SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Department of Human Services
Division of Health Engineering
(207) 287-5672 FAX (207) 287-4172

PROPERTY LOCATION

City, Town, or Plantation	Crystal
Street or Road	Crystal Road RT.#159
Subdivision, Lot #	LOT 2

>> CAUTION: PERMIT REQUIRED - ATTACH IN SPACE BELOW <<

The th... CRYSTAL ... PERMIT # 1134 ... STATE COPY
s ... Date Permit Issued: 5/12/07 ... $ 100.00 FEE ☐ If Double Fee Charged
Local Plumbing Inspector Signature ... L.P.I. # 09103

OWNER / APPLICANT INFORMATION

Name (last, first, MI) — ■ Owner ■ Applicant
Adams, Dennis

Mailing Address of Owner / Applicant	P.O.Box 37 Patten, Me. 04765
Daytime Tel. #	207-462-8484

Municipal Tax Map # 01 Lot # 8915

OWNER OR APPLICANT STATEMENT
I state and acknowledge that the information submitted is correct to the best of my knowledge and understand that any falsification is reason for the Department and/or Local Plumbing Inspector to deny a Permit.
Kent M Willeys — 5-11-07
Signature of Owner or Applicant — Date

CAUTION: INSPECTION REQUIRED
I have inspected the installation authorized above and found it to be in compliance with the Subsurface Wastewater Disposal Rules Application.
5/15/07 — (1st) date approved
Local Plumbing Inspector Signature — 6/17/07 (2nd) date approved

PERMIT INFORMATION

TYPE OF APPLICATION
■ 1. First Time System
☐ 2. Replacement System
Type replaced: _____
Year installed: _____
☐ 3. Expanded System
☐ a. Minor Expansion
☐ b. Major Expansion
☐ 4. Experimental System
☐ 5. Seasonal Conversion

THIS APPLICATION REQUIRES
■ 1. No Rule Variance
☐ 2. First Time System Variance
☐ a. Local Plumbing Inspector Approval
☐ b. State & Local Plumbing Inspector Approval
☐ 3. Replacement System Variance
☐ a. Local Plumbing Inspector Approval
☐ b. State & Local Plumbing Inspector Approval
☐ 4. Minimum Lot Size Variance
☐ 5. Seasonal Conversion Permit

DISPOSAL SYSTEM COMPONENTS
■ 1. Complete Non-engineered System
☐ 2. Primitive System (graywater & alt. toilet)
☐ 3. Alternative Toilet, specify: _____
☐ 4. Non-engineered Disposal Area
☐ 5. Holding Tank, _____ gallons
☐ 6. Non-engineered Disposal Field (only)
☐ 7. Separated Laundry System
☐ 8. Complete Engineered System (2000 gpd or more)
☐ 9. Engineered Treatment Tank (only)
☐ 10. Engineered Disposal Field (only)
☐ 11. Pretreatment, specify: _____
☐ 12. Miscellaneous Components

SIZE OF PROPERTY
6.5± ☐ SQ. FT. ■ ACRES

SHORE LAND ZONING
☐ Yes ■ No

DISPOSAL SYSTEM TO SERVE
■ 1. Single Family Dwelling Unit, No. of Bedrooms: 3
☐ 2. Multiple Family Dwelling, No. of Units: ____
☐ 3. Other: _____
(specify)
Current Use ☐ Seasonal ☐ Year Round ■ Undeveloped

TYPE OF WATER SUPPLY
■ 1. Drilled Well ☐ 2. Dug Well ☐ 3. Private
☐ 4. Public ☐ 5. Other

DESIGN DETAILS (SYSTEM LAYOUT SHOWN ON PAGE 3)

TREATMENT TANK
■ 1. Concrete
☐ a. Regular
■ b. Low Profile
☐ 2. Plastic
☐ 3. Other: _____
CAPACITY: 1000 GAL.

DISPOSAL FIELD TYPE & SIZE
☐ 1. Stone Bed ☐ 2. Stone Trench
■ 3. Proprietary Device
☐ a. Cluster array ■ c. Linear
■ b. Regular load ☐ d. H-20 load
☐ 4. Other: _____
SIZE: 1152 ■ sq. ft. ☐ lin. ft.

GARBAGE DISPOSAL UNIT
■ 1. No ☐ 2. Yes ☐ 3. Maybe
If Yes or Maybe, specify one below:
☐ a. multi-compartment tank
☐ b. ___ tanks in series
☐ c. increase in tank capacity
☐ d. Filter on Tank Outlet

DESIGN FLOW
270 gallons per day
BASED ON:
■ 1. Table 501.1 (dwelling unit(s))
☐ 2. Table 501.2 (other facilities)
SHOW CALCULATIONS
— for other facilities —
3 Bedrooms at 90 at gallons each=270 gallons per day
☐ 3. Section 603.0 (meter readings)
ATTACH WATER METER DATA

SOIL DATA & DESIGN CLASS
PROFILE CONDITION DESIGN
1 / AIII(C) 1
at Observation Hole # TP-1
Depth 16" Ground Water
of Most Limiting Soil Factor

DISPOSAL FIELD SIZING
☐ 1. Small — 2.0 sq. ft. / gpd
☐ 2. Medium — 2.6 sq. ft. / gpd
☐ 3. Medium — Large 3.3 sq. ft. / gpd
■ 4. Large — 4.1 sq. ft. / gpd
☐ 5. Extra Large — 5.0 sq. ft. / gpd

EFFLUENT / EJECTOR PUMP
■ 1. Not Required
☐ 2. May Be Required
☐ 3. Required
Specify only for engineered systems:
DOSE: _____ gallons

LATITUDE AND LONGITUDE
at center of disposal area
Lat. 46 d 00 m 092 s
Lon. 68 d 24 m 092 s
if g.p.s. state margin error: 16" ±

SITE EVALUATOR STATEMENT

I certify that on 11-20-06 (date) I completed a site evaluation on this property and state that the data reported are accurate and that the proposed system is in compliance with the State of Maine Subsurface Wastewater Disposal Rules (10-144A CMR 241).

William K Hersey — Site Evaluator Signature
60 — SE #
12-5-06 — Date

WILLIAM K. HERSEY — Site Evaluator Name Printed
(207) 498-2108 — Telephone Number
SoilDogger@Juno.com — E-mail Address

Note: Changes to or deviations from the design should be confirmed with the Site Evaluator.

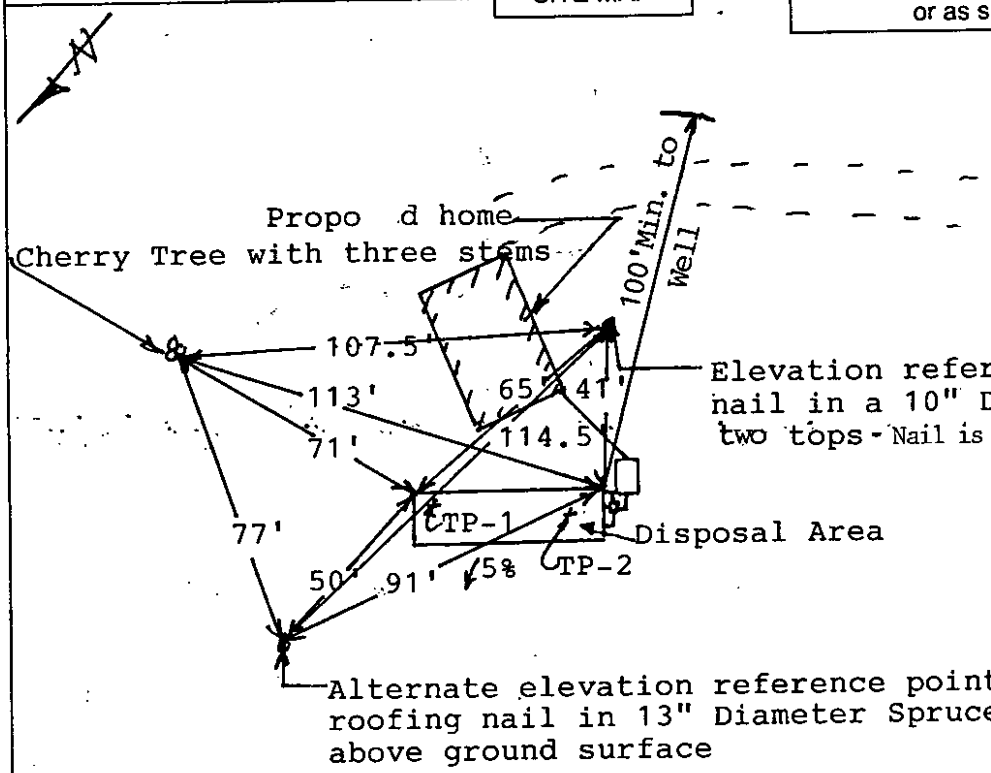
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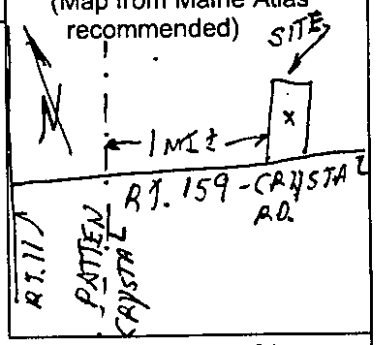
Town, City, Plantation	Street, Road, Subdivision	Owner's Name
Crystal	LOT 2 Crystal Road RT.#159	Adams, Dennis

SITE MAP

Scale 1" = 50 ft. or as shown



SITE LOCATION PLAN
(Map from Maine Atlas recommended)



SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown Above)

Observation Hole 1 ■ Test Pit ☐ Boring

" Depth of Organic Horizon Above Mineral Soil

DEPTH BELOW MINERAL SOIL SURFACE (inches)

Texture	Consistency	Color	Mottling
0 Gravelly Silt Loam	Friable	Brown	
10		Yellowish Brown	Few Faint Common Distinct
20		Grayish Brown	Many Distinct
30 Ledge			
40			
50			

Soil Classification	Slope	Limiting Factor	
1 Profile / AIII(C) Condition	5 %	16 "	■ Ground Water ☐ Restrictive Layer ☐ Bedrock ☐ Pit Depth

Observation Hole 2 ■ Test Pit ☐ Boring

" Depth of Organic Horizon Above Mineral Soil

DEPTH BELOW MINERAL SOIL SURFACE (inches)

Texture	Consistency	Color	Mottling
0 Gravelly Silt Loam	Friable	Dark Yellowish Brown	
10		Yellowish Brown	Few Faint Common Distinct
20	Firm	Grayish Brown	Many Distinct
30 Limit of Excavation			
40			
50			

Soil Classification	Slope	Limiting Factor	
1 Profile / C Condition	5 %	18 "	■ Ground Water ☐ Restrictive Layer ☐ Bedrock ☐ Pit Depth

William K. Hussey
Site Evaluator Signature

60
SE #

12-5-06
Date

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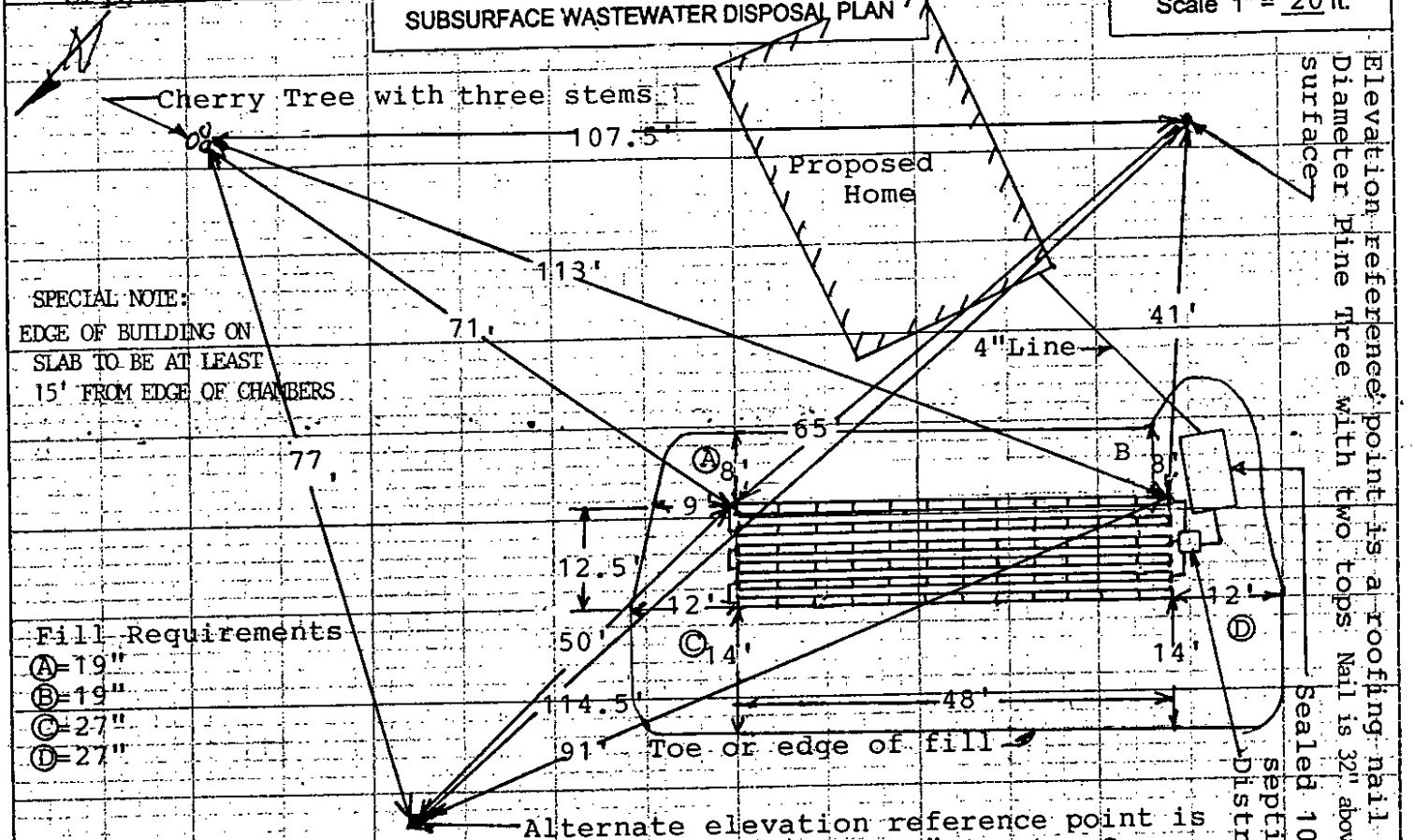
Town, City, Plantation: Crystal

Street, Road, Subdivision: Lot 2 Crystal Road RT. #159

Owner's Name: Adams, Dennis

SUBSURFACE WASTEWATER DISPOSAL PLAN

Scale 1" = 20 ft.



SPECIAL NOTE:
EDGE OF BUILDING ON SLAB TO BE AT LEAST 15' FROM EDGE OF CHAMBERS

Fill Requirements
Ⓐ=19"
Ⓑ=19"
Ⓒ=27"
Ⓓ=27"

Alternate elevation reference point is a roofing nail in a 13"Diameter Spruce Tree 79"above ground surface

Installation consists of 6 rows of 12 Quick-4 EQ-24 11"high by 15"wide by 4'long plastic chambers with 12"between rows
TOTAL=72 Chambers

NOTES:
1. INSTALLATION TO COMPLY WITH CHAPTER 8 ATTACHED.
2. DO NOT USE WHEELED VEHICLES ON DISPOSAL AREA DURING INSTALLATION.
3. CONTRACTOR TO FIELD VERIFY THAT CUT AND/OR FILL REQUIREMENTS AND THE CONSTRUCTION ELEVATIONS SHOWN ON PAGES THREE & FOUR ARE CONSISTENT.

FILL REQUIREMENTS		CONSTRUCTION ELEVATIONS		ELEVATION REFERENCE POINT	
Depth of fill (Upslope)	19"	Finish Grade Elevation	-30"	Location & Description	SEE ABOVE
Depth of fill (Downslope)	27"	Top of Distribution Pipe or Proprietary Device	-40"	Reference Elevation	00"
		Bottom of Disposal Area	-51"		
		Bottom Gravelly Coarse Sand Pad	-57"		

SEE PAGE FOUR FOR CROSS-SECTION

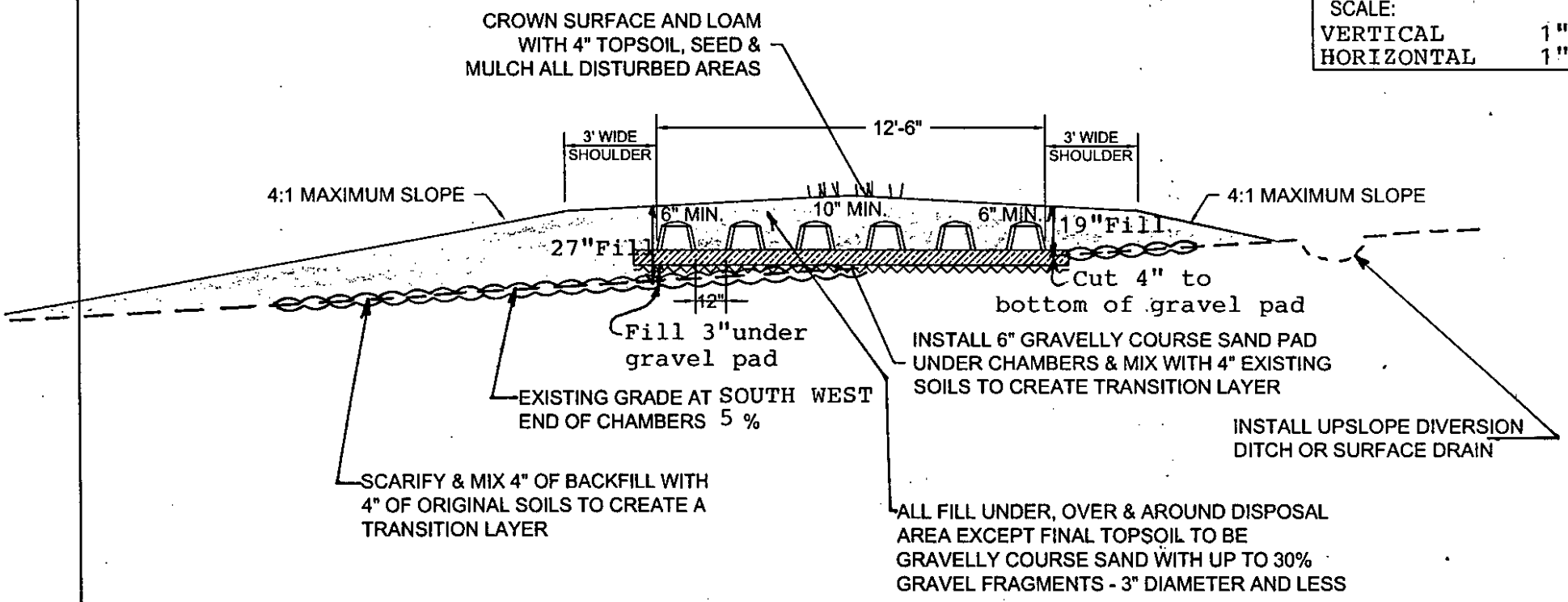
William H. Hersey — Site Evaluator Signature

60 — SE #

12-5-06 — Date

Town, City, Plantation	Street, Road, Subdivision	Owner's Name	SUBSURFACE WASTEWATER DISPOSAL SYSTEM CROSS SECTION
Crystal	Lot 2 CrystaL Road-RT.#159	Adams,Dennis	

SCALE:
VERTICAL 1"=5'
HORIZONTAL 1"=5'



NOTES:
1. REMOVE SOD BENEATH CHAMBERS & BACKFILL EXTENSIONS AND ROTOTILL TO LOOSEN PACKED SOILS.
2. PLACE FOUR INCHES OF BACKFILL AND MIX WITH FOUR INCHES OF NATIVE SOILS USING A ROTOTILLER OR EXCAVATOR TEETH. THIS PROCEDURE ENHANCES THE INFILTRATION OF EFFLUENT INTO THE NATIVE SOILS.
3. PLACE 6" THICK GRAVELLY COARSE SAND PAD, WHEN SHOWN, UNDER CHAMBER AREA , AND ROTOTILL OR MIX WITH 4" EXISTING SOILS TO CREATE TRANSITIONAL HORIZON.
4. SET CHAMBERS AND PLACE REMAINING BACKFILL COMPACTING ONLY SUFFICIENTLY TO PREVENT FURTHER SETTLING.
5. LIME, FERTILIZE & SEED WITH APPROPRIATE SEED TO ESTABLISH SOD AND PREVENT EROSION. ONCE SEEDED, MULCH ALL DISTURBED AREAS.
6. CONTRACTOR TO FIELD VERIFY THAT BOTTOM OF DISPOSAL AREA CONSTRUCTION ELEVATIONS AND CUT AND/OR FILL REQUIREMENTS SHOWN ABOVE ARE CONSISTENT.
7. RECOMMENDATION: INSULATE TOP OF SEPTIC TANK WITH 2" POLYSTYRENE TO RAISE DIGESTION TEMPERATURES RESULTING IN MORE COMPLETE WASTEWATER TREATMENT.

CONSTRUCTION ELEVATIONS

Finish Grade Elevation	-30"
Top of Chambers	-40"
Bottom of Chambers	-51"
Bottom of Gravelly Course Sand	-57"
ELEVATION REFERENCE POINT (E.R.P.)	00"

William K. Hussey
Site Evaluator Signature

60
SE #

12-5-06
Date

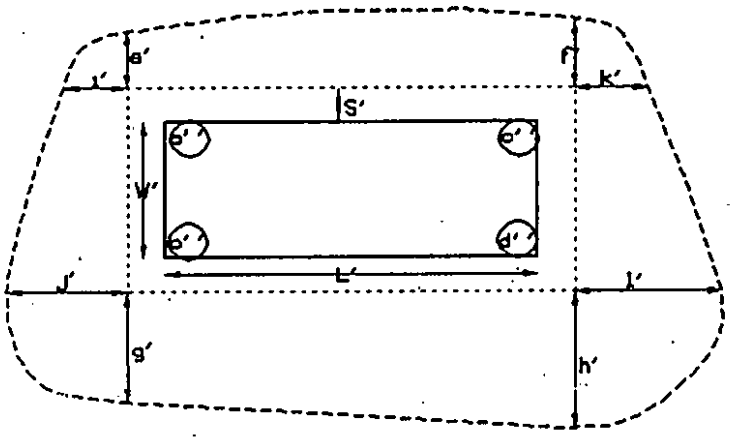
Fill Estimation Worksheet

William K.Hersey
292 Hardison Road
Caribou,Me.04736
207-498-2108
E-Mail-soildogger@juno.com

Town: Crystal
Project owner/applicant: Adams,Dennis
Address: P.O.Box 37
Patten,Me.04765

LOT 2

This worksheet is being provided as a complimentary tool to assist in estimating the **approximate** amount of fill required to construct the proposed system. This worksheet does not substitute for a personal visit to the site for you own estimate. These calculations are intended to serve as a check to your work. Site features beyond the model (terrain) can vary to effect model projections.



Length (L)	48	feet
Width (W)	12.5	feet
Shoulder (S)	3	feet
Depth of fill:		
upper left (a)	19	inches
upper right (b)	19	inches
lower left (c)	27	inches
lower right (d)	27	inches
Fill Extension:		
left up (e)	5	feet
right up (f)	5	feet
left down (g)	11	feet
right down (h)	11	feet
upper left (i)	6	feet
lower left (j)	9	feet
upper right (k)	6	feet
lower right (l)	6	feet
Cost of fill per yard=	$ X.XX	

Body	71 cubic yards
Fill Down	25 cubic yards
Fill Up	8 cubic yards
Fill left	5 cubic yards
Fill right	4 cubic yards
Fill upleft	1 cubic yards
Fill upright	1 cubic yards
Fill dwnleft	3 cubic yards
Fill dwnright	2 cubic yards

SubTotal=	120 cubic yards
Shrinkage %=	15 %
Total Backfill	138 cubic yards

Adjusted cost of Total Backfill= XX.xx