DGS MACARTHUR HS CFA CONCEPT

1- February -2024









Project Goals

- Improve overall school functionality and expand SF with addition
- Provide efficient circulation, improved accessibility
- Unify exterior design and create strong sense of arrival
- Overcome lower school feel (formerly private lower school)
- Meet DCPS enrollment requirements and minimize disruption to occupied school during construction



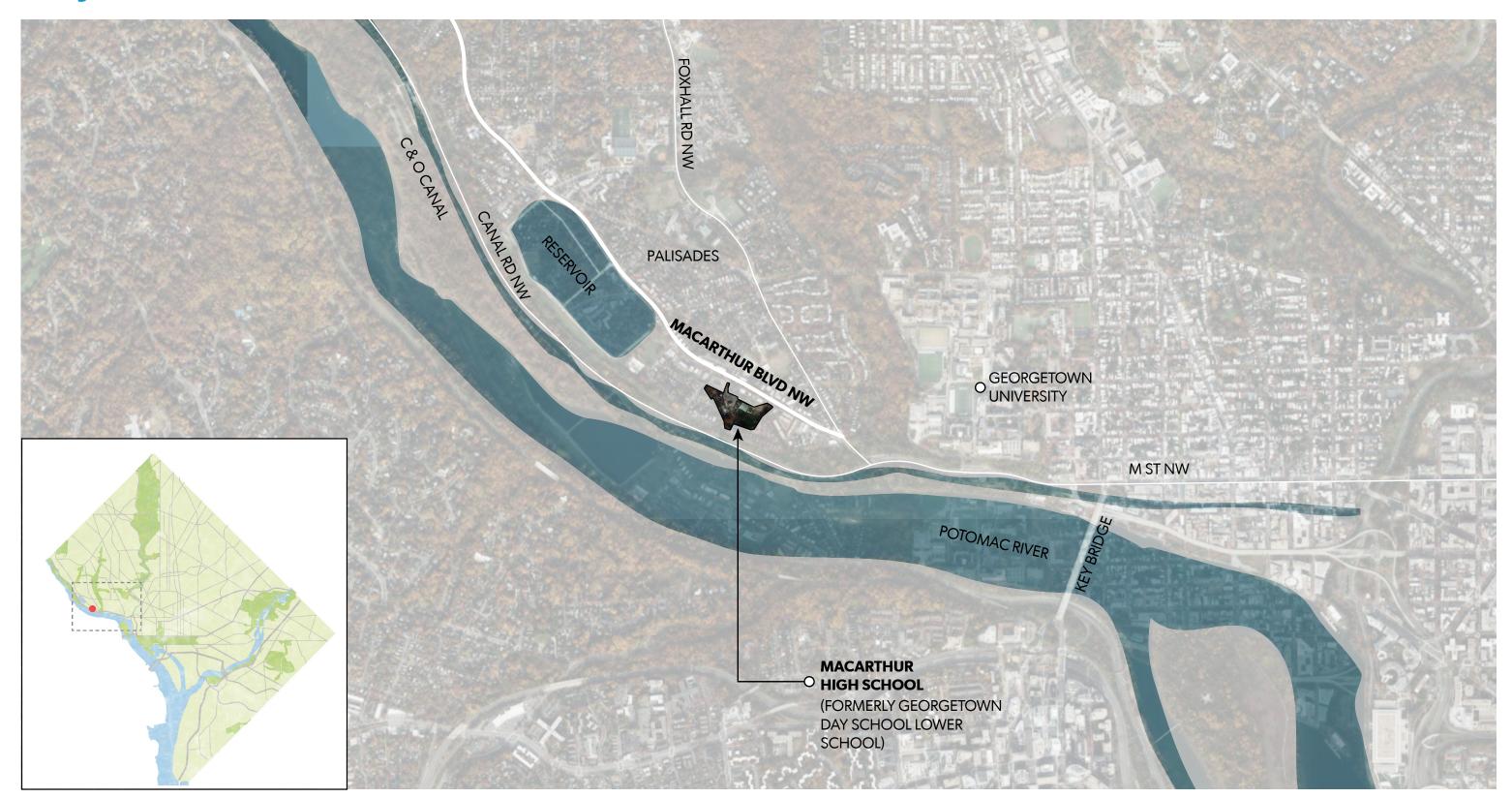








Project Location













Site Context

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OBSERVATIONS

- 1. Mid-block site, with frontage set back from MacArthur Blvd behind residential buildings
- 2. MacArthur Blvd is the only site access road
- 3. Private road Laverock PI, no site access
- 4. Steep drop off towards Clark Pl and Canal Rd
- 5. Minimal public transit. Bus stops for D6 near West driveway
- 6. Residential neighborhood
- 7. Hardy Recreation Center, DPR facility



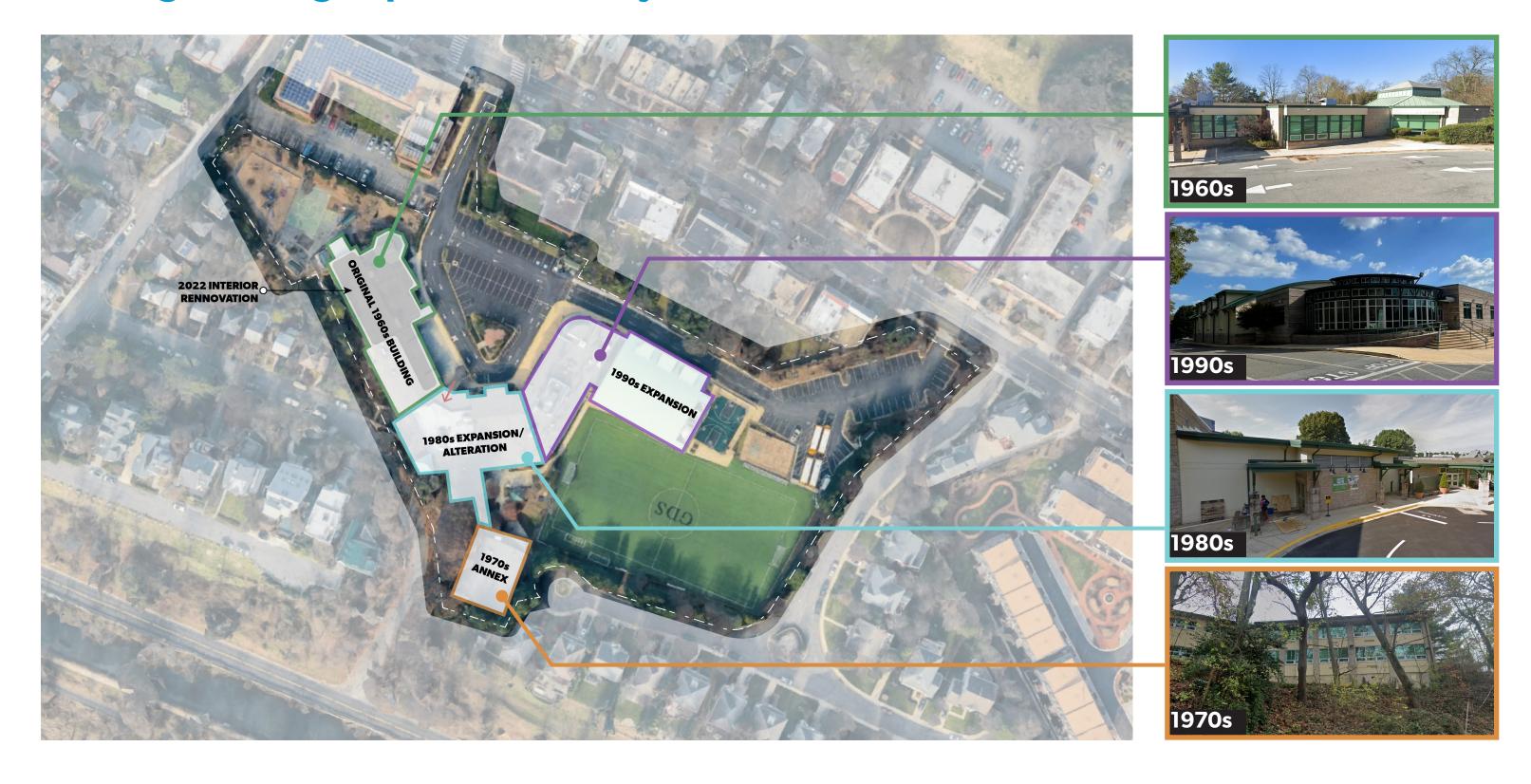








Existing Building Expansion History













Existing Building Material Palette Evolution



























Existing Building and Site



70's Annex from Clark Pl



4 Main Entrance from NE



2 80's Expansion from Clark Pl



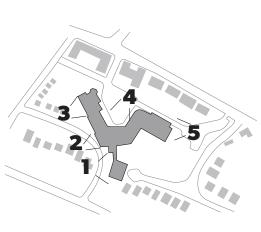
5 Gym from NE



3 Original Building from Clark Pl

















Existing Street Views



West Curb on MacArthur Blvd



4 East Curb on MacArthur Blvd



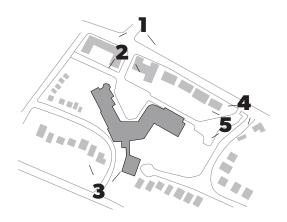
2 West Curb on MacArthur Blvd



5 East Curb on MacArthur Blvd



3 View on Clark Pl













Existing Entrance Experience

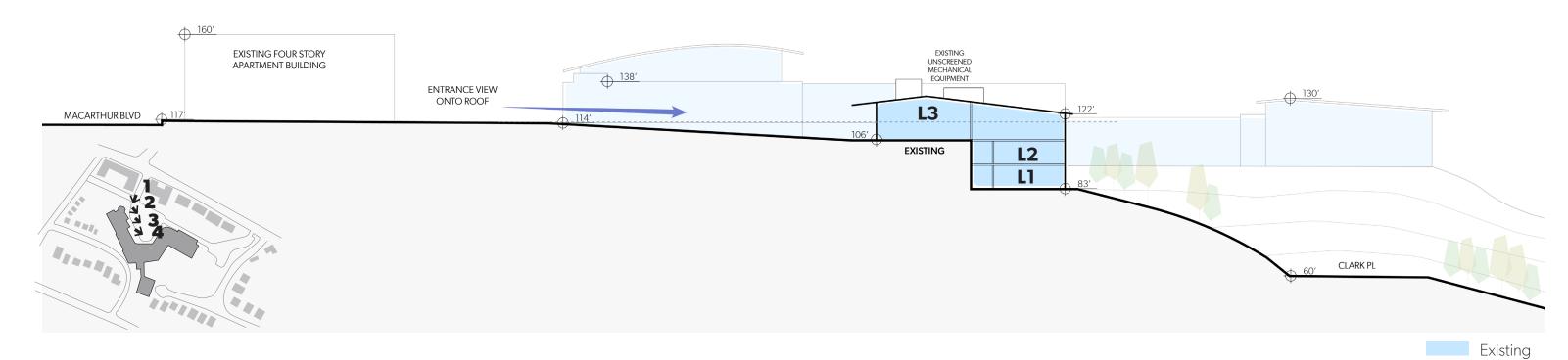








1 2 3













Phasing Considerations



Existing Building:

Currently occupied and remains occupied through construction

Sports Field:

Use must be maintained throughout construction

70's Annex:

Required occupancy in Fall 2025 to accommodate enlarged student population











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Construction Logistics Considerations



Shared Access:

Access to apartment parking lot must be maintained

Wood Framed Construction:

Challenge for new addition to tie in while occupied. New construction would require extensive modifications of recently renovated areas

Steep Grade:

Challenge for construction access while school is occupied

Laverock PI:

Private drive; no access











Concept Site Analysis



A/B

Adds to sprawling Building and does not improve overall arrival, civic presence or interior circulation challenges.

C

Will not meet owner occupancy requirements.

Poses construction challenges due to steep grade drop off.

D

Improves overall arrival sequence and civic presence.

Improves interior circulation while minimally impacting school functions during construction.











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Concept Investigation Overview



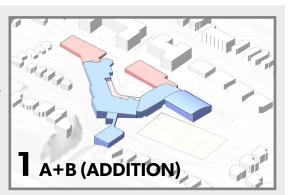


SCHOOL FUNCTIONALITY

UNIFIED ARCHITECTURE

CONSTRUCTION FEASIBILITY

Sprawling footprint increases circulation challenges across site and between levels. Maximizes reuse of existing building





SCHOOL FUNCTIONALITY

UNIFIED ARCHITECTURE

CONSTRUCTION FEASIBILITY

Multi story addition disconnected from existing school. Zoning and circulation challenges. Maximizes reuse of existing building



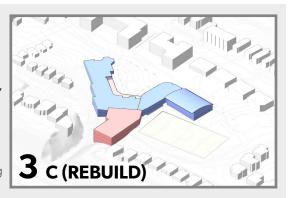


SCHOOL FUNCTIONALITY

UNIFIED ARCHITECTURE

CONSTRUCTION FEASIBILITY

Compact footprint. Demolishing the annex presented challenges to phased budget and phased occupancy. Poses additional constructibility challenges including maintaining access to the field and existing utilities



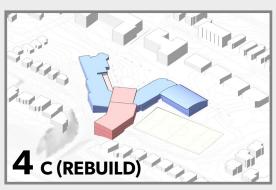
BUDGET

SCHOOL FUNCTIONALITY

UNIFIED ARCHITECTURE

CONSTRUCTION FEASIBILITY

Compact footprint and new entry. Demolishing the annex presented challenges to phased budget and phased occupancy. Poses added constructibility challenges including maintaining access to the field and existing utilities.



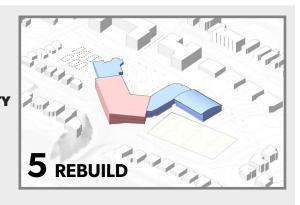


SCHOOL FUNCTIONALITY

UNIFIED ARCHITECTURE

CONSTRUCTION FEASIBILITY

Requires extensive demolition of existing occupied building areas. Area of addition exceeds budget and is not feasible for school operations during construction.





SCHOOL FUNCTIONALITY

UNIFIED ARCHITECTURE

Completes circulation loop & maximizes reuse of existing building.















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Proposed Addition Location



CENTRAL ADDITION

Improves arrival sequence and civic presence of school

New entrance and improved school identity

Improved interior circulation

Manageable impact to students during construction

Creates secure outdoor space with new courtyard

Retains existing recreation spaces

Minimizes neighborhood disturbance

Addresses complex site grading

Maximizes use of existing building



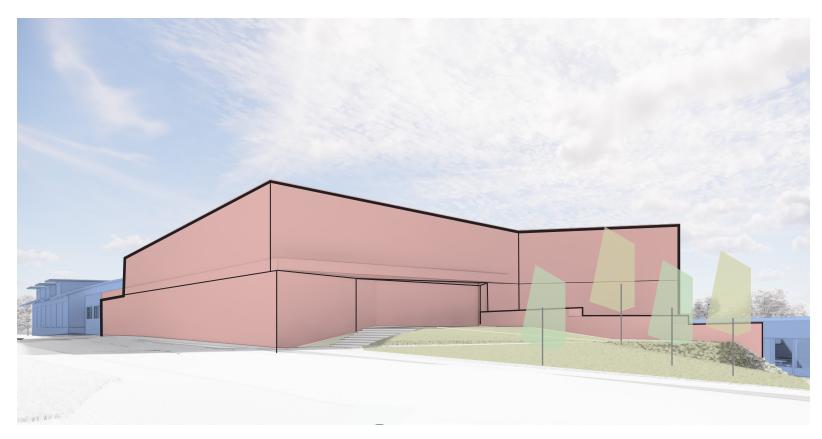








Concept Massing









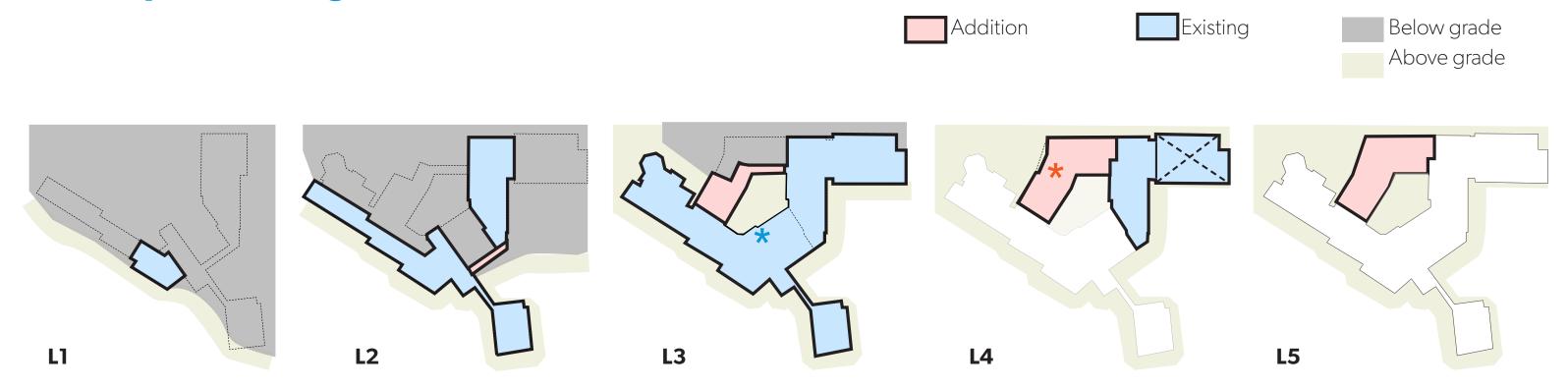


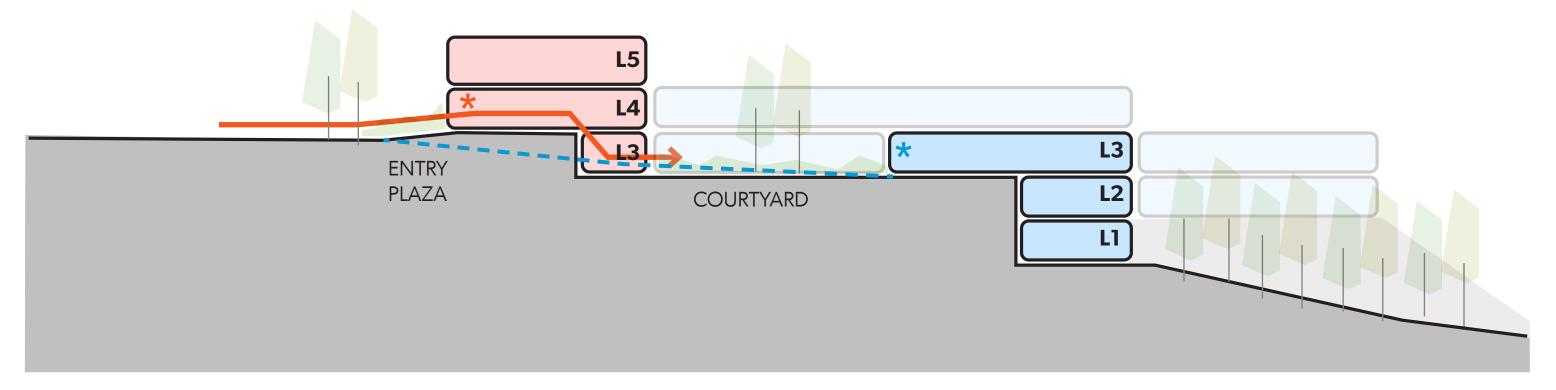






Concept Planning





















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Concept Program



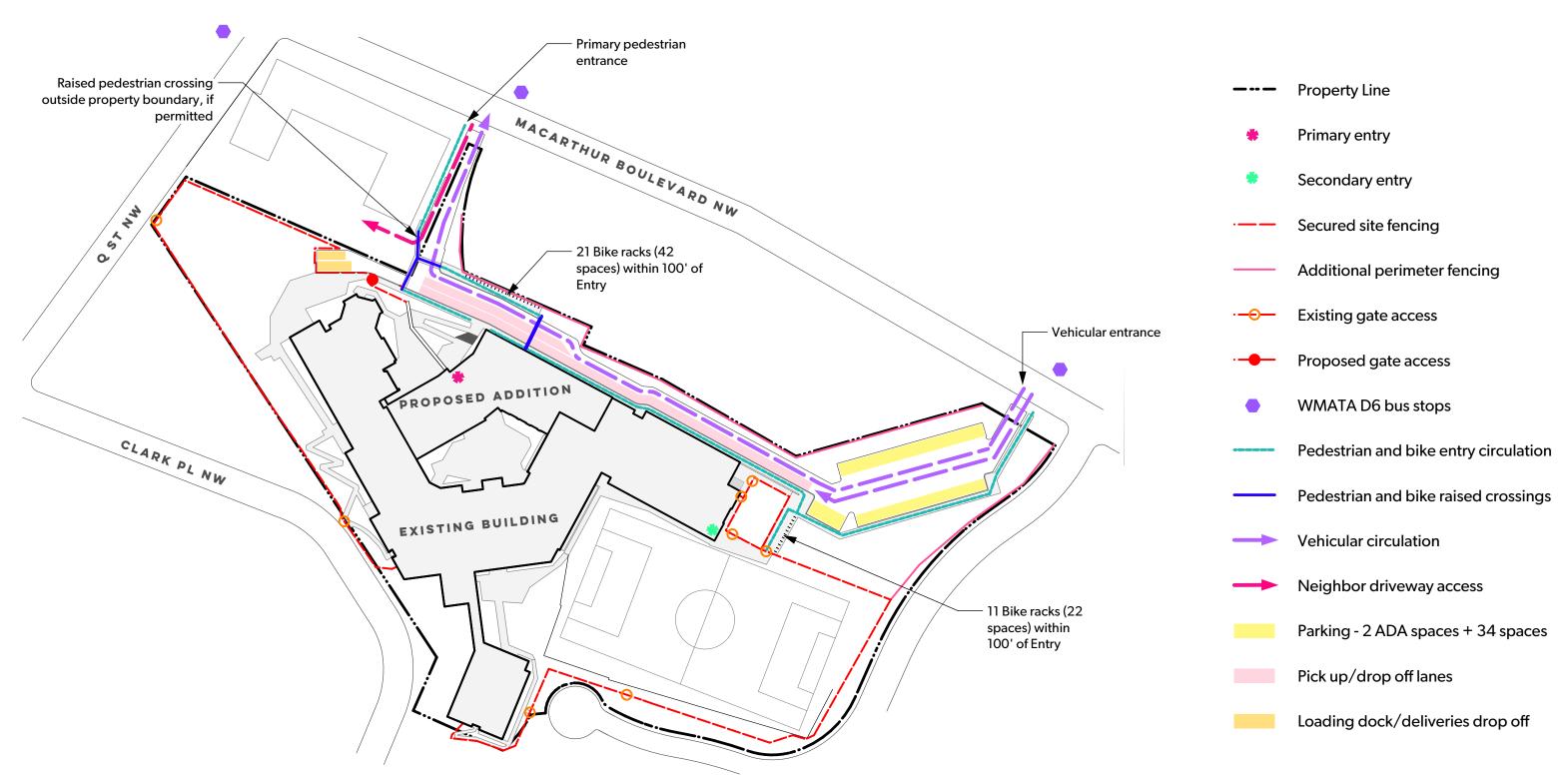








Site Access and Movements





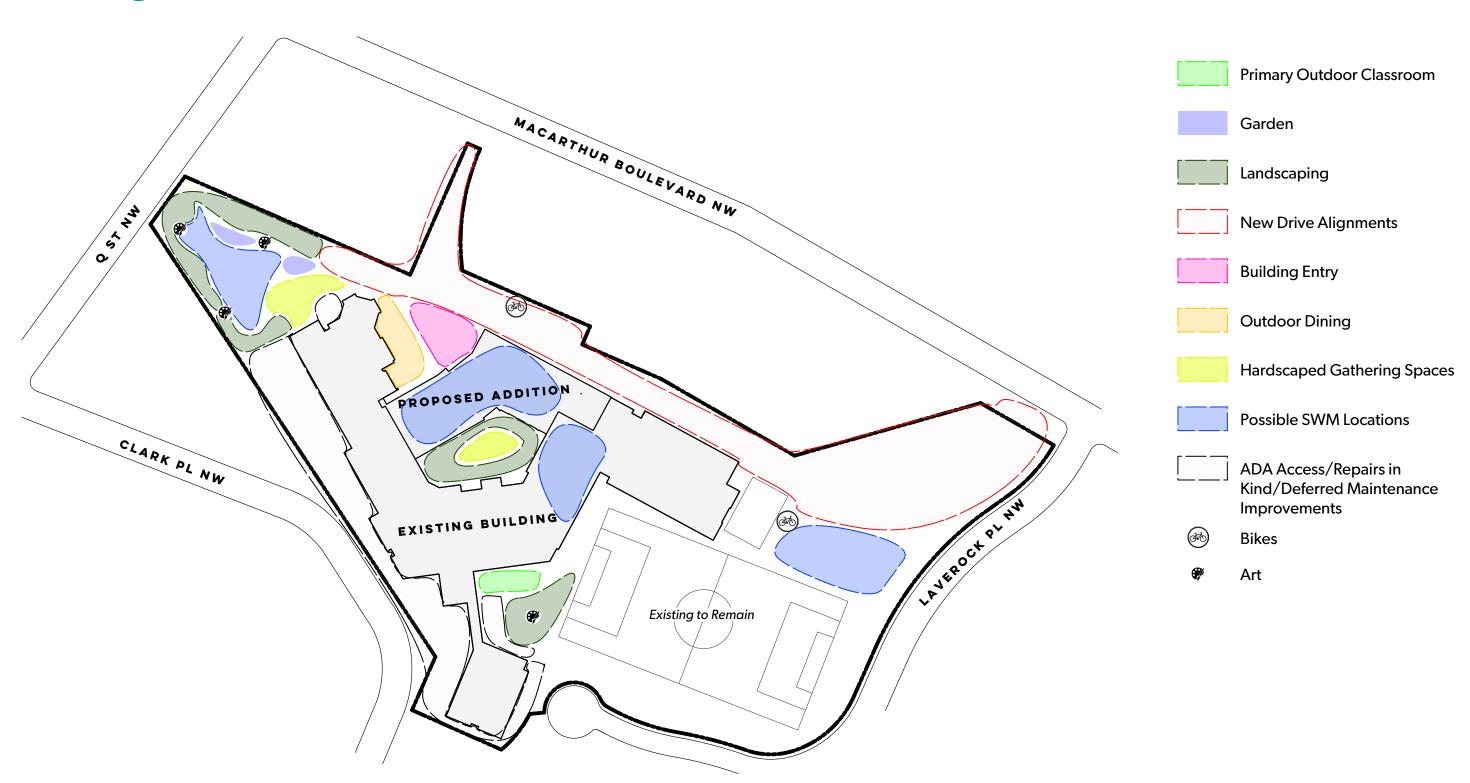








Site Organization













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Concept Site Plan



- Flexible lawn area with landscape mounds and screening plantings
- Loading docks
- Plaza and Raised Beds
- Extensive green roof remainder of existing roof is not feasible
- Bike parking spaces (64)
- New drive and drop off alignments
- Entry landscape with accesible path, steps, integrated seating and planting
- Outdoor dining terrace
- Improved ADA ramps, paths, and walls
- Courtyard gathering space
- 11 Outdoor classroom
- 12 **Bioretention**





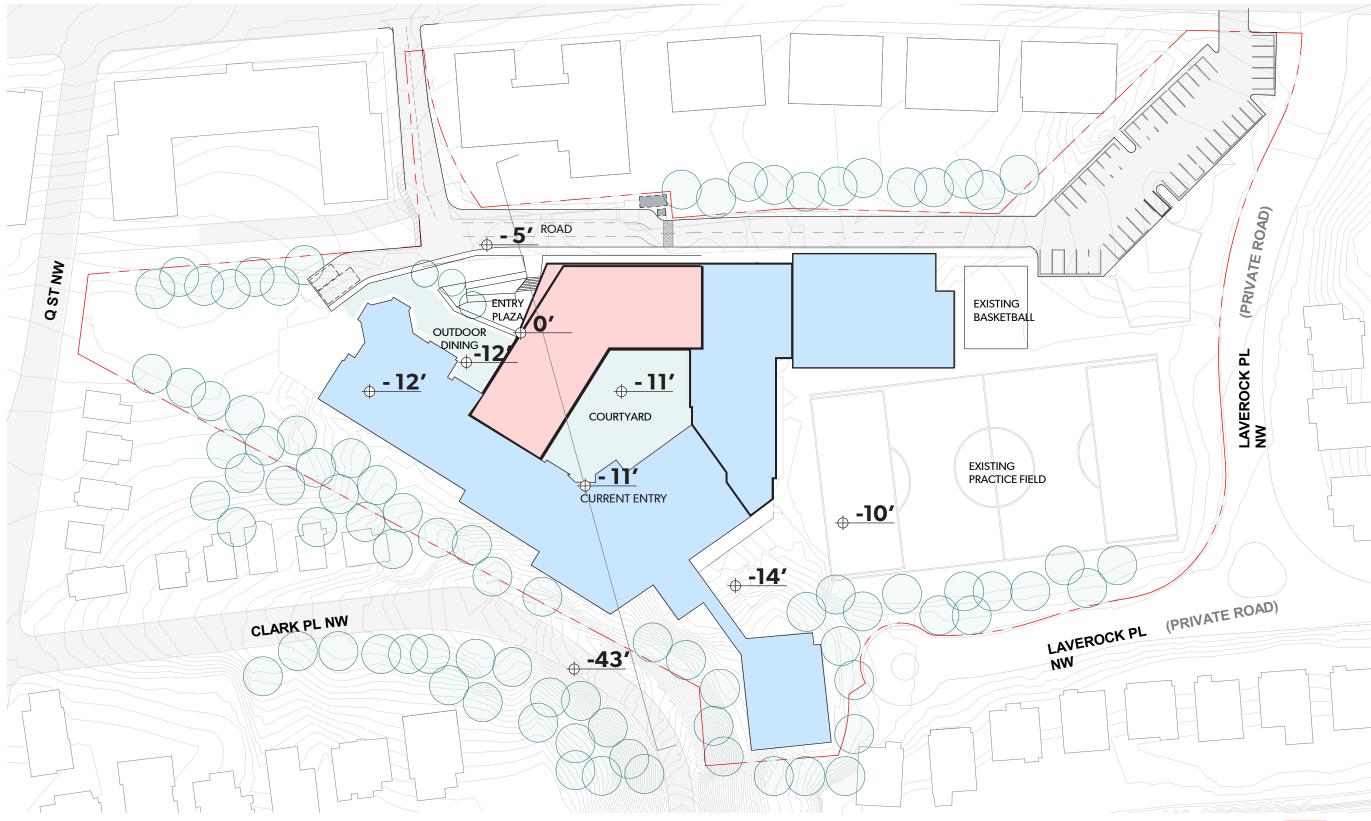








Site Topography







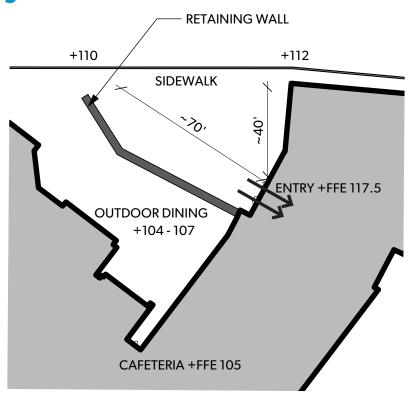






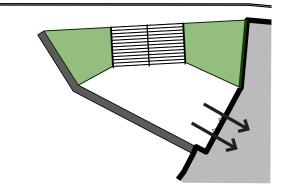


Entry Plaza Studies



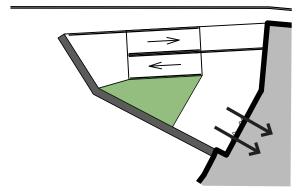
Constraints:

- Entry is 5-7' from sidewalk grade
- Required to maintain existing cafeterial entry beyond outdoor dining zone
- Wall required to achieve splits in terraces for Cafeteria access



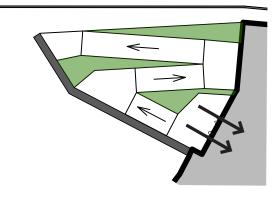
Stair Only:

- + Large areas of planting or stair
- Not ADA accessible or equitable



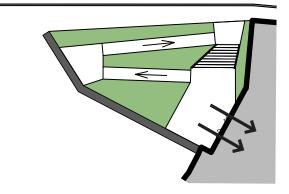
Ramp Only:

- + Equitable accessibility, ramp slopes at 1:12
- Requires handrails across view of building
- Restricted movement may cause slower egress
- Restricts planting and gathering space
- Ramp width constrained due to amount of area available
- Ramp needs to range from 60' 90' long with landings each 30' of run



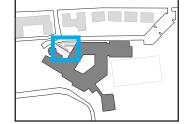
Accessible Path Only:

- + Equitable accessibility, path slopes at 1:20
- + No handrails required
- + Planting can weave through the space
- Restricted movement may cause slower egress
- Path width constrained due to amount of area available
- Path needs to range from 100' 120' long



Proposed Entrance (Hybrid Approach):

- + Equitable entry experience
- + Eases flow by allowing for multiple types of experiences
- + Increased planting at entry
- + Planting can weave through the space





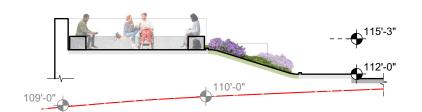




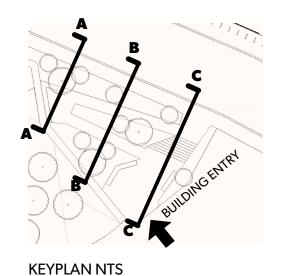




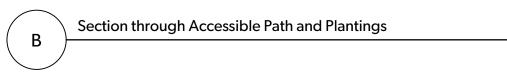
Entry Plaza Sections

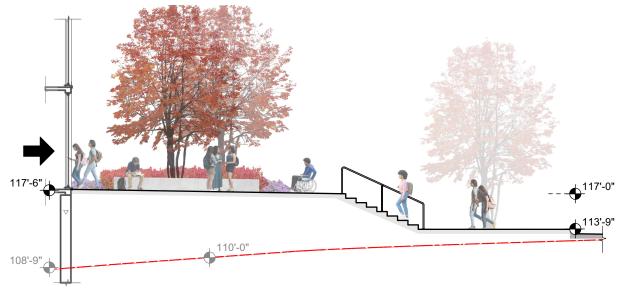




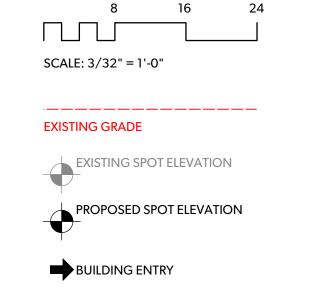








Section through Building Entry Plaza and Stair







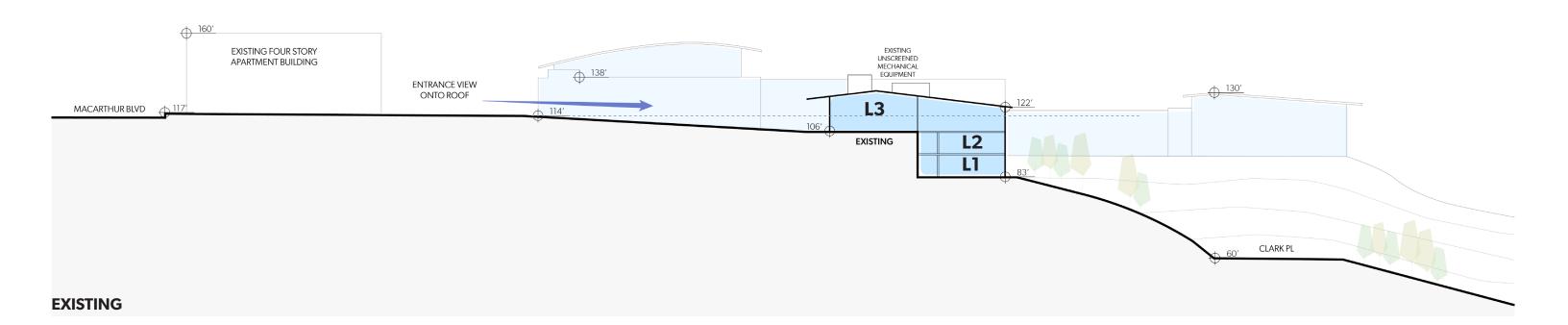


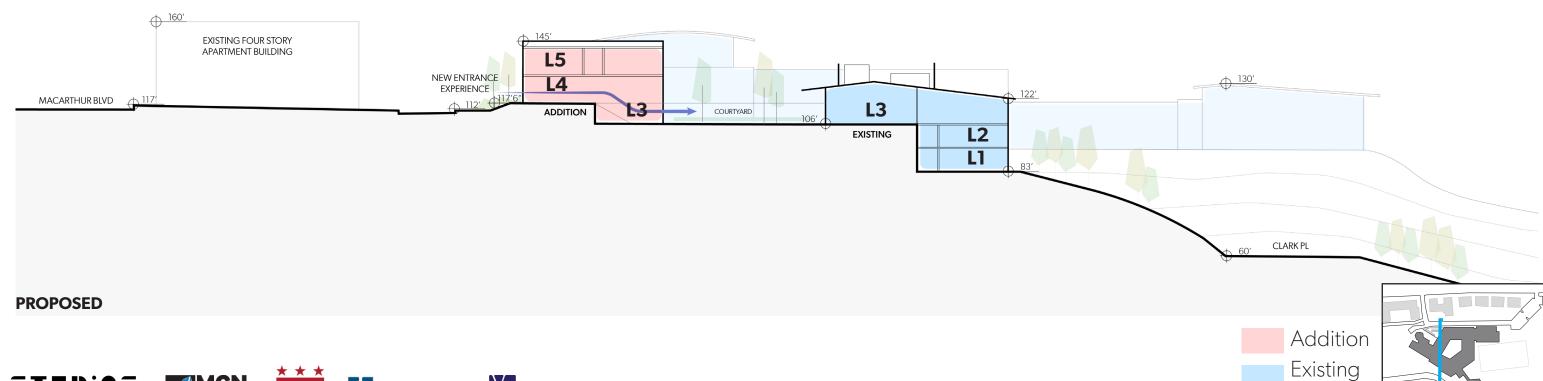




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Concept Section







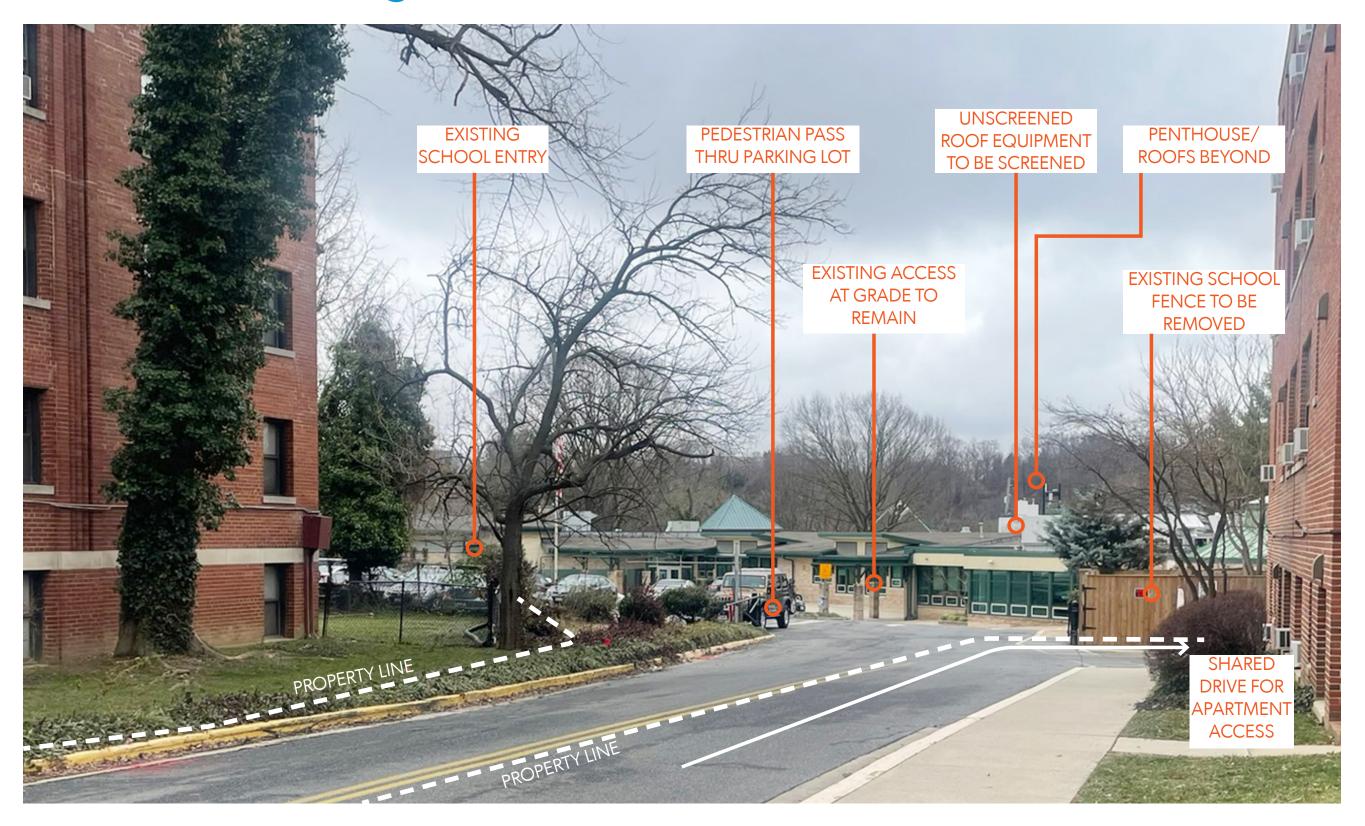








Street View - Existing















EXISTING

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Street View - Proposed











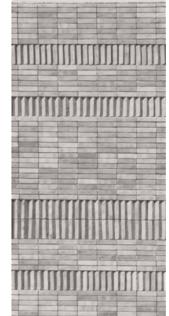




Building Addition

MATERIALS











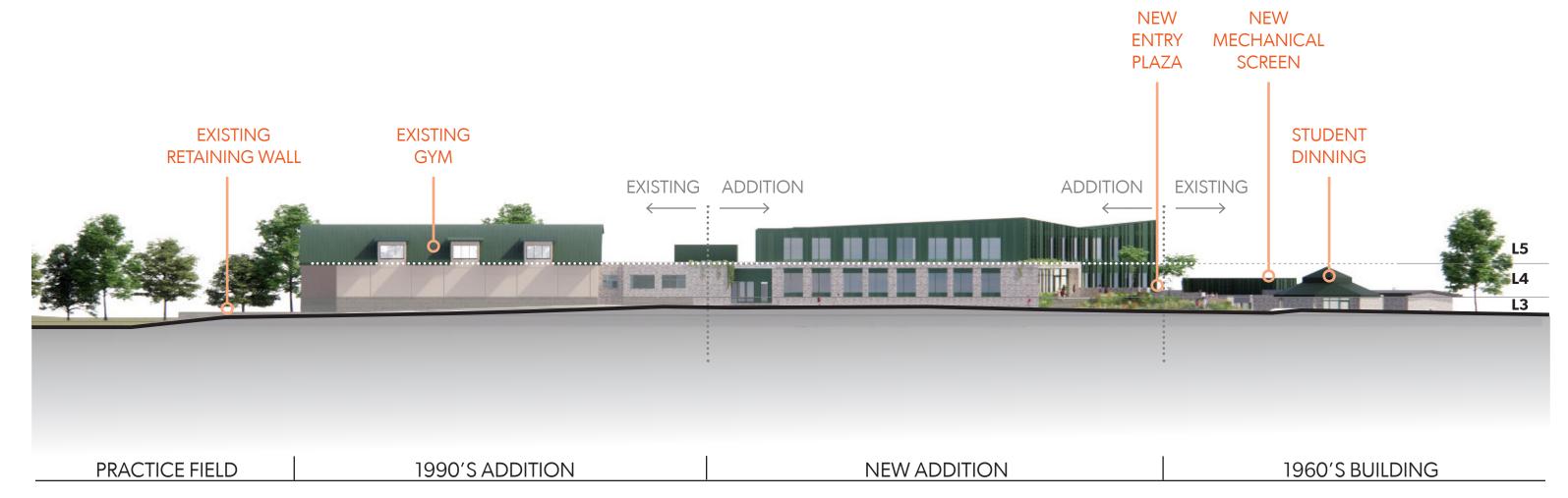








North Elevation



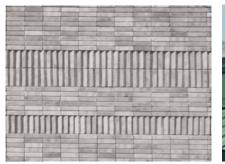
















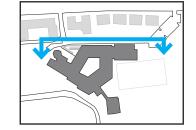












STUD:05