

STATE OF OREGON  
Department of Environmental Quality

**CERTIFICATE OF SATISFACTORY COMPLETION**

**SUBSURFACE OR ALTERNATIVE SEWAGE SYSTEM**

Owner: MAUREEN K MCDOUGALL Permit Number: 12-189578-SP  
Location: 3722 NE MAYWOOD PL

In accordance with Oregon Revised Statue 454.665 this certificate is issued as evidence of satisfactory completion of a subsurface or alternative sewage disposal system at the above location.

November 1, 2012  
Date

Erin Mick, REHS  
Sanitarian

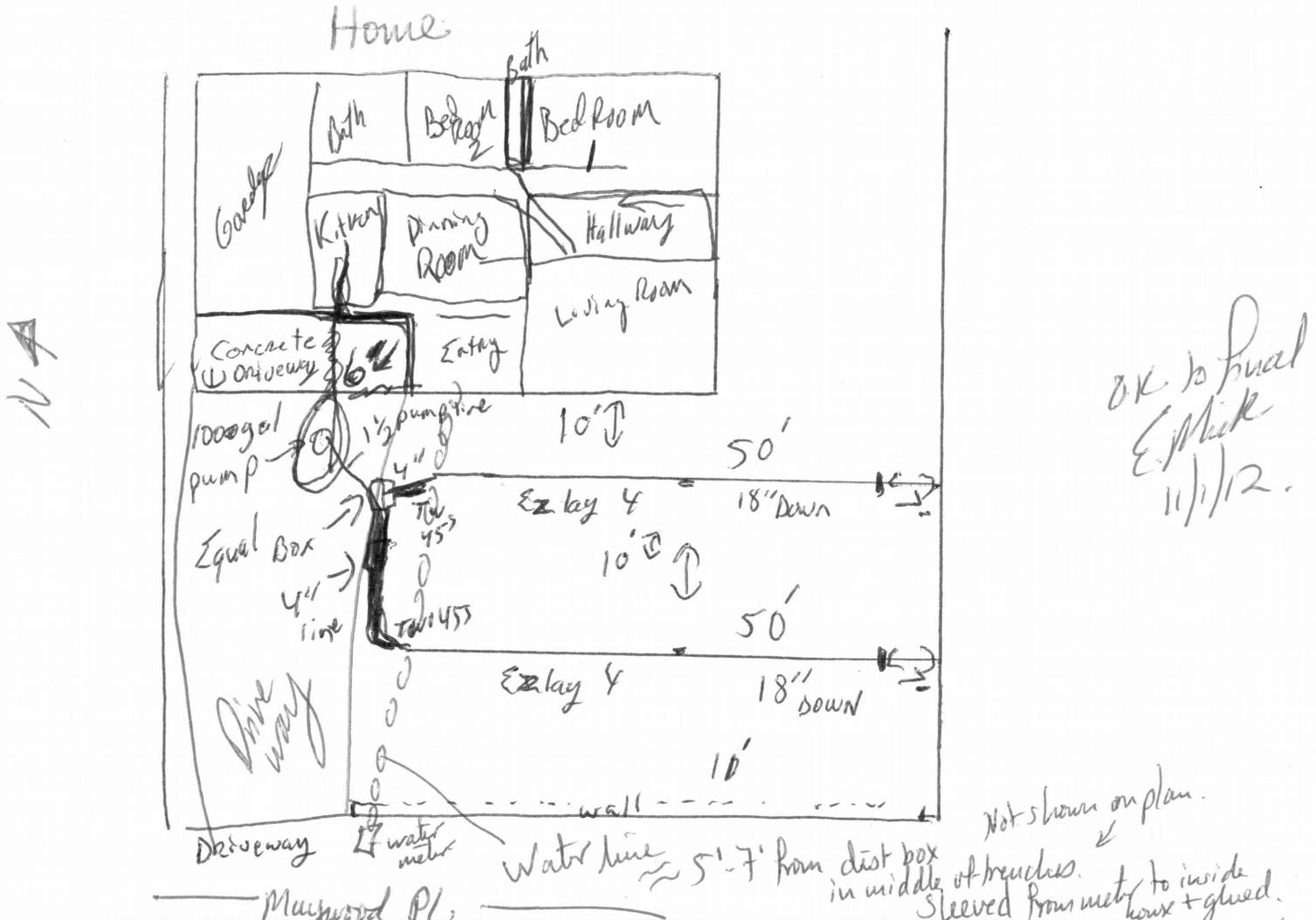


City of Portland  
**PORTLAND, OREGON**  
Bureau of Development Services



Address 3722 NE Maywood Pl Permit Number 12-189578-000-005p

**Section 3: As-Built Plan of the Constructed System** - Indicate the direction of North and show the locations of all wells within 200 feet of the system.



**Section 4: Construction was performed by:**

Property Owner (Permittee)

Sewage Disposal Service Name Ted Rudger JA Exc Inc DEQ Licence # 33280

I certify the information provided in this notice is correct, and that the construction of this system was in accordance with the permit and the rules regulating the construction of on-site sewage disposal systems (OAR Chapter 340, Divisions 71 and 73).

System Installer's Signature Ted Rudger

Title Pres Date Oct 19 12

City of Portland, Oregon - Bureau of Development Services, Site Services Sanitation Section  
 Phone: 503-823-6892 • FAX: 503-823-5433 • TTY: 503-823-6868

Address 3722 NE Maywood Pl Permit Number 12189578000-005p



## City of Portland, Oregon - Bureau of Development Services

1900 SW Fourth Avenue • Portland, Oregon 97201 • 503-823-7300 • www.portlandonline.com/bds



### Sanitation Final Inspection Request and Notice

Pursuant to the requirements within ORS 454.665, OAR 340-71-170 and OAR 340-71-175, the system installer and/or the permittee must notify the Department of Environmental Quality (or its authorized Agent) when the construction, alteration or repair of a system for which a permit was issued is completed (except for the backfilling or covering of the installation). The Department (or Agent) has 7 days to perform an inspection of the completed construction after the official notice date, unless the Department (or Agent) elects to waive the inspection and authorizes the system to be backfilled earlier. Receipt and acceptance of this completed form by the Department (or Agent) establishes the official notice date of your request for the pre-cover inspection. Please complete all four sections of the form and return it to the office that issued the permit. Forms that are determined to be incomplete will be returned.

Date Received \_\_\_\_\_

#### Section 1: Basic Information

Property Owner Dan Simpson

Permit Number 12189578 County Mult. Township \_\_\_\_\_

Range \_\_\_\_\_ Section \_\_\_\_\_ Tax Lot \_\_\_\_\_ Tax Acct \_\_\_\_\_

Job Location 3722 NE Maywood Pl

Date System Construction Completed \_\_\_\_\_ Date Submitted to DEQ or Agent \_\_\_\_\_

#### Section 2: Materials List - Identify and list all materials used in the system's construction.

TANK 1000gal Michels precast Traffic Rated

pump HV 125 SC LNX Discharge pump

Internal splice box SB 3 LN ORENCO Systems

12x10 4 EPS Geo L/pipe 300'

Ex Flow 12x10 pipe only 100'

concrete Equal Disruption

1 1/2 PVC 40 sc plump line

4" sewer pipe 10'

45' sewer 4 of them

continued on back



P.O. Box 1260  
 28128 SE HWY 212  
 BORING, OR. 97009  
 PHONE: (503) 663-2807  
 FAX: (503) 663-9712

DATE: 10/19/12

EMPLOYEE: Kyle

START/STOP TIME:

LIST OF MACHINERY & HOURS USED:

JOB: Ted Rudiger 503-887-8084  
 3722 NE Maywood Place  
 Portland, OR

WORK DONE:

Pumped 600 gals from cesspool  
 for abandonment

\$279.00

check # 4143

Thank you, Kyle

Total \$279.00

SIGNATURE: \_\_\_\_\_

3722 NE MAYWOOD PL  
12-189578-000-00-SP

3228333

City of Portland BDS

INSPECTION REPORT

On-Site Sewage Disposal/Alt Permit

Issued: 10/16/12

IVR Number: 3228333

Inspection Code: 999

Single Family Dwelling/Major Repair

Occupancy: Const. Type:

**Inspection:**

999 Final Permit

(503) 887-8089

Call Date/Time: 11/1/2012 08:47:09

Requested Date/Time: 11/1/12

Replace failing CP with new 1000gal traffic rated Michael's dose tank to 2 equal seepage trenches totally 90', max 42" deep, min 38" with, 24" of EzFlow and 24" wide. (4 bundles. Pumping to d-box, 45'ing down to line. Must sleeve entire length of water line. PT and ET from COT to final.

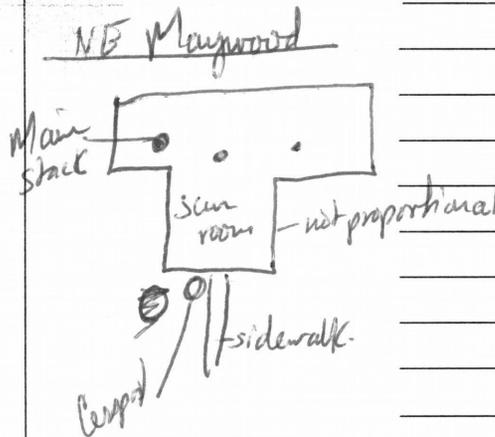
Applicant:  
TED RUDIGER JR EXCAVATION INC  
Work: (503) 887-8089  
  
Owner:  
MAUREEN K MCDOUGALL

Applicant:  
TED RUDIGER JR EXCAVATION INC  
Work: (503) 887-8089  
  
Owner:  
MAUREEN K MCDOUGALL

Decommissioning Subsurface Sewage Sys Zoning Enforcement Agency: MAYWOOD PARK Zoning - Property (1): TBD Water Source: Public Land Feasibility Study Number: LFS 27-12 # of Bedrooms: 2 Standard Septic Tank/Drainfield System: 1

**Most Recent Inspections:**

10/19/12 836 1 EM  
10/19/12 814 1 EM



1	Approved
2	Partially Approved
3	Approved with Corrections
4	Rollover/Missed
5	Not Approved
6	Consultation Completed

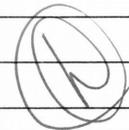
No Access	1
Stop Work Order Issued	2
Not Ready	3
Could Not Locate	4
See Correction Notice on Job Site	5
No Plans on Job	6
No Permit Card on Job	7
Fees Owed	8
Subcontractor Information Missing	9
Cancelled by Customer	0

Confirmation: NONE Inspector/Date/Time/Phone: *Jim Mill 823-5471 11/1/12*

*Back C.P. pumped + filled w/ crushed 4' bgs to top + 15' deep 1' from sewer room*

*Pump Rec'd Rec'd*

*OK to final all permits for septic*



Fees Paid		
Repair Permit - SFD	\$826.00	DEQ Surcharge \$60.00

3722 NE MAYWOOD PL  
12-189578-000-00-SP

3228333

City of Portland BDS

INSPECTION REPORT

On-Site Sewage Disposal/Alt Permit

Issued: 10/16/12

IVR Number: 3228333

Inspection Code: 814

Single Family Dwelling/Major Repair

Occupancy: Const. Type:

Inspection:

814 Drainfield (503) 887-8089

Call Date/Time: 10/18/2012 15:42:04 Requested Date/Time: 10/19/12

Replace failing CP with new 1000gal traffic rated Michael's dose tank to 2 equal seepage trenches totally 90', max 42" deep, min 38" with, 24" of EzFlow and 24" wide. (4 bundles. Pumping to d-box, 45'ing down to line. Must sleeve entire length of water line. PT and ET from COT to final.

Applicant: TED RUDIGER JR EXCAVATION INC Work: (503) 887-8089

Owner: MAUREEN K MCDOUGALL

Decommissioning Subsurface Sewage Sys Zoning Enforcement Agency: MAYWOOD PARK Zoning - Property (1): TBD Water Source: Public Land Feasibility Study Number: LFS 27-12 # of Bedrooms: 2 Standard Septic Tank/Drainfield System: 1

Applicant: TED RUDIGER JR EXCAVATION INC Work: (503) 887-8089

Owner: MAUREEN K MCDOUGALL

Most Recent Inspections:

Need to call for 842 for C.P. - pump rec'd + see if fitted to final.

1	Approved
2	Partially Approved
3	Approved with Corrections
4	Rollover/Missed
5	Not Approved
6	Consultation Completed

No Access	1
Stop Work Order Issued	2
Not Ready	3
Could Not Locate	4
See Correction Notice on Job Site	5
No Plans on Job	6
No Permit Card on Job	7
Fees Owed	8
Subcontractor Information Missing	9
Cancelled by Customer	0

Confirmation: #274362 Inspector/Date/Time/Phone: Jim [Signature] 823-5471 10/19/12

New 1000gal traffic rated Michael's dose tank (septic converted to dose et Michael's) under test + good.

2 x 50' EzFlow seepage trenches - 4 bundles top line had light leak at coupling. Once bedded, it will be at proper elevation. Please bed properly. D-box w/ traffic rated lid as well.

Water line is running through middle of drainfield. It was sleeved w/ 2" SCH 40 that was glued from meter to house + was glued to shrink gasket around house. Owner is aware + accepts risk.

- ET + PT from C.O.T approved - inspection shows onsite as built rec'd + is good.

Fees Paid		
Repair Permit - SFD	\$826.00	DEQ Surcharge \$60.00

3722 NE MAYWOOD PL  
12-189578-000-00-SP

3228333

City of Portland BDS

INSPECTION REPORT

On-Site Sewage Disposal/Alt Permit

Issued: 10/16/12

IVR Number: 3228333

Inspection Code: 836

Single Family Dwelling/Major Repair

Occupancy: Const. Type:

Inspection:

VM

836 Septic Tank

(503) 887-8089

Call Date/Time: 10/18/2012 15:43:03

Requested Date/Time: 10/19/12 AM

Replace failing CP with new 1000gal traffic rated Michael's dose tank to 2 equal seepage trenches totally 90', max 42" deep, min 38" with, 24" of EzFlow and 24" wide. (4 bundles. Pumping to d-box, 45'ing down to line. Must sleeve entire length of water line. PT and ET from COT to final.

Applicant:  
TED RUDIGER JR EXCAVATION  
INC  
Work: (503) 887-8089

Owner:  
MAUREEN K MCDOUGALL

Decommissioning Subsurface Sewage Sys Zoning Enforcement Agency: MAYWOOD PARK Zoning - Property (1): TBD Water Source: Public Land Feasibility Study Number: LFS 27-12 # of Bedrooms: 2 Standard Septic Tank/Drainfield System: 1

Applicant:  
TED RUDIGER JR EXCAVATION  
INC  
Work: (503) 887-8089

Owner:  
MAUREEN K MCDOUGALL

Most Recent Inspections:

<input checked="" type="checkbox"/>	1	Approved
<input checked="" type="checkbox"/>	2	Partially Approved
<input type="checkbox"/>	3	Approved with Corrections
<input type="checkbox"/>	4	Rollover/Missed
<input type="checkbox"/>	5	Not Approved
<input type="checkbox"/>	6	Consultation Completed

No Access	1
Stop Work Order Issued	2
Not Ready	3
Could Not Locate	4
See Correction Notice on Job Site	5
No Plans on Job	6
No Permit Card on Job	7
Fees Owed	8
Subcontractor Information Missing	9
Cancelled by Customer	0

Confirmation: #274362	Inspector/Date/Time/Phone <i>Egan Mick 8 10/18/12</i>
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*See 814 for notes of approval.*

Fees Paid		
Repair Permit - SFD	\$826.00	DEQ Surcharge \$60.00



CITY OF  
**PORTLAND, OREGON**  
 BUREAU OF DEVELOPMENT SERVICES  
 1900 SW 4th Ave., Suite 5000  
 Portland, OR 97201



**ON-SITE SEWAGE DISPOSAL/ALT PERMIT**

**12-189578-000-00-SP**

**Site Address: 3722 NE MAYWOOD PL**

**Issued: 10/16/12**

<b>PROJECT INFORMATION</b>		Occ. Group	Const. Type
Single Family Dwelling	Major Repair		
Project Description: Replace failing CP with new 1000gal traffic rated Michael's dose tank to 2 equal seepage trenches totally 90', max 42" deep, min 38" with, 24" of EzFlow and 24" wide. (4 bundles. Pumping to d-box, 45'ing down to line. Must sleeve entire length of water line. PT and ET from COT to final.			

<b>APPLICANT</b>	TED RUDIGER JR EXCAVATION INC	Phone (503) 887-8089
<b>PROPERTY OWNER</b>	MAUREEN K MCDUGALL <i>Dan Simpson is new owner</i>	Phone
<b>CONTRACTOR</b>	TED RUDIGER JR EXCAVATION INC	Phone

Project Details		Project Details	
# of Bedrooms	2	Decommissioning Subsurface Sewage	Yes
Land Feasibility Study Number	LFS 27-12	Standard Septic Tank/Drainfield System	1
Zoning - Property (1)	TBD	Zoning Enforcement Agency	MAYWOOD PARK

**Need traffic rated tank specs and floor plans to final. EMick 10/16/12**

**All work to conform to requirements of Oregon Administrative Rules 340.71 and 340.73 governing on-site sewage disposal. All work shall be performed by the property owner or by a licensed installer. Permits are only transferrable by reapplication. Post permit on site until work is completed.**

**BEFORE YOU DIG** ATTENTION: Oregon law requires you to follow rules adopted by the Oregon Utility Notification Center. Those rules are set forth in OAR 952-001-0010 through OAR 952-001-0090. You may obtain copies of the rules by calling the center. (Note: the telephone number for the Oregon Utility Notification Center is 1-800-332-2344).

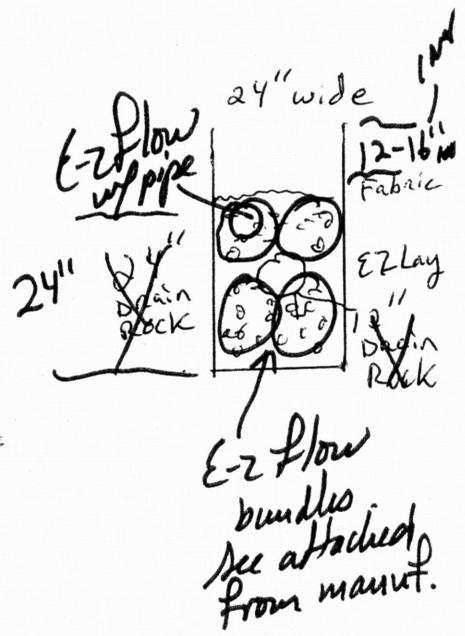
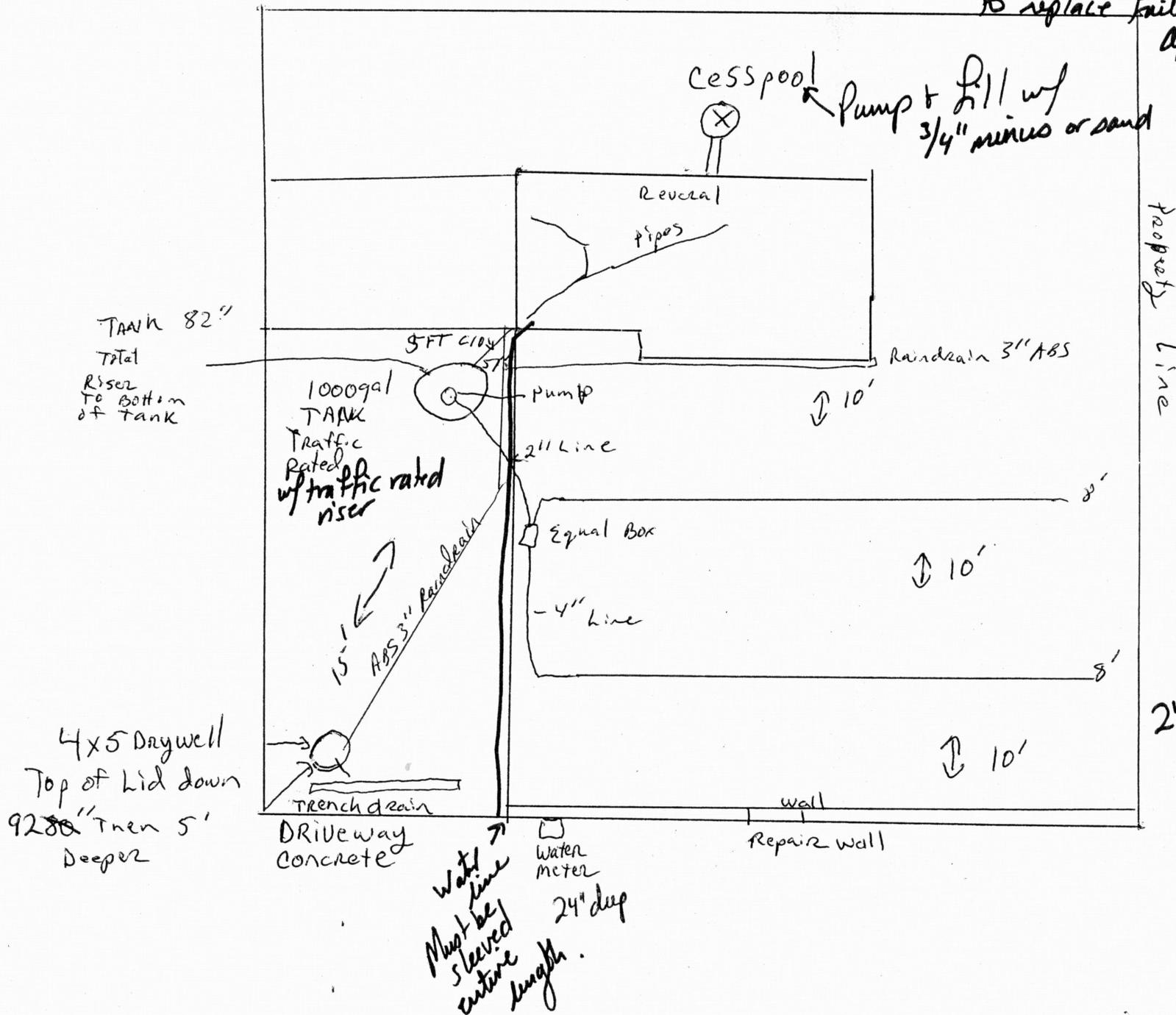
**CITY CONTACT** E-Mail: Phone: Fax: (503) 823-4172

**INSPECTION REQUEST PHONE NUMBERS** Sanitation Inspections - Call Before 6:00 AM: (503) 823-7000  
 TDD: (503) 823-6868  
 IVR Inspection Request Number: 3228333

3722 NE Maywood Place

12-189578 SP New tank & D.F. (seepage trenches)  
to replace failing cesspool.

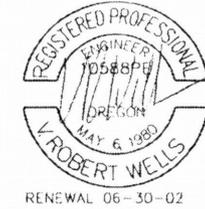
Approved to issue  
E-Mud  
10/16/12



12-189578 SP

# 1000 GALLON SEPTIC TANK ( H2O LOADING )

*Converted to a dosing, see  
e-mail  
& notes  
on p. 2*



TANK CAPACITY	
RESERVE CAPACITY	180 GAL
LIQUID CAPACITY	1072 GAL
TOTAL VOLUME	1252 GAL
TANK:	21.2 GAL/PER INCH

## GENERAL NOTES:

1. THE SEPTIC TANK AS SHOWN COMPLIES WITH THE REQUIREMENTS OF THE STATE OF OREGON, DEPARTMENT OF ENVIRONMENTAL QUALITY, "ON-SITE SEWAGE DISPOSAL RULES" DATED APRIL 1, 1995.
2. INLET AND OUTLET SEAL FOR EXTERIOR PIPING SHALL BE 4" SV4 NEOPRENE COLLAR CAST INTO CONCRETE CONFORMING TO ASTM C-564. BY TYLER.
3. CONCRETE SHALL ATTAIN A MINIMUM 7- DAY COMPRESSIVE STRENGTH OF 3000 P.S.I. AND A 28- DAY COMPRESSIVE STRENGTH OF 5000 P.S.I. MINIMUM CEMENT CONTENT SHALL BE 7 SACKS PER CU. YD. MAXIMUM SLUMP 3 INCHES.
4. REINFORCING BARS SHALL CONFORM TO ASTM A615 GRADE 40 ( $f_y = 40,000$  P.S.I.). WELDED WIRE FABRIC (W.W.M.) SHALL BE ASTM A185.
5. WALL REINFORCING SHALL BE AS NOTED ON PLANS. TOP AND BOTTOM REINFORCING SHALL BE AS INDICATED ON THE DRAWINGS. ADDITIONAL REINFORCING TO BE PROVIDED FOR TEMPERATURE/ SHRINKAGE CRACKING AND IMPACT/ HANDLING LOADS BY ADDING 1.6 LB. PER CU. YD. OF "FORTA FIBRE" SYNTHETIC FIBER REINFORCING.
6. TANKS SHALL BE EQUIPED WITH WATER TIGHT RISERS TO BRING ACCESS TO OR ABOVE FINISHED GRADE. 6" RISER INCREMENTS FROM 12" MINIMUM TO 36" MAXIMUM.
7. GROUT SOLID ALL UNUSED KNOCKOUTS AND SEAL ALL TANK PENETRATIONS WITH CONSPEC ALL-PATCH CONCRETE PATCHING MORTAR BY CONSPEC MANUFACTURING INC.
8. SEAL RISERS TO TANK TOP AND TANK SECTIONS AT FIELD JOINTS WITH 3/4" x 3/4" CONTINUOUS BUTYL CAULK. CON-SEAL CS101 OR EQUAL.
9. TEST TANKS FOR WATERTIGHTNESS. AFTER TANKS ARE INSTALLED PLUG ALL INLETS AND OUTLETS AND TEST TANKS BY FILLING EACH TANK TO A MINIMUM OF TWO (2) INCHES ABOVE THE POINT OF THE RISER CONNECTION TO THE TANK. THERE SHALL BE NO MORE THAN ONE (1) GALLON OF LEAKAGE IN A 24 HOUR PERIOD.
10. IN AREAS OF HIGH GROUND WATER THAT WILL CAUSE HYDROSTATIC UPLIFT OF THE TANK CONSTRUCT HYDROSTATIC UPLIFT HOLD DOWN AROUND TANK. SEE DETAIL.

1000 GAL SEPTIC TANK  
( H2O LOADING )  
COVER SHEET

MICHAELS'  
PRECAST CONCRETE  
BORING, OREGON  
35175 S.E. HWY 211  
(503) 668-4073

RECEIVED

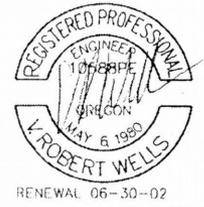
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PROJECT	01-235
DRAWN	RW
CHECKED	
SHEET NUMBER	1

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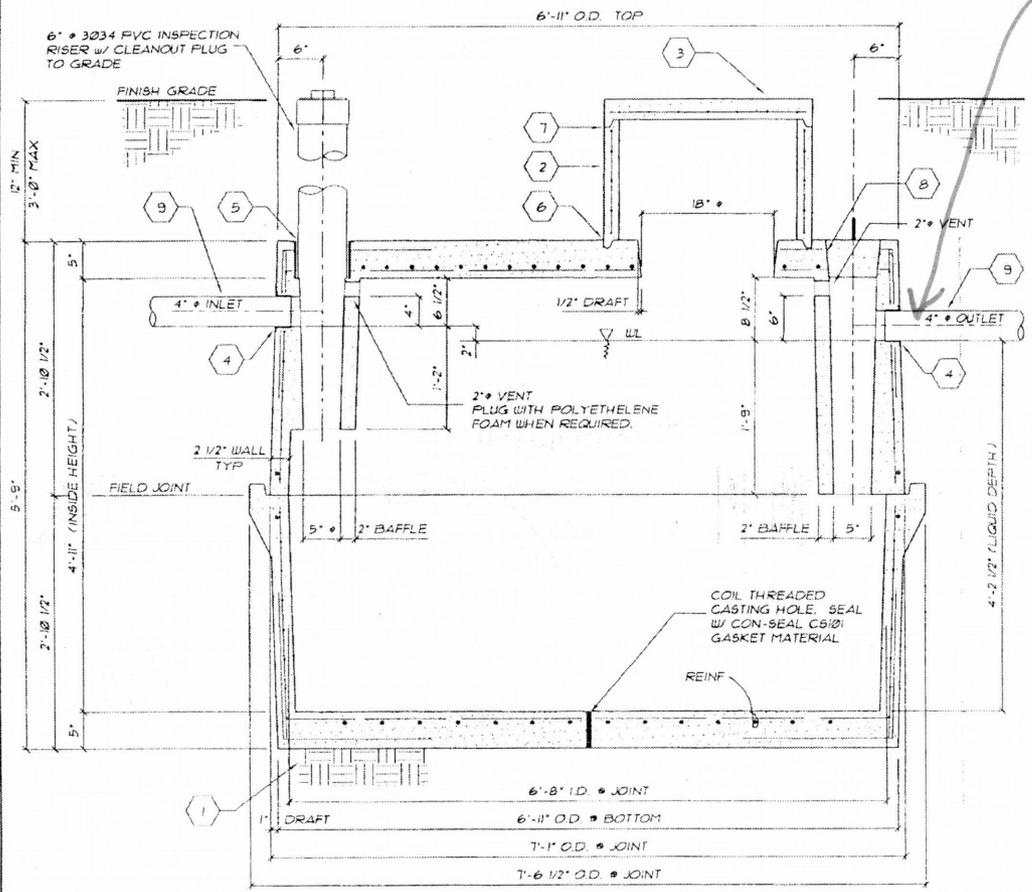
12-189578 SP

to be capped & filled w/ concrete

to convert to a dose tank. @ 2" less w/ inlet now 2" higher will be reflected in float setting changes.  
 Conversation of Jan from Michael's.



10/16/12



TANK SECTION

3/4" = 1'-0"

- 1 TANK TO BE PLACED ON LEVEL NATIVE MATERIAL WITH NO PROTRUDING ROCKS. OPTIONAL 2" SAND LEVELING COURSE OR 4" OF 3/4"-Ø COMPACTED ROCK LEVELING CORSE.
- 2 REINFORCED CONCRETE RISER. 6" RISER INCREMENTS FROM 12" MIN TO 36" MAX.
- 3 REINFORCED CONCRETE LID.
- 4 4" TYLER SV4 NEOPRENE (ASTM C-564) COLLAR CAST INTO CONCRETE.
- 5 6" TYLER SV6 NEOPRENE (ASTM C-564) COLLAR CAST INTO CONCRETE.
- 6 SEAL RISER TO TANK WITH 3/4" x 3/4" CONTINUOUS BUTYL CAULK AROUND EACH. CON-SEAL CS101 OR EQUAL.
- 7 SEAL LID TO RISER WITH 1/4" THICK EXPANDED POLYETHYLENE STRIP AROUND.
- 8 SEAL CONCRETE PLUG OVER OUTLET TO TANK WITH 3/4" x 3/4" CONTINUOUS BUTYL CAULK AROUND. CON-SEAL CS101 OR EQUAL.
- 9 USE 4" PVC SCHEDULE 40 INLET AND OUTLET PIPE WITHIN TANK EXCAVATION LIMITS.

1000 GAL SEPTIC TANK  
 ( H2O LOADING )  
 SECTIONS

MICHAELS' PRECAST CONCRETE BORING, OREGON

35175 S.E. HWY 211  
 (503) 668-4073

DATE	11/01/01
PROJECT	01-235
DRAWN	RW
CHECKED	
SHEET NUMBER	2

**Mick, Erin (BDS)**

---

**From:** Jan White [Jan@michaelsprecast.com]  
**Sent:** Tuesday, October 16, 2012 1:47 PM  
**To:** Mick, Erin (BDS)  
**Subject:** RE: tank specs  
**Attachments:** 1000 H2O Septic Tank.pdf; 1000 H2O Dosing Tank.pdf

*Erin,  
Per our second conversation I will pour the outlet baffle of my 1000 gallon H2O (traffic rated) Septic Tank full of concrete, making the outlet water tight. By blocking the outlet baffle this will turn the 1000 gallon H2O Septic Tank into a 1000 gallon H2O Dosing Tank. The only difference will be the inlet will be raised by 2" from a standard 1000 gallon H2O Dosing Tank and we will adjust the float settings to correct this. Please see the attached specs on both tanks.*

*New float settings are as follows:  
Alarm on 15"  
Pump on 17"  
Pump off 21"*

*This is measured from the outside top of the tank down.*

*Thanks,*

*Jan White  
Office Manager  
Michaels Precast Concrete, LLC  
503-668-4073*

*Thanks,*

*Jan White  
Office Manager  
Michaels Precast Concrete, LLC  
503-668-4073*

---

**From:** Mick, Erin (BDS) [mailto:Erin.Mick@portlandoregon.gov]  
**Sent:** Tuesday, October 16, 2012 1:20 PM  
**To:** 'Jan White'  
**Subject:** RE: tank specs

Got it. Perfect. Thank you for your efforts. Have a great one,

Erin Mick  
REHS, Onsite Sanitation  
Multnomah County  
Site Development, BDS  
1900 SW 4th, Suite 5000

10/18/2012

Portland, OR 97201  
ph: 503-823-5471  
fax: 503-823-5433  
[Erin.mick@portlandoregon.gov](mailto:Erin.mick@portlandoregon.gov)

---

**From:** Jan White [<mailto:Jan@michaelsprecast.com>]  
**Sent:** Tuesday, October 16, 2012 1:15 PM  
**To:** Mick, Erin (BDS)  
**Subject:** RE: tank specs

*Erin,*

*Per our conversation I will pour the inlet baffle of my 1000 gallon H2O (traffic rated) Septic Tank full of concrete, making the inlet water tight. This will then make the outlet baffle my inlet baffle and turn the 1000 gallon H2O Septic Tank into a 1000 gallon H2O Dosing Tank. Please see the attached specs on both tanks.*

*Thanks,*

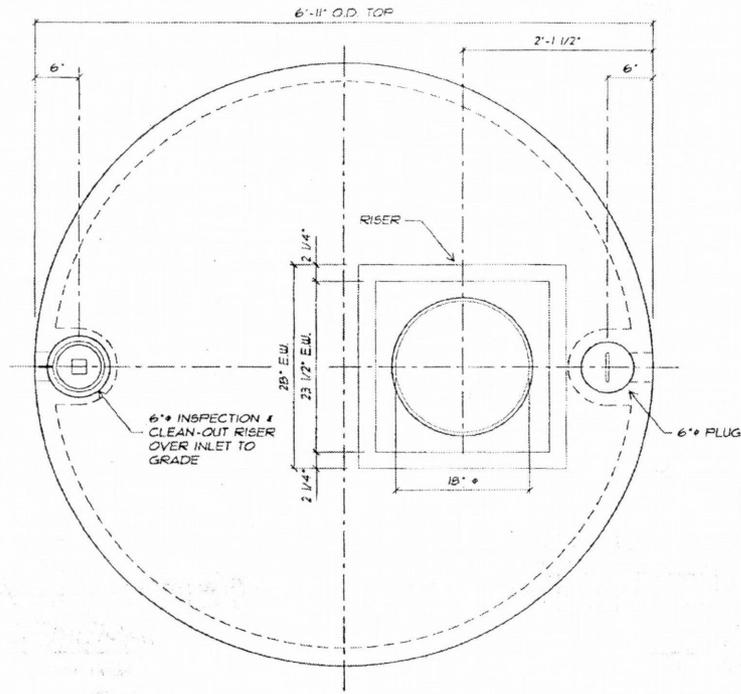
*Jan White  
Office Manager  
Michaels Precast Concrete, LLC  
503-668-4073*

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**From:** Mick, Erin (BDS) [<mailto:Erin.Mick@portlandoregon.gov>]  
**Sent:** Tuesday, October 16, 2012 1:07 PM  
**To:** 'Jan@michaelsprecast.com'  
**Subject:** tank specs

Erin Mick  
REHS, Onsite Sanitation  
Multnomah County  
Site Development, BDS  
1900 SW 4th, Suite 5000  
Portland, OR 97201  
ph: 503-823-5471  
fax: 503-823-5433  
[Erin.mick@portlandoregon.gov](mailto:Erin.mick@portlandoregon.gov)

10/18/2012



COVER PLAN

3/4" = 1'-0"



1000 GAL SEPTIC TANK  
( H2O LOADING )  
COVER PLAN

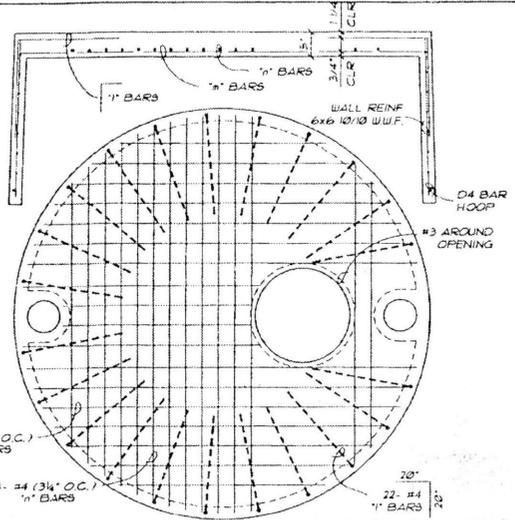
MICHAELS'  
PRECAST CONCRETE

35175 S.E. HWY 211  
(503) 688-4073

BORING, OREGON

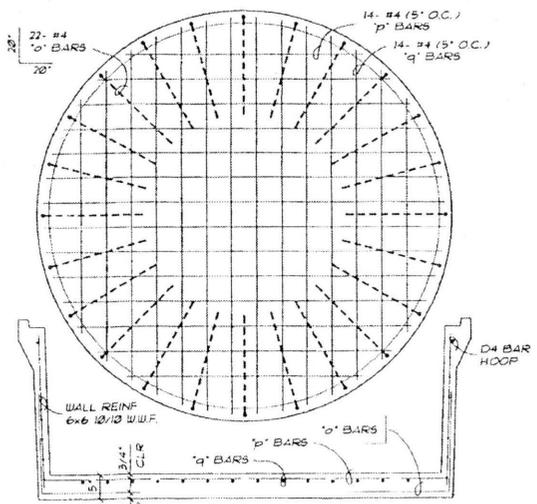
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DATE	11/01/01
PROJECT	01-235
DRAWN	RW
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SHEET NUMBER	3



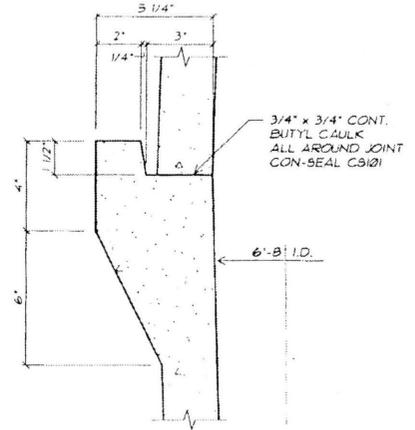
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NTS



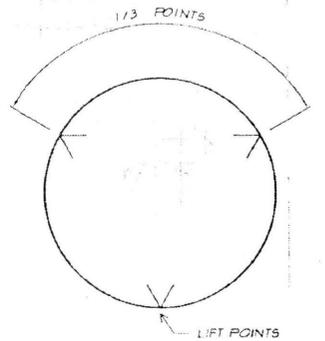
**BOTTOM REINFORCING**

NTS

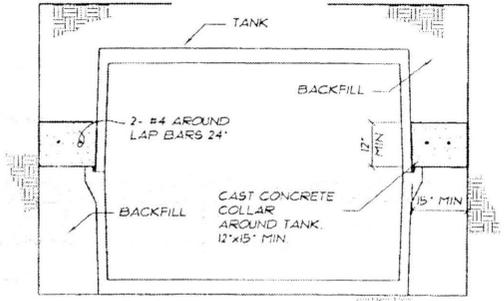
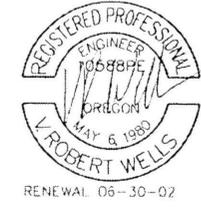


**FIELD JOINT DETAIL**

NTS



**TANK LIFT POINTS**



IN AREAS WHERE HIGH GROUND WATER OCCURS CONSTRUCT CONCRETE HOLD DOWN COLLAR AROUND TANK.

**HYDROSTATIC UPLIFT HOLD DOWN**

NTS

**1000 GAL SEPTIC TANK  
( H2O LOADING )  
DETAILS**

**MICHAELS'**  
PRECAST CONCRETE

35175 S.E. HWY 211  
(503) 668-4073

BORING, OREGON

DATE	11/01/01
PROJECT	01-235
DRAWN	R/W
CHECKED	
SHEET NUMBER	4

**Product Descriptions (continued)****4. Seepage Trench System -- 1201A/1201A-GEO, 1201P/1201P-GEO, 1001A/1001A-GEO, 1001P/1001P-GEO:**

Both the 10-inch and 12-inch diameter cylinders may be used within seepage trenches in lieu of drain media. Four or more cylinders can be placed in a 24-inch wide trench. At least one of the top cylinders shall contain perforated piping. Serial distribution methods limit the maximum effluent depth to no more than 6 inches higher than the invert level of the perforated piping within the higher trenches. The minimum back-fill depth is 6 inches when equal distribution methods are used, and 12 inches with serial distribution methods. GEO product can only be used at the top of the configuration. See Figure 5 for example configuration.

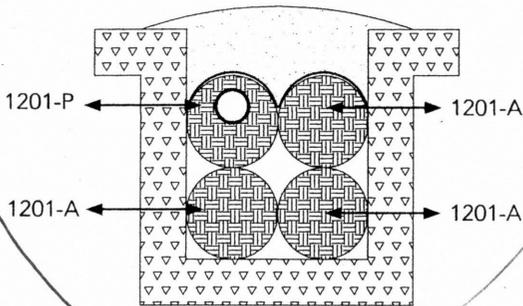


Figure 5.

**5. Steep Slope Systems -- 1201A/1201A-GEO, 1201P/1201P-GEO, 1001A/1001A-GEO, 1001P/1001P-GEO:**

Both the 10-inch and 12-inch diameter cylinders may be used within seepage trenches in a steep slope system in lieu of drain media. Four cylinders can be placed in a 24-inch wide trench. At least one of the top cylinders shall contain the perforated piping. Serial distribution methods limit the maximum effluent depth to no more than 6 inches higher than the invert level of the perforated piping with the higher trenches. GEO product can only be used at the top of the configuration. See Figure 5 for example configuration.

**6. Curtain Drains -- 1001A/1001A-GEO, 1001P/1001P-GEO:**

The 10-inch diameter cylinders can be used in a 12-inch minimum width trench in lieu of pipe and drain media in curtain drains. Pipe-

containing cylinders shall be on the bottom, and additional cylinder may be stacked so as to provide the equivalent media depth required. GEO product can only be used at the top of the configuration. See Figure 6 for example configuration.

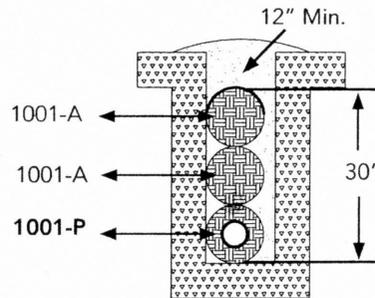


Figure 6.

**7. Tile Dewatering Systems:**

The 10-inch diameter cylinders can be used in a 12-inch minimum width trench in lieu of pipe and drain media within field collection drainage tile trenches. If there is a concern that the volume of groundwater to be collected and drained exceeds the carrying capacity of the four inch diameter corrugated pipe in the bottom cylinder, then two stacks of cylinders (containing piping in both of the base cylinders) may be placed, provided the trench is not less than 20 inches wide. See Figure 6 for example configuration.

**8. Pressurized Distribution:**

Disposal systems using 10-inch or 12-inch diameter cylinders in lieu of drain media can utilize pressurized distribution. The perforated pressure piping shall be placed within the 4-inch diameter pipe with orifices at the 12 o'clock position. Orifice shields shall not be required.



LFS 27-1

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ONSITE SANITATION City of Portland - Bureau of Development Services  
1900 SW 4<sup>th</sup> Avenue, Portland, Oregon 97201 - 503-823-7363 - TTY 503-823-6868 - www.portlandoregon.gov/bds

# INSTALLATION PERMIT APPLICATION

Category	
<input checked="" type="checkbox"/> 1 & 2 Family Dwelling	<input type="checkbox"/> Multi-Family <input type="checkbox"/> Accessory Building <input type="checkbox"/> Comm'l/Industrial
Job Site Information and Location	
Property Owner:	Dan Simpson
Job Address:	3722 NE Maywood Place
City/State/Zip:	Portland OR
Street/Cross Street:	102
Legal Description:	
Size/Acreage of Parcel:	9000 sq feet
Domestic Water Source:	Private <input type="checkbox"/> Public <input checked="" type="checkbox"/>
Project/System description:	
Land Feasibility Study (LFS) # _____	
Existing System:	Existing # of Bedrooms <u>2</u>
Tank:	Cesspool
System Type:	
Drainfield Dispersal Method:	Lineal Feet _____
Proposed System:	Proposed # of Bedrooms <u>2</u>
Tank:	1000 gal
System Type:	pump
Drainfield Dispersal Method:	Drainmedia
Lineal Feet:	100'
Installer	
Business Name:	Ted Rudiger EX2
Installer Name:	same
Address:	16235 Tracy Lane
City/State/Zip:	OR city OR 97045
Phone:	503 887 8089
FAX:	
DEQ Lic #:	33280
CCB#:	162137
Authorized Signature:	Date: OCT 2 12
Applicant	
Name:	
Address:	
City/State/Zip:	
Phone:	FAX:
E-mail:	
Signature:	Date:
Sanitation Fees	
<b>NOTE:</b> DEQ surcharge applies to ALL installation permits	Subtotal _____
	DEQ Surcharge _____
	<b>TOTAL</b> _____

Application Submittal Checklist	
Applications must be complete with <b>all</b> the submittals indicated. Only complete application packets will be accepted for review. See back side for additional description of required submittal	
FOR ALL PERMITS:	
<input type="checkbox"/> Completed Application Form <input type="checkbox"/> Scaled, legible & detailed site plan <input type="checkbox"/> Floor Plans <input type="checkbox"/> DEQ approved tank spec sheet <input type="checkbox"/> Water supply source & line location ( <input type="checkbox"/> public <input type="checkbox"/> private) <input type="checkbox"/> Property Address from Multnomah County	
DRAINFIELDS:	
<input type="checkbox"/> Planning & Zoning approval (LUCS form) <input type="checkbox"/> Beginning, middle & end elevations of each line <input type="checkbox"/> Drainfield material type <input type="checkbox"/> Test pit location(s) on SAME site plan <input type="checkbox"/> Pump calcs & selection (as applicable) <input type="checkbox"/> Sand Filter construction details (as applicable)	
Advanced Treatment Technology (ATT)	
<input type="checkbox"/> Signed O&M contract <input type="checkbox"/> DEQ approved spec sheet	

PERMIT FEES		
Description	Qty	Fee
<b>Single Family Construction - (New Installation Permit)</b>		
Standard Septic Tank/Drainfield		\$ 1,876
Sand Filtration		\$ 2,549
Advanced Treatment Technology		\$ 2,549
Capping Fill		\$ 2,549
Pressure Distribution		\$ 2,549
Seepage Trench		\$ 1,876
Tile Dewatering		\$ 2,549
Gray Water Waste Disposal Sump		\$ 961
Other (Redundant and Steep Slope)		\$ 1,876
<b>Single Family (Repair/Replacement Permit)</b>		
Septic Tank (only) - minor		\$ 409
Septic Tank/Standard Drainfield - major	1	\$ 826
Septic Tank/Non-Standard Drainfield - major		\$ 1,123
<b>Commercial/Multi-Family Construction - (New Installation Permit)</b>		
Standard Septic Tank/Drainfield		\$ 1,876
Sand Filtration		\$ 2,549
Advanced Treatment Technology		\$ 2,549
Alternative & Non-Standard System		\$ 2,549
Holding Tank		\$ 1,876
<b>Commercial/Multi-Family (Repair/Replacement Permit)</b>		
Septic Tank (only) - minor		\$ 961
Septic Tank/Standard Drainfield - major		\$ 1,876
Alternative & Non-Standard System		\$ 2,549
Holding Tank		\$ 1,876
<b>Large Systems (over 601-2,500 gpd)</b>		
Plan Review		\$ 1,128
Additional charge per 500 gallons (# of 500 gallons _____)		\$ 238
<b>Alteration Permit (expansion/relocation)</b>		
Septic Tank/Drainfield - major		\$ 1,885
Septic Tank (only) - minor		\$ 961
<b>Reinspection fee</b>		
Reinspection Fee (commercial or residential)		\$ 202
<b>Reinstatement, Renewal, or Permit Transfer</b>		
With Site Visit		\$ 1,119
Without Site Visit		\$ 486
<b>Miscellaneous</b>		
Third and Subsequent Checksheets		\$ 184
Work without Permit (two times the permit fee)		
<b>DEQ Surcharge</b>		
Applies to ALL Installation Permits	1	\$ 60

Issued permit will be mailed to the applicant listed on the application  
Allow up to 20 working days after complete submittal for review of your application

Additional Submittal Requirements on page 2

10/16/12

Hi Ted,

I just wanted to let you know that in the future, you will receive check-sheets for the missing items + that I do need you to review the check-list of items on the application(s) prior to submitting future plans.

Also, I heard that you still didn't have a completed application form when you turned this in. You, the installer, are the property's representative + need to know what you are proposing. The techs downstairs won't know.

Please, in the future, make sure it's complete. Thanks very much.  
Have a great trip too! Evin