DEEP TEST PIT & PERC. TEST DATA

TP#1
0 - 14" FILL TOPSOIL, AND BROWN SANDY FILL WITH GRAVEL
14 - 31" LIGHT BROWN TO GREY FIRM SAND SOME GRAVEL
(LOOSE-FIRM), FILTER FABRIC AT 14"
31 - 42" SAME AS ABOVE BUT SILTY AND GREY
42 - 74" GREY FIRM SAND (LOOSE)
REDOX/MOTTLES: HEAVY AT 31" SOME AT 22" (28" PER LRC 2/21/13)
GW: 72" - LEDGE: NO - ROOTS: NO - FILTER FABRIC AT 14"
PERCOLATION RATE AT TP #1 = 10.0 MIN./IN., 28" DEEP
(PER LRC LETTER 2/21/13)

TP#2
0 - 11" TOPSOIL
11 - 30" LIGHT BROWN FINE SANDY LOAM LOOSE, SOME SILT AND GRAVEL
30 - 80" GREY SANDY TILL, VERY FIRM
REDOX/MOTTLES: 31" - GW: SEEPS AT 70" - LEDGE: NO REFUSAL-
ROOTS: MOST TO 27"
PERCOLATION RATE AT TP #2 = 8.0 MIN./IN., 24" DEEP
(PER LRC LETTER 2/21/13)

TEST PITS AS WITNESSED AND DESCRIBED BY DON MITCHELL, 2/6/13
LOCATION SHOWN AS DESCRIBED IN LETTER FROM LRC DATED 2/21/13
AND ARE THEREFORE APPROXIMATE.

HYDRAULIC FACTORS (HF)

	Hydraulic Gradient (% Slope)							
	0-0.5	0.5-1.0 1-2	2.1-3.0	3.1-4.0	4.1-5.0	5.1-8.0	8.1-12.0	12.1-16.0	>16.0
	See Comments in Section VIII A								
0-12 (<12)									
12.1 - 24.0	52	62	54	46	42	34	28	26	
24.1 - 30.0	48	54	48	42	34	30	28	26	24
30.1 - 36.0	42	49	42	38	34	30	28	26	24
36.1 - 48.0	40	42	34	30	28	26	24	22	20
48.1 - 60.0	36	38	30	28	26	24	22	20	18
60.1 - 72.0	34	32	28	26	24	22	20	18	16
72.1 - 84.0	30	28	26	24	22	20	18	16	14
>84.0	MLSS Need Not be Considered								

Receiving Soil Depth (Inches)

B100A SEPTIC DESIGN

DAILY FLOW (PER TABLE 4):
TOTAL BUILDING AREA = 8,939 FT²
DESIGN FLOW FOR INDUSTRIAL BUILDING (PER FT²) = 0.1
8,939 FT² X 0.1 GPD = 894 GALLONS PER DAY

USE A MINIMUM 1,000 GALLON SEPTIC TANK

REQUIRED EFFECTIVE LEACHING:
DAILY FLOW = 894 GAL.
PERC. RATE = <10.1 MIN./IN
REQ. ELA = DAILY FLOW / APP. RATE (TABLE 8)
REQUIRED ELA = 894 / 1.5 = 596 FT² OF LEACHING

MLSS CALCULATION:
SLOPE = 11.1%
AVG. RL = 29.5
HF = 24

FLOW FACTOR = DAILY FLOW / 300
894 / 300 = 1.99

PERC FACTOR (<10.1 MIN/IN) = 1.0

MLSS = 24 X 1.99 X 1.0 = 47.8'

USE 1 ROW OF GST6212 @ 10.0 FT² OF LEACHING PER LINER FT X
60' OF TRENCH = 600 FT² OF LEACHING PROVIDED (596 FT² REQUIRED)

GEOMATRIX GST "LEACHING SYSTEM
8<#' CROSS SECTION

Finished Grade shall be pitched to sheet flow stormwater away from system

Cover material depth shall be >6" and shall be uniform over system

ASTM C-33 Sand (or approved equivalent)

Filter Fabric

Distribution Pipe* CT DOT No. 6 stone

*P

*H

≥2"

≥2"

62"

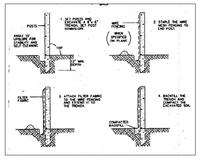
*Hs 6" (GST6206)
12" (GST6212)
18" (GST6218)
24" (GST6224)
30" (GST6230)
36" (GST6236)

*Pe 2" - 5.5"
"3" min, I.D., ASTM D-3034, SDR 35 pipe for gravity applications
0.75" min, I.D., ASTM D-2665, SCH 40 PVC pipe for pressure applications

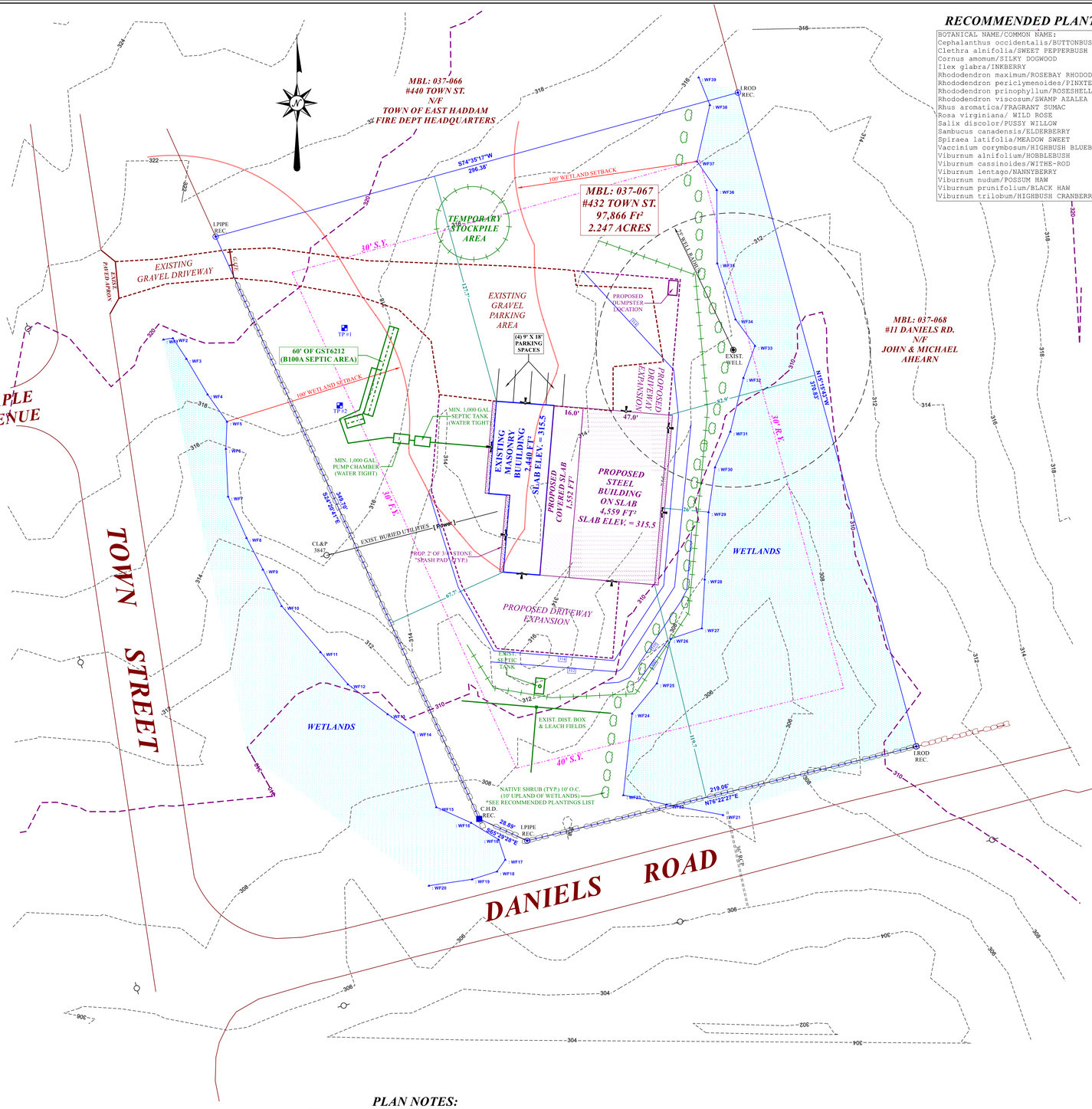
GEOMATRIX SYSTEMS, LLC
DECEMBER 2004 Revised 2/2006
8-8' Cross Section
Geomatrix Systems, LLC, Killingworth, CT
Date: 12/2004 Scale: NTS
Drawn By: JMC Checked By: JMC

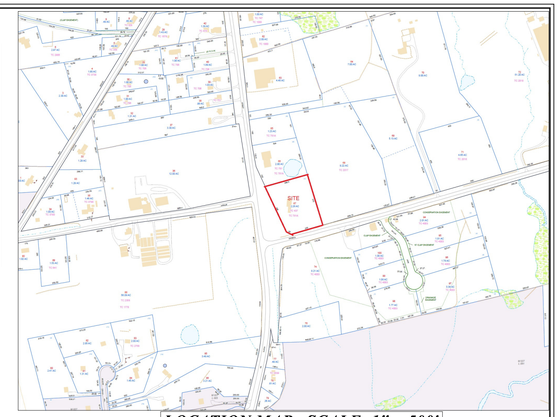
ZONING COMPLIANCE CHART - ZONE: IG-2

	REQUIRED	PROVIDED
MINIMUM LOT AREA	1 ACRE	2.247 ACRES
MINIMUM LOT WIDTH	150'	224.31'
FRONT YARD SETBACK	30'(W)	67.7'(W)
SIDE YARD SETBACK	30'(N) - 40'(S)	127.7'(N) - 119.7'(S)
REAR YARD SETBACK	30'(E)	82.9'(E)
MAX. BUILDING COVERAGE	20%	9.2%
MAX. BUILDING HEIGHT	30'	SEE ARCH. PLANS



SILT FENCE DETAIL





LOCATION MAP - SCALE: 1" = 500'

RECOMMENDED PLANTINGS LIST:

BOTANICAL NAME/COMMON NAME:	MATURE SIZE:
Cephalanthus occidentalis/BUTTONBUSH	10'
Clethra alnifolia/SWEET PEPPERBUSH	8'
Cornus amomum/SILKY DOGWOOD	8'-10'
Ilex glabra/INKBERRY	6'
Rhododendron maximum/ROSEBAY RHODODENDRON	10'-15'
Rhododendron periclymenoides/PINXTER-FLOWER	6'
Rhododendron prinophyllum/ROSESHELL AZALEA	8'
Rhododendron viscosum/SWAMP AZALEA	9'
Rhus aromatica/FRAGRANT SUMAC	3'-6'
Rosa virginiana/ WILD ROSE	6'
Salix discolor/PUSSY WILLOW	10'-15'
Sambucus canadensis/ELDERBERRY	10'-12'
Spiraea latifolia/MEADOW SWEET	2'-4'
Vaccinium corymbosum/HIGHBUSH BLUEBERRY	6'-10'
Viburnum alnifolium/HOBBLEBUSH	10'
Viburnum cassinoides/WITHE-ROD	6'
Viburnum lentago/NANNYBERRY	15'
Viburnum nudum/POSSUM HAW	10'
Viburnum prunifolium/BLACK HAW	15'
Viburnum trilobum/HIGHBUSH CRANBERRY	12'

APPROVED BY THE EAST HADDAM PLANNING AND ZONING COMMISSION

CHAIRMAN/SECRETARY DATE

CONSTRUCTION NOTES

NO CHANGE IN PLAN LOCATION OR ELEVATION SHALL BE MADE WITHOUT NOTIFYING THE ENGINEER AND THE PROPER TOWN AUTHORITY.

THE ENGINEER SHALL BE NOTIFIED PRIOR TO CONSTRUCTION TO SET LOCATION AND GRADE STAKES FOR THE SUBSURFACE SEWAGE DISPOSAL SYSTEM TO INCLUDE: FILL MATERIAL, SEPTIC TANK, PRIMARY LEACH SYSTEM. SIMILAR STAKING REQUIRED FOR ALL CURTAIN AND FOUNDATION DRAINS AND WELL.

NO SOIL STRIPPING OR EXCAVATION SHALL BEGIN WITHIN THE AREA OF THE SUB-SURFACE SEWAGE DISPOSAL SYSTEM WITHOUT A VALID CONSTRUCTION PERMIT.

A LICENSED SEWAGE DISPOSAL SYSTEM INSTALLER SHALL OBTAIN A CONSTRUCTION PERMIT AND ARRANGE FOR THE SITE INSPECTION PRIOR TO CONSTRUCTION. THE SYSTEM SHALL BE INSTALLED IN ACCORDANCE WITH THIS PLAN AND ALL APPLICABLE STATE, AND LOCAL RULES, REGULATIONS AND CODES.

TOPSOIL TO BE STRIPPED AND STOCKPILED PRIOR TO ANY FILLING. SCARIFY AREA BEFORE FILLING. AVOID STRIPPED AREA WITH HEAVY VEHICLES ON WHEELS TO MINIMIZE COMPACTION. PLACE FILL AT EDGE OF PREPARED AREA AND SPREAD WITH BULLDOZER IN 6" LIFTS AND COMPACT TO 90% MAXIMUM DENSITY.

SANITARIAN TO INSPECT ANY FILL OVER 24" DEEP PRIOR TO CONSTRUCTION.

TRENCH BOTTOMS SHALL BE LEVEL AND SET TO FOLLOW CONTOURS OF EXISTING GRADE. TRENCH LATERALS SHALL BE LEVEL WITH PERFORATIONS DOWNWARD.

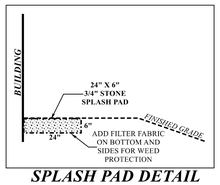
NO CONSTRUCTION BELOW ORIGINAL GRADE IN THE LEACHING SYSTEM AREA SHALL TAKE PLACE WITHIN 48 HOURS OF A RAINSTORM OR WITH STANDING PUDDLES.

ALL FOOTING DRAINS, CURTAIN DRAINS AND SUBSURFACE SEWAGE DISPOSAL SYSTEM COMPONENTS SHALL BE INSPECTED BY THE TOWN AND LOCATED "AS-BUILT" BY THE ENGINEER/LAND SURVEYOR PRIOR TO COVERING. INSPECTION SHALL BE WITHIN 2 WORKING DAYS FOLLOWING TIMELY NOTIFICATION BY THE CONTRACTOR TO PROTECT OPEN WORK FROM SILTATION AND EROSION.

ALL DISTURBED AREAS SHALL BE GRADED, LOAMED , AND SEEDED AS SOON AS POSSIBLE AFTER CONSTRUCTION. IF SEEDING CANNOT TAKE PLACE DURING THE GROWING SEASON, A TEMPORARY MULCH COVER SHALL BE PLACED AND MAINTAINED UNTIL PERMANENT/COVER CAN BE ESTABLISHED.

A LICENSED WELL DRILLER SHALL OBTAIN A PERMIT PRIOR TO ANY DRILLING. THE WELL SHALL BE PROVIDED IN ACCORDANCE WITH THIS PLAN AND ALL APPLICABLE STATE AND LOCAL REGULATIONS AND CODES.

SATISFACTORY COMPLETION OF ALL THE ABOVE REQUIREMENTS SHALL PRECEED THE FINAL INSPECTION AND APPROVAL OF THE SUBSURFACE SEWAGE DISPOSAL SYSTEM AND WELL.



SPLASH PAD DETAIL
N.T.S.

EROSION CONTROL NOTES

GENERAL REQUIREMENTS FOR EROSION CONTROL:

A SCHEDULE OF OPERATIONS TO INCLUDE STARTING AND COMPLETION DATES FOR MAJOR DEVELOPMENT PHASES, SUCH AS LAND CLEARING AND GRADING, STREET, SIDEWALK, AND STORM SEWAGE INSTALLATION, ETC.

SEEDING, SODDING, OR REVEGETATION PLANS AND SPECIFICATIONS FOR ALL UNPROTECTED OR UNVEGETATED AREAS SHALL BE IMPLEMENTED AS SOON AS POSSIBLE.

EXCAVATIONS , FILLS AND GRADING :

CUT AND FILL SLOPES SHALL NOT BE STEEPER THAN 3:1 UNLESS STABILIZED BY A RETAINING WALL OR CRIBBING, EXCEPT AS APPROVED BY THE COMMISSION UNDER SPECIAL CONDITIONS.

ADEQUATE PROVISIONS SHALL BE MADE TO PREVENT SURFACE WATER FROM DAMAGING THE CUT FACE OF EXCAVATION OR THE SLOPING SURFACES OF FILLS.

CUT AND FILLS SHALL NOT ENDANGER ADJOINING PROPERTY.

FILL SHALL BE PLACED AND COMPACTED SO AS TO MINIMIZE SLIDING OR EROSION OF THE SOIL.

GRADING SHALL NOT BE DONE IN SUCH A WAY SO AS TO DIVERT WATER ONTO THE PROPERTY OF ANOTHER LANDOWNER WITHOUT THE EXPRESSED CONSENT OF THAT LANDOWNER AND THE COMMISSION.

FILLS SHALL NOT ENCROACH ON THE NATURAL WATERCOURSES OR CONSTRUCTED CHANNELS.
DURING GRADING OPERATIONS, NECESSARY MEASURES FOR DUST CONTROL SHALL BE EXERCIZED.

GRADING EQUIPMENT WILL NOT BE ALLOWED TO CROSS LIVE STREAMS EXCEPT BY MEANS OF BRIDGES AND CULVERTS OR OTHER METHODS AS APPROVED BY THE COMMISSION.

IMPLEMENTATION PROCEDURES:

WHEREVER FEASIBLE, NATURAL VEGETATION SHOULD BE RETAINED AND PROTECTED.

ONLY THE SMALLEST PRACTICAL AREA OF LAND SHOULD BE EXPOSED AT ANY ONE TIME DURING DEVELOPMENT.

WHEN LAND IS EXPOSED DURING DEVELOPMENT, THE EXPOSURE SHOULD BE KEPT TO THE SHORTEST PRACTICAL PERIOD OF TIME.

WHERE NECESSARY, TEMPORARY VEGETATION AND/OR MULCHING SHOULD BE USED TO PROTECT AREAS EXPOSED DURING DEVELOPMENT.

THE PERMANENT FINAL VEGETATION AND STRUCTURES SHOULD BE INSTALLED AS SOON AS PRACTICAL IN THE DEVELOPMENT.

LEGEND

- DEEP TEST PIT / PERC TEST
- WETLAND FLAG
- I.P. AS NOTED
- C.H.D. MONUMENT
- SILT FENCE
- 314 PROPOSED CONTOUR
- WALL PACK LIGHT

SITE PLAN

PREPARED FOR

SCOTT ERLANDSON

432 TOWN STREET - EAST HADDAM, CONNECTICUT
SCALE 1" = 30' - DECEMBER 5, 2024
REVISED: 2/3/25

0 30' 60'

REFERENCE NOTE

THIS SURVEY AND MAP HAVE BEEN PREPARED PURSUANT TO THE REGULATIONS OF CONNECTICUT STATE AGENCIES SECTIONS 20-300B-1 THROUGH 20-300B-20 AND THE "STANDARDS FOR SURVEYS AND MAPS IN THE STATE OF CONNECTICUT" ADOPTED FOR USE BY THE CONNECTICUT ASSOCIATION OF LAND SURVEYORS, INC. ON SEPTEMBER 26, 1996.

THE TYPE OF SURVEY IS "ZONING LOCATION SURVEY".

THE BOUNDARY DETERMINATION CATEGORY IS "DEPENDENT RESURVEY".

THE HORIZONTAL ACCURACY CONFORMS TO "A-2" STANDARDS.

MAP REFERENCE:

PROPERTY TO BE CONVEYED BY SHOREHAM IMPROVEMENT CO. TO TABER DE FOREST - TOWN STREET AT DANIELS ROAD - EAST HADDAM, CONN. - SCALE 1" = 60' - 1 FEB. 1963 - BY PAUL KAYE, L.S.

EAST HADDAM SURVEY CONFIRMING DEED DISTANCES OF RECORD FOR A PORTION OF THE FRANK S. HUNTER ADAMO EASTATE (SECOND PIECE) - SCALE: 1" = 50' - AUG. 1973 - BY R.A. DUTCH, P.E., L.S.

BOUNDARY PLAN - DANIELS ROAD ESTATES - DANIELS ROAD - EAST HADDAM, CONNECTICUT - SCALE: 1" = 50' - DATE FEBRUARY 10, 2006 - REVISED THRU 9/26/06 - BY VOLLMER ASSOCIATES

PLAN NOTES:

NORTH SHOWN PER NORTH AMERICAN DATUM OF 1983

ELEVATIONS SHOWN ARE LIDAR BASED, AND ARE ON THE NORTH AMERICAN VERTICAL DATUM OF 1988.

SEPTIC LOCATION PER SITE INVESTIGATION BY OWNER AND RECORD AS-BUILT

WETLANDS DELINEATED BY ERIC DAVISON, SOIL SCIENTIST, 11/5/24 AND LOCATED BY DUTCH & ASSOCIATES

PROPOSED BUILDING IS NOT INTENDED TO HAVE GUTTERS.
A 2' "SPASH PAD" TO BE INSTALLED BELOW DRIP EDGE.

TOPSOIL STRIPPED FOR CONSTRUCTION TO BE USED TO "TOP DRESS" AND/OR BE REMOVED FROM THE SITE

WALL PACK LIGHTS TO BE FULL CUT OFF AND DARK SKY COMPLIANT

STATE OF CONNECTICUT JOHN R. MARTINELLI No. 19464 LICENSED PROFESSIONAL ENGINEER

"TO MY KNOWLEDGE AND BELIEF
THIS MAP IS SUBSTANTIALLY CORRECT
AS NOTED HEREON."

CHARLES R. DUTCH, L.S. 15776 LICENSE NUMBER

STATE OF CONNECTICUT CHARLES R. DUTCH No. 15776 LICENSED LAND SURVEYOR

DUTCH & ASSOCIATES
LAND SURVEYORS
392 SOUTH MAIN STREET, COLCHESTER, CONN.
PHONE: (860) 537-3465

JOB NO. 24-194

Traverse PC