2 Quincy Street, Somerville MA – Urban Residence (UR) Apartment Building

This is a proposed four-story structure containing 17, one-bedroom units, some with exterior balconies, a mechanical basement and roof deck and garden. There is an elevator serving all floors and two egress stair enclosures. There is a paved walkway on the right side to the trash / recycling bin storage and open-air bike lockup at the back under a canopy.

The unit's range in size from 475 SF to 967 SF, some of these have exterior balconies for outdoor space and all units have access to the common roof deck.

We are providing a robust landscaping package around the building inside a 6 foot high wooded fence, two new trees at the back of the property, shrubbery and gravel under the balconies on the left side of the property and a permeable paver pathway on the right to access the trash niche and the bike storage at the back of the building. The roof has a roof deck surrounded by a green roof.

Rainwater is collected by internal roof drains and directed to a sub-surface infiltration system under the bike parking area at the back of the building.

We request relief from 3 items in the Lot Standards Sections of the Urban Residence Apartment Building Section.

1. Lot Width. With no driveway there is a 55 Foot requirement: The existing land is trapezoidal in shape; the front of the site is 49.9 feet wide while the back is 59.3 feet wide, we request relief as this site is an odd shape.
2. Side yard setback. This lot, a UR district abuts a NR district on the right, we request relief from the side yard setback requirement on the NR side to match that setback on the left to allow development of the Urban Residence site.
3. The ground story is to be 2 feet above adjacent grade; the first floor is presently 1 foot 7 inches above grade with the use of ramps both external and internal to allow for accessibility compliance, which is complying with the intent of the zoning code.

LEGEND

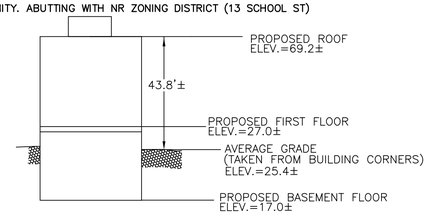
⊡	BOUND
•	IRON PIN/PIPE
⊙	STONE POST
	TREE
	TREE STUMP
	SHRUBS/FLOWERS
	SIGN
	BOLLARD
Ⓢ	SEWER MANHOLE
Ⓓ	DRAIN MANHOLE
	CATCH BASIN
Ⓦ	WATER MANHOLE
WV	WATER VALVE
	HYDRANT
GV	GAS VALVE
Ⓔ	ELECTRIC MANHOLE
E	ELECTRIC HANDHOLE
	UTILITY POLE
	LIGHT POLE
Ⓜ	MANHOLE
48.00	SPOT GRADE
TW	TOP OF WALL
BW	BOTTOM OF WALL
	EXISTING BUILDING
	RETAINING WALL
	STONE WALL
	FENCE
	TREE LINE
S	SEWER LINE
D	DRAIN LINE
W	WATER LINE
G	GAS LINE
E	UNDERGROUND ELECTRIC LINE
OHW	OVERHEAD WIRES
145	CONTOUR LINE (MJR)
146	CONTOUR LINE (MNR)

ZONING LEGEND

ZONING DISTRICT: UR

	REQUIRED	EXISTING	PROPOSED
LOT WIDTH	55'	49.96'	49.96'*
LOT AREA	–	6,044 SF	6,044 SF
MIN. LOT WIDTH	55'	49.96'	49.96'
MIN. YARD FRONT	10'	10.6'	10.5'
SIDE	5' R / 20.0' L	2.0'R / 21.5' L	5.5' R / 5.5' L**
REAR	10'	43.1'	13.0'
LOT COVERAGE	65% OF LOT 3,928.6 S.F.	87% OF LOT 5,263.0 S.F.	62.3% OF LOT 3,764.6 S.F.
FACADE BUILD OUT	MIN. 80%	–	80%
GROUND STORY EL.	MIN. 2'	3.8'	1.6'

* NON CONFORMITY
* NON CONFORMITY. ABUTTING WITH NR ZONING DISTRICT (13 SCHOOL ST)

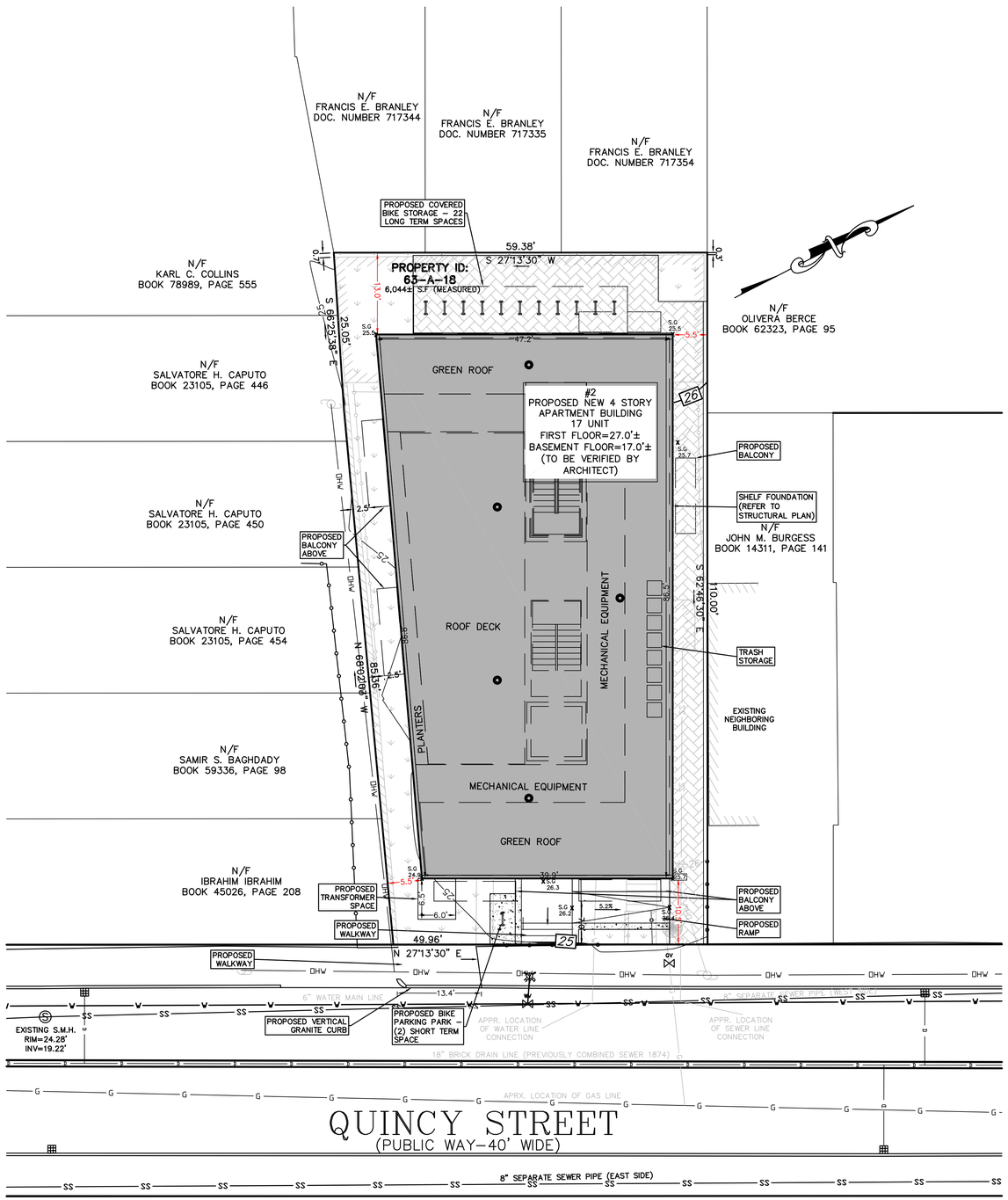


PROPOSED PROFILE
NOT TO SCALE

GRAPHIC SCALE

10 0 5 10 20 40

(IN FEET)
1 inch = 10 ft.



NOTES:

1. INFORMATION SHOWN ON THIS PLAN IS THE RESULT OF A FIELD SURVEY PERFORMED BY SPRUHAN ENGINEERING, P.C. AS OF 07/10/2022.

2. DEED REFERENCE: BOOK 79560, PAGE 82
PLAN REFERENCE 1: PLAN BOOK 1227, PG END
MIDDLESEX COUNTY SOUTH DISTRICT REGISTRY OF DEEDS.

3. THIS PLAN IS NOT INTENDED TO BE RECORDED.

4. I CERTIFY THAT THE DWELLING SHOWN IS NOT LOCATED WITHIN A SPECIAL FLOOD HAZARD ZONE. IT IS LOCATED IN ZONE X, ON FLOOD HAZARD BOUNDARY MAP NUMBER 25017C0438E, IN COMMUNITY NUMBER: 250214, DATED 06/04/2010.

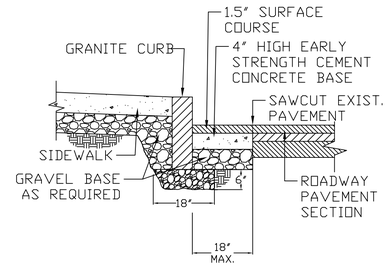
5. THIS PLAN DOES NOT SHOW ANY UNRECORDED OR UNWRITTEN EASEMENTS WHICH MAY EXIST. A REASONABLE AND DILIGENT ATTEMPT HAS BEEN MADE TO OBSERVE ANY APPARENT USES OF THE LAND; HOWEVER THIS NOT CONSTITUTE A GUARANTEE THAT NO SUCH EASEMENTS EXIST.

6. FIRST FLOOR ELEVATIONS ARE TAKEN AT THRESHOLD.

7. NO RESPONSIBILITY IS TAKEN FOR ZONING TABLE AS SPRUHAN ENGINEERING, P.C. ARE NOT ZONING EXPERTS. TABLE IS TAKEN FROM TABLE PROVIDED BY LOCAL ZONING ORDINANCE. CLIENT AND/OR ARCHITECT TO VERIFY THE ACCURACY OF ZONING ANALYSIS.

8. THE ELEVATIONS SHOWN ARE BASED ON CITY OF SOMERVILLE DATUM.

9. ZONING INFORMATION: UR–URBAN RESIDENTIAL.



*6" REVEAL TYPICAL. REVEAL MAY VARY FROM 3" TO 9" WITH DPW APPROVAL.

VERTICAL GRANITE CURB DETAIL
N.T.S.

REFER TO ARCHITECTURAL PLANS FOR ALL ZONING RELATED INFORMATION

PROPOSED FIRST FLOOR ELEVATION TO BE VERIFIED BY ARCHITECT PRIOR TO ANY CONCRETE BEING POURED.

AREA LEGEND

- PROPOSED PERMEABLE PAVERS
- PROPOSED ROOF AREA
- PROPOSED LANDSCAPED AREA

Spruhan Engineering, P.C.
80 JEWETT ST, (SUITE 1)
NEWTON, MA 02458
Tel: 617-816-0722
Email:edmond@spruhaneng.com

2 QUINCY STREET, SOMERVILLE, MASSACHUSETTS.

SURVEY PLAN

REVISION BLOCK

BY	DESCRIPTION	DATE
RV	UPDATED PER ARCHITECTURAL PLANS RECEIVED 07/06/2026	08/19/26

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COMMONWEALTH OF MASSACHUSETTS
CHRISTOPHER C. CHARLTON
NO. 48649
PROFESSIONAL LAND SURVEYOR

DATE:	04/20/2026
DRAWN BY:	R.V
CHECKED BY:	G.P
APPROVED BY:	C.C

PROPOSED PLOT PLAN

SHEET 1 OF 1

LEGEND

SS	SEWER LINE
S	SEWER MANHOLE
W	WATER LINE
G	GAS LINE
UP	UTILITY POLE
GV	GAS VALVE
E	OVERHEAD ELECTRIC SERVICE
WV	WATER VALVE
	CATCH BASIN
	FENCE
205	CONTOUR LINE (MJR)
195	CONTOUR LINE (MNR)
X	SPOT GRADE
D	DRAIN MANHOLE
	HYDRANT
	TREE
	INTERNAL ROOF DRAIN

DEEP OBSERVATION HOLE LOG:

GENERAL SOIL CONDITIONS FOR THE AREA PERFORMED AT 2 QUINCY ST, SOMERVILLE, MA. BY MATTHEW MUI, SOIL EVALUATOR #14259 REPRESENTING SPRUHAN ENGINEERING, P.C.

DATED: 07/27/2023
HOLE NUMBER: TP-1

GENERAL SITE CONDITIONS: BUILDINGS, PAVED/GRASS AREAS.

GRADE AT TEST PIT = 25.40'±
ESHGWT NOT OBSERVED

DEEP OBSERVATION HOLE LOG

DEEP OBSERVATION HOLE NUMBER:			TP-1			GROUND ELEVATION:						25.4'
Depth (in)	Horizon/ Layer	Matrix: Color-Moist	Redoximorphic Features: Depth (in)	Color	Percent	Texture (USDA)	Coarse Fragments: (Percent by Volume): Gravel	Cobbles & Stones	Structure	Consistence (Moist)	Other
0-16	A	10YR 3	–	–	–	SANDY LOAM	<5	<5	MASSIVE	FRIABLE	–
16-36	Bw	7.5Y 3	–	–	–	SANDY LOAM	<5	<5	MASSIVE	FRIABLE	–
36-72	C1	2.5Y 3	–	–	–	LOAMY SAND	<5	<5	MASSIVE	FRIABLE	–
72-84	C2	5Y 5	–	–	–	CLAY LOAM	<5	<5	BLOCKY	FRIABLE	–
84-110	C3	2.5Y 3	NONE	–	–	LOAMY SAND	<5	<5	MASSIVE	FRIABLE	NO REF.

NOTES:
1. NO WATER, NO REDOX.
2. NO REFUSAL
3. LOGGED BY MATTHEW MUI, SE14259 ON 07/27/2023.

GENERAL NOTES

1. THE CONTRACTOR SHALL REPORT TO THE OWNER AND ENGINEER OF ANY SIGNIFICANT VARIATIONS IN EXISTING SITE CONDITIONS FROM THOSE SHOWN ON THESE PLANS. ANY PROPOSED REVISIONS TO THE WORK, IF REQUIRED BY THESE SITE CONDITIONS, SHALL NOT BE UNDERTAKEN UNTIL REVIEWED AND APPROVED BY THE OWNER AND THE ENGINEER.
2. IN ORDER TO PROTECT THE PUBLIC SAFETY DURING CONSTRUCTION, THE CONTRACTOR IS RESPONSIBLE FOR INSTALLING AND MAINTAINING AT ALL TIMES ALL NECESSARY SAFETY DEVICES AND PERSONNEL, WARNING LIGHTS, BARRICADES, AND POLICE OFFICERS.
3. ALL WORK SHALL CONFORM TO CITY OF SOMERVILLE GENERAL CONSTRUCTION STANDARDS.
4. THE CONTRACTOR SHALL REGULARLY INSPECT THE PERIMETER OF THE PROPERTY TO CLEAN UP AND REMOVE LOOSE CONSTRUCTION DEBRIS BEFORE IT LEAVES THE SITE. ALL DEMOLITION DEBRIS SHALL BE PROMPTLY REMOVED FROM THE SITE TO A LEGAL DUMP SITE. ALL TRUCKS LEAVING THE SITE SHALL BE COVERED.
5. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO INSTITUTE EROSION CONTROL MEASURES ON AN AS NECESSARY BASIS, SUCH THAT EXCESSIVE SOIL EROSION DOES NOT OCCUR.
6. THE LOCATION OF UNDERGROUND UTILITIES AS REPRESENTED ON THESE PLANS IS BASED UPON PLANS AND INFORMATION PROVIDED BY THE RESPECTIVE UTILITY COMPANIES OR MUNICIPAL DEPARTMENTS SUPPLEMENTED BY FIELD IDENTIFICATION WHEREVER POSSIBLE. NO WARRANTY IS MADE AS TO THE ACCURACY OF THESE LOCATIONS OR THAT ALL UNDERGROUND UTILITIES ARE SHOWN. THE CONTRACTOR SHALL CONTRACT DIG SAFE AT LEAST 72 HOURS PRIOR TO THE START OF CONSTRUCTION. DIG SAFE TELEPHONE NUMBER IS 1-800-322-4844.
7. THE CONTRACTOR SHALL VERIFY THE LOCATION, SIZE AND DEPTH OF EXISTING UTILITIES PRIOR TO TAPPING INTO, CROSSING OR EXTENDING THEM. IF THE NEW WORK POSES A CONFLICT WITH EXISTING UTILITIES, THE ENGINEER SHALL BE NOTIFIED PRIOR TO THE CONTRACTOR CONTINUING.
8. NO LEDGE, BOULDERS, OR OTHER UNYIELDING MATERIALS ARE TO BE LEFT WITHIN 6" OF THE WATER IN THE TRENCH, NOR ARE THEY TO BE USED FOR BACKFILL FOR THE FIRST 12" ABOVE THE PIPES.
9. PAVEMENT AREA SHALL BE PAVED TO A THICKNESS AS SHOWN ON THE PLANS MEASURED AFTER COMPACTION, WITH A BINDER COURSE AND TOP COURSE OF CLASS I BITUMINOUS CONCRETE PAVEMENT, TYPE I-1.
10. BASE MATERIAL SHALL BE CLEAN BANK RUN GRAVEL, CONFORMING TO M.D.P.W. M1.03.1, WITH NO STONES LARGER THAN THREE (3) INCHES IN DIAMETER AND SHALL BE PLACED AND ROLLED WITH AT LEAST A TEN TON ROLLER. THE SURFACES SHALL BE WET DURING ROLLING TO BIND THE MATERIAL. ALL STONES OF 4" DIAMETER OR LARGER SHALL BE REMOVED FROM THE SUB-BASE PRIOR TO PLACING BASE MATERIAL.
11. ALL EXISTING PAVING TO BE DISTURBED SHALL BE CUT ALONG A STRAIGHT LINE THROUGH ITS ENTIRE THICKNESS. BUTT THE NEW PAVING INTO THE EXISTING PAVEMENT TO REMAIN.
12. ANY PAVEMENT REMOVED FOR UTILITY TRENCH EXCAVATION OR OTHERWISE DAMAGED DURING CONSTRUCTION SHALL BE REPLACED WITH A PAVEMENT SECTION CONSISTING OF 1" WEAR COURSE OVERLYING A 1 1/2" BINDER COURSE OVERLYING A 8" COMPACTED GRAVEL BASE COURSE.
13. THE CONTRACTOR SHALL APPLY FOR A STREET OPENING AND UTILITY CONNECTION PERMITS AND SIDEWALK CROSSING PERMIT WITH THE CITY OF SOMERVILLE DPW.
14. CONTRACTOR TO ENSURE THAT ALL SURFACE WATER IS DIVERTED AWAY FROM BUILDING FOUNDATION DURING FINAL GRADING.

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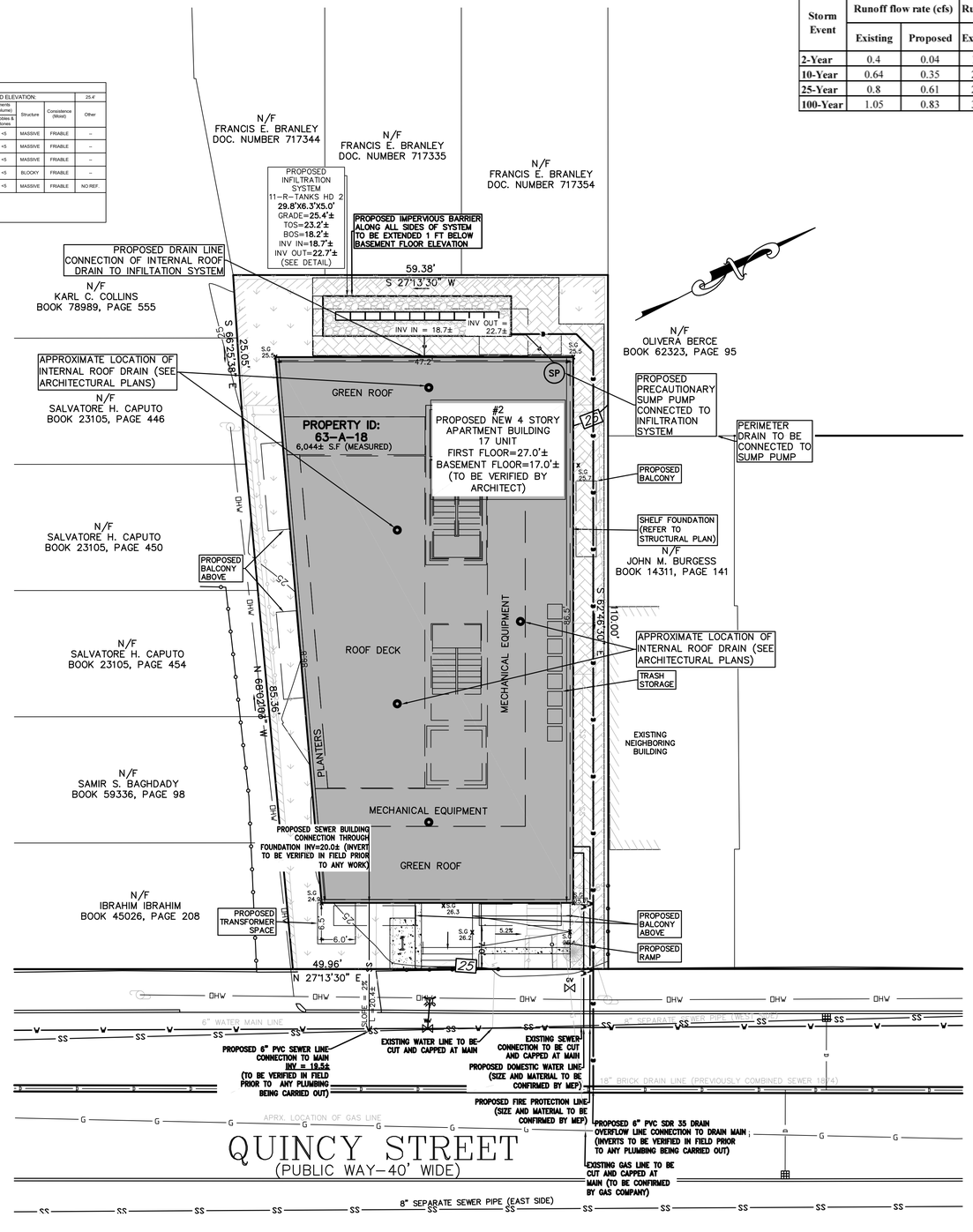
8. THE ELEVATIONS SHOWN ARE BASED ON CITY OF SOMERVILLE DATUM.
9. ZONING INFORMATION: UR-URBAN RESIDENTIAL.

GRAPHIC SCALE

10 0 5 10 20 40

(IN FEET)
1 inch = 10 ft.



AREA LEGEND

PROPOSED PERMEABLE PAVERS

PROPOSED ROOF AREA

PROPOSED LANDSCAPED AREA

Overall summary Table (HydroCAD)

Storm Event	Runoff flow rate (cfs)		Runoff Volume (cf)	
	Existing	Proposed	Existing	Proposed
2-Year	0.4	0.04	1,354	140
10-Year	0.64	0.35	2,225	687
25-Year	0.8	0.61	2,786	1,116
100-Year	1.05	0.83	3,640	1,831

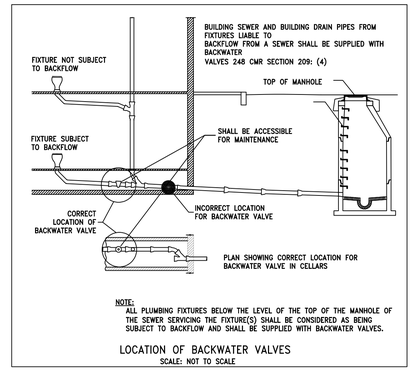
DRAINAGE AREA SUMMARY

EXISTING ROOF AREA = 1,200.6 S.F.
EXISTING GARAGE = 1,166.0 S.F.
EXISTING DRIVEWAY = 2,514.0 S.F.
EXISTING IMPERVIOUS (STEPS/CURB/WALKWAY/PAVED AREAS) = 386.4 S.F.
EXISTING LANDSCAPE AREA = 777.0 S.F.

PROPOSED ROOF AREA (IMPERVIOUS) = 2,458.5 S.F.
PROPOSED GREEN ROOF (PERMEABLE) = 1,306.1 S.F.
PROPOSED WALKWAY (PERMEABLE PAVERS)= 997.1 S.F.
PROPOSED IMPERVIOUS (RAMP, STEPS. LANDING, PARKING SPACE) = 296.2 S.F.
PROPOSED LANDSCAPE AREA = 986.1 S.F.

TOTAL EXISTING IMPERVIOUS AREA = 5,267.0 S.F.
TOTAL PROPOSED IMPERVIOUS AREA = 2,754.7 S.F.

TOTAL DECREASE IN IMPERVIOUS AREA = 2,512.3 S.F.



LOCATION OF BACKWATER VALVES
SCALE: NOT TO SCALE

*** PER TITLE V, SEWER FLOW RESIDENTIAL (G.P.D)**
EXISTING = (5 BEDROOMS x 110 G.P.D.) = 550 G.P.D
PROPOSED = (17 BEDROOMS x 110 G.P.D.) = 1,870 G.P.D

THEREFORE, PROPOSED INCREASED FLOW = 1,320 G.P.D
MITIGATION FEE = $14.35 X 440 G.P.D = $18,942.0

PRIOR TO SUBMISSION TO THE ENGINEERING DEPARTMENT FOR CIVIL PLAN APPROVAL, AN ADDITIONAL TEST PIT SHALL BE PERFORMED TO DETERMINE THE DEPTH OF SEASONAL HIGH GROUNDWATER RELATIVE TO THE PROPOSED BASEMENT FLOOR ELEVATION.

BACKFLOW PREVENTERS MUST BE INSTALLED IN ALL NEW BASEMENT FIXTURES

REFER TO ARCHITECTURAL PLANS FOR ALL ZONING RELATED INFORMATION

ALL SURFACE WATER RUNOFF SHALL BE DIRECTED AWAY FROM BUILDING FOUNDATION AND AWAY FROM NEIGHBORING PROPERTY

PROPOSED FIRST FLOOR ELEVATION TO BE VERIFIED BY ARCHITECT PRIOR TO ANY CONCRETE BEING POURED.

SEE LANDSCAPE PLAN FOR FENCE DETAILS AND MATERIALS

Spruhan Engineering, P.C.
80 JEWETT ST, (SUITE 1)
NEWTON, MA 02458
Tel: 617-816-0722
Email:edmond@spruhaneng.com

2 QUINCY ST, SOMERVILLE, MASSACHUSETTS.

CIVIL PLANS

REVISION BLOCK

BY	DESCRIPTION	DATE

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COMMONWEALTH OF MASSACHUSETTS EDMOND SPRUHAN JR. No. 43331 REGISTERED PROFESSIONAL ENGINEER

DATE:	08/19/2026
DRAWN BY:	R.V
CHECKED BY:	G.P
APPROVED BY:	E.S

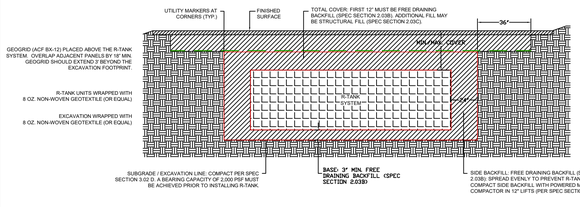
CIVIL PLAN

SHEET 1 OF 2

NOTES:
1. INSTALLATIONS PER THIS DETAIL MEET GUIDELINES OF HL-93 LOADING PER THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS.
2. FOR ALL INSTALLATIONS, BASE: UNCOMPACTED FREE DRAINING BACKFILL (SPEC SECTION 2.03A) TO PROVIDE A LEVEL BASE. SURFACE MUST BE SMOOTH, FREE OF LUMPS OR DEBRIS, AND EXTEND 2' BEYOND R-TANK FOOTPRINT. THE ENGINEER OF RECORD IS RESPONSIBLE FOR ASSESING THE BEARING CAPACITY OF THE SUBGRADE, AND BASE.
3. FOR INSTALLATIONS IN LANDSCAPED AREAS, THE INSTALLATION OF TREES IS PROHIBITED ABOVE THE R-TANK UNITS. PLEASE CONTACT YOUR LOCAL FERGUSON WATERWORKS REPRESENTATIVE FOR MORE INFORMATION.
4. R-TANK UNITS ARE NOT DESIGNED TO SUPPORT LOADS FROM BUILDINGS OR STRUCTURES. THEREFORE, THE ENGINEER OF RECORD MUST COORDINATE WITH THE PROPER DISCIPLINES TO ENSURE NO STRUCTURAL LOADS ARE IMPARTED UPON THE SYSTEM AND ANY INFILTRATION FROM THE SYSTEM HAS BEEN ACCOUNTED FOR IN THE FOUNDATION DESIGN.

R-TANK UNIT LOAD RATING				
UNIT TYPE	COMPRESSION STRENGTH	HS-20 MIN. COVER*	HS-25 MIN. COVER*	MAX. COVER*
HD	33.0 PSI	20"	24"	6.99'
SD	42.0 PSI	18"	21"	9.99'
MD	64.0 PSI	15"	18"	9.99'
UD	134.0 PSI	12"	15"	6.99'

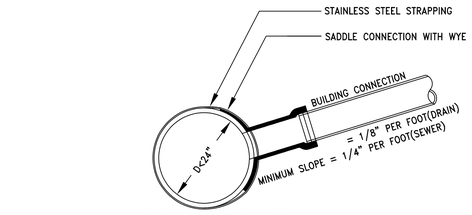
* MINIMUM AND MAXIMUM COVER ARE MEASURED FROM THE TOP OF THE R-TANK UNIT TO THE TOP OF THE FINISHED SURFACE.



FERGUSON WATERWORKS
FOR ADDITIONAL INFORMATION PLEASE VISIT: www.fergusonga.com

FERGUSON WATERWORKS – R-TANK HD, SD, UD VEHICULAR LOAD SECTION DETAIL

DRAWN BY: JKB | DATE: 7/28/2026 | SHEET NO.: 1 of 1

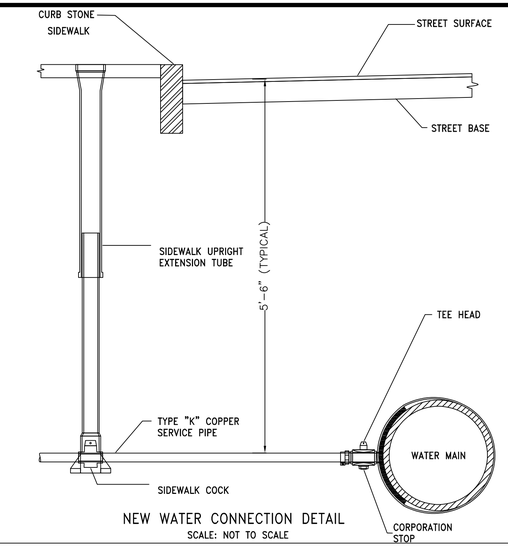


EXISTING SEWER OR DRAIN PIPE

NOTES:

1. FULL PVC OR IRON SADDLE MAY BE USED TO CONNECT TO EXISTING PVC, CLAY, CONCRETE, OR IRON PIPE.
2. SADDLES MUST HAVE RUBBER GASKETS AND SHALL BE TIGHTENED WITH STRAPS. SADDLES WILL NOT BE CEMENTED ONTO THE PIPE.
3. FULL WYE CONNECTION FITTINGS MAY BE USED
4. PIPE SHALL BE CUT TO CONFORM TO THE OPENING IN THE SADDLE.
5. CONNECTIONS DIRECTLY INTO THE EXISTING PIPE WITHOUT A SADDLE OR A FULL WYE FITTING ARE NOT ALLOWED.

TYPICAL SADDLE CONNECTION TO EXISTING SEWER OR DRAIN
SCALE: NOT TO SCALE



NEW WATER CONNECTION DETAIL
SCALE: NOT TO SCALE

Spruhan Engineering, P.C.
80 JEWETT ST, (SUITE 1)
NEWTON, MA 02458
Tel: 617-816-0722
Email:edmond@spruhaneng.com

2 QUINCY ST, SOMERVILLE, MASSACHUSETTS.

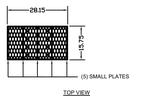
CIVIL PLANS

REVISION BLOCK

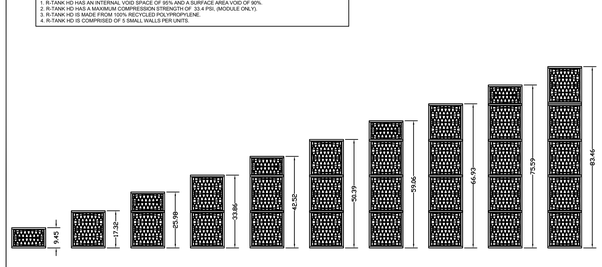
BY	DESCRIPTION	DATE

UNIT TYPE	WIDTH	LENGTH	HEIGHT	STORAGE VOLUME	WEIGHT
MINI	15.75"	28.15"	9.45"	2.30 CF	10.90 LBS.
SINGLE	15.75"	28.15"	17.32"	4.22 CF	17.30 LBS.
SINGLE+MINI	15.75"	28.15"	25.98"	6.33 CF	25.90 LBS.
DOUBLE	15.75"	28.15"	33.86"	8.25 CF	32.30 LBS.
DOUBLE+MINI	15.75"	28.15"	42.52"	10.36 CF	41.00 LBS.
TRIPLE	15.75"	28.15"	50.39"	12.28 CF	47.40 LBS.
TRIPLE+MINI	15.75"	28.15"	59.06"	14.39 CF	56.00 LBS.
QUAD	15.75"	28.15"	66.93"	16.31 CF	62.40 LBS.
QUAD+MINI	15.75"	28.15"	75.59"	18.42 CF	63.80 LBS.
PENTA	15.75"	28.15"	83.46"	20.34 CF	69.30 LBS.

NOTES:
1. R-TANK HD HAS AN INTERNAL VOID SPACE OF 95% AND A SURFACE AREA VOID OF 90%.
2. R-TANK HD HAS A MAXIMUM COMPRESSION STRENGTH OF 33.4 PSI. (MODULE ONLY).
3. R-TANK HD IS MADE FROM 100% RECYCLED POLYPROPYLENE.
4. R-TANK HD IS COMPRISED OF 5 SMALL WALLS PER UNITS.



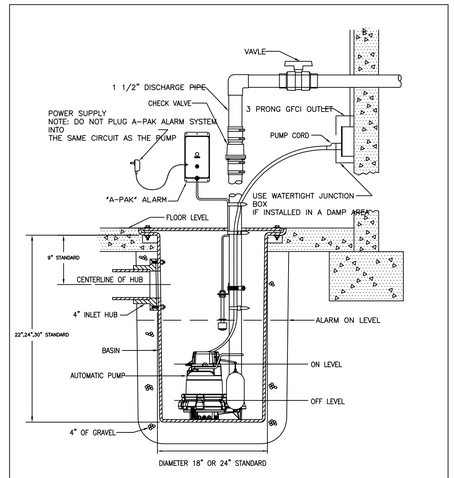
TOP VIEW



FERGUSON WATERWORKS
FOR ADDITIONAL INFORMATION PLEASE VISIT: www.fergusonga.com

R-TANK^{HD} MODULE DETAIL

DRAWN BY: JKB | DATE: 7/28/2026 | SHEET NO.: 1 of 1



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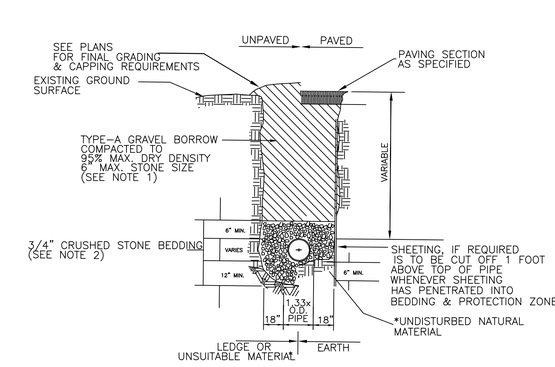

* SUITABILITY OF MATERIAL IS TO BE DETERMINED BY THE TOWN OF BROOKLINE.

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

N.T.S.

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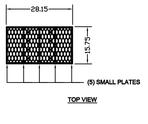
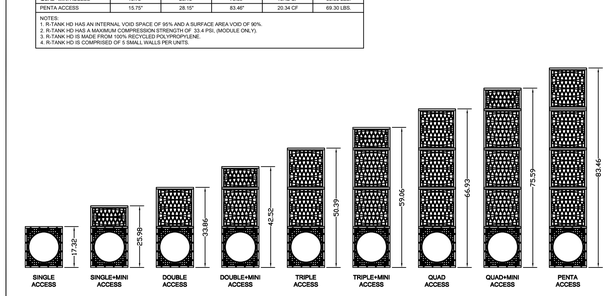
UNIT TYPE	WIDTH	LENGTH	HEIGHT	STORAGE VOLUME	WEIGHT
SINGLE ACCESS	15.75"	28.15"	17.32"	4.22 CF	17.30 LBS.
SINGLE+MINI ACCESS	15.75"	28.15"	25.98"	6.33 CF	25.90 LBS.
DOUBLE ACCESS	15.75"	28.15"	33.86"	8.25 CF	32.30 LBS.
DOUBLE+MINI ACCESS	15.75"	28.15"	42.52"	10.36 CF	41.00 LBS.
TRIPLE ACCESS	15.75"	28.15"	50.39"	12.28 CF	47.40 LBS.
TRIPLE+MINI ACCESS	15.75"	28.15"	59.06"	14.39 CF	56.00 LBS.
QUAD ACCESS	15.75"	28.15"	66.93"	16.31 CF	62.40 LBS.
QUAD+MINI ACCESS	15.75"	28.15"	75.59"	18.42 CF	63.80 LBS.
PENTA ACCESS	15.75"	28.15"	83.46"	20.34 CF	69.30 LBS.

NOTES:
1. R-TANK HD HAS AN INTERNAL VOID SPACE OF 95% AND A SURFACE AREA VOID OF 90%.
2. R-TANK HD HAS A MAXIMUM COMPRESSION STRENGTH OF 33.4 PSI. (MODULE ONLY).
3. R-TANK HD IS MADE FROM 100% RECYCLED POLYPROPYLENE.
4. R-TANK HD IS COMPRISED OF 5 SMALL WALLS PER UNITS.



TOP VIEW



FERGUSON WATERWORKS
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R-TANK^{HD} ACCESS MODULE DETAIL

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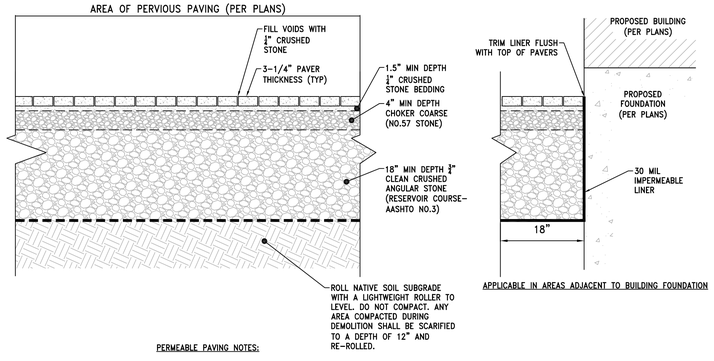
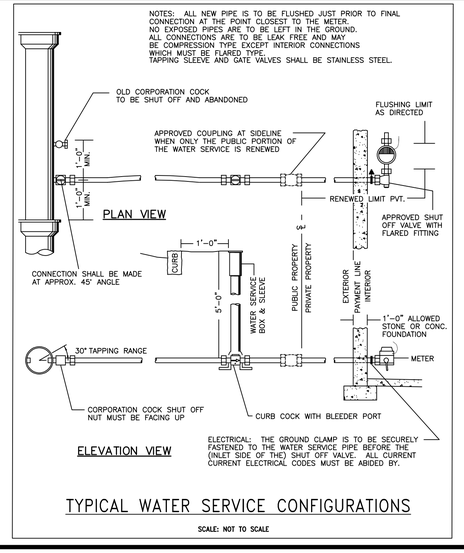


APPLICABLE IN AREAS ADJACENT TO BUILDING FOUNDATION

PERMEABLE PAVING NOTES:

1. PAVERS SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURES SPECIFICATIONS.

PERVIOUS PAVER DETAIL
SCALE: NOT TO SCALE



TYPICAL WATER SERVICE CONFIGURATIONS

SCALE: NOT TO SCALE

COMMONWEALTH OF MASSACHUSETTS
EDMOND J. SPRUHAN
CIVIL
No. 51976
REGISTERED PROFESSIONAL ENGINEER

DATE:	08/19/2026
DRAWN BY:	R.V
CHECKED BY:	G.P
APPROVED BY:	E.S

DETAILS

EROSION CONTROL NOTES

1. THE EROSION CONTROL PLANS IN THIS SET SHALL BE REVIEWED AND IMPLEMENTED BY THE CONTRACTOR PRIOR TO COMMENCEMENT OF WORK. CONTRACTOR SHALL WORK WITH THE PROJECT'S ENGINEER THROUGHOUT CONSTRUCTION TO ENSURE THE SITE IS PROPERLY PROTECTED FROM POSSIBLE POLLUTANTS. THE ENGINEER HAS AUTHORIZATION TO ADD OR REMOVE BMP MEASURES THROUGHOUT CONSTRUCTION.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR IMPLEMENTING AND MAINTAINING SITE EROSION CONTROL AT ALL TIMES.
3. IT SHALL BE THE RESPONSIBILITY OF THE OWNER AND THE PERMITTEE TO ENSURE THAT EROSION DOES NOT OCCUR FROM ANY ACTIVITY DURING OR AFTER PROJECT CONSTRUCTION. ADDITIONAL MEASURES, BEYOND THOSE SPECIFIED, MAY BE REQUIRED BY THE PLANNING DIRECTOR AS DEEMED NECESSARY TO CONTROL ACCELERATED EROSION.
4. AT THE END OF EACH WORKDAY, AT THE END OF EACH WORKWEEK, THE CONTRACTOR SHALL IMPLEMENT ALL TEMPORARY MEASURES NECESSARY TO PREVENT EROSION AND SILTATION, UNTIL THE PROJECT HAS BEEN FINALIZED. THESE MEASURES SHALL INCLUDE, BUT NOT BE LIMITED TO, DIRECT SEEDING OF THE AFFECTED AREAS, STRAW MULCHING, AND/OR INSTALLATION OF STRAW BALES DAMS/SILT FENCES.
5. DURING CONSTRUCTION, NO TURBID WATER SHALL BE PERMITTED TO LEAVE THE SITE. USE OF SILT AND GREASE TRAPS, FILTER BERMS, HAY BALES OR SILT FENCES SHALL BE USED TO PREVENT SUCH DISCHARGE.
6. ALL AREAS ON- AND OFF-SITE EXPOSED DURING CONSTRUCTION ACTIVITIES, IF NOT PERMANENTLY LANDSCAPED PER PLAN, SHALL BE PROTECTED BY MULCHING AND/OR SEEDING.
7. ALL EXCAVATED MATERIAL SHALL BE REMOVED TO AN APPROVED DISPOSAL SITE OR DISPOSED OF ON-SITE IN A MANNER THAT WILL NOT CAUSE EROSION.
8. ANY MATERIAL STOCKPILED, FOR LONGER THAN 14 DAYS, DURING CONSTRUCTION SHALL BE COVERED WITH PLASTIC.
9. UPON COMPLETION OF CONSTRUCTION, ALL REMAINING EXPOSED SOILS SHALL BE PERMANENTLY REVEGETATED.
10. IT IS THE CONTRACTOR'S RESPONSIBILITY TO SEE THAT ADDITIONAL MEASURES NECESSARY TO CONTROL SITE EROSION AND PREVENT SEDIMENT TRANSPORT OFF-SITE ARE IMPLEMENTED.
11. ALL SPILLS AND/OR LEAKS SHALL BE IMMEDIATELY CLEANED UP AND MITIGATED.

CONSTRUCTION MATERIALS

- ALL LOOSE STOCKPILED CONSTRUCTION MATERIALS THAT ARE NOT ACTIVELY BEING USED (I.E. SOIL, SPOILS, AGGREGATE, FLY-ASH, STUCCO, HYDRATED LIME, ETC.) SHALL BE COVERED AND BERMED.
- ALL CHEMICALS SHALL BE STORED IN WATERTIGHT CONTAINERS (WITH APPROPRIATE SECONDARY CONTAINMENT TO PREVENT ANY SPILLAGE OR LEAKAGE) OR IN A STORAGE SHED (COMPLETELY ENCLOSED).
- EXPOSURE OF CONSTRUCTION MATERIALS TO PRECIPITATION SHALL BE MINIMIZED. THIS DOES NOT INCLUDE MATERIALS AND EQUIPMENT THAT ARE DESIGNED TO BE OUTDOORS AND EXPOSED TO ENVIRONMENTAL CONDITIONS (I.E. POLES, EQUIPMENT PADS, CABINETS, CONDUCTORS, INSULATORS, BRICKS, ETC.).
- BEST MANAGEMENT PRACTICES TO PREVENT THE OFF-SITE TRACKING OF LOOSE CONSTRUCTION AND LANDSCAPE MATERIALS SHALL BE IMPLEMENTED.

WASTE MANAGEMENT

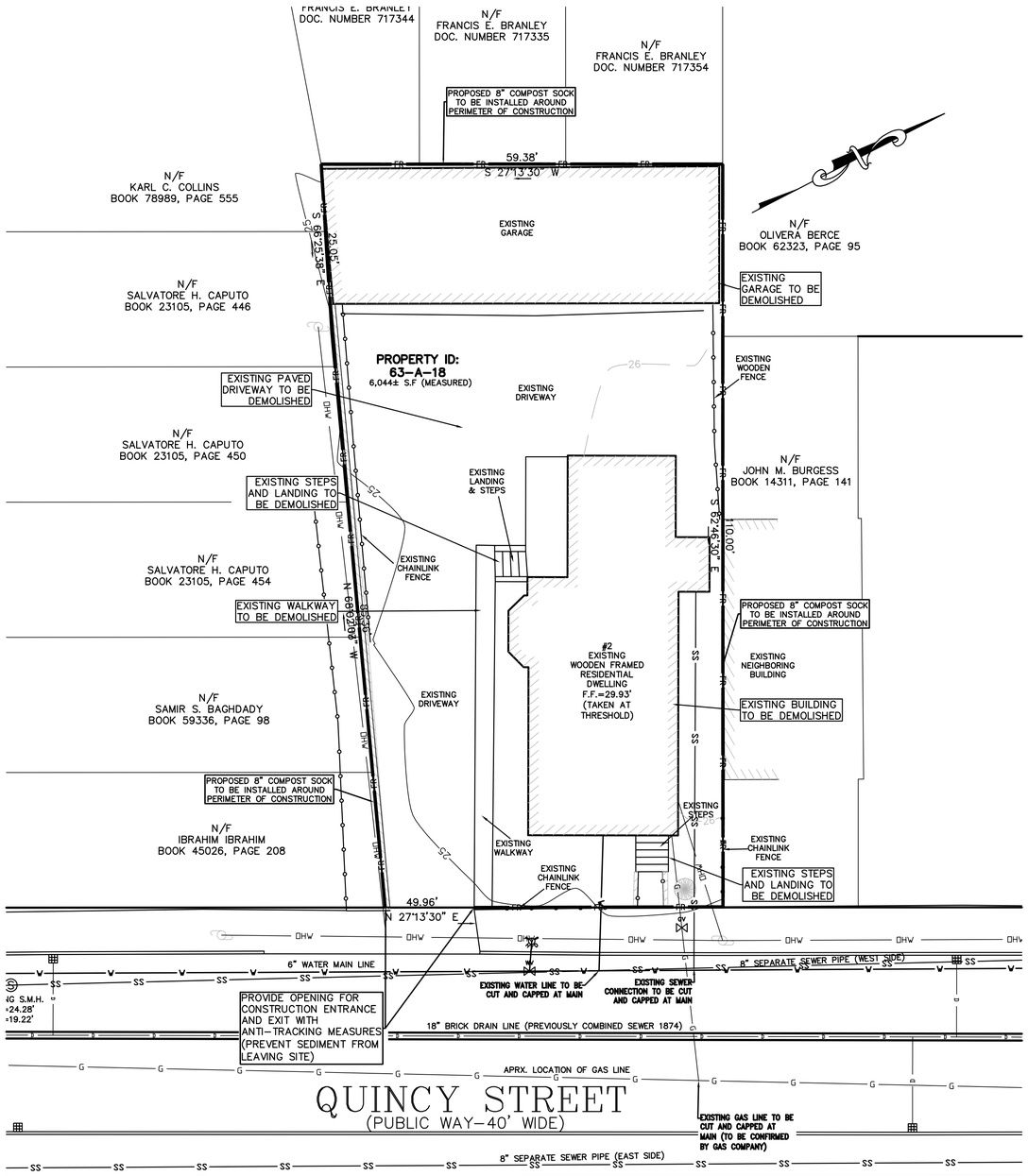
- DISPOSAL OF ANY RINSE OR WASH WATERS OR MATERIALS ON IMPERVIOUS OR PERVIOUS SITE SURFACES OR INTO THE STORM DRAIN SYSTEM SHALL BE PREVENTED.
- SANITATION FACILITIES SHALL BE CONTAINED (E.G. PORTABLE TOILETS) TO PREVENT DISCHARGES OF POLLUTANTS TO THE STORM WATER DRAINAGE SYSTEM OR RECEIVING WATER, AND SHALL BE LOCATED A MINIMUM 20 FEET AWAY FROM AN INLET, STREET OR DRIVEWAY, STREAM, RIPARIAN AREA OR OTHER DRAINAGE FACILITY.
- SANITATION FACILITIES SHALL BE INSPECTED REGULARLY FOR LEAKS AND SPILLS AND CLEANED OR REPLACED AS NECESSARY.
- COVER WASTE DISPOSAL CONTAINERS AT THE END OF EVERY BUSINESS DAY AND DURING A RAIN EVENT.
- DISCHARGES FROM WASTE DISPOSAL CONTAINERS TO THE STORM WATER DRAINAGE SYSTEM OR RECEIVING WATER SHALL BE PREVENTED.
- STOCKPILED WASTE MATERIAL SHALL BE CONTAINED AND SECURELY PROTECTED FROM WIND AND RAIN AT ALL TIMES UNLESS ACTIVELY BEING USED.

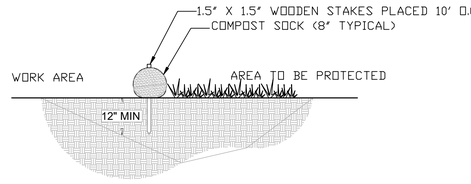
  PROCEDURES THAT EFFECTIVELY ADDRESS HAZARDOUS AND NON-HAZARDOUS SPILLS SHALL BE IMPLEMENTED.EQUIPMENT AND MATERIALS FOR CLEANUP OF SPILLS SHALL BE AVAILABLE ON SITE AND THAT SPILLS AND LEAKS SHALL BE CLEANED UP IMMEDIATELY AND DISPOSED OF PROPERLY; AND
- CONCRETE WASHOUT AREAS AND OTHER WASHOUT AREAS THAT MAY CONTAIN ADDITIONAL POLLUTANTS SHALL BE CONTAINED SO THERE IS NO DISCHARGE INTO THE UNDERLYING SOIL AND ONTO THE SURROUNDING AREAS.

GRAPHIC SCALE

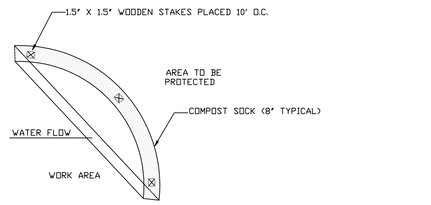
10 0 5 10 20 40

(IN FEET)
1 inch = 10 ft.





SECTION NTS



PLAN NTS

NOTES:
1. ALL MATERIAL TO MEET SPECIFICATIONS.
2. COMPOST SOCKS FILL TO MEET APPLICATION REQUIREMENTS.
3. FILTER MEDIA TO BE DISPERSED ON SITE, AS DETERMINED BY ENGINEER.

COMPOST SOCK DEETAIL
NTS

FR FR COMPOST SOCK

COMPOST SOCK INSTALLATION

1. LOCATE/MARK ANY UTILITIES.
2. CHECK ALL PERMITS.
3. OBTAIN COMPOST MEETING SPECIFICATIONS.
4. OBTAIN FILTER SOCK NETTING.
5. FILL FILTER SOCK NETTING WITH COMPOST.
6. MARK OUT AREA FOR FILTER SOCK; ORIENT LENGTH OF SOCK PARALLEL TO THE SLOPE SO THAT THE RUNOFF ENTERS AS SHEET FLOW.
7. IN HIGH-FLOW OR STEEP-SLOPE AREAS, ORIENT A SECOND SOCK PARALLEL TO THE FIRST TO DISSIPATE FLOWS.
8. LAY FILTER SOCK NETTING OUT AS PLANNED.
9. FILL FILTER SOCK WITH COMPOST.
10. STAKE FILTER SOCK EVERY 10 FT. STAKES SHOULD BE DRIVEN THROUGH THE CENTER OF THE SOCK, AND 1 FT INTO THE GROUND.
11. IF SOCK NETTING MUST BE JOINED, FIT BEGINNING OF THE NEW SOCK OVER THE END OF THE OLD SOCK, OVERLAPPING BY 1-2 ft. FILL WITH COMPOST; THEN STAKE THE JOIN.

TYPICAL MAINTENANCE SCHEDULE

INSPECT FILTER SOCKS PERIODICALLY, AND ESPECIALLY AFTER LARGE STORM EVENTS. ENSURE THAT THE FILTER SOCK IS INTACT, AND THATTHE AREA UPSTREAM HAS NOT FILLED WITH SEDIMENT. IF THE UPSTREAM AREA HAS FILLED WITH SEDIMENT, OR IF THE FILTER SOCK HAS BEEN OVERTOPPED, INSTALL ADDITIONAL FILTER SOCKS FURTHER UPSTREAM. SEDIMENT BEHIND THE SOCK SHOULD BE REMOVED WHEN THE DEPTH OF THE SEDIMENT REACHES 3.25-IN. FOR AN 8-IN. SOCK, 4.75-IN. FOR A 12-IN. SOCK AND 7.25-IN. FOR AN 18-IN. SOCK. FOR SOCKS WITH GREATER DIAMETERS, REMOVE SEDIMENT BEHIND THE SOCK WHEN THE ACCUMULATED SEDIMENT DEPTH REACHES 40 PERCENT OF THE DESIGN DIAMETER OF THE SOCK.

ALL EROSION MITIGATION MEASURES SHALL BE IN PLACE PRIOR TO MAJOR CONSTRUCTION OR SOIL DISTURBANCE COMMENCING ON THE SITE.

VEHICLE STORAGE AND MAINTENANCE

- MEASURES SHALL BE TAKEN TO PREVENT OIL, GREASE, OR FUEL TO LEAK IN TO THE GROUND, STORM DRAINS OR SURFACE WATERS.
- ALL EQUIPMENT OR VEHICLES, WHICH ARE TO BE FUELED, MAINTAINED AND STORED ONSITE SHALL BE IN A DESIGNATED AREA FITTED WITH APPROPRIATE BMPs.
- LEAKS SHALL BE IMMEDIATELY CLEANED AND LEAKED MATERIALS SHALL BE DISPOSED OF PROPERLY.

LANDSCAPE MATERIALS

- CONTAIN STOCKPILED MATERIALS SUCH AS MULCHES AND TOPSOIL WHEN THEY ARE NOT ACTIVELY BEING USED
- CONTAIN FERTILIZERS AND OTHER LANDSCAPE MATERIALS WHEN THEY ARE NOT ACTIVELY BEING USED.
- DISCONTINUE THE APPLICATION OF ANY ERODIBLE LANDSCAPE MATERIAL WITHIN 2 DAYS BEFORE A FORECASTED RAIN EVENT OR DURING PERIODS OF PRECIPITATION.
- APPLY ERODIBLE LANDSCAPE MATERIAL AT QUANTITIES AND APPLICATION RATES ACCORDING TO MANUFACTURE RECOMMENDATIONS OR BASED ON WRITTEN SPECIFICATIONS BY KNOWLEDGEABLE AND EXPERIENCED FIELD PERSONNEL.
- STACK ERODIBLE LANDSCAPE MATERIAL ON PALLETS AND COVERING OR STORING SUCH MATERIALS WHEN NOT BEING USED OR APPLIED.

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2 QUINCY ST, SOMERVILLE, MASSACHUSETTS.

CIVIL PLANS

REVISION BLOCK

BY	DESCRIPTION	DATE

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COMMONWEALTH OF MASSACHUSETTS
EDMOND SPRUHAN
CIVIL
NO. 53316
REGISTERED PROFESSIONAL ENGINEER

DATE:	08/19/2026
DRAWN BY:	R.V
CHECKED BY:	G.P
APPROVED BY:	E.S

EROSION CONTROL & DEMOLITION PLAN

SHEET 3 OF 3