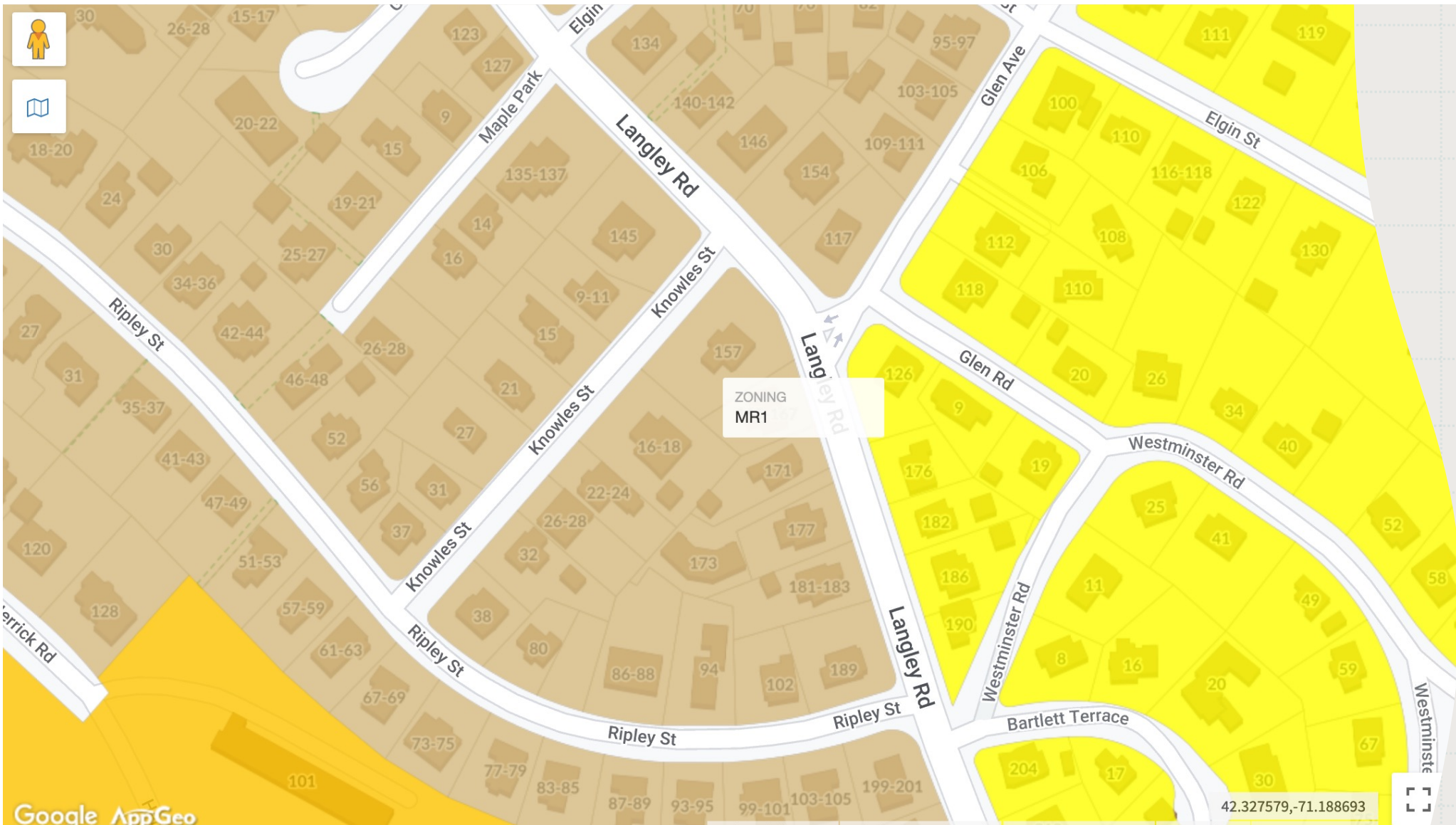


Special Permit Petition
Land Use Committee
Public Hearing - July 19, 2022

157 Langley Road



General Project Information

14,886 SF of land

MR1 Zone

By-Right development: 2-Family House

Proposed development: 3-Family House

Sustainability Features - HERS Level 1

Smaller Building Envelope/Larger Setbacks

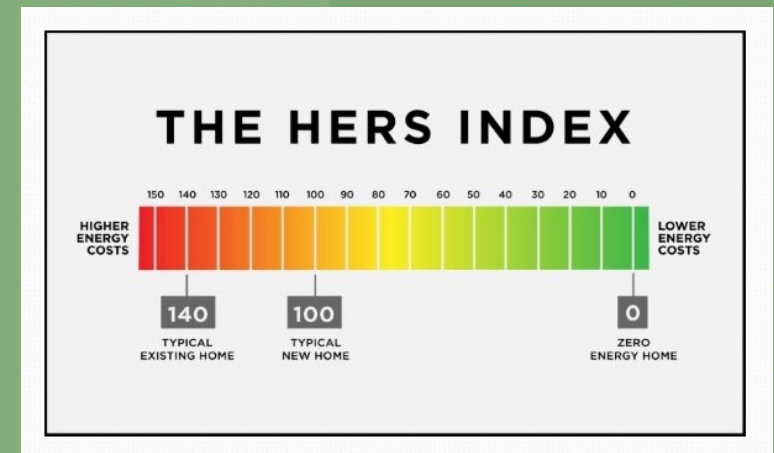
- 25 feet setbacks (vs. 7.5 ft side and 15 ft rear)
- 25% Lot Coverage (Approx. 745 SF smaller than By-Right)
- Smaller Building Envelope than By-Right
- FAR Comparable to By-Right (0.50 max by right/0.56 proposed - approx. 745 sf.)

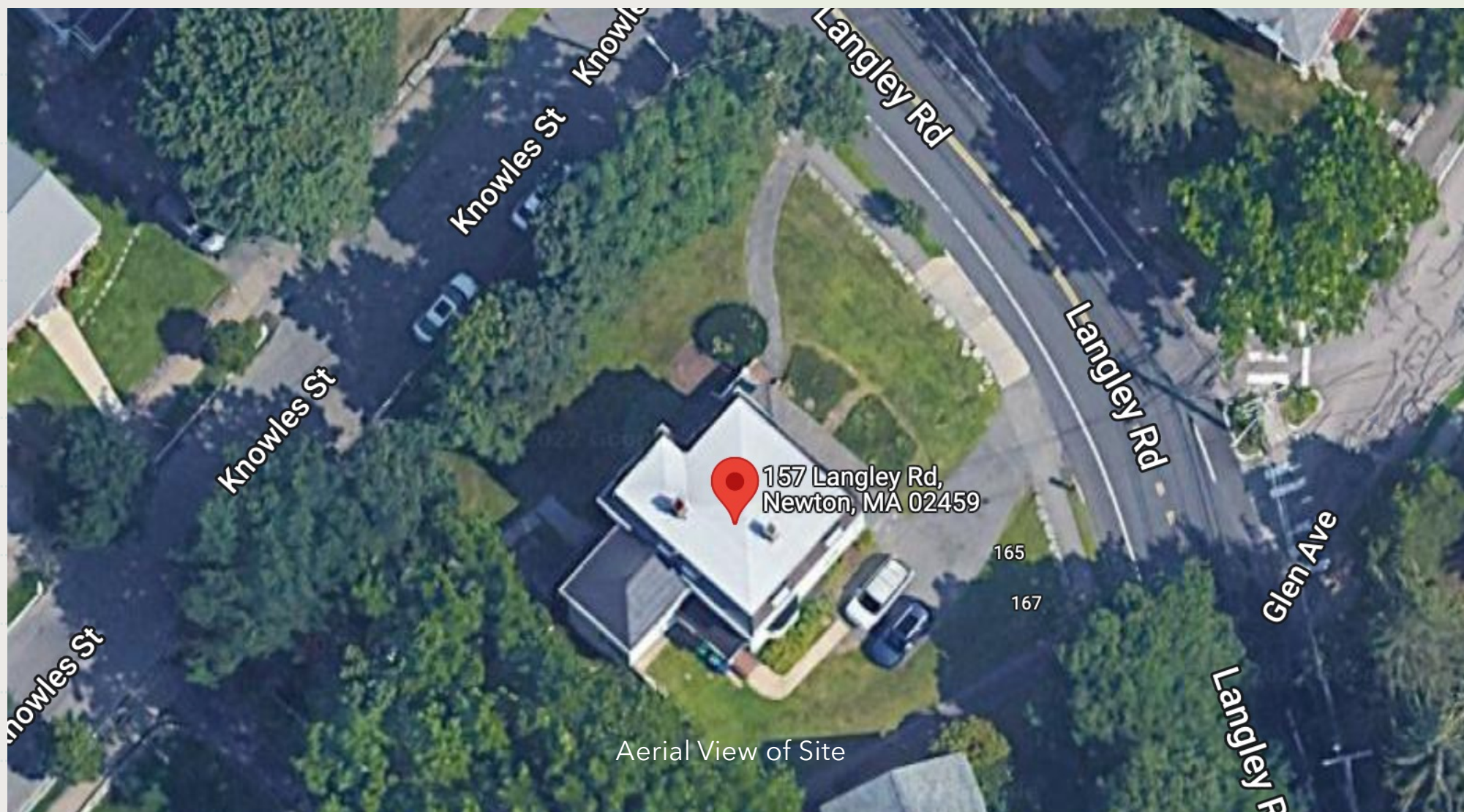
By-Right / Proposed Compared

	By Right	Proposed
Front Setback	25 feet or average	29.6 feet (Langley) 25.7 feet (Knowles)
Side Setback	7.5 feet	25.4 feet
Rear Setback	15 feet	25.3 feet
Lot Coverage	30%	24.8%
Open Space	50%	53.07%
FAR	0.50 (with bonus)	0.56
Height	36 feet	35.01 feet
Units and Sized	Two Units @ 3,721.50 SF each unit + basement and 3 cars parking	Three Units @ 2,761 SF each unit + basement and 2 parking spaces

Sustainability Features

- All Electric HVAC, hot water heaters, and mechanical systems and Energy Star appliances
- Commitment to Home Energy Rating System (HERS) - Level 1 Eligibility = 45 HERS Index or lower
- No Fossil fuels
- Pre-wiring for EV charging stations in garages
- Use of LED lighting, High Efficiency Air Circulation Systems, Thermal insulated windows, doors, and foam insulation
- Thermal and Acoustical Insulation between Units
- Liora Silkes Reviewed - Project is above standard





Aerial View of Site



Existing House (view from Langley Road)



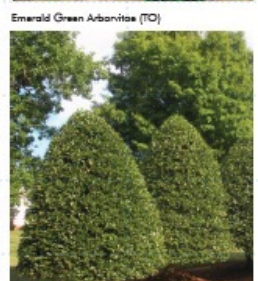
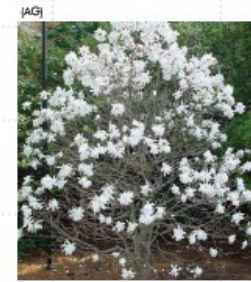
Rendering of New House

The colors displayed on this plan are for illustration purposes and may be affected by the software or hardware used in its creation. Actual colors of materials may vary.



Rendering of New House

The colors displayed on this plan are for illustration purposes and may be affected by the software or hardware used in its creation. Actual colors of materials may vary.



PROPOSED PLANT LIST

QTY	Latin Name	COMMON NAME	SIZE	NOTES
DECIDUOUS TREES				
AG-2	<i>Amelanchier canadensis</i>	Waxberry	6-10' H	10' x 10'
AT-1	<i>Acer saccharum</i>	Sugar Maple	2.5-3' cal	10' x 10'
MS-1	<i>Magnolia stellata</i>	Star Magnolia	1.5' cal	10' x 10'
OP-1	<i>Quercus palustris</i>	Pin Oak	3-3.5' cal	10' x 10'
UA-2	<i>Ulmus americana</i>	Homestead Elm	3-3.5' cal	10' x 10'
EVERGREEN TREES				
OP-2	<i>Thuja occidentalis</i>	Emerald Green Arborvitae	6-8' H	10' x 10'

Existing Tree	To Be Removed	To Be Protected	To Be Added
5+3+2.5+2.5 DBH Norway maple	x		
1" DBH Norway maple		x	
3+3+3+3 DBH Norway maple	x		
4+9+9+10 DBH Alnus		x	
1" DBH Cherry	x		
2" DBH Norway maple	x		
2" DBH Norway maple		x	
1" DBH Norway maple	x		
5+12" DBH Norway maple	x		
1" DBH Oak	x		
1" DBH	x		



Mountain Laurel (KL) Slender Deutzia (JG) Inkberry (IG) Feather Reed Grass (ck)



Blue Holly (LM) Mt. Fire Jap. Andromeda (PJ) Rhododendron Catawbiense (RC) Doublefile Viburnum (VP)



Goatsbeard (af) White Coralbell (hu) Purple Globe bulbs (pl) Bigroot Geranium (gm)



Christmas Fern (pa) Catmint (mf) Red Coralbell (hr) Sage (sn)

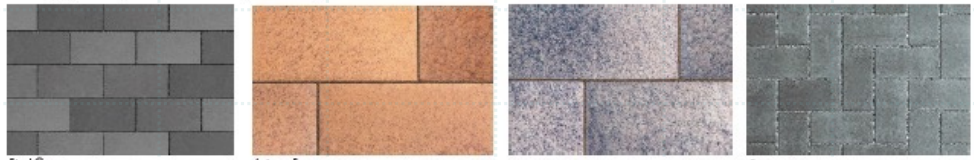
CA 4	<i>Clethra alnifolia</i> Hummingbird	Summerweet Hummingbird	5 gal.	Pots
DS 13	<i>Deutzia gracilis</i>	Slender Deutzia	5 gal.	Pots
HP 2	<i>Hydrangea paniculata</i> Panicle	Panicle Hydrangea	3 gal.	Pots
HQ 4	<i>Hydrangea quercifolia</i>	Oakedleaf Hydrangea	5 gal.	Pots
MI 4	<i>Malva x neoveiana</i> BLUE PRINCESS	Blue Flower	7 gal.	Pots
ES 19	<i>Malva sylvestris</i> Mallow	Soft growing Mallow	2 1/2 gal.	Pots
KL 2	<i>Malva sylvestris</i>	Mountain Laurel	5 gal.	Pots
RJ 1	<i>Platanus japonica</i> Red Head	Japanese Platan	5 gal.	Pots
RA 6	<i>Rosa carolina</i> Va. Gae.	La. Gae. Rose	5 gal.	Pots
RC 7	<i>Rhododendron catawbiense</i>	Catawba Rhododendron	3 1/2 gal.	Pots or Pots
RF 12	<i>Rosa rugosa</i>	Pinkie	3 gal.	Pots
VP 1	<i>Viburnum plicatum</i> F. Tenetoum Mallow	Doublefile Viburnum	7 gal.	Pots

HERBACEOUS	ed 2	<i>Artemisia biennis</i>	Greenleaf	2 gal.
	el 40	<i>Alchemilla vulgaris</i> - perla selection	Purple Globe bulbs	5 gal. or 5 or 5
	sk 12	<i>Coleragobis scutellaria</i> Wolf Flower	Feather Reed Grass	2 gal.
	ep 13	<i>Echinacea purpurea</i>	Purple Coneflower	2 gal.
	gm 18	<i>Geranium mac. 'Bavaria Vierge'</i>	Bigroot Geranium	2 gal.
	hu 6	<i>Hesperis matronalis</i> (RED)	Red Coralbell	1 gal.
	hu 8	<i>Hesperis matronalis</i> (WHITE)	White Coralbell	1 gal.
	pl 8	<i>Hyacinthus orientalis</i> (WHITE)	White Flower	1 gal.
	sn 7	<i>Salvia nemorosa</i> 'Caradonna'	Catmint	2 gal.
	sn 20	<i>Salvia nemorosa</i> 'Caradonna'	Sage	2 gal.

NOTE: Plants subject to substitution based on availability with approval by Landscape Architect



Unit Paving Options: Ecopatria Permeable Pavers by Unilock OR Typical Holland Pavers?



Steel Grey Autumn Sun Winter Marval Granite Blend

Retaining wall options: Thin stone veneer, Versalok concrete block wall



Ashlar Waymouth Granite Stone Veneer [zip concrete wall with stone veneer and capstone] available from Plymouth Quarries
 Versalok - Mosaic Wall, Blended Colors
 Versalok - Standard Wall, Newport Blend



Fencing images shown are options for type and style, the material could be either wood or vinyl

Privacy Board Fence Along Property Lines and Top of Walls: Options for Solid or Open Picket, Flat top or Scalloped

Not to Scale

EXISTING LEGEND

—	SEWER LINE
⊙	SEWER MANHOLE
—	WATER LINE
—	GAS LINE
⊕	UTILITY POLE
⊕	GAS VALVE
—	OVERHEAD ELECTRIC SERVICE
⊕	WATER VALVE
⊕	CATCH BASIN
—	FENCE
—	CONTOUR LINE (M/R)
—	CONTOUR LINE (M/NR)
X	SPOT GRADE
⊕	DRAIN MANHOLE
⊕	HYDRANT
⊕	TREE

ZONING LEGEND

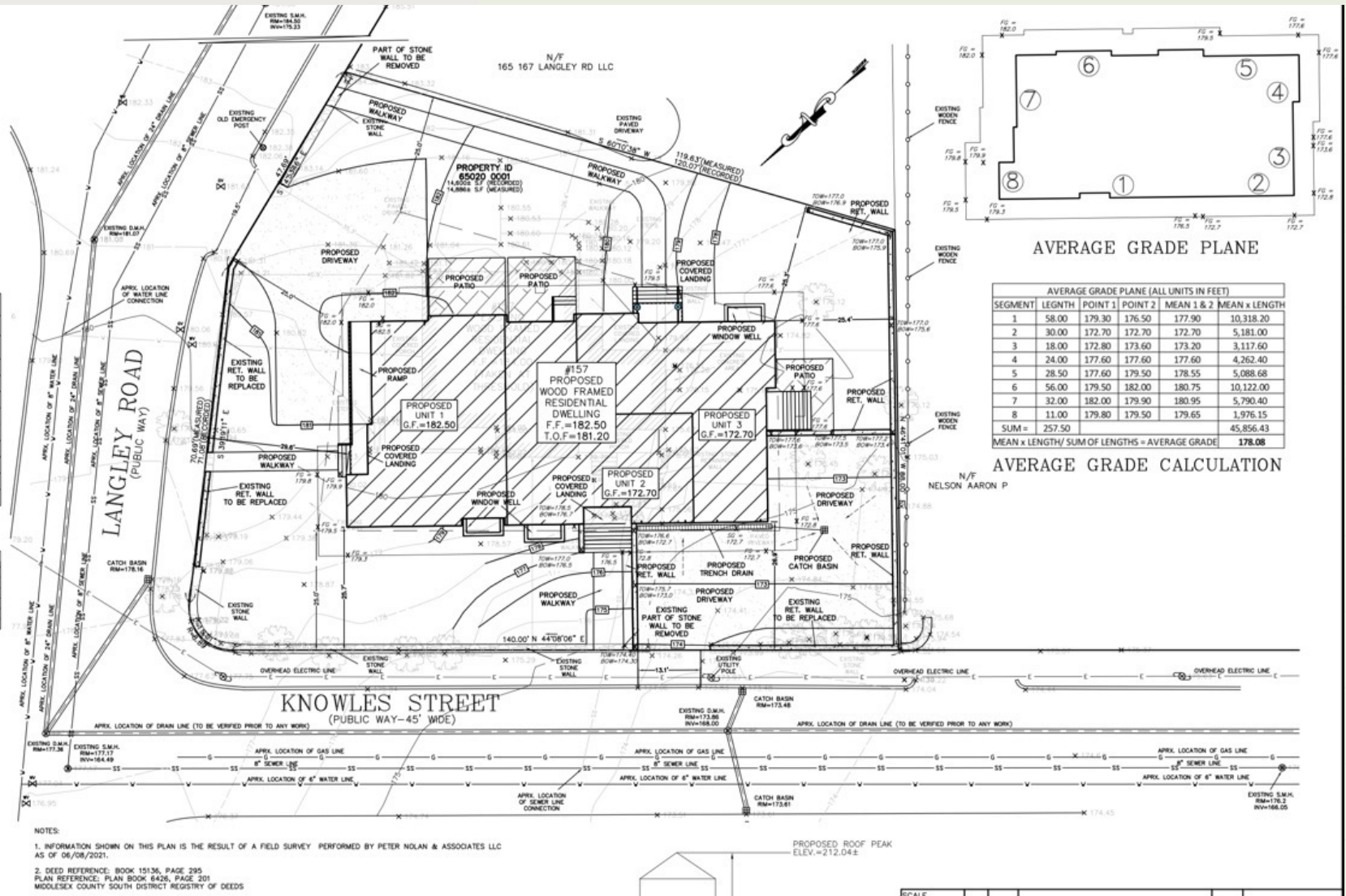
ZONING DISTRICT: MULTI-RESIDENCE 1
(LOT CREATED BEFORE 12/07/1953)

	REQUIRED	PROPOSED
MIN. AREA	7,000 S.F.	14,886 S.F. (MEASURED)
MIN. FRONTAGE	70'	273.39'
MIN. YARD FRONT (LANGLEY)	25'	29.6'
MIN. YARD FRONT (KNOWLES)	25'	25.7'
SIDE	25'	25.4'
REAR	25'	25.3'
MAX. LOT COV.	25%	24.9%
MIN. OPEN SPACE	50%	51%
MAX. BLDG. HEIGHT	36'	33.93'±

* REQUIRED BY SPECIAL PERMIT

EXISTING IMPERVIOUS AREA		PROPOSED IMPERVIOUS AREA	
	EXISTING	HOUSE	PROPOSED
HOUSE	1,815.29 S.F.	HOUSE	3,719.57 S.F.
DRIVEWAY	1,824.92 S.F.	DRIVEWAY	3,184.12 S.F.
PORCH/ LANDING/ STEPS	580.18 S.F.	PORCH/ LANDING/ STEPS	380.39 S.F.
WALKWAY	399.58 S.F.	WALKWAY/ PATIO	1,131.89 S.F.
TOTAL	4,339.93 S.F.	TOTAL	8,427.97 S.F.

EXISTING IMPERVIOUS AREA = 4,339.93 SF
 PROPOSED IMPERVIOUS AREA = 8,427.97 SF
 $8,427.97 \text{ SF} - 4,339.93 = 4,088.04 \text{ SF}$
 WHICH IS BIGGER THAN 4X (=595.44 SF)
 OF LOT (14,886 SF)
 WHICH IS BIGGER THAN 400 SF
 THEREFORE ENGINEERING APPROVAL IS REQUIRED



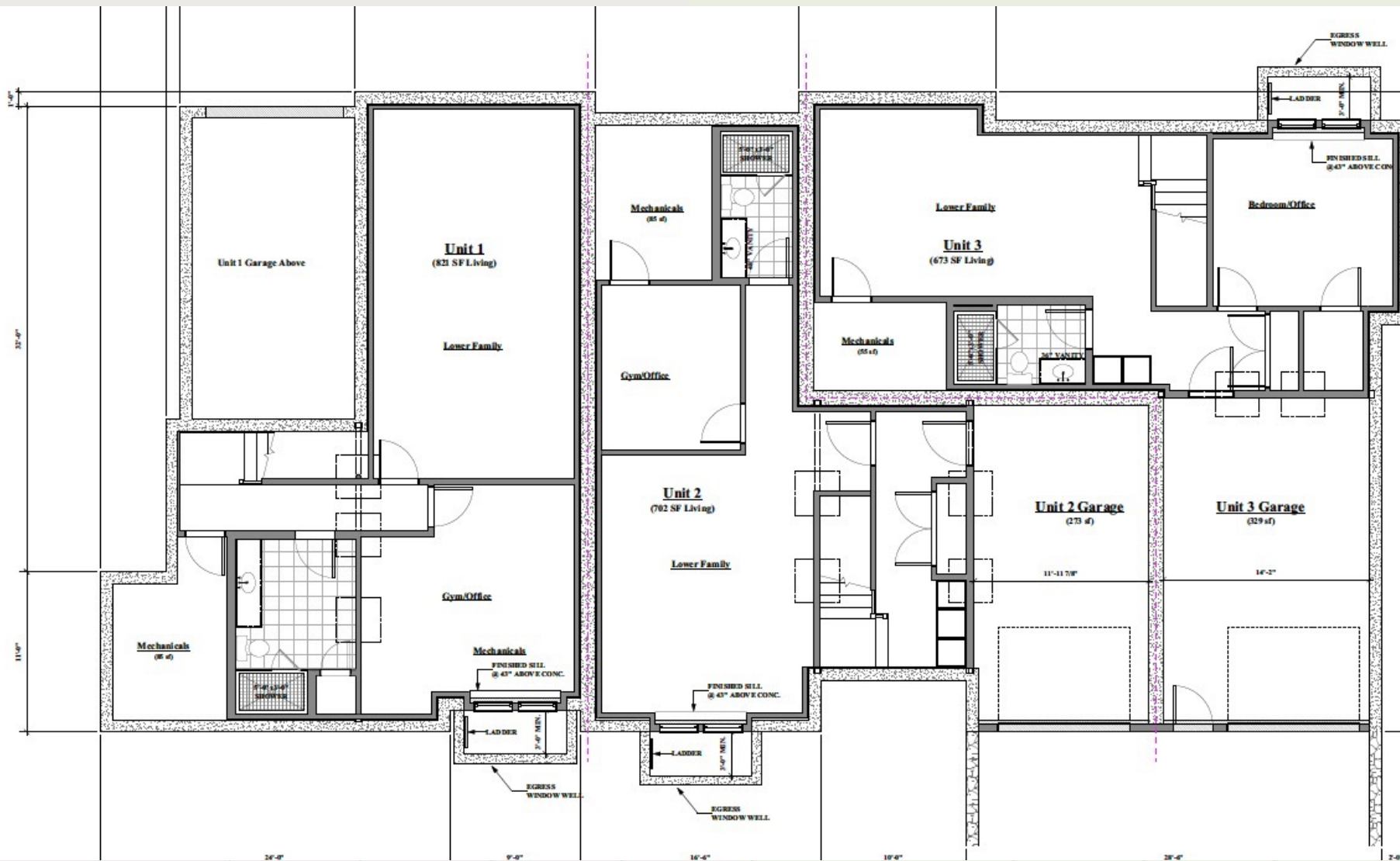
AVERAGE GRADE PLANE

AVERAGE GRADE PLANE (ALL UNITS IN FEET)					
SEGMENT	LENGHTH	POINT 1	POINT 2	MEAN 1 & 2	MEAN x LENGTH
1	58.00	179.30	176.50	177.90	10,318.20
2	30.00	172.70	172.70	172.70	5,181.00
3	18.00	172.80	173.60	173.20	3,117.60
4	24.00	177.60	177.60	177.60	4,262.40
5	28.50	177.60	179.50	178.55	5,088.68
6	56.00	179.50	182.00	180.75	10,122.00
7	32.00	182.00	179.90	180.95	5,790.40
8	11.00	179.80	179.50	179.65	1,976.15
SUM =	257.50				45,856.43
MEAN x LENGTH/ SUM OF LENGTHS = AVERAGE GRADE					178.08

AVERAGE GRADE CALCULATION

- NOTES:**
1. INFORMATION SHOWN ON THIS PLAN IS THE RESULT OF A FIELD SURVEY PERFORMED BY PETER NOLAN & ASSOCIATES LLC AS OF 06/08/2021.
 2. DEED REFERENCE: BOOK 15136, PAGE 295
 PLAN REFERENCE: PLAN BOOK 6426, PAGE 201
 MIDDLESEX COUNTY SOUTH DISTRICT REGISTRY OF DEEDS

SCALE



Langley Road



Langley Road



Second Floor Plan

Q&A

