

Soil Information			
Sym.	Unit Name	Acres	% Coverage
CbA	Cabot silt loam, 0-3% slopes	0.47 A	6.2 %
CaC	Cabot silt loam, 3-15% slopes	0.59 A	7.7 %
PeA	Peru stony loam, 0-5% slopes	1.56 A	20.4 %
PeB	Peru stony loam, 5-12% slopes	4.15 A	54.5 %
PcC	Peru extremely stony loam	0.85 A	11.2 %
Total Area		7.62 A	100.0 %

**Allowable Density Calculations**

AREA (SF)	ALLOWABLE DENSITY/ACRE	ALLOWABLE DENSITY/ACRE
WETLANDS, WETLAND AND STREAM BUFFERS AND SLOPES 30% AND GREATER	0 UNITS/43,500 SF	0 UNITS
SLOPES 15-24%	1 UNITS/435,000 SF	0.001 UNITS
UNCONSTRAINED 10-15% SLOPES	1 UNITS/80,000 SF	2.020 UNITS
TOTALS	332,013 SF	2.021 UNITS

- WETLANDS, WETLAND AND STREAM BUFFERS - 10%/101 SF (1310 ACRES)
- SLOPES 15-24% 458 SF (101 ACRES)

**Zoning Information**

AGRICULTURAL / RURAL RESIDENTIAL ZONING DISTRICT (ARZD)  
 TAX PARCEL NUMBER: 2400410000  
 DP#16-02

**DIMENSIONAL REQUIREMENTS:**  
 MINIMUM LOT FRONTAGE: 40 FEET  
 MINIMUM LOT SIZE: 80,000 SF

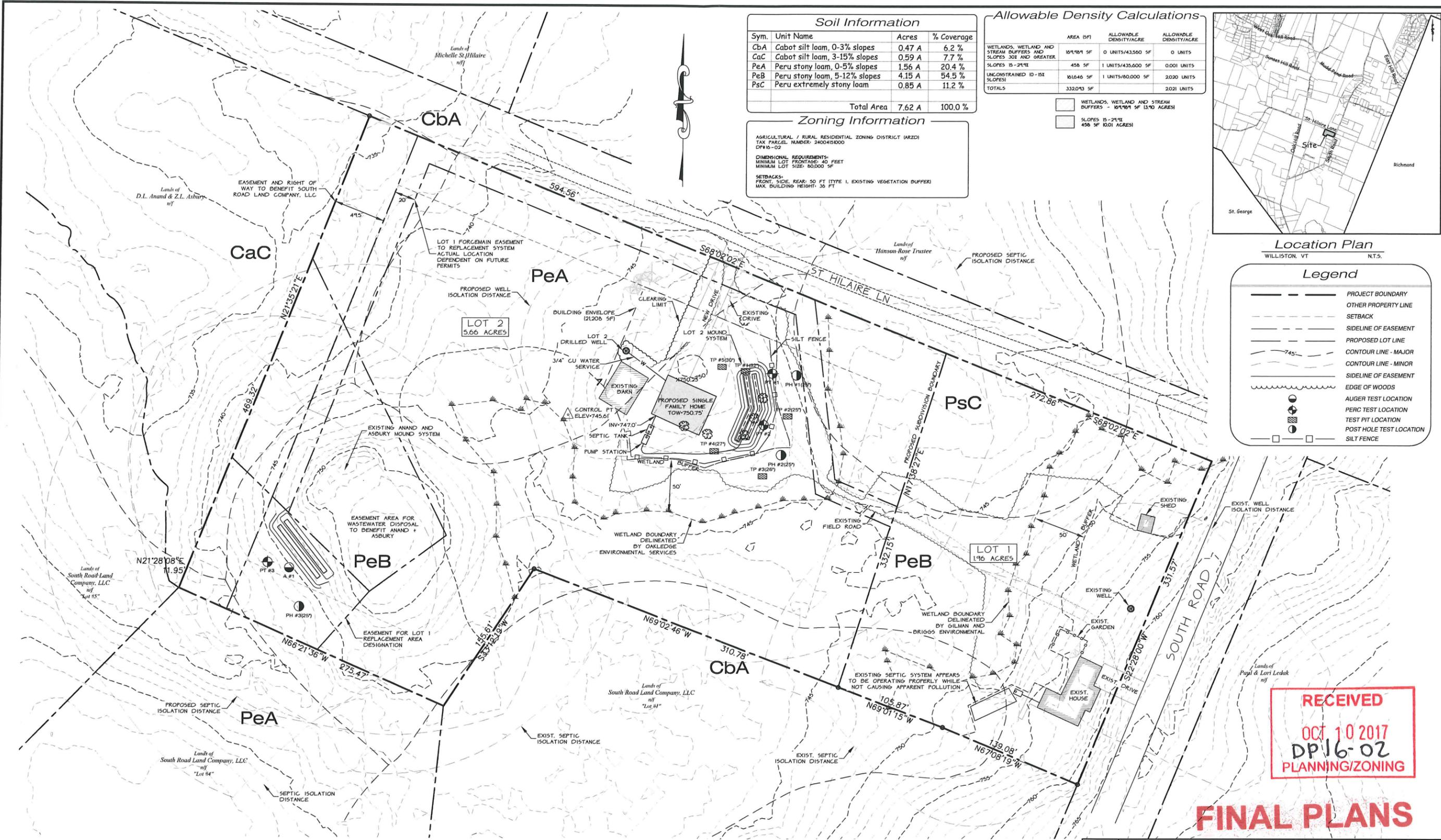
**SETBACKS:**  
 FRONT, SIDE, REAR: 50 FT (TYPE I, EXISTING VEGETATION BUFFERS)  
 MAX. BUILDING HEIGHT: 30 FT



**Location Plan**  
 WILLISTON, VT N.T.S.

**Legend**

- PROJECT BOUNDARY
- OTHER PROPERTY LINE
- SETBACK
- SIDELINE OF EASEMENT
- PROPOSED LOT LINE
- CONTOUR LINE - MAJOR
- CONTOUR LINE - MINOR
- SIDELINE OF EASEMENT
- EDGE OF WOODS
- AUGER TEST LOCATION
- PERC TEST LOCATION
- TEST PIT LOCATION
- POST HOLE TEST LOCATION
- SILT FENCE



**RECEIVED**  
 OCT 10 2017  
 DP16-02  
 PLANNING/ZONING

FINAL PLANS

**Notes:**

- THIS PLAN IS NOT TO BE USED FOR PROPERTY CONVEYANCE. PLEASE SEE PLAN ENTITLED "BOUNDARY + BOUNDARY ADJUSTMENT PLAT", SHD. PL, PREPARED BY O'LEARY-BURKE CIVIL ASSOCIATES, P.L.C., DATED 4/15/13.
- UTILITIES SHOWN ARE BASED ON BEST AVAILABLE INFORMATION. CONTRACTOR SHALL EXCAVATE UTILITY TO DETERMINE ACTUAL ELEVATION + LOCATION AND CONSULT WITH ENGINEER PRIOR TO INSTALLATION OF PROPOSED UTILITIES.

Upon finding that the final plans complied with all requirements of the Williston Development Bylaw and all conditions imposed on the approval of Discretionary Permit 16-02, the Williston Development Review Board/Administrator approved the final plans for the Handy Subdivision on the 21 day of OCTOBER, 2017.

*Russell J. A.*  
 Presiding member / Administrator's signature

**Owner/Applicant**  
 SHAWN HANDY  
 3020 SOUTH ROAD  
 WILLISTON, VT 05495

THE CONTRACTOR SHALL NOTIFY "DIGSAFE" AT 1-888-DIG-SAFE PRIOR TO ANY EXCAVATION.



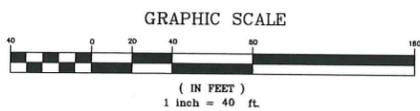
DATE	REVISION	BY
9/13/17	Revised for Final Plan Application	BWC
7/17/17	Revised per VVW Comments	BWC
5/18/17	Revised for VVW Permit Application	BWC
2/23/17	Revised density calculations, included surveyed property lines	BWC
12/10/15	Added remaining wetland boundary delineation and density calculations	BWC
10/2/15	Revised per Public Works Comments	BWC

SURVEY	CEBCA	RECORD DRAWING	PRELIMINARY
DESIGN	CEBCA	FINAL	SKETCH/CONCEPT
DRAWN	KGM		
CHECKED	DWB/PJQ		
SCALE	1"=40'		

<b>HANDY SUBDIVISION</b>	
SOUTH ROAD AND ST. HILAIRE LANE WILLISTON, VT	
<b>SITE PLAN</b>	
DATE	8/16/15
JOB#	2015-40
FILE	2015-40-57
PLAN SHEET #	1



DP 16-02

**TEST PIT LOG**

DATE 5/26/15  
METHOD CONTRACT EXCAVATOR  
PRESENT D. BURKE  
S. HANDY, OWNER

TP 1  
0'-7": DARK BROWN LOAM  
7'-22": YELLOW/BROWN FINE SANDY LOAM, 10% GRAVEL  
22'-30": BROWN/BROWN VERY FINE SAND, 20% GRAVEL  
30'-49": DARK BROWN FINE SAND, 20% GRAVEL, REDOX FEATURES AT 32"

ESHW 32"  
LEGE N/A

TP 2  
0'-9": DARK BROWN LOAM  
9'-29": YELLOW/BROWN FINE SANDY LOAM, 10% GRAVEL  
29'-28": DARK BROWN VERY FINE SAND, REDOX FEATURES AT 25"-28"  
28'-51": DARK BROWN FINE SAND, 20% GRAVEL

ESHW 25"-28"  
LEGE N/A

TP 3  
0'-8": DARK BROWN LOAM  
8'-15": YELLOW/BROWN FINE SANDY LOAM, 10% GRAVEL  
15'-26": YELLOW/BROWN VERY FINE SAND, 20% GRAVEL  
26'-32": DARK BROWN FINE SAND, 20% GRAVEL, REDOX FEATURES AT 26"  
32'-47": BROWN SILTY SAND

ESHW 26"  
LEGE N/A

TP 4  
0'-9": DARK BROWN LOAM  
9'-22": YELLOW/BROWN FINE SANDY LOAM, 10% GRAVEL  
22'-29": YELLOW/BROWN VERY FINE SAND, 20% GRAVEL, REDOX FEATURES AT 27"  
29'-32": DARK BROWN FINE SAND, 20% GRAVEL  
32'-49": BROWN VERY FINE SAND, FE+

ESHW 27"  
LEGE N/A

TP 5  
0'-5": DARK BROWN LOAM  
5'-13": RED/BROWN LOAMY FINE SAND  
13'-18": YELLOW/BROWN VERY FINE SAND, 20% GRAVEL  
18'-23": BROWN VERY FINE SAND, 10% GRAVEL  
23'-31": BROWN VERY FINE SAND, 10% GRAVEL, REDOX FEATURES AT 30"  
31'-49": BROWN VERY FINE SAND, 10% GRAVEL

ESHW 30"  
LEGE N/A

AUGER 1  
0'-9": DARK BROWN LOAM  
9'-24": YELLOW/BROWN FINE SANDY LOAM, REDOX FEATURES AT 24"  
24'-29": YELLOW/BROWN VERY FINE SAND  
29'-48": BROWN VERY FINE SAND, WATER AT 41"

ESHW 24"  
LEGE

**POST HOLE TEST PIT LOG**

DATE 7/6/17  
METHOD POST HOLE  
PRESENT D. BURKE

POST HOLE 1  
0'-8": DARK BROWN LOAM  
8'-21": YELLOWISH/BROWN SILTY SAND, 10% GRAVEL  
21'-37": BROWN SANDY SILT, REDOX FEATURES AT 25"

ESHW 25"  
LEGE N/A

POST HOLE 2  
0'-7": DARK BROWN LOAM  
7'-21": YELLOWISH/BROWN SILTY SAND, 10% GRAVEL  
21'-36": BROWN SILTY SAND, 10% GRAVEL, REDOX FEATURES AT 25"-26"

ESHW 25"-26"  
LEGE N/A

POST HOLE 3  
0'-9": BROWN LOAM  
9'-17": YELLOWISH/BROWN FINE SAND  
17'-24": YELLOWISH/BROWN SILTY SAND, 10% GRAVEL  
24'-36": BROWN SANDY SILT, REDOX FEATURES AT 25"

ESHW 25"  
LEGE N/A

**INSPECTION**

- THE CONTRACTOR OR OWNER SHALL NOTIFY THE ENGINEER A MINIMUM OF 24 HOURS IN ADVANCE FOR INSPECTION OF:
  - THE PLOWED SOIL SURFACE PRIOR TO PLACEMENT OF MOUND SAND.
  - THE SYSTEM PRIOR TO BACKFILLING OVER THE STONE AND TRENCHES AND TESTING, INCLUDING THE SEPTIC TANK OPERATION OF THE PUMP STATION, AND LATERAL LINES.
- THIS DESIGN MUST BE INSPECTED BY O'LEARY-BURKE CIVIL ASSOCIATES, P.C., ESSEX JUNCTION, VERMONT 05452. TO ENSURE COMPLIANCE WITH THESE PLANS & THE DESIGN INTENT, O'LEARY-BURKE CIVIL ASSOCIATES, P.C. WAIVES ANY AND ALL RESPONSIBILITY AND LIABILITY FOR PROBLEMS THAT ARISE FROM FAILURE TO FOLLOW THESE PLANS, SPECIFICATIONS, AND THE DESIGN INTENT THAT THE PLANS CONVEY, AND FROM FAILURE TO HAVE BEEN NOTIFIED BY THE CONTRACTOR TO INSPECT THE WORKS AND TESTS IN PROGRESS.

**CONSTRUCTION REQUIREMENTS**

- UTILITIES INFORMATION SHOWN HEREON WERE OBTAINED FROM THE BEST AVAILABLE SOURCES AND MAY OR MAY NOT BE EITHER ACCURATE OR COMPLETE. THE CONTRACTOR SHALL VERIFY THE EXACT LOCATION OF EXISTING UTILITIES AND SHALL BE RESPONSIBLE FOR ANY DAMAGE TO ANY UTILITY, PUBLIC OR PRIVATE, SHOWN OR NOT SHOWN HEREON.
- PRIOR TO CONSTRUCTION, ALL MATERIALS SHALL BE APPROVED BY THE ENGINEER.
- PLOW THE AREA TO A DEPTH OF 7" - 8", PARALLEL TO THE LAND CONTOUR WITH THE PLOW THROWING THE SOIL UPSLOPE TO PROVIDE A PROPER INTERFACE BETWEEN THE FILL AND THE NATURAL SOIL. ONCE THE PLOWING OF THE LAND IS COMPLETED, THE AREA SHALL BE FENCED TO PREVENT VEHICLES AND EQUIPMENT FROM ENTERING THE PLOWED AREA.
- TO PREVENT COMPACTION, CONSTRUCTION EQUIPMENT SHALL NOT BE MOVED ACROSS THE PLOWED SURFACE OR THE EFFLUENT DISPERSAL AREA. HOWEVER, AFTER PLACEMENT OF A MINIMUM OF SIX (6) INCHES OF SAND FILL OVER THE PLOWED AREA, LOW GROUND PRESSURE CONSTRUCTION EQUIPMENT MAY BE DRIVEN OVER THE PROTECTED SURFACE TO EXPEDITE CONSTRUCTION. CONSTRUCTION AND/OR PLOWING SHALL NOT BE INITIATED WHEN THE SOIL MOISTURE CONTENT IS HIGH.
- CONSTRUCTION SHOULD BE INITIATED IMMEDIATELY AFTER PREPARATION OF THE SOIL INTERFACE BY PLACING ALL OF THE SAND FILL NEEDED FOR THE MOUND TO THE DEPTH SHOWN ON THE PLANS. THIS DEPTH WILL PERMIT EXCAVATION OF THE TRENCHES TO ACCOMMODATE THE CRUSHED STONE AND DISTRIBUTION PIPING. AFTER THE TRENCHES ARE DUG, THE STONE SHALL BE PLACED INTO THE TRENCH, HAND LEVELED AND THE DISTRIBUTION PIPE INSTALLED. THE ENGINEER SHALL WITNESS THE TESTING OF THE DISTRIBUTION SYSTEM. AFTER THE TESTING IS COMPLETED AND THE CRUSHED STONE HAS BEEN COVERED WITH MARIAT 140N FABRIC OR EQUAL, THE ENTIRE MOUND SHALL BE COVERED WITH TOPSOIL NATIVE TO THE SITE, OR SOIL OF SIMILAR CHARACTERISTICS TO SUPPORT VEGETATION FOUND IN THE UNBUILT PORTION OF THE SITE. THE COVER SHALL BE TWELVE (12) INCHES. NATIVE SOIL FROM THE SITE IS SUITABLE, PROVIDED THE TOP FOUR (4) INCHES OF COVER IS TOPSOIL. THE ENTIRE MOUND SHALL BE SEED, SOAKED, AND MULCHED WITH VEGETATIVE COVER TO ASSURE STABILITY OF THE INSTALLATION.
- THE FILL MATERIAL (MOUND SAND), FROM THE NATURAL SOIL (PLOWED) SURFACE TO THE TOP OF THE TRENCH, SHALL BE SAND WITH A PERCENTAGE MEETING ONE OF THE FOLLOWING GRADATIONS SHOWN IN THE DETAIL ON THIS SHEET. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL FURNISH A CURRENT SIEVE ANALYSIS OF THE SAND TO BE USED, SUBJECT TO APPROVAL BY THE ENGINEER.
- TRENCHES SHALL BE EXCAVATED INTO THE MOUND SAND AS SHOWN IN THE DETAIL ON THIS SHEET. THE BOTTOM OF THE TRENCHES SHALL BE ABSOLUTELY LEVEL, SIDE TO SIDE AND END TO END.
- THE PRESSURE DISTRIBUTION PIPE SHALL BE RIGID PLASTIC PIPE, SCHEDULE 40, WITH DIAMETER AS INDICATED. THE PIPE SHALL HAVE A SINGLE ROW OF HOLES, SIZE AND SPACING AS INDICATED ON THE DETAIL SHEET, ALONG THE LENGTH OF THE PIPE WITH THE LAST HOLE AT THE ENDCAP. ALL LATERALS SHALL BE LAID LEVEL. ALL JOINTS AND CONNECTIONS SHALL BE SOLVENT-CEMENTED, HOLDING DOWNWARD.
- THE PRESSURE DISTRIBUTION PIPE SHALL BE PLACED ON 6 INCHES OF 3/4" TO 1-1/2" WASHED CRUSHED STONE WITH THE HOLES DOWNWARD. THE WIDTH AND DEPTH OF THE CRUSHED STONE SHALL BE AS SHOWN ON THE PLANS. THE MATERIAL USED TO COVER THE TOP OF THE STONE SHALL BE MARIAT 140N FABRIC.
- THE AREA SURROUNDING THE MOUND SHALL BE GRADED TO PROVIDE DIVERSION OF SURFACE RUN-OFF WATERS.

**GENERAL SPECIFICATIONS**

- ALL WORK AND MATERIALS SHALL BE IN ACCORDANCE WITH THE LATEST AGENCY OF NATURAL RESOURCES STANDARDS, 10-STATE STANDARDS, ANWA STANDARDS, AND THESE PLANS AND SPECIFICATIONS.
- THE CONTRACTOR SHALL BE RESPONSIBLE AT HIS OWN EXPENSE FOR ENSURING THAT THE DUST CREATED AS A RESULT OF CONSTRUCTION DOES NOT CREATE A NUISANCE OR A SAFETY HAZARD. WHERE AND WHEN CREASED NECESSARY BY THE ENGINEER, THE CONTRACTOR WILL BE REQUIRED TO NET SECTIONS OF THE CONSTRUCTION AREA WITH WATER OR APPLY CALCIUM CHLORIDE OR SWEEP THE ROADWAY WITH A POWER BROOM AS DUST CONTROL.
- ALL DISTURBED AREAS SHALL BE STABILIZED WITH SEEDING AND MULCHING PRIOR TO OCTOBER 1 OF EACH YEAR. ANY DISTURBED AREAS OUTSIDE THE ROADWAY SHALL BE IMMEDIATELY SEEDING AND MULCHED WITHIN 15 DAYS. ANY WORK PERFORMED AFTER OCTOBER 1 OF EACH YEAR SHALL BE STABILIZED WITH MULCH AND NETTING SUFFICIENT TO PREVENT EROSION AND SHALL BE IMMEDIATELY SEEDING AND MULCHED AS SOON AS WEATHER PERMITS IN THE SPRING.
- THE CONTRACTOR SHALL ENCLOSE THE TRUNKS OF LARGE TREES NEAR THE ROADWAY SHALL BE IMMEDIATELY SEEDING AND MULCHED WITHIN 15 DAYS.
- ALL SLOPES, DITCHES, AND DISTURBED AREAS SHALL BE GRADED SMOOTH AND BE FREE OF POCKETS WITH SUFFICIENT SLOPE TO ENSURE DRAINAGE.
- ALL FILL OR BACKFILL SHALL BE PLACED IN 6 INCH LIFTS AND THOROUGHLY COMPACTED TO 95% OF MAXIMUM DENSITY OF OPTIMUM MOISTURE CONTENT AS DETERMINED BY ASTM D698 STANDARD PROCTOR.
- ALL DISTURBED AREAS SHALL RECEIVE A MINIMUM OF 4 INCHES OF TOPSOIL AND BE SEED, FERTILIZED, LIMED, AND MULCHED IN ACCORDANCE WITH THE FOLLOWING:
  - SEED MIXTURE IN ALL AREAS SHALL BE URBAN MIX CONFORMING TO THE TABLE TO THE RIGHT. FOR SEEDING BETWEEN SEPTEMBER 1 AND OCTOBER 1, WINTER RYE SHALL BE USED AT A RATE OF 100 LBS PER ACRE.
  - FERTILIZER SHALL BE STANDARD COMMERCIAL GRADE CONFORMING TO THE STATE FERTILIZER LAW AND TO THE STANDARDS OF THE ASSOCIATION OF OFFICIAL AGRICULTURAL CHEMISTS. DRY FERTILIZER, IF USED, SHALL BE APPLIED AT THE RATE OF 500 POUNDS PER ACRE. LIQUID FERTILIZER, IF USED, SHALL BE APPLIED IN A 1-2-1 RATIO WITH THE MINIMUM RATE TO INCLUDE 100 POUNDS OF NITROGEN, 200 POUNDS OF PHOSPHATE, AND 100 POUNDS OF POTASH PER ACRE.
  - LIMESTONE SHALL CONFORM TO ALL STATE AND FEDERAL REGULATIONS AND TO THE STANDARDS OF THE ASSOCIATION OF OFFICIAL AGRICULTURAL CHEMISTS. THE LIMESTONE SHALL BE APPLIED AT A RATE OF ONE TON PER ACRE AS DIRECTED.
  - WITHIN 24 HOURS OF APPLICATION OF FERTILIZER, LIME, AND SEED, THE SURFACE SHALL BE MULCHED WITH A HAY MULCH. MULCH SHALL BE SPREAD UNIFORMLY OVER THE AREA AT A RATE OF TWO TONS PER ACRE AS ORDERED BY THE ENGINEER.
  - ALL TURF ESTABLISHMENT SHALL BE PERFORMED IN ACCORDANCE WITH THE VERMONT STANDARD SPECIFICATIONS FOR CONSTRUCTION, SECTION 631.
  - TOPSOIL SHALL BE STOCKPILED, SEED, AND MULCHED UNTIL REUSED. HAYBALES SHALL BE PLACED AND STACKED CONTINUOUSLY AROUND THE BOTTOM OF THE TOPSOIL PILES.

**TESTING REQUIREMENTS**

THE CONTRACTOR SHALL FURNISH ALL FACILITIES AND PERSONNEL FOR CONDUCTING THE FOLLOWING TESTS:

- STRUCTURES TEST:**

THE SEPTIC AND PUMP STATION TANKS SHALL BE TESTED BY FILLING WITH WATER TO A POINT ONE (1) FOOT BELOW THE ACCESS LID. A STABILIZATION PERIOD OF ONE (1) HOUR SHALL BE PROVIDED TO ALLOW FOR ABSORPTION. AT THE END OF THE STABILIZATION PERIOD, THE STRUCTURES SHALL BE REFILLED IF NECESSARY TO ONE (1) FOOT BELOW THE ACCESS LID AND THE TEST PERIOD OF 24 HOURS SHALL BEGIN. AT THE END OF THE TEST, THERE SHALL BE NO VISIBLE OR MEASURABLE EXFILTRATION OR INFLTRATION. IF THE TEST FAILS, IT SHALL BE CONSIDERED FAILED. IF THE TEST FAILS, THE CONTRACTOR SHALL REPAIR OR WATERPROOF AND RE-TEST AT NO EXTRA EXPENSE TO THE OWNER.
- DISTRIBUTION LINES TEST:**

THE ENGINEER MUST PERFORM A PRESSURE AND DISTRIBUTION TEST OF THE MOUND LATERALS BEFORE COVERING. AFTER DRILLING THE HOLES (UPWARD) AS SPECIFIED & BEFORE INSTALLING ORIFICE SHIELDS, THE UNIFORMITY & HEIGHT SHALL BE TESTED. WHILE PRESSURIZED BY THE PUMP STATION, THE HEIGHT OF THE WATER COLUMN BEING DISCHARGED FROM EACH HOLE WILL BE MEASURED TO VERIFY ADEQUATE PRESSURE AND EVEN DISTRIBUTION. WATER COLUMNS 2.5 FT OR HIGHER WILL CONSTITUTE A PASSING TEST. HOLES SHALL BE PLACED DOWNWARD FOLLOWING A PASSING TEST.

**MAINTENANCE**

- THE SEPTIC TANK'S PURPOSE IS TO SETTLE OUT SOLIDS, CONTAIN THE SCUM AND PASS TREATED EFFLUENT. BACTERIA WITHIN THE SEPTIC TANK HELPS DECOMPOSE THE SOLIDS. SHOULD ANY SOLIDS PASS THROUGH THE SEPTIC TANK INTO THE SYSTEM, PREMATURE CLOGGING OF THE PIPING, STONE OR NATIVE SOIL BENEATH THE SYSTEM IS LIKELY TO OCCUR. ONLY HUMAN WASTES SHOULD ENTER THE SEWAGE SYSTEM. WATER USE SHOULD BE CONSERVATIVE AND CLEANING AGENTS CAN NOT ENTER THE SYSTEM, AS THEY KILL BACTERIA.
- THE STATE FLOW FIGURES OF 490 GAL/DAY/BEDROOM ARE BASED ON SHORT TERM PEAK USE PERIODS (IE. DAILY EVENTS). ACTUAL FLOWS FOR THE PROPOSED 4 BEDROOM HOME SHOULD AVERAGE 200 GALLONS PER DAY.
  - THE SLUDGE LEVEL IS WITHIN 12 INCHES OF THE BOTTOM OF THE TANK
  - THE SCUM LAYER IS WITHIN 3 INCHES OF THE TOP OF THE OUTLET
  - IF A OR B IS ANTICIPATED TO OCCUR PRIOR TO THE NEXT INSPECTION.
  - IN ANY CASE, THE TANK SHALL BE PUMPED AT A MAXIMUM 5 YEAR INTERVAL.
- ONCE PER YEAR, THE PUMP STATION SHOULD BE INSPECTED. ANY SOLIDS OR SLUDGE REMOVED.
- ABOVE ITEMS 1 - 4 ARE INTENDED TO PROLONG THE LIFE OF THE SYSTEM, NOT GUARANTEE IT. A PROPERLY OPERATED & MAINTAINED SYSTEM GENERALLY FUNCTIONS PROPERLY FOR 8 - 25 YEARS.

**PUMP REQUIREMENTS**

SINGLE PHASE  
230V PUMP  
CAPABLE OF 30 GPM AT 14' TDH

**INDIVIDUAL DRILLED WELL DESIGN DATA**

- THE DRILLED WELL(S) CONSTRUCTION, LOCATION, DISINFECTION AND TESTING SHALL BE IN ACCORDANCE WITH THE STATE OF VERMONT - WATER SUPPLY REGULATIONS
- THE BASIS OF DESIGN FOR EACH DRILLED WELL IS:
  - AVG. DAY DEMAND : 490 GPD (4 BEDROOM HOME)
  - MAX. DAY DEMAND : 490 GPD / 720 MIN/DAY @ 0.88 GPM
  - INSTANTANEOUS PEAK DEMAND : 5 GPM / HOME = 5 GPM
  - SOURCE CAPACITY: TO BE DETERMINED, AREA WELL LOGS SHOW AN ADEQUATE WATER SOURCE IN THE PROJECT AREA.
  - STORAGE CAPACITY: SIZE TO BE DETERMINED BASED ON WELL YIELD (IF REQUIRED).
  - PUMP CAPACITY: 1 LOT @ 5 GPM = 5 GPM MINIMUM
  - OPERATING PRESSURE RANGE: 40 - 60 PSI AT PRESSURE SWITCH

**DRILLED WELL ISOLATION DISTANCES**

ROADWAY, PARKING DRIVES, < 3 RESIDENCES	25 FEET
SEWAGE PIPING / TANKS	15 FEET
PROPERTY LINE	50 FEET
SURFACE WATER	10 FEET
BUILDINGS	10 FEET
SEWAGE SYSTEM: DOWNSLOPE WELL	200 FEET
UPSLOPE WELL	100 FEET

**SUMMARY OF SOIL TEST PIT LOGS**

TEST PIT NUMBER	EXISTING GROUNDWATER (DEPTH IN INCHES)	REDOX/ORGANIC FEATURES (DEPTH IN INCHES)	EXISTING LEDEGE (DEPTH IN INCHES)
TP1	> 49"	32"	> 49"
TP2	> 51"	25"-28"	> 51"
TP3	> 47"	26"	> 47"
TP4	> 49"	27"	> 49"
TP5	> 49"	30"	> 49"

**PERCOLATION TEST RESULTS**

TESTS PERFORMED ON 4/24/17 BY BWC

TEST NUMBER	TEST DEPTH (INCHES)	PERCOLATION RATE (MINUTES/INCH)
PT 1	24	20.0 MIN./INCH
PT 2	24	14.5 MIN./INCH
PT 3	24	31.2 MIN./INCH

**SUMMARY OF POST HOLE SOIL LOGS**

TEST PIT NUMBER	EXISTING GROUNDWATER (DEPTH IN INCHES)	REDOX/ORGANIC FEATURES (DEPTH IN INCHES)	EXISTING LEDEGE (DEPTH IN INCHES)
PH1	> 25"	25"	> 25"
PH2	> 26"	25"-26"	> 26"
PH3	> 25"	25"	> 25"

**SEWAGE DESIGN INFORMATION**

**LOT #2 MOUND**

- IT IS THE OPINION OF THE ENGINEER THAT THE SOIL CONDITIONS WITHIN THE PROPOSED SEWAGE DISPOSAL AREAS MEET THE STATE OF VERMONT EPR RULES & ARE SUITABLE FOR MOUND SEWAGE DISPOSAL AS SHOWN ON THESE PLANS.
- THE FOLLOWING MINIMUM ISOLATION DISTANCES SHALL BE MAINTAINED FROM THE DISPOSAL AREA TO:
 

WATER MAIN	50 FEET
WATER SERVICE	25 FEET
PROPERTY LINE	25 FEET
BUILDING (NO FOOTING DRAIN)	25 FEET
SLOPES STEEPER THAN 20%	490 SF
DRIVEWAYS & PARKING LOTS	10 FEET
TREES	10 FEET

**LOT #1 REPLACEMENT AREA DESIGNATION ONLY**

- IT IS THE OPINION OF THE ENGINEER THAT THE SOIL CONDITIONS WITHIN THE PROPOSED SEWAGE DISPOSAL AREAS MEET THE STATE OF VERMONT EPR RULES & ARE SUITABLE FOR MOUND SEWAGE DISPOSAL AS SHOWN ON THESE PLANS.
- BASIS OF DESIGN:
 

NO. OF BEDROOMS =	4
TOTAL DESIGN FLOW =	490 GPD
PERCOLATION RATE =	< 60 MIN./INCH
LOADING RATE, Q =	1.0 GPD/SF
ABSORPTION AREA REQUIRED: 490 / 1.0 =	490 SF
BASAL AREA REQUIRED: 490 / 0.74 =	662 SF

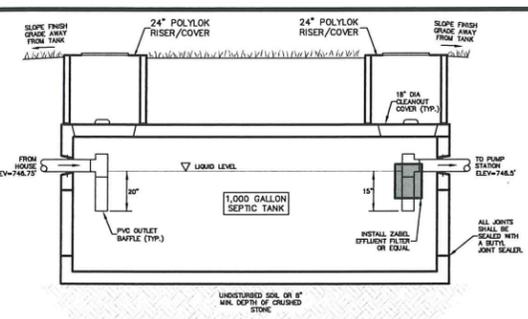
(2) 4' x 62' = 496 S.F. (1,589 S.F. OF BASAL AREA PROVIDED)

**LOT #1 REPLACEMENT AREA DESIGNATION ONLY**

- IT IS THE OPINION OF THE ENGINEER THAT THE SOIL CONDITIONS WITHIN THE PROPOSED SEWAGE DISPOSAL AREAS MEET THE STATE OF VERMONT EPR RULES & ARE SUITABLE FOR MOUND SEWAGE DISPOSAL AS SHOWN ON THESE PLANS.
- BASIS OF DESIGN:
 

NO. OF BEDROOMS =	4
TOTAL DESIGN FLOW =	490 GPD
PERCOLATION RATE =	< 60 MIN./INCH
LOADING RATE, Q =	1.0 GPD/SF
ABSORPTION AREA REQUIRED: 490 / 1.0 =	490 SF
BASAL AREA REQUIRED: 490 / 0.74 =	662 SF

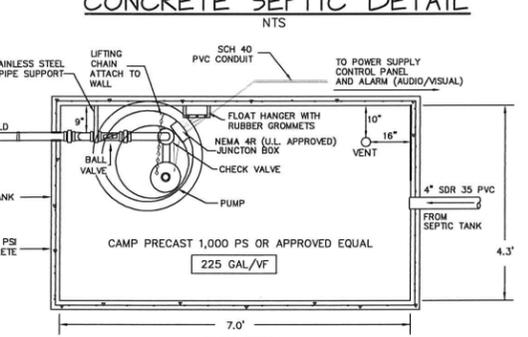
(2) 4' x 62' = 496 S.F. (1,589 S.F. OF BASAL AREA PROVIDED)



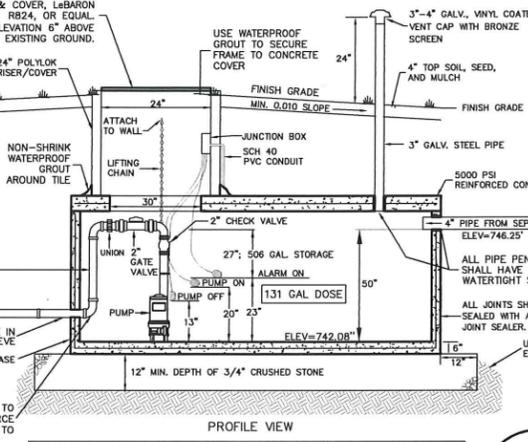
**CONCRETE SEPTIC TANK DETAIL**

NOTES:  
1. EXCAVATION MUST BE AT LEAST 12" WIDER AND LOWER THAN TANK SIZE.  
2. PROVIDE WATERPROOF PIPING CONNECTIONS USING PRE-FAB 4" PLASTIC BOOTS OR NON-SHRINK GROUTS.  
3. EXTERNALLY COAT CONCRETE SEPTIC TANK WITH TWO COATS OF A BITUMINOUS WATERPROOFING. THE TANK SHALL BE LEAKAGE TESTED PRIOR TO BACKFILLING. LATERALS TO THE PUMP TANK WITH WATERPROOF PVC CONDUIT.

**PLAN VIEW**



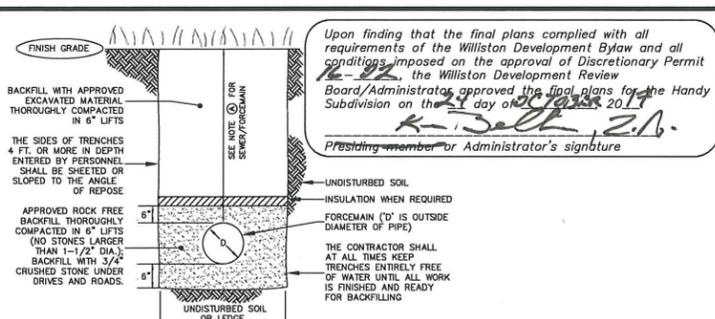
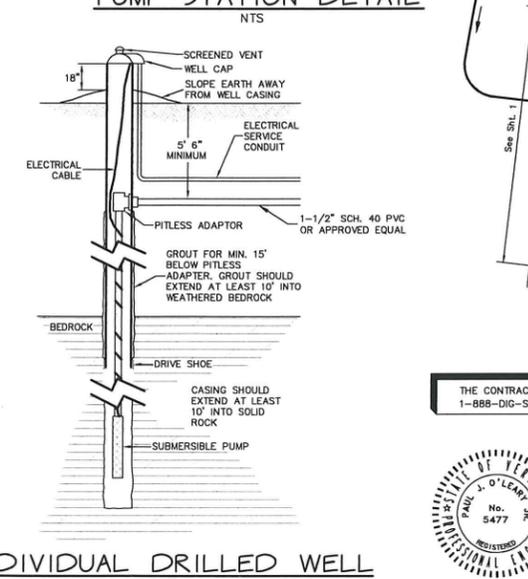
**SECTION VIEW**



**PUMP STATION DETAIL**

NOTE: IF THE TANK LOCATION OR ELEVATIONS CHANGE, FROM WHAT IS SHOWN SHOWN ON THE SITE PLAN, CONTACT THE ENGINEER

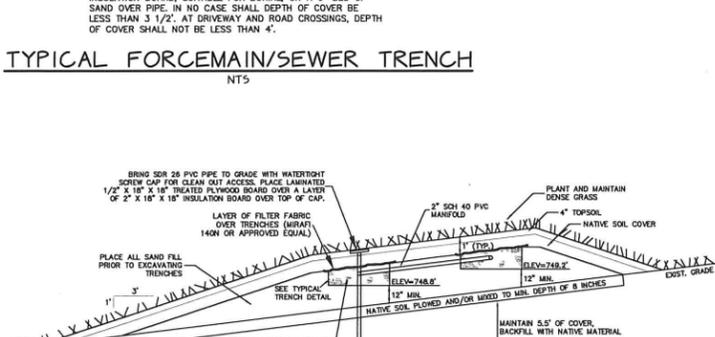
**INDIVIDUAL DRILLED WELL**



**TYPICAL FORCEMAIN/SEWER TRENCH**

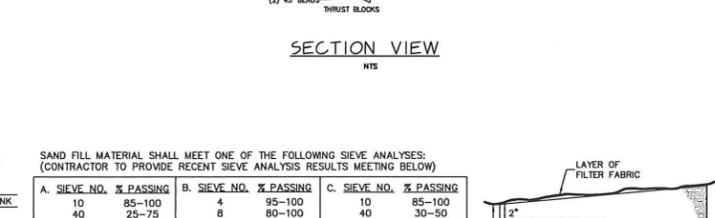
NOTE (A) (FOR SEWER AND FORCEMAIN TRENCHES):  
IF COVER IS LESS THAN 5'-6", PLACE 2" WIDE BY 4" THICK INSULATION BOARD, SUITABLE FOR BURIAL, ON A 6" BED OF SAND OVER PIPE. IN NO CASE SHALL DEPTH OF COVER BE LESS THAN 3 1/2'. AT DRIVEWAY AND ROAD CROSSINGS, DEPTH OF COVER SHALL NOT BE LESS THAN 4'.

**SECTION VIEW**



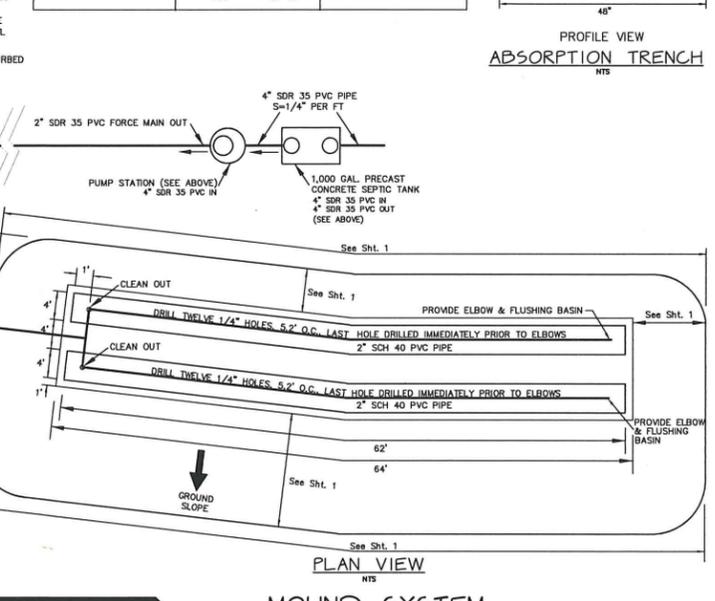
**SECTION VIEW**

**PLAN VIEW**



**PLAN VIEW**

**MOUND SYSTEM**



**MOUND SYSTEM**

THE CONTRACTOR SHALL NOTIFY "DIGSAFE" AT 1-888-DIG-SAFE PRIOR TO ANY EXCAVATION.

DATE	REVISION	BY
9/13/17	Revised for Final Plan Application	BWC
7/11/17	Revised per WW Comments	BWC

DESIGN: BWC  
DRAWN: BWC  
CHECKED: DWB/PJO  
SCALE:

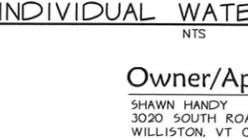
**HANDY SUBDIVISION**  
SOUTH ROAD AND ST. HILAIRE LANE WILLISTON, VT.  
2015-40

**O'LEARY-BURKE CIVIL ASSOCIATES, PLC**  
13 CORPORATE DRIVE  
PO BOX 117  
FAIR HAVEN, VT 05743  
E-MAIL: ocb@olearyburke.com

**WELL & SEPTIC DETAILS**

DATE 5/18/17  
JOB 2015-40  
FILE 2015-40-57  
PLAN SHEET 2

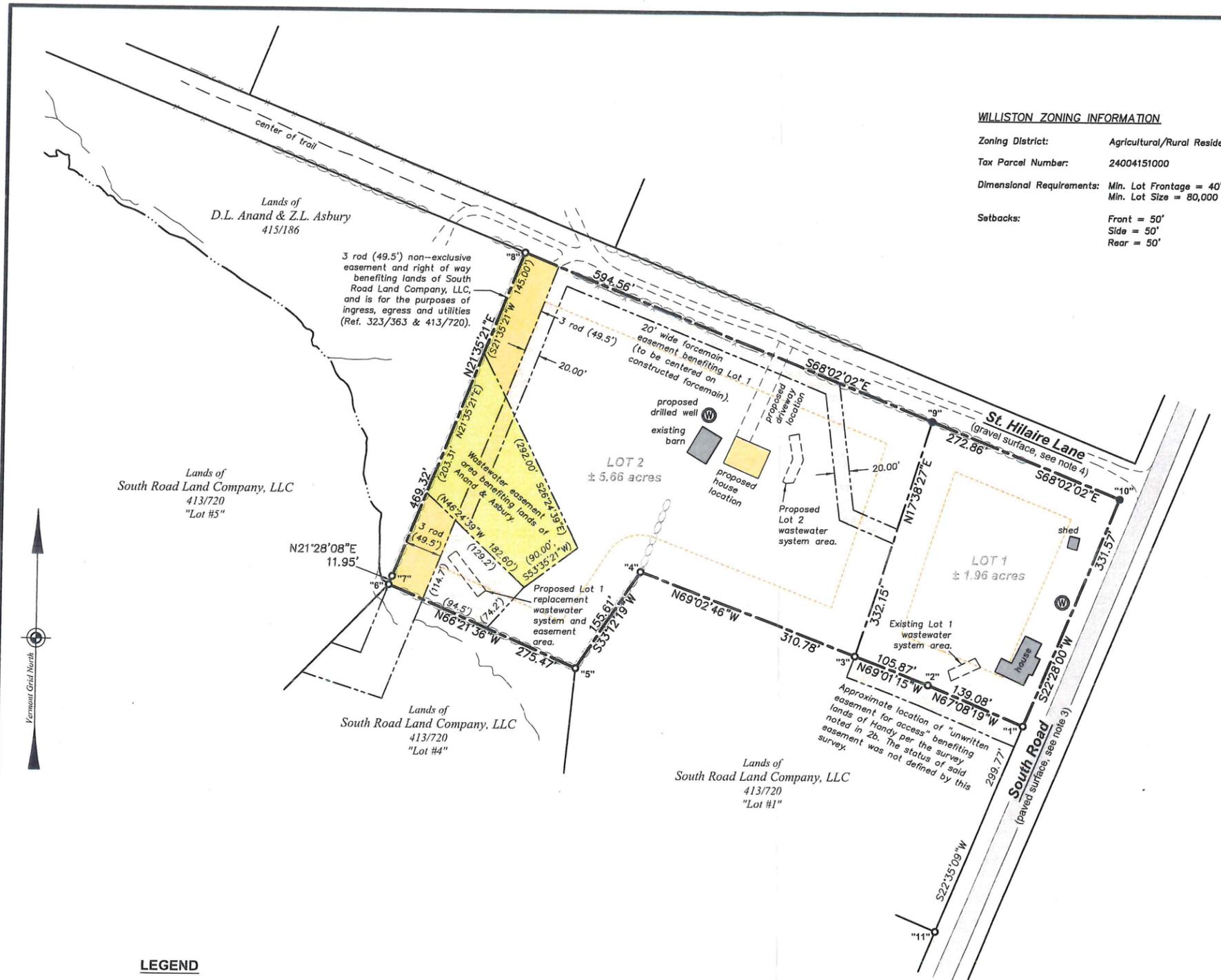
**INDIVIDUAL WATER SYSTEM**



**INDIVIDUAL WATER SYSTEM**

Owner/Applicant  
SHAWN HANDY  
3020 SOUTH ROAD  
WILLISTON, VT 05445





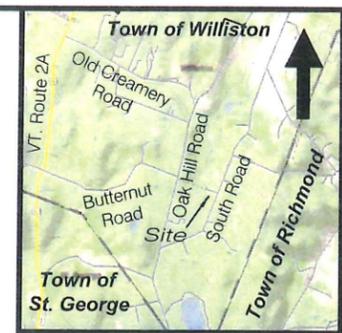
**WILLISTON ZONING INFORMATION**

Zoning District: Agricultural/Rural Residential (ARZD)

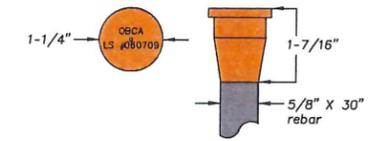
Tax Parcel Number: 24004151000

Dimensional Requirements: Min. Lot Frontage = 40'  
Min. Lot Size = 80,000 sq. ft.

Setbacks: Front = 50'  
Side = 50'  
Rear = 50'



**Typical Stamped Caps on Set Monumentation**  
(not to scale)



**CORNER LIST**

NOTE: (O.D.) indicates outside diameter of applicable monument.

CORNER 1: 1/2" rebar recovered 4" above grade.  
CORNER 2: 1/2" rebar recovered 4" above grade.  
CORNER 3: 1/2" rebar recovered 4" above grade.  
CORNER 4: 1/2" rebar recovered 4" above grade.  
CORNER 5: 1/2" rebar recovered flush with grade.  
CORNER 6: 1/2" rebar recovered 7" above grade.  
CORNER 7: 1" (O.D.) metal pipe recovered 4" above grade.  
CORNER 8: 1" (O.D.) metal pipe recovered leaning and was located at it's base.  
CORNER 9: 5/8" rebar TO BE SET  
CORNER 10: 5/8" rebar TO BE SET  
CORNER 11: 1/2" rebar recovered 4" above grade.

**SURVEY NOTES**

- The purpose of this survey is to retrace, monument and subdivide the lines and corners of lands deeded to Gabriel S. Handy and Gabriel G. Handy in Volume 435, Page 834 of the Town of Williston Land Records, dated September 15, 2008.
- The following plats recovered in the Town of Williston Land Records were used in aid of this survey:
  - Plat entitled; "Plat of Subdivision, Lands of Bruce L. & Jerri E. Brown, St. Hilaire Lane, Williston, Vermont", prepared by Albert W. Harris, L.S. 584, dated February 11, 1999, last revised August 21, 2000 and is recorded in the Williston Land Records.
  - Plat entitled; "Final Subdivision Plat, Property of South Road Land Company, LLC, South Road II Subdivision, Volume 413, Page 720, South Road, Williston, Vermont", prepared by Leonard H. Amblo, L.S. 695, dated February 22, 2005 and February 10, 2010, last revised October 25, 2011, and is recorded in the Williston Land Records.
- The westerly line of South Road was established at 2 rods (33') from the approximate center of the current traveled portion of the highway and from existing monumentation recovered on site. No attempt was made by this survey to determine or identify the record location, width or legal status of South Road.
- The southerly side line of St. Hilaire Lane was established along a best fit of existing physical evidence recovered in the form of wire fence, stone walls and existing monumentation and information taken from the plat noted in 2a. St. Hilaire Lane is designated as a private roadway per prior surveys of record. No attempt was made by this survey to determine or identify the record location, width or legal status of said roadway.
- Unless otherwise noted, the physical location of underground utilities were not determined by this survey.
- The information on this plat reflects conditions that were existing at the time of the survey both at the project location and in the land records of the Town of Williston as of June and November, 2015 and August, 2016.
- The direction of this survey is relative to Vermont Grid North (NAD83, VT-4400) as determined by RTK-GPS observations made on site June 10, 2015.

**LEGEND**

Found Corner Monument (See Corner List) ○

Set Corner Monument (See Corner List) ●

Corner Number (See Corner List) "7"

Drilled Well (W)

Subject Boundary Line ————

Subdivision Boundary Line - - - - -

Adjoining Boundary Line ————

Easement Boundary Line - · - · -

Zoning Setback Line - · - · -

Wire Fence — x — x — x — x —

Stone Wall ————

Water Course/Drainage ————

Approved by the Resolution of the Development Review Board of the Town of Williston, Vermont on the 11 day of APRIL, 2017, subject to the requirements and conditions of said Resolution.

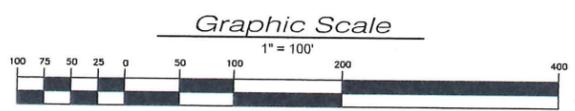
Signed this 24 day of OCT., 2017, by Ka. Bell, Z.A. E.A.  
Chairman of Clerk

Town of Williston Clerk's Office Received for Record

This \_\_\_ day of \_\_\_\_\_ A.D. 20\_\_\_ at \_\_\_ o'clock

\_\_\_ minutes \_\_\_ M. and filed in: \_\_\_\_\_

City Clerk



Seth W. Kittredge, L.S. 060709

THE INFORMATION ON THIS PLAT IS A COMPILATION AND REVIEW OF PERTINENT LAND RECORD INFORMATION, FIELD MEASUREMENTS, PAROL EVIDENCE AND OTHER STATE AND LOCAL DOCUMENTS. THIS PLAT IS IN ACCORDANCE WITH 27 V.S.A. 1403 AND CURRENT RULES SET FORTH BY THE VERMONT BOARD OF LAND SURVEYORS. THIS PLAT IS ONLY VALID WITH MY ORIGINAL SEAL AND SIGNATURE.	DATE SURVEY OBCA DESIGN OBCA DRAWN SWK CHECKED SWK/PJO SCALE 1"=100'	REVISION <input type="checkbox"/> RECORD DRAWING <input checked="" type="checkbox"/> FINAL <input type="checkbox"/> PRELIMINARY <input type="checkbox"/> SKETCH	<b>SUBDIVISION PLAT</b>  of Lands Owned by <b>GABRIEL S. HANDY &amp; GABRIEL G. HANDY</b>  3020 South Road Town of Williston, County of Chittenden, State of Vermont	DATE 8/31/2017 JOB 2015-40 FILE 2015-40-PLAT PLAN SHEET # <b>PL1</b>
	<b>O'LEARY-BURKE CIVIL ASSOCIATES, P.L.C.</b> 13 CORPORATE DRIVE ESSEX, VT PHONE: 978-9990 FAX: 978-9989 E-MAIL: obca@olearyburke.com			