



Spruhan
Engineering, P.C.

80 JEWETT ST, (SUITE 2)
NEWTON, MA 02458

Tel: 617-816-0722
Email: edmond@spruhaneng.com

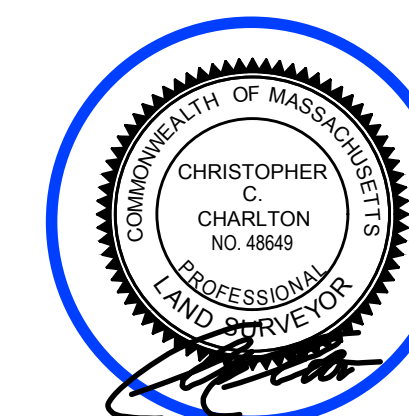
107 TRUMAN RD,
NEWTON
MASSACHUSETTS

SURVEY PLAN

REVISION BLOCK

DESCRIPTION	DATE

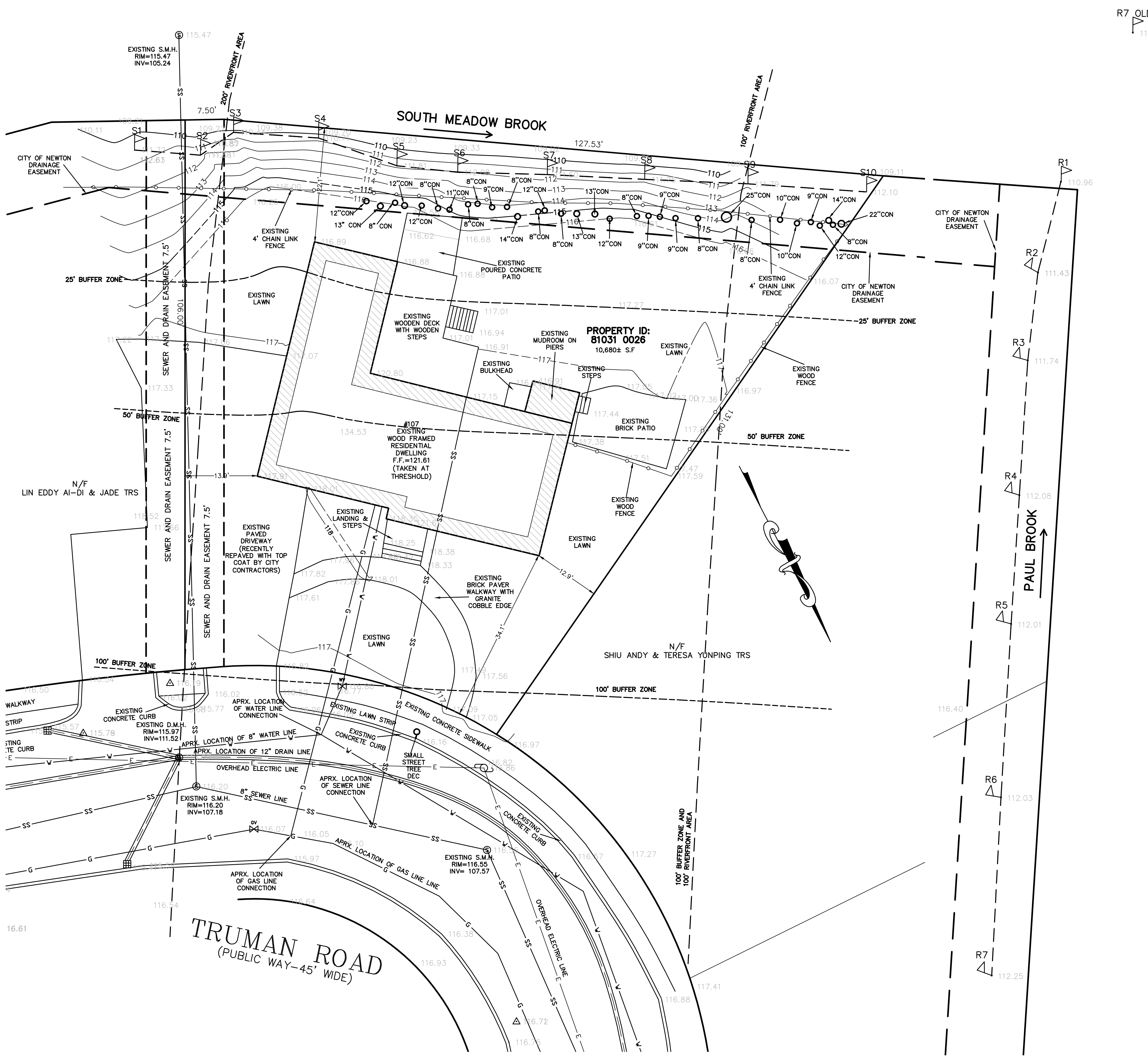
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DATE:	8/8/2022
DRAWN BY:	O.S
CHECKED BY:	E.S
APPROVED BY:	E.S

PLOT PLAN

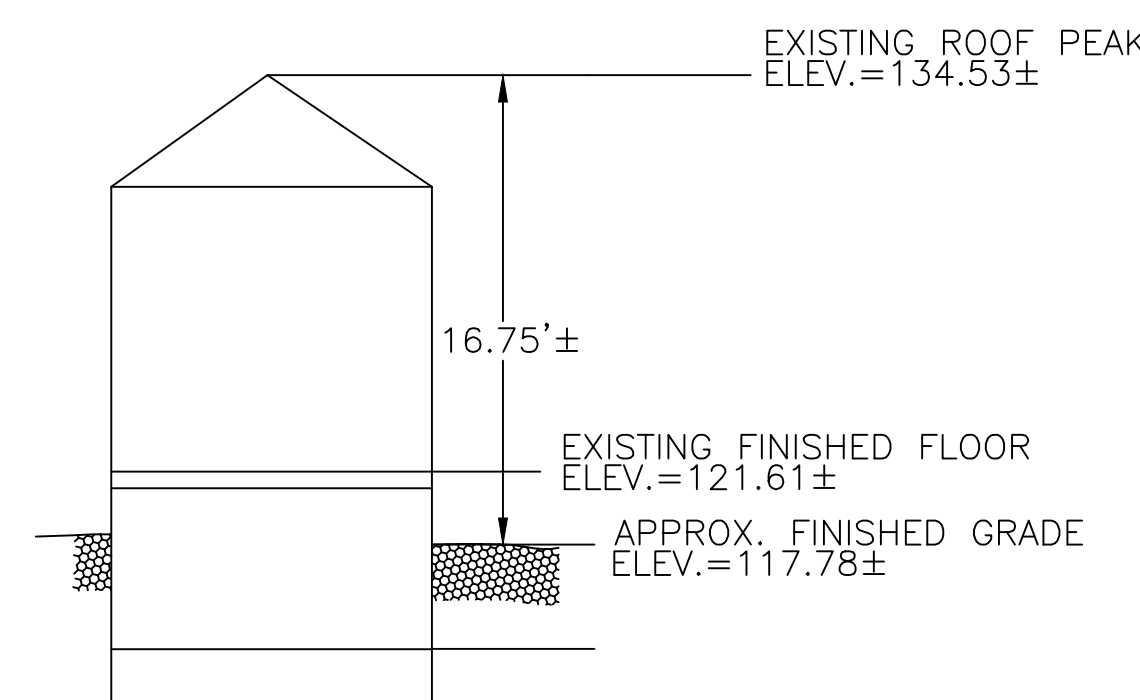
SHEET 1 OF 3



R7 OLD
111.6

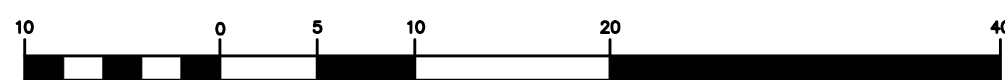
- NOTES:
1. INFORMATION SHOWN ON THIS PLAN IS THE RESULT OF A FIELD SURVEY PERFORMED BY SPRUHAN ENGINEERING, P.C. AS OF 11/28/2021.
 2. DEED REFERENCE: 1952 BOOK 7846, PAGE 503 MIDDLESEX SOUTH COUNTY DISTRICT REGISTRY OF DEEDS
 3. THIS PLAN IS NOT INTENDED TO BE RECORDED.
 4. I CERTIFY THAT THE DWELLING SHOWN IS LOCATED WITHIN A SPECIAL FLOOD HAZARD ZONE. IT IS LOCATED IN ZONE AE, ON FLOOD HAZARD BOUNDARY MAP NUMBER 250700554E. THE ZONE AE HAS A 100-YEAR FLOOD ELEVATION OF 114 NAVD 1988 OR 120.5 CITY OF NEWTON DATUM PER FLOOD ORDINANCE.
 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 CITY OF NEWTON DATUM.
 9. ZONING INFORMATION: SR3 (SINGLE RESIDENCE 3), LOT WAS RECORDED BEFORE 7 DECEMBER 1953

LEGEND	
☐	BOUND
○	IRON PIN/PIPE
◊	STONE POST
●	TREE
●	TREE STUMP
⊕	SHRUBS/FLOWERS
⊕	SIGN
⊕	METAL POST
⊕	SEWER MANHOLE
⊕	DRAIN MANHOLE
⊕	CATCH BASIN
⊕	WATER MANHOLE
⊕	WATER VALVE
⊕	HYDRANT
⊕	GAS VALVE
⊕	ELECTRIC MANHOLE
⊕	ELECTRIC HANDHOLE
⊕	UTILITY POLE
⊕	LIGHT POLE
⊕	MANHOLE
⊕	SPOT GRADE
⊕	TOP OF WALL
⊕	BOTTOM OF WALL
⊕	EXISTING BUILDING
⊕	RETAINING WALL
⊕	STONE WALL
⊕	FENCE
⊕	TREE LINE
⊕	SEWER LINE
⊕	DRAIN LINE
⊕	WATER LINE
⊕	GAS LINE
⊕	UNDERGROUND ELECTRIC LINE
⊕	OVERHEAD WIRES
⊕	CONTOUR LINE (MJR)
⊕	CONTOUR LINE (MNR)



EXISTING PROFILE
NOT TO SCALE

GRAPHIC SCALE



(IN FEET)
1 inch = 10 ft.



Spruhan Engineering, P.C.

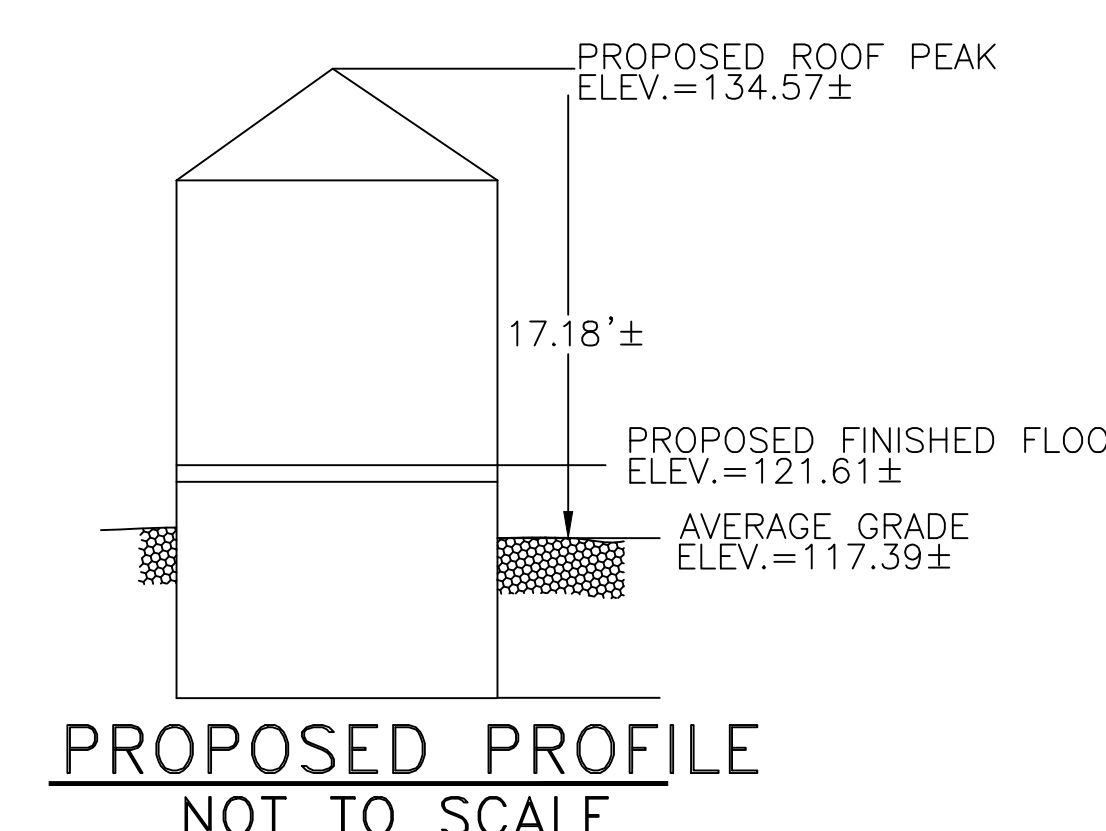
80 JEWETT ST, (SUITE 2)
NEWTON, MA 02458

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ZONING LEGEND

ZONING DISTRICT: SINGLE RESIDENCE 3 (LOT CREATED BEFORE 12/07/1953)

	REQUIRED	PROPOSED
MIN. AREA	7,000 S.F.	10,680± S.F.
MIN. FRONTAGE	70'	62.56'
MIN. YARD FRONT	25'	25.2'
SIDE	7.5'	17.3'
REAR	15'	31.0'
MAX. LOT COV.	30%	21.38%
MIN. OPEN SPACE	50%	67.02%
MAX. BLDG. HEIGHT	36'	17.18±



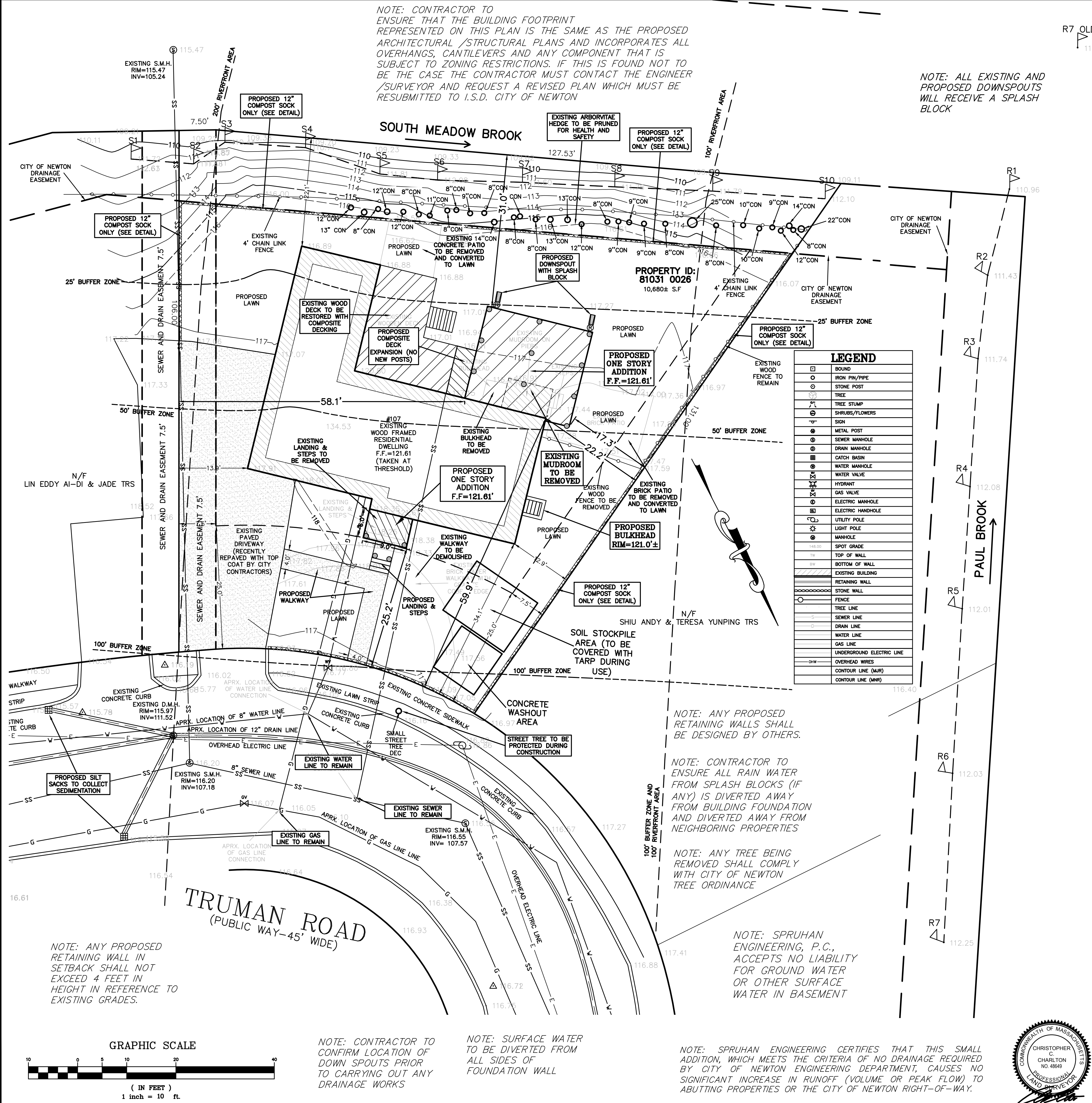
FLOODPLAIN IMPACT & MITIGATION SUMMARY			
ELEVATION (FT)	FLOODPLAIN IMPACT (CF)	FLOOD MITIGATION (CF)	FLOODPLAIN NET (CF)
115-116	0.0	7.8	-7.8
116-117	4.7	72.6	-67.9
117-118	213.8	380.3	-166.5
118-119	37.6	88.8	-51.2
119-120	37.6	65.3	-27.7
120-120.5	18.8	29.0	-10.2
TOTALS	312.5	643.8	-331.3

FOR EXIST. BUILDING (PATIOS, PIERS, STEPS, WALKWAY)			
ELEVATION (FT)	CUT AREA (SF)	HEIGHT (FT)	CUT VOLUME (CF)
115-116	7.8	1.0	7.8
116-117	72.6	1.0	72.6
117-118	380.3	1.0	380.3
118-119	88.8	1.0	88.8
119-120	65.3	1.0	65.3
120-120.5	58.0	0.5	29.0
TOTAL			643.8

FOR PROPOSED ADDITION (STEPS, WALKWAY, BULKHEAD)			
ELEVATION (FT)	FILL AREA (SF)	HEIGHT (FT)	FILL VOLUME (CF)
115-116	0.0	0.0	0.0
116-117	0.0	0.0	0.0
117-118	205.9	1.0	205.9
118-119	26.6	1.0	26.6
119-120	26.6	1.0	26.6
120-120.5	26.6	0.5	13.3
TOTAL			272.4

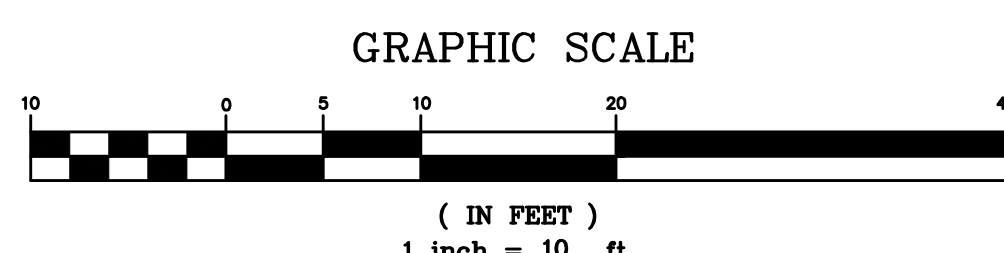
FOR PROPOSED BUILDING (PIERS)			
ELEVATION (FT)	FILL AREA (SF)	HEIGHT (FT)	FILL VOLUME (CF)
115-116	0.0	0.0	0.0
116-117	4.7	1.0	4.7
117-118	7.9	1.0	7.9
118-119	11.0	1.0	11.0
119-120	11.0	1.0	11.0
120-120.5	11.0	0.5	5.5
TOTAL			40.0

Pier = φ12" = 0.785 SF



LEGEND

- BOUND
- IRON PIP/PIPE
- STONE POST
- TREE
- TREE STUMP
- SHRUBS/FLOWERS
- SIGN
- METAL POST
- SEWER MANHOLE
- DRAIN MANHOLE
- CATCH BASIN
- WATER MANHOLE
- WATER VALVE
- HYDRANT
- GAS VALVE
- ELECTRIC MANHOLE
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- FENCE
- TREE LINE
- SEWER LINE
- DRAIN LINE
- WATER LINE
- GAS LINE
- UNDERGROUND ELECTRIC LINE
- OVERHEAD WIRES
- CONTOUR LINE (MIR)
- CONTOUR LINE (MNR)



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DATE: 8/8/2022
DRAWN BY: O.G.
CHECKED BY: C.C.
APPROVED BY: E.S.

CIVIL PLAN

SHEET 2 OF 3



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80 JEWETT ST, (SUITE 2)
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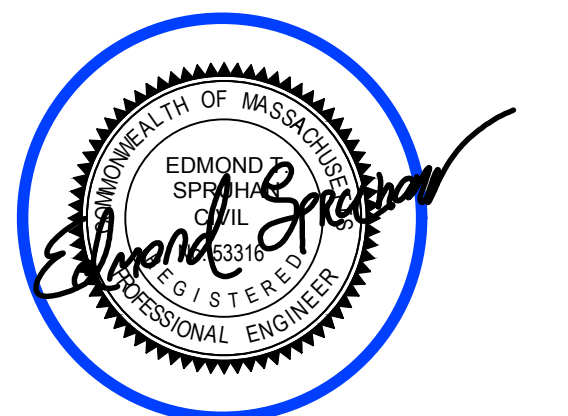
107 TRUMAN RD,
NEWTON
MASSACHUSETTS

CIVIL PLAN

REVISION BLOCK

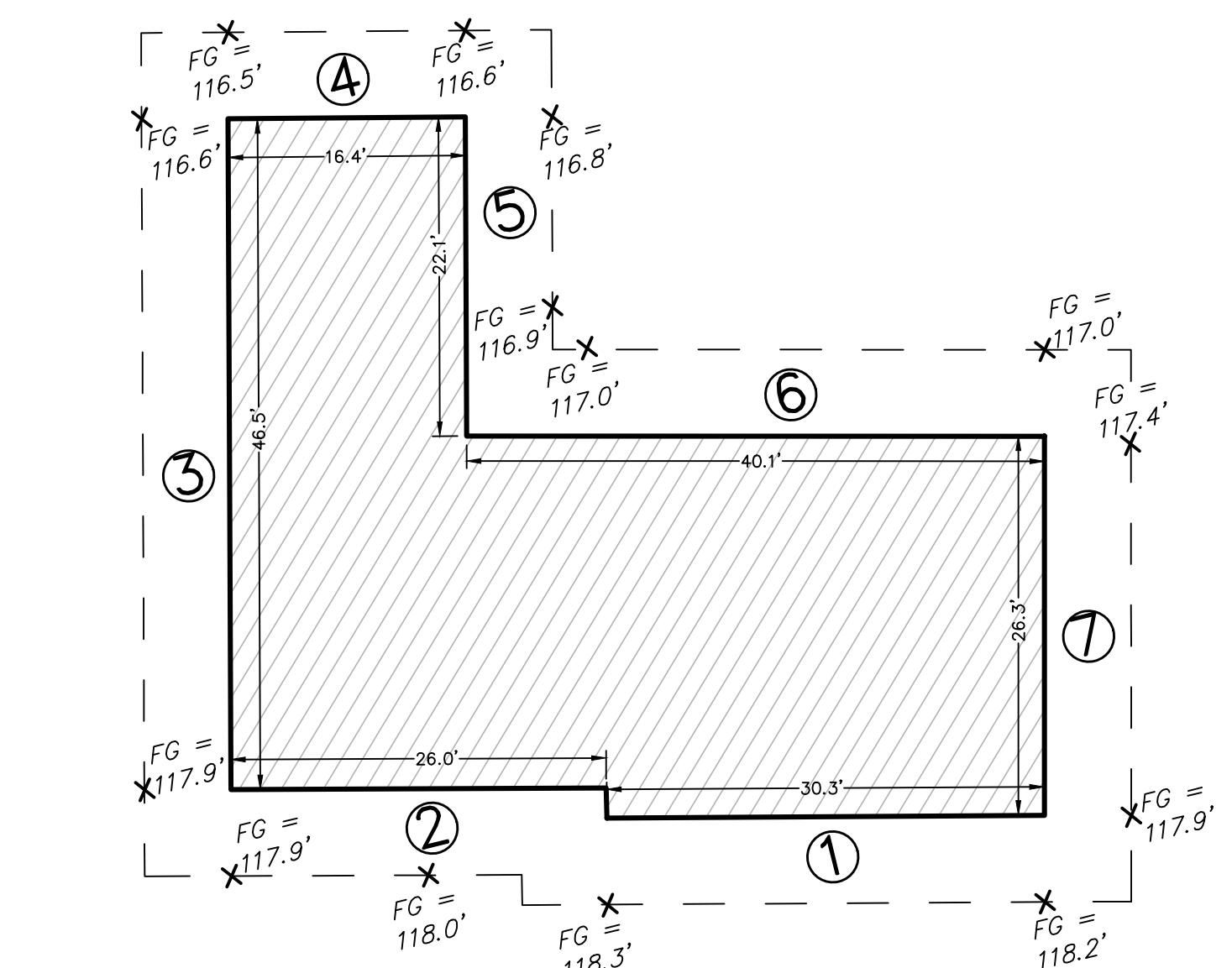
DESCRIPTION	DATE

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DETAILS



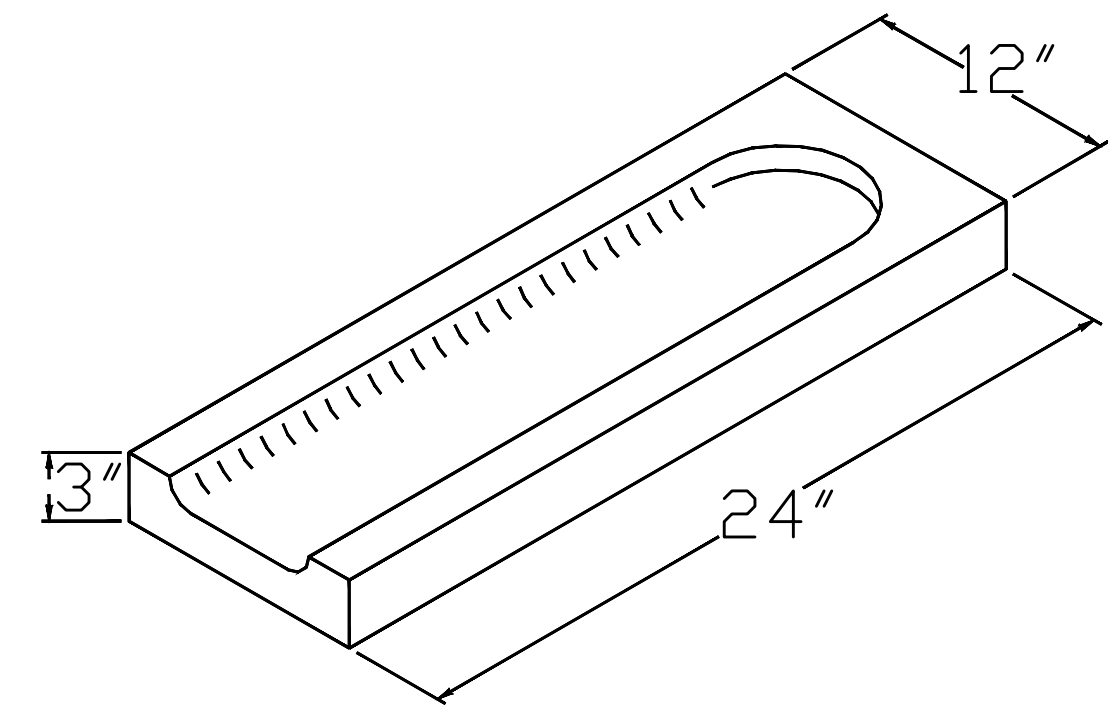
AVERAGE GRADE PLANE (ALL UNITS IN FEET)					
SEGMENT	LEGNTH	POINT 1	POINT 2	MEAN 1 & 2	MEAN x LENGTH
1	30.30	118.20	118.30	118.25	3,582.98
2	26.00	118.00	117.90	117.95	3,066.70
3	46.50	117.90	116.60	117.25	5,452.13
4	16.40	116.50	116.60	116.55	1,911.42
5	22.10	116.80	116.90	116.85	2,582.39
6	40.10	117.00	117.00	117.00	4,691.70
7	26.30	117.40	117.90	117.65	3,094.20
SUM=	207.70				24,381.50
SUM OF MEAN x LENGTH / SUM OF LENGTHS = AVERAGE GRADE PLANE =					117.39

DRAINAGE AREA SUMMARY

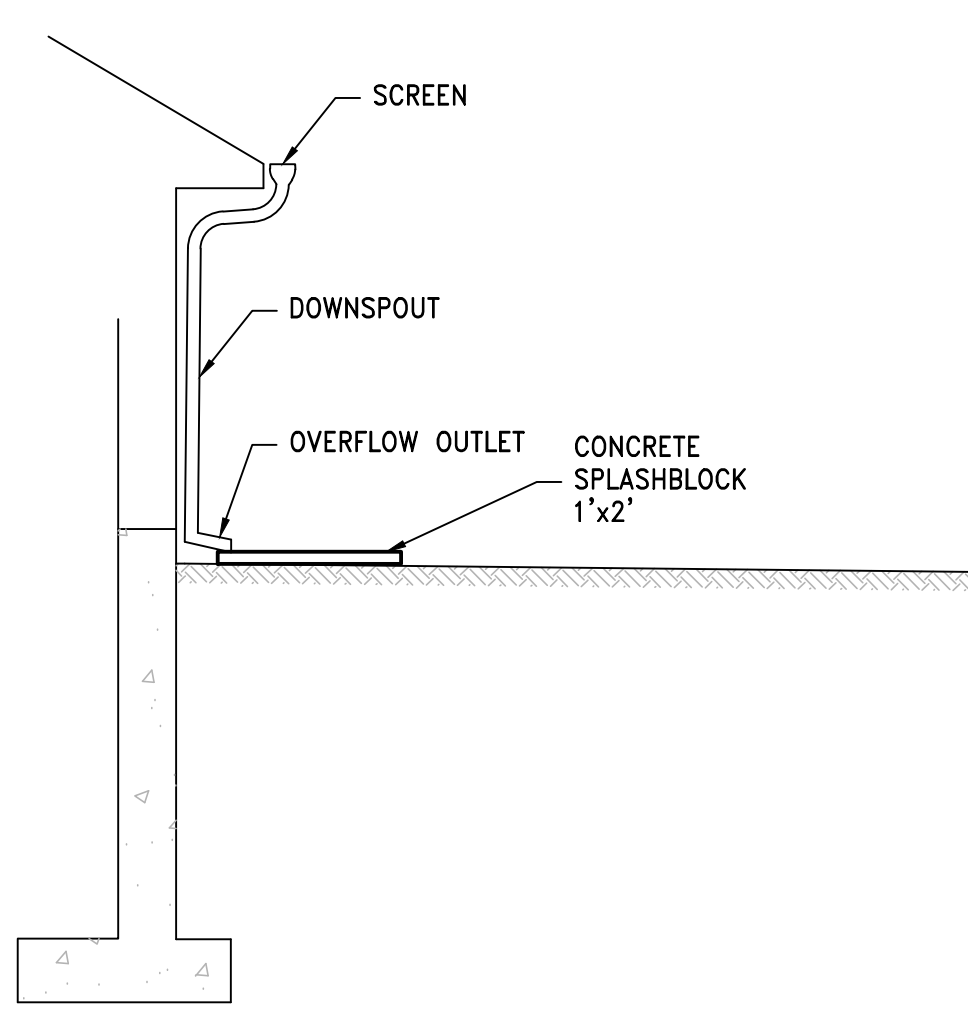
EXISTING FEATURES:
HOUSE/MUDROOM/BULKHEAD = 1,879.9 S.F.
LANDING/STEPS = 87.8 S.F.
PAVED DRIVEWAY = 1,175.0 S.F.
FRONT WALK = 253.7 S.F.
CONCRETE PATIO = 111.3 S.F.
BRICK PATIO = 234.9 S.F.
DECK = 334.6 S.F.
LAWN/LANDSCAPE = 6,602.8 S.F.

PROPOSED FEATURES:
HOUSE/ADDITIONS/BULKHEAD = 2,300.1 S.F.
LANDING/STEPS = 47.0 S.F.
PAVED DRIVEWAY = 1,175.0 S.F.
FRONT WALK = 146.6 S.F.
DECK = 374.8 S.F.
LAWN/LANDSCAPE = 6,636.5 S.F.

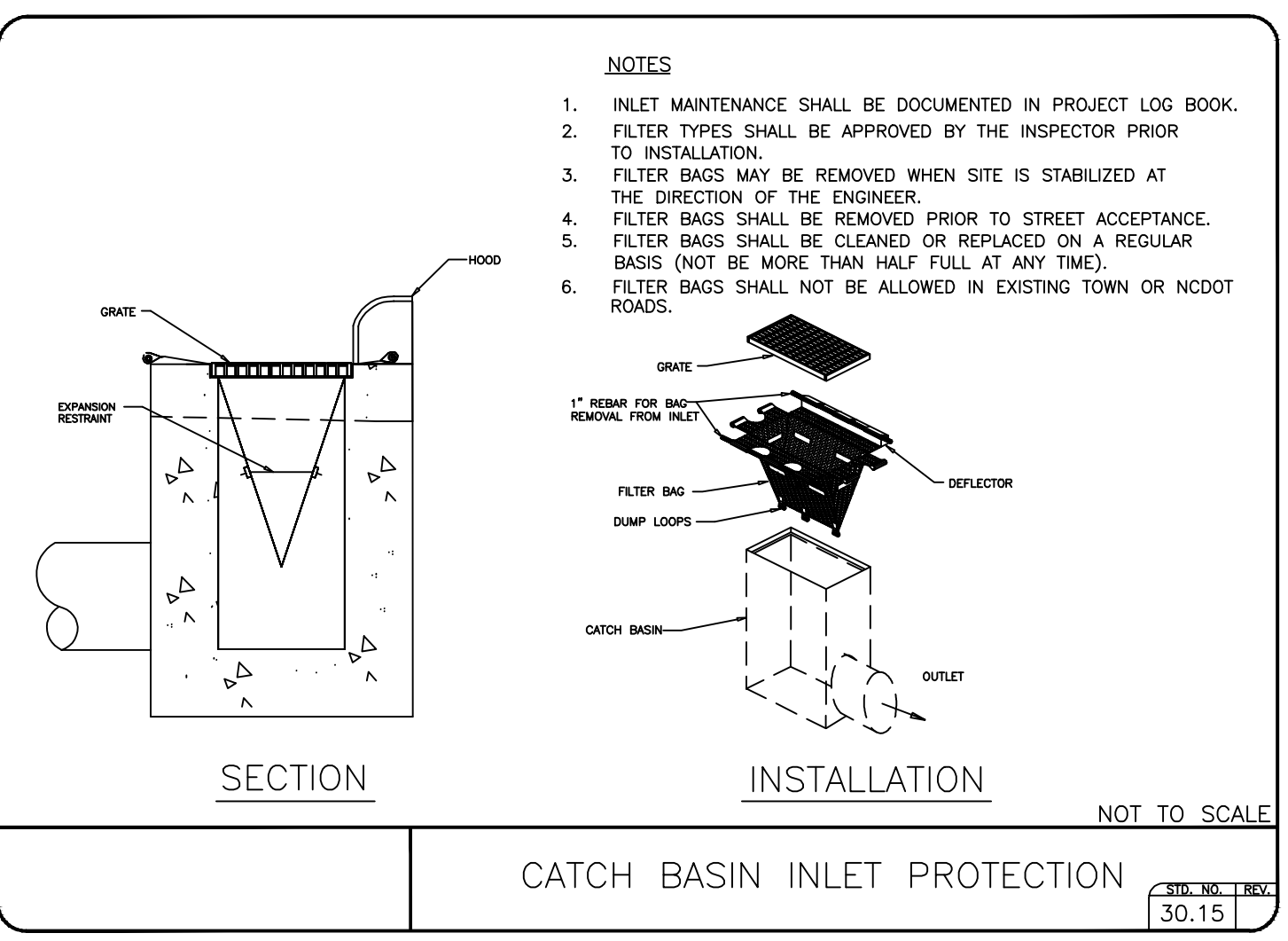
TOTAL EXISTING IMPERVIOUS AREA = 4,077.2 S.F.
TOTAL PROPOSED IMPERVIOUS AREA = 4,043.5 S.F.
TOTAL DECREASE IN IMPERVIOUS AREA = 33.7 S.F.



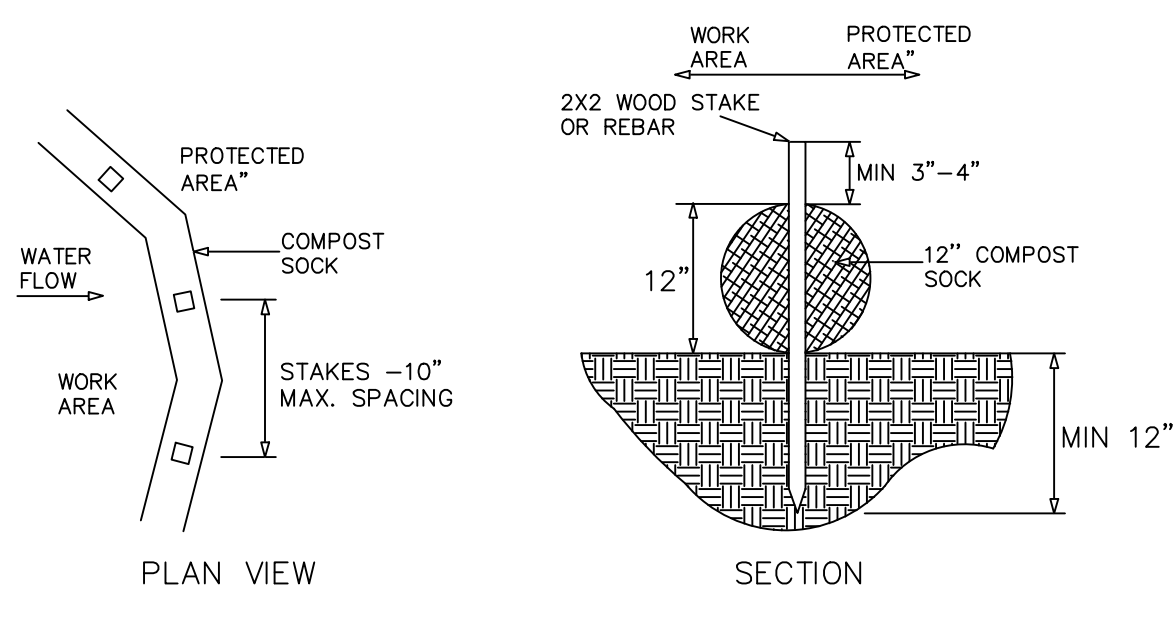
SPLASH BLOCK
N.T.S.



TYPICAL DOWNSPOUT DETAIL
N.T.S.



CATCH BASIN INLET PROTECTION
N.T.S.



COMPOST SOCK DETAIL

EXISTING IMPERVIOUS AREA = 4,077.2 S.F.
PROPOSED IMPERVIOUS AREA = 4,043.5 S.F.

4,043.5 S.F. - 4,077.2 S.F. = -33.7 S.F.

WHICH IS LESS THAN 4% (427.2 S.F.) OF LOT (10,680.0 S.F.)

WHICH IS LESS THAN 400 S.F.

THEREFORE ENGINEERING APPROVAL NOT REQUIRED

NOTE: SPRUHAN ENGINEERING CERTIFIES THAT THIS SMALL ADDITION, WHICH MEETS THE CRITERIA OF NO DRAINAGE REQUIRED BY CITY OF NEWTON ENGINEERING DEPARTMENT, CAUSES NO SIGNIFICANT INCREASE IN RUNOFF (VOLUME OR PEAK FLOW) TO ABUTTING PROPERTIES OR THE CITY OF NEWTON RIGHT-OF-WAY.