

LOT AREA
29,896 s.f.

U-POLE
70=47.5

REFERENCES
DEED BK 25093 PG. 257
DEED BK 54,114 PG. 487
DEED BK 14,589 PG. 272
PLAN #1872 OF 1986

ZONING
MR 1
LOT AREA MIN. 10,000 S.F.
LOT COVERAGE 18% MAX.
SPOT SPACE 45% MIN.
F.A.R. MAX= 0.5
MIN. F 40' OR MODAL AVG.
SETBACKS 1/2 30'

BUILDING HEIGHT CALCULATIONS
Σ ALL SIDES x LENGTH FND'N (AVERAGED)

BUILDING HEIGHT AVG. Σ [(s1 + s2)/2 x L]
FORMULA

I CERTIFY THAT THE DWELLING AND SITE FEATURES SHOWN HEREON HAVE BEEN LOCATED FROM INSTRUMENT SURVEY AND THAT PROPERTY LINES HAVE BEEN DETERMINED FROM DEEDS AND PLANS OF RECORD.

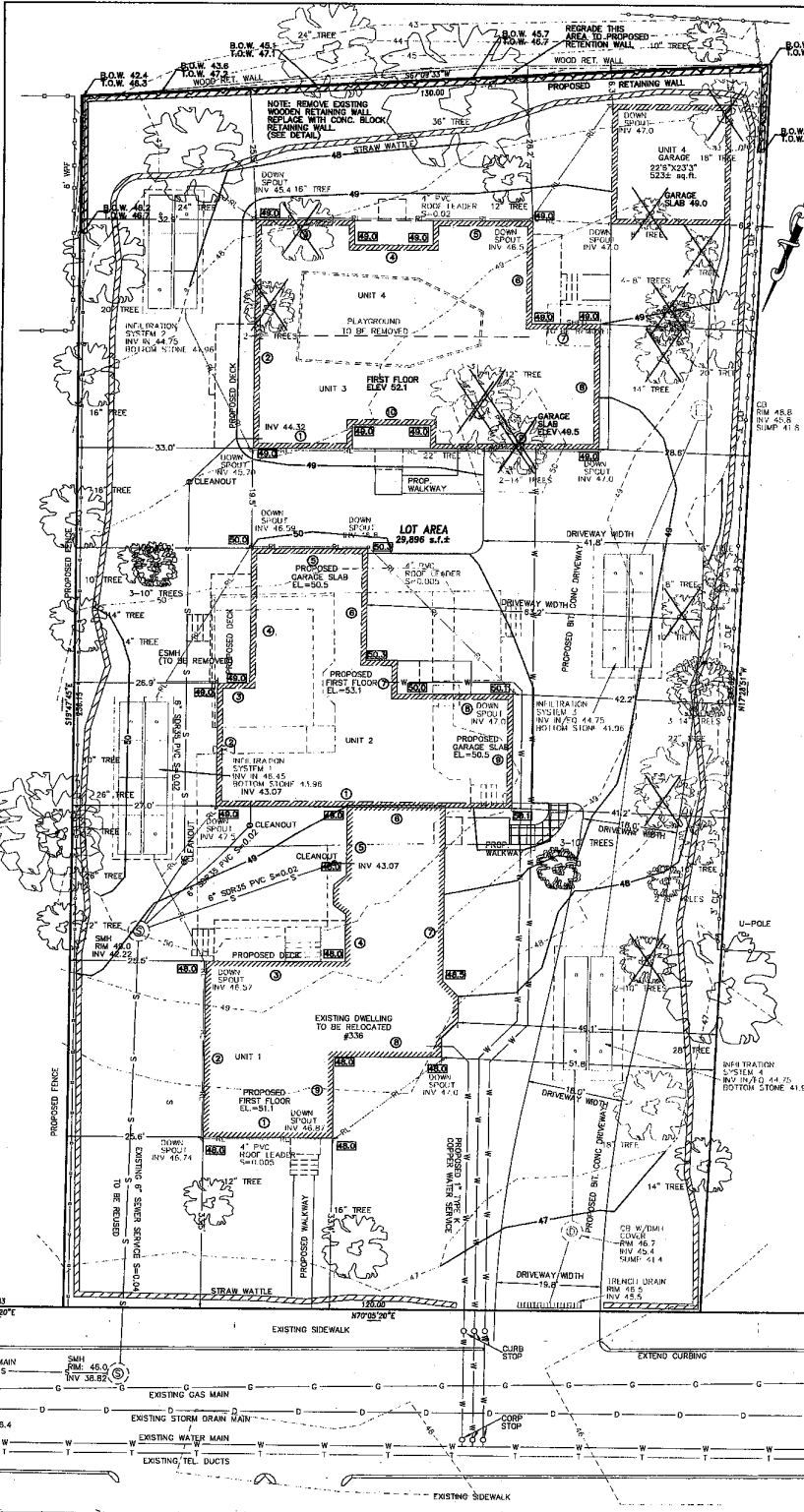
Bruce Cotton
David Cotton



EXISTING CONDITIONS PLAN
for
PATRICK MCKENNA
at
336 NEWTONVILLE AVE.
NEWTON, MA

CIVIL ENVIRONMENTAL CONSULTANTS L.L.C.
8 OAK STREET, PEABODY, MA 01960 (978) 531-1191

SHEET NO: 1 OF 3 DATE: 2-16-2016 JOB NO: 3582
DRAWN BY: W.S.D.



- GENERAL NOTES:
- NO EXCAVATION IS ALLOWED WITHIN ANY CITY RIGHT OF WAY BETWEEN NOVEMBER 15TH AND APRIL 15TH. IF AN EMERGENCY EXISTS OR OTHER 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 EXISTING WATER & SEWER SERVICES SHALL BE CUT AND CAPPED AT THE MAINS AND BE COMPLETELY REMOVED FROM THE SITE AND PROPERLY BACKFILLED. THE ENGINEERING DIVISION MUST INSPECT THIS WORK. FAILURE TO FINISH THIS WORK INSPECTED MAY RESULT IN THE DELAY OF THE ISSUANCE OF THE UTILITY CONNECTION PERMIT.
 - AS OF JANUARY 1, 2009, ALL TRENCH EXCAVATION CONTRACTORS SHALL COMPLY WITH MGL CH 26A, 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 AN INSTALL CURB & SIDEWALK PERMIT WITH THE DPW PRIOR TO START OF WORK.
 - AFTER ALL ENGINEERING PERMITS ARE OBTAINED, THE CONTRACTOR NEEDS TO NOTIFY THE ENGINEERING DIVISION AHEAD IN ADVANCE AND SCHEDULE AN APPOINTMENT TO HAVE THE WATER, DRAINAGE & 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.
 - WITH THE EXCEPTION OF GAS SERVICES, ALL UTILITY TRENCHES WITHIN THE CITY OF NEWTON RIGHT OF WAY WILL BE BACKFILLED WITH TYPE (EXCAVABLE) CONTROLLED DENSITY FILL, AS SPECIFIED BY THE CITY OF NEWTON ENGINEERING SPECIFICATIONS.
 - 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 AND DRAINAGE (UTILIZING SWING TES), ANY EASEMENTS AND FINAL GRADING.
 - IF ENGINEERING DIVISION ACCEPTANCE IS REQUESTED PRIOR TO ALL SITE WORK BEING COMPLETED, THE APPLICANT WILL BE REQUIRED TO POST A DEDICATED BANK CHECK IN THE AMOUNT TO COVER THE REMAINING WORK. THE CITY ENGINEER SHALL DETERMINE THE VALUE OF THE UNCOMPLETED WORK.
 - THE NEW SEWER SERVICES AND STRUCTURES WILL NEED TO BE PRESSURE TESTED AS FEASIBLE PRIOR TO ACCEPTANCE. THE PROPOSED SEWER LINE THAT CANNOT BE TESTED SHALL BE VIDEO TAPED AND SUBMITTED TO THE INSPECTOR.
 - EXISTING TIMBER RETENTION WALLS ALONG PROPERTY LINES TO BE REMOVED AND REPLACED WITH CONCRETE BLOCK RETENTION WALLS TO BE BUILT ACCORDING TO MANUFACTURING SPECIFICATIONS AND REINFORCED. REQUIRED RETENTION WALL ALONG PROPERTY LINE TO BE NO GREATER THAN 3 FT. HEIGHT.

AVERAGE GRADE PLANE CALCULATION UNIT 1

SECTION LENGTH	GRADE PLANE FORMULA	AVG. GRADE
1	24.33 (((48.0+48.0)/2)x24.33)/198.00 = 5.96	
2	3.78 (((48.0+48.0)/2)x 3.78)/18.00 = 8.45	
3	28.17 (((48.0+48.0)/2)x28.17)/198.00 = 6.41	
4	9.25 (((48.0+48.0)/2)x 9.25)/198.00 = 2.27	
5	13.29 (((48.0+48.0)/2)x13.29)/198.00 = 3.31	
6	18.46 (((48.0+48.0)/2)x18.46)/198.00 = 4.64	
7	33.75 (((48.0+48.0)/2)x33.75)/198.00 = 6.44	
8	20.25 (((48.0+48.0)/2)x20.25)/198.00 = 4.89	
9	18.00 (((48.0+48.0)/2)x18.00)/198.00 = 4.89	
AVERAGE GRADE PLANE TOTAL		48.36
MAX. BUILDING HEIGHT		51.10
MAXIMUM BUILDING ELEVATION		85.36
PROPOSED FIRST FLOOR ELEVATION		51.10
BUILDING HEIGHT		28.33
PROPOSED BUILDING MAX ELEVATION		79.43

AVERAGE GRADE PLANE CALCULATION UNIT 2

SECTION LENGTH	GRADE PLANE FORMULA	AVG. GRADE
1	55.75 (((50.1+49.0)/2)x55.75)/206.46 = 13.38	
2	24.00 (((48.0+48.0)/2)x 24.00)/206.46 = 5.70	
3	6.00 (((48.0+48.0)/2)x6.00)/206.46 = 1.42	
4	28.29 (((48.0+50.0)/2)x 28.29)/206.46 = 6.30	
5	21.89 (((50.0+50.0)/2)x21.89)/206.46 = 5.32	
6	21.75 (((50.0+50.0)/2)x21.75)/206.46 = 5.30	
7	8.33 (((50.0+50.0)/2)x8.33)/206.46 = 1.99	
8	22.00 (((50.0+50.0)/2)x22.00)/206.46 = 5.40	
9	22.25 (((50.1+50.1)/2)x22.25)/206.46 = 5.40	
AVERAGE GRADE PLANE TOTAL		48.74
MAX. BUILDING HEIGHT		53.10
MAXIMUM BUILDING ELEVATION		85.74
PROPOSED FIRST FLOOR ELEVATION		53.10
BUILDING HEIGHT		28.33
PROPOSED BUILDING MAX ELEVATION		81.43

AVERAGE GRADE PLANE CALCULATION UNIT 3 & 4

SECTION LENGTH	GRADE PLANE FORMULA	AVG. GRADE
1	18.61 (((48.0+48.0)/2)x18.61)/218.98 = 4.16	
2	44.30 (((48.0+48.0)/2)x44.30)/218.98 = 9.91	
3	18.61 (((48.0+48.0)/2)x18.61)/218.98 = 4.16	
4	14.88 (((48.0+48.0)/2)x14.88)/218.98 = 3.29	
5	18.84 (((48.0+48.0)/2)x18.84)/218.98 = 4.22	
6	20.07 (((48.0+48.0)/2)x20.07)/218.98 = 4.49	
7	13.05 (((48.0+48.0)/2)x13.05)/218.98 = 2.92	
8	24.23 (((48.0+48.0)/2)x24.23)/218.98 = 5.42	
9	31.89 (((48.0+48.0)/2)x31.89)/218.98 = 7.14	
10	14.88 (((48.0+48.0)/2)x14.88)/218.98 = 3.29	
AVERAGE GRADE PLANE TOTAL		48.00
MAX. BUILDING HEIGHT		52.00
MAXIMUM BUILDING ELEVATION		85.00
PROPOSED FIRST FLOOR ELEVATION		52.00
BUILDING HEIGHT		28.33
PROPOSED BUILDING MAX ELEVATION		80.10

LEGEND:

TREES TO BE REMOVED

REFERENCES
 DEED BK. 25,093 PG. 257
 DEED BK. 24,114 PG. 487
 DEED BK. 14,361 PG. 272
 PLAN #1872 OF 1986

GRAPHIC SCALE
 1 inch = 30 ft.

ZONING - LOT CREATED PRIOR TO 1953:

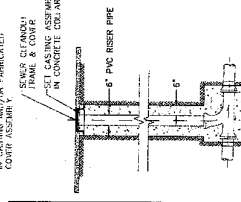
DISTRICT	REQ'D	EXISTING	PROPOSED
LOT AREA (MIN.)	15000 S.F.	29,896 S.F.±	29,896 S.F.±
LOT AREA PER UNIT (MIN.)	4,000 S.F.	29,896 S.F.±	7,474 S.F.±
FLOOR AREA RATIO (MAX.)	0.40	0.308	0.308
LOT COVERAGE (MAX.)	25%	6.1%	22.9%
OPEN SPACE (MIN.)	50%	85.1%	58.8%
FRONTAGE (MIN.)	80 FT.	120.00 FT	120.00 FT.
SETBACKS - FRONT	25 FT.	74.3 FT.	33.5 FT.
SETBACKS - SIDE	25 FT.	23.0 FT./49.0 FT.	25.6 FT./26.9 FT.
SETBACKS - REAR	25 FT.	98.7 FT.	25.5 FT.
SETBACKS - ACCESSORY	5 FT.	27.7 FT.	6.3 FT.
HEIGHT (MAX.)	36 FT.	30 FT.	31.43 FT.
NO. OF STORES	2.5	2	2



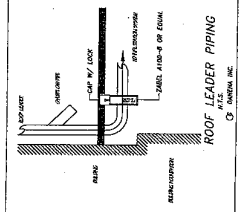
PROPOSED SITE PLAN
 336 NEWTONVILLE AVENUE
 NEWTON, MA
 FOR
 PATRICK MCKENNA
 CIVIL ENVIRONMENTAL CONSULTANTS
 8 OAK STREET PEABODY, MA 01960 978-531-1191

SHEET NO: 2 OF 3 DATE: 5/4/2017 JOB: 3582
 DRAWN BY: C.R.L.

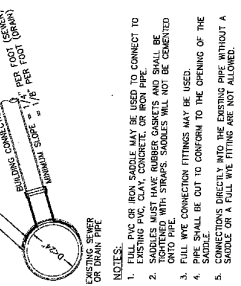
NOTE:
 CLEARANCE OF SHALL BE ENOUGH
 TO CLEAR THE MANHOLE
 COVER ASSURANCE



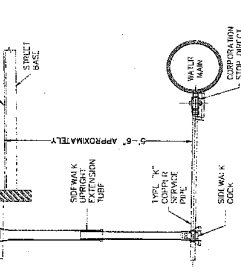
SEWER CLEANOUT
 4" PVC RISER PIPE
 CLEANOUT CAP WITH
 1/2" AIR GAP
 IN CONCRETE CULVERT



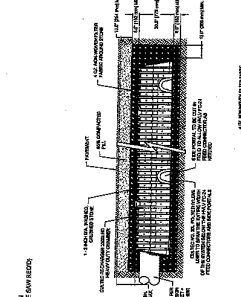
ROOF LEADER PIPING
 4" PVC RISER PIPE
 CLEANOUT CAP WITH
 1/2" AIR GAP
 IN CONCRETE CULVERT



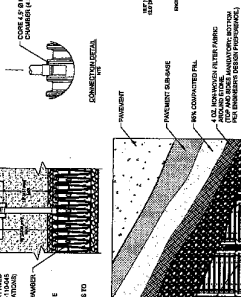
SEWER/RAIN SERVICE CONNECTION DETAIL
 4" PVC RISER PIPE
 CLEANOUT CAP WITH
 1/2" AIR GAP
 IN CONCRETE CULVERT



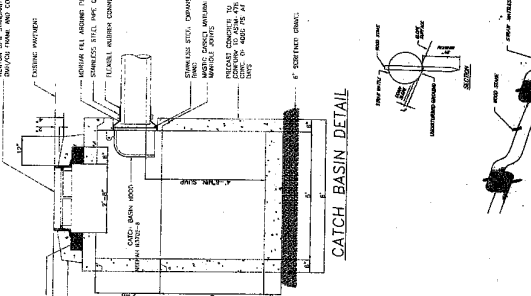
WATER SERVICE CONNECTION DETAIL
 1/2" AIR GAP
 IN CONCRETE CULVERT



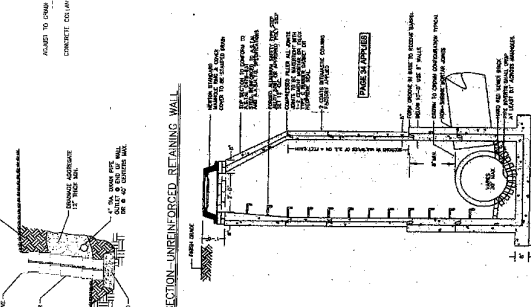
TYPICAL SECTION-UNREINFORCED RETAINING WALL
 4" PVC RISER PIPE
 CLEANOUT CAP WITH
 1/2" AIR GAP
 IN CONCRETE CULVERT



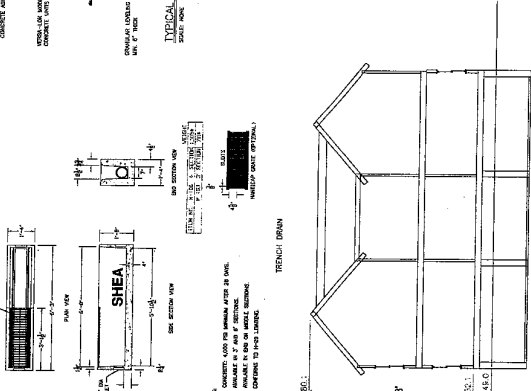
PRECAST SEWER MANHOLE DETAIL
 4" PVC RISER PIPE
 CLEANOUT CAP WITH
 1/2" AIR GAP
 IN CONCRETE CULVERT



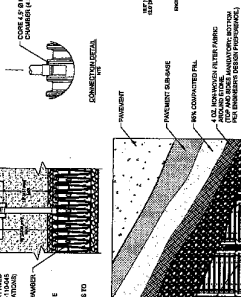
CATCH BASIN DETAIL
 4" PVC RISER PIPE
 CLEANOUT CAP WITH
 1/2" AIR GAP
 IN CONCRETE CULVERT



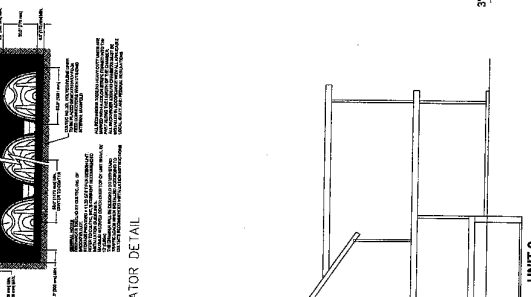
TRENCH DRAIN
 4" PVC RISER PIPE
 CLEANOUT CAP WITH
 1/2" AIR GAP
 IN CONCRETE CULVERT



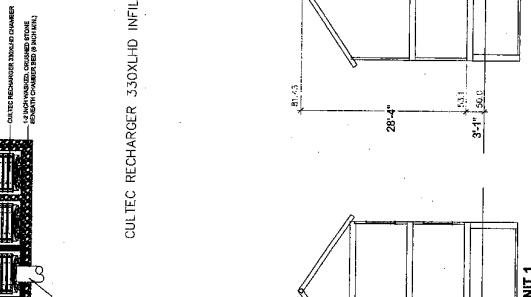
TYPICAL C.O.D.E. WATER METER DETAIL
 4" PVC RISER PIPE
 CLEANOUT CAP WITH
 1/2" AIR GAP
 IN CONCRETE CULVERT



CULVERT RECHARGER 330XLHD INFILTRATOR DETAIL
 4" PVC RISER PIPE
 CLEANOUT CAP WITH
 1/2" AIR GAP
 IN CONCRETE CULVERT



BUILDING CROSS-SECTIONS
 4" PVC RISER PIPE
 CLEANOUT CAP WITH
 1/2" AIR GAP
 IN CONCRETE CULVERT



BUILDING CROSS-SECTIONS
 4" PVC RISER PIPE
 CLEANOUT CAP WITH
 1/2" AIR GAP
 IN CONCRETE CULVERT

DETAIL SHEET
 336 NEWTONVILLE AVENUE
 NEWTON, MA
 FOR
 PATRICK MCKENNA
 CIVIL ENVIRONMENTAL CONSULTANTS
 8 OAK STREET PEABODY, MA 01960 978-531-1191
 SHEET NO: 3 OF 3 DATE: 5/4/2017 JOB: 3562
 DRAWN BY: C.R.L.



UNITS 3 & 4
 4" PVC RISER PIPE
 CLEANOUT CAP WITH
 1/2" AIR GAP
 IN CONCRETE CULVERT

UNITS 1 & 2
 4" PVC RISER PIPE
 CLEANOUT CAP WITH
 1/2" AIR GAP
 IN CONCRETE CULVERT

UNITS 3 & 4
 4" PVC RISER PIPE
 CLEANOUT CAP WITH
 1/2" AIR GAP
 IN CONCRETE CULVERT

UNITS 1 & 2
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