

James City County Ordinance CUP Application Contrast

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IMPORTANT

This is not an official New Kent County document and is not legal advice.

James City County's Data Center Policy on Conditional Use Permit Applications

James City County's listed Special Use Permit (SUP) application requirements for data centers form a solid foundational package focused on construction impacts, visual/landscape effects, basic environmental features, fiscal effects, and Comprehensive Plan consistency. They are useful for staff analysis but remain relatively high-level and incomplete compared with the most restrictive and empirically effective application standards currently in use.

James City County Requirements (as provided)

Applications should include:

- A **Construction Management Plan** covering schedule, phasing, hours of construction, noise mitigation measures, parking, and traffic control.
- A **Landscape Plan** detailing existing vegetation, limits of proposed clearing, buffers, screening, plant materials/species, plus a report addressing viewshed impacts.
- An **inventory** of wetlands, Resource Protection Areas (RPAs), streams, floodplains, and forested areas.
- **Fiscal impacts analysis** (operating and capital budget effects on the County).
- A **narrative** on consistency with adopted Comprehensive Plan goals regarding capacity of existing and planned public facilities/services and the County's ability to provide them.

These address important practical issues (construction disruption, visual character, basic natural features, tax/revenue effects, and planning alignment). They do not, however, mandate specialized technical studies that directly quantify the highest-impact externalities of data centers—particularly power demand, water demand, operational noise, and long-term site liability.

Contrast with the Most Restrictive and Effective Standards in Use

The strongest current application requirements (seen in York County VA, Fairfax County VA, various Pennsylvania townships such as Lower Saucon, Atlanta's proposed SUP rules, model ordinances, and other progressive localities) layer additional mandatory technical studies and documentation that give decision-makers better tools to evaluate, condition, or deny projects. Key elements that go beyond James City include:

1. Quantified Utility Capacity and Demand Documentation (most critical for grid and water protection) York County requires formal letters from the electric utility and public water purveyor at application that confirm sufficient capacity **at full operating capacity**, specify the exact energy (MW/voltage) and water volumes, and (in the electric case) address proximity to substations/transmission. These are paired with mandatory five-year re-verification that actual

usage matches the approved amounts and a hard 25% expansion cap that triggers a new public SUP process if exceeded.

Many other strong ordinances require detailed Energy Consumption / Energy Management Plans (peak demand, load profiles, renewable sourcing or PPAs, efficiency measures) and Water Consumption / Conservation Plans (closed-loop systems, projected volumes, impact on regional supply). Atlanta's SUP rules explicitly require water consumption, conservation/sustainability, energy consumption, and transmission-line impact assessments (including environmental effects of any new lines). These quantified letters and plans are among the most effective tools for preventing ratepayer cost-shifting and infrastructure strain.

2. Pre- and Post-Construction Noise Studies (highly effective given real-world complaints)

York, Fairfax, and numerous model/PA ordinances require professional acoustical studies (often by INCE-board-certified or equivalent engineers using ISO 9613 or similar modeling). These typically include:

- Pre-construction ambient measurements (especially nighttime).
- Predictive modeling of all equipment (cooling, generators, transformers) at full load, with day/night limits (often both dBA and dBC/low-frequency).
- Post-construction field verification before occupancy or within a set period after operations begin.

James City's Construction Management Plan mentions noise mitigation during construction but does not require operational noise modeling or verification studies. Pre/post noise studies are among the most empirically valuable requirements because low-frequency "hum" and generator testing are frequent sources of resident complaints even when pure dBA limits appear met.

3. Broader Environmental and Community Impact Analysis James City requires a basic inventory of wetlands/RPAs/streams/floodplains/forests plus a viewshed report. Stronger packages require a full Environmental and Community Impact Analysis covering critical impact areas (steep slopes, erodible soils, high water tables, mature native vegetation, aquifer recharge, wildlife habitats/corridors, cultural/historic resources), stormwater, and cumulative effects. Some also mandate wildlife habitat assessments or cultural resource surveys within a defined radius.

4. Decommissioning Plans with Financial Security Increasingly standard in restrictive ordinances (PA models and others): a detailed plan for safe shutdown, equipment removal, e-waste/hazardous materials handling, and site restoration, backed by a bond, letter of credit, or escrow at 110–150% of estimated costs (often excluding salvage value). James City's list does not address end-of-life liability.

5. Additional Common High-Value Elements

- Traffic Impact Analysis (often already triggered by general trip-generation thresholds, but sometimes specified with construction haul routes).
- Architectural elevations, material samples, and equipment screening details.

- Third-party or detailed fiscal/economic impact studies that go beyond basic operating/capital budget effects (sometimes including property-value analysis).
- Pre-application neighborhood notification or meetings.
- Electronic waste / battery management plans.

Overall Assessment

James City’s requirements provide a competent baseline for visual character, construction management, basic natural-resource inventory, fiscal effects, and Comprehensive Plan consistency. They are **less comprehensive and less restrictive** than the empirically strongest packages currently in effect. The most effective standards combine James City–style elements with mandatory, quantified utility capacity letters (plus ongoing verification and expansion limits), professional pre- and post-construction noise studies, detailed energy/water management plans, fuller environmental/community impact analysis, and secured decommissioning plans.

For a highly restrictive New Kent ordinance, the James City list should be retained and expanded with these stronger technical requirements—particularly the York County-style full-capacity utility letters with five-year re-verification, professional noise studies (pre/post, dBA + dBC), and decommissioning security. This combination gives staff and the Board the most practical tools to evaluate the highest-impact issues and attach enforceable conditions. See York County application standards below:

York County, Virginia’s verification and re-verification protocols for data centers are contained in Zoning Ordinance Section 24.1-489.1 (Standards for data centers). These were adopted in June 2025 (Ordinance No. 25-16(R)) and remain in effect, with minor refinements reflected in the current codified text.

Initial Application Requirements (CUP submission)

Any special use permit application must be accompanied by:

1. **Electric utility letter** from the electric utility purveyor confirming:
 - o Sufficient proximity and availability to a substation and transmission lines **with sufficient capacity** to serve the proposed data center.
 - o The letter must specify the amount of energy and voltage level the data center will use **at full operating capacity**.
 - o Current codified versions also typically require specification of the energy source and the amounts/voltage levels for each phase of the project in addition to full capacity.
2. **Public water purveyor letter** indicating sufficient capacity to serve the proposed data center (in some versions, more explicitly tied to water use as a coolant) and specifying the amount of water the facility will use **at full operating capacity**.

Capacity certification is based on the facility’s full/ultimate build-out. The Board of Supervisors can deny the application if the utilities cannot confirm adequate capacity without adverse effects.

Ongoing Re-Verification Protocol

- **The data center shall submit a letter from the electric utility and public water purveyor every five (5) years, confirming/verifying that the data center is using the same amount of electricity and water as was approved.**

This creates recurring accountability and is designed to detect increases in demand (e.g., denser server packing) that do not involve a larger building footprint.

Expansion Limits

- The data center may expand its usage of electricity or water by **no more than 25%** of the amount originally approved.
- Any increase beyond 25% requires an amendment to the special use permit under the procedures in Section 24.1-115(d). This triggers Board of Supervisors review after a duly advertised public hearing. The Board may attach additional conditions. The applicant pays the costs of advertising and the hearings.

Related Supporting Requirements

- All data centers must connect to a public water system; wells are prohibited as a water supply.
- Water conservation methods (examples: rainwater harvesting, water recycling systems) must be employed; proposed methods require County approval and must appear on the site plan.

Intent and Context

These provisions were explicitly strengthened during the June 17, 2025 Board adoption process in response to concerns about grid strain, ratepayer cost-shifting, and “load creep.” Supervisors added the “with sufficient capacity” language, the five-year re-verification cadence, and the 25% expansion cap so that the County retains ongoing leverage over utility demand.

The result is a closed-loop system: full-capacity certification at approval → mandatory five-year utility confirmation of actual usage → hard expansion ceiling that forces a new public process if exceeded. This is one of the clearer and more enforceable ongoing verification mechanisms among Virginia localities regulating data centers.