# SUBDIVISION PLAN NEHANTIC HIGHLANDS SUBDIVISION

APPROVED BY THE EAST LYME PLANNING COMMISSION					
CHAIRMAN/SECRETARY					
APPROVAL DATE					
FILING DATE					
EXPIRATION DATE					
	ENT CONTROL PLAN CERTIFIED BY ME PLANNING COMMISSION ON				
DATE					
CHAIRMAN/SECRETARY					

- BEARNIGS AND COORDMATES NOTICE DEEDEN ARE REFERENCED TO THE CONNECTIONS STATE
  PLANE COORDMATE SYSTEM (NAD 83) EPOCH 2011 (2010.), ELEVATIONS DEPOTED HEREON ARE REFERENCED TO THE NORTH AMERICAL VERTICAL DATIAL OF 1866 (MAYD86)
  PRANSFORED FROM ELIPSOD HEIGHT TO ORTHOMETRIC NECHT UTILIZING MESCHIE CONSTRUCTION OF THE NORTH AMERICAL VERTICAL DATIAL OF 1866 (MAYD86)
  PROMED FROM ELIPSOD HEIGHT TO ORTHOMETRIC NECHT UTILIZING MESCHIE COOK
  SOFTEMBRUE DY QUIGBLE ODSTRUMING SYSTEM (1959) OSSERVATIONS UTUZINOT THE STATE
  OF CONNECTICAT, MANIO THE FOLORMIC VALUE REFERENCE NETWORK (ACORN)
  THESE STATIONS CTION, MANIO THE FOLORMIC VALUE REFERENCE NETWORK (ACORN)

- THIS PLAN REPREGENTS THE LOCATION OF THE BOUNCS AND SITE CONDITIONS DETERMINED BY FIELD SURVEY IN MAY & JUNE 2021.

- ALTA SURVEY PREPARED FOR NET FIVE AT PAUM POINT, LLC LOCATION: WALNUT HILL ROAD & HOLMES ROAD EAST LYME & MONTYALLE, COMMECTICUT DATE: OCTOBER 20, 2010 BY J. ROBERT PEANHER & ASSOCIATES, P.C.
- LOT LINE REVISION WALNUT HILL COUNTRY CLUB 38 HOLMES ROAD EAST LYME, CONNECTICUT DATE: 7-9-03 BY J. ROBERT FFANNER & ASSOCIATES, P.C.
- SUBDIVISION PLAN PROPERTY OF BARBARA J FIALKOSKY KAREN M. FREME & ROBERT J. JANDYIC GRASSY HILL ROAD EAST LYME, CONN. DATED JANUARY 11, 1998 REVISED THRU 6-12-98 SCALE 1"-100" BY J. ROBERT PFANNER & ASSOCIATES, P.C.
- HILLTOP ESTATES, INC. HOLMES ROAD EAST LYME & MONTVILLE, CONN. SECT 1 -- MONTVILLE LOTS 1 TO 28 -- SCALE: 15-100' REV. MAY 10, 1950 BY C. SANNING.

- LOT LINE WODIFICATIONS PROPERTY OF DUVAL PARTNERS LLC HOLMES ROAD, GRASSY HILL ROAD & UPPER WALNUT HILL ROAD EAST LYME, CONNECTICUT SEPTEMBER 2, 2021 REMISE NOVEMBER 15, 2021 BY JAMES BERNARDO LAND SUPPEYING LLC.

# APPLICANT: KRISTEN CLARKE PE & SHELLY HARNEY **HOLMES ROAD &** UPPER WALNUT HILL ROAD EAST LYME, CONNECTICUT

**FEBRUARY 7, 2023** 

# OWNER:

PORT SIDE HOLDINGS INC. & ENGLISH HARBOUR CAPITAL PARTNERS LLC, TENANTS IN

COMMON

207 CLARENDON AVE SOUTHPORT, NC 28461 860-227-1301

APPLICANT:

KRISTEN CLARKE, PE & SHELLY HARNEY 207 CLARENDON AVE SOUTHPORT, NC 28461 860-227-1301

# SURVEYOR:

JAMES BERNARDO LAND SURVEYING, LLC JAMES BERNARDO, LS 102A SPITHEAD ROAD

WATERFORD, CT 06385 860-447-0236

MAY ENGINEERING TIM MAY, PE 1297 RT 163

OAKDALE, CT 06370 860-884-9671

# ATTORNEY:

GERAGHTY & BONNANO LLC ATTY. PAUL GERAGHTY 38 GRANITE STREET NEW LONDON, CT 06320 860-447-8077

# **INDEX TO SHEETS**

**COVER SHEET** 

2 OVERALL BOUNDARY 3 LOT LAYOUT

SITE DEVELOPMENT TEST HOLE DATA

SITE DEVELOPMENT &

STORMWATER DRAINAGE FLOW PATHS

7 **EROSION CONTROL AND** 

**GRADING LOTS 1-4 EROSION CONTROL AND** 

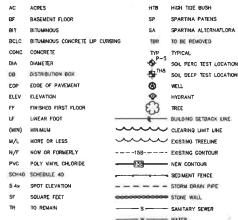
**GRADING LOT 5** 

SIGHT LINE **VERIFICATION LOTS 1-4** 

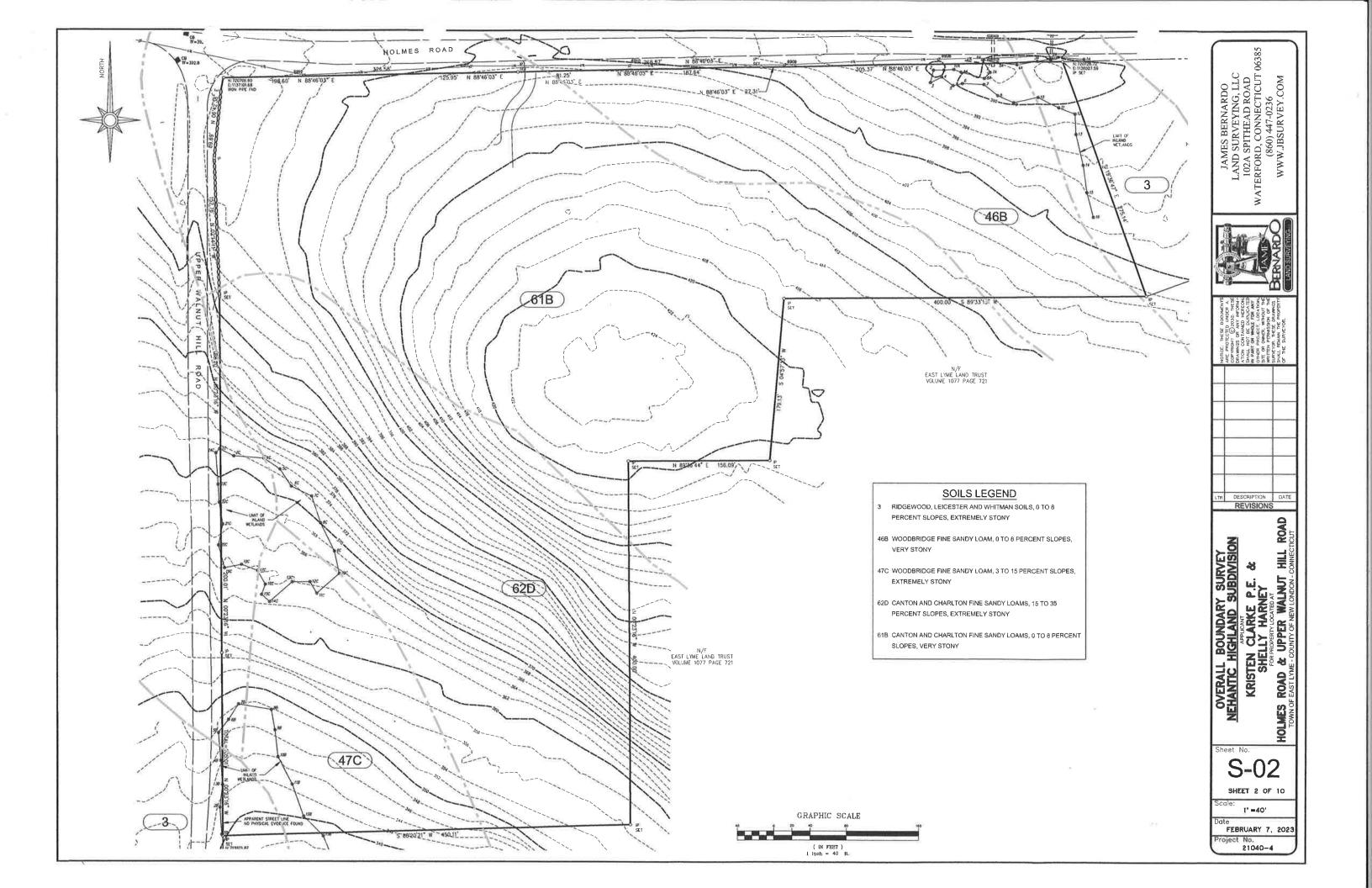
**HOLMES ROAD** SIGHT LINE

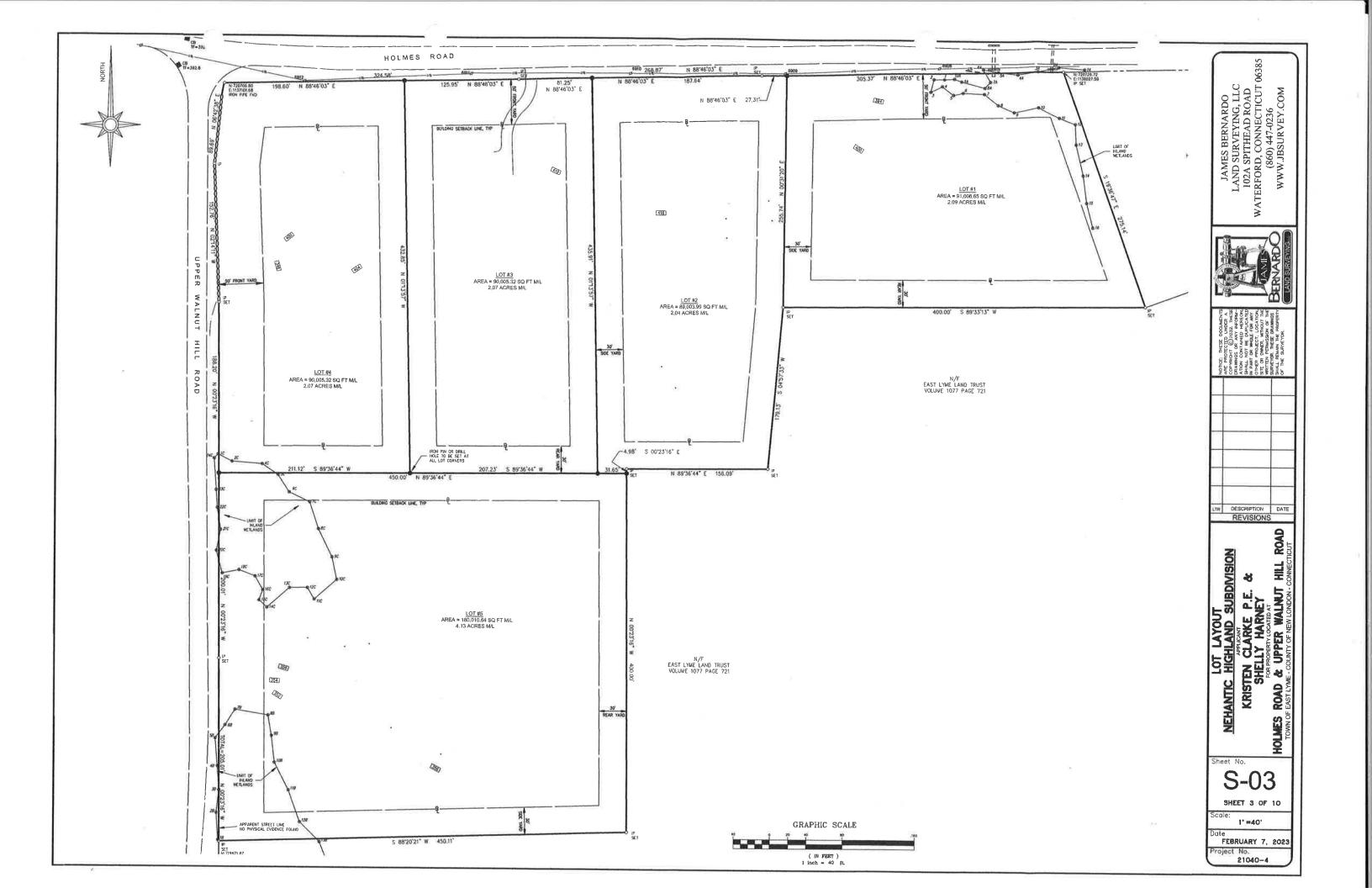
**VERIFICATION LOTS 5** UPPER WALNUT HILL

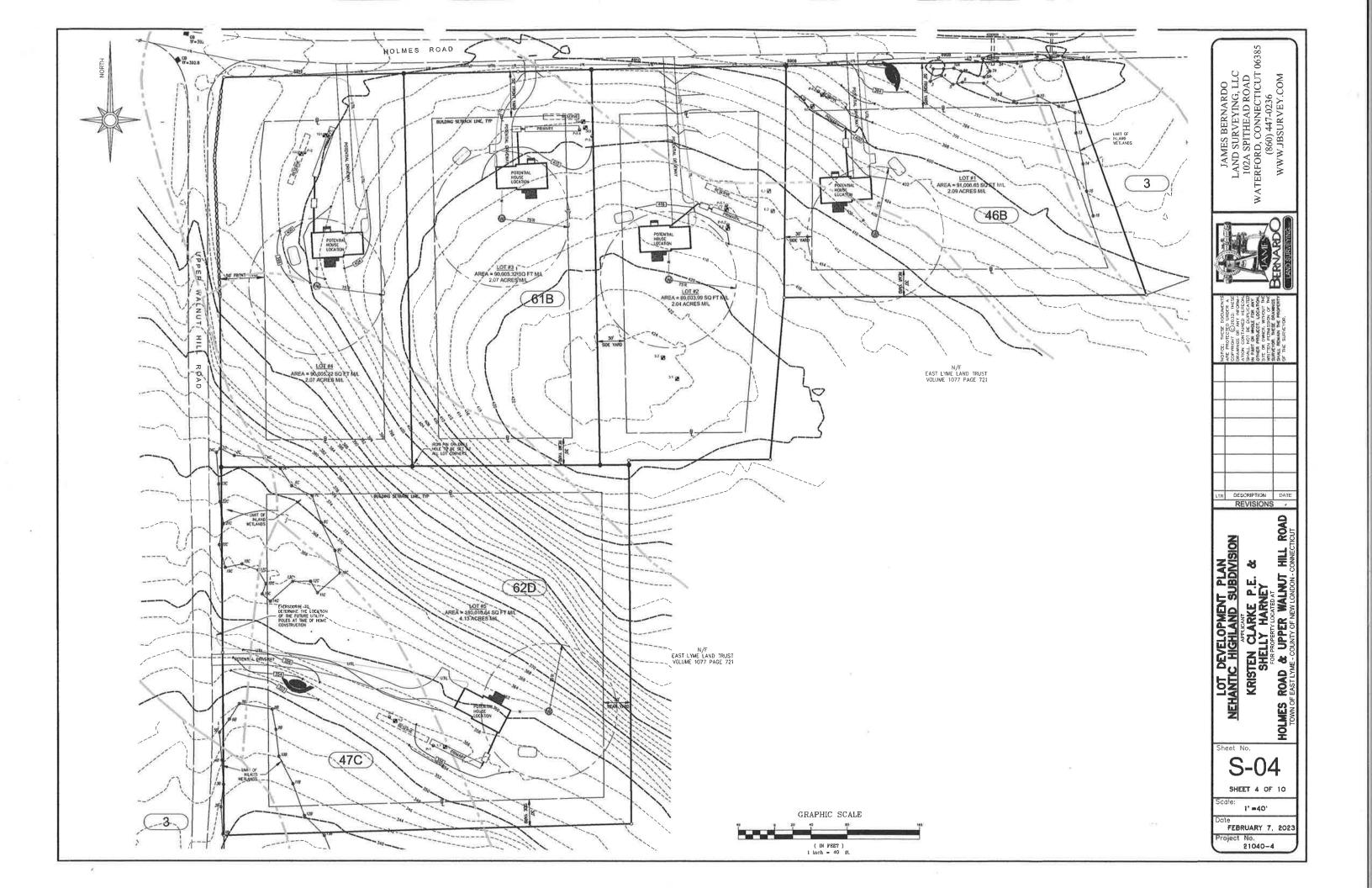
ROAD



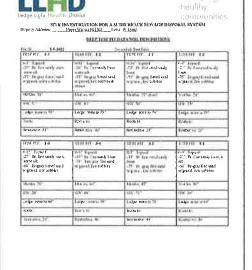
JAMES BERNARDO LICENSE #70121



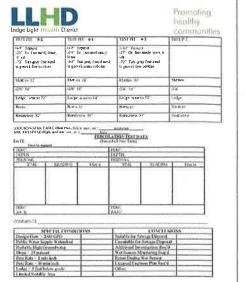




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LLHD







RATE: 15 MINUTES/INCH

HOLE DATA WERE PROVIDED BY THE

SURVEYING , LLC.

NOTE: ALL PERCOLATION TEST AND TEST

APPLICANT KRISTEN CLARKE, PE AND WERE NOT VERIFIED BY JAMES BERNARDO LAND

# JAMES BERNARDO LAND SURVEYING, LLC 102A SPITHEAD ROAD WATERFORD, CONNECTICUT 06 (860) 447-0236 WWW.JBSURVEY.COM

ROAD Figure

NEHANTIC HIGHLAND SUBDIVISION
REISTEN CLARKE P.E. &
SHELLY HARNEY
FOR FROPERTY LOCATED AT
TOWN OF EAST LYME. COUNTY OF NEW LONDON - CONNECTICUT

Sheet No.

S-05

HOLMES

SHEET 5 OF 10

1'=40' FEBRUARY 7, 2023

21040-4

Parc Tests
House Connecticut
Dete: January 19, 2023 Lot # 1 Test No 6.1 Pre soak-8 15am-D 14" 11 0" 9.0" 6 75" 6 75" 5 75" Lot # 1 Ten No. 62 Hole Depth 14' Pre soak-8 20am-Dry 1:00 (refill hole 12") 1:10 1:20 1:30 1:40 1:50 1/0 2.0\* 1.25\* 1.25 1.0\*

Parc Tosts Holman Rhad East Lyme Connectiful Oate: January 19, 2023				
Lot # 2 Test No. 5 I Hale Depth 24				
Pre soak-7 45am-Dry	12:00 0004			
		Reading	Drop	
12:05 (ref.   hole   12 )		24"	n/a	
12.15		19 0"	5.0	
12:25		17 25"	1.75	
1235		16.0.*	1 251	
1245		15.0"	10"	
1.2:59		140	10	
Personalism Rate:			10.0 min/in	
Lot# 2 Test No. 5 2 Hole Depth 24*				
Pre soak 7 50am-Dry	12 00 mon			
		Reading	Drop	
("SI slod lifter) 00:51		24"	n/a	
12 10		1975	4 25"	
1530		18.0"	1 75	
12:00		16.75*	1 25"	
12:40		15.5	1 25	
12 50		14.25.	1 25"	
Presidente Rate			8 minin	

		Lyme Connecticur January 19, 202	
Lot #13 Test No 33 Hote Depth 14"			
Pre soek-8:00 mm-Dry	2:05pm		
		Reading	Drop
205 (dir hole 12)		161	n/a
215		13.5"	2.5"
2 25		11 Q*	2.5*
2:35		9.0"	₹.0*
2 45		7.75"	1.25
2.55		675	70.
Percolation Rate			10.0 mlm n
Lot # 3 Test No. 3 4			
Hole Depth 14"			
Pre soak-8:05am:Dny	2-00pm		
		Reading	Drop
2.00 (reliii hole 12")		16'	F/4
2 10		12 25"	2.73*
2.20		10.01	20
2.30		B 75°	1 25"
2.40		7.5	1.25
250		6 75	1000
3.00		5 875"	.675
Periodicio Rete			1.6 minutes

	East	Holmes Road Lyme Connecticus January 2 202:	
Loc # 6 Test No. 1 Hale Depth 15"			
Pre-soak-8:45am-Dry	1 20pm		
		Reading	D∙ор
1:30 (refili hale 12")		15"	n/a
1:40		9.75	4.25"
1 50		7.25 *	2.5"
2 00		5.5 "	1 75"
2 10		4.0	<u>1.5°</u>
Percolation Rate			67 min/in
Lot # 6 Test No. 2 Note Depth 15"			
Pte wak-7 50em Cry	20pm		
		Rending	Drop
1/35 (refit) hote 12")		151	nia
1.45		11.0*	4.0"
1.55		9 79"	1.25
2:05		8.75	1.0"
210		7.75"	1.0"
2:20			.75
2.10		6.07	1.0
Proceedidos Ruta:			1 4 mln/lin

PROPOSED 4 BEDROOM HOUSE
DESIGN PERCOLATION RATE = 1.0-10.0 MINUTES/INCH
LEACHING AREA REQUIRED = 577.5 SF EFFECTIVE
DESIGN: 1,250 GALLON SEPTIC TANK (MINIMUM) AND 1 ROW, 60LF-GST6212
LEACHING AREA PROVIDED = 675 SF EFFECTIVE
100% RESERVE AREA PROVIDED

HYDRAULIC GRADIENT DEPTH TO RESTRICTIVE LAYER
HYDRAULIC FACTOR
FLOW FACTOR FOR 4 BEDROOMS PERCOLATION FACTOR FOR UP TO 10 MINUTES/INCH = 1.0 MLSS REQUIRED MLSS PROVIDED

LOT #1

LOT #2
PROPOSED 4 BEDROOM HOUSE PROPOSEO 4 BEDROOM HOUSE

DESIGN PERCOLATION RATE = 1.0-10.0 MINUTES/INCH

LEACHING AREA REQUIRED = 577.5 SF EFFECTIVE

DESIGN: 1,250 GALLON SEPTIC TANK (MINIMUM) AND 1 ROW, 60 LF-GST6212

LEACHING AREA PROVIDED = 675 SF EFFECTIVE

100% RESERVE AREA PROVIDED HYDRAULIC GRADIENT

DEPTH TO RESTRICTIVE LAYER HYDRAULIC FACTOR FLOW FACTOR FOR 4 BEDROOMS PERCOLATION FACTOR FOR UP TO 10 MINUTES/INCH MLSS REQUIRED MLSS PROVIDED

LOT #3 PROPOSED 4 BEDROOM HOUSE
DESIGN PERCOLATION RATE = 10.1-20.0 MINUTES/INCH
LEACHING AREA REQUIRED = 787.5 SF EFFECTIVE
DESIGN: 1,250 GALLON SEPTIC TANK (MINIMUM) AND 1 ROW, 62 LF-GST6218
LEACHING AREA PROVIDED = 868 SF EFFECTIVE
100% RESERVE AREA PROVIDED

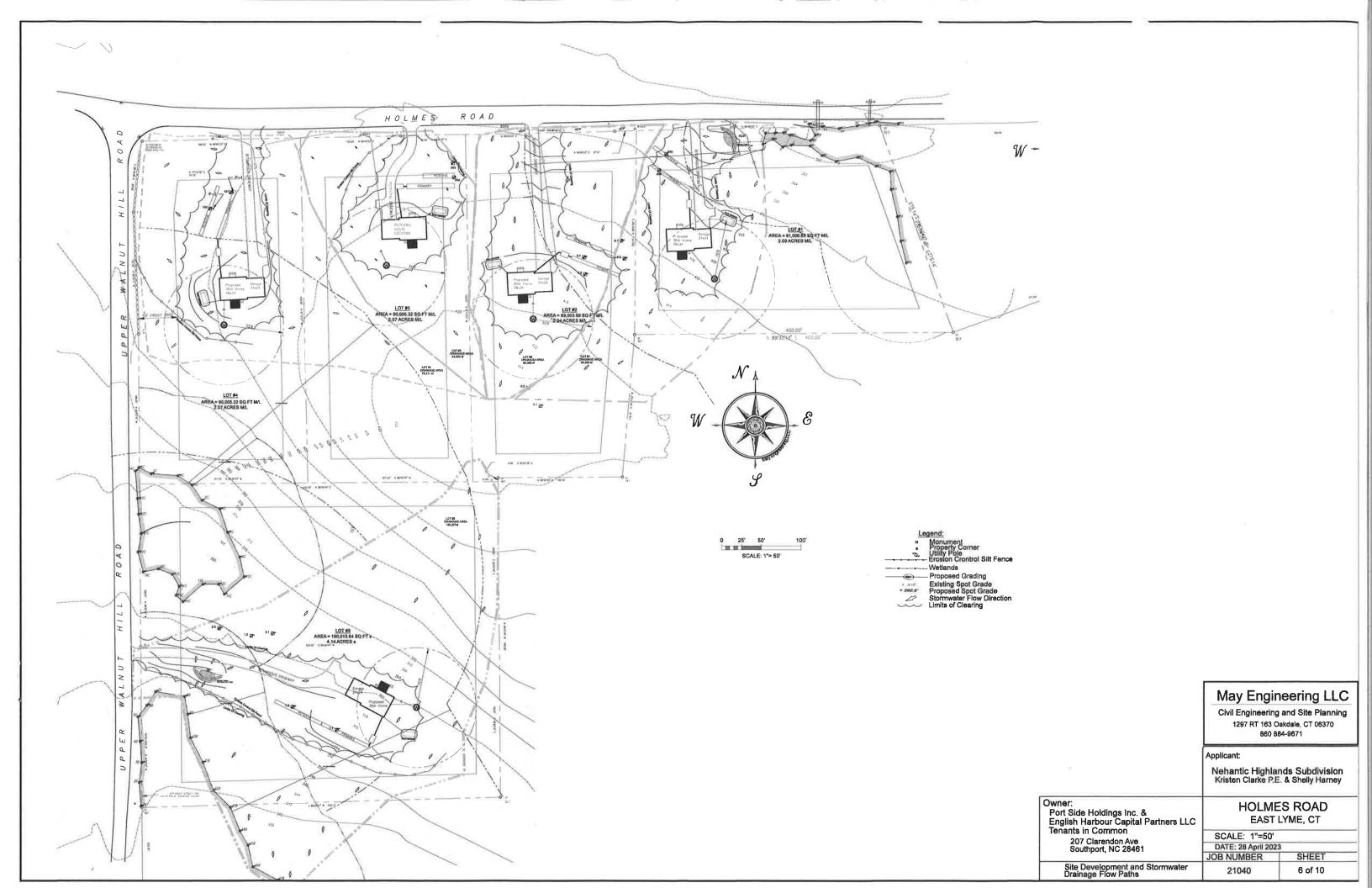
HYDRAULIC GRADIENT DEPTH TO RESTRICTIVE LAYER HYDRAULIC FACTOR FLOW FACTOR FOR 4 BEDROOMS MLSS REQUIRED · 61.25° MLSS PROVIDED # 62'

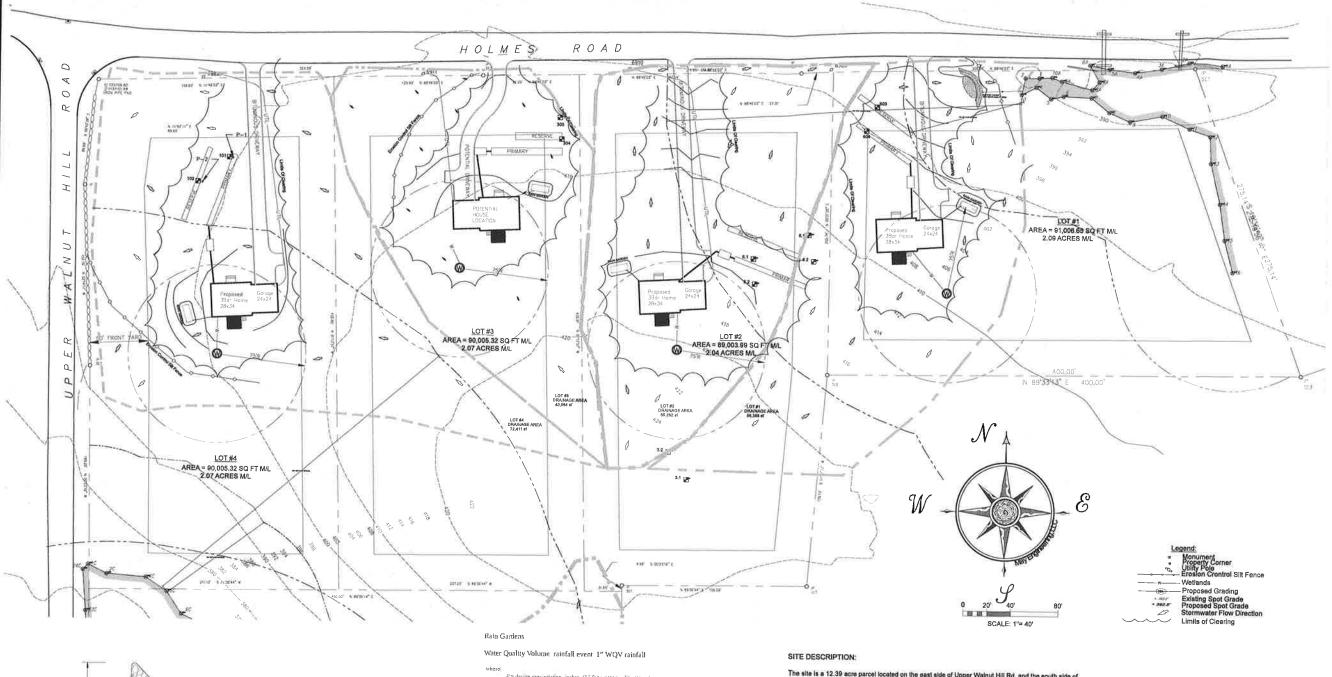
LOT #4 PROPOSED 4 BEDROOM HOUSE
DESIGN PERCOLATION RATE = 10.1-20.0 MINUTES/INCH
LEACHING AREA REQUIRED = 787.5 SF EFFECTIVE
DESIGN: 1.250 GALLON SEPTIC TANK (MINIMUM) AND 1 ROW, 58 LF-GST6212
LEACHING AREA PROWDED = 812 SF EFFECTIVE
100% RESERVE AREA PROWDED

MLSS CALCULATION NEED NOT BE CONSIDERED, DEPTH TO RESTRICTIVE LAYER GREATER THAN  $60\ensuremath{^{\circ}}$ 

PROPOSED 4 BEDROOM HOUSE PROPOSED 4 BEDROOM HOUSE
DESIGN PERCOLATION RATE = 10,1-20.0 MINUTES/INCH
LEACHING AREA REQUIRED = 787.5 SF EFFECTIVE
DESIGN: 1,250 GALLON SEPTIC TANK (MINIMUM) AND 1 ROW, 82 LF-GST6218
LEACHING AREA PROVIDED = 868 SF EFFECTIVE
100% RESERVE AREA PROVIDED HYDRAULIC GRADIENT

DEPTH TO RESTRICTIVE LAYER
HYDRAULIC FACTOR
FLOW FACTOR FOR 4 BEDROOMS
PERCOLATION FACTOR FOR UP TO 10 MINUTES/INCH MLSS REQUIRED = 61.25

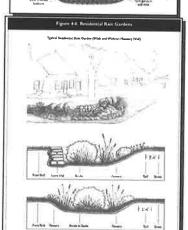






SEDIMENT FOREBAY

WITH WATER QUALITY BERM

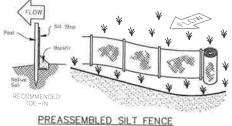


The site is a 12.39 acre parcel located on the east side of Upper Walnut Hill Rd, and the south side of Holmes Rd in the Town of East Lyme, CT. The proposed site development is for 5 residential subdivision lots. The parcel was previously part of the Hathaway Farm property, and is an undeveloped wooded parcel with mature dociduous trees and dense understory of brush, with slopes ranging from 3% to 10%. There are wellands and water courses located on this parcel. The soil type is primarily a hydraulic soil group 8 consisting of Canton-Cariton fine sandy loams and Woodbridge fine sandy loam. The soil types were evaluated for their permeability and have a moderate infiltration rate throughout the site.

aite.

The existing stormwater drainage flow paths for proposed tots #1 & 2 flow across the parcels in a northeasterly direction to the existing drainage path along Holmes Rd, and then into the wetlands south side of Holmes Rd. Stormwater drainage flows for proposed lots #3 & 4 flow across the parcel in a northwestern direction into the existing drainage paths along Holmes Rd, and Upper Walnut Hill Rd. Stormwater drainage flows for proposed to #5 flows south west across the parcel lots wetland on the east side of Upper Walnut hill Rd. The stormwater then flows onto the surrounding adjacent property as shallow concentrated flow dispersing into the woods or wetland areas. No evidence of channelized flows or ponding is observed. flows or ponding is observed.

The proposed 5 residential subdivision lots will have less than 1/2 ac of disturbance for each lot. Water



SOIL EROSION & SEDIMENTATION CONTROL NOTES

E & S plan is based on Connecticut Guidelines for Soll Erosion and Sediment Control\*

Install Erosion Control silt fence as depicted on this plan
All disturbed areas shall have erosion control installed down gradient to stop soil migration. After each rainfall event erosion control shall be inspected and repairs to insure silt fence integrity to stop silt migration off site.

Unnecessary clearing of any vegetation or ground cover will be avoided. Any disturbed area left unvegetated will be covered with a hay or straw mulch to minimite erosion

Seed Mixture Seeding Rate Red Fescue Colonial Bentgrass-Exeter Perennial Ryegrass Birdsfoot Trefoil-Empire

Any proposed vegetation which has not survived one growing season will be replaced,

All suitable material excavated for roadway construction to be used elsewhere on site Unsuitable material will be removed from the site and deposited in a suitable location.

All construction activity to occur between March 15 and October 15 to avoid adverse

Less than (1/2) of an acre of disturbance is proposed for this site plan.

# May Engineering LLC

Civil Engineering and Site Planning 1297 RT 163 Oakdale, CT 06370 860 884-9671

# Applicant:

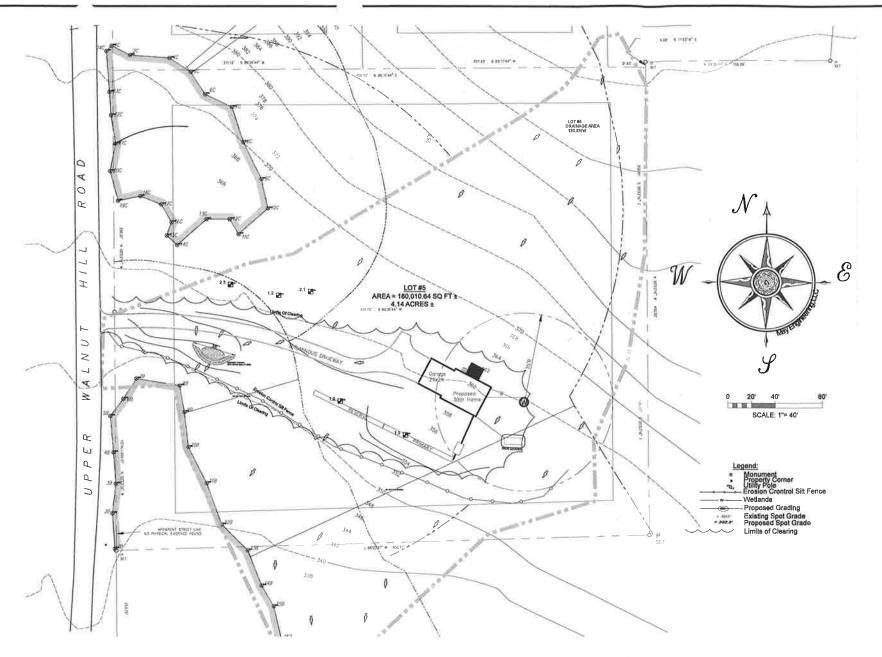
Nehantic Highlands Subdivision Kristen Clarke P.E. & Shelly Harney

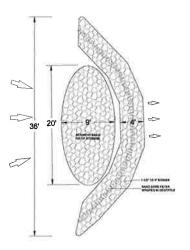
Owner:	
Port Side Holdings Inc. &	
English Harbour Capital Partners	LC
Tenants in Common	
207 Clarendon Ave	
Southport, NC 28461	

Erosion Control and Grading Plan Lots 1-4

**HOLMES ROAD** EAST LYME, CT SCALE: 1"=40'

DATE: DATE: 28 April 2023 JOB NUMBER SHEET 7 of 10 21040





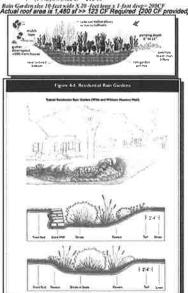


SEDIMENT FOREBAY WITH WATER QUALITY BERM

# Rain Gardens

# Water Quality Volume rainfall event 1" WQV rainfall

P= dosign precipitation, inches (1" for water quality storm) A= drainage area (acres) toof area 2,400 sf >> 0.055 ac V= numble volume CF=(1713) a 2400 sf = 200 CF=(1713) a 2400 sf = 200 CF=(1713) and V=(1713) and



# SITE DESCRIPTION:

The site is a 12,38 scre parcel located on the east side of Upper Welnut Hill Rd, and the south side of Holmes Rd in the Town of East Lyme, CT. The proposed site development is for 5 residential subdivision lots. The parcel was previously part of the Halhaway Farm property, and is an undeveloped wooded parcel with meture deciduous trees and dense understory of brush, with slopes renging from 3% to 10%. There are wetlands and water courses located on this percel. The soil type is primarily a hydraulic soil group B constelling of Centon-Cartion fine sandy loams and Woodbridge fine sandy loams The soil types were evaluated for their permeability and have a moderate infiltration rate throughout the

site.

The skitting stormwater drainage flow paths for proposed lots #1 & 2 flow across the parcels in a northeasterly direction to the existing drainage path along Holmas Rd, and then into the wellands south side of Holmas Rd. Stormwater drainage flows for proposed lots #3 & 4 flow across the parcel in a northwestern direction into the existing drainage paths along Holmas Rd, and Upper Walnut Hill Rd. Stormwater drainage flows for proposed lot #3 & 4 flow across the parcel in a northwestern direction into the existing drainage paths along Holmas Rd, and Upper Walnut Hill Rd. Stormwater drainage flows for proposed lot #5 flows south west across the parcel into welland on the east side of Upper Walnut Hill Rd. The stormwater then flows onto the surrounding adjacent property as the flows contained flow interaction for the specific workland area. We adjacent of the proping of the p shallow concentrated flow dispersing into the woods or wetland areas. No evidence of channelized

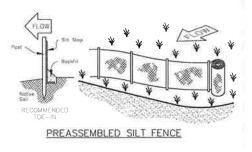
shallow concentrated flow dispersing into the woods or wetland areas. No evidence of channelized flows or ponding is observed.

The proposed 5 residential subdivision lots will have less than ½ ac of disturbance for each lot. Water quality volumes WQV will be implemented by the use of rain gardens to capture the roof runoff and will reduce the Water Quality Pion (WQF). Each parcel will have peved driveweys and grassed lewns. Additional water quality measures are proposed to slow down stormwater velocities and reduce sediment loads prior to stormwater entering the wellands. A sediment forebay stong with a water quality bem is proposed to intercept flows from Lot #1.8 ½ and another is proposed to intercept flows from Lot #5. The proposed sediment forebay slong and water quality berm are designed using the Connecticut Stormwater Quality Manuel. Each Sediment forebay is designed with a shallow basin, with 150 of storage that will allow stormwater to settle out sediments. The water quality berm is a mound of 1-1/2" to 3" stones with geotextile & sand core filter, that is designed to reduce stormwater velocities and improve water quality.

mound of 1-1/2" to 3" stories with gotextuse a sand core filter, that is designed to reduce stormwater velocities and improve water quality.

Stormwater will be managed during construction with a soil and erosion control plan using best management practices (BMP's) from the ConnDOT Drainage Manual and the Connecticut Stormwater Quality Manual. Stormwater will also be managed by treatment controls for stormwater discharges.

These will include rain gardens for all roof discharges to militigate water quality volumes (WQV) for the 1" rain fall, Designed devices such as sadiment forebay and water quality berms designed to intercept stormwater, reduce sediment and slow velocities before intering into the wetlands.



SOIL EROSION & SEDIMENTATION CONTROL NOTES

E & S plan is based on Connecticut Guidelines for Soll Erosion and Sediment Control\*

All disturbed areas shall have erosion control installed down gradient to stop soil migration. After each rainfall event erosion control shall be inspected and repairs to insure silt fence integrity to stop silt migration off site.

Unnecessary clearing of any vegetation or ground cover will be avoided. Any disturbed area left unvegetated will be covered with a hay or straw mulch to minimize erosion

Following final grading, all disturbed areas will be covered with 6" loam and seeded as described below. If final grading occurs past October 15, disturbed areas will be seeded with winter rye- grass and mulched with hay or straw at a rate of 1.5 - 2 tons per acre.

Seed Mixture Seeding Rate % by Wt., Lbs./Ac.

Red Fescue 75-100

Colonial Bentgrass-Exeter 5
Personal Byserces 7
Personal Researces 7-

Perennial Ryegrass Birdsfoot Trefoil-Empire

Any proposed vegetation which has not survived one growing season will be replaced.

All suitable material excavated for roadway construction to be used elsewhere on site. Unsuitable material will be removed from the site and deposited in a suitable location

All construction activity to occur between March 15 and October 15 to avoid adverse

Less than (1/2) of an acre of disturbance is proposed for this site plan.

# May Engineering LLC

Civil Engineering and Site Planning 1297 RT 163 Oakdale, CT 06370 860 884-9671

Applicant:

Nehantic Highlands Subdivision Kristen Clarke P.E. & Shelly Harney

**HOLMES ROAD** EAST LYME, CT

Owner: Port Side Holdings Inc. & English Harbour Capital Partners LLC	
Tenants in Common 207 Clarendon Ave	SCAL
Southport, NC 28461	DATE
	JOB NU

LE: 1"=40' : 28 April 2023 UMBER SHEET Erosion Control and Grading Plan Lot #5 21040 8 of 10

