

EXISTING SYMBOLS LEGEND

- CONC. BOUND W/ LEAD PLUG
- EXISTING BENCHMARK
- EXISTING UNDERGROUND COMM.
- EXISTING STORM DRAIN
- EXISTING SANITARY SEWER
- EXISTING WATER MAIN
- EXISTING GAS MAIN
- EXISTING UNDERGROUND ELEC.
- EXISTING OVERHEAD ELEC.
- EXISTING 2" CONTOUR
- EXISTING 10' CONTOUR
- EXISTING STONE WALL
- EXISTING TREE LINE
- EXISTING QUARRAIL
- EXISTING WETLAND LINE
- EXIST. STREAM

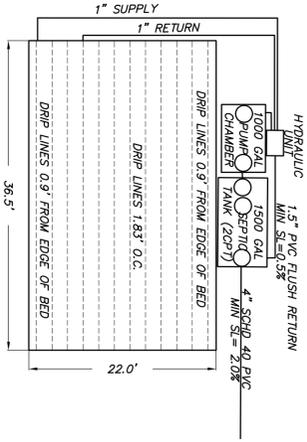
- IRON PIPE/IRON PIN
- EXISTING DRAIN MANHOLE
- EXISTING SEWER MANHOLE
- EXISTING CATCH BASIN
- EXISTING FLOW DIRECTION
- EXISTING FIVE HYDRANT
- EXISTING WATER GATE
- EXISTING UTILITY POLE
- EXISTING PERC TEST LOCATION
- EXISTING WELL

- PROPOSED REMAINING WALL
- PROPOSED DRAIN MANHOLE
- PROPOSED TRENCH DRAIN
- PROPOSED STORM DRAIN
- PROPOSED SEWER MANHOLE
- PROPOSED CATCH BASIN
- PROPOSED HYDRANT
- PROPOSED WATER GATE
- PROPOSED WATER SERVICE
- PROPOSED SEWER SERVICE
- PROPOSED GAS SERVICE
- PROPOSED GAS GATE

PROPOSED SYMBOLS LEGEND

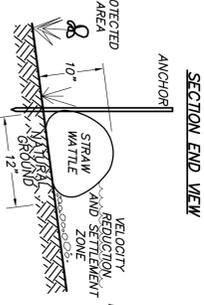
- PROPOSED STORM DRAIN
- PROPOSED SANITARY SEWER
- PROPOSED SEWER SERVICE
- PROPOSED WATER MAIN
- PROPOSED WATER SERVICE
- PROPOSED GAS MAIN
- PROPOSED UNDERGROUND ELEC.
- PROPOSED CONTOUR
- PROPOSED UNDERGROUND COMM.
- PROPOSED FLORED END
- PROPOSED SPOT GRADE
- PROPOSED STRAW WATTLES

EXISTING WALKWAY TO BE REMOVED AND REPLACED TO ORIGINAL CONDITIONS FOLLOWING CONSTRUCTION  
 PROVIDE NEW CLEANOUT TO GRADE PRIOR TO CHANGE IN DIRECTION AT BUILDING SEWER CONNECTION.  
 EXISTING SEPTIC TANK TO BE PUMPED OF CONTENTS, REMOVED, AND REPLACED WITH NEW 1500 GAL. 2 COMPARTMENT ST AND 1000 GAL PUMP CHAMBER  
 REMAINS OF EXISTING SEPTIC SYSTEM TO BE REMOVED AND REPLACED WITH CLEAN TILE MANHOLE. EXISTING SEPTIC DISCRETION OF THE BOARD OF HEALTH AGENT AND ENGINEER.

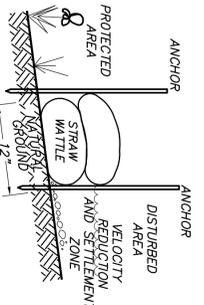


BED DETAIL

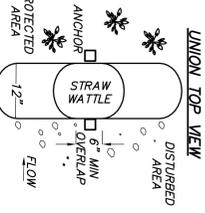
1"=10'



SECTION END VIEW



UNION END VIEW



UNION TOP VIEW

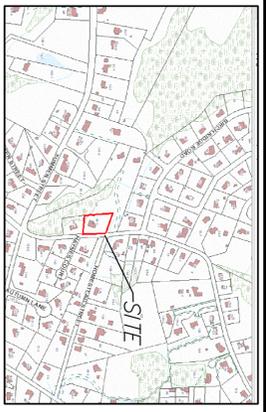
STRAW WATTLE DETAIL

NO SCALE

1. WATTLES SHALL BE CONSTRUCTED OF BIODEGRADABLE TUBULAR PLASTIC OR SIMILAR MATERIAL, AND SHALL BE FILLED WITH STRAW OR WOOD.
2. INSTALL WATTLES IN LOCATIONS SHOWN ON THE PLAN.
3. INSTALL THE WATTLES SWAYLY INTO A 3-5" DEEP TRENCH AND OVERLAP AS SHOWN IN THE DETAIL.
4. INSTALL ANCHOR STAKES ON DOWNHILL SIDE OF THE WATTLES, AND AT 5' SPACING GREATER THAN THE LENGTH OF THE WATTLE.
5. AT A MINIMUM, ANCHOR STAKES SHALL BE 3/4" SQUARE BY 24" LONG, EXISTING VEGETATION GREATER THAN 2" DIAMETER MAY BE USED AS ANCHORS.
6. INSPECT WATTLES AFTER RAINFALL EVENTS TO ENSURE THEY ARE IN CONTACT WITH THE SOIL AND THOROUGHLY ENTRENCHED, AND REPAIR AS NEEDED.
7. INSPECT DOWNGRADE SLOPE AFTER SIGNIFICANT RAINFALL EVENTS TO ENSURE SCOUR IS NOT OCCURRING UNDER THE WATTLES, AND REPAIR AS NECESSARY.

SOIL SUITABILITY ASSESSMENT

DEEP HOLE OBSERVATION NUMBER: 316-1		DATE: 3/8/16		SOIL EVALUATOR: JONATHAN MARKER, P.E.	
SURFACE EL.: 199.0		BLOCK: AGRN		E: CARLTON	
DEPTH	SOIL COLOR	TEXTURE	PERCENT SAND	PERCENT SILT	PERCENT CLAY
0-36"	10YR 5/2	SL	85	10	5
36-60"	10YR 5/2	SL	85	10	5
60-115"	10YR 5/2	SL	85	10	5



LOCUS MAP

NO SCALE

- GENERAL NOTES**
1. THIS DESIGN PLAN IS INTENDED SOLE FOR THE PURPOSE OF CONSTRUCTION. THE SEWAGE DISPOSAL SYSTEM ONLY ADDITIONAL TOWN AND STATE REGULATIONS MAY BE APPLICABLE TO THIS PROJECT INCLUDING BUT NOT LIMITED TO ZONING AND WETLANDS.
  2. SITE PLAN BASED ON EXISTING CONDITIONS. ALTHOUGH CARE HAS BEEN TAKEN TO SHOW EXISTING CONDITIONS, THERE MAY BE OTHER SUBSURFACE ITEMS THAT MAY BE ENCOUNTERED DURING EXCAVATION. THE CONTRACTOR SHALL INFORM THE DESIGNING ENGINEER UPON ENCOUNTERING SUCH DISCREPANCIES.
  3. PROPERTY BOUNDARIES SHOWN ARE THE RESULT OF A SITE PLAN 1706 OF 1965 RECORDED AT MIDDLESEX SOUTH REGISTRY AND SURVEYED BY MARKEY AND RUBIN INC ON 3/17/16.
  4. THE SEPTIC TANK SHALL BE PUMPED WHEN THE SLUDGE DEPTH IS 12" OR MORE. THE TANK SHALL BE PUMPED WHEN THE TOP OF THE SLUDGE LEVEL IS WITHIN 2" OF THE TOP OF THE OUTLET TEE OR 2" OF THE BOTTOM OF THE OUTLET TEE (310 CMR 15.340) ABOUT EVERY 2 YEARS OR WHEN REQUIRED BY THE LOCAL BOARD OF HEALTH.
  5. ANY SITE WORK WITHIN 100' OF A WETLAND IS SUBJECT TO REGULATION UNDER THE WETLANDS PROTECTION ACT AND PROTECTION AND THE LOCAL CONSERVATION COMMISSION.
  6. ALL KNOWN DRINKING WATER WELLS WITHIN 200 FEET OF INDICATED.
  7. THE PROPOSED SEWAGE DISPOSAL SYSTEM ARE SHOWN OR FOR THE USE OF A GARABAGE GRINDER.
  8. THE PROPOSED SEWAGE DISPOSAL SYSTEM IS INTENDED FOR DWELLING UNITS ONLY. WATER TREATMENT DISCHARGES SUCH AS WATER SOFTENERS SHALL BE DISCHARGED TO A SEPARATE DRYWELL.
  9. THERE ARE NO WATER SUPPLIES OR TRIBUTARIES THERETO LOCATED WITHIN 400' OF THE PROPOSED SYSTEM (SOURCE DEP WSP).

CONSTRUCTION NOTES

1. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO CONTACT DIGSAFE AT LEAST 72 HOURS PRIOR TO EXCAVATION OF PUBLIC OR PRIVATE PROPERTY. 1-888-DIG-SAFE
  2. EXCAVATION AND CONSTRUCTION PROCEDURES AND MATERIALS SHALL CONFORM TO THIS PLAN, TITLE 5, AND THE REQUIREMENTS OF THE BOARD OF HEALTH.
  3. ANY DEVIATION IN CONSTRUCTION FROM THIS PLAN SHALL VOID ANY CERTIFICATION MADE RELATIVE TO THE SYSTEM UNLESS APPROVED IN WRITING BY THE LOCAL APPLICABLE AUTHORITY AND THE DESIGNING ENGINEER.
  4. ALL PRECAST SYSTEM COMPONENTS SHALL BE EITHER WATERTIGHT BY MANUFACTURER'S SPECIFICATION AND WARRANTY, OR MADE WATERTIGHT USING ASPHALT OR SYNTHETIC POLYMER SEALER SPECIFIED BY THE CONCRETE OR SEALER MATERIAL MANUFACTURER.
  5. PRECAST CONCRETE TANKS SHALL BE SET ON A MINIMUM OF SIX INCHES OF MECHANICALLY COMPACTED CRUSHED STONE.
  6. DISTRIBUTION BOX OUTLET PIPES SHALL BE LAID LEVEL FOR THE FIRST TWO FEET OUT OF THE DISTRIBUTION BOX.
  7. DISTRIBUTION BOX SHALL BE SET ON EITHER SIX INCHES OF MECHANICALLY COMPACTED CRUSHED STONE, OR A SIX-INCH THICK CONCRETE PAD WITH AN AREA 1.5 TIMES THE BOTTOM AREA OF THE DISTRIBUTION BOX.
  8. DISTRIBUTION BOX SHALL BE EQUIPPED WITH A PVC TEE WITH THE TEE END OF PUMP CHAMBER OR WHEN THE SLOPE OF THE INLET LINE IS GREATER THAN 8%.
  9. SYSTEM SHALL BE VENTED THROUGH THE BUILDING PLUMBING OR AS SHOWN ON THE SYSTEM PROFILE.
  11. ALL UNSUITABLE MATERIAL ENCOUNTERED IN THE EXCAVATION SHALL BE REMOVED.
  12. ALL AGGREGATE USED FOR LEACHING STRUCTURES SHALL CONSIST OF DOUBLE WASHED STONE, THE SIZE SPECIFIED, AND FREE FROM IRON, FINES, AND DUST IN PLACE.
  13. THE 5' LIMIT OF EXCAVATION REQUIRES ALL ORGANIC MATERIAL WITHIN 5 FEET OF THE LEACHING FACILITY BE REMOVED AND REPLACED WITH WELL COMPACTED GRANULAR FILL MEETING THE REQUIREMENTS OF 310 CMR 15.255.
  14. ALL BACKFILL AND BREAKOUT FILL MUST BE CLEAN AND FREE OF STONES OR Boulders GREATER THAN 6" IN SIZE. TAILINGS, CLAY OR SIMILAR MATERIALS ARE PROHIBITED. SYSTEM SHALL BE GRADED TO PREVENT FLOODING OF STORMWATER OVER THE LEACHING FACILITY.
  15. PRIOR TO EXCAVATION, THE SEWAGE DISPOSAL SYSTEM CORNERS SHALL BE STAKED AND FLAGGED BY THE DESIGN ENGINEER OR A PROFESSIONAL LAND SURVEYOR.
  16. THE BOTTOM AND SIDES OF THE EXCAVATION SHALL BE LEVEL AND SCARIFIED. VEHICULAR TRAFFIC IN THE EXCAVATION SHOULD BE AVOIDED.
  17. PRIOR TO PLACEMENT OF FILL, THE BOTTOM SURFACE SHALL BE SCARIFIED AND RELATIVELY DRY. THE WATER TABLE IS ABOVE THE ELEVATION OF THE BOTTOM OF THE EXCAVATION, THE EXCAVATION SHALL BE DE-WATERED AS NECESSARY.
  18. PRIOR TO BACKFILL, ALL SYSTEM COMPONENTS SHALL BE MARKED WITH YELLOW TAPE IN ORDER TO LOCATE THEM ONCE BURIED.
- LOCAL REGULATION VARIANCE REQUESTS**
- THE FOLLOWING VARIANCES TO THE ACTON BOARD OF HEALTH RULES AND REGULATIONS ARE REQUESTED FOR THIS DESIGN:
- REGULATION 11-6.1.1: REQUIRES A MINIMUM OFFSET FROM THE LEACHFIELD TO WETLANDS OF 75'. A VARIANCE IS REQUESTED TO ALLOW THE SYSTEM TO BE INSTALLED IN THE SAME LOCATION AS THE EXISTING SYSTEM, WHICH IS 53' FROM THE WETLAND LINE.
- REGULATION 16-6.2.5: REQUIRES A 6' OFFSET FROM ESTIMATED SEASONAL HIGH GROUNDWATER TO THE LEACHING SYSTEM (SYSTEM IS LOCATED WITHIN 9' ABOVE). A VARIANCE IS REQUESTED TO ALLOW THE SYSTEM TO BE INSTALLED NO CLOSER THAN 5' TO GROUNDWATER.

#	DATE	REVISION	COMMENT

DATE: 3/17/16



**SUBSURFACE SEWAGE DISPOSAL DESIGN SITE PLAN**  
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 ACTON, MASSACHUSETTS

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SHEET 1 OF 2