

National Standards For Photogrammetric mapping (Highway Committee 1968)

Contours - Ninety (90) percent of the elevations determined from the solid-line contours of the topographic maps shall have an accuracy with respect to true elevation of one half ($1/2$) contour interval or better and the remaining ten per cent of such elevations shall not be in error by more than one contour interval. This accuracy shall apply only to the contours, which are on each map. Thus, in each particular area where the intermediate contours have had to be omitted because of the steepness of the ground slopes and only the index contours are delineated on the maps, the accuracy stipulations apply to contour interval of the index contours. Wherever the intermediate contours are not omitted, of course, the accuracies are applicable to the contour interval specified for the topographic maps. In densely wooded areas where heavy brush or tree cover fully obscures the ground and the contours are shown as dashed lines, they shall be plotted as accurately as possible from the stereoscopic model, while making full use of spot elevations obtained during ground-control surveys and all spot elevations measured photogrammetrically in places where the ground is visible.

Coordinate Grid Lines - The plotted position of each plane coordinate grid line shall not vary by more than one one-hundredth ($1/100$) of an inch from true grid value on each map manuscript.

Horizontal Control - Each horizontal control point shall be plotted on the map manuscript within the coordinate grid in which it should lie to an accuracy of one one-hundredth ($1/100$) of an inch of its true position as expressed by the plane coordinates computed for the point.

Planimetric Features - Ninety percent of all planimetric features which are well-defined on the photographs shall be plotted so that their position on the finished maps shall be accurate to within at least one-fortieth of an inch of their true coordinate position, as determined by the test surveys, and none of the features tested shall be misplaced on the finished map by more than one-twentieth of an inch from their true coordinate position. The true coordinate position shall be determined by making accurate measurements originating and closing in station markers of the project basic control.

Special Requirements - When stipulated in special provisions that all specified features (planimetry and contours) shall be delineated on the maps, regardless of whether they can or cannot be seen on the aerial photographs and on stereoscopic models formed there from, the consultant shall complete compilation of the required maps by field surveys on the ground so as to comply with all accuracy and completeness stipulations.

Spot Elevations - Ninety per cent of all spot elevations placed on the maps shall have an accuracy of at least one-fourth ($1/4$) the contour interval, and the remaining ten (10) percent shall be not in error by more than one-half ($1/2$) the contour interval.