

REFERENCE POINTS

Reference points are contained on a survey data sheet (containing the project's horizontal survey alignment), which is furnished by the survey processing unit.

REFERENCE BLOCK*

A Reference Block is to be shown in the lower right corner of the plan sheet to designate the location of detail sheets associated with the plans (i.e.- plan profiles, entrance profiles, drainage descriptions sheets, etc.).

NORTH ARROW

A [North Arrow](#) is to be shown on each plan sheet in a conspicuous location.

SCALE

A [bar scale](#) is to be shown in the lower right corner of each plan sheet.

TOPOGRAPHY

All existing topography provided by the electronic data collector is to be accurately plotted on the plans. Care must be exercised in turning right angles from the baseline in plotting items by station plus and distance. Any angles used for plotting purposes are to be turned by tangent offsets. [Station pluses and distances](#) are to be shown on the plans for items of great importance (such as property corners, iron pins, etc.) In critical areas, distances only are shown to other items of topography (such as the closest corner of buildings in critical areas are to be shown similarly. All [existing drainage structures](#) are to be shown similarly. All existing drainage structures are to be plotted to scale and noted with all available information such as size, materials, invert elevations, etc. [Flow arrows](#) are to be shown for all labeled, generally perpendicular to the baseline. An effort must be made to keep this lettering close enough to the item to readily identify it, but beyond anticipated proposed items.

UTILITIES

All available existing utility information is to be shown on the plans. Overhead utility lines, except for high voltage transmission lines, are not to be shown. It is extremely important that all invert and rim elevations for sanitary sewer manholes (SMH) be shown. A [note](#) is to be shown in the upper left corner of the plan sheet listing owners of each utility shown on that sheet. The designation for all underground utilities should be shown frequently on the plans to easily identify the type of underground utility. At connecting roadways or other points where gravity sanitary sewer facilities leave the project corridor, it is essential to show the next manhole with its elevations.

* Rev. 7/06