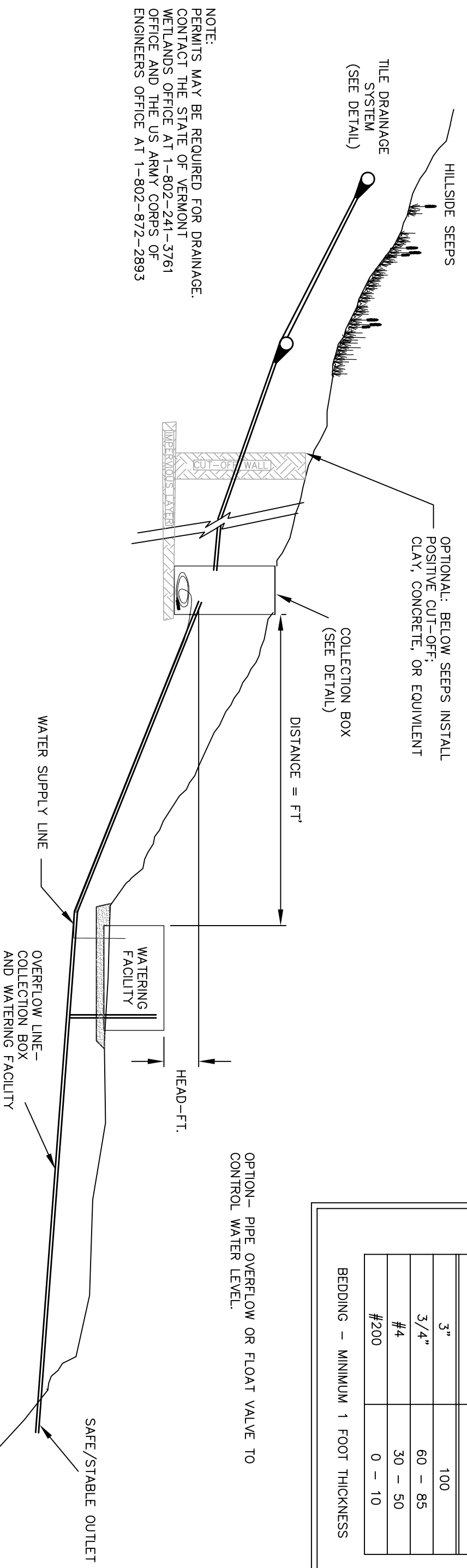


DETAIL OF GRAVITY FLOW SPRING DEVELOPMENT
(NOT TO SCALE)



NOTE:
PERMITS MAY BE REQUIRED FOR DRAINAGE.
CONTACT THE STATE OF VERMONT
WETLANDS OFFICE AT 1-802-241-3761
OFFICE AND THE US ARMY CORPS OF
ENGINEERS OFFICE AT 1-802-872-2893

GRAVEL GRADATION

SIEVE SIZE	% PASSING
3"	100
3/4"	60 - 85
#4	30 - 50
#200	0 - 10

BEDDING - MINIMUM 1 FOOT THICKNESS

SPRING DEVELOPMENT
SSD/GRAVITY FLOW

HAZARD CLASS
LOW

JOB CLASS

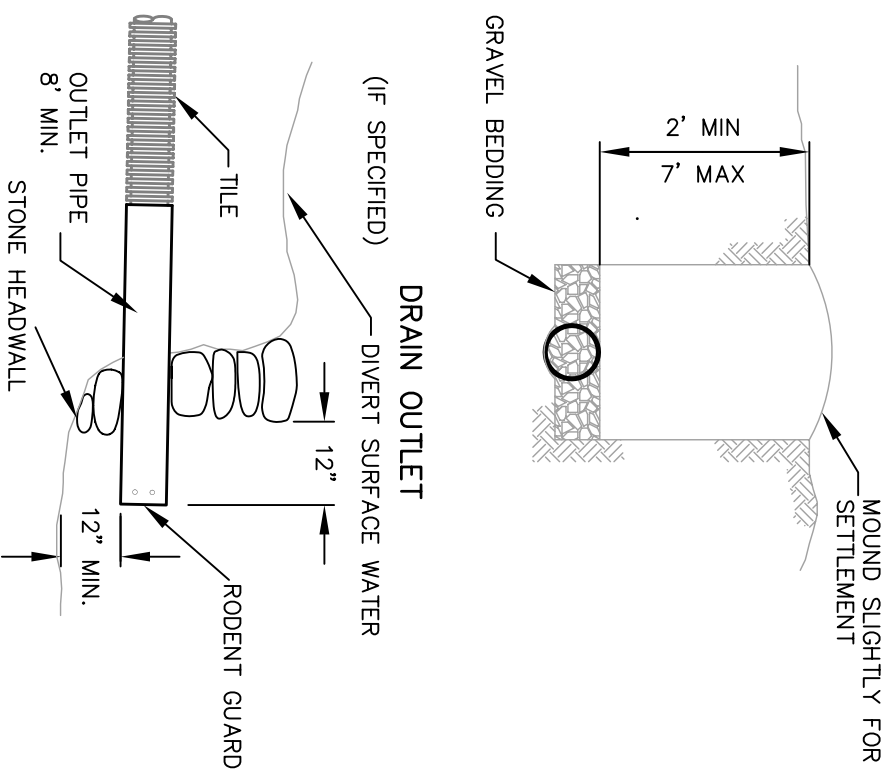
VERMONT



Date _____
Designed _____
Drawn _____
Checked _____
Approved by _____

TILE DRAINAGE DETAILS

TYPICAL SECTION



RODENT GUARDS

ALT. NO. 1
 1/4" Ø HOLES DRILLED AT 1-1/2" O.C. MIN. SIZE SHALL BE NO. 9 GALVANIZED WIRE.

ALT. NO. 2
 5/16" Ø HOLES DRILLED AT 1-1/2" O.C. HORIZONTAL BARS SHALL BE 1/4" GALVANIZED BOLTS.

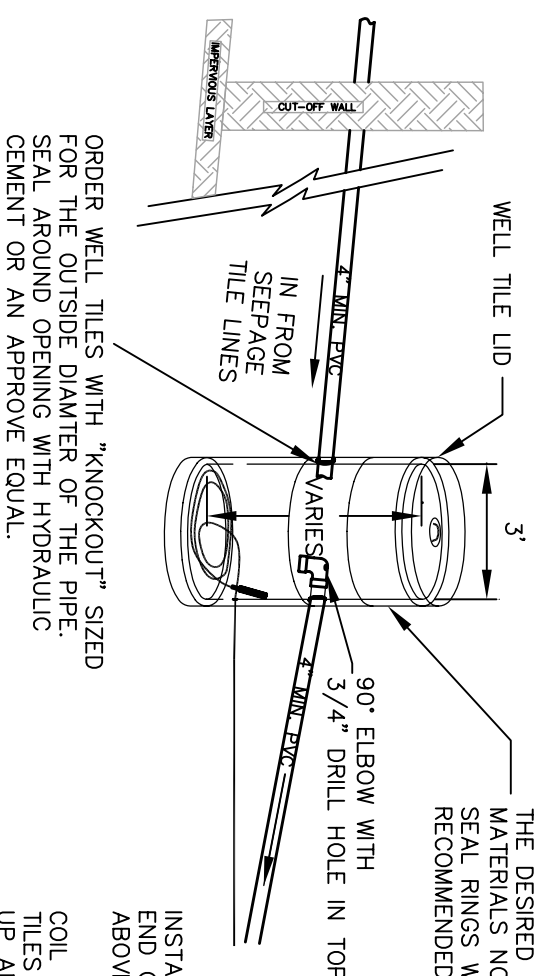
PIPE DIAMETER (IN.)	NUMBER OF WIRES/BOLTS
4"	2
6"	3
8"	5

CONSTRUCTION NOTES

1. THE TRENCH BOTTOM SHALL BE GROOVED TO PROVIDE SUPPORT FOR THE BOTTOM 1/3 OF THE PIPE WHEN FLEXIBLE PIPE IS INSTALLED. GRAVEL BEDDING MAY BE USED TO PROVIDE LATERAL SUPPORT FOR THE PIPE WHEN THE TRENCH BOTTOM CANNOT BE GROOVED.
2. ROUND PIPE PERFORATION SHALL BE 3/16". PLACE HOLES DOWN. SLOTS SHALL BE NO LONGER THAN 1-1/4".
3. AS SOON AS PLACED AND INSPECTED THE PIPE SHALL BE HAND COVERED WITH LOOSE, FRIABLE MATERIAL FROM THE TRENCH SIDES, OR FILTER GRAVEL TO A DEPTH OF 6" OVER THE PIPE.
4. DO NOT PUSH LARGE STONES INTO TRENCH.
5. THE OUTLET PIPE SHALL BE RIGID AND NON-PERFORATED. METAL PIPE SHALL BE USED IF THE HEADWALL IS CONCRETE OR IF DISCHARGE IS INTO A DRAINAGE CHANNEL OR STREAM.

DETAIL OF GRAVITY FLOW SPRING "COLLECTION" BOX

(NOT TO SCALE)



PRE-CAST CONCRETE WELL TILES CAN BE ORDERED IN VARIOUS LENGTHS OF "RINGS" TO PROVIDE THE DESIRED DIMENSIONS. USED MATERIALS NOT ACCEPTABLE. SEAL RINGS WITH MANUFACTURER'S RECOMMENDED MATERIALS.

NOTE:
 PLACE "WELL TILES" ON LEVEL SUBBASE OF CRUSHED STONE. BOTTOM OPTIONAL DEPENDING ON WATER SUPPLY AVAILABLE

INSTALL STRAINER/SCREEN ON INLET END OF WATER PIPE - SUSPEND END ABOVE FLOOR TO AVOID DEBRIS.
 COIL EXTRA WATER LINE IN WELL TILES LONG ENOUGH TO PULL LINE UP AND OUT OF BOX TO SHUT SYSTEM DOWN AND PROTECT IN FREEZING WEATHER.

DEPTH OF WELL TILES DEPENDENT UPON DEPTH OF SPRING/SEEPS. WELL TILES CAN BE DEEPER IN GROUND TO PROVIDE MORE STORAGE; APPROX. 50 GALLONS PER L.F. OF 36" I.D. WELL TILES

BILL OF MATERIALS

- _____ L.F. of _____ inch PVC or HDPE (NON-PERFORATED)
- _____ L.F. of _____ inch PVC or HDPE (PERFORATED)
- _____ L.F. of _____ inch HEAVY DUTY PE Water line (160 PSI)
- _____ S.Y. of _____ GEOTEXTILE - WOVEN FABRIC
- _____ C.Y. of _____ inch Clean Bank Run Gravel or Stone
- _____ C.Y. of _____ PSI test CONCRETE - (optional pad)

MISC. FIXTURES, ELBOWS, VALVES, FITTINGS, etc. as needed not identified separately.
 PRECAST CONCRETE WELL TILES - Meeting ASTM# C-75 AS NEEDED FOR DEPTH AND STORAGE REQUIREMENTS - SEE VT-574 FOR STORAGE REQUIREMENTS
 ALL COMPONENTS, STRUCTURES AND APPURTENANCES AS PER MANUFACTURERS RECOMMENDATIONS OR AS PER NRCS STANDARDS AND SPECIFICATIONAS
 REFERENCE SPECIFICATIONS - VERMONT STANDARDS 614, 574, 606, 620, 587.

THE NATURAL RESOURCES CONSERVATION SERVICE MAKES NO REPRESENTATION AS TO THE LOCATION OR EXISTENCE OF PUBLIC OR PRIVATE UTILITIES IN THE VICINITY OF INVESTIGATIONS OR CONSTRUCTION OPERATIONS CONDUCTED THROUGH ITS PROGRAM.
 THE NRCS WILL NOT BE HELD RESPONSIBLE FOR DAMAGE TO UTILITIES THAT OCCUR DURING THE INVESTIGATIONS OR CONSTRUCTION OPERATIONS.
 IF YOU KNOW THE EXISTENCE OF UNDERGROUND UTILITIES IN THE VICINITY OF THE PROPOSED WORK AREA, PLEASE INFORM THE USDA NRCS SO THAT THE APPROPRIATE ACTION CAN BE IMPLEMENTED.

DIG SAFE
 THE NEW VERMONT DIG SAFE STATE LAW REQUIRES THAT THAT ANYONE WHO EXCAVATES WITHIN AN UNDERGROUND UTILITY EASEMENT OR THE AREA OF A PUBLIC RIGHT OF PUBLIC RIGHT OF WAY MUST NOTIFY UTILITY COMPANIES AT LEAST 48 HOURS BEFORE DIGGING. THE UTILITIES IN VERMONT WHICH SUPPLY GAS, ELECTRICITY, TELEPHONE SERVICE, AND CABLE TELEVISION HAVE MANY MILES OF UNDERGROUND FACILITIES. IN ORDER TO PROTECT THESE UNDERGROUND FACILITIES AND MEET THE REQUIREMENTS OF THE LAW, THE UTILITIES HAVE ESTABLISHED A PUBLIC SYSTEM CALLED "DIG SAFE". ONE FREE PHONE CALL TO THE CENTER SATISFIES THE LAW AS ALL MEMBER OF UTILITIES WILL BE NOTIFIED PRIOR TO THE START OF DIGGING. SO CALL "DIG SAFE" BEFORE YOU DIG - AND BE SAFE!
 CALL 1-888-225-4977