

TOWN OF BRASELTON
SANITARY SEWER LIFT STATION AND FORCEMAIN
PLAN REVIEW CHECKLIST
May 2006

Project Name: _____

Project Engineer: _____

Development Type _____ (residential, commercial, industrial, etc.)

Braselton Project No. _____

Note: This checklist serves the designer and plan reviewer as a minimum guideline only, highlighting the Town of Braselton's standards. This document in no way represents all requirements of the Town of Braselton, Georgia Department of Natural Resources, or sound design practices.

DESIGNER SHALL DESIGN LIFT STATIONS IN ACCORDANCE WITH TOWN OF BRASELTON STANDARD SPECIFICATIONS AND DETAILS FOR WATER AND SEWER MAIN CONSTRUCTION.

FOR LIFT STATION AND RELATED REQUIREMENTS, THE DESIGNER SHALL CONSULT THE FOLLOWING MAJOR SECTIONS (Please note other sections will apply such as Chain Link Fencing):

Manholes.....	02601
Sewage Lift Station.....	02731
Sanitary Sewer Force Mains	02732
Lift Station Electrical Work.....	16000
Standby Generator	16621
SCADA Requirements.....	16000

ALSO SEE LIFT STATION DETAILS No. PS-1 through PS-11.

SITE PLAN-**To Scale of Actual Site**

- To scale showing existing and proposed contours, and all topographical features
- Surveyed and designed in accordance with Town of Braselton Coordinates and Monuments
- Minimum scale: 1" =20' (thus, 1" = 30' not allowed)
- Site grading to provide for positive drainage and storm piping if necessary
- Show all necessary site dimensions. Minimum site = 50' x 50'
- Show 100 year flood line, or state that there is none
- Show wetwell, valve vault, underground piping (forcemain, gravity sewer), manholes, bypass pump connections, and generator
- Required items and structures shown and located with dimensions on site plan
- Show water supply arrangements
- Show fencing and gate with dimensions
- Finished site surface indicated
- Show access road, plan and profile
- Access road shall be paved

- Plans must note that all construction shall be in accordance with the "Town of Braselton Standard Specifications and Details", latest edition

STRUCTURAL-PIPING LIFT STATION PLAN-****To Scale Plan View and Cross Section of Wetwell and Vault Piping

- Minimum of Duplex, Submersible
- Minimum 10'-Diameter Wetwell
- Note "Wetwell and first manhole upstream shall be coated as per the Town Specification Section 02601."
- Show plan view of wetwell and vault to scale including piping, pumps, hatches, concrete, hoist(s), valves, fittings, pressure gauges, any reinforcement; Minimum scale: 1/4" =1'-0" (thus, 1/8" =1'-0" not allowed)
- Show section view of wetwell and vault to scale including piping, pumps, hatches, concrete, hoist(s), valves, fittings, any reinforcement, pressure gauges, elevations; Minimum scale: 1/4" =1'-0" (thus, 1/8" =1'-0" not allowed)
- Note "All piping from pumps to discharge of valve vault shall be DIP-Flanged"
- Note "Vault shall be reinforced concrete, min. 3,000 psi, in accordance with ASTM C913"
- All wall penetrations shall be sealed with Link Seal WS products or equal
- Note "Wetwell shall be reinforced concrete, min. 3,000 psi, in accordance with ASTM C478"
- Grout shown in wetwell bottom
- Vault floor has positive drainage, grout
- Pressure gauges shown
- Hoist shown and specified
- Plans must note that all construction shall be in accordance with the "Town of Braselton Standard Specifications and Details", latest edition
- Note "Contractor-Developer shall submit Shop drawings for pumps, associated lift station equipment, and generator to the design engineer for review and approval prior to submittal to the Town Engineers. The Town must receive 2 copies of the approved shop drawings with the approval notation and signature of the design engineer. The Town shall conduct a final review for compliance with Town Standards. No lift station installation shall be allowed until this shop drawing review is completed by the design engineer and the Town."

FORCE MAIN PLAN AND PROFILE

- Any lines outside of road r/w must be in a 20-foot easement
- Surveyed and designed in accordance with Town of Braselton Coordinates and Monuments
- Plan and profile sheets shall be provided for force main. Profiles shall have a horizontal scale of not more than one hundred (100) feet to the inch and a vertical scale of not more than twenty (20) feet to the inch. The plan view shall be shown on the same sheet as the profile with match-lines if necessary. Plan and profile views should have line designations, station numbers, manhole numbers and any other indexing necessary to easily correlate the plan and profile views.
- Plan View- Clearly show and label proposed pipeline, size, material, and location.
- Plan View- Clearly label all road right-of-ways (existing and proposed) and easements (existing and proposed).
- Plan View- Clearly show and label existing and proposed topography and existing and proposed features pertinent to design and layout along pipeline route.
- Plan View- Provide adequate dimensions, stations, and labels to clearly indicate proposed location of pipeline relative to features such as right-of-way, centerlines, edge of roads, coordinates, etc.
- All stream crossings with elevations of the streambed.
- Stream/Creek Crossings-cross these under or outside of culvert piping. These installations require restrained joints. Provide plan view and cross section of the crossing showing the existing ground,

proposed ground and side slopes, the creek and culvert, elevations, the proposed pipeline and any fittings necessary. Refer to Standard Detail W-25. Additional easements may necessary for this area.

- Aerial crossings not permitted
- All piping shall be DIP
- Show size and location of vacuum and air release valves.
- Need to show 100 year flood plain in critical areas
- Show all items on plan AND profile which may pose a conflict, i.e. other utilities, culverts, drains, roads, etc.
- Paved Road crossings require steel casing with restrained joints inside the casing as per the Town Standards.
- Plans must note that all construction shall be in accordance with the "Town of Braselton Standard Specifications and Details", latest edition

SUPPORTING DATA/CALCULATIONS/SUBMITTALS

- Stamped by PE
- Design flow determination 350 GPD per lot is minimum
- Peak Flow determination
- Static Head and TDH Calculation
- Wetwell volume and cycle time calculation
- 1-hour min. storage
- Min. velocity = 3.0 fps
- Pump passes 3-inch solid
- Plot of system head curve with selected pump curve
- Manufacturer's preliminary submittal on pumps and associated items
- 3-phase power only
- Buoyancy calculations
- Submit Detail PS-1