SCHEDULE & RECENT MEETINGS
BLPC MEETINGS

1. Introductions and Discussion
   April 8, 2015

2. Visioning and Site Planning
   April 20, 2015

3. Site Planning and Massing
   May 4, 2015

4. Learning Environments
   May 18, 2015

5. Preliminary Concepts
   June 1, 2015

6. Concept Development and Value Analysis
   June 15, 2015

7. Preferred Concept and Conclusions
   June 29, 2015

8. Concept Development, continued
   July 13, 2015

9. Preferred Concept
   August 3, 2015

10. Review of School Board Presentation
    September 2015, TBD
OPTION C2 - “TERRACE”

VACATION LANE TO OLD DOMINION WITH LEVEL 1 PLAZA

- Connection from Vacation Lane to Old Dominion
- Can enter/exit from Old Dominion
- Existing bus loop widened for more capacity
- Entry/Drop-off Plaza at Level 1
- No change to park or west parking
- Field shifts east
- **145 parking spaces**
OPTION C2 - “TERRACE”

LEVEL 1 PLAN

LEGEND
- Existing Circulation
- Existing Program
- Proposed Circulation
- Proposed Program

- Media Center
- Soccer and Ultimate Frisbee Field
- Entry Plaza
OPTION C2 - “TERRACE”

MASSING

Phase 2 addition

Phase 1 addition
OPTION C2 - "TERRACE"

MASSING - Contextual Response

- Low massing preserves view of existing gym and classroom facades
- Courtyard enhances the existing symmetry
- Projecting main drop-off entrance; vocabulary of the historic main entrance
- Field is shifted but the size is maintained
OPTION C2 - “TERRACE”

MASSING - Program & Circulation

- Occupiable Green Roof
- New Drop-off & Field Entrance
- New Parent Drop-off Plaza
- New Auxiliary Gym & Lockers
- New ADA Elevator Connecting All Floors
- Stratford Program Converted to Media Center Adjacent to Courtyard
- Classrooms & Electives

Arlington Public Schools
Stratford Middle School - 8
OPTION C2 - “TERRACE”

PERSPECTIVE
OPTION C3 - “LINK”
VACATION LANE TO OLD DOMINION WITH SIGNAL

- Expanded bus drop-off at existing location
- New parent drive from Vacation Lane to Old Dominion
- Entry Plaza/drop-off at west end of addition
- Signal at Old Dominion allows right and left exits
- No change to park or west parking
- Field shifts south
- 155 parking spaces
OPTION C3 - “LINK”

LEVEL 1 PLAN

LEGEND
- Existing Circulation
- Existing Program
- Proposed Circulation
- Proposed Program

- Soccer and Ultimate Frisbee Field
- Lockers
- Auxiliary Gym

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Stratford Middle School - 11
OPTION C3 - “LINK”

MASSING

Phase 1 addition

Phase 2 addition
OPTION C3 - “LINK”

MASSING - Contextual Response

Atrium provides the opportunity to preserve and protect the historic south facade.

Maintain vocabulary of historic facade.

New Addition will maintain the historic relationship of the classroom core to the field.

Projecting form at new entrance; vocabulary of the historic main entrance.

Symmetrical and vertical elements respond to the historic facade beyond.

Trees preserved.

Follow the historic precedent of massing that directly reflects the use of the interior spaces.

Atrium reduces the amount of building envelope, improving energy performance.

Atrium reduces the amount of building envelope, improving energy performance.
OPTION C3 - “LINK”

MASSING - Program & Circulation

- Enclosed Atrium
- Classrooms & Electives
- New ADA Elevator Connecting 3 Floors
- Renovated Media Center
- Improved Building Circulation
- Stratford Program Converted Auxiliary Gym & Lockers
- New Parent Drop-off Plaza
- New Parent Drop-off Plaza
OPTION C3 - “LINK”

PERSPECTIVE
OPTION G2 - “HILL”
IN / OUT FROM OLD DOMINION W/ STRUCTURED PARKING

- Expanded bus drop-off at existing location
- New parent loop off of Old Dominion
- Signal at Old Dominion allows right and left exits
- 1 level structured parking under drop-off loop
- No change to Stratford field
- 144 parking spaces
OPTION G2 - “HILL”

LEVEL 2 PLAN

LEGEND
- Existing Circulation
- Existing Program
- Proposed Circulation
- Proposed Program

Garage below at Level 1

New Entry

Media Center below

Soccer and Ultimate Frisbee Field +280'

+310' +305' +320' +310'

+290' +280' +270'

Quinn Evans Architects

Arlington Public Schools
Stratford Middle School - 17
OPTION G2 - “HILL”

MASSING

Phase 2 addition

Phase 1 addition
OPTION G2 - “HILL”

MASSING - Contextual Response

- Low massing preserves view of existing building
- Enhance visual & physical connection to the field
- Symmetrical approach to media center and central stair tower
- Landscape approach preserves open space
- Skylight with view to tower from media center
- Low massing preserves view of existing building
OPTION G2 - "HILL"

MASSING - Program & Circulation

- New Parent Drop-off Plaza
- Stratford Program Converted Auxiliary Gym & Lockers
- Circulation Concentrated on the West
- Classrooms & Electives
- New ADA Elevator Connecting All Floors
- New Media Center
OPTION G2 - "HILL"

PERSPECTIVE
• Vacation lane widened as much as possible
• Parking garage under field: 135 spaces
• Can work with several schemes
• Field either left at existing elevation, or raised 5’.
• Existing bus loop for pedestrians and bikes only
### Site Criteria

- **Limit disturbance to existing DPR property**
- **Preserve and enhance existing field uses and site amenities on APS property**
- **Minimize environmental impacts: stormwater, non-permeable surfaces, RPA boundary**
- **Provided flexibility for phase 2**
- **Balance site and building costs ($ only includes road and concept regrading)**

### Building Criteria

- **Provide an addition that enhances the arrival and internal circulation network**
- **Respect and compliment existing historic character**
- **Maximize building construction efficiency**
- **Provide optimal daylighting and learning environments**

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**Option Comparison Matrix**

<table>
<thead>
<tr>
<th>OPTIONS</th>
<th>A</th>
<th>A1</th>
<th>A2</th>
<th>C2</th>
<th>C3</th>
<th>G2</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>SITE CRITERIA</strong></td>
<td></td>
<td></td>
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<td></td>
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<td></td>
</tr>
<tr>
<td>Limit disturbance to existing DPR property</td>
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<td></td>
<td>green</td>
<td></td>
<td></td>
<td>red</td>
</tr>
<tr>
<td>Preserve and enhance existing field uses and site amenities on APS property</td>
<td></td>
<td></td>
<td>yellow</td>
<td></td>
<td></td>
<td>green</td>
</tr>
<tr>
<td>Minimize environmental impacts: stormwater, non-permeable surfaces, RPA boundary</td>
<td></td>
<td></td>
<td>yellow</td>
<td></td>
<td></td>
<td>green</td>
</tr>
<tr>
<td>Provided flexibility for phase 2</td>
<td></td>
<td></td>
<td>yellow</td>
<td></td>
<td></td>
<td>green</td>
</tr>
<tr>
<td>Balance site and building costs ($ only includes road and concept regrading)</td>
<td></td>
<td></td>
<td>yellow</td>
<td></td>
<td></td>
<td>green</td>
</tr>
</tbody>
</table>

**KEY:**
- Green: Satisfies criteria and already optimized
- Yellow: Satisfies criteria but not yet optimized
- Red: Does not satisfy criteria and satisfying criteria would be challenging
- Pink: Could satisfy criteria with changes

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**Quinn Evans Architects**

Arlington Public Schools
Stratford Middle School - 23
• 446 trees identified on Stratford APS site by arborist

• Trees assigned priority levels 1-4 for preservation

• Do not have survey info or tree inventory for the DPR site
EXISTING TREES

PRIORITY LEVEL 1

- Priority Level 1: Tree in good condition with some specific value

- Only one (1) tree on the Stratford property given this designation at this time.

- Arborist reviewing completed tree survey data and some designations may change
EXISTING TREES

PRIORITY LEVEL 2

• Priority Level 2: Fair to good condition; should try to preserve

• 136 trees designated at this level
**EXISTING TREES**

**PRIORITY LEVEL 3**

- Priority Level 3: Fair at best. Retain if no impact.
- 131 trees designated at this level.
EXISTING TREES

PRIORITY LEVEL 4

- Priority Level 4: Poor or less, typically recommended for removal.
- 57 trees designated at this level
EXISTING TREES

PRIORITY LEVEL UNKNOWN

- 39 trees surveyed, but not included in arborist inventory
- Some located in DPR property
EXISTING TREES

DPR PROPERTY

- Estimated locations of trees on DPR property
• Site option C2 has the greatest impact on existing trees.
• Site regrading impacts trees even if they are not located on the proposed road.
**OPTION C3 - TREE IMPACT**

- Some trees impacted because field is shifted south
- Regrading for site road impacts trees northeast of Old Dominion
- Currently studying realignment of portion of road between entry plaza and Old Dominion to minimize tree impact
OPTION G2 - TREE IMPACT

- Minimal impact to APS property in Phase 1
- Impact is mostly on DPR property; trees shown are estimated based on aerial imagery.
- Phase 2 impact would be greater with addition along Old Dominion perpendicular to Phase 1 addition
RESPONSE TO BLPC QUESTIONS

GSF PER SCHEME

Terrace = 48,000 GSF

Link = 50,000 GSF

Hill = 47,000 GSF
RESPONSE TO BLPC QUESTIONS

C2 “TERRACE” - SECTION - DAYLIGHT OPPORTUNITY

THE TERRACE
RESPONSE TO BLPC QUESTIONS
C3 “LINK” SECTION

FIRST FLOOR
292' - 6"
SECOND FLOOR
305' - 10"
THIRD FLOOR
319' - 2"
BASEMENT
273' - 8"

THE LINK
RESPONSE TO BLPC QUESTIONS

C3 “LINK” SECTION

The Link
Additional Story

Arlington Public Schools
Stratford Middle School
RESPONSE TO BLPC QUESTIONS

G2 PARKING GARAGE

- Approximately 70 spaces at Level 1 (El. + 290’)
- Connection to Level 1 at new entry / existing Stratford entrance
- Garage with two levels would yield approximately 110 spaces. Total of 177 on site, which is not enough for Phase 2 TDM.
APS Stratford Project
Transportation Analysis Overview

Stratford BLPC #8

July 13, 2015
Outline

- Recent and Upcoming Project Activities
- BLPC 7 Follow-Ups
Recent & Upcoming Project Activities

- July 13—Meeting with County to discuss recommendations
- July 16 – PFRC Meeting
- July 22 – School Board Gallery Walk
1. APS middle school **drive rate is higher in the morning** than afternoon.

2. Traffic analysis assumes **35% drive rate as a baseline**, and **30% drive rate in a Transportation Demand Management (TDM) Scenario**.

3. Future middle school morning traffic will be **concentrated over a shorter period** compared to current conditions, and will occur earlier than the highest peak of morning rush hour traffic.

4. With these assumptions, **some intersections in the area will experience increased delay**. Degree and location of intersection delay varies between site options.
2. Traffic Analysis: Drive Rate Assumption

Source: 2013 and 2014 APS GO! Student Travel tallies (AM counts)

Range of APS Middle School Drive Rates

- Average MS drive rate (28%-29%)
- Williamsburg MS (41% in 2013 & 32% in 2014)
- Swanson MS (24% in 2013 & 2014)

Parent Survey--33% drive rate for Williamsburg in 2013
2. Traffic Analysis: Drive Rate Assumption

Range of APS Middle School Drive Rates

- Average MS drive rate (28%-29%)
- Swanson MS (24% in 2013 & 2014)
- Williamsburg MS (41% in 2013 & 32% in 2014)
- Baseline scenario drive rate assumption: 35%

Source: 2013 and 2014 APS GO! Student Travel tallies (AM counts)
2. Traffic Analysis: Drive Rate Assumption

Range of APS Middle School Drive Rates

- Average MS drive rate (28%-29%)
- Swanson MS (24% in 2013 & 2014)
- Williamsburg MS (41% in 2013 & 32% in 2014)

TDM scenario drive rate assumption: 30%
Baseline scenario drive rate assumption: 35%

Source: 2013 and 2014 APS GO! Student Travel tallies (AM counts)
# Stratford TDM Potential—Drive Rate by Distance

Drive rate for students who are not eligible for APS bus services by distance

<table>
<thead>
<tr>
<th>School</th>
<th>Drive Rate—Less than 0.5 miles</th>
<th>Drive Rate—Greater than 0.5 mile up to 1 mile</th>
<th>Drive Rate—Greater than 1 mile</th>
<th>Overall Drive Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Williamsburg</td>
<td>24.1%</td>
<td>65.2%</td>
<td>68.8%</td>
<td>33%</td>
</tr>
<tr>
<td>Swanson</td>
<td>9.8%</td>
<td>36.4%</td>
<td>49.1%</td>
<td>29%</td>
</tr>
<tr>
<td>All</td>
<td>17.9%</td>
<td>35.1%</td>
<td>49.2%</td>
<td>26%</td>
</tr>
</tbody>
</table>

- Drive rate for students within ½ mile of school substantially lower compared to students living further out.

*Source: 2013 Parent Survey*
### Stratford TDM Potential—Students Within 1 Mile

- 74% more APS students live within ½ mile of Stratford compared to Williamsburg.

<table>
<thead>
<tr>
<th>School</th>
<th>APS Students Within ½ Mile</th>
<th>APS Students Within 1 Mile</th>
</tr>
</thead>
<tbody>
<tr>
<td>Swanson</td>
<td>901</td>
<td>3,183</td>
</tr>
<tr>
<td>Stratford</td>
<td>869</td>
<td>2,560</td>
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<tr>
<td>Williamsburg</td>
<td>500</td>
<td>1,753</td>
</tr>
</tbody>
</table>

Source: 2013 student address data
Stratford TDM Potential—Student Density by Census Block

**Student Density by Census Block**
- Low
- Medium
- High

**Distance From School**
- 1/4 Mile
- 1/2 Mile
- 1 Mile
Stratford TDM Potential—Walk/Bike Infrastructure
OPTION G2 – 1000 Seat School

- Signal queue backs into drop-off zone
OPTION G2 – 1300 Seat School with TDM

- Signal queue backs into drop-off zone
- Drop-off queue backs closer to OD
OPTION G2 – 1300 Seat School with TDM

• Illustrates moving the drop-off zone back to accommodate the signal queue
• Drop-off queue backs onto OD
OPTION C2 (Previously Studied)

- Minor Changes between C2 and C3 for traffic analysis
- This illustrates the movements where the distribution will change
OPTION C3 (Not Studied)

- This illustrates the change in the distribution
- NB Through Movement is Easier than NB Left Turn
- Minor impacts to Military and Vacation Trip Distribution
### Evaluation of Stratford Site Access Options

<table>
<thead>
<tr>
<th>Criterion</th>
<th>A</th>
<th>A1</th>
<th>C2</th>
<th>C2 Alt</th>
<th>C3</th>
<th>G2</th>
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<tbody>
<tr>
<td>1. Minimizes adding traffic to intersections that are currently</td>
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<tr>
<td>challenging (specifically Five Points and Lorcom/Old Dominion)</td>
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<td>2. Minimizes impacts to local streets (specifically 23rd and Vacation)</td>
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<td>3. Doesn’t limit movements as doing so may contribute to congestion</td>
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<td>(number of arrows)</td>
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<td>4. Separates modes</td>
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<tr>
<td>5. Provides adequate queuing and turning space for buses</td>
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<tr>
<td>6. Provides adequate queuing space for parent drop-off</td>
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<td>7. Provides comfortable pedestrian and bicycle access</td>
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<td>8. Accommodates staff, visitor and park/rec parking</td>
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Questions?