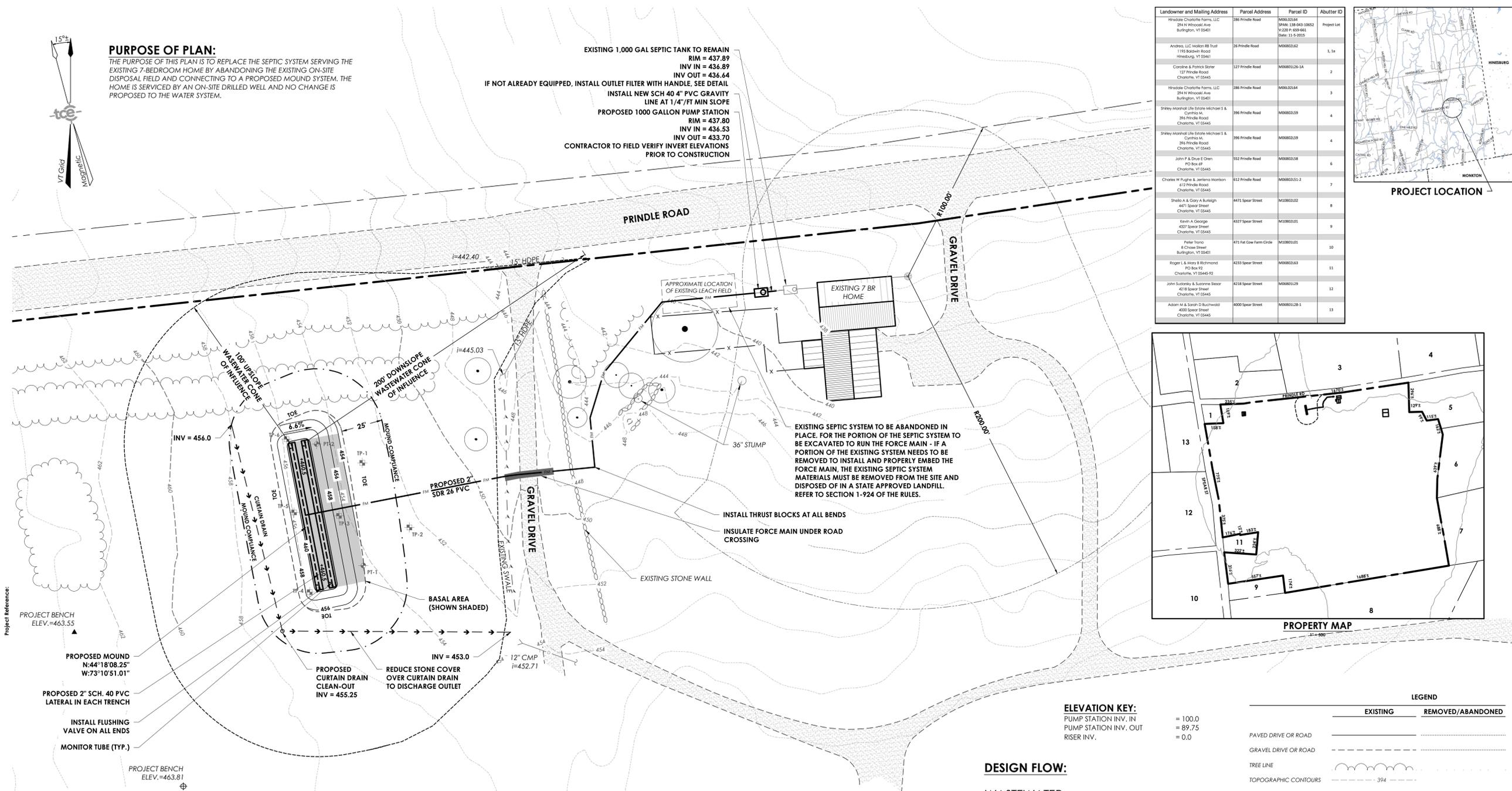




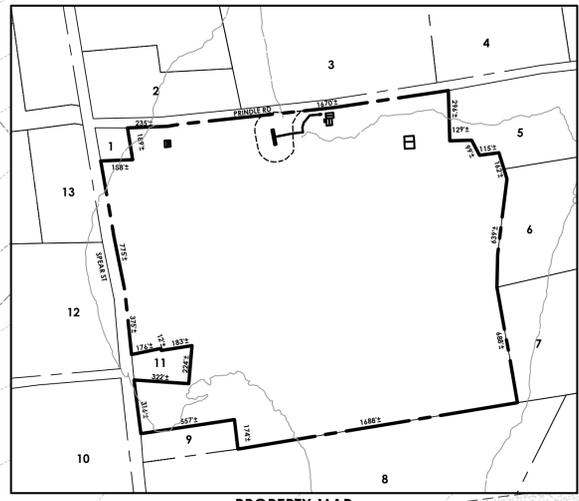
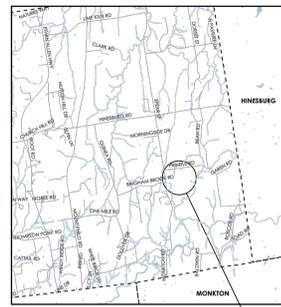
PURPOSE OF PLAN:

THE PURPOSE OF THIS PLAN IS TO REPLACE THE SEPTIC SYSTEM SERVING THE EXISTING 7-BEDROOM HOME BY ABANDONING THE EXISTING ON-SITE DISPOSAL FIELD AND CONNECTING TO A PROPOSED MOUND SYSTEM. THE HOME IS SERVICED BY AN ON-SITE DRILLED WELL AND NO CHANGE IS PROPOSED TO THE WATER SYSTEM.

EXISTING 1,000 GAL SEPTIC TANK TO REMAIN
RIM = 437.89
INV IN = 436.89
INV OUT = 436.44
IF NOT ALREADY EQUIPPED, INSTALL OUTLET FILTER WITH HANDLE, SEE DETAIL
INSTALL NEW SCH 40 4" PVC GRAVITY LINE AT 1/4" FT MIN SLOPE
PROPOSED 1000 GALLON PUMP STATION
RIM = 437.80
INV IN = 436.53
INV OUT = 433.70
CONTRACTOR TO FIELD VERIFY INVERT ELEVATIONS PRIOR TO CONSTRUCTION



Landowner and Mailing Address	Parcel Address	Parcel ID	Abutter ID
Hinsdale Charlotte Farms, LLC 294 N Winooki Ave Burlington, VT 05401	286 Prindle Road	M06102164 (SPAN: 138-043-10852) (DATE: 11-5-2015)	Project Lot
Andros, LLC (Molon 88 Trust) 1195 Boston Road Huntington, VT 05451	26 Prindle Road	M0602162	1, 1a
Condra & Pinski Siter 127 Prindle Road Charlotte, VT 05445	127 Prindle Road	M0610216-5A	2
Hinsdale Charlotte Farms, LLC 294 N Winooki Ave Burlington, VT 05401	286 Prindle Road	M06102164	3
Shelley Marshall (aka Estelle Michon) S & Cynthia M 396 Prindle Road Charlotte, VT 05445	396 Prindle Road	M0602159	4
Shelley Marshall (aka Estelle Michon) S & Cynthia M 396 Prindle Road Charlotte, VT 05445	396 Prindle Road	M0602159	4
John P & Dore E Chen PO Box 49 Charlotte, VT 05445	553 Prindle Road	M0602158	6
Charles W Fugate & Amanda Morrison 117 Prindle Road Charlotte, VT 05445	117 Prindle Road	M0602151-2	7
Shelley A & Clay A Burleigh 4471 Spear Street Charlotte, VT 05445	4471 Spear Street	M10802102	8
Kevin A George 4327 Spear Street Charlotte, VT 05445	4327 Spear Street	M10802101	9
Peter Romo 8 Chase Street Burlington, VT 05401	473 Fat Cow Farm Circle	M10801101	10
Roger L & Mary S Richmond PO Box 92 Charlotte, VT 05445-92	4233 Spear Street	M0602163	11
John Sutovsky & Suzanne Senor 4218 Spear Street Charlotte, VT 05445	4218 Spear Street	M0601129	12
Adam M & Sarah D Buchwald 4000 Spear Street Charlotte, VT 05445	4000 Spear Street	M0601128-1	13



Revisions	No.	Description	Date	By
△	1	WW Comments	11/16/17	ALR

TAX ID: M06102164
Use of these Drawings
1. Unless otherwise noted, these Drawings are intended for preliminary planning, coordination with other disciplines or utilities, and/or approval from the regulatory authorities. They are not intended as construction drawings unless noted as such or marked approved by a regulatory authority.
2. By use of these drawings for construction of the Project, the Owner represents that they have reviewed, approved, and accepted the drawings, obtained all necessary permits, and have met with all applicable parties/disciplines, including but not limited to, the Engineer and the Architect, to insure these plans are properly coordinated including, but not limited to, contract documents, specifications, owner/contractor agreements, building and mechanical plans, private and public utilities, and other pertinent permits for construction.
3. Owner and Architect, are responsible for final design and location of buildings shown, including an area measuring a minimum five (5) feet around any building and coordinating final utility connections shown on these plans.
4. Prior to using these plans for construction layout, the user shall contact TCE to ensure the plan contains the most current revisions.
5. These Drawings are specific to the Project and are not transferable. As instruments of service, these drawings, and copies thereof, furnished by TCE are its exclusive property. Changes to the drawings may only be made by TCE. If errors or omissions are discovered, they shall be brought to the attention of TCE immediately.
6. It is the User's responsibility to ensure this copy contains the most current revisions. If unsure, please contact TCE.

ELEVATION KEY:

PUMP STATION INV., IN	= 100.0
PUMP STATION INV., OUT	= 89.75
RISER INV.,	= 0.0

LEGEND

	EXISTING	REMOVED/ABANDONED
PAVED DRIVE OR ROAD	—————	-----
GRAVEL DRIVE OR ROAD	-----	-----
TREE LINE	~~~~~	~~~~~
TOPOGRAPHIC CONTOURS	-----	-----
STREAM	~~~~~	~~~~~
SEWER MAINS AND SERVICES	-----	-----
SEWER FORCEMAIN	-----	-----
WATER MAINS AND SERVICES	-----	-----
OVERHEAD POWER	-----	-----
UNDERGROUND POWER	-----	-----
PROPERTY LINE	-----	-----
ADJOINING PROPERTY LINE	-----	-----
EASEMENTS	-----	-----
FENCE	-----	-----

DESIGN FLOW:

WASTEWATER
EXISTING
7 BEDROOM HOME: 140 GPD/BEDROOM X 3 BEDROOMS + 70 GPD/BEDROOM X 4 BEDROOM = **700 GPD**

PROPOSED
7 BEDROOM HOME: 140 GPD/BEDROOM X 3 BEDROOMS + 70 GPD/BEDROOM X 4 BEDROOM = **700 GPD**

WATER
EXISTING
7 BEDROOM HOME: 140 GPD/BEDROOM X 3 BEDROOMS + 70 GPD/BEDROOM X 4 BEDROOM = **700 GPD**

PROPOSED
7 BEDROOM HOME: 140 GPD/BEDROOM X 3 BEDROOMS + 70 GPD/BEDROOM X 4 BEDROOM = **700 GPD**

PERCOLATION TEST RESULTS:
PT-1 21.8 MIN./IN.
PT-2 32.5 MIN./IN.

PROJECT INFORMATION:

- OWNER OF RECORD: HINSDALE CHARLOTTE FARMS, LLC
C/O IRENE HINSDALE
294 N. WINOOKI AVE.
BURLINGTON, VERMONT 05401
- PHYSICAL ADDRESS OF PROPERTY: 286 PRINDLE ROAD
CHARLOTTE, VERMONT 05445
- PARCEL SIZE: 92± ACRES (THIS SIDE OF PRINDLE ROAD)
136± ACRES (TOTAL)
- ZONING DISTRICT: RURAL

"I HEREBY CERTIFY THAT IN THE EXERCISE OF MY REASONABLE PROFESSIONAL JUDGMENT THE DESIGN-RELATED INFORMATION SUBMITTED WITH THIS APPLICATION IS TRUE AND CORRECT, AND THAT THE DESIGN INCLUDED IN THIS APPLICATION FOR A PERMIT COMPLIES WITH THE VERMONT WASTEWATER SYSTEM AND POTABLE WATER SUPPLY RULES AND THE VERMONT WATER SUPPLY RULES" (REF. ENVIRONMENTAL PROTECTION RULES CHAPTER 1 §1-306 (a)).
LAST REVISED 10/02/17

EXISTING CONDITIONS NOTES:

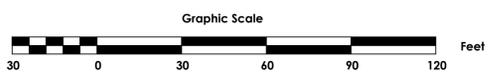
- THE PURPOSE OF THE EXISTING CONDITIONS PLAN IS TO DEPICT PERTINENT EXISTING CONDITIONS AS NOV. 3, 2017.
- BEARINGS SHOWN ARE BASED UPON VERMONT GRID NORTH.
- VERTICAL DATUM IS BASED ON NAVD88 (GEOID 12). A TRIMBLE R6 RTK GPS UNIT WAS EMPLOYED FOR THESE OBSERVATIONS.
- COORDINATE SYSTEM IS BASED ON VERMONT STATE PLANE (U.S. SURVEY FEET).
- THE LOCATION OF EXISTING UNDERGROUND UTILITIES AND IMPROVEMENTS SHOWN ARE BASED ON RESEARCH, UTILITY PLANS PROVIDED BY OTHERS, AND/OR SURFACE EVIDENCE ENCOUNTERED AND WERE OBTAINED IN A MANNER CONSISTENT WITH THE ORDINARY STANDARD OF PROFESSIONAL CARE AND HAVE NOT BEEN INDEPENDENTLY VERIFIED BY THE OWNER OR THE DESIGN ENGINEER. ADDITIONAL UTILITIES NOT SHOWN MAY EXIST. ENGINEER SHALL BE NOTIFIED IF ANY DISCREPANCIES ARE ENCOUNTERED. ACTUAL LOCATION OF UNDERGROUND UTILITIES MAY VARY. DIGSAFE MUST BE CONTACTED PRIOR TO ANY EXCAVATION. CALL 1-888-DIG SAFE (344-7233).
- PERIMETER BOUNDARIES SHOWN HEREON STRICTLY FROM TAX MAP INFORMATION ONLY. THIS PLAN DOES NOT DEPICT A FORMAL BOUNDARY SURVEY, UNLESS NOTED AS SUCH.

BASIS OF DESIGN FOR MOUND:
THE INTENT OF THIS DESIGN IS TO SHOW A STATE COMPLIANT WASTEWATER DISPOSAL SYSTEM FOR THE PROPOSED HOME WITH 36 INCHES OR MORE OF SOILS BETWEEN THE GROUND SURFACE AND EVIDENCE OF THE SEASONAL HIGH GROUNDWATER TABLE AND 48 INCHES OF SOIL TO ANY SIGNS OF LEDGE. THE DESIGN IS BASED ON THE PERFORMANCE BASED APPROACH OF THE STATE ENVIRONMENTAL PROTECTION RULES.

- DESIGN FLOW: 3 BEDROOMS @ 140 GPD/BDR + 4 BEDROOMS @ 70 GPD/BDR = 700 GPD
- APPLICATION RATE = 1.0 GPD/SF (MAX. MOUND SAND)
- DISPOSAL AREA REQUIRED = 700 GPD / 1 GPD/SF = 700 SF
- DISPOSAL AREA PROVIDED = 90' x 4' x 2 TRENCHES = 720 SF
- BASAL AREA REQUIRED = 700 GPD / 74 GPD/SF = 945.9 SF
- BASAL AREA PROVIDED = 2761 SF
- ORIFICE SPACING: (1) ORIFICE PER 25 SF
- ORIFICES REQUIRED: 720 SF / 25 SF/ORIFICE = 29 ORIFICES
USE 30 ORIFICES AT 1/4" - 1.28 GPM PER ORIFICE (MAINTAIN MINIMUM 1 PSI PER ORIFICE)
- MINIMUM REQUIRED FLOW: 30 ORIFICES @ 1.28 GPM/ORIFICE = 43.5 GPM
USE 57 GPM
- ORIFICE SPACING: USE 34 ORIFICES TOTAL (17 PER LATERAL) SPACE AT 64.5" OR 5'-4 1/2"
- PUMP SELECTION: GOULDS WE1512H CAPABLE OF 57 GPM @ 60 TDH

SOIL TEST PIT INFORMATION:
SOIL PROFILES WERE CONDUCTED ON 10/26/2017 BY AMANDA RAAB, TCE AND BRIAN TREMBACK, TOWN OF CHARLOTTE (L&D).

TEST PIT 1 0-14" TOPSOIL, FSL, DARK BROWN, SOME PEBBLES, ROOTS, FRIABLE 14-24" ORANGE BROWN, FSL, BLOCKYSUB, COBBLES, PEBBLES, 18" TO SHWT, DISTINCT MOTTLING BELOW 18", REDOX/DEPLETION, FEW ROOTS, FRIABLE 24-40" GREY BROWN, LOAM, BLOCKYSUB, COBBLES, PEBBLES, VERY MOTTLED, REDOX/DEPLETION, FIRM NO LEDGE TO DEPTH, NO SEEPS, 18" TO SHWT	TEST PIT 2 0-14" TOPSOIL, FSL, DARK BROWN, SOME PEBBLES, ROOTS, BONY/ANGULAR STONE, DENSE AT BOTTOM OF LAYER 14-20" ORANGE BROWN, FSL, BLOCKYSUB, COBBLES, PEBBLES, SHWT, FAINT MOTTLING BELOW 14", REDOX/DEPLETION, FEW ROOTS, DENSE, BONY 20-30" GREY BROWN, FSL, MOTTLED THROUGHOUT, FIRM 30-46" ORANGE BROWN LOAM, MOIST SOILS, SEEPS AT 30" NO LEDGE, SEEPS AT 30", 14" TO SHWT	TEST PIT 3 0-4" TOPSOIL, FSL, DARK BROWN, SOME PEBBLES, ROOTS, FRIABLE 4-16" TAN BROWN, FSL, STONES/PEBBLES, ROOTS, FRIABLE, BLOCKYSUB 16-34" ORANGE BROWN/GREY BROWN, FSL, DENSE, VERY PLATY, VERY MOTTLED, SOME COBBLES DOWN BELOW 34-46" GREY BROWN, VERY FINE SAND, DENSE, STONES/PEBBLES THROUGHOUT, MOTTLES NOT PRESENT, MOIST NO LEDGE, SEEPS AT 46", 16" TO SHWT	TEST PIT 4 0-7" TOPSOIL, FSL, DARK BROWN, SOME PEBBLES, ROOTS, FRIABLE 7-16" DARK BROWN, FSL, STONES/PEBBLES, ROOTS, DENSE, BLOCKYSUB, ANGULAR STONE, BONY, TRANSITION TO ORANGE BROWN NEAR BOTTOM OF LAYER 16-27" GREY BROWN, LOAM, FAINT MOTTLES, ROOTS TO 18", DENSE 27-43" GREY BROWN, LOAM, VERY MOTTLED REDOX/DEPLETION, STONES THROUGHOUT, SEEPS AT 40" NO LEDGE, SEEPS AT 40", 16" TO SHWT	TEST PIT 5 0-14" TOPSOIL, FSL, DARK BROWN, SOME PEBBLES, ROOTS, FRIABLE 14-22" TAN BROWN, FSL, STONES/PEBBLES, ROOTS TO 22", DENSE, BLOCKYSUB, COBBLES PRESENT, FAINT MOTTLING AT 18" 22-43" ORANGE BROWN GREY BROWN, FSL, MOTTLED THROUGHOUT, REDOX/DEPLETION, FIRM NO LEDGE, NO SEEPS, 18" TO SHWT	TEST PIT 6 0-6" TOPSOIL, FSL, DARK BROWN, SOME PEBBLES, ROOTS, FRIABLE 6-15" ORANGE BROWN, FSL, STONES/PEBBLES, ROOTS PRESENT, FRIABLE, BLOCKYSUB 15-19" ORANGE BROWN, FSL, STONES/PEBBLES, ROOTS PRESENT, MOTTLES PRESENT LOWER LAYER, FRIABLE, PLATY 19-45" GREY/ORANGE, FINE SAND, VERY MOTTLED, COBBLES/STONES/PEBBLES PRESENT, FRIABLE NO LEDGE, NO SEEPS, 19" TO SHWT
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Project Title
Hinsdale Charlotte Farms, LLC
286 Prindle Road
Charlotte, Vermont

Sheet Title
Wastewater Plan

Date:	11/10/17
Scale:	1" = 30'
Project Number:	17-124
Drawn By:	NPC
Project Engineer:	ALR
Approved By:	JPP
Field Book:	340

C3-01