Arlington Public Schools

Arlington Career Center Project
Meeting #2 Advance Materials - Part 2 of 3

Background and Revised Site Design and Massing Concept

Complete before 7pm

on February 16, 2022

Outline

1. BLPC/PFRC Meeting Schedule
2. Educational Specifications at a Glance
3. PFRC Principles of Civic Design: Influence on Building Massing
4. Revised Site Design and Massing Concept
5. Curbside Management
6. Parking Demand and Supply
7. School-day Transportation Timing
8. Next Steps

BLPC/PFRC Meeting Schedule

BLPC / PFRC Meeting Schedule

2022 **2023**

CONCEPT DESIGN

Jan 19 — BLPC/PFRC MEETING #1

Feb 16 — BLPC/PFRC MEETING #2

Mar 30 — BLPC/PFRC MEETING #3

Refine Siting and Orientation

- Orient the primary building entrance to the appropriate adjacent street or public space so movement and entrance to buildings are natural and intuitive.
- Emphasize pedestrians, bicycles, and mass transit over automobiles in building placement, entry, and architecture.
- Ensure building and site are functionally and spatially coherent, facilitating the flow of people to, from, and within the site.
- Create 'positive' outdoor spaces with a pedestrian emphasis.

Begin Building Form

- Develop massing strategies appropriately scaled to the site and neighborhood.
- Use massing to emphasize a pedestrian, human scale to the building, breaking into smaller subparts that respond to site and program.
- Develop a sense of hierarchy in the massing, emphasizing the leading to the important functions and spaces in the building, including the entrance.

SCHEMATIC DESIGN

Jun TBD — BLPC/PFRC MEETING #4

Aug TBD — BLPC/PFRC MEETING #5

Refine Building Form

- Develop massing strategies appropriately scaled to the site and neighborhood.
- Use massing to emphasize a pedestrian, human scale to the building, breaking into smaller subparts that respond to site and program.
- Develop a sense of hierarchy in the massing, emphasizing the leading to the important functions and spaces in the building, including the entrance.

Begin Building Details and Materials

- Use design details related to pedestrian scale and provide interest, discovery, and character.
- Celebrate the civic nature of the project with public art and iconic architectural elements.
- Use durable and permanent materials to assure longevity of, and civic pride in, the project.
- Appropriately plan budgets to reduce negative design impact of value engineering.
- Explore consistent design elements with other successful Arlington civic projects.
- Design building lobbies to create a sense of place and importance.

USE PERMIT

Jan TBD — BLPC/PFRC MEETING #6

PRE-CONSTRUCTION

Oct TBD — BLPC/PFRC MEETING #7

Legend:

- BLPC/PFRC meeting in 2022
- BLPC/PFRC meeting in 2023
- PFRC: Principle of Civic Design

http://arlington.granicus.com/MetaViewer.php?view_id=2&event_id=857&meta_id=131247

Reference:

https://www.apsva.us/engage/arlington-career-center-project

CIVIC VALUE

- Respect neighborhood context and important historic structures.
- Take advantage of prominent sites and major civic programs to create bold architecture.
- Emphasize leadership in energy conservation and environmental sustainability through architectural design, materials, and construction methods.
- Utilize universal design to ensure open and welcoming accessibility for all citizens.
- Explore adaptive reuse of significant existing structures and building elements and consider possible future reuse of new buildings.
- Optimize open space for public relaxation and recreation, and minimize building footprint and areas used for parking, on-site roads, and service drives.
- Support joint development and use of school and county facilities when in the best interest of both entities.

Discussion Topics for Meeting #2

- Like in meeting #1, during meeting #2 PFRC/BLPC members will discuss several questions in a small group setting.
- Discussion topics include:
  - Revised site plan strengths and concerns
  - Revised site plan alignment with PFRC Principles of Civic Design
  - Public space between existing Arlington Career Center (ACC) and new ACC/new field
  - On-site Parking

Educational Specifications at a Glance

Base Educational Specifications

260,000sf Total Building Area

5 Instructional Programs

- Arlington Tech
- CTE-only from neighborhood high schools
- English Learner Institute (EL)
- Academic Academy
- Program for Employment Preparedness (PEP)

37 Secondary CTE Classrooms and Labs

- Maintains all existing CTE programs
- Accommodates growth

Teen Parenting

Base Educational Specifications

What Else:

Visual Arts / Fine Arts:

- Learning Lab for 2D & 3D Graphic Arts
- Pottery and Kiln

Performing Arts:

- Flexible Music Labs, Ensemble and Practice Rooms

“Black Box” Flexible Performance Space:

- Portable Stage & Seating to Support Theatre Performances and Assembly Space

Full Size Gymnasium:

- Accommodates 50’x84’ Basketball Court & Regulation Volleyball Court

Library / Media Center:

- Sized to Accommodate APS Standard Book/Student Ratio

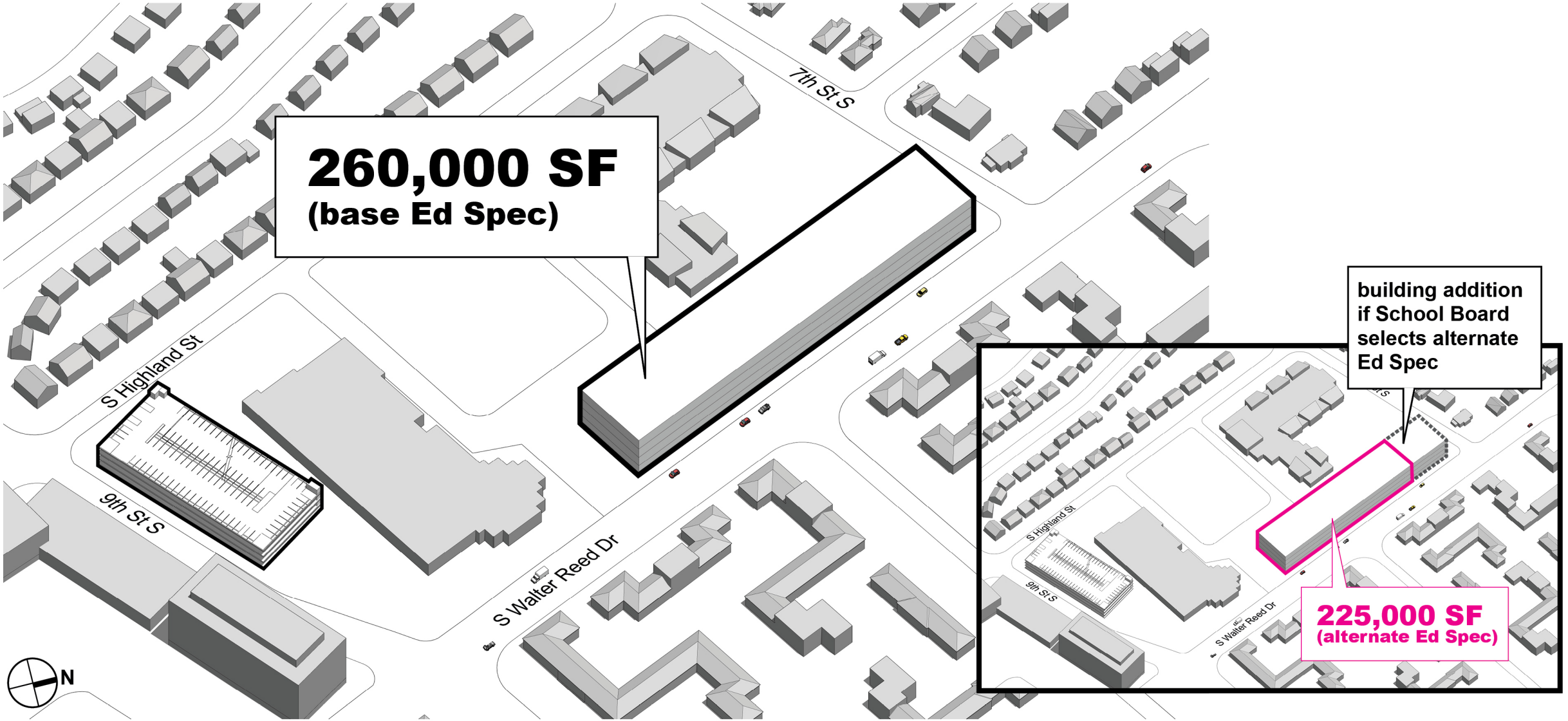
Alternate Educational Specifications

Similar to Base Educational Specification

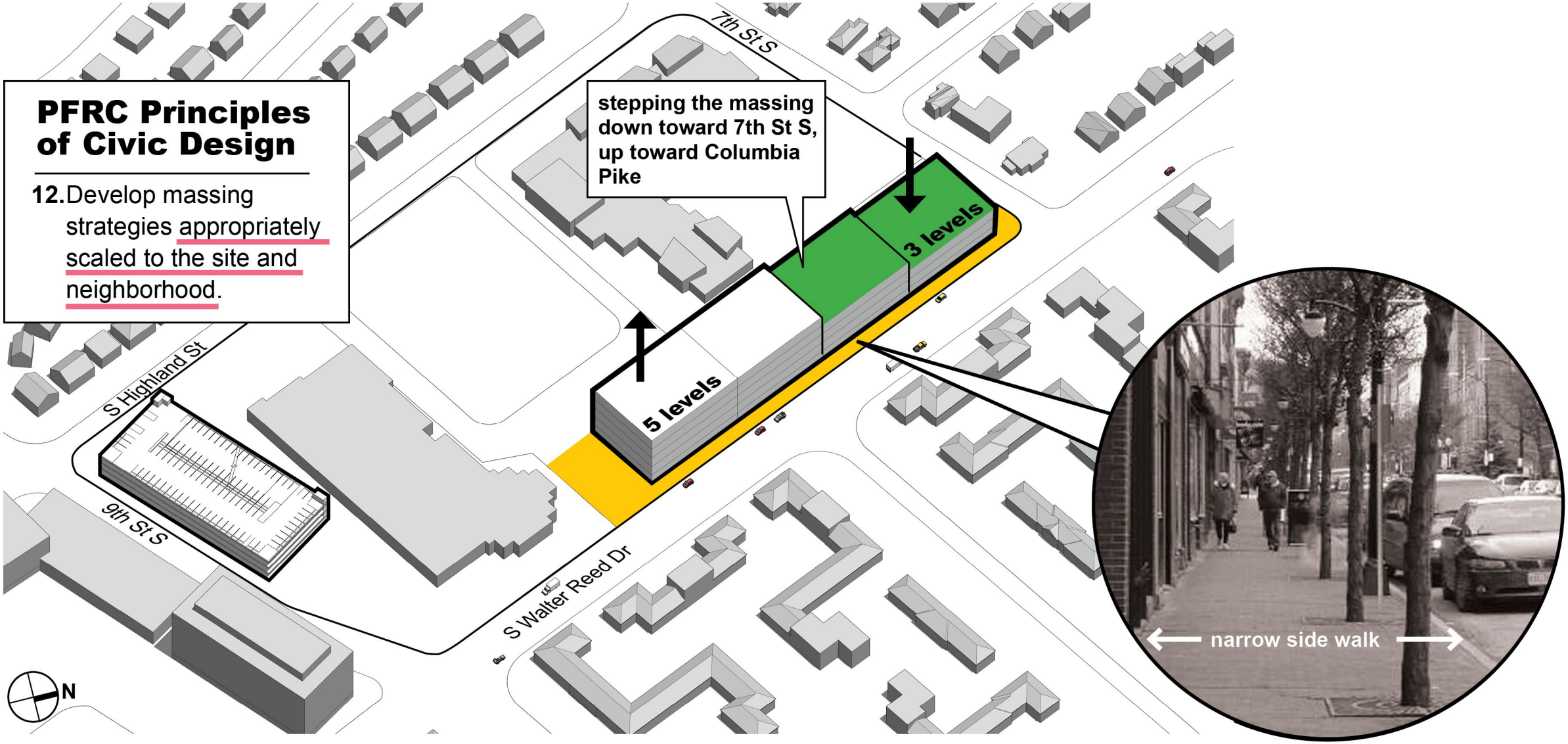
- **Reduces Capacity of Arlington Tech by 450 seats**
  - With a plan to add spaces in a future project
- **Fewer Classrooms and Labs**
- **Smaller Building by 35,000 sf**
- **No Changes to the Support Spaces such as Performing Arts, Gymnasium, Cafeteria, Library, etc.**

PFRC Principals of Civic Design: Influence on Building Massing

Building Massing Study



Building Massing Study



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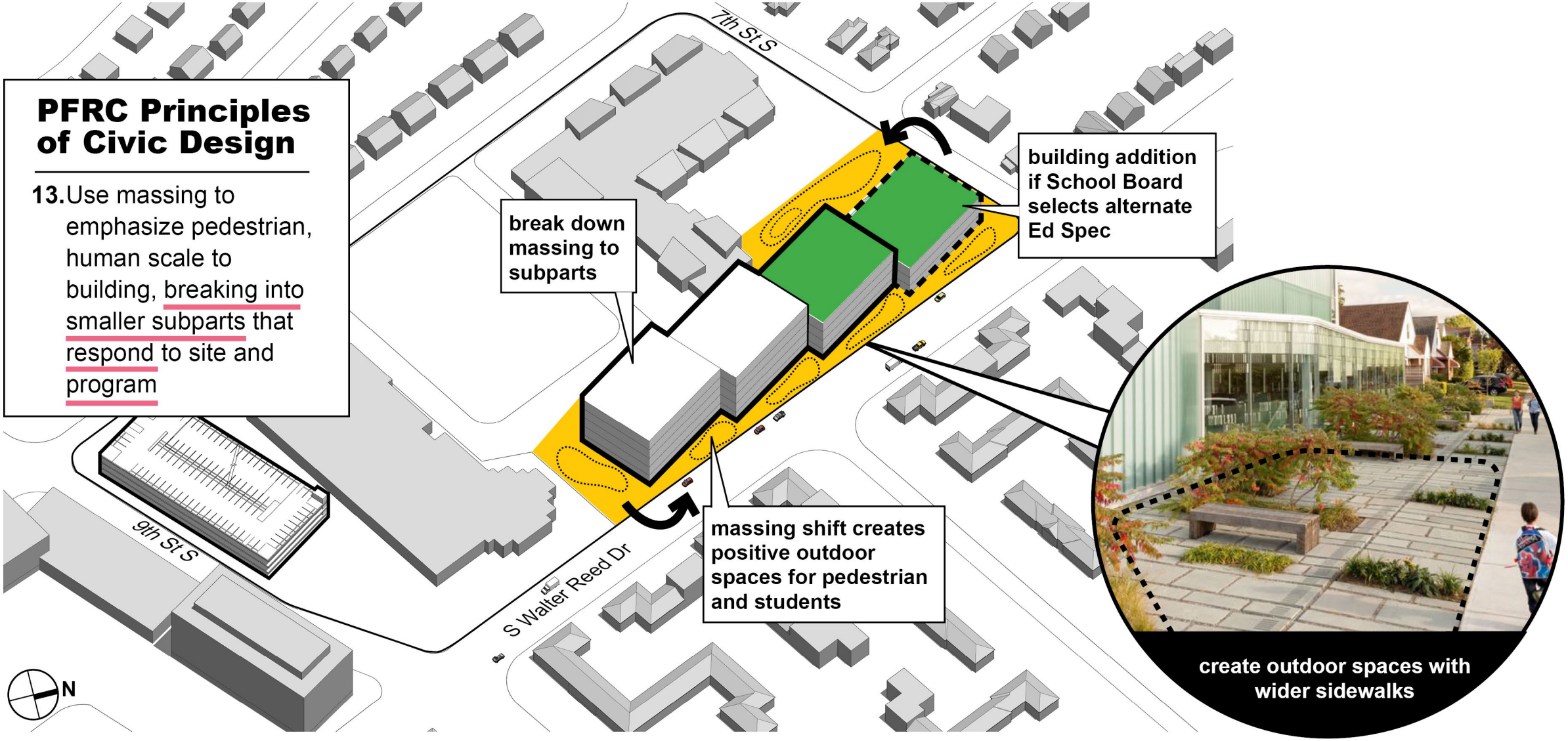

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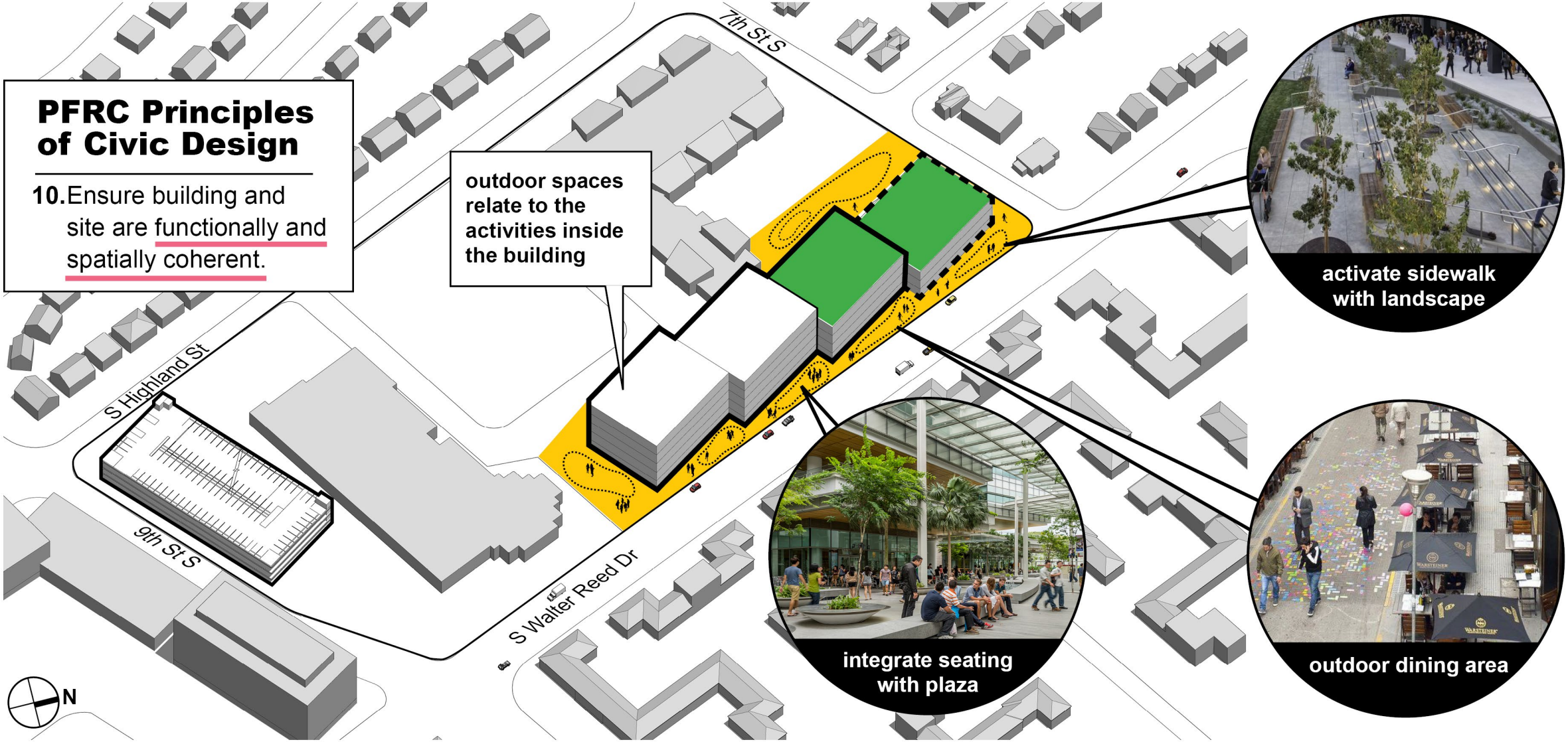


Building Massing Study

PFRC Principles of Civic Design

8. Orient primary building entrance to the appropriate adjacent street or public space so movement and entrance to buildings are natural and intuitive.

entry adjacent to public plaza

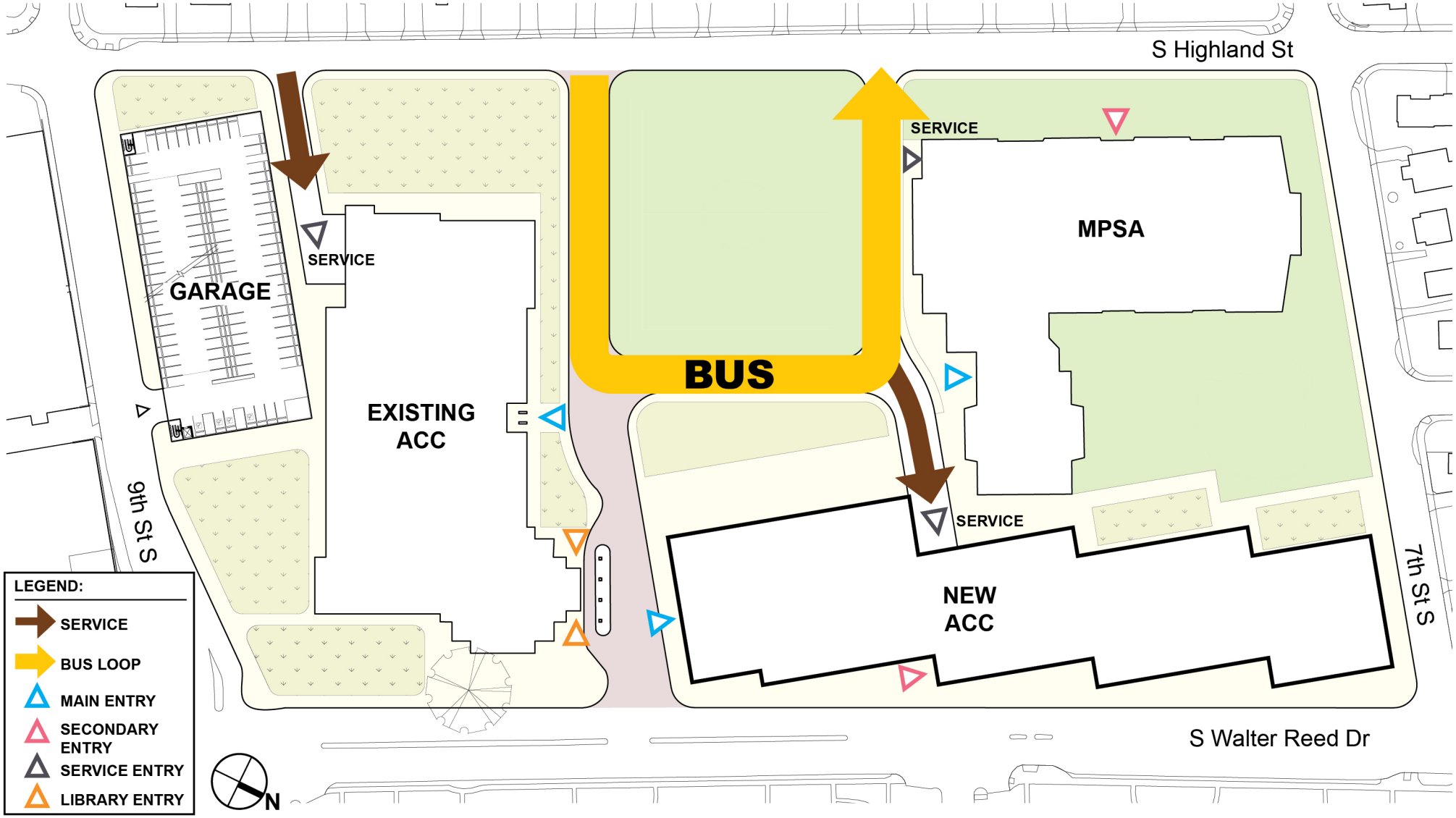
Building Massing Study

PFRC Principles of Civic Design

2. Take advantage of prominent sites and major civic programs to create bold architecture
11. Create positive outdoor spaces with pedestrian emphasis

Bus and Pedestrian Site Circulation

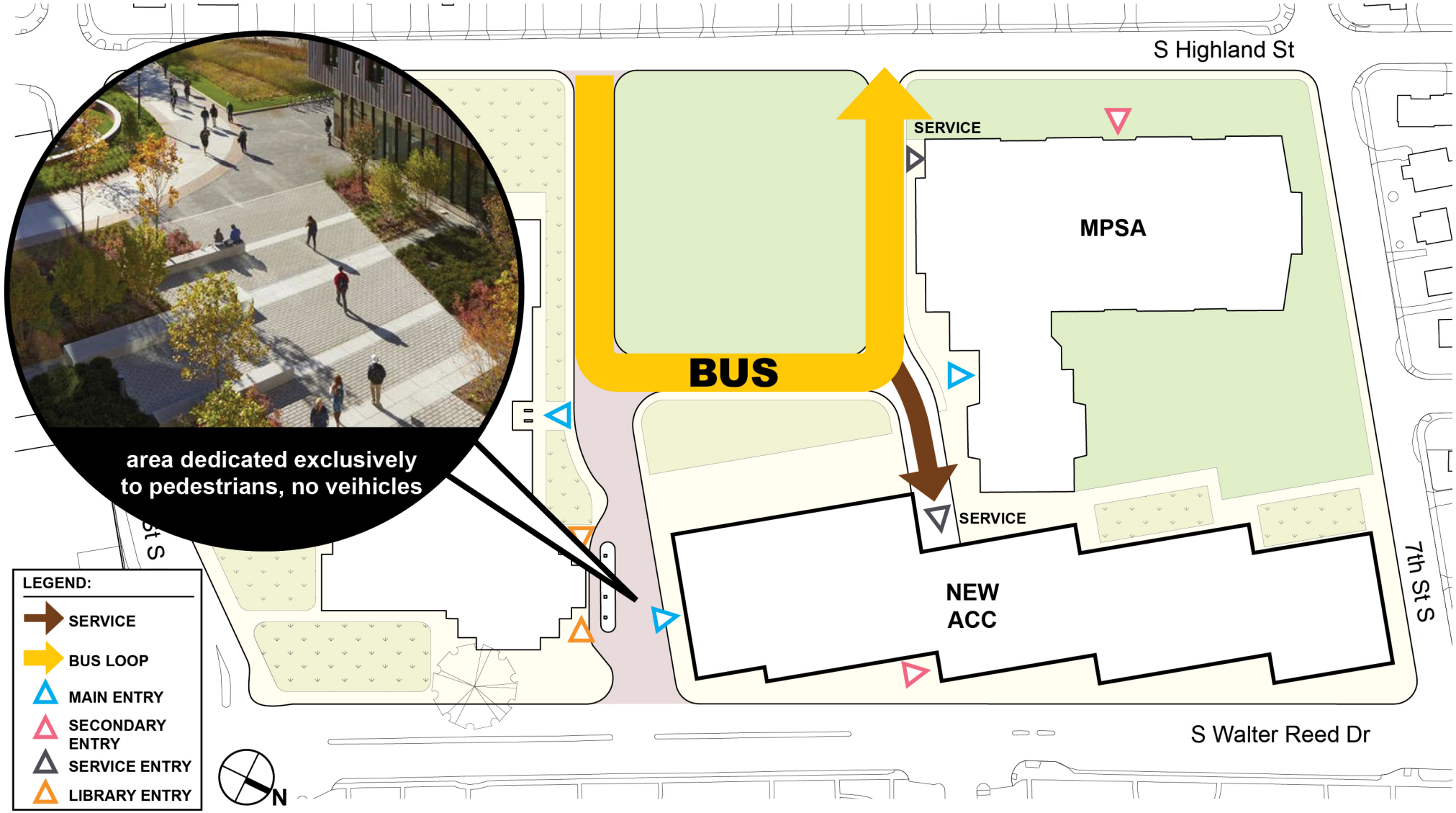
Site Concept: Bus Circulation #1



PFRC Principles of Civic Design

6. Optimize open space for public relaxation and recreation, and minimize building footprint and areas used for parking, on-site roads, and service drives.
9. Emphasize pedestrians, bicycles, and mass transit over automobiles in building placement, entry, and architecture.
10. Ensure building and site are functionally and spatially coherent, facilitating the flow of people to, from, and within the site

Site Concept: Bus Circulation #1



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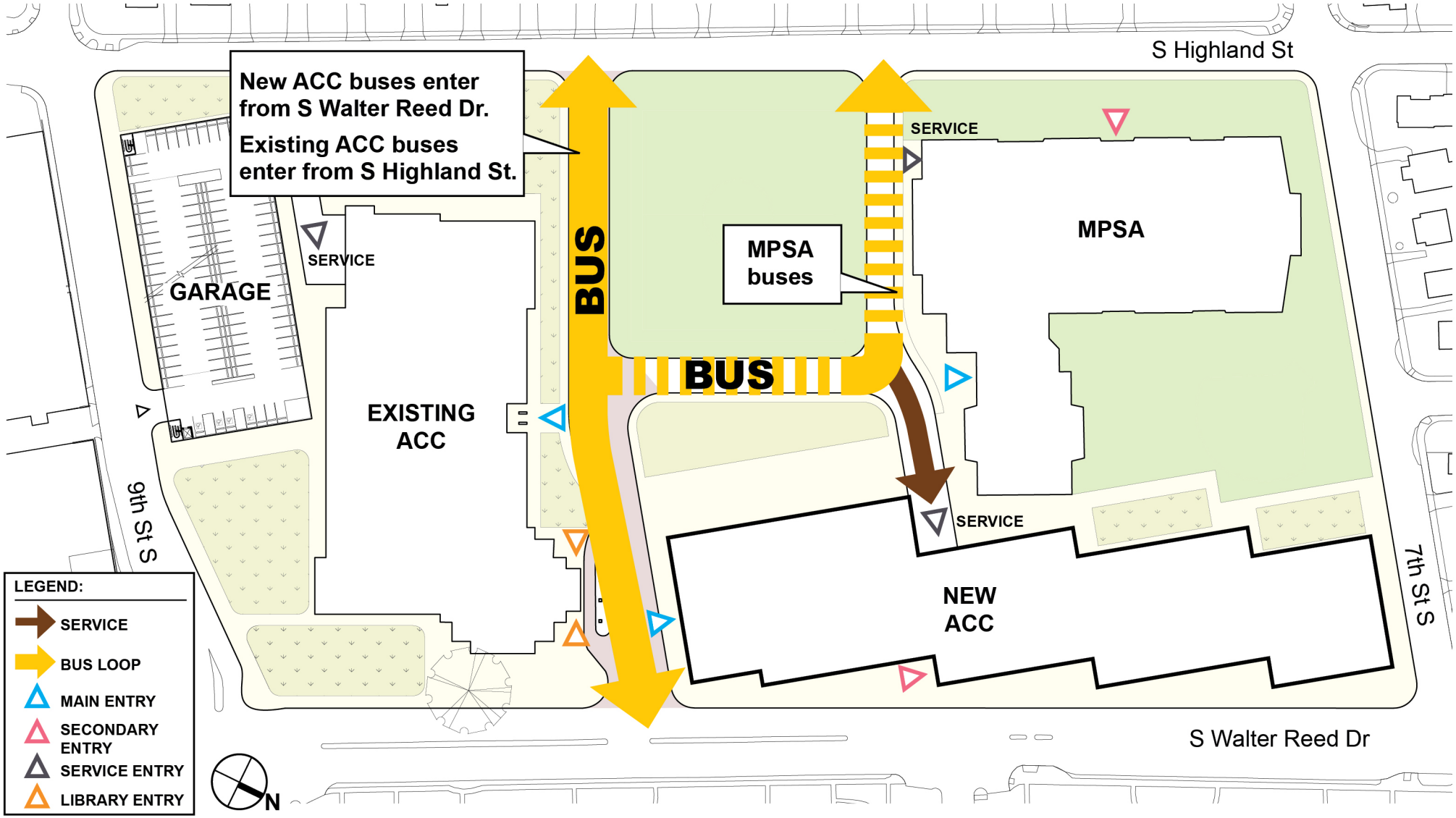
Site Concept: Bus Circulation #2



PFRC Principles of Civic Design

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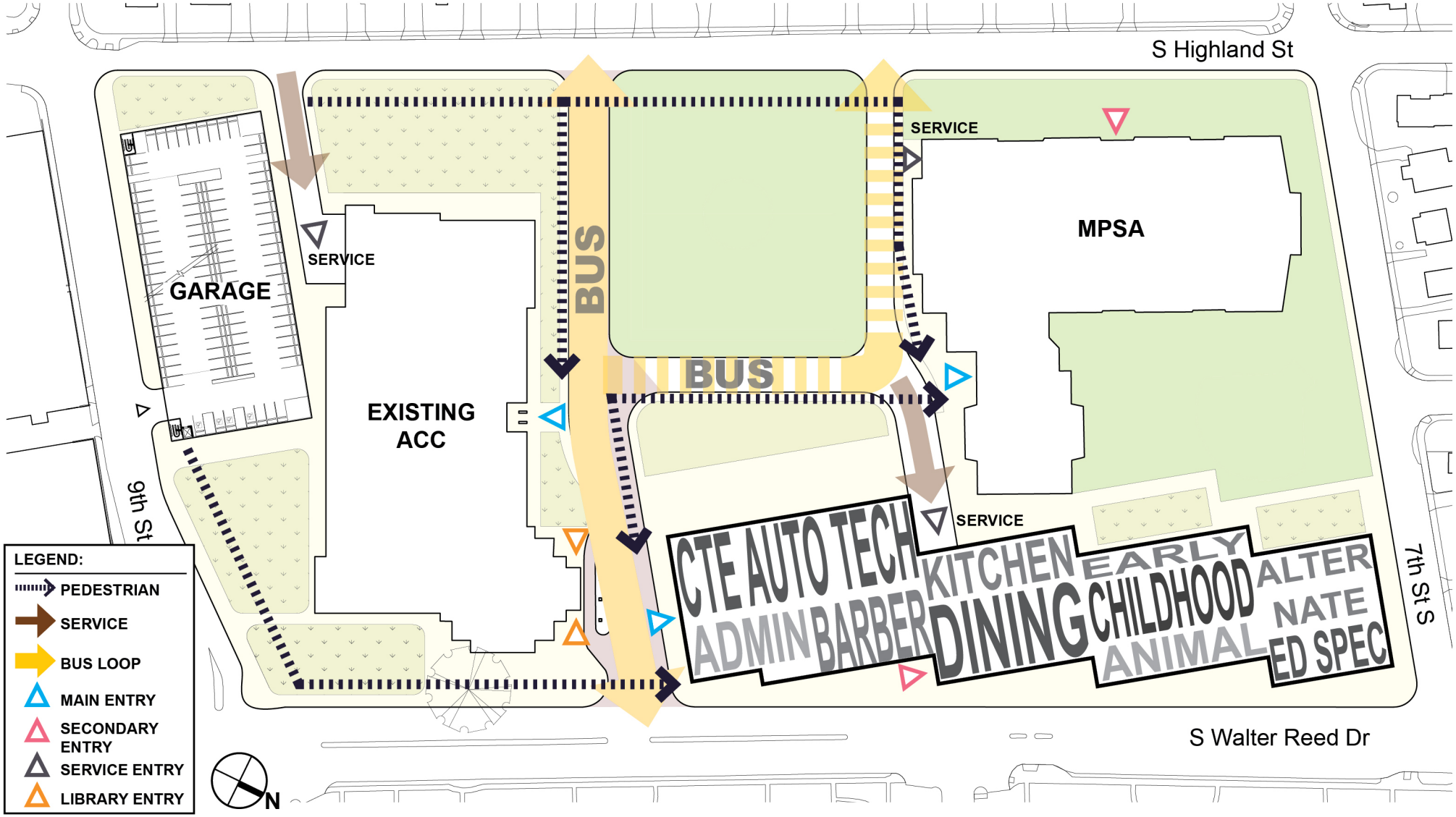
Site Concept: Pedestrian Circulation



PFRC Principles of Civic Design

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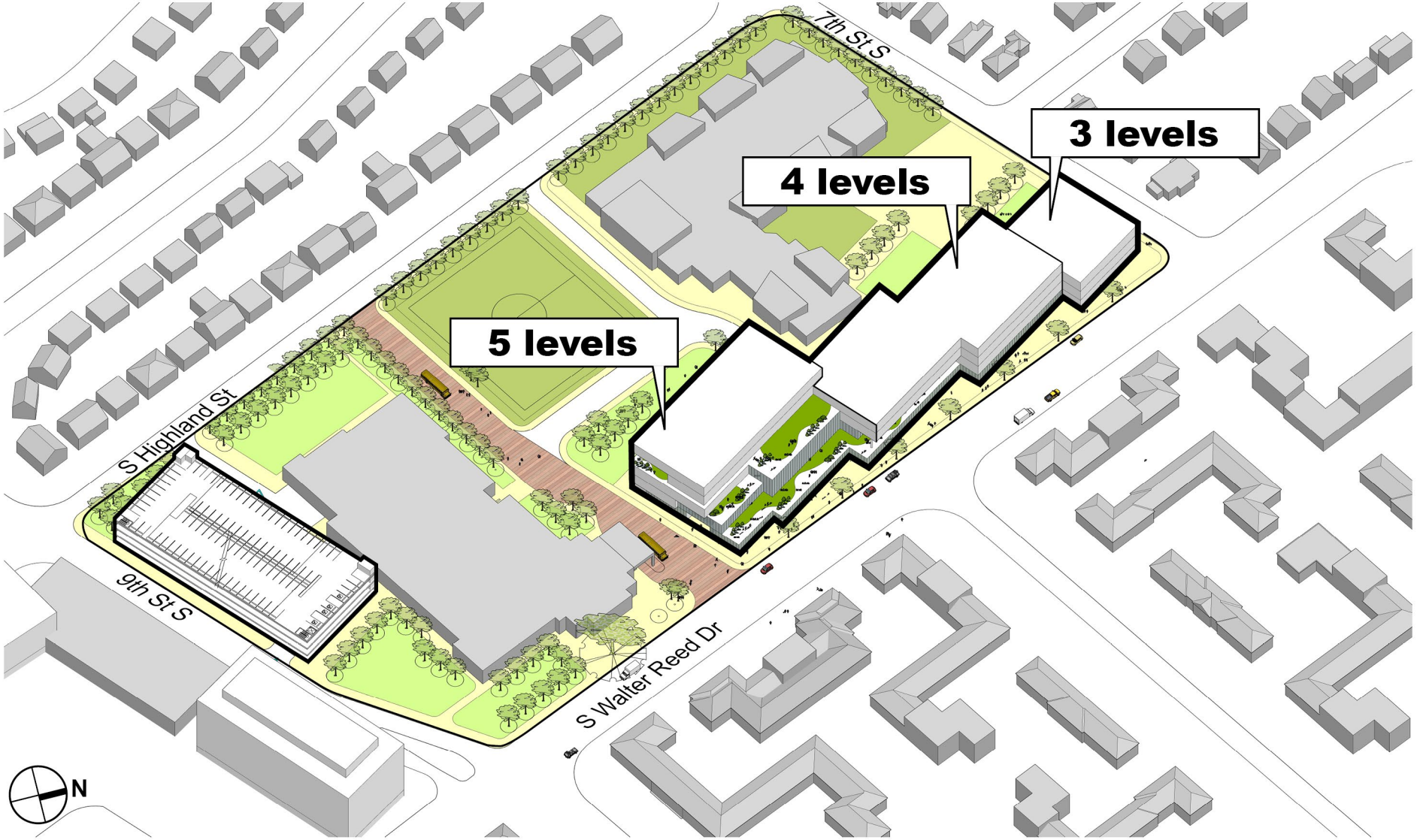
10. Ensure building and site are functionally and spatially coherent, facilitating the flow of people to, from, and within the site

Revised Site Design and Massing Concept

Developing a Revised Concept

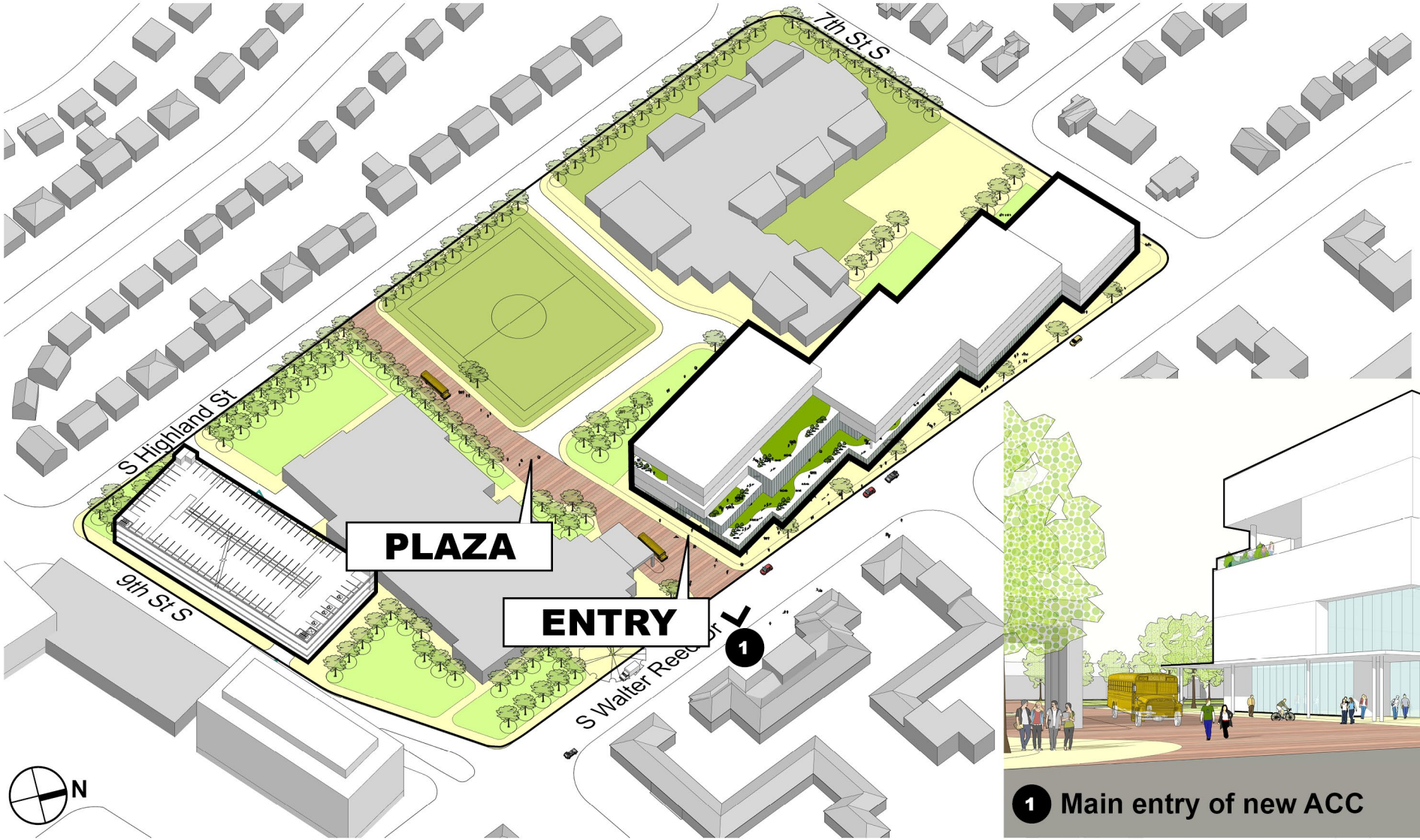
- Preparing a revised concept is a confluence of many inputs, including:
  - Space and adjacency requirements derived from the Ed Specs
  - PFRC Principles of Civic Design
  - Transportation data collection, observations, and analysis
  - Discussions with ACC and Arlington County staff
  - Feedback from BLPC, PFRC, and the public
- Preparation for BLPC/PFRC meeting #2 focused on revisions to building massing and internal circulation for busses and pedestrians.
- Further refinement of the area adjacent to the existing ACC building, including on-site parking, will be a focus in preparation for BLPC/PFRC meeting #3.

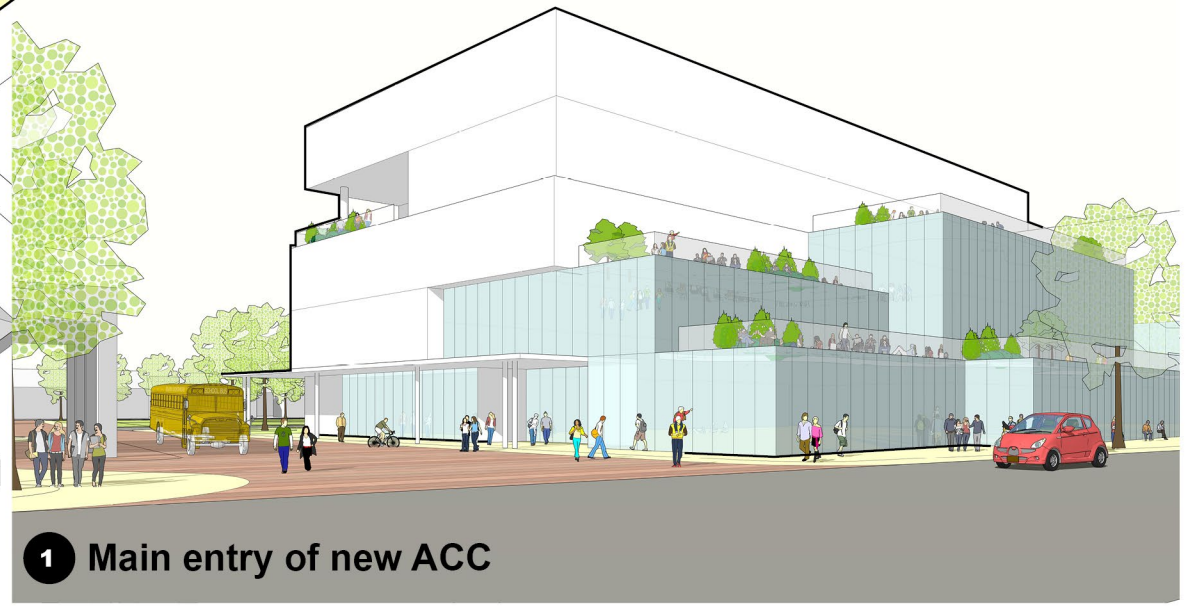
Site & Massing Concept



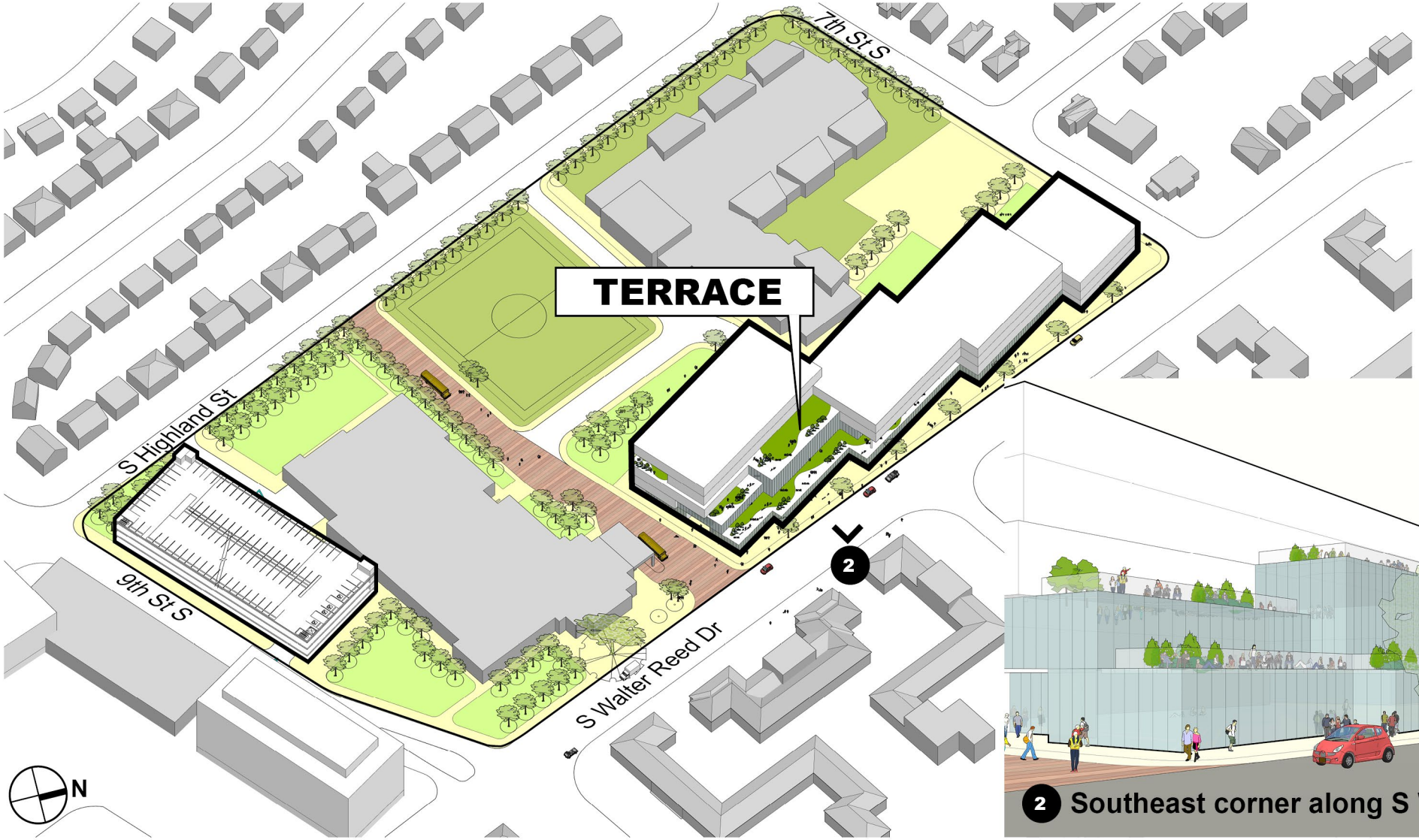
Site & Massing Concept

PLAZA:
the plaza space will support bus and service operations during the school day and be dedicated to pedestrians at all other times.

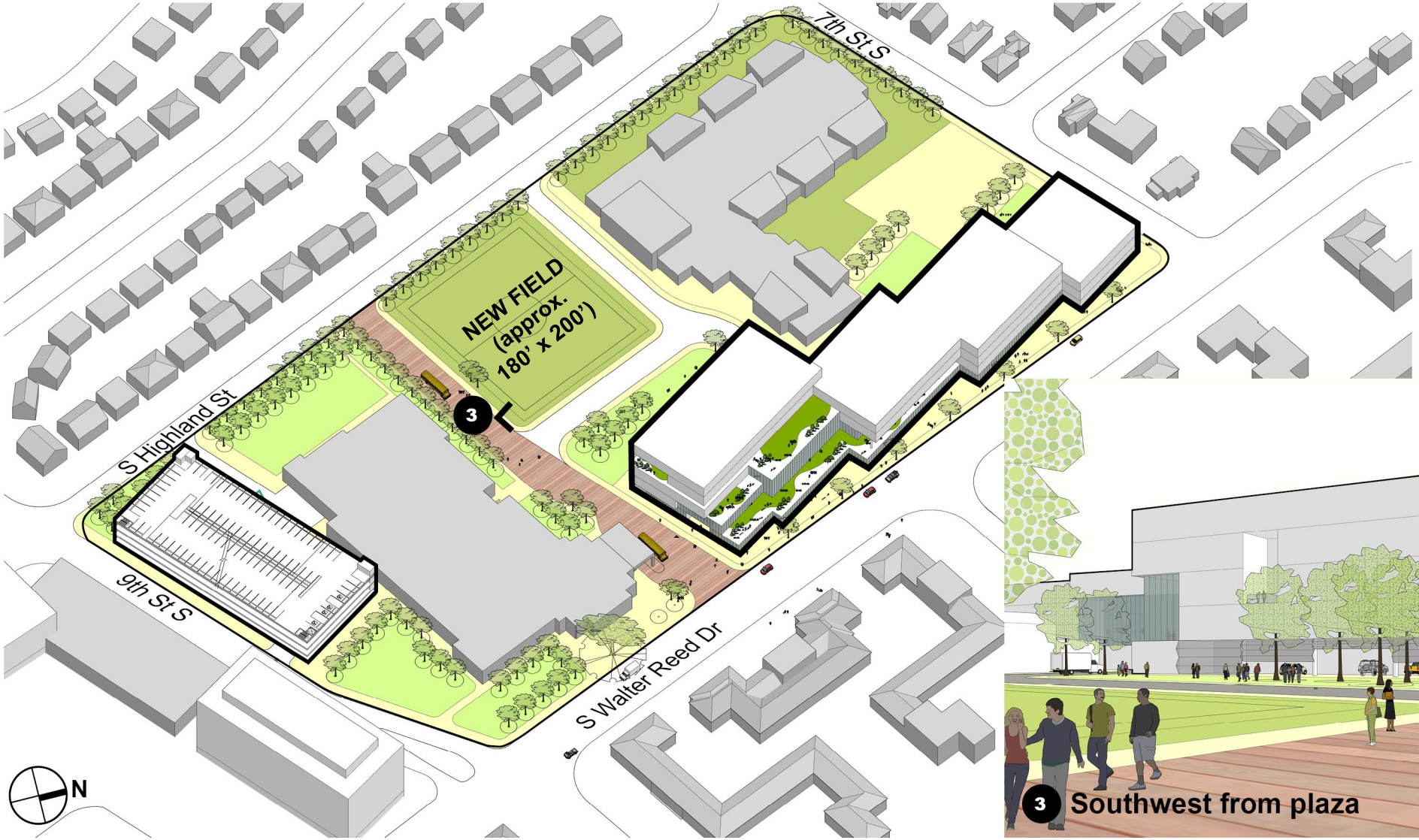


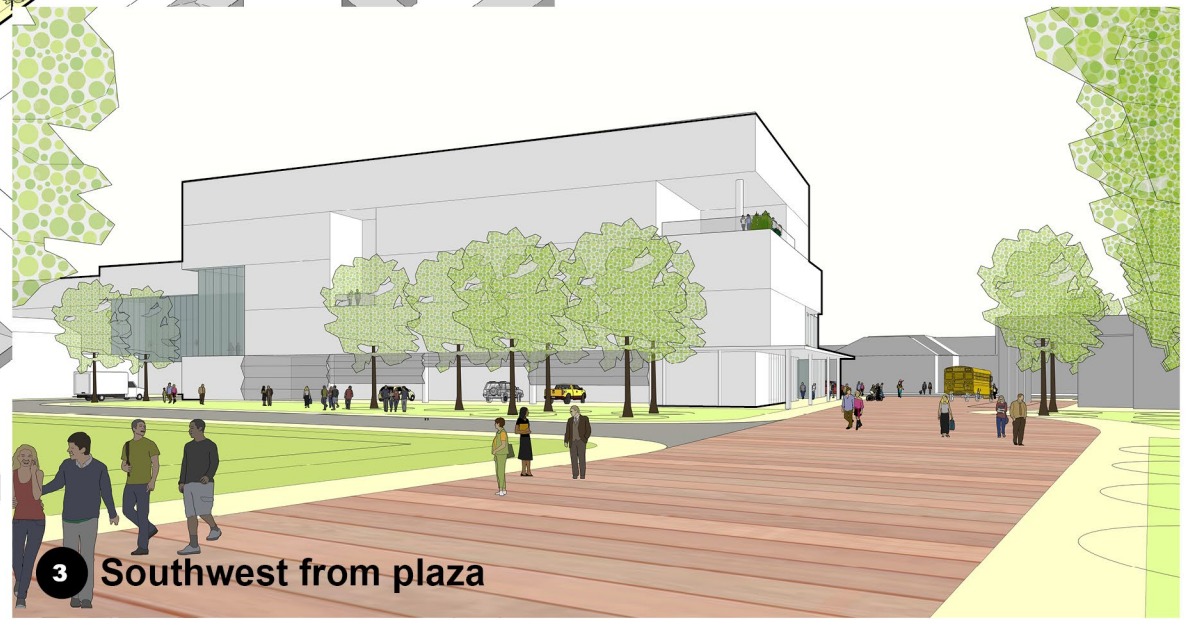


Site & Massing Concept



Site & Massing Concept

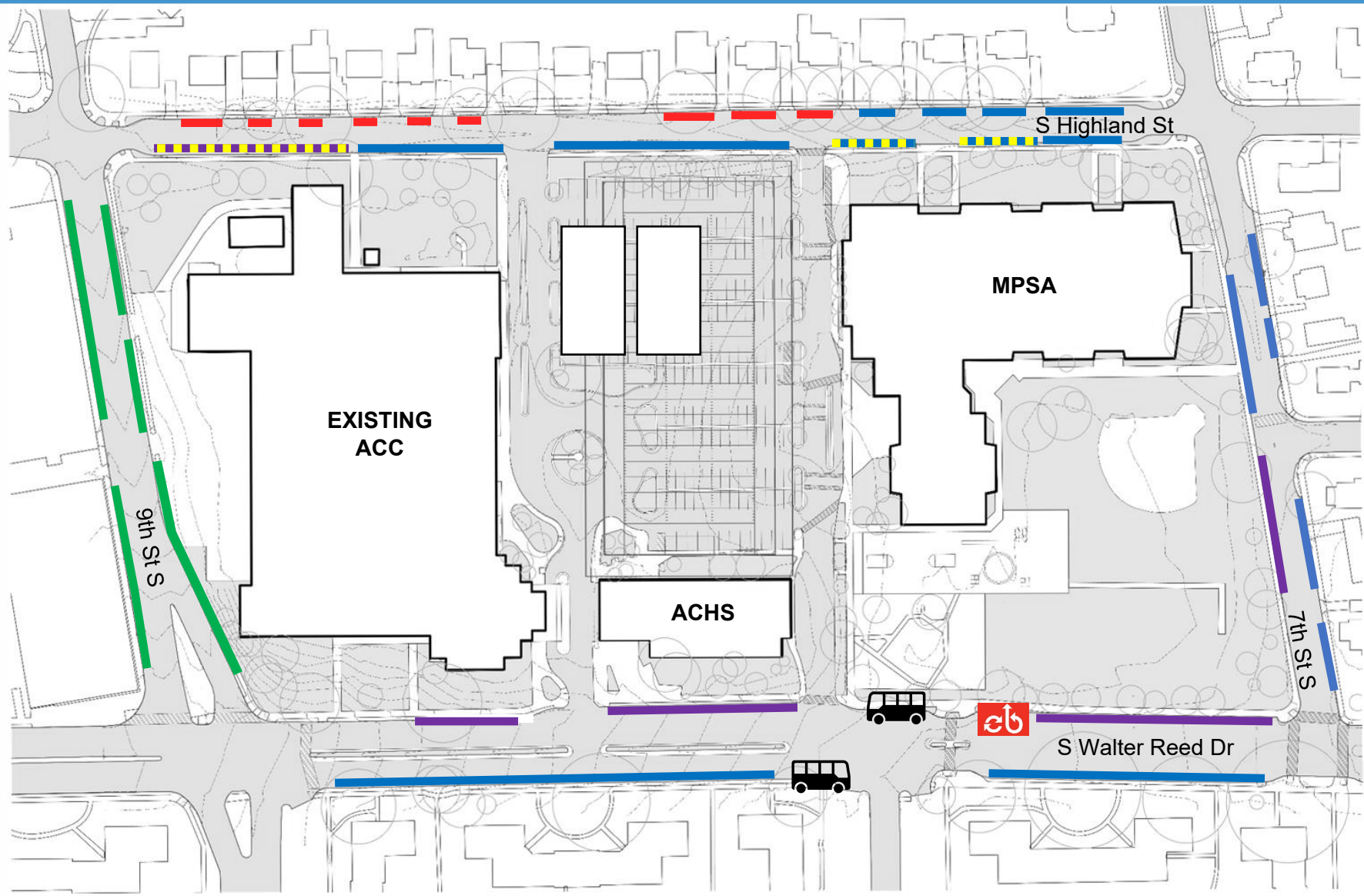




Curbside Management

Existing Curbside Management

- 177 total spaces on streets surrounding campus
- Metered parking on 9th Street is underutilized
- Observations and data indicates time-restricted parking on Walter Reed serves visitor demand for Library and ACC

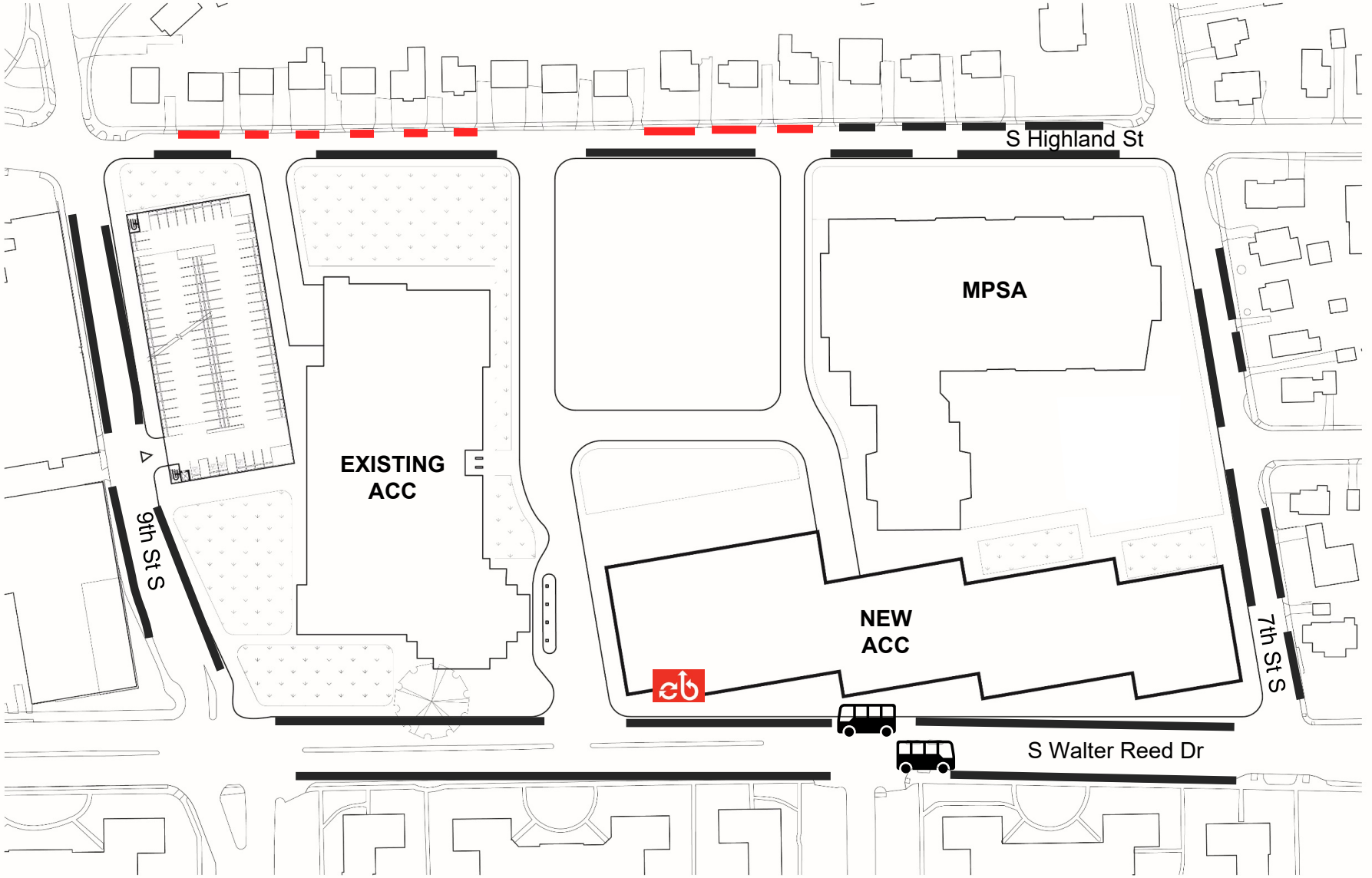


Curbside management (on school days)

- Unrestricted
- Time restricted
- Metered
- Residential Permit Parking
- Pick-up/Drop-off during arrival/dismissal

Future Curbside Management

- Complete Streets project will create more on-street spaces on Walter Reed
- Capital Bikeshare station can be moved off-street to prominent space near new ACC front-door
- Management of spaces could change in future, except for the Residential Permit Spaces on Highland Street
- Approximately 170-180 non-permit spaces expected



Future Curbside Management

- Arlington County ultimately determines curbside management
- APS Goals for future curbside management:
  - Coordinate with Complete Streets project to allow for visitor and ADA use of curbside in front of new ACC building and Library
  - Allow for ADA use of curbside on Highland St. for MPSA
  - Increase utilization of parking on 9th Street – including management that works for high school students
  - Improve sidewalk conditions along curbside uses where possible
  - Develop flexible infrastructure that can be easily adapted to changing conditions (e.g., modifying locations for PUDO)

Parking Demand and Supply

Parking – How we determine on-site requirements

Calculate estimated peak **demand** considering all site uses	Uses parking demand models derived from data collected at and near the campus on multiple dates, and the Ed Specs
Determine reasonable expected **reduction**	Based on past trends and Transportation Demand Management (TDM) division-wide goals (APS GO! and Vision Zero)
Assign parking **supply** to match peak demand	Supply can be on-site, off-site (both in structures and on-street), and/or a mix of both
County Board **approves** required parking as part of the Use Permit	Required parking supply minimum replaces the placeholder number of 400 parking spaces shown in the preliminary site plan

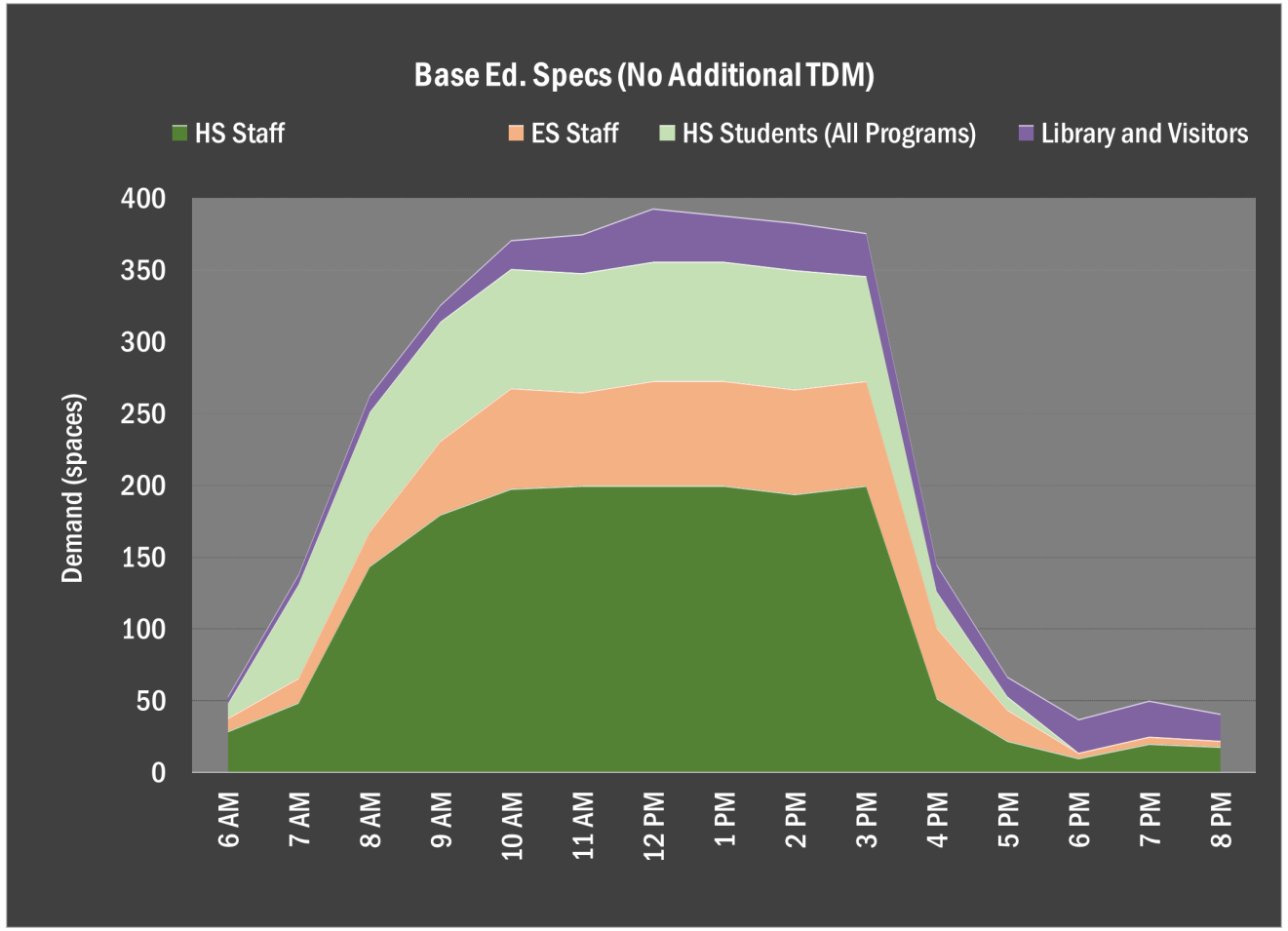
Parking – Combined Campus Demand

Calculate estimated peak **demand** considering all site uses

Determine reasonable expected **reduction**

Assign parking **supply** to match peak demand

County Board **approves** required parking as part of the Use Permit



The parking model calculates combined campus demand throughout the day to determine when the combined demand peaks

Parking – Transportation Demand Management

Calculate estimated peak **demand** considering all site uses

Determine reasonable expected **reduction**

Assign parking **supply** to match peak demand

County Board **approves** required parking as part of the Use Permit

Population	Driving Mode Splits (Based on 2016 APS Go! Surveys)	Target TDM Driving Mode Splits
Elementary School Staff	82%	75%
High School Staff	88%	75%
High School Students	16%	12%

Based on past trends and Transportation Demand Management (TDM) division-wide goals (APS GO! and Vision Zero)

Parking – Peak Parking Demand with Expected Reductions

Calculate estimated peak **demand** considering all site uses

Determine reasonable expected **reduction**

Assign parking **supply** to match peak demand

County Board **approves** required parking as part of the Use Permit

Population	Peak Parking Demand (spaces)	
	ACC Base Ed Specs 2,283 students on campus	**Maximum Site Capacity** 2,570 students on campus
APS Staff	237-273	279-316
Library & Visitor	37	37
High School Students	64-83	64-83
Total	**338-393**	**377-436**

-Ranges reflect demand based on existing versus target driving mode splits

-Maximum site capacity assumes no additional high school students compared to Base Ed Specs – High School student demand would increase if another high school program was added to campus

-ACC Base Ed Specs students on campus includes 1,795 for ACC and 488 for MPSA

-Maximum Site Capacity student on campus is derived from the FY 2023-32 CIP direction approved by the School Board on October 28, 2021 and includes 1,795 for ACC and 775 for TBD

Parking – Supply Options

Calculate estimated peak **demand** considering all site uses

Determine reasonable expected **reduction**

Assign parking **supply** to match peak demand

County Board **approves** required parking as part of the Use Permit

On-Site (structured and/or surface):

- Provides greatest flexibility and predictability for parking management
- Requires capital investment
- Permanence could reduce options for alternative site development

Off-Site (leased in nearby structure):

- Limited flexibility and dependent on availability and market conditions
- Distance from ACC may make use of leased spaces ineffective

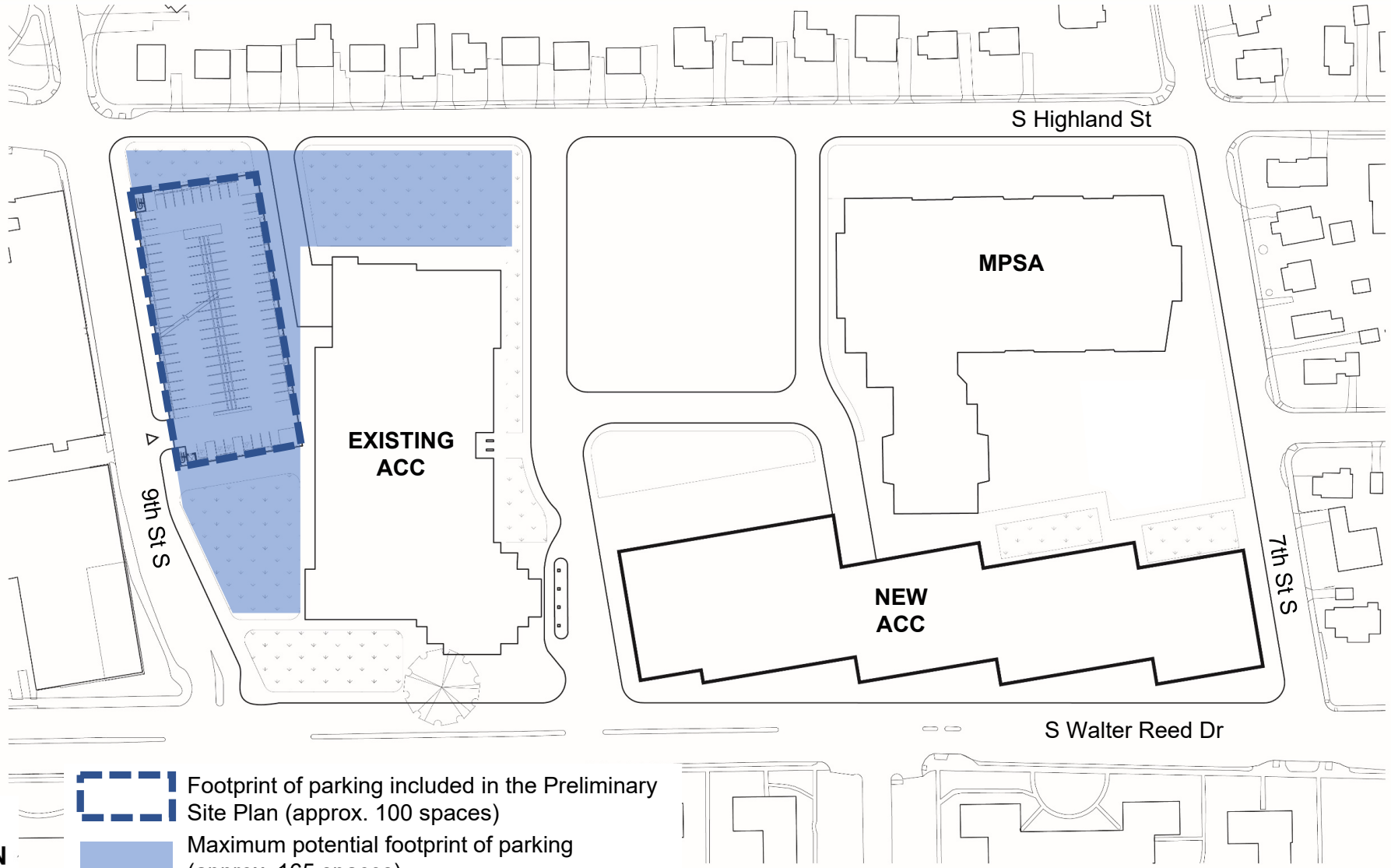
On-Street spaces adjacent/near campus:

- Viable option to address demand, particularly for spaces immediately adjacent to APS property
- Strategy successfully used on recent APS projects

Considerations for On-Site Parking

- The 400 spaces of on-site parking within a four-level above-grade parking structure included in the preliminary site plan was a placeholder which was intended to be updated based on further data collection and analysis during the design phase.
- Items to consider regarding the quantity and location of on-site parking:
  - Initial capital and ongoing operational/maintenance costs
  - Construction phasing and duration
  - Trade-offs for alternative uses such as open space and required stormwater management
  - Impact on flexibility for future site development
  - Ability to modify (expand or reduce) as parking demand changes

Potential Footprint for On-Site Parking



PFRC Principles of Civic Design

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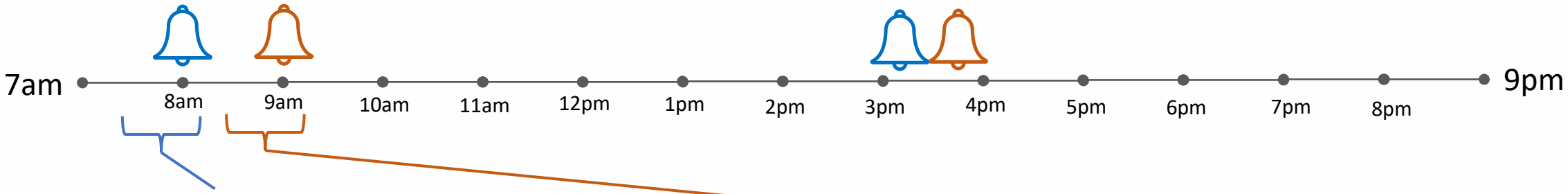
School-Day Transportation Timing

School-day Transportation Timing – Arrival



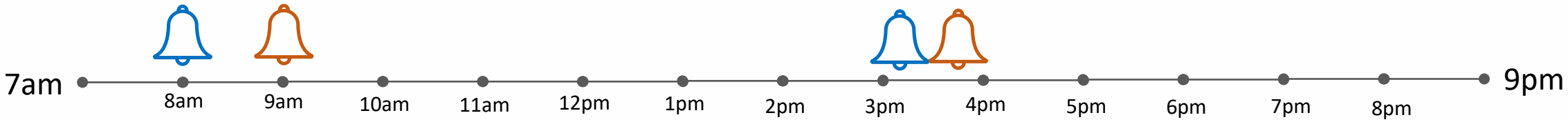
Career Center

- Morning Bell: 8:00 am
- Bus needs:
  - Estimated bus needs of 15 total during arrival and dismissal
  - Not all buses will be on site during arrival since they leave as soon as they unload all passengers
- Pick-up/Drop-off needs:
  - Estimated maximum of 20-25 cars loading/unloading at a single time
  - Not all cars expected to use designated pick-up/drop-off area

Montessori School

- Morning Bell: 9:00 am
- Bus needs:
  - Estimated bus needs of 6 total during arrival and dismissal
  - Not all buses will be on site during arrival since they leave as soon as they unload all passengers
- Pick-up/Drop-off needs:
  - Estimated maximum of 15-20 cars loading/unloading at a single time
  - Not all cars expected to use designated pick-up/drop-off area

School-day Transportation Timing – Mid-day



Career Center

- Bus needs:
  - CTE program loading/unloading students several times a day (estimated 3 buses at time)
  - Field trips
- Loading needs
  - Traditional loading for deliveries (e.g., cafeteria)
  - Unique needs/access for AutoTech program

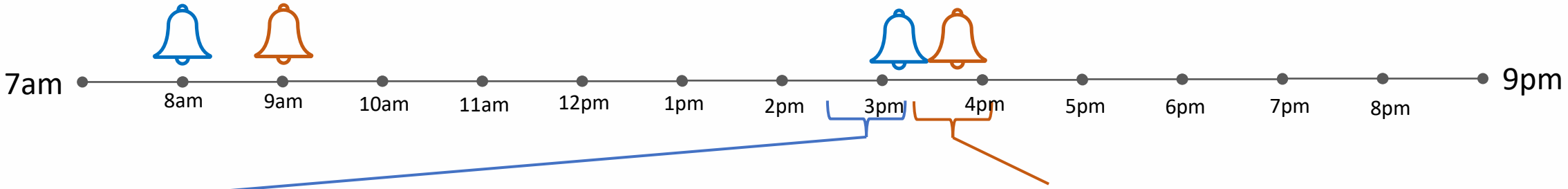
Montessori School

- Bus needs:
  - Field trips
- Loading needs
  - Traditional loading for deliveries (e.g., cafeteria)

Library

- Open 10am to 8pm most days

School-day Transportation Timing – Dismissal



Career Center

- Afternoon Bell: 3:10 am
- Bus needs:
  - Estimated bus needs of 15 total during arrival and dismissal
  - All 15 buses may need to be on site to load/match students to buses. If all 15 buses lined up in a row it would take up most of the U-shaped bus area (all three sides). This space can be shortened if buses parked diagonally or in multiple rows.
- Pick-up/Drop-off needs:
  - Estimated maximum of 25-35 cars loading/unloading at a single time
  - Higher number compared to arrival because students need to match to cars
  - Not all cars expected to use designated pick-up/drop-off area

Montessori School

- Afternoon Bell: 3:41 am
- Bus needs:
  - Estimated bus needs of 6 total during arrival and dismissal
  - All 6 buses may need to be on site to load/match students to buses.
- Pick-up/Drop-off needs:
  - Estimated maximum of 20-30 cars loading/unloading at a single time
  - Higher number compared to arrival because students need to match to cars
  - Not all cars expected to use designated pick-up/drop-off area

Next Steps

Next Steps

- Continue developing the project design; including incorporating feedback from the BLPC, PFRC, and public.
- Prepare a final proposed Concept Design for the March 30 BLPC/PFRC meeting which will include refinements to the site plan, building massing, and on-site parking.
- At the March 30 meeting the BLPC/PFRC will discuss the proposed Concept Design and identify open issues for further development and/or refinement during the Schematic Design phase.

Arlington Career Center Project
Meeting #2 Advance Materials - Part 2 of 3

Background and Revised Site Design and Massing Concept

Complete before 7pm

on February 16, 2022