HERNANDO COUNTY UTILITIES DEPARTMENT (HCUD)

GENERAL SUBDIVISION CONSTRUCTION DRAWING SPECIFICATIONS CHECKLIST

This checklist includes some typical specifications and requirements subdivision construction drawings must adhere to and contain. In some instances, an item may not apply or there may be additional requirements in HCUD's Specifications Manual or Utility Details not listed below. The designer should review those documents at www.hernandocounty.us/living-here/utilities/utilities-engineering for any allowable deviations or for any additional specifications or requirements not listed below. If a deviation to a specification or requirement is requested, please contact HCUD to discuss prior to officially submitting the construction drawings for review.

A. Subdivision and Offsite Utilities to be Owned and Maintained by HCUD

General

- ☐ 1. Construction plans meet requirements listed in HCUD's Specifications Manual Sections 2.3 Standard Items for Construction Plans & 2.5 Wastewater Pump Stations (...Owned...by HCUD).
- ☐ 2. All Residential lots have both water and sewer service lines shown. All Commercial lots have individual (6-inch) sewer services shown and water mains adjacent to all lots allowing long or short water service installations during lot buildout.
- ☐ 3. Single water/sewer services are shown on either side of obstructions located at the property corner [i.e. fire hydrants, water ARVs, storm boxes (double water services preferred, where possible), and platted utility/drainage/access tracts and easements (does not apply to typical side lot easements)] (3.11.1.7).
- ☐ 4. Double water and sewer services are shown at the property corner. Single water and sewer services are shown within 5-feet from the side lot line. Long side water service taps are within 5-feet of the side lot line.
- ☐ 5. A 1-inch Polyethene Tubing (PET) water service line is shown at the pump station site (4D.13.5).
- ☐ 6. Vertical and horizontal separations/clearances for all water and sewer mains meet FDEP minimum separation distances (2.3.1.11 and HCUD detail G-06).
- ☐ 7. Valves, bends, tees, etc. are located in green areas or under sidewalks; not in curbing, ADA mats, or under roadways.
- ☐ 8. Valves, fittings, hydrants, etc. are symbolized and labeled.
- ☐ 9. All casings extend 10-feet beyond the edge of pavement on both sides of the road in areas where drilling or boring is performed (8.1).
- ☐ 10. Sidewalks shall be located no closer than 2.5-feet from the right of way line to allow green space to install water meter boxes, fire hydrants, cleanouts, and other utility appurtenances.
- ☐ 11. Plans include a master plan of water, sewer, and reclaimed water utilities for the entire project shown on one sheet (2.3.1.16).
- ☐ 12. Plans shall include a key map (on one page) showing the entire project's overall layout with construction phases clearly marked (2.3.1.18).
- ☐ 13. Plans specify the invert of all intersecting utilities on the plan or profile views (2.3.1.14).

☐ 14. Plans show all underground utilities, storm drains, or other structures which cross or are located close to the proposed pipelines on the plan or profile views (2.3.1.17).

Water Mains

☐ 15. Water mains shall be placed a minimum of 5-feet away from, and no more than 9-feet away from the property line. Deviations around storm boxes and at intersections are allowed, as approved by HCUD (2.3.1.15).

☐ 16. Water mains constructed along local streets shall have a minimum of 36-inches to a maximum of 48-inches of cover. Water mains constructed along collector roads shall have a minimum of 48-inches to a maximum of 60-inches of cover. Cover is measured from finished grade to top of pipeline. Deviations allowed for pipeline conflicts and Horizontal Directional Drilling (3.4.6).

☐ 17. Valves are shown to isolate no more than 30 lots or are spaced no more than 1,000-feet apart to limit the amount of water main that is shut down for repair (3.10.11.2).

☐ 18. Minimum distribution main pipe size is 4-inch, with the exception of the minimum size for distribution mains serving fire hydrants which shall be 8-inches (3.4.4.3).

☐ 19. Fire hydrant lead lines (6-inch) are installed on minimum 8-inch water mains, hydrants are spaced maximum 1,000-feet apart, & 6-inch hydrant leads are less than 150-feet long (3.8.1.4).

☐ 20. Constructed of PVC C900 or ductile iron pipe (2.3.2.6).

☐ 21. Cul-de-sacs water mains are looped.

☐ 22. Dead ends have blow-off assemblies (3.10.9.1).

☐ 23. Subdivisions have a minimum of two feeds; each located on opposing sides of the property or as determined by HCUD. If a second hook up location is not currently possible, provisions are made to allow for future hookup from at least one adjoining property (as determined by HCUD) for when water becomes available (3.4.2.2).

☐ 24. Temporary bacteriological sample points are shown per FDEP/AWWA regulations (beginning, end, all branches, and along every 1,200-feet of water main (3.13).

☐ 25. A jumper water meter is shown and labeled at one water main connection point (3.14 and HCUD detail W-03). Other connection point(s) show a small gap, bacteriological sample point, and have a label to make the final connection after the water main is cleared for use.

Wastewater Force Mains

☐ 26. Minimum pipe size is 4-inch (4C.1.2).

☐ 27. Constructed of PVC C900 (4C.1.3).

☐ 28. Force mains shall be placed a minimum of 5-feet away from, and no more than 9-feet away from the property line. Deviations around storm boxes and at intersections are allowed, as approved by HCUD (2.3.1.15).

☐ 29. Cover depth is a minimum of 48-inches to a maximum of 60-inches (4C.1.5).

☐ 30. No 90-degree bends are used (use two 45-degree bends).

☐ 31. ARV's are shown at the high elevation points on the pipeline (4C.5.4.1).

☐ 32. Isolation valves are shown no more than 1,000-feet apart (4C.8.3).

Gravity Sewer Systems

☐ 33. Manhole spacing does not exceed 350-feet apart (4B.5.1.1).

☐ 34. Manholes are labels with the rim and invert elevations and total depth (2.3.3.2).

☐ 35. Gravity main slopes are designed at or greater than minimum gradients listed in 4B.2.5.

☐ 36. Each gravity main run is labeled with the size, type of pipe, slope, and distance between manholes in both plan and profile views (2.3.3.1).

☐ 37. Manholes 12-feet deep and greater are labeled as epoxy coated or are monolithic fiberglass (4B.5.1.6).

☐ 38. Collector Manholes are installed per HCUD Detail S-10 or S-15 and are epoxy coated or monolithic fiberglass (4C.7.3).

☐ 39. Manholes have a minimum inside diameter of 48-inches and are not deeper than 30-feet (4B.5.1.3 & 4B.5.1.5).

☐ 40. Wet wells have a minimum inside diameter of 6-feet and are 30-feet or less in depth (4D.8.1.5).

☐ 41. Laterals within 20-feet of a manhole are connected directly into the manhole provided the side lot line is upstream and will not create reverse flow in the manhole.

☐ 42. Existing or proposed manholes receiving force main flows are to be epoxy coated or monolithic fiberglass (4C.7.1.1).

Wastewater Pump Stations

☐ 43. Equipped with DFS telemetry (11.2).

☐ 44. Pumps can pass a minimum 3-inch diameter spherical solid (4D.9.1.1).

☐ 45. Internal piping is PVC C900, minimum 4-inch (4D.13.1).

☐ 46. Equipped with an Odor Control Unit, when applicable (4D.3.1).

☐ 47. Equipped with a generator, when applicable (4D.1.5).

☐ 48. Wet well structure is either coated per HCUD's updated coating specification or is monolithic fiberglass (4D.8.1.9).

☐ 49. Tract or easement size is a minimum of 50-feet wide by 60-feet deep.

☐ 50. 50-feet x 50-feet of the tract or easement is fenced (excluding front 10-foot easement).

☐ 51. The pump station slab elevation shall be set based on adjacent lot pad elevations. In the absence of adjacent lot pads, the slab elevation shall be set based on a minimum rise of 2 percent from the edge of pavement or minimum 1-foot above the crown of the road, whichever is greater. All driveway and site drainage shall be directed away from the station slab, allowing for no standing or ponding of water on the pump station site (4D.4.2).

☐ 52. HCUD's Pump Station detail is shown on plans and all blanks are completed.

Notes and Details That Must Be Shown on Plans

☐ 53. All new Utilities construction procedures & materials shall meet or exceed Hernando County Utilities Department Potable Water, Reclaimed Water & Wastewater Construction Specifications Manual, latest edition as available on the Internet @ www.hernandocounty.us/living-here/utilities/utilities-engineering.

☐ 54. Contractor to schedule a pre-construction meeting five (5) business days prior to the start of off-site utility construction. Contractor must provide all utility submittals to the HCUD inspector for review and approval a minimum of three (3) business days prior to the pre-construction meeting. HCUD inspector MUST attend the pre-construction meeting. Contact HCUD at (352) 540-4368 Ext. 35132 to schedule the pre-construction meeting.

☐ 55. Contractor to notify HCUD Inspector 48 hours prior to utility construction in the County Right-of-Way. HCUD Inspector must be present for all water and sewer connections.

☐ 56. Construction water to be provided by a temporary construction water meter installed by HCUD on the closest HCUD owned fire hydrant to the site. Construction meters will be installed by HCUD within five (5) business days of signing up for service. Contractor to contact HCUD's Customer Service to sign up for service, if construction water is required.

☐ 57. All after hour work requests must be submitted to HCUD a minimum of 6 business days (not including public holidays and weekends) prior to the proposed work. The request must follow HCUD's revised Scheduled After Hours Work Request SOP dated 6-10-24 (or latest edition). If after hours work is proposed contact HCUD to receive the revised SOP prior to requesting after hours work.

☐ 58. The existing utility infrastructure is subject to field verification. Verification of the size, location, depth, material type and any other pertinent information is the responsibly of the Developer/EOR/Contractor prior to construction.

☐ 59. Contractor to stake the utility easements/tracts that will contain HCUD owned infrastructure during construction and maintain the staking until the infrastructure is installed.

☐ 60. Contractor shall report all unauthorized releases or spills of wastewater to surface or ground waters or any other abnormal events to HCUD at (352) 754-4490 in accordance with F.A.C. Rule 62-604.550 immediately and without delay once the contractor becomes aware of the discharge. Contractor is responsible for immediate remediation/cleanup of the affected area, with a written report of the cleanup procedure provided to HCUD within 3 days of the event.

☐ 61. HCUD owned infrastructure: HCUD personnel must be present to physically verify that the installation of all pipe fittings has been done per plan before burying. These fittings shall include but not limited to: coupling, restraint, tee, 90, 45, 22, 11, air release, and any diversions from a straight pipe run. If HCUD has not inspected the fitting before burying the contractor will be responsible for uncovering for inspection.

☐ 62. FDEP utilities separation requirements and detail are shown.

☐ 63. All applicable HCUD utility details (current versions) are shown.