

Richmond Township As-Built Plan Standards

The following guidelines are provided for the preparation of acceptable record construction plans. These guidelines are not intended to be all inclusive or to replace sound engineering judgement in providing the necessary information to adequately describe the development project.

Field survey for record drawings is to be done after all grading, paving, utility, and building construction is completed. Survey shall include, but is not limited to the following items:

1. **Utilities:** Elevations of inverts and structure covers, hydrants, and shutoffs for all underground utilities (water, sanitary, storm) along with actual pipe lengths and type of material shall be obtained and noted on the plans. All gatewells, manholes, catch basins, shutoffs, and similar types of structures are to be located and noted on the plans. Location of edge drains, electrical, gas, phone, cable or other underground facilities not included above shall also be noted on the plans. All structures at ground level, which are not in the road pavement, shall be tied in an acceptable fashion to property corners or other suitable witnesses.
2. **Grading:** Perimeter lot grades and additional grades at appropriate intervals to detail flow of drainage and character of finished grading work (berms, swales etc.) shall be noted on the plans. Sufficient information shall be provided to describe detention/retention areas and actual volumes on the plans. Permanent pond elevations and/or retention-storage elevations shall also be provided.
3. **Paving:** Finished pavement cross section grades shall be obtained at appropriate intervals or where there is significant break in road profile grade. Low points (sags) and crests in road profile are to be identified. Cross sections at existing adjoining streets are also required.
4. **Sidewalks:** Elevations of sidewalks and pathways shall be obtained at intervals not to exceed 100 feet in length and shall be obtained where there are apparent breaks in grade and/or intersection with driveways or side streets. Two elevations shall be taken at each interval to determine crown of pathway.
5. **Building:** Changes in the design, dimensions, specifications or location of project features and equipment. Actual location of anchors, construction and control joints, etc., in concrete. Changes in details of design or additional information prepared and/or furnished by the Contractor, including but not limited to, fabrication, erection, installation plans and placing details, pipe sizes, insulation material, dimensions of equipment foundations, HVAC controls, fire alarm, fire sprinkler, irrigation systems...etc. Correct dimensions and details transferred from shop drawings.

The above information shall be neatly described and noted on the original approved construction plan drawings by crossing out the design information and printing the survey information adjacent to it with the letters "RD" or "AB". Both plan and profile sheets are to be done in this fashion. On profile sheets, it is not necessary to redraw the storm sewer or sanitary sewer, but indicate slope, inverts, lengths...etc., in the fashion described. All plans shall indicate as-built date and initials of the person producing the documents.

Submit 4 complete Bond plan sets (full size, signed and sealed) including standard detail sheets. Film plan sets are not required. Also, provide digital files of the plans hard copies in Portable Document Format (PDF) and in AutoCAD (DWG) mapped to scale. Acceptable file media are Thumb Drive, Flash Drive...etc.