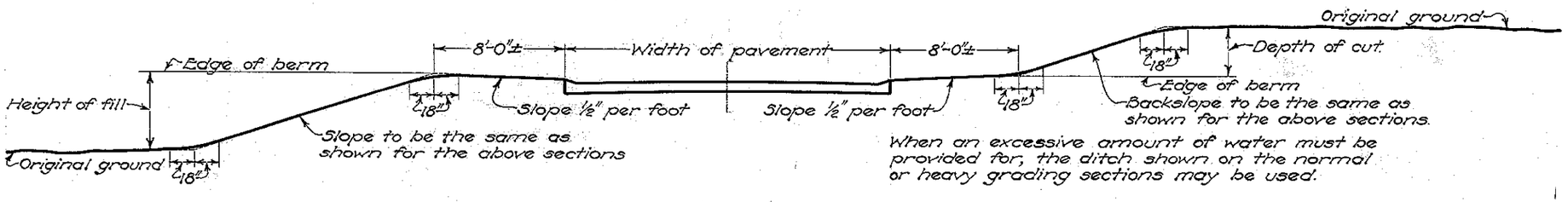
HEAVY GRADING SECTION



SUPERELEVATED SECTION



CURB SECTION



When an excessive amount of water must be provided for, the ditch shown on the normal or heavy grading sections may be used.

NOTES

GENERAL:—

Slopes and ditches shall be constructed as shown on the cross-section sheets. All corners or edges to be rounded.

When the project is near a village or city, or in a built up section, a 3"x 3'-0" cinder or gravel footpath may be placed at the most convenient location to accommodate the public.

Width of berm to be as shown on the typical section.

NORMAL SECTION:—

The 3 to 1 slope shall be standard for earth fills not to exceed 5 feet in height. In case the project has a considerable amount of surplus material, and right of way and topography permit, the 3 to 1 slope shall be continued for such heights as may be needed to utilize this material.

The 3 to 1 slope shall be standard in cuts not to exceed 3 feet in depth. Where right of way and topography permit, this same slope shall be used in greater depths when more excavation is needed to furnish material for embankment. Where the 3 to 1 slope is not feasible, consideration shall be given to a 2 to 1 slope.

HEAVY GRADING SECTION:—

The 1½ to 1 slope shall be standard for earth fills over 5 feet in height, except where the 3 to 1 slope is carried to such heights as may be needed to utilize surplus material.

The 1½ to 1 slope shall be standard in cuts over 3 feet in depth except that where right of way and topography permit, the 3 to 1 or 2 to 1 slope shall be used if more excavation is needed.

The intercepting ditch shall be used where the general slope of the land is toward the highway and shall extend the full length of the cut section to prevent erosion.

SUPERELEVATED SECTION:—

The slope of the berm on the lower side of pavements without curbs shall be ½" per foot until the rate of superelevation of the pavement becomes more than ½" per foot, then the berm slope shall be the same as the rate of superelevation of the pavement.

The slope of the berm on the upper side of pavements without curbs shall be the same as the slope of the pavement at all points around the curve and transitions.

Ditches and slopes other than berms shall be the same as shown for the normal and heavy grading sections.

CURB SECTION:—

Slopes other than berms shall be the same as shown for the normal and heavy grading sections.

BUREAU OF LOCATION & DESIGN
OHIO DEPARTMENT OF HIGHWAYS

SHOULDERS SLOPES AND DITCHES

STANDARD CONSTRUCTION DRAWING E-5

APPROVED _____ CHIEF ENGINEER

7-12-35