

Conceptual Lot Development: Lot 1
SCALE: 1"=40'

Conceptual Lot 1 Development

TEST PIT DATA
NDNH File No. 12000186
Testing Conducted on 2/15/18
by Terra Bombard, R.S.

TP 6A-1 (2018)
Mottles: N/O
Ground Water: N/O
Ledge: 67"
0-9" Topsoil/Roots
9-28" Very Fine Loomy Sand/Moist
28-67" Compact Very Fine Loomy Sand

TP 6A-2 (2018)
Mottles: 20"
Ground Water: 20"
Ledge: 67"
0-8" Topsoil
8-20" Very Fine Loomy Sand/Wet
20-56" Groundwater

TP 3 (2019)
Mottles: 30"
Ground Water: N/O
Ledge: N/O
Roots: 42"
0-12" Topsoil
12-30" OB/YB Fine Sandy Loom
30-70" GR Sandy Loom Till. Mottled

PERCOLATION TEST DATA
Performed by CLA Engineers, Inc. on 9/28/20

| Time | Measuredown (Inches) | Change (inches) |
|------|----------------------|-----------------|
| 3:00 | 12" | - |
| 3:05 | 15" | -3 |
| 3:10 | 18" | -3 |
| 3:15 | 20" | -2 |
| 3:20 | 21" | -1 |
| 3:25 | 22.5" | -1.5 |
| 3:30 | 24" | -1.5 |

Min. Perc Rate = 4 min./inch

SEPTIC SYSTEM DESIGN
PRIMARY LEACHING AREA
3 BEDROOM RESIDENCE
PERCOLATION RATE: 4 MIN./INCH
LEACHING AREA REQUIRED: 495 SF

USE 12"x48" STONE TRENCH
EFFECTIVE LEACHING AREA OF LEACHING TRENCH 3.0 SF/LF
REQUIRED LENGTH = 495 SF / 3.0 SF/LF = 165 LF

MLSS CALCULATION
HYDRAULIC FACTORS
DEPTH TO RESTRICTIVE LAYER = 20"
SLOPE = 6 VF / 71 LF = 8.4%
HYDRAULIC FACTOR (HF) = 30
FLOW FACTOR (FF) = 1.5
PERCOLATION FACTOR (PF) = 1.0 (UP TO 10.0 MIN./INCH)
MLSS REQUIRED: 30 x 1.5 x 1.0 = 45 LF

PROPOSED SYSTEM
USE 3 ROWS OF 55 LF
LEACHING AREA PROVIDED = 495 SF

RESERVE LEACHING AREA
USE SAME AS PRIMARY SYSTEM

Conceptual Lot 2 Development

TEST PIT DATA
NDNH File No. 12000186
Testing Conducted on 8/6/20
by Sherry McGinn, R.S.

TP 6-1
Mottles: 28"
Ground Water: N/O
Roots: 28"
Ledge: 94"
0-12" Topsoil
12-28" OB Fine Sandy Loom
28-94" GR Mottled Sandy Loom Till

TP 6-2
Mottles: 32"
Ground Water: N/O
Roots: 32"
Ledge: 100"
0-13" Topsoil
13-32" OB Fine Sandy Loom
32-100" GR Mottled Sandy Loom Till

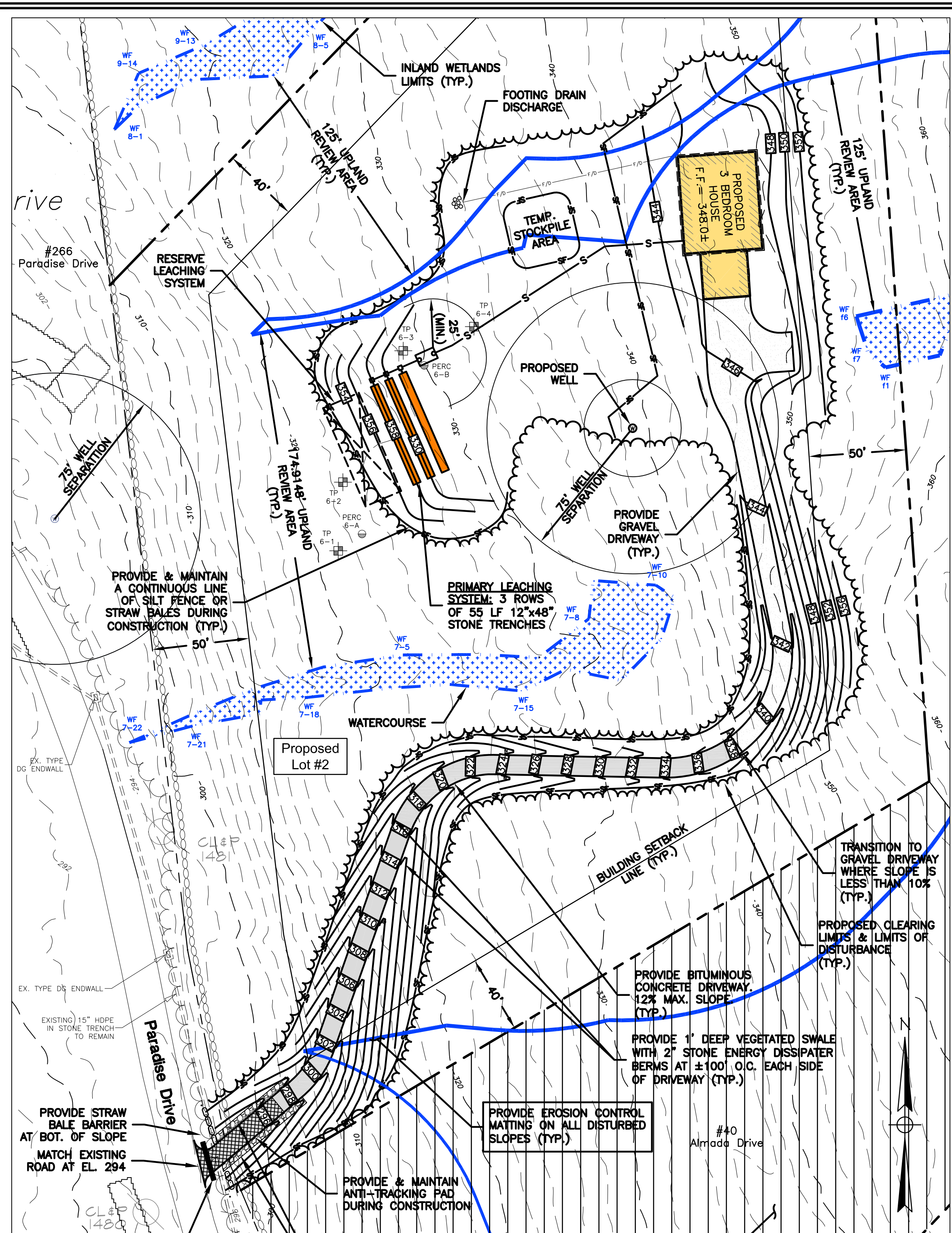
TP 6-3
Mottles: 24"
Ground Water: N/O
Roots: 24"
Ledge: 84"
0-8" Topsoil
8-24" RB Fine Sandy Loom
24-84" GR Mottled Sandy Loom Till

TP 6-4
Mottles: 30"
Ground Water: N/O
Roots: 30"
Ledge: 89"
0-11" Topsoil
11-30" YB/RB Fine Sandy Loom
30-89" GR Mottled Sandy Loom Till

PERCOLATION TEST DATA
Performed by CLA Engineers, Inc. on 8/6/20

| Time | Measuredown (Inches) | Change (inches) |
|------|----------------------|-----------------|
| 1:16 | 3.25 | - |
| 1:18 | 7.25 | 4 |
| 1:20 | 9 | 1.75 |
| 1:22 | 11 | 2 |
| 1:24 | 12.25 | 1.25 |
| 1:26 | 13.25 | 1 |
| 1:28 | 14.5 | 1.25 |
| 1:30 | 15.5 | 1 |
| 1:32 | 16.5 | 1 |
| 1:34 | 17 | 0.5 |
| 1:36 | 17.5 | 0.5 |
| 1:38 | 18 | 0.5 |
| 1:40 | 18.5 | 0.5 |
| 1:42 | 19 | 0.5 |

Perc Rate = 4 min./inch



Conceptual Lot Development: Lot 2
SCALE: 1"=40'

PROVIDE 20 LF 2-8" PVC (C900) OR DUCTILE IRON CULVERTS TO CONVEY FLOW FROM THE SWALE
INV.IN=293.6
INV.OUT=293.0

SEPTIC SYSTEM DESIGN
PRIMARY LEACHING AREA
3 BEDROOM RESIDENCE
PERCOLATION RATE: 4 MIN./INCH
LEACHING AREA REQUIRED: 495 SF

USE 12"x48" STONE TRENCH
EFFECTIVE LEACHING AREA OF LEACHING TRENCH 3.0 SF/LF
REQUIRED LENGTH = 495 SF / 3.0 SF/LF = 165 LF

MLSS CALCULATION
HYDRAULIC FACTORS
DEPTH TO RESTRICTIVE LAYER = 24"
SLOPE = 10 VF / 86 LF = 11.6%
HYDRAULIC FACTOR (HF) = 28
FLOW FACTOR (FF) = 1.5
PERCOLATION FACTOR (PF) = 1.0 (UP TO 10.0 MIN./INCH)
MLSS REQUIRED: 28 x 1.5 x 1.0 = 39 LF

PROPOSED SYSTEM
USE 3 ROWS OF 55 LF
LEACHING AREA PROVIDED = 495 SF

RESERVE LEACHING AREA
USE SAME AS PRIMARY SYSTEM

CLA Engineers, Inc.
CIVIL · STRUCTURAL · SURVEYING

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Subdivision Plan Prepared for Paul R. Lehto
#40 Almada Drive, Brooklyn, Connecticut

Two Lot Resubdivision
40 Almada Drive
Brooklyn, Connecticut

Lot Development Plan
Lot 1 & Lot 2

Project No. CLA-6383
Proj. Engineer K.J.H.
Date: 3/31/2021
Sheet No. 7



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