

---

# APPENDIX 1: CONSTRUCTION PLAN CHECKLIST

---

## APPENDIX 1: CONSTRUCTION PLAN CHECKLIST ALL PLANS

- Plans on 24-inch by 36-inch paper (Originals shall be transmitted on a USB 3.0 flash drive (preferred) or CD/DVD as an electronic DWG file). The file format shall be AutoCAD 2018 or later. No conversion from Microstation or other CAD based programs is acceptable).
- Signed, sealed, and dated by the Florida Registered Engineer of Record (all sheets).
- Letter of transmittal with Service Request Number, Folio Number, name, address, and telephone number of the project Engineer.
- Plans must reflect the approved point of connection (P.O.C.) as specified in the "Service Application Conditional Approval Letter."
- Index of Drawings on the cover sheet or first sheet following.
- Project location map.
- A title block on each sheet identifying the Engineer of Record, firm, Certificate of Authorization, telephone number, and page content. Include project datum, North Arrow (as appropriate), and scale.
- One or more overall utility plan sheets (Master Plan) at a minimum scale of 1 inch = 200 feet' showing existing and proposed improvements.  
The horizontal scale for Construction Plans is:  
1 inch = 20 feet (scale showing proposed construction within existing infrastructure, ie. POC)  
1 inch = 30 feet  
1 inch = 40 feet
- The vertical scale is:  
1 inch = 5 feet
- Width and center line of each right-of-way indicated.
- Width of pavement and distance to property line shown for all streets.
- All underground utilities, storm drains, or other structures which cross or are located close to the proposed pipelines and structures are shown on the drawings in both plan and profile views. **Cross section details of all conflicting crossings are shown.**
- Size, type, material, and length of pipes shown, for all proposed water, reclaimed water, and wastewater lines, both on-site and off-site.
- Schematic diagrams and designs for all equipment and structures not otherwise clearly indicated on the plans.
- Street names or identifiers indicated (correct location on plan).
- Subdivision name, lot, and block numbers.
- All County-regulated utilities proximate to the design shall be shown on the plan view in their reported location.
- All water, wastewater, and reclaimed water lines crossing other utility lines have at least 18" vertical clearance. A design exception has been approved when there is less than the minimum separation.
- The method of pipe crossing existing pavement is specified, i.e., jack and bore, or open cut.
- The invert elevations of all intersecting utilities are shown on the profile views.
- Minimum pipeline clearance is five feet from property lines.
- Minimum cover of 36 inches for water and reclaimed water lines, and 48 inches for force main lines.

## POTABLE WATER MAINS

- Joint restraint shown at all water main bends, fittings, valves, fire hydrants, and tapping sleeves.
- Joint restraint detail that conforms to County standards.
- Valves with roadway boxes are provided for all branch connections, loop ends, fire hydrant stubs, or other locations as required, to facilitate operation of the distribution system.
- Valve spacing is 500 feet (maximum) in commercial, industrial, multi-family and residential districts; and 1,000 feet (maximum) in rural areas.
- Air release valves are provided where the water main profile is high, as required.
- Fire hydrant spacing in accordance with Public Utilities Technical Specification 331001.
- Location of sleeve for use in connection with far side water service installation.
- A note stating that the PVC water mains shall have locator wire attached to it.
- Backflow prevention device, as required.
- Location of blow-offs, as required.

## RECLAIMED WATER MAINS

- Joint restraint shown at all water main bends, fittings, valves, fire hydrants, and tapping sleeves.
- Joint restraint detail that conforms to County standards.
- Valves with roadway boxes are provided for all branch connections, loop ends, or other locations as required to facilitate operation of the distribution system.
- Valve spacing is 1,000 feet (max.) in commercial, industrial, multi-family and residential districts; and 2,000 feet (max.) on Transmission lines.
- Air release valves are provided where the water main profile is high, as required.
- Location of sleeve for use in connection with far side water service installation.
- A note indicating that PVC water mains shall have locator wire attached to it.
- Location of blow-offs, as required.

## WASTEWATER GRAVITY MAINS

- On the wastewater gravity profiles, show the size, type of pipe, slope, and distance between manholes.
- Manholes are located in the centerline of the road, out of the wheel path.
- Minimum parallel separation from a potable water main is 10 feet; minimum crossing separation is 18 inches. A design exception has been approved when there is less than minimum separation.
- Invert elevation and direction is shown for each pipe entering or exiting a manhole. Rim elevation must also be specified.
- All manhole stubs and connections shown on both the plan and profile view.
- Manhole and manhole connection details must be shown.
- Drop manhole and detail is required for drops two feet or more.
- Eight-inch PVC minimum for gravity mains within right-of-way, six-inch minimum for double service laterals and four-inch minimum for single service laterals.

## FORCE MAINS

- Joint restraint specified at all force main bends, valves, fittings, and tapping sleeves.
- Joint restraint detail that conforms to County Standards.
- Air release valves are provided at high points along the force main profile, as required.
- A note stating that the PVC force main shall have locator wire attached to it.
- In-line valves shall be provided at intervals not to exceed 1,000 feet.

## JACK AND BORE CROSSINGS

- Jack and bore crossings showing the casing pipe on both the plan and profile view. County Standard jacking detail is included.
- A cross sectional detail of the jacking is included.
- Casing pipe diameter, thickness, and class is specified on the plan and detail views.

## PRIVATELY OWNED WASTEWATER PUMP STATIONS

- Location of pump station on private property.
- Design capacity (average daily/peak flows) and system response/curve calculations.
- Pump identification, including all nameplate data. Pump curve for selected pump with design point noted.
- Wet well operating elevations, inverts, and slab elevations.
- Identification of fittings and valves on private property.

## WASTEWATER PUMP STATIONS TO BE COUNTY OWNED AND MAINTAINED

- Location and size of site to be dedicated to County.
- A to-scale site plan showing the pump station slab, access driveway, elevations, setbacks from property lines and surrounding buildings and lot grading details.
- Valve and piping identification.
- Backflow prevention device.
- Pump identification, including all nameplate data.
- Design capacity (average daily / peak flows) and system response/curve calculations.
- Wet well design criteria and pump control level settings.
- Wet well depth 25 feet or less.
- Pump curve for selected pump with design point noted.
- Information included on a pump station calculations detail sheet.
- The proposed pumping station meets the wastewater system's hydraulic requirements provided by the County.
- Electrical sheet includes load calculations, breaker coordination study and short circuit analysis.