

**Town of Manchester  
Public Works Department  
Engineering Division**

**MINIMUM RECORD (AS-BUILT) DRAWING REQUIREMENTS**

Record drawings for all subdivisions, private developments and other work regulated by these Public Improvement Standards are to be plotted on 24" x 36" sheets at the same scale shown on the approved subdivision or private site development plans. Plans are to be certified and sealed by a Land Surveyor licensed in the State of Connecticut and prepared in accordance with the "Minimum Standards for Surveys and Maps in the State of Connecticut" as adopted by the Connecticut Association of Land Surveyors, Inc. on September 26, 1996, as amended.

Record drawings shall be based on the Town of Manchester Horizontal and Vertical Control Network as established in 1998 utilizing published CTDOT values. The horizontal values are based on NAD 83 and the vertical values are based on NAVD 88 utilizing the Geoid 96 model. When using either traditional terrestrial survey methods or utilizing GPS, site values are to be localized with the existing network. Adequate care and methods shall be utilized in accordance the "Minimum Standards for Surveys and Maps in the State of Connecticut" as referenced herein. Plans must be certified by a land surveyor licensed in the State of Connecticut. Plan shall be submitted on 24" x 36" sheets on mylar that is no less than 0.004 inch (4 mils) thickness.

Tie sheets for all existing Network Control Stations are available upon request from the Engineering Division. Refer to Section 7.01 of the Manchester Public Improvement Standards for additional information.

At a minimum, record drawings shall include the following information:

1. All geometry pertaining to street lines, the perimeter boundary of the development, internal property or lot lines, and easement lines.
2. All monumentation set and found for project perimeter, streetline, lot corners, angle points and easements. The above locations shall be certified to an A-2 Standard of Accuracy by a Land Surveyor licensed in the State of Connecticut. This certification shall also indicate the approximate date that all monumentation and iron pins were set.
3. Town Control Stations observed and values utilized, method/methods utilized for developing site values, and coordinates displayed on three (3) physically monumented site or referenced locations on all applicable sheets.
4. Semi-permanent benchmarks set at all roadway intersections and along newly constructed roadways. The maximum distance between benchmarks shall not exceed 600' and no less than three (3) benchmarks shall be set. The datum shall be NGVD 1988.
5. Volume and page of all easements conveyed to the Town of Manchester or applicable party.
6. Title sheet showing sheet layout and phase lines, if applicable.
7. Title blocks indicating "As-Built" or "Record Drawing" with a date.
8. Lot numbers and street addresses for the subject property and all abutting properties.
9. All building setback lines.
10. All existing foundations with a minimum of three (3) dimensions from separate property lines shown to the nearest one-tenth (0.1) of a foot (not required for Subdivision Plans).
11. As-built location of all types of sidewalks, curbs, sidewalk ramps, driveway openings, guide rail, traffic signs, pavement markings and protective fence.
12. Dimensions of major features, such as width of roadway and sidewalk, cul-de-sac radius, etc.

13. As-built locations of all drainage structures and pipes with labels for top of frame, top of headwall, invert elevations and pipe size and material. Submission of revised design calculations may be required if the constructed system differs from the approved drawings as determined by the Engineer.
14. As-built locations of stormwater treatment systems with appropriate top, bottom and invert elevations. Labels for hydrodynamic separators shall include the manufacturer and model number.
15. As-built location of all water mains, water services, curb boxes, valve boxes, hydrants, sanitary sewer mains and laterals, and manholes (with labels for top of frame and invert elevations).
16. As-built locations of all street light poles with labels for owners and pole numbers.
17. As-built locations of all underground utilities (i.e. electric, gas, telephone, and cable) as well as all above ground utility boxes, transformer pads, manholes, junction boxes, vaults (with dimensions) and handholes.
18. As-built locations of detention basins that include topography, and labels for the top of berm, emergency spillway and bottom of basin elevations, and invert elevations for all inlet and outlet structures. Include the locations and dimensions of any trash racks.
19. As-built location of all foundation drains that discharge into Town drainage structures with labels for pipe size, material and invert elevations.
20. Limits and dimensions of riprap aprons and/or scour holes at drainage outlets with labels for the type (size) of riprap installed.
21. All existing topography for the property that is based on the same vertical datum as the approved subdivision or development plan. Topography shall be shown in one-foot or two-foot contour intervals with spot grades at all high and low points, top and bottom elevations of curbs and retaining walls, and other critical locations.
22. For Subdivisions, profile sheets showing existing and finished roadway centerline profile with final roadway centerline grades at every 50 foot interval and at all low, high and intersection points. Profile sheets shall also include all underground utilities, including pipe sizes and materials, top of frame and invert elevations, flow lines and slopes of pipe. Preliminary road profiles shall identify the base course of pavement if the surface course has not been installed.
23. Traffic signal plan(s), if applicable.
24. Legend which accurately describes monumentation set and found (i.e. 5/8" rebar, 1" iron pipe, concrete monument with brass cap, etc.)
25. North arrow.

Note that these are the minimum submission requirements; the Town reserves the right to request additional information as required for review.