



STAFFORD COUNTY BOARD OF BUILDING CODE APPEALS

Draft Meeting Minutes

Stafford County Public Schools Hearing June 15, 2023 at 3:00 p.m.
George L. Gordon Government Center – Board Chambers
1300 Courthouse Road | Stafford, VA 22554

Call to Order: Mr. Santay called the meeting to order at 3:02 p.m.

Roll Call: The following members were present: Burton Bigoney, Jr. (arrived at 3:29pm), Gregory Cox, J.C. Hall, Stacy Lampman, and Samer Shalaby

Also in attendance were Paul Santay, Chief Director of Community Development; Cary Jamison, Stafford County Building Official; Savannah Carabin, Development Services Administrative Manager; Katrina Griffin, Building Inspections Administrative Specialist; and other interested parties.

Election of Officer(s):

Mr. Santay outlined that the board consists of five members and seven alternate members. With three members and one alternate present, a quorum was established. Before addressing the appeal, the board needed to elect a chair. Mr. Shalaby, as an alternate, was ineligible for the position. Mr. Hall nominated Ms. Lampman as chair, and Mr. Cox seconded the motion. With no other nominations, the board proceeded to vote, and Ms. Lampman was elected as chair with unanimous approval. Congratulations were extended to the new chair, with an acknowledgement of the potential pressures associated with the role.

Amendment to the Bylaws:

Mr. Santay proceeded to inform the board about the requirement stated in the bylaws that five members must be present to vote on an appeal before the Code Appeals Board. Mr. Santay mentioned that due to the infrequency of appeals, the county attorney's office suggested a change in the bylaws to lower the quorum required to hear an appeal from five members to three. Noting the provision of the proposed bylaw changes in the agenda packet, Mr. Santay offered to continue discussing the matter or let the chair initiate a vote on the bylaws. Ms. Lampman inquired if everyone had reviewed the notes, to which Mr. Shalaby agreed that it would make things easier for the board. Mr. Shalaby then made a motion to approve the bylaws as adjusted or modified, and Mr. Hall seconded it. Following a brief discussion, the board unanimously approved the motion.



Mr. Santay acknowledged Mr. Neubert's presence in the audience and mentioned the need to pause the meeting briefly for a discussion with the chair regarding the order of the appeal and certain procedural aspects outlined in Robert's Rules and the bylaws. He requested a motion for a recess, which Ms. Lampman promptly made, and Mr. Shalaby seconded it. The board unanimously approved the recess, and the meeting was temporarily adjourned for approximately five minutes, with Ms. Lampman authorized to reconvene when ready.

Hearing of the Appeal:

Ms. Lampman called the meeting back to order and sought confirmation if roll call had been conducted, which was confirmed by Mr. Santay. Mr. Santay then explained that the first step in the appeal process was for the chair to read the appeal, acknowledging that it might be challenging due to the need to navigate through different sections of the application. He suggested focusing on specific sections, such as the second page for issue mentions and the fifth page for detailed information provided by the applicant. Mr. Santay mentioned having ample time to address the appeal during the meeting and emphasized the importance of reading the pertinent portions. Ms. Lampman began reading the appeal, starting with the appellant's details and violations one through five. Mr. Santay interjected to clarify that these were decisions made by the building official based on the standard permit application, rather than direct violations. He further mentioned an additional violation in section number five and asked Ms. Lampman to read it. Afterward, Ms. Lampman continued reading the temporary modular classroom appeal summary, outlining various sections of the 2018 Virginia Construction Code, as well as the locations where the modular classrooms were installed or proposed. Mr. Santay indicated that the application review was sufficient and suggested moving on to the staff's report.

Report from Staff:

Ms. Jamison, the Stafford County Building Official, explained the basis of her decision regarding the use of ABS pads instead of code-required frost-free footings. She mentioned attending a DHCD-sponsored seminar on industrialized buildings to manufactured homes, where they learned about the requirements and installation methods for these structures. She emphasized the importance of frost-free footings for buildings over 600 square feet and expressed her understanding of the necessity for permanent foundations. She mentioned that ABS pads were submitted along with engineering certifications but highlighted that they were only approved for manufactured homes, not industrialized buildings.

Mr. Shalaby asked if there had been any problems with the existing use of ABS pads in the county, to which Ms. Jamison responded that they had not been notified of any issues. Mr. Cox inquired about soil testing requirements for the pads, and Ms. Jamison confirmed that soil testing was required and had been conducted for the rejected ABS pads.

Mr. Shalaby further questioned the differences between industrialized buildings and manufactured homes, to which Ms. Jamison explained the variations in loading criteria and the



need for frost-free footings in industrialized buildings due to their larger size. She mentioned that while ABS pads might meet the loading requirements, they still did not fulfill the frost-free criteria.

Concerns were raised about potential issues with frost heave and cracking in the rated corridors of the buildings if ABS pads were used. The discussion also touched upon the intended duration of the buildings, with a range of three to six years mentioned.

Ms. Lampman asked if there were any problems with the ABS pads used in the past, and Ms. Jamison stated that they had not been informed of any issues. The conversation circled back to the code's requirements and the need for consistency in enforcing them across different types of structures.

Mr. Bigoney summarized the issue as whether ABS remanufactured pads could be used as foundations, considering that the code did not allow it for industrialized buildings.

Mr. Cox expressed concern about setting a precedent and allowing various types of structures to use ABS pads if approved for industrialized buildings, potentially leading to inconsistent enforcement.

Ms. Jamison acknowledged these concerns and emphasized her commitment to upholding the standards set by the code, stating that she believed Stafford County should be held to the highest standard.

Appellant Presentation:

Mr. Neubert, the Assistant Director of Facilities Planning, Design, and Construction for Stafford County Public Schools, began his presentation by expressing his appreciation for everyone's presence and stating their desire for a resolution. He mentioned the two existing locations, Rocky Run Elementary and Conway, where they currently have ABS pads on dirt. The foundation's extension was necessary to go below the topsoil and ensure proper support criteria. The loading requirements for both modular homes and industrialized buildings were discussed, with the number of piers determined by the total weight and code regulations. Mr. Neubert emphasized that modular homes typically require around 20 piers, while industrialized buildings, such as their six Plex units, can have over 80 piers. The use of ABS pads for modular housing was codified and widely accepted, while the industrialized building sector had specific manufacturers in certain states. The manufacturer provides the foundation design for each specific situation, and they are responsible for the attachment to the plan, which includes certifications from various states. Mr. Neubert highlighted the temporary nature of the



classrooms, mentioning ongoing projects for new elementary schools and a high school. The modular classrooms provide temporary relief until these projects are completed and the excess students can be relocated. They have previously used modular classrooms for swing space during remodels and additions to other schools. Mr. Neubert explained that the term "temporary" is significant, and while the code allows for one-year temporary approvals, it doesn't impose a limit on extensions. He referred to a section in the code that permits local building officials to consider and accept products and construction methods not currently in the code. The appeal was necessary to achieve an equal playing field and to address the significant cost difference due to using frost footings. The design and budget were based on previous experience, and they aimed to minimize foundation costs by utilizing existing asphalt or concrete. Mr. Neubert concluded his presentation by requesting that the manufacturer's representative, Greg, speak about the current utilization of ABS pad systems. However, Ms. Lampman intervened, indicating that their time was up. Mr. Pelton, the project manager for the company selling and leasing the buildings, briefly mentioned their experience with ABS pads on various projects, such as in Chesterfield County, DC, and Winchester. He emphasized that many units were placed on grass and slopes using ABS pads and explained the process of leveling the area and building piers to support the structures.

Ms. Lampman then thanked them for the presentation and invited questions from the board members, starting with Mr. Bigoney.

Mr. Bigoney inquired about the installation process for manufactured off-site temporary classrooms and whether each installation is examined by an engineer beforehand. Mr. Pelton confirmed that this was the case. Mr. Neubert clarified that the classrooms are designed by an engineer and the designs are submitted for permit applications. The county conducts inspections based on the approved documentation. It was noted that the existing installations have had no significant problems, except for one instance where a unit became loose due to the absence of a lock washer. Mr. Bigoney raised a question about the materials used between the ABS foundations and the building, specifically inquiring whether it was concrete block dry stacked or if mortar was used. Mr. Pelton explained that currently, the materials are dry stacked up to 52 inches. Efforts are made to keep them below 52 inches to avoid additional surface binding or masonry work. Additionally, Mr. Bigoney asked about the diagonal metal straps and their purpose, to which Mr. Pelton confirmed they were installed for wind load.

Mr. Cox asked if there was a need to test the compressive strength of the blacktop. He mentioned concrete at Hartwood and questioned whether compression strength testing was conducted on the blacktop before setting up the buildings. Mr. Neubert explained that the



earth beneath the blacktop is required to be structural fill and is compacted to 95% design capacity. Each layer, including the stone and asphalt, undergoes specific testing and compaction. The compaction of the asphalt is assessed using a nuclear gauge to ensure maximum compaction for the expected weight load. Mr. Cox further inquired about whether compression testing had been conducted on the site as it currently stands. Mr. Neubert clarified that all testing is conducted during the original installation process, with each layer tested to meet specific criteria. He mentioned the compaction tests on earth and stone, along with the rolling pattern required for asphalt compaction. However, there was no specific compression testing being conducted on the site at present. Mr. Cox expressed uncertainty and suggested that more information is needed on the matter.

Mr. Bigoney asked a follow-up question regarding mounting the ABS pads below the frost line. Mr. Neubert explained that while they would prefer to mount the mats, like in previous installations, the current method has been successful for temporary situations. No significant issues have been reported, and regular inspections are conducted by the safety and security division, as well as the project manager and the principal. It was noted that although schools initially dislike the idea of trailers, they become fond of them once they are in use, making them a successful temporary housing solution for private schools.

Mr. Shalaby sought clarification regarding frost-related concerns. He asked if the manufacturer had conducted any studies or if historical data existed regarding issues caused by frost. Mr. Pelton responded that there had been no problems related to frost, emphasizing that the impermeable asphalt surface prevents water from accumulating or causing issues. He mentioned that anecdotally, no problems have been reported. Mr. Neubert mentioned that playing fields typically use topsoil, but the proposed installations would predominantly be placed on asphalt. He explained that if the installation penetrated the asphalt, it would necessitate removing and replacing the asphalt surfaces, which was estimated to cost over \$1.5 million. Mr. Shalaby inquired about the specifications of the asphalt, asking about the thickness of the stone and asphalt layers. Mr. Neubert mentioned that the asphalt was not poured by their team and suggested referring to older plans for more specific details. Mr. Shalaby raised concerns about moisture infiltration and frost resistance. Mr. Neubert expressed that placing the structures on the surface posed less risk compared to going to a frost-free depth. He emphasized the potential for moisture collection when creating a hole, suggesting that placing them on the surface was a safer option. In addition, Mr. Shalaby questioned the fire safety measures and approval status of the buildings. Mr. Pelton clarified that every building of that particular type includes a fire-rated corridor. He provided examples of buildings in Chesterfield



and Winchester, highlighting their longevity and approval, including temporary permits and the movement of one site after two years. He mentioned that even with soft ground and water issues, there were no major difficulties reported. Mr. Shalaby inquired about checking with other jurisdictions regarding their approval process for similar projects and whether they obtained temporary permits or yearly approvals. Ms. Jamison shared that she had contacted the building official from Chesterfield, who confirmed that ABS pads were allowed for industrialized buildings. He acknowledged that it was not officially approved but mentioned a lack of time to address the matter further.

Ms. Lampman questioned the manufacturer's response to the building code change from modular to industrial. Mr. Pelton clarified that he did not work for the manufacturer but rather purchased the buildings from them for leasing purposes. Ms. Lampman sought confirmation if the designated buildings were classified as residential structures, to which Mr. Neubert responded that they were classified as industrialized buildings. Mr. Neubert explained that the code change had introduced unexpected financial implications, but he viewed the situation from a common-sense perspective. He highlighted that the code allowed for different materials and methods as long as they adhered to the code's intent. He offered to guarantee recurring inspections for the existing buildings and emphasized their history of successful installations and operations without problems. Ms. Lampman inquired about the expected duration for the buildings. Mr. Neubert stated that the buildings would be in use until the delivery of the first elementary school in 2026, with plans to deliver another elementary school in 2027. Ms. Lampman asked about the inspection process and who would be responsible for ensuring correct installation. Mr. Neubert confirmed the presence of a third-party inspection company that handles structural inspections, including foundations and tie straps, as required by the special inspections program.

Mr. Shalaby sought clarification from Cary regarding the possibility of obtaining indefinite extensions. Ms. Jamison confirmed that one-year extensions were permissible as per the code and could be continued or stopped at any time.

Mr. Cox raised a concern about frost heave susceptibility mentioned on page 8 of 11. He questioned whether the installation method provided adequate protection against frost heave. Mr. Neubert clarified that the proposed ABS pads from tie down engineering were approved for at-grade installation, as evidenced by certified plans.

Mr. Shalaby inquired about verifying the information regarding ABS pads. Mr. Neubert referred to the manufacturer's information provided on the next page, which included the Radco listing



number 1355. He mentioned being unable to look up information due to not being a building official, suggesting further verification.

Ms. Jamison explained that the manufacturer required compliance with state and local codes, including frost-free protection. She emphasized that the design and use of listed and tested materials should not be altered, though other means and methods or materials could be used. For frost-prone areas like Stafford County, the ABS pads should be placed 24 inches below grade.

Mr. Cox requested assistance in interpreting the drawings and locating references to the ABS pads' installation method. Mr. Neubert highlighted the footing designs on page two of the attached 11" by 17" document, specifically designed for ABS pads on asphalt and existing grade. He explained that these designs were submitted for previous permits, but new information led them to consider locating the pads on asphalt.

Mr. Shalaby suggested checking the depth of the asphalt for further confirmation. Mr. Neubert agreed to make the necessary inquiries.

Presentations by the Public:

Ms. Lampman proceeded to open the public portion of the meeting and welcomed comments from the public. With no interest from members of the public, Ms. Lampman officially closed the public portion of the meeting. She proceeded to initiate the discussion phase.

Discussion:

Mr. Shalaby expressed mixed thoughts regarding the use of trailers and the associated costs. He mentioned the need for considering the depth of the asphalt and its ability to support the weight of fire trucks. He suggested that assessing the depth would provide a reasonable basis for decision-making. Mr. Shalaby expressed concern about the absence of any mention of frost-related issues in the product or manufacturer information. He suggested that the depth of the asphalt should be examined to ensure a reasonable assessment of its suitability for installation. He acknowledged that decisions might not be made on the same day but requested the opportunity to review the asphalt depth.

Mr. Bigoney expressed his support for the concept of ABS footing pads and their ability to provide a sound foundation for various structures. He mentioned that reasonable efforts to provide foundations for one-story structures were generally not vulnerable to catastrophic failures. He noted the importance of certifications for the ABS product but stated that he had no concerns regarding the use of the pads.



Ms. Lampman voiced her concern about the lack of sufficient information to vote appropriately. She emphasized the need for proper responses to the violations presented and the importance of having additional information. Specifically, she mentioned the absence of a stamp on frost-related issues and insufficient information about existing conditions and on-site engineer approval. She expressed the desire for additional information to make an informed decision.

Mr. Cox requested that the pad being used be referenced in the notes section of the drawings. He emphasized the need for clear information on the specific pad and its installation method. He mentioned that the red co specifications were not found during research. Without this information, he was not prepared to make a decision.

Mr. Hall expresses his willingness to vote in favor of allowing the use of the trailers if there is information from a professional stating that each individual site can support them. He suggests extending the temporary period on a yearly basis if the appellant has the right to do so.

Mr. Shalaby asks about the consequences if the trailers are accepted and then not extended after a certain period, to which Ms. Jamison responds that retrofitting may be required in that case. She mentions the need for a third-party approved and certified inspection firm rather than relying solely on an OSHA inspector. She expresses hesitancy in extending the use of the trailers beyond a reasonable period of time and mentions that the DHCD sets the maximum temporary duration at 180 days. Mr. Shalaby proposes setting a maximum time limit of 627 days for the use of the trailers, with the possibility of reevaluating the situation if necessary. Ms. Jamison agrees and suggests requiring inspections by a certified firm. Mr. Shalaby requests specific information about each site, including the depths of the asphalt and a statement from the engineer certifying their suitability.

Ms. Lampman seeks clarification on the specifics they are looking for and emphasizes the need for site-specific information.

Mr. Bigoney suggests using loaded dump trucks to test the strength of the asphalt and alleviate concerns.

Mr. Shalaby emphasizes the importance of separation for frost and moisture control. Mr. Neubert shares his perspective on frost issues and suggests that the chance of frost damage is low given the impervious asphalt surface and skirting around the modulars. However, Ms. Lampman emphasizes the need for documented statements rather than relying solely on common sense.



Mr. Cox raises concerns about the ground pressure requirement and the need to understand how much fill would be necessary. He also mentions the importance of ensuring that there are no utilities being crossed by the trailers. Mr. Neubert assures that the existing utilities have been marked and adjustments can be made to the foundation location if needed.

Ms. Lampman asks if they should ask the appellant to defer, and Mr. Santay explains that if they decide on a deferral, they would need the appellant's agreement. Mr. Santay suggests that Ms. Lampman read the deferral statement one more time before taking the vote. He also mentions that if it's a deferral, there's no need to read the statement for appealing to the state. Ms. Lampman asks about the timeline for the deferral, and Mr. Santay suggests that it be scheduled as soon as possible.

Mr. Neubert provided information about the ongoing installation schedule for the schools and discusses the options for testing the asphalt, including rolling a weighted dump truck and coring to determine the thickness of different layers. Mr. Shalaby expresses his preference for coring to measure the depth. Mr. Neubert suggests hiring a third party to perform the boring test and provide a report. Mr. Shalaby suggests that the third party could also conduct a Dynamic Cone Penetrometer (DCP) test to determine the bearing capacity of the soil.

Ms. Lampman proceeds by restating the appellant's application. The appellant in this case is Stafford County Public Schools. They are discussing the violations and appeals related to the Virginia Construction Code edition 2018. Violation number two pertains to documentation and approval, violation number three relates to conditions of listings, violation number four concerns temporary buildings and structures, and violation number five involves frost protection. The appellant argues that the manufacturer has submitted signed and sealed foundation designs supporting the use of ABS pads instead of concrete footings, backed by a certified Virginia engineer.

Mr. Santay suggests that if the board is leaning towards a deferral, they can ask for a vote from the board members. Ms. Lampman seeks a recommendation, and Mr. Shalaby makes a motion to defer the decision until the applicant provides more information regarding pavement thickness and details from an engineer about the specific pad being used. Mr. Cox seconds the motion, and a vote is called. All board members, except Mr. Bigoney, vote in favor of the motion.

Ms. Lampman acknowledges the result and mentions that they will work with the appellant to determine a suitable date for obtaining the required information. She also notes that they will



coordinate with the board to schedule a future meeting. This concludes the hearing, and a motion for adjournment is made by Mr. Shalaby, which is supported by all members in favor.

The full transcription of the meeting is available at:



https://otter.ai/u/RHk9D-Oa4wwINBkVvCIsVkJL-k?utm_source=copy_url