

ROADS, ROAD SHOULDERS,

FRAME TO BE SET IN FULL

-CEMENT CONCRETE COLLAR

-PRECAST CONCRETE

MH ECCENTRIC CONE

-BUTYL ROPE GASKET

RISER SECTION

SLOPED TOWARD

SECTION OR FLAT SLAB

SECTION @ SHALLOW MH

-PRECAST CONCRETE MH

-BRICK SHELF SHALL BE

ELEVATION TO BE AT

-RUBBER BOOT

LEAST AS HIGH AS

CHANNEL. LOWEST SHELF

CROWN OF HIGHEST PIPE.

MATERIAL TO BE

REPLACED W/GRAVEL

REMOVED AND

BORROW (MHD

IN 6" LAYERS

COMPACTED

—SEE ARCHITECTURAL
DRAWINGS FOR ROOF DRAIN

PROVIDE REVERSE WYE FOR CLEANOUT AND OVERFLOW

TRANSITION TO UNDERGROUND

CPP DRAIN AS REQUIRED

SIZE AND MATERIAL.

M1.03.0 "TYPE B")

DRIVEWAYS, WALKWAYS

BED OF MORTAR

4'-0" DIA.

6" MIN.¬

TYPICAL SEWER MANHOLE DETAIL

NOT TO SCALE

## **UTILITY NOTES:**

DIGITAL AND HARD COPY FORMAT

THE NEW SEWER SERVICE(S) AND/OR STRUCTURES SHALL BE PRESSURE TESTED OR VIDEOTAPED AFTER FINAL INSTALLATION IS COMPLETE. METHOD OF FINAL INSPECTION SHALL BE DETERMINED SOLELY BY THE CONSTRUCTION INSPECTOR FROM THE CITY ENGINEERING DIVISION. THE SEWER SERVICE WILL NOT BE ACCEPTED UNTIL ONE OF THE TWO METHODS STATED ABOVE IS COMPLETED. A CERTIFICATE OF OCCUPANCY WILL NOT BE RECOMMENDED UNTIL THIS TEST IS COMPLETED. A CERTIFICATE OCCUPANCY WILL NOT BE RECOMMENDED UNTIL THIS TEST IS COMPLETED AND A WRITTEN REPORT IS RECEIVED BY THE CITY ENGINEER.

THE SEWER SERVICES AND WATER SERVICES NEED TO BE COMPLETELY REMOVED FROM THE MAINS TO THE EXISTING DWELLING AND PROPERLY BACK-FILED. THE CONTRACTOR SHALL MAKE ARRANGEMENTS TO HAVE THIS ABANDONMENT INSPECTED BY A REPRESENTATIVE OF THE ENGINEERING DIVISION, FAILING TO HAVING THESE INSPECTIONS MAY RESULT IN THE DELAY OR DENIAL OF ISSUING NEW UTILITY CONNECTION PERMITS.

THE CONTRACTOR IS RESPONSIBLE FOR CONTACTING THE ENGINEERING DIVISION AND SCHEDULING AN APPOINTMENT 48 HOURS PRIOR TO THE DATE WHEN THE UTILITIES WILL BE MADE AVAILABLE FOR AN INSPECTION OF WATER SERVICES. SEWER SERVICE AND DRAINAGE SYSTEM INSTALLATION. THE UTILITY IN QUESTION SHALL BE FULLY EXPOSED FOR THE INSPECTOR TO VIEW; BACK FILLING SHALL ONLY TAKE PLACE WHEN THE CITY INSPECTOR HAS GIVEN THEIR APPROVAL.

PRIOR TO AN OCCUPANCY PERMIT BEING ISSUED, THE APPLICANT'S ENGINEER SHALL SUBMIT TO THE ENGINEERING DIVISION AN AS BUILT DRAWING IN

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.

No excavation is allowed within any City right-of-way between November 15th and April 15th. If an 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.

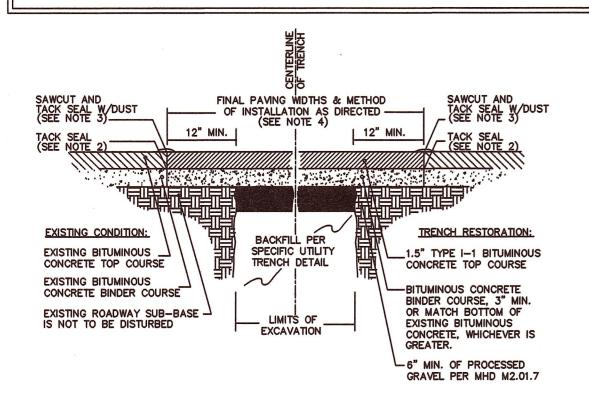
The new water and sewer services must be in-place AND accepted by the Engineering Division prior to the issuance of the Certificate of Occupancy.

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 and private property.

The Applicant will have to apply for Street Opening, Utility Connection and Trench Permits as well as an Install Curb & Sidewalk Permit with the DPW prior to start of work.

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.

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). The City of Newton assumes no liabilities for design assumption, errors or omissions by the Engineer of Record.

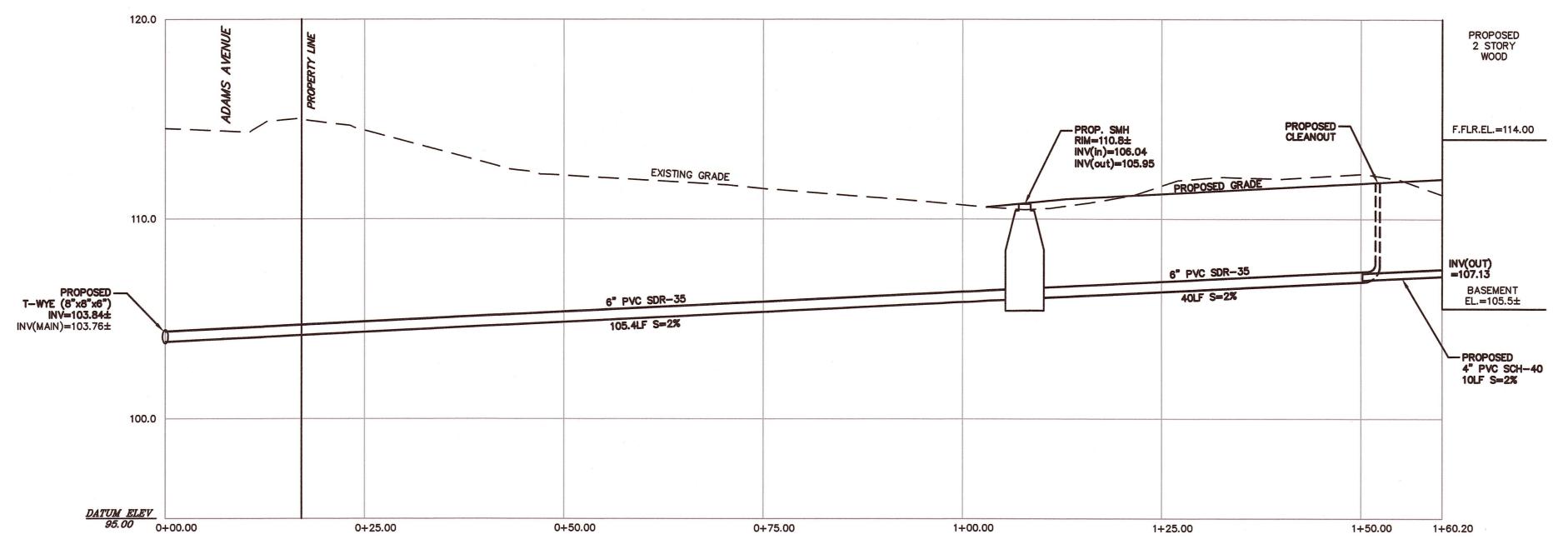


- 1. ALL INSTALLATION AND MATERIAL SPECIFICATIONS PER MASS. HIGHWAY DEPARTMENT STANDARD SPECIFICATIONS FOR HIGHWAYS AND BRIDGES, 1988 AS AMENDED.
- 2. ALL EXPOSED BITUMINOUS CONCRETE IS TO BE TACKED PER MHD PRIOR TO NEW BITUMINOUS CONCRETE INSTALLATION.
- 3. ALL EXPOSED JOINTS ARE TO BE SEALED WITH TACK AND STONE DUST. 4. ANY TOP COURSE APPLIED AT A WIDTH OF 6' WIDE OR GREATER IS TO BE

NOT TO SCALE

PLACED BY MACHINE/BOX SPREADER WHEN & AS DIRECTED BY THE CITY OF NEWTON. TYPICAL TRENCH REPAIR & PAVEMENT SECTION DETAIL (1/2)

END VIEW



UNPAVED PAVED

TYPICAL WATER

TRENCH DETAIL

NOT TO SCALE

2. CRUSHED STONE BEDDING SHALL CONFORM TO

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

GRAVEL BORROW SHALL CONFORM TO MASS HIGHWAY SPECIFICATION M1.03.0

MASS HIGHWAY SPECIFICATION M2.01.1

PIPE -

UNSUITABLE

- PAVING & SUB-BASE AS SPECIFIED

SEE TYPICAL PAVEMENT SECTION

ABOVE TOP OF PIPE AND

UNDISTURBED NATURAL MATERIAL

SEE PLANS FOR FINAL GRADING -

TYPE-A GRAVEL BORROW COMPACTED TO

95% MAX. DRY DENSITY 6" MAX. STONE SIZE

COMPACTED AS SPECIFIED ABOVE. MAXIMUM STONE — SIZE — 2"

12" MIN. CLEARANCE -

EXISTING GROUND

SURFACE .

- PAVING & SUB-BASE

PAVEMENT SECTION

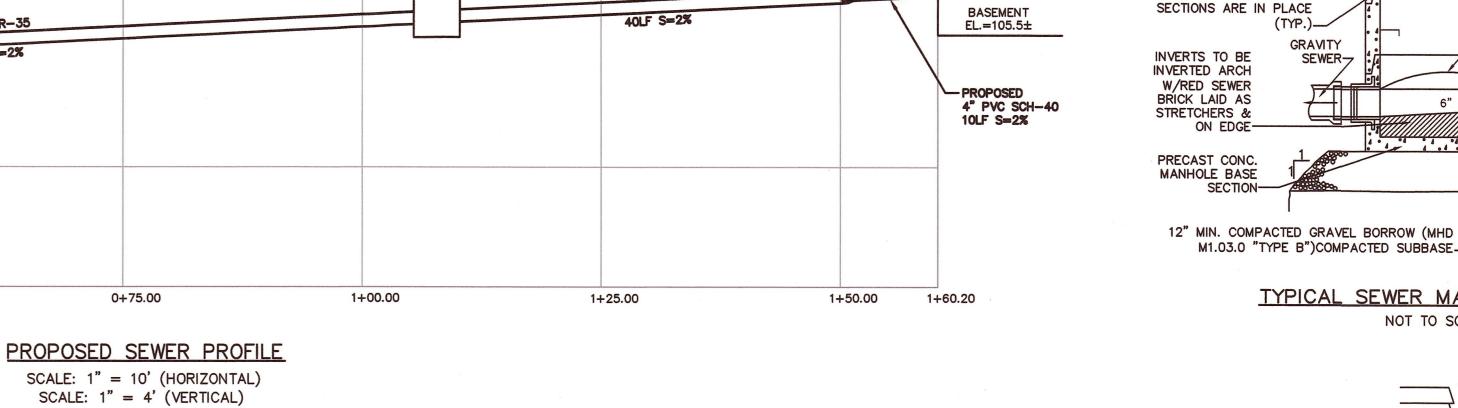
SHEETING, IF REQUIRED
IS TO BE CUT OFF 1 FOOT

ABOVE TOP OF PIPE AND
ANY WOOD SHEETING DRIVEN
DRIVEN BELOW PIPE ZONE
SHALL BE LEFT IN PLACE

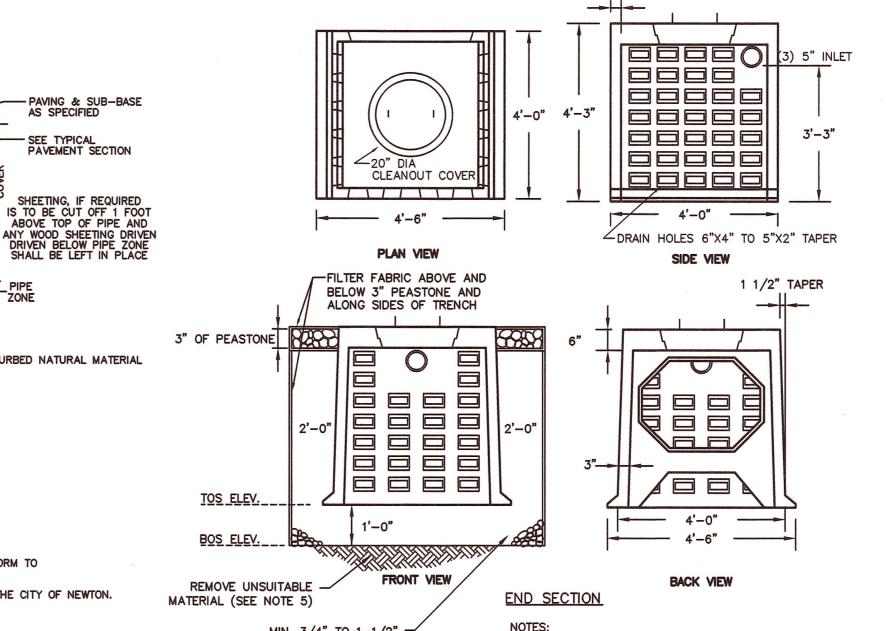
MIN. CLEARANCE

UNDISTURBED NATURAL MATERIAL

AS SPECIFIED



WASHED STONE

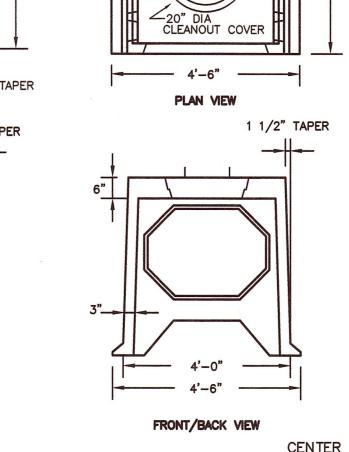


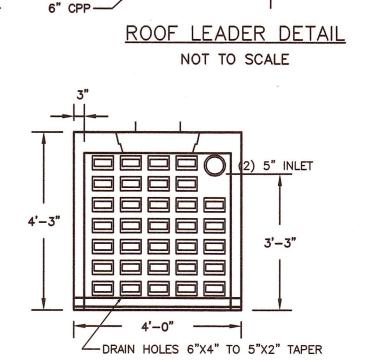
SIDEWALK S=7.5%\*

MINIMUM OF 1-FOOT OF COVER CONCRETE: 4,000 PSI MINIMUM AFTER 28 DAYS.

SECTIONS AVAILABLE WITHOUT 20" CLEANOUT.

ALSO AVAILABLE IN H-20 LOADING.





CENTER SECTION

CROSS COUNTRY

24" SEWER MANHOLE COVER-

FINISH GRADE

ADJUST TO FINISH GRADE WITH COURSES

2-COURSES MIN.,

COPOLYMER

TO BOTTOM-

(TYP.)

GRAVITY

SEWER-

M1.03.0 "TYPE B")COMPACTED SUBBASE ....

MORTAR JOINTS INSIDE

& OUT AFTER PRECAST

ON EDGE

4-COURSES MAX.-

OF MORTARED BRICK

STEEL REINFORCED

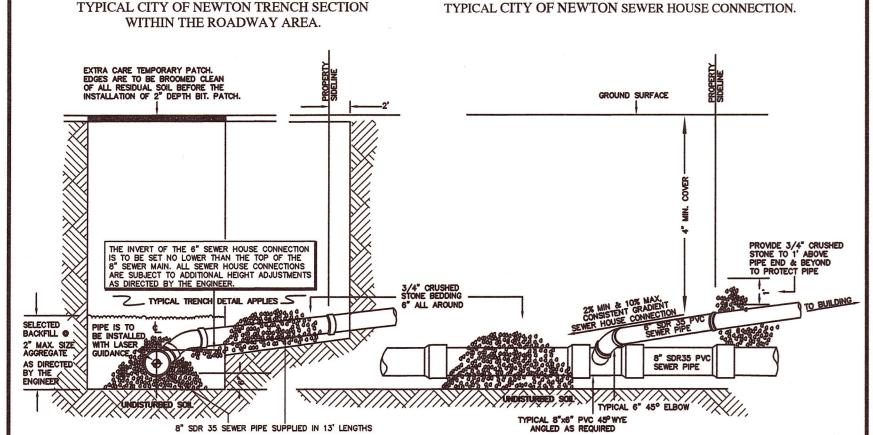
POLYPROPYLENE

PLASTIC STEPS

12" O.C.(TYP.)

BEFORE YOU DIG CONTACT THE DIG SAFE CENTER TO PREVENT DAMAGE TO TELEPHONE, GAS OR ELECTRIC UNDERGROUND FACILITIES OF MEMBER UTILITIES, CALL TOLL FREE -888-DIG-SAFE. MASSACHUSETTS STATE LAW REQUIRES NOTIFICATION AT LEAST THREE BUSINESS DAYS BEFORE YOU START DIGGING OPERATIONS. IN AN EMERGENCY, CALL IMMEDIATELY

**EXCAVATORS** 



(DETAILS NOT TO SCALE)

FOR DETAILS NOT SHOWN ON THIS PLAN SEE THE CITY OF NEWTON "GENERAL CONSTRUCTION DETAILS".

**ELEVATION VIEW** 

\* SUITABILITY OF MATERIAL IS TO BE DETERMINED BY THE CITY OF NEWTON. TYPICAL C.D.F. TRENCH DETAIL NOT TO SCALE

FOR FINAL GRADING AS SPECIFIED & CAPPING REQUIREMENTS EXISTING GROUND-SURFACE TYPE-A GRAVEL BORROW COMPACTED TO 95% DRY DENSITY 6" MAX. STONE SIZE (SEE NOTE 1) 3/4" CRUSHED STONE BEDDING SHEETING, IF REQUIRED
IS TO BE CUT OFF 1 FOOT
ABOVE TOP OF PIPE
WHENEVER SHEETING
HAS PENETRATED INTO
BEDDING & PROTECTION ZONE (SEE NOTE 2) UNDISTURBED NATURAL MATERIAL

\* 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 M2.01.1

> GRAVITY SEWER TRENCH DETAIL NOT TO SCALE



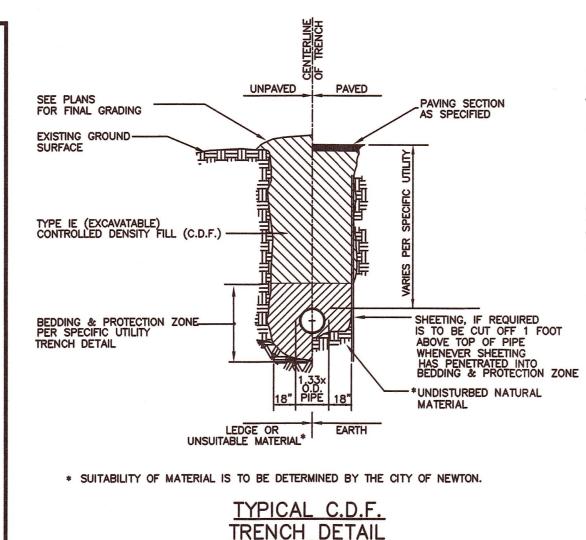
DETAIL SHEET NEWTON, MASSACHUSETTS SHOWING PROPOSED CONDITIONS AT #57 ADAMS AVENUE

SCALE: AS SHOWN DATE: JUNE 16, 2016

PROJECT: 214163

LAND SURVEYORS - CIVIL ENGINEERS. 132 ADAMS STREET 2ND FLOOR SUITE 3 NEWTON, MA 02458 (617) 332-8271

SHEET 2 OF 2



UNPAVED PAVED

\* SUITABILITY OF MATERIALS IS TO BE DETERMINED BY THE CITY OF NEWTON

TYPICAL P.V.C. DRAIN

TRENCH DETAIL

1. GRAVEL BORROW SHALL CONFORM TO MASS HIGHWAY SPECIFICATION M1.03.0

NOT TO SCALE

2. CRUSHED STONE BEDDING SHALL CONFORM TO

MASS HIGHWAY SPECIFICATION M2.01.1

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

SEE PLANS FOR FINAL GRADING

EXISTING GROUND

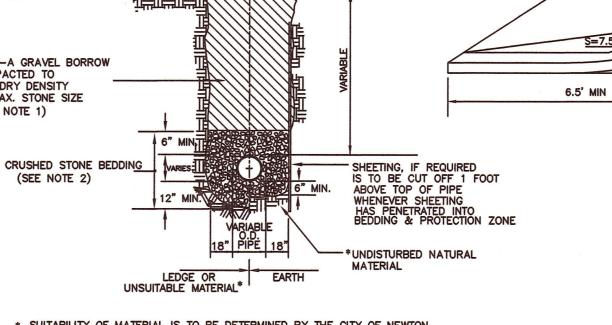
TYPE-A GRAVEL BORROW COMPACTED TO

95% MAX. DRY DENSITY 6" MAX. STONE SIZE

PROTECTION ZONE, SAND OR TYPE-C GRAVEL BORROW

COMPACTED CRUSHED STONE
BEDDING AGAINST EXISTING MATERIAL
3/4" MAX. STONE SIZE

COMPACTED AS SPECIFIED ABOVE. MAXIMUM STONE SIZE - 2"





EXCAVATION OF UNSUITABLE MATERIAL WILL EXTEND FIVE FEET LATERALLY IN ALL DIRECTIONS BEYOND THE OUTER PERIMETER OF THE GALLEY SECTIONS AND TO A DEPTH OF NATURALLY OCCURRING PERVIOUS MATERIAL. UNSUITABLE

\* 0.5% ±

MATERIAL WILL BE REPLACED WITH GRAVEL BORROW(MHD M1.03.0 TYPE "B") COMPACTED IN 6" LAYERS.

1.5%\* SLOPE

5% TO 15%

<u>THROUGH SIDEWALK DRIVEWAYS W/</u>

CURB RETURNS DETAIL

NOT TO SCALE

**GALLEY SECTIONS** 

NOT TO SCALE



.5' CURB REVEAL-

BC=3 1/2" MINI DRIVEWAY
S" MINI FOUNDATION



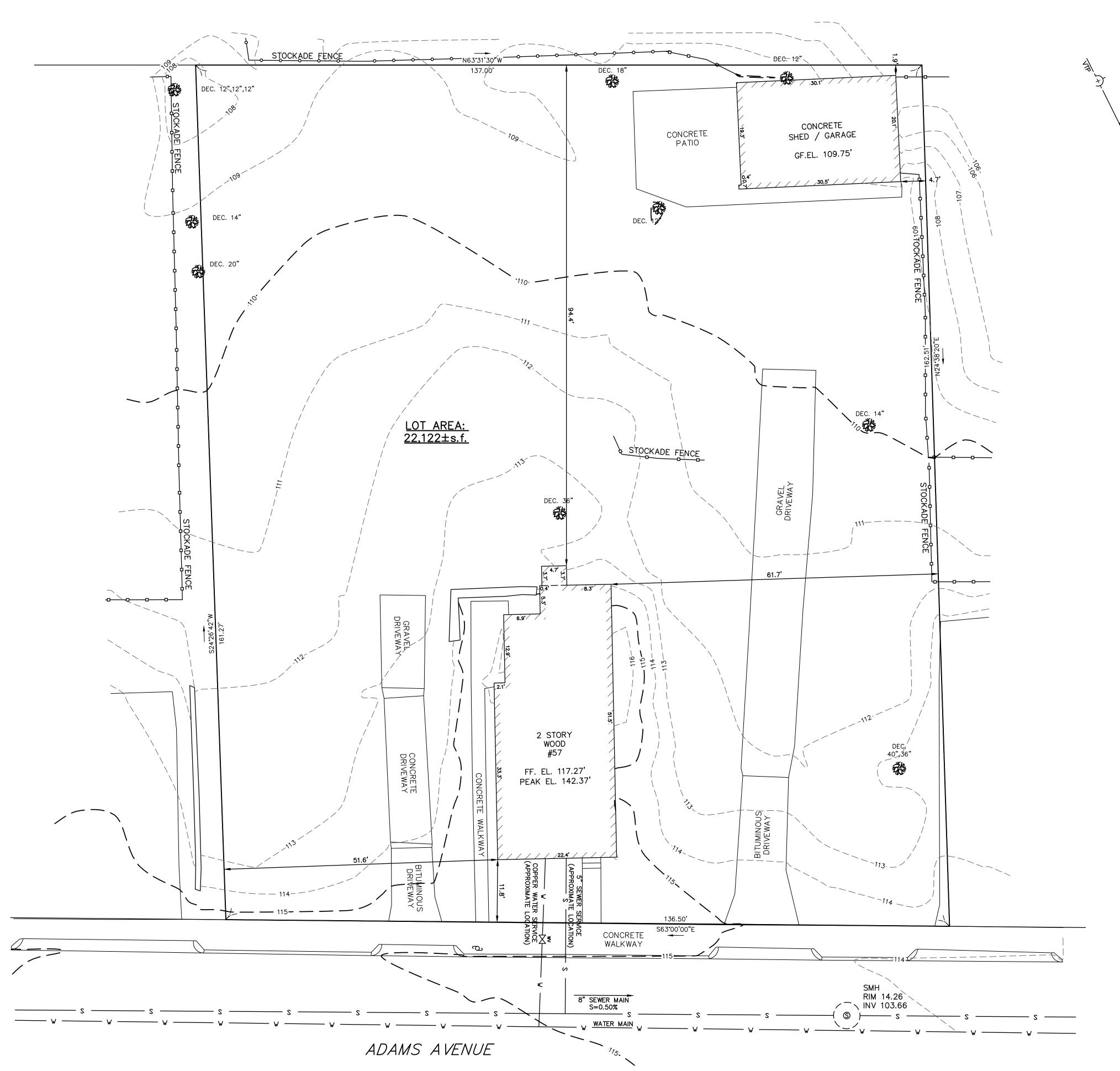
S=7.5%\*

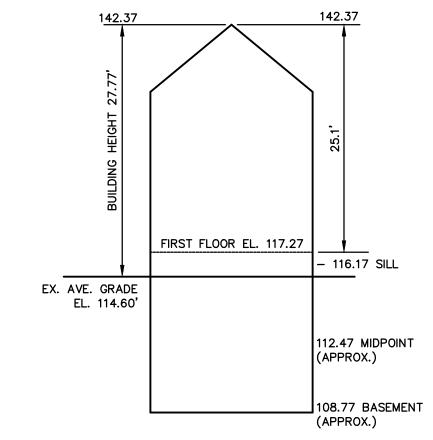


## <u>LEGEND</u> BUILDING PROPERTY LINE W/ BEARING DISTANCE CONTOUR PICKET FENCE DRAIN LINE WATER LINE GAS LINE GAS VALVE WATER VALVE DRAIN MANHOLE SEWER MANHOLE CATCH BASIN UTILITY POLE LIGHT POLE DEC. 22" DECIDUOUS TREE

CONIFEROUS TREE

**CON.** 12"





EXISTING BUILDING HEIGHT

NOT TO SCALE

Address:#57 Adams Avenue - Newton, MA <u>Length Weighted Mean</u> Existing Average Grade Calculation							
Segment	Length Of	Height of	Height of	E=(C+D)/2	F=BxE		
	Segment	High Point	Low Point	Average			
	in Feet	of Segment	of Segment	Segment Height			
1	22.40	115.71	115.70	115.71	2591.79 Sq. Ft		
2	33.30	115.41	115.20	115.31	3839.66 Sq. Ft		
3	12.90	115.38	115.22	115.30	1487.37 Sq. Ft		
4	6.90	113.67	113.23	113.45	782.81 Sq. Ft.		
5	8.30	112.86	112.42	112.64	934.91 Sq. Ft.		
6	51.50	114.96	112.94	113.95	5868.43 Sq. Ft		
Total	135.30				15504.96 Sq. F		
		Total Column F	/ Total Column B :	 = Average Grade			
			Average Grade: 114.60'				

ZONING CHART					
NEWTON, MASSACHUSETTS					
ZONE: SR-3 (NEW)	SUBMISSIC	N: EXISTING			
REGULATION	REQUIRED	EXISTING			
LOT AREA	10,000s.f.	22,122±s.f.			
LOT FRONTAGE	80.0'	136.50'			
FRONT SETBACK	30.0'	11.8'			
SIDE SETBACK	10.0'	51.6'			
REAR SETBACK	15.0'	94.4'			
LOT COVERAGE	30.0%	7.7%			
OPEN SPACE	50.0%	85.3%			
BUILDING HEIGHT	36.0'	27.77			
AVERAGE GRADE	N/A	114.60			

## TOPOGRAPHIC SITE PLAN NEWTON, MASSACHUSETTS

SHOWING EXISTING CONDITIONS AT #57 ADAMS AVENUE

SCALE: 1in.=10ft. DATE: AUGUST 13, 2014 PROJECT: 214163



NOOLO1.	211100
VT	P
SSOCI	ATES

LAND SURVEYORS — CIVIL ENGINEERS. 132 ADAMS STREET 2ND FLOOR SUITE 3 NEWTON, MA 02458 (617) 332-8271

