# Patrick Henry Feasibility Study

School Board Presentation May 14, 2015









### Purpose

- Purpose of the study is to evaluate the feasibility of an addition/renovation versus new construction project for a PreK-8 school at the Patrick Henry site.
- Purpose of the presentation is to review the content of the study which includes existing site and building analysis, an architectural program, analysis of four masterplan options, comparison of the options, project cost estimates, recommendations for next steps, and an appendix with supporting documentation.





## **Existing Conditions Analysis**

### **Existing Site Analysis**

- Unsafe, inefficient bus and car circulation
- Play areas not age specific
- No Kiss & Ride
- Underutilized tennis court

### **Existing Building Analysis**

- Building is in fair condition, some leaks are evident
- Deterioration of structural elements and mechanical equipment
- Unsafe exit paths around modular classrooms
- Accessibility upgrades needed
- No flexible education space

# **Development of Program**

The approved PreK-8 Educational Specifications was used as a starting point, and was modified taking into account feedback from the following sources:

- City and ACPS Core Group Meetings
- Curriculum Meetings
- Recreation Center Program Meeting
- Community Meetings
- Stakeholder Meetings
- Code/Zoning Officials
- Other ACPS and Recreation Center Staff Engagement

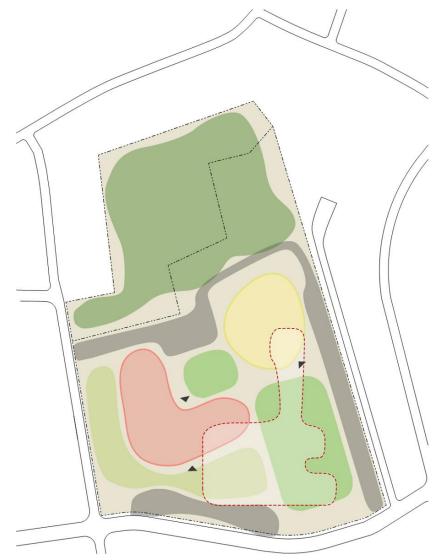


# Design Principles

- Keep as much of existing school in operation during construction as possible to minimize swing space
- Respect Smaller Scale Residential Context
- Primary Site Access from Taney Ave.
- Distribute Vehicular Access to Avoid Congestion
- Locate Parking Away from Taney & N. Latham Corner
- Maximize Outdoor Public Space
- LEED Silver Sustainable Design
- Budget

# New Building Option 1A

- The school is placed at the corner of Taney Ave. and N Latham St.
- This allows 75% of the existing building to be occupied during construction
- Multipurpose field goes over existing building, becomes forecourt for Recreation Center
- Bus loop is on Taney Ave.
- School is set back from N Latham St.
- Low, 2-story massing along N Latham St., 3-story massing along Taney Ave.





**New Building Option 1A – Site Plan** 



- Plentiful open space, Multipurpose field acts as a forecourt
- 2-story volume is sensitive to N. Latham neighbors
- 3-story along Taney Ave. activates street frontage, while remaining at a comfortable distance from Taney Ave.
- Sheltered play area
- Recreation Center is visible from Taney Ave

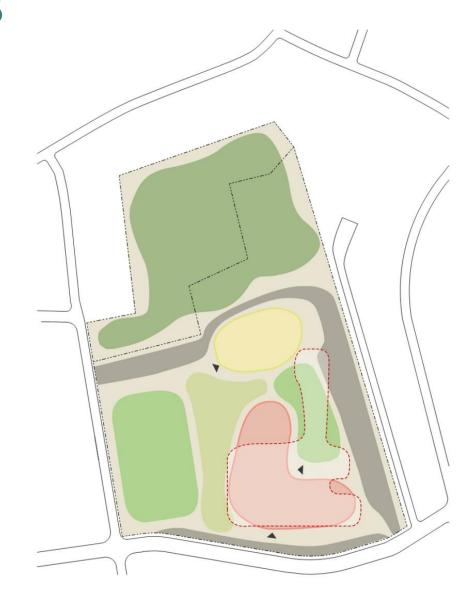
- Moving Recreation Center to back of site cuts up contiguous green space
- Swing space needed for 25% of existing building



**New Building Option 1A – Perspective from Taney Ave** 

# New Building Option 1B

- Same building design as 1A, locates new school in same place as existing school
- Multipurpose field on corner of Taney
  & N. Latham
- This option has the most open space between N. Latham and School
- 2-story wing on Taney Ave, 3 story wing points north
- Bus loop on Taney Ave





New Building Option 2 – Site Plan

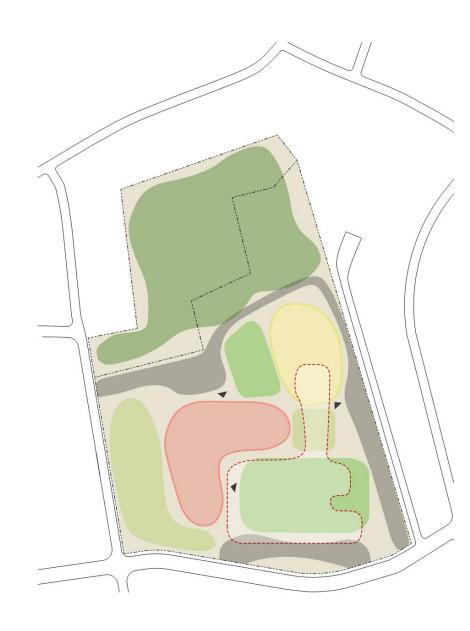


- Large open space on N. Latham Street, sensitive to neighbors
- Parking on N Latham St. is smaller than other parking lot, less traffic on N Latham St.
- Large volume of Recreation Center in back of site
- Two-story massing along Taney Ave. sensitive to neighbors on Taney Ave.

- Requires demolishing all of the existing building before construction, needs the most swing space of all options
- Play areas are near parking
- View of Recreation Center is blocked by school from Taney Ave
- 3-story volume in center of site cuts site into two halves

# New Building Option 2

- All of the existing school remains in use during construction, only Recreation Center wing is demolished
- Open green space on N. Latham
- Requires no swing space
- Multipurpose field fronts Taney Ave.
- 3-story wing parallel to N. Latham, set back
- 2-story wing parallel to Taney Ave.
- Bus loop on Taney Ave.





New Building Option 2 – Site Plan



- Entire existing school remains in operation during oconstruction
- Compact building massing frees up open space
- Outdoor Learning Space on 3rd floor
- Green space along North Latham Street

- 3-story building massing adjacent to N Latham St.
- Building volume disconnects program spaces into two blocks



**New Building Option 2 – Perspective from Taney Ave** 

Renovation / Addition Option

- Keeps important parts of existing building – Mechanical room, Auditorium, Cafeteria
- 3-Story addition along Taney Ave.
- Modular classrooms are removed, atrium constructed in its place
- Multipurpose field on corner of N. Latham and Taney
- Bus loop on Taney Ave.





Renovation / Addition Option - Site Plan



- New face to school along Taney Ave.
- Recreation Center & School each have own presence to community.
- Majority of building volume positioned along Taney Ave.
- Sheltered play area

- Requires swing space during renovation of existing building
- Large building footprint, less open space on site
- Recreation Center is hidden by school from Taney Ave.
- Existing renovated building with shorter life cycle
- Longest construction duration required.



Renovation / Addition Option – Perspective from Taney Ave

# **Comparison of Options**

OPTIONS	NEW BUILDING OPTION 1A	NEW BUILDING OPTION 1B	NEW BUILDING OPTION 2	RENOVATION + ADDITION
MEETS SCHOOL PROGRAM	√	√	√	✓
MEETS SITE PROGRAM	√	✓	√	✓
SITE ORGANIZATION	New school building built around the existing school building. Field located on the site of the existing school	Field located along N Latham St., new school built on the site of the existing school	New school building built around the existing school building. Field located on the site of the existing school	Field placed along N Latham St. Existing school building renovated. New addition built along Taney Ave.
BUILDING ORGANIZATION	2-story wing built along N Latham St. 3-story wing built along Taney Ave.	2-story wing built along Taney Ave. 3-story wing in the center of the site	3-story wing built along N. Latham St. 2-story wing built facing Taney Ave.	3-story new addition built along Taney Ave.
CONSTRUCTION	Requires swing space for 11 classrooms during construction	Requires swing space for 40 classrooms + admin + dining area during construction	None required	Requires swing space for 11 classrooms during construction
BUS/PARKING	Accommodates 12 buses and 190 cars. Separate bus loop within the site	Accommodates 12 buses and 190 cars. Lay-by lane on Taney Ave. for buses	Accommodates 12 buses and 190 cars. Separate bus loop within the site	Accommodates 12 buses and 190 cars. Lay-by lane on Taney Ave. for buses
GREEN SPACE	Large open green area along N Latham St. and Taney Ave.	Large open green area in the center of the school	Large open green area along N Latham St.	Smaller open green area
TOTAL COST	\$ 39,238,714	\$ 41,738,714	\$ 38,507,017	\$ 37,677,748

# **Cost Estimate Summary**

#### **Included in Estimate:**

- Construction
- Demolition
- Sitework
- Green Roof
- Construction Management
- Design Contingency
- Logistics/Swing/Phasing
- Inflation Adjustment

#### **Excluded from Estimate:**

- Hazardous Materials Abatement
- Special Geotechnical Work
- Traffic Study & Controls
- Temporary Utilities
- Real Estate due diligence, appraisal
- Project & Contract Management
- Financing, Accounting fees
- Legal services
- Permit & Regulatory fees
- Design fees
- Field Survey
- Inspections & Testing
- Furniture, Fixtures & Equipment
- Moving & Storage

# **Cost Estimate**

OPTIONS	NEW BUILDING OPTION 1A	NEW BUILDING OPTION 1B	NEW BUILDING OPTION 2	RENOVATION + ADDITION
BUILDING	\$ 34,101,142	\$ 34,101,142	\$ 33,880,962	\$ 32,838,571
BUILDING DEMOLITION	\$ 518,130	\$ 518,130	\$ 518,130	\$ 238,673
SWING COST	\$ 511,517	\$ 3,011,517	\$0	\$ 492,579
SITEWORK	\$ 3,883,725	\$ 3,883,725	\$ 3,883,725	\$ 3,883,725
OUTDOOR MULTI-PURPOSE FIELD	\$ 224,200	\$ 224,200	\$ 224,200	\$ 224,200
TOTAL COST	\$ 39,238,714	\$ 41,738,714	\$ 38,507,017	\$ 37,677,748

# What is included in the Appendix

### **Existing Facility Condition Assessment**

- Architectural (Building Envelope Analysis)
- Structural
- Civil Site Survey
- Geotechnical Survey
- MEP and Fire Protection

### **Cost Estimate Report**

### **Meeting Minutes**

### **Next Steps**

### **Preferred Option 2**

### **Site Planning Advantages**

- School is set back from N. Latham, limiting the impact on these residents
- Open green space along both streets
- Multi-purpose field creates a buffer between multifamily apartments and school
- Bus loop and most parking is off of Taney Ave, with a smaller parking area for the Recreation Center off of N. Latham
- Recreation center is visible from both N. Latham Street and Taney Ave.

### **Construction Advantages**

- The plan as proposed is consistent with the CIP budget
- Existing building to remains in use throughout construction
- Cost of trailers can be used to produce the best possible school building
- A new state of the art facility will have a longer life span than a renovation

### Discussion









Superintendent

Dr. Alvin L. Crawley

**School Board** 

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