

LOCATION MAP SCALE: 1" = 400'

Champlain Valley Co-Housing Development Company LLC

Vol. 149 Pgs. 189-191
Map Slide 133 Pg. 6

SEE NOTE 2

PARCEL B
OPEN SPACE

Mark J. Patane and
Margaret Mary Jansch

Vol. 142 Pgs. 262-264
Vol. 84 Pgs. 596-597
Vol. 58 Pgs. 586-588
Map Slide 56
SEE NOTE 11

Otto A. Engelberth Revocable Trust

Vol. 126 Pg. 194
Map Slide 78

"APPROVED"
Department

Environmental Conservation

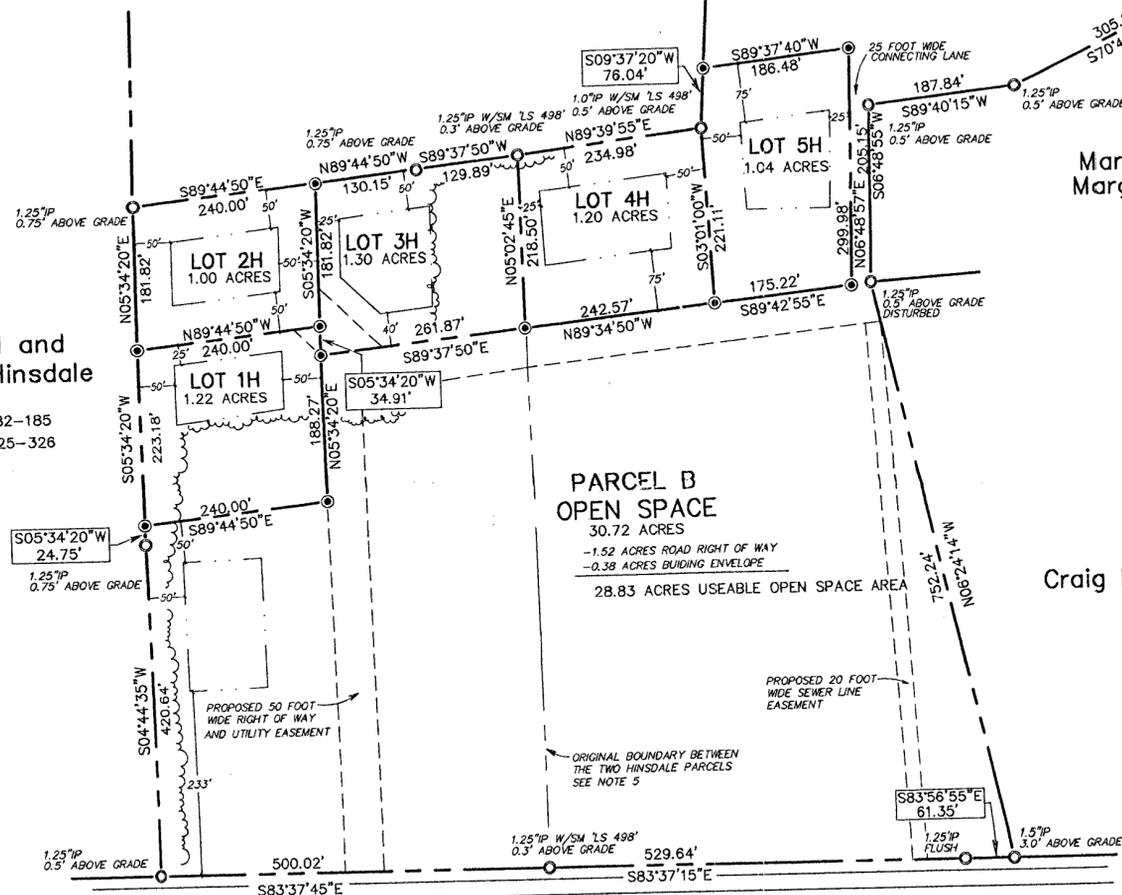
Approved By: MLC

Permit #: WW-4-2250-1

DATE: 3-26-07

Clark W. III and
Suzanne G. Hinsdale

Vol. 154 Pgs. 182-185
Vol. 155 Pgs. 325-326



EAST THOMPSON'S POINT ROAD - SEE NOTE 3

Clark W. III and Suzanne G. Hinsdale

Craig L. and Janice Palmer

Vol. 37 Pg. 1
Map Slide 19 Pg. 1

LEGEND:

- 1" IRON PIN FOUND WITH OUTSIDE DIAMETER
- 1" IRON PIN FOUND WITH SURVEY MARKER
- 5/8" REINFORCEMENT BAR WITH SURVEY MARKER TO BE SET
- BOUNDARY LINE
- - - RIGHT OF WAY - EASEMENT LINE
- BUILDING ENVELOPE
- ⊙ WELL
- △ CALCULATED POINT

NOTES:

1. The boundary survey was performed with a total station.
2. The bearings are referenced to the above mentioned plat and magnetic north with a declination of +/- 15 degrees west.
3. East Thompson's Point Road has an assumed right of way width of 49.5 feet, determined by existing monumentation.
4. U.S. Route 7 has a 99 foot wide right of way, reference Town Records Vol. 2 page 521. The right of way was determined from existing monumentation.
5. This subdivision consist of two parcels both are in the name of Clark W. III and Suzanne G. Hinsdale. The easterly parcel is referenced in Volume 150 page 693, Volume 149 pages 165-170, and Map Slide 133 page 6. The westerly parcel is referenced in Volume 154 pages 61-62 and 135-136 and Map Slide 118 page 15.
6. There is a 60 foot wide right of way across the Engleberth parcel from U.S. Route 7 to Lot 4, reference Volume 149 pages 165-170.
7. There is a 20 foot wide recreational path easement along the westerly side line of U.S. Route 7 to the Town of Charlotte, reference Volume 138 pages 45-48.
8. There are two 20 foot wide easements from Lot 5H northerly to the south end of the pond on the Champlain Valley Co-Housing parcel, reference Volume 149 pages 189-191. The location of the easements were not defined.
9. The location of the waste water disposal area is depicted on a plan prepared by Heindel and Noyes titled 'CW III & Suzanne Hinsdale', dated Aug. 02, 2005, sheet 1 of 1.
10. These wells may be subject to a water system easement, reference Volume 122 pages 479-483.
11. There is a proposed 20 foot wide utility easement across the Patane - Jansch parcel.



WW-4-2250-1

Subdivision approval by resolution of the Planning Commission, Charlotte, Vermont, on the ___ day of ___, 20___, subject to all requirements and conditions of said resolution.

Chairperson

CHARLOTTE TOWN CLERK'S OFFICE
RECEIVED FOR RECORD

This ___ day of ___ A.D. 20___
at ___ o'clock ___ minutes ___ m and
recorded in map slide ___ on page ___

Attest _____ Town Clerk

I CERTIFY THAT THIS PLAT IS BASED ON RECORD RESEARCH, FIELD MEASUREMENTS AND EVIDENCE AND OTHER PERTINENT INFORMATION. THE PLAT COMPLIES WITH THE REQUIREMENTS OF V.S.A. 27 SECTION 1403 AND CONFORMS WITH THE STATE STANDARDS FOR THE PRACTICE OF LAND SURVEYING.

STUART J. MORROW L.L.S. 565

SJM	02:28:06	LOT CONFIGURATION
SJM	12:15:05	LOT CONFIGURATION
Date	Checked	Revision
Drawn by:	_____	Date: JULY 2005
Checked by:	SJM	Scale: 1" = 150'
Approved by:	_____	Project No.: 05109

FINAL PLAT MAJOR SUBDIVISION		RECEIVED FEB 12 2007 WWMD
PROPERTY OF Clark W. III and Suzanne G. Hinsdale		
CHARLOTTE		VERMONT
STUART J. MORROW Consulting Land Surveyor Shelburne, Vermont 802-985-8809		

0880-859

DESIGN NOTES:

- Description:

This proposal is for developing "Parcel B" lot within the Big Oak Subdivision located off Big Oak Lane. Project will re-allocate flows for approved community mound disposal system. Existing mound is designed and constructed for 2,175 gal./day. Existing Lots 1H-5H each are permitted to have a four bedroom single-family residence that is served by an on-site drilled well for potable water and an off-site shared community wastewater disposal system. Parcel B will also be designed as a four bedroom single-family residence and will connect to existing community wastewater system and be supplied by an onsite drilled bedrock well.
- Water Supply:

A. The proposed drilled wells are to be located as shown on the Site Plans. Locations for drilled wells on any lots created in the future must meet the requirements of the Vermont Environmental Protection Rules, (Vermont Water Supply Rule - Chapter 21, Appendix A, Part 11-4), including the following minimum isolation distances:

Source of Contamination:	Isolation Distance:
Septic Tanks & Pump Stations:	50 feet
Sewer lines & Force Mains:	50 feet
Buildings:	10 feet
Drives:	15 feet

B. Maintain a 25-foot minimum isolation distance between water service lines and wastewater disposal system and related tanks. Maintain a minimum 10-foot horizontal distance between sewer service lines and water service lines.

C. Well Yield:
The Average Day Demand, (ADD), for a proposed four bedroom house is 490 gal./day. The Maximum Day Demand, (MDD) is calculated by dividing the ADD by not more than 720 minutes. The resulting flow rate is expressed in gallons per minute and equals the minimum well yield allowed without required storage. The MDD is: $(490 \text{ gal./day}) / (720 \text{ minutes}) = 0.68 \text{ gallons per minute}$.

However, wells that have yields less than the Instantaneous Peak Demand of 5 gallons per minute may require some type of storage.

D. Conventional water saving plumbing fixtures including, but not limited to, maximum 3 1/2 gallons per flush toilets, maximum 2 g.p.m. low flow showerheads and faucet aerators will be used in the proposed houses.

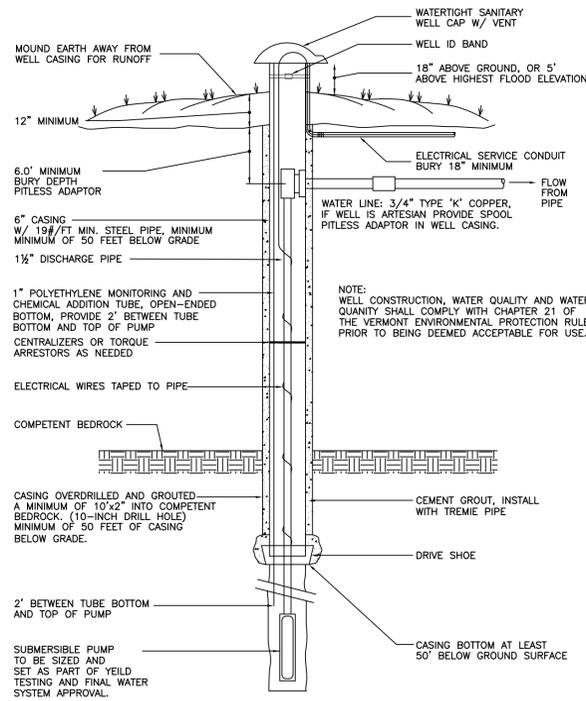
E. The Owner is responsible for assuring the project well provides adequate quality and quantity before it is deemed ready for use. By this plan the Designer makes no guarantee as to well yield or quality.
- Sewage Disposal:

A. Design Flow for Residential Units:
The design flow for single-family residential units shall be calculated on the following requirements:

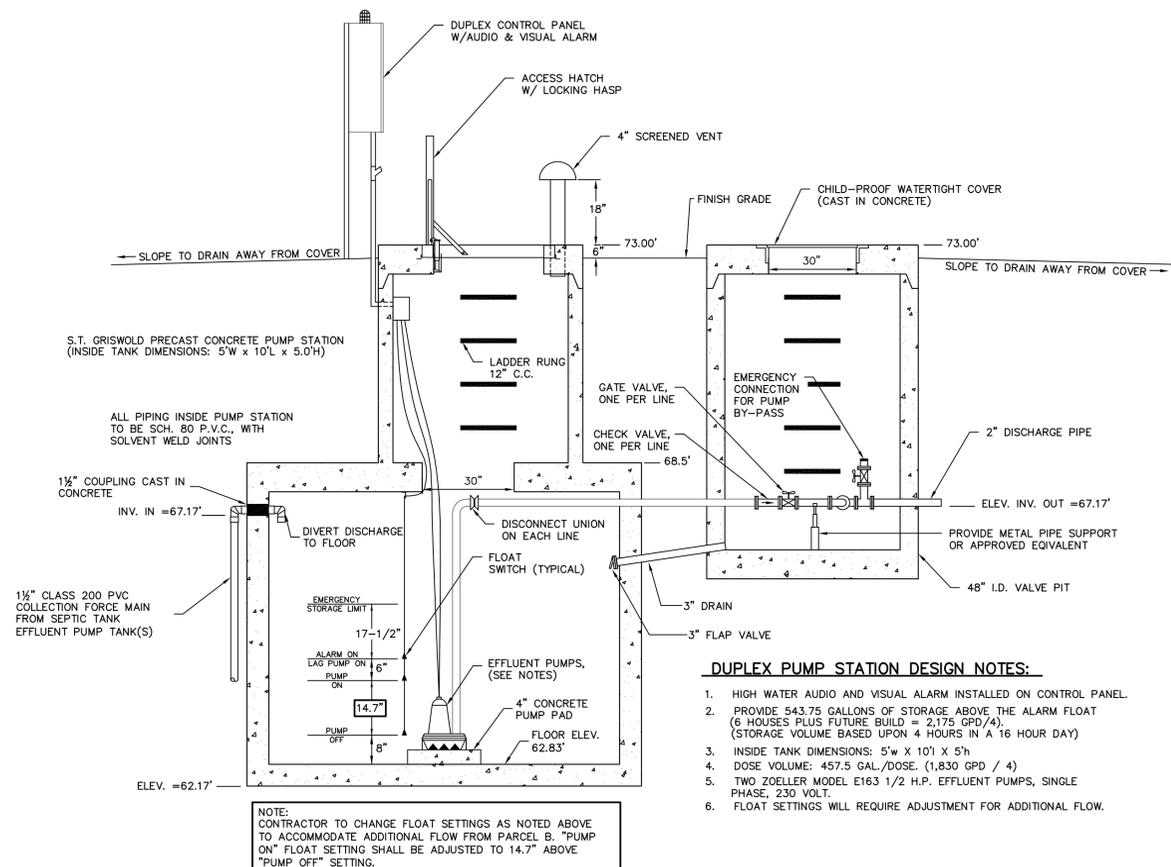
 - The design flow for each person shall be 70 gallons per person per day;
 - The first three bedrooms shall be assumed to have two persons per bedroom;
 - Each additional bedroom may be assumed to one person per bedroom. When a building will be subject to rental use or when it is likely there will be extended or frequent high occupancy use, the system should be sized for at least 2 persons per bedroom.
 - The design flow for a single-family residence on its own individual lot shall be based on a minimum of three bedrooms.

When five or more single-family residential units are connected to a single soil-based disposal system, design flows may be derived from S1-504, Table 1(b).

The total design flow for 6 units is 1,830 gpd without regard for the number of bedrooms. This wastewater system was designed and permitted under WW-4-2250-1 for future expansion to accommodate 2,175 gpd. The existing permit allows for 5 units at 1,575 gpd. An additional 255 gpd is required for Parcel B. There will be 345 gpd remaining addition flows for future expansion.
- Topographic & Boundary Information:
Boundary information provided by Stuart Morrow, L.S.



BEDROCK WELL INSTALLATION DETAIL
NOT TO SCALE

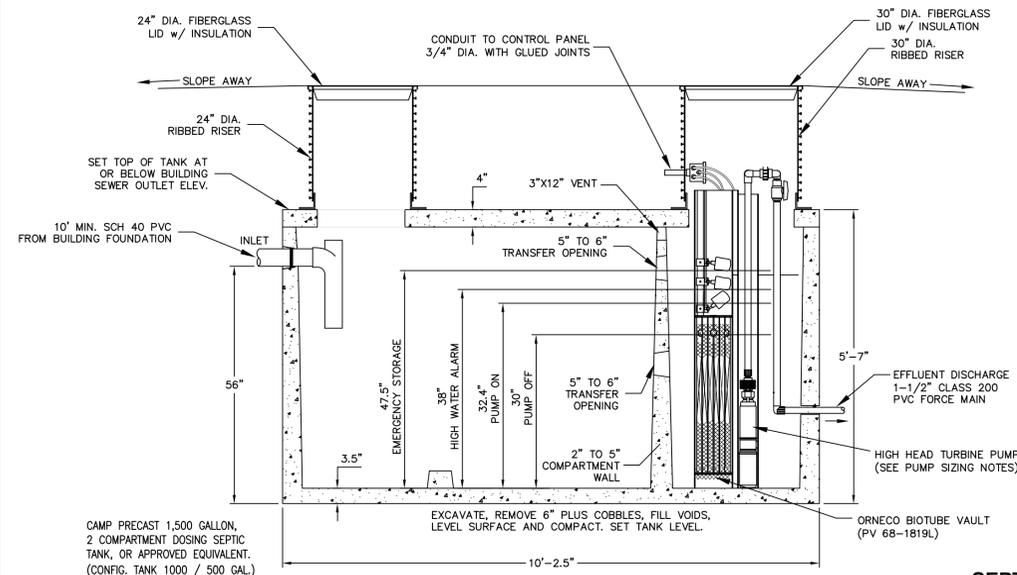


DUPLEX PUMP STATION DESIGN NOTES:

- HIGH WATER AUDIO AND VISUAL ALARM INSTALLED ON CONTROL PANEL.
- PROVIDE 543.75 GALLONS OF STORAGE ABOVE THE ALARM FLOAT (6 HOUSES PLUS FUTURE BUILD = 2,175 GPD/4). (STORAGE VOLUME BASED UPON 4 HOURS IN A 16 HOUR DAY)
- INSIDE TANK DIMENSIONS: 5'W X 10'1 X 5'H
- DOSE VOLUME: 457.5 GAL./DOSE, (1,830 GPD / 4)
- TWO ZOELLER MODEL E163 1/2 H.P. EFFLUENT PUMPS, SINGLE PHASE, 230 VOLT.
- FLOAT SETTINGS WILL REQUIRE ADJUSTMENT FOR ADDITIONAL FLOW.

NOTE: CONTRACTOR TO CHANGE FLOAT SETTINGS AS NOTED ABOVE TO ACCOMMODATE ADDITIONAL FLOW FROM PARCEL B. "PUMP ON" FLOAT SETTING SHALL BE ADJUSTED TO 14.7" ABOVE "PUMP OFF" SETTING.

EXISTING COMMUNITY DUPLEX PUMP STATION DETAIL
NOT TO SCALE



NOTES:

- PROVIDE A HIGH WATER AUDIO AND VISUAL ALARM, TO BE INSTALLED IN BUILDING.
- PROVIDE 305 GALLONS OF EMERGENCY STORAGE ABOVE THE ALARM FLOAT (1,830/6).
- SUPPLIER TO CERTIFY SUITABILITY OF STATION BASED ON SITE CONDITIONS.
- INSIDE TANK DIMENSIONS: 66" W X 116.5" L X 52.5" H (to inlet invert)
- DOSE VOLUME: 76.25 GAL./DOSE (305 GPD / 4 DOSES).

1,500 GALLON TWO COMPARTMENT SEPTIC TANK EFFLUENT PUMPING SYSTEM DETAIL
NOT TO SCALE

SEPTIC TANK EFFLUENT PUMP SYSTEM SIZING:

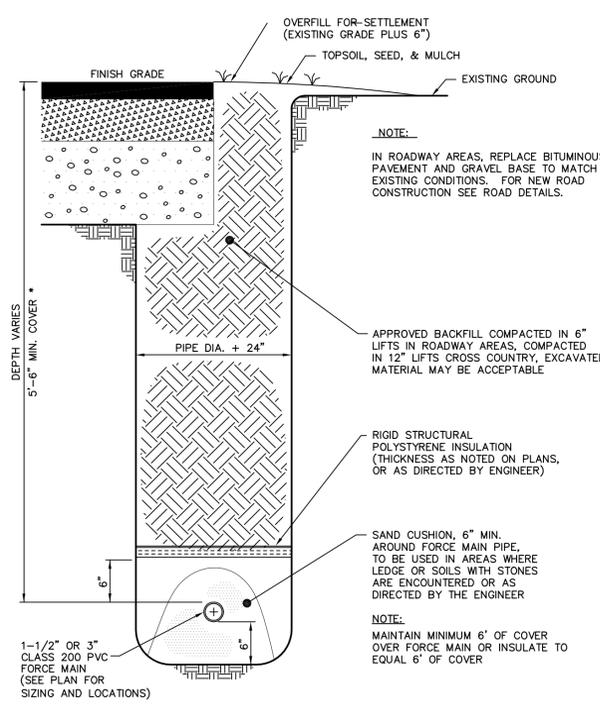
Note: The following lot dischargeS to the 1-1/2" Class 200 effluent sewer main at an average rate of 5 gpm.

Parcel B:

Head losses, worst case:	
487' ft of 1 1/2" PVC @ 5 g.p.m. =	0.6'
Pressure head at effluent main =	0.1'
Elevation =	35.0'
Total Dynamic Head =	35.7'

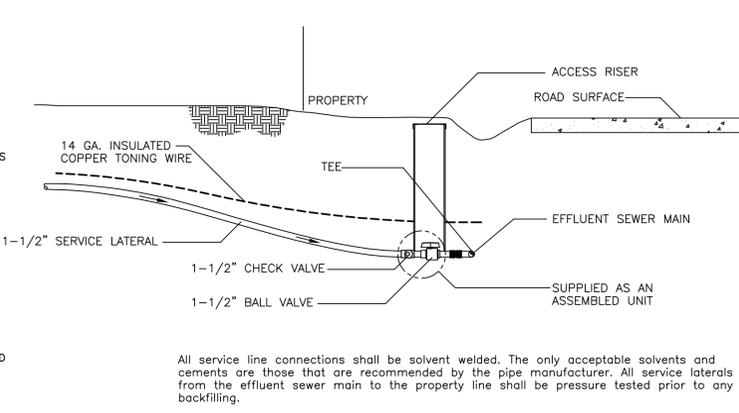
Use Orenco Model P100512 1/2 HP turbine effluent pump or approved equivalent with 1/4" flow controller, single phase, 115 volt, (35.7' TDH @ 5 g.p.m.)

*Includes 100 ft extra length for pump station fittings, exit losses, etc.



FORCE MAIN TRENCH DETAIL
NOT TO SCALE

* MUST MAINTAIN 3- FEET MIN. OF SOIL COVER, NATIVE/BORROW. USE RIGID STRUCTURAL POLYSTYRENE INSULATION, THICKNESS AS NOTED ON PLANS, OR AS DIRECTED BY ENGINEER.



EFFLUENT SEWER SERVICE CONNECTION
NOT TO SCALE

MARK R. LUMAN
NO. 458-B
LICENSED DESIGNER

PARCEL B DETAILS

C.W. III AND SUZANNE HINSDALE
BIG OAK LANE
CHARLOTTE, VERMONT

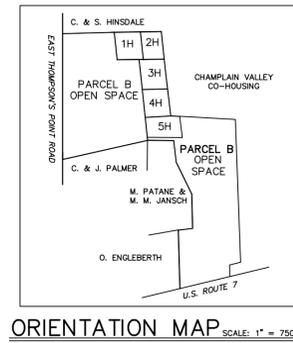
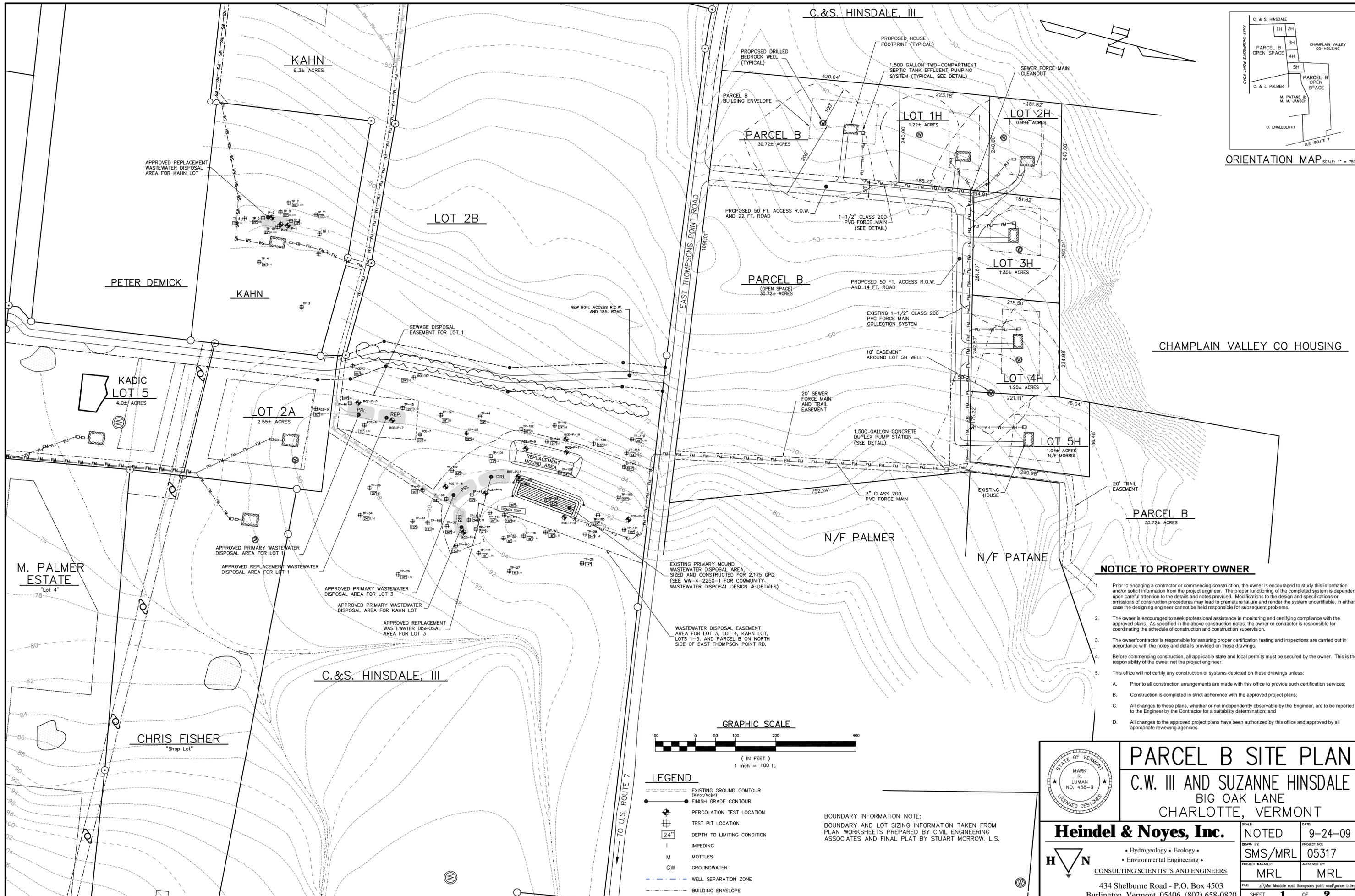
Heindel & Noyes, Inc.

Hydrogeology • Ecology •
Environmental Engineering •

CONSULTING SCIENTISTS AND ENGINEERS

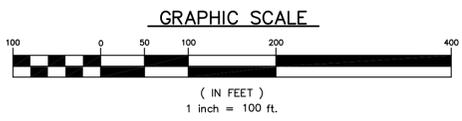
434 Shelburne Road - P.O. Box 4503
Burlington, Vermont 05406 (802) 658-0820

SCALE: NOTED	DATE: 9-24-09
DRAWN BY: SMS/MRL	PROJECT NO.: 05317
PROJECT MANAGER: MRL	APPROVED BY: MRL
FILE: z:\hns hinsdale east thompsons point road\parcel b.dwg	
SHEET: 2	OF: 2



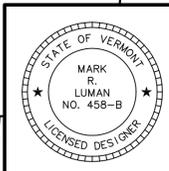
NOTICE TO PROPERTY OWNER

- Prior to engaging a contractor or commencing construction, the owner is encouraged to study this information and/or solicit information from the project engineer. The proper functioning of the completed system is dependent upon careful attention to the details and notes provided. Modifications to the design and specifications or omissions of construction procedures may lead to premature failure and render the system uncertain, in either case the designing engineer cannot be held responsible for subsequent problems.
- The owner is encouraged to seek professional assistance in monitoring and certifying compliance with the approved plans. As specified in the above construction notes, the owner or contractor is responsible for coordinating the schedule of construction and construction supervision.
- The owner/contractor is responsible for assuring proper certification testing and inspections are carried out in accordance with the notes and details provided on these drawings.
- Before commencing construction, all applicable state and local permits must be secured by the owner. This is the responsibility of the owner not the project engineer.
- This office will not certify any construction of systems depicted on these drawings unless:
 - Prior to all construction arrangements are made with this office to provide such certification services;
 - Construction is completed in strict adherence with the approved project plans;
 - All changes to these plans, whether or not independently observable by the Engineer, are to be reported to the Engineer by the Contractor for a suitability determination; and
 - All changes to the approved project plans have been authorized by this office and approved by all appropriate reviewing agencies.



- LEGEND**
- - - - - EXISTING GROUND CONTOUR (Minor/Major)
 - - - - - FINISH GRADE CONTOUR
 - ⊕ PERCOLATION TEST LOCATION
 - ⊕ TEST PIT LOCATION
 - ⊕ DEPTH TO LIMITING CONDITION
 - I IMPEDING
 - M MOTTLES
 - GW GROUNDWATER
 - - - - - WELL SEPARATION ZONE
 - - - - - BUILDING ENVELOPE

BOUNDARY INFORMATION NOTE:
 BOUNDARY AND LOT SIZING INFORMATION TAKEN FROM PLAN WORKSHEETS PREPARED BY CIVIL ENGINEERING ASSOCIATES AND FINAL PLAT BY STUART MORROW, L.S.



PARCEL B SITE PLAN
 C.W. III AND SUZANNE HINSDALE
 BIG OAK LANE
 CHARLOTTE, VERMONT

Heindel & Noyes, Inc.

Hydrogeology • Ecology • Environmental Engineering •
 CONSULTING SCIENTISTS AND ENGINEERS

434 Shelburne Road - P.O. Box 4503
 Burlington, Vermont 05406 (802) 658-0820

SCALE: NOTED	DATE: 9-24-09
DRAWN BY: SMS/MRL	PROJECT NO.: 05317
PROJECT MANAGER: MRL	APPROVED BY: MRL
FILE: z:\h&n hinsdale east thompsons point road\parcel b.dwg	SHEET: 1 OF 2