



*Excellence in
Teaching and Learning
for All*

Darlington County School District
Darlington, South Carolina
August 2, 2012

Darlington Area Schools - Building Evaluations

School Name: Cain Elementary School Observed By: Creed/Carter
Principal: Ms. Wanda Odom
Grade Levels: 4K – 2nd
Site Size: Approximately 20 Acres
Student Population: 376 (Approximate Student Population)
Staff Size: 40 (Approximate Staff Size)

Campus Overview and General Observations:

Cain Elementary School sits on a 20 acre site which is relatively flat with a small wooded area at the back of the site. The site is located near Hwy 52, South Main Street in downtown Darlington, access to the school occurs across the front off 1st Street. No issues were noted with Storm water drainage. The main building is typical of the designs associated with schools built in the 1950's. Buildings were added later as needs arose and there are currently five buildings. Instructional areas are sub-divided by grade level in such a manner that there is a kindergarten building, a first grade building and a second grade building. Renovations have periodically occurred based on need and not through a planned process such as a master plan.

Access to the main entrance of the school is not easily identifiable. The original entrance to the school is still present, the name of the school is mounted on the wall adjacent to a pair of doors and storefront and sidewalks leading to the main entrance. However there is no visitor parking near the front entry and visitors must park on the side adjacent to the staff/bus drop off. The parent drop off occurs on the other end of the building in a very small drop off loop, where parents drive-thru a gate when entering and exiting.

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.

The majority of campus buildings consist of masonry load bearing with bar joists and standing seam metal roof roofs; the two smaller buildings are masonry load bearing with built up roofs; there is also a portable where the coordinating teacher and materials are housed. The ages of the buildings dictate varying compliance to a variety of building codes creating many noncompliant conditions as it relates to current codes.

The campus appears to have fencing along a large area of its perimeter however there does not appear to be a separate play ground area for the kindergarten children. Adjacent to the staff/visitor parking and the bus drop off there is a softball field and open field for playing team sports.

The parent drive forms at the front left of the school with drop off on the side of the school adjacent to the media center. The bus loops also comes off of 1st Street, but on the opposite side of the school and students are dropped off under a covered canopy at the center of campus, covered canopies then allow the students to travel to the other buildings.

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				■	Traffic patterns are awkward for parents, staff and buses Ideally the staff parking, visitor parking and bus loop would be separated
Main Entrance				■	Not easily recognizable, at the very least if visitor parking remains at current location, a sidewalk ought to be placed directing visitors to the main entrance, ideally a covered walk would also be included Lack of entry lobby. Visitors enter on end of corridor with no sight lines to the office. Poor visibility of reception staff as to who has entered the building. Very small and cramped front office
Exterior Doors			■		Combination of HM and storefront



					Have some hardware issues Have some ADA issues considering clearances, pull pressure, and hardware
Interior Doors		■			ADA door clearances Most doors appear to have been recently replaced
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 system was replaced within the last 6-10 years but horn strobes are not placed in the classrooms and therefore the system does not meet code requirements.
Fire Protection			■		As new buildings are added and buildings are renovated sprinklers will be required to be added. Walls do not appear to be rated
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		■			None noted



Plumbing				■	While plumbing systems appear to be functioning, many fixtures do not meet ADA accessibility requirements. In addition there are no individual toilets in rooms as specified by OSF. Each building does have its own group toilet. Does not appear to be sufficient staff or student toilets
Teacher Work Areas				■	Appear to be lacking in quantity, technology, and size
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
Electrical Rooms				■	Storage is occurring in front of panels. Non-compliant floor clearances exist. In some instances wiring was not color coded per NEC. Some panels are old and replacement breakers may be unavailable.
Data/Server				■	Server currently housed in its own room
ADA Compliance				■	Many noncompliant toilets Many room side door clearances are noncompliant
Code Compliance				■	Numerous violations including: life safety; energy efficiency; accessibility; and seismic to name a few.
Roof	■				With the exception of the Curriculum Teacher Building, all roofs appear to have been recently re-roofed to include new standing seam fascias
Structure				■	No apparent structural issues noted
Appearance and Finishes					
Curb Appeal				■	Typical of schools from the 50's. It is the



					opinion of the architect that the original front entry should be enhanced and re-used. A covered entry leading from existing visitor parking should be studied as well as the possibility of providing some visitor parking along the front in the form of a drive thru, if nothing else.
Grounds			■		Average as compared to other schools in the District, Reworking of the drives and access as parents, buses and visitors approach campus is recommended
Exterior Envelope			■		Appears adequate
Ceilings			■		Communication wires are laying on ceiling systems
Walls		■			Combination of Glazed CMU and CMU
Flooring			■		Carpet at Media Center needs replacement VCT overall is in good condition
Comments:					

Building Information:

Building 1: Main Office/Cafeteria/Kitchen/Media/Kindergarten

Year Occupied: 1953
 Renovations: None
 First Floor: 14,043
 Total: 14,043

14,043





Total Classrooms: 6 Classrooms
Total Classroom Occupancy: 6/classroom x 20 = 120

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: Standing Seam Metal 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: Recently upgraded
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

Year Const.: 1953
Renovations: None
First Floor: 7,070
Total: 7,070

7,070

Total Classrooms: 7 Classrooms

Building Evaluations, Darlington County School District
Jumper Carter Sease / Architects, P.A.





Total Occupancy: 7 Classrooms x 20= 140

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:	Standing Seam Metal Roof
Finishes:	VCT on Floor
Plumbing Systems	Copper Supply/Cast Iron Waste
Mechanical Systems:	Free Blow Bard Units
Electrical System:	240/480V System
Fire Alarm:	Recently upgraded
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

Year Const.:	1960
Renovations:	None
First Floor:	<u>11,166</u>
Total:	11,166

4,074

Total Classrooms: 10 Classrooms

Building Evaluations, Darlington County School District
Jumper Carter Sease / Architects, P.A.





Total Occupancy: 10 Classrooms x 20 = 200

Building Systems:

Footings: Spread
 Structure: Load Bearing Masonry w/ Bar Joist
 Exterior Walls: CMU/Brick Veneer
 Fenestration: Aluminum Double Hung
 Exterior Doors: Hollow Metal Frames and Doors
 Roof System: Standing Seam Metal Roof
 Finishes: VCT. Glazed CMU in corridor
 Plumbing Systems: Copper Supply/Cast Iron Waste
 Mechanical Systems:
 First Floor: Free blow exterior hung Bard Unit
 Electrical System: 240/480V System
 Fire Alarm: Recently upgraded
 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 (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: Mobile Unit (Used for Coordinator Teacher)

Year Const.:
 Renovations:
 Total: 1,600 1,600

Building 5: Classroom – Learning Center

Year Const.: 1986



Renovations: None
 First Floor: 1,200
 Total: 1,200 1,200

Total Classrooms: 2 Classrooms
 Total Occupancy: 2 Classrooms x 20 = 40



Building Systems:

Footings: Spread
 Structure: Load Bearing Masonry w/ Bar Joist
 Exterior Walls: CMU/Brick Veneer
 Fenestration: Aluminum Double Hung
 Exterior Doors: Hollow Metal Frames and Doors
 Roof System: Built Up Roof
 Finishes: VCT
 Plumbing Systems: Copper Supply/Cast Iron Waste
 Mechanical Systems:
 First Floor:
 Electrical System: 240/480V System
 Fire Alarm: Recently upgraded
 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 (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 6: Mobile Unit – PE / Reading Recovery

Year Const.:
 Renovations:
 Total: 1,600 1,600

Total Campus Square Footage 29,587

Assessment of Major Spaces:

Administration:	<p>Cramped spaces Receptionist has no visual to persons at pair of doors entering school until they have gained access to entire school. Office waiting is inadequate. Health Room is inadequate in size and does not have ADA toilet or a shower. Health Room is not within admin area. Entire admin area is too small and needs to be expanded</p>	
Guidance Offices:	<p>Small and in freestanding building would work best if incorporated into main classroom buildings</p>	
Classrooms:	<p>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. In addition many classrooms that would require individual toilets per current OSF standards do not have them Corridor floors are VCT with some walls containing glazed emu. ACT is present in most areas with sloped ceilings occurring on one side of corridor in Building 1.</p>	
Science Labs	<p>None Present</p>	
Media Center	<p>Small in size but with sloped ceiling, could use some more natural light</p>	
Cafeteria:	<p>Size appears to be inadequate Of note is the lack of stage anywhere on campus Single serving line appears to work. Kitchen appears adequate and has tile floor</p>	
Physical Education:	<p>The existing multi-purpose/PE Room is inadequate. This is simply a room inside a portable</p>	
Arts Rooms:	<p>Natural light is lacking Additional sinks are needed Outdoor areas for 2-D and 3-D art are suggested No Kiln</p>	
Music Spaces:	<p>The sizes of the rooms appear to be adequate.</p>	

Need acoustical treatment on walls.

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 thru visitor parking as well as staff parking. Would be best to provide separate entrance for buses and/or visitors

Recommendations:

There are several major factors when considering renovations to Cain Elementary School. The age of the main instructional building 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, 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 size of the Cafeteria, the lack of an adequate indoor multi-purpose room and stage are also to be considered. The elimination of the two older portables found on the campus and the inclusion of these teaching areas into a brick and mortar building should be included as a goal.

Option 1: (Renovations and Additions)

The following buildings should be renovated:

Building 1: Renovate Cafeteria and Kitchen area into new administration front office area, with new security airlock entry leading into front reception area. Existing office area could be converted into Guidance area.



Building 2: If possible renovate restrooms so one ADA compliant stall is achieved.

Building 3: If possible renovate restrooms so one ADA compliant stall is achieved.
Add sinks at art room.

Building 5: Room 12, to become new Reading Recovery Room.

Covered breezeway connecting buildings 1,2,3,4 and 5 to become enclosed corridor.

It is our opinion that the following buildings should be abandoned and removed from the site:

Building 6: This building will be demolished to create space for a new cafeteria/multipurpose and kitchen. The bus loop will be re-routed and the new cafeteria will act as the new loading and unloading place for students.

Phasing: Due to the nature of the additions, with careful planning the construction could take place during the school year. However, renovations to Building 1 will need to occur during the summer. It is the recommendation of the architect that the Admin renovations do not begin until the new building is complete.

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

Although the above mentioned renovations and additions would address many of the issues found by the architects when touring the Cain Campus, another viable option when considering the cost of a new multipurpose room, as well as the necessary cost to upgrade front office would be to bring the students from Brunson-Dargan to the Cain Campus. The small size of the student population at Brunson Dargan and the fact that this school also does not have a multi-purpose indoor space, would create a situation where students currently located at both schools would be enriched by the merging of both campuses. In addition to the recommendations found in Option 1 above a new classroom wing housing 14 new classrooms would be included in Option 2. The new classroom wing could be located directly off the new enclosed corridor and adjoining Building 3, this would be accomplished by the removal of Building 4, as discussed above. The new wing would house the 3rd, 4th and 5th grade students. The existing visitor parking would be re-worked in conjunction with the new admin area. The existing staff parking would be re-worked.