



# Bus Management Recommendations

BLPC Meeting for  
Stratford and H-B Woodlawn  
Wilson Site, 18<sup>th</sup> Street  
May 11, 2016

# Summary of recommendations



- During arrival:
  - Restrict access to 18<sup>th</sup> Street for Stratford only
  - Restrict parking for both schools
- During dismissal
  - Restrict access to 18<sup>th</sup> Street for both schools
  - Restrict parking for both schools



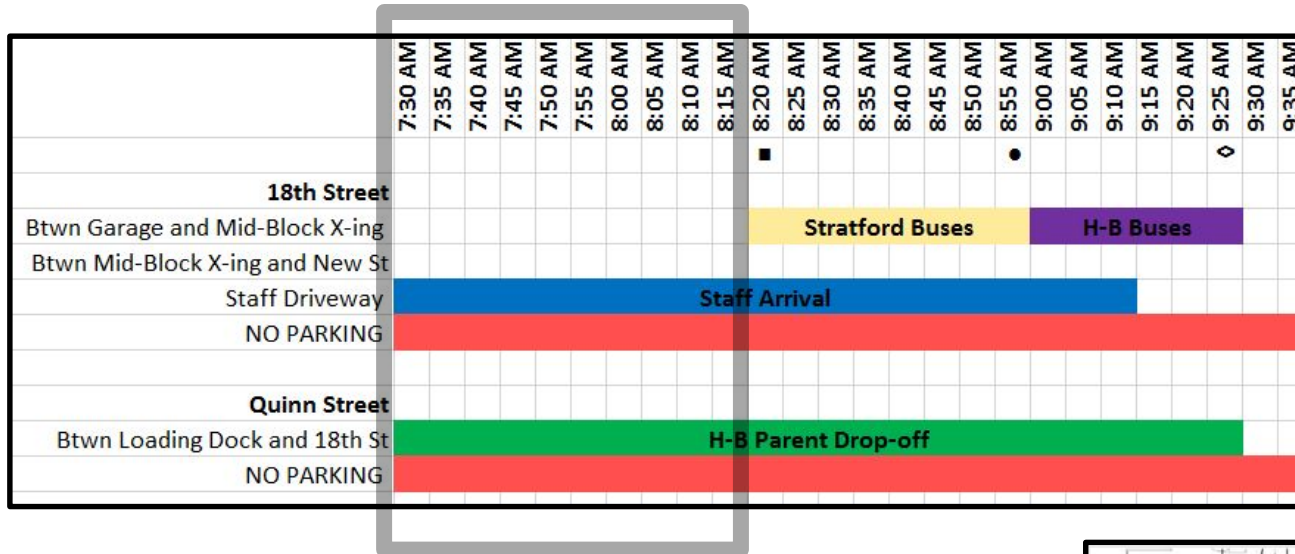
# **BEGAN WITH SORTING OUT THE ARRIVAL AND DISMISSAL SEQUENCING**

# Current Planning Context for Bus Management



- Planning for 8 buses for Stratford and 13 buses for H-B Woodlawn
- BLPC/PFRC process identified 18th Street as location for drop-off and pick-up
- Stratford starts 30 minutes earlier than H-B Woodlawn
- Per state law: The driver of a vehicle also need not stop when approaching a school bus which is loading or discharging passengers from or onto property immediately adjacent to a school if the driver is directed by a law-enforcement officer or other duly authorized uniformed school crossing guard to pass the school bus. <http://law.lis.virginia.gov/vacode/46.2-859/>
  - May conclude from this that unless a police officer or uniformed school crossing guard is present, all drivers must stop while buses are unloading or loading on 18<sup>th</sup> Street.
- Mid-block crossing on 18<sup>th</sup> Street at Rosslyn Highlands Park will be maintained

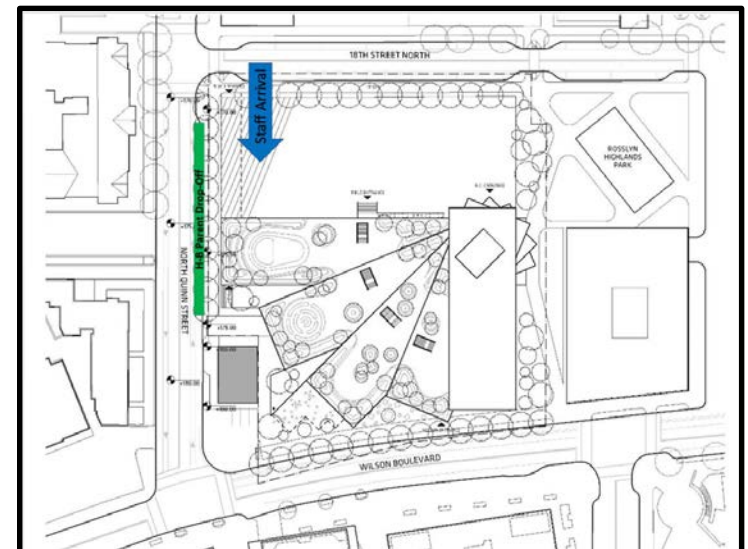
# Arrival Timing



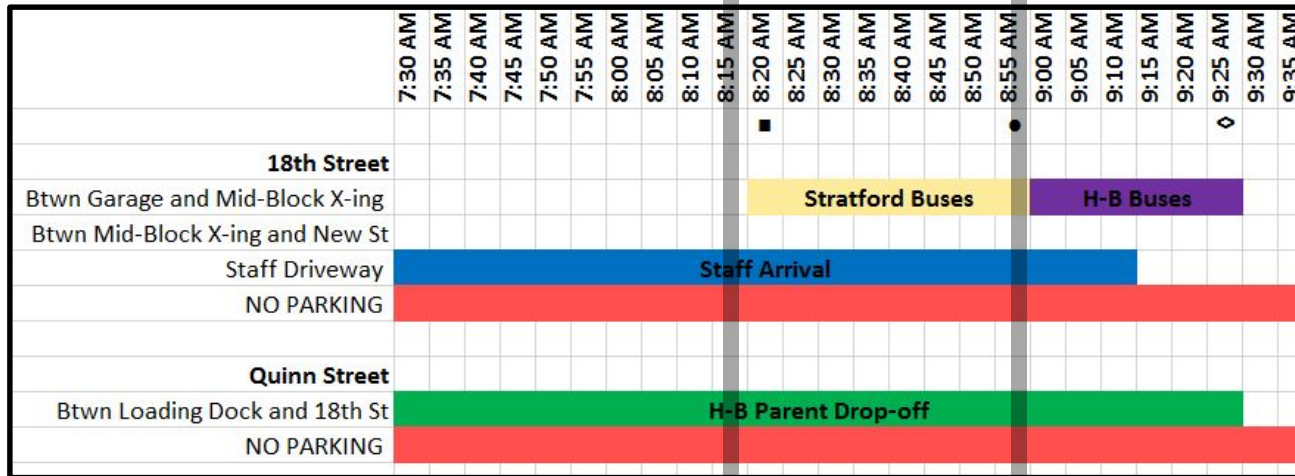
**7:30 – 8:20 AM**

■ 8:20 AM H-B Zero Period Bell

- H-B Parent Drop-Off on Quinn St
- Staff Arrival via Parking Driveway
- Parking restrictions on N Quinn St and 18<sup>th</sup> St N
- Note: Special Ed bus can park in front of field after 9:30AM



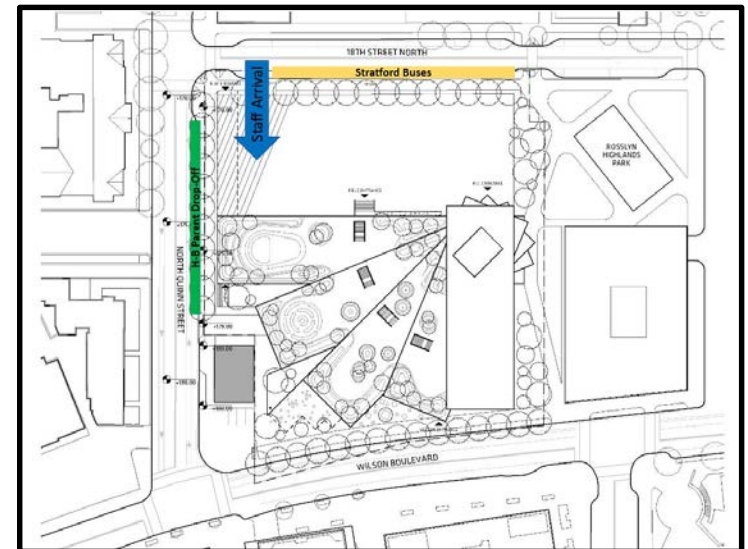
# Arrival Timing



## 8:20 – 9:00 AM

- 8:20 AM H-B Zero Period Bell
- 8:54 AM Stratford Bell

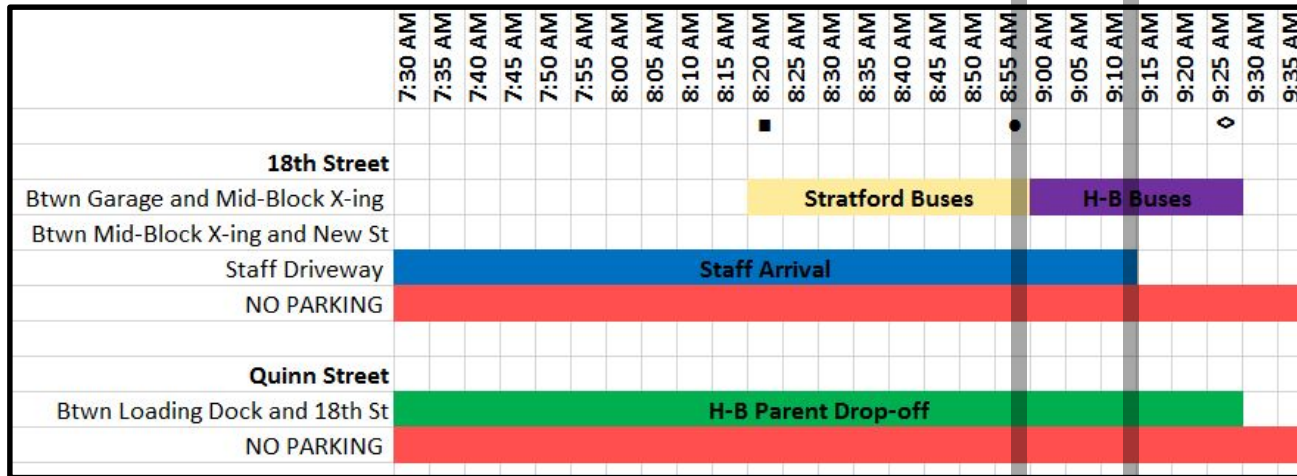
- Stratford Buses Arrive on 18<sup>th</sup> St N
- H-B Parent Drop-Off on Quinn St
- Staff Arrival via Parking Driveway
- Parking restrictions on N Quinn St and 18<sup>th</sup> St N



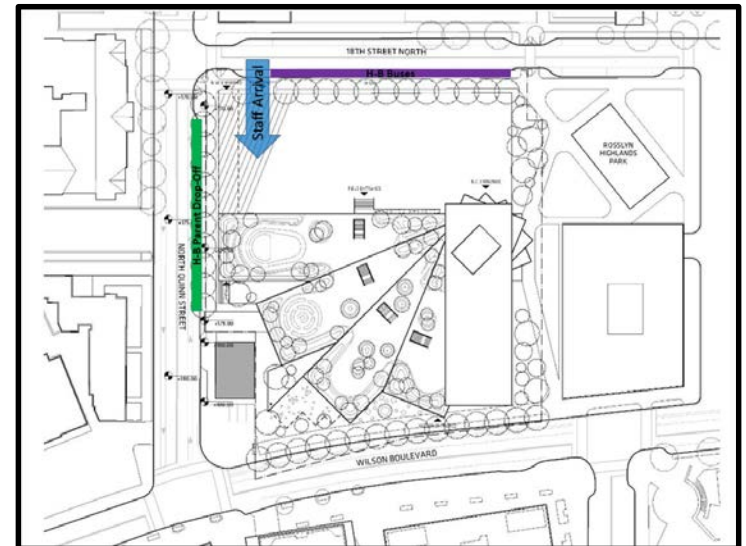
# Arrival Timing



**9:00 – 9:15 AM**

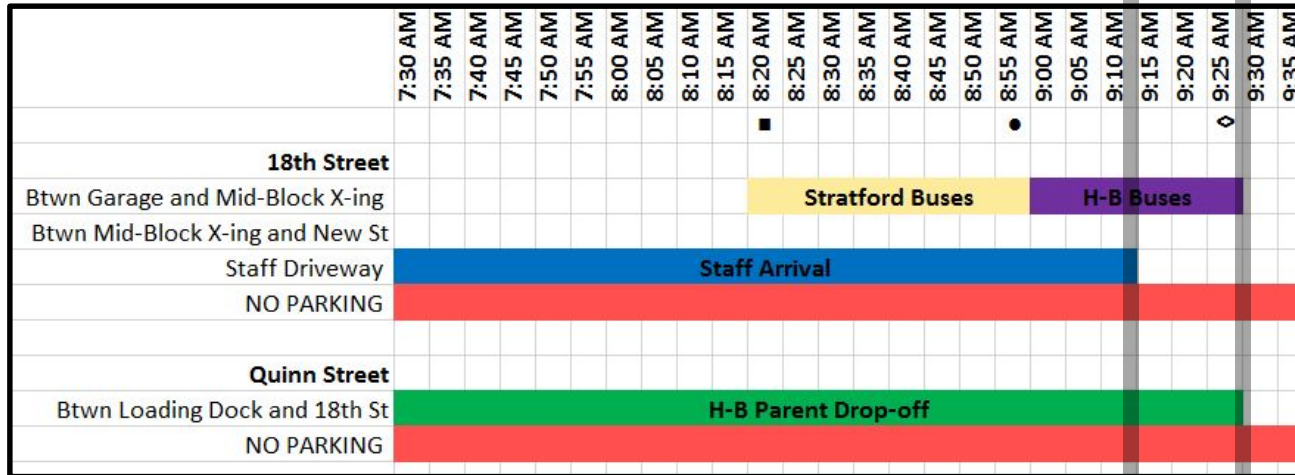


- H-B Buses Arrive on 18<sup>th</sup> St N
- H-B Parent Drop-Off on Quinn St
- Staff Arrival via Parking Driveway
- Parking restrictions on N Quinn St and 18<sup>th</sup> St N



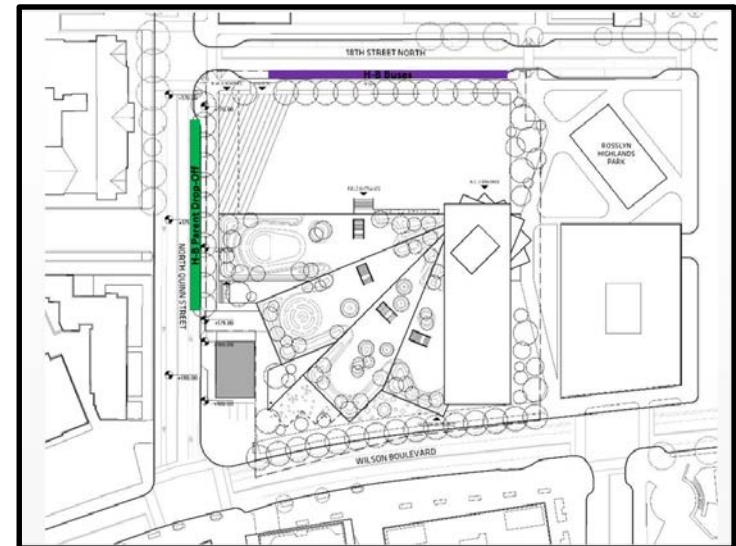


# Arrival Timing



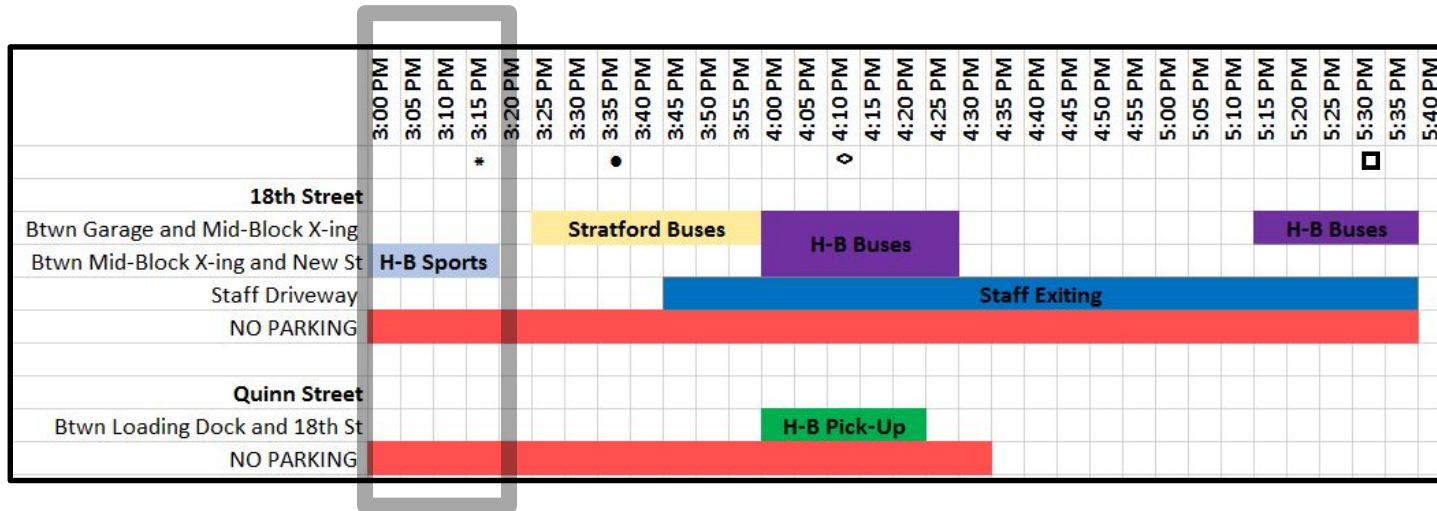
**9:15 – 9:30AM**  
 ◇ 9:24 AM H-B First Period Bell

- H-B Buses Arrive on 18<sup>th</sup> St N
- H-B Parent Drop-Off on Quinn St
- Parking restrictions on N Quinn St and 18<sup>th</sup> St N



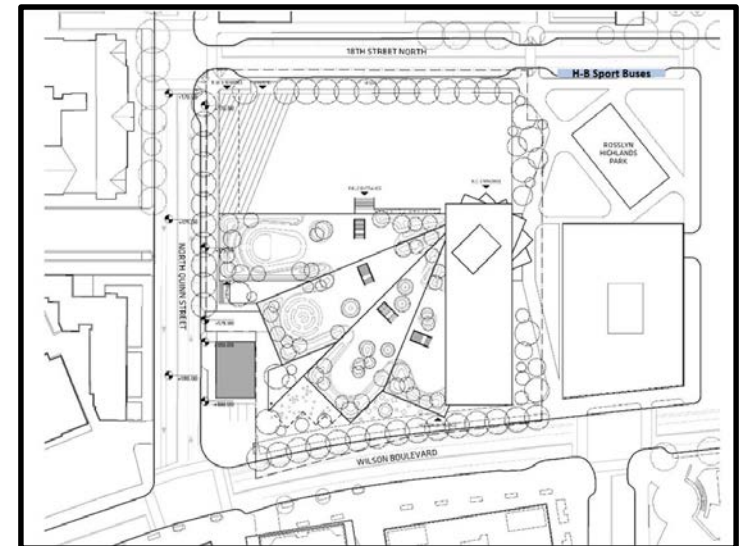


# Dismissal Timing

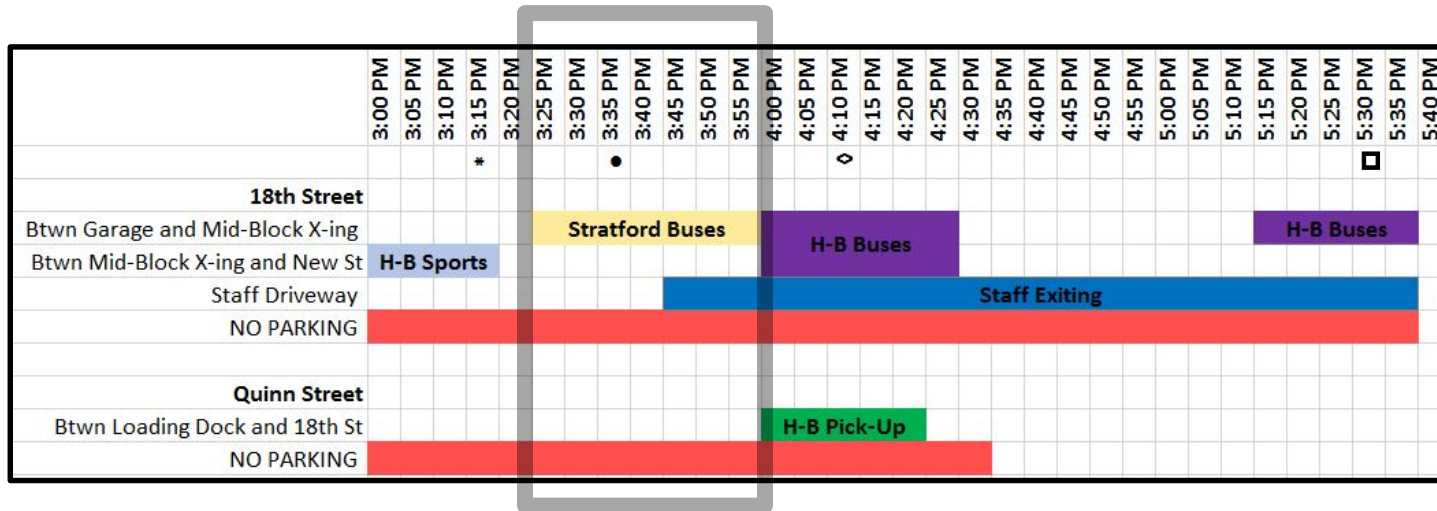


**3:00 -  
3:20 PM**  
\*3:15 PM H-B  
Sports Buses  
Leave

- H-B Sports Buses Arrive on 18<sup>th</sup> St N;  
Depart at 3:15 PM
- Parking restrictions on N Quinn St and  
18<sup>th</sup> St N



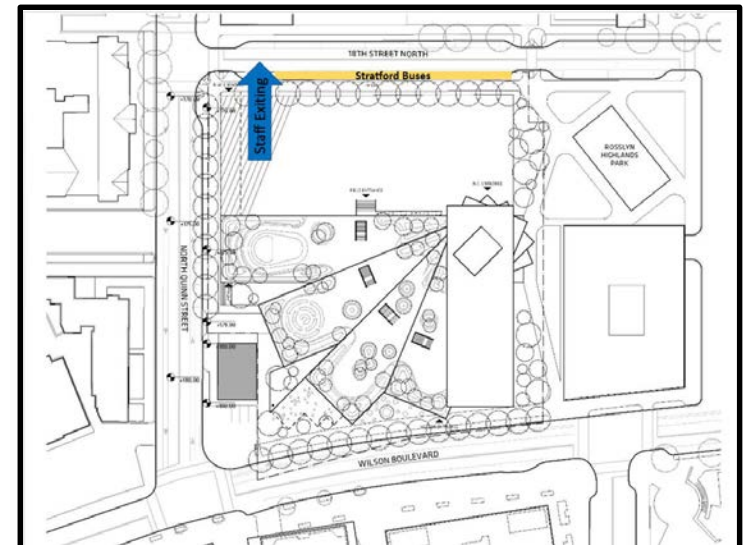
# Dismissal Timing



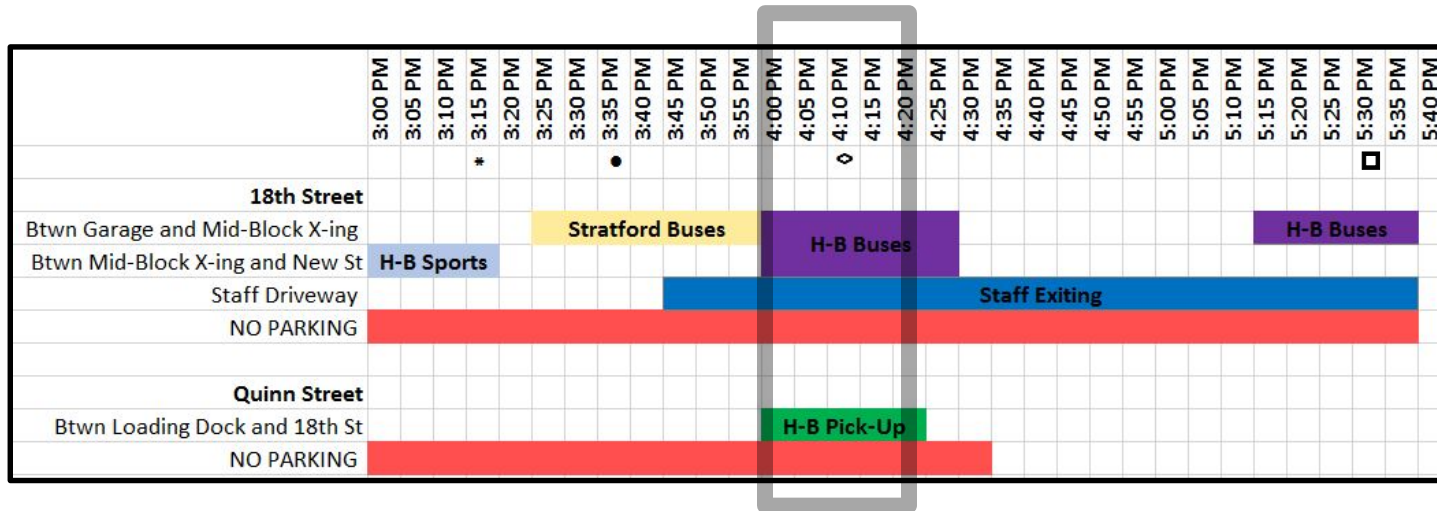
**3:25 -  
4:00 PM**

- 3:36 PM  
Stratford Bell

- Stratford Buses Arrive on 18<sup>th</sup> St N
- Staff Begin Exiting Parking Lot on 18<sup>th</sup> St N
- Parking restrictions on N Quinn St and 18<sup>th</sup> St N

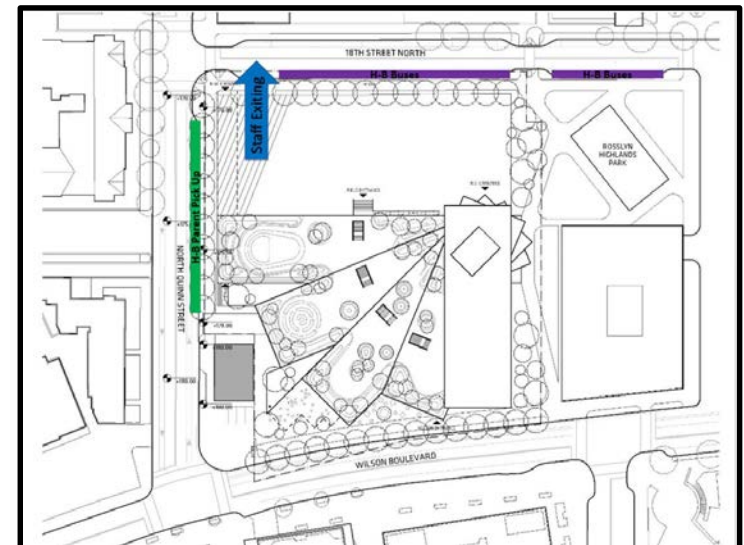


# Dismissal Timing

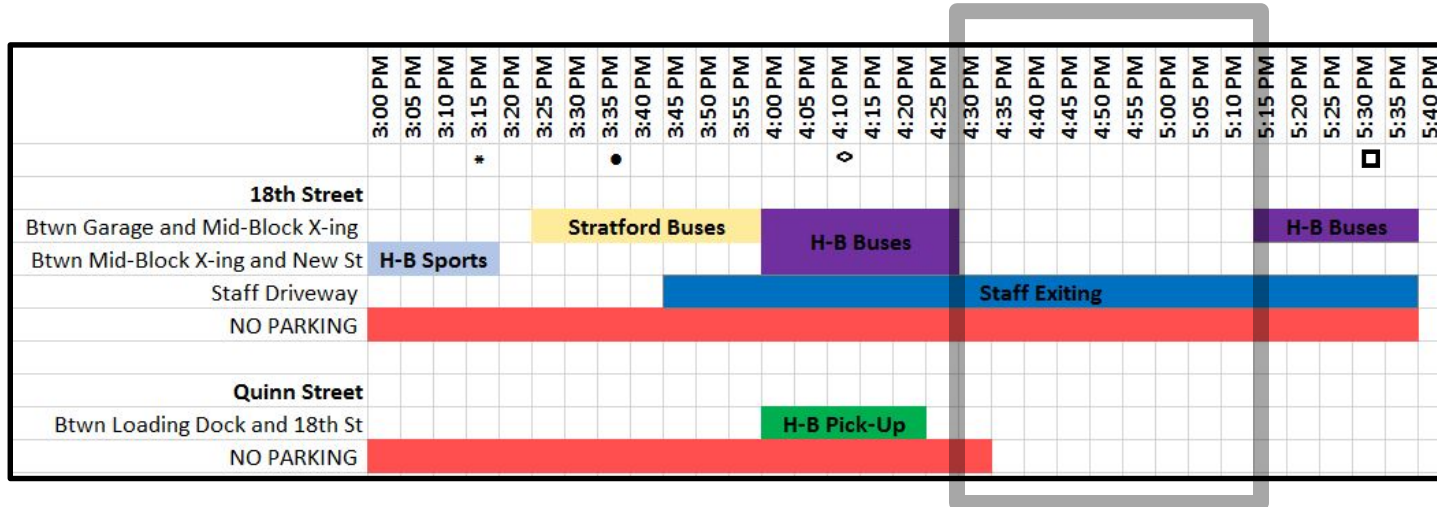


**4:00 –  
4:20 PM**  
◊ 4:06 PM H-B Bell

- H-B Buses Arrive on 18<sup>th</sup> St N
- Staff Exit Parking Lot on 18<sup>th</sup> St N
- H-B Parent Pick-Up Begins on Quinn St
- Parking restrictions on N Quinn St and 18<sup>th</sup> St N

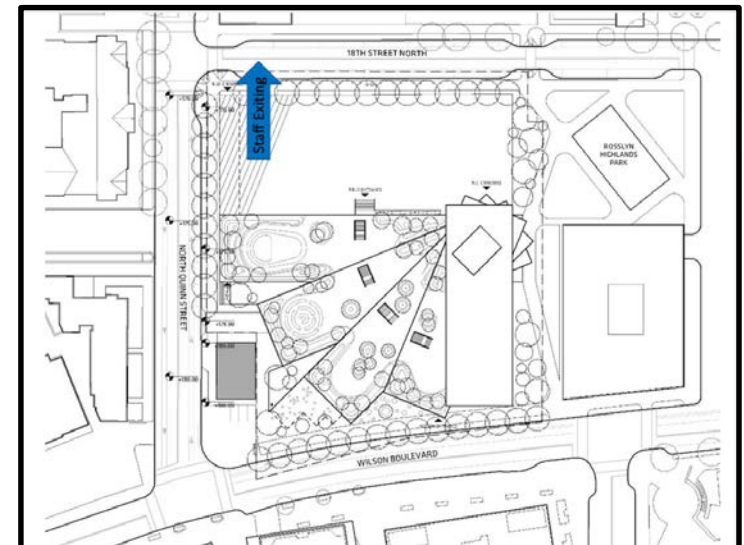


# Dismissal Timing



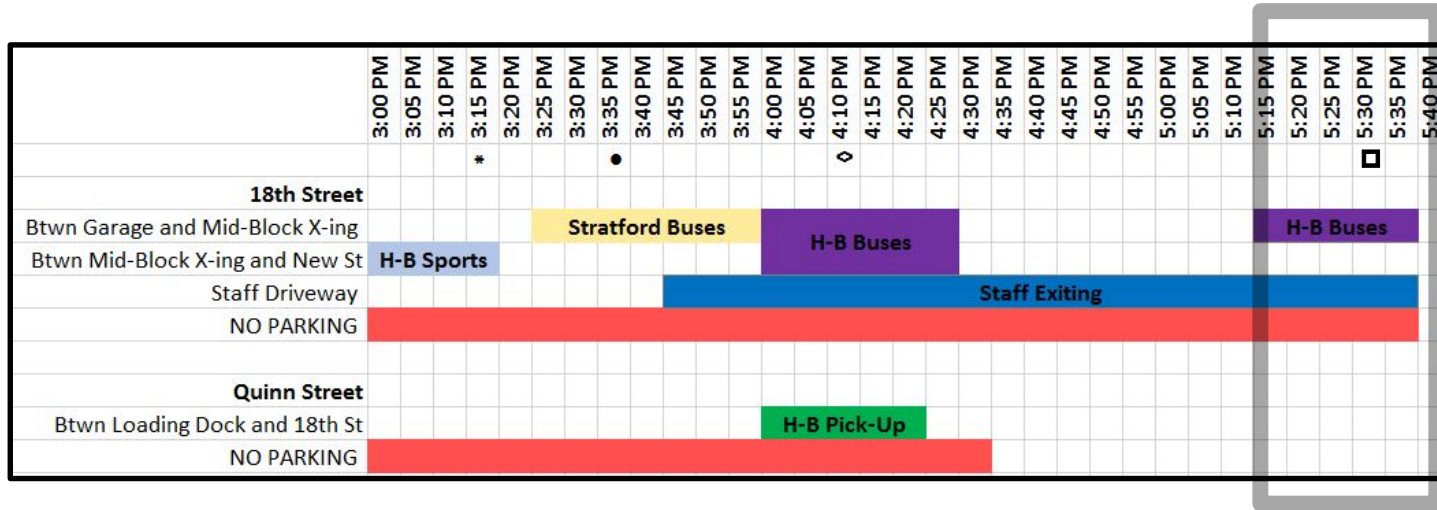
**4:30 –  
5:15 PM**

- Staff Exit Parking Lot on 18<sup>th</sup> St N
- Parking restrictions on N Quinn St and 18<sup>th</sup> St N



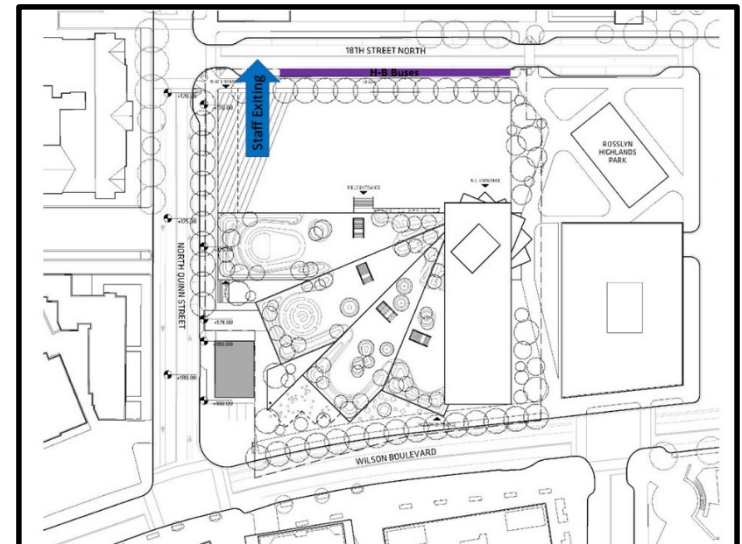


# Dismissal Timing



**5:15 –**  
**5:40 PM**  
 □ 5:30 PM H-B  
 Late Buses Leave

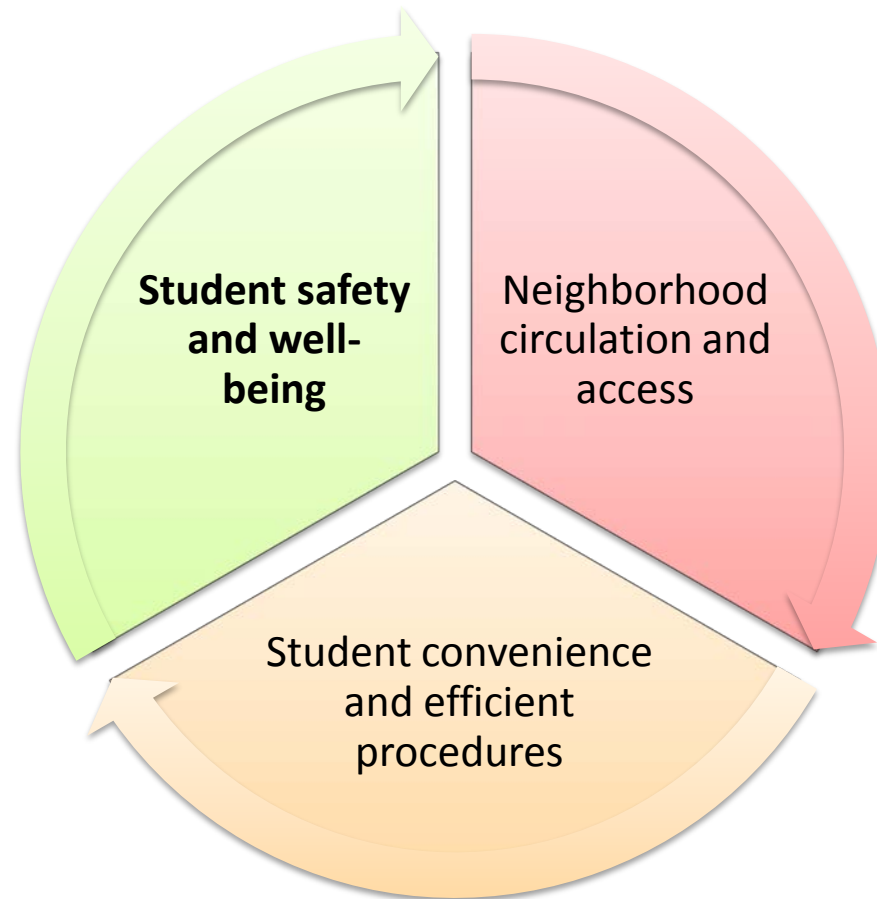
- H-B Late Buses Arrive on 18<sup>th</sup> St N
- Staff Exit Parking Lot on 18<sup>th</sup> St N
- No Parking on 18<sup>th</sup> St N





# KEY CONSIDERATIONS

# Key considerations







**RECOMMEND LIMITING ACCESS TO  
18<sup>TH</sup> STREET DURING ARRIVAL AND  
DISMISSAL**

# Limiting access to 18<sup>th</sup> Street during arrival and dismissal



## Three options for managing 18<sup>th</sup> Street

1. Signage and periodic enforcement
2. Signage with police officer directing traffic
3. Open with police officer directing traffic

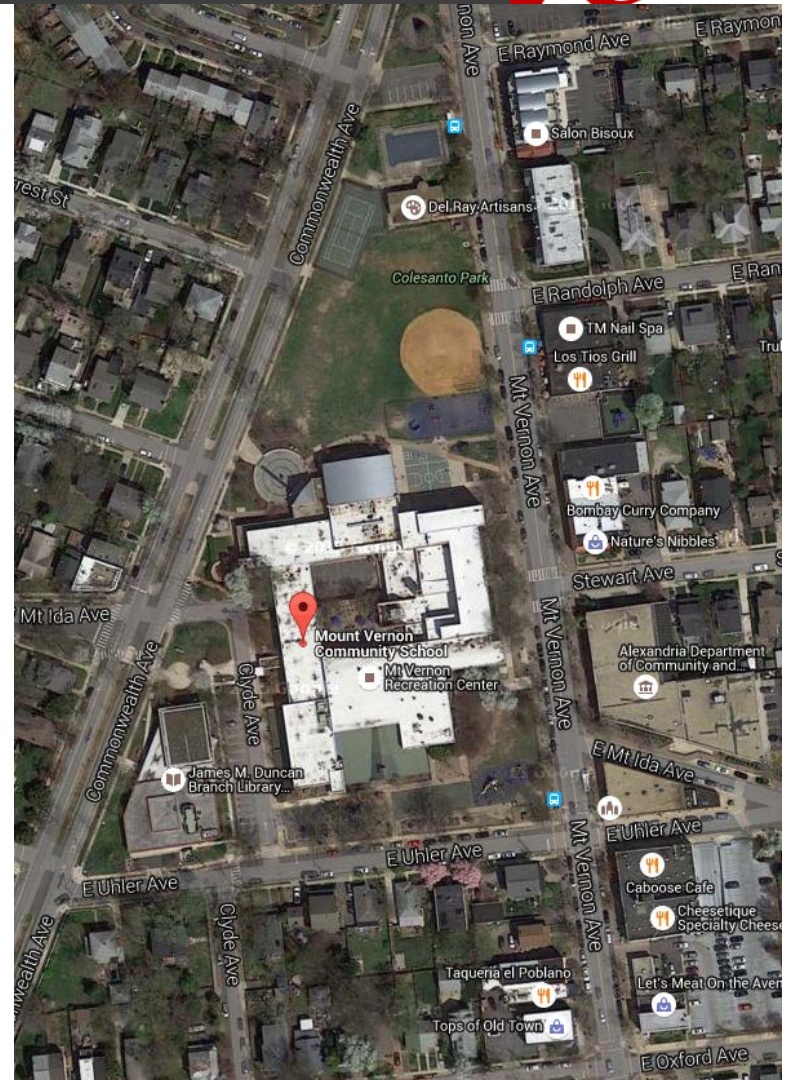
Limiting access is essential for Stratford arrival and dismissal

Not essential for H-B Woodlawn, but may be practical

# How other school systems handle on-street school bus drop-off and pick-up



- Mt. Vernon Community school, Alexandria
  - Drop-off on curb with crossing guard
  - Afternoon pick-up on school grounds
  - Only 1 or 2 special ed buses; arrive at different times
- Various schools in Richmond
  - Drop-off on curb with no crossing guard
  - Motorists do no stop; no enforcement
  - Have been child pedestrian crashes
  - One 1 or 2 special ed buses; arrive at different times





# How other school systems handle on-street school bus drop-off and pick-up



## Boston – Carter Development School



# Carter School, Boston



- About 30 students and 8 buses
- Space on-site: School dead ends between two streets that connect with street in front of building
- All buses arrive about the same time with all staff greeting students and escorting them into building
- Buses pull away as students depart
- Majority of students are in wheel chairs; few self-propel

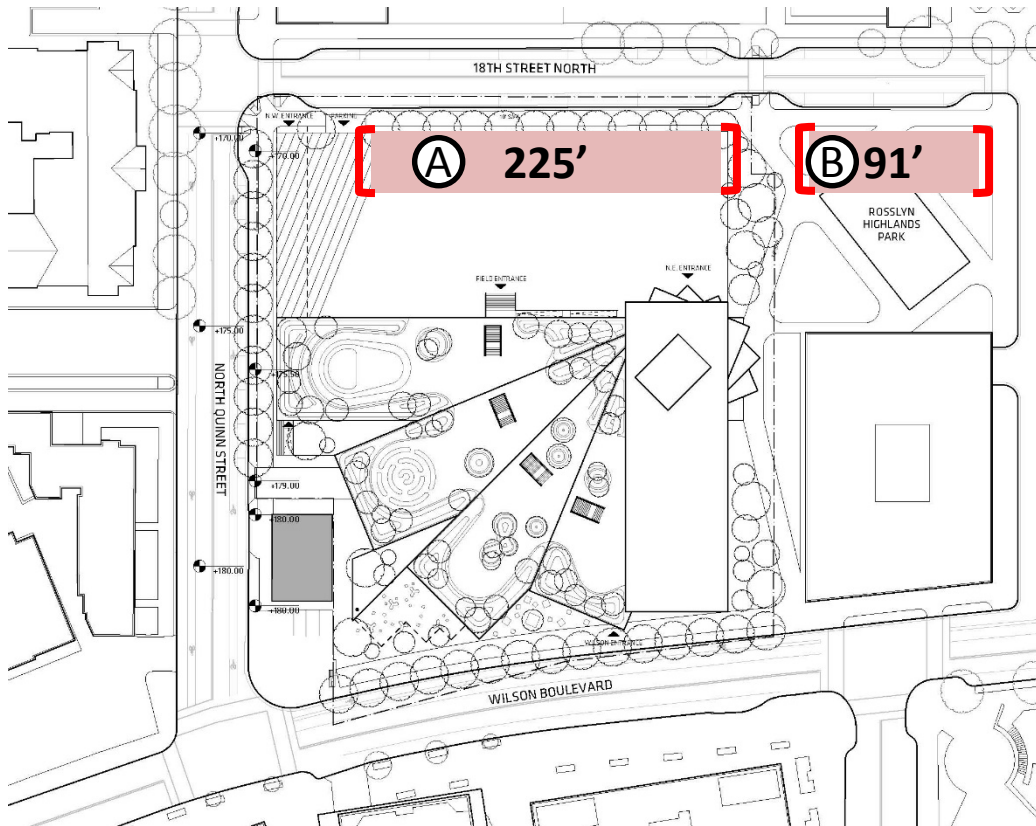




# AVAILABLE SPACE FOR BUSES ON 18<sup>TH</sup> STREET



# Curb space along 18<sup>th</sup> Street



Current site plan allows for up to 342 feet of curb space

- Stratford principal does not want to use this space for its students
- H-B Woodlawn principal is comfortable using this space





# **SOME NEEDS OF THE TWO SCHOOL DIFFER**



# STRATFORD

# Stratford Arrival and Dismissal Curbside Needs



- Need to create a special environment for these students
- Limiting motor vehicle access to 18<sup>th</sup> Street is key for this
- Restricting parking will increase available space



## Stratford Arrival and Dismissal

Buses now line up around driveway circle at school entrance



## Stratford Arrival and Dismissal

The arrival ritual: All staff meets students and buses





## Stratford Arrival and Dismissal

The Arrival Ritual: part of the overall care for students



## Stratford Arrival and Dismissal

Dismissal on April 8, 2016



# Stratford Arrival and Dismissal Curbside Needs



- Space for all buses to dwell to unload and load students at the same time for both arrival and dismissal
- Maneuvering space needed for staff to unload and load students, including for wheel chair lifts
- Minimal travel distance between bus and school door
- Linear space of up to 320' for 8 buses

Number	Bus length	Maneuvering length	Total length	Total length of all buses
8	25' or 30'	10'	35' min 40' max	280' min 320' max

# Recommendations for Stratford Arrival and Dismissal

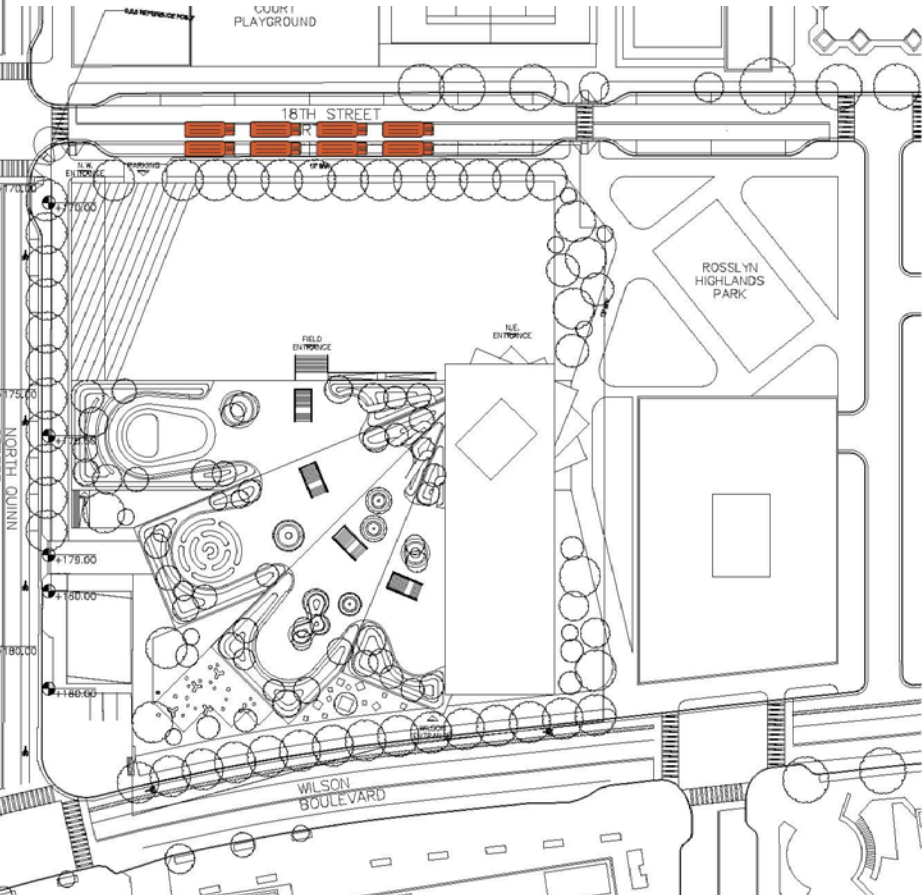


- Recreate the current environment for Stratford students at Wilson site
  - Limited access to 18<sup>th</sup> Street and parking restrictions
  - All buses staged at one time on 18<sup>th</sup> Street
  - Build a flush curb
- Options not considered feasible:
  - Use space east of mid-block crossing: Too far for students to travel
  - Buses arrive in two waves: Due to contract times, staff may not be available

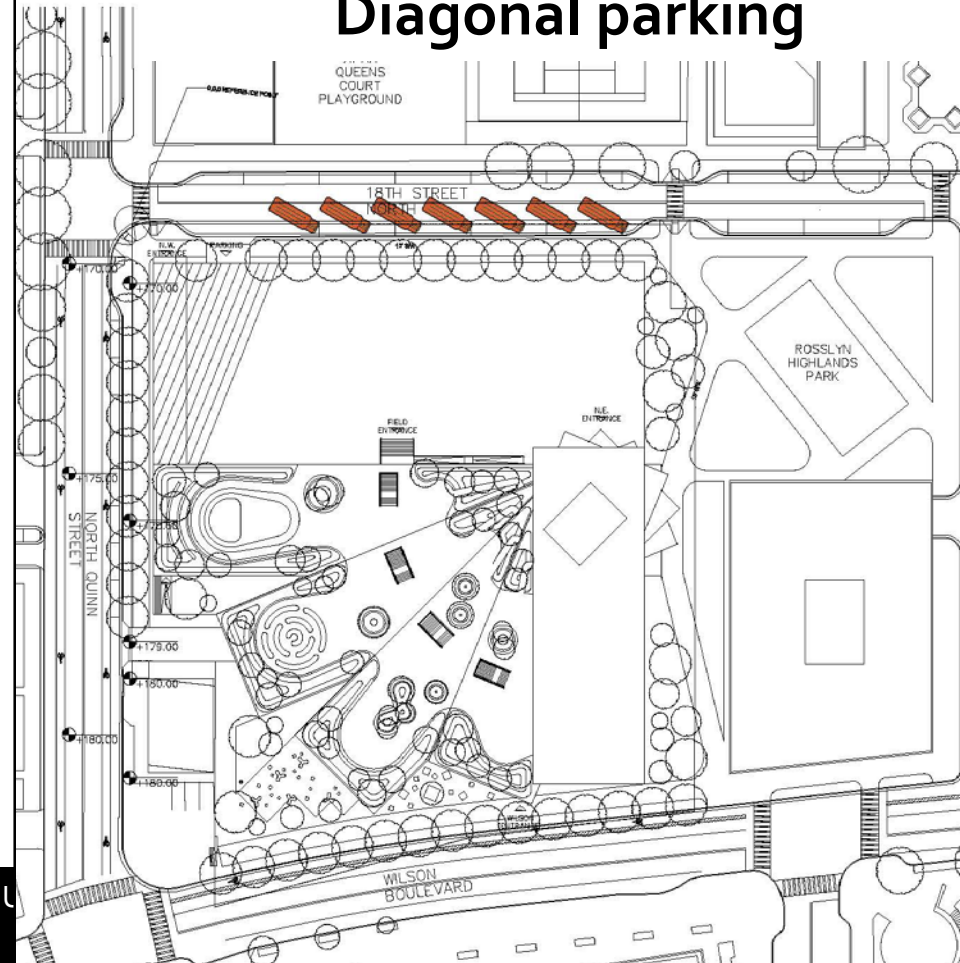
# Potential bus staging configurations



## Double-stacked



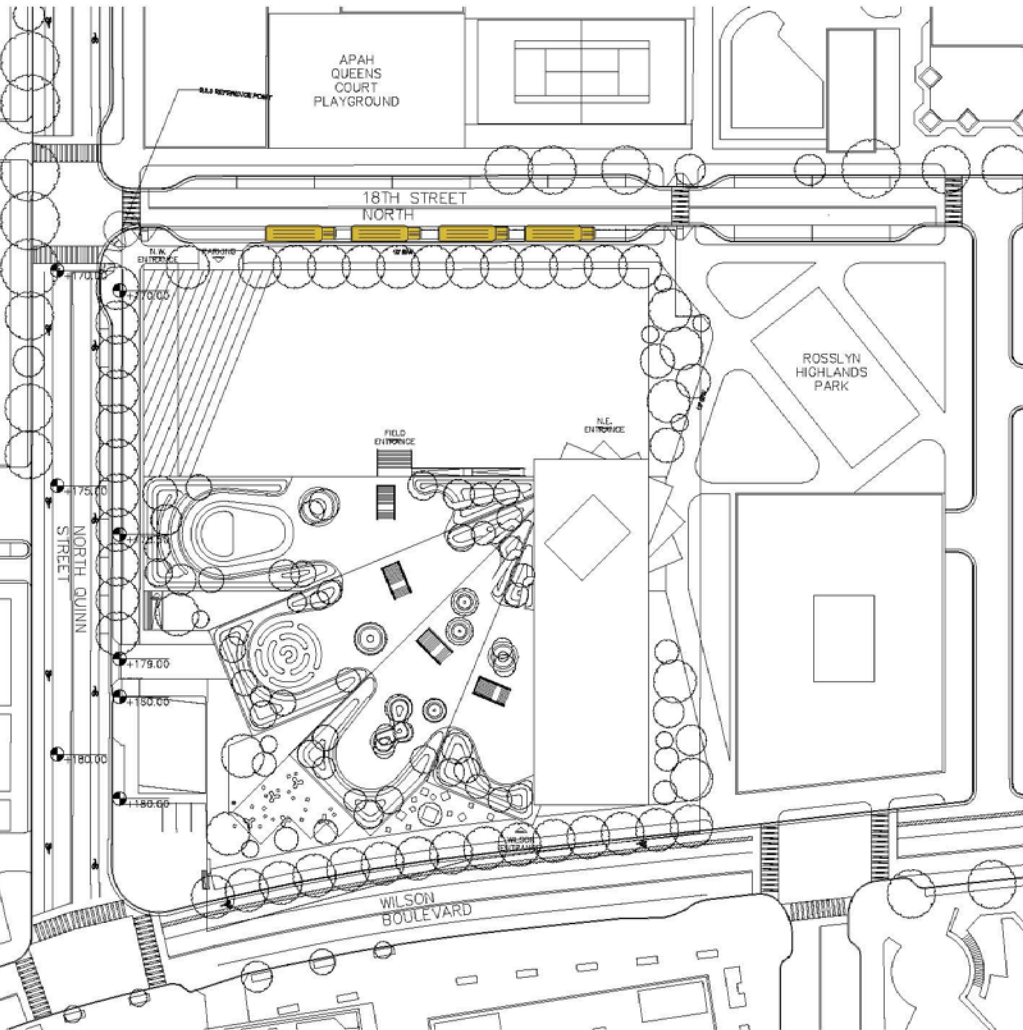
## Diagonal parking





# **H-B WOODLAWN ARRIVAL/DISMISSAL**

# H-B Woodlawn Arrival



- A total of 13 buses arrive at different times, unload and depart
- Multiple buses may arrive and unload at the same time, but bus dwell time is short
- Close the street or police officer directs traffic

# H-B Woodlawn Dismissal Needs



- Space for multiple buses to wait for dismissal and students to board
- Adequate space needed for students waiting for bus
- Space in front of Rosslyn-Highlands park is closer to H-B Woodlawn entrance
- Linear space need is 650' for 13 buses

Number	Bus length	Maneuvering length	Total length	Total length of all buses
13	40'	10'	50'	650' (13 buses)

# Recommendation for H-B Woodlawn Dismissal



Continue limited access to the street after Stratford dismissal

- Requires two waves of buses
- Several potential configurations
- Parking restrictions

Option offering limited benefit:

- No access restrictions to the street
- Requires 3 waves of buses
- Minimal time difference for 3 waves of buses



# Recommendation for H-B Woodlawn Dismissal

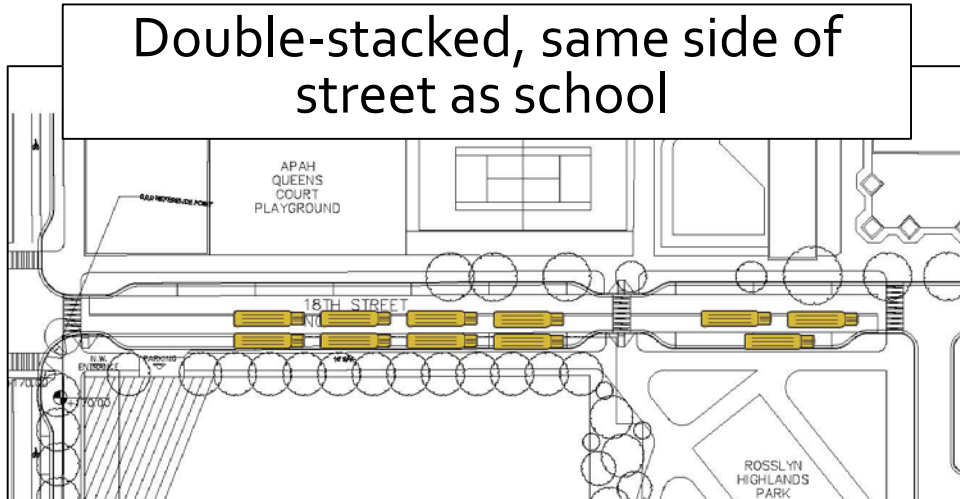


- All buses wait for dismissal on 18<sup>th</sup> Street:
  - All headed eastbound
  - Half in parking lane
  - Half in travel lane
- Limited access to 18<sup>th</sup> Street
- Parking restrictions
- Three potential staging configurations

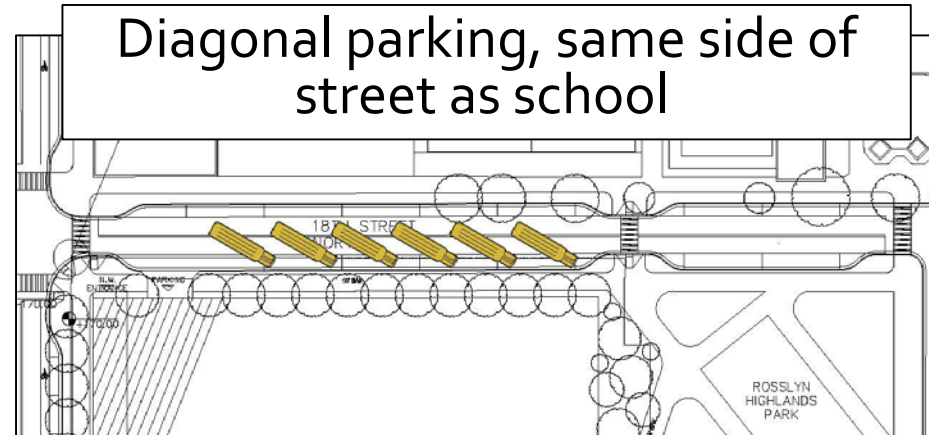
# H-B Dismissal: Potential staging configurations



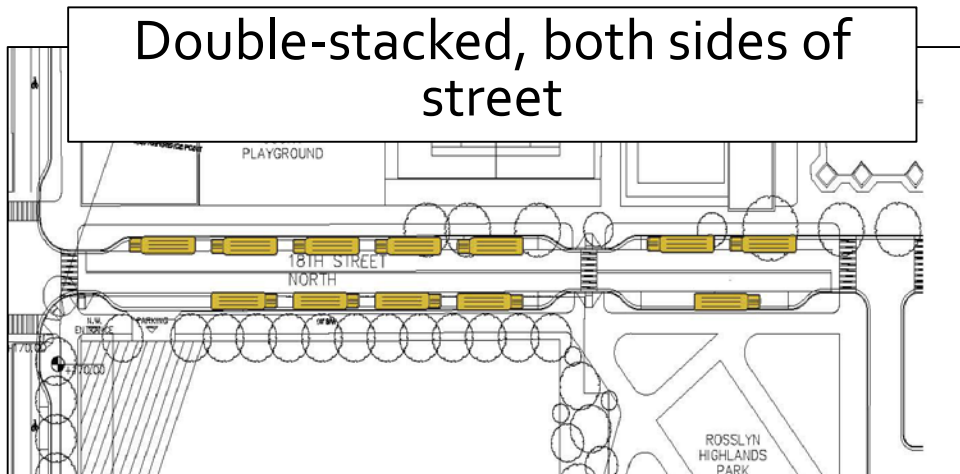
Double-stacked, same side of street as school



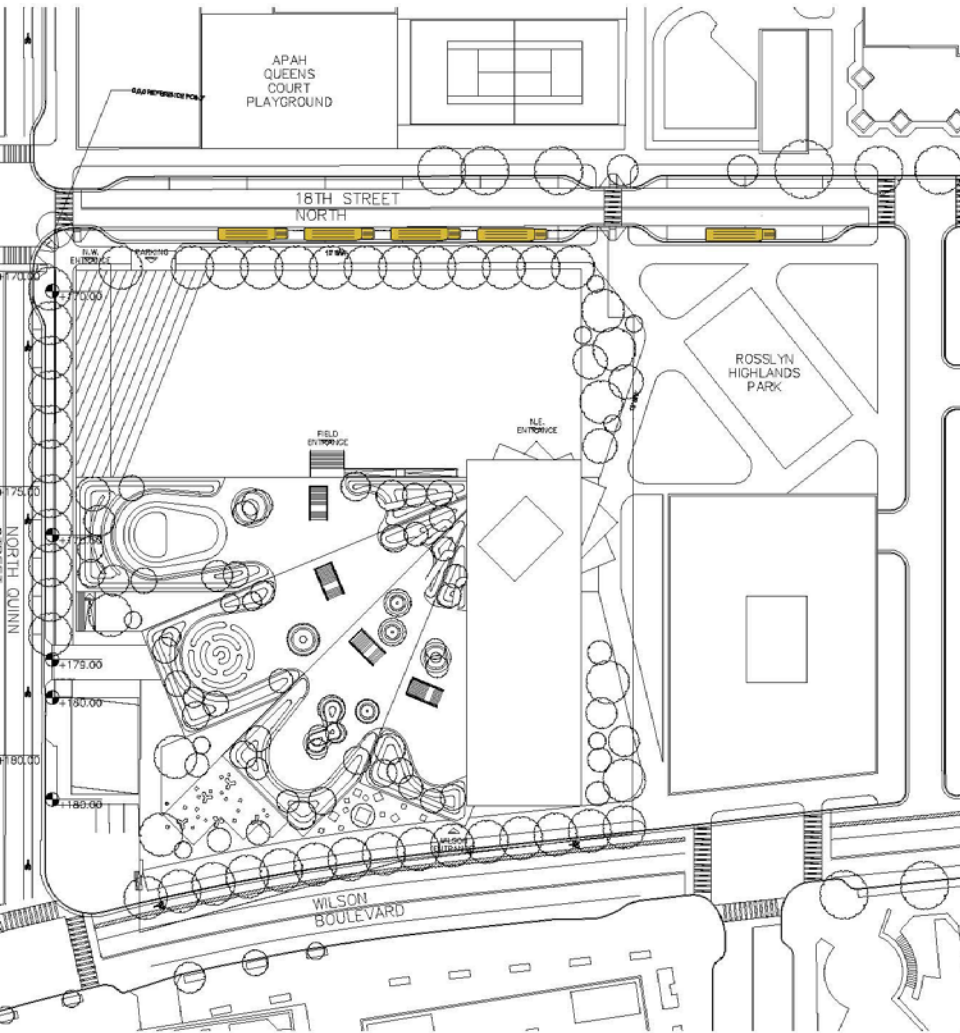
Diagonal parking, same side of street as school



Double-stacked, both sides of street



# Not recommended: Open access to 18<sup>th</sup> Street



- Use existing curb space for up 5 or 6 buses at one time
- Dismiss students in three groups, depending on waiting buses
- Stage buses off-site
- Police officer directs traffic
- Parking restrictions

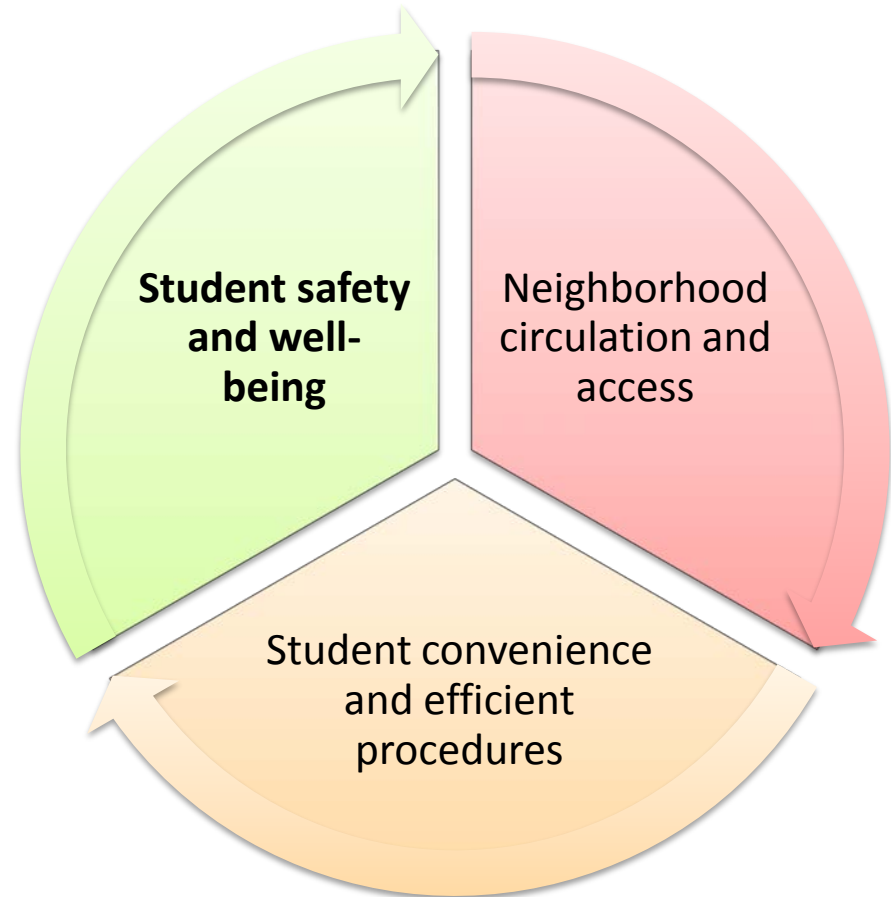


# **RECOMMENDATIONS BASED ON STRATFORD NEEDS AND STUDENT SAFETY**

# Key considerations



★ Importance of replicating special environment for Stratford students





# Summary of recommendations



- During arrival:
  - Restrict access to 18<sup>th</sup> Street for Stratford only
  - Restrict parking for both schools
- During dismissal
  - Restrict access to 18<sup>th</sup> Street for both schools
  - Restrict parking for both schools



Recommendations are based on current information and site plan; plan needs to be re-evaluated and refined after school opens