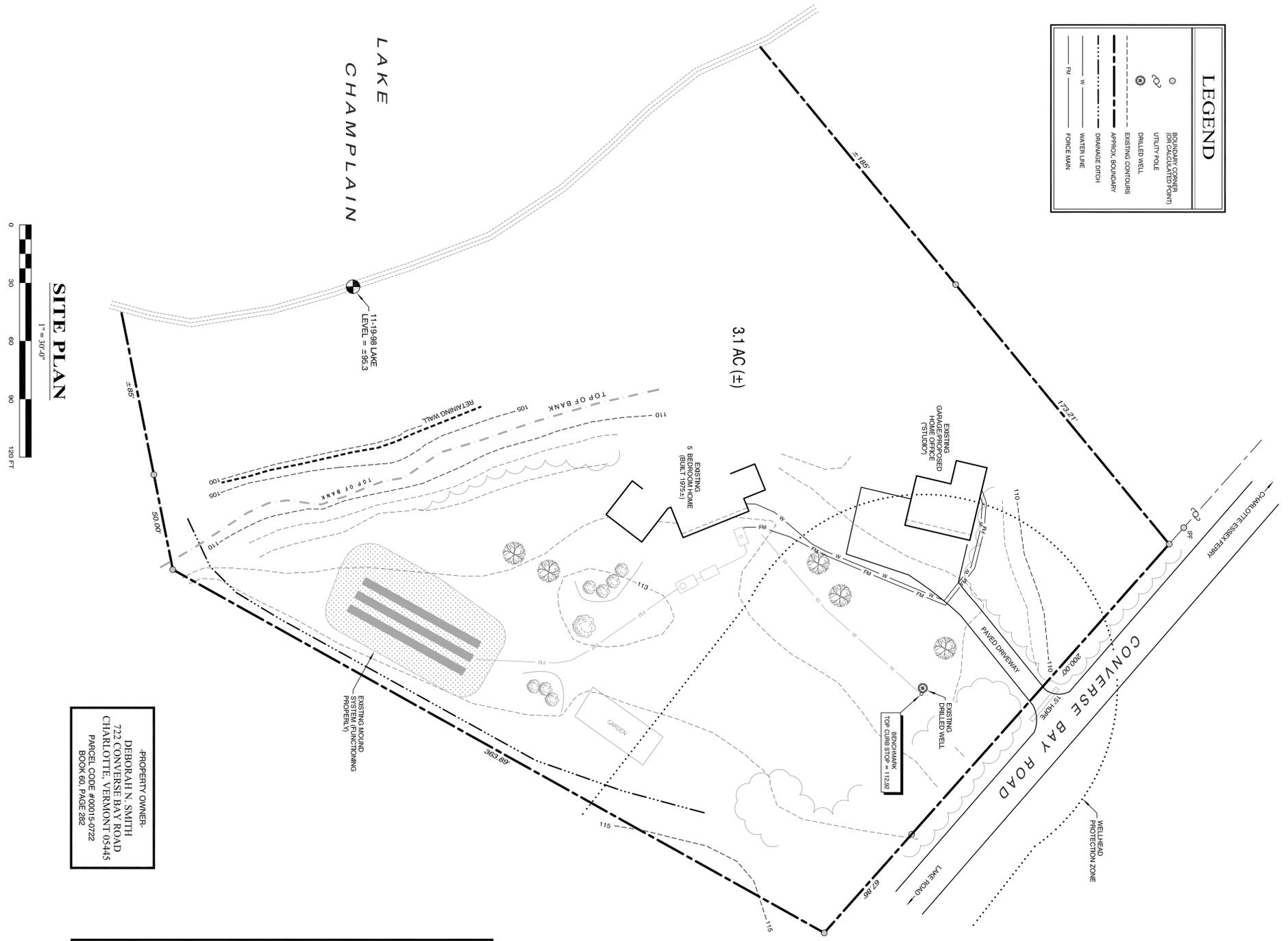
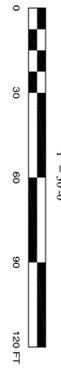


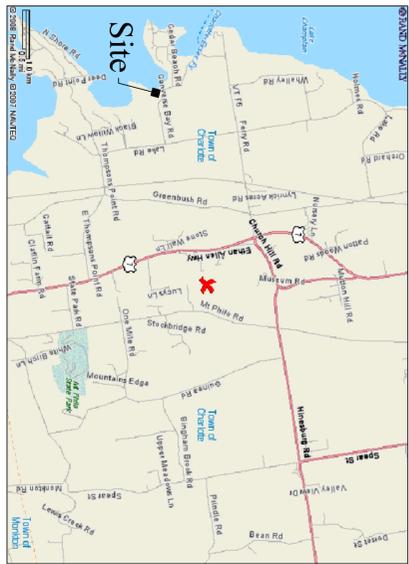
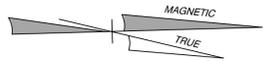
LEGEND	
○	ROUNDABOUT CENTER
○	UTILITY POLE
○	DRILLED WELL
---	EXISTING CONTOURS
---	APPROX. BOUNDARY
---	DRAINAGE DITCH
---	WATER LINE
---	FORCE MAIN



**SITE PLAN**  
1" = 30'-0"



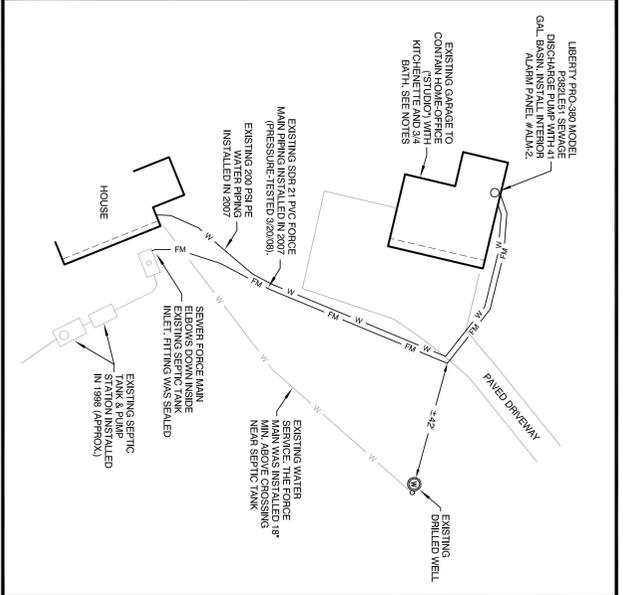
**PROPERTY OWNER:**  
DEBORAH N. SMITH  
722 CONVERSE BAY ROAD  
CHARLOTTE, VERMONT 05445  
PARCEL CODE #00015-0722  
BOOK 60, PAGE 282



**LOCATION MAP**  
NTS

**WATER SYSTEM DEMAND**  
Description: Existing drilled well.  
Average day demand: (3 BR x 140 GPD) + (2 BR x 70 GPD) = 580 GPD.  
Instantaneous peak demand: 5 GPM Minimum  
No increased flows associated with proposed home office.  
**WASTEWATER SYSTEM BASIS OF DESIGN**  
Description: Existing mound system  
Existing 3 BR home: (3 BR x 140 GPD) + (2 BR x 70 GPD) = 580 GPD \*  
\*RC-4001 system design: 150 GPD X 5 BR = 750 GPD.  
No increased flows associated with proposed home office.

**PROJECT & PERMIT NOTES**  
The owner proposes to install a kitchenette and 3/4 bathroom within the garage for use as a home office. The home office will be used exclusively by the owner. Wastewater and water flows are incidental to the use of the home office.  
The sewer force main and water service were installed within the same excavation. The water service was installed within the same excavation between piping. It is the Designer's opinion that certain factors justify the valence:  
• The facilities will be used by the owner only with minimal wastewater and water flows anticipated (no net increase to system).  
• Piping is installed within a dense clay.  
• The wastewater piping successfully passed a pressure/leakage test.  
**The force main was pressure tested on 3/20/08 by Island Excavating Corp. in accordance with the attached specifications. No measurable pressure drop or leakage was reported.**  
All conditions set forth in Remediation Certificate #RC-4001 shall remain in effect or as modified herein.



**SITE DETAIL**  
1" = 30'-0"

**FORCE MAIN TESTING**  
**1-4-05 (g) Force Mains**  
(a) Pressure Test: Upon completion of construction of a force main the test shall be performed and designed. All newly laid pipe shall be tested at a minimum of 1.5 times the highest working pressure in the section in accordance with the following procedure:  
(1) Test pressure shall:  
(A) not be less than 50 psi of the highest rating along the test section.  
(B) not exceed pipe or thrust restraint design pressure.  
(C) be of at least 2 hour duration.  
(D) not vary by more than 5 psi.  
(E) be of at least 150 psi.  
Boundary of the test section includes closed gate valves.  
(2) Preparation: Each valved section of pipe shall be filled with water to the lowest point of the line or section under test and connected to test gauge, shall be applied by means of a pump connected to the pipe.  
(3) A) General: Before applying the specified test pressure, all shall be expanded completely from the pipe and valves.  
(4) Examination: All exposed pipe, fittings, valves, and joints shall be inspected, or valves, that are discovered following the pressure test shall be repaired or replaced with sound material and the test shall be repeated.  
(5) Leakage Test  
(1) A leakage test shall be conducted concurrently with the pressure test.  
(2) Leakage Defined: Leakage shall be defined as the quantity of water that must be supplied from the newly laid pipe, or any valved section thereof, to maintain pressure within 5 psi of the specified test pressure after the air in the pipeline has been expelled and the pipe has been filled.  
**1-4-05(h)(3) Force Mains**  
(3) Allowable leakage: No pipe installation will be accepted if the leakage is greater than that determined by the following formula:  
 $L = (N)(D)^{1.75}$   
7400  
L is the allowable leakage in gallons per hour  
N is the number of joints in the length of pipeline tested  
D is the nominal diameter of the pipe in inches  
e is the average test pressure during the leakage test, in pounds per square inch gage.

**DEBORAH N. SMITH**  
722 CONVERSE BAY ROAD  
CHARLOTTE - VERMONT



**PROPOSED HOME OFFICE**

**WILLIS DESIGN ASSOC., INC.**  
P. O. BOX 98  
RICHMOND - VERMONT 05477  
(802) 434-5303

DESIGN	JTW
CHECKED	JTW
DATE	3/20/08
SCALE	NOTED
JOB NO.	98071-1R
SHEET	1