

James City County Ordinance Design Elements Contrast

CITIZEN ANALYSIS — PUBLIC REVIEW COPY

This issue paper was prepared by citizens for public education and discussion. Statements are treated as citizen analysis or opinion unless they are directly supported by a cited source. Source verification and factual review remain ongoing. Corrections and additional public records are welcome.

SOURCE-CITED FACT	A factual statement should be treated as source-supported only when a citation or source note is provided.
CITIZEN ANALYSIS	Interpretation, comparison, recommendation, or conclusion written by citizen contributors.
VERIFICATION ONGOING	Additional records, review, and corrections may change or refine the paper.

IMPORTANT

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

JCC Ordinance Design Elements Contrast

James City County’s Design Elements Guidance is a solid, moderate set of standards that exceeds many older industrial zoning defaults, but it falls short of the strongest currently adopted or recommended performance standards in Virginia and progressive model ordinances—particularly on architectural articulation, buffer intensity, and equipment screening.

The language is guidance for Special Use Permit review rather than rigid zoning text, which provides flexibility but can reduce enforceability compared with codified quantitative requirements.

Item-by-Item Assessment

a. Adaptive measures for future reuse of structures This is one of the stronger and more forward-looking elements. Explicit requirements to design for adaptive reuse (modular construction, convertible floor plates, removable mechanical systems, etc.) are uncommon in data-center ordinances. Most focus on decommissioning bonds or plans rather than designing the buildings themselves for post-data-center life. James City’s approach is more effective than typical practice for long-term land-use flexibility, especially in a rural/suburban county concerned about permanent industrial footprints. Few jurisdictions currently match or exceed this.

b. Colocation spaces for local server deployments or proximity to end-users This is distinctive and community-oriented (favoring edge computing benefits and local economic ties). Most zoning ordinances treat hyperscale data centers as pure industrial uses and do not require or incentivize colocation capacity or proximity to end-users. It is a positive policy preference but can be difficult to enforce meaningfully against pure hyperscale operators and may conflict with security or operational models. It is not widely used elsewhere and is less “effective” as a hard design constraint than as an evaluation criterion.

c. Building façades consistent with Comprehensive Plan Character Design Guidelines This is relatively weak and vague. “Consistent with” guidelines leaves significant discretion and often results in boxy, undifferentiated warehouse forms. Stronger current standards are far more prescriptive:

- Spotsylvania requires varied building pattern/texture, neutral tones complementary to surroundings, wall-plane projections or recesses every 100 ft, and fenestration/green-wall treatment comprising a minimum of 50% of any visible façade.
- Fairfax requires a change in façade surface (material, pattern, texture, color, or accent) every 150 horizontal feet and windows/doors/similar fenestration features comprising at least 30% of each façade, plus high-quality design demonstrated by elevations and sight-line studies.
- Prince William and similar guidelines require at least two design elements (height change, step-backs/recesses, fenestration, material/pattern/color change, or accent

materials) to avoid long undifferentiated surfaces; mechanical equipment must be screened by the building itself or compatible solid walls/parapets.

James City's approach is less effective at preventing visual industrial character than these quantitative articulation and fenestration rules.

d. Fencing (black vinyl-coated, ≤8 ft, not in front landscaping adjacent to public roads, no barbed/razor wire) This is effective and aligns with or slightly exceeds many good current practices. Comparable strong rules include:

- Stafford: security fencing 7–8 ft, placed interior to buffers; chain-link or barbed wire prohibited except around electrical substations.
- Fairfax/Prince William-style guidelines: no chain-link (with or without inserts) or barbed wire along public or private street frontages; fencing located so it does not disrupt buffers.
- Chesapeake and others: maximum 8 ft, no barbed/razor wire, not placed in front landscaping areas adjacent to public roads.

James City's black vinyl-coated preference and absolute ban on barbed/razor wire are strong. The most effective versions add that fencing must sit behind the required landscape buffer on public-facing sides and use high-quality, non-chain-link materials (e.g., decorative metal or solid screening) where visible.

e. Vegetated buffers (50 ft internal to property lines; 100 ft adjacent to public rights-of-way; retain existing vegetation + native supplements; evergreen mixture increased to ≥45%; placed to reduce noise and screen views; vegetation inventory required) This is a reasonable baseline but modest compared with the strongest standards. Strengths include the evergreen percentage boost, native preference, noise/view placement requirement, and mandatory inventory. Weaknesses are the relatively narrow widths and lack of mandatory berms, quantified density/opacity performance, or full equipment enclosure rules.

Stronger examples currently in effect or recommended:

- Spotsylvania: 300 ft restricted buffers (no structures or linear utilities) adjacent to residential, schools, parks, places of worship, and rivers, with mandatory 8 ft landscaped earthen berms (≤25% gradient) where vegetation gaps exist, plus specific dense evergreen planting rates (e.g., large evergreen every 10 linear ft + medium every 5 ft) and preservation of existing forest.
- Many Virginia and model ordinances: minimum 100 ft (often 150–300 ft) buffers with 6+ ft berms (≤2:1 slope), layered native plantings, higher evergreen percentages or specific spacing for year-round opacity, and additional solid-wall or building screening of all ground- and roof-mounted mechanical equipment, generators, and substations.
- Fairfax and similar: full enclosure of cooling/generator equipment where mechanically feasible (or solid-wall screening), plus landscape buffers; equipment yards separated or screened from residential views.

James City's 50/100 ft widths and 45% evergreen standard provide meaningful improvement over basic industrial buffers but are less effective at visual and acoustic attenuation than the wider, bermed, higher-density, and equipment-enclosure standards now used in the stricter Virginia localities and model ordinances.

f. Hazardous materials / damaged equipment storage This is practical and protective. Requiring OSHA/EPA-compliant containers shown on the Master Plan (or a written alternative plan preventing soil/groundwater/surface-water contact) is a solid environmental safeguard. Stronger overall programs pair this with mandatory decommissioning/e-waste plans, spill-prevention controls, monitoring, and sometimes financial assurance. James City's language is effective as a minimum design/operational constraint and is consistent with better current practice.

Overall Contrast and Recommendations for Higher Effectiveness

James City's design package is strongest on adaptive reuse, fencing aesthetics/restrictions, and basic hazardous-materials controls. It is comparatively weaker on façade articulation, buffer width/performance, and mandatory mechanical-equipment enclosure/screening. The most effective standards currently in use elsewhere combine:

- Prescriptive architectural standards (articulation intervals, minimum fenestration or green-wall percentages, material quality, and solid screening of all equipment).
- Wider, bermed, higher-density vegetated buffers with explicit year-round opacity and acoustic-performance goals.
- Fencing placed behind buffers with high-quality materials on public faces.
- Full or near-full enclosure of generators and cooling equipment.
- Design-for-reuse and clear hazardous-materials rules (which James City already addresses well).

For a highly restrictive New Kent ordinance, retain and strengthen the adaptive-reuse and hazardous-materials provisions, adopt more quantitative façade and equipment-screening rules modeled on Spotsylvania/Fairfax, and upgrade buffers toward 100–300 ft widths with mandatory berms and denser evergreen standards. This would elevate the design elements to match or exceed the most effective location-and-performance packages now in effect.