



Darlington County School District

Darlington, South Carolina

August 2, 2012

Darlington Area Schools - Building Evaluations

School Name: Brunson-Dargan Observed By: Creed/Carter
Principal: Mrs. Ada O Sindab
Grade Levels: 3rd – 5th
Site Size: Approximately 16 Acres
Student Population: 221 (Approximate Student Population)
Staff Size: 34 (Approximate Staff Size)

Campus Overview and General Observations:

Brunson-Dargan Elementary School sits on a 16 acre site which slopes off towards the back and towards the track and football stadium found at the back of the campus. The site is located at the intersection of Wells and Doneralle Streets in downtown Darlington. Because of the slope of the site towards the back there are some moisture issues in buildings 4 and 5, also some site erosion issues regarding water run-off and sidewalks. In addition it is believed there is also some water intrusion issues present on site as could be determined by the presence of sandbags on the exterior adjacent to exterior doors. The buildings are typical of the designs associated with schools built in the late 1950's and 1960's. Buildings had renovation work as needs arose, there are currently five buildings. Instructional areas are sub-divided by grade level in such a manner that there is a third grade/ cafeteria building, a fourth grade building and a fifth grade/ media center building. In addition there is an admin building and a smaller one storey building at back of campus which houses Music, PE and Exceptional Children, it should be noted that this smaller building has no interior corridor and access is gained to each individual classroom from the outside underneath an continuous canopy.

Although access to the main entrance of the school is marked with a canopy element and some accent screen block walls it is somewhat confusing and hard to gain direct access from a visitor's standpoint. It is not easily identifiable mostly because on must walk-underneath the canopy and then walk through an outdoor courtyard all the way to the back of courtyard to enter the admin building. There is some parallel visitor parking near the front entry canopy this occurs directly off of the parent drop off along Wells street.

Because of the open plan campus it is difficult for administrators to monitor all activity on the campus. In addition, there are covered canopies connecting the five buildings; making it hard to secure the campus. Numerous doors must be left unlocked throughout the day for students and staff to circulate on the campus. A visitor could easily gain access to any of the campus buildings without ever checking in at the office.

The campus buildings consist of masonry load bearing with bar joists and built-up roofs; the ages of the buildings dictate varying compliance to a variety of building codes creating many noncompliant conditions as it relates to current codes.

Because the campus is flanked by an old football field and a baseball field there is some fencing present but the entire playground is not fenced.

The bus loops also comes off of Doneralle Street and enters and exists off of this street. There is also a dirt road cut-thru at the back of the campus which runs parallel to Doneralle Street. The abandoned football stadium at the back of the school is a security concern as well as an eyesore. Kitchen trash dumpster and loading area directly off of parent drive-thru and Wells street creating an eyesore

FACILITIES OVERVIEW					
SYSTEM	0 (adequate)	1 (mild need)	2 (strong need)	3 (critical need)	REMARKS
Safety and Health					
Site Security				■	The Campus is an open campus with numerous access points and no means of control.
Traffic Patterns				■	Access to admin building is awkward for a visitor
Main Entrance				■	Although there is an accent canopy structure demarking the entry point. A person must walk under canopy entry and then back to uncovered area, through an open courtyard.
Exterior Doors			■		Combination of HM and storefront Have some hardware issues Have many ADA issues considering, clearances, pull pressure, and hardware
Interior Doors				■	ADA door clearances Most doors appear to be in good shape but many do not have ADA compliant hardware



Windows				■	Do not meet OSF egress requirements Are not energy efficient Operation is questionable on many windows. Permanent bookcases present in front of some windows impede easy emergency egress
Fire Alarm				■	The alarm was not tested for compliance but was replaced within the last 6 to 10 years.
Fire Protection				■	As new buildings are added and buildings are renovated sprinklers will be required to be added. Walls do not meet rating requirements.
Technology		■			Most instructional areas have had technology upgrades, as a result there are some exposed wires in corridors that should be placed in conduit
HVAC				■	Individual Free Blowing Bard Units
Mold/Moisture				■	Musty smell present and ACT damaged by moisture present
Plumbing				■	While plumbing systems appear to be functioning, many fixtures do not meet ADA accessibility requirements. Each building does have its own group toilet. Does not appear to be sufficient staff or student toilets
Teacher Work Areas				■	Inadequate considering teacher population. Renovations are recommended.
Electrical				■	Most switches are not ADA compliant GFI breakers are needed at wet areas. Insufficient outlets in classrooms
Lighting				■	Lighting levels appear to be adequate but they may not meet ASHRAE requirements.

Electrical Rooms				■	Appear to be inadequate
Data/Server				■	Although housed in a separate room, access is easily obtained
ADA Compliance				■	Many noncompliant toilets Many room side door clearances are noncompliant. Many non-compliant grade changes and non compliant egress out of building 4
Code Compliance				■	Numerous violations including: life safety; energy efficiency; accessibility; and seismic to name a few.
Roof				■	Roofs appear to have been patched at numerous locations and over the years.
Structure			■		No apparent structural issues noted
Appearance and Finishes					
Curb Appeal			■		Typical of schools from the 50's.
Grounds			■		Due to the various canopy types, buildings and grade changes the campus has a very disjointed and unwelcoming appearance
Exterior Envelope			■		Possibility of water intrusion in areas due to grades
Ceilings			■		Communication wires are laying on ceiling systems. Several ACT appeared to need replacement
Walls			■		Painted CMU
Flooring			■		Carpet at Media Center needs replacement Quarry Tile corridor floors in excellent condition, VCT in other areas in

					varying condition
Comments:					

Building Information:

Building 1: Administration

Year Occupied:	1966	
Renovations:	None	
First Floor:	<u>2,747</u>	
Total:	2,747	2,747

Building Systems:

Footings:	Spread
Structure:	Load Bearing Masonry w/bar joist
Exterior Walls:	Brick Veneer
Fenestration:	Aluminum Double Hung and fixed Storefront
Exterior Doors:	Hollow Metal Frames and Aluminum Storefront
Roof System:	Built Up Roof
Finishes:	Carpet in Media Center, VCT and Tile
Plumbing Systems	Copper Supply/Cast Iron Waste
Mechanical Systems:	Free blow exterior hung Bard Units
Electrical System:	240/480V System
Fire Alarm:	In need of upgrades
Emergency Lights:	Ceiling battery backup

2006 IBC Code Review:

Utilities	City of Darlington
Occupancy	Educational Type "E"
Construction Type	II B Unprotected/Un-sprinkled
Area Allowed	14,500 sf
Maximum Stories	Two (2) Stories
Fire Rated Assemblies:	
Fire Barriers	Corridors - Not Rated (1 hr. req.)
Structural Steel	No Ratings (1 hr. req.)
Roof/Ceiling	No Ratings (1 hr. req.)
Fire Walls	None Required
Toilets:	
Toilet Counts	Appear to be inadequate
ADA Accessibility	Noncompliant



Building 2: Classroom/Cafeteria

Year Const.: 1969
Renovations: None
First Floor: 19,840
Total: 19,840

19,840

Total Classrooms: 10 Classrooms
Total Occupancy: 10 Classrooms x 20= 200

Building Systems:

Footings: Spread
Structure: Load bearing masonry w/ Bar Joist
Exterior Walls: Brick veneer / Dryvit
Fenestration: Aluminum double hung and Fixed Storefront
Exterior Doors: Hollow Metal Frames and Doors
Elevated Floor: Slab on grade
Roof System: Built up Roof
Finishes: Quarry Tile and VCT on Floors
Plumbing Systems: Copper Supply/Cast Iron Waste
Mechanical Systems: Free Blow Bard Units
Electrical System: 240/480V System
Fire Alarm: Needs upgrading
Emergency Lighting: Wall mounted battery backup

2006 IBC Code Review:

Utilities: City of Darlington
Occupancy: Educational Type "E"
Construction Type: II B Unprotected/Un-sprinkled
Area Allowed: 14,500 sf
Maximum Stories: Two (2) Stories
Fire Rated Assemblies:
Fire Barriers: Corridors - No Ratings (1 hr. req.)
Structural Steel: No Ratings (1 hr. req.)
Floor/Ceiling: No Ratings (1 hr. req.)
Roof/Ceiling: No Ratings (1 hr. req.)
Fire Walls: None Required
Toilets:
Toilet Counts: In adequate
ADA Accessibility: Noncompliant



Building 3: Classroom/Media Center

Year Const.: 1965
 Renovations: None
 First Floor: 14,000
 Total: 14,000

14,000

Total Classrooms: 8 Classrooms
 Total Occupancy: 8 Classrooms x 20 = 160

Building Systems:

Footings: Spread
 Structure: Load Bearing Masonry w/ Bar Joist
 Exterior Walls: CMU/Brick Veneer/Dryvit
 Fenestration: Aluminum Double Hung
 Exterior Doors: Hollow Metal Frames and Doors
 Roof System: Built up Roof
 Finishes: VCT, Quarry Tile, Carpet
 Plumbing Systems: Copper Supply/Cast Iron Waste
 Mechanical Systems:
 First Floor: Free blow exterior hung Bard Unit
 Electrical System: 240/480V System
 Fire Alarm: Needs Upgrading
 Emergency Lighting: Wall mounted battery backup

2006 IBC Code Review:

Utilities: City of Darlington
 Occupancy: Educational Type "E"
 Construction Type: II B Unprotected/Un-sprinkled
 Area Allowed: 14,500 sf
 Maximum Stories: Two (2) Stories
 Occupant Load:
 Fire Rated Assemblies:
 Fire Barriers: Corridors- No rating (1 hr. req.)
 Structural Steel: No Ratings (1 hr. req.)
 Floor/Ceiling: No Ratings (1 hr. req.)
 Roof/Ceiling: No Ratings (1 hr. req.)
 Fire Walls: None Required
 Toilets:
 Toilet Counts: In adequate
 ADA Accessibility: Noncompliant



Building 4: Third Grade and Art Room Classroom Building

Year Occupied:	1958	
Renovations:	None	
First Floor:	<u>7,532</u>	
Total:	7,532	7,532

Building Systems:

Footings:	Spread
Structure:	Load Bearing Masonry w/bar joist
Exterior Walls:	Brick Veneer/Dryvit
Fenestration:	Aluminum Double Hung and fixed Storefront
Exterior Doors:	Hollow Metal Frames and Aluminum Storefront
Roof System:	Built Up Roof
Finishes:	VCT and Quarry Tile
Plumbing Systems:	Copper Supply/Cast Iron Waste
Mechanical Systems:	Free blow exterior hung Bard Units
Electrical System:	240/480V System
Fire Alarm:	In need of upgrades
Emergency Lights:	Ceiling battery backup



2006 IBC Code Review:

Utilities	City of Darlington
Occupancy	Educational Type "E"
Construction Type	II B Unprotected/Un-sprinkled
Area Allowed	14,500 sf
Maximum Stories	Two (2) Stories
Fire Rated Assemblies:	
Fire Barriers	Corridors - Not Rated (1 hr. req.)
Structural Steel	No Ratings (1 hr. req.)
Roof/Ceiling	No Ratings (1 hr. req.)
Fire Walls	None Required
Toilets:	
Toilet Counts	Appear to be inadequate





Assessment of Major Spaces:

Administration:	Although adequate in size because it is located in a freestanding building it makes it hard for receptionist and other admin staff to monitor what is occurring on campus.
Guidance Offices:	Adequate would work better if more centrally located
Classrooms:	Classroom numbers appear adequate for the student population. Classrooms could use additional casework Toilet facilities in classroom buildings are inadequate and do not meet ADA standards. Corridor floors are quarry tile and classroom floors are VCT ACT is present in most areas; some appeared damaged due to high humidity and/or moisture levels
Science Labs	Adequate
Media Center	Large in size, would benefit from more natural light
Cafeteria:	Size appears to be adequate There is a very small "stage platform" built at one end Single serving line appears to work. Kitchen appears adequate
Physical Education:	The existing multi-purpose/PE Room is inadequate. This is simply a room inside the Alert Building with low ceiling clearances
Arts Rooms:	Natural light is lacking Additional sinks are needed Outdoor areas for 2-D and 3-D art are suggested No Kiln
Music Spaces:	The sizes of the rooms appear to be adequate. Need acoustical treatment on walls. Ideally this room would also have a higher volume
Other:	Contiguous buildings to increase security Consideration of ambient noise when selecting mechanical systems





Consideration of air quality when selecting mechanical systems

Low flow toilets and plumbing fixtures

LED lighting where applicable

Need for more staff toilets

General Observations:

Main Office is not easily discerned on inside or outside

Parent Drop-Off small

Currently buses drive exists through same exit used by one of the staff lots. Would be best to provide separate entrance for buses and staff

Recommendations:

There are several major factors when considering renovations to Brunson Dargan Elementary School. The age of the main instructional buildings as it relates to size of classrooms as well as size or lack of support areas (teacher work rooms, staff toilets, compliant student toilets, guidance areas, adequate science as well as computer areas, administrative and technology support areas) existing technology and electrical issues and security issues of the open campus plan. The lack of an adequate indoor multi-purpose room and stage are also to be considered. Drainage and site issues created by the sloping site and water intrusion into buildings should also be considered.

Option 1: (Renovations and Additions)

If the Brunson Dargan campus is to remain operational canopies connecting all classrooms buildings should become enclosed corridors to help with security issues. This would be costly and is not recommended.

Option 2: (Relocate Students to Cain Campus from Brunson-Dargan)

Due to the conditions of the existing buildings and to the size of the student population; it is the architect's recommendation that the students from Brunson Dargan be relocated to Cain campus. The Cain campus due to its relatively flat site is well suited to take on an addition and would therefore become a K-5th grade campus.