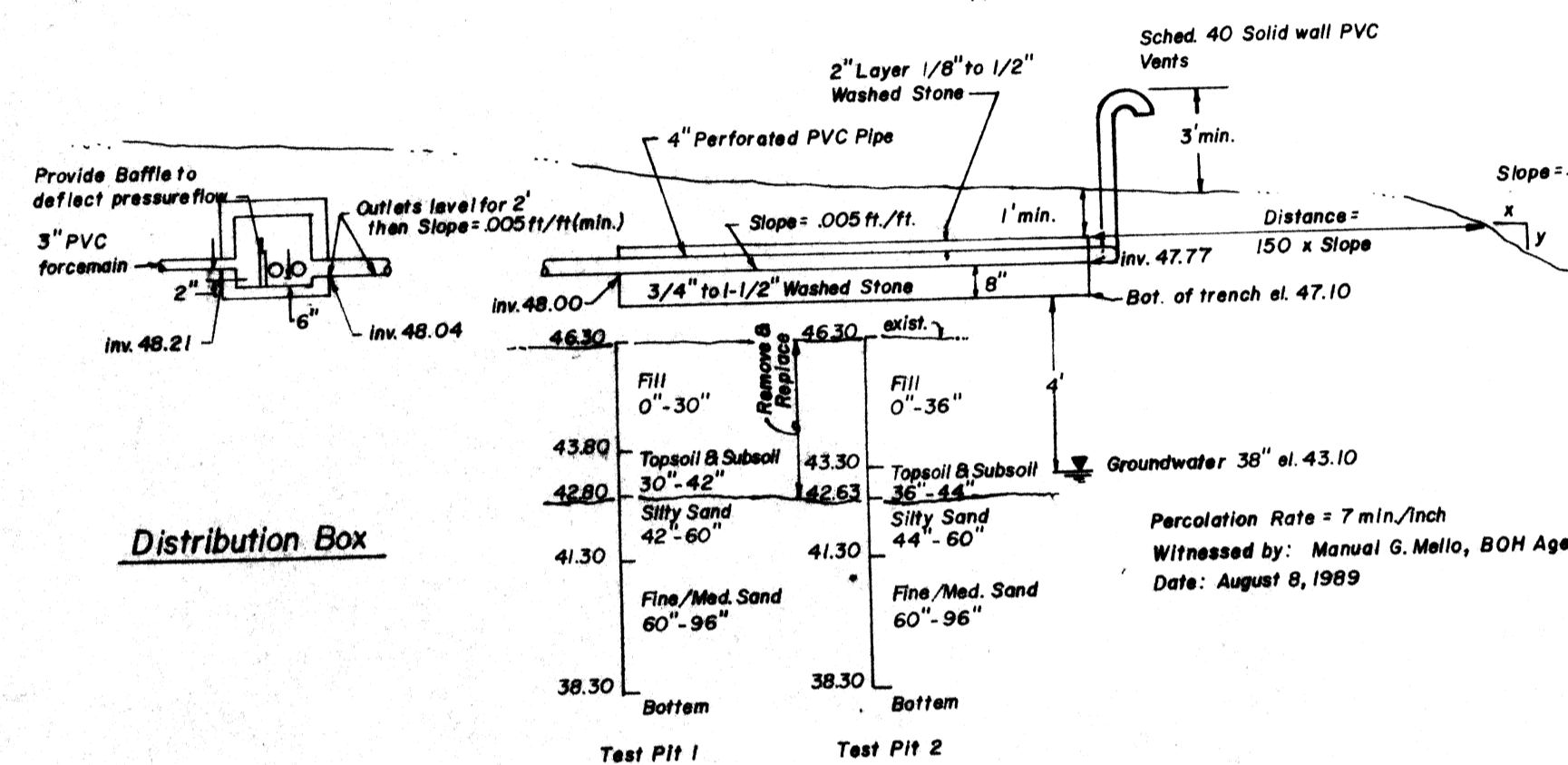


1500 Gallon Septic Tank
Rotondo ST 5x10-15, or approved equal (H2O min.)

Pump Chamber

BOYDCO Model 403A3 or approved equal



Distribution Box

Leaching Trenches

PROFILE
not to scale

Soil Test Data

NOTES AND SPECIFICATIONS

- Property information is from Deed reference Book 2147, Pages 270, Plymouth Registry. Verify the perimeter boundary by survey prior to construction.
- Elevations refer to NGVD datum. Benchmark: A U.S.C.&G.S. and State Survey Standard Disc, Stamped "MAAC-79.27", Set in a concrete monument located approximately 245' west of centerline of Hope Street. Elevation = 79.27 N.G.V.D.
- All construction shall conform to Title V of the Massachusetts Environmental Code, and the Seekonk Board of Health Regulations.
- All topsoil, subsoil and detritious material, if any, shall be excavated and removed from all areas below the leaching facility and to a distance of 25 feet in all directions when the leaching facility is above natural ground elevation; or for 10 feet in all directions when the leaching facility is below natural ground elevation. Fill material shall be clean coarse washed sand or other granular material, free from fines, clay, organic matter, and large boulders, having a percolation rate in its original and after placement of 2 minutes per inch or faster. Construct the trenches in this material.
- The stone around the leaching trench pipes shall consist of washed stone ranging from 3/4 to 1-1/2 inches in size and be free of iron, fines, and dust in place. It shall extend the full width of the trench, shall be not less than 8 inches deep beneath the bottom of the distribution pipes and shall extend at least to the top of the washed pipes. The stone shall be covered with at least a 2 inch layer of washed stone ranging from 1/8 to 1/2 inches in size, and be free of iron, fines and dust in place. All stone must have less than 0.2 percent material finer than a number 200 sieve as determined by the ASTM test methods T-11 and T-27 (latest edition). The contractor shall provide a grain size analysis to the engineer prior to placement of the stone.
- The minimum depth of cover material shall be 12 inches. Earth materials used to cover leaching systems shall be free of stumps, or waste construction material. Machinery which may crush or disturb the alignment of pipe in the disposal system shall not be allowed on any part of the disposal area. Finished surface including the side slopes and disturbed areas around the leaching trench area shall be loamed (4 inch minimum) and seeded, and maintained until established.
- Perforated and solid PVC pipe and fittings shall be tight jointed schedule 40.
- Open trenches shall be protected with hay bales and / or silt fencing to prevent surface runoff, silt and debris from entering the trench.
- Any smeared or compacted surfaces of each trench shall be raked to a depth of one inch, and loose material removed, before the stone is placed in each trench.
- The bottom of each trench shall be level.
- The Board of Health shall require inspection of all construction by the design engineer or by an agent of the Board of Health, and require such person to certify in writing that all work has been completed in accordance with the terms of the permit and the approved plan.
- No permanent structure may be constructed over the leaching facility.
- For proper performance, septic tank should be inspected at least once a year and pumped when the total depth of scum and solids exceeds 1/3 the liquid depth of the tank.

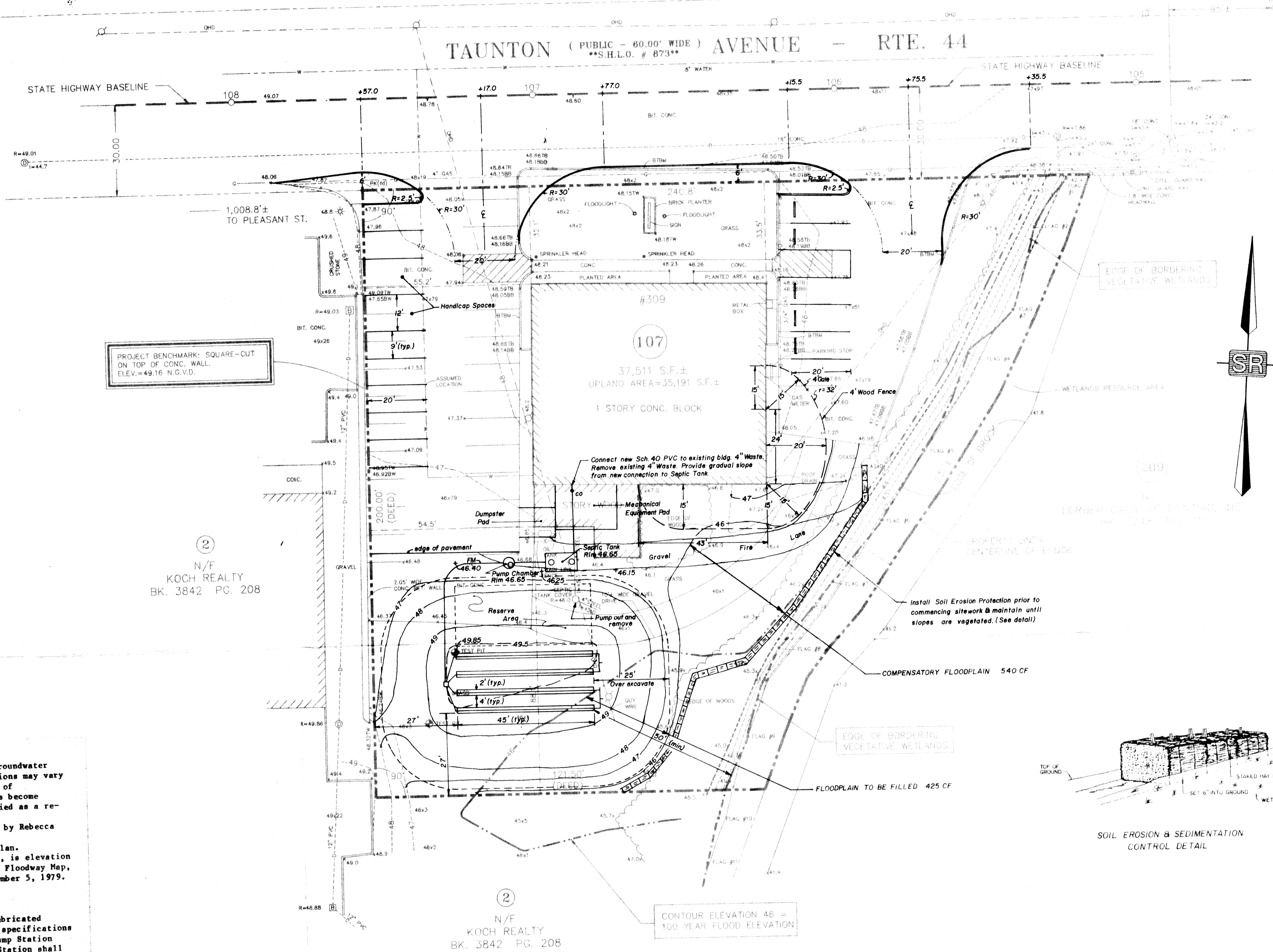
- Septic system design was based on subsurface soil and groundwater conditions observed at the test pit locations only. Conditions may vary at locations not investigated by test pits, or, in the case of groundwater levels, with seasonal fluctuations. Should this become evident during construction, the engineer needs to be notified as a re-evaluation of the design may be necessary.
- The edge of the bordering vegetated wetland was flagged by Rebecca Longley, Wetlands Biologist and in the field surveyed.
- Finished grading shall be done in accordance with the plan.
- The 100 year flood elevation, as indicated on this plan, is elevation 46 in accordance with the National Flood Insurance Program, Floodway Map, 46 in accordance with the National Flood Insurance Program, Floodway Map, Community Panel Number 250063 0003 A, Effective Date: September 5, 1979.

PUMP STATION SPECIFICATION

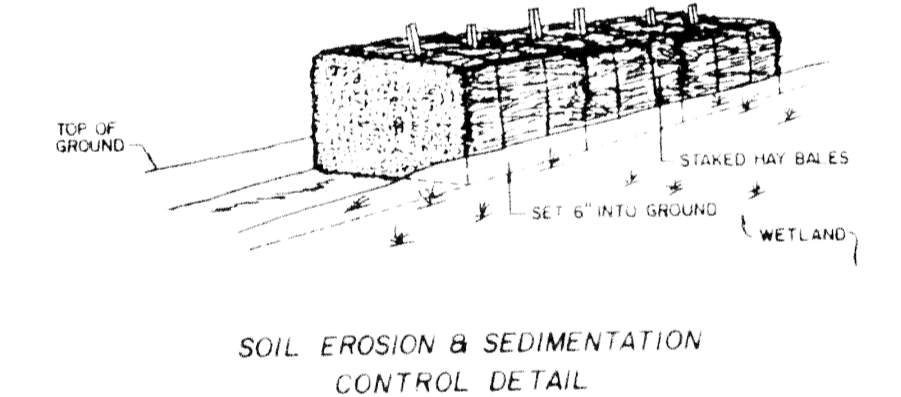
- General** - Contractor shall furnish and install (1) prefabricated concrete submersible pump station in accordance with these specifications and as indicated on this plan. Contractor shall furnish Pump Station Manufacturer's guarantee that all joints are watertight. Station shall be factory assembled and delivered to jobsite with all equipment installed and guaranteed by manufacturer. Five copies of operation and maintenance instructions shall be provided along with start up assistance to insure correct operation of the system. Five complete sets of shop drawings and performance data shall be provided on all equipment to the architect/engineer for approval prior to installation. Pump Station shall be a 403A3 as manufactured by Boydc, Inc., East Providence, Rhode Island or approved equal.
- Structure** - The structure shall be precast concrete sections in conformance with the latest ASTM specification C478 with minimum H2O loading required. The inside diameter shall be 4'-0" and wall thickness will be a minimum of 5" thick. Floor thickness will be a minimum of 6" thick. Joints between concrete sections shall be sealed with Kent Seal No. 2 butyl rubber joint sealant installed in accordance with manufacturer's instructions. All joints and openings are to be guaranteed water tight. Structure is to be provided with co-polymer polypropylene steel reinforced manhole steps conforming to ASTM 2146-68. Steps shall be installed 12" on center. Structure entrance hole shall be covered with a 24" diameter H2O loading manhole frame and solid cover as indicated on this plan.
- Pumps** - The two pumps shall be the submersible type sewage ejectors capable of passing 2" solids. Pump motors shall be 1/2 HP, 115v, 1 phase, 60 Hz submersible type or approved equal.
- Piping** - Force main piping shall be 3" schedule 40 PVC. Shutoff valves shall be full port 3" bronze gate valves. Check valves shall be heavy duty iron body, swing type, pressure rating 40 p.s.i.
- Controls** - Controls shall be cabinet mounted for a duplex pumping system. Panel shall be mounted in a locked enamel, gasketed, nema 12 enclosure to be located within the building at the location as directed by the owner/architect. Panel shall be supplied with circuit breakers, contactors, manual-off-automatic selector switches, pump running lights, lead pump indicating LED and plug in alternating relay. Pump actuating devices shall consist of three polyurethane enclosed mercury float switches. Float mounting devices shall be BOYDCO Model GRS consisting of 13# reinforced concrete anchor with cast in 30# stainless steel eye bolt; 1/4" galvanized chain; 304 stainless steel hook cast-in concrete cover designed to maintain proper tension on chain, and floats secured to the chain by plastic devices that are impervious to sewage.

DESIGN DATA

- Estimated Hydraulic Loading**
5,150 gsf x 75 G.P.D. per 1000 gsf = 387 G.P.D. (Title V)
Garbage Disposal is not proposed.
- Leaching Area Design Hydraulic Loading**
Seekonk Board of Health Regulations require 50X (Title V)
387 G.P.D. x 150X = 580 G.P.D.
- Septic Tank Size**
Design Loading = 387 G.P.D. x 150X = 580 gallons (Title V)
Minimum size = 1,250 gallons (Seekonk BOH requirement)
Tank Provided = 1,500 gallons (H2O Loading required)
- Design Percolation Rate = 7 minutes per inch**
Sidewall loading = 1.45 gal/sf (Title V)
Bottom loading = .67 gal/sf (Title V)
- Leaching Area Provided**
Sidewall: 45' x .67' x 2 sides x 4 trenches = 240 sf
Bottom: 45' x 2' x 4 trenches = 360 sf
Total Area Provided = 600 sf
- Leaching Rate Provided**
Sidewall: 240 sf x 1.45 gal/sf = 348 G.P.D.
Bottom: 360 sf x .67 gal/sf = 241 G.P.D.
Total Leaching Rate Provided = 589 G.P.D.



PLAN
scale: 1"=20'



SOIL EROSION & SEDIMENTATION CONTROL DETAIL

SR	SURVEY RESOURCES INC FOUR FIRST STREET BRIDGEWATER, MA. 02324 (MA) 1-800-872-2900		
	SCALE IN FEET 20 0 20		
BY	CALCD	DRAWN	CHKD
			APPRVD

Revisions	Date		
Fence Added	12/11/91		
Septic Tank Buoyancy Footings, Entry Drive, Vents	1/8/90		
SEPTIC SYSTEM IMPROVEMENT PLAN IN SEEKONK, MA. PREPARED FOR ADVANCED DIAGNOSTIC IMAGING, INC.			
SCALE	DATE	ACAD FILE	JOB NO.
1"=20'	11/07/89		890903