

LEGEND
 --- EXISTING CONTOUR
 - - - PROPOSED CONTOUR
 □ TEST HOLE
 ▲ FLAGGED WETLAND EDGE

WETLAND DELINEATION BY:
 NATURAL RESOURCE SERVICES, INC.

PAUL D. CARLSON
 No. 7142
 REGISTERED PROFESSIONAL ENGINEER
 CIVIL

INSITE Engineering Services, LLC
 PROFESSIONAL ENGINEERS | LAND SURVEYORS
 Precision. Clarity. Certainty.
 501 Great Road, Unit 104
 North Smithfield, Rhode Island 02896
 Phone: (401) 762-2870 Fax: (401) 401-762-2871
 Web Address: insiteengineers.com

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
 OFFICE OF WATER RESOURCES
 FRESHWATER WETLANDS PROGRAM
 APPROVED WITH CONDITIONS
 AS SPECIFIED IN THE LETTER OF APPROVAL
 DATED AUG 16 2021 FILE # 19-0216
 NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL
 APPROVED PLANS MUST BE AT CONSTRUCTION SITE

Environmental Management
 JUN 30 2021
 Office of Water Resources

WETLANDS MODIFICATION PLAN
 for
ANDROMEDA REAL ESTATE PARTNERS LLC
 PLAT 8, LOT 42
 WOONSOCKET HILL ROAD
 NORTH SMITHFIELD, RHODE ISLAND
 JUNE, 2021
 SCALE: 1 INCH EQUALS 30 FEET
 GRAPHIC SCALE

No.	DESCRIPTION	DATE

SHEET NUMBER 1 of 2 JOB NUMBER 21-092

PERIMETER WETLANDS RESTORATION NOTES

- UPON COMPLETION OF FINAL GRADING, 4"-6" OF PLANTABLE TOPSOIL SHALL BE SPREAD OVER THE RESTORATION AREA.
- THE AREA SHALL BE SEEDED WITH A WILDLIFE CONSERVATION MIX THEN MULCHED WITH A LAYER OF LOOSE STRAW.
- THE AREA SHALL BE PLANTED WITH THE FOLLOWING:
 - TREES - RED MAPLE (*Acer rubrum*) 10 TOTAL
RED OAK (*Quercus rubra*) 10 TOTAL
each plant shall be 6-8 feet tall and spread 20 feet on-center
 - SHRUBS - HIGHBUSH BLUEBERRY (*Vaccinium corymbosum*) 30 TOTAL
PEPPERBUSH (*Clethra alnifolia*) 30 TOTAL
each plant shall be 2-3 feet tall with spacing AT 6 feet on-center
- THE RESTORATION AREA SHALL BE WATERED AS REQUIRED THROUGHOUT THE FIRST GROWING SEASON TO MAXIMIZE SURVIVAL OF THE TREES AND SHRUBS.
- THE RESTORATION AREA SHALL BE ALLOWED TO REVERT TO A NATURALIZED CONDITION.

TEST HOLE DATA

DATE: 3-27-18

TH1
0"-4" A, SL, 10YR 3/4
4"-24" Bw, SL, 10YR 5/6
24"-98" C, LS 2.5YR 5/3
ESHWI 42"
LEDGE AT 98"

TH2
0"-4" A, SL, 10YR 3/4
4"-24" Bw, SL, 10YR 5/6
24"-72" C, LS 2.5YR 5/3
ESHWI 30"
LEDGE AT 72"

TH3
0"-4" A, SL, 10YR 3/4
4"-24" Bw, SL, 10YR 5/6
24"-72" C, LS 2.5YR 5/3
ESHWI 36"
LEDGE AT 72"

LEDGE PROBES
P1 - 34" P4 - 36"
P2 - 26" P5 - 50"
P3 - 34" P6 - 50"

WETLAND SOIL SAMPLES

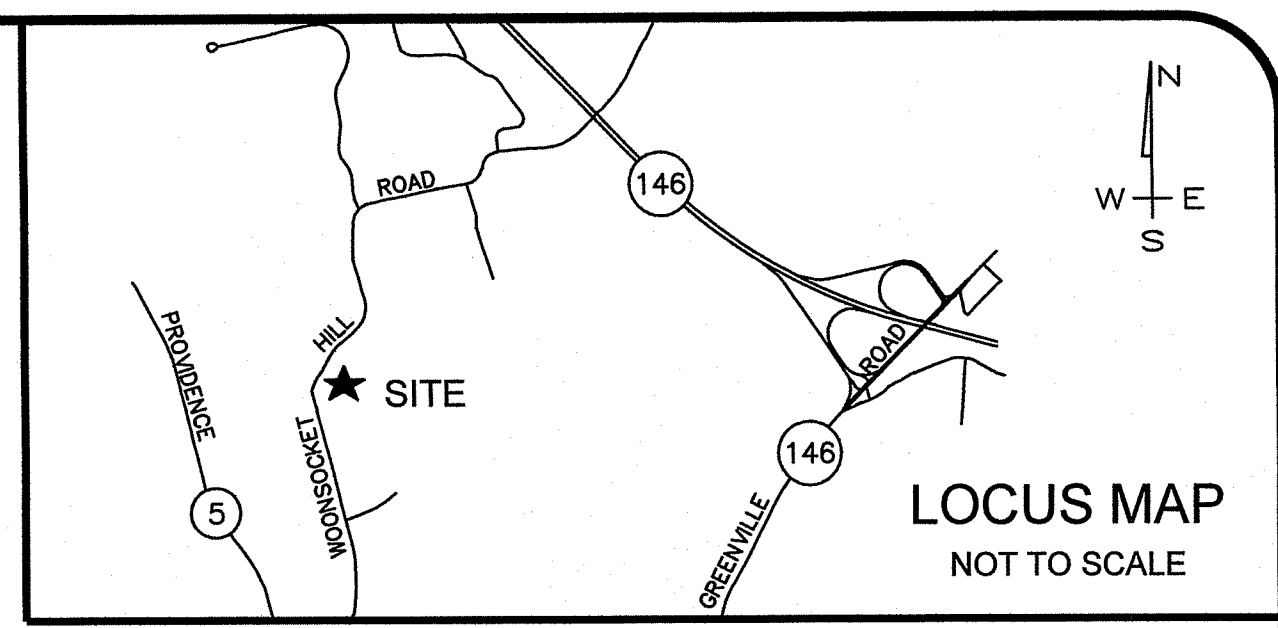
PERFORMED BY EDWARD J. AWZINIS
NATURAL RESOURCE SERVICES INC. (NRS)
DATE: 12-9-19

0"-9" Oe
9"-13" A, vst SIL, 10YR 2/1
13"-18" Bg¹ vst SIL, 10YR 5/1

0"-5" Oe
5"-10" A, vst SIL, 10YR 2/1
10"-18" Bg¹ vst SIL, 10YR 5/1

0"-12" Oe
12"-18" Bg¹ vst SIL, 10YR 5/1

0"-3" Oe
3"-8" A, vst SIL, 10YR 2/1
8"-18" Bw¹ vst SIL, 10YR 4/3 c+d



LOCUS MAP
NOT TO SCALE

Environmental Management
JUN 30 2021
Office of Water Resources

RAIN GARDEN

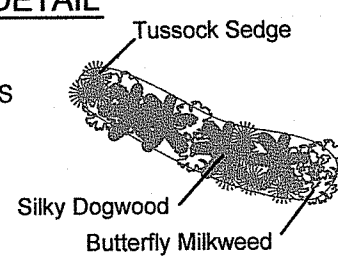
TREATMENT
Rain garden to be 8" deep with a 2 - 4 inch amended soil layer (50/50 mixture of the excavated native soils and mature organic compost) and a 2 - 3 inch layer of non-dyed aged shredded hardwood mulch.

- CONSTRUCTION**
- A crushed stone entrance should be installed at the inflow to prevent channeling.
 - A berm to detain stormwater should be constructed along the downhill side of the rain garden, perpendicular to the slope of the lawn.
 - Be sure that the soil within the rain garden area does not become compacted by construction activities (i.e. heavy machinery). If soil becomes severely compacted it may need to be tilled and amended to maintain proper

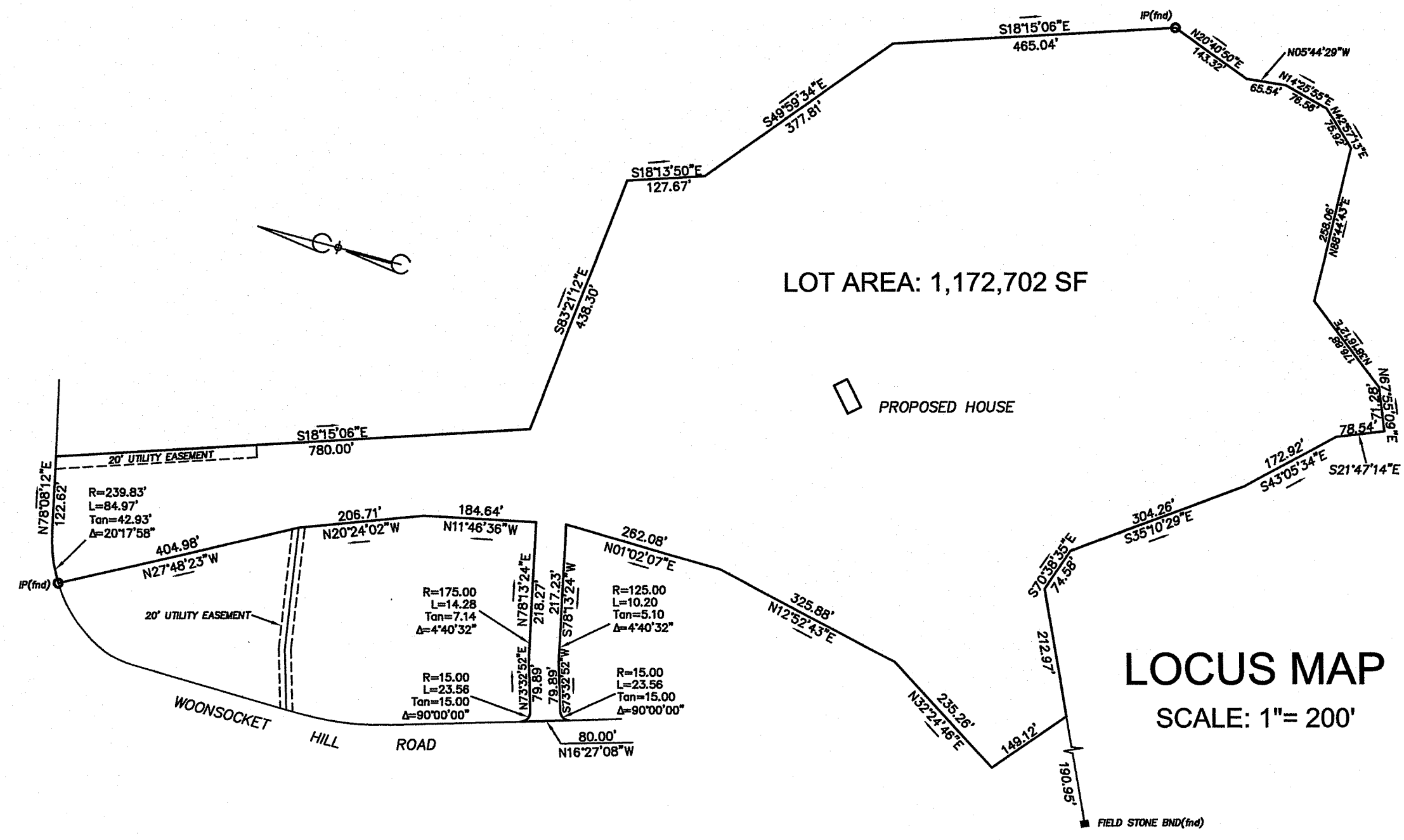
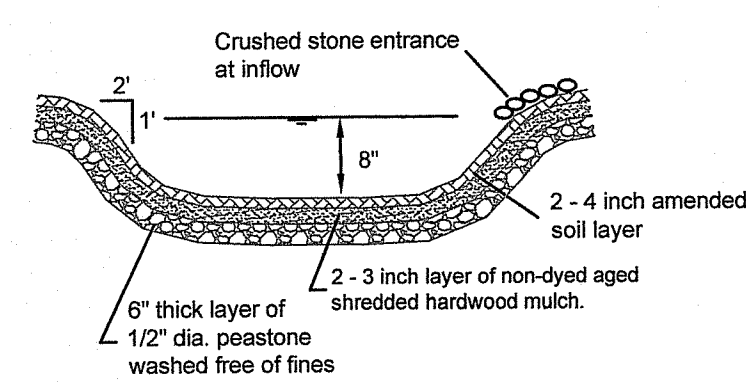
- MAINTENANCE**
- The rain garden shall be inspected following at least the first two precipitation events of at least 1.0 inch to ensure that the system is functioning properly. Thereafter, the rain garden shall be monitored and maintained to assure proper functioning, plant growth and survival. Plants shall be replaced on an as-needed basis during the growing season.
 - Silt/sediment shall be removed from the rain garden when the accumulation exceeds one inch, or when water ponds on the surface of the rain garden for more than 48 hours. The top few inches of material shall be removed and shall be replaced with fresh soil mixture and mulch.
 - Pruning or replacement of woody vegetation shall occur when dead or dying vegetation is observed.
 - Soil erosion gullies shall be repaired when they occur.
 - Fertilizer or pesticides shall not be applied to plants within rain gardens.
 - Perennial plants and ground covers shall be replaced as necessary to maintain an adequate vegetated ground cover. Annual plants may also be used to maintain ground cover.

RAIN GARDEN PLANTING DETAIL

NOT TO SCALE
ROOF AREA: 1,212 SF
SOIL TEXTURE: SANDY LOAMS
AREA: 96 SF
24 PLANTS

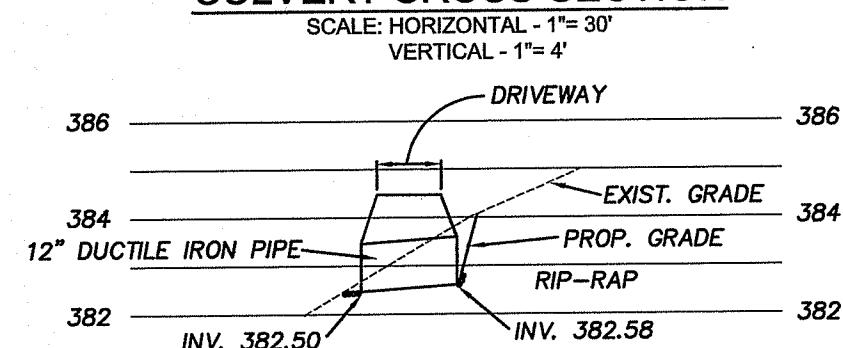


RAIN GARDEN CROSS-SECTION

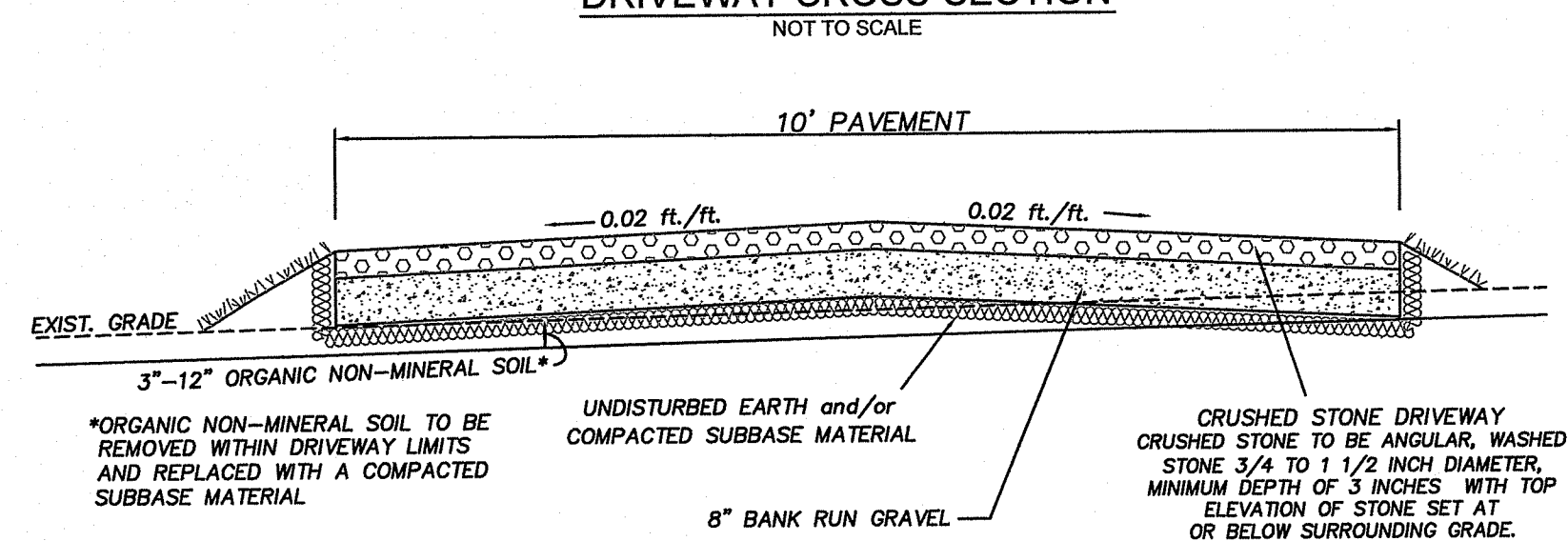


LOCUS MAP
SCALE: 1"= 200'

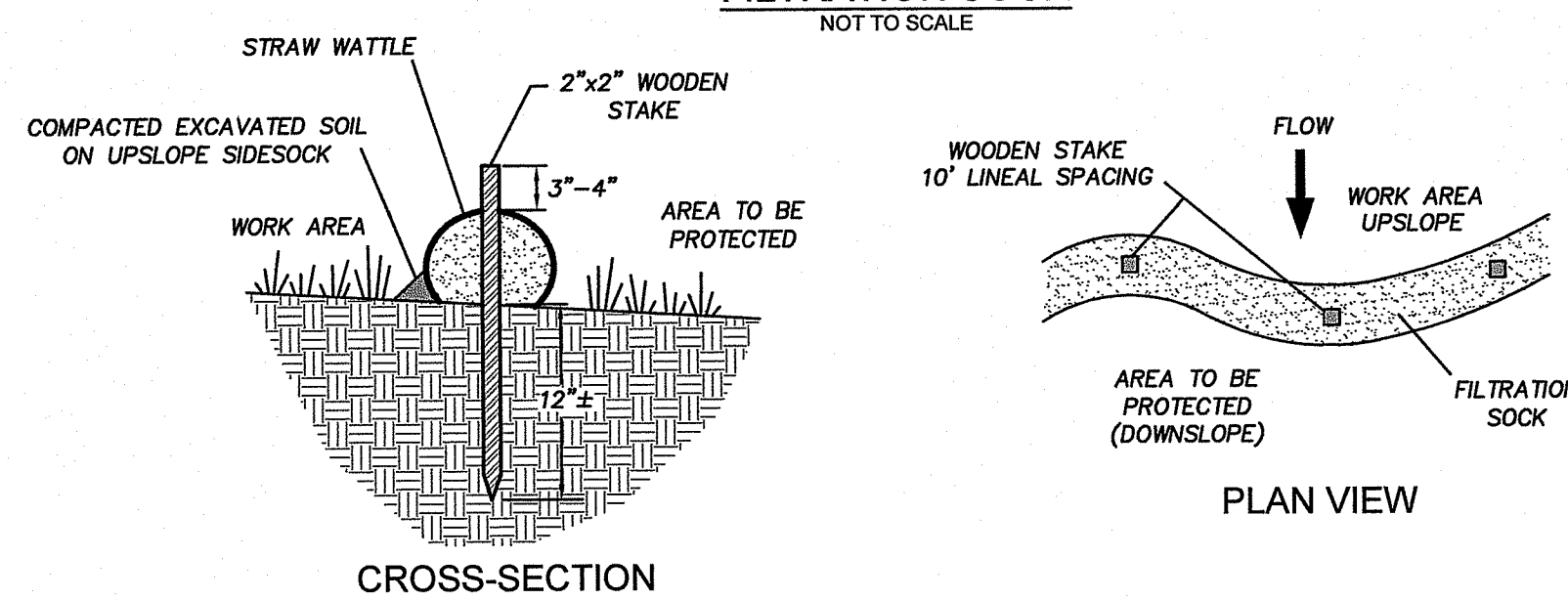
CULVERT CROSS-SECTION



DRIVEWAY CROSS-SECTION



FILTRATION SOCK



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Christopher D. Wenzel

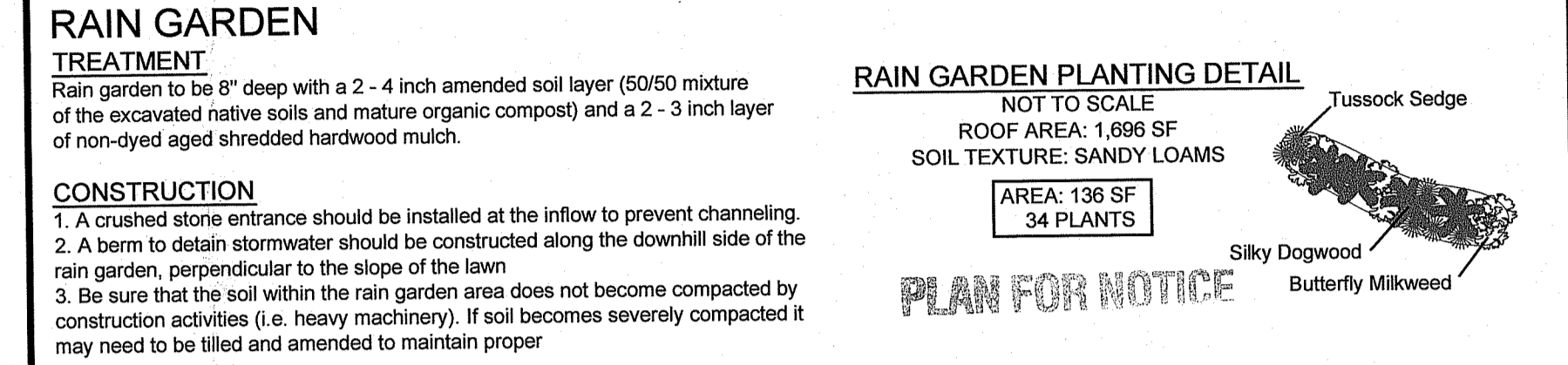
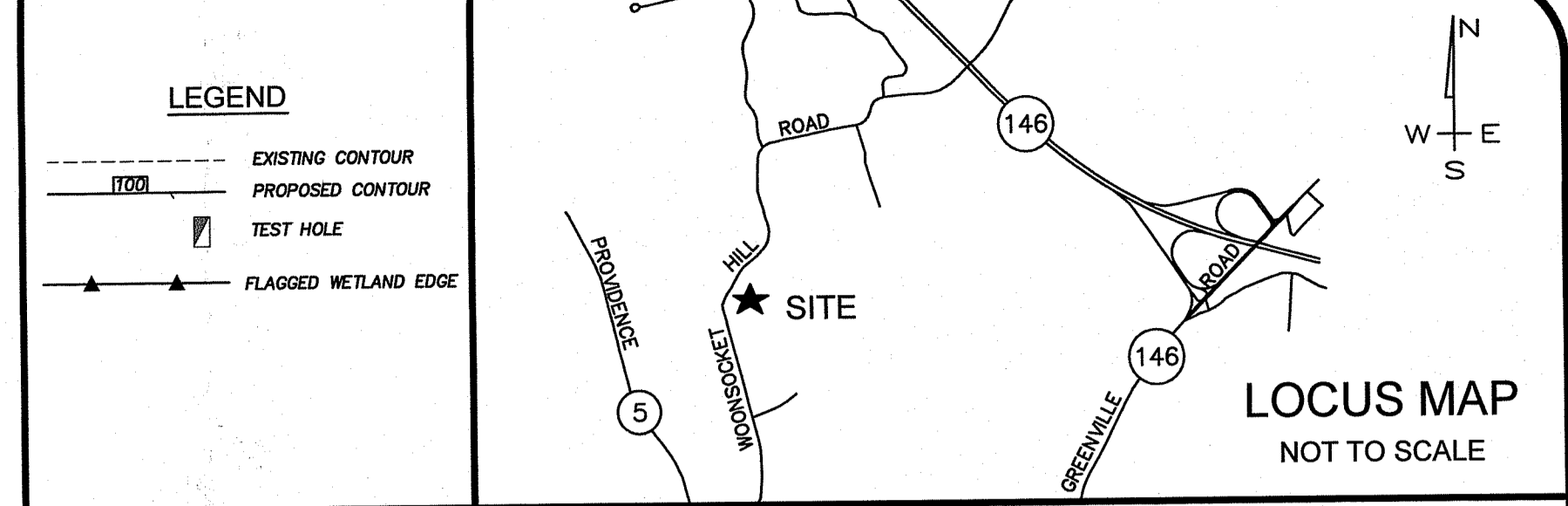
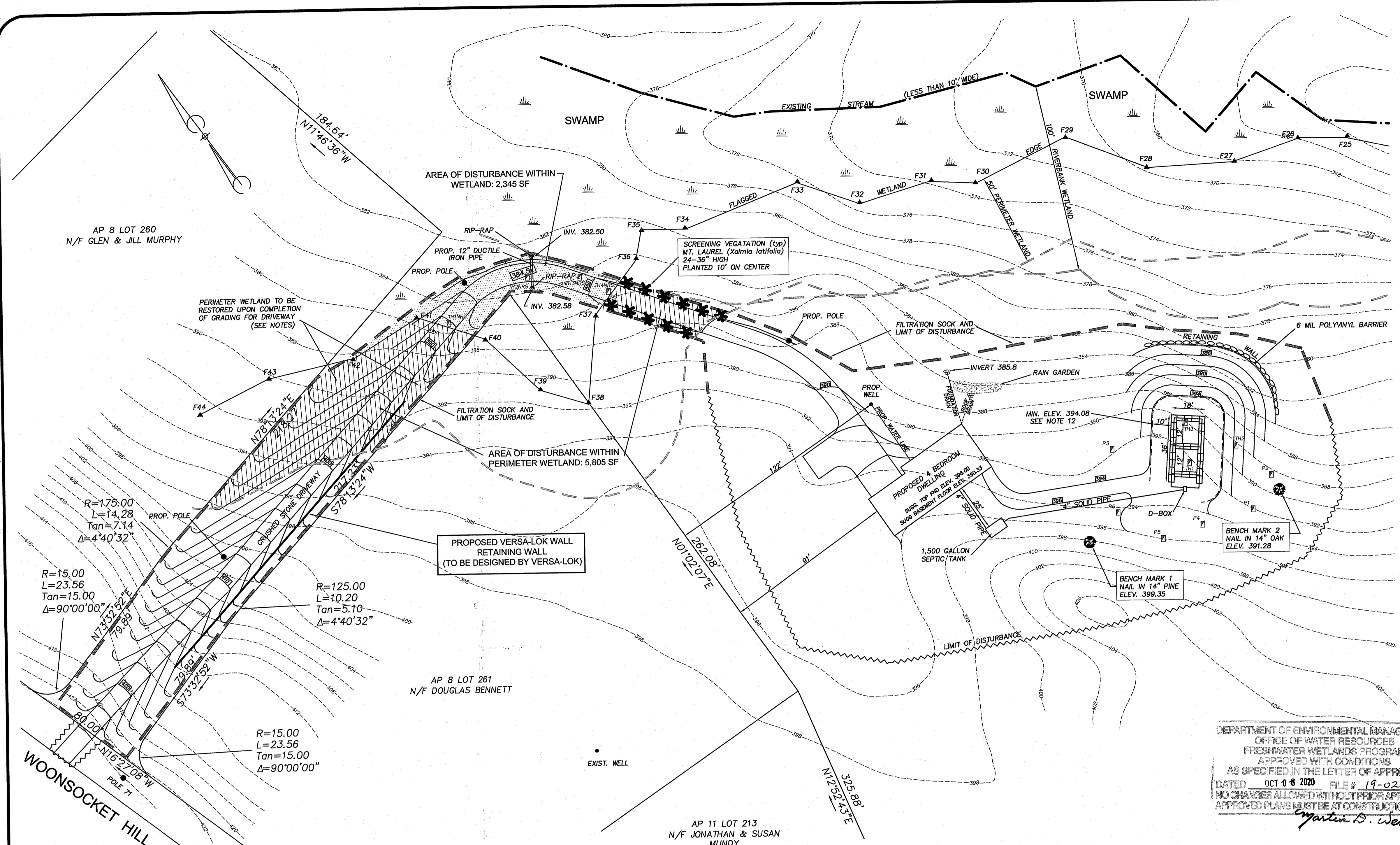
DETAIL SHEET
for
ANDROMEDA REAL ESTATE PARTNERS LLC
PLAT 8, LOT 42
WOONSOCKET HILL ROAD
NORTH SMITHFIELD, RHODE ISLAND
JUNE, 2021
SCALE: 1 INCH EQUALS 30 FEET
GRAPHIC SCALE

No.	DESCRIPTION	DATE

SHEET NUMBER 2 of 2 JOB NUMBER 21-092

PAUL D. CARLSON
No. 7142
REGISTERED PROFESSIONAL ENGINEER
CIVIL

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THIS STAMP IS FOR RIDEM WETLANDS PERMITTING ONLY

NICHOLAS J. PIAMPANO
 No. 6512
 REGISTERED PROFESSIONAL ENGINEER (CIVIL)

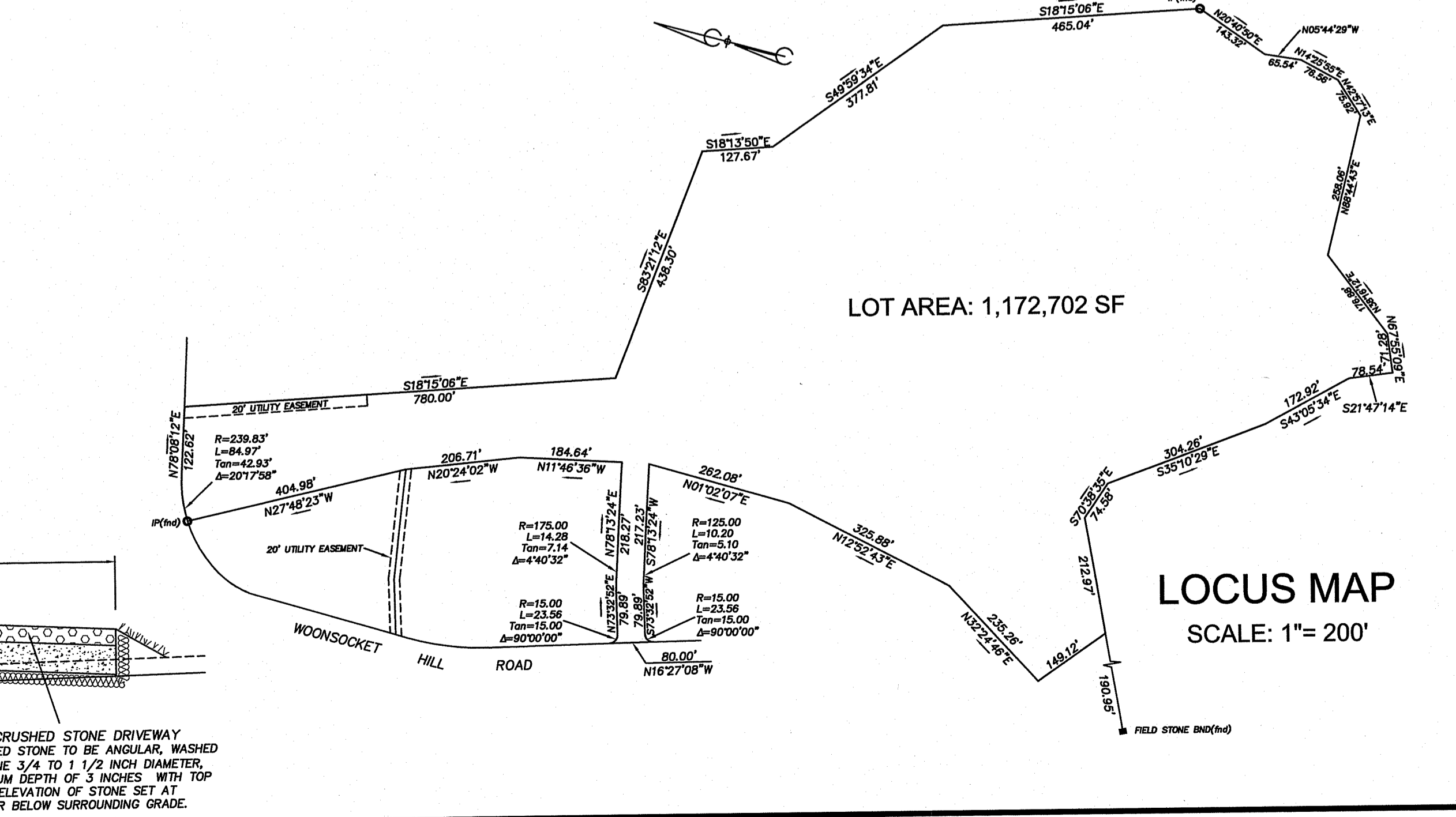
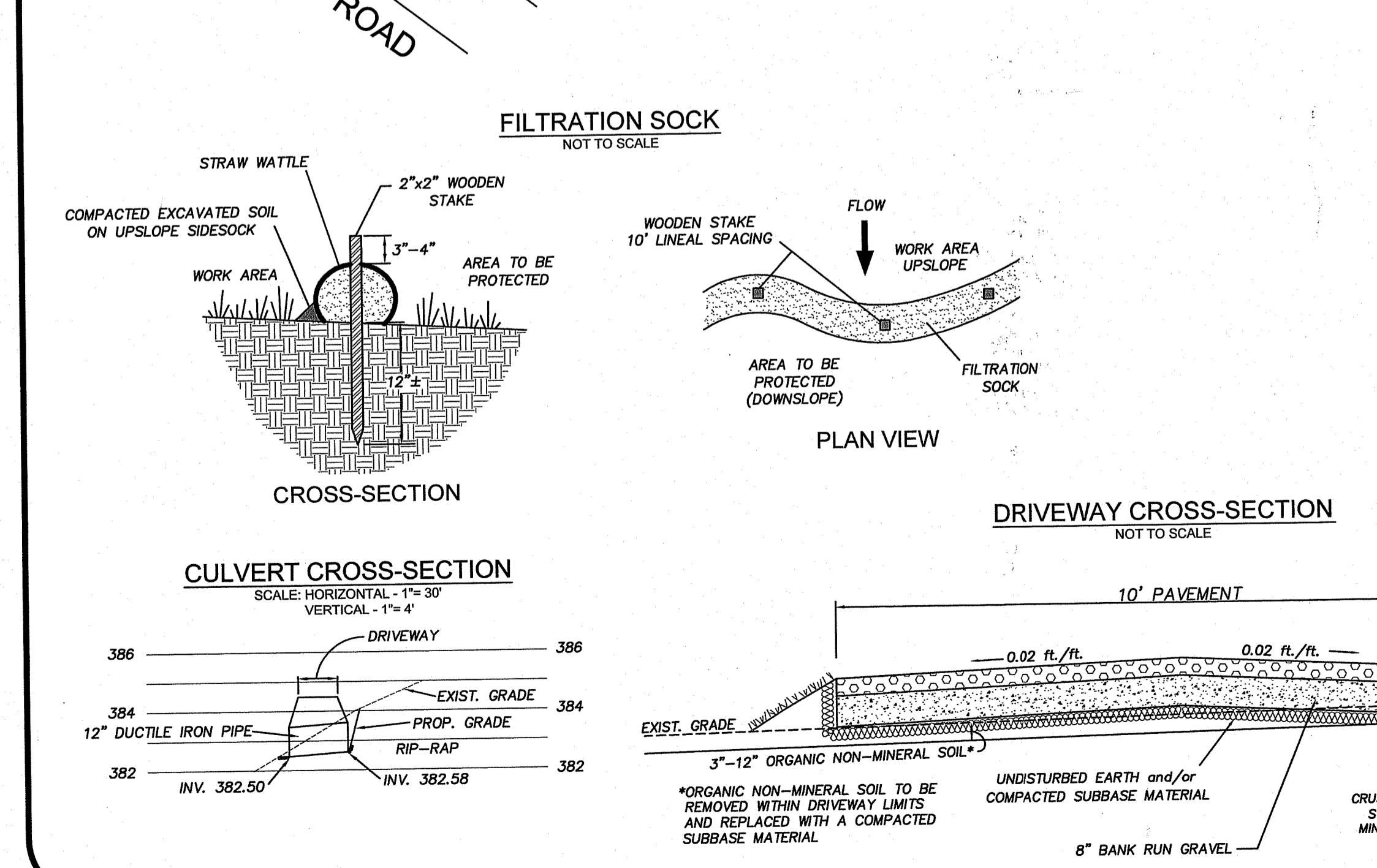
ADVANCED CIVIL DESIGN, INC.
 CIVIL ENGINEERS
 88 PEEPTOAD ROAD
 SCITUATE, RI 02857
 P1: (401) 644-8656
 P2: (401) 473-4404

ZONING DISTRICT: RA
 MINIMUM LOT AREA: 40,000 SF
 MINIMUM FRONTAGE: 150'
 MINIMUM SETBACKS: FRONT - 30'
 SIDE - 25'
 REAR - 40'

CERTIFICATION
 THIS SURVEY HAS BEEN CONDUCTED AND THE PLAN HAS BEEN PREPARED PURSUANT TO SECTION 9 OF THE RULES AND REGULATIONS ADOPTED BY THE RHODE ISLAND STATE BOARD OF REGISTRATION FOR PROFESSIONAL LAND SURVEYORS ON NOVEMBER 25, 2015, AS FOLLOWS:
 LIMITED CONTENT BOUNDARY SURVEY; CLASS IV TOPOGRAPHIC T-4

STATEMENT OF PURPOSE
 THE PURPOSE FOR THE CONDUCT OF THE SURVEY AND THE PREPARATION OF THE PLAN IS AS FOLLOWS: PROPOSED HOUSE

MARC N. NYBERG
 No. 1797
 PROFESSIONAL LAND SURVEYOR



TEST HOLE DATA
 DATE: 3-27-18

TH1 0'-4" A, SL, 10YR 3/4 4'-24" Bw, SL, 10YR 5/6 24"-98" C, LS 2.5YR 5/3 ESHWT 42" LEDGE AT 98"	TH2 0'-4" A, SL, 10YR 3/4 4'-24" Bw, SL, 10YR 5/6 24"-72" C, LS 2.5YR 5/3 ESHWT 30" LEDGE AT 72"	TH3 0'-4" A, SL, 10YR 3/4 4'-24" Bw, SL, 10YR 5/6 24"-72" C, LS 2.5YR 5/3 ESHWT 36" LEDGE AT 72"	LEDGE PROBES P1 - 34" P4 - 36" P2 - 26" P5 - 50" P3 - 34" P6 - 50"
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WETLAND SOIL SAMPLES
 PERFORMED BY EDWARD J. AVZINIS
 NATURAL RESOURCE SERVICES INC. (NRS)
 DATE: 12-9-19

TH1 0'-9" Oe 9"-13" A, vet SL, 10YR 2/1 13"-18" Bg, vet SL, 10YR 5/1	TH2 0'-5" Oe 5"-10" A, vet SL, 10YR 2/1 10"-18" Bg, vet SL, 10YR 5/1	TH3 0'-12" Oe 12"-18" Bg, vet SL, 10YR 5/1	TH4 0'-3" Oe 3"-8" A, vet SL, 10YR 2/1 8"-18" Bw, vet SL, 10YR 4/3 c+d
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Nyberg & Associates A SUBSIDIARY OF

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 PLAT 8, LOT 42
 WOONSOCKET HILL ROAD
 NORTH SMITHFIELD, RHODE ISLAND
 JUNE, 2019
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No.	DESCRIPTION	DATE
1.	NAME CHANGE	8-1-19
2.	ADDRESS 11-12-19 DEM COMMENTS	12-19-19

SHEET NUMBER 1 of 1 JOB NUMBER 17-103