Include the following information on the project drawings. See DCSM sections 2.4 and 2.7 for additional details on drawings.

**Instructions**:

Indicate your response to each item in the checklist. Select ‘Yes’ if the checklist item has been completed in full. Select ‘No’ or ‘N/A’ if that item is not included or not required for the specific project. Explain why that item has not been included in the submittal.

| **RESPONSE** | **REQUIREMENTS** |
| --- | --- |
|  | Exterior Water Distribution System |
| Choose an item. | Provide plan and location of all new pipelines. Include size and type of pipe. |
| Choose an item. | Show or specify maximum working pressure of the system. |
| Choose an item. | Show location, size, and type of service of existing connecting, intersecting, and adjacent pipelines, and other utilities. |
| Choose an item. | Show paved areas and railroads which pass over new pipelines. |
| Choose an item. | Provide profile, where necessary, to show existing parallel or crossing underground piping, conduits, clearances, or unusual conditions. |
| Choose an item. | Provide class or thickness of pipe. Include material identification if more than one class or thickness is used. Show limits for each where class or thickness will be different for different sections of pipeline. |
| Choose an item. | Provide bedding conditions. |
| Choose an item. | Provide details and locations of critical flanged joints, joints made with sleeve-type mechanical couplings, grooved and shouldered type joints, and insulating joints. |
| Choose an item. | Show locations of valves, hydrants (identify which one are traffic-type hydrants), indicator posts, and details concerning valves, where necessary. |
| Choose an item. | Show or specify size and shape of hydrant operating nut and cap nuts if nonstandard nuts are required. Provide dimensions of threads (major diameter, minor diameter, pitch diameter, thread form, and number of threads per inch) on hydrant hose and pumper connections if nonstandard threads are required. |
| Choose an item. | Show connection of service line to water main, if different from that specified. |
| Choose an item. | Provide location or size of thrust blocks, including type. Provide location of and details of metal harness, when necessary. Confirm that the metal harness, when necessary, is shown for polyvinyl chloride (PVC) plastic water main pipe. |
| Choose an item. | Show details for fire hydrant installation. |
|  | Site Steam or Hot Water Distribution System |
| Choose an item. | Provide plan and location of all new pipelines. Include size of pipe. |
| Choose an item. | Show or specify maximum working pressure of the system. |
| Choose an item. | Show location, size, and type of service of existing connecting, intersecting, and adjacent pipelines and other utilities. |
| Choose an item. | Show paved areas and railroads which pass under or over new pipelines. |
| Choose an item. | Provide profile to show elevations, manholes, laterals, crossing utilities, and unusual conditions. |
| Choose an item. | Provide class or thickness of pipe. Include material identification if more than one class or thickness is used. Show limits for each where class or thickness will be different for different sections of pipeline (unless clearly described in specifications). |
| Choose an item. | Show locations, types and typical or special details of above grade and in tunnel pipe supports and pipe guides. |
| Choose an item. | Show locations of expansion loops or expansion joints. |
| Choose an item. | Show locations and details of anchors. |
| Choose an item. | Show locations and typical and special details of pipe tunnels and trenches. |
| Choose an item. | Show points of connection. |
| Choose an item. | Show location and details of concrete thrust blocks. |
| Choose an item. | Show location and details of manholes. |
| Choose an item. | Show location and size of main and branch line valves. |
| Choose an item. | Show location and size of vents and drains. |
| Choose an item. | Provide location and detail of drip legs, trap stations, trap schedule, and method of condensate recovery. |
| Choose an item. | Provide diagrams of electronic circuitry for controls and instrumentation shown. |
|  | Stormwater Conveyances |
| Choose an item. | Provide plan and location of all new stormwater conveyances including dimensions, slope, direction of flow, pipe material, and channel lining. |
| Choose an item. | Provide location, size, and type of service of existing connecting, intersecting, or adjacent pipelines and other utilities. |
| Choose an item. | Show paved areas and railroads which pass over new pipelines. |
| Choose an item. | Include profiles of storm sewers and culverts along with existing parallel or crossing underground piping, conduits, clearances or unusual conditions. |
| Choose an item. | Invert elevations at beginning and end of storm drains and culverts and at manholes or similar structures. |
| Choose an item. | Note class or strength of pipe and limits for each where class or strength will be different for different sections of pipeline. Indicate shape requirements if different shapes available. |
| Choose an item. | Provide design details for all stormwater system structures including manholes, catch basins, curb inlets, and head walls. |
| Choose an item. | Confirm that storm drainage lines and culverts will be watertight. |
| Choose an item. | Provide bedding details and location of cradle(s), when cradle is required. |
| Choose an item. | Provide location, size, elevation, and details, if necessary, for stormwater detention/retention basin or structure. |
|  | Exterior Sanitary Sewer System |
| Choose an item. | Plan and location of new pipelines, including type of service and size of pipe. |
| Choose an item. | Provide location, size, and type of service of existing connecting, intersecting, or adjacent pipelines and other utilities. |
| Choose an item. | Show paved areas and railroads which pass over new pipelines. |
| Choose an item. | Include a profile where necessary to show existing parallel or crossing underground piping, conduits, clearances or unusual conditions. |
| Choose an item. | Invert elevations at beginning and end of pipelines and at manholes or similar structures. |
| Choose an item. | Note class or strength of pipe and limits for each where class or strength will be different for different sections of pipeline. |
| Choose an item. | Provide design details for pertinent manholes, septic tank(s), and sewage absorption trench including Virginia Department of Health requirements. |
| Choose an item. | Show bedding conditions, where different from those specified in the appropriate specification. Show location of cradle(s), when cradle is required, if not covered. |
| Choose an item. | Show sections and details of pump stations. |
| Choose an item. | Provide location and size of thrust blocks on pressure lines. |
| Choose an item. | Show location of flanged joints on pressure sewers if only used on part of line. |
| Choose an item. | Show location of mechanical joints on ductile iron piping if used on only part of the system. |
| Choose an item. | Provide location, size, and type of service of existing connecting, intersecting, and adjacent pipelines and other utilities. |
|  | Chilled, Condenser, or Dual System Water Systems |
| Choose an item. | Provide single line plan and necessary sections indicating location, sizes and routing of associated piping. Show piping larger than 4" diameter using double lines. |
| Choose an item. | Show locations of anchors, expansion loops and fittings. |
| Choose an item. | Provide details of anchors and guides. |
| Choose an item. | Provide flow diagrams for system(s). |
| Choose an item. | Provide appropriate schedules and details for equipment or components. |
|  | Interior Steam or Hot Water Distribution Systems |
| Choose an item. | Provide plan and location of all new pipelines, including size of pipe. |
| Choose an item. | Provide maximum working pressure of the systems. |
| Choose an item. | Provide location, size, and type of service of existing connecting, intersecting, and adjacent pipelines and other utilities. |
| Choose an item. | Locate and detail the pipe entry through building wall or slab. Include detail of interface between the tunnel or box trench and the building. |
| Choose an item. | Provide isometrics to show elevations, manholes, laterals, crossing utilities and unusual conditions. |
| Choose an item. | Provide locations, types and typical or special details of pipe supports and guides. |
| Choose an item. | Show locations and isometric of expansion loops. |
| Choose an item. | Provide locations and details of anchors. Indicate pitch of pipe and direction. |
| Choose an item. | Show points of connection. |
| Choose an item. | Provide location and size of main and branch line valves. |
| Choose an item. | Provide location and size of vents and drains. |
| Choose an item. | Provide location and detail of drip legs, trap stations, trap schedule, and method of condensate recovery. |