[illegible] REVIEWED AND ACCEPTED AS NOTED BELOW

- ☑ FOR BUILDING PERMIT ONLY
- ☐ FOR DEMOLITION ONLY
- ☐ FOR FIRE ALARM APPROVAL ONLY
- ☐ FOR SITE REVIEW ONLY
- ☐ FOR SPRINKLER APPROVAL ONLY
- ☑ FIRE PROT. TO BE DESIGNED & SUBMITTED BY INSTALLER
- ☐ NO FIRE PROTECTION REQUIRED – BASED ON PLANS SUBMITTED
- ☐ OTHER

NEWTON FIRE DEPARTMENT
FIRE PREVENTION
SIGNATURE
4.27.2016
DATE

DATE
2/23/2016

DRAWING NO.
INLINE-LENOX

SCALE
1/4" = 1'-0"

PROPOSED RENOVATION BY

INLINE CONSTRUCTION

35 LENOX ST. NEWTON, MA

PROJECT NAME

afab enterprises
CUSTOM HOME DESIGNS

AFAB ENTERPRISES
PO BOX 916
BURLINGTON, MA
01803

OFFICE (781)272-2156

FAX (781)229-6394

WWW.AFABHOMES.COM

COMMONWEALTH OF MASSACHUSETTS
ANDREW S. BRADSHAW
STRUCTURAL
No. 45173
REGISTERED
PROFESSIONAL ENGINEER
11/3/16

PAGE
1

GARAGE DOOR DESIGN TO BE VERIFIED

DATE
4/2/2016

DRAWING NO.
INLINE-LENOX

SCALE
1/4" = 1'-0"

PROPOSED RENOVATION BY

INLINE CONSTRUCTION

35 LENOX ST. NEWTON, MA

PROJECT NAME

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ANDREW S. BRADSHAW
STRUCTURAL
No. 43113
REGISTERED PROFESSIONAL ENGINEER
4/3/16

PAGE
2

FOUNDATION NOTES

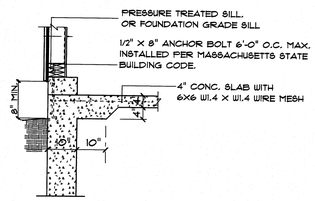
1) CONCRETE SLABS ON GRADE SHALL HAVE CONTROL JOINTS CUT AT LEAST 1/4 THE SLAB THICKNESS. THESE SHALL BE SPACED NOT MORE THAN 30 FEET IN EACH DIRECTION. CONTROL JOINTS SHALL BE PLACED WHERE OFFSETS ARE MORE THAN 10 FEET. CONTRACTION JOINTS ARE NOT REQUIRED WHERE 6X6 W1.4 X W1.4 WELDED WIRE FABRIC OR EQ. IS PLACED AT MID- DEPTH OF THE SLAB.

2) THE COMPRESSIVE STRENGTH OF CONCRETE FOUNDATIONS AT 28 DAYS SHALL NOT BE LESS THAN 3,000 lbs./SQ.INCH. SLAB FLOORS TO HAVE A COMPRESSIVE STRENGTH OF 4,000 PSI AT 28 DAYS.

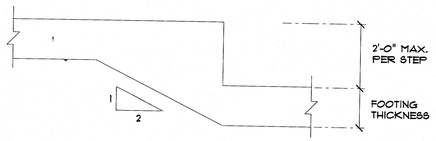
3) FOUNDATION WALLS SHALL EXTEND AT LEAST 8" ABOVE FINISH GRADE.

4) THE BOTTOM OF ANY POINT OF A FOUNDATION SHALL BE A MINIMUM OF 4'0" BELOW FINISH GRADE.

5) FOUNDATION ANCHOR BOLTS SHALL BE A MINIMUM OF 1/2" IN DIAMETER. THEY SHALL HAVE A MINIMUM EMBED OF 8" IN POURED CONCRETE. THERE SHALL BE A MINIMUM OF TWO ANCHORS PER SECTION OF SILL PLATE. MAXIMUM SPACING SHALL BE 6'-0" O.C. INSTALL IN ACCORDANCE WITH MASSACHUSETTS STATE BUILDING CODE



SLAB/FOOTING AT DOOR OPENING NO SCALE



NOTE:
ALL FOOTING STEPS MUST BE IN ACCORDANCE WITH THIS DETAIL

TYP. FOOTING STEP NO SCALE

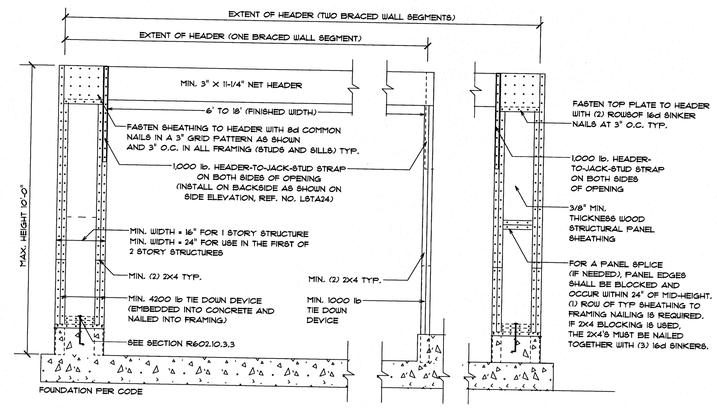
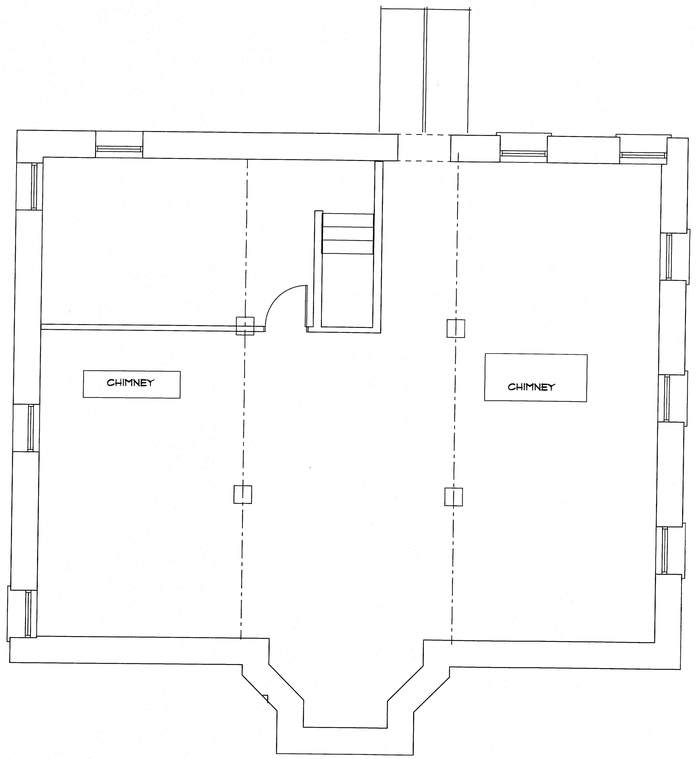
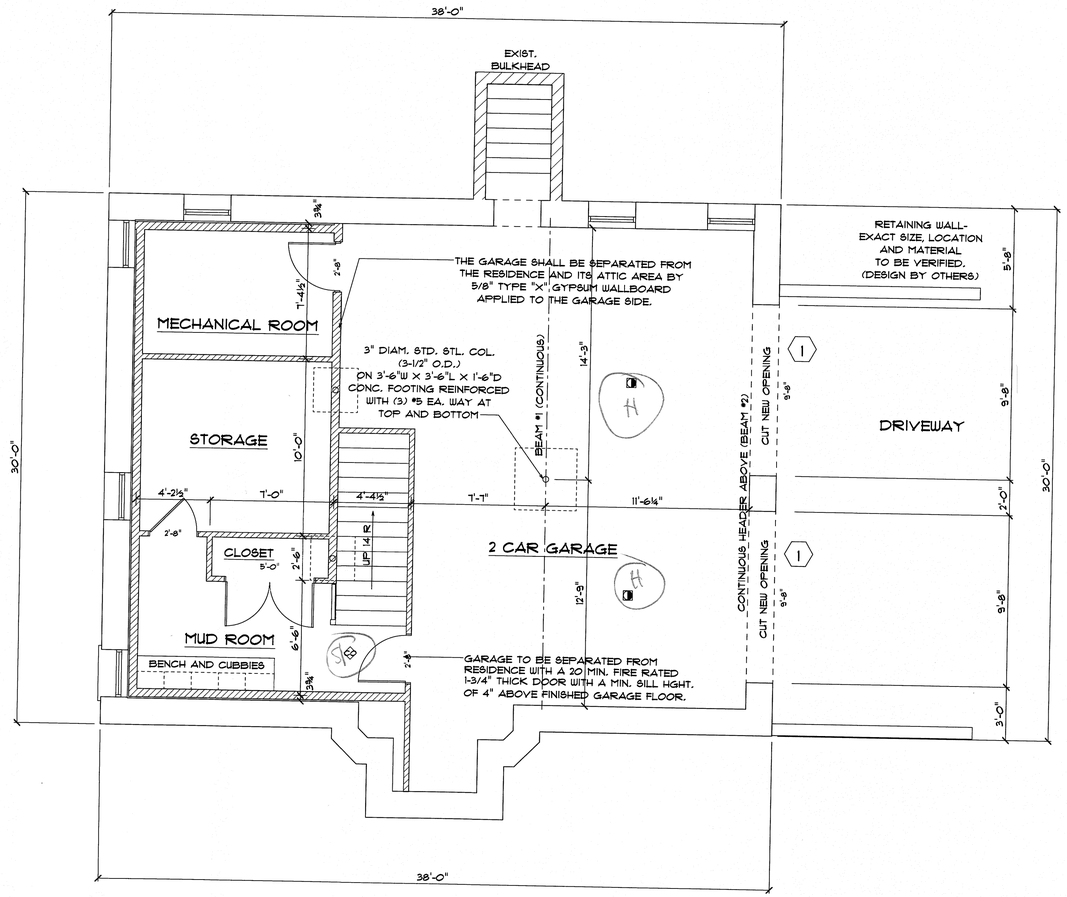


FIGURE R602.10.3.3
METHOD PFH: PORTAL FRAME WITH HOLD-DOWNS
NOT TO SCALE

1. FRAME NEW OPENING
2. REPLACE EXISTING UNIT
3. REMOVE UNIT/BLOCK OPENING



EXIST. BASEMENT PLAN



NEW 2X WALLS

EXIST. FIELD STONE FOUNDATION

PROPOSED BASEMENT PLAN

DATE 4/2/2016
DRAWING NO. INLINE-LENOX
SCALE 1/4" = 1'-0"

PROPOSED RENOVATION BY
INLINE CONSTRUCTION
35 LENOX ST. NEWTON, MA

PROJECT NOTE

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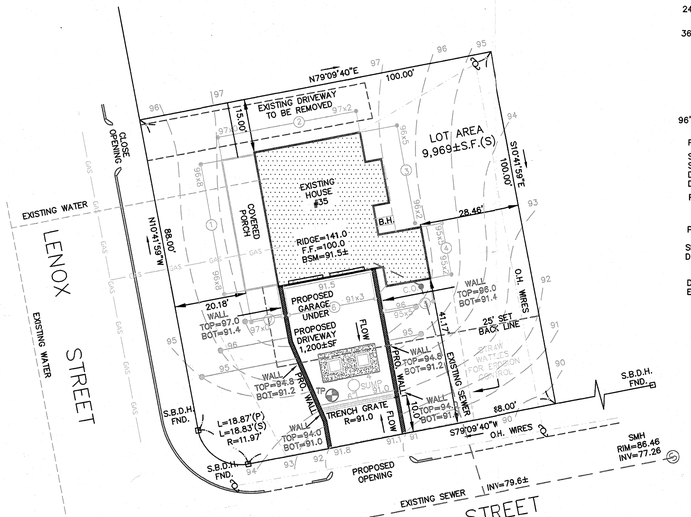
11/3/16

PAGE 3

PLAN #471 OF 1988



DEPTH (INCHES)	TEST PIT	ELEVATION (FEET)
0"		94.0
12"	LOAM 10YR 3/3	93.0
24"	SUB SOIL 10TR 4/6	92.0
36"		91.0
	PERC	
	HARD GRAVEL 10YR 5/2	90.0
96"	NO WATER	86.0

PERCOLATION RATE

START PRE SOAK = 9:10
START PERK = 9:25
DOWN 3 INCHES = 9:45
DOWN 6 INCHES = 10:30 > 45/3=15

PERCOLATION 15 MIN. PER INCH

PERCOLATION TESTS PERFORMED ON 5/03/16

SEE REPORT FROM DR. EDWARD T.T. CHIANG P.E. DATED MAY 10, 2016

DRAINAGE SHOWN IS DESIGNED FOR THE ENTIRE NEW DRIVEWAY

LOTS CREATED BEFORE 12/07/53
SR1 ZONE

	REQUIRED	EXISTING
AREA	= 15,000sf	= 9,969sf
FRONTAGE	= 100ft	= 194.83ft
FRONT	= 25ft	= 20.18ft, 41.17'
SIDE	= 12.5ft	= 15.00ft
REAR	= 25ft	= 28.46ft
F.A.R.	= .33 (3,289sf)	= .38 (3,760±sf)
HEIGHT	= 36ft	= 45.3'
STORIES	= 2.5	= 3
LOT COV.	= 20% (1,993)	= 17.2%
OPEN SPACE	= 65% (6,479)	= 70.8%

COVERAGES:
HOUSE / PORCH = 1,715±SF OR 17.2%
PRO. PAVEMENT = 1,200±SF OR 12.0%
PRO. OPEN SPACE = 7,055±SF OR 70.8%

EXISTING F.A.R.

BASEMENT (BELOW GRADE) = 0sf
FIRST FLOOR = 1,372sf
SECOND FLOOR = 1,194sf
THIRD FLOOR /ATTIC = 1,194sf (ESTIMATED)
TOTAL = 3,760 OR .38 FAR

DEED REFERENCE:
CERTIFICATE # 14773
BOOK 879 PAGE 23

PLAN REFERENCE:
LAND COURT PLAN 4624A
DATED OCTOBER 20, 1913

I HEREBY CERTIFY THAT THE HOUSE SHOWN ON THIS PLAN WAS LOCATED IN THE FIELD BY INSTRUMENT

THE HOUSE SHOWN ON THIS PLAN IS IN FLOOD ZONE "X" AND IS NOT IN 100 YEAR FLOOD LINE DESIGNATED BY THE FLOOD INSURANCE RATE MAP PANEL # 25017C0551E DATED JUNE 04, 2010.

EXISTING HEIGHTS

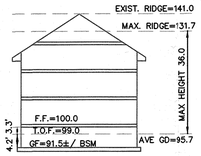
FINISHED AVERAGE GRADE PLANE

$\frac{\sum[(e1+e2)/2xL]}{P}$

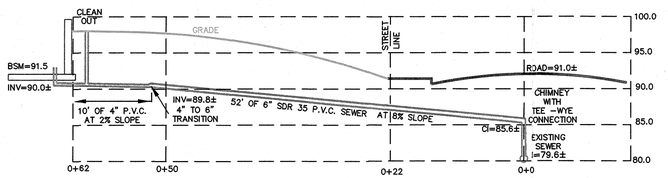
1. (96.8 + 96.8)/2 x 38.00 = 3678.40
2. (97.0 + 97.2)/2 x 39.25 = 3811.17
3. (96.5 + 96.2)/2 x 28.90 = 2784.51
4. (95.5 + 95.2)/2 x 14.50 = 1382.57
5. (95.5 + 95.5)/2 x 15.65 = 1494.57
6. (91.3 + 91.3)/2 x 25.40 = 2319.02
7. (97.0 + 97.0)/2 x 10.30 = 999.10

TOTAL P=172.00 = 16,469.34

16,469.34 / 172.00 = 95.75
AVERAGE GRADE = 95.7
95.7+ 36 = 131.7 MAX. RIDGE = 131.7



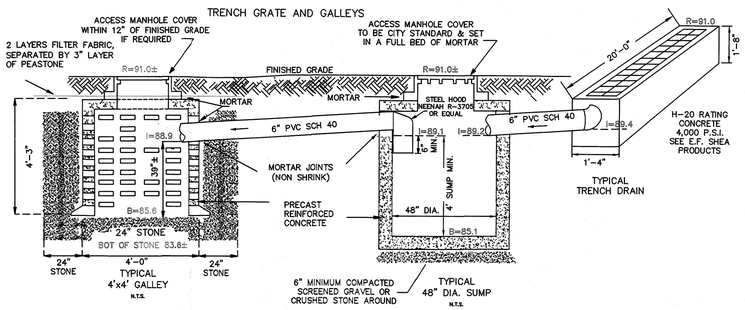
LEGEND:
S = SURVEY
R = RIM
I = INVERT
B = BOTTOM
CI = CHIMNEY INVERT

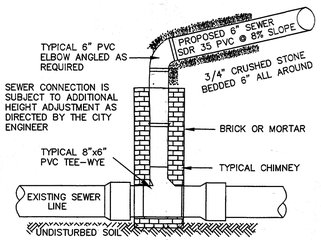


SEWER PROFILE
NOT TO SCALE

NOTE:
THE SEWER LINE SHOWN ON THIS PLAN WILL BE INSTALLED IN THE SAME PROXIMITY OF THE EXIST SEWER LINE

TRENCH GRATE AND GALLEYS





TYPICAL SEWER SERVICE CONNECTION INSTALLED TO CITY STANDARDS
(NTS)

THE ROPOSED WALLS SHALL BE LESS THEN 4' IN HEIGHT IF CONSTRUCTED IN ANY FRONT YARD OR SIDE YARD SET BACKLINE

UTILITIES SHOWN ARE FROM PUBLIC RECORDS AND SURVEYED IN THE FIELD AND SHALL BE VERIFD BY DEVELOPER AND DIG SAFE

ANY SEWER INSIDE OF BUILDING MUST HAVE THE CITY OF NEWTON PLUMBING APPROVAL

THE SEWER INSIDE THE BUILDING SHALL BE MIN. 4 SCH 40 OR D.I. PIPE

THE SEWER PIPE FROM 10' IN FRONT OF HOUSE INTO BUILDING IS 4" PIPE WITH 2% SLOPE

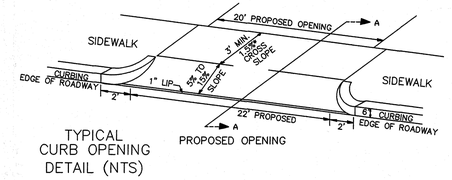
WATER AND SEWER LINES SHALL BE A MINIMUM OF 10' FEET APART.

IF THE CONTRACTOR INTENDS TO USE ANY PART OF THE EXISTING WATER LINE OR SEWER LINE, THEY SHALL BE INSPECTED AND MEET THE APPROVAL FROM THE CITY INSPECTORS

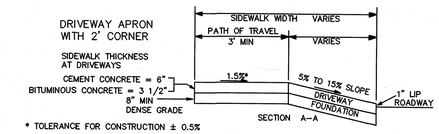
ALL UTILITIES SHALL BE LOCATED ON AN AS BUILT PLAN

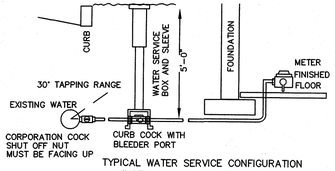
STRAW WATTLES FOR EROSION CONTROL SHALL BE PLACED AROUND CONSTRUCTION AREA.

ANY NEW SEWER SERVICES AND STRUCTURES WILL NEED TO BE PRESSURE TESTED AS FEASIBLE PRIOR TO ACCEPTANCE. ANY PROPOSED SEWER LINES THAT CAN NOT BE TESTED SHALL BE VIDEO TAPE AND SUBMITTED TO THE INSPECTOR.

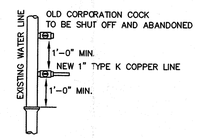


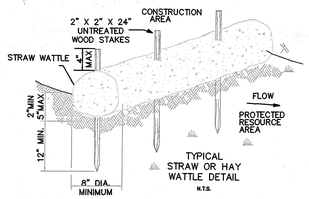
TYPICAL CURB OPENING DETAIL (NTS)
PROPOSED OPENING





TYPICAL WATER SERVICE CONFIGURATION INSTALLED TO CITY STANDARDS
(NTS)





TYPICAL STRAW OR HAY WATTLE DETAIL
N.T.S.

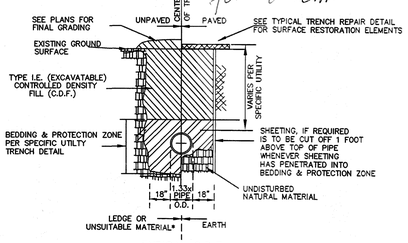
NOTES:

1. NO EXCAVATION IS ALLOWED WITHIN ANY CITY RIGHT OF WAY BETWEEN NOVEMBER 15TH AND APRIL 15TH. IF ANY EMERGENCY EXISTS OR THERE ARE EXTENUATING CIRCUMSTANCES, APPLICANT MAY SEEK PERMISSION FOR SUCH WORK FROM THE CITY DPW COMMISSIONER VIA THE CITY ENGINEER. IF PERMISSION IS GRANTED, SPECIAL CONSTRUCTION STANDARDS WILL BE APPLIED. APPLICANT OR APPLICANT'S REPRESENTATIVE MUST CONTACT THE CITY OF NEWTON ENGINEERING DEPARTMENT PRIOR TO START OF WORK FOR CLARIFICATION.
2. THE APPLICANT WILL HAVE TO APPLY FOR STREET OPENING, UTILITY CONNECTION, AND AN INSTALL CURB AND SIDEWALK PERMITS WITH THE DPW PRIOR TO START OF WORK.
3. THE EXISTING WATER AND SEWER SERVICES SHALL BE CUT AND CAPPED AT THE MAINS AND BE COMPLETELY REMOVED FROM SITE AND PROPERLY BACKED FILLED. THE ENGINEERING DIVISION MUST INSPECT THIS WORK; FAILURE TO HAVING THIS WORK INSPECTED MAY RESULT IN DELAY OF ISSUANCE OF THE UTILITY CONNECTION PERMIT.
4. AFTER ALL ENGINEERING PERMITS ARE OBTAINED, THE CONTRACTOR NEEDS TO NOTIFY THE ENGINEERING DIVISION 48-HOURS IN ADVANCE AND SCHEDULE AN APPOINTMENT TO HAVE THE DRAINAGE SYSTEM, WATER AND SEWER SERVICES INSPECTED. THE SYSTEM AND UTILITIES MUST BE FULLY EXPOSED FOR THE INSPECTOR. ONCE THE INSPECTOR IS SATISFIED, THE SYSTEM AND UTILITIES MAY THEN BE BACKFILLED.
5. WITH THE EXCEPTION OF GAS SERVICES, ALL UTILITY TRENCHES WITHIN THE CITY OF NEWTON RIGHT-OF-WAY WILL BE BACKFILLED WITH TYPE IE (EXCAVATABLE) CONTROLLED DENSITY FILL, AS SPECIFIED BY THE CITY OF NEWTON ENGINEERING SPECIFICATIONS.
6. THE NEW SEWER SERVICES AND STRUCTURES WILL NEED TO BE PRESSURE TESTED PRIOR TO ACCEPTANCE.
7. AS OF MARCH 1, 2009, 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 OR PRIVATE PROPERTY.
8. PRIOR TO THE ISSUANCE OF AN OCCUPANCY PERMIT, AN AS-BUILT PLAN SHALL BE SUBMITTED TO THE ENGINEERING DIVISION IN BOTH DIGITAL FORMAT AND IN HARD COPY. THE PLAN MUST SHOW ALL UTILITIES, DRAINAGE STRUCTURES, GATES, ETC. WITH SWING TIES FROM FIXED POINTS (I.E. HOUSE, FOUNDATION ETC.) AND ANY EASEMENTS AND FINAL GRADING.
9. 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 FUNCTIONABILITY OR PERFORMANCE OF ANY ITEMS CONSTRUCTED IN ACCORDANCE WITH THE DESIGN(S).
10. THE CITY OF NEWTON ASSUMES NO LIABILITIES FOR DESIGN ASSUMPTION, ERRORS OR OMISSIONS BY THE ENGINEER OF RECORD.

Approved
City of Newton
Engineering Div.
Date May 31, 2016

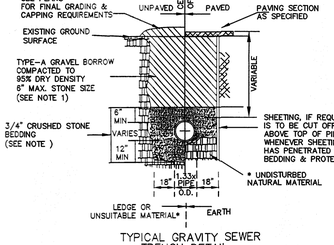
Note: Existing water must be 1-inch type K copper pipe.

Please see approval memo for conditions.



TYPICAL C.D.F. TRENCH SECTION
(NTS)

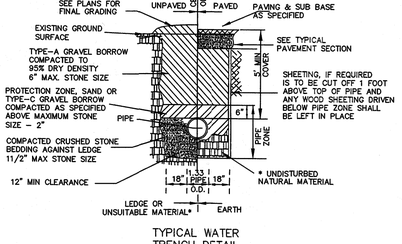
* SUITABILITY OF MATERIAL IS TO BE DETERMINED BY THE CITY OF NEWTON



TYPICAL GRAVITY SEWER TRENCH DETAIL
(NTS)

* SUITABILITY OF MATERIAL IS TO BE DETERMINED BY THE CITY OF NEWTON

1. GRAVEL BORROW SHALL CONFORM TO MASS HIGHWAY SPECIFICATION M1.03.0
2. CRUSHED STONE BEDDING SHALL CONFORM TO MASS HIGHWAY SPECIFICATION M2.03.0



TYPICAL WATER TRENCH DETAIL
(NTS)

* SUITABILITY OF MATERIAL IS TO BE DETERMINED BY THE CITY OF NEWTON

1. GRAVEL BORROW SHALL CONFORM TO MASS HIGHWAY SPECIFICATION M1.03.0
2. CRUSHED STONE BEDDING SHALL CONFORM TO MASS HIGHWAY SPECIFICATION M2.03.0

ISD - ENGINEERING PLAN REVIEW
APPROVED: AD
DATE: 5/13/16

ROBERT BIBBO #47391 REGISTERED PROFESSIONAL LAND SURVEYOR
5/11/16

TSUNG TING CHIANG No. 23891 REGISTERED PROFESSIONAL ENGINEER
5/12/16

PLAN OF LAND ~ NEWTON, MA
SHOWING PROPOSED DRIVEWAY AND UTILITIES # 35 LENOX STREET
DATE: 5/12/16 SCALE: 1" = 20'
PREPARED BY:

BIBBO BROTHERS AND ASSOCIATES
SURVEYING, ENGINEERING & CONSTRUCTION CONSULTING
10 HAMMER STREET, WALTHAM, MA 02453
TEL: 781-891-0417
E-MAIL: bibbobrothers@comcast.net
RALPH BIBBO JR., MANAGER - OWNER
ROBERT BIBBO, P.L.S. - OWNER