

CITY OF ORLANDO AS-BUILT SURVEY CHECKLIST

Use this checklist to follow the Chapter 5 Requirements of the City of Orlando's Engineering Standards Manual as stated in Section 5.03

GENERAL REQUIREMENTS

- The as-built survey requirements as defined in Section 5.03 are for both public and private improvements and defined within the section. Was Chapter 5 reviewed in its entirety?
- The as-built survey data must be overlaid on the construction plan set that was approved for your project (electronic files of the plans are the base data).
- Construction Plan information must be shown in grayscale with the plan information untouched or unaltered.
- The as-built survey must be to scale and match the plan scale information,
- The as-built survey data will be shown in bold print that is easily discernible from the grayscale plan information.
- The as-built survey data must be in Florida State Plane Coordinates, Florida Zone East (0901), North American Datum (NAD) of 1983 (Adjustment based on control) and referenced to known control that must be referenced as to where the control came from. (Plan survey control sheet for example).
- The as-built survey data must be in North American Vertical Datum (NAVD) of 1988 and referenced to known control that must be referenced as to where the control came from. (Plan survey control sheet for example).
- The as-built survey must be prepared by a Florida Licensed Professional Surveyor and Mapper.
- The licensed surveyor must reference and replace any project control points, boundary corners, benchmarks, section corners and any other control monuments that may be lost or destroyed, at no additional cost to the City.
- Accuracy of all constructed public stormwater and sanitary sewer improvements, and those connected to the public system, shall be within 0.5 feet (+/-6") horizontally and 0.2 feet (+/-2.4") vertically of the location depicted on the construction plan drawings. All CAD files containing as-built storm and sanitary improvements for both public and private construction must be drawn on a layer beginning with V-STRM for storm pipes, structures and hardware, and a layer beginning with V-SSWR for sanitary sewer pipes, structures and hardware.



COVER PAGE

- The as-built survey data must be overlaid on the construction plan set that was approved for your project (electronic files).
- The cover page must be titled *As-built Survey*, if the as-built survey is a progressive survey it should be labeled as such and labeled **Final As-built Survey** at project completion.
- The Surveyor's Certification must be included on the survey. This can either be on the cover, with the certification covering the entire as-built survey with a clear denotation of sheets, upon which the surveyor is certifying. If the cover certification is not used, each page will have to be certified and the surveyor will sign and seal each sheet. Electronic seals and signatures are not accepted at this time.
- If there is an index on the cover sheet, the pages containing as-built survey data must be shown in bold.
- Only the as-built survey information should shown in bold, all plan information should be shown in grayscale.
- The certification must qualify the purpose of the survey, horizontal and vertical datums and the last date in the field.

REQUIRED AS-BUILT INFORMATION

- The as-built survey clearly shows the designed and constructed locations and vertical data for ease of comparison between planned and constructed improvements.
- Planned improvements required as part of the as-built survey must include:
 - Storm and sanitary sewers and structures (including cleanouts), drainage conveyance systems and retention ponds
 - Potable and reclaimed water mains and all cleanouts
 - Meters, valves, force mains, gas mains and other utilities
 - Irrigation lines (2-inch and larger)
 - Process piping
 - Electric and communication duct banks, traffic and pedestrian signals, pull boxes, cabinets, transformers, structures
 - Fences, pavement, curbs, sidewalks, driveways, appurtenances and buildings
 - The specified improvements noted above are the minimum requirements and if additional information is needed to confirm the project was built properly it can be requested by the City.
- If a structure information table was provided on the plans, then the as-built information shall be shown in the table.
- Design call-outs shall have a thin strike line through the design call-out and all as-built information must be labeled (or abbreviated "AB") and be shown in a bolder text that is completely legible.
- Pavement and drainage flow line elevation shots shall be taken at a minimum of 25' intervals and at grade breaks.
- As-built survey shots shall be taken at the same locations as shown on the plans for ease of comparison. Any variations from required material sizes or types shall be noted.
- Any sheets that support the as-built survey or sheets that should have as-built data shown on them should be included. This includes the general notes and legend pages, site and civil sheets, plan and profile sheets, structure detail sheets and tables (not typical sections), sheets with construct calls and other sheets that identify the planned improvements to a specified value (stationing, coordinate values and vertical values) and are necessary for a comparison to the planned values versus the completed construction.

DIGITAL FILES

- Digital files include CAD and PDF of the as-built survey that are submitted on CD, DVD or Thumbdrive and are complete with all reference files.
- All CAD files must be complete with reference files and any other documents and images associated with the CAD files.
- CAD files must be identically matching to the signed and sealed as-built survey.
- The submitted digital files must be in the original format of the plans. i.e. Autocad Civil 3d, Microstation, etc. The City's preferred CAD platform is Autocad Civil 3d 2014 or newer.
- The preferred CAD Standards of the City of Orlando is National CAD Standards. Other standards are acceptable as long as the layers and data is easily discernible and have reference files and other pertinent information include with the submittal.

I certify that I as signing surveyor, have reviewed the requirements as defined in Chapter 5, of the City of Orlando's Engineering Standards Manual, 5th Edition, and that my as-built survey conforms to the requirements defined therein and highlighted by this checklist.

Signature: _____

Signing Surveyor

Date: _____

Today's Date