



KUHN RIDDLE ARCHITECTS

**Amherst Municipal Affordable Housing Trust
East Street School Housing Study**

Amherst, Massachusetts
January 16, 2019

Study Outline

1. Executive Summary
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6. Cost Analysis
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Executive Summary

This study was sponsored by the Amherst Municipal Affordable Housing Trust to inform a “Request for Proposals” (RFP) to be issued by the Town to prospective developers for the creation of quality affordable housing on the site of the East Street School building in Amherst, MA. **Kuhn Riddle Architects** was engaged by the Trust to study options for converting the school building into housing and developing the remaining buildable site area with additional housing and required parking. The team also considered options that demolished the school building and maximized the number of units possible on the lot with all new construction.

Parking is the governing factor in either scenario. Town zoning regulations require two parking spaces per unit however some area communities, including Amherst, have reduced that number to 1.5 spaces per unit for affordable housing developments in recognition that not every household will always have two cars. The goal in this case was to maintain one parking space per unit given the site’s proximity to public transportation and possible on street parking that could also be made available. The reduced levels of parking would have to be negotiated during the special permit process. The site could also be developed using a 40B Comprehensive Permit, which would still need to address parking and density.

As demonstrated in the following design concepts, **the school building is able to accommodate 6 one bedroom apartments.** These units would not be accessible due to the fact that installing an elevator would be cost prohibitive and architecturally difficult. **Accessible units would be provided in the new construction.**

Repurposing the school building for housing was not seen to be a prohibitive cost relative to building all new construction. In fact the overall cost per unit appears to be less in the scheme that saves the school due to the savings realized by not paying for the cost of demolition and redevelopment of the site at the existing building footprint.

The greatest density is achieved with the construction of a new 34 unit four story building along East Street with parking tucked in behind. The summary notes from the Housing Forum shows the perspective of town residents and stakeholders, as well as the pros and cons of maximizing the potential of the site versus saving the existing school.

The Trust could choose to be prescriptive in their RFP in terms of defining the number of units and bedroom mix that are desirable and whether or not to preserve the existing building. It could also choose to **allow the developers flexibility** to generate their own program and design solution based on the proforma that works best for them. Regardless of the direction taken, **this study offers a basis for evaluating future proposals** and prepares the Trust for the questions that will arise during the RFP process relative to density, parking, affordability and architectural character.

Study Goals

1. Consider various housing configurations both using the existing school building and demolishing it.
2. Weigh options for providing a mix of studio, one, two and three bedroom units.
3. Consider both multi-level apartment style buildings and townhouse configurations.
4. Balance the unit types and numbers with the maximum amount of parking the site will support.
5. Consider options for how to utilize the wetland fields to the south and whether or not to provide parking on the existing lot located behind the school building.
6. Study the visual impact of different housing configurations on the overall character scale of the neighborhood.
7. Prepare a comparative cost analysis of the various approaches to developing the site.

The Site and Existing Building

Site Description

The East St. School is a former elementary school that burned in 1893 and was rebuilt in 1895. It burned again in 1936 destroying the original bracketed hip roof which was replaced by a flat roof, giving the building a truncated appearance that remains today. The original entrance and stairs were eliminated in the 1970's.

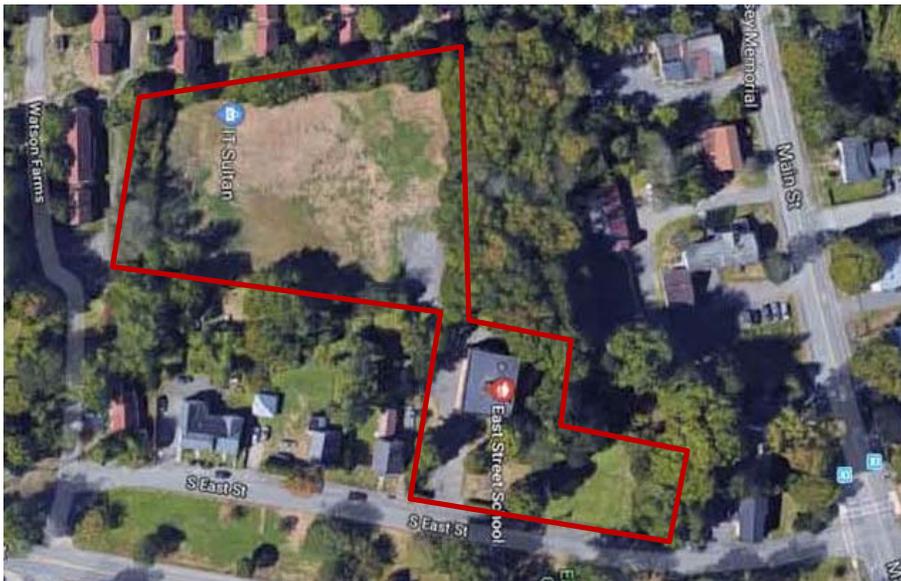
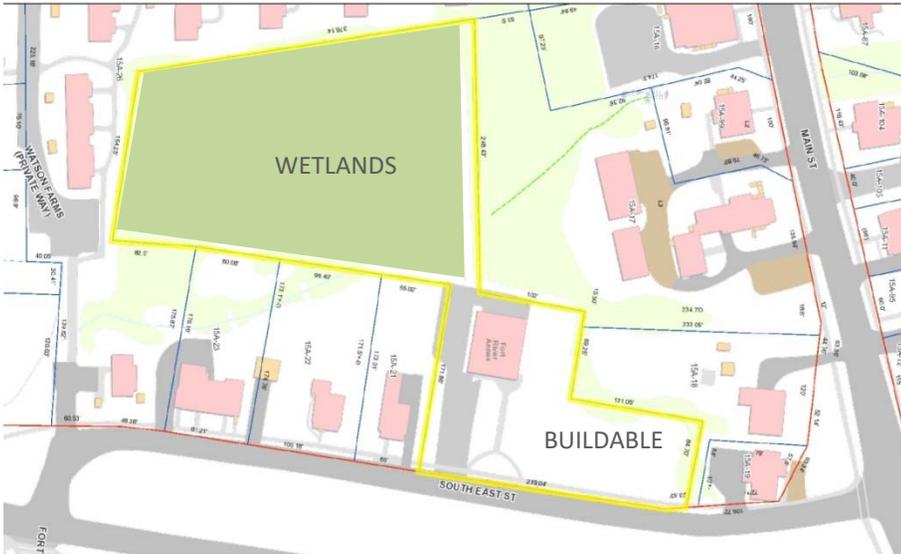
It is currently maintained by the Town of Amherst and has been sitting vacant for the past several years. It includes a basement and two classroom floors. In 2015, the Town of Amherst reviewed renovating the building for office spaces. There is a set of plans and specifications for this renovation which served as a reference for this study.

The building is believed to contain lead and asbestos, however a full hazardous materials survey has not yet been completed. A hazardous materials survey should be completed prior to design. All new mechanical, plumbing, electrical and fire protection systems will be required if the building is renovated.

The roof was recently replaced and the interior of the building is in good condition. The exterior masonry and windows appear to be in good shape but will require a thorough assessment.

The site itself comprises 2.34 acres and includes a large playing field behind the school building. This area has been flagged for wetlands and cannot be developed. It could either be maintained as open space or allowed to revegetate. An existing parking lot located on this portion of the site may be maintained if deemed advantageous to future development.

The eastern portion of the site that fronts along East Street and extends west to the school building is the only portion of the overall site that is viable for development.



The Site and Existing Building



View From East Street

The Site and Existing Building



Typical Classroom

The Site and Existing Building



View to Wetland Area and Existing Parking



View to Northwest Corner of Building



View Looking South Down East Street



View Looking North Up East Street

The Site and Existing Building



View to Northern Portion of Buildable Area



View to Parking in Front of Building

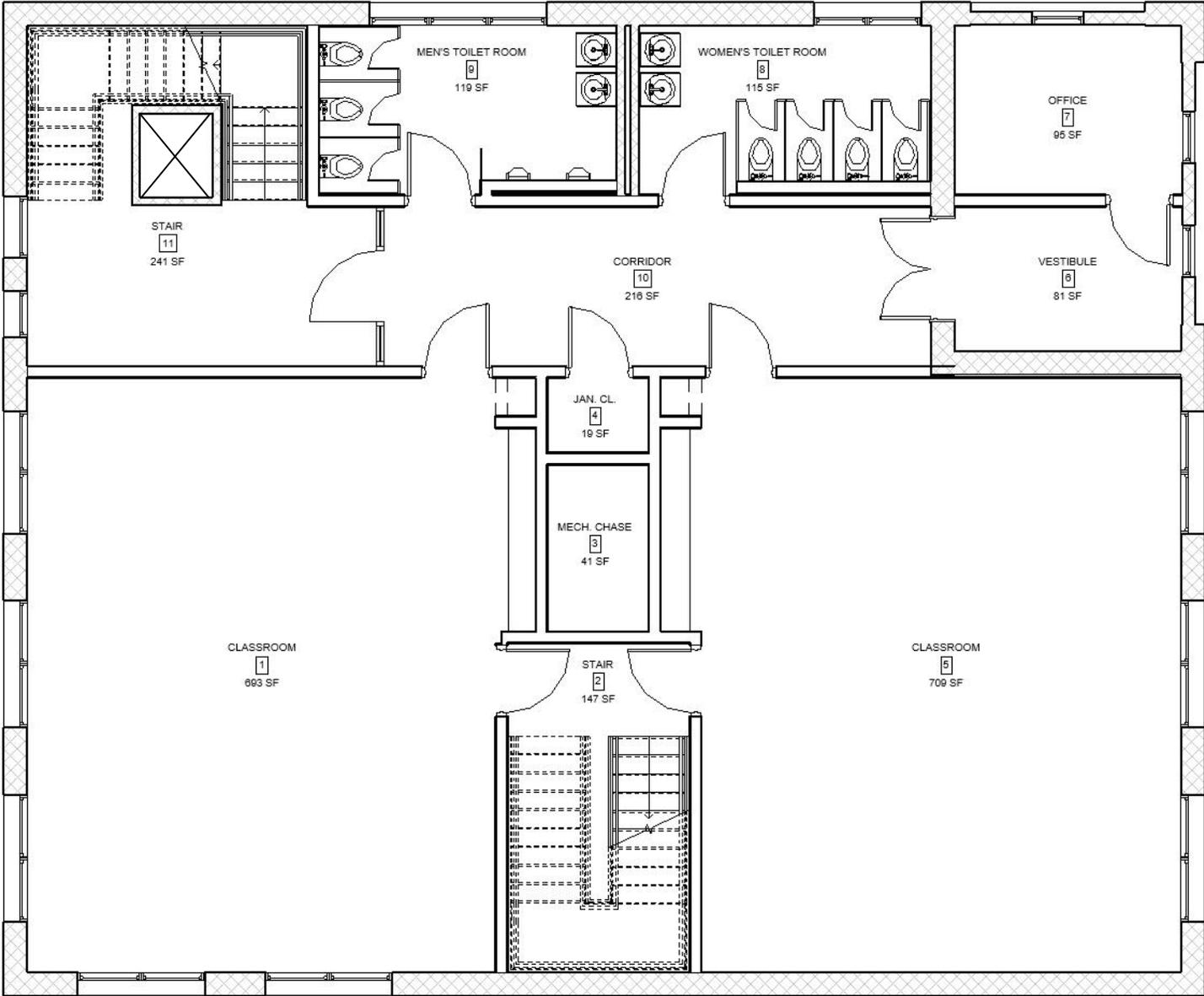


View From Building to East Street



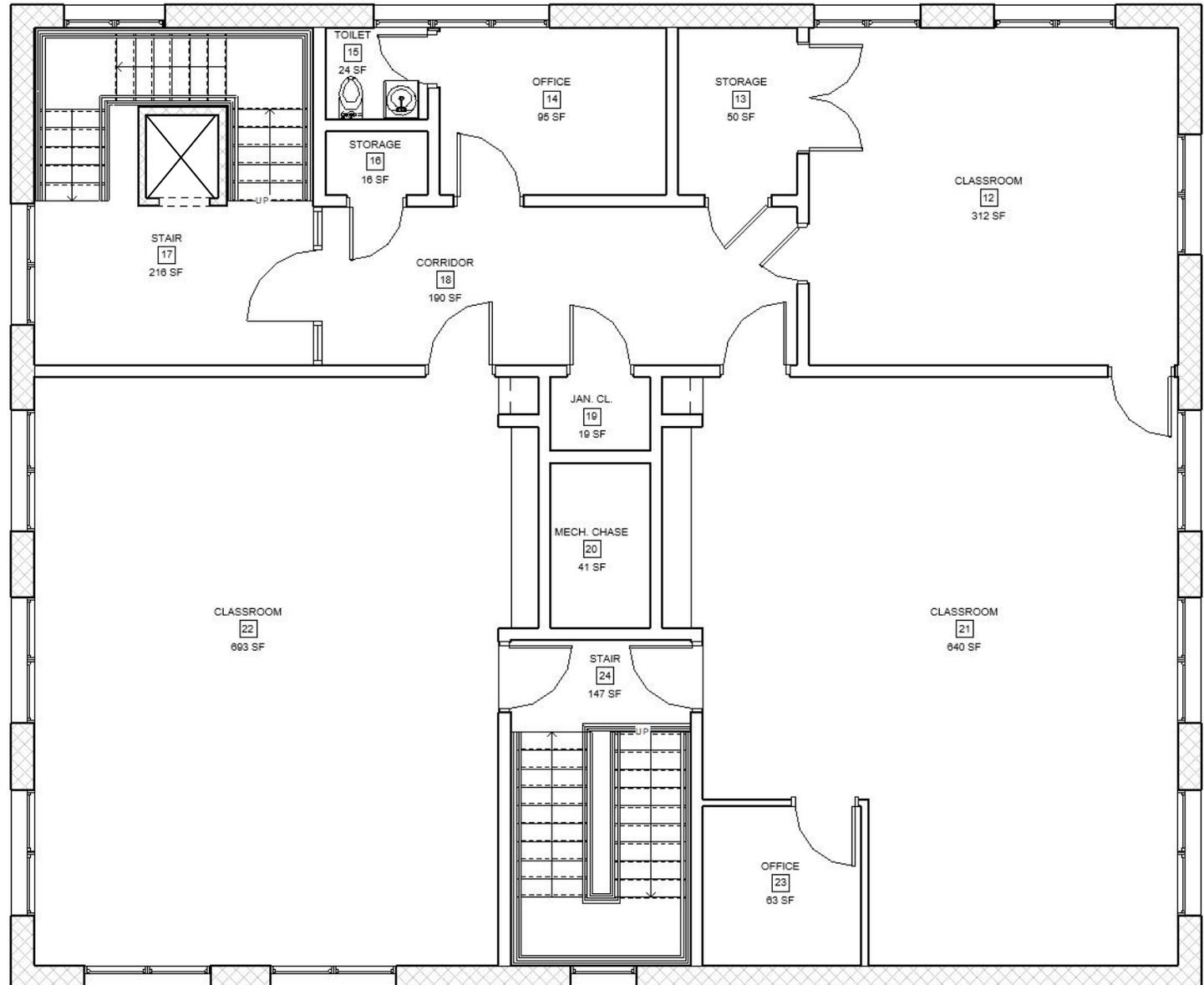
View of Building From East Street

The Site and Existing Building Plan



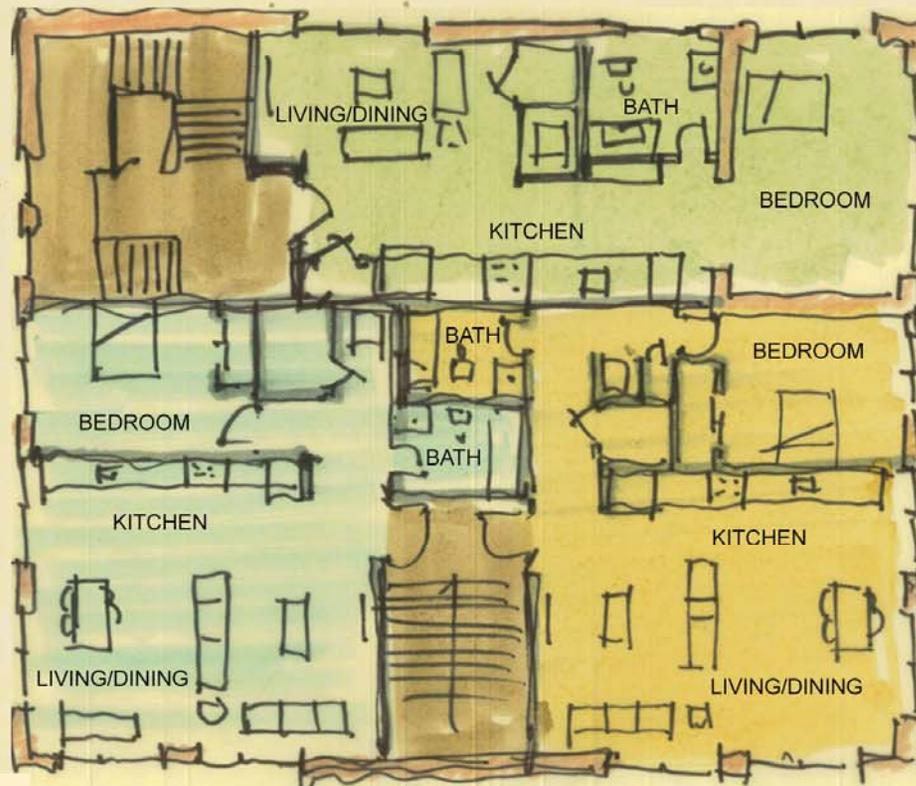
First Floor

The Site and Existing Building Plan



Second Floor

East Street School Options-Proposed Floor Plan



Three 1 Bedroom Units
on each of two floors

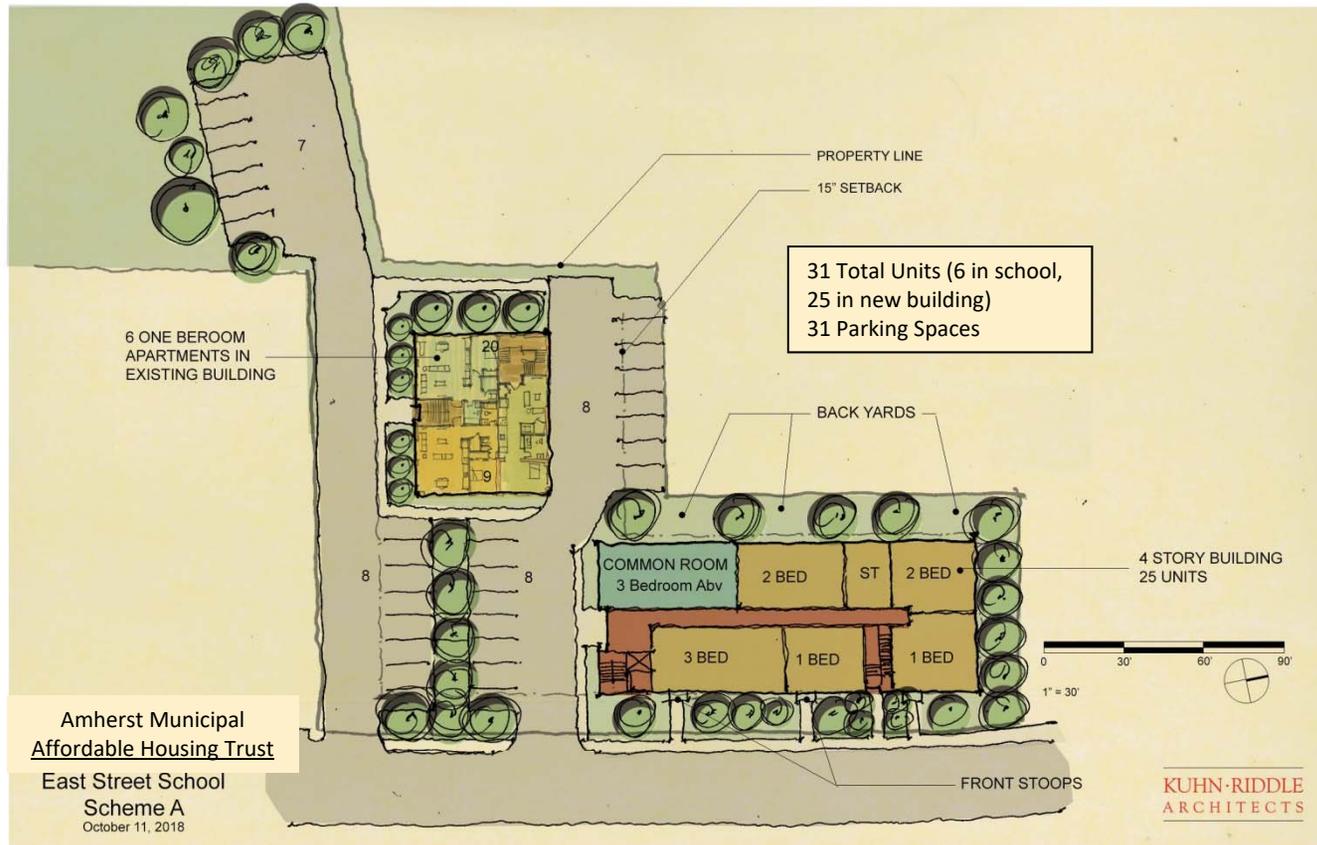
Amherst Municipal
Affordable Housing Trust

East Street School
Proposed School Building Plan
September 13, 2018


3/16" = 1' - 0"

KUHN·RIDDLE
ARCHITECTS

Outline of Possible Units & Costs – Scheme A – Apartment Building with School



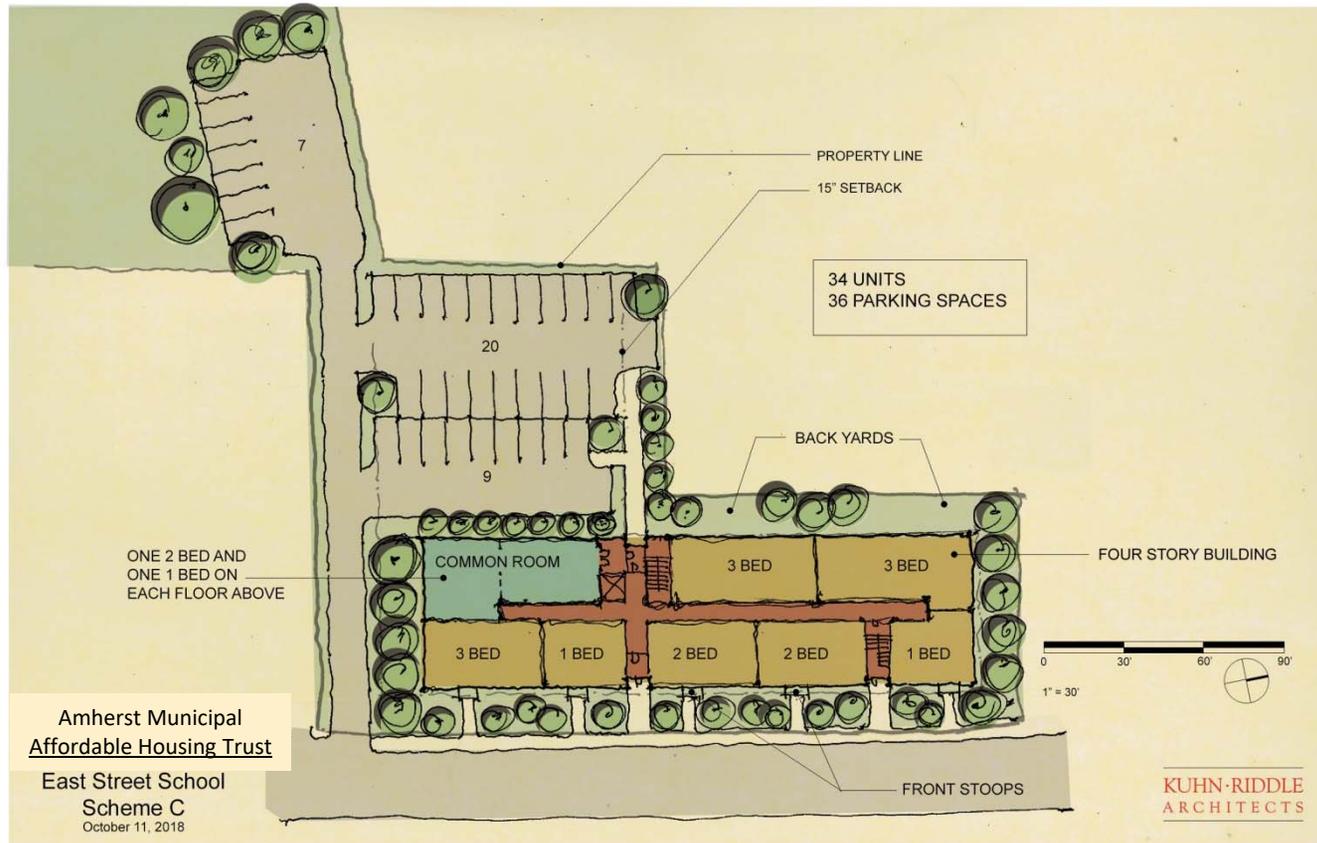
Scheme A	UNIT TYPE				TOTAL
	Studio	1 Bed	2 Bed	3 Bed	
First Floor	1	2	2	1	6
Second Floor	1	2	2	2	7
Third Floor	NA	2	1	3	6
Fourth Floor	NA	2	1	3	6
Total	2	8	6	9	25
Total Parking	31				
Existing School Building		6			6
TOTAL UNITS					31
New Construction Bedrooms	2	8	12	27	49
Existing School Building Bedrooms	0	6	0	0	6
TOTAL BEDROOMS					55

Demo					\$0
Site Work					\$550,000
		SF			
New Constuction	\$/SF	30,000	\$165		\$4,950,000
Renovated Construction	\$/SF	5,472	\$220		\$1,203,840
Renovated Basement		2,736	\$150		\$410,400
					\$7,114,240
Contingency	10%				\$711,424
Total Construction					\$7,825,664
Average Construction Cost Per Unit					\$252,440.77

Bedroom Per Parking Space	1.77
Dollars Per Bedroom	\$142,284.80

Costs do not include predevelopment or soft costs (architectural, engineering fees) that add 30% to the total project cost.

Outline of Possible Units & Costs – Scheme C – Apartment Building: No School



Amherst Municipal
Affordable Housing Trust
East Street School
Scheme C
October 11, 2018

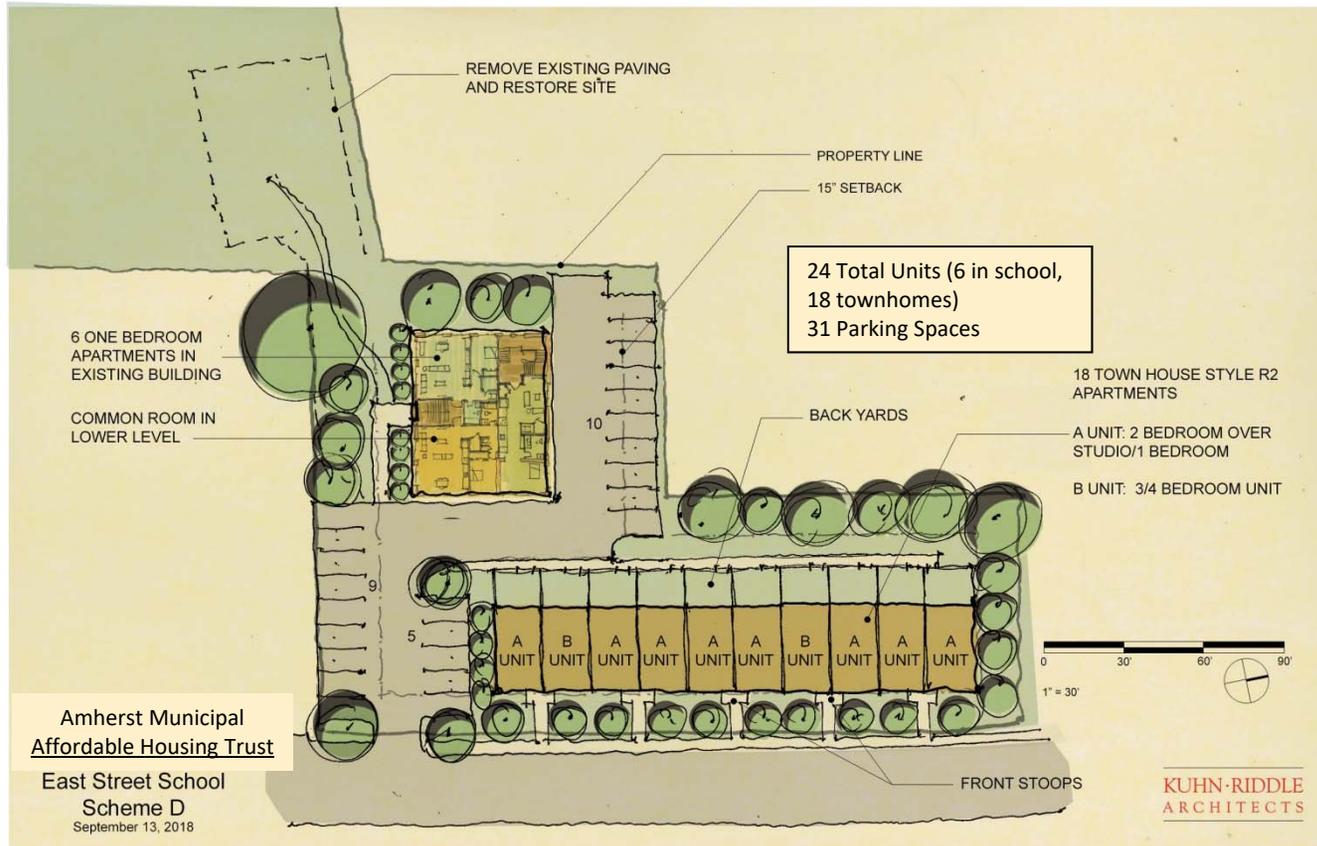
Scheme C	UNIT TYPE				TOTAL
	Studio	1 Bed	2 Bed	3 Bed	
First Floor	0	2	2	3	7
Second Floor	0	3	3	3	9
Third Floor	0	3	3	3	9
Fourth Floor	0	3	3	3	9
Total	0	11	11	12	34
Total Parking					36
Demo Existing School Building					0
Total Units					34
New Construction Bedrooms	0	11	22	36	69
Existing School Building Bedrooms	0	0	0	0	0
TOTAL BEDROOMS					69

Demo				\$175,000
Site Work				\$750,000
New Construction	\$/SF	45,000	\$165	\$7,425,000
Renovated Construction	\$/SF	0	\$220	\$0
Renovated Basement		0	\$150	\$0
				\$8,350,000
Contingency	10%			\$835,000
Total Construction				\$9,185,000
Average Construction Cost Per Unit				\$270,147.06

Bedroom Per Parking Space	1.92
Dollars Per Bedroom	\$133,115.94

Costs do not include predevelopment or soft costs (architectural, engineering fees) that add 30% to the total project cost.

Outline of Possible Units & Costs – Scheme D - Townhouses



Scheme D	UNIT TYPE				TOTAL
	Studio	1 Bed	2 Bed	3 Bed	
First Floor	8	0	0	2	10
Second Floor	0	0	8	0	8
Total	8	0	8	2	18
Total Parking	24				
Existing School Building		6			6
Total Units					24
New Construction Bedrooms	8	0	16	6	30
Existing School Building Bedrooms	0	6	0	0	6
TOTAL BEDROOMS					36

Costs do not include predevelopment or soft costs (architectural, engineering fees) that add 30% to the total project cost.

Demo				\$0
Site Work				\$750,000
		SF		
New Constuction	\$/SF	18,000	\$190	\$3,420,000
Renovated Construction	\$/SF	5,472	\$220	\$1,203,840
Renovated Basement		2,736	\$150	\$410,400
				\$5,784,240
Contingency	10%			\$578,424
Total Construction				\$6,362,664
Average Construction Cost Per Unit				\$265,111.00

Bedroom Per Parking Space	1.50
Dollars Per Bedroom	\$176,740.67

Street Context Massing – Three Story Building With School



EAST STREET SCHOOL AFFORDABLE HOUSING STUDY - CONCEPTUAL STREET CONTEXT

Street Context Massing – Four Story Building With School



EAST STREET SCHOOL AFFORDABLE HOUSING STUDY - CONCEPTUAL STREET CONTEXT

Street Context Massing – Four Story Building With No School



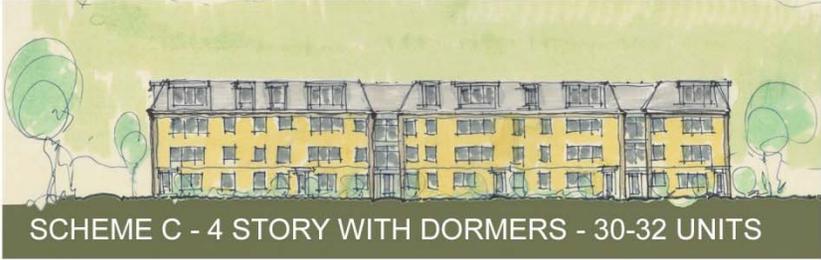
EAST STREET SCHOOL AFFORDABLE HOUSING STUDY - CONCEPTUAL STREET CONTEXT

Street Context Massing – Four Story Building With No School



EAST STREET SCHOOL AFFORDABLE HOUSING STUDY - CONCEPTUAL STREET CONTEXT

Street Context Massing – Four Story Building With No School



EAST STREET SCHOOL AFFORDABLE HOUSING STUDY - CONCEPTUAL STREET CONTEXT

Street Context Massing – Three Story Townhouse With School



EAST STREET SCHOOL AFFORDABLE HOUSING STUDY - CONCEPTUAL STREET CONTEXT

Possible Housing Types – Apartment Building



Photo: MicaBlue Creative

The Flats at Village Hill Northampton, MA



Photo: MicaBlue Creative

The Flats at Village Hill Northampton, MA



Rendering: Kuhn Riddle Architects

Stiebel Apartments, Holyoke, MA



Rendering: Kuhn Riddle Architects

University Drive Apartments, Amherst, MA

Possible Housing Types - Townhomes



Photos: MicaBlue Creative

Summary Report of Housing Forum Group Discussions

On Thursday, November 1, 2018 the League of Women Voters of Amherst and the Amherst Municipal Affordable Housing Trust sponsored a Housing Forum. This report is a result of that collaboration. Six League members, listed below, reported on small group discussions of the architectural ideas presented by Aelan Tierney of Kuhn Riddle Architects, also shown in this report.

Reporters from Amherst League of Women Voters

Kathy Campbell, leader
Cynthia Brubaker
Nancy DiMattio
Rebecca Fricke
Phyllis Lehrer
Adrienne Terrizzi

Group Facilitators from Housing Trust

Rita Farrell
Sid Ferreira
John Hornik
Tom Kegelman
Jay Levy
Nathaniel Malloy (Town Staff Liaison to Trust)
Priscilla White

Summary of Major Points of Discussion:

Retaining the East Street School

No consensus emerged from the group discussions. Some groups and individuals were clearly in favor of retaining the existing school building, while others saw more reasons not to do so. The pros and cons are as follows:

Positives:

- Keeps historic fabric; historic significance of building
- Good building 'bones'
- Would make quite nice, high-ceiling, large-windowed apartments

Concerns:

- School not handicapped accessible
- Less energy efficient
- Renovation would not be cost-effective for the number of units and bedrooms gained
- All new construction allows more freedom architecturally
- Outside look of the East Street School not attractive

Summary Report of Housing Forum Group Discussions

Discussions of the Designs A, C, and D resulted in elements that were viewed as positive by one or more groups, as well as elements that were viewed as potential problems, as follows:

Positives:

- Inclusion of a common room
- Elevator
- Walkways to front stoops
- Mixed rooflines
- Mixture of # of bedrooms; two-bedroom apartments are in particularly high demand; this is the category that has a waiting list at Olympia Oaks.
- More texture in exterior
- Articulation/front porches
- Keep wetland area as play area (mowed)
- Ratio of one unit to one parking spot
- Apartment building was set back from the street, screened by trees and with individual entrances to ground-floor units.
- Flat roof surface on the apartment building for solar, noting that even the mansard-roofed version of the four-story building would have considerable flat roof space. Also, solar-covered parking could be considered.

Mixed Responses: Four stories for new construction:

Pros:

- Biggest bang for the buck in terms of bedrooms and number of units
- More cost effective
- Could meet the objective of more affordable units
- Mitigate negatives of massing with design of roofline and facade
- Neighborhood not particularly interesting architecturally or historic

Cons:

- Out of scale with neighborhood
- More impactful in terms of the size and look
- Big box look
- Flat facade

Appendix: Massachusetts Historical Commission Inventory Form

Massachusetts Cultural Resource Information System Scanned Record Cover Page

Inventory No:	AMH.656
Historic Name:	East Street Elementary School
Common Name:	Amherst School Department Offices
Address:	45 South East St
City/Town:	Amherst
Village/Neighborhood:	East Village
Local No:	151, 630, 717
Year Constructed:	c 1893
Architect(s):	Park, Charles Edward
Architectural Style(s):	Altered beyond recognition; Romanesque Revival
Use(s):	Administration Office; Public School
Significance:	Architecture; Community Planning; Education
Area(s):	AMH.D: East Village Historic District
Designation(s):	Nat'l Register District (07/03/1986)
Building Materials(s):	Wall: Brick; Glazed Terra Cotta; Stone, Cut



The Massachusetts Historical Commission (MHC) has converted this paper record to digital format as part of ongoing projects to scan records of the Inventory of Historic Assets of the Commonwealth and National Register of Historic Places nominations for Massachusetts. Efforts are ongoing and not all inventory or National Register records related to this resource may be available in digital format at this time.

The MACRIS database and scanned files are highly dynamic; new information is added daily and both database records and related scanned files may be updated as new information is incorporated into MHC files. Users should note that there may be a considerable lag time between the receipt of new or updated records by MHC and the appearance of related information in MACRIS. Users should also note that not all source materials for the MACRIS database are made available as scanned images. Users may consult the records, files and maps available in MHC's public research area at its offices at the State Archives Building, 220 Morrissey Boulevard, Boston, open M-F, 9-5.

Users of this digital material acknowledge that they have read and understood the MACRIS Information and Disclaimer (<http://mhc-macris.net/macrisdisclaimer.htm>)

Data available via the MACRIS web interface, and associated scanned files are for information purposes only. THE ACT OF CHECKING THIS DATABASE AND ASSOCIATED SCANNED FILES DOES NOT SUBSTITUTE FOR COMPLIANCE WITH APPLICABLE LOCAL, STATE OR FEDERAL LAWS AND REGULATIONS. IF YOU ARE REPRESENTING A DEVELOPER AND/OR A PROPOSED PROJECT THAT WILL REQUIRE A PERMIT, LICENSE OR FUNDING FROM ANY STATE OR FEDERAL AGENCY YOU MUST SUBMIT A PROJECT NOTIFICATION FORM TO MHC FOR MHC'S REVIEW AND COMMENT. You can obtain a copy of a PNF through the MHC web site (www.sec.state.ma.us/mhc) under the subject heading "MHC Forms."

Commonwealth of Massachusetts
Massachusetts Historical Commission
220 Morrissey Boulevard, Boston, Massachusetts 02125
www.sec.state.ma.us/mhc

This file was accessed on: Thursday, September 13, 2018 at 5:39: PM

Appendix: Massachusetts Historical Commission Inventory Form

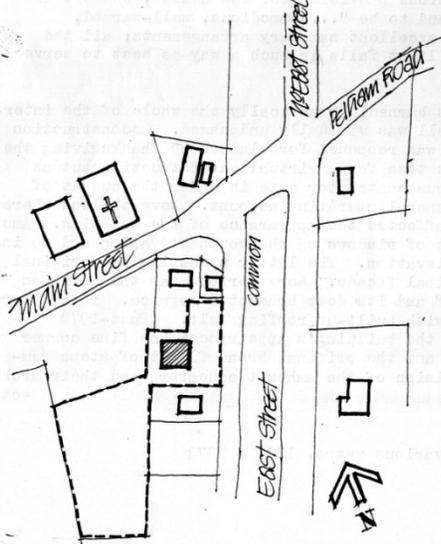
FORM B - BUILDING

MASSACHUSETTS HISTORICAL COMMISSION
Office of the Secretary, State House, Boston

Am. H. 656
 In Area no. 11 Form no. 630
 75 SOUTH EAST ST
 (INC) (D) 656



4. Map. Draw sketch of building location in relation to nearest cross streets and other buildings. Indicate north.



1. Town AMHERST, Massachusetts
 Address East Street, Amherst
 Name Old East Street School
 Present use Administrative functions associated with the Amherst School system
 Present owner Town of Amherst
 3. Description: PL. E. VITT
 Date 1893
 Source Amherst Town Records

Style Romanesque
 Architect Charles E. Park, Boston
 Exterior wall fabric Brick, with Pelham stone and terracotta trim
 Outbuildings (describe) None
 Other features Style derives from fine corner porch (now crudely filled in) and large, arched, stair window on No. side. Large banks of flat-arched windows reflect industrial trends. Fine detailing with restrained use of stone for fountains and cills. Terracotta impostes. Altered pitched roof removed 1936 and center bank of windows added on E. Moved Date side

5. Lot size:
 One acre or less Over one acre x
 Approximate frontage 262'
 Approximate distance of building from street 90'
 6. Recorded by John H. Martin
 Organization Amherst Historical Commission
 Date 23rd June, 1980

(over)

7. Original owner (if known) Town of Amherst
 Original use Elementary School for Amherst School District No.2 until June 1973.
 Subsequent uses (if any) and dates Various uses associated with Amherst Town and Schools. Currently houses center for curriculum development.

8. Themes (check as many as applicable)
- | | | | | | |
|-----------------------|-------------|--------------|-------------|----------------|-------------|
| Aboriginal | <u> </u> | Conservation | <u> </u> | Recreation | <u>x</u> |
| Agricultural | <u> </u> | Education | <u>xx</u> | Religion | <u> </u> |
| Architectural | <u>x</u> | Exploration/ | <u> </u> | Science/ | <u> </u> |
| The Arts | <u>x</u> | settlement | <u> </u> | invention | <u> </u> |
| Commerce | <u> </u> | Industry | <u> </u> | Social/ | <u> </u> |
| Communication | <u>x</u> | Military | <u> </u> | humanitarian | <u>x</u> |
| Community development | <u>x</u> | Political | <u> </u> | Transportation | <u> </u> |

9. Historical significance (include explanation of themes checked above)
 An earlier school on this site was destroyed by fire on December 5th 1893. The architect for the new school was Charles E. Park of Boston, who seems to have been given an opportunity to break with tradition in school planning and design, insofar as the other school buildings in Amherst at the time are concerned. The building's uncompromisingly 'modern' appearance may also be a reflection of the tight budget of \$7,600. The Annual Town Report of 1895 noted that the building offered a contrast to the town's other schools in its "generous provision for the health, comfort and enjoyment of its occupants." It was found to be "...commodious, well-warmed, thoroughly ventilated and provided with excellent sanitary arrangements; all the rooms are bright and attractive and the light falls in such a way as best to serve the pupils at their work."

On February 13th 1936 the new school was burned. Practically the whole of the interior was destroyed; but the brickwork shell was virtually undamaged. Reconstruction proceeded with ~~the~~ great speed and was reopened for classes by Thanksgiving the same year. Not only an incredibly short time for a virtual reconstruction but as remarkable was the fact that the anonymous contractor came in under the budget of \$30,175 and \$1.25 was returned to the general operating account. Nevertheless there were short cuts taken which materially affected the appearance of the building. Amongst these was the decision to block two bays of windows on the south elevation and to insert a new bank of windows on the east elevation. The latter upsetting the original solid to void relationship on the principal facade. More serious was the decision not to rebuild the original pitched roof and its deep bracketed cornice. Today there is a plain brick parapet, capped weakly with built-up roofing felt. Post-1970 alterations have detracted further from the building's appearance: the fine corner porch has been insensitively blocked-in and the original broad flight of steps removed, a sad commentary on the initial vision of the Amherst educators and their architect.

10. Bibliography and/or references (such as local histories, deeds, assessor's records, early maps, etc.)
Jones Library Archives for photographs
Annual Reports of the Town of Amherst, various years, 1895 - 1973

Appendix: Massachusetts Historical Commission Inventory Form

FORM B - BUILDING

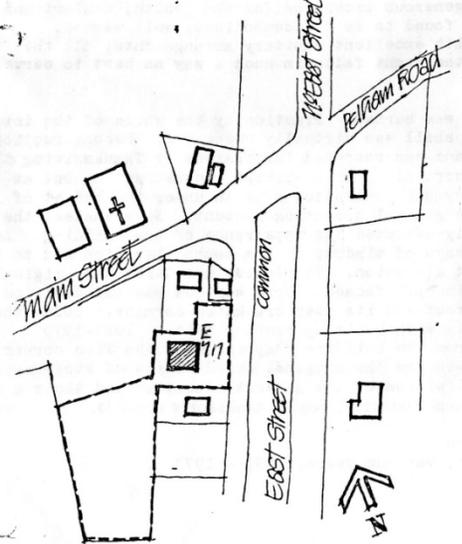
MASSACHUSETTS HISTORICAL COMMISSION
Office of the Secretary, State House, Boston

In Area no. 11 Form no. AMH.656-577

AMH.656



other buildings. Indicate north.



(over)

1. Town AMHERST, Massachusetts
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 Name Old East Street School
 Present use Administrative functions associated with the Amherst School system
 Present owner Town of Amherst

3. Description:
 Date 1893
 Source Amherst Town Records
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 Architect Charles E. Park, Boston
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Aboriginal	<input type="checkbox"/>	Conservation	<input type="checkbox"/>	Recreation	<input checked="" type="checkbox"/>
Agricultural	<input type="checkbox"/>	Education	<input checked="" type="checkbox"/>	Religion	<input type="checkbox"/>
Architectural	<input checked="" type="checkbox"/>	Exploration/ settlement	<input type="checkbox"/>	Science/ invention	<input type="checkbox"/>
The Arts	<input checked="" type="checkbox"/>	Industry	<input type="checkbox"/>	Social/ humanitarian	<input checked="" type="checkbox"/>
Commerce	<input type="checkbox"/>	Military	<input type="checkbox"/>	Transportation	<input type="checkbox"/>
Communication	<input checked="" type="checkbox"/>	Political	<input type="checkbox"/>		
Community development	<input checked="" type="checkbox"/>				

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