

SFGstudios

Architectural Design Services
278 Elm Street, Suite 226
Somerville, MA 02144
781.956.9773 cell
SFGstudios@msn.com

PROJECT

34-38 Dane Street Residences

34 - 38 Dane Street
Somerville, Massachusetts

Occupancy / Use : RESIDENTIAL USE GROUP R-2

All construction methods are to comply with:

International Building Code 2009 (IRC) with MA Amendments (780 CMR)

International Fire Code 2009 (IFC)

International Mechanical Code 2009 (IMC)

International Fuel & Gas Code 2009 (IFGC)

International Electrical Code 2009 (IEC)

International Energy Conservation Code 2012 (IECC) with MA Amendments (780 CMR 115.AA)

OWNER

Cassia Silva
Paulo DaSilva
38 Dane Street
Somerville, Massachusetts

ZONE RC

MAP 64 / BLOCK D / LOT 1 & 3

LOT SIZE: 7,440 SF

DESIGN CRITERIA: SOMERVILLE, MASSACHUSETTS

CLIMATE ZONE 5A

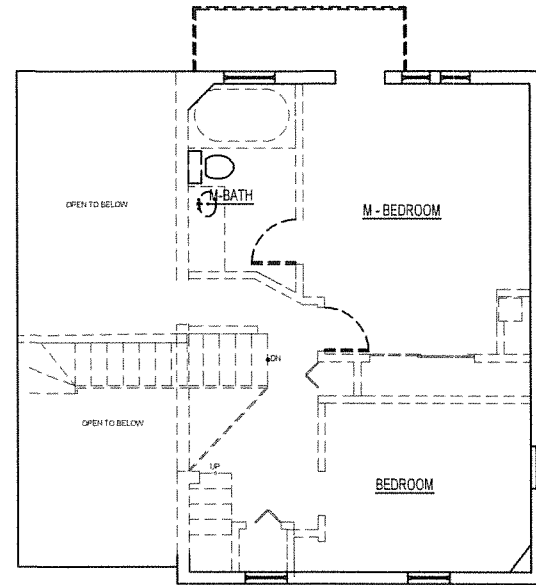
GROUND SNOW LOAD (Pg) 50 PSF

WIND SPEED 100 MPH

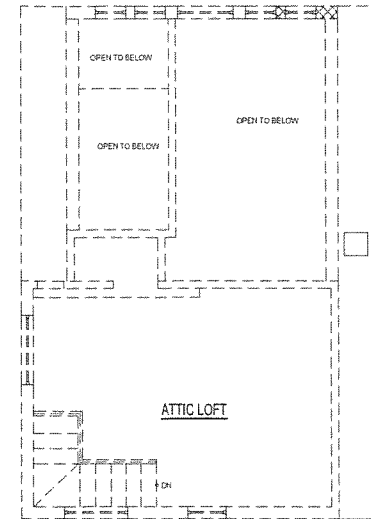


DANE STREET ELEVATIONS 34 - 38 DANE ST

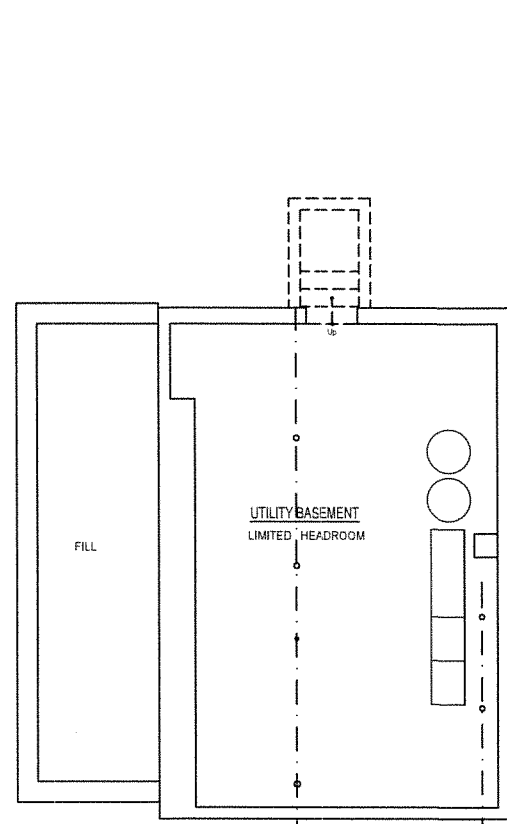
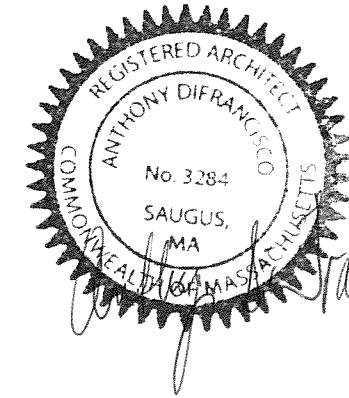
PROPOSED 34 DANE ST WITH PROPOSED 38 DANE ST



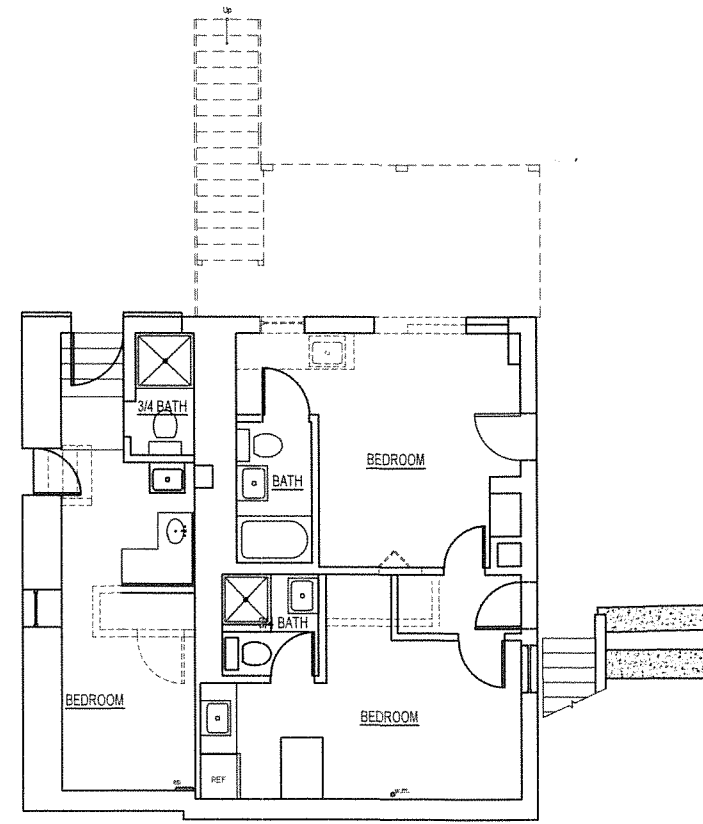
EXISTING SECOND FLOOR



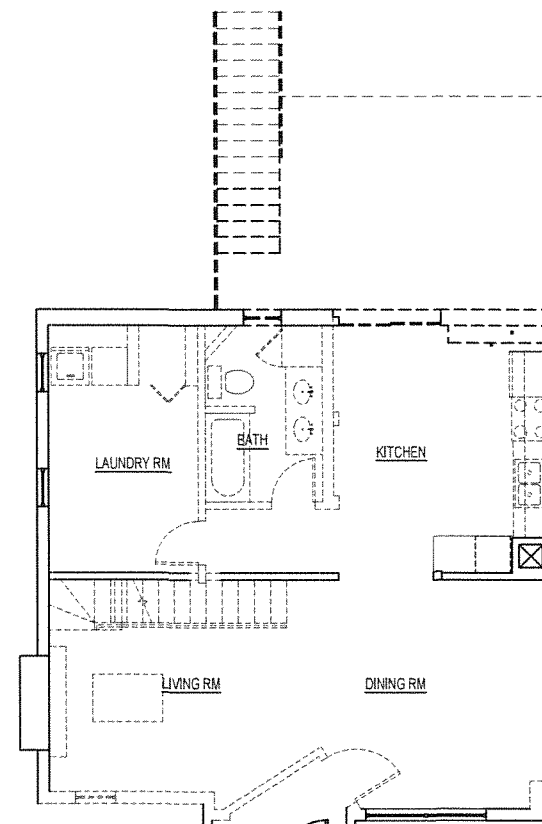
EXISTING ATTIC



EXISTING UTILITY BASEMENT



EXISTING GARDEN LEVEL



EXISTING FIRST FLOOR

GROSS FLR AREA = 3,336 GFA
LIVING AREA = 1,576 NSF
PER ASSESSOR'S DATABASE

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Somerville, MA 02143

34 - 38 DANE STREET DEVELOPMENT
34 - 38 DANE STREET
SOMERVILLE, MA 02143
38 DANE STREET
EXISTING CONDITIONS

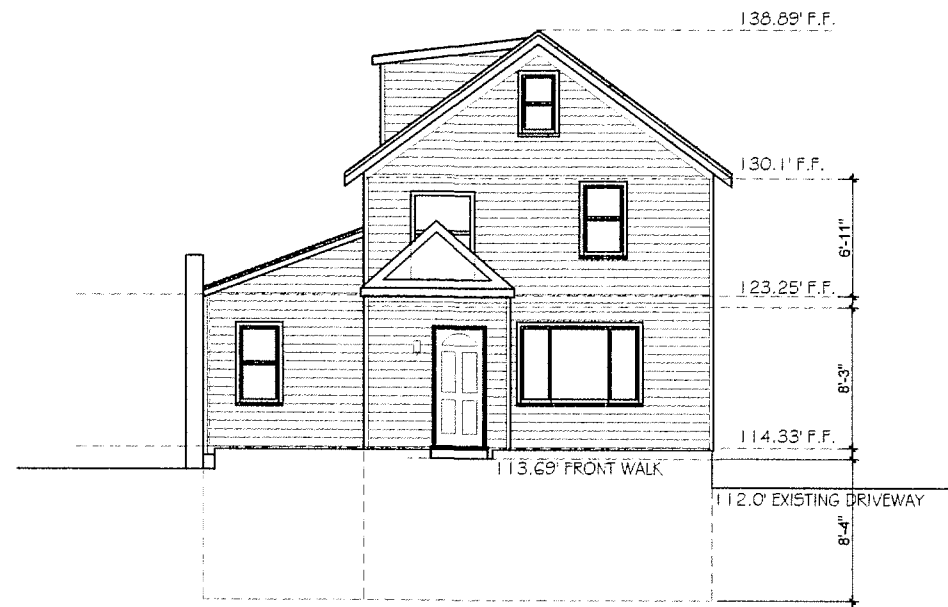
NO.	DATE	REVISIONS
1	04/07/17	ZBA SUBMITTAL

DRAWN BY: SFG
APPROVED BY: ADF

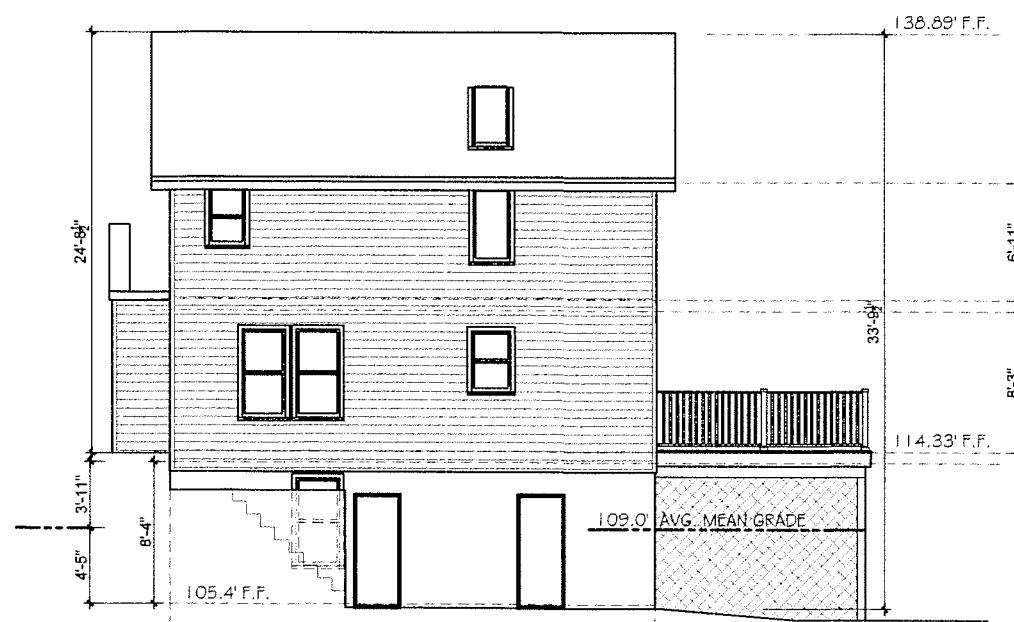
DATE: 02/20/2017

PROJECT No.
SCALE: 3/32" = 1'-0"

DRAWING No. **X1.0**



EXISTING FRONT ELEVATION - 38 DANE ST



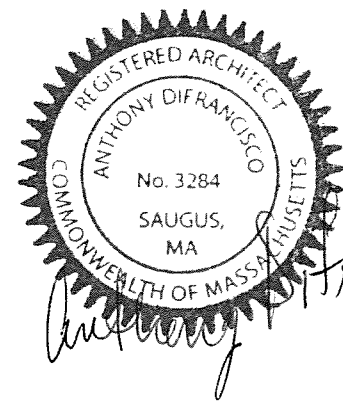
EXISTING RIGHT ELEVATION - 38 DANE ST



EXISTING REAR ELEVATION - 38 DANE ST



EXISTING LEFT ELEVATION - 38 DANE ST



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34 - 38 DANE STREET DEVELOPMENT
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 SOMERVILLE, MA 02143
 38 DANE STREET
 EXISTING CONDITIONS

REVISIONS	DATE	BY	APPROVED BY
1	04/07/17	ZBA SUBMITTAL	

DRAWN BY: SFG APPROVED BY: ADF

DATE: 02/20/2017

PROJECT No:

SCALE: 3/32" = 1'-0"

DRAWINGS No: X2.0

OWNER
 Cassia Silva
 Paulo Dasilva
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34 - 38 DANE STREET DEVELOPMENT
 34 - 38 DANE STREET
 SOMERVILLE, MA 02143
 34 DANE STREET
 PROPOSED FLOOR PLANS

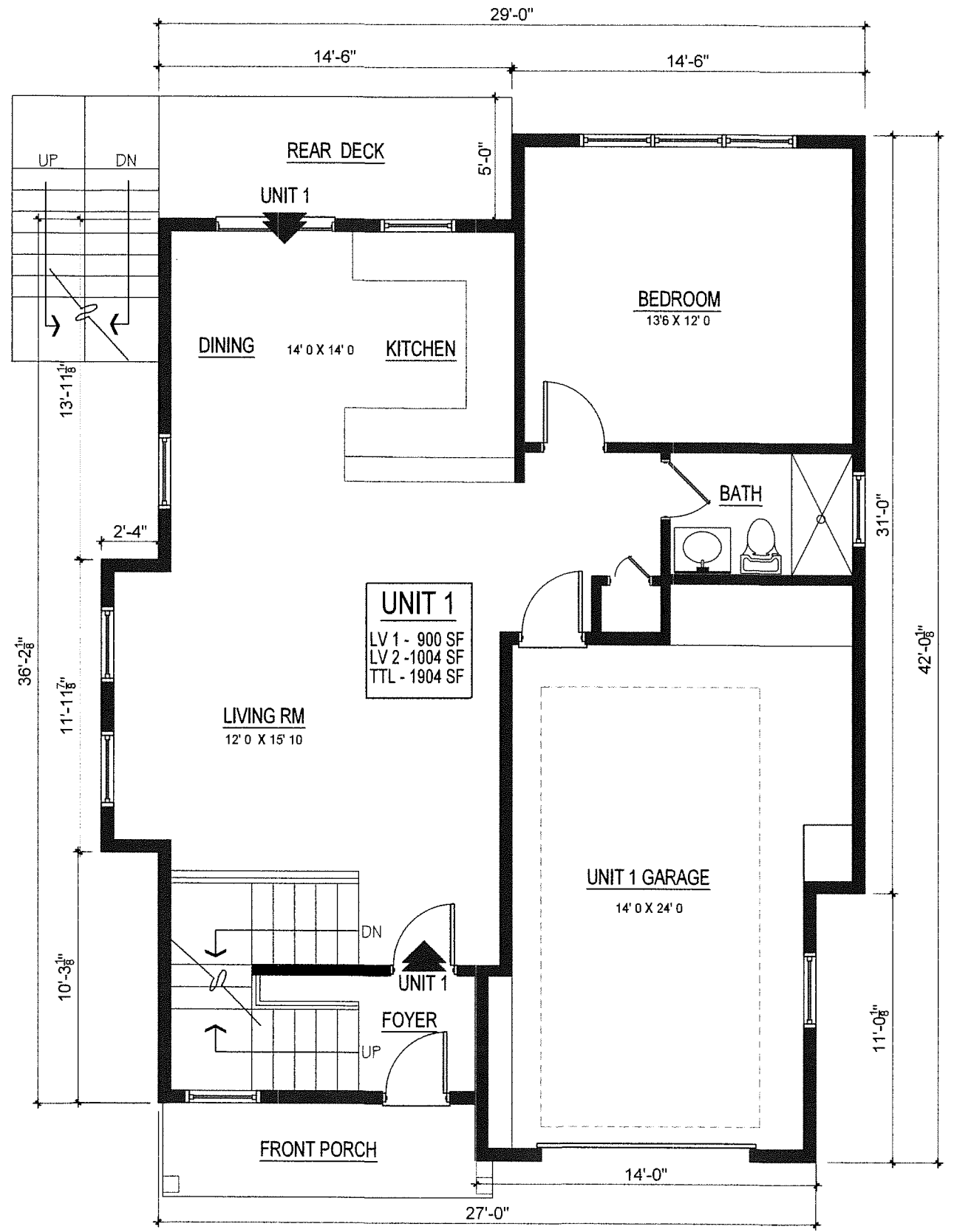
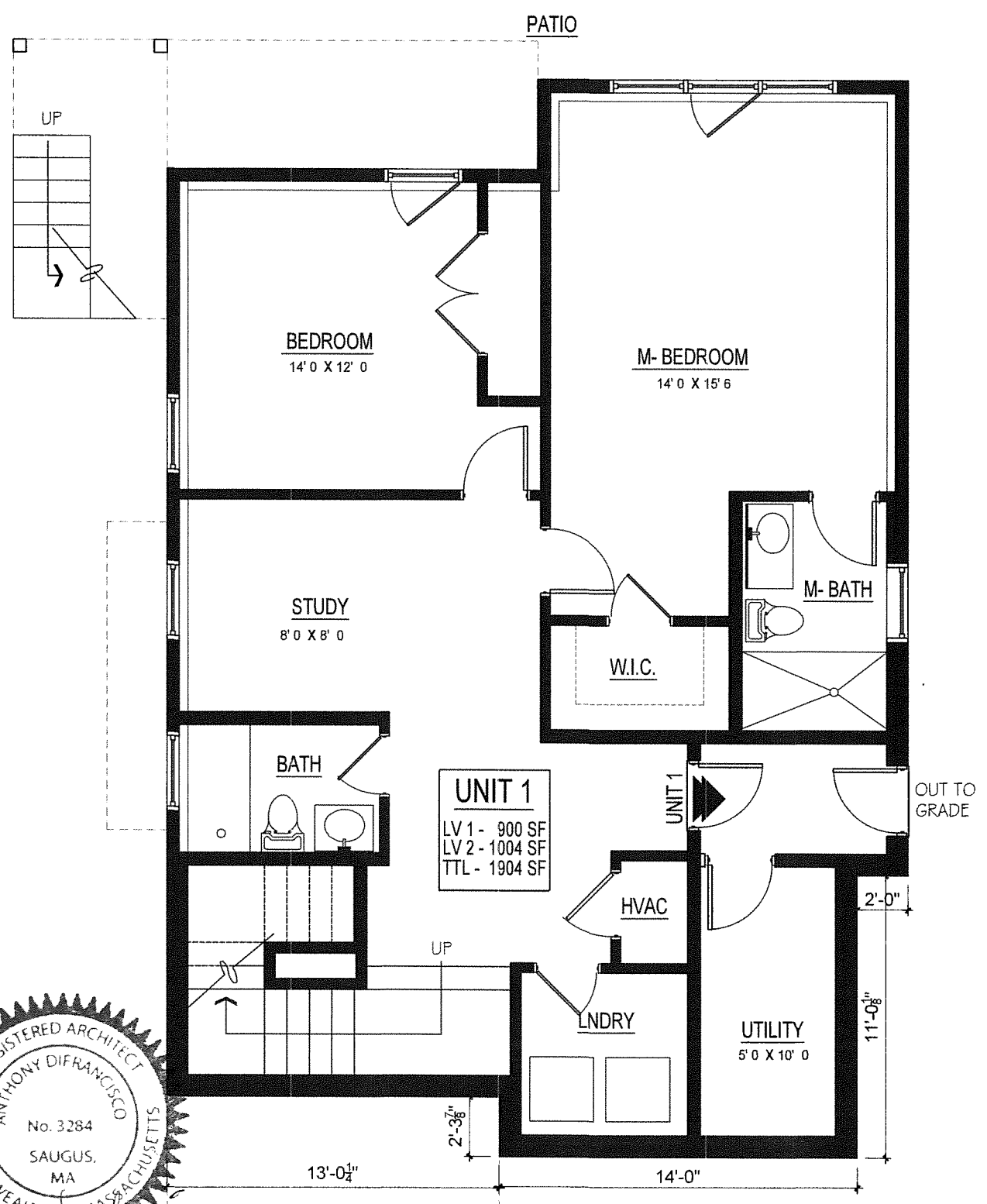
NO.	REVISIONS	DATE	BY
1	04/02/17 ZBA SUBMITTAL		
2			
3			
4			
5			

DRAWN BY: SFG
 APPROVED BY: ADF

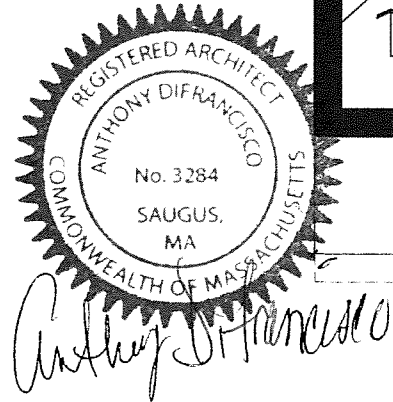
DATE: 02/20/2017

PROJECT NO.
 SCALE: 3/16" = 1'-0"

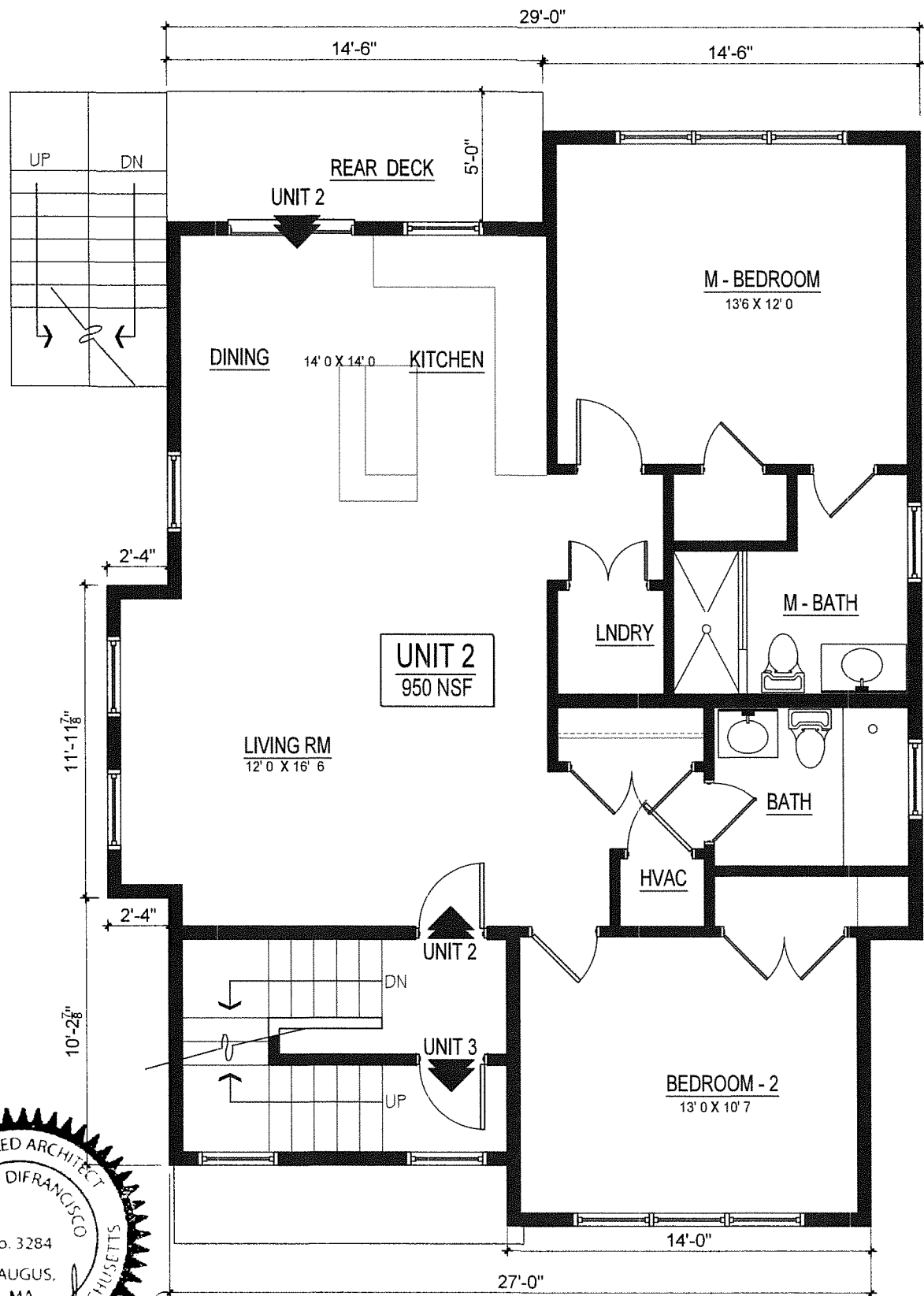
DRAWING NO. **A1.0**



34 DANE STREET

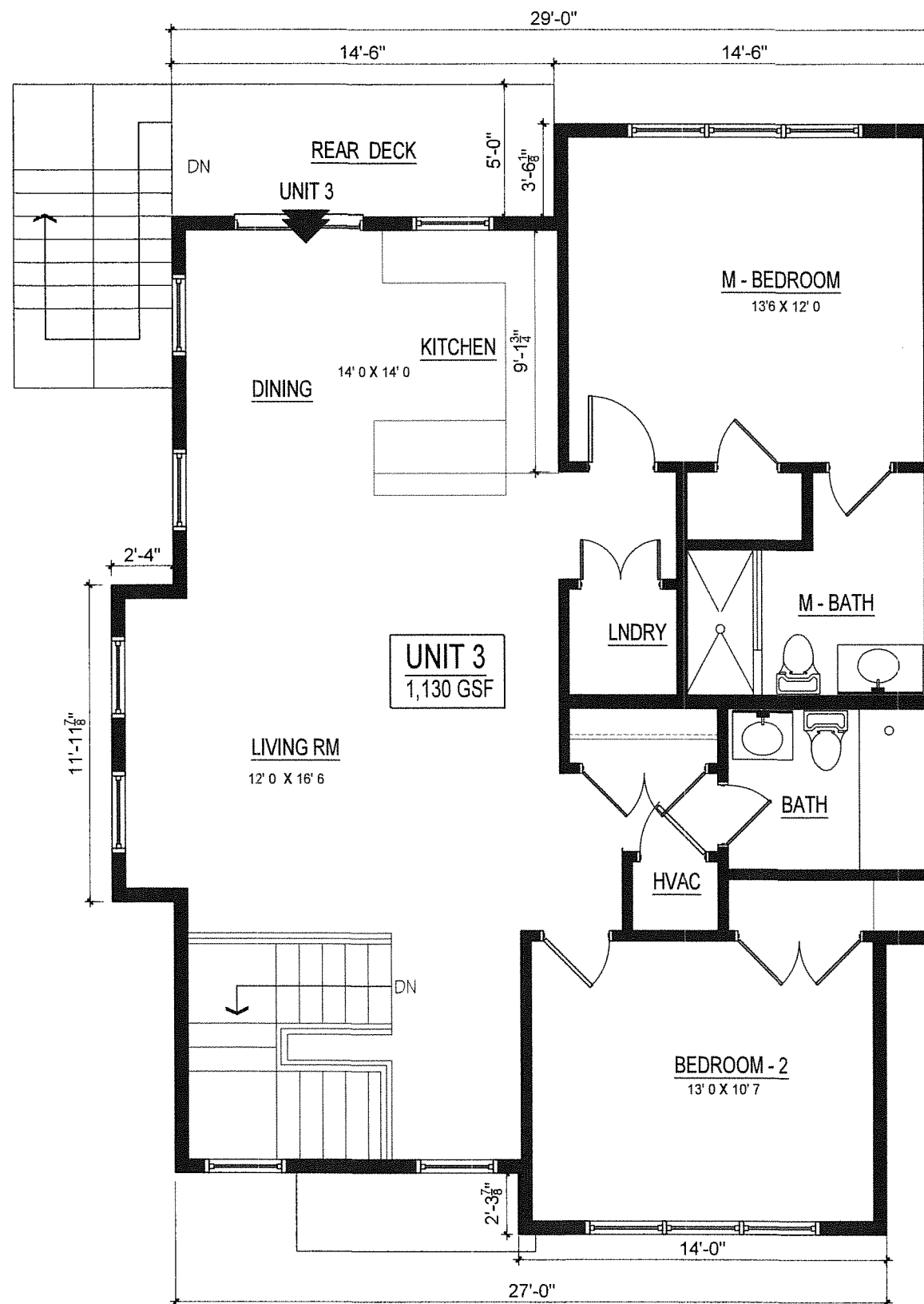


04/02/2017 ZBA SUBMITTAL



SECOND FLOOR PLAN

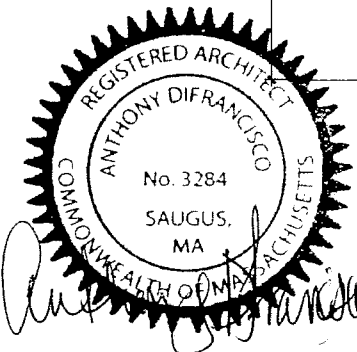
GSF - 1,143
NSF - 1,030
3/16" = 1'-0"



THIRD FLOOR PLAN

GSF - 1,143
NSF - 900
3/16" = 1'-0"

34 DANE STREET



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34 - 38 DANE STREET DEVELOPMENT
34 - 38 DANE STREET
SOMERVILLE, MA 02143
34 DANE STREET
PROPOSED FLOOR PLANS

REVISIONS	
No.	Description
1	04/07/17 ZBA SUBMITTAL

DRAWN BY: SFG
APPROVED BY: ADF

DATE: 02/20/2017

PROJECT No.
SCALE: 3/16" = 1'-0"

DRAWING No. **A1.1**

OWNER
 Cassia Silva
 Paulo Dasilva
 38 Dane Street
 Somerville, MA 02143

34 - 38 DANE STREET DEVELOPMENT
 34 - 38 DANE STREET
 SOMERVILLE, MA 02143
 34 DANE STREET
 PROPOSED ELEVATIONS

REVISIONS	DATE	BY	APPROVED BY
1	04/07/17	ZBA SUBMITTAL	

DRAWN BY: SFG APPROVED BY: ADF

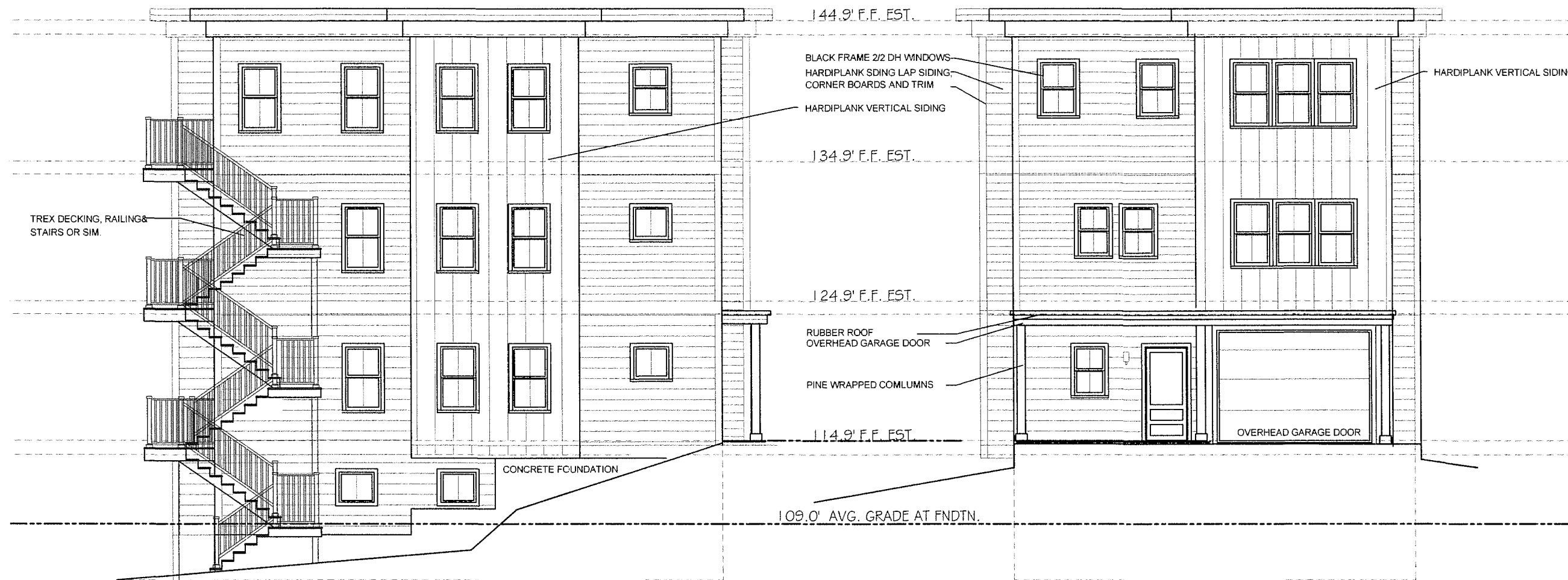
DATE: 02/20/2017

PROJECT No.:

SCALE: 1/8" = 1'-0"

DRAWINGS No.:

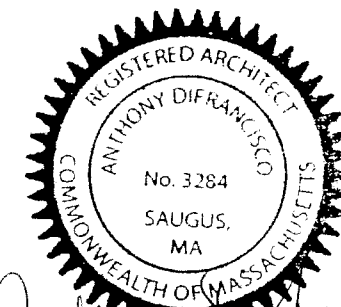
A2.0



LEFT ELEVATION - 34 DANE ST
 1/8" = 1'-0"

FRONT ELEVATION - 34 DANE ST
 1/8" = 1'-0"

34 DANE STREET



Anthony DiFrancesco

OWNER
 Cassia Silva
 Paulo Dasilva
 38 Dane Street
 Somerville, MA 02143

34 - 38 DANE STREET DEVELOPMENT
 34 - 38 DANE STREET
 SOMERVILLE, MA 02143

34 DANE STREET
 PROPOSED ELEVATIONS

REVISIONS	DATE	BY	REVISION
1	04/07/17	ZBA	SUBMITTAL
2			
3			
4			
5			

DRAWN BY: SFG ADF

DATE: 02/20/2017

PROJECT No.

SCALE: 1/8" = 1'-0"

DRAWING No. **A2.1**

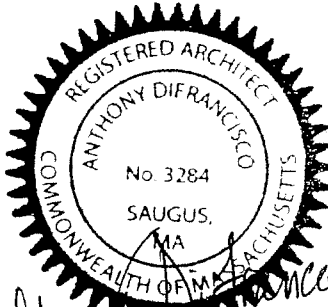


REAR ELEVATION - 34 DANE ST
 1/8" = 1'-0"

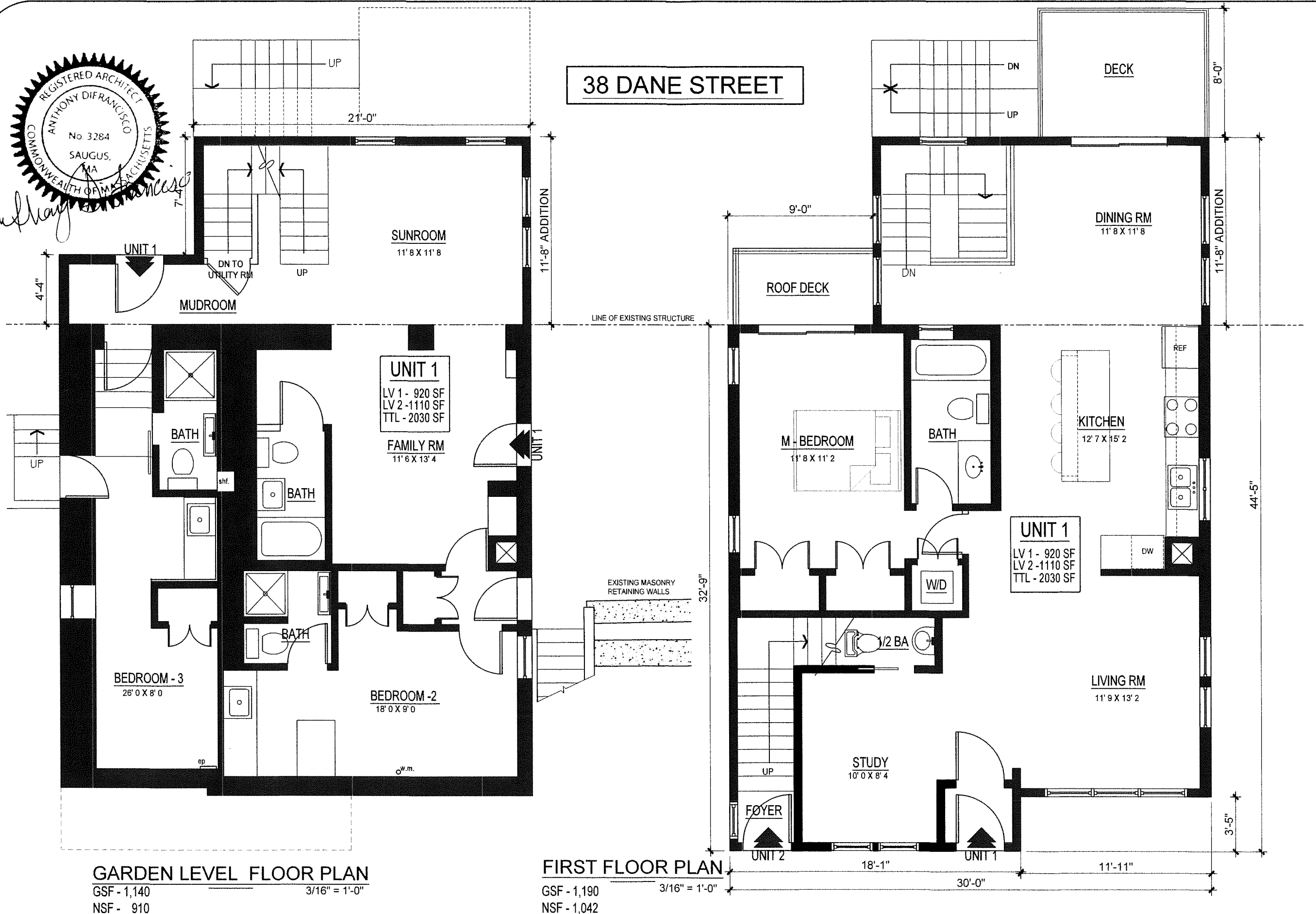
RIGHT ELEVATION - 34 DANE ST
 1/8" = 1'-0"

34 DANE STREET





38 DANE STREET



GARDEN LEVEL FLOOR PLAN
 GSF - 1,140
 NSF - 910
 3/16" = 1'-0"

FIRST FLOOR PLAN
 GSF - 1,190
 NSF - 1,042
 3/16" = 1'-0"

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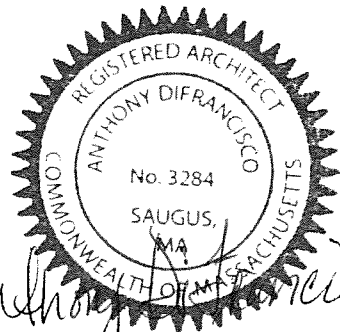
OWNER
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34 - 38 DANE STREET DEVELOPMENT
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 PROPOSED FLOOR PLANS

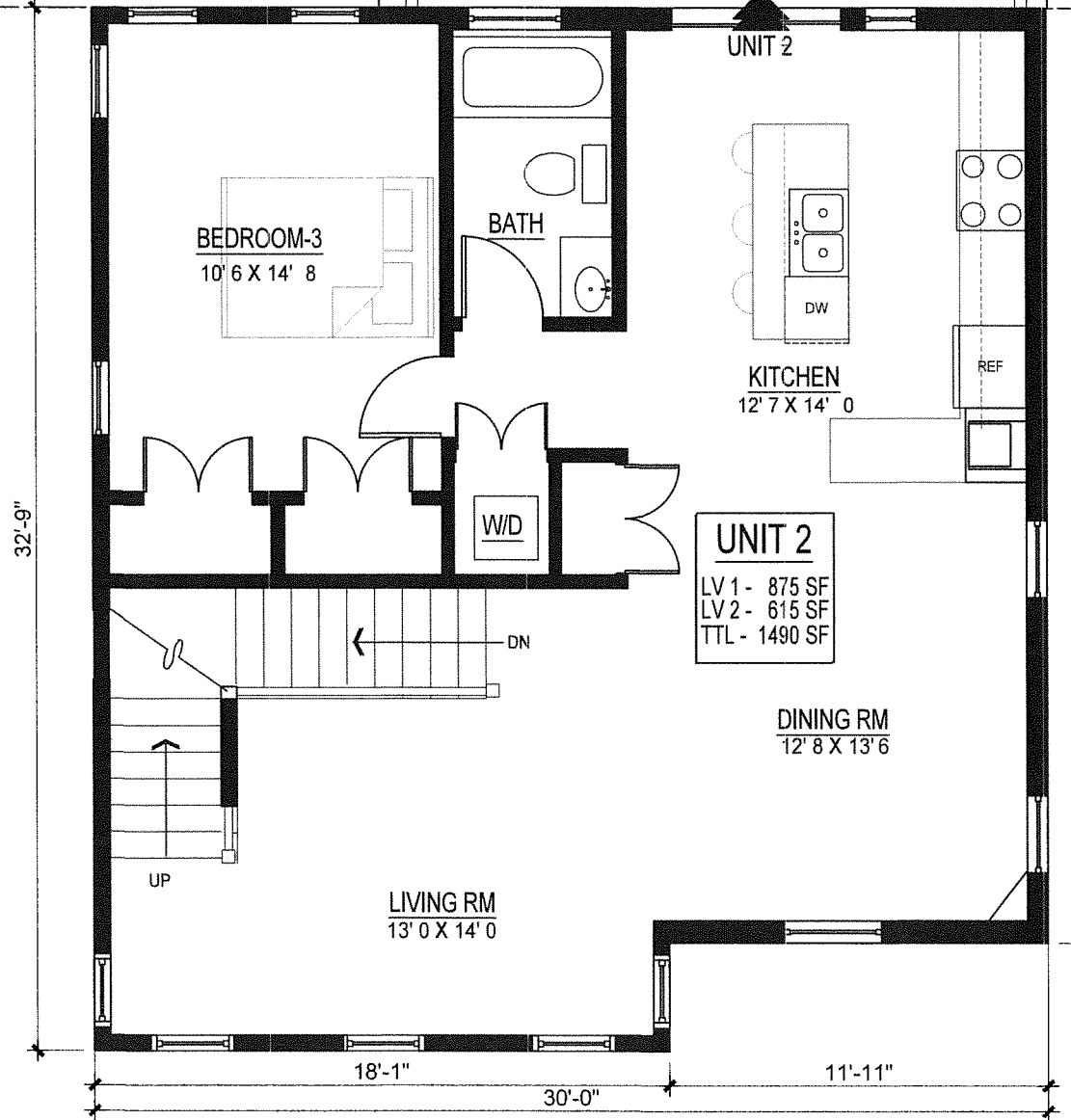
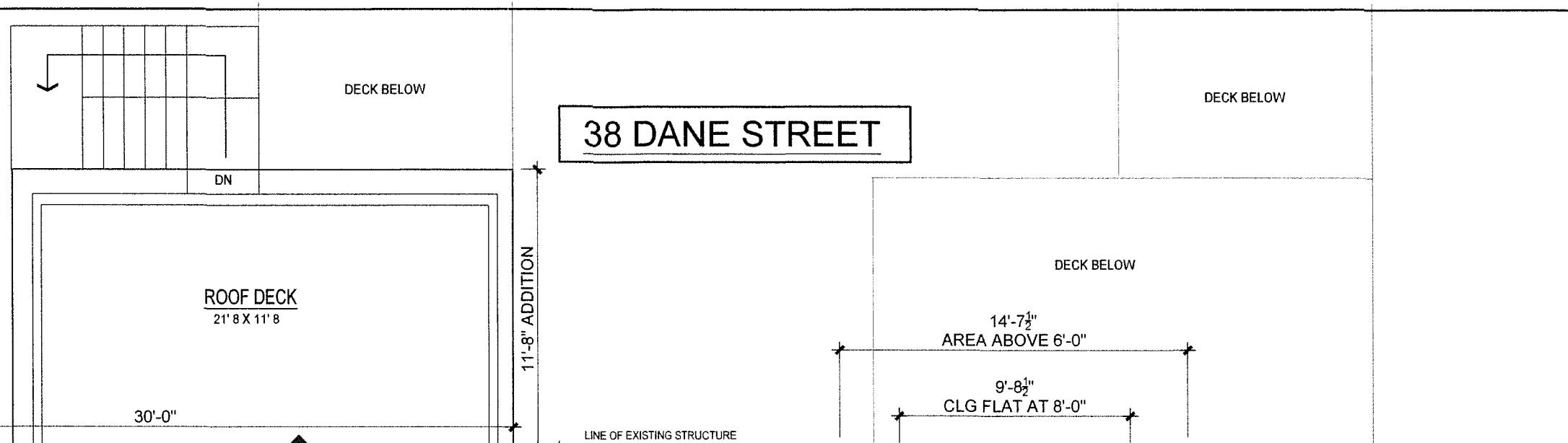
REVISIONS	
1	04/07/17 ZBA SUBMITTAL
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3	
4	
5	

DRAWN BY: SFG
 APPROVED BY: ADF
 DATE: 02/20/2017
 PROJECT NO:
 SCALE: 3/16" = 1'-0"
 DRAWING NO: **A3.0**

04/06/2017 ZBA SUBMITTAL

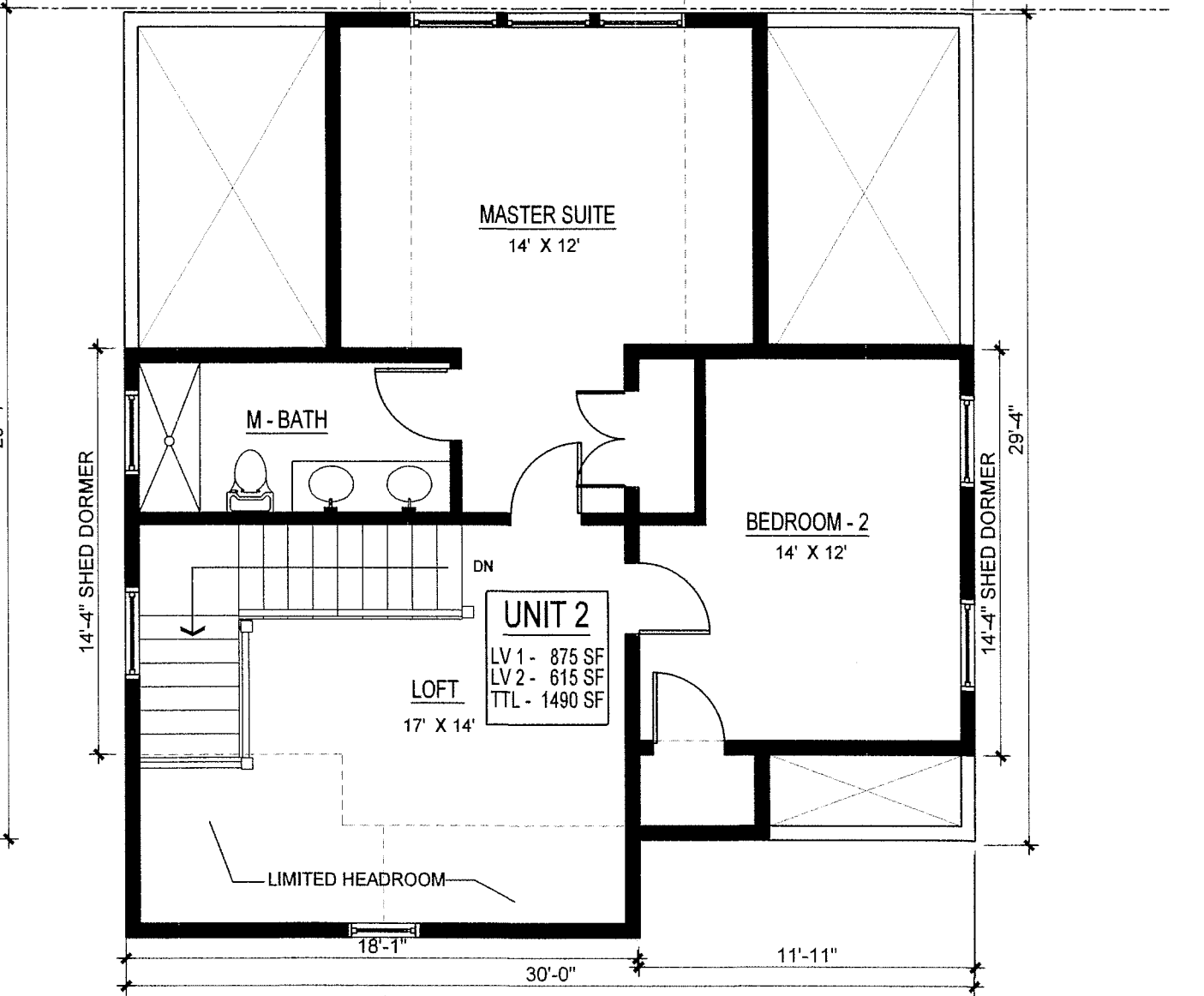


Anthony DiFrancisco



SECOND FLOOR PLAN

GSF - 945
NSF - 865
3/16" = 1'-0"



THIRD FLOOR PLAN

GSF - 945
NSF - 565
3/16" = 1'-0"

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Paulo Dasilva
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Somerville, MA 02143

34 - 38 DANE STREET DEVELOPMENT
34 - 38 DANE STREET
SOMERVILLE, MA 02143
38 DANE STREET
PROPOSED FLOOR PLANS

NO.	DATE	REVISIONS
1	04/02/17	ZBA SUBMITTAL
2		
3		
4		
5		

DRAWN BY: SFG ADF
APPROVED BY: ADF
DATE: 02/20/2017
PROJECT NO.
SCALE: 3/16" = 1'-0"
DRAWING NO. **A3.1**

04/02/2017 ZBA SUBMITTAL

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 Cassia Silva
 Paulo Dasilva
 38 Dane Street
 Somerville, MA 02143

34 - 38 DANE STREET DEVELOPMENT
 34 - 38 DANE STREET
 SOMERVILLE, MA 02143
 38 DANE STREET
 PROPOSED ELEVATIONS

REVISIONS	DATE	BY	APPROVED BY
1	04/07/17	ZBA SUBMITTAL	

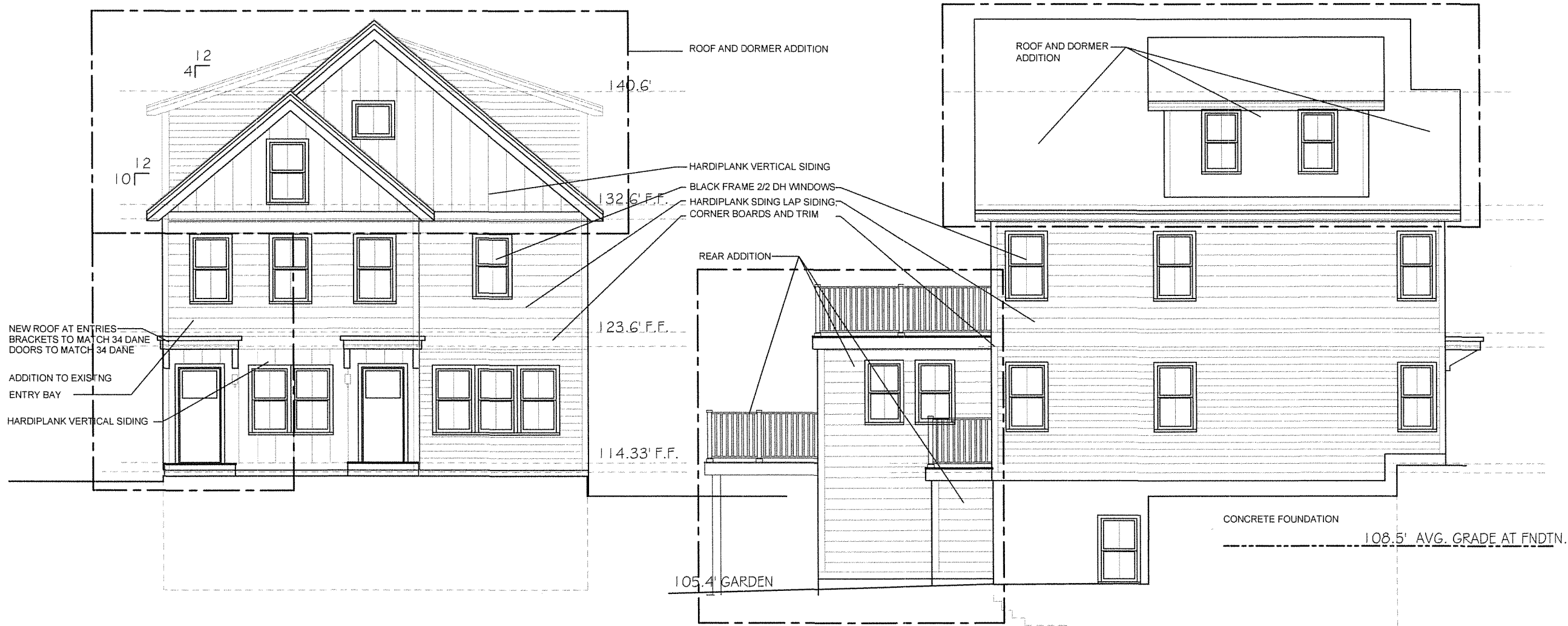
DRAWN BY: SFG APPROVED BY: ADF

DATE: 02/20/2017

PROJECT No:

SCALE: 1/8" = 1'-0"

DRAWING No: A4.0



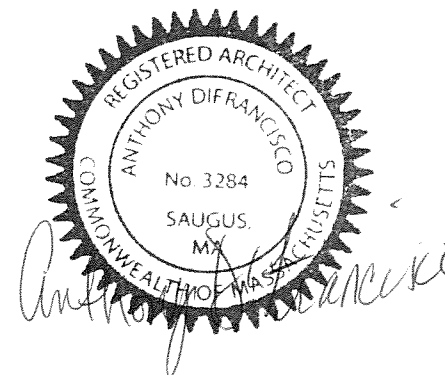
PROPOSED FRONT ELEVATION - 38 DANE ST

1/8" = 1'-0"

PROPOSED LEFT ELEVATION - 38 DANE ST

1/8" = 1'-0"

38 DANE STREET



OWNER
 Cassia Silva
 Paulo Dasilva
 38 Dane Street
 Somerville, MA 02143

34 - 38 DANE STREET DEVELOPMENT
 34 - 38 DANE STREET
 SOMERVILLE, MA 02143
 38 DANE STREET
 PROPOSED ELEVATIONS

REVISIONS	DATE	BY	APP'D BY
1	04/07/17	ZBA SUBMITTAL	

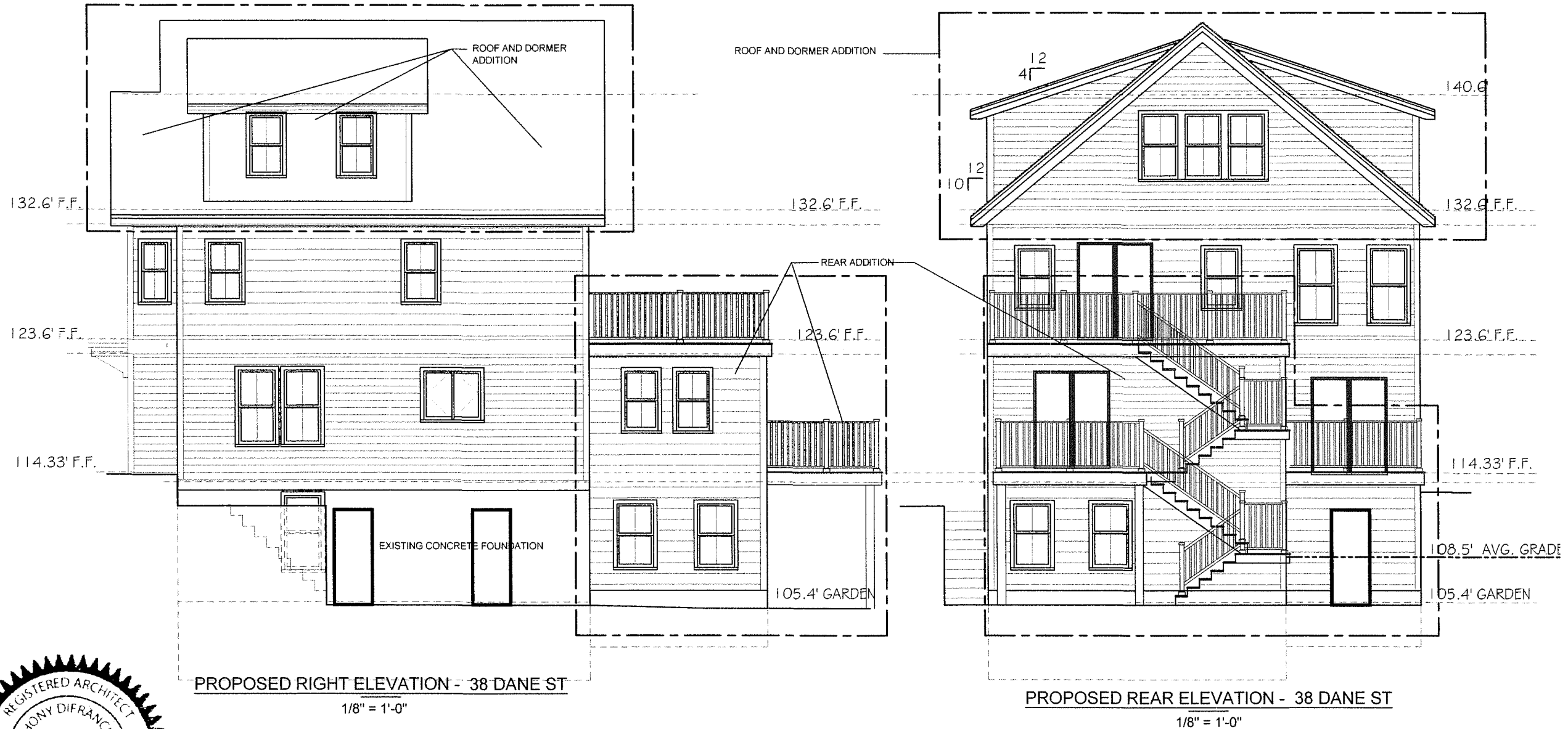
DRAWN BY: SFG
 APPROVED BY: ADF

DATE: 02/20/2017

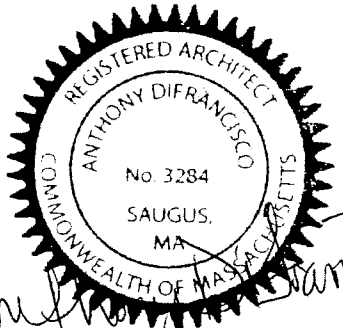
PROJECT No:

SCALE: 1/8" = 1'-0"

DRAWING No: **A4.1**



38 DANE STREET



04/06/2017 ZBA SUBMITTAL

OWNER
 Cassia Silva
 Paulo Dasilva
 38 Dane Street
 Somerville, MA 02143

34 - 38 DANE STREET DEVELOPMENT
 34 - 38 DANE STREET
 SOMERVILLE, MA 02143
 34-38 DANE STREET
 PERSPECTIVES

REVISIONS	DATE	BY	DESCRIPTION
1	04/07/17	ZBA	SUBMITTAL

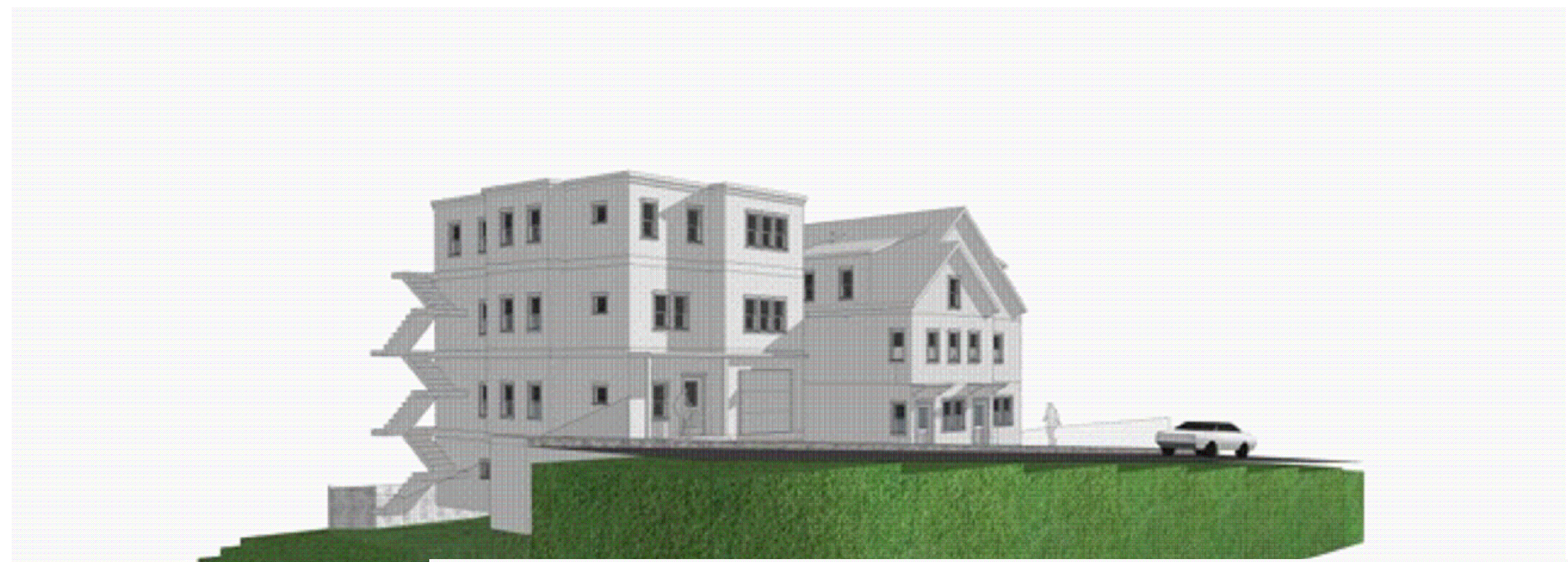
DRAWN BY: SFG APPROVED BY: ADF

DATE: 02/20/2017

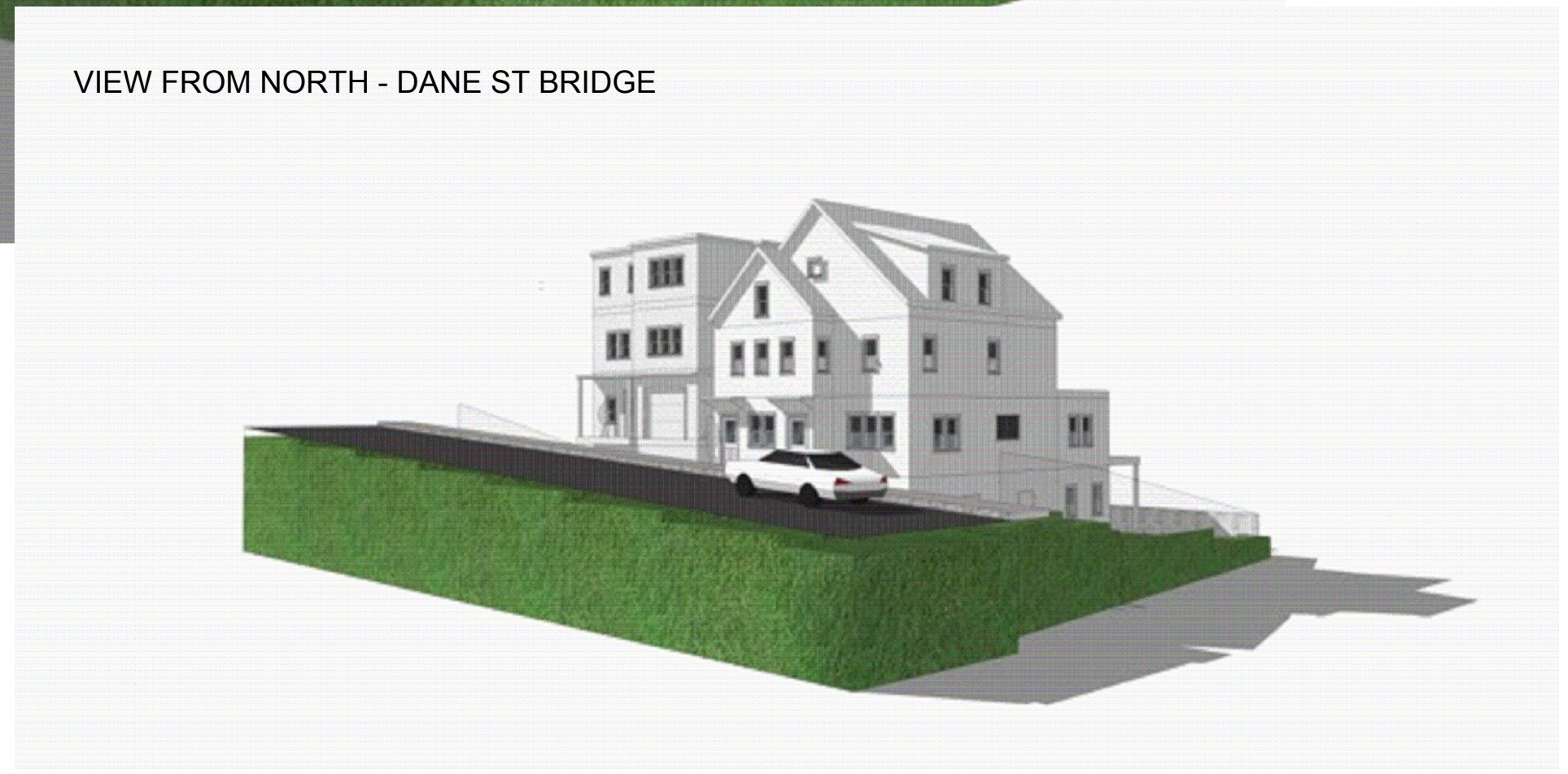
PROJECT No.

SCALE: 1/8" = 1'-0"

DRAWING No. **AV1.0**



VIEW FROM NORTH - DANE ST BRIDGE



VIEW FROM WEST

PROPOSED MULTI-UNIT DEVELOPMENT

CITY STAMP

34 & 38 DANE STREET
SOMERVILLE, MA 02143

APPLICANT

PAULO & CASSIA DASILVA
38 DANE STREET
SOMERVILLE, MA 02143

ARCHITECT

SFG STUDIOS
278 ELM STREET, SUITE 226
SOMERVILLE, MA 02144

CIVIL ENGINEER



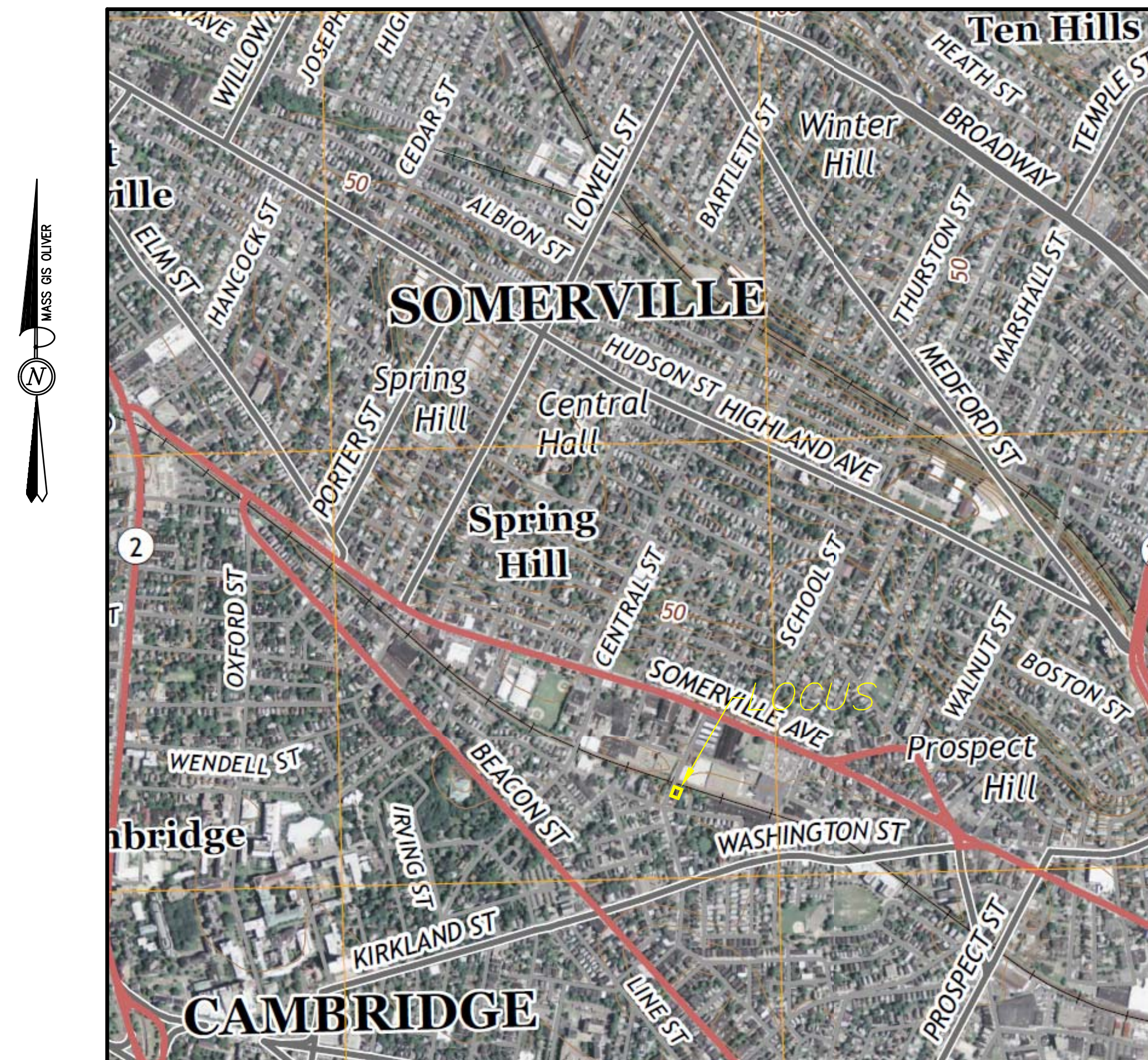
HENDERSON CONSULTING SERVICES, LLC
P.O. BOX 626
LEXINGTON, MA 02420

SURVEYOR

LAND MAPPING, INC.
10 ANDREW SQUARE, SUITE 201B
SOUTH BOSTON, MA 02127

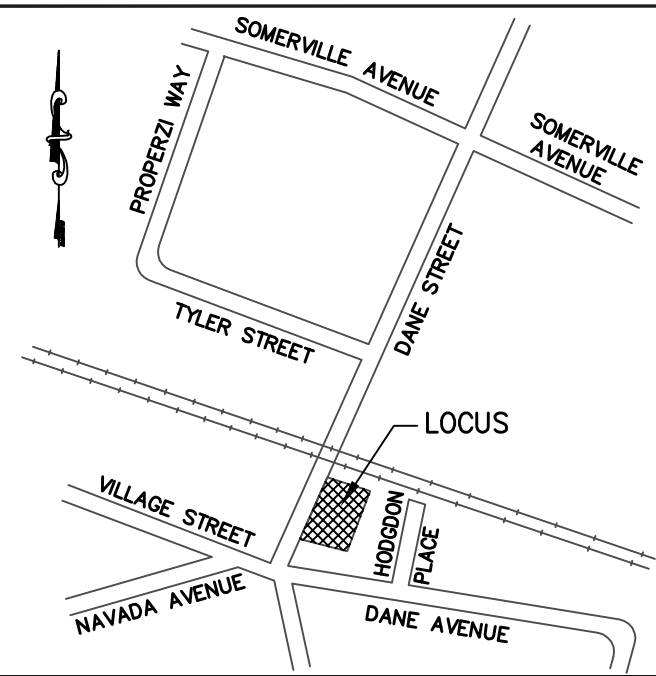
SHEET INDEX

- COVER SHEET
- C1 - EXISTING CONDITIONS
- C2 - SITE LAYOUT
- C3 - GRADING & DRAINAGE
- C4 - UTILITY
- C5 - SITE PREPARATION
- C6 - CONSTRUCTION DETAILS
- C7 - CONSTRUCTION DETAILS
- C8 - LANDSCAPE PLAN



LOCUS AERIAL - SCALE ~1"=800'
SOURCE: USGS 2013/2014 ORTHO

APRIL 6, 2017



LOCUS MAP
NOT TO SCALE

PLAN REFERENCE

- * South Middlesex Registry of Deeds:
 - Plan Book 4 Plan 79
 - Plan No. 433 of 1975
 - Plan No. 750 of 1996
 - LC Plan 32007-A
- * State Highway Layouts:
 - 1992 Layout # 7052

GENERAL NOTES:

- * Deed Ref.: Book 66199, Page 513 (Lot A)
Book 39702, Page 276 (Lot B)
- * Assessors Ref.: Map 64 Block D Parcels 1 & 3
- * Zone: Residence C
- * Elevations based on assumed datum.
- * Additional utilities may exist that are not shown on this plan.

Prior to any construction, contact DIG-SAFE (1-800-344-7233) to field verify location of all utilities.

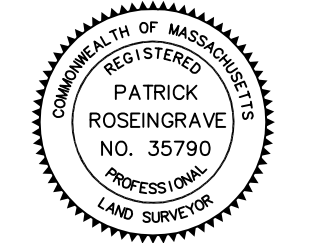
Plan of Land
38 Dane Street
Somerville, MA 02143

Plan Prepared By:



10 Andrew Square, Suite 201B
South Boston, MA 02127
Tel. 857-544-3061

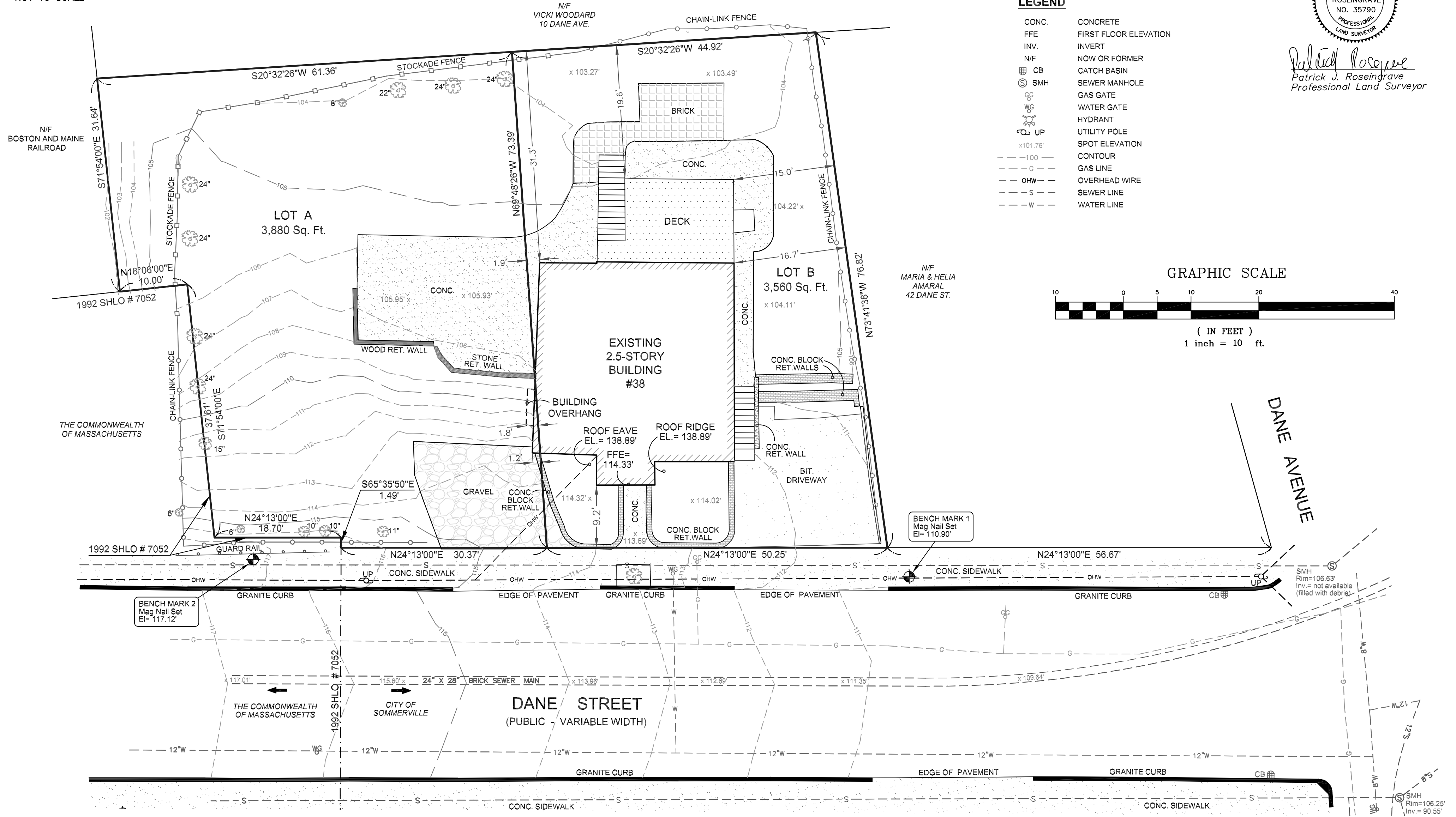
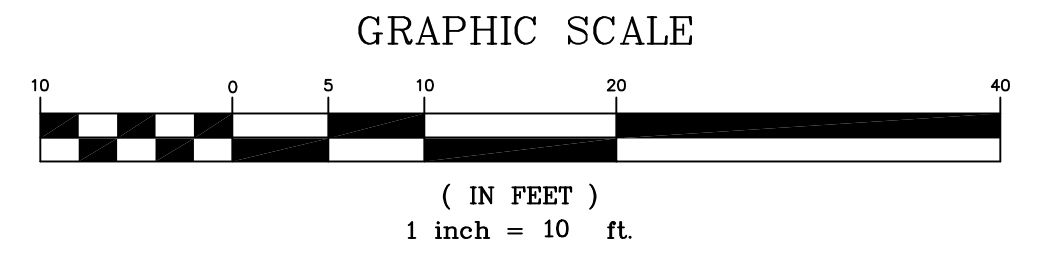
Date: December 21, 2015

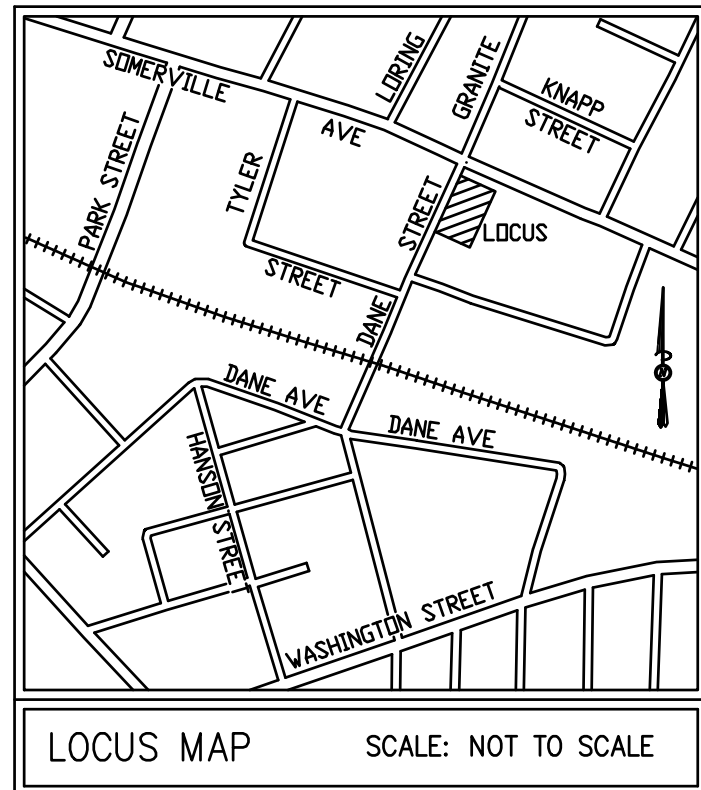


Patrick J. Roseingrave
Patrick J. Roseingrave
Professional Land Surveyor

LEGEND

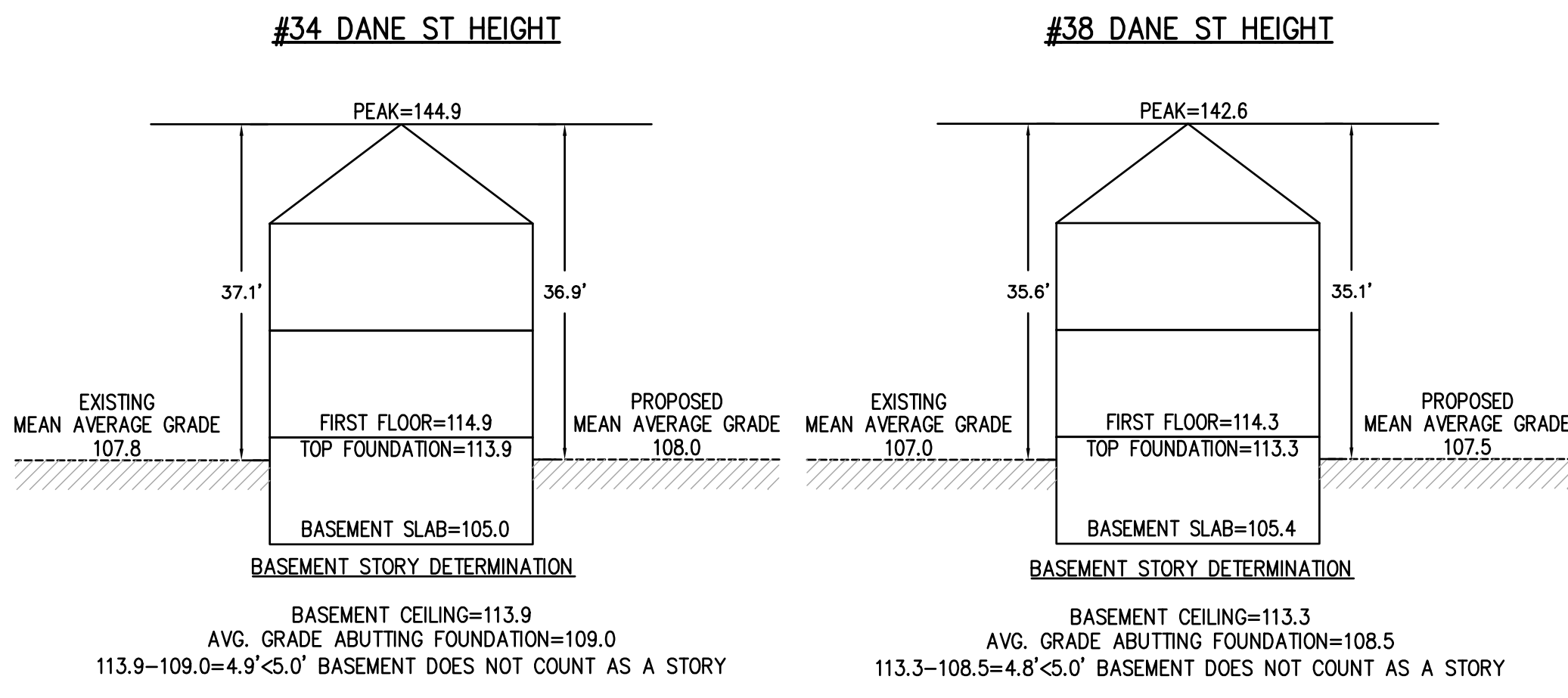
CONC.	CONCRETE
FFE	FIRST FLOOR ELEVATION
INV.	INVERT
N/F	NOW OR FORMER
CB	CATCH BASIN
SMH	SEWER MANHOLE
CG	GAS GATE
WG	WATER GATE
HY	HYDRANT
UP	UTILITY POLE
x101.76'	SPOT ELEVATION
- - - 100 - - -	CONTOUR
- - - G - - -	GAS LINE
- - - OHW - - -	OVERHEAD WIRE
- - - S - - -	SEWER LINE
- - - W - - -	WATER LINE





SITE NOTES

- LOCUS IS LOCATED WITHIN ZONE X (NOT SHADED) AS SHOWN ON THE FEMA F.I.R.M. COMMUNITY PANEL NO. 25017C0438E DATED JUNE 4, 2010.
- LOCUS DOES NOT LIE WITHIN A DEP DESIGNATED ZONE II RESOURCE PROTECTION AREA.
- LOCUS LIES IN THE CITY OF SOMERVILLE RESIDENCE C (RC) ZONING DISTRICT.
- EXISTING CONDITIONS DATA WAS OBTAINED FROM AN ON-THE-GROUND SURVEY PERFORMED BY LAND MAPPING, INC. ON DECEMBER 21, 2015.
- LOCATIONS OF SUBSURFACE UTILITIES AND STRUCTURES, SHOWN HEREON, WERE OBTAINED FROM ABOVE GROUND OBSERVED EVIDENCE, AS WELL AS AVAILABLE CITY AND PRIVATE UTILITY RECORDS. THE SIZE, TYPE AND LOCATION OF UTILITIES SHOWN ARE APPROXIMATE. SUMMIT LAND SURVEYING LLC ASSUMES NO RESPONSIBILITY FOR DAMAGES INCURRED AS A RESULT OF UTILITIES OMITTED OR INACCURATELY SHOWN. THE CONTRACTOR SHALL PROPERLY LOCATE ALL UTILITIES PRIOR TO THE BEGINNING OF CONSTRUCTION BY CONTACTING DIGSAFE (888-344-7233). THE CONTRACTOR SHALL EXCAVATE TEST PITS TO VERIFY UTILITY LOCATIONS AS NECESSARY.
- ELEVATIONS SHOWN HEREON REFER TO AN ASSUMED DATUM.
- ABUTTER'S INFORMATION WAS COMPILED FROM THE LATEST AVAILABLE CITY OF SOMERVILLE ASSESSOR'S RECORDS.



CITY STAMP

ZONING DATA:

DISTRICT: RESIDENCE C (5 UNITS PROPOSED) PER §7.1 OF ZONING ORDINANCE. USE REQUIRES SPECIAL PERMIT				
CRITERIA	REQUIRED	EXISTING	PROPOSED	COMPLIANCE
MINIMUM LOT AREA	7,500 SF	7,440 SF	7,440 SF	EXISTING NON-COMFORMITY
MINIMUM LOT AREA PER UNIT	875 SF	7,440 SF	1,488 SF	COMPLIES
MAXIMUM LOT COVERAGE	70%	39.4% (2,936 SF)	57.2% (4,253 SF)	COMPLIES
MINIMUM LANDSCAPE AREA	25%	60.5% (4,504 SF)	42.8% (3,187 SF)	COMPLIES
MINIMUM PERVIOUS AREA	30%	60.5% (4,504 SF)	60.0% (4,463 SF)	COMPLIES
MAXIMUM FLOOR AREA RATIO	2.0	0.21	0.93	COMPLIES
NET FLOOR AREA	--	1,576 SF	6,934 SF	COMPLIES
MINIMUM FRONTAGE	50 FT	100.81 FT	100.81 FT	COMPLIES
MINIMUM FRONT YARD	15 FT	9.2 FT	9.2 FT	EXISTING NON-COMFORMITY
MINIMUM SIDE YARD (RIGHT)	10 FT	16.7 FT	15.0 FT	COMPLIES
MINIMUM SIDE YARD (LEFT)	10 FT	48.0 FT	10.0 FT	COMPLIES
MINIMUM REAR YARD	14.25 FT (§8.6.13)	31.3 FT	14.6 FT	COMPLIES
MAXIMUM HEIGHT	3 STORIES/40 FT.	2.5 STORIES/30.4 FT	3 STORIES/36.9 FT	COMPLIES

REAR YARD REDUCTION (§8.6.13) - FOR EACH FOOT BY WHICH A LOT IS LESS THAN 100 FEET DEEP, 3 INCHES MAY BE DEDUCTED FROM THE REQUIRED LOT DEPTH.

EXISTING LOT DEPTH = 76.8'
 REDUCTION = 0.25 x (100' - 77') = 5.75' REDUCTION
 REQUIRED REAR SETBACK = 20 - 5.75 = 14.25'

*NOTE: PROPOSED NET FLOOR AREA, FLOOR AREA RATIO AND BUILDING ELEVATIONS PROVIDED BY PROJECT ARCHITECT.

PARKING REQUIREMENTS:

	PER §9.5 OF THE SOMERVILLE ZONING ORDINANCE	
	#34 DANE STREET	#38 DANE STREET
REQUIRED	1.5 SPACES PER 2 BED UNIT x 2 UNITS + 2.0 SPACES PER 3 BED UNIT x 1 UNIT = 5.0 SPACES	2.0 SPACES PER 3 BED UNIT x 2 UNITS = 4.0 SPACES
PROPOSED	2 SPACES (1 EXTERIOR & 1 GARAGE)	2 SPACES (2 EXTERIOR)
WAIVER REQUEST	3 SPACE WAIVER	2 SPACE WAIVER

AREA STATISTICS

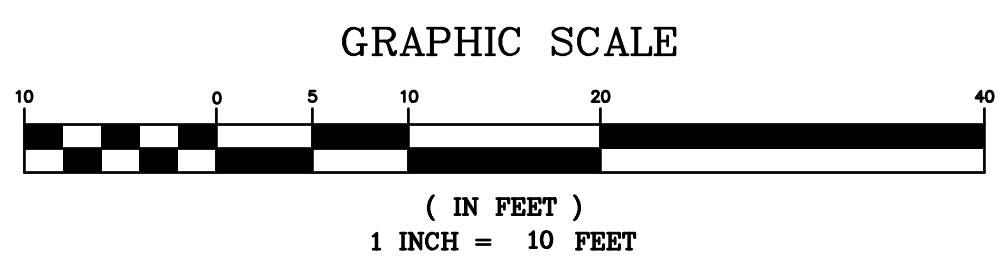
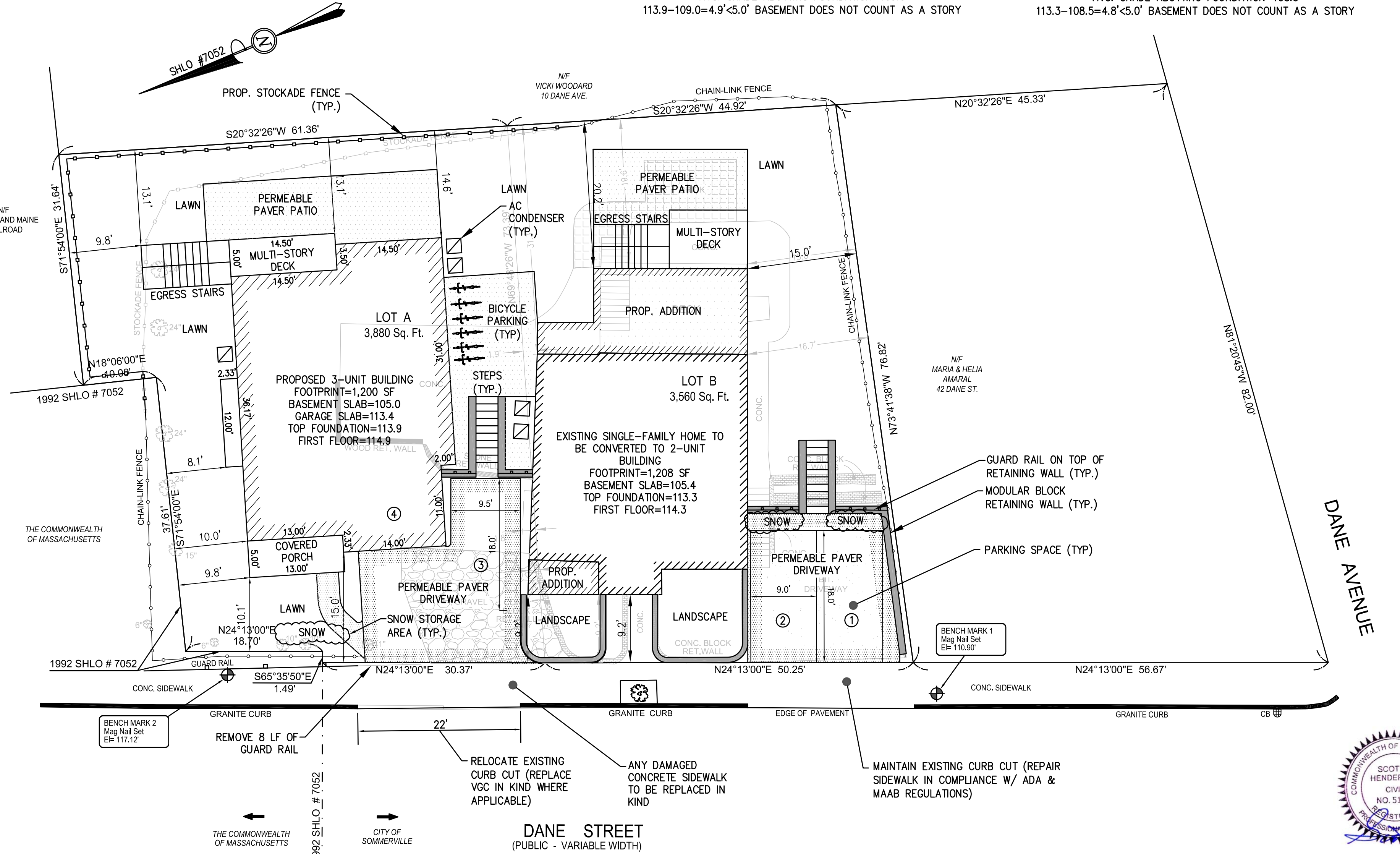
AREA COMPONENT	EXISTING	PROPOSED
BUILDING FOOTPRINT (ROOFS)	880 SF	2,408 SF
PAVEMENT	2,056 SF	569 SF
PERMEABLE PAVER PATIOS & DRIVEWAYS	--	1,276 SF
GRASS (LAWN)/ LANDSCAPE	3,784 SF	2,787 SF
WOODS/BRUSH	720 SF	400 SF
TOTAL IMPERVIOUS	2,936 SF	2,977 SF
TOTAL PERVIOUS	4,504 SF	4,463 SF

LEGEND

- 340 --- EXISTING CONTOUR
- 341 --- PROPOSED CONTOUR
- +100.00 SPOT GRADE
- ⊗ GAS METER
- ⊕ WATER GATE VALVE
- ⊗ WATER SERVICE
- ⊕ HYDRANT
- ⊗ CATCH BASIN
- ⊕ SEWER MANHOLE
- ⊕ UTILITY POLE
- OHW --- OVERHEAD WIRE
- S --- SEWER PIPE
- W --- WATER PIPE

ABBREVIATIONS

- APPROX APPROXIMATE
- ASPH ASPHALT
- BD BOUND
- BLDG BUILDING
- BIT CONC BITUMINOUS CONCRETE
- BM BENCHMARK
- BS BOTTOM OF SLOPE
- CB CATCH BASIN
- CB/DH CONC. BOUND/DRILL HOLE
- CCB CAPE COD BERM
- CLF CHAIN LINK FENCE
- CO CLEAN OUT
- CONC CONCRETE
- Δ DELTA ANGLE
- D DRAIN
- DCB DOUBLE CATCH BASIN
- DMH DRAIN MANHOLE
- E ELECTRIC
- ELEV ELEVATION
- E/T/C ELECTRIC, TELEPHONE, & CABLE TV
- EXIST EXISTING
- FND FOUNDATION
- F&C FRAME AND COVER
- F&G FRAME AND GRATE
- G GAS
- GG GAS GATE
- GS GAS SERVICE
- GRAN GRANITE
- HOR HORIZONTAL
- HYD HYDRANT
- INV INVERT
- MAX MAXIMUM
- MH MANHOLE
- MIN MINIMUM
- NTS NOT TO SCALE
- OHW OVERHEAD WIRE
- PL PROPERTY LINE
- PROP PROPOSED
- PVC POLYVINYL CHLORIDE PIPE
- PVMT PAVEMENT
- RCP REINFORCED CONCRETE PIPE
- ROW RIGHT OF WAY
- S SEWER
- SB STONE BOUND
- SB/DH STONE BOUND/DRILL HOLE
- SMH SEWER MANHOLE
- SS SEWER SERVICE
- TR TREE
- W WATER MAIN
- WG WATER GATE



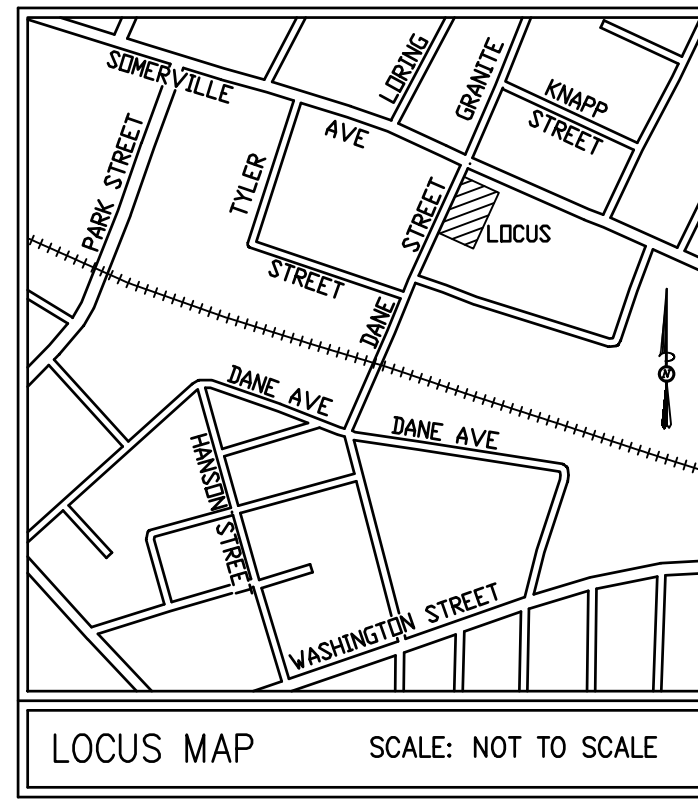
DRAWN BY: SCOTT P. HENDERSON, PE	PROJECT: 34 & 38 DANE
SCALE: 1"=10'	ISSUE DATE: 4/6/17
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PROJECT: **PLAN OF LAND**
34 & 38 DANE STREET
ASSESSOR'S ID 64-D-1 & 64-D-3
SOMERVILLE, MASSACHUSETTS

OWNER: **PAULO & CASSIA DASILVA**
38 DANE STREET
SOMERVILLE, MA 02143

DRAWING TITLE: **Site Layout Plan** SHEET # **C2**



CITY STAMP

STORM DRAIN NOTES

1. ALL STORMWATER CONVEYANCE PIPES SHALL BE ADS N-12 HDPE OR APPROVED EQUAL.
2. BACKFILL SHALL BE COMPACTED TO 95% MAXIMUM DRY DENSITY BY AASHTO T-180D METHOD.
3. UNSUITABLE SOIL BELOW THE INVERT SHALL BE REMOVED AND REPLACED WITH APPROVED MATERIAL AND SHALL NOT BE USED AS BACKFILL.
4. ALL CATCH BASIN GRATES SHALL BE TYPICAL SQUARE OPENING GRATES UNLESS OTHERWISE NOTED.
5. ALL CATCH BASINS SHALL HAVE A MINIMUM 4' SUMP AND OUTLETS FROM CATCH BASINS SHALL BE FITTED WITH A HOOD.
6. ALL CASTING SHALL BE FURNISHED FROM AN APPROVED VENDOR THAT MEETS AASHTO REQUIREMENTS FOR H-20 TRAFFIC LOADING.

GENERAL UTILITY NOTES

1. THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AND STRUCTURES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF VARIOUS UTILITY COMPANIES AND WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THIS INFORMATION IS NOT TO BE RELIED UPON AS BEING EXACT OR COMPLETE. THE LOCATION OF ALL UNDERGROUND UTILITIES AND STRUCTURES SHALL BE VERIFIED IN THE FIELD BY THE CONTRACTOR PRIOR TO THE START OF CONSTRUCTION. THE CONTRACTOR MUST CONTACT THE APPROPRIATE UTILITY COMPANY, ANY GOVERNING PERMITTING AUTHORITY, AND "DIGSAFE" AT LEAST 72 HOURS PRIOR TO ANY EXCAVATION WORK TO REQUEST EXACT FIELD LOCATION OF UTILITIES AND THE ENGINEER SHALL BE NOTIFIED IN WRITING OF ANY UTILITIES INTERFERING WITH THE PROPOSED CONSTRUCTION AND APPROPRIATE REMEDIAL ACTION SHALL BE TAKEN BEFORE PROCEEDING WITH THE WORK. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLAN.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ESTABLISHING AND MAINTAINING ALL CONTROL POINTS AND BENCHMARKS NECESSARY FOR THE WORK.
3. ALL ABANDONED STRUCTURES SHOULD BE REMOVED OR FILLED WITH DENSE GRADE AND STONE.

ADA & MAAB NOTE

THE REGULATIONS OF THE AMERICANS WITH DISABILITIES ACT AND THE MA ARCHITECTURAL ACCESS BOARD DO NOT APPLY TO THE PROPOSED SITE USE. AS SUCH, HANDICAP PARKING AND ACCESSIBLE ROUTE PROVISIONS ARE NOT REQUIRED.

SOIL TESTING INFORMATION

EXPLORATORY TEST PITS SHALL BE CONDUCTED IN THE PROXIMITY OF THE INFILTRATION SYSTEMS PRIOR TO BEGINNING SITE WORK. THE RESULTS OF THESE PITS SHALL BE LOGGED BY A LICENSED SOIL EVALUATOR AND SUBMITTED TO THE SOMERVILLE ENGINEERING DEPARTMENT FOR REVIEW. CONSERVATIVE ESTIMATES FOR SOIL CONDITIONS WERE USED IN PREPARING THE ILLUSTRATED SITE DRAINAGE DESIGN.

STORMWATER RUNOFF STATISTICS (ONE DESIGN POINT)

DESIGN STORM (TYPE III, NRCC)	PRE-DEVELOPMENT PEAK RATE & VOLUME	POST-DEVELOPMENT PEAK RATE & VOLUME
2-YEAR (3.16 INCHES)	0.20 CFS / 662 CF	0.07 CFS / 265 CF
10-YEAR (4.77 INCHES)	0.44 CFS / 1,404 CF	0.38 CFS / 908 CF
100-YEAR (8.62 INCHES)	1.09 CFS / 3,475 CF	1.04 CFS / 2,800 CF

AREA STATISTICS

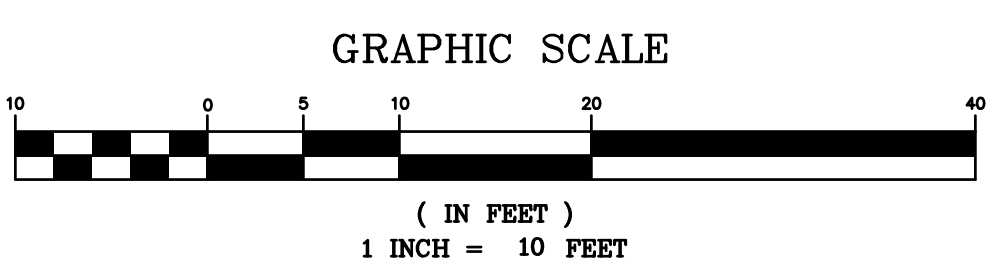
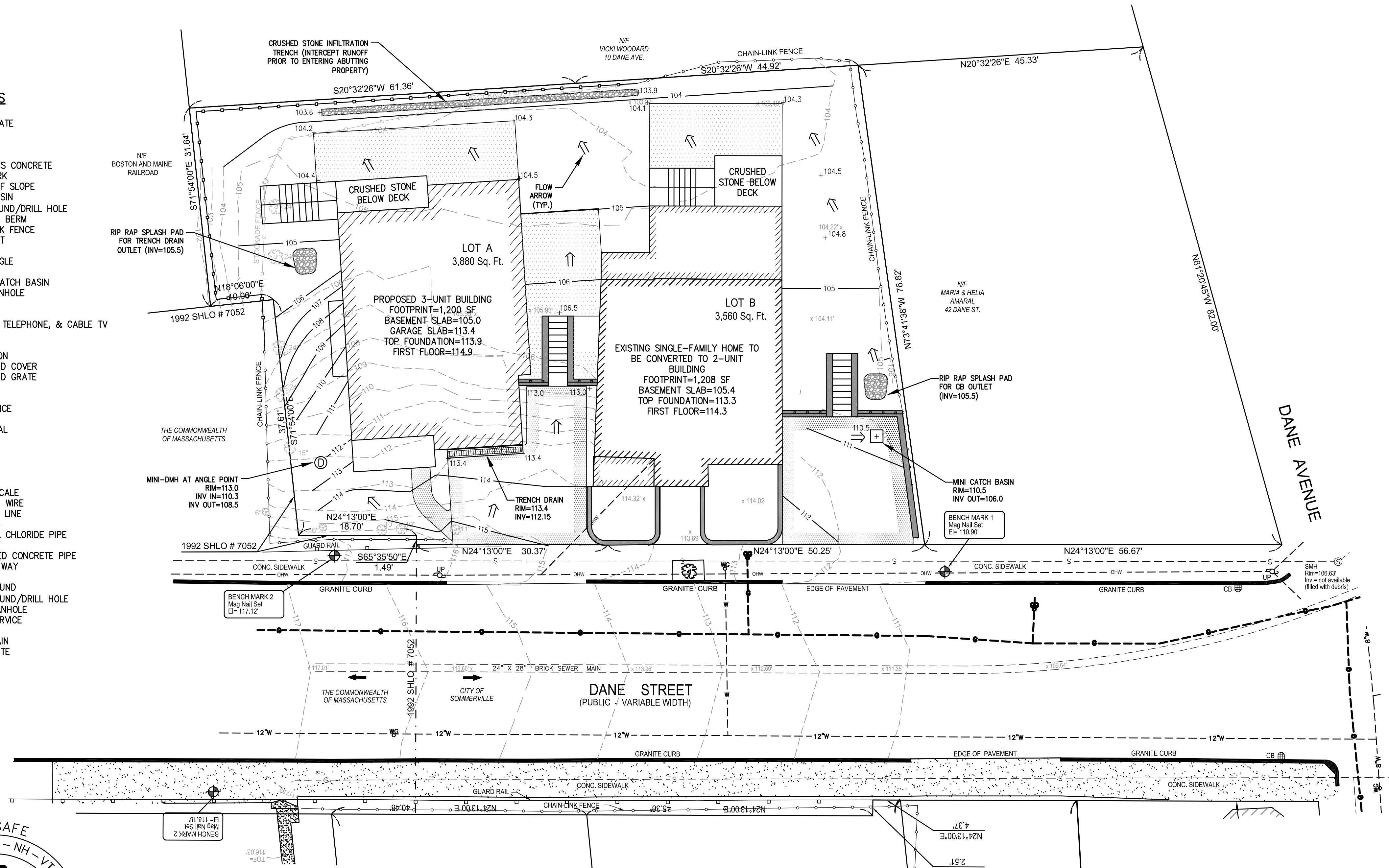
AREA COMPONENT	EXISTING	PROPOSED
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PERMEABLE PAVER PATIOS & DRIVEWAYS	---	1,276 SF
GRASS (LAWN)/ LANDSCAPE	3,784 SF	2,787 SF
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- 341 --- PROPOSED CONTOUR
- +100.00 SPOT GRADE
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- D — DRAIN PIPE
- G — GAS PIPE
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- W — WATER PIPE

ABBREVIATIONS

- | | |
|----------|---------------------------------|
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| ASPH | ASPHALT |
| BD | BOUND |
| BLDG | BUILDING |
| BIT CONC | BITUMINOUS CONCRETE |
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| CB/DH | CONC. BOUND/DRILL HOLE |
| CCB | CAPE COD BERM |
| CLF | CHAIN LINK FENCE |
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| CONC | CONCRETE |
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| E | ELECTRIC |
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| EXIST | EXISTING |
| FND. | FOUND. |
| FND | FOUNDATION |
| F&C | FRAME AND COVER |
| F&G | FRAME AND GRATE |
| G | GAS |
| GG | GAS GATE |
| GS | GAS SERVICE |
| GRAN. | GRANITE |
| HOR | HORIZONTAL |
| HYD | HYDRANT |
| INV | INVERT |
| MAX | MAXIMUM |
| MH | MANHOLE |
| MIN | MINIMUM |
| NTS | NOT TO SCALE |
| OHW | OVERHEAD WIRE |
| PL | PROPERTY LINE |
| PROP | PROPOSED |
| PVC | POLYVINYL CHLORIDE PIPE |
| PVMT | PAVEMENT |
| RCP | REINFORCED CONCRETE PIPE |
| ROW | RIGHT OF WAY |
| S | SEWER |
| SB | STONE BOUND |
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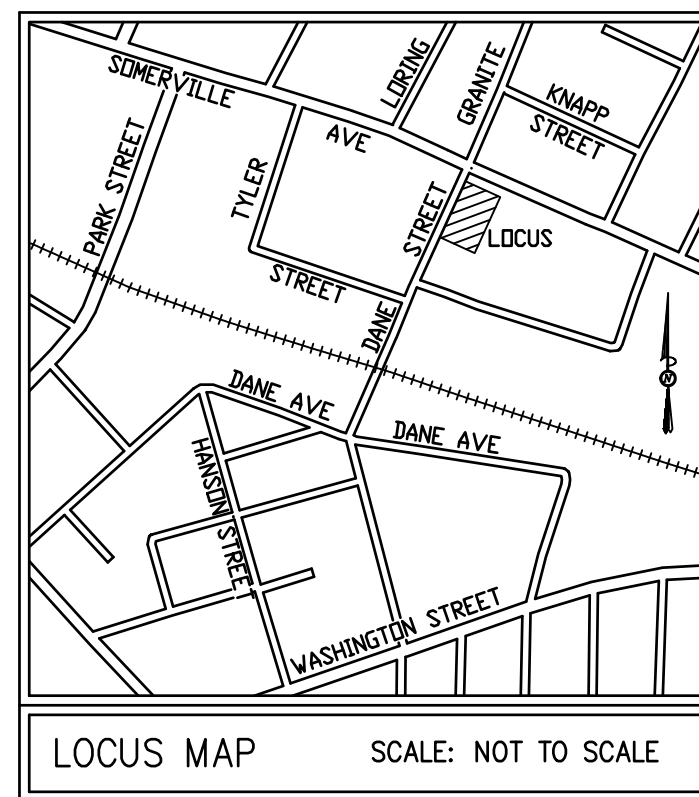
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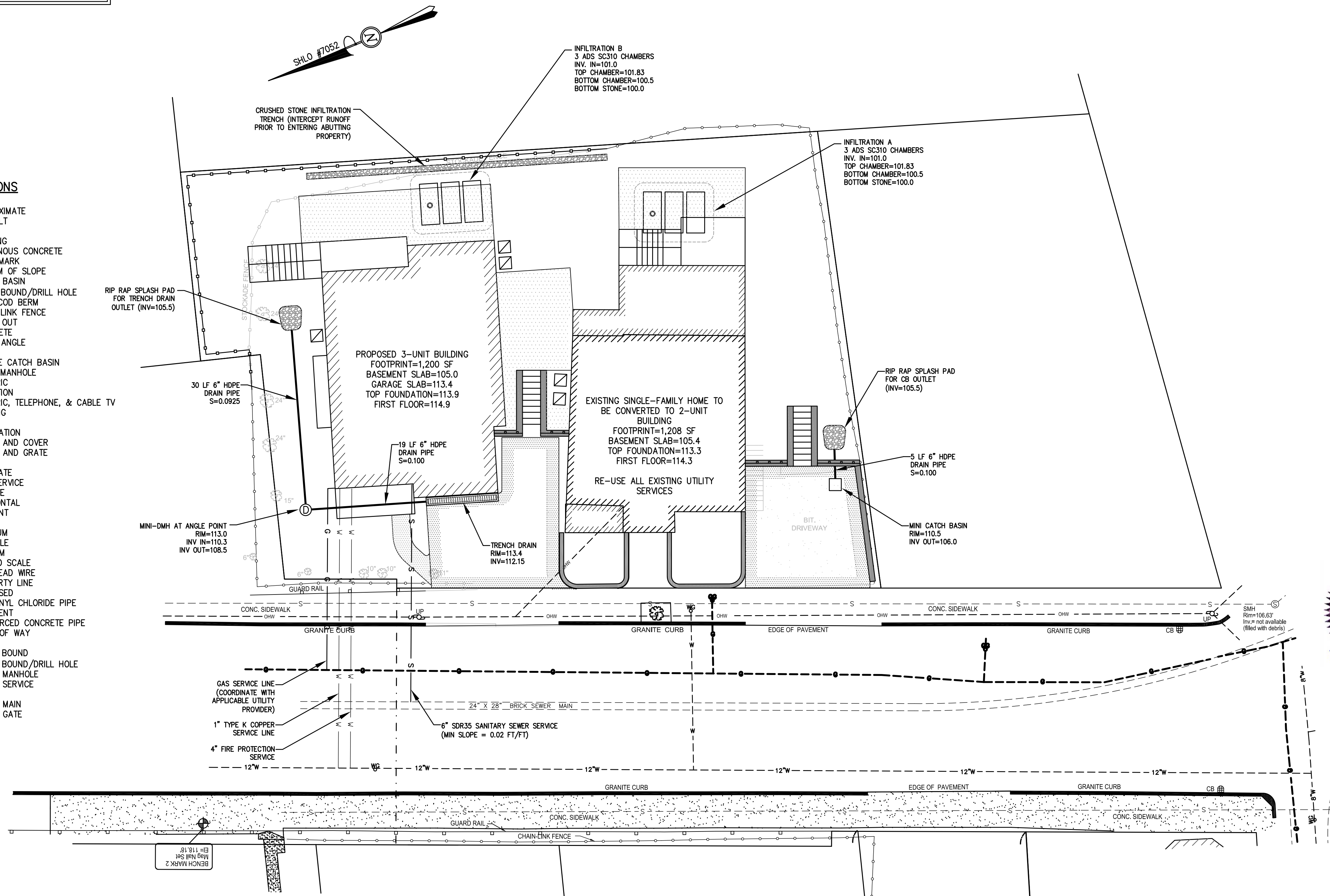
DRAWING TITLE: **Grading & Drainage Plan** SHEET #: **C3**



CITY STAMP

ABBREVIATIONS

APPROX	APPROXIMATE
ASPH	ASPHALT
BD	BOUND
BLDG	BUILDING
BIT CONC	BITUMINOUS CONCRETE
BM	BENCHMARK
BS	BOTTOM OF SLOPE
CB	CATCH BASIN
CB/DH	CONC. BOUND/DRILL HOLE
CCB	CAPE COD BERM
CLF	CHAIN LINK FENCE
CO	CLEAN OUT
CONC	CONCRETE
Δ	DELTA ANGLE
D	DRAIN
DCB	DOUBLE CATCH BASIN
DMH	DRAIN MANHOLE
E	ELECTRIC
ELEV	ELEVATION
E/T/C	ELECTRIC, TELEPHONE, & CABLE TV
EXIST	EXISTING
FND.	FOUNDATION
F&C	FRAME AND COVER
F&G	FRAME AND GRATE
G	GAS
GC	GAS GATE
GS	GAS SERVICE
GRAN.	GRANITE
HOR	HORIZONTAL
HYD	HYDRANT
INV	INVERT
MAX	MAXIMUM
MH	MANHOLE
MIN	MINIMUM
NTS	NOT TO SCALE
OHW	OVERHEAD WIRE
PL	PROPERTY LINE
PROP	PROPOSED
PVC	POLYVINYL CHLORIDE PIPE
PVMT	PAVEMENT
RCP	REINFORCED CONCRETE PIPE
ROW	RIGHT OF WAY
S	SEWER
SB	STONE BOUND
SB/DH	STONE BOUND/DRILL HOLE
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WATER & SEWER NOTES

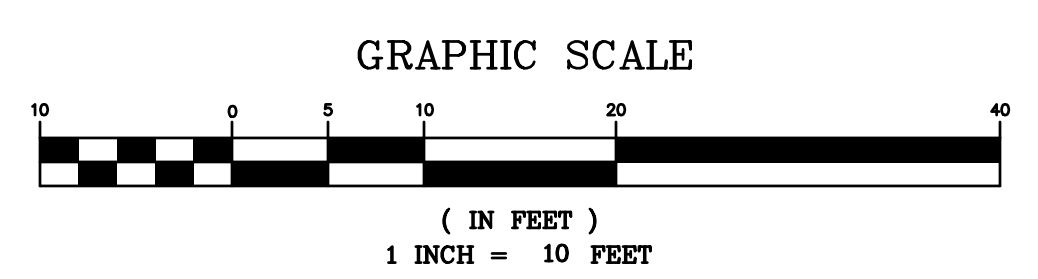
1. PROPOSED SERVICE CONSTRUCTION SHALL CONFORM TO ALL STANDARD CITY OF SOMERVILLE GENERAL CONSTRUCTION DETAILS AND STANDARD SPECIFICATIONS.
2. A MINIMUM OF 10 FEET CLEAR HORIZONTALLY SHALL BE MAINTAINED BETWEEN SANITARY SEWER PIPES AND WATER PIPES. WHENEVER CONDITIONS PREVENT A LATERAL SEPARATION OF 10 FEET TO A WATER PIPE, THE ELEVATION OF THE CROWN OF THE SEWER PIPE SHALL BE AT LEAST 18 INCHES BELOW THE INVERT OF THE WATER PIPE. WHENEVER IT IS IMPOSSIBLE TO OBTAIN VERTICAL SEPARATION AS STIPULATED ABOVE, BOTH THE WATER PIPE AND THE SEWER PIPE SHALL BE ENCASED IN CONCRETE FOR A MINIMUM DISTANCE OF 10 FEET FROM THE CROSSING POINT OF THE OTHER PIPE AS MEASURED NORMALLY FROM ALL POINTS ALONG THE PIPE.
3. ALL GRAVITY SEWER PIPE SHALL BE POLYVINYL CHLORIDE (PVC) SDR-35.

ROOF LEADERS

1. ROUTE ALL DOWNSPOUTS ON BOTH STRUCTURES TO RESPECTIVE INFILTRATION SYSTEMS VIA SCH 40 PVC ROOF LEADERS.
2. A MINIMUM SLOPE OF 0.005 FT/FT SHALL BE USED FOR ALL ROOF LEADERS. SEE CONSTRUCTION DETAILS.

LEGEND

--- 340 ---	EXISTING CONTOUR
--- 341 ---	PROPOSED CONTOUR
+100.00	SPOT GRADE
○	GAS METER
⊗	WATER GATE VALVE
⊗	WATER SERVICE
○	HYDRANT
□	CATCH BASIN
○	SEWER MANHOLE
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—	DRAIN PIPE
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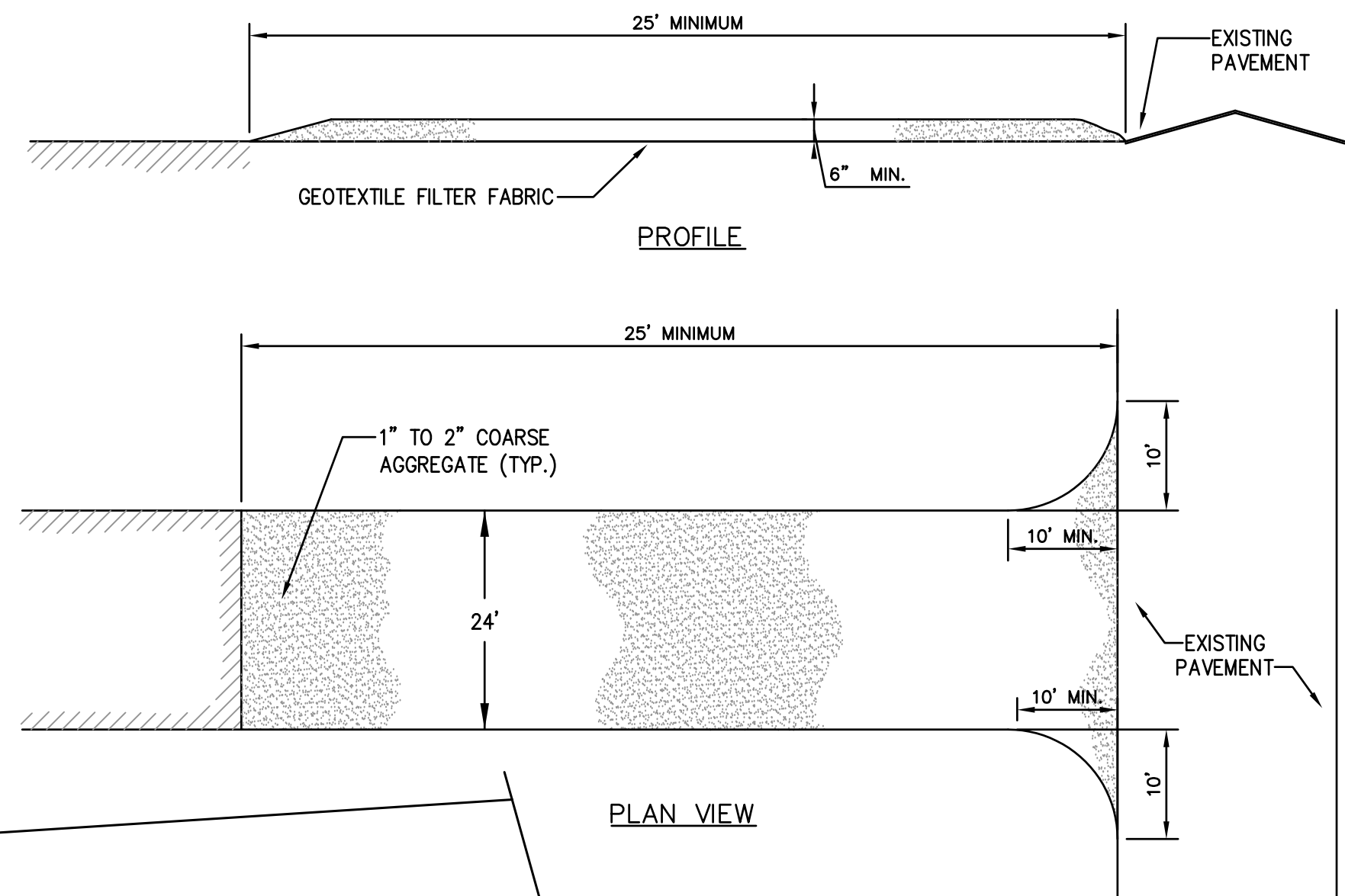
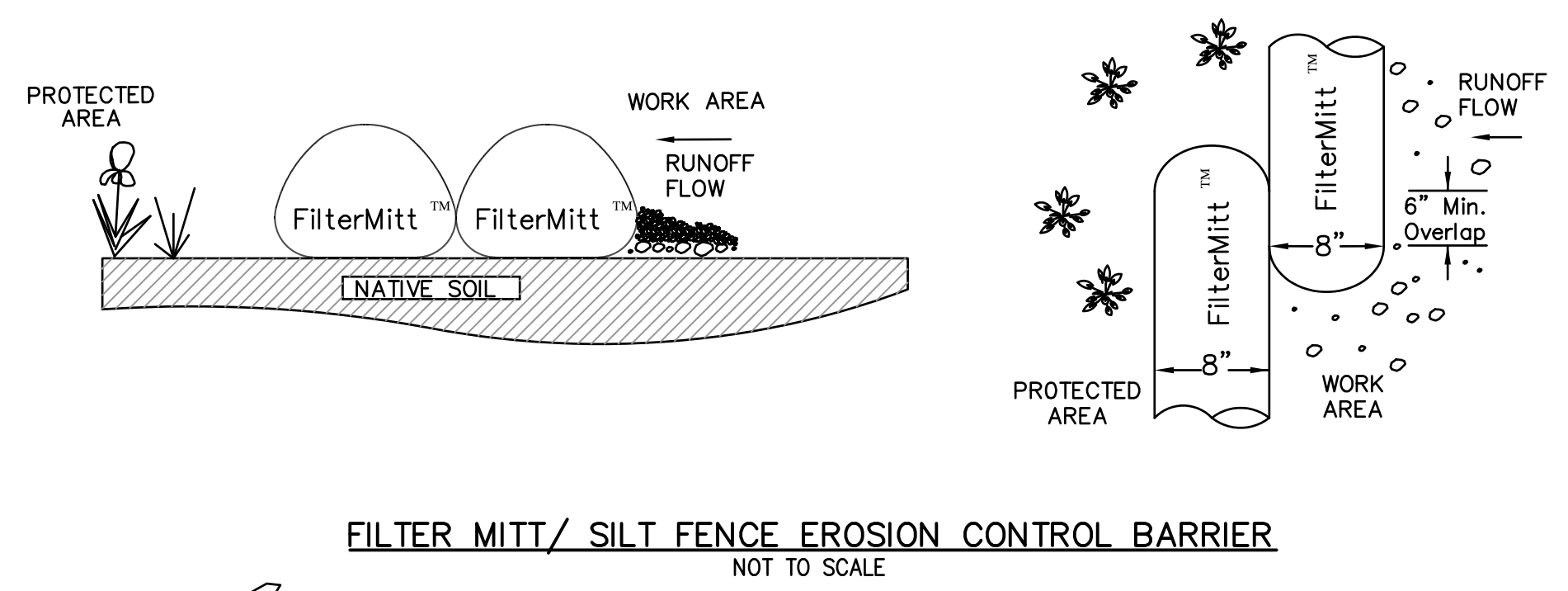
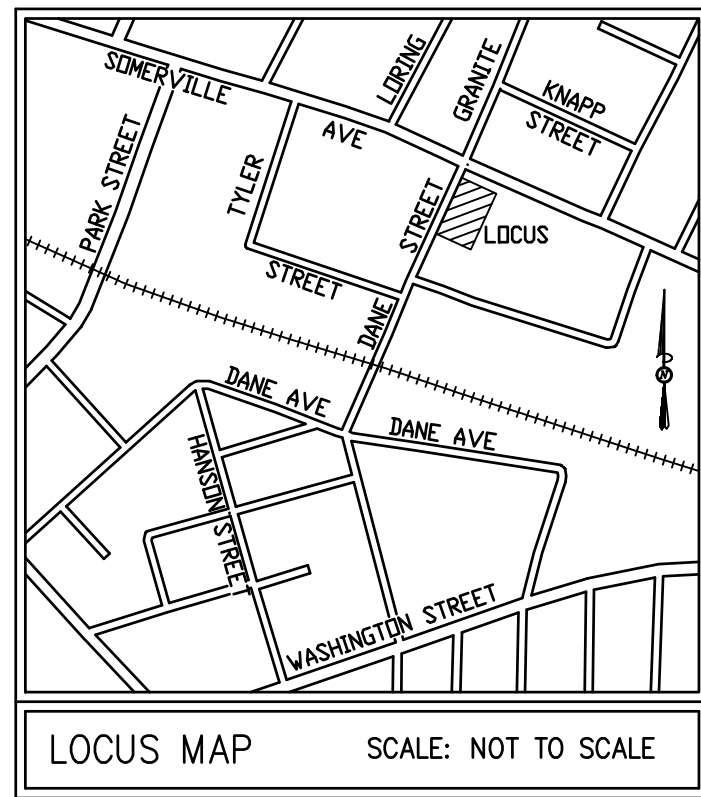
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PROJECT: **PLAN OF LAND**
34 & 38 DANE STREET
ASSESSOR'S ID 64-D-1 & 64-D-3
SOMERVILLE, MASSACHUSETTS

OWNER: **PAULO & CASSIA DASILVA**
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DRAWING TITLE: **Utility Plan** SHEET #: **C4**

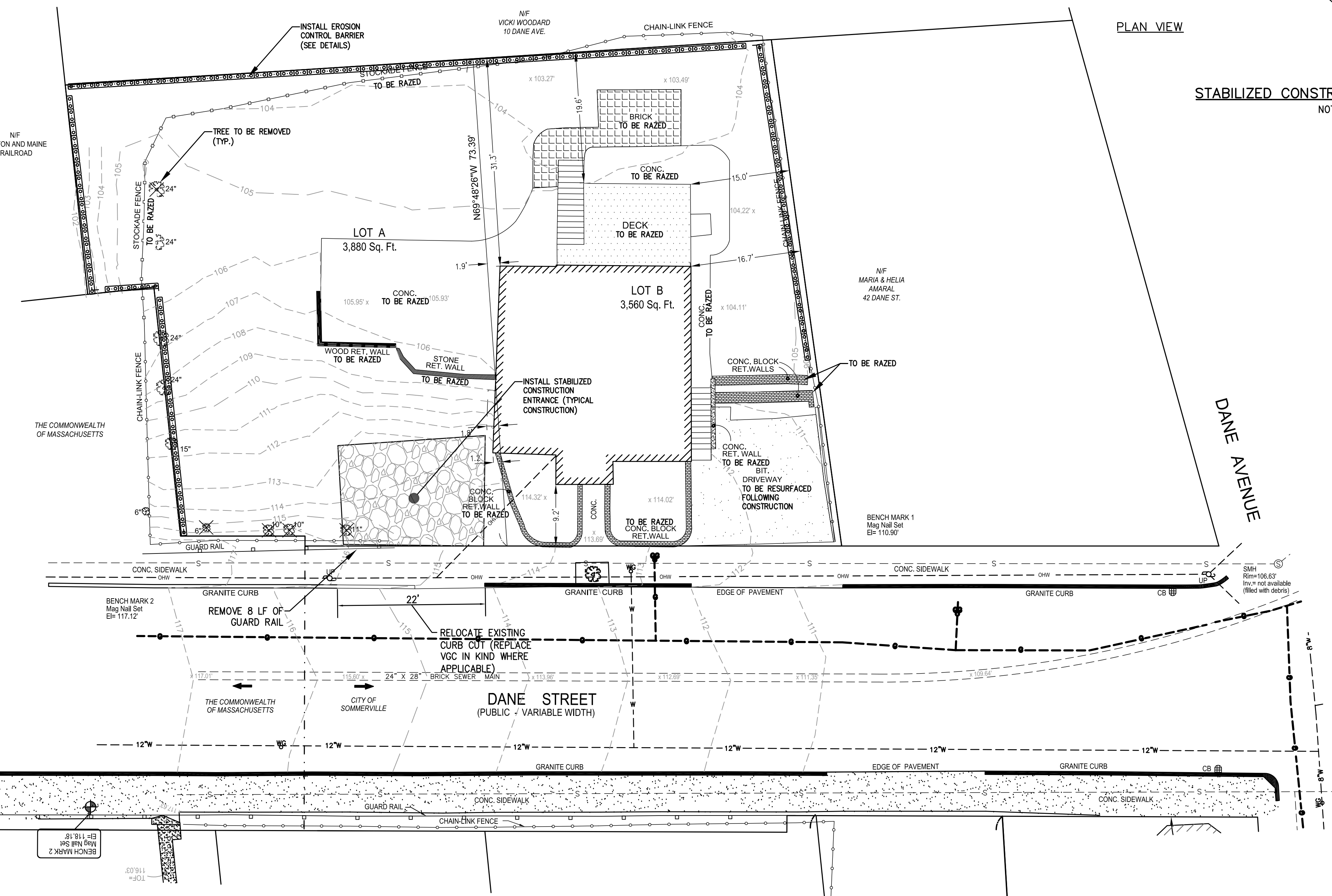


- CONSTRUCTION SPECIFICATIONS:**
1. STONE FOR A STABILIZATION CONSTRUCTION ENTRANCE SHALL BE 1 TO 2 INCH STONE, RECLAIMED STONE, OR RECYCLED CONCRETE EQUIVALENT.
 2. THE LENGTH OF THE STABILIZED ENTRANCE SHALL NOT BE LESS THAN 15 FEET.
 3. THE THICKNESS OF THE STONE FOR THE STABILIZED ENTRANCE SHALL NOT BE LESS THAN 6 INCHES.
 4. THE WIDTH OF THE ENTRANCE SHALL NOT BE LESS THAN A FULL WIDTH OF THE ENTRANCE WHERE INGRESS OR EGRESS OCCURS OR 10 FEET, WHICH EVER IS GREATER.
 5. GEOTEXTILE FILTER CLOTH SHALL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING THE STONE. FILTER CLOTH IS NOT REQUIRED FOR A SINGLE FAMILY RESIDENTIAL LOT.
 6. ALL SURFACE WATER THAT IS FLOWING TO OR DIVERTED TOWARDS THE CONSTRUCTION ENTRANCE SHALL BE PIPED BENEATH THE ENTRANCE. IF PIPING IS IMPRACTICAL, A BERM WITH 5:1 SLOPES THAT CAN BE CROSSED BY VEHICLES MAY BE SUBSTITUTED FOR THE PIPE.
 7. THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, WASHED, OR TRACKED ONTO PUBLIC RIGHT-OF-WAY MUST BE REMOVED PROMPTLY.

CITY STAMP

ABBREVIATIONS

- | | |
|----------|---------------------------------|
| APPROX | APPROXIMATE |
| ASPH | ASPHALT |
| BD | BOUND |
| BLDG | BUILDING |
| BIT CONC | BITUMINOUS CONCRETE |
| BM | BENCHMARK |
| BS | BOTTOM OF SLOPE |
| CB | CATCH BASIN |
| CB/DH | CONC. BOUND/DRILL HOLE |
| CCB | CAPE COD BERM |
| CLF | CHAIN LINK FENCE |
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| PVMT | PAVEMENT |
| RCP | REINFORCED CONCRETE PIPE |
| ROW | RIGHT OF WAY |
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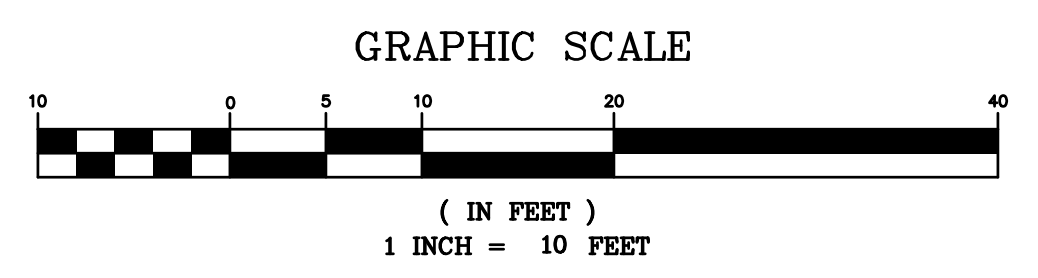


EROSION CONTROL NOTES

1. DURING CONSTRUCTION, NO MATERIAL SHALL BE STOCKPILED WITHOUT ADEQUATE EROSION CONTROL MEASURES IN PLACE.
2. EROSION CONTROLS SHALL BE INSPECTED DAILY AND REPAIRED AS NECESSARY.
3. IN AREAS WHERE EROSION CONTROLS ARE INSTALLED NEAR STEEP SLOPES THAT WILL BE DISTURBED, A SECOND EROSION CONTROL LINE SHALL BE INSTALLED 10 FEET DOWNGRADIENT IN CASE OF A BREACH OF THE PRIMARY CONTROL LINE.

LEGEND

- | | |
|-------------|------------------|
| --- 340 --- | EXISTING CONTOUR |
| --- 341 --- | PROPOSED CONTOUR |
| +100.00 | SPOT GRADE |
| ○ | GAS METER |
| ⊗ | WATER GATE VALVE |
| ⊗ | WATER SERVICE |
| ○ | HYDRANT |
| □ | CATCH BASIN |
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| — G — | GAS PIPE |
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| — S — | SEWER PIPE |
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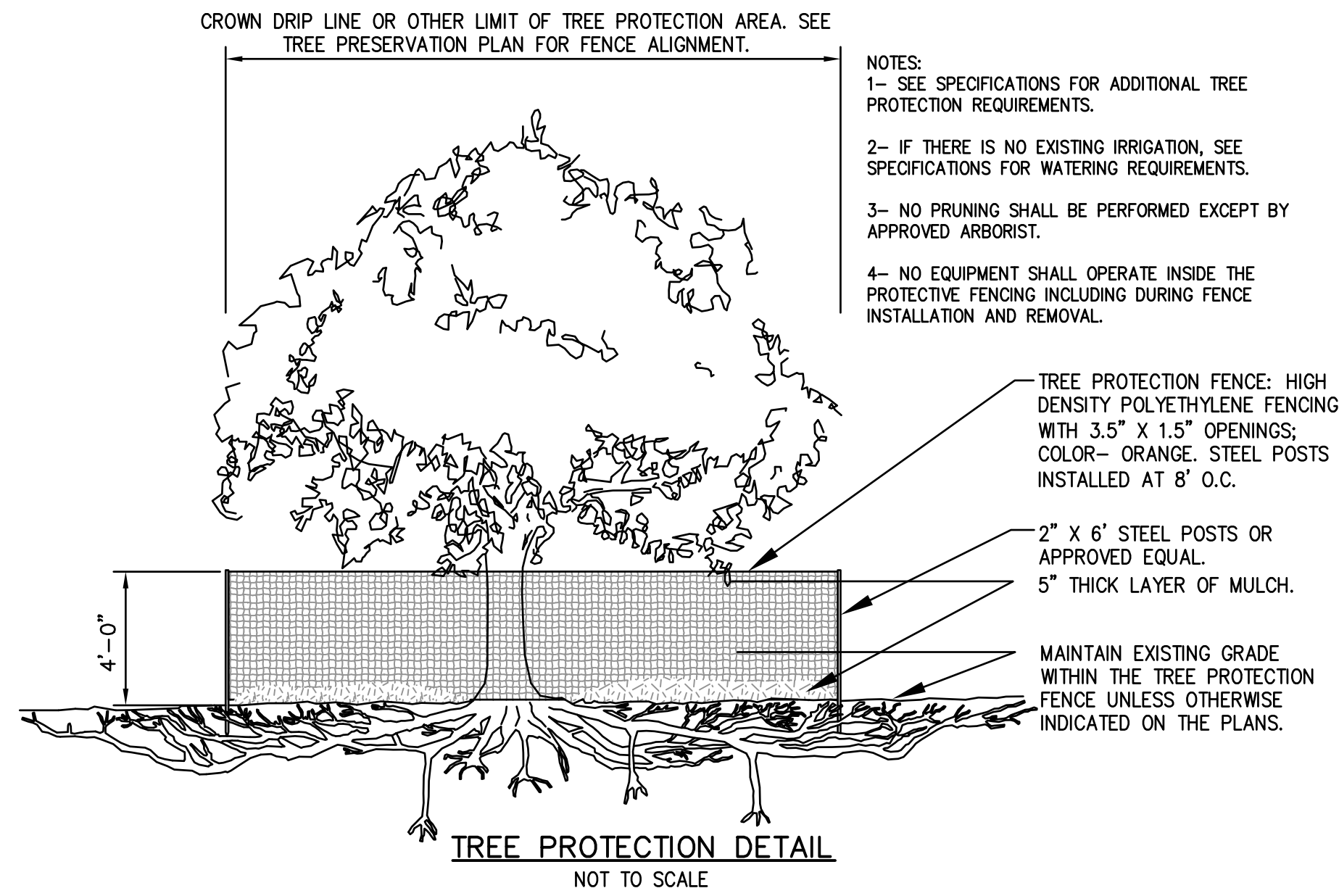
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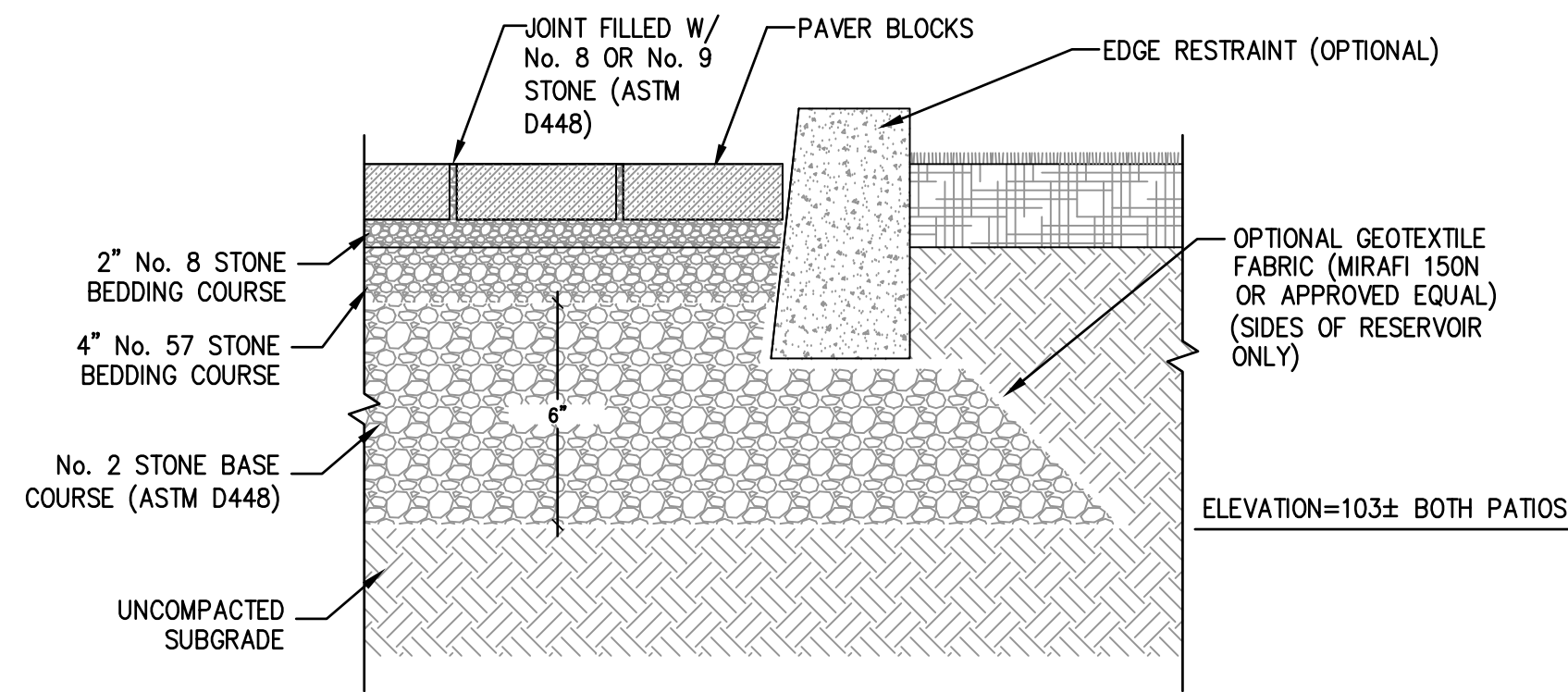
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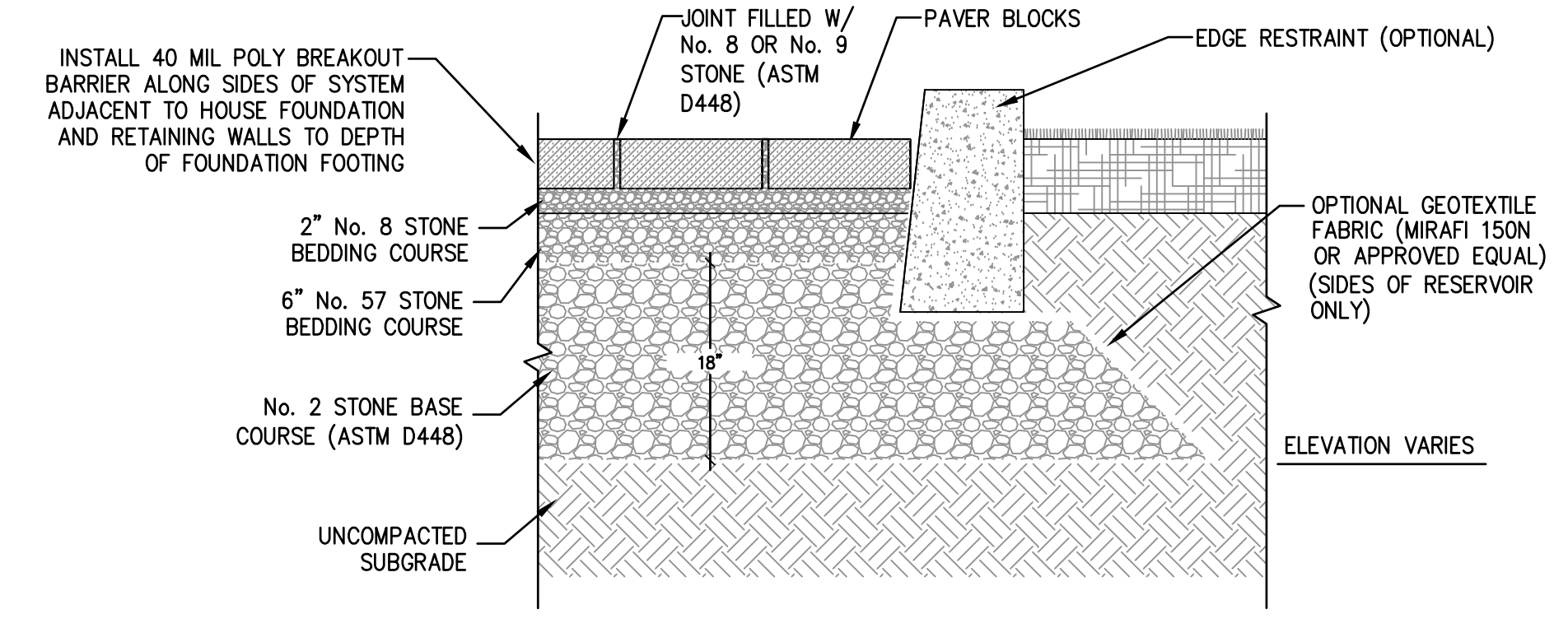
DRAWING TITLE: **Site Preparation Plan** SHEET # **C5**



TREE PROTECTION DETAIL
NOT TO SCALE



TYPICAL PERMEABLE PAVER PATIO DETAIL
NOT TO SCALE

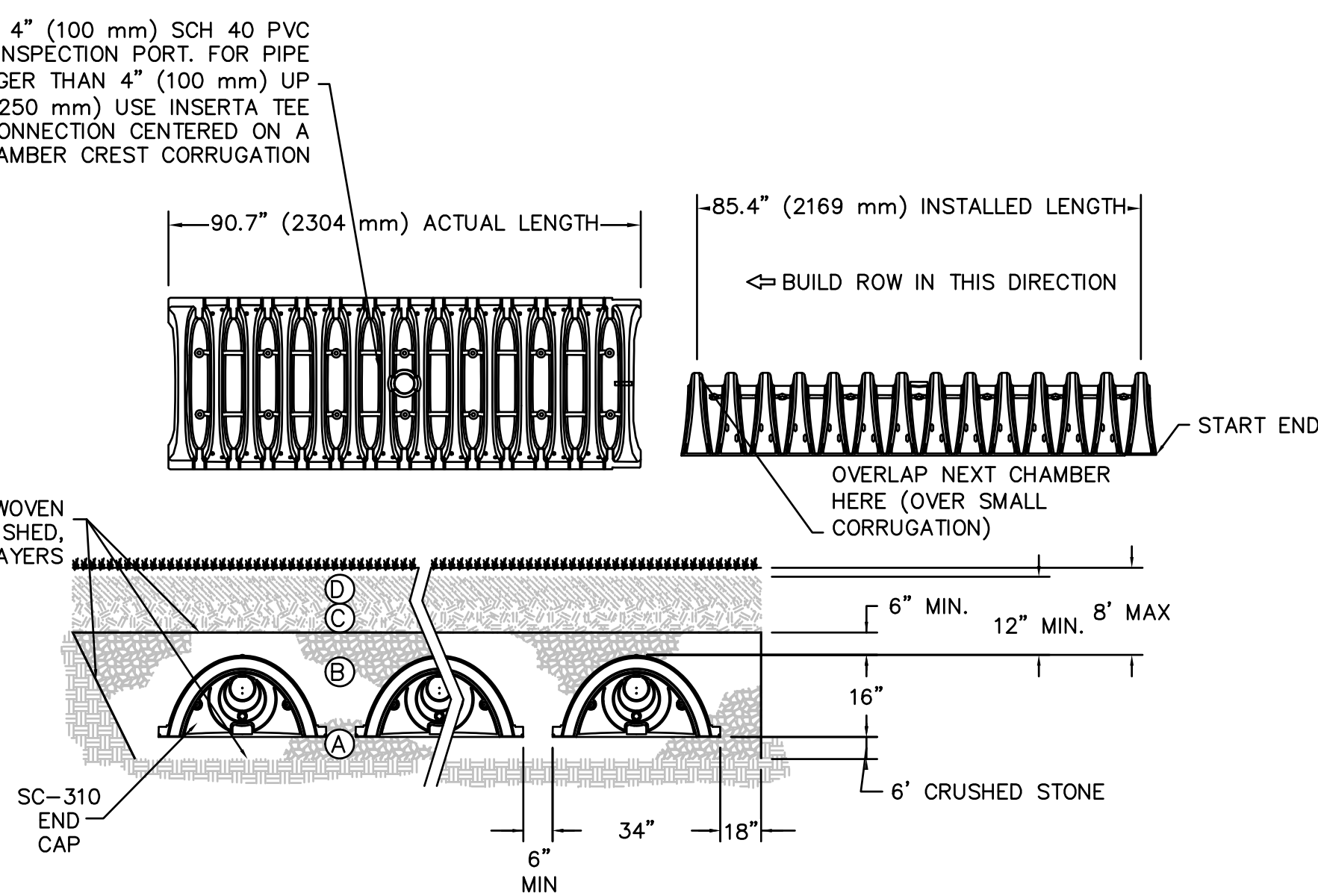


TYPICAL PERMEABLE PAVER DRIVEWAY DETAIL
NOT TO SCALE

ACCEPTS 4" (100 mm) SCH 40 PVC PIPE FOR INSPECTION PORT. FOR PIPE SIZES LARGER THAN 4" (100 mm) UP TO 10" (250 mm) USE INSERTA TEE CONNECTION CENTERED ON A CHAMBER CREST CORRUGATION

NOMINAL CHAMBER SPECIFICATIONS	34.0" X 16.0" X 85.4"	(864 mm X 406 mm X 2169 mm)
CHAMBER STORAGE	14.7 CUBIC FEET	(0.42 m ³)
MINIMUM INSTALLED STORAGE*	31.0 CUBIC FEET	(0.88 m ³)
WEIGHT	35.0 lbs.	(16.8 kg)

*ASSUMES 6" (152 mm) ABOVE, BELOW, AND BETWEEN CHAMBERS

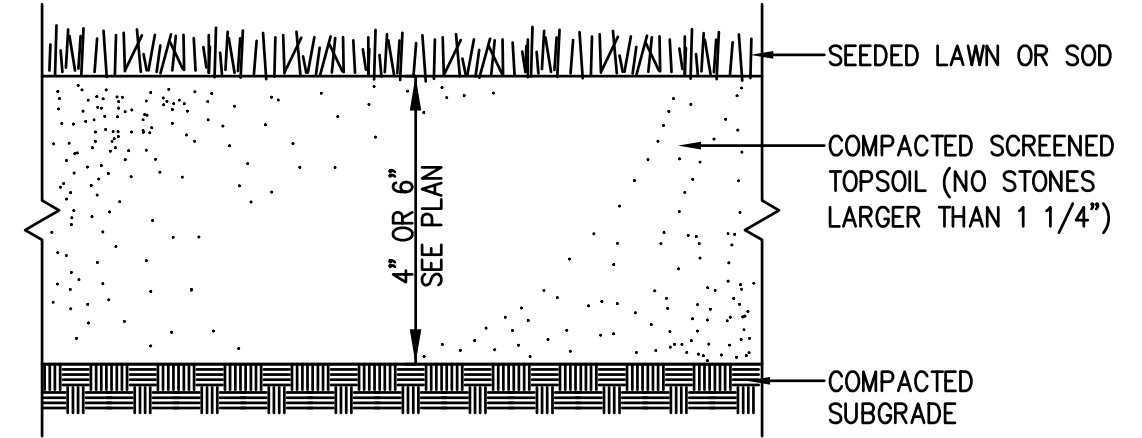


ADS GEOSYNTHETICS 601T NON-WOVEN GEOTEXTILE ALL AROUND CLEAN CRUSHED, ANGULAR STONE IN A & B LAYERS

- FILL MATERIAL SCHEDULE
- CRUSHED STONE BASE, 3/4" TO 2" ANGULAR, DOUBLE-WASHED STONE, COMPACTED WITH PLATE COMPACTOR TO PROVIDE LEVEL BASE.
 - CRUSHED STONE EMBEDMENT, 3/4" TO 2" ANGULAR, DOUBLE-WASHED STONE, NO COMPACTION REQUIRED.
 - ACCEPTABLE FREE DRAINING, GRANULAR FILL MATERIAL (MHD M2.01.7 UNDER PAVEMENT, MHD M1.01.0). BEGIN COMPACTION AFTER 12' OF STONE IS INSTALLED. COMPACT REMAINING MATERIAL IN 6" LIFTS TO A 95% PROCTOR DENSITY. DO NOT USE ROLLER OVER 12,000 LBS.
 - TYPICAL LOAM AND SEED FOR LANDSCAPE APPLICATIONS, ROADWAY SUB-BASE FOR PAVEMENT APPLICATIONS.

- SUBSURFACE INFILTRATION CHAMBERS SHALL BE ADS STORMTECH SC-310 CHAMBER OR APPROVED EQUAL. ALTERNATIVE UNIT SHALL ONLY BE INSTALLED AFTER APPROVAL FROM THE ENGINEER OF RECORD.
- IN THIS APPLICATION, CHAMBERS SHALL NOT BE INSTALLED BELOW PAVEMENT OR IN ANY AREA WHERE VEHICULAR TRAFFIC IS EXPECTED.
- DESIGN ELEVATIONS AND LOCATION OF SYSTEMS ARE ILLUSTRATED ON THE DESIGN PLAN.
- CHAMBER INVERT SHALL BE SET AT OR ABOVE SEASONAL HIGH GROUNDWATER.
- ROOF LEADERS DISCHARGING INTO CHAMBERS SHALL BE 4" SCH. 40 PVC SET AT A MINIMUM SLOPE OF 0.005 FT/FT.

SUBSURFACE ROOF INFILTRATION CHAMBERS
(STORMTECH SC-310)
NOT TO SCALE

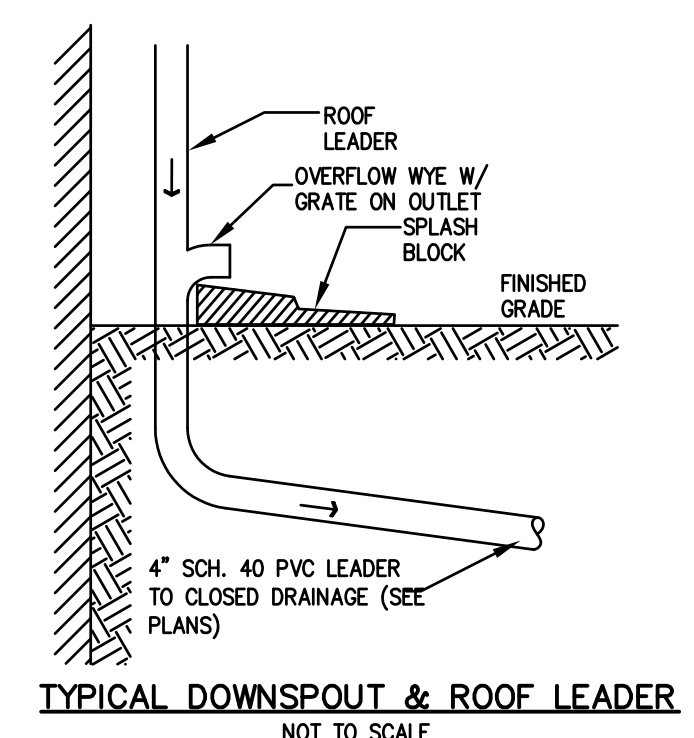


NOTES:

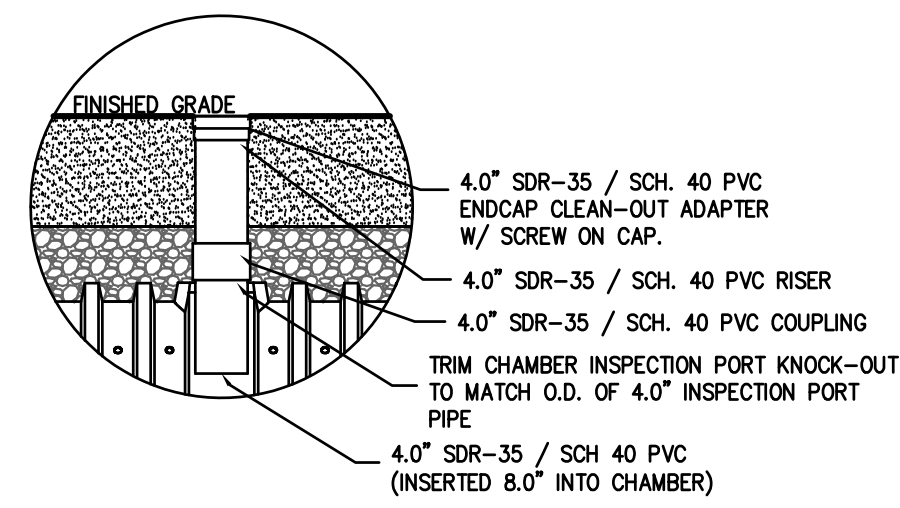
- TOP OF LOAM (TOPSOIL) IS FINISHED GRADE.
- TOPSOIL SHALL CONTAIN BETWEEN 5% AND 12% ORGANIC MATTER AND SHALL HAVE A MAXIMUM STONE SIZE OF 1 1/4" AND SHALL CONFORM TO THE FOLLOWING GRADATION:

SIEVE	% PASSING
1 1/4 INCH	100
No.4	85-100
No.40	60-85
No.100	38-60
No.200	28-40

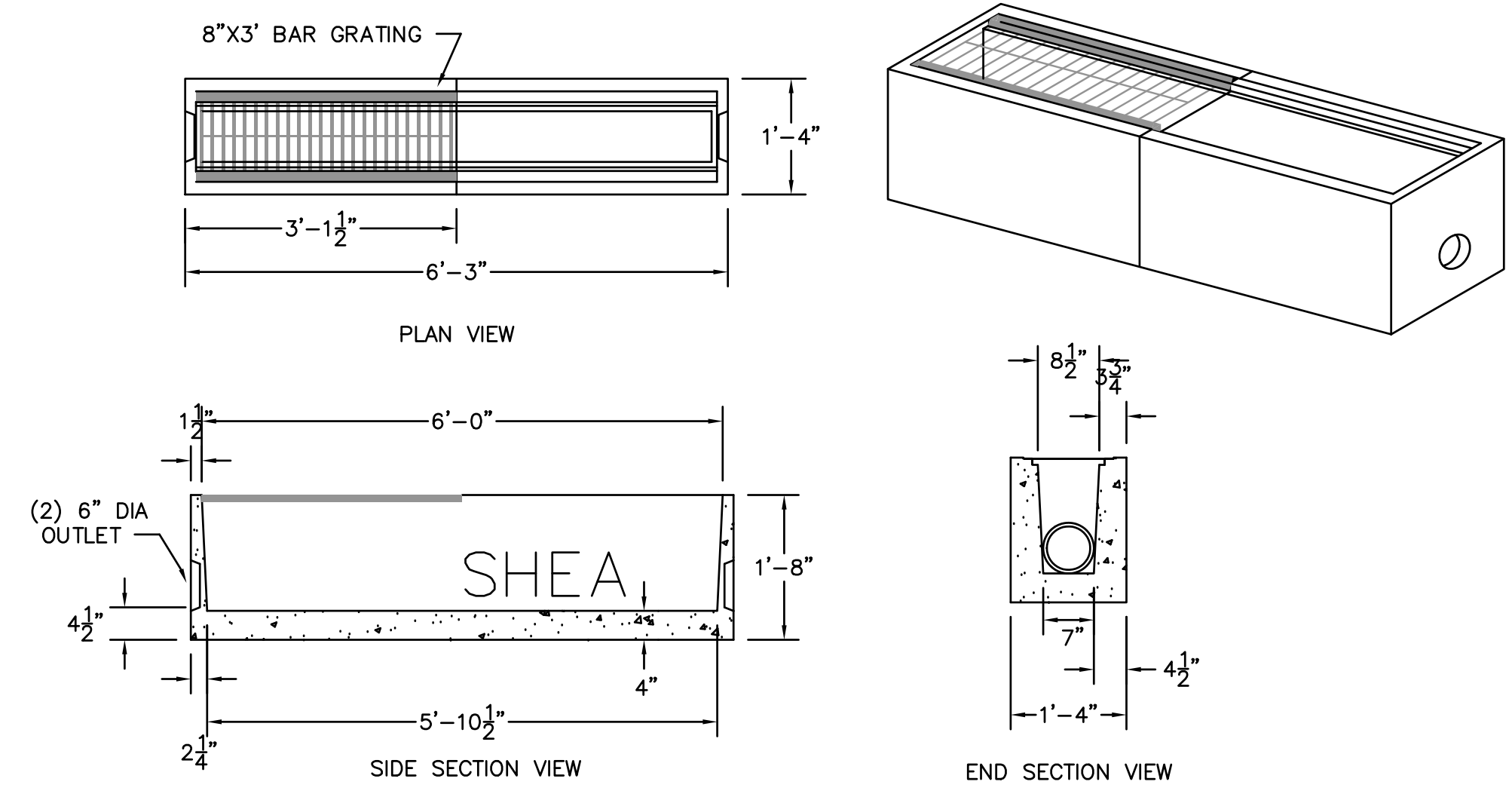
SEEDING OR SODDED LAWN DETAIL
NOT TO SCALE



TYPICAL DOWNSPOUT & ROOF LEADER
NOT TO SCALE

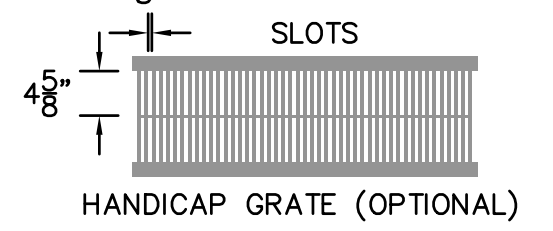


INSPECTION PORT
(MIN. 1 PER SYSTEM)
NOT TO SCALE



- NOTES:
- CONCRETE: 4,000 PSI MINIMUM AFTER 28 DAYS.
 - AVAILABLE IN 3' AND 6' SECTIONS.
 - AVAILABLE IN END OR MIDDLE SECTIONS.
 - CONFORMS TO H-20 LOADING.

ITEM NO.	M-TD6	6' SECTION	WEIGHT
	M-TD3	3' SECTION	711#



PRECAST CONCRETE TRENCH DRAIN
NOT TO SCALE



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(774) 993-9903 hscivil@gmail.com

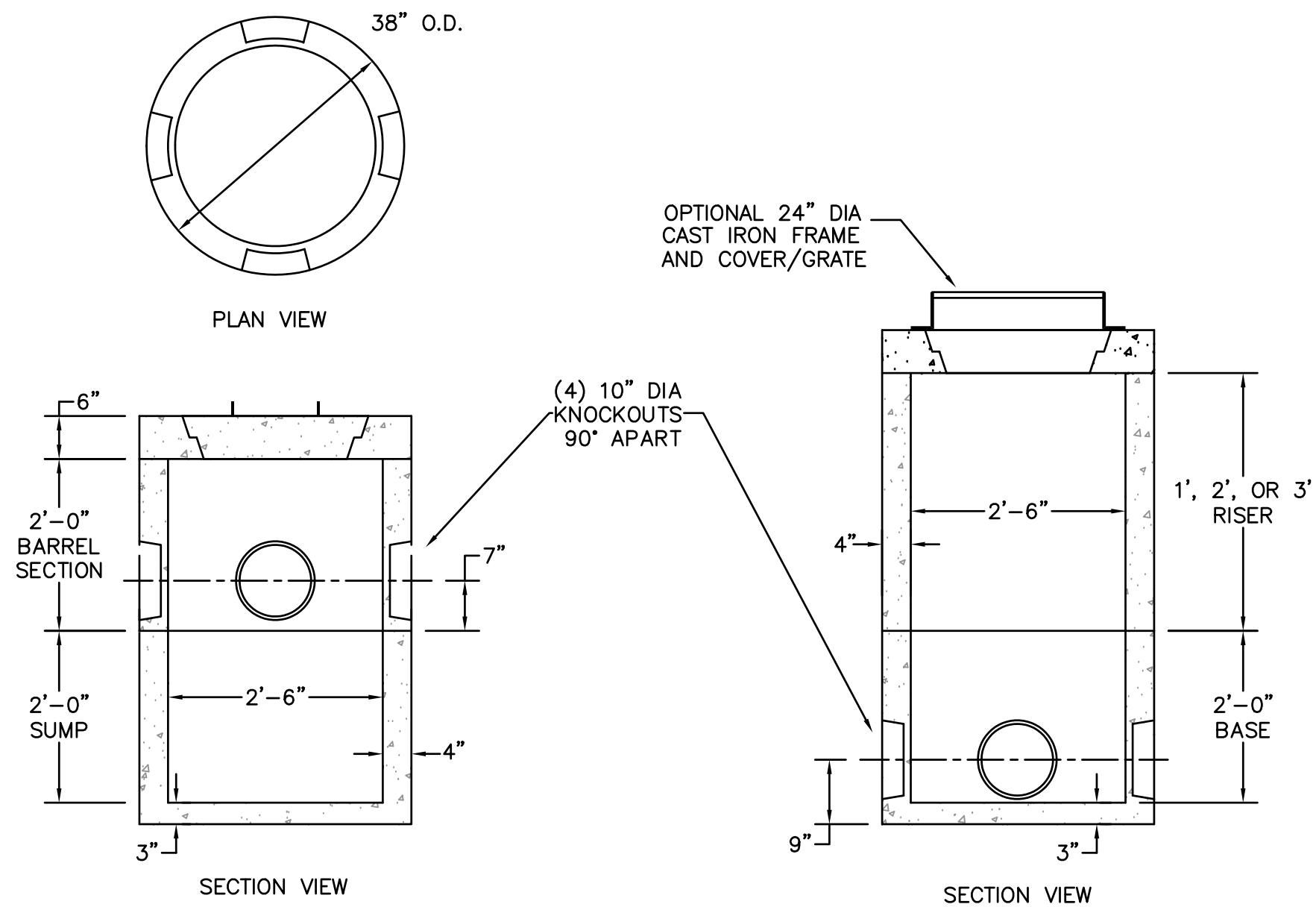
PROJECT:
PLAN OF LAND
34 & 38 DANE STREET
ASSESSOR'S ID 64-D-1 & 64-D-3
SOMERVILLE, MASSACHUSETTS

OWNER:
PAULO & CASSIA DASILVA
38 DANE STREET
SOMERVILLE, MA 02143

DRAWN BY: SCOTT P. HENDERSON, PE	PROJECT: 34 & 38 DANE
SCALE: AS NOTED	ISSUE DATE: 4/6/17
REVISION:	
REVISION:	
REVISION:	
REVISION:	
REVISION:	

DRAWING TITLE: **Construction Details**
SHEET #: **C6**

CITY STAMP



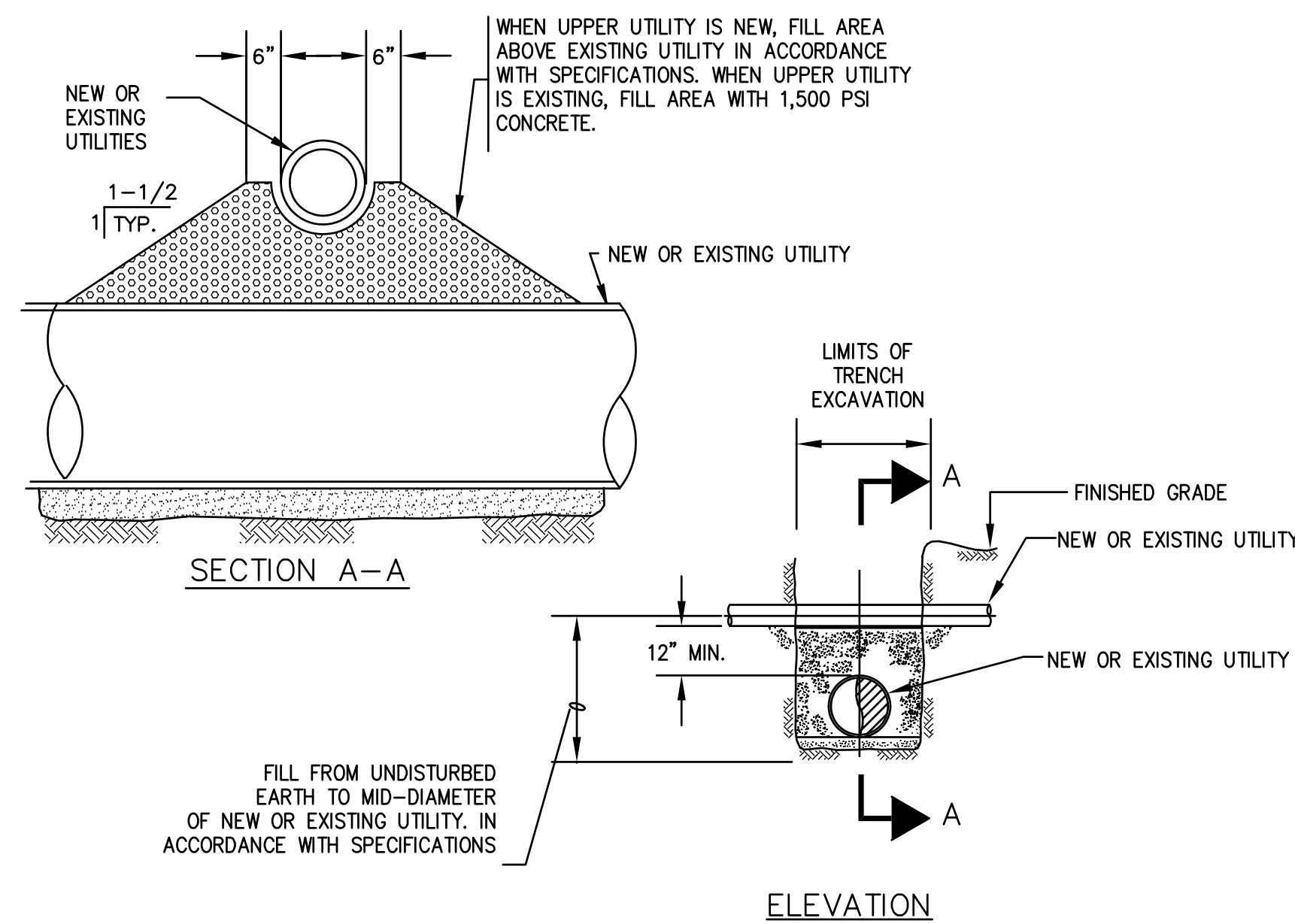
NOTES:

1. CONCRETE: 5,000 PSI MINIMUM AFTER 28 DAYS.
2. DESIGNED FOR H-20 LOADING.
3. SUPPLIED BY SHEA CONCRETE OR APPROVED EQUAL

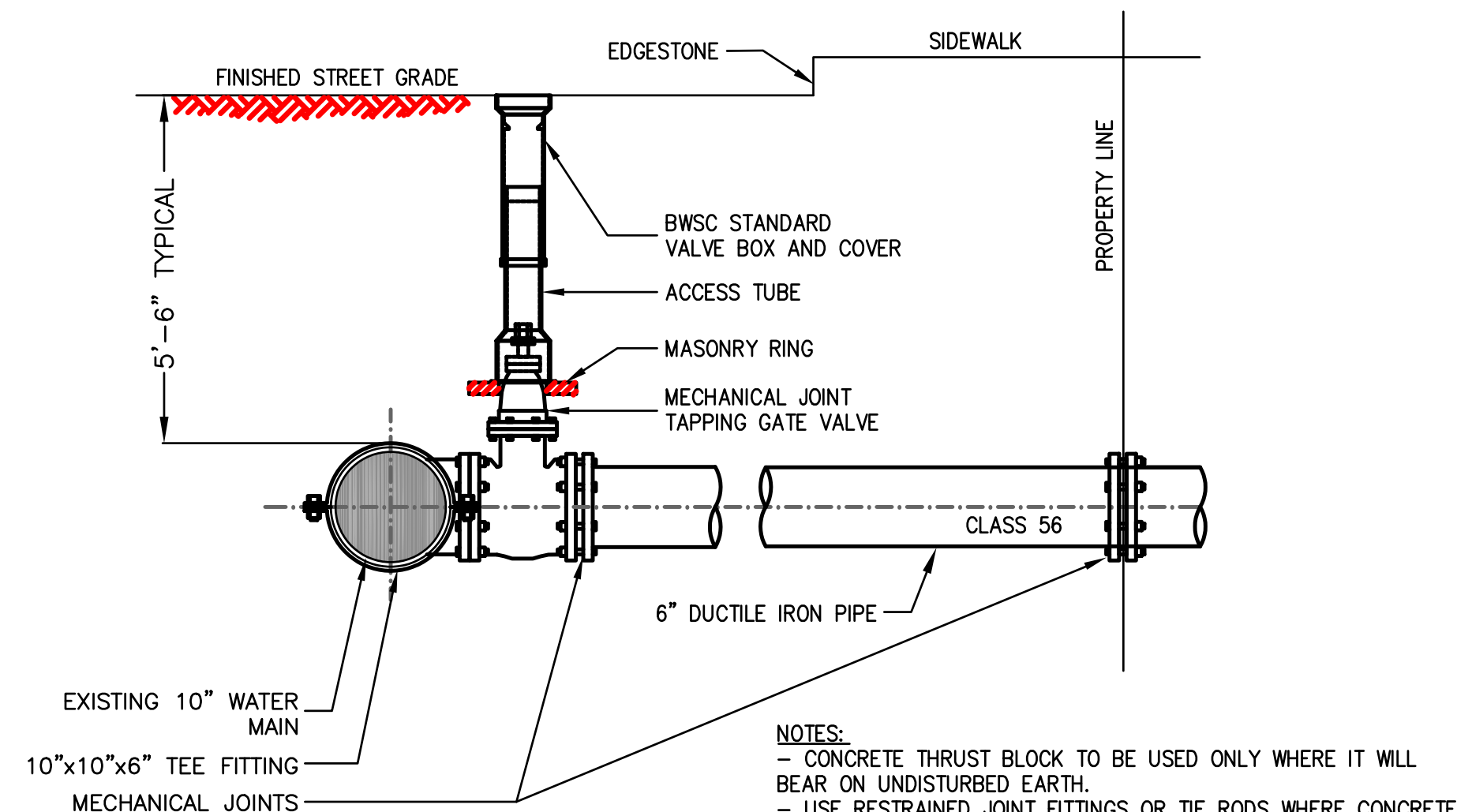
SECTIONS	ITEM NO	WEIGHT
1'-0" RISER	MC-MCB12RH	440#
2'-0" RISER	MC-MCB24RH	880#
3'-0" RISER	MC-MCB36RH	1320#
2'-0" BASE	MC-MCB24SH	1175#
2'-0" BARREL	MC-MCB24BSH	880#
38" COVER	MC-MCB38CH	585#

MANHOLE 30" DIA H-20
MINI CATCH BASIN

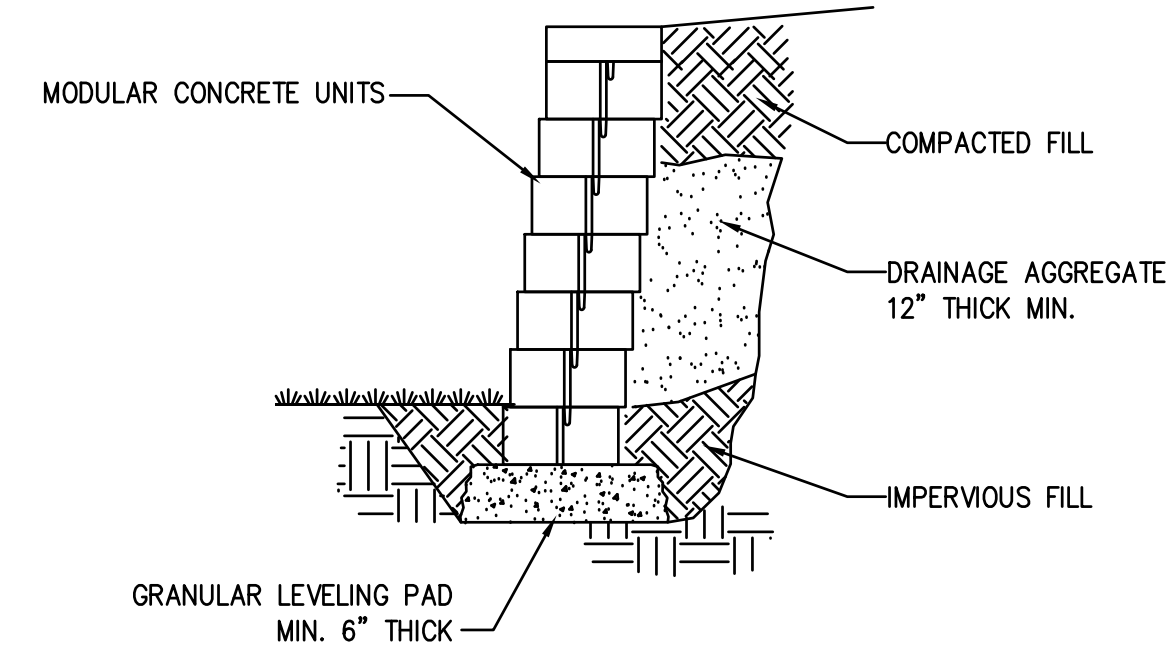
MINI-CATCH BASIN DETAIL
NOT TO SCALE



TYPICAL UTILITY CROSSING
NOT TO SCALE

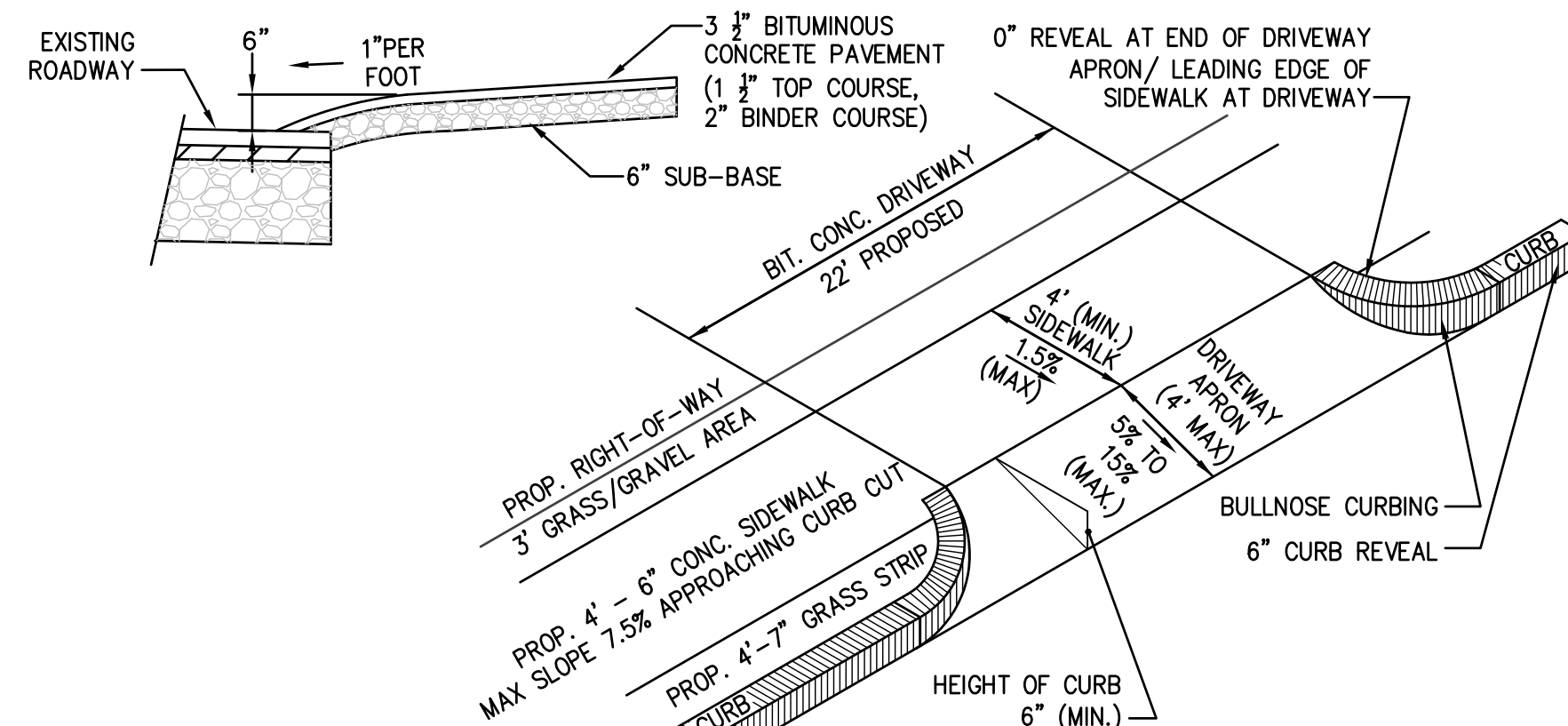


FIRE PROTECTION SERVICE CONNECTION
(TEE FITTING & GATE VALVE)
NOT TO SCALE

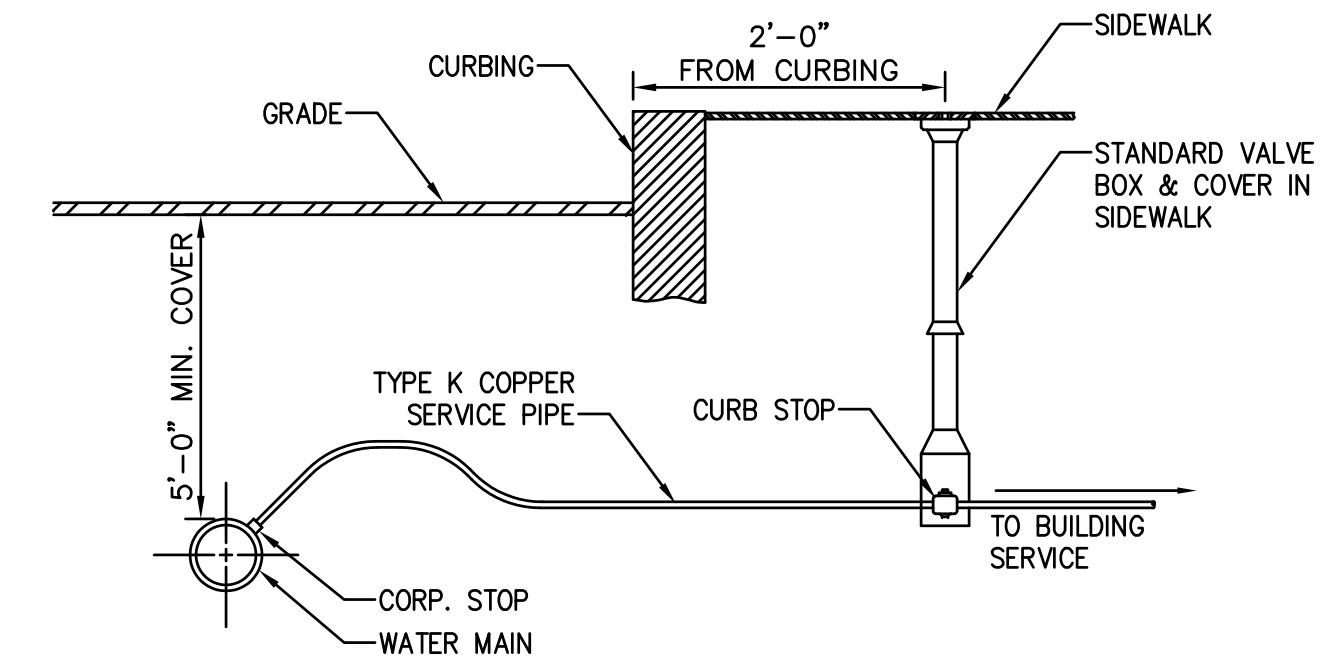


TYPICAL MODULAR BLOCK RETAINING WALL

NOT TO SCALE
DESIGNED BY OTHERS



DRIVEWAY APRON DETAIL
NOT TO SCALE



WATER SERVICE CONNECTION DETAIL
NOT TO SCALE



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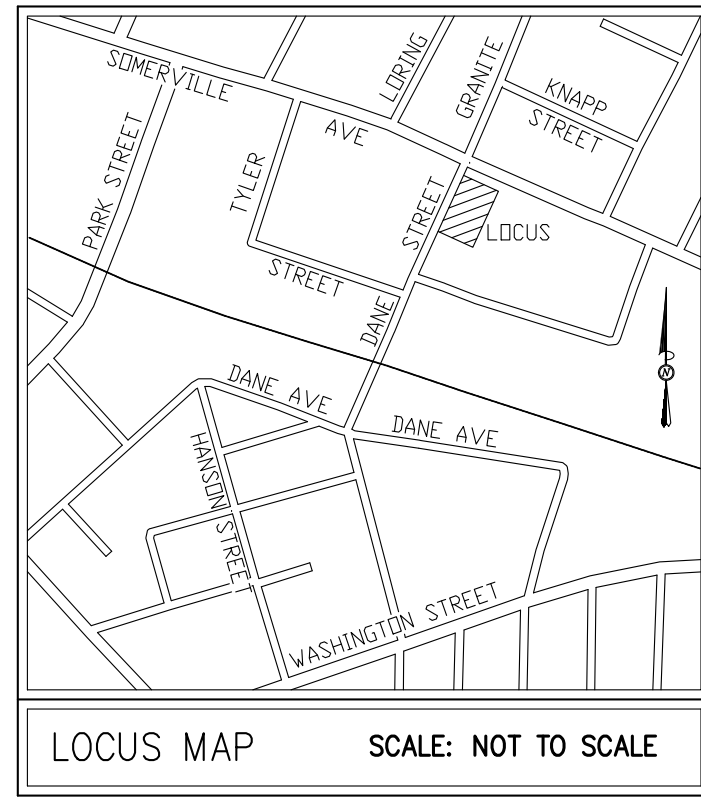
PROJECT: **PLAN OF LAND**
34 & 38 DANE STREET
ASSESSOR'S ID 64-D-1 & 64-D-3
SOMERVILLE, MASSACHUSETTS

OWNER: **PAULO & CASSIA DASILVA**
38 DANE STREET
SOMERVILLE, MA 02143

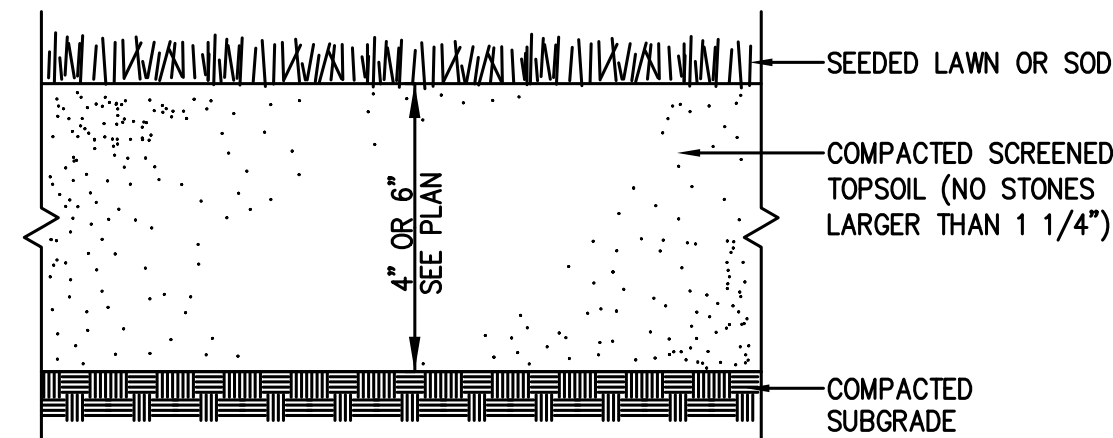
DRAWN BY: SCOTT P. HENDERSON, PE	PROJECT: 34 & 38 DANE
SCALE: AS NOTED	ISSUE DATE: 4/6/17
REVISION:	
REVISION:	
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REVISION:	
REVISION:	

DRAWING TITLE
Construction Details

SHEET #
C7



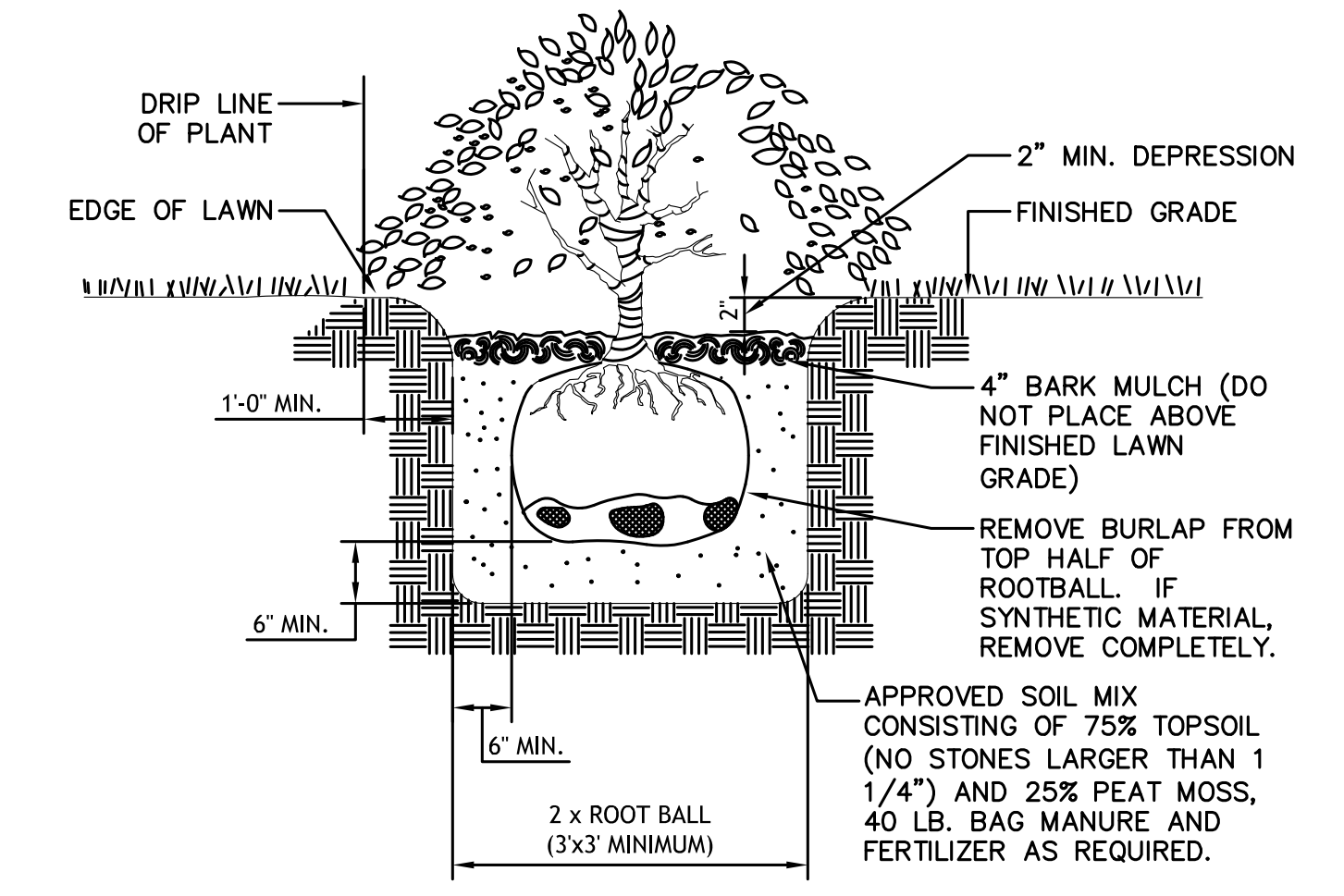
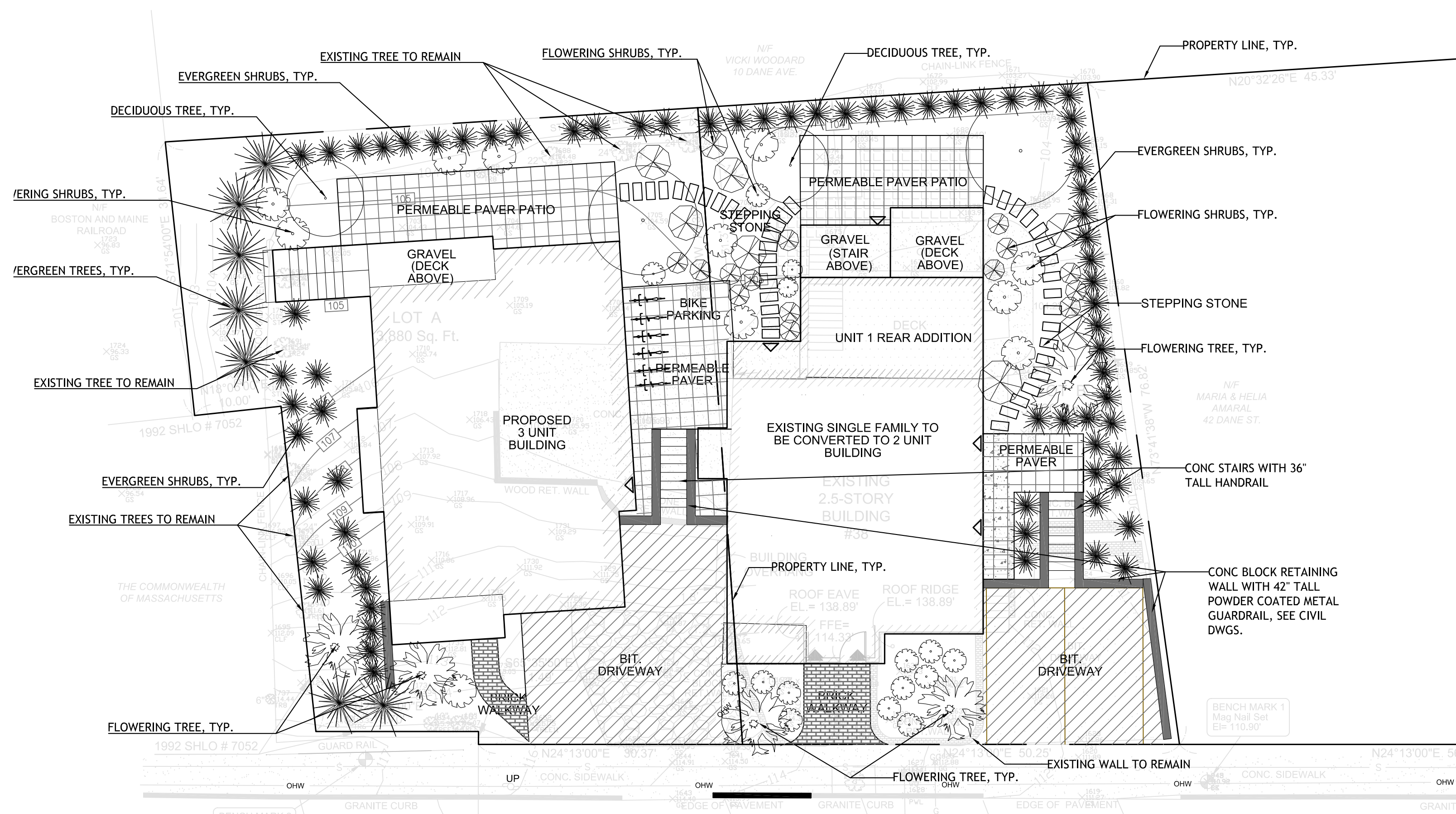
CITY STAMP



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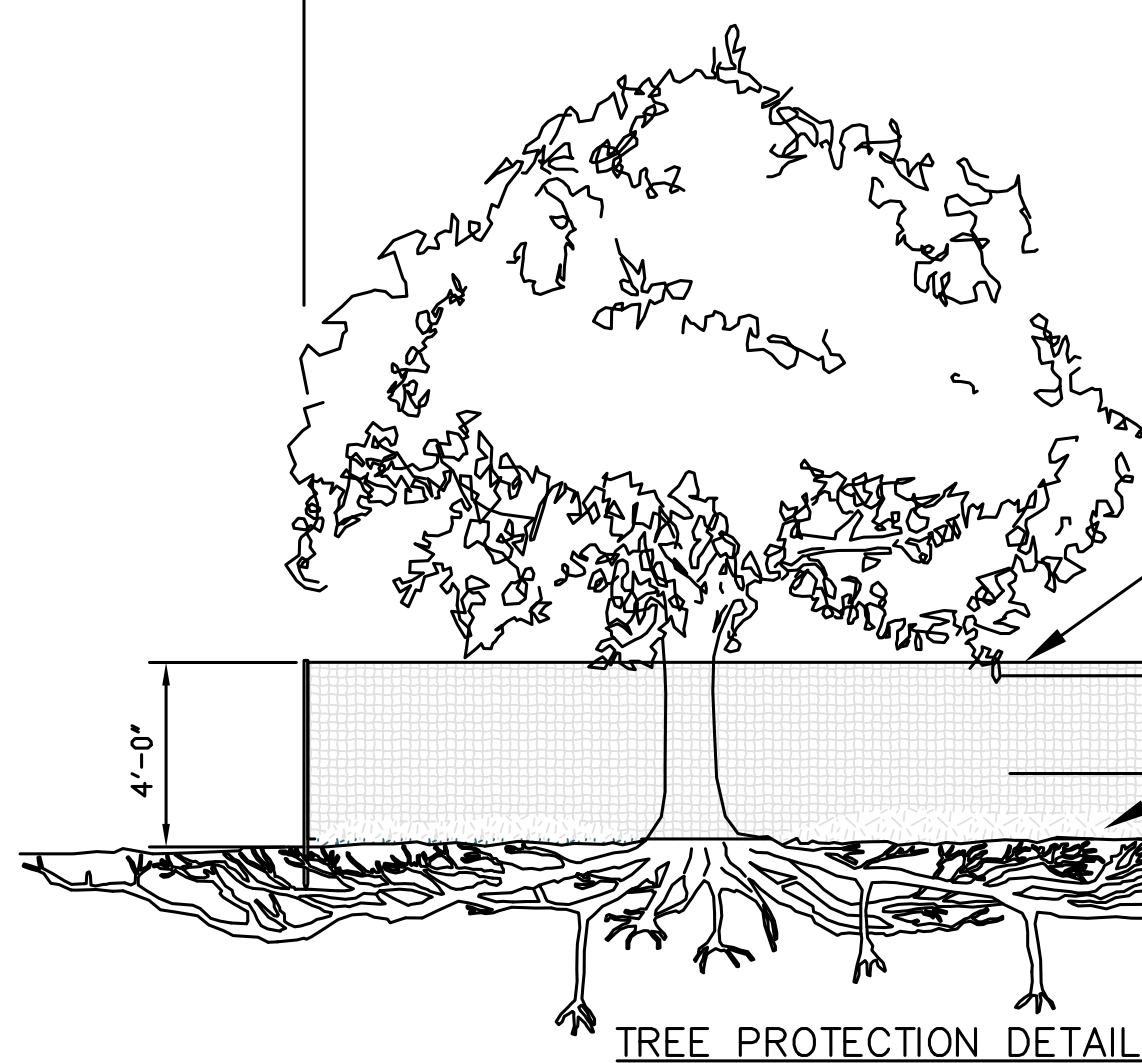
SEEDED OR SODDED LAWN DETAIL
NOT TO SCALE



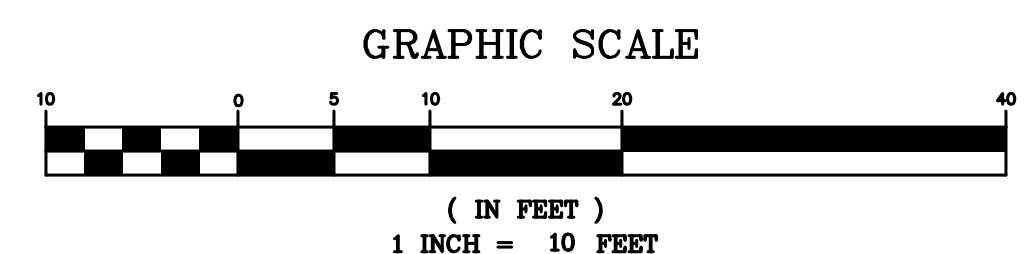
TYPICAL SHRUB PLANTING DETAIL
SCALE: NOT TO SCALE

CROWN DRIP LINE OR OTHER LIMIT OF TREE PROTECTION AREA. SEE TREE PRESERVATION PLAN FOR FENCE ALIGNMENT.

- NOTES:
- SEE SPECIFICATIONS FOR ADDITIONAL TREE PROTECTION REQUIREMENTS.
 - IF THERE IS NO EXISTING IRRIGATION, SEE SPECIFICATIONS FOR WATERING REQUIREMENTS.
 - NO PRUNING SHALL BE PERFORMED EXCEPT BY APPROVED ARBORIST.
 - NO EQUIPMENT SHALL OPERATE INSIDE THE PROTECTIVE FENCING INCLUDING DURING FENCE INSTALLATION AND REMOVAL.



TREE PROTECTION DETAIL
NOT TO SCALE



DRAWN BY: PHYLLIS ZHOU	PROJECT: 34 & 38 DANE
SCALE: 1"=10'	ISSUE DATE: 4/6/17
REVISION:	
REVISION:	
REVISION:	
REVISION:	
REVISION:	

PHYLLIS ZHOU
LANDSCAPE DESIGNER

PROJECT:
PLAN OF LAND
34 & 38 DANE STREET
ASSESSOR'S ID 64-D-1 & 64-D-3
SOMERVILLE, MASSACHUSETTS

OWNER:
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38 DANE STREET
SOMERVILLE, MA 02143

DRAWING TITLE: **Landscape Plan** SHEET #: **C8**