WEST TRAVIS COUNTY PUBLIC UTILITY AGENCY
PLAN REVIEW REQUIREMENTS

SER CHECKLIST

Engineer's summary letter describing project, project location (CO/City/ETJ), land use, density, IC, how w/ww is being provided

SER APPLICATION completed, backup documentation for flow and LUE calculations, as needed

LOCATION MAP delineating site plan/subdivision/ final plat and surrounding tracts

Landscape Irrigation – flow & LUEs calculations. Demonstrate xeriscape compliance. Provide table with water schedule delineated by zone. LUE conversion: 1 LUE = 900 gpd using total gallons/cycle for the entire system.

CONSTRUCTION PLAN REVIEW CHECKLIST

General -

Engineer's summary letter describing project, project location (CO/City/ETJ), land use, density, IC, how w/ww is being provided, #LUEs approved

ESD signoff for fire hydrant spacing approval

Existing easements with doc# reference – project specific

Copies/sign-off blocks for TxDOT utility cut permit, TxDOT driveway permit, ESD, County and City permits, etc, as applicable

TCEQ CZP, Water Plan Review, Wastewater Plan Review approval letters, if applicable

Signed final plat with notes designating water/wastewater provider. If applicable, PUA notes to ensure compliance with the MOU policies

Plan approval for water quality compliance, if applicable

Capacity verification (w/ww), if applicable

Engineering report, as needed

Documentation for irrigation meter sizing including landscape irrigation plan with zones laid out and flow calculations (demonstrate xeriscape compliance). Separate meter for irrigation

Cover sheet -

- PUA cover sheet notes
- PUA Grid sheet reference panel/water system ref - HWY 290 or Hwy 71, wastewater
- Mapsco sheet reference number
- WTCPUA signoff block
- Project Address
- Pressure plane
- PUA water meter (domestic), irrigation meter (if applicable)
- Pressure Reducing Valve (PRV) specifications/settings (if applicable)
- tract tax id number
- Lot/Block with highest and lowest pressure
- Materials/quantities list
- Signoff block for West Travis County Public Utility Agency

General Notes –

- WTCPUA notes
- TCEQ, City, County, TxDOT, as appropriate

Overall utility Plan

- Plan view showing all existing and proposed utilities, easements

Plan/Profile sheets

Water

- Size, pipe material and location of water lines and appurtenance (existing and proposed) with respect to easements, right-of-way, edge of pavement
- Location, size and description of other known existing and/or proposed utilities (identity any potential conflicts with w/ww lines and services
- Profile of all water lines 8" and larger. Minimum size – 8" diameter
- Existing ground and finished street grades and/or subgrades.
- All existing and proposed easements
- Minimum cover – 4' from top of pipe to finished grade
- Station and elevations of all utility crossings
- Begin and end stations of encasement pipe, size, material, type, and thickness of encasement pipe, spacers and factory end seals and begin/end station of carrier pipe restraint. Non-shrink grout is not acceptable for filling and/or closing the encasement
- Pipe size, percent grade (+/-) and pipe material including ASTM and/or AWWA designation.
- Station and elevations for begin and end points, intersections, PC/PT, grade breaks, valve, fire hydrants, air release valves, pressure/flow regulating valves and at 50 foot intervals.
- Station and elevation and clearance OD – OD at all utility crossings. Provide detail demonstrating compliance with the requirements of TCEQ 290.44.

- All existing and proposed structures, including but not limited to drainage structures, bridges, culverts, and retaining walls in vicinity of proposed water lines shall be labeled. Detail how water pipe will be protected.
- Pipe restraint when required shall be identified in profile by station (begin/end) with type designated per City of Austin SPL of the type restraint being installed. Fittings and valves shall be mechanical joint. Restrain all pipe-to-fitting and pipe-to-valve connections using lug (wedge)-type external restraint devices. Restrain all valve-to-fitting connections using MJ x MJ adaptors. External joint restraint devices and MJ x MJ adaptors shall be in accordance with City of Austin SPL WW-27A. Where restraint of pipe with push-on joints is specified, use joint restraint gaskets per COA SPL WW-27G and include the following note on plans showing encased pipe installation, "Push-on joint pipe installed in casing shall be restrained using joint restraint gaskets. That pipe shall be installed by pulling, not pushing, the pipe through the casing." Table with restrained pipe lengths for all fittings.
- GVs at all pc/pt curb returns at intersections
- Fire Hydrants/meters/ manholes/cleanouts - located so not to conflict with ADA, sidewalk, traffic signals/signs, and other surface features. Label top of curb elevation at fire hydrants.
- Loop water lines wherever possible.
- All public water improvements including water pipe, fire hydrants, valves, meters, and backflow preventers located outside public right-of-way shall be situated within a dedicated easement. All public water lines within an easement shall be ductile iron pipe. Pipe 12" diameter and smaller shall be Cl 350 ductile iron pipe. Pipe greater than 12" diameter shall be Cl 250 ductile iron pipe. Minimum width for a water line easement shall be 15' wide. Minimum width for a joint water/wastewater easement or easement with two (2) utility lines shall be 25' wide.
- No domestic water service from fire line lead w/o backflow preventer and separate valve.
- 5' od-od btw water line, wastewater line & storm sewer line
- 3' min to dry utility from water service
- No wyes on water lines, no 90 degree bends on water lines.
- Cut-in tee is typically required in lieu of tapping sleeve and valve. Engineer is to provide shut-out plan with affected property owner (names, addresses, tract tax ID#) identified. Plan is to show all gate valves in vicinity.
- Min 9' fire hydrant to wastewater line/service
- Detail for w/ww service on same lot corner
- Separate domestic meter and irrigation meter. Irrigation meter cannot come off of domestic water meter. For sites – separate meter for each building
- Concrete thrust blocking is not allowed
- Details of all required appurtenances
- Changes in direction of PVC pipe shall only be by use of fittings or by deflecting straight pipe sections at joints. Deflection of PVC pipe at fittings is not allowed. Deflection of straight PVC pipe sections shall not exceed 1 degree at each joint (even if joint restraint devices are installed), Deflection of pipe joints at fittings is only allowed on ductile iron pipe. Longitudinal bending of pipe is not allowed.
- Storz adapter (only for projects served by Hays Co ESD)

Wastewater

- Wastewater – indicate direction of flow for existing and proposed wwl
- Stations at proposed connections to existing or proposed wwls. Label name of existing wwl in vicinity of proposed project
- Location of all existing and proposed wastewater lines, manholes, and services
- Profile of all wastewater lines with existing ground and proposed finished grades or subgrade and finished grades if outside pavement.
- Location, alignment and structural features of the wastewater lines including manholes and concrete retards
- Station and elevation and clearance OD – OD at all utility crossings. Provide detail demonstrating compliance with the requirements of TCEQ Chapter 217.
- Pipe size, percent grade and pipe material including ASTM and/or AWWA designation
- Station and elevations for begin and end points, manholes, clean-outs and at intermediate points every 50 feet.
- Minimum and maximum design flows, flow velocities, and depth for each pipe segment (MH-MH) for peak wet and dry weather. Flow in GPM, velocity in feet/second, and depth of flow in inches, and "N" factor of 0.013, in accordance with TCEQ requirements.
- Rim elevations for manholes
- Flow line elevations and pipe sizes for all pipe connections at manholes.
- Begin and end stations of encasement pipe, size, material, type, and thickness of encasement pipe, spacers and factory end seals and begin/end station of carrier pipe restraint. Non-shrink grout is not acceptable for filling and/or closing the encasement
- Details of all required appurtenances
- Locations of all existing and proposed ww services, ww lines and manholes
- Location of all bolted manhole covers.
- Plan view of the invert of each manhole or junction box having three or more pipe connecting to it, regardless of pipe sizes, or when two pipes connect to a manhole at an angle other than 180 degrees from each other
- All manholes shall be lined as required by WTCPUA inspector.
- Force main and lift station design and submittals shall meet the City of Austin current Utility
- All existing and proposed structures, including but not limited to drainage structures, bridges, culverts, and retaining walls in vicinity of proposed water lines shall be labeled. Detail how wastewater pipe will be protected.
- All public wastewater improvements including wastewater pipe, manholes, and appurtenances located outside public right-of-way shall be situated within a dedicated easement. Minimum width for a wastewater line easement shall be 15' wide. Minimum width for a joint water/wastewater easement or easement with two (2) utility lines shall be 25' wide.
- Criteria Manual Sections 2.7 and 2.9.4 for lift stations, unless instructed otherwise.

Details

- Current City of Austin details and/or WTCPUA details
- WTCPUA Tracer Wire detail City of Austin Standard Products List apply; unless otherwise designate.