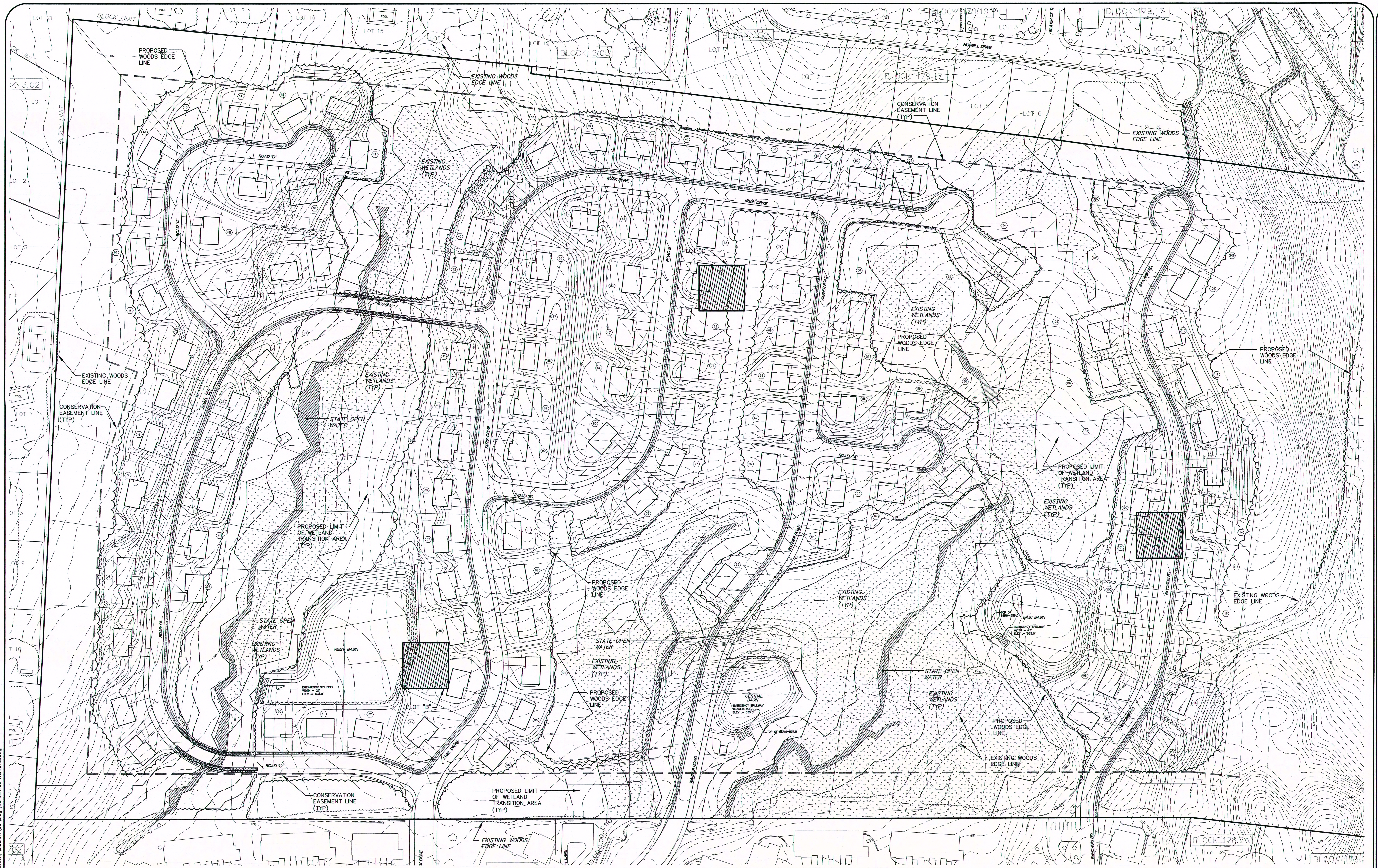


CALCULATIONS:

EXISTING TREE CALCULATIONS:

FROM FIELD SURVEY AND COUNT:

TREE SIZES	PLOT 'A'	PLOT 'B'	PLOT 'C'
2-6"	78	95	84
6-12"	35	15	34
12-18"	8	18	5
18-24"	4	0	1
24-30"	1	2	0
30-36"	0	0	0
36"-AND UP	0	1	1
TOTAL	126	131	125

EACH TREE SURVEY PLOT AREA 100' x 100' +/- = 10,000 SF +/-

AVERAGE # OF TREES 2" AND GREATER:
= (126 + 131 + 125)/3 = 128 TREES PER 10,000 SF
= 128 x (43,560/10,000 SF) = 558 TREES PER ACRE

AVERAGE # OF TREES 6" AND GREATER:
= (48 + 36 + 41)/3 = 42 TREES PER 10,000 SF
= 42 x (43,560/10,000 SF) = 182 TREES PER ACRE

TREE REMOVAL CALCULATIONS:

TOTAL ACREAGE OF SITE = 120.43 AC.
94% OR 113.55 AC. OF SITE IS WOODED

CALCULATED # OF TREES 2" AND GREATER ON SITE
= 113.55 x 558 = 63,361 EXISTING TREES

CALCULATED # OF TREES 6" AND GREATER ON SITE
= 113.55 x 182 = 20,666 EXISTING TREES

WOODED AREA TO BE DISTURBED = 49.53 AC.

CALCULATED # OF TREES 2" AND GREATER TO BE REMOVED
= 49.53 x 558 = 27,638 TREES

CALCULATED # OF TREES 6" AND GREATER TO BE REMOVED
= 49.53 x 182 = 9,014 TREES

TREE PLANTINGS CALCULATIONS:

STREET TREES = 499 (REFER TO SHEET 21)

DETENTION BASIN PLANTING (REFER TO SHEET 22)
SHADE TREES = 20
ORNAMENTAL TREES = 49
EVERGREENS = 103
SHRUBS = 386/7 = 55 *
TOTAL TREES FOR BASIN PLANTING = 227

ON-LOT PLANTING (REFER TO SHEET 23):
TYPICAL LOT TREES = 119 LOTS X 14 TREES PER LOT = 1,666

ESSEX FELL BUFFER PLANTING (REFER TO SHEET 23)
EVERGREENS = 1,035 LF/17.5 = 59

TOTAL TREE EQUIVALENTS TO BE PLANTED = 2,479

* INSTALLATION OF 7 SHRUBS HAS BEEN CALCULATED TO BE EQUIVALENT TO 1 TREE FOR PLANTING COUNT.

EXISTING ON-SITE TREE SPECIES LIST

BOTANICAL NAME	COMMON NAME	PLOT 'A'	PLOT 'B'	PLOT 'C'
ACER RUBRUM	RED MAPLE	X	X	X
BETULA LENTA	BLACK BIRCH	X	X	
CARYA SPECIES	HICKORY	X	X	X
LIRIODENDRON TULIPIFERA	TULIP POPLAR	X	X	
QUERCUS ALBA	WHITE OAK	X	X	X
QUERCUS MACROCARPA	BUR OAK	X	X	
QUERCUS PALUSTRIS	PIN OAK	X	X	
QUERCUS RUBRA	RED OAK	X	X	X
SASSAFRAS ALBIDUM	COMMON SASSAFRAS	X	X	X

NOTES:

1. REFER TO LANDSCAPE PLANS FOR PROPOSED LOCATION AND SPECIES OF PLANT MATERIALS.
2. NO RARE AND/ OR HISTORIC TREES EXISTING ON SITE.
3. IN LIEU OF PLANTINGS, APPLICANT RESERVES RIGHT TO MAKE A REASONABLE CONTRIBUTION TO TREE FUND.

LEGEND

EXISTING WOODS EDGE LINE
EXISTING CONTOUR
100X100' ± TREE SURVEY PLOT AREA
EXISTING WETLANDS
PROPOSED DWELLING
PROPOSED ROAD
PROPOSED TREE LINE
PROPOSED CONTOUR

GRAPHIC SCALE
80 0 40 80 160 320
(IN FEET)
1 inch = 80 ft.

PAUL W. ANDERSON
N.J. PROFESSIONAL ENGINEER
LIC. NO. 33410
SIGNATURE INVALID WITHOUT RAISED SEAL OF P.E.

REV. 4	11-05-07	GENERAL REVISIONS, ENGINEERS COMMENTS
REV. 3	09-25-07	REVISED AS PER WETLANDS SUBMISSION AND AS PER REVIEWING ENGINEER'S COMMENTS.
REV. 2	06-28-07	REVISED TREE REMOVAL CALCULATIONS
REV. 1	04-23-07	ADDED PUMP STATION LOT AND REVISED NOTES
Revisions		

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Pennoni
210 Malapardis Road
Suite 104
Cedar Knolls, NJ 07927
TEL: 973.267.3244
Fax: 973.267.9816
www.pennoni.com

Proj. No.	WEHI0901
Date	03-12-2010
Drawn by	ET/FP
Designed by	ESH
Checked by	ESH/PWA
Scale	AS SHOWN

PRELIMINARY AND FINAL SUBDIVISION
WEST ESSEX HIGHLANDS
BLOCK 179 LOT 32
TOWNSHIP OF WEST ORANGE
ESSEX COUNTY, NEW JERSEY

EXISTING TREE AND TREE REMOVAL PLAN

SHEET 27 OF 76

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