

BLOCK 46.01, LOT 33
WEST ORANGE
ESSEX COUNTY, NEW JERSEY

<u>SHEET</u>	<u>SHEET TITLE</u>
01	VARIANCE PLAN
02	STEEP SLOPE PLAN
03	GRADING, DRAINAGE & UTILITY PLAN AND CONSTRUCTION DETAILS
04	TREE REMOVAL PLAN
05	SOIL EROSION AND SEDIMENT CONTROL PLAN



VARIANCES REQUESTED			
SECTION	DESCRIPTION	SECTION	DESCRIPTION
25. ATT.#3	A MINIMUM LOT AREA OF 80,000 S.F. IS REQUIRED; WHEREAS A LOT AREA OF 2,491 S.F. IS PROPOSED. THIS IS A PRE-EXISTING NONCONFORMING CONDITION.	25.28.8	A MAXIMUM DISTURBANCE OF 20% OF SLOPES BETWEEN 20% TO 24.99% IS PERMITTED; WHEREAS A DISTURBANCE OF 81.4% (746 S.F.) OF SLOPES 20% TO 24.99% IS PROPOSED.
25.ATT.#3	A MINIMUM LOT AREA PER UNIT OF 80,000 S.F. IS REQUIRED; WHEREAS A LOT AREA OF 2,491 S.F. IS PROPOSED. THIS IS A PRE-EXISTING NONCONFORMING CONDITION.	25.28.8	NO DISTURBANCE OF SLOPES 25% OR MORE IS PERMITTED; WHEREAS A DISTURBANCE OF 52.8% (5,769 S.F.) OF SLOPES 25% OR GREATER IS PROPOSED.
25. ATT.#3	A MINIMUM LOT WIDTH OF 100 FT. IS REQUIRED; WHEREAS A LOT WIDTH OF 76.0 FT. IS PROPOSED. THIS IS A PRE-EXISTING NONCONFORMING CONDITION.		
25.ATT.#3	A MINIMUM SIDE YARD SETBACK OF 25 FEET IS REQUIRED; WHEREAS A SIDE YARD SETBACK OF 11.4 FT. IS PROPOSED.		
25.ATT.#3	A MINIMUM COMBINED SIDE YARD SETBACK OF 50 FEET IS REQUIRED; WHEREAS A COMBINED SIDE YARD SETBACK OF 26.5 FT. IS PROPOSED.		
25.ATT.#3	A MINIMUM FLOOR AREA OF 3,000 S.F. IS REQUIRED; WHEREAS 2,889 S.F. OF FLOOR AREA IS PROPOSED.		
25.ATT.#3	A MAXIMUM BUILDING COVERAGE OF 20% IS REQUIRED; WHEREAS 64.0% OF BUILDING COVERAGE IS PROPOSED. BASED ON EFFECTIVE LOT AREA.		
25.ATT.#3	A MAXIMUM LOT COVERAGE OF 30% IS REQUIRED; WHEREAS 111.6% OF LOT COVERAGE IS PROPOSED. BASED ON EFFECTIVE LOT AREA.		
§25.8.4(b)	SOLID WALLS AND FENCES NOT HIGHER THAN SIX FEET ARE PERMITTED IN THE REAR YARD AND ON THE SIDE PROPERTY LINE UP TO THE REAR LINE OF THE APPLICANT'S HOUSE.		



SOURCE: NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION, BGIS, NJ-GEOWEB

3.	LOCATION:	BLOCK 46.01, LOT 33 104 WINDING WAY TOWNSHIP OF WEST ORANGE ESSEX COUNTY, NEW JERSEY TAX MAP SHEET # 4
2.	OWNER/APPLICANT:	PARDO DEVELOPMENT 104 WINDING WAY WEST ORANGE, NJ 07052
3.	LOT AREA:	14,351.96 S.F. (0.329 ACRES)
4.	ZONE/DISTRICT:	R-1 (ONE-FAMILY DWELLINGS ON 80,000 S.F. LOTS)
5.	EXISTING USE:	VACANT
6.	PROPOSED USE:	SINGLE-FAMILY RESIDENTIAL
7.	INFORMATION SHOWN TRANSFERRED FROM A SURVEY ENTITLED "BOUNDARY & TOPOGRAPHIC SURVEY THE PROPERTY LOCATED AT: 104 WINDING WAY, TOWNSHIP OF WEST ORANGE, 07052 NEW JERSEY, COUNTY OF ESSEX, LOT 33, BLOCK 46.01", DATED OCTOBER 10, 2025, PREPARED BY GEOSPATIAL SURVEYING & LAYOUT.	
8.	PROPOSED BUILDING INFORMATION, AS SHOWN, PER ARCHITECTURAL DRAWINGS ENTITLED, "NEW SINGLE FAMILY DWELLING FOR PARDO DEVELOPMENT BLOCK: 46.1, LOT: 33 LOT 33-104 WINDING WAY WEST ORANGE ESSEX COUNTY, NEW JERSEY 07052" DATED ISSUED FOR RECORD JULY 07, 2021, PREPARED BY DANTASCARRETTE ARCHITECTURE.	
9.	THE PROPERTY APPEARS ON THE NATIONAL FLOOD INSURANCE PROGRAM - FIRM FLOOD INSURANCE RATE MAP, ESSEX COUNTY, NEW JERSEY, MAP NUMBER 34013C0094F, EFFECTIVE DATE: JUNE 04, 2007. <u>SUBJECT SITE IS LOCATED WITHIN ZONE X (AREA OF MINIMAL FLOOD HAZARD)</u>	
10.	UNDERGROUND UTILITIES SHOWN HEREON ARE APPROXIMATE. THEIR ACCURACY OR COMPLETENESS ARE NOT GUARANTEED BY THE ENGINEER. MARK OUTS FROM UTILITY COMPANIES AND FIELD CONFIRMATION BY CONTRACTOR MUST BE MADE PRIOR TO CONSTRUCTION SO THAT DISTURBANCE AND/OR DISRUPTION TO THESE UTILITIES MAY BE AVOIDED.	
11.	ELEVATIONS AS SHOWN ARE BASED ON ASSUMED DATUM PER SURVEY REFERENCE.	
12.	PUBLIC SEWER, WATER, GAS, ELECTRIC, CATV AND TELEPHONE SERVICES ARE PRESENTLY SERVING THE AREA AND WILL SERVE THE PROPOSED BUILDING.	
13.	ALL PROPOSED CONSTRUCTION TO BE IN CONFORMANCE WITH THE TOWNSHIP OF WEST ORANGE STANDARDS DETAILS.	
14.	THIS SITE PLAN MAKES NO CERTIFICATION OR REPRESENTATION AS TO THE LOCATION OF ANY UNDERGROUND ELECTRICAL, PHONE OR CABLE CONDUITS AND/OR WIRES WHICH MAY BE PRESENT ON THE SITE.	
15.	PROPOSED GRADING TO BE DONE AS 3:1 MAXIMUM AND 2.0% MINIMUM WITHIN LAWN AREAS.	
16.	CONTRACTOR IS RESPONSIBLE FOR OBTAINING A ROAD OPENING PERMIT FROM THE TOWNSHIP OF WEST ORANGE PRIOR TO ANY WORK WITHIN THE TOWNSHIP'S RIGHT OF WAY.	

ZONING DISTRICT:	R-1 (ONE-FAMILY DWELLINGS ON 80,000 S.F. LOTS)			
	REQUIRED/ALLOWED	EXISTING	PROPOSED	
MINIMUM LOT AREA	80,000 S.F.	2,491 S.F.*	2,491 S.F.* (V)	VARIANCE REQUESTED, PENC
MINIMUM LOT AREA PER UNIT	80,000 S.F.	-	2,491 S.F.* (V)	VARIANCE REQUESTED, PENC
MINIMUM LOT WIDTH	150 FT.	76.0 FT.*	76.0 FT.* (V)	VARIANCE REQUESTED, PENC
MINIMUM FRONT YARD SETBACK	40 FT.	-	40.0 FT.	
MINIMUM SIDE YARD SETBACK	25 FT.	-	11.4 FT. (V)	VARIANCE REQUESTED
MINIMUM SIDE YARD SETBACK COMBINED	50 FT.	-	26.5 FT. (V)	VARIANCE REQUESTED
MINIMUM REAR YARD SETBACK	30 FT.	-	33.60 FT.	
MINIMUM FLOOR AREA	3,000 S.F.	-	2,689 S.F. (V)	VARIANCE REQUESTED
MAXIMUM BUILDING COVERAGE	20%	-	64.0% (V)	VARIANCE REQUESTED
MAXIMUM LOT COVERAGE	30%	-	111.6% (V)	VARIANCE REQUESTED
MAXIMUM BUILDING HEIGHT	35 FT.	-	31.33 FT.	
MAXIMUM NUMBER OF STORIES	2.5	-	2.5	

<u>EXISTING</u>	<u>PROPOSED</u>
NO STRUCTURES PRESENT	GROUND FL. 1,519 S.F.
	PORCH 75 S.F.
	TOTAL 1,594 S.F.
	(1,594 S.F./2,491 S.F.*= 0.640) 64.0%

*CALCULATION IS BASED ON EFFECTIVE LOT AREA PER STEEP SLOPE ORDINANCE 25-28.1
SEE STEEP SLOPE DISTURBANCE PLAN FOR EFFECTIVE LOT AREA CALCULATIONS

<u>EXISTING</u>	<u>PROPOSED</u>	
NO STRUCTURES PRESENT	DWELLING - 1ST FL.	1,429 S.F.
	DWELLING - 2ND FL.	1,260 S.F.
	<u>TOTAL</u>	<u>2,689 S.F.</u>

<u>EXISTING</u>	<u>PROPOSED</u>
NO STRUCTURES PRESENT	
	DWELLING 1,519 S.F.
	PORCH, STEPS, DECK 296 S.F.
	PAVEMENT 966 S.F.
	<u>TOTAL 2,781 S.F.</u>
	(2,781 S.F./2,491 S.F.= 1.116) 111.6%

*CALCULATION IS BASED ON EFFECTIVE LOT AREA PER STEEP SLOPE ORDINANCE 25-28.8
SEE STEEP SLOPE DISTURBANCE PLAN FOR EFFECTIVE LOT AREA CALCULATIONS

AVERAGE GRADE:

$$\frac{99.00 + 99.00 + 89.90 + 96.00}{4} = 95.98$$

FIRST FLOOR FINISHED FLOOR ELEVATION = 101.00
HEIGHT FROM FINISHED FLOOR TO PEAK ROOF = 26.3'
BUILDING HEIGHT = (101.00 - 95.98) + 26.31' = 31.33'

BOARD CHAIRMAN	DATE
BOARD SECRETARY	DATE
MUNICIPAL ENGINEER	DATE



revisions		
01.	09.30.25	revised per township comment
02.	11.04.25	general revisions

man | **TERRA**
DESIGN LLC

BLOCK 46.01, LOT 33
104 WINDING WAY
TOWNSHIP OF WEST ORANGE, ESSEX COUNTY, N.J.
TAX MAP SHEET # 4

NNI MANILIO, PE
PROFESSIONAL ENGINEER 47552

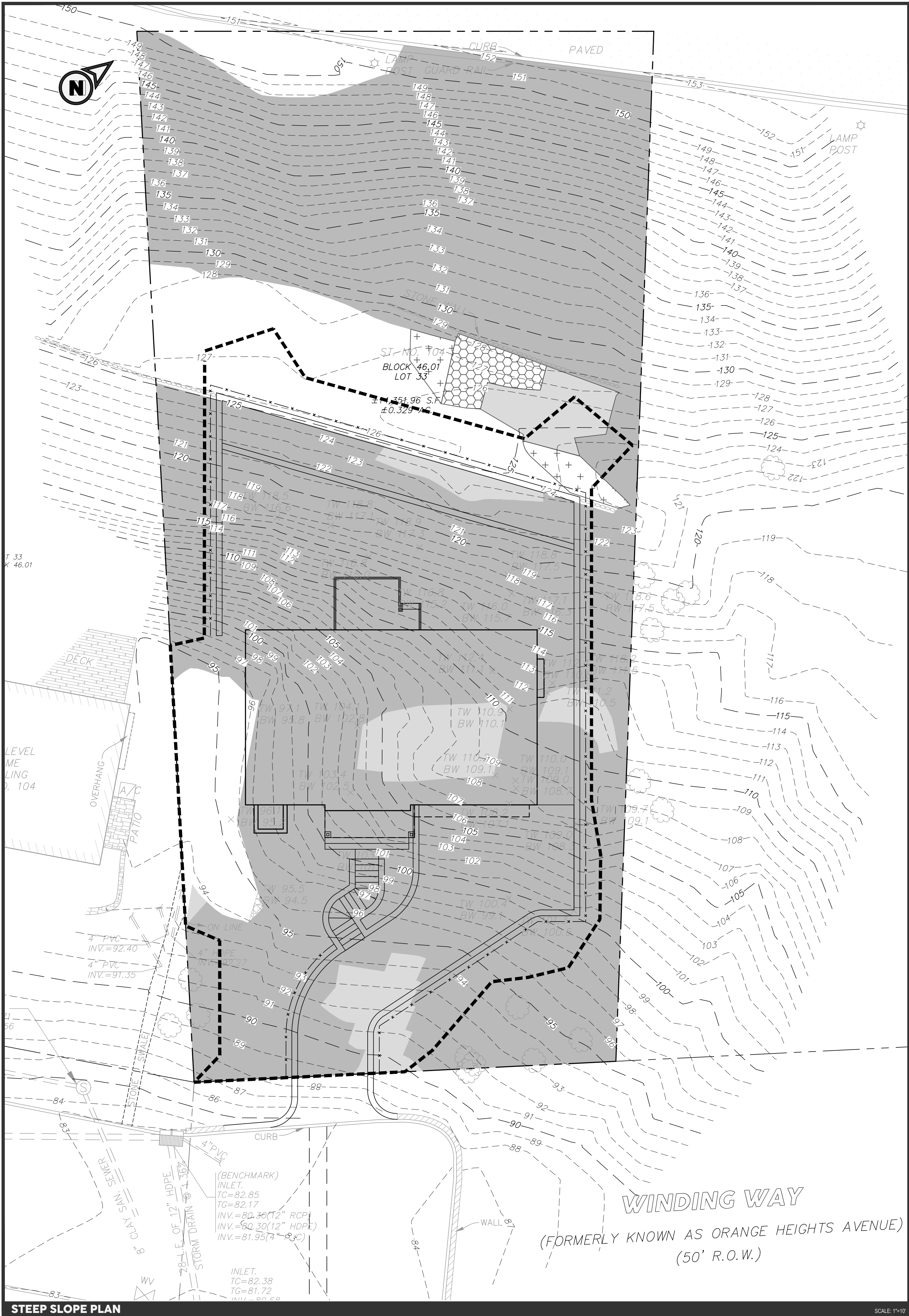
GIOVANNI MANILIO, PE
NEW JERSEY PROFESSIONAL ENGINEER 4755

man | TERRA
DESIGN LLC

drawn by	jam	date	08.28.2023
checked by	jam	scale	1"=20'

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certificate of authorization: 24GA28327100

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GENERAL NOTES

1. INFORMATION SHOWN TRANSFERRED FROM A SURVEY ENTITLED "BOUNDARY & TOPOGRAPHIC SURVEY THE PROPERTY LOCATED AT: 104 WINDING WAY, TOWNSHIP OF WEST ORANGE, 07052 NEW JERSEY, COUNTY OF ESSEX, LOT 33, BLOCK 46.01", DATED OCTOBER 10, 2025, PREPARED BY GEOSPATIAL SURVEYING & LAYOUT.
2. UNDERGROUND UTILITIES SHOWN HEREON ARE APPROXIMATE. THEIR ACCURACY OR COMPLETENESS ARE NOT GUARANTEED BY THE ENGINEER. MARK OUTS FROM UTILITY COMPANIES AND FIELD CONFIRMATION BY CONTRACTOR MUST BE MADE PRIOR TO CONSTRUCTION SO THAT DISTURBANCE AND/OR DISRUPTION TO THESE UTILITIES MAY BE AVOIDED.
3. ELEVATIONS AS SHOWN ARE BASED ON ASSUMED DATUM PER SURVEY REFERENCED.
4. PUBLIC SEWER, WATER, GAS, ELECTRIC, CATV AND TELEPHONE SERVICES ARE PRESENTLY SERVING THE AREA AND WILL SERVE THE PROPOSED BUILDING.
5. ALL PROPOSED CONSTRUCTION TO BE IN CONFORMANCE WITH THE TOWNSHIP OF WEST ORANGE STANDARDS DETAILS.
6. THIS SITE PLAN MAKES NO CERTIFICATION OR REPRESENTATION AS TO THE LOCATION OF ANY UNDERGROUND ELECTRICAL, PHONE OR CABLE CONDUITS AND/ OR WIRES WHICH MAY BE PRESENT ON THE SITE.
7. PROPOSED GRADING TO BE DONE AS 3:1 MAXIMUM AND 2.0% MINIMUM WITHIN LAWN AREAS.
8. CONTRACTOR IS RESPONSIBLE FROM OBTAINING A ROAD OPENING PERMIT FROM THE TOWNSHIP OF WEST ORANGE PRIOR TO ANY WORK WITHIN THE TOWNSHIP'S RIGHT OF WAY.

STEEP SLOPE ANALYSIS

HATCH	+	+	+		
SLOPE RANGE	0% TO 10%	10% TO 14.99%	15% TO 19.99%	20% TO 24.99%	25% OR MORE
AREA SHOWN	2,082 S.F. (0.05 AC.)	289 S.F. (0.01 AC.)	131 S.F. (0.00 AC.)	916 S.F. (0.02 AC.)	10,933 S.F. (0.25 AC.)
PERMITTED DISTURBANCE	100%	60%	40%	20%	0%
PORTION DISTURBANCE	77.9% (1,621 S.F.)	20.8% (60 S.F.)	0% (0 S.F.)	81.4% (746 S.F.)	52.8% (5,789 S.F.)

STEEP SLOPE EFFECTIVE LOT AREA

STEEP SLOPE	AREA SHOWN	ADJUSTMENT FACTOR	EFFECTIVE LOT AREA
AREA 1: SLOPES 0-10%	2,082 S.F.	1.0	2,082 S.F.
AREA 1: SLOPES 10-14.99%	289 S.F.	0.6	173.4 S.F.
AREA 1: SLOPES 15-19.99%	131 S.F.	0.4	52.4 S.F.
AREA 1: SLOPES 20-24.99%	916 S.F.	0.2	183.2 S.F.
AREA 1: SLOPES 25% OR MORE	10,933 S.F.	0.0	0 S.F.
TOTAL EFFECTIVE LOT AREA			2,491 S.F.

revisions		
01.	09.30.25	revised per township comments
02.	11.04.25	general revisions

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104 WINDING WAY

BLOCK 46.01, LOT 33
104 WINDING WAY
TOWNSHIP OF WEST ORANGE, ESSEX COUNTY, NJ
TAX MAP SHEET # 4

STEEP SLOPE
DISTURBANCE
PLAN



GIOVANNI MANILIO, PE
NEW JERSEY PROFESSIONAL ENGINEER #7552

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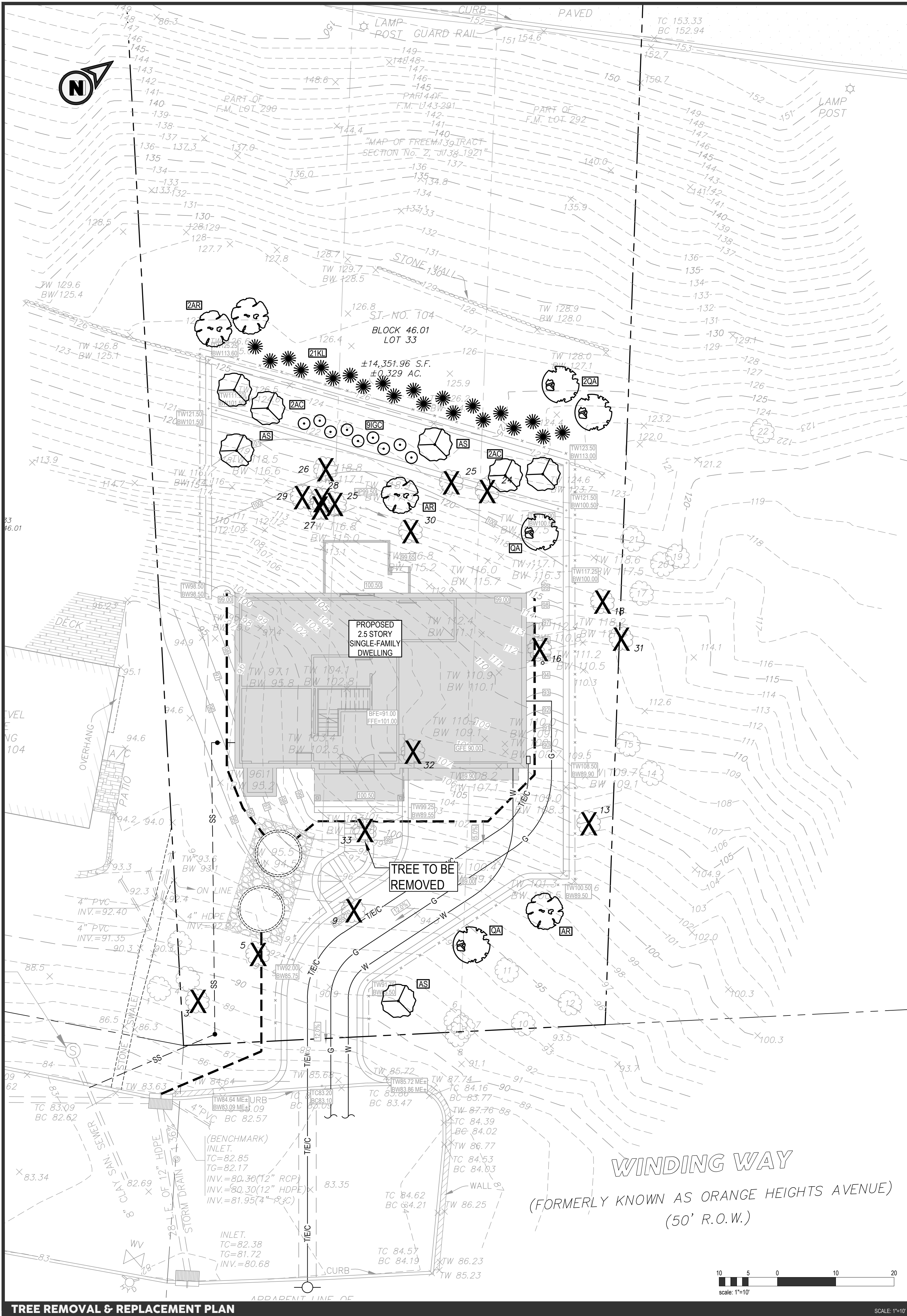
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TREE REMOVAL/REPLACEMENT SCHEDULE *

TREE#	DIAMETER/SPECIES	VIALE	NON-VIALE	REMOVE	COMMENTS	REQUIRED REPLACEMENTS
1	22" Hickory	X		No	Off site	0
2	12" Atlantic White Cedar	X		No	On site	0
3	22" Scarlet Oak		X	Yes	Lighting strike	1
4	15" Ash		X	No	On site, dead	0
5	6" Dogwood	X		Yes		1
6	14" Pin Oak	X		No		0
7	19" Hickory	X		No		0
8	7" Hickory	X		No		0
9	15" Hickory	X		Yes		6
10	7" Wild Cherry	X		No		0
11	32" Hickory	X		No		0
12	8" Atlantic White Cedar	X		No		0
13	24" Norway Maple	X		Yes		8
14	5" Sugar Maple	X		No	Off site	0
15	8" Norway Maple	X		No	Off site	0
16	13" Sycamore	X		Yes	Crooked	4
17	4" Norway Maple	X		Yes	Off site	0
18	4" American Holly		X	Yes		4
19	7" x 7" x 10" Norway Maple	X		No	Off site	0
20	5" Norway Maple	X		No	Off site	0
21	8" Norway Maple	X		No	Off site	0
22	8" Sweet Cherry	X		No	Off site	0
23	21" Red Maple		X	Yes	Dying	1
24	30" Tree of Heaven		X	Yes	Dead	1
25	7" Tree of Heaven		X	Yes	Dead	1
26	9" Tree of Heaven		X	Yes	Dead	1
27	8" American Elm	X		Yes		4
28	5" Tree of Heaven		X	Yes		1
29	6" Tree of Heaven		X	Yes		1
30	6" Tree of Heaven		X	Yes		1
31	8" American Holly	X		Yes	Leaning	4
32	7" Wild Cherry	X		Yes		4
33	7" English Yew	X		Yes	Leaning	4
TOTAL Replacement Trees						47

* SEE GENERAL NOTE #2

PLANTING SCHEDULE

KEY	QTY	BOTANICAL NAME	COMMON NAME	SIZE	ROOT
AC	4	Amelanchier canadensis	SHADBLOW SERVICEBERRY	2.5" CAL.	B & B
AR	4	Acer rubrum	RED MAPLE	2.5" CAL.	B & B
AS	3	Acer saccharum	SUGAR MAPLE	2.5" CAL.	B & B
QA	4	Quercus alba	WHITE OAK	2.5" CAL.	B & B

KEY	QTY	BOTANICAL NAME	COMMON NAME	SIZE	ROOT
IGC	9	Ilex glabra 'compacta'	COMPACT INK BERRY	30"-36"	CONT.
KL	21	Kalmia latifolia	MOUNTAIN LAUREL	30"-36"	CONT.

TOTAL REPLACEMENT TREES REQUIRED = 47

TOTAL REPLACEMENT TREES PROVIDED = 15

TOTAL TREES TO BE PROVIDED IN LIEU OF PAYMENT = 32

GENERAL NOTES

- INFORMATION SHOWN TRANSFERRED FROM A SURVEY ENTITLED "BOUNDARY & TOPOGRAPHIC SURVEY THE PROPERTY LOCATED AT: 104 WINDING WAY, TOWNSHIP OF WEST ORANGE, 07062 NEW JERSEY, COUNTY OF ESSEX, LOT 33, BLOCK 46.01", DATED OCTOBER 10, 2025, PREPARED BY GEOSPATIAL SURVEYING & LAYOUT.
- TREES WERE FIELD IDENTIFIED IN OCTOBER 2025 AND THE TREE REMOVAL/REPLACEMENT ASSESSMENT WAS PERFORMED BY JOHN LINSON, NEW JERSEY LICENSED TREE EXPERT #198.
- UNDERGROUND UTILITIES SHOWN HEREON ARE APPROXIMATE, THEIR ACCURACY OR COMPLETENESS ARE NOT GUARANTEED BY THE ENGINEER. MARK OUTS FROM UTILITY COMPANIES AND FIELD CONFIRMATION BY CONTRACTOR MUST BE MADE PRIOR TO CONSTRUCTION SO THAT DISTURBANCE AND/OR DISRUPTION TO THESE UTILITIES MAY BE AVOIDED.
- ELEVATIONS AS SHOWN ARE BASED ON ASSUMED DATUM PER SURVEY REFERENCED.
- ALL PROPOSED CONSTRUCTION TO BE IN CONFORMANCE WITH THE TOWNSHIP OF WEST ORANGE STANDARDS DETAILS.
- THIS SITE PLAN MAKES NO CERTIFICATION OR REPRESENTATION AS TO THE LOCATION OF ANY UNDERGROUND ELECTRICAL, PHONE OR CABLE CONDUITS AND/OR WIRES WHICH MAY BE PRESENT ON THE SITE.
- PROPOSED GRADING TO BE DONE AS 3:1 MAXIMUM AND 2.0% MINIMUM WITHIN LAWN AREAS.

PLANTING NOTES

- NO SUBSTITUTIONS TO PLANT LIST SHALL BE MADE UNLESS AUTHORIZED BY THE DESIGN ENGINEER AND APPROVED BY THE TOWNSHIP AND REGULATORY AGENCIES.
- ALL PLANTING BEDS SHALL BE MULCHED WITH 3" MINIMUM.
- ALL DISTURBED AND PERMANENT TURF AREAS SHALL BE SEEDED WITH A GENERAL PURPOSE MIXTURE SIMILAR TO THE FOLLOWING. SCS SEED MIX #14 (TALL TURF FESCUE, KENTUCKY BLUEGRASS, PERENNIAL RYEGRASS) OR APPROVED EQUAL. SEE SOIL EROSION AND SEDIMENT CONTROL SHEETS FOR SEEDING SPECIFICATIONS.
- TOPSOIL PROTECTION: NO TOPSOIL SHALL BE REMOVED FROM THE SITE OR USED AS SPILL. ALL TOPSOIL MOVED DURING THE COURSE OF CONSTRUCTION SHALL BE REDISTRIBUTED ON ALL RE-GRADED SURFACES SO AS TO PROVIDE AN EVEN COVER AND SHALL BE STABILIZED BY SEEDING OR PLANTING. ALL RE-GRADED TURF AREAS SHALL BE COVERED BY A SIX (6) INCH MINIMUM THICKNESS OF TOPSOIL. IF SUFFICIENT TOPSOIL IS NOT AVAILABLE ON THE SITE, TOPSOIL MEETING OR EXCEEDING THE MINIMUM REQUIREMENTS OF THE NDOT SPECIFICATIONS, AND CERTIFIED AS FREE OF ANY TOXINS SHALL BE PROVIDED TO RESULT IN A SIX (6) INCH MINIMUM THICKNESS.
- LAWN AREAS SHALL MAINTAIN A MINIMUM SLOPE OF 2% AND A MAXIMUM OF 3 FEET HORIZONTAL TO 1 FOOT VERTICAL.
- UNACCEPTABLE PLANT MATERIALS: MATERIALS WHICH HAVE DAMAGED OR CROOKED LEADERS, DEFORMED GROWTH HABIT, ABRASIONS OF THE BARK, SUNSCALDS, WINDBURN, DISFIGURING KNOTS, OR FRESH CUTS OF LIMBS OVER 3/4 IN. WHICH HAVE NOT COMPLETELY CALLEDUS WILL BE REJECTED. IN ADDITION, TREES HAVING THEIR CENTRAL LEADERS HEADED BACK WILL ALSO BE REJECTED.
- ALL LANDSCAPING SHALL BE GUARANTEED FOR ONE (1) YEAR AFTER FINAL ACCEPTANCE. IT IS UNDERSTOOD THAT THE OWNER WILL PROVIDE ADEQUATE AND TIMELY CARE AT ALL TIMES.
- ALL PLANTED TREES SHALL HAVE VISIBLE ROOT COLLARS AND FREE OF DEFECTS TO PASS INSPECTION.

revisions		
01	09.30.25	revised per township comments
02	11.04.25	general revisions

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TAX MAP SHEET # 4

TREE REMOVALS/
REPLACEMENT
PLAN

GIOVANNI MANILIO, PE
NEW JERSEY PROFESSIONAL ENGINEER #7552

manTERRA
DESIGN LLC

drawn by jam date 08.28.2023

checked by jam scale 1"=10'

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certificate of authorization: 24GA28327100

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