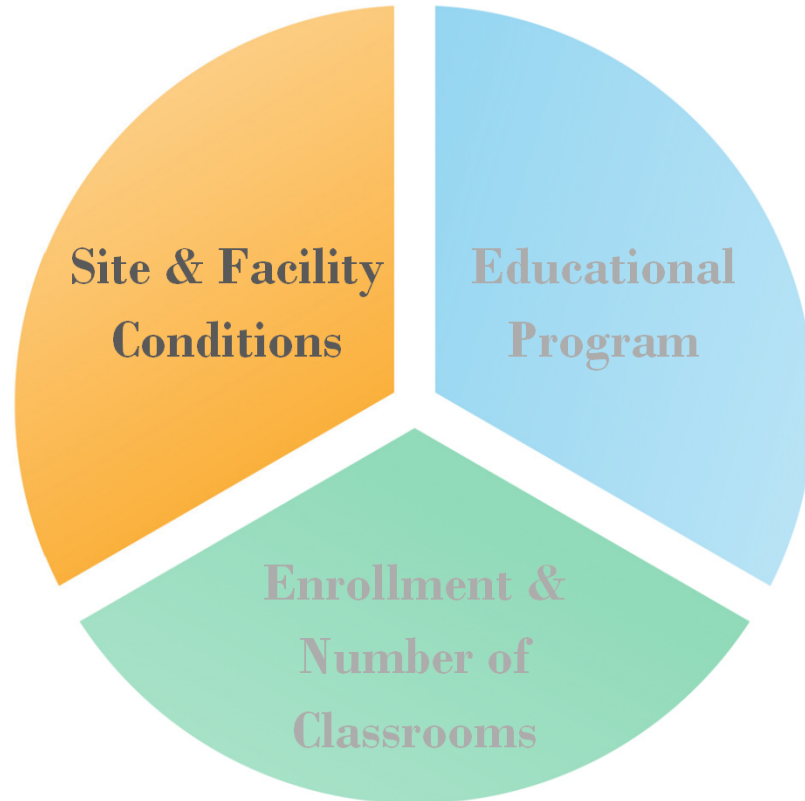


Underwood & Ward
Facility & Enrollment Study
Existing Facilities Assessment

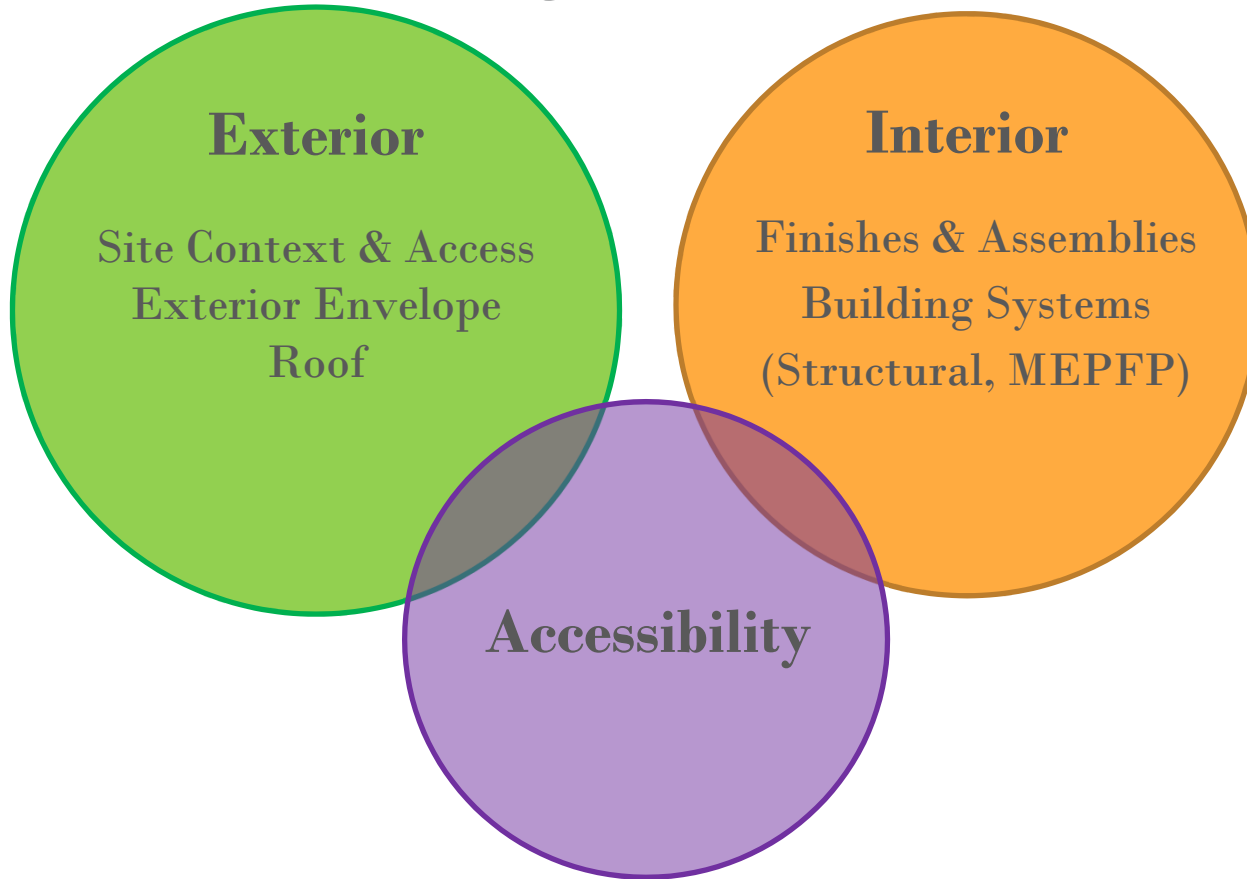
June 13, 2023



NPS Facilities Goal: Planning for the Future



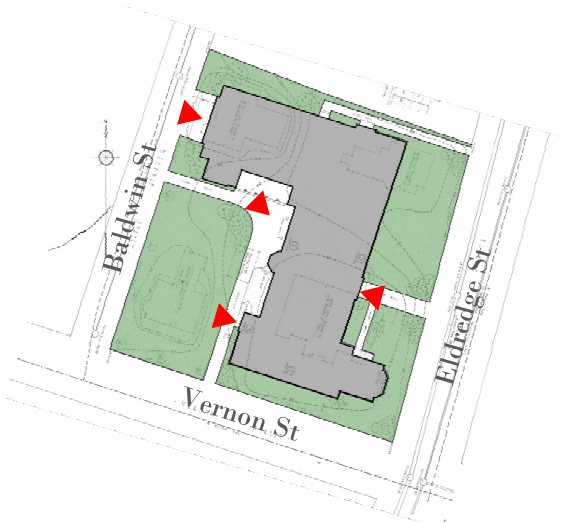
What are we evaluating?



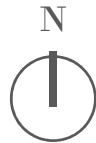
Underwood Elementary



Underwood Elementary Site Context & Access



Original 1924 site plan



Underwood Elementary Site Context & Access

- 1 acre site, building footprint is $\frac{3}{4}$ of site, parking about $\frac{1}{4}$
- Located within NRHP Farlow & Kenrick Park Historic District
- School does not have dedicated play space, shares Farlow Park playground with public
- Part of Vernon Street permanently closed for easier access, additional parking
- Main entrance on Eldredge St



Underwood Elementary Building Evolution



1924

School opens, features assembly hall, boys & girls playrooms in basement, coal storage rooms



1978

New cafeteria, art and music classrooms in basement
Assembly hall/gym partitioned, stage converted to library
Assembly hall loggia enclosed to create new lobby
New toilet rooms
New elevator replaces part of stairwell
Office mezzanine added above gym and lobby



1989

Exterior window replacement

2020-2022

Nurse suite reconfigured for Covid

Underwood Elementary Exterior Envelope



Underwood Elementary Roof



Underwood Elementary

Accessibility

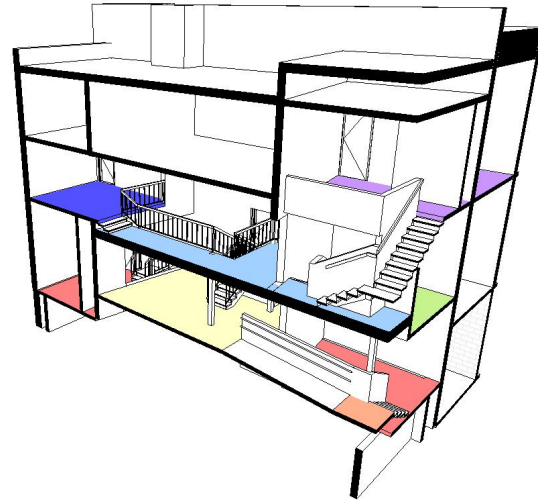
- 1 accessible building entrance at grade, remote from main office
- Granite steps, interior stairs are barriers for other entrances/exits
- Ramp handrails are not 521 CMR compliant, landings are smaller than 5 feet in some areas, clear width narrower than 4 feet at library
- Elevator is small and does not accommodate a stretcher
- Certain floors cannot be reached by wheelchair (library, music loft)
- Boys & girls toilet rooms have floor level challenges and raised platforms at stalls; staff toilet rooms do not meet minimum room size for turning radius, do not have accessible fixtures
- Push/pull side clearance conflicts observed at multiple doors, size of some door leaves less than 3 feet
- Casework does not allow knee space at sinks



Underwood Elementary Accessibility



Underwood Elementary Accessibility



- Level 7
- Level 6
- Level 5
- Level 4
- Level 3
- Level 2
- Level 1

Library section

Underwood Elementary Interior Finishes & Assemblies

- Floor, wall, and ceiling finishes at end of life
- Casework original to 1978 renovation, not accessible
- Water damage from roof leaks, floor/ceiling in gym damaged
- Signs of rust on stair finishes and under carriages
- Fire-ratings undefined, wire-glass no longer accepted by code as fire-rating
- Appliances and fixtures are dated
- Guardrails are only 36" at stairs, library, loft



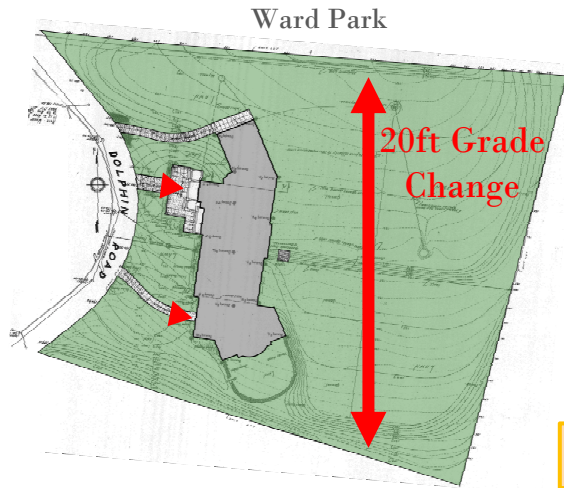
Underwood Elementary Building Systems

- Structure is in good condition, minor cracks observed in slab and foundation walls
- Mechanical system lacks reliable, consistent temperature control throughout school
- AC is limited to main office; steam piping at gym has failed
- School does not have a fire sprinkler system
- Plumbing fixtures are dated, some not accessible
- Piping is in poor condition, roof drainage does not appear adequate
- Main electrical service and power system are old and limited – especially for future upgrades
- Main power and emergency power systems are co-located within custodian office with difficult access
- Kitchen sink does not have required grease trap, art sinks do not have solids interceptor
- Main water service does not have reduced pressure backflow preventer

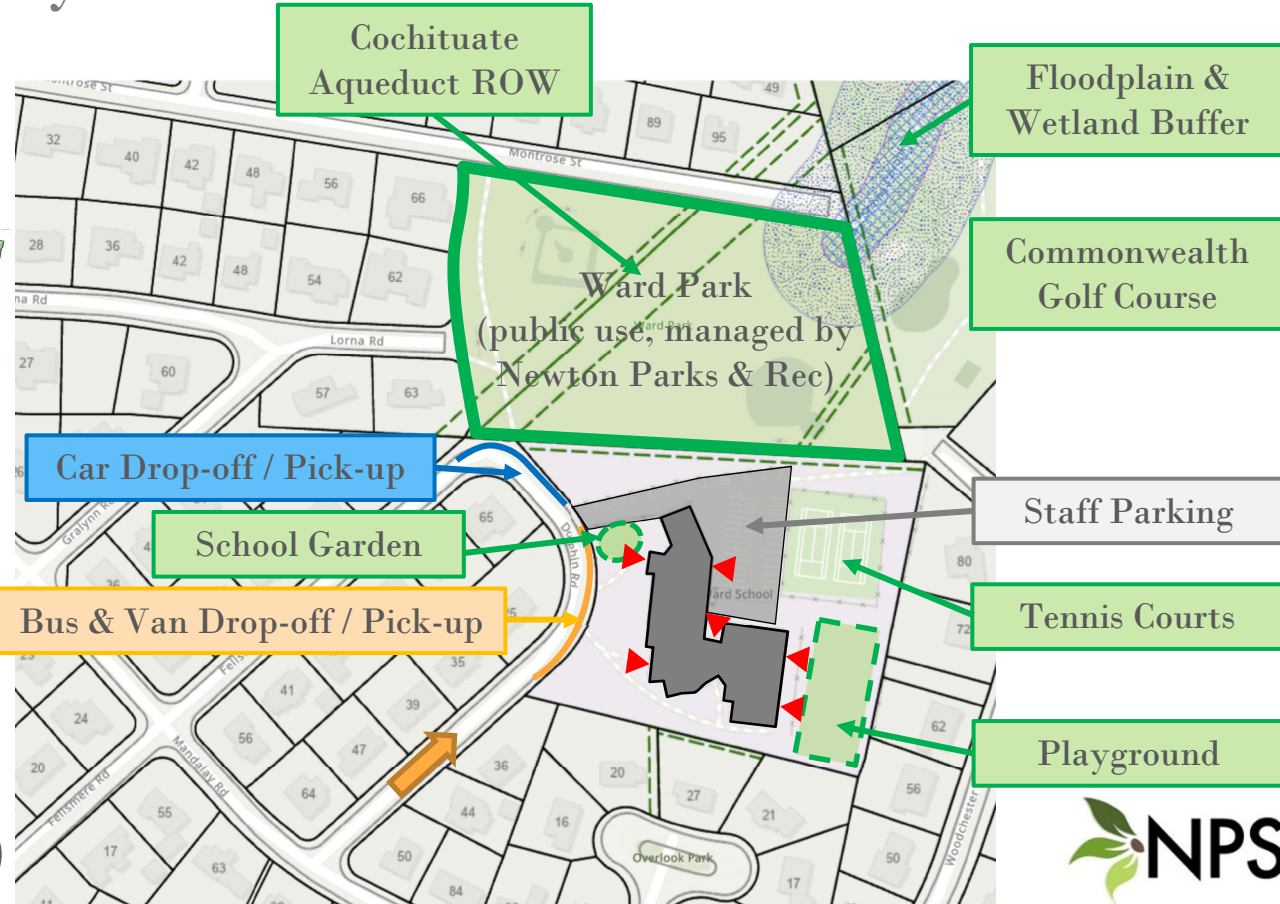
Ward Elementary



Ward Elementary Site Context



Original 1928 site plan

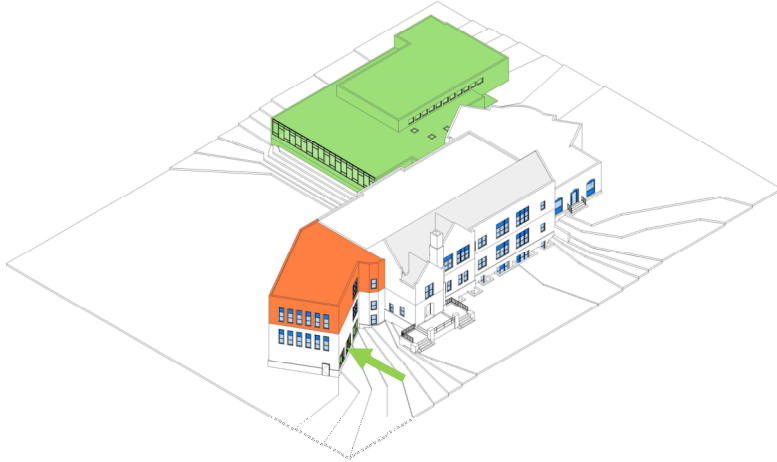


Ward Elementary Site Context

- 3 acre hillside site, with 3.5 acre public use Ward Park to north
- School has dedicated playground and tennis courts, both are maintained by Newton Parks & Rec, controlled by NPS
- Main entrance on Dolphin Road, one way street in residential neighborhood
- Easements at the edge of property, ROW within park



Ward Elementary Building Evolution



1928

School opens, featuring dedicated kindergarten and assembly hall



1949

Second floor added above assembly hall/classroom wing



1956

Gymnasium/multi-purpose room & classroom addition
Assembly hall converted to classrooms in basement



1986

Exterior window replacement (except for some basement windows)

1990-2022

Additional classrooms, cafeteria in basement
Specialized services moves to library
Nurse suite reconfigured for Covid

Ward Elementary Exterior Envelope



Ward Elementary Roof



Ward Elementary Accessibility

- 1 accessible building entrance at grade near gym, remote from main office, 1 building entrance at grade in basement, but threshold is steep
- Site walkway from parking to playground appears steeper than 1:20
- Granite stairs, interior stairs are barriers for other entrances/exits
- There is no elevator - first, second, and library floors are inaccessible
- Boys & girls toilet rooms have floor level challenges and raised platforms at stalls, no accessible stalls in some; staff toilet rooms do not meet minimum room size for turning radius, or have accessible fixtures
- Floor level changes at the library and staff lounge
- Push/pull side clearance conflicts observed at multiple doors, size of some door leaves less than 3 feet
- Casework does not allow knee space at sinks



Ward Elementary Accessibility



Ward Elementary Interior Finishes & Assemblies

- Floor, wall, and ceiling finishes at end of life (some ceilings/lighting have been replaced in the last few years)
- Water damage from roof leaks
- Most built in casework is original, hardware not operable, other casework not accessible
- Signs of rust on stair finishes and under carriages
- Fire-rated shafts at stairs not defined, wire-glass no longer accepted by code as fire-rating
- Appliances and fixtures are dated
- Guardrails are only 36" at stairs

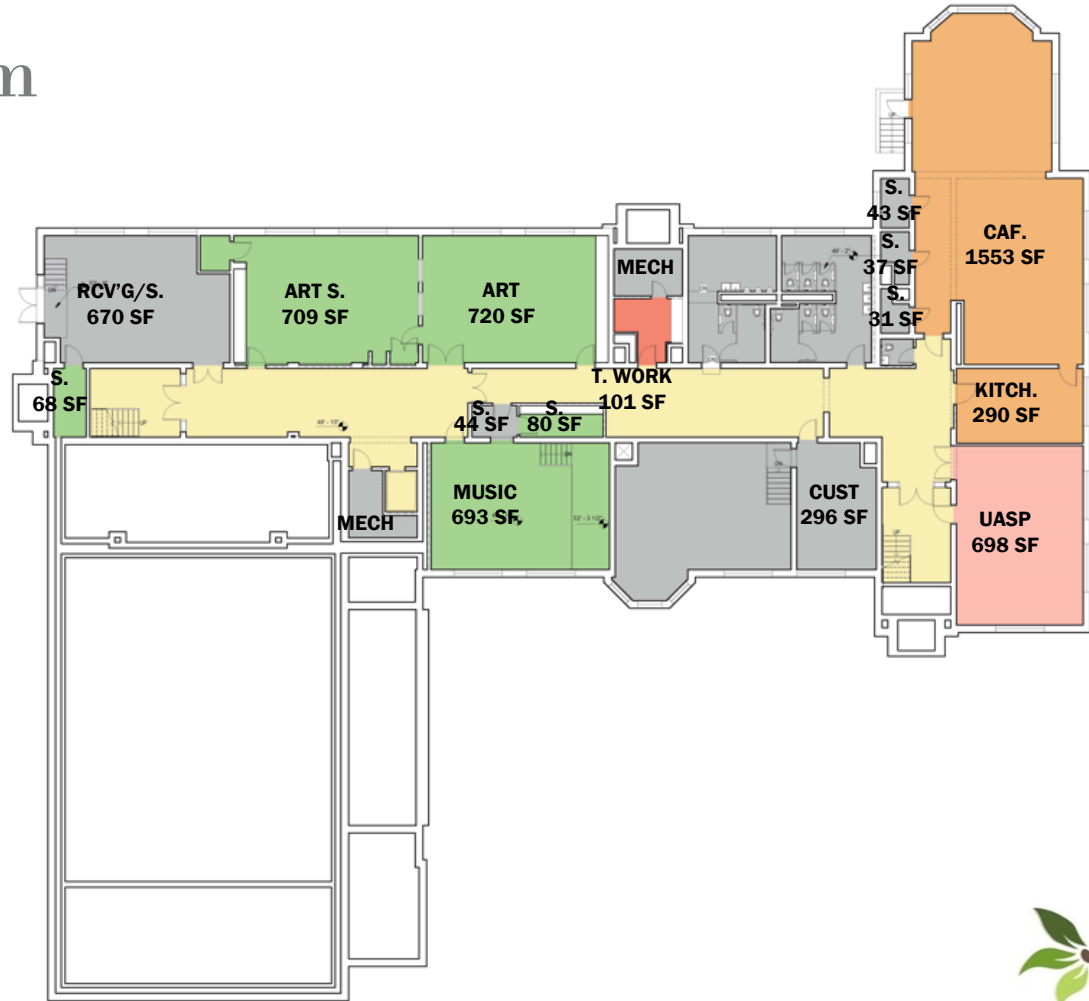
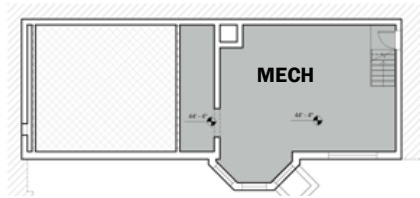














Ward Elementary Building Systems

- Structure is in good condition, minor cracks observed in slab and foundation walls
- Mechanical system lacks reliable, consistent temperature control throughout school
- AC is limited to a few window units
- One boiler is non-functional, the other does not have a back-up
- School does not have a fire sprinkler system
- Plumbing fixtures are dated, some not accessible
- Piping is in poor condition, roof drainage does not appear adequate
- Main electrical service and power system are old and limited – especially for future upgrades, door missing from electrical room
- Kitchen sink does not have required grease trap, art sinks do not have solids interceptor
- Main water service does not have reduced pressure backflow preventer

Existing Program

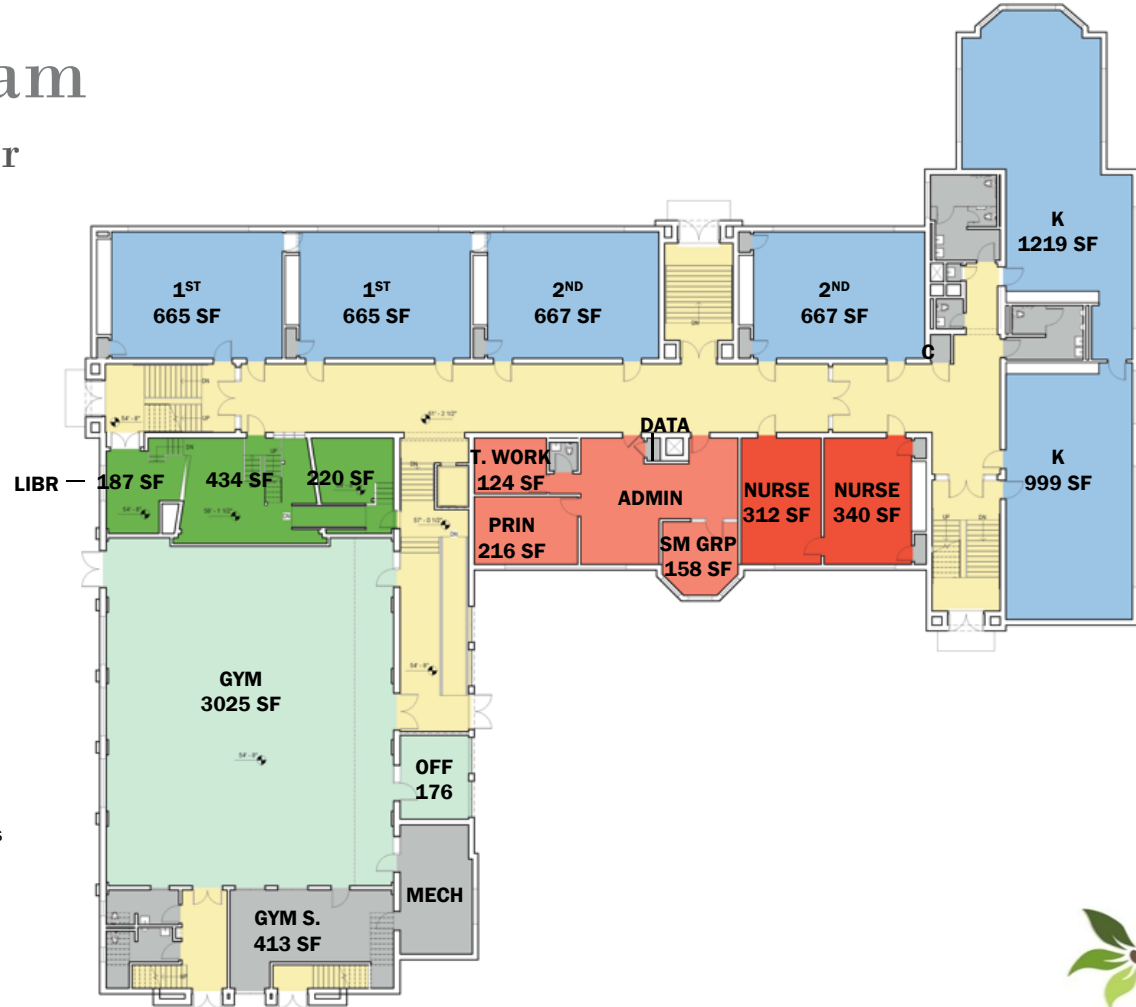
Underwood – Lower Floor



- | | |
|--|--|
|  Core Academic Spaces |  Platform |
|  Special Education |  Medical |
|  Art & Music |  Admin & Guidance |
|  Health & Phys Ed |  Other/Extended Day |
|  Media Center |  Cust, Maint, & Toilets |
|  Dining & Food Service |  Circulation |

Existing Program

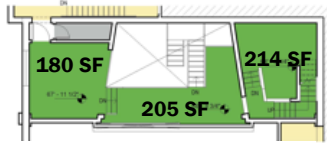
Underwood – Lower Floor















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|---|--|
| ■ Core Academic Spaces | ■ Platform |
| ■ Special Education | ■ Medical |
| ■ Art & Music | ■ Admin & Guidance |
| ■ Health & Phys Ed | ■ Other/Extended Day |
| ■ Media Center | ■ Cust, Maint, & Toilets |
| ■ Dining & Food Service | ■ Circulation |

Existing Program

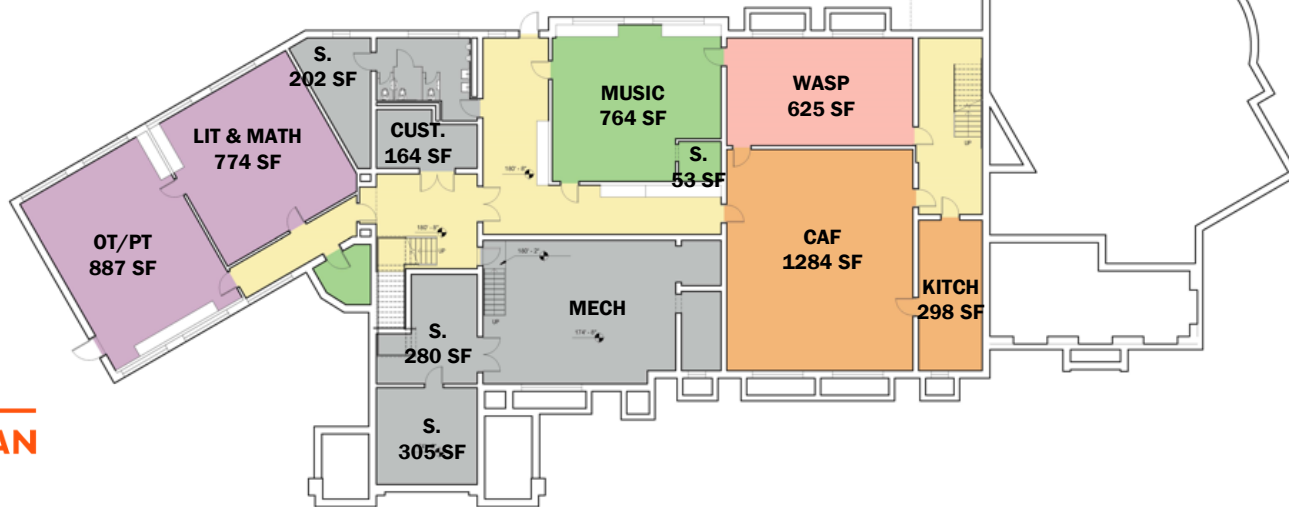
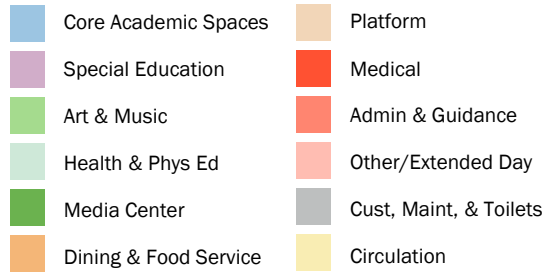
Underwood – Lower Floor



- | | |
|--|--|
|  Core Academic Spaces |  Platform |
|  Special Education |  Medical |
|  Art & Music |  Admin & Guidance |
|  Health & Phys Ed |  Other/Extended Day |
|  Media Center |  Cust, Maint, & Toilets |
|  Dining & Food Service |  Circulation |

Existing Program

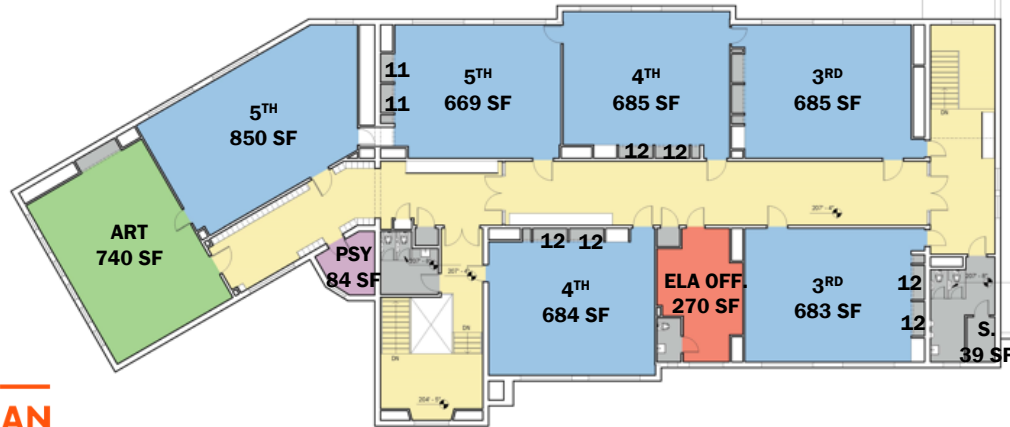
Ward – Lower Floor



Existing Program

Ward – Upper Floor

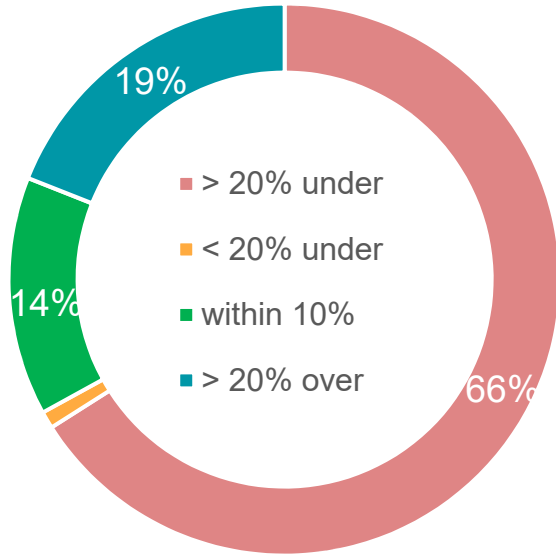
- | | |
|-----------------------|------------------------|
| Core Academic Spaces | Platform |
| Special Education | Medical |
| Art & Music | Admin & Guidance |
| Health & Phys Ed | Other/Extended Day |
| Media Center | Cust, Maint, & Toilets |
| Dining & Food Service | Circulation |



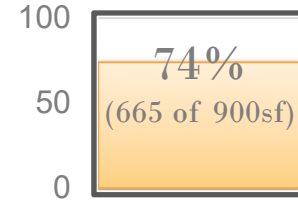
Existing Space Sizes

Underwood

Sizes vs Standards



Classroom Size



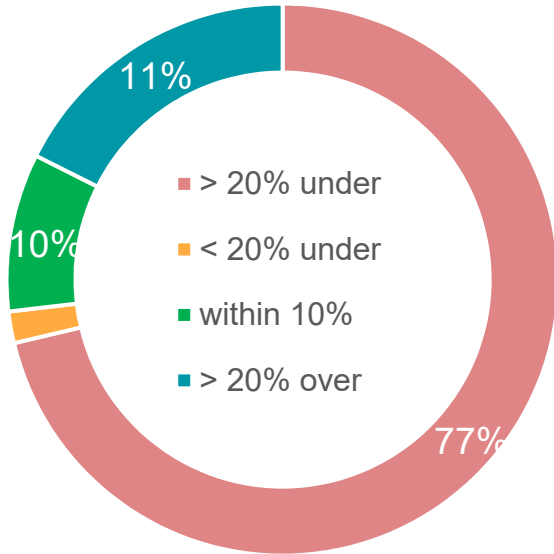
Spaces Missing

- Learning Center(s)
- Breakout Spaces
- Stage
- 4 Offices (shared)
- Nursing Room

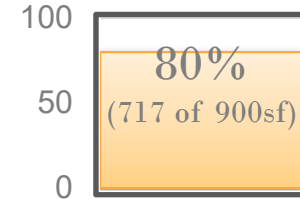
Existing Space Sizes

Ward

Sizes vs Standards



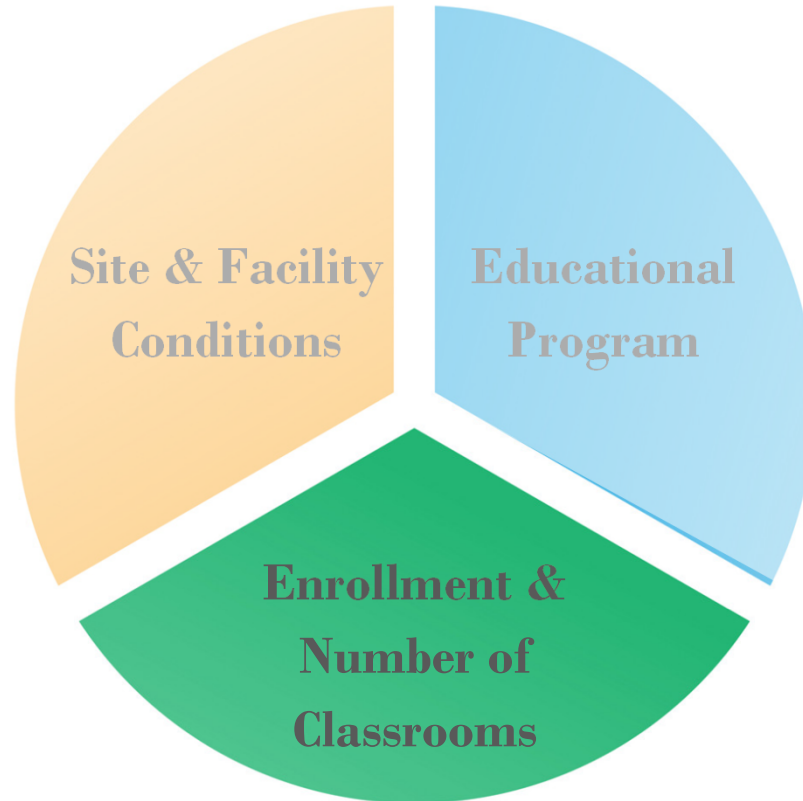
Classroom Size



Spaces Missing

- Learning Center(s)
- Breakout Spaces
- Conference Space
- 2 Offices (shared)

NPS Facilities Goal: Planning for the Future



Space Summary / Comparison

Elementary Schools	Existing		Educ. Program	PROGRAM COMPARISON (AS DESIGNED)						MSBA
	Undrwd	Ward		Angier	Zervas	Cabot	Countrysd	L-Eliot	Franklin	
Students	221	194	394-414	465	490	480	465	396-414	396-414	396
Classrooms	12	11	18	24	24	24	21	18	18	18
Special Educ.	1500 sf	2300 sf	3900 sf	Achieve +3800 sf	Stride +3500 sf	Stride +3900 sf	Spark +4400 sf	Reach +4600 sf	Bridge +4200 sf	4500 sf
Art Rooms	1	1	1	1	1	1	1	1	1	1
Music Rooms	1	1	1	1	1	1	1	1	1	1
Health / Wellness	3000 sf	2500 sf	6000 sf	6000 sf	6000 sf	6000 sf	6000 sf	6000 sf	6000 sf	6000 sf
Media Center	1600 sf	1700 sf	2500 sf	2800 sf	2900 sf	2800 sf	2800 sf	2700 sf	2700 sf	2500 sf
Cafeteria / Kitchen	2100 sf	2800 sf	6200 sf	6300 sf	6700 sf	7100 sf	6400 sf	5900 sf	6200 sf	6200 sf
Admin / Nurse	1800sf	1300 sf	2600 sf	2900 sf	3000 sf	3400 sf	2300 sf	3100 sf	2700 sf	2700 sf
Custodial	1200 sf	1000 sf	1800 sf	1800 sf	1900 sf	2200 sf	1800 sf	900 sf	1600 sf	2000 sf