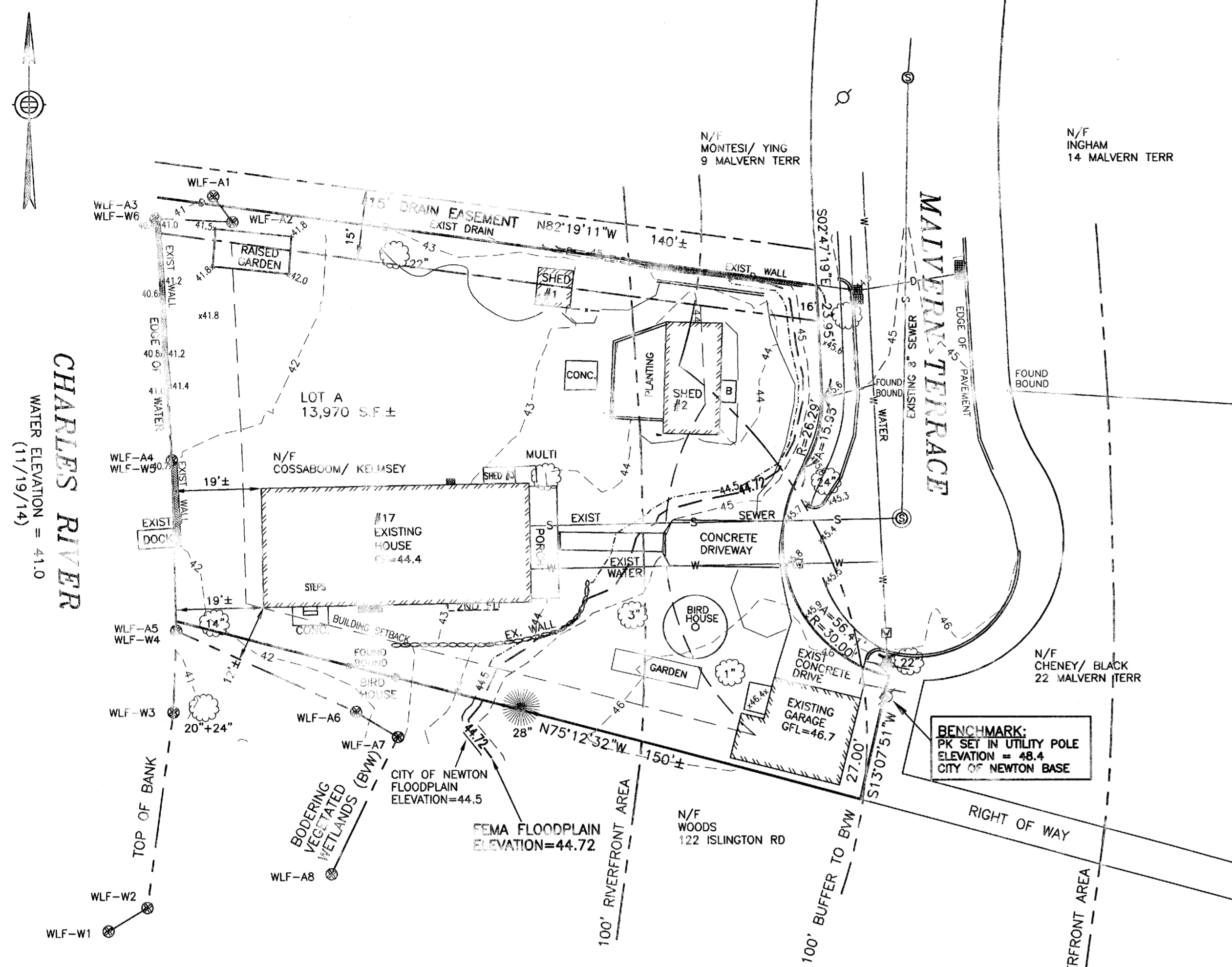
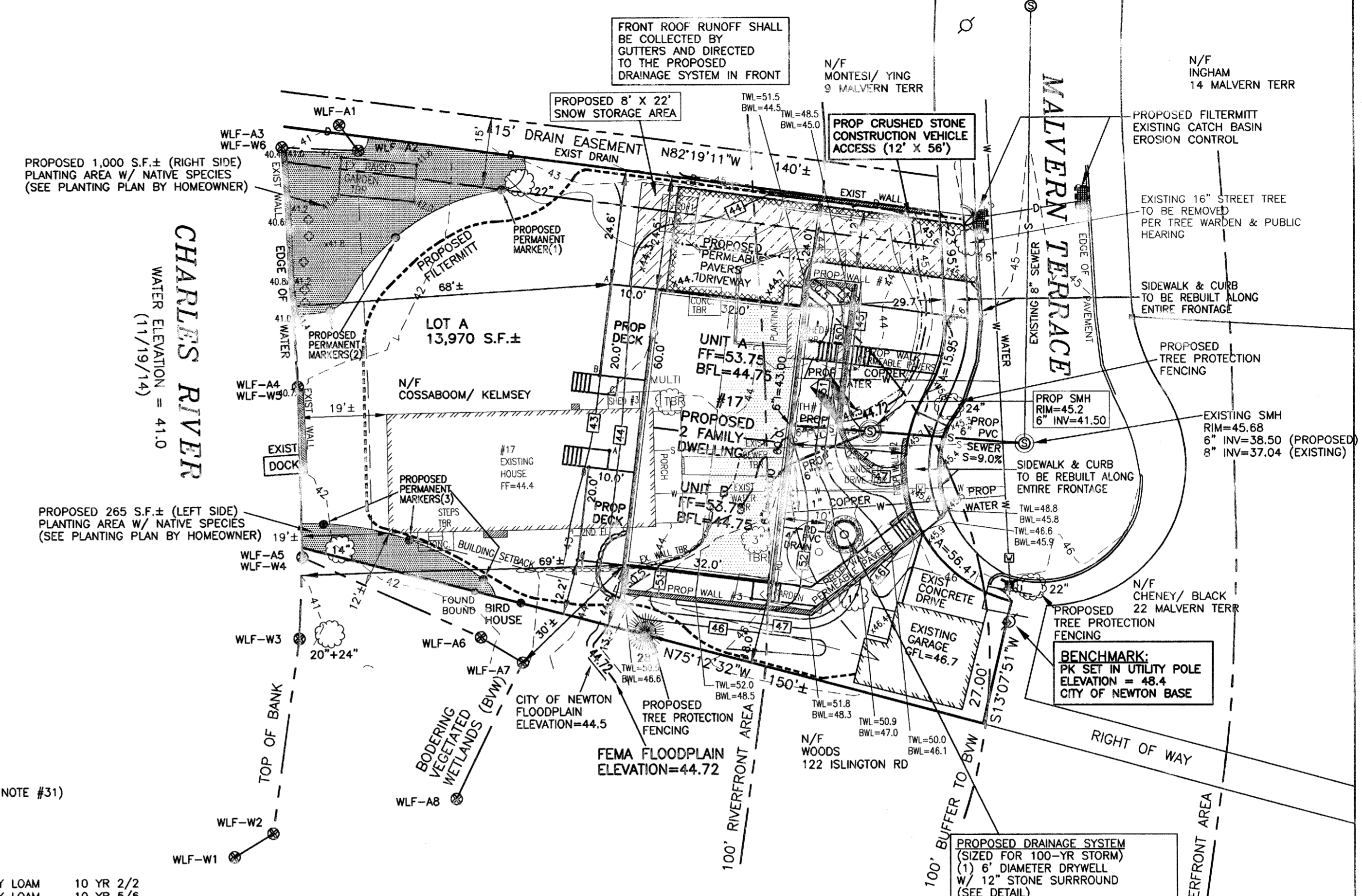


LEGEND

- UTILITY POLE
- WATER GATE
- ⊕ HYDRANT
- ⊕ GAS GATE
- ⊕ SEWER MANHOLE
- ⊕ DRAIN MANHOLE
- ⊕ CATCH BASIN
- TREE
- LIGHT POLE
- SIGN
- TBR TO BE REMOVED
- TBA TO BE ABANDONED
- TH#1 DEEP TEST HOLE
- PT#1 PERCOLATION TEST
- 71.4 X SPOT ELEVATION
- [] ELEVATION CONTOUR
- 71- EXISTING CONTOUR
- D- DRAIN LINE
- RD- ROOF DRAIN
- FD- FOUNDATION DRAIN
- W- WATER LINE
- S- SEWER LINE
- G- GAS LINE
- OHW- OVERHEAD WRES
- X- FENCE
- STONEWALL
- HEDGE
- TREE LINE
- WLF-# WETLAND FLAG



EXISTING CONDITIONS
 SCALE: 1 IN. = 20 FT.



PROPOSED CONDITIONS
 SCALE: 1 IN. = 20 FT.

SOIL LOG: (SEE NOTE #31)
 DECEMBER 3, 2015
 TEST HOLE #1 (TH#1)
 ELEVATION = 44.5
 0'-18" A SANDY LOAM 10 YR 2/2
 18'-32" B SANDY LOAM 10 YR 5/8
 32'-66" C SANDY LOAM 2.5 Y 5/4
 GROUNDWATER OBSERVED AT 36'

CUT/ FILL CALCULATIONS

CUT IN FEMA FLOODPLAIN:		FILL IN FEMA FLOODPLAIN:	
EXISTING HOUSE TBR	= 3,000 C.F.	PROPOSED FOUNDATION	= 1,180 C.F.
EXISTING SHED #1 TBR	= 110 C.F.	PROPOSED GRADING FILL	= 1,016 C.F.
EXISTING SHED #2 TBR	= 145 C.F.	PROPOSED DECK - UNIT A	= 2 C.F.
EXISTING SHED #3 TBR	= 35 C.F.	PROPOSED DECK - UNIT B	= 2 C.F.
PROPOSED GRADING CUT	= 60 C.F.	TOTAL FILL	= 2,370 C.F.
TOTAL CUT	= 3,350 C.F.		

CUT/ FILL BY FOOT:

ELEVATION	CUT	FILL
41.72-42.72	250 C.F.	0 C.F.
42.72-43.72	1,300 C.F.	420 C.F.
43.72-44.72	1,800 C.F.	1,780 C.F.
TOTAL	3,350 C.F.	2,370 C.F.

IMPERVIOUS AREAS

STRUCTURES	EXISTING	PROPOSED
DRIVEWAY	2,383 S.F.	2,331 S.F.
WALKS & PATIOS	477 S.F.	1,145 S.F.
WALLS & CURBS	109 S.F.	337 S.F.
	180 S.F.	53 S.F.
	3,077 S.F.	3,866 S.F.

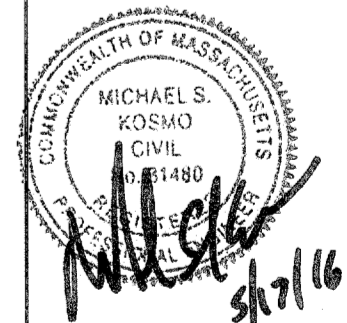
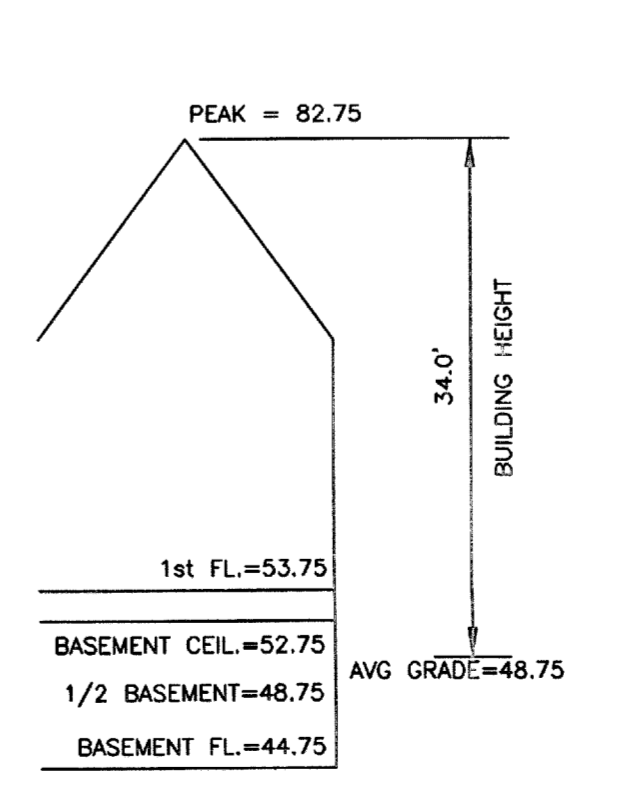
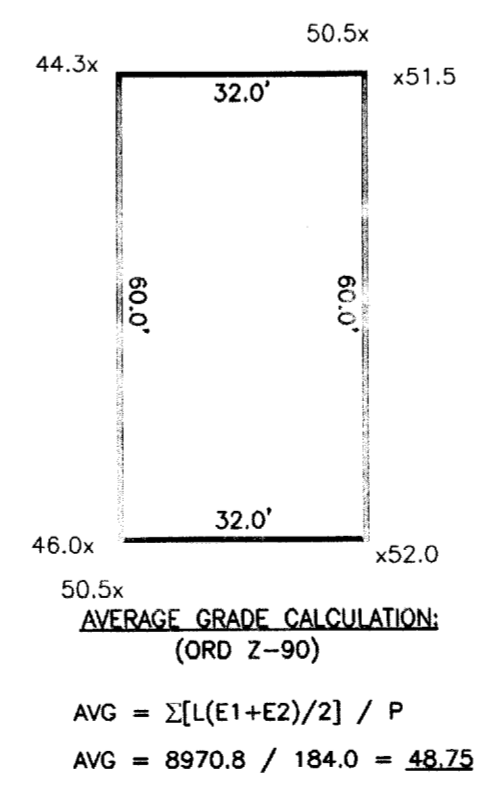
IMPERVIOUS INCREASE = 789 S.F.±

RIVERFRONT & WORK AREAS

- TOTAL RIVERFRONT AREA ON PROPERTY = 13,970 S.F.±
- DEGRADED AREA WITHIN THE RIVERFRONT (EXISTING) WITHIN 100' RIVERFRONT AREA = 3,178 S.F.±
 WITHIN 100'-200' RIVERFRONT AREA = 2,460 S.F.±
- ALTERATIONS WITHIN THE RIVERFRONT (PROPOSED) WITHIN 100' RIVERFRONT AREA = 3,540 S.F.±
 WITHIN 100'-200' RIVERFRONT AREA = 3,129 S.F.±
- ALTERATIONS WITHIN 100-YR FLOODPLAIN = 4,214 S.F.±
- ALTERATIONS WITHIN 100' BUFFER ZONE = 5,802 S.F.±

GENERAL NOTES

- ELEVATIONS REFER TO CITY OF NEWTON BASE. BENCHMARK: PK NAIL SET IN UTILITY POLE NEAR SOUTH EAST PROPERTY CORNER, ELEVATION = 48.4.
- THE LOCATIONS AND ELEVATIONS OF ALL EXISTING UTILITIES SHALL BE CONSIDERED APPROXIMATE AND MUST BE VERIFIED BY THE CONTRACTOR PRIOR TO ANY CONSTRUCTION. THE CONTRACTOR SHALL VERIFY THE LOCATIONS OF ANY CROSSINGS OF PROPOSED AND EXISTING UTILITIES.
- MASSACHUSETTS STATE LAW REQUIRES UTILITY NOTIFICATION AT LEAST THREE BUSINESS DAYS PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL CALL DIG-SAFE AT 1-888-344-7233 IN ORDER TO COMPLY WITH STATE LAW.
- ALL UTILITY CONSTRUCTION SHALL CONFORM TO THE CITY OF NEWTON GENERAL CONSTRUCTION DETAILS, LATEST EDITION, PREPARED AND ISSUED BY THE NEWTON ENGINEERING DEPARTMENT. COPIES MAY BE OBTAINED AT THE OFFICE OF THE CITY ENGINEER.
- NO WORK WITHIN ANY CITY OF NEWTON RIGHT-OF-WAY IS ALLOWED BETWEEN NOVEMBER 15TH AND APRIL 15TH. IF AN EMERGENCY EXISTS OR THERE ARE EXTENUATING CIRCUMSTANCES, THE APPLICANT MAY REQUEST PERMISSION FROM THE CITY ENGINEER, OR DESIGNEE FOR SUCH WORK.
- ALL CONSTRUCTION ACTIVITIES WITHIN THE CITY OF NEWTON RIGHT-OF-WAY MUST FULLY COMPLY WITH ALL CITY OF NEWTON CONSTRUCTION SPECIFICATIONS AS WELL AS 521 CMR 21.00 AND 22.00.
- PROPOSED SEWER PIPE SHALL BE 6" PVC SDR 35.
- PROPOSED WATER SERVICE SHALL BE 1" TYPE K COPPER.
- THIS PLAN IS THE RESULT OF AN INSTRUMENT SURVEY DONE ON THE GROUND NOVEMBER 19, 2014.
- ALL WORK SHALL BE SUBJECT TO THE INSPECTION BY AND APPROVAL OF THE CITY ENGINEER.
- NO EXCAVATION SHALL BE MADE BY THE CONTRACTOR IN ANY PUBLIC WAY OR UTILITY EASEMENT UNLESS AT LEAST FORTY-EIGHT (48) HOURS, EXCLUSIVE OF SATURDAYS, SUNDAYS, AND HOLIDAYS, BEFORE THE PROPOSED EXCAVATION IS TO BE MADE, HE HAS SUBMITTED, BY REGISTERED MAIL, WRITTEN NOTICE OF THE PROPOSED EXCAVATION TO THE FOLLOWING:
 a. SUCH PUBLIC UTILITY COMPANIES AS SUPPLY GAS, ELECTRICITY, AND TELEPHONE SERVICE IN THE CITY.
 b. SUCH PRIVATE COMPANIES AS PROVIDE CABLE TELEVISION SERVICE IN THE CITY.
 c. CITY OF NEWTON WATER & SEWER DEPARTMENT.
 SUCH NOTICE SHALL SET FORTH THE STREET NAME AND A REASONABLY ACCURATE DESCRIPTION OF THE LOCATION OF THE EXCAVATION.
- THE CONTRACTOR SHALL PROVIDE CITY OF NEWTON POLICE OFFICERS FOR THE DIRECTION AND CONTROL OF TRAFFIC, AS REQUIRED BY THE CITY ENGINEER.
- NO WORK SHALL BE PERFORMED UNTIL THE NECESSARY PERMITS ARE OBTAINED FROM THE CITY OF NEWTON PUBLIC WORKS DEPARTMENT.
- ALL TRENCHES IN PAVED STREETS SHALL BE TEMPORARILY PATCHED WITH 1.5 INCH DEPTH OF BITUMINOUS CONCRETE, LAID HOT AND MAINTAINED UNTIL THE PERMANENT PATCH IS INSTALLED.
- WITH THE EXCEPTION OF GAS UTILITY SERVICES, ALL UTILITY TRENCHES WITHIN ANY CITY OF NEWTON RIGHT-OF-WAY WILL BE BACKFILLED WITH TYPE IIE (EXCAVATABLE) CONTROLLED DENSITY FILL, AS SPECIFIED BY THE CITY OF NEWTON ENGINEERING SPECIFICATIONS.
- WARNING SIGNS SHALL CONFORM TO PAGE 12 OF THE CITY OF NEWTON GENERAL CONSTRUCTION DETAILS.
- IN CASES WHERE LEDGE OR BouldERS ARE ENCOUNTERED, EVERETT M. BROOKS CO. WILL NOT BE RESPONSIBLE FOR THE AMOUNT OF ROCK ENCOUNTERED.
- PROPOSED WALLS BY OTHERS.
- IF ANY PART OF THIS DESIGN IS TO BE ALTERED IN ANY WAY, THE DESIGN ENGINEER, AS WELL AS THE APPROVING AUTHORITIES, SHALL BE NOTIFIED IN WRITING BEFORE CONSTRUCTION.
- PRIOR TO AN OCCUPANCY PERMIT BEING ISSUED, AN AS-BUILT PLAN SHALL BE SUBMITTED TO THE ENGINEERING DIVISION IN BOTH DIGITAL FORMAT AND HARD COPY. THE PLAN SHOULD SHOW ALL UTILITIES, AND DRAINAGE (INCLUDING SWING-TIES), EASEMENTS AND FINAL GRADING.
- THE APPLICANT WILL HAVE TO APPLY FOR A STREET OPENING & UTILITIES CONNECTION PERMITS AS WELL AS A SIDEWALK CROSSING PERMIT WITH THE DPW.
- THE CONTRACTOR IS RESPONSIBLE FOR NOTIFYING THE DESIGN ENGINEER FOR INSPECTIONS OR AS-BUILT LOCATIONS. EVERETT M. BROOKS CO. WILL NOT PROVIDE AS-BUILT CERTIFICATION TO UNINSPECTED BACKFILLED UTILITIES. A MINIMUM OF 48 HOURS NOTICE IS REQUIRED PRIOR TO INSPECTIONS.
- WHEREVER THE PROPOSED SEWER PIPE DOES NOT HAVE A MINIMUM OF 10' HORIZONTAL SEPARATION OR IS NOT AT LEAST 18" VERTICALLY BELOW THE EXISTING WATER PIPE, THE SEWER PIPE SHALL BE ENCASED IN CONCRETE.
- THE CONTRACTOR SHALL NOTIFY THE ENGINEERING DIVISION 48 HOURS IN ADVANCE AND SCHEDULE AN APPOINTMENT TO HAVE THE DRAINAGE SYSTEM, WATER & SEWER SERVICES INSPECTED. THE SYSTEM & UTILITIES MUST BE FULLY EXPOSED FOR THE INSPECTOR. ONCE THE INSPECTOR IS SATISFIED, THE SYSTEM & UTILITIES MAY THEN BE BACKFILLED.
- THE EXISTING WATER & SEWER SERVICES SHALL BE CUT AND CAPPED AT THE MAIN AND BE COMPLETELY REMOVED FROM THE SITE AND PROPERLY BACKFILLED. THE ENGINEERING DIVISION MUST INSPECT THIS WORK; FAILURE TO HAVE THIS WORK INSPECTED MAY RESULT IN THE DELAY OF ISSUANCE OF THE UTILITY CONNECTION PERMIT.
- IF A CERTIFICATE OF OCCUPANCY IS REQUESTED PRIOR TO ALL SITE WORK BEING COMPLETED, THE APPLICANT WILL BE REQUIRED TO POST A CERTIFIED BANK CHECK IN THE AMOUNT TO COVER THE REMAINING WORK. THE CITY ENGINEER SHALL DETERMINE THE VALUE OF THE UNCOMPLETED WORK.
- THE PROPOSED SEWER SERVICE LINE WILL NEED TO BE PRESSURE TESTED PRIOR TO USE.
- ALL TRENCH EXCAVATION CONTRACTORS SHALL COMPLY WITH MASSACHUSETTS GENERAL LAWS CHAPTER 82A, TRENCH EXCAVATION SAFETY REQUIREMENTS, TO PROTECT THE GENERAL PUBLIC FROM UNAUTHORIZED ACCESS TO UNATTENDED TRENCHES. TRENCH EXCAVATION PERMIT REQUIRED. THIS APPLIES TO ALL TRENCHES ON PUBLIC AND PRIVATE PROPERTY.
- APPROVAL OF THIS PLAN BY THE CITY OF NEWTON ENGINEERING DIVISION IMPLIES THAT THE PLAN MEETS THE MINIMAL DESIGN STANDARDS OF THE CITY OF NEWTON. HOWEVER, THE ENGINEERING DIVISION MAKES NO REPRESENTATIONS AND ASSUMES NO RESPONSIBILITY FOR THE DESIGN(S) IN TERMS OF SUITABILITY FOR THE PARTICULAR SITE CONDITIONS OR OF THE FUNCTIONALITY OR PERFORMANCE OF ANY ITEMS CONSTRUCTED IN ACCORDANCE WITH THE DESIGN(S). THE CITY OF NEWTON ASSUMES NO LIABILITIES FOR DESIGN ASSUMPTIONS, ERRORS OR OMISSIONS BY THE ENGINEER OF RECORD.
- WETLAND DELINEATION BY SCOTT GODDARD, GODDARD CONSULTING, LLC, NORTHBOROUGH, MA ON NOVEMBER 5, 2014.
- SOIL PERCOLATION DESIGN RATE = 5 MPI (FROM SOIL MAPS)
- ALL TOPSOIL, SUBSOIL OR IMPERVIOUS SOIL MUST BE EXCAVATED AND REMOVED BELOW THE LEACHING DRYWELL AND TO A DISTANCE 5' LATERALLY IN ALL DIRECTIONS BEYOND THE SIDES OF THE DRYWELL. BACKFILL AS REQUIRED WITH A CLEAN GRANULAR SAND, FREE FROM ORGANIC MATTER AND DELETERIOUS SUBSTANCES. THE SAND SHALL HAVE A PERCOLATION RATE OF 2 MINUTES PER INCH OR FASTER.
- PRIOR TO DEMOLITION & CONSTRUCTION, AND UPON COMPLETION OF ALL CONSTRUCTION, THE APPLICANT SHALL HAVE THE DRAIN LINE IN THE CITY EASEMENT INSPECTED VIA CLOSED CIRCUIT TELEVISION INSPECTION (CCTV). THE ENGINEER & UTILITY DIVISION SHALL BE GIVEN 48 HOUR PRIOR NOTICE TO THE DATE OF THE CCTV INSPECTION TO ARRANGE AN INSPECTOR TO WITNESS THE INSPECTION.
- THE OWNERSHIP, OPERATION AND MAINTENANCE OF THE PROPOSED DRAINAGE SYSTEM AND ALL APPURTENANCES INCLUDING CONFORM TO THE CITY'S CONSTRUCTION STANDARDS.
- THE APPLICANT WILL HAVE TO APPLY FOR A BUILDING PERMIT WITH THE INSPECTORIAL SERVICE DEPARTMENT.
- THE APPLICANT'S CONTRACTOR SHALL APPLY WITH THE DPW FOR UTILITIES CONNECTION PERMITS. NOTE THAT THE WINTER WATERSHED DIVISION WILL BE IN AFFECT ON DECEMBER 15TH. NO EXCAVATIONS WILL BE ALLOWED WITHIN PUBLIC RIGHT OF WAYS UNTIL APRIL 15TH.
- ALL SITUATION CONTROL SYSTEMS SHALL BE INSTALLED AND INSPECTED BY THE CONSERVATION COMMISSION AGENT(S) PRIOR TO ANY CONSTRUCTION.
- PRIOR TO A REQUEST FOR A CERTIFICATION OF COMPLIANCE AN AS-BUILT PLAN SHALL BE SUBMITTED TO THE ENGINEERING DIVISION IN BOTH DIGITAL FORMAT AND IN HARD COPY. THE PLAN SHALL SHOW ALL UTILITIES AND FINAL GRADES, ANY EASEMENTS AND FINAL GRADING, IMPROVEMENTS AND LIMIT OF RESTORATION WORK.
- ALL SITE MUST BE COMPLETED BEFORE REQUESTING A CERTIFICATE OF OCCUPANCY.



SITE PLAN OF LAND IN NEWTON, MA

17 MALVERN TERRACE
 SCALE: 1 IN. = 20 FT.
 DATE: MARCH 21, 2016
 DRAWN: ES
 CHECK: MSK & BB
 REVISIONS:
 3/23/16 VARIOUS REVISIONS ES
 5/4/16 VARIOUS REVISIONS ES
 5/17/16 VARIOUS REVISIONS ES