

New K-8 School at 3201 Ryan Avenue

CIVIC DESIGN REVIEW

SEPTEMBER 3, 2019



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Prepared by:



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A Critical Community Need

Located at 3001 Ryan Avenue, the proposed Ryan Avenue K-8 school addresses a critical need.

Our city's northeast neighborhoods have experienced sustained and extraordinary growth. Student enrollments have risen dramatically, driving rapidly rising enrollment projections in the four neighboring elementary schools (J.H. Brown, Edwin Forrest, Thomas Holme and R.B. Pollock) which feed into the existing Meehan Middle School. The capacity of these area schools is seriously challenged.

Scheduled to open for the start of classes Fall 2021, the New Ryan Avenue K-8 School is designed to accommodate 1,660 learners and provide 21st century learning environments for the area's children, alleviating pressure at surrounding area schools.

Campus Masterplan Concept

The proposed K-8 School will be constructed on an approximately 95-acre School District of Philadelphia (SDP) parcel(s) presently shared by Meehan Middle School (3001 Ryan Avenue), Lincoln High School (3201 Ryan Avenue) and a SDP sports facility.

The New K-8 School will serve as a feeder school for Lincoln High School and will be sited to complement the existing Lincoln HS and create a cohesive campus while maintaining separate identities and access for each facility.

The existing Meehan Middle School and Lincoln High School shall remain occupied and operating as SDP schools throughout design and construction of the Project. The SDP intends to decommission Meehan upon the completion and occupancy of the New K-8 facility.

Community Engagement & Design Input

The K-8 School's proposed siting and the development of the Campus Masterplan Concept were guided by a robust series of community meetings, the presentation of site selection and design options, with public input gathered through a series interactive public 'voting' presentations and online surveys. Community input accessed through these survey techniques determined the key criteria and design factors to be considered.

Five potential building locations within the campus parcel were initially explored and evaluated. Ultimately, community surveys and public meetings determined the selection of the building's siting. The community's clear preference for the proposed location was overwhelming, and reflected the community's strong desire for reserving the land south of Lincoln HS for recreation uses while leveraging the proximity to Pennypack Park to provide a contemplative and natural setting for the New K-8 School.



AERIAL PLAN



1 NORTH SIDE OF ROWLAND AVENUE AT THE INTERSECTION OF SHEFFIELD AVENUE LOOKING NORTHWEST



2 NORTH SIDE OF ROWLAND AVENUE AT THE INTERSECTION OF CHIPPENDALE STREET LOOKING NORTHWEST



3 LINCOLN ACCESS ROAD AT THE INTERSECTION OF ROWLAND AVENUE AND SHELMIER AVENUE LOOKING NORTHWEST



4 ACCESS ROAD ALONGSIDE LINCOLN HIGH SCHOOL LOOKING NORTHWEST



5 LINCOLN ACCESS ROAD AT THE NOTRHEAST CORNER OF LINCOLN HIGH SCHOOL LOOKING NORTHWEST



6 NOREAST FIELD OF LINCOLN HIGH SCHOOL LOOKING NORTHWEST



7 NORTH CORNER OF PARCEL LOOKING SOUTHWEST



8 NORTH CORNER OF PARCEL LOOKING SOUTHEAST



9 NORTHWEST CORNER OF LINCOLN HIGH SCHOOL LOOKING NORTHEAST



10 EAST SIDE OF RYAN AVENUE AT THE INTERSECTION OF NESPER STREET LOOKING NORTHEAST



11 NORTHEAST CORNER OF ROWLAND AVENUE AND RYAN AVENUE LOOKING NORTH



12 EAST SIDE OF RYAN AVENUE AT THE INTERSECTION OF BATTERSBY STREET LOOKING EAST



13 SOUTHWEST CORNER OF RYAN AVENUE AND SANDYFORD AVENUE LOOKING EAST



14 ACCESS ROAD ALONGSIDE AUSTIN MEEHAN MIDDLE SCHOOL LOOKING EAST



AERIAL VIEW LOOKING EAST



AERIAL VIEW LOOKING NORTH





ARRIVAL \ \ BUS ROUTES

- 1 PARKWOOD - OXFORD CIRCLE
- 14 BENSLEM - FRANKFORD
- 28 FOX CHASE - TACONY
- 66 TORRESDALE - TACONY
*CONNECTION TO BROAD STREET LINE

- 70 CHELTENHAM - TACONY
*CONNECTION TO REGIONAL RAIL
- 88 BUSTLETON - FRANKFORD
*CONNECTION TO BROAD STREET LINE

BUILDING SITING OPTIONS

The Project Team and the School District of Philadelphia initially considered five potential locations for the new K-8 School.

1. School on Rowland Avenue

The immediacy and proximity to the Ryan & Rowland intersection were determined to pose both elevated risks and greater distraction for the learning environments. Given the proximity to the trafficked intersection, vehicular access would need to be brought to the north side of a new building, effectively cutting off access to play areas and remaining fields located between this new building and Lincoln HS. Additionally, recorded community sentiment preferred maintaining this portion of the campus parcel for community recreation and sports uses.

2. The Former High School Location

Positioning the New School further from the Ryan & Rowland intersection, at the prior location of the original Lincoln HS would improve the concerns raised by proximity to the intersection, but would still impose limits upon land available for the community's recreational use. Current HS sports practice fields would be eliminated and the overall project costs would be increased due to the need to excavate and demolish abandoned foundations and below grade structures from the original high school.

3. School on Ryan Avenue

The portion of the parcel immediately west of Abraham Lincoln HS was determined to be too small to accommodate the footprint required by the 180,000GSF program. Effective use of this portion of the site was further complicated by significant grade changes present at its northern reaches and limited space for developing adequate access and drop-off lanes. Use of this portion of the site would also eliminate any potential consideration for future additions or modifications to the Abraham Lincoln HS.

4. School in a Natural Setting

The pocketed area immediately adjacent to Pennypack Park offered a unique setting for siting the school. The proximity to nature and the tree-lined boundary established a quiet and calm tone and distinguished this area experientially from the dense urban neighborhoods immediately surrounding the campus and from which the student would be drawn. This location also afforded simplified and direct access routing and avoided operational impacts to both Meehan and Lincoln during its construction.

5. A Campus Cluster

The team explored the possibility for creating a 'Quad' or court between the new K-8 and Lincoln HS, but this was challenged by the fact that the existing High School's eastern bar housed the larger assembly spaces (gym, cafeteria, lockers) and service functions, effectively limiting opportunities for shared engagement of programs. The site also sat above existing stormwater management systems and would require significant additional costs to replace these and modify the existing



SITE OPTION ANALYSIS \ ELIMINATION

1 School on Rowland Avenue <ul style="list-style-type: none"> + Easy Pedestrian access + Retains HS practice fields - Proximity to busy intersection - Difficult vehicular access 	2 The Former High School Location <ul style="list-style-type: none"> + Retains some community fields - Adds traffic to existing HS Loop - Challenged vehicular access - Abandoned HS foundations 	3 School on Ryan Avenue <ul style="list-style-type: none"> + Easy Pedestrian access + Retains HS & Community fields - Too small to fit program - Steep grades & loss of trees 	4 School in a Natural Setting <ul style="list-style-type: none"> + Unique Setting + Separate driving loop & pedestrian access + Retains HS & Community fields - Relocates baseball & softball 	5 A Campus Cluster <ul style="list-style-type: none"> + Separate drive loop & pedestrian access + Retains HS & Community fields - Difficult to connect to service side of HS - Conflicts with Stormwater system
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Final Site Selection

As the process developed, attention became focused upon two leading options for location of the proposed K-8. These were re-named Options 'A' and 'B' and presented to the community. Survey results determined a distinct preference for Option 'A' and location of the New K-8 near the tree-lined pocket adjacent Pennypack Park.

Community Fields Use

Though it maintained a portion of the fields along Rowland, Option B effectively reduced the area being made available for community use. This reduction was negatively viewed across all public surveys and gave rise to the largest numbers of public comments and expressed concerns. Site Option A was understood to retain the community uses without imposing any new limitations or restrictions.

Vehicular Access

Option B was challenged by its proximity to the heavily trafficked Ryan and Rowland intersection. The roadway inlets for the School's access lane(s) would necessarily be located only a short distance from the intersection. These locations would inevitably be in conflict with stacked queues during signal changes and would contribute to congestion both at the intersection and within the campus parcel. Option B would also likely require an extension of the existing Lincoln HS loop to accommodate shared use for buses.

The ability to locate access and discharge for Option A more remotely from the Ryan intersection alleviates signal change queues while providing a distinct approach that would function independently of Lincoln HS both during construction and post-occupancy. Option A also offered the opportunity for utilization of the Meehan MS drop-off loop as a second (Grades 6-8) circulation route once Meehan is decommissioned. This would help reduce loads on Rowland and improve traffic generally.

Pedestrian Access

Given the density of student population residing south of Rowland, Option A served to balance walking distances while providing the safest walking paths for student traveling from either the Ryan or Rowland boundary. This location also segregates the student populations as the natural paths leading to the New K-8 would be distanced from the traffic patterns of Lincoln HS students.

The Option B location would need to accommodate and coordinate the access paths for both the New K-8 and Lincoln populations as these would likely be sharing paths. These paths would be confined within a more condensed area and would result in students having to cross a series of intersections within the campus parcel.

An Engaged Public Process

At the direction of the School Board of the School District of Philadelphia (SDP), a robust series of public meetings and presentations were conducted throughout the spring and summer of 2019 to solicit public input regarding both the development of criteria for the consideration of potential locations for the new K-8 school and subsequently, for the selection of a specific building location.

Public presentations and forums were held at Abraham Lincoln High School and surrounding elementary schools to discuss the project and topics related to catchment boundaries. The community's input was collected through a series of interactive, real-time surveys, where the attending public could record their preferences and see these tallied onscreen as well as through an online survey tool on the District's website.

Key Site Design Criteria

As a result of the public presentations and community engagement effort, focus was drawn toward five (5) design concerns for determination of the building's location:

- Walking distance
- Traffic
- Safety
- Environmental Considerations
- Community Use

Finalizing Site Selection

The community survey tools were utilized to determine the public's preference between the two final building location options. Both the in-person sessions and the online survey reflected an overwhelming preference in favor of locating the new K-8 School near Pennypack Park at the northeast quadrant of the campus parcel.

Identified benefits to this location included:

- Maintenance of Community access and use for the recreation fields along Rowland Avenue, A quiet and protected natural setting for the proposed elementary program,
- Ability to develop distinct pedestrian (student) walking paths from both Ryan and Rowland avenues that would both avoid interfering with Lincoln HS circulation patterns and crossing any vehicular traffic lanes within the property,
- Ability to develop and construct the new school with minimal impacts for either Meehan Middle School or Lincoln High School during construction,
- Balanced walking distances for students approaching from either Ryan or Rowland Avenues,
- Enhanced safety through increased presence, visibility and monitoring of what had previously been a remote and unoccupied portion of the overall campus parcel,
- Ability to develop two separate vehicular loops at the school, segregating bus traffic from parent drop-off and thus promoting student safety
- Reduced costs due to a clear, flat site free of existing structures or underground infrastructure.

New School Access

To promote Student Safety, separate driving loops and access paths were developed for:

- Parent drop-off and parking
- School Bus drop-off and Staff parking
- Bike lane and parking

Student walkways to the New K-8 School from both Ryan and Rowland Avenue avoid crossing any vehicular lanes once on the campus parcel.

The driving lanes providing vehicular access to the New K-8 utilize a re-designed version of the present Abraham Lincoln Service Lane, thus avoiding any increase to existing HS traffic congestion.

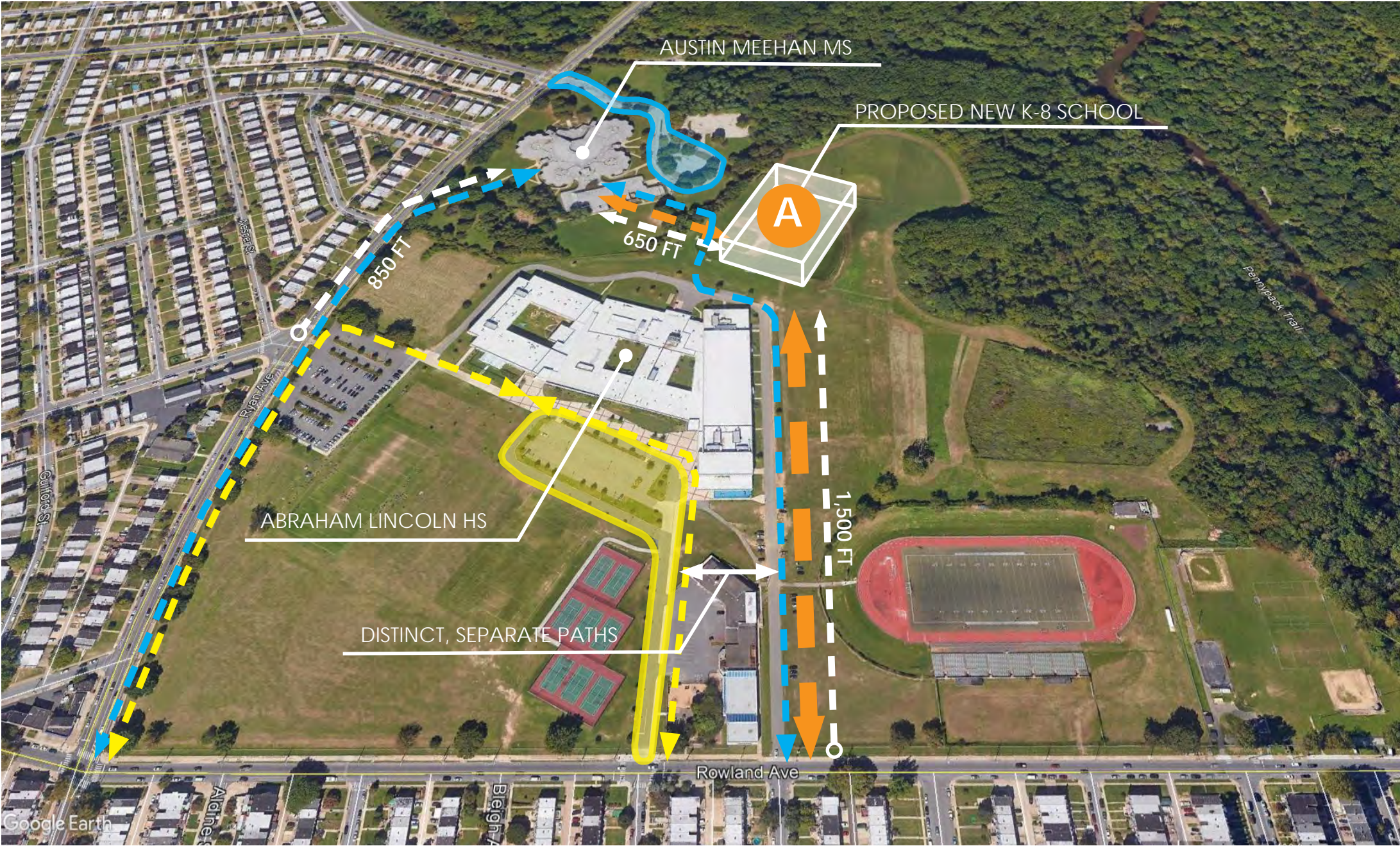
The redesign includes the construction of a wide pedestrian path (sidewalk) running parallel to the vehicular roadway along its eastern edge. This path is separated from the by a tree-lined landscape buffer which includes light poles for the new walkway. The new path provides clear, unobstructed lines of sight between the New K-8 and Rowland Avenue.

A Second Access Loop

Once Meehan is decommissioned, the New K-8 can also utilize the existing Meehan Loop as a secondary drop-off point, alleviating traffic from Rowland and providing a distinct arrival and discharge point for the Middle School (Grades 6-8) population of the New School.

Minimally Disruptive

This design strategy provides the added benefit of avoiding any impact to existing traffic and pedestrian access routes serving either Meehan MS or Abraham Lincoln HS throughout the construction of the New K-8.



Balancing Walking Distances

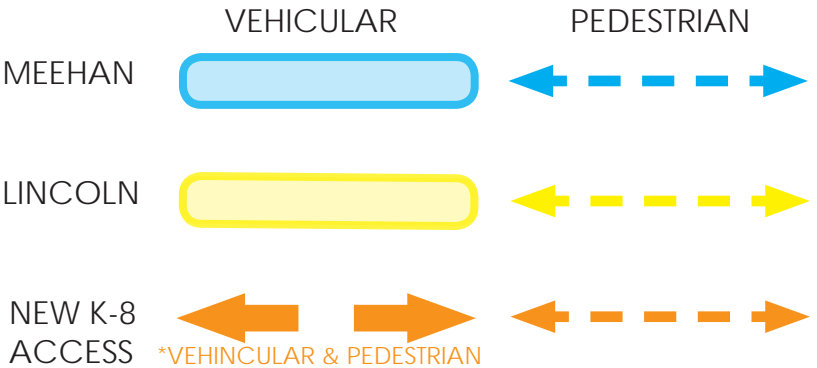
The proposed building location effectively balances travel distances for pedestrians from both Ryan and Rowland avenues while recognizing the density of the residential neighborhood immediately south of Rowland.

Existing Meehan

2,200 FT - Rowland to Meehan
850 FT - Mid-Ryan Ave to Meehan

New K-8

1,500 FT - Rowland to New K-8
650 FT - New K-8 to Meehan

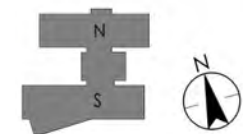













DEPARTMENT LEGEND

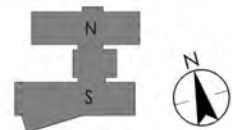
- BUILDING CIRCULATION
- BUILDING CIRCULATION (SERVICE)
- BUILDING SUPPORT SPACES
- INSTRUCTIONAL MEDIA CENTER
- ACADEMIC CORE SPACES
- SHARED ACADEMIC SPACES
- COLLABORATION SPACE
- ASSEMBLY PROGRAM AREAS (THRU CIRCULATION)
- ASSEMBLY PROGRAM AREAS
- FOOD SERVICE (SERVERY)
- FOOD SERVICE (KITCHEN)
- ADMINISTRATION





DEPARTMENT LEGEND

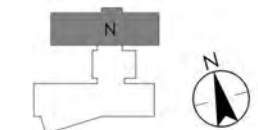
-  BUILDING CIRCULATION
-  BUILDING SUPPORT SPACES
-  INSTRUCTIONAL MEDIA CENTER
-  ACADEMIC CORE SPACES
-  SHARED ACADEMIC SPACES
-  COLLABORATION SPACE
-  ADMINISTRATION





DEPARTMENT LEGEND

- BUILDING CIRCULATION
- BUILDING SUPPORT SPACES
- ACADEMIC CORE SPACES
- SHARED ACADEMIC SPACES
- COLLABORATION SPACE
- ADMINISTRATION





TREES



Acer x freemanii 'Celebration' | Celebration Freeman's Maple



Quercus bicolor | Swamp White Oak



Quercus palustris | Pin Oak



Quercus phellos | Willow Oak



Taxodium distichum | Bald Cypress



Ulmus americana 'Princeton' | American Elm

SMALL TREES AND SHRUBS



HERBACEOUS PERENNIALS



Carex amphibola | Creek Sedge



Aster oblongifolius 'Raydon's Favorite' | Aromatic Aster



Amsonia hubrichtii | Threadleaf Bluestar



Bouteloua curtipendula | Sideoats Grama



Deschampsia cespitosa 'Goldtau' | Tufted Hair Grass



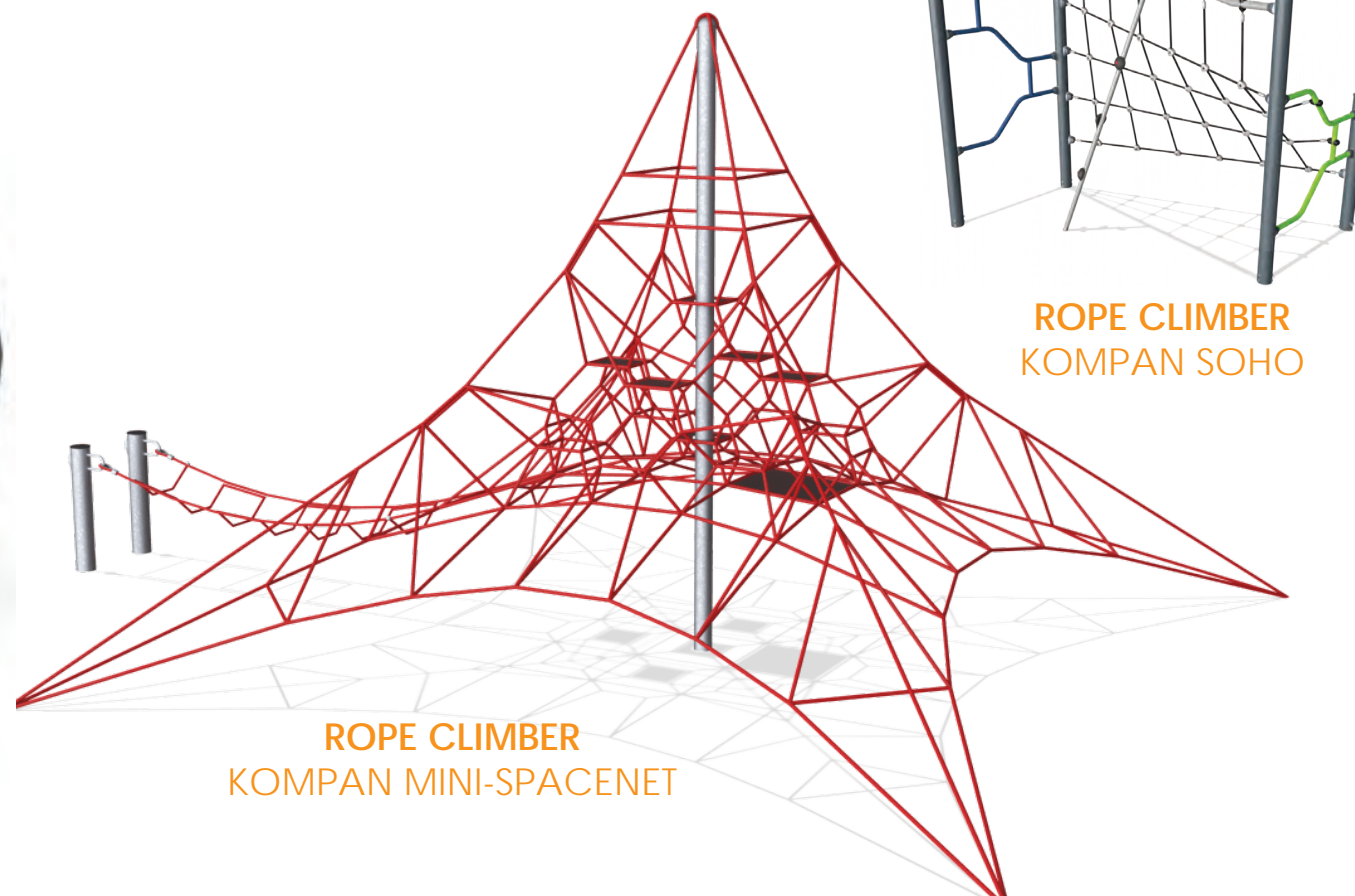
Narcissus 'February Gold' - Daffodil



SEATING AND PLAY / OUTSIDERS LOOP ARC



CUBE CLIMBER / KOMPAN



ROPE CLIMBER
KOMPAN SOHO

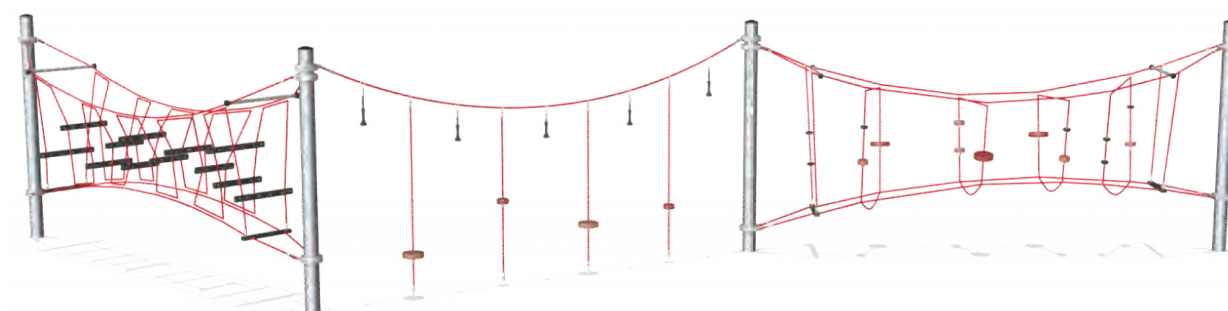
ROPE CLIMBER
KOMPAN MINI-SPACENET



SEATING AND PLAY / OUTSIDERS STARFISH



GEODESIC CLIMBER / KOMPAN BLOOX



BALANCE SKILLS / KOMPAN AGILITY PACKAGE

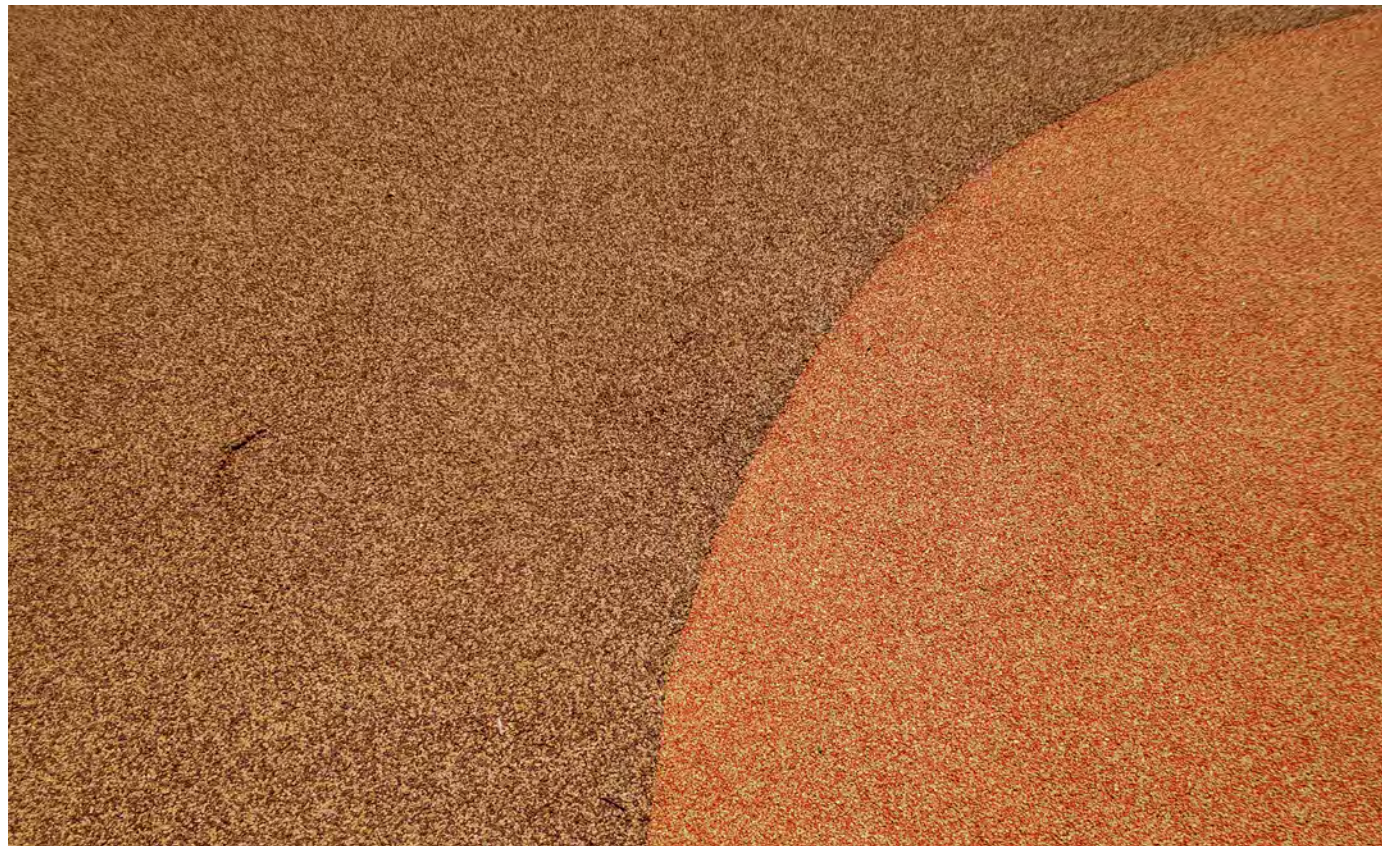


BASKETBALL



SEATING AND PLAY / OUTSIDERS HOPOP

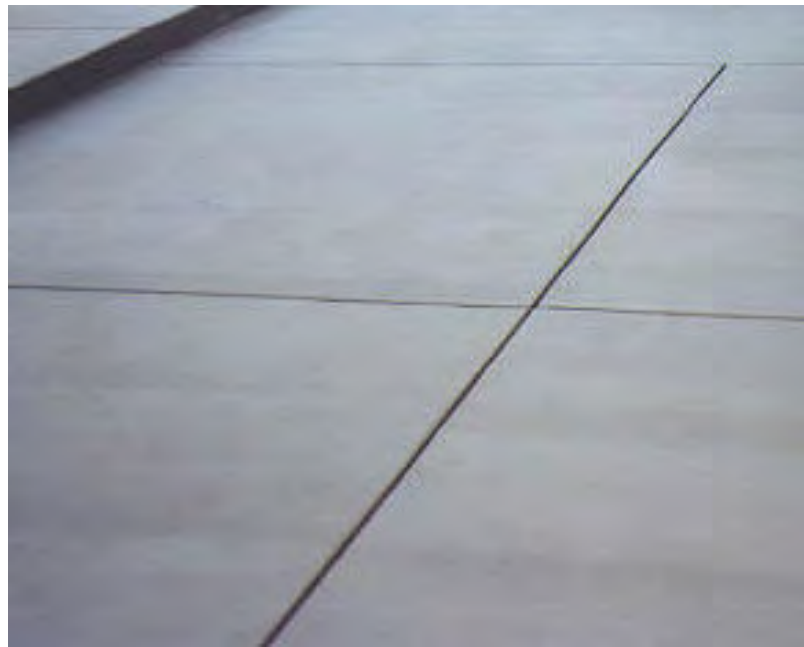




RUBBER SAFETY SURFACE



THERMOPLASTIC PAINT ON ASPHALT



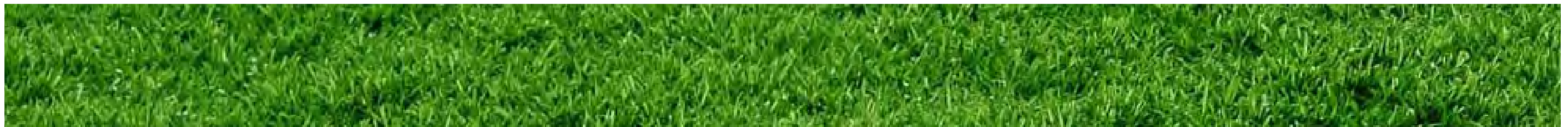
CONCRETE



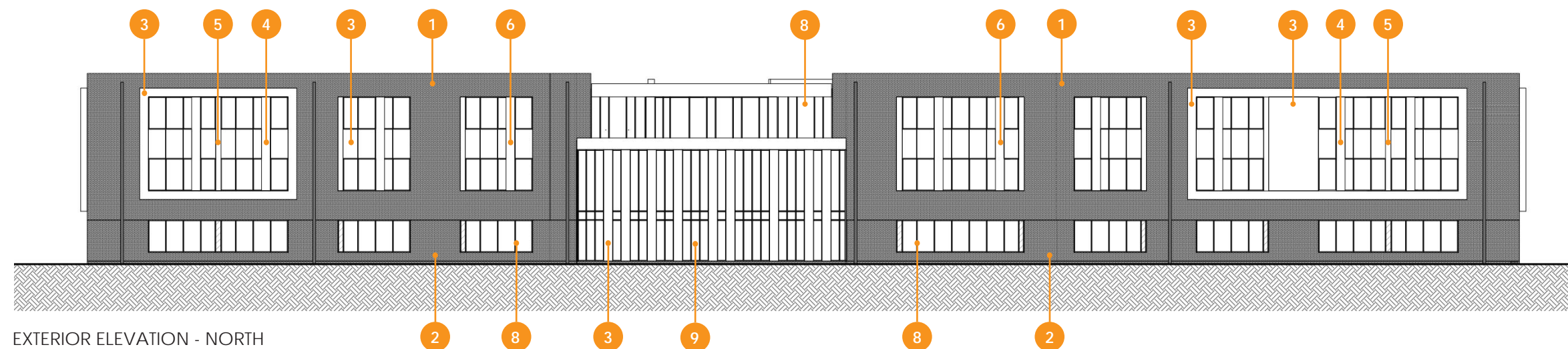
TREES WITH GROUNDCOVER



PLANT BEDS WITH TREES, SHRUBS & HERBACEOUS PERENNIALS

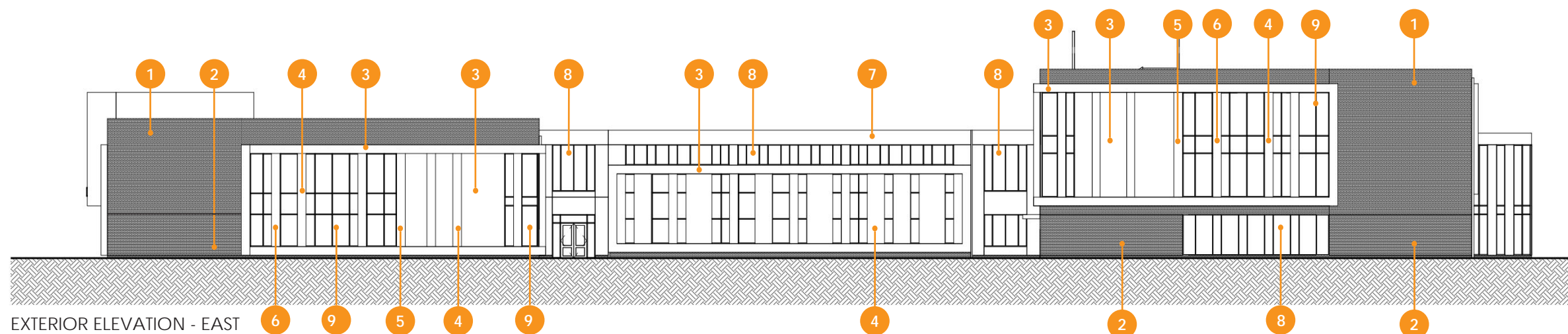


LAWN

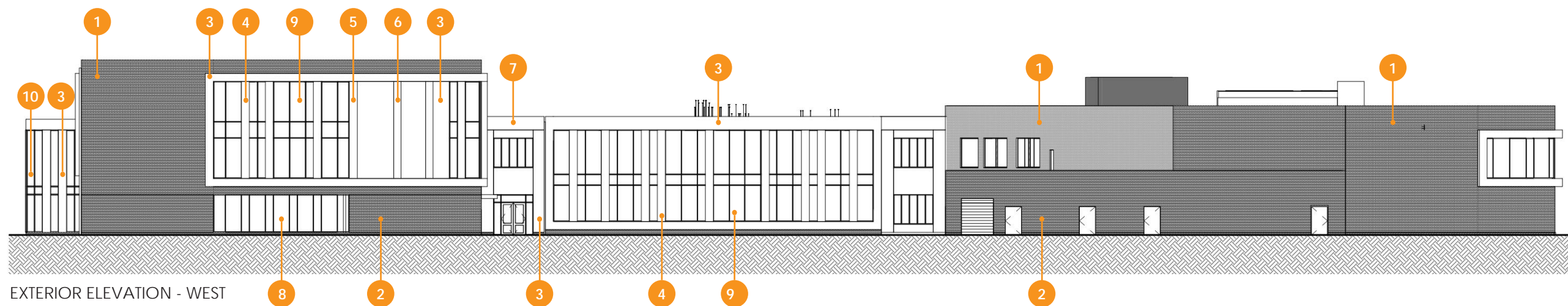


EXTERIOR ELEVATION - NORTH

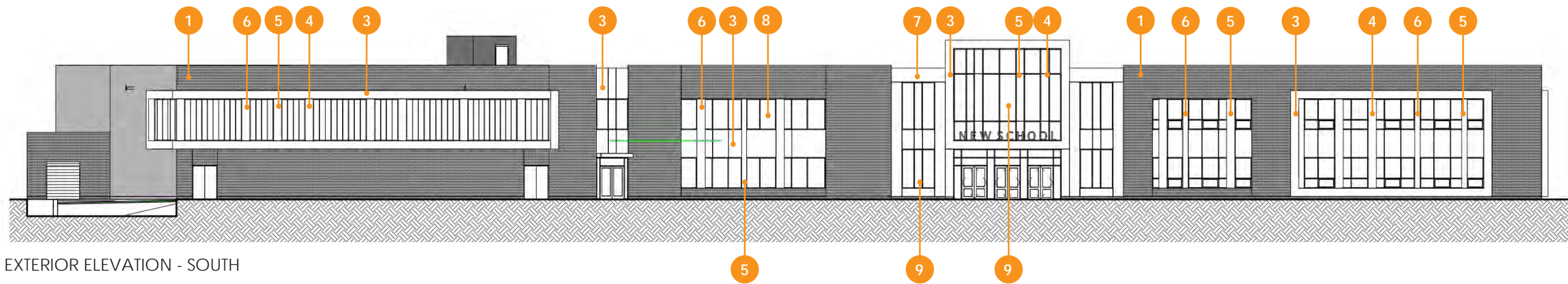
- 1 BRICK - GRAY STRIPED
- 2 BRICK - CHARCOAL
- 3 METAL PANELS - WARM GREY
- 4 METAL PANELS - BRONZE
- 5 METAL PANELS - ORANGE
- 6 METAL PANELS - GREEN
- 7 METAL PANELS - BLUE
- 8 METAL PANELS - YELLOW
- 9 ALUMINUM STOREFRONT ASSEMBLY
- 10 ALUMINUM CURTAINWALL ASSEMBLY



EXTERIOR ELEVATION - EAST

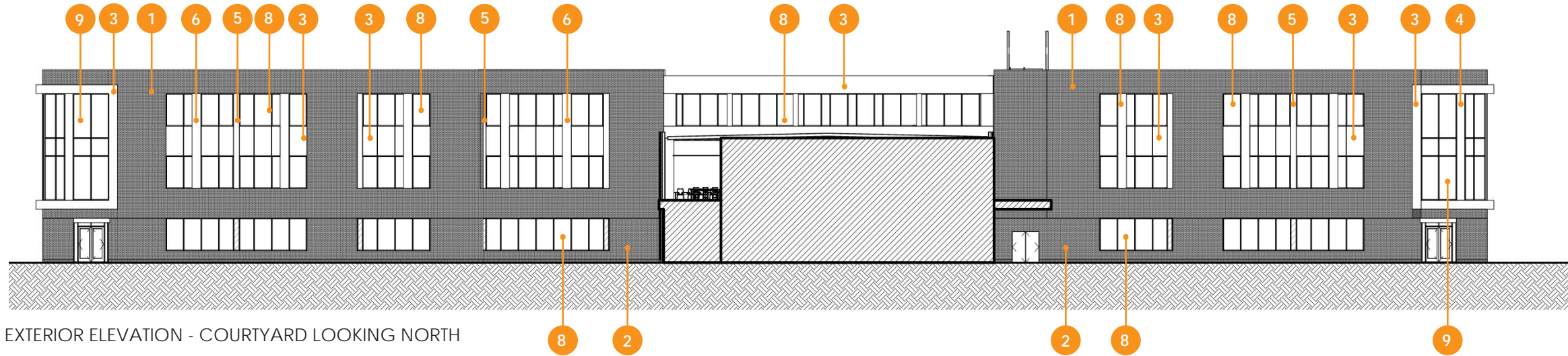


EXTERIOR ELEVATION - WEST

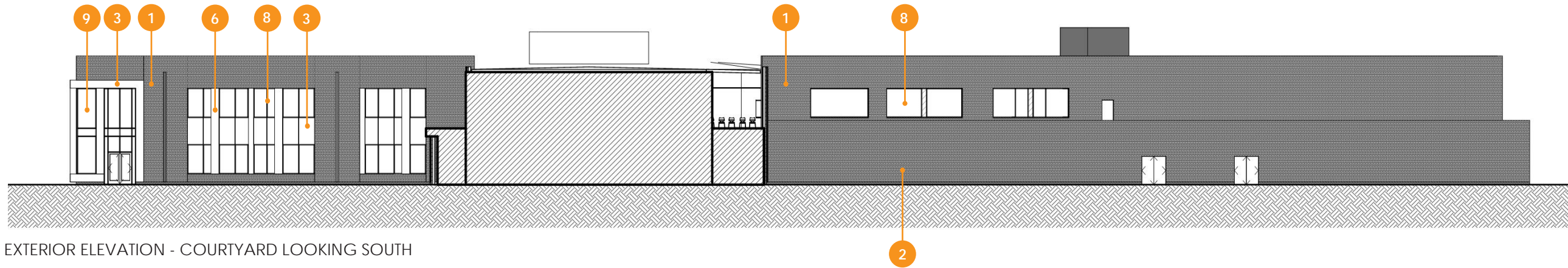


EXTERIOR ELEVATION - SOUTH

- 1 BRICK - GRAY STRIPED
- 2 BRICK - CHARCOAL
- 3 METAL PANELS - BRONZE
- 4 METAL PANELS - ORANGE
- 5 METAL PANELS - GREEN
- 6 METAL PANELS - BLUE
- 7 METAL PANELS - YELLOW
- 8 ALUMINUM STOREFRONT ASSEMBLY
- 9 ALUMINUM CURTAINWALL ASSEMBLY



EXTERIOR ELEVATION - COURTYARD LOOKING NORTH



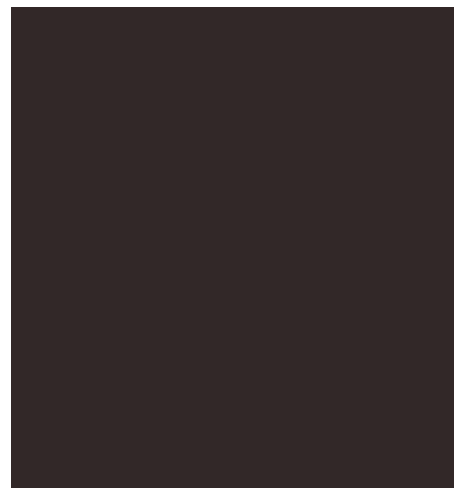
EXTERIOR ELEVATION - COURTYARD LOOKING SOUTH



1 BRICK - GRAY STRIPED



2 BRICK - CHARCOAL



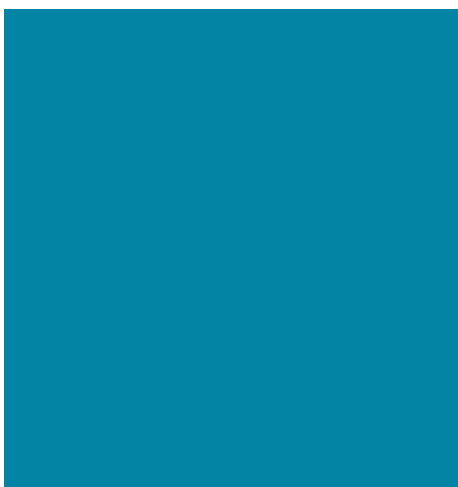
3 METAL PANELS - BRONZE



4 METAL PANELS - ORANGE



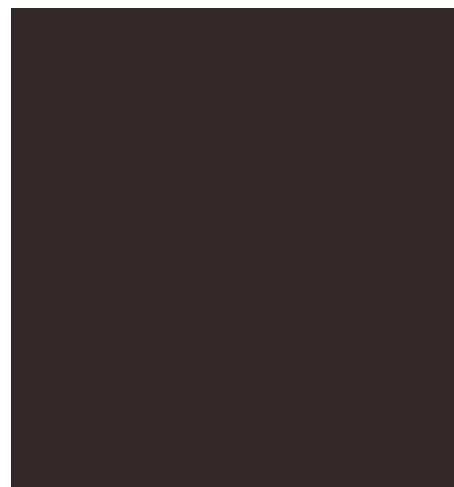
5 METAL PANELS - GREEN



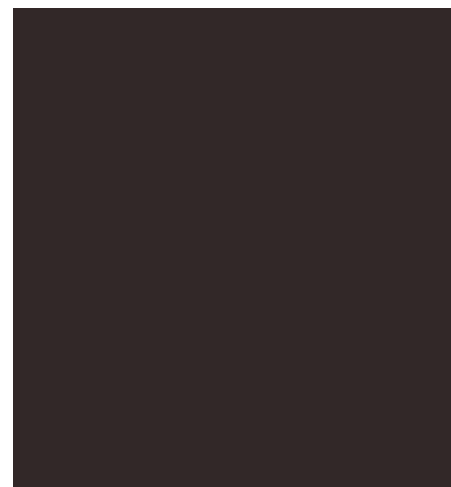
6 METAL PANELS - BLUE



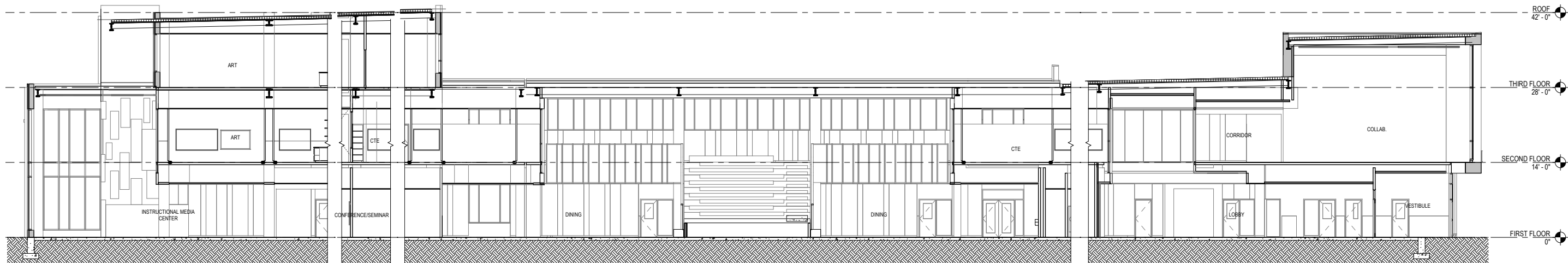
7 METAL PANELS - YELLOW



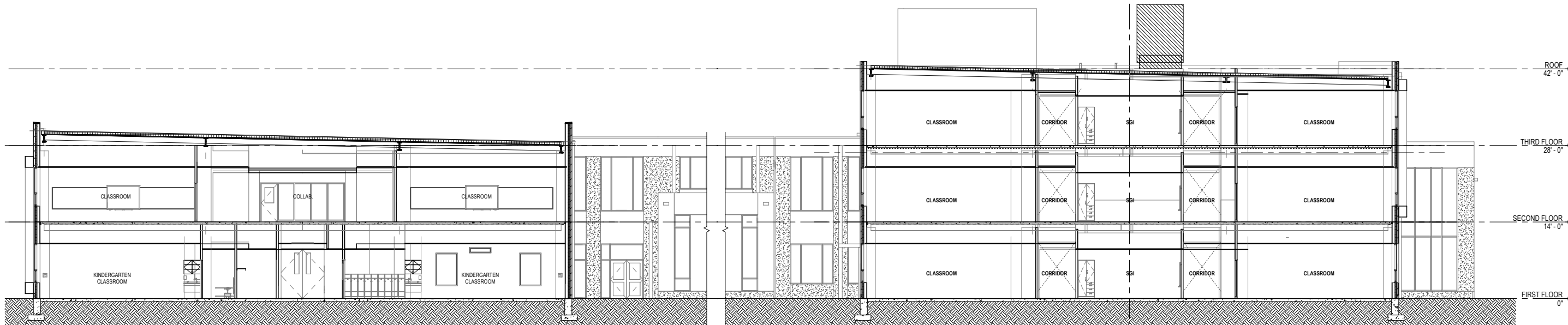
8 STOREFRONT GLAZING WITH ALUMINUM FRAME - BRONZE



9 CURTAIN WALL GLAZING WITH ALUMINUM FRAME - BRONZE



BUILDING SECTION – NORTH/SOUTH



BUILDING SECTION – EAST/WEST



SOUTHEAST PERSPECTIVE



WEST COURTYARD



AERIAL LOOKING NORTH

Civic Design Review Sustainable Design Checklist

Sustainable design represents important city-wide concerns about environmental conservation and energy use. Development teams should try to integrate elements that meet many goals, including:

- Reuse of existing building stock
- Incorporation of existing on-site natural habitats and landscape elements
- Inclusion of high-performing stormwater control
- Site and building massing to maximize daylight and reduce shading on adjacent sites
- Reduction of energy use and the production of greenhouse gases
- Promotion of reasonable access to transportation alternatives

The Sustainable Design Checklist asks for responses to specific benchmarks. These metrics go above and beyond the minimum requirements in the Zoning and Building codes. All benchmarks are based on adaptations from Leadership in Energy and Environmental Design (LEED) v4 unless otherwise noted.

Categories	Benchmark	Does project meet benchmark? If yes, please explain how. If no, please explain why not.
Location and Transportation		
(1) Access to Quality Transit	Locate a functional entry of the project within a ¼-mile (400-meter) walking distance of existing or planned bus, streetcar, or rideshare stops, bus rapid transit stops, light or heavy rail stations.	The building entry is 185 feet further than 1/4-mile to the nearest SEPTA bus stop. However, public school buses will deliver a portion of the students to the building front door.
(2) Reduced Parking Footprint	All new parking areas will be in the rear yard of the property or under the building, and unenclosed or uncovered parking areas are 40% or less of the site area.	The proposed parking lots are less than 40% of the site area. While the lots are in the front of the property, they are visually separated from the student views to the wooded areas.
(3) Green Vehicles	Designate 5% of all parking spaces used by the project as preferred parking for green vehicles or car share vehicles. Clearly identify and enforce for sole use by car share or green vehicles, which include plug-in electric vehicles and alternative fuel vehicles.	Yes 5% of the spaces are designated for car share and electric vehicles.
(4) Railway Setbacks (Excluding frontages facing trolleys/light rail or enclosed subsurface rail lines or subways)	To foster safety and maintain a quality of life protected from excessive noise and vibration, residential development with railway frontages should be setback from rail lines and the building’s exterior envelope, including windows, should reduce exterior sound transmission to 60dBA. (If setback used, specify distance) ⁱ	There are no railway frontages surrounding our site. Building setbacks are >1,000 feet.

(5) Bike Share Station	Incorporate a bike share station in coordination with and conformance to the standards of Philadelphia Bike Share.	Unable to have a bike share station on site due to School District of Philadelphia standards.
Sustainable Sites		
(6) Pervious Site Surfaces	Provides vegetated and/or pervious open space that is 30% or greater of the site's Open Area, as defined by the zoning code. Vegetated and/or green roofs can be included in this calculation.	Pervious open space exceeds 30% of the total site area.
(7) Rainwater Management	Conform to the stormwater requirements of the Philadelphia Water Department(PWD) and either: A) Develop a green street and donate it to PWD, designed and constructed in accordance with the PWD Green Streets Design Manual, OR B) Manage additional runoff from adjacent streets on the development site, designed and constructed in accordance with specifications of the PWD Stormwater Management Regulations	This project conforms with the PWD stormwater requirements. But we are not developing a Green Street or managing additional runoff from adjacent to streets.
(8) Heat Island Reduction (excluding roofs)	Reduce the heat island effect through either of the following strategies for 50% or more of all on-site hardscapes: A) Hardscapes that have a high reflectance, an SRI>29. B) Shading by trees, structures, or solar panels.	The largest source of hardscape with an SRI<29 is the proposed parking lot and pedestrian path. Both of these elements are intended to be shaded with trees. The parking lot will meet the interior landscaping tree requirements and the proposed path will have trees spaced along its length. The remainder of the hardscape is intended to be concrete.
Energy and Atmosphere		
(9) Energy Commissioning and Energy Performance - Adherence to the New Building Code	PCPC notes that as of April 1, 2019 new energy conservation standards are required in the Philadelphia Building Code, based on recent updates of the International Energy Conservation Code (IECC) and the option to use ASHRAE 90.01-2016. PCPC staff asks the applicant to state which path they are taking for compliance, including their choice of code and any options being	This project is following the IECC.

(10) Energy Commissioning and Energy Performance - Going beyond the code	Will the project pursue energy performance measures beyond what is required in the Philadelphia code by meeting any of these benchmarks? ⁱⁱⁱ <ul style="list-style-type: none"> •Reduce energy consumption by achieving 10% energy savings or more from an established baseline using ASHRAE standard 90.1-2016 (LEED v4.1 metric). •Achieve certification in Energy Star for Multifamily New Construction (MFNC). •Achieve Passive House Certification 	This project will not be pursuing these performance measures.
(11) Indoor Air Quality and Transportation	Any sites within 1000 feet of an interstate highway, state highway, or freeway will provide air filters for all regularly occupied spaces that have a Minimum Efficiency Reporting Value (MERV) of 13. Filters shall be installed prior to occupancy. ^{iv}	This project is >1,000 feet away from any public roadway.
(12) On-Site Renewable Energy	Produce renewable energy on-site that will provide at least 3% of the project's anticipated energy usage.	This project will not be pursuing on-site renewable energy.
Innovation		
(13) Innovation	Any other sustainable measures that could positively impact the public realm.	This project has set aside green fields for community use - Recreation Bonus

ⁱ Railway Association of Canada (RAC)'s “Guidelines for New Development in Proximity to Railway Operations. Exterior Sound transmission standard from LEED v4, BD+C, Acoustic Performance Credit.

ⁱⁱ Title 4 The Philadelphia Building Construction and Occupancy Code
 See also, “The Commercial Energy Code Compliance” information sheet:
<https://www.phila.gov/li/Documents/Commercial%20Energy%20Code%20Compliance%20Fact%20Sheet--Final.pdf>
 and the “What Code Do I Use” information sheet:
<https://www.phila.gov/li/Documents/What%20Code%20Do%20I%20Use.pdf>

ⁱⁱⁱ LEED 4.1, Optimize Energy Performance in LEED v4.1
 For Energy Star: www.Energystar.gov
 For Passive House, see www.phius.org

^{iv} Section 99.04.504.6 "Filters" of the City of Los Angeles Municipal Code, from a 2016 Los Angeles Ordinance requiring enhanced air filters in homes near freeways

