



FREMONT UNIFIED SCHOOL DISTRICT

Thornton Middle School Conversion

Quattrocchi Kwok Architects

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Transforming Thornton



- Incoming 6th graders in year 2021/22
- Student population forecasted to increase from 1,350 to 1,910 by the Long Range Facilities Plan and updated to peak at 2,174 (current long term population trend)
- 2017 implementation plan budget was based on LRFP enrollment of 1,910
- Modernize a 55-year-old campus
- Transform campus and create 21st-century learning environment

Assessment – Site



- Aged hardscape, almost no landscape, lack of shade
- Lack of outdoor learning & social areas
- Insufficient site lighting
- Sump pump fails, areas flood
- Parking and drop-off inadequate to meet current and future load

Assessment – Architectural



- Roofing, exterior beams decaying
- Window system, louvers in poor condition
- Deteriorating ceilings, walls, & floors
- Accessibility needs upgrading
- Not enough classrooms for incoming students
- Library, administrative, support services, locker rooms too small

Assessment – Structural & Mechanical, Electrical and Plumbing (MEP) System












- Most mechanical units old & at end of useful life
- Electrical wiring, lighting, & life safety need upgrading
- Campus-wide IT upgrades
- Minimal seismic upgrade of permanent buildings
- Some plumbing fixtures broken or non-compliant

A Transformed Campus



- New identity for Thornton
- Welcoming entry building with library, admin, and student support services
- Improved parking and drop-off
- Modular classroom buildings reduce cost and construction time
- Outdoor shaded area for lunch, study & rainy day physical education (PE).
- Modernize existing buildings
- Ready for 6th graders in fall 2021

Modernization Scope

	Very Minor	Minor Modernization	Moderate Modernization	Major Modernization
Architectural	<ul style="list-style-type: none"> • Repair roofing, gutters, caps • Recoat roof • Patch & paint ceilings, walls • Replace 25% flooring & base • Accessibility compliance – bathrooms, door hardware, thresholds, casework 	<ul style="list-style-type: none"> • Everything in  + • Cap and seal damaged exterior beams • Replace broken windows and damaged louvers • Replace & paint 100% flooring and base 	<ul style="list-style-type: none"> • Everything in  + • Replace all classroom ceilings, windows & louvers system, wall finishes, flooring • Upgrade locker rooms, old multiuse bldg. 	<ul style="list-style-type: none"> • Everything in  + • Replace full roofing • Replace all doors and windows • New non-bearing walls, interior finishes. • New casework
Structural	None	None, unless necessary to support new HVAC units	Seismic upgrade: locker rms, possibly old multiuse bldg.	Everything in 
Mechanical	None	Replace outdated HVAC units in kind	Replace outdated HVAC w/new efficient units	<ul style="list-style-type: none"> • Everything in  + • Full mech. upgrade
Electrical	Replace/repair non-functioning and non-compliant fixtures, switches, receptacles, etc.	<ul style="list-style-type: none"> • Everything in  + • Replace fixtures in poor condition 	<ul style="list-style-type: none"> • Everything in  + • New wiring, lighting, controls, life safety at reconfigured areas 	<ul style="list-style-type: none"> • Everything in  + • Full electrical upgrade
Plumbing	None	Replace & relocate fixtures where necessary	Replace & relocate fixtures where necessary	<ul style="list-style-type: none"> • Everything in  + • Full plumbing upgrade



QKA Design Option 1



- Existing Building (No Current Work)
- New Construction
- Reconfigured / Major Modernization
- Moderate Modernization
- Minor Modernization
- Very Minor Modernization
- Demolish Building
- Potential New Temporary Portables
- Reconfigured Playfield

Housed in Existing Permanent Structures	1,194
Housed in Existing Temporary Portables	271
Housed in New Permanent Structures	454
Total Capacity (Meets LRFP Population Trends)	1,919
Capacity Based on Current Enrollment Projections	2,176 *
Unmet Capacity	(257)

Estimated Project Cost (1,919 Capacity)

\$ 61,708,492

*** Estimated Project Cost (2,176 Capacity)**

\$ 64,997,774

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QKA Design Option 2B (Option 1 + More New Classrooms)



- Existing Building (No Current Work)
- New Construction
- Reconfigured / Major Modernization
- Moderate Modernization
- Minor Modernization
- Very Minor Modernization
- Demolish Building
- Potential New Temporary Portables
- Reconfigured Playfield

Housed in Existing Permanent Structures	1,194
Housed in Existing Temporary Portables	180
Housed in New Permanent Structures	802
Total Capacity (Meets LRFP Population Trends)	2,176
Capacity Based on Current Enrollment Projections	2,176
Unmet Capacity	0

Estimated Project Cost (2,176 Capacity) \$76,000,798



Options & Budget



Option 1

Option 2A

Option 2B

Option 1 + More Modernization

Option 1 + More Classrooms

Estimate	\$ 61.71 Million	\$ 70.85 Million	\$ 76.00 Million
Budget	\$ 61.82 Million	\$ 61.82 Million	\$ 61.82 Million
Difference	\$ (00.11) Million	\$ 9.03 Million	\$ 14.18 Million
Est. (2,174 Enrollment)	\$ 65.00 Million	\$ 74.14 Million	\$ 76.00 Million

Reference Slides



Possibilities – New Buildings



- New buildings have revitalized other campuses and will transform Thornton
- New entry provides focal point when approaching campus and more security options
- Revitalizes neighborhood and shows residents' tax dollars at work
- Modern science/technology classroom buildings promote 21-century learning

Possibilities – Landscape



- Designed outdoor spaces support 21st-century education goals
- Shaded areas for lunch, learning, PE
- Variety of scales promotes community and shapes individual identities
- Sustainable bioswales/planting areas improve drainage, cool microclimate