

Agenda Summary

June 22, 2020

Agenda Item No. 3-C-2

HDAC Ceramics Classroom Project

Summary: HDAC would like to convert their basement storage space into a classroom space with two kilns. This time has been set aside for HDAC to review the enclosed plans with the Selectboard. It is important that HDAC obtain a permit from the Vermont Department of Fire Safety as a condition for advancing the project. Also, it is worth noting in that HDAC has agreed to a separate meter and to pay the electricity associated with the kilns and classroom which shall be on a new separate meter.

During the planning for the HDAC project, it came to the attention of the Town that the existing electrical service for the building is inadequate and not compliant with code requirements for the existing building. Upgrades of the existing 400-amp service is required. With the proposed classrooms and kilns, with existing electrical load, a new 800-amp service is required. Public Works has investigated the scope and cost to upgrade the service. In general, this will require a new utility pole drop, approximately 200 LF of trench excavation, conduits and feeders, a new meter panel, and installation of new electrical panels separating the electrical to the HDAC classroom/kilns from the remainder of the building, and exterior restoration. The estimated total cost for all exterior work Town sided electrical panel is \$25K. The cost for the HDAC panel and interior electrical for the classroom/kiln is by HDAC.

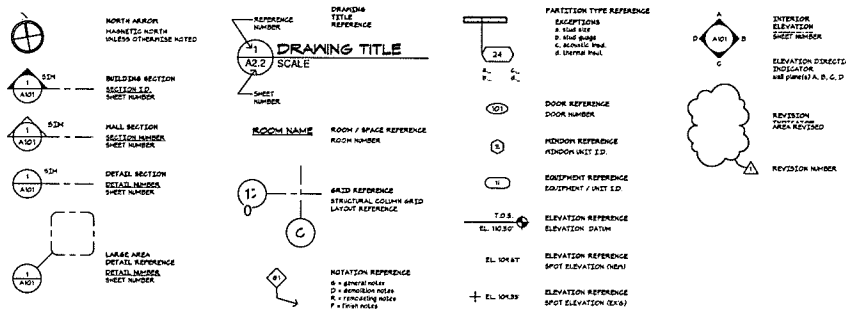
Town Plan Impact: Arts and Culture Task #6: *Support the Helen Day Art Center's strategic plan, including expanded educational opportunities, year-round outdoor sculpture exhibition, and unique, Stowe-centered classes and workshops.*

Fiscal Impact: The cost to bring the electrical service up to code is estimated to cost \$25,000. There is currently \$613,000 in unallocated capital reserves.

Recommendation: Move to approve the proposed classroom / kiln project subject to cost being paid by HDAC and obtaining a Department of Fire Safety Permit, appropriate \$25,000 from the General Fund Capital reserves to pay for the electrical service upgrade required to bring it up to code, with the understanding that HDAC will pay for upgrades to new service panel and interior electrical system for their classroom/kiln project.

HELEN DAY ARTS CENTER CERAMICS CLASSROOM

GRAPHIC SYMBOLS



ABBREVIATIONS

A.C., A.C.	AIR CONDITIONING	DET	DETAIL	GPPL	GYP-SUM PLASTER	NO, #	NUMBER	SO	SQUARE
A.F.F.	ABOVE FINISHED FLOOR	DF	DRAINING FOUNTAIN	GT	GROUT	NOM	NOMINAL	ST	STAINLESS STEEL
AB	ANCHOR BOLT	DH	DOUBLE HANG	GV	GALVANIZED	NTS	NOT TO SCALE	STD	STANDARD
ADD	ADDENDUM	DIA, DIAM	DIAMETER	GW	GYP-SUM WALL BOARD	O	ON CENTER	STL	STEEL
ALT	ALTERNATE	DL	DIMENSION	H	HOLLOW CORE	OC	ON CENTER	STO	STORAGE
ANC	ANCHOR ANCHORAGE	DM	DEAD END	HDW	HARDWARE	OH	OVERHEAD	STR	STRUCTURAL STRUCTURE
ARCH	ARCHITECTURE(S)	DP	DOOR-PROOFING	HOR	HORIZONTAL	OP	OPENING	SUS	SUSPENDED SYSTEM
B	BOARD	DR	DOOR	HT	HEIGHT	OPF	OPPOSITE	SY	SYSTEM
BD	BELOW	DT	DRAIN TILE	HTG	HEATING	OWJ	OPEN WEB JOIST	T	TONGUE & GROOVE
BEL	BETWEEN	DWG	DRAWING	HYAC	HEAT, VENT, & AIR CONDITIONING	P	PRECAST CONCRETE	T	TREAD
BET	BETWEEN	DWR	DRAWER	HWH	HOT WATER HEATER	PE	PEDESTAL	TEL	TELEPHONE
BIT	BITUMINOUS	E	EACH	I	INSIDE DIAMETER	PER	PERFORATED	THK	THICKNESS
BLDG	BUILDING	EA	EACH	INCL	INCLUDE (S) (ING)	PERF	PERFORATED	THR	THRESHOLD
BLK, BLKG	BLOCK, BLOCKING	EF	EACH FACE	INS	INSULATE, INSULATION	PL	PLAIN	TOS	TOP OF SLAB
BM	BENCH MARK	ELEV	ELEVATION	INT	INTERIOR	PLA	PLASTER	TOW	TOP OF WALL
BLG	BOTTOM	ELEC	ELECTRIC, ELECTRICAL	J	JOIST	PL	PLAIN	TST	TOP OF STEEL
BP	BEARING PLATE	EGS	EDGE OF SLAB	JT	JOINT	PLS	PANEL	TV	TELEVISION
BRG	BRACING	EGS	EDGE OF SLAB	K	KITCHEN	PRF	PREFORM	TY	TYPICAL
BS	BOTH SIDES	EQ	EQUIPMENT	LAM	LAMINATE	PSC	PRESTRESSED CONCRETE	UNF	UNFINISHED
BSMT	BASEMENT	EXP	EXPOSED	LAV	LAVATORY	PT	PRESSURE TREATED	UNO	UNLESS NOTED OTHERWISE
BW	BOTHWAYS	EXT	EXTERIOR	LC	LIGHT CONTROL	PTD	PAINTED	UNP	UNPAINTED
C	CABINET	F	FURNISHED BY OTHERS	LL	LIVE LOAD	PTN	PARTITION	V	VAPOR BARRIER
CB	CATCH BASIN	FIN	FINISH, FINISHED	LT	LIGHT	PVC	POLYVINYL CHLORIDE	VERT	VERTICAL
CF	COUNTERFLASH	FLG	FLASHING	LT	LIGHT	PLY	PLYWOOD	VF	VERIFY IN FIELD
CI	CAST IRON	FLR	FLOOR, FLOORING	LV	LIVE LOAD	R	RADIUS	VJ	V-JOINT
CR	CIRCLE	FRL	FIRE RESISTANT	M	MASONRY	RAD	RADIUS	W	WIDTH
CJT	CONTROL JOINT	FR	FRAME	MAX	MAXIMUM	REF	REFERENCE	W, W/O	WITH, WITHOUT
CL	CENTER LINE	FR	FRAME	MED	MEDICINE CABINET	REF	REFERENCE	WC	WATER CLOSET
CLG	Ceiling	FUR	FURNISHED BY OTHERS	MEX	MECHANICAL MANUFACTURER	REQ	REQUIRED	WD	WOOD
CLOS	CLOSET	FSH	FINISH, FINISHED	MFG	MECHANICAL MANUFACTURER	REV	REVISION	WH	WALL HANG
CLR	CLEAR	FLD	FLOOR, FLOORING	MNS	MAIN DISTRIBUTION PANEL	RM	ROOM	WI	WIRE MESH
CMU	CONCRETE MASONRY UNIT	FLR	FLOOR, FLOORING	MNS	MAIN DISTRIBUTION PANEL	RO	ROUGH OPENING	WP	WATERPROOF
CM	COLUMN	FLR	FLOOR, FLOORING	MNS	MAIN DISTRIBUTION PANEL	RO	ROUGH OPENING	WS	WATER STOP
CON	CONCRETE	FLR	FLOOR, FLOORING	MNS	MAIN DISTRIBUTION PANEL	RO	ROUGH OPENING	WS	WATER STOP
CONC	CONCRETE	FLR	FLOOR, FLOORING	MNS	MAIN DISTRIBUTION PANEL	RO	ROUGH OPENING	WS	WATER STOP
CONST	CONSTRUCTION	FLR	FLOOR, FLOORING	MNS	MAIN DISTRIBUTION PANEL	RO	ROUGH OPENING	WS	WATER STOP
CONT	CONTINUOUS	FLR	FLOOR, FLOORING	MNS	MAIN DISTRIBUTION PANEL	RO	ROUGH OPENING	WS	WATER STOP
CPT	CARPET	FR	FRAME	MNS	MAIN DISTRIBUTION PANEL	RO	ROUGH OPENING	WS	WATER STOP
CR	COUNTERSINK	FR	FRAME	MNS	MAIN DISTRIBUTION PANEL	RO	ROUGH OPENING	WS	WATER STOP
CSMT	CASSETTE	FR	FRAME	MNS	MAIN DISTRIBUTION PANEL	RO	ROUGH OPENING	WS	WATER STOP
CT	CERAMIC TILE	FR	FRAME	MNS	MAIN DISTRIBUTION PANEL	RO	ROUGH OPENING	WS	WATER STOP
CTR	COUNTER	FR	FRAME	MNS	MAIN DISTRIBUTION PANEL	RO	ROUGH OPENING	WS	WATER STOP
D	DRAIN	FR	FRAME	MNS	MAIN DISTRIBUTION PANEL	RO	ROUGH OPENING	WS	WATER STOP
DA	DOUBLE ACTING	FR	FRAME	MNS	MAIN DISTRIBUTION PANEL	RO	ROUGH OPENING	WS	WATER STOP
DEM, DEMO	DEMOLITION	FR	FRAME	MNS	MAIN DISTRIBUTION PANEL	RO	ROUGH OPENING	WS	WATER STOP

Building Code Analysis
Helen Day Arts Center - New Ceramics Classroom
40 Pond Street, Stowe, VT
5/4/2020

Project Description: The project consists of the Modification of part of the existing unfinished basement of a two story wood-framed building, to construct a new Ceramics Classroom, Kin Room, Storage Room and Open Storage Area. The existing building contains a sprinkler system, which will be modified as the modification allows.

Applicable Codes:
2015 Vermont Fire and Building Safety Code (by adoption of the following)
2015 IBC (as amended by 2015 VFBSC)
2015 NFPA 1 (as amended by 2015 VFBSC)
2015 NFPA 101 (as amended by 2015 VFBSC)
2015 Vermont Plumbing Rules
2012 Vermont Access Rules (by adoption of the following)
2010 ADA Standards for Accessible Design (as amended by 2012 VARI)
2015 Vermont Commercial Building Energy Standards

Existing Building Areas

Basement Level	7,620 sf	2015 IBC Use and Occupancy Classification
Kin Room	124 sf	Use Group S-1: Storage
Main Level	7,620 sf	Use Group A-3: Library
Upper Level	7,620 sf	Use Group A-3: Art Gallery and Use Group B: Offices, Training and skill development (art classes)
Total Building Gross Floor Area	22,860 sf	

Project Modification Areas (Basement Level)

Ceramics Classroom	745 sf	2015 IBC Use and Occupancy Classification
Kin Room	124 sf	Use Group B: Training and skill development (art classes)
Storage Room	75 sf	Use Group S-1: Storage
Open Storage Area	226 sf	Use Group S-1: Storage
Total Modification Area Floor Area	1,170 sf	

Building Code Analysis

2015 IBC - Entire Building
Chapter 5: Allowable Height and Area Limits (Allowable values shown below are for Occupancy Classification A-3, Construction type SB, with sprinkler system):
Allowable height = 80' Existing height = 42 1/2' (Roof ridge)
Allowable Stories = 2 Existing Stories = 2
Allowable Area Per Floor = 10,000 sq ft Existing Largest Floor = 7,620 sq ft
508.3 Non-Separated Occupancies: The existing building and the proposed Modifications comply with this section using the most restrictive Occupancy Classification, A-3
509.3 Incidental Uses: The Kin Room complies with the area limitations of this section. 124 sf / 7,620 sq ft = 1.6%
509.4 Incidental Uses: The Kin Room requires no separation from the rest of the building per this section; however it will be separated by 1 hour separation and a sprinkler system.

2015 NFPA 101 - Modification Area Only
Chapter 4: Building Rehabilitation:
43.11.1 MORA on this building is classified as a Modification
43.1.3 New construction will comply with Chapter 5B, New Business Occupancies, Per A.3.3.140.3(3) Classrooms under 50 persons
43.2.2 This project is not an Extensive Modification. The rehabilitation work area is less than 50% of the building area. 1,170 sf / 22,860 sf = 5.1%
Chapter 3B New Business Occupancies:
30.1.5 Classification of Hazard of Contents: Ordinary Hazard Contents
30.1.7 Occupant Load (per 7.3.1.2)
Occupant Load Factor:
Ceramics Classroom: 50 sf/occupant (Concentrated Business Use) x 745 sf = 15 Occupants
Kin Room: 100 sf/occupant (Business Use) x 124 sf = 1 Occupant
Storage Room: 500 sf/occupant (Storage Use) x 75 sf = 1 Occupant
Open Storage Area: 500 sf/occupant (Storage Use) x 226 sf = 1 Occupant
1b Total Occupants (Per occupant load factor)
25 Total Occupants (Maximum probable population)

30.2.1.3 Inside open stair open stairway is permitted to serve as a component of the required means of egress system from not more than one floor level below the street floor.
30.2.3.1 Capacity of Means of Egress (per 7.3)
Egress Capacity Factors: Stairways = 0.3, Level Components = 0.2
Total required doorway width: 25 x 0.3 + 15 = Total existing = 12"
Total required stairway width: 25 x 0.2 + 5" Total existing = 6"
30.2.4.1 Number of Means of Egress (per 7.4):
Required Exits: 2 Proposed Exits: 2
30.2.5 Arrangement of Means of Egress:
Dead-End Corridor: 50' maximum
Common Path of Travel: 100' maximum for 30 occupants or less
30.2.6 Travel Distance to Exits: 300' maximum with sprinkler system. Longest proposed route is 58'-11"
30.2.8 Illumination of means of egress shall comply with section 7.0
30.2.9 Emergency lighting is not required.
30.3.10 Means of egress shall be provided with signs and comply with section 7.10, and include illuminated exit signs, and tactile exit signage.
30.3.2.2 Interior wall and ceiling finishes will be Class A, B, or C
30.3.4.1 A fire alarm system is not required.
30.3.5 Portable fire extinguishers are required, and will be in accordance with Section 9.4
30.3.6 (3) Exit access corridors are not required to be fire rated.

2012 Vermont Access Rules
(36-404, Elevator, Alterations to Existing Buildings, Exception (d) (Per 2012 Vermont Access Rules amendment) Accessible route by elevator or platform 1 ft is not required for a story/floor less than 3,000sf in area.

End of Building Code Analysis



REVISIONS

NO.	DATE	DESCRIPTION

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HELEN DAY ARTS CENTER
CERAMICS CLASSROOM
40 POND STREET - STOWE, VT

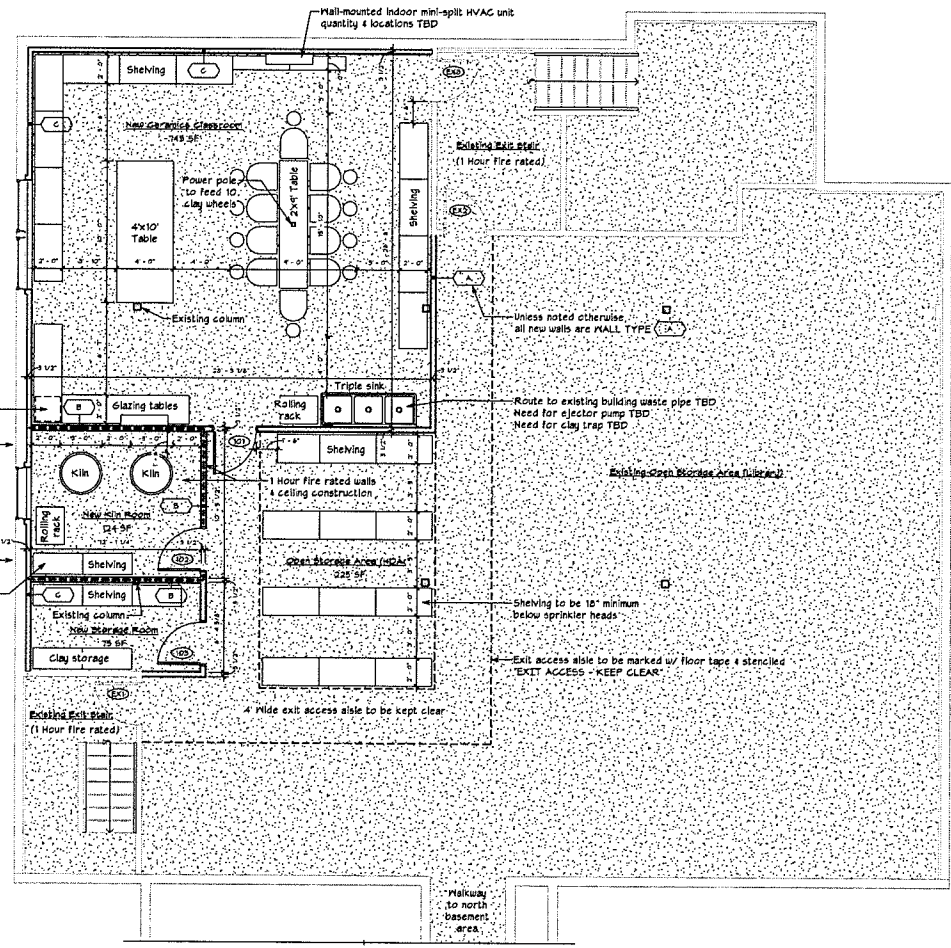
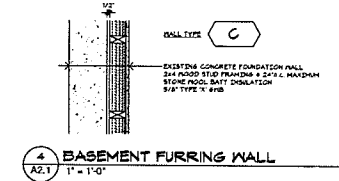
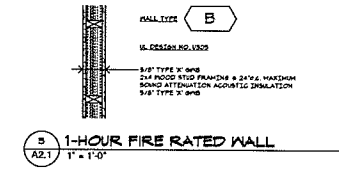
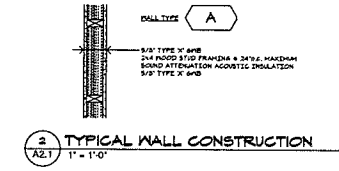
COVER SHEET

Date	5/4/2020
Scale	1/4" = 1'-0"
Drawn	MP
Job	1992
Sheet	A0.1
	of 30 Sheets

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DOOR SCHEDULE

DOOR NO.	SIZE	TYPE	DOOR MATERIAL	JAMB MATERIAL	HARDWARE SET	NOTES
LOWER LEVEL						
101	36" x 80"	Flush	Metal	Metal		
102	36" x 80"	Flush	Metal	Metal		1-hour fire rating, Self-closing, Self-latching, Gasketed
103	36" x 80"	Flush	Metal	Metal		



1 LOWER LEVEL FLOOR PLAN (PARTIAL)
A2.1 1/4" = 1'-0"

DRAWING KEY

- EXISTING WALL TO REMAIN
- DEMO
- PROPOSED HOOD FRAMED WALL
- PROPOSED EXTERIOR WALL SYSTEM
- PROPOSED CONCRETE WALL

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PERMIT & CONSTRUCTION

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HELEN DAY ART CENTER
HELEN DAY ARTS CENTER CERAMICS CLASSROOM

96 POND STREET - STONE VT

LOWER LEVEL FLOOR PLAN

Date: 5/4/2020
 Name: As Indicated
 Drawn: MP
 Job: 1992
 Sheet: A2.1
 of 304 Sheets

1/4" MAX PROJECT TO COMMERCIAL Unless Other A/C Lower Classroom
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