GENERAL NOTES

1. THIS DESIGN PLAN IS INTENDED FOR THE SOLE PURPOSE OF CONSTRUCTION OF 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 DETERMINE SUBSURFACE CONDITIONS, THIS PLAN MAY NOT SHOW ALL UTILITIES, BEDROCK, BURIED DEBRIS OR 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 SURVEY ON 8/26/13. PROPERTY LINES BASED ON MAP B OF LONG LAKE RECORDED AT MIDDLESEX SO REGISRTY OF DEEDS AS PLAN 27 IN BOOK 362.
4. THE SEPTIC TANK SHALL BE PUMPED WHEN THE SLUDGE DEPTH IS WITHIN 12" OF THE BOTTOM OF THE OUTLET TEE. WHEN THE TOP OF THE SCUM LEVEL IS WITH 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 REQUIRES FILING WITH THE DEPARTMENT OF ENVIRONMENTAL PROTECTION AND THE LOCAL CONSERVATION COMMISSION.
6. ALL KNOWN DRINKING WATER WELLS WITHIN 200 FEET OF THE PROPOSED SEWAGE DISPOSAL SYSTEM ARE SHOWN OR INDICATED.
7. THE PROPOSED SEWAGE DISPOSAL SYSTEM IS NOT DESIGNED FOR THE USE OF A GARBAGE GRINDER.
8. THE PROPOSED SEWAGE DISPOSAL SYSTEM IS INTENDED FOR TREATMENT OF SANITARY SEWAGE PRODUCED BY SINGLE FAMILY 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 PROPSOED SYSTEM (SOURCE DEP WSPA)

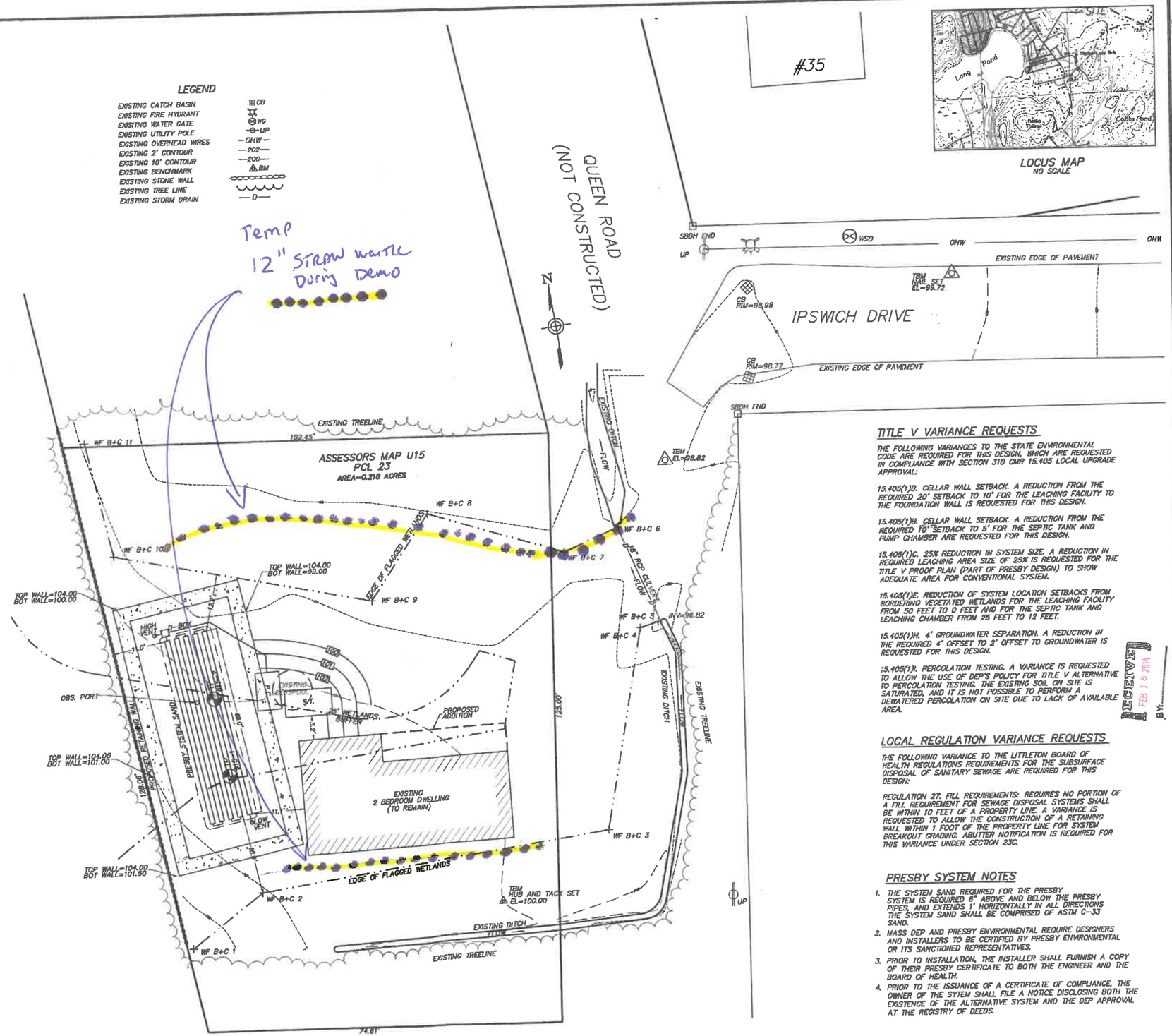
CONSTRUCTION NOTES

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 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 APPROVING 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 USE OF A 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 PONDING 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 MAGNETIC MARKING TAPE IN ORDER TO LOCATE THEM ONCE BURRIED.
19. ALL EXISTING SEPTIC SYSTEM COMPONENTS SHALL NE ABANDONED IN ACCORDANCE WITH 310CMR15.354, INCLUDING REMOVAL OF ALL PREVIOUS TANKS, PITS, PIPES, AND AGGREGATE. LIMIT OF TITLE V FILL SHALL BE EXCAVATED TO NATURALLY OCCURING MATERIAL.

GRAPHIC SCALE
SCALE: 1"=10'
0 5 10 20 30 FEET
0 2.5 5 10 METERS

LEGEND

EXISTING CATCH BASIN	CB
EXISTING FIRE HYDRANT	
EXISTING WATER GATE	WG
EXISTING UTILITY POLE	UP
EXISTING OVERHEAD WIRES	OHW
EXISTING 2' CONTOUR	202
EXISTING 10' CONTOUR	200
EXISTING BENCHMARK	BM
EXISTING STONE WALL	
EXISTING TREE LINE	
EXISTING STORM DRAIN	D



LOCUS MAP
NO SCALE

TITLE V VARIANCE REQUESTS

THE FOLLOWING VARIANCES TO THE STATE ENVIRONMENTAL CODE ARE REQUIRED FOR THIS DESIGN, WHICH ARE REQUESTED IN COMPLIANCE WITH SECTION 310 CMR 15.405 LOCAL UPGRADE APPROVAL:

15.405(1)B. CELLAR WALL SETBACK. A REDUCTION FROM THE REQUIRED 20' SETBACK TO 10' FOR THE LEACHING FACILITY TO THE FOUNDATION WALL IS REQUESTED FOR THIS DESIGN.

15.405(1)B. CELLAR WALL SETBACK. A REDUCTION FROM THE REQUIRED 10' SETBACK TO 5' FOR THE SEPTIC TANK AND PUMP CHAMBER ARE REQUESTED FOR THIS DESIGN.

15.405(1)C. 25% REDUCTION IN SYSTEM SIZE. A REDUCTION IN REQUIRED LEACHING AREA SIZE OF 25% IS REQUESTED FOR THE TITLE V PROOF PLAN (PART OF PRESBY DESIGN) TO SHOW ADEQUATE AREA FOR CONVENTIONAL SYSTEM.

15.405(1)E. REDUCTION OF SYSTEM LOCATION SETBACKS FROM BORDERING VEGETATED WETLANDS FOR THE LEACHING FACILITY FROM 50 FEET TO 0 FEET AND FOR THE SEPTIC TANK AND LEACHING CHAMBER FROM 25 FEET TO 12 FEET.

15.405(1)H. 4' GROUNDWATER SEPARATION. A REDUCTION IN THE REQUIRED 4' OFFSET TO 2' OFFSET TO GROUNDWATER IS REQUESTED FOR THIS DESIGN.

15.405(1)I. PERCOLATION TESTING. A VARIANCE IS REQUESTED TO ALLOW THE USE OF DEP'S POLICY FOR TITLE V ALTERNATIVE TO PERCOLATION TESTING. THE EXISTING SOIL ON SITE IS SATURATED, AND IT IS NOT POSSIBLE TO PERFORM A DEWATERED PERCOLATION ON SITE DUE TO LACK OF AVAILABLE AREA.

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LOCAL REGULATION VARIANCE REQUESTS

THE FOLLOWING VARIANCE TO THE LITTLETON BOARD OF HEALTH REGULATIONS REQUIREMENTS FOR THE SUBSURFACE DISPOSAL OF SANITARY SEWAGE ARE REQUIRED FOR THIS DESIGN:

REGULATION 27. FILL REQUIREMENTS: REQUIRES NO PORTION OF A FILL REQUIREMENT FOR SEWAGE DISPOSAL SYSTEMS SHALL BE WITHIN 10 FEET OF A PROPERTY LINE. A VARIANCE IS REQUESTED TO ALLOW THE CONSTRUCTION OF A RETAINING WALL WITHIN 1 FOOT OF THE PROPERTY LINE FOR SYSTEM BREAKOUT GRADING. ABUTTER NOTIFICATION IS REQUIRED FOR THIS VARIANCE UNDER SECTION 23C.

PRESBY SYSTEM NOTES

1. THE SYSTEM SAND REQUIRED FOR THE PRESBY SYSTEM IS REQUIRED 6" ABOVE AND BELOW THE PRESBY PIPES, AND EXTENDS 1' HORIZONTALLY IN ALL DIRECTIONS THE SYSTEM SAND SHALL BE COMPRISED OF ASTM C-33 SAND.
2. MASS DEP AND PRESBY ENVIRONMENTAL REQUIRE DESIGNERS AND INSTALLERS TO BE CERTIFIED BY PRESBY ENVIRONMENTAL OR ITS SANCTIONED REPRESENTATIVES.
3. PRIOR TO INSTALLATION, THE INSTALLER SHALL FURNISH A COPY OF THEIR PRESBY CERTIFICATE TO BOTH THE ENGINEER AND THE BOARD OF HEALTH.
4. PRIOR TO THE ISSUANCE OF A CERTIFICATE OF COMPLIANCE, THE OWNER OF THE SYTEM SHALL FILE A NOTICE DISCLOSING BOTH THE EXISTENCE OF THE ALTERNATIVE SYSTEM AND THE DEP APPROVAL AT THE REGISTRY OF DEEDS.

#	DATE	REVISION COMMENT

DATE: 1/7/14

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COMMONWEALTH OF MASSACHUSETTS PROFESSIONAL ENGINEER NO. 35828 TIMOTHY J. WILSON 2/18/14

COMMONWEALTH OF MASSACHUSETTS PROFESSIONAL LAND SURVEYOR NO. 38361 2-11-14

SUBSURFACE SEWAGE DISPOSAL DESIGN SITE PLAN

35 QUEEN ROAD
LITTLETON, MASSACHUSETTS

CLIENT:
HALIT CANDEMIR
35 QUEEN ROAD
LITTLETON, MASSACHUSETTS

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