

UNIT 1 & 2
PROPOSED BUILDING HEIGHT
NOT TO SCALE

Address: #5-7 Elm Street

**Length Weighted Mean
Proposed Average Grade Calculation
Units 1 & 2**

A Segment	B Length Of Segment in Feet	C Height of High Point of Segment	D Height of Low Point of Segment	E E=(C+D)/2 Average Segment Height	F F=BxE
1	29.00	58.30	58.10	58.20	1687.80 Sq. Ft.
2	15.58	58.30	58.25	58.25	907.54 Sq. Ft.
3	15.75	58.10	58.10	58.10	915.08 Sq. Ft.
4	18.74	58.00	58.00	58.00	1086.92 Sq. Ft.
5	5.80	58.00	57.80	57.90	335.82 Sq. Ft.
6	7.08	57.70	57.70	57.70	408.52 Sq. Ft.
7	21.54	58.00	57.20	57.60	1240.70 Sq. Ft.
8	9.30	57.00	56.70	56.85	528.71 Sq. Ft.
9	11.95	58.20	57.00	57.60	688.32 Sq. Ft.
10	25.58	57.90	57.90	57.90	1481.08 Sq. Ft.
11	13.50	58.00	57.80	57.90	781.65 Sq. Ft.
12	15.03	57.80	57.60	57.70	867.23 Sq. Ft.
13	6.97	57.70	57.60	57.65	401.82 Sq. Ft.
14	21.54	57.80	57.80	57.80	1245.01 Sq. Ft.
15	23.00	58.00	57.80	57.90	1331.70 Sq. Ft.
16	13.00	58.10	58.10	58.10	755.30 Sq. Ft.
17	6.00	58.20	58.10	58.15	348.90 Sq. Ft.
18	24.00	58.10	58.10	58.10	1394.40 Sq. Ft.
Total	283.36				16406.49 Sq. Ft.

Total Column F / Total Column B = Average Grade
Average Grade: 57.90'

ZONING CHART
NEWTON, MASSACHUSETTS

ZONE: BU-1 (As Of Right) SUBMISSION: EXISTING

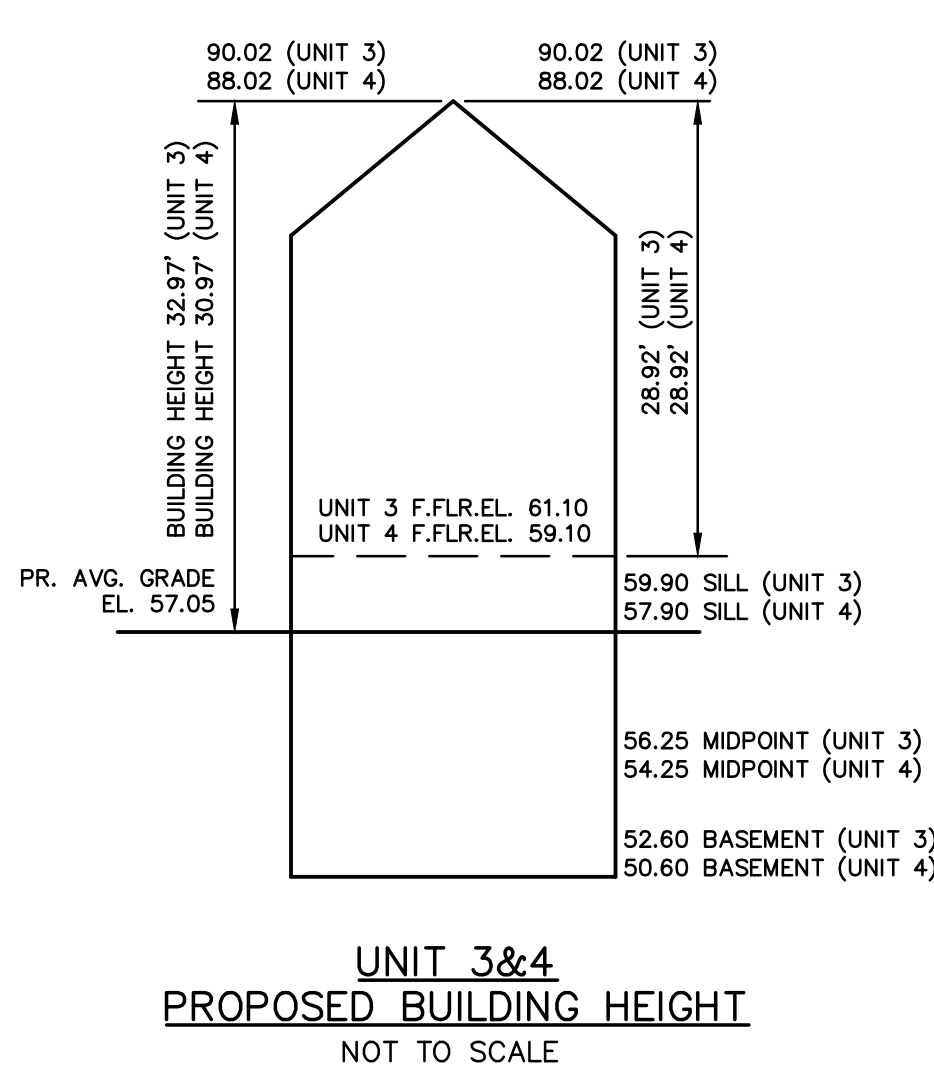
REGULATION	REQUIRED	LOT 15 (Vacant Lot)
LOT AREA	10,000s.f.	6,836±s.f.
FRONT SETBACK	Avg.	-
SIDE SETBACK	1/2 bldg.ht.	-
REAR SETBACK	0	-
BUILDING HEIGHT	24' 2" Story	-

Address: #5-7 Elm Street

**Length Weighted Mean
Proposed Average Grade Calculation
Units 3 & 4**

A Segment	B Length Of Segment in Feet	C Height of High Point of Segment	D Height of Low Point of Segment	E E=(C+D)/2 Average Segment Height	F F=BxE
1	9.25	58.20	58.20	58.20	538.35 Sq. Ft.
2	9.38	58.30	58.00	58.15	545.45 Sq. Ft.
3	3.46	58.00	57.50	57.75	199.82 Sq. Ft.
4	11.15	56.00	55.90	55.95	623.84 Sq. Ft.
5	2.97	57.80	56.00	56.90	168.99 Sq. Ft.
6	5.30	57.00	56.00	56.50	299.45 Sq. Ft.
7	2.37	57.00	56.70	56.85	134.73 Sq. Ft.
8	10.62	58.90	57.00	57.95	615.43 Sq. Ft.
9	16.14	58.90	57.00	57.95	935.31 Sq. Ft.
10	28.44	57.00	56.50	56.75	1613.97 Sq. Ft.
11	8.00	58.90	56.80	56.80	452.80 Sq. Ft.
12	15.75	58.00	54.90	56.45	889.09 Sq. Ft.
13	6.50	56.70	56.30	56.50	367.25 Sq. Ft.
14	12.00	56.30	56.10	56.20	674.40 Sq. Ft.
15	19.29	54.90	54.90	54.90	1059.02 Sq. Ft.
16	19.00	56.70	56.10	56.40	1071.60 Sq. Ft.
17	7.00	57.00	56.70	56.85	397.95 Sq. Ft.
18	13.75	57.10	57.00	57.05	784.44 Sq. Ft.
19	22.00	57.10	57.00	57.05	1255.10 Sq. Ft.
20	20.04	58.00	58.00	58.00	1162.32 Sq. Ft.
21	1.50	58.00	57.00	57.50	86.25 Sq. Ft.
22	10.96	58.20	58.00	58.10	636.78 Sq. Ft.
23	13.75	58.10	58.00	58.05	798.19 Sq. Ft.
24	20.79	57.90	57.60	57.75	1200.62 Sq. Ft.
Total	289.41				16511.15 Sq. Ft.

Total Column F / Total Column B = Average Grade
Average Grade: 57.05'



UNIT 3 & 4
PROPOSED BUILDING HEIGHT
NOT TO SCALE

LEGEND

- BUILDING
- PROPERTY LINE W/ BEARING DISTANCE
- CONTOUR
- STOCKADE FENCE
- CHAINLINK FENCE
- PICKET FENCE
- SEWER LINE
- DRAIN LINE
- WATER LINE
- GAS LINE
- GAS VALVE
- WATER VALVE
- DRAIN MANHOLE
- SEWER MANHOLE
- CATCH BASIN
- UTILITY POLE
- LIGHT POLE
- DECIDUOUS TREE
- CONIFEROUS TREE

DIG SAFE

EXCAVATORS
BEFORE YOU DIG CONTACT THE DIG SAFE CENTER TO PREVENT DAMAGE TO TELEPHONE, GAS OR ELECTRIC UNDERGROUND FACILITIES OF MEMBER UTILITIES. CALL TOLL FREE 1-888-DIG-SAFE. MASSACHUSETTS STATE LAW REQUIRES NOTIFICATION AT LEAST THREE BUSINESS DAYS BEFORE YOU START DIGGING OPERATIONS. IN AN EMERGENCY, CALL IMMEDIATELY

SCALE: 1"=10'

ZONING CHART
NEWTON, MASSACHUSETTS

ZONE: MR-2 (NEW) SUBMISSION: BLDG. PERMIT

REGULATION	REQUIRED	LOT B	PROPOSED
LOT AREA	10,000s.f.	19,483±s.f.	26,319±s.f.
LOT FRONTAGE	80.0'	75.50'	189.05'
FRONT SETBACK	25.0'	17.5'	26.0'
SIDE SETBACK	10.0'/25.0*	25.1'	25.5'
REAR SETBACK	15.0'/25.0*	166.1'	29.4'
BUILDING HEIGHT	36.0'	25.10'	31.12'/30.20' 32.97'/30.97'
AVERAGE GRADE	-	58.69	57.90/57.05
LOT COVERAGE	30.0%/25.0*	5.8%	22.2%
OPEN SPACE	50.0%	86.1%	61.0%

*ATTACHED DWELLING.

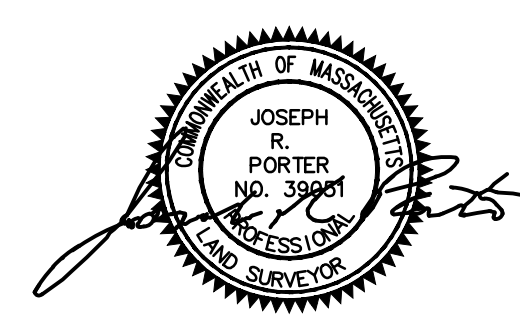
ZONING PLAN
NEWTON, MASSACHUSETTS
SHOWING PROPOSED CONDITIONS AT
#5-#7 ELM STREET
#114 RIVER STREET (VACANT LOT)

SCALE: 1in.=10ft. DATE: JUNE 9, 2014
REVISED: NOVEMBER 18, 2014; NOVEMBER 28, 2014;
MAY 5, 2017; DECEMBER 19, 2017; MARCH 21, 2018;
APRIL 30, 2018

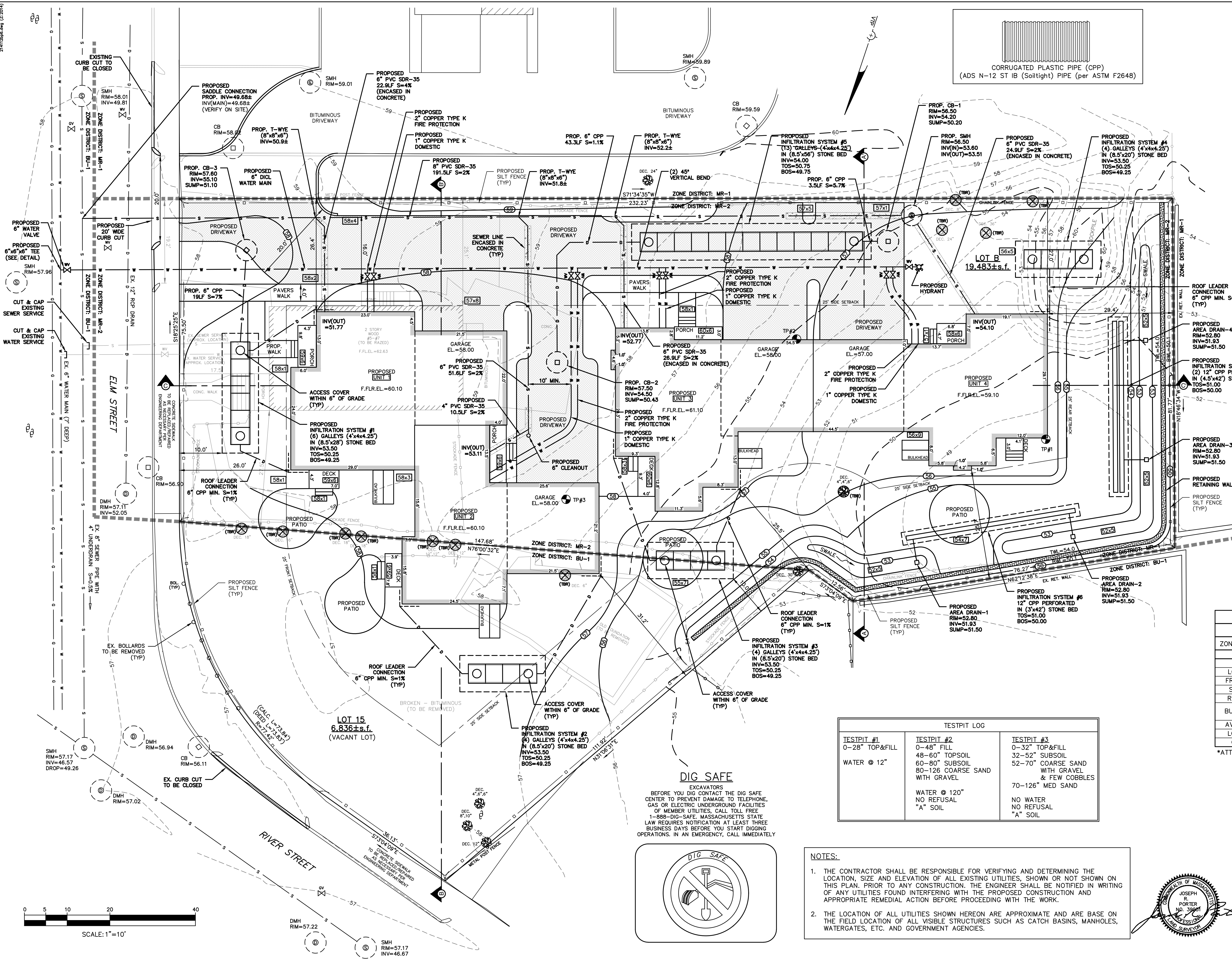
PROJECT: 214112

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

SHEET 1 OF 5



21412906.dwg (2/2014)



LEGEND

BUILDING	
PROPERTY LINE W/ BEARING DISTANCE	S81°58'34"E 116.23'
CONTOUR	- 70 -
STOCKADE FENCE	
CHAINLINK FENCE	
PICKET FENCE	
SEWER LINE	S
DRAIN LINE	D
WATER LINE	W
GAS LINE	G
GAS VALVE	
WATER VALVE	
DRAIN MANHOLE	
SEWER MANHOLE	
CATCH BASIN	
UTILITY POLE	
LIGHT POLE	
DECIDUOUS TREE	DEC. 22'
CONIFEROUS TREE	CON. 12'

ZONING CHART
NEWTON, MASSACHUSETTS

ZONE: BU-1 (As Of Right) SUBMISSION: EXISTING

REGULATION	REQUIRED	LOT 15 (Vacant Lot)
LOT AREA	10,000s.f.	6,836±s.f.
FRONT SETBACK	Avg.	-
SIDE SETBACK	1/2 bldg.ht.	-
REAR SETBACK	0	-
BUILDING HEIGHT	24' 1/2 Story	-

ZONING CHART
NEWTON, MASSACHUSETTS

ZONE: MR-2 (NEW) SUBMISSION: BLDG. PERMIT

REGULATION	REQUIRED	LOT B	PROPOSED
LOT AREA	10,000s.f.	19,483±s.f.	26,319±s.f.
LOT FRONTAGE	80.0'	75.50'	189.05'
FRONT SETBACK	25.0'	17.5'	26.0'
SIDE SETBACK	10.0'/25.0'*	25.1'	25.5'
REAR SETBACK	15.0'/25.0'*	166.1'	29.4'
BUILDING HEIGHT	36.0'	25.10'	31.12'/30.20'
AVERAGE GRADE	-	58.69	57.90/57.05
LOT COVERAGE	30.0%/25.0%*	5.8%	22.2%
OPEN SPACE	50.0%	86.1%	61.0%

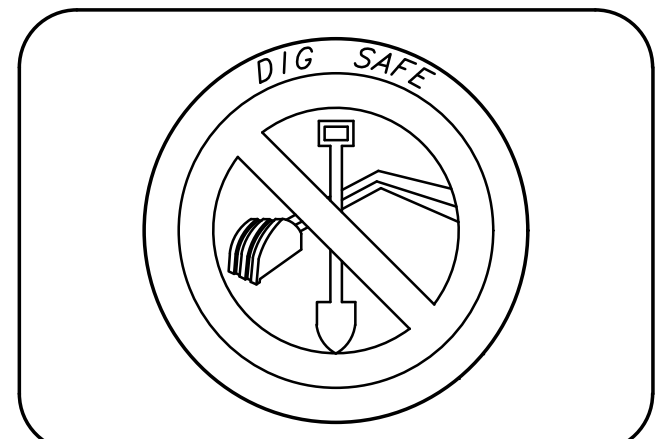
*ATTACHED DWELLING.

TESTPIT LOG

TESTPIT #1	TESTPIT #2	TESTPIT #3
0-28" TOP & FILL	0-48" FILL	0-32" TOP & FILL
WATER @ 12"	48-60" TOPSOIL	32-52" SUBSOIL
	60-80" SUBSOIL	52-70" COARSE SAND
	80-126 COARSE SAND WITH GRAVEL	WITH GRAVEL & FEW COBBLES
	WATER @ 120"	70-126" MED SAND
	NO REFUSAL	NO WATER
	"A" SOIL	NO REFUSAL
		"A" SOIL

DIG SAFE

EXCAVATORS BEFORE YOU DIG CONTACT THE DIG SAFE CENTER TO PREVENT DAMAGE TO TELEPHONE, GAS OR ELECTRIC UNDERGROUND FACILITIES OF MEMBER UTILITIES. CALL TOLL FREE 1-888-DIG-SAFE. MASSACHUSETTS STATE LAW REQUIRES NOTIFICATION AT LEAST THREE BUSINESS DAYS BEFORE YOU START DIGGING OPERATIONS. IN AN EMERGENCY, CALL IMMEDIATELY



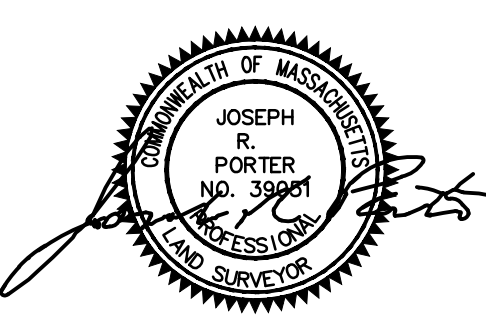
- NOTES:**
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING AND DETERMINING THE LOCATION, SIZE AND ELEVATION OF ALL EXISTING UTILITIES, SHOWN OR NOT SHOWN ON THIS PLAN. PRIOR TO ANY CONSTRUCTION, THE ENGINEER SHALL BE NOTIFIED IN WRITING OF ANY UTILITIES FOUND INTERFERING WITH THE PROPOSED CONSTRUCTION AND APPROPRIATE REMEDIAL ACTION BEFORE PROCEEDING WITH THE WORK.
 - THE LOCATION OF ALL UTILITIES SHOWN HEREON ARE APPROXIMATE AND ARE BASE ON THE FIELD LOCATION OF ALL VISIBLE STRUCTURES SUCH AS CATCH BASINS, MANHOLES, WATERGATES, ETC. AND GOVERNMENT AGENCIES.

TOPOGRAPHIC SITE PLAN
NEWTON, MASSACHUSETTS

SHOWING PROPOSED CONDITIONS AT #5-#7 ELM STREET (VACANT LOT)
#114 RIVER STREET (VACANT LOT)

SCALE: 1in.=10ft. DATE: JUNE 6, 2014
REVISED: NOVEMBER 18, 2014; NOVEMBER 28, 2014
JANUARY 27, 2017; MAY 5, 2017; DECEMBER 19, 2017
MARCH 21, 2018; APRIL 30, 2018

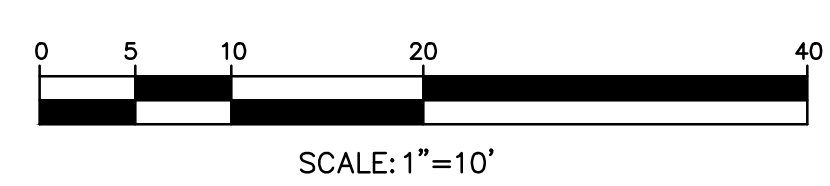
PROJECT: 214112



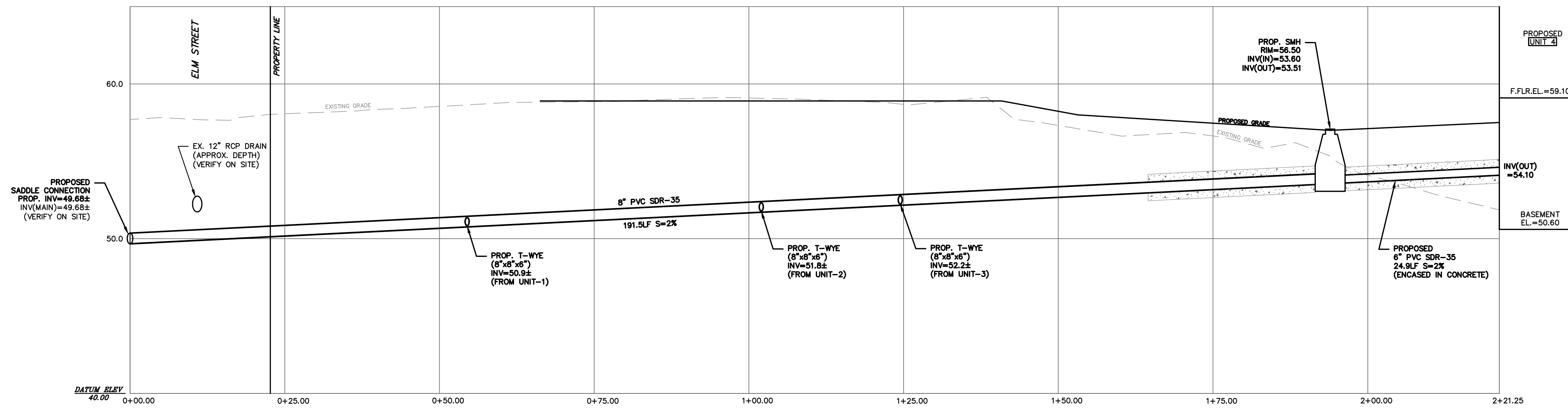
VTP ASSOCIATES INC.

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

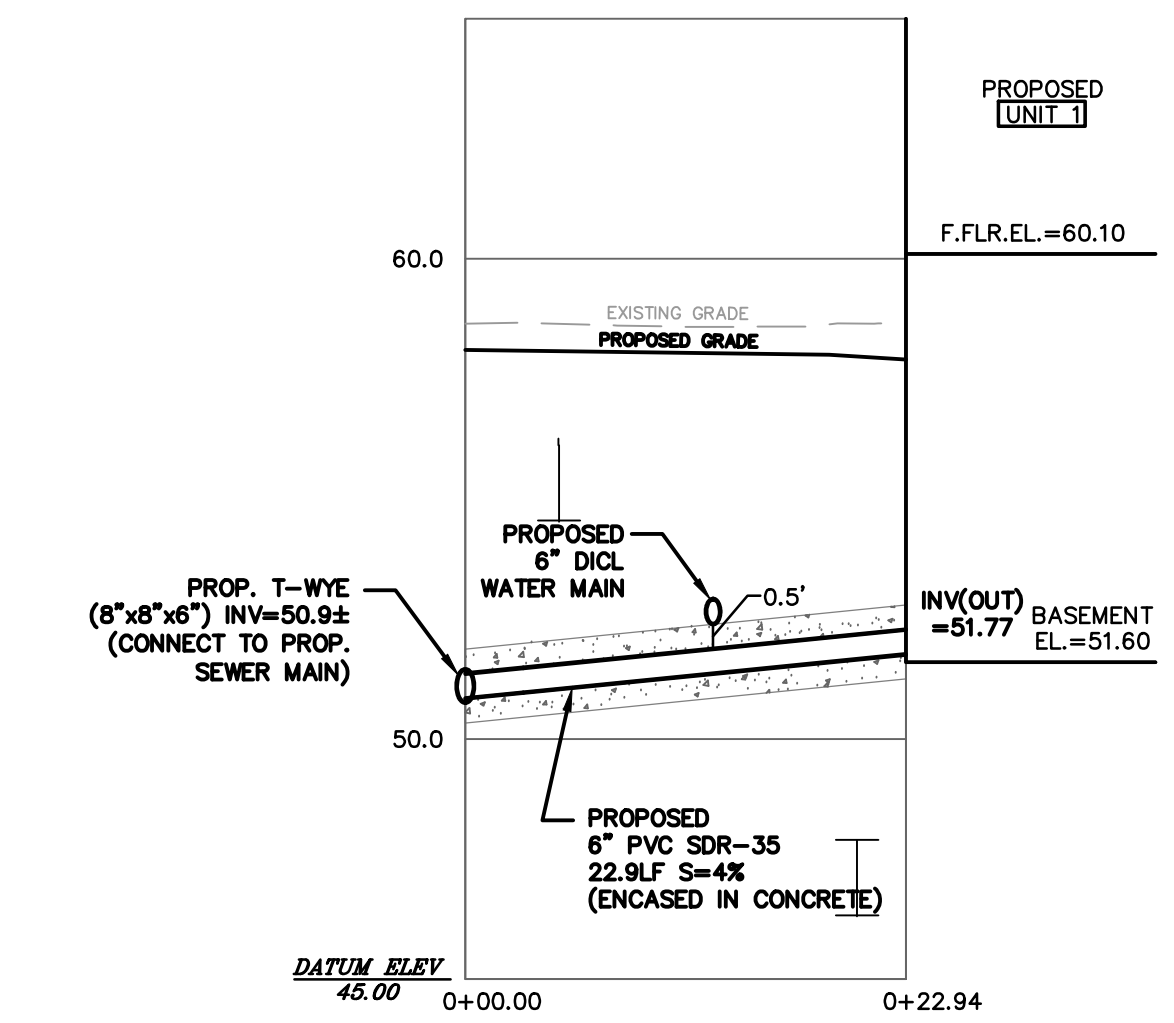
SHEET 2 OF 5



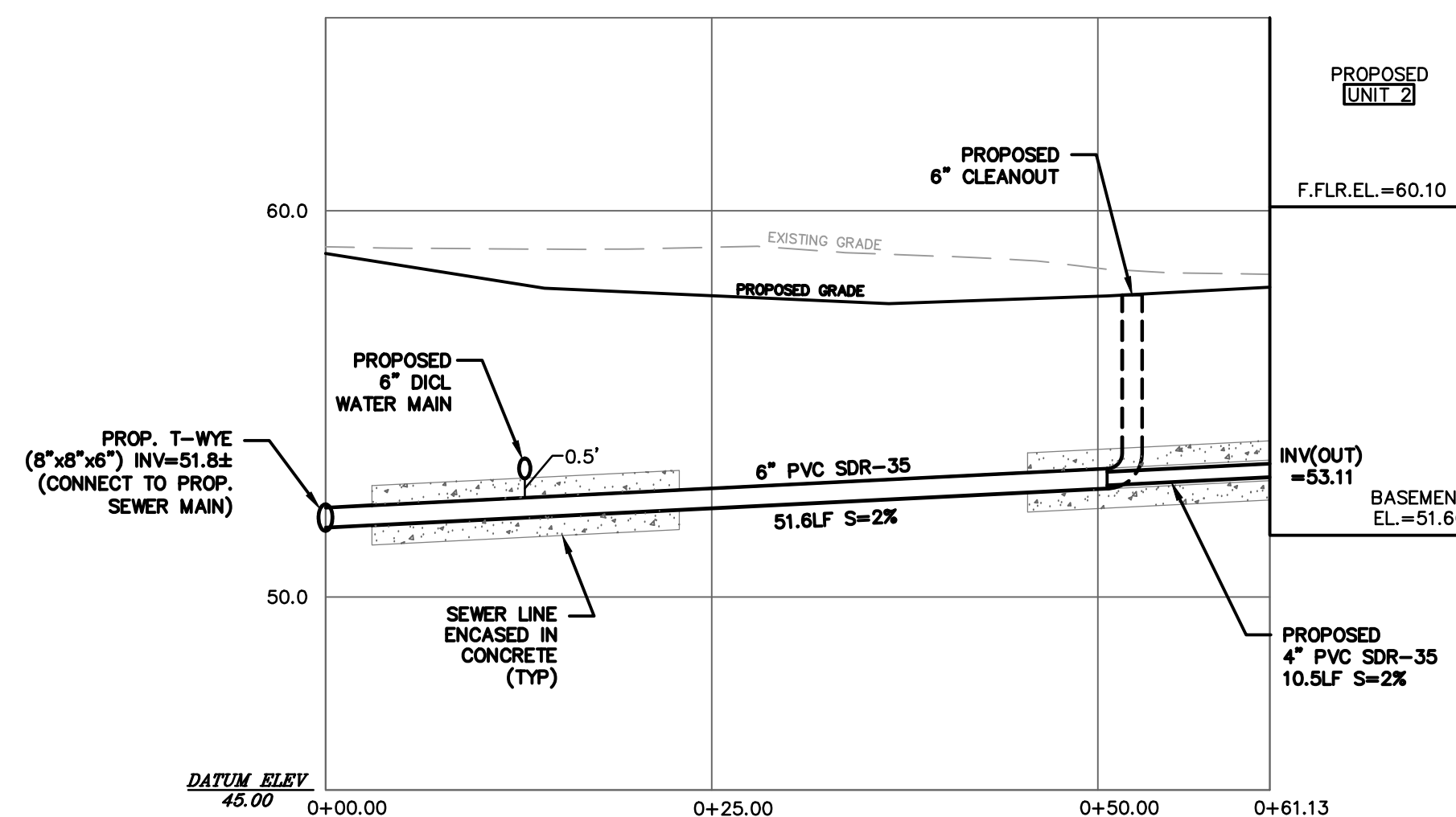
21412sp04.dwg (2/2013)



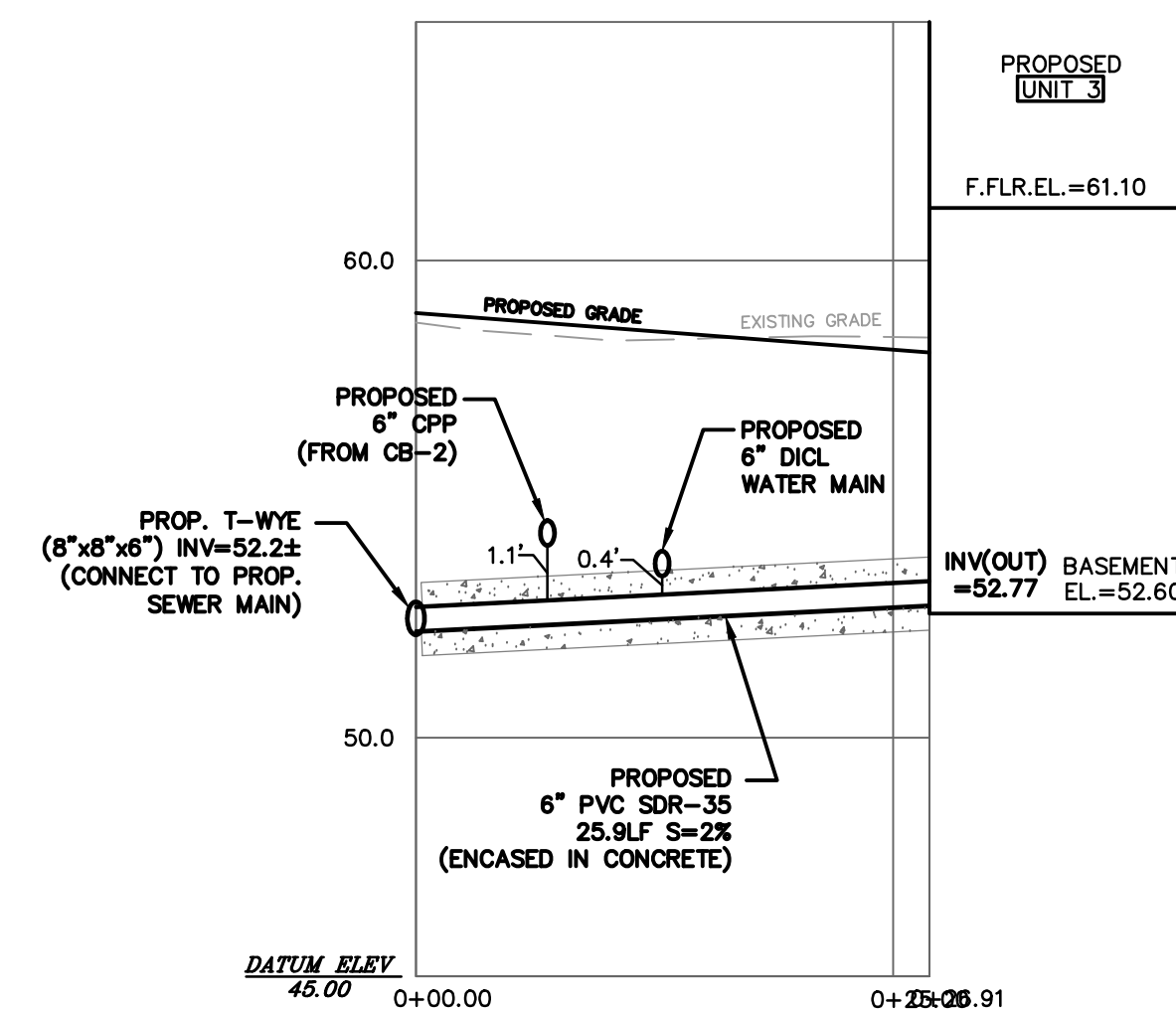
PROPOSED SEWER MAIN PROFILE
 SCALE: 1" = 10' (HORIZONTAL)
 SCALE: 1" = 4' (VERTICAL)



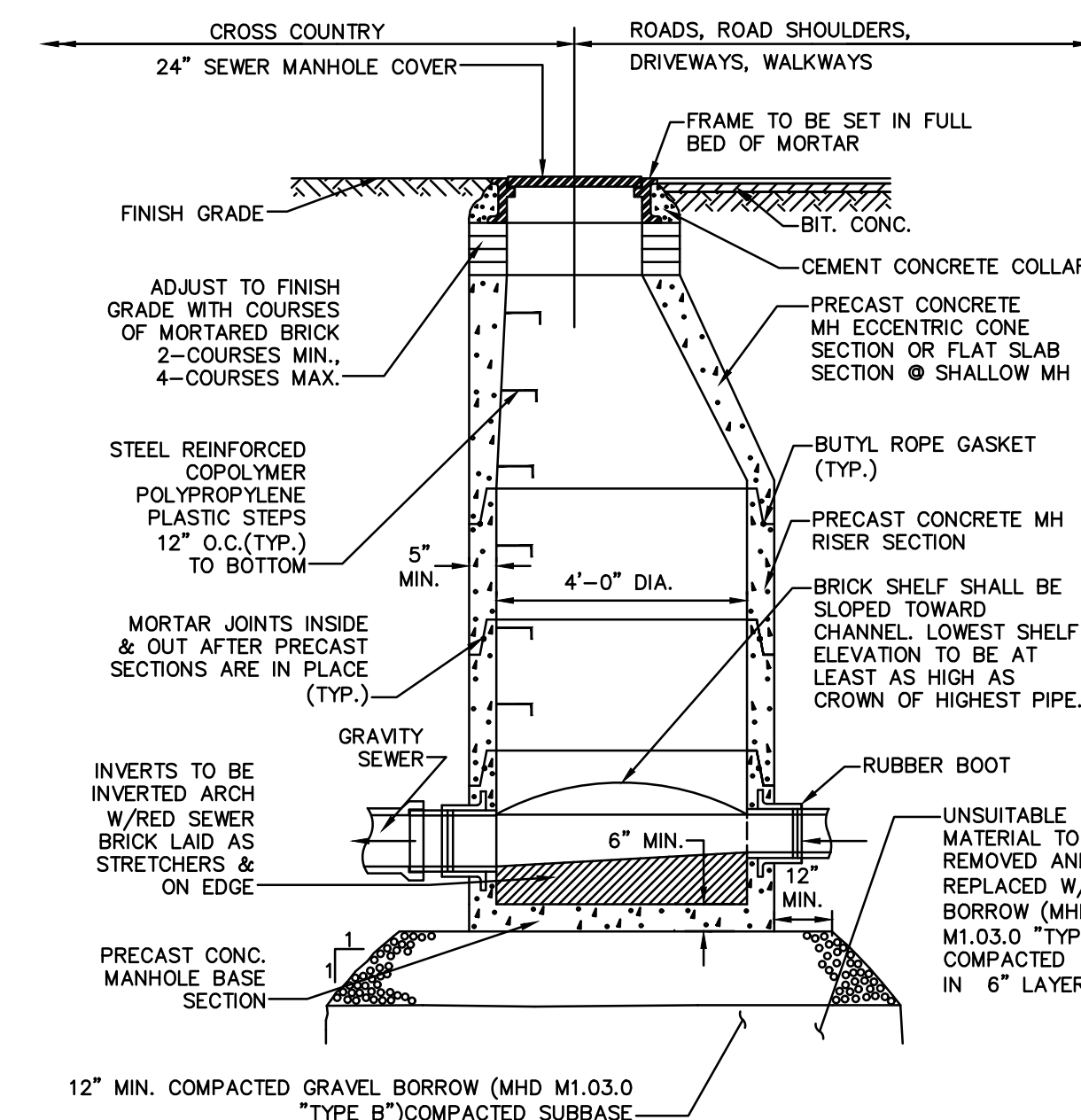
PROPOSED UNIT-1 SEWER SERVICE PROFILE
 SCALE: 1" = 10' (HORIZONTAL)
 SCALE: 1" = 4' (VERTICAL)



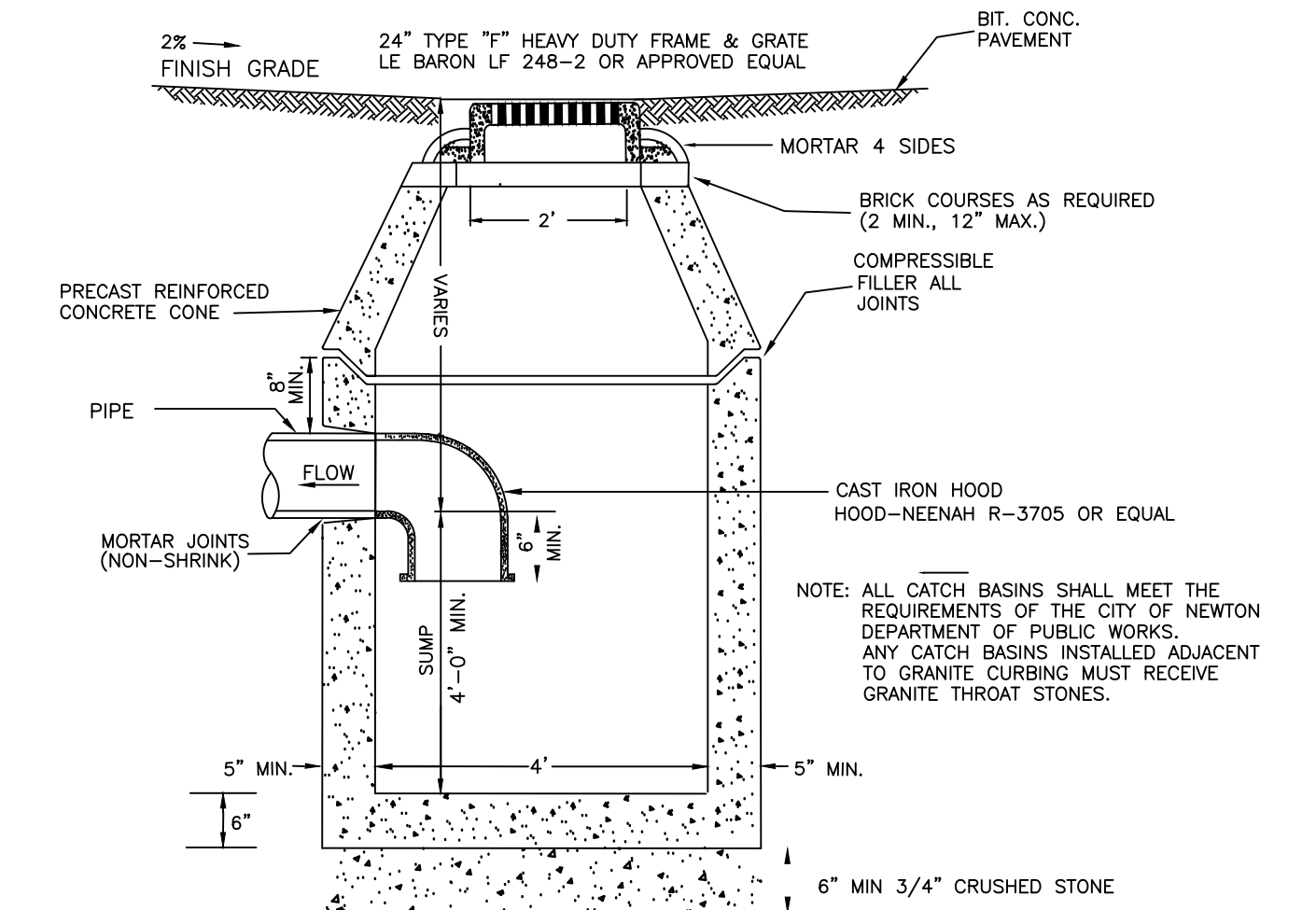
PROPOSED UNIT-2 SEWER SERVICE PROFILE
 SCALE: 1" = 10' (HORIZONTAL)
 SCALE: 1" = 4' (VERTICAL)



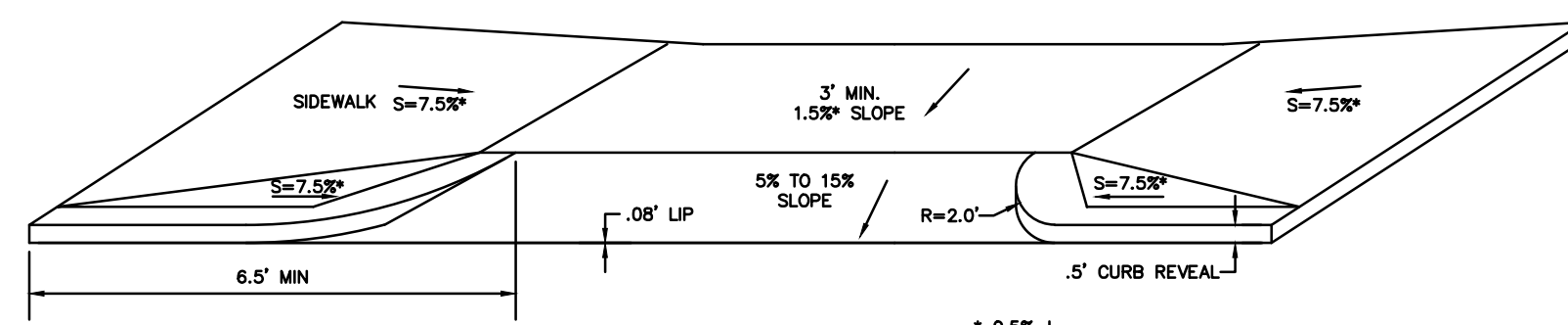
PROPOSED UNIT-3 SEWER SERVICE PROFILE
 SCALE: 1" = 10' (HORIZONTAL)
 SCALE: 1" = 4' (VERTICAL)



TYPICAL SEWER MANHOLE DETAIL
 NOT TO SCALE

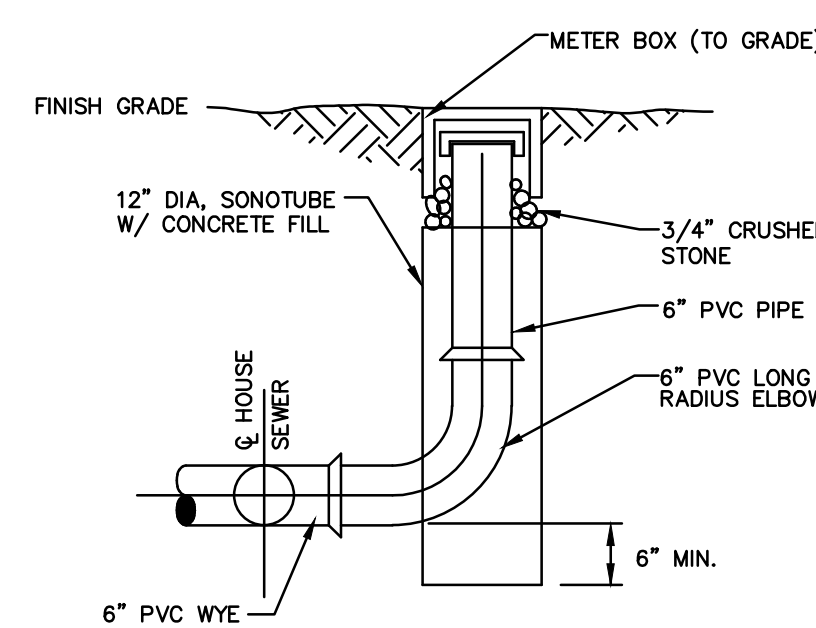


TYPICAL PRECAST CONCRETE CATCH BASIN WITH GAS TRAP
 NOT TO SCALE

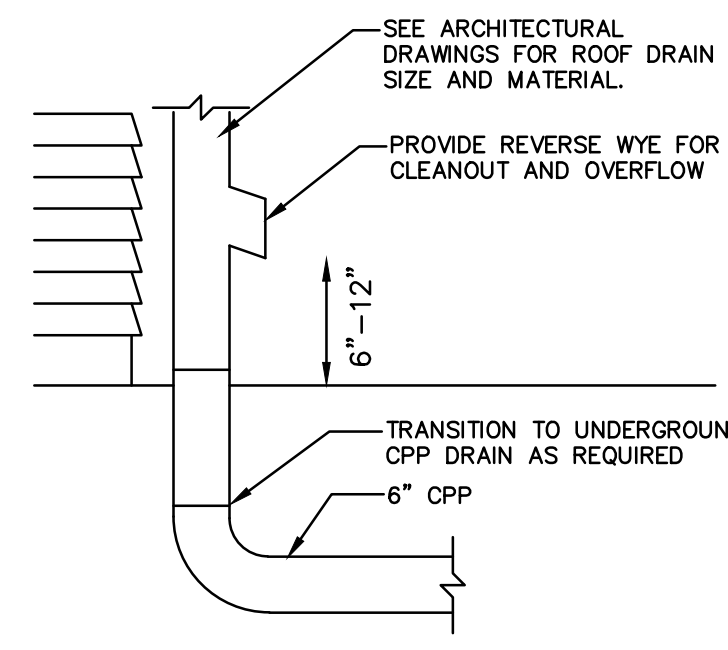


THROUGH SIDEWALK DRIVEWAYS W/ CURB RETURNS DETAIL
 NOT TO SCALE

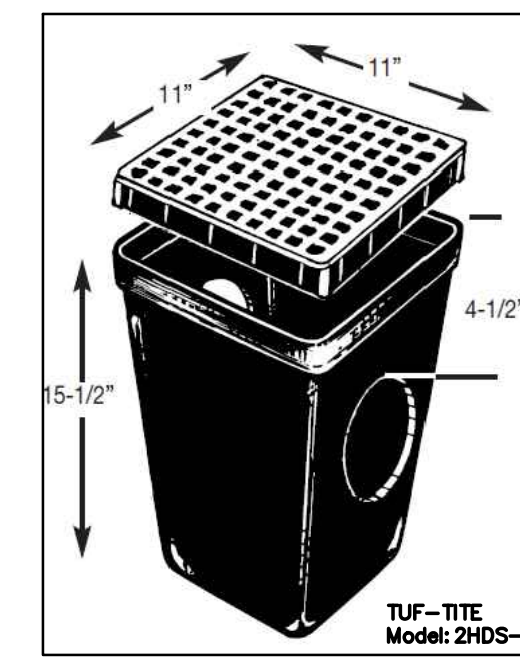
- ITEM NO. TY-500PC STANDARD 6,000LBS
 ITEM NO. TY-500PCH H-20 6,800LBS
- NOTES:
 1.) CONCRETE: 4,000PSI MINIMUM AFTER 28 DAYS
 2.) DESIGN CONFORMS WITH 310 CMR 15.000.
 3.) ALL REINFORCEMENT PER ASTM C1227-93
 4.) ALSO AVAILABLE IN H-20 LOADING
 5.) JOINT SEALED WITH BUTYL RESIN
 6.) PUMPS AND ACCESSORIES OPTIONAL



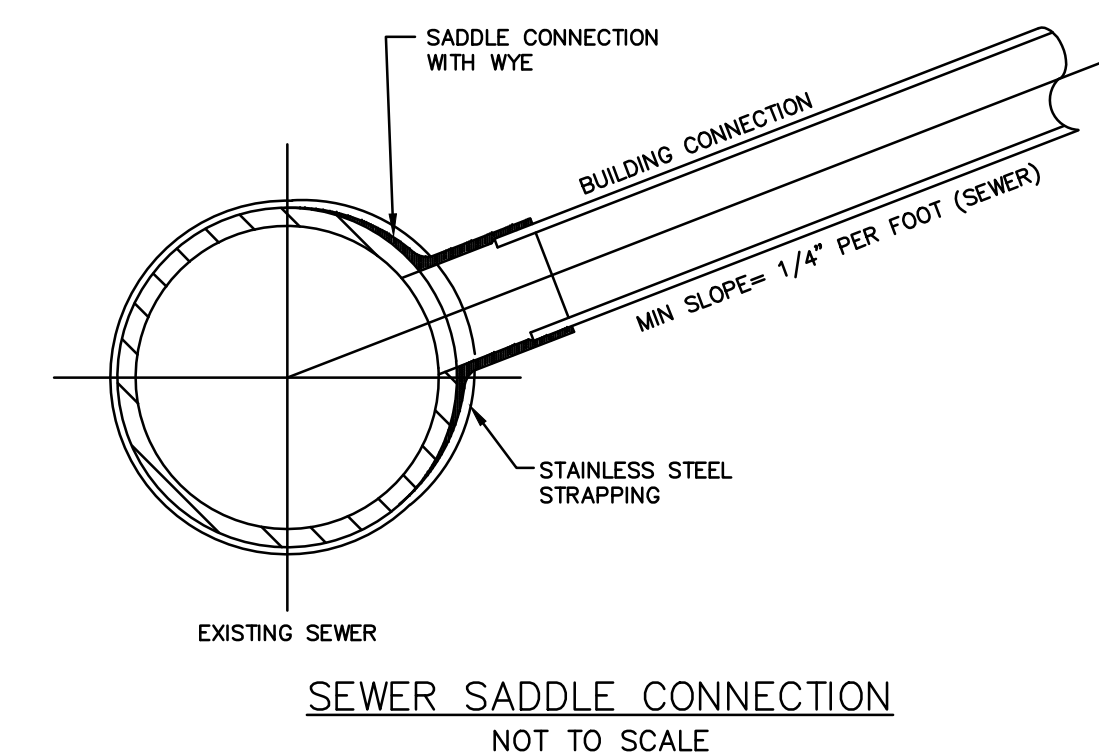
SEWER CLEANOUT
 NOT TO SCALE



ROOF LEADER DETAIL
 NOT TO SCALE



AREA DRAIN DETAIL
 NOT TO SCALE



SEWER SADDLE CONNECTION
 NOT TO SCALE



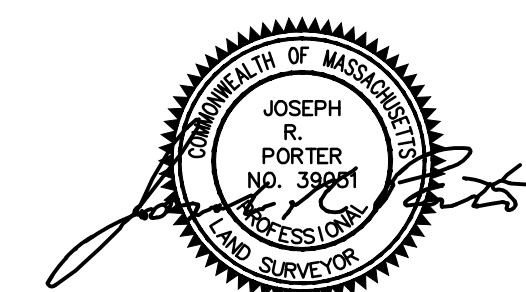
DETAIL-1
 NEWTON, MASSACHUSETTS
 SHOWING PROPOSED CONDITIONS AT
 #5-#7 ELM STREET
 #114 RIVER STREET (VACANT LOT)
 SCALE: AS-SHOWN DATE: JUNE 6, 2014
 REVISED: NOVEMBER 18, 2014

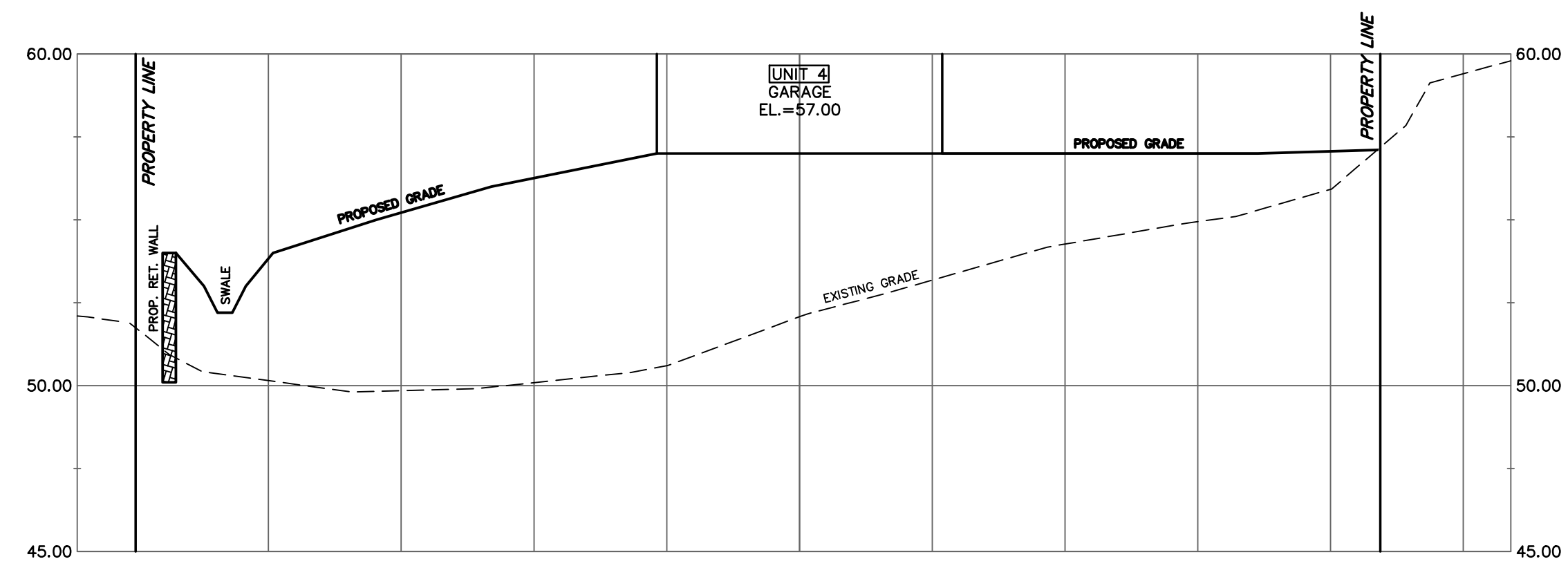
PROJECT: 214112

VTP ASSOCIATES
 INC.

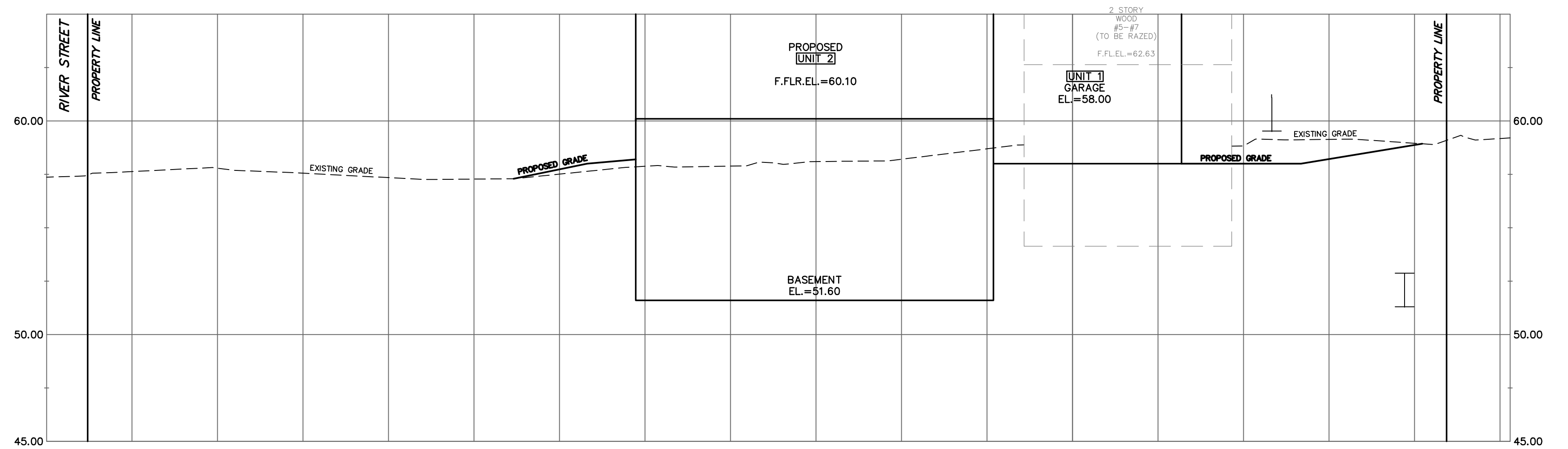
LAND SURVEYORS - CIVIL ENGINEERS, 132
 ADAMS STREET 2ND FLOOR SUITE 3
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 (617) 332-8271

SHEET 3 OF 5

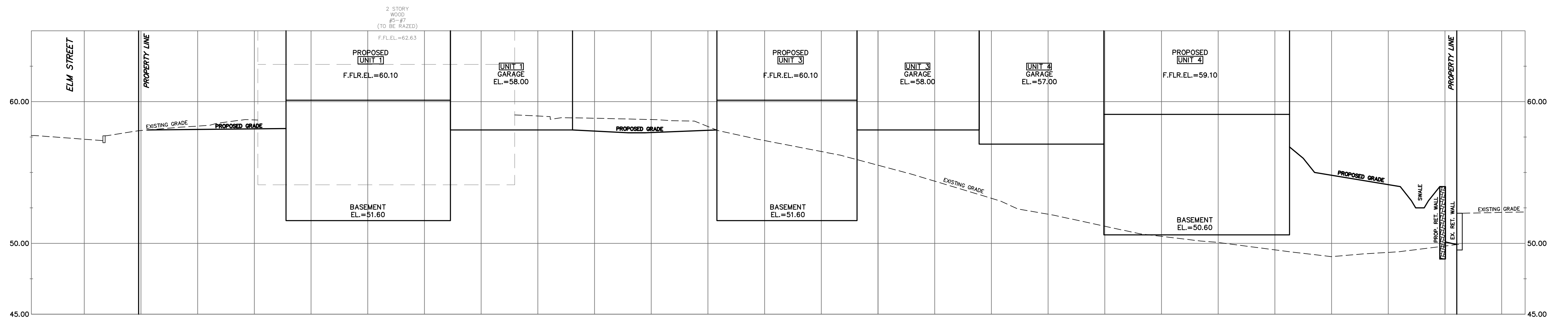




SECTION A-A'
SCALE: 1" = 10' (HORIZONTAL)
SCALE: 1" = 4' (VERTICAL)



SECTION B-B'
SCALE: 1" = 10' (HORIZONTAL)
SCALE: 1" = 4' (VERTICAL)



SECTION C-C'
SCALE: 1" = 10' (HORIZONTAL)
SCALE: 1" = 4' (VERTICAL)

DIG SAFE

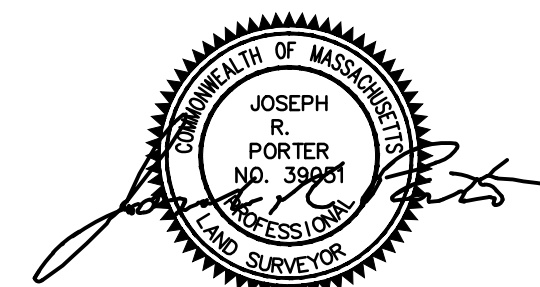
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1-888-DIG-SAFE. MASSACHUSETTS STATE
LAW REQUIRES NOTIFICATION AT LEAST THREE
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OPERATIONS. IN AN EMERGENCY, CALL IMMEDIATELY



**DETAIL-3
NEWTON, MASSACHUSETTS**

SHOWING PROPOSED CONDITIONS AT
#5-#7 ELM STREET
#114 RIVER STREET (VACANT LOT)
SCALE: AS-SHOWN DATE: NOVEMBER 28, 2014

PROJECT: 214112



**VTP
ASSOCIATES
INC.**

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