

# H.D. Cooke Modernization:

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## Introduction

The site specific educational specifications (ed specs) for HD Cooke were developed by a consultant with limited input from teachers and community, but were based on DCPS standard educational specifications for elementary schools. Once the ed specs were done, an architect, specifically hired for the design of Cooke, developed a feasibility study that looked at various options for meeting the educational specifications. Then, the District of Columbia Public Schools approved one schematic option for the modernization of HD Cooke that included the demolition of the 1960s addition and the building of two other additions on the original 1909 and 1920s building. (See attachments A and B.)

Ideally such a process should have satisfactorily addressed all of the issues raised in this paper. However, DCPS is still new to school facilities planning and design and the process is not without problems. As a result, important issues still need to be addressed and significant modifications may still need to be made to ensure a solution for the community and school system that will likely exist in the neighborhood for generations to come.

## A: Student Population

## Question: Why Add 142 Students?

Cooke served 433 students in 2001-2002, yet the re-designed school is planned for a population of 572 students with no explanation for the upward adjustment.1 The student enrollment projections must be examined because: 1) the population trends don't warrant the increase; 2) the increase will be detrimental educationally; 3) substantial questions remain about the expected grade distribution; 4) the sixth grade should moved to Lincoln; 5) there simply is not enough space on the site; and 6) the increased cost may be prohibitive.

#### Concerns

### 1) Unwarranted Population Increase

The number of students in the neighborhood is not likely to expand in the next ten or twenty years. On the contrary, with rampant gentrification in the neighborhood, student numbers are more likely to diminish somewhat in the short run. Ward I student populations have held steady in the past decades with only slight downturns and no significant increases. Ideally, if the student population increases in the future, additional schools will be built rather than increase the enrollment at our present schools. Or, additional classrooms could be added to Bancroft, or Marie Reed, — those schools with large enough sites to accommodate some increase.

### 2) Educational Detriment

All Ward I schools are at or above optimum enrollments now, with an average of about 450 students in the nine pre-k to fifth/sixth grade schools.2 Cooke's current population is on the upper end of the optimal size for elementary schools — especially when we know that smaller schools are better educationally. Smaller schools are particularly important for low-income children, where security is an issue and where parental involvement is lacking.

In a school with more than 450 students, it becomes impossible to schedule weekly sessions for each classroom with "enrichment" subjects such as art, music, computers, physical education, library, etc., simply because there are not enough hours in the week to give every regular classroom a turn with these very important resources. Thus, a school of more than 450 students is counter productive educationally.

#### 3) Grade Distribution

The grade distribution of students planned when Cooke reopens also requires explanation:

- 4 Pre-K
- 3 Kinder
- 4 First (3 in 12/01 ed spec)
- 3 Second
- 4 Third (3 in 12/01 ed spec)
- 3 Forth

<sup>1</sup> The District of Columbia Public Schools Educational Facilities Master Plan (December 2000), puts the enrollment estimate for a modernized school at 500 students, which was the schools enrollment at the time the Master Plan was finalized.

<sup>&</sup>lt;sup>2</sup> Adams with 286 is lowest, Tubman is highest with 674: Bancroft, 524; Bruce-Monroe, 480; Gage-Eckington, 403; HD Cooke 426; Meyer 367; Park View 405; Marie Reed 480; Cleveland (P-S to 4) 241. Figures are 2001-2002.

2 Fifth

2 Sixth.

This grade breakdown appears to assume about 18 students per class in pre-k and kindergarten, 22 per class for 1st through 3rd grades, and 24 per class in 4th through 6th grade (550), with an additional 30 students in three special needs classrooms (580). These student/teacher ratios adhere to DCPS standards but are higher than might be allowed for a school where more than half of the students are classified as limited and non-English speaking.

The sequencing from class to class is not easy to understand. How will 60 kindergarten students expand to fill 88 first grade seats and 88 first graders fit into space for 66 second grade students? Nor is planning clear when 88 third graders squeeze into slots for 72 in fourth grade. With a new and improved school, the attrition of 5th and 6th grade students to parochial and private schools may not continue.

If one or two of the pre-k classrooms listed are actually Head Start classrooms, then the sequence from pre-k to kindergarten may be more realistic, but the other grade sequences remain in question. Providing Head Start pre-school classes for the neighborhood is very important, but the demand must be studied further because affordable childcare services in the neighborhood are good, readily available, and well used.

#### 4) Location of the 6th Grade

The Ed Specs do not address the unresolved question of Cooke's sixth graders moving to Lincoln Middle School when it is reopened, which should be about one year before Cooke's building is finished (2006-7). Retaining the sixth grade at Cooke means adding at least two additional classrooms, and at least 50 large sixth grade bodies to an already overcrowded site. We know that parents hesitate to accelerate their children's graduation from the security of elementary school, and many in DC rightly argue that the trip to middle school is too far for their children to walk alone at eleven years of age. However, the walk to Lincoln will be only slightly farther than the walk to Cooke and for many Cooke students, Lincoln will be closer than Cooke. The walk to Lincoln involves no more exposure to busy intersections than does the walk to Cooke.

Sections of Ward I include some of the few areas in the city where middle schools are geographically feasible, and we should take advantage of that fact to cut down on overcrowding at the elementary level. Lincoln's 2001-2002 enrollment was 442, but the new Lincoln is being planned for 600. This allows plenty of space for sixth graders from Cooke, Tubman, and Marie Reed which are the elementary schools nearest to Lincoln which currently retain their sixth grades.

## 5) Lack of Site Space

Adding 142 students translates to six or seven extra classrooms; if the sixth grade moves to middle school, then the current plan is for eight to nine excess classrooms. With six or seven extra classrooms there will be six or seven more teachers; if each class has a teacher's aide that totals to twelve to fourteen added people — and their cars.

Lunchroom capacity needs to be studied. With three lunch shifts, Cooke now has approximately 144 students in the lunchroom at one time and teachers with lunch-room duty are taxed and drained by the noon-time chaos in the cafeteria. In a school of 575 with three lunch shifts there will be 190 children in the lunchroom simultaneously. Noisy, overcrowded lunchrooms are hard on children. The students are rushed, lunches don't get eaten completely and children end up cranky and unable to concentrate by early afternoon.

With Cooke's extreme site constraints, any additional students means a direct trade-off between playground and parking and cafeteria overcrowding that will result in a new school that is not educationally adequate and detrimental to the livability of the neighborhood — what we have now.

#### 6) Prohibitive Cost

The July 2001 feasibility study calls for an allowance of 150 square feet per student. The first nine "tier zero" schools currently in construction have an average cost per square foot of \$266.3 The DCPS Capital Improvement Plan estimates a capital budget cap at \$226 per square foot for the next "tier one" projects, including H.D. Cooke. This is a full project estimate that includes planning, design, engineering, construction, project management and furniture, fixtures and equipment, but excludes swing space improvement and transportation costs. Using the capital budget estimate of \$226 per square foot, it is apparent that adding 142 students adds almost five million dollars to the cost of the Cooke project (142 students x 150 sq. ft./student x \$226/ sq. ft. = \$4,813,850. District tax payers cannot afford the cost of this increase in space because, with our very limited capitol budget, it comes directly at the expense of other schools in dire need of improvement.

### Recommendations on Student Enrollment:

- 1) Reduce school enrollment numbers to around 450.
- 2) Add Head Start classrooms if that is warranted after more study.
- 3) Figure on a grade distribution with: two Headstart (30 students), three pre-k (45 students), three kinder (54 students), three first (60 students), three second (60 students), three third (60 students), three fourth (60 students) and 20 special needs students.
- 4) Plan to move the sixth grade to the new Lincoln Middle School.

<sup>&</sup>lt;sup>3</sup> Cleveland \$230/sq. ft.; Thomson \$258/sq. ft.; Key \$238/sq. ft.; Barnard \$329/sq. ft.; Noyes \$321/sq. ft.; Miner \$286/sq. ft.; Randle Highlands \$287/sq. ft.; Patterson \$233/sq. ft.; Kelly Miller \$219/sq. ft. Source: Our City, Our Future: FY2000-FY2005, Capital Improvements Plan; FY2000 Budget, Volume 1., June 1, 1999; DCPS FY2002 Revised Capital Spending Plan; FY2003-2008 Capital Improvements Program, November 30, 2001; Office of Facilities Management Monthly Report, March 26, 2002. If the average cost of the tier 0 schools currently in construction is a more realistic reflection of costs (\$266/sq. ft.), then the additional students at Cooke would result in an added cost of \$5,665,880.

## B. Community Use

## Question: Has the community had sufficient opportunity to explore all possible uses?

### Concerns

Parents, students and neighbors want access to school amenities after normal school hours. Before and after care for students is expected, but the general community would like to take advantage of the school for literacy, computer, and English language classes for instance. Neighborhood groups want meeting space, use of the gymnasium, access to the stage for small musical and theatrical performances, and neighbors want to use the media center's computers. Folks are yearning for a real community center at Cooke. While research is just starting on how such a community hub might be organized, financed, and staffed, the school plans must address the possibility with minor but critical adjustments.

### 1) Need for some dedicated space for community purposes

A full menu of community activities would require modest administrative space (shared with before and after care?), for a dedicated staff person to organize, certify and schedule activities and watch over the building after 4:00 pm; a desk, phone, computer, small conference space, file cabinet, locker, key storage would be required. Space for free-standing locked storage closets for adult class materials might be planned to fit into the wide halls of the old building and there may need to be space for an extra security desk at a separate, public entrance to the gym or multipurpose space.

### 2) Need for design elements to facilitate shared school/community use

Several interior gates may have to be located strategically so that access to school administrative areas and regular classroom corridors is restricted while common areas, designated after-hours classrooms and toilets remain available.

Consideration should be given to the possibility of shared use of intermediate grade classrooms, or the art room, which might more easily accommodate adults. Proximity to shared space that could be used for childcare during adult classes should be considered along with the possibility of fencing a small portion of the playground for after-dark childcare outside.

The gym floor specifications should be modified to be appropriate for adult use. The gym should accommodate a court large enough for adult play and have a wood floor, not vinyl tile over concrete.

## Recommendations on Community Use:

Cooke must be planned to facilitate community use wherever possible and the specific requirements for community use need to be integrated into the design, not developed as an overlay.

More focus groups and discussions on community use and on the relationships between Cooke and Bell and Lincoln regarding multi-purpose space need to be undertaken.

## C: Multipurpose Space

## Question: Is the design appropriate?

The fundamental utility of a large, multi-purpose space must be examined, especially on such a small site because: 1) requirements for useable cafeteria and gymnasium space outweigh the need for a large assembly area; 2) the practicality/cost of a retractable dividing wall is questionable; 3) the need for a separate primary grades lunchroom is questionable; and 4) there are site constraints.

### Concerns

### 1) Triple-use Space Not Practical

It is doubtful that on an actual school day this large triple-use space will be much more useful to the school than the current cafeteria/gym/stage. Although there is a folding wall planned between the gym and the cafeteria, it is not likely to stop sound sufficiently enough that the performance area can be used while the gym is also in operation. Indeed, it may not be possible to use the gym during lunch period. Cafeteria noise may be so high that adding gym noise simultaneously will result in an intolerable din — which is what Cooke has now. In practice the multipurpose space will be used for one of the three functions at any time — it is one room, not three. While this might be fine for a school of 200 students, we know from the present situation with 433 students that it simply does not contribute to education.

### 2) Questionable Cost/Practicality of Retractable Screen

Further, the folding screen may be prohibitively expensive in the long run when replacement costs are figured in. Ease of use and repair costs also have to be considered. The total cost of the folding screen over the years will surely be much more than simply building a thick masonry wall between the cafeteria and the gym to stop the flow of sound.

## 3) Infrequent Need for Large Assembly Area

Obviously, without the folding wall, the possibility of opening the gym/cafeteria to house a really large assembly would be lost. However, the cafeteria and the gym will be used separately all day, every day, but neither the school nor the surrounding community needs to house a substantial assembly very often. Cooke is located within five minutes walk of three churches with large halls that could be used occasionally: Casa Del Pueblo United Methodist, National Baptist Memorial and All Souls Unitarian. Furthermore, the large new Lincoln/Bell auditorium should be finished at about the same time the new Cooke is completed and it is just slightly beyond the five-minute walk measured from Cooke.

## 4) Questionable Need for Primary Grades Lunchroom

The ed specs call for a separate primary grades lunch room of 925 square feet, slightly smaller than the standard pre-k classroom of 1,050 square feet; it is planned to accommodate 60 students and up to 10 adults per lunch session. There are no ancillary services planned for the room other than a drinking fountain. While the idea of a separate dining area for the younger students is fine in theory, it does not seem feasible in this case. Without food storage and clean-up facilities adjacent, lunches will have to be wheeled in from the main cafeteria for two shifts to accommodate 140 pre-k and kindergarten students, then all the solid and liquid trash has to be removed. This will over-burden the food service and custodial staff at their busiest time of day. It will also create two areas where special considerations have to be made for roaches and rats.

#### 5) Site Constraints

With the constraints of Cooke's odd, T-shaped site, keeping the multipurpose space as one massive footprint means it has to be located on the largest available space, necessarily taking up a good portion of what would otherwise be playground. Dividing the room's functions into two or three component parts and distributing those rooms elsewhere in the building would save playground and parking space on Cooke's peculiar site. (See attachments B and C and D.)

## Recommendations on Multipurpose Space Design:

- 1) Separate the gym, cafeteria and auditorium functions if possible or plan either a gym/auditorium or a cafeteria/auditorium.
- 2) Jettison the plan for a separate lunch room for the primary grades.
- 3) Keep the present cafeteria/assembly room.
- 4) Locate the gymnasium on Euclid Street.
- 5) Locate the media center in the new construction.

### Possible Solution Part A: Retain the Original Assembly Room and Cafeteria

The existing assembly room/cafeteria is what the neighborhood considers "their" portion of HD Cooke. It has served for meetings, voting, movie viewing, and other neighborhood activities since 1908. Furthermore, it is unique architecturally in the neighborhood, with massive columns and decorative molding around the ceiling and stage — architecture that our children are privileged to live with on a daily basis. It should be preserved and renovated with attention to improving the acoustics, visually opening up the original galleries with glass, re-opening the skylights, and extending the backstage area so that it is truly useful for small productions.

### Possible Solution Part B: Locate the Gym or Gym/Auditorium on Euclid St.

If the gym were sited at or slightly below grade on Euclid St., several problems might be solved. An active entrance to the school would be at sidewalk level, thus ridding the block of the "dead zone" that contributes to the lack of safety that is currently a problem along that street. Although connecting to the historic school might be awkward, such an entrance would provide easy access after regular school hours. Similarly, if the before and after care (and community use) offices were near the entrance with storefront-type windows facing the sidewalk, or if windows looked directly into the gym at eye-level, security on the block would be greatly enhanced. (See attachments C and D.)

#### Possible Solution Part C: Locate the Media Center in New Construction

The media center could be located in any new construction planned either above a new administration area or above a new set of primary classrooms. It is a much smaller, more compartmentalized set of spaces than either the cafeteria or the gymnasium and thus more easily accommodated into an irregular space. Indeed, if the enrollment size were to be further trimmed, the media center could comfortably fit into two combined classrooms in the old building.

## D. Entrances

## Question: Have we explored all possible options for the school entrances?

### Concerns

Cooke's front entrance has always been a problem. The historic entrance is handsome on the outside, and dynamic and decorative when you get inside, but it is confusing. The front door opens onto a split level between the ground floor and the first floor, immediately facing more stairs down to the cafeteria or more stairs up to the first floor. Unfortunately, there seems to be no perfect solution — every option has drawbacks. Furthermore, Cooke is facing a standard DCPS problem — the school requires access from many active doors.

#### 1) Historic Front Entrance

As indicated in all the plans, the original front entrance must be maintained. However, the area around the entrance could be enhanced with seating and plantings (of necessity with a low fence) in the spirit of the community garden indicated in some early drawings. This would provide continuity with the front garden of the Sarah's Circle (Senior Center) building next door, hopefully with a bench or two at sidewalk level to accommodate people who don't climb stairs.

#### 2) New Front Entrance

A new front entrance could be located about fifty feet into the alley, where a Euclid St. addition would attach to the historic structure. Although this places the main entrance at a distance from the sidewalk, the front door would be easily seen from the street and the alley is broad enough (20 feet) to serve as an open plaza in front of the entrance. (It would be about the same distance from the front of the building as the Euclid St. entrance planned in Option B-2.) In this location, the front entrance could provide site lines into the play ground entrance and the Euclid street entrance and might be located adjacent to the administration area. The plaza area could be a useful gathering place before school. Good lighting would be crucial. (See attachment C.)

## 3) Problems in Attaching to the Adjacent Row House

Attaching to the adjacent row house, considered in the Option B plans, compromises both the school and the house. The house is poorly maintained at present. If attached to the school, its value as residential property would be forever diminished, making any renovation less economically feasible. Zoning exceptions would have to be sought if it were to be put into use as, for instance, an office. Office space would be more compatible with the school but the neighborhood would not be likely to favor any zoning change.

The Option B plans use the existing lower level corner entrance to the historic school and enclose the alley to form a large glazed welcome area. This would necessitate entering first a large vestibule, then a long gallery, then turning before the administration area is reached. The entrance would be difficult from a security standpoint as well as confusing.

### 4) Euclid Street Entrance

If possible, any entry door on Euclid Street should be located next to a windowed office that is usually occupied by school staff or before and after care employees, so that the street activity is readily observable.

#### 5) Back Entrance

Care should also be given to the back entrance from the west alley as many of the staff members will use this door exclusively as a pathway from the parking lot. Here too, lighting will be important.

## Recommendations on Entrances:

- 1) Locate the Community Art garden/seating area around the historic front entrance.
- 2) Build a new entrance across the alley where the Euclid St. parcel meets the main building site.
- 3) Avoid attaching to the adjacent row house.
- 4) Locate the Euclid Street entrance near a windowed, occupied office.
- 5) Provide a pleasant door into the school from the parking lot.

## E. Site Design

Question: Have we preserved as much open space as possible for playground and parking?

### Concerns

### 1) Keeping the 1961 Addition

As it stands now, Cooke technically has all of the total square footage required, even for 500 students, with the exception of the large spaces that are missing in the old school: the gym and the media center. While part of this "excess" space is due to the old building's large hallways and stairwells, the number of rooms actually is sufficient for 430 students.

The school currently has twenty-one regular classroom spaces in the historic school with additional space for administration, teacher's room, music room, special education, and generous space for boiler room, custodian, supply storage, kitchen and cafeteria. The classrooms in the historic school are good sized, with adjacent cloakrooms and large windows. The 1961 addition has ten classrooms, six of which are quite small. The rooms, obviously, do not fit the standard ed specs exactly — some are much smaller, most are just a bit too small — but they are functional classrooms now. Completely renovated, incorporating the cloakrooms into the classrooms, with ample bathrooms, sinks in the classrooms, lockers in the halls, and an elevator, the historic school could serve the present population very well — especially if the administrative suite were returned to classroom use.

Renovating the 1961 addition would probably require that the six smaller classrooms be combined into four, and here too, additional bathrooms and modern classroom fixtures and an elevator would have to be added. Thirty classrooms would be available with this scenario, enough to cover art, music and special needs. With the Option-B plan, 29 classroom spaces are provided, including special education which means, for classroom space, the present building and the proposed building are equivalent. With 420 students, for instance about 20 regular classrooms are required: 30 classroom spaces would leave ample rooms for special education, music, art, pull-out ESL, teacher's room, and other special needs.

If the current configuration of buildings were thoughtfully renovated, with an additional modest addition for administrative space, gymnasium and media center, all of Cooke's needs could be met. This simpler addition could be accommodated by connecting with the Euclid Street parcel.

#### 2) Excavation Economics

One reason for removing the dirt was to increase security by gaining direct access from the sidewalk all around the school, thus increasing surveillance of neighborhood activity. However, turning the Euclid St. frontage into an active entrance at the sidewalk would address some of these safety issues. Re-designing the playground entrance from Mozart Place with a broad, inviting stairway would also help keep that street frontage along the playground area active. Two or three years of construction and opening a new school may in itself challenge the localized drug traffic culture on the block and go a long way toward solving some of the public safety issues.

The other reason for the excavation was to simplify the problems involved with connecting the lower level of the historic school with the new construction. Solving these problems without the total site excavation will be more difficult and possibly less elegant, but any additional cost must be carefully weighed. It will be cheaper, and much more ecologically sound, to work the problems out with paper and pencil rather than with front-loaders and dump trucks.

If the excavation is to be complete, and roughly ten feet of soil is removed from the Euclid Street and Mozart St. sides of the site, it appears that substantial retaining walls will be required along the back yards of the townhouses on 17th Street, and lower walls along the south (back) of the Sarah's Circle building on

Fuller St. If this eliminates access to the backyard parking of the Sarah's Circle building it would, of course, be objectionable to them. How the elevation differential would work along the service alley at the north of the school is also unclear; would the alley have to be closed and re-built at two levels, with access and egress exclusively from 17th Street, and parking lot access and egress only from Mozart?

### 3) Playground Adequacy

Because Adams Morgan is so urban, neighbors put a high value on open leafy space. Children in the apartment buildings on the block need this play area badly and adults need the open space. As a general community amenity, the playground may be more important than the school.

With such intense use, grass is nearly impossible. The play-field area should be planned for artificial turf and carefully graded and prepared with a porous substrate of crushed rock and sand so soccer-field grade artificial turf can be properly installed — this should be automatic for schools with constrained space. While initially expensive, it saves the cost of mowing over the years while providing an almost continuously useable surface.

Numerous raised planting beds should be planned for trees and shrubbery and for classroom garden projects. Hardscape should include an adult-sized, lighted basketball court, with child-height hoops installed to create two half-courts during the school day.

Fencing around the basketball area should be tall enough to contain stray balls.

Several water fountains should be available with one close to the basketball court.

The hardscape should also include space for jump rope (Cooke has had a champion double-dutch team), hopscotch, etc, with a drained area near a hose bib that would provide space for summer-school water play.

Trees should be sited for maximum shade at noon when students are out for recess. Trees should not form a screen to block views into the playground from the street.

Outdoor lighting around the school should be more than just stark security lighting but must be pleasant to be in and look out on. Outdoor lighting should be sturdy, and caged, with bulbs that are easily replaced. This is particularly important at Cooke because it is literally the backyard for hundreds of people in the surrounding apartment buildings.

## 4) Parking Adequacy

Underground parking was discussed as a possibility during the first community meeting. The idea was later dismissed as too expensive and a security risk. Without that option, parking trade-offs are very tight on this site. At present, about 40-45 parking places are taking up functionally half of the main school yard behind the school. Current plans call for 33-36 parking spots for a larger school.

However, if the parking is strictly delimited from the play area, which is not the case now, and if the playground is planned so that every inch is useable, 40 parking spaces could be provided. In a scenario that retains the 1960's addition, only the current plan for 33-35 spaces is practicable because of severe constraints on playground space.

Tandem parking would be required so that teachers will have to coordinate parking with keys controlled in the main office. This system has been successful at other schools where teachers work out the inconveniences because they need their cars. Parking will remain inadequate and teachers must accept assignments at Cooke knowing that they may have to walk, bike, or take public transportation. However, public transportation is excellent with numerous bus lines crossing within two blocks of the school and the Columbia Heights Metro less than a ten minute walk away.

## Recommendations on Site Issues:

- 1) Consider using the 1961 addition.
- 2) Try to work out the plan for Cooke without excavating the entire site.

- 3) Preserve open space for neighborhood and students; develop full site schematics with play equipment, outdoor basketball, play field and trees, now, not as an afterthought to the building.
- 4) Increase parking from the existing scheme. Forewarn staff members that parking will not increase after construction.

## F. Green Design

## Questions: Have all possible opportunities been explored?

Because Cooke is in such a thoroughly paved, densely populated urban setting, neighbors truly value quiet, open space and vegetation. Sustainable design is particularly important here where the sun on the blacktop and the roofs creates a microclimate that can be stifling.

### Concerns

#### 1) Noise Pollution

With so many people living in close proximity, noise pollution is critical. The new school's air handling units have to be as quiet as possible even if this is an added expense. The surrounding apartment buildings are not centrally air-conditioned and people typically have their windows open in fair weather. Residents cannot be subjected to the excessive noise of someone else's central air.

#### 2) Green Roof

The possibility of a small, demonstration green roof for the new school should be considered. It would be a living science lesson for students and would provide DCPS with a positive innovative showcase. In the long term, reduced energy costs and longer roof life should recapture whatever design alterations have to be made to support a planted roof. Similarly, simple systems to filter and channel rainwater run-off from all the roofs should be studied and incorporated into the design.

Grants are available from the Watershed Protection Division of the District's health Department and the Chesapeake Bay Foundation which could be used to study these sustainable design possibilities.

## 3) Permeable Parking and Play Areas

Artificial turf can't help clean the air, but at least it will allow rainwater to filter slowly. Similarly, rather than the DCPS standard recycled rubber surface around the play equipment, Cooke should use deep wood chips in order to achieve a water permeable surface. While wood chips have to be added periodically, they are cooler and less dangerous with respect to imbedded glass. Shards of glass get buried deep in the chips rather than sticking out at the surface which is a regularly recurring problem in Adams Morgan.

Similarly, grass pavers could be planned for the parking lot. These are a pavement of grid-patterned concrete flagstones set directly on graded soil so short grass can grow through the pattern. The parking area will be in such constant use that there should be little problem with overgrowth. The parking lot would be green and allow water to flow slowly into the storm drains.

## Recommendations on Green Design:

- 1) Make certain that air-handling units are quiet.
- 2) Make a real effort to include a green roof and recapture runoff.
- 3) Make every effort to use permeable surfaces on the playground and parking areas.

## G. Budget

## Question: Is the currently approved design plan cost effective?

#### Concerns

### 1) Affordability of Two Additions

Building two large (although connected) additions to the school, one on the Euclid St. lot (the primary classrooms) and another at the back of the school (the large multipurpose space) requires two major foundations, roofs, etc., which contribute more to the expense than would a smaller, simpler construction area. A single addition on the Euclid Street side with a less extensive attachment to the historic school might make more sense. (See attachments B and C.)

### 2) Affordability of Atrium Roofs

The Option B plans appear to depend on expanses of atrium-type roofs over the "interior street" planned to connect the historic school to the multipurpose space and the primary wing. While this provides a dramatic solution to linking three buildings into one, providing great circulation, and some indirect day-lighting to the buildings connected, it creates real problems in terms of initial cost, as well as heating and cooling costs, cleaning costs, and all too soon, maintenance and repair costs. DCPS's track record on maintenance over the past quarter century argues for the barest minimum when it comes to glass roofs. If smaller skylights will not suffice, a different solution entirely must be sought. A detailed and realistic accounting for the construction costs and long-term maintenance and repair costs must be carefully scrutinized before moving forward with atrium roofs, the interior street or even banks of skylights.

The interior street would be pleasant for those on the street and under the glass — assuming highly effective heating and air conditioning — but roofing over the connection between the buildings will not allow enough daylight into the adjacent classrooms, especially in the south ell of the 1908 building. They will remain in a perpetual twilight, dependent on fluorescent fixtures.

#### 3) Cost Estimate Details

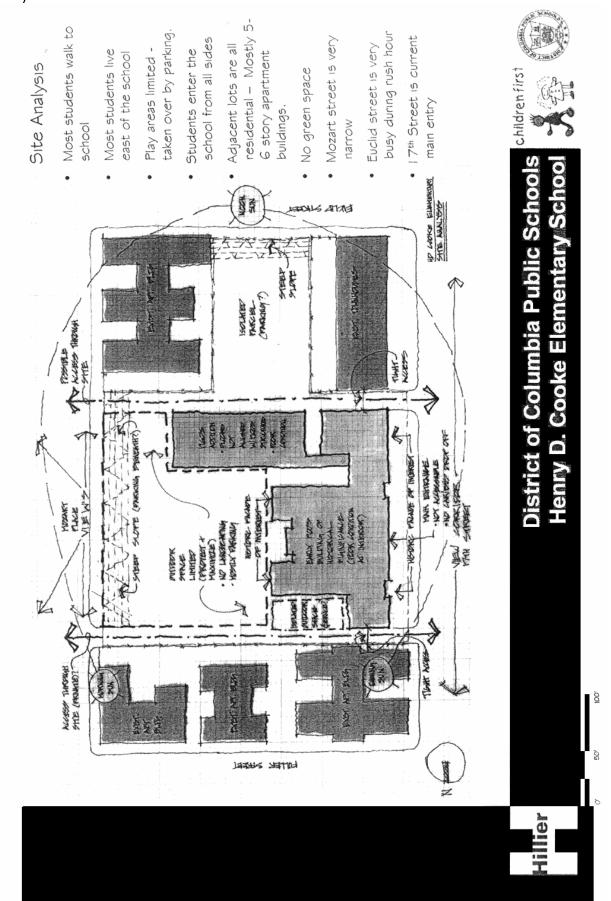
The quality of the cost estimates for this project is critical. Detailed information about what specifically has been included must be forthcoming before any final design decisions are made. It is unclear where in the project budget there are provisions for such things as carpets, furniture, computers, sinks, cabinetry, telephones, copiers, library books, stage curtains, sound system — all the final items that will make the school truly functional. Assuming that the built portion of the playground is included in construction costs — grading, gravel, fencing, hard paving, and soft paving, stairways, hand railings, planting beds — where are the line items for the actual play equipment and the artificial turf, without which, the playground will not be really useable? If not already accounted for, how much will these items add to the \$14 million price tag?

## Recommendations on Budget:

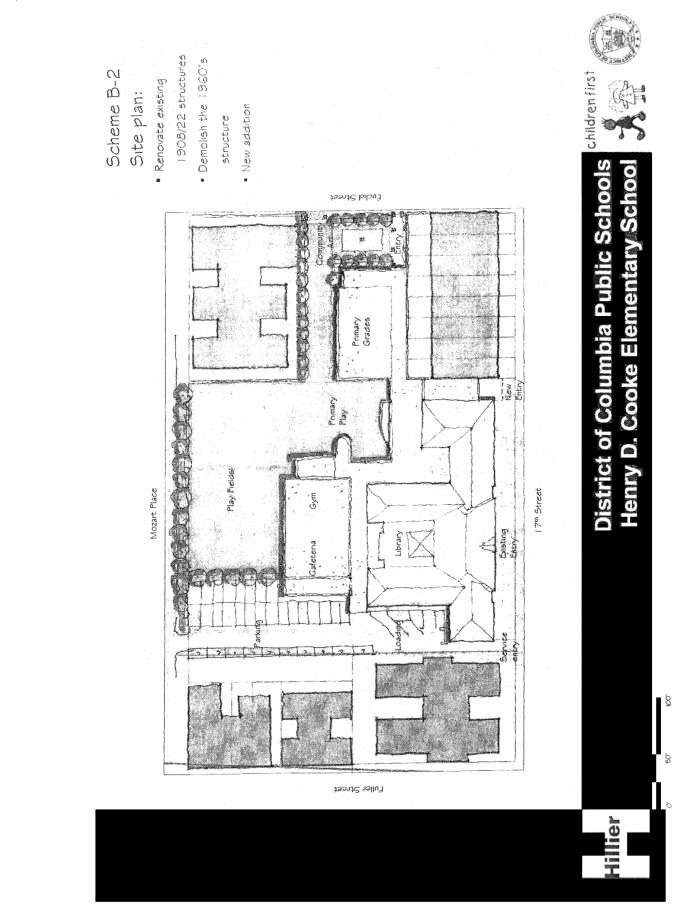
- 1) Review the extent of the planned construction, making every effort to condense the footprint.
- 2) Re-work the plan for the interior street with atrium-type roofs.
- 3) Provide a more detailed estimate of the entire cost of the project.

## H. Attachments

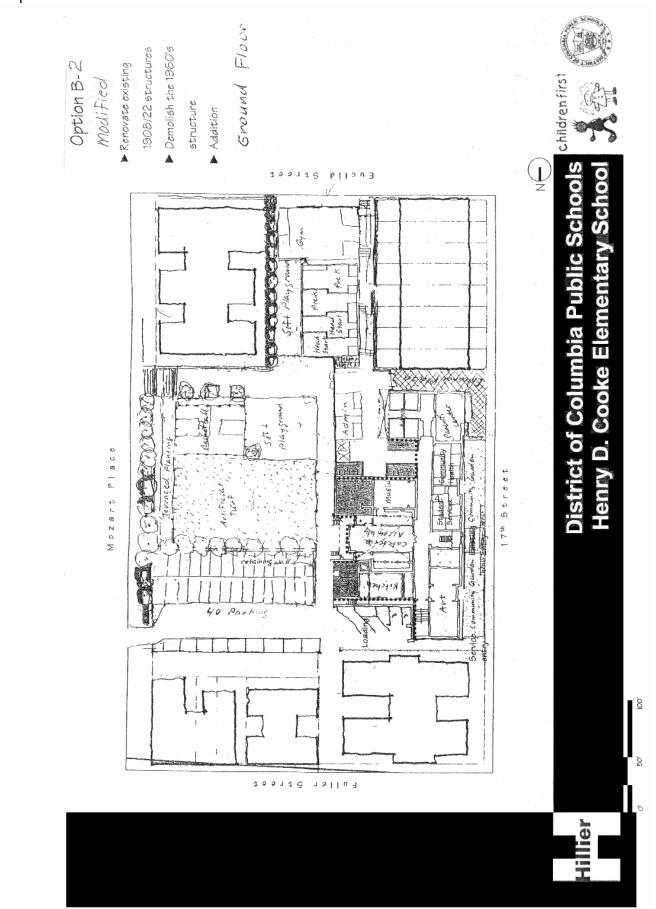
## A) Site Analysis



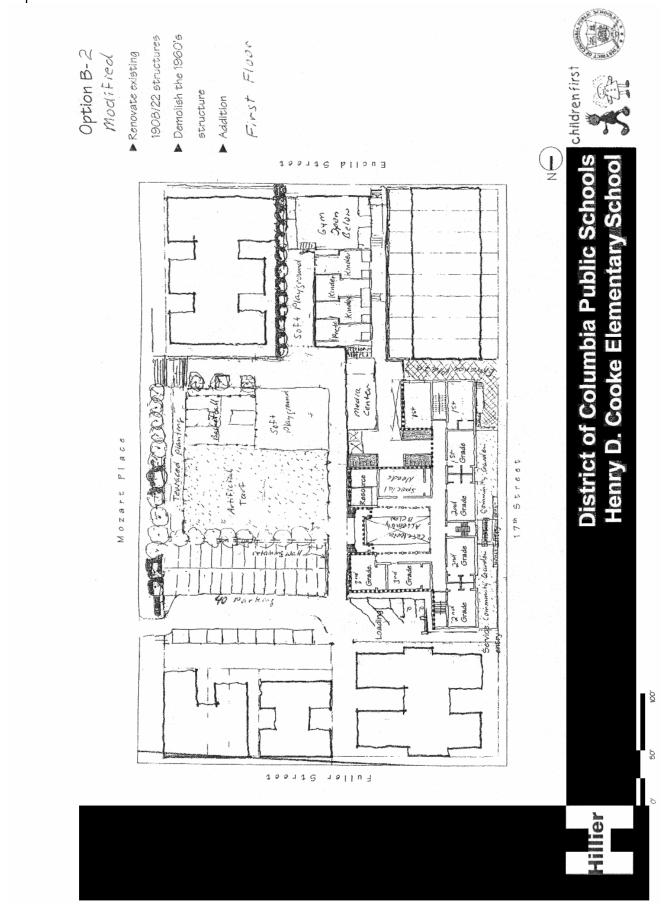
## B) Scheme B-2 Site Plan



## C) Option B-2 Modified: Ground Floor



## D) Option B-2 Modified: First Floor



## E) Option B-2 Modified: Second Floor

