

COMPREHENSIVE MOLD REPORT

ON THE

VERMONT VETERAN'S HOME

BENNINGTON, VERMONT

February 15, 2014

PREPARED PURSUANT TO ACT 51 2013 SESSION SECTION 17

FOR

Vermont Veteran's Home Board of Trustees

Vermont State Employees Association

House Committee on Corrections Institutions

Senate Committee on Institutions

Prepared by:

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Act 51, Sec. 17. VERMONT VETERANS' HOME

(a) The sum of \$1,216,000.00 is appropriated in FY 2014 to the Department of Buildings and General Services for the Vermont Veterans' Home for emergency mold remediation actions, for updates to the 2006 facilities assessment report, and for the development of a comprehensive plan to address and prevent mold growth.

(b) The Commissioner of Buildings and General Services, in consultation with the Chief Administrative Officer of the Veterans' Home, shall apply for any eligible federal funds to use as a match for the appropriation made in subsection (a) of this section and shall work with Vermont's Congressional Delegation to investigate the availability of other possible federal funding sources. The Commissioner of Buildings and General Services shall notify the Chairs of the House Committee on Corrections and Institutions and the Senate Committee on Institutions on the availability of federal funds and the status of a federal match to be used for the project described in subsection (a) of this section on or before July 31, 2013.

(c) The Commissioner of Buildings and General Services, in consultation with the Chief Administrative Officer of the Veterans' Home, shall contract with an independent third party to conduct an update to the 2006 facilities assessment report of the Vermont Veterans' Home. On or before January 15, 2014, the Commissioner shall submit a copy of the report to the House Committee on Corrections and Institutions and the Senate Committee on Institutions.

(d) The Commissioner of Buildings and General Services, in consultation with the Chief Administrative Officer of the Veterans' Home, shall contract with an independent third party to prepare a comprehensive plan to address the ongoing mold issues at the Home and prevent any additional mold issues.

(1) The plan shall include:

(A) identification of currently known mold issues and potential mold issues at the Veterans' Home;

(B) recommendations for implementing preventive measures to address mold growth;

(C) estimates for the projected cost to implement the recommendations and preventive measures;

(D) a proposed time line to implement the plan; and

(E) a review and consideration of the findings of the Veterans' Home management and operations review required by 2013 Acts and Resolves No. 1, Sec. 53.1, the updated facilities assessment report required by subsection (c) of this section, and the findings and recommendations of any other design professionals or consultants engaged by the Department of Buildings and General Services to work at the Veterans' Home.

(2) On or before February 15, 2014, the Commissioner shall submit a copy of the plan to the Veterans' Home Board of Trustees, the Vermont State Employees' Association (VSEA), the House Committee on Corrections and Institutions, and the Senate Committee on Institutions.

Total Appropriation – Section 17 \$1,216,000.00

COMPREHENSIVE MOLD REPORT

for

VERMONT VETERAN'S HOME

Bennington, Vermont

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TIMOTHY D. SMITH & ASSOCIATES PC

Vermont Veteran's Home
Bennington, Vermont

COMPREHENSIVE MOLD REPORT
February 2014

EXECUTIVE SUMMARY

The purpose of this Report is to inform the reader of certain mold issues and potential mold issues that were discovered at the Vermont Veteran's Home (VVH) in Bennington, Vermont, during the past 18 months; how these issues have been addressed; and, how they will continue to be addressed in the future in an effort to minimize the occurrence of such mold growth in the facility.

The Report includes:

- (1) The identification of currently known mold issues and potential mold issues.
- (2) Recommendations for implementing preventative measures to address mold growth.
- (3) Estimates for the projected cost to implement the recommendations and preventative measures.

A proposed time-line to implement these measures.

The following **Executive Summary** is based on the "Comprehensive Plans to Address Ongoing Mold Issues" as prepared by:

Crothers Environmental Group, LLC, (CEG) the indoor environmental Mold Consultant for the State of Vermont and the Vermont Veteran's Home.

and

Friedman Fisher Associates, PC, (FFA) Mechanical, Electrical, Plumbing, and Fire Protection Consultants that have been working on various projects at the Vermont Veteran's Home since 2008, including the Geothermal Conversion Project.

This Report also includes the Exterior Envelope Assessment Update as prepared by Timothy D. Smith & Associates PC_(TSA), Architect for several past phases and proposed future phases of work at VVH,

and,

the “Indoor Mold Assessment Report” prepared by CEG in September of 2012 when the mold issue was first raised,

and,

A Preventive Maintenance Plan for Mold Monitoring and Remediation, prepared by Richard Frantz, Director of Environmental Services at the Vermont Veteran’s Home

Also included in this Comprehensive Report is the Facility Condition Assessment and Energy Audit prepared by EMG and dated November 18, 2013,

and

Independent Review - Management and Operations of the Vermont Veteran’s Home prepared by Health Care Management Associates and dated August 8, 2013.

MOLD LOCATIONS:

The reports prepared by CEG and FFA have both identified where mold issues existed at the VVH, as summarized below and as shown on the attached key drawings:

- Basement and Crawl Spaces
 - a. "A Wing" basement Mechanical Room.
 - b. "B Wing" basement.
 - c. "C Wing" basement.
 - d. "D Wing" basement.
 - e. North Wing crawl space.
 - f. East Wing crawl space.
 - g. Administration Building basement Mechanical Room.
 - h. Chapel crawl space.
 - i. Food Service basement.
 - j. Tunnel to Boiler Room.

- Main and Second Level Spaces
 - a. Dining Room "W" (Rm 513)
 - b. Art room (Rm 412)
 - c. Activities (Rm 612)
 - d. Office (Rm 314)
 - e. TV Room (Rm 315)
 - f. Office (Rm 321)
 - g. Namaste (Rm 322)
 - h. Office (Rm 323)
 - i. Dirk's Room (Rm 320)
 - j. TV Room (Rm 514)
 - k. Waiting (Rm 510)
 - l. Staff Kitchen (Rm 516)
 - m. Café (Rm 515)
 - n. Second floor of Administration Wing

WHAT IS MOLD?

As described in both the CEG Report and the FFA Report, Mold is a general term that is used to describe microbial elements that naturally exist in our environment. Other than an environment that is specifically created with "Clean -Room" technology, mold cannot be prevented. It will always exist both inside of buildings and outside of buildings, whenever the nutrients (such as dirt or other organic material), water, oxygen and favorable temperatures exist. A "mold-free" outdoor environment cannot exist in the Northeast; a "mold-free" interior environment cannot practically be

created; but, a “mold-safe” environment can be achieved and that is the goal of the Comprehensive Plan that is presented and will continue to be strived for at the Vermont Veteran’s Home.

There is a clear distinction between the mold spores found on the main level and those found in the basement areas. The main level mold spores primarily mimic outdoor mold spore types and concentrations, while the basement airborne mold spores are consistent with those found in water damaged/moisture issue buildings.

The mold types in the basements that are of concern are *Aspergillus/Penicillium* like. The spores are nearly identical for both *Aspergillus* and *Penicillium*, thus they are reported as *Aspergillus/Penicillium* like. When you see bread turn blue, that mold is *Penicillium*. If you ever see white spots on your leather jacket, that mold would be *Aspergillus*.

The mold types found on the main level that are of concern is *Cladosporium /Cladosporioides*.

The mold type found on the second floor Administration Medical Records area is *Aspergillus/Penicillium*.

The mold that gets the most media attention is *Stachybotrys chartarum*, known as The Black Mold. There is no known *Stachybotrys chartarum* in the VVH.

All mold spores in elevated airborne concentrations can be problematic to sensitive individuals. In low concentrations, there is minimal risk to humans; however, some people could have allergies to certain types of molds and would have reactions similar to hay fever or pollen allergies.

CURRENTLY KNOWN MOLD ISSUES:

Basement and Crawl Space areas:

All of the Basement areas had varying degrees of mold growth. The presence of moisture from various sources is primary cause of this mold growth. The sources include ground water infiltration. Most of the basement areas of the VVH are at the ground water level. In some cases, the basement floor levels are below the ground water level and the structure was not designed to ground water pressures nor was the original foundation waterproofed. This reality cannot be altered and because of

this fact, retroactively preventing moisture infiltration due to this very high level of ground water becomes expensive and problematic. This condition is of particular importance in those areas where no concrete slab now exists, such as the east Wing crawl space or in areas where existing concrete slabs are incomplete, cracked or otherwise have failed over the years.

To complicate matters, these high ground water levels tend to maintain low temperatures at the basement concrete slabs which create ideal condensation conditions during high humidity periods, creating even more moisture to enhance mold growth. Vapor pressure differences, bringing high summer humidity to condense in cool areas and on cool surfaces also add to this problem.

Water infiltration is also prevalent through foundation cracks, fresh air louvers that are in wells located below grade, and failed basement windows and window sealants. In many cases these ideal infiltration conditions are enhanced by exterior grading issues where, over the years, the grades have settled around the buildings allowing surface rain water to flow back toward the building foundation where these conditions exist. Refer also to the TSA "Exterior Envelope Assessment Update" that is a part of this Report.

The majority of the plumbing and heating piping is located in the basement areas. Most of this is very old, dating back to the original construction and early additions and is constantly experiencing leaks. The maintenance department often has difficulty discovering and repairing these leaks, due to a limited mechanical maintenance staff and budget. Again, this source of moisture adds even more moisture to the basement areas.

The infiltration, high moisture levels and leaks all contribute to mold growth. Existing absorbent materials such as some building materials, duct and pipe insulation, filters, and stored materials are the food for mold. Even dirt and dust are excellent mediums for mold growth. Detailed descriptions of the mold condition of each of the Basement locations as listed under "Mold Locations" above, are included in the CEG and FFA reports included herein.

Main Level Areas:

The mold issues discovered in the main level of the VVH were limited to mold growth inside of the console style Water Source Heat Pumps (WSHP). *Cladosporium cladosporioides* is the mold that was found in the units and in the air. No mold was found in any other Main Level areas.

Second Floor Area:

Mold issues were discovered on the second floor of the Administration Building, primarily in the Medical Records Room 281 and in one office 289 that is adjacent to the Medical Records Room. The mold was discovered both in the Fan Coil units and in the air samples taken.

REMEDICATION OF MOLD and PREVENTIVE MEASURES:

All spaces and systems effected by mold shall be and has already been tested, evaluated and documented in the form of a "Work Plan" by Crothers Environmental Group, LLC, (CEG) the indoor environmental Mold Consultant for the State of Vermont and the Vermont Veteran's Home. This work plan has been and will be utilized by qualified Mold Remediation Contractors to perform the required work connected with the removal, discarding, and cleaning of all spaces and materials that require remediation.

The specific remediation work done or planned for each area identified with a mold issue is specified area by area in the reports by CEG and FFA included herein.

The remediation work that has already been completed is identified below as Phase I.

Phase II which will complete the high priority remediation work is ready for Bidding. Act 51, 2013 Session, Sec. 17 appropriations Phase II, \$1,216,000 for work.

Phase II (Alternate) is a part of the high priority remediation work but exceeds the current available budget.

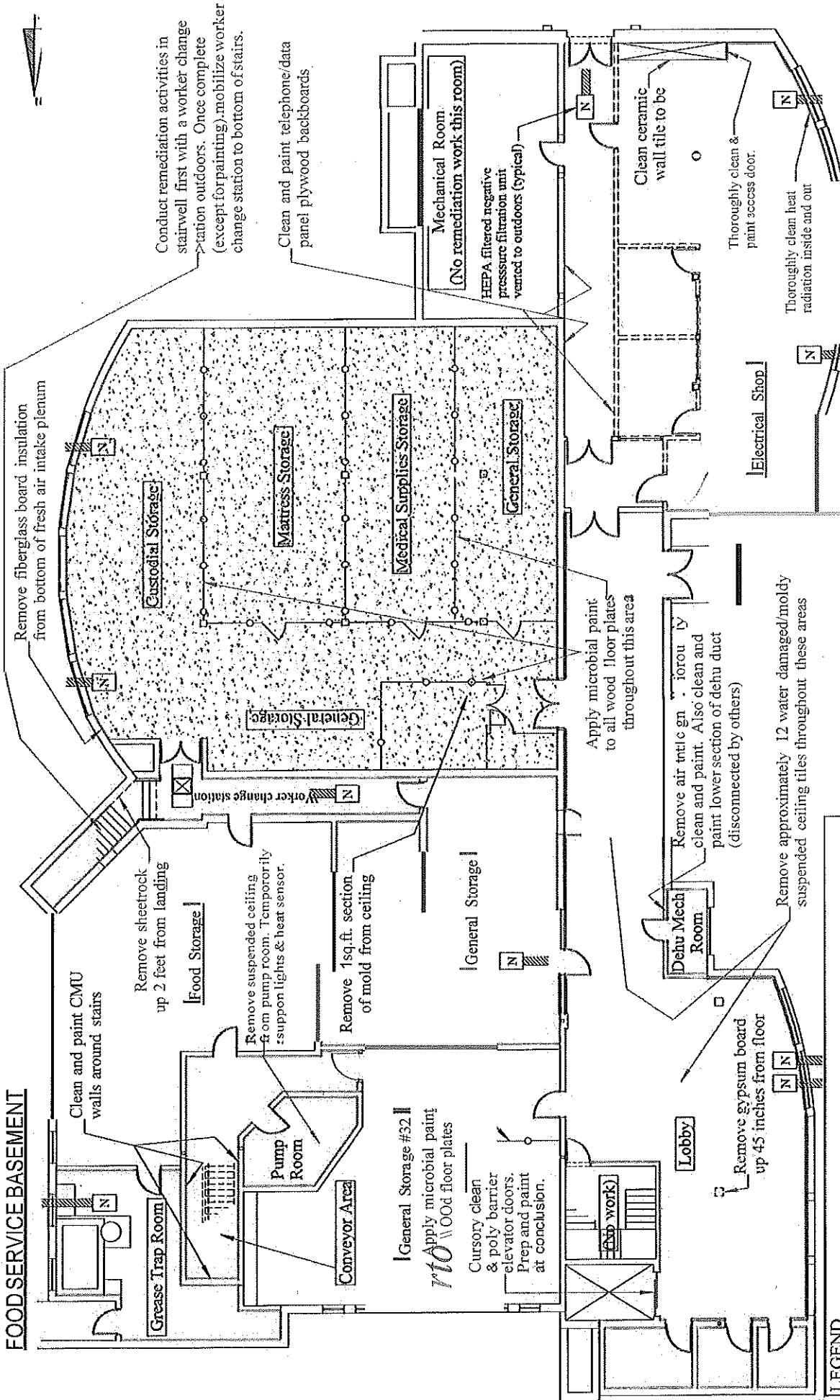
Future 2,3,4,&5 are projects that are required to fully complete the mold remediation work recommended to be done at the VVH.

PHASE I:

The first Phase of remediation work was begun in July of 2013 and completed in October of 2013. This phase of the work also included preventative work. The project included mold testing, remediation, and post-remediation efforts as well as installing 4 HEPA blowers and over 80 UV lights plus the mold preventative work and as outlined and described in Diagrams MR1A and FS1. The remediation Work Plan prepared by CEG is also included in this report. All follow-up testing resulted in a mold safe environment for the work areas and a basement area that will be easy to inspect, monitor and detect mold growth in the future.

(SEE FOLLOWING DRAWING MR1A and FS1)

FOOD SERVICE BASEMENT



LEGEND

- Remove gypsum board up 45 inches from floor. Clean and apply microbial paint to floor plates (remove cove base where present). Take care not to damage light gage metal stud framing.
- Conduct cursory cleaning of walls, then apply microbial paint from the floor up 8 feet or to suspended ceiling height.
- Conduct cursory cleaning of ceiling, then apply microbial paint.
- Remove & dispose of fiberglass panels and associated cove base. Clean and apply microbial paint to wall.
- C. — Conduct thorough cleaning of doors, treat rust per specification, then prep door for painting and apply microbial paint.

NOTES: With the exception of the Food Storage area and General Storage area #321, all wall surfaces not demarcated by magenta colored lines shall be cursory cleaned. Remove all cove base encountered in basement work areas

Prepared by:	h) CROTHERS Environmental Group, LLC Morrisville, Vermont 802-888-1936
Floor Plan provided by:	Timothy D. Smith & Associates
	Vermont Veterans Home 325 North Street - Benning on Vermont Basement - Food Storage and General Storage Areas Mold Remediation Project Design Drawings
	Not to scale Date: 5/10/13
	MR-IA

PHASE II:

Phase II of the Mold Remediation project is full designed and specified and awaits State Funding. The project focuses on the Main Level of the VVH and the Second Floor of the Administration Building, and includes mold testing, remediation, and post-remediation efforts as described in Diagrams MR-1 thru MR-4 and mold preventative work as indicated in Drawings A1.1 thru A2.2 with HVAC work as outlined on Drawing M-1. The remediation Work Plan prepared by CEG is also included in this report.

Phase II work: *Remediate and clean 5 basement rooms; new HVAC for 12 patient common areas.*

Phase II (Alternate) work: *Remediate and Clean 2nd Floor Administration; replace HVAC.*

(SEE FOLLOWING DRAWINGS A1.1 through A2.2 and HVAC DRAWING M-2)

DATE: DEC. 12, 2013

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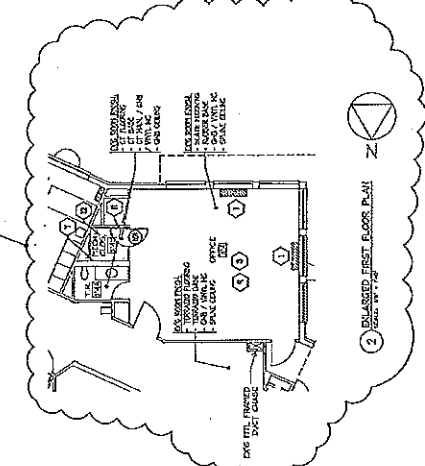
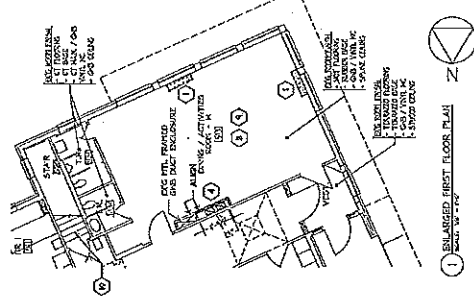
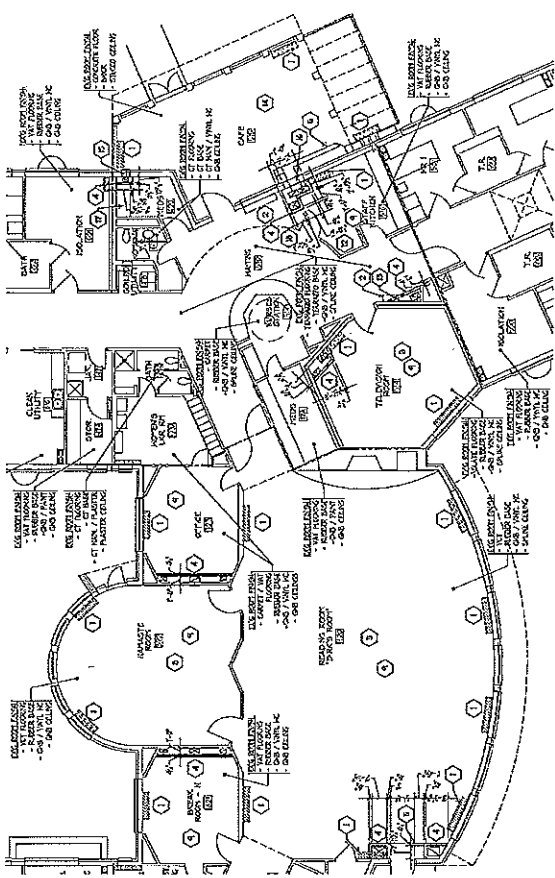
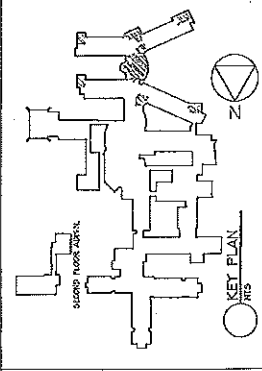
TIMOTHY D. SMITH & ASSOCIATES, P.C.
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VERMONT VETERANS' HOME
WATER INFILTRATION AND MOLD REMEDIATION,
PHASE 2
ENLARGED FLOOR PLANS AND DETAILS

A1.3
 SET

- GENERAL NOTES:**
1. ALL CONCRETE WALLS SHALL BE CONSIDERED AS EXISTING UNLESS NOTED OTHERWISE. THE LOCATION OF EXISTING WALLS SHALL BE SHOWN ON ALL FLOOR PLANS. ALL WALLS SHALL BE CONSIDERED AS EXISTING UNLESS NOTED OTHERWISE. ALL EXISTING WALLS SHALL BE CONSIDERED AS EXISTING UNLESS NOTED OTHERWISE. ALL EXISTING WALLS SHALL BE CONSIDERED AS EXISTING UNLESS NOTED OTHERWISE.
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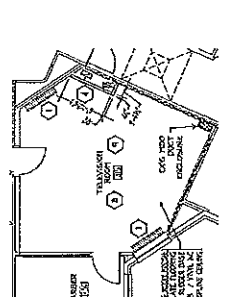
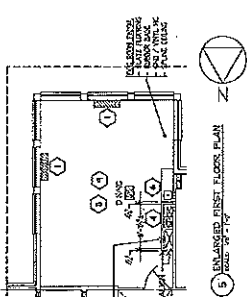
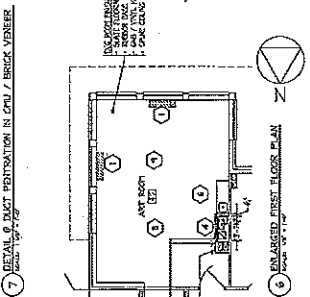
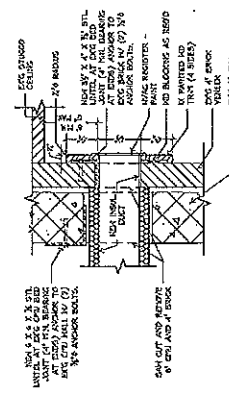
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1 ENLARGED FIRST FLOOR PLAN
 SCALE: 1/8" = 1'-0"

2 ENLARGED FIRST FLOOR PLAN
 SCALE: 1/8" = 1'-0"

3 ENLARGED FIRST FLOOR PLAN
 SCALE: 1/8" = 1'-0"



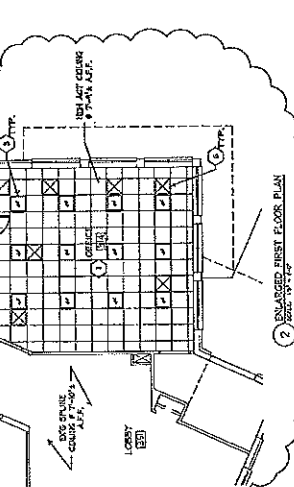
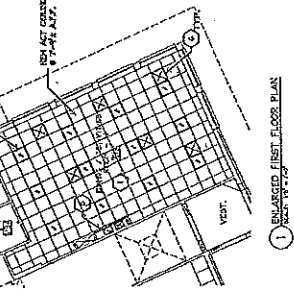
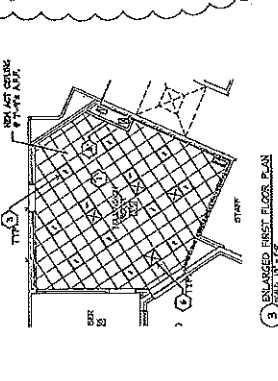
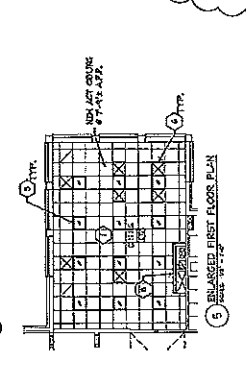
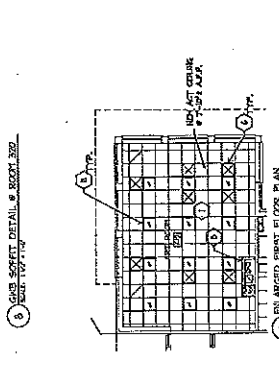
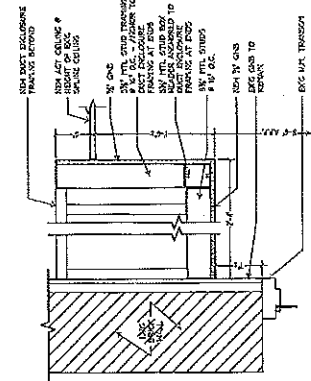
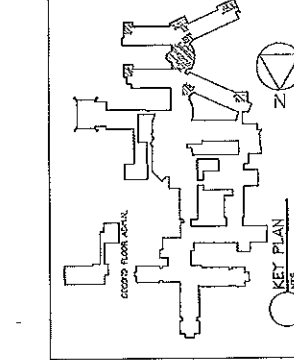
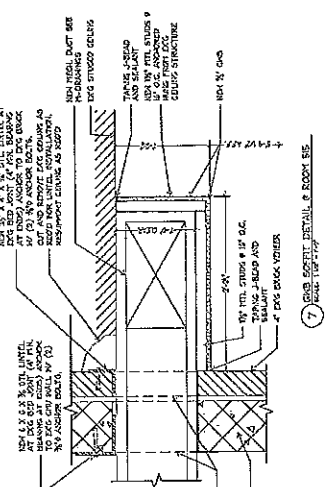
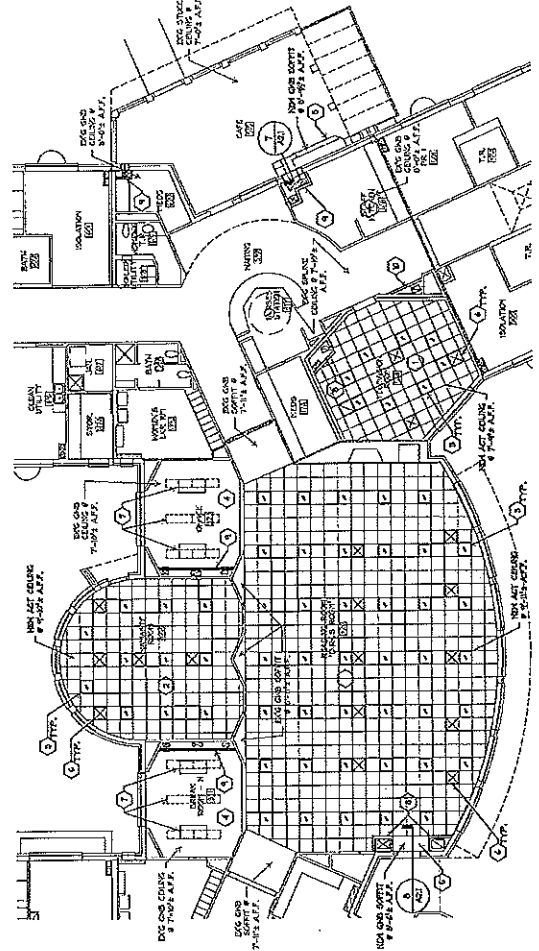
7 RETAIL & MGMT RESTROOM IN CPU / BRICK VENEER
 SCALE: 1/4" = 1'-0"

8 ENLARGED FIRST FLOOR PLAN
 SCALE: 1/8" = 1'-0"

9 ENLARGED FIRST FLOOR PLAN
 SCALE: 1/8" = 1'-0"

10 ENLARGED FIRST FLOOR PLAN
 SCALE: 1/8" = 1'-0"

- PER GENERAL NOTES:**
1. ALL EXISTING CEILING MOUNTED ELECTRIC AND FIRE ALARM DEVICES, AS WELL AS EXISTING LIGHT FIXTURES, SHALL BE REMOVED AND RELOCATED, OR REWORKED AS SHOWN - SEE 03-0000.
 2. ALL EXISTING GRANULAR LEADS TO BE REINTEGRATED WITH PLUMBLE EXPANSION AND TOLERATED TO NEAREST CENTER OF CEILING TILE - SEE 03-0000.
- REFLECTED CEILING:**
1. EXISTING GRANULAR CEILING TO BE REMOVED IN ITS ENTIRETY, NOT PER 03-0000, AND REWORKED AS SHOWN.
 2. GRANULAR CEILING TO BE REMOVED IN ITS ENTIRETY, NOT PER 03-0000, AND REWORKED AS SHOWN.
 3. GRANULAR CEILING TO BE REMOVED IN ITS ENTIRETY, NOT PER 03-0000, AND REWORKED AS SHOWN.
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 9. GRANULAR CEILING TO BE REMOVED IN ITS ENTIRETY, NOT PER 03-0000, AND REWORKED AS SHOWN.
 10. GRANULAR CEILING TO BE REMOVED IN ITS ENTIRETY, NOT PER 03-0000, AND REWORKED AS SHOWN.

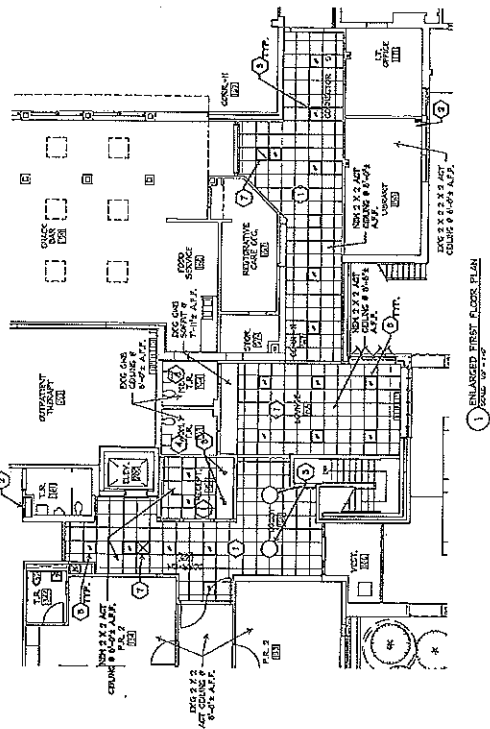
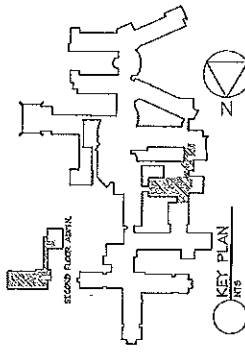


A2.2

VERMONT VETERANS' HOME
 BENNINGTON, VERMONT
 WATER INFILTRATION AND MOLD REMEDIATION
 PHASE 2
 ENLARGED REFLECTED CEILING PLANS

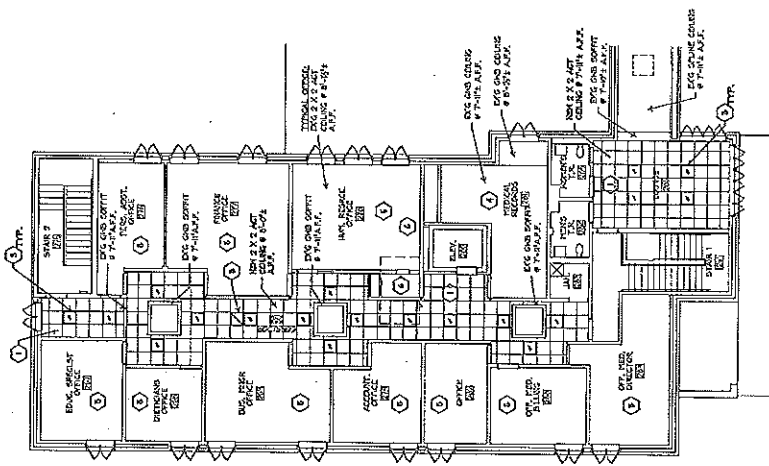
TIMOTHY D. SMITH & ASSOCIATES, P.C.
 ONE MAIN STREET
 VERMONT 05201
 802.244.4144
 CK, BY

DATE: DEC. 12, 2013



ALL WORK SHOWN ON THIS SHEET, EXCEPT AS NOTED OTHERWISE, IS TO BE IN ACCORDANCE WITH THE 2009 INTERNATIONAL RESIDENTIAL CODE.

- SEE GENERAL NOTES.
1. WHERE NEW CEILING ARE SPECIFIED, ALL EXISTING CEILING JOISTS MUST BE SUPPORTED, UN-SUPPORTED, OR REMOVED AND REPLACED AS REQUIRED.
 2. WHERE NEW CEILING ARE SPECIFIED, ALL EXISTING CEILING JOISTS MUST BE ATTACHED WITH 2x4 BRACKET AND BOLTS AND RELOCATED TO CENTER CENTER OF CEILING TIE - SEE PHOTOS.
- SEE NOTES BEHIND.
1. EXISTING CEILING SYSTEMS TO BE REMOVED IN ITS ENTIRETY.
 2. EXISTING CEILING SYSTEMS TO BE REMOVED IN ITS ENTIRETY.
 3. EXISTING CEILING SYSTEMS TO BE REMOVED IN ITS ENTIRETY.
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 7. EXISTING CEILING SYSTEMS TO BE REMOVED IN ITS ENTIRETY.



FUTURE REMEDIATION WORK:

Other areas that need consideration include the East Wing, one of the oldest un-renovated wings in the entire facility, and the main Level Food Service Area which was last renovated in 1984. While there have been no specific reports of mold growth in these areas, their age alone would suggest that it is time to investigate these areas more thoroughly. A study to do this work was begun but was stopped for the lack of State and Federal Funding.

Future 2 work: Remediate and replace mechanical insulation in 5 basement areas; recommended exterior repairs; remediate, clean and renovate East Wing and Kitchen.

Future 3 work: Remediate and replace mechanical insulation in Administration Building and D-Wing basements.

Future 4 work: Remediate and replace mechanical insulation in B-Wing and C-Wing basements.

Future 5 work: Remediate and replace mechanical insulation in Food Service basement.

VERMONT VETERAN'S HOME PREVENTIVE MAINTENANCE PLAN:

Richard Frantz, Director of Environmental Services at VVH prepared the following information as the outline for future preventive maintenance, mold monitoring and remediation.

Preventive maintenance Plan for mold monitoring and remediation:

The Vermont Veterans Home is entrusted with the care of our Veterans as well as the staff involved in providing such care. It is our intent to provide a safe environment for all care takers, Veterans, and visitors. Mold development is considered to be among the hazards we need to consider in our environment.

To that end our plan will involve the regular monitoring of our environment by a variety of means. Said means will include visual inspections of surfaces and equipment, collection of routine samples for lab analysis at regular intervals to provide a reasonable sampling for all areas of the facility, and monitoring of areas

prone to water infiltration.

Sampling methods will be determined according to current standards on a random basis. Sampling will be done by an independent firm. This will be an accredited consultant, who will provide information regarding guidelines and an explanation of sampling, identification, and lab procedures.

Should random sampling indicate the presence of mold, such samples will be compared to exterior samples. Should interior sampling indicate concentrations of mold higher than exterior samples, a remediation plan will be implemented immediately; so that areas involved may be returned to a "mold safe" condition.

Specific procedures for mold remediation will be dictated by the mold consultant, taking into consideration some of the following factors:

- necessary access to the area
- facility needs for the area
- safe working practices for remediation
- long and short term prognoses for any remediation action

Preventive maintenance log for mold inspections:

Frequency: Bi-monthly or as determined for specific location

Location: All rooms, passageways, storage, and mechanical areas

Procedure:

- 1) Inspect areas throughout the building representing a mixture of uses for the following:
 - a. Visible signs of mold growth
 - b. Water leaks
 - c. Condensate accumulations
 - d. Odors or other indicators of mold growth.
- 2) Inspect dehumidifiers per existing PM procedure
- 3) Mold accumulations must be cleaned on cleanable surfaces with soap and water. Do not use bleach.
- 4) Mold testing will be performed on a frequency determined by an environmental consultant. Tests will be conducted at least every 6 months. Test results are to be held with Environmental Services Dept.
- 5) Log maintenance notes and repairs.

6) Log mold readings and environmental evaluations as reported.

Date	Location	Notes	Sampling date	Initial

Geothermal System General Maintenance to control mold growth:

The geothermal installation requires maintenance, both to address general preventative maintenance issues and to clean unit components and spaces that may develop a mold condition.

Our preventative maintenance program includes inspection, belt replacement, greasing, adjustments, filters, and other tasks as identified. A major part of this process is cleaning all surfaces of each of the 174 heat pump units. There are condensate trays, drain lines, and coils that require thorough cleaning. The cleaning is necessary, especially in cooling season to ensure that mold is eliminated or kept in check inside and out of all units. This process is carried out at a minimum quarterly. There are areas where heavy traffic or moisture may dictate increased frequency. A maintenance tech spends approximately 30-40 hours/ month completing these tasks. A journeyman plumber spends approximately 40 hours/month adjusting temps, inspecting, troubleshooting, and computer tracking system and component activity.

General Space Maintenance to control mold growth:

In addition, a cleaning program is in place to address general environmental surfaces, particularly in basement spaces, many of which are below water table. While these areas have undergone a substantial remediation effort to eliminate mold and to seal surfaces against water infiltration, an ongoing cleaning and inspection process is necessary to monitor conditions. To that end the custodial and maintenance departments work to clean floors, walls as necessary and

equipment within those spaces. This process accounts for approximately 40 hours/month, adjusted according to seasons, mechanical issues, etc.

Preventive maintenance procedure for dehumidifiers:

Frequency: Quarterly

1. De-energize units.
2. Inspect for loose or missing parts, unusual vibration, or other indicators.
3. Inspect electrical connections and controls.
 - a. thermostats should be set for :75 deg. cooling,
70 deg. heating
 - b. humidistats should be set for 55%
4. Check belt tension and condition; replace if cracked or worn.
5. Replace filter.
6. Clean fittings; lube as necessary.
7. Ensure drains are free flowing.
8. Record maintenance work date, initials, and notes on log sheet. A copy of the log will be filed in the preventive maintenance manual when completed.

ESTIMATES of PROJECTED COSTS to IMPLEMENT MOLD REMEDIATION PLANS:

(See Following: Vermont Veteran's Home Cost Estimate -Rev 2/11/14)

PHASE I: Expended
Project Costs: \$ 276,765

PHASE II: Estimated
Project Costs: \$ 1,173,235

PHASE II (Alternate)
Project Costs: \$ 468,000

FUTURE (2-5): Estimated
Project Costs: \$ 5,462,751

TOTAL

Preventative Maintenance Costs per year: \$ 20,000/yr

PROJECTED TIMELINE:

Phase I work: Remediate 1/3 of basement/storage.
Completed in October, 2013.

Phase II work: Remediate and clean 5 basement rooms; new HVAC for 12 patient common areas.
*Can be completed approximately 8 months after Contract is awarded.
(Project on hold pending State Funding).*

Phase II (Alternate) work: Remediate and Clean 2nd Floor Administration; replace HVAC.
*Can be completed with Phase II base, if funding becomes available.
(Construction time approximately 4 months after Contract is awarded).*

Future 2 work: Remediate and replace mechanical insulation in 5 basement areas; recommended exterior repairs; remediate, clean and renovate East Wing and Kitchen.
One year of planning, design and bid plus one year of construction, after project approval.

Future 3 work: Remediate and replace mechanical insulation in Administration Building and D-Wing basements.
Unknown start date: Three months planning and design plus 3 month construction after project approval.

Future 4 work: Remediate and replace mechanical insulation in B-Wing and C-Wing basements.
Unknown start date: Two months planning and design plus 3 month construction after project approval.

Future 5 work: Remediate and replace mechanical insulation in Food Service basement.
Unknown start date: One month planning and design plus 2 month construction after project approval.

Preventive Maintenance Work:
Ongoing

Vermont Veterans' Home
Cost Estimate Mold Remediation 2012-2014
 REV 2/11/14

Sources of Revenue	
Remainder from Phase 3	\$234,000
2013 Capital Bill Request	\$1,216,000
TOTAL FUNDS	\$1,450,000

PHASE/YEAR	PHASE 1 Complete	PHASE 2 2014	PHASE 2 ALT 2014	FUTURE 2 2015-2016	FUTURE 3 2020	FUTURE 4 2020	FUTURE 5 2020 ++	TOTAL
Design	\$80,050	\$114,500	\$0	\$20,000	\$8,000	\$10,000	\$8,000	\$240,550
Mold Consultant - Crothers	\$24,217	\$25,000	\$0	\$20,000	\$8,000	\$20,000	\$8,000	\$105,217
Remediation	\$42,175	\$51,000	\$20,000	\$571,000	\$87,000	\$1,500,000	\$62,000	\$2,333,175
Gen. Construction or Insulation	\$126,060	\$972,735	\$448,000	\$133,400	\$39,000	\$120,000	\$23,000	\$1,862,195
Waterproofing	\$4,263	\$10,000	\$0	\$0	\$0	\$0	\$0	\$14,263
Exterior Envelope Repairs	\$0	\$0	\$0	\$745,351	\$0	\$0	\$0	\$745,351
East Wing / Kitchen Reno				\$2,000,000				\$2,000,000
Future Maintenance	\$276,765	\$1,173,235	\$468,000	\$20,000	\$20,000	\$20,000	\$20,000	\$80,000
				\$3,509,751	\$162,000	\$1,670,000	\$121,000	\$7,380,751
TOTAL PHASE 1 & 2 (funded)	\$1,450,000		\$468,000					
PHASE 2 UN-funded Alternate								\$468,000

Phase 1: remediate 1/3 basement/storage COMPLETE
 Phase 2: remediate/clean 5 basement rooms, and new HVAC for 12 patient common areas
 Phase 2 ALT: remediate, REPLACE old heating w/ NEW HVAC, minor reno in 2nd Floor Admin area
 Future 2: Remediate & Replace mechanical insulation in 5 basement areas (A, N, E, Chap, Tunl), Recommended exterior repairs, East wing/Kitchen Reno
 Future 3: Main Admin & D Basement remediate & replace mech insulation
 Future 4: Full removal B/C basement
 Future 5: Replace mech insulation in Food Service basement if required (currently OK)