PROGRAMMING NOTES IMPACTING SCHOOL FACILITY DESIGN

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While sunlight is very important in an effective school design, in a library it is hard to give up <u>wall space</u> for the actual 12,000 or so books that should be in the Library for outside windows. You have to locate these "real" books where they do not interfere with the classroom area needed as well as the computer lab space.

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<u>Music</u> – The music room area should better reflect the needs of the instruction going on. A large room that is only used for band practice one or two hours a day is not good use of space. The music teacher needs a space big enough to accommodate big classes, and that has a large storage area adjoining. If the stage is not located at the end of the gym where physical activity with much noise is going on essentially before, during and after school, then band practice and other related arts activities could take place on the stage.

Related Arts Location – It would appear that all of the Related Arts area could be close to the gym entrance where large instruments or carts of artwork, etc. could have easy access to outside pick-up. This would be in the area that could be used after hours and gated off from the rest of the school.

Hallways in High Student Volume Area(s) – It has been recommended that attention be given to the width of hallways in areas in which a substantial number of students are coming and going at one time. An example would be the cafeteria and gym access area or any other area where large numbers of students go after eating. Hallways that have to accommodate large numbers of students at one time need to be large enough for that to happen safely.

CDC Area – The classrooms accommodating CDC students need to be designed so they meet the needs of those special students and their teachers. It is helpful to have easy access to the Administration area, classroom space for consultations and service providers, some small kitchen capability, wash/dryer, large closets, large changing areas, and access to enclosed playground with adaptive equipment. Grandview School has been discussed as a model.

<u>Small Gym Area</u> – A small gym or activity area will be highly utilized. Realistic programming of this space should take place. If it will be highly used by CDC programming, the space should be designed for that purpose. It has been recommended that the area have a tile floor that is easily cleaned, and a substantial storage area. The small "gym" floor does not need to be cushioned hardwood.

Stage – There has been multiple comments about not having a stage area associated with the big gym space. It is assumed that the reason the stage is at the end of a gym area is that there is seating large enough to hold a substantial number of students or large group of parents. With the use of bleachers for indoor sports in a gym, it appears that the only way to utilize a stage at the end of a gym area is to put up folding chairs. This is a tremendous amount of work, and the seating has to be installed only when the gym is not in use.

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gym for all students but not using a permanent stage. A portable stage could be used in the center of the gym and students then seated in the bleachers. For more formal performances, the recommendation from the Town is to use one of the Town's excellent performance spaces, especially when performing for parents. While having a stage in an appropriate area is great for rehearsals and performances with a limited audience, a quality stage area with professional sound and lighting is expensive and used infrequently. Teachers trying to use a stage at the end of a gym area when there is noisy physical activities going on almost the entire school day, find these activities to be incompatible and the stage is not utilized as intended.

<u>Cafeteria</u> – The Washington County Nutritionist and probable cafeteria manager should sit down with the architect and go over equipment actually needed, and discuss the spatial relationships within the kitchen area and the food and beverage lines as well as the student eating area. There should also be an exploration of ways to "entertain" students during their lunch period in order to avoid boredom and conflict.

It is important that there is a "reality check" on the equipment programmed for the kitchen. Expensive equipment that is not used or used infrequently should be avoided. It is important that there is thoughtful input on that issue from the Nutritionist and kitchen manager. Also, it is important to get information from these people on how the equipment is placed within the kitchen space so the kitchen operation is most functional and efficient. The same is true of the area students get their food and beverages to avoid unwanted congestion and confusion.

Technology – Obviously, technology is a really big issue. Security depends on effective technology. It is been pointed out that there is a goal to provide all students with iPads which will reduce the need for computer labs to one. There are five in the new Boones Creek School. It makes the most sense to make the Jonesborough School as technically up-to-date as possible, and that requires all classrooms, offices, and other areas to be wired or provided Wi-Fi access to facilitate the equipment and programming in the school. This requires comprehensive installation of conduit and wiring when the school is under construction. Also, technology is quickly changing, and it is hard to predict what additional wiring or signalization may need to be available in 3 years or 5 years. The conduit for wiring is not terribly expensive and it is most effective when it is installed before walls finishes are constructed. This is another reason to look for a suitable wall surface beside concrete block. The cost of installing conduit and wiring will be much less.

The recommendation is to create a Technology Subcommittee consisting of Washington County School technology staff, the consulting engineer responsible for designing the technology plan for the Jonesborough School, and one or more people in the community that are in the technology field and can help develop an innovative technology plan for the new school.

<u>Expansion</u> – There will need to be extra classrooms built into the school layout. Extra rooms in the Related Arts area have been discussed if there is support for educational

enhancement through community-based arts programming. There should be a certain amount of extra classroom space built into the initial design. There should also be area(s) designated to allow school building expansion at the time the school population expands to the point more building area is needed. Jonesborough is on the major route from the western end of the County to three of the largest employers in the County; ETSU, the VA, and the Medical Center. There is already a substantial amount of students from other Washington County school districts that are dropped off at the Jonesborough School because it is so convenient to drop children off in the Jonesborough schools on the way to work. There needs to be an expansion plan for the future included into the design process.

Outside Facilities – If agricultural education programming is a special feature with the Jonesborough School, there needs to be a design plan for outside facilities associated with that program. For example, there should be a well-designed equipment and storage building that also could contain a produce washing area. It could also take on a "potting shed" layout with slatted work tables and inside watering capability and floor drainage. This building would need to be designed complimentary to the school building, but be located adjacent to the agricultural area. Donations would be sought to pay for materials and equipment, and if the Carter County Work Camp Crew is still assigned to Jonesborough it is possible that crew could carry out the construction.

Another outside building has been discussed. This building would have more of a small annex layout where classroom instruction could take place, but without negatively impacting the normal school operation going on in the main building. The building could be designed for cooking classes and the handling and preparation of local produce. Classes in horticulture, gardening, beginning farming, could take place in this facility, and potentially art instruction that is likely to be more messy and requires classroom space that can easily cleaned. It is also possible to have a cooler or large refrigerator in this area. This building would likely need to be located close to the main school building, in the area close to the Related Arts area and the Cafeteria, but it could be anywhere around the school.

<u>Environmental Education With Outside Facilities</u> – There are some opportunities to provide additional instruction in outside facilities having an environmental impact. Three of these are as follows:

Stormwater Management and Water Quality. The construction project will have at least one detention or retention pond which is built to control stormwater runoff from the property. These pond areas provide an excellent opportunity to educate students on techniques used to remove pollutants from ditch lines and drainage areas feeding into streams, and the important techniques used to improve the water quality of our streams and rivers. This instruction can also include a number of measures that can be taken at home that can have a big impact on water quality. When young children learn the importance of these measures and how they can improve the environment, it is much more likely their parents will pay attention as well.

Solar Energy. BrightRidge has met with Jay McCusker of Ken Ross Architects and me to discuss their initiative inwhich BrightRidge will build a new Solar Farm west of Jonesborough and dedicate a certain amount of panel area to the Jonesborough School and other school facilities. The kilowatts produced through this section of solar panels will be credited to the account of the new Jonesborough School. The panels will be producing energy year-round, and will be especially producing during the summer. This is the time of year the school will likely be least active. Regardless, the value of the energy produced year-round will reduce the overall electric costs charged to the school. It will not likely be net-zero, but there can be a great reduction in electric costs. BrightRidge has also agreed to install two or three solar panels on the school property, and to have them connected into science rooms. This is another opportunity to provide some great instruction on the value of solar energy. BrightRidge can assist in developing some excellent curriculum tools for teachers. The cost of this program with the Jonesborough school is zero; nothing, just the willingness to be engaged in the program.

Natural Open Space and Walkways. There is an opportunity to develop natural areas and instructional opportunities using nature walks and well planted open space areas in a number of places on the total 48 acres of the school site. The school property is currently mostly in grass, but an open space design plan based on environmental instruction opportunities can be developed and implemented over a period of time using donations and grant funding. It may take a few years to develop but a plan needs to be developed and resulting priorities implemented.

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