

Manitoba



Conservation

Environmental Stewardship Division
Environmental Assessment and Licensing Branch
123 Main Street, Suite 160, Winnipeg, Manitoba R3C 1A5
T 204 945-7100 F 204 945-5229
www.gov.mb.ca/conservation/eal

FAXED

CLIENT FILE NO.: 5265.00

August 5, 2008

Wayne Derksen
Agassiz Resource Management Ltd.
Box 750
Winkler MB R6W 4A1

Dear Mr. Derksen:

Enclosed is Environment Act **Licence No. 2843** dated August 5, 2008 issued in accordance with The Environment Act to **Agassiz Resource Management Ltd.** for the construction and operation of the Development being an irrigation system in the rural municipalities of Dufferin and Thompson (Kroeker Farms Irrigation Project), with two water intakes on the Boyne River in SE 28-6-6W and SW 29-6-6W and one intake on the Stephenfield Reservoir in W 35-6-7W, and two offstream reservoirs in E 16-6-6W (B2 and B2-E) and one in SW 29-6-6W (B5), in accordance with the Proposal filed under The Environment Act dated April 30, 2007.

In addition to the enclosed Licence requirements, please be informed that all other applicable federal, provincial and municipal regulations and by-laws must be complied with.

For further information on the administration and application of the Licence, please feel free to contact Raymond Reichelt, Environment Officer at (204) 239-3608.

Pursuant to Section 27 of The Environment Act, this licencing decision may be appealed by any person who is affected by the issuance of this Licence to the Minister of Conservation within 30 days of the date of the Licence.

Yours truly,

Tracey Braun, M. Sc.
Director
Environment Act

Enc.

c: B. Gillespie, Regional Director, Central Region
Millennium Public Library
Manitoba Eco-Network
South Central Regional Library (Morden)
R.M. of Dufferin
R.M. of Thompson

NOTE: Confirmation of Receipt of this Licence No. 2843 (by the Licensee only) is required by the Director of Environmental Assessment and Licensing. Please acknowledge receipt by signing in the space provided below and faxing a copy (letter only) to the Department by August 11, 2008.

On behalf of Agassiz Resource Management Ltd.

Date

****A COPY OF THE LICENCE MUST BE KEPT ON SITE AT THE DEVELOPMENT AT ALL TIMES****

Manitoba
spirited energy

LICENCE

Licence No. / Licence n° 2843

Issue Date / Date de délivrance August 5, 2008

In accordance with The Environment Act (C.C.S.M. c. E125) /
Conformément à la Loi sur l'environnement (C.P.L.M. c. E125)

Pursuant to Section 11(1) / Conformément au Paragraphe 11(1)

THIS LICENCE IS ISSUED TO : / CETTE LICENCE EST DONNÉE À :

AGASSIZ RESOURCE MANAGEMENT LTD.;
"the Licencee"

for the construction and operation of the Development being an irrigation system in the rural municipalities of Dufferin and Thompson (Kroeker Farms Irrigation Project), with two water intakes on the Boyne River in SE 28-6-6W and SW 29-6-6W and one intake on the Stephenfield Reservoir in W 35-6-7W, and two offstream reservoirs in E 16-6-6W (B2 and B2-E) and one in SW 29-6-6W (B5), in accordance with the Proposal filed under The Environment Act dated April 30, 2007, and subject to the following specifications, limits, terms and conditions:

GENERAL TERMS AND CONDITIONS

This Section of the Licence contains requirements intended to provide guidance to the Licencee in implementing practices to ensure that the environment is maintained in such a manner as to sustain a high quality of life, including social and economic development, recreation and leisure for present and future Manitobans.

1. The Licencee shall collect and dispose of all used oil products and other regulated hazardous wastes generated by the machinery used in the construction and operation of the Development in accordance with applicable Manitoba Conservation and legislation requirements.
2. The Licencee shall revegetate areas disturbed by the construction of the Development with a mixture of native or introduced grasses or legumes. These areas shall be revegetated as quickly as possible following construction to prevent soil erosion and the establishment of noxious weeds. Native species shall be used to revegetate areas where native species existed prior to construction.

****A COPY OF THE LICENCE MUST BE KEPT ON SITE AT THE DEVELOPMENT
AT ALL TIMES****

3. The Licencee shall:
 - (a) prepare "As Constructed" drawings for the Development and shall label the drawings "As Constructed"; and
 - (b) provide to the Director, within three months of the completion of construction of the Development, two sets of "As Constructed" drawings.

SPECIFICATIONS, LIMITS, TERMS AND CONDITIONS
PROJECT SCOPE

4. The Licencee shall, unless otherwise approved by the Director in writing, construct the water diversion and management works and irrigate the lands as described on Figure 1, attached to this Licencee. Proposed amendments to this project must be submitted to the Director for approval with an accompanying discussion of the nature and purpose of the amendments.

CONSTRUCTION

5. The Licencee shall provide engineering drawings for the second reservoir of the Development in E 16-6-6W (B2-E) for the approval of the Director prior to the construction of the reservoir. The drawings shall show the location, size and construction details of the reservoir.
6. The Licencee shall, not less than two weeks prior to beginning construction of the Development, provide notification to the Environment Officer responsible for the administration of this Licence of the intended starting date of construction and the name of the contractor responsible for the construction.
7. The Licencee shall establish any fuel storage areas required for the construction and operation of the Development:
 - (a) a minimum distance of 100 metres from any waterbody; and
 - (b) in compliance with the requirements of *Manitoba Regulation 188/2001*, respecting *Storage and Handling of Petroleum Products and Allied Products*, or any future amendment thereof.
8. The Licencee shall, during construction and operation of the Development:
 - (a) immediately report any reportable spills to Manitoba Conservation's Accident Reporting Line at (204) 944-4888; and
 - (b) provide a follow-up report to the Director on a reportable environmental accident outlining the cause(s) and proposing corrective action to prevent reoccurrence.
9. The Licencee shall not remove, destroy or disturb species listed as rare, endangered, or of special concern, or their habitats. These species are listed in *Manitoba Regulation 25/98*, respecting *Threatened, Endangered and Extirpated Species*, or any future amendment thereof, and in the federal Species at Risk Act.

10. The Licencee shall not harm, remove, destroy or disturb migratory birds, their nests or their eggs pursuant to the requirements of the federal Migratory Birds Convention Act.
11. The Licencee shall, during construction of the Development, take all appropriate measures to prevent erosion and the deposition of sediment into the Boyne River.
12. The Licencee shall not undertake instream construction activities in connection with the Development between April 1 and June 30 of any year.
13. The Licencee shall not undertake instream construction activities in connection with the Development during periods of high streamflow.
14. The Licencee shall, during construction of water intake works in connection with the Development, minimize the extent of clearing of riparian vegetation adjacent to the Boyne River.
15. The Licencee shall, during construction of the pipelines of the Development, construct the crossing of the Boyne River by augering, tunnelling or boring. An open cut crossing shall not be made unless prior consultation with Manitoba Water Stewardship and Department of Fisheries and Oceans staff has occurred and the prior written approval of the Director has been obtained.
16. The Licencee shall, where open cut stream crossing techniques are used on intermittent waterways and artificial drainage channels, minimize disturbance to riparian areas and restore the bottom and banks of the waterways to their original elevations and shapes.
17. The Licencee shall construct open cut stream crossings associated with the Development in accordance with the methodologies described in the October, 2005 publication "Pipeline Associated Watercourse Crossings Third Edition", published by the Canadian Pipeline Water Crossing Committee, and the May, 1996 publication "Manitoba Stream Crossing Guidelines for the Protection of Fish and Fish Habitat", published by the Department of Fisheries and Oceans and Manitoba Natural Resources.
18. The Licencee shall not alter local drainage patterns by the construction of the Development.
19. The Licencee shall install buried pipelines on cultivated land or land in its natural state in accordance with the methodology illustrated in Figures 2 to 4, attached to this Licence. These procedures do not apply when a plough or a continuous trencher is used to install a pipeline.

**OPERATION – MATTERS RESPECTING WATER MANAGEMENT AND
WATER QUALITY PROTECTION**

20. The Licencee shall install and maintain instream water diversion works associated with the Development in accordance with the requirements of the Department of Fisheries and Oceans.
21. The Licencee shall screen the pump intakes associated with the Development in accordance with the Department of Fisheries and Oceans publication "Freshwater Intake End-of-Pipe Fish Screen Guideline" (March, 1995). Final screen designs shall be approved by the Department of Fisheries and Oceans prior to the operation of the Development.
22. The Licencee shall alter the screens on the pump intakes associated with the Development if future research indicates that different design criteria are appropriate with respect to water withdrawals prior to July 1 of any year.
23. The Licencee shall maintain minimum instream flows below the diversion points of the Development on the Boyne River in SE 28-6-6W and SW 29-6-6W at all times while water is being diverted into the Development. The minimum instream flows at the diversion points shall be as determined by Manitoba Water Stewardship and in accordance with the provisions of a Water Rights Licence issued for the Development.
24. The Licencee shall immediately cease diverting water from the Boyne River or reduce the diversion rate if the minimum instream flow provided for in Clause 23 of this Licence is not equalled or exceeded.
25. The Licencee shall limit the pumping rates at the water diversion points of the Development to rates as specified in a Water Rights Licence issued for the Development by Manitoba Water Stewardship.
26. The Licencee shall install backflow prevention devices and maintain them in operational condition at all times if fertilizer or crop protection products are applied through the irrigation systems of the Development.
27. The Licencee shall, if fertilizer or crop protection products are applied through the irrigation systems of the Development, not allow irrigation water containing these materials to be applied to or drain to surface water bodies.
28. The Licencee shall comply with the requirements of *Manitoba Regulation 62/2008*, respecting *Nutrient Management*, or any future amendment thereof.

**OPERATION – MATTERS RESPECTING LAND MANAGEMENT AND SOIL
QUALITY PROTECTION**


29. The Licencee shall not use water diverted by the Development to irrigate land in the project area more frequently than one year in three.
30. The Licencee shall manage phosphorus as well as nitrogen in all nutrient management plans developed pursuant to Clause 31 of this Licence.
31. The Licencee shall implement agronomic practices described in the following documents:
 - (a) Sections 4 and 5.2 of the report “Kroeker Farms Irrigation Project: Environment Act Proposal” prepared by Golder Associates, March, 2006;
 - (b) Sections 5 and 6 of the report “Land and Agronomic Assessment for the Kroeker Farms Irrigation Development Project” prepared by AXYS Agronomics, February, 2005; and
 - (c) “Manual of Best Management Practices for Irrigated Crop Production in Manitoba, 2nd Draft” by the Association of Irrigators of Manitoba, concerning general agronomic practices, or future versions thereof.
32. The Licencee shall ensure that drift from the irrigation equipment of the Development does not enter the Stephenfield Provincial Recreation Park. Drift includes irrigation water, crop fertility products and crop protection products.

MONITORING

33. The Licencee shall, on a daily basis while the reservoir of the Development is being filled and while irrigation is occurring from the Development, record volumes of water pumped, and durations of pumping. A report on this information shall be provided, by February 1 of the following year, to the Environment Officer responsible for the administration of this Licence and the Environmental Assessment and Licensing Branch. The report shall be provided in the format shown in Table 1, attached to this Licence.
34. The Licencee shall, upon the request of the Director:
 - (a) sample, monitor, analyze or investigate specific areas of concern regarding groundwater, surface water and soil for such duration and at such frequencies as may be specified;
 - (b) determine the environmental impact associated with the specific areas of concern; and
 - (c) provide the Director, within such time as may be specified, with such reports, drawings, specifications, analytical data, descriptions of sampling and analytical procedures being used, and such other information as may from time to time be requested.
35. The Licencee shall, prior to the commencement of operation of the Development, meet with the Environment Officer responsible for the administration of this Licence and the contact person for the Environmental Assessment and Licensing Branch of Manitoba Conservation to review the monitoring and reporting requirements of this Licence.

REVIEW AND REVOCATION

- A. Environment Act Licence No. 2113 is hereby rescinded.
- B. If, in the opinion of the Director, the Licencee has exceeded or is exceeding or has or is failing to meet the specifications, limits, terms, or conditions set out in this Licence, the Director may, temporarily or permanently, revoke this Licence.
- C. If construction of the development has not commenced within three years of the date of this Licence, the Licence is revoked.
- D. If, in the opinion of the Director, new evidence warrants a change in the specifications, limits, terms or conditions of this Licence, the Director may require the filing of a new proposal pursuant to Section 11 of The Environment Act.



Tracey Braun, M. Sc.
Director
Environment Act

Client File: 5265.00

FIGURE 1 TO ENVIRONMENT ACT LICENCE NO. 2843

Kroeker Farms - Boyne River Irrigation Project



Legend

- Pump Station
- Pipeline (existing)
- Pipeline (proposed)
- Existing Tiled
- Proposed Tiled (Owned)
- Proposed Tiled (Leased)
- Others
- Reservoir
- Drainage
- Highways
- Roads

Irrigated Potato Rating

Class 1	Class 2	Class 3	Class 4	Class 5

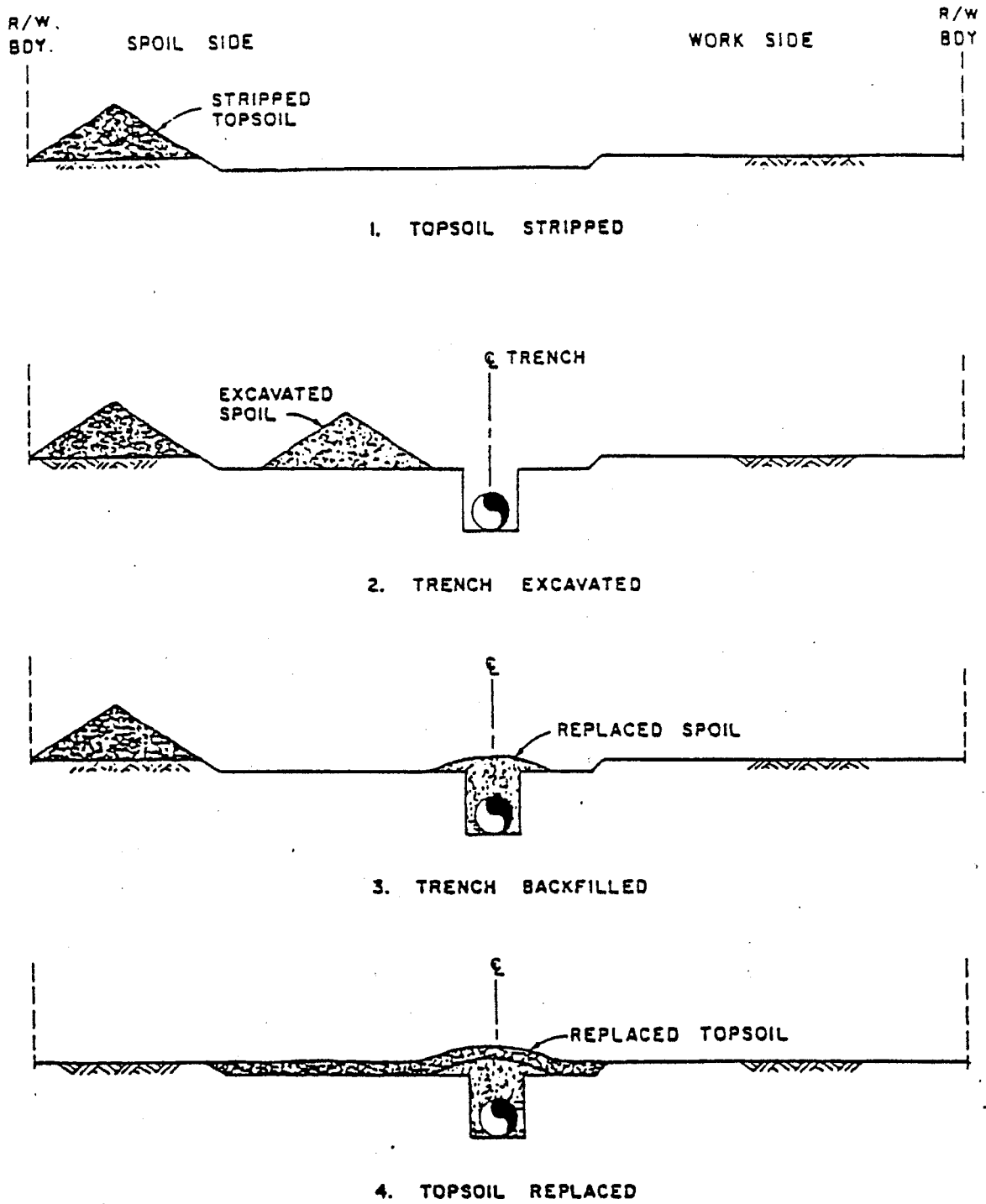
Total acres for the project is 3,452

Legal	Field #	Pivot	Endgun	Total Acres
NW 7-6-6 W1	705	119.7	9.7	129.4
SE 16-6-6 W1	718, 719	104.2	14.3	118.4
SW 16-6-6 W1	710, 714	90.7	14.3	105.0
NW 16-6-6 W1	715	119.7	12.9	132.6
NE 16-6-6 W1	720, 735	87.2	11.5	98.6
NE 17-6-6 W1	739	119.7	12.3	132.0
SW 18-6-6 W1	700	105.3	8.4	113.6
NW 18-6-6 W1	702	119.7	10.7	130.4
NE 18-6-6 W1	703	119.7	12.5	132.2
SW 19-6-6 W1	742	119.7	12.7	132.5
NW 19-6-6 W1	744	119.7	13.1	132.9
NE 19-6-6 W1	745	114.2	10.8	125.0
SE 20-6-6 W1	741	119.7	12.5	132.3
SW 20-6-6 W1	740	101.2	9.2	110.4
NE 20-6-6 W1	755	104.2		104.2
SE 21-6-6 W1	728	119.7	12.3	132.0
SW 21-6-6 W1	721, 722	154.5	0.0	154.5
NW 21-6-6 W1	725	119.7	10.4	130.1
NE 21-6-6 W1	731-33	137.9	0.0	137.9
SE 28-6-6 W1	732, 733	37.3	0.0	37.3
SW 29-6-6 W1	760, 761	77.6	0.0	77.6
SE 13-6-7 W1	704	106.3	12.1	118.4
SW 24-6-7 W1	746	119.7	16.0	135.8
NW 24-6-7 W1	747	119.7	11.8	131.5
N 25-6-7 W1	775, 776	291.4	0.0	291.4
NW 25-6-7 W1	769	100.0	0.0	100.0
SW 35-6-7 W1	771, 772	89.5	10.8	100.3
SW 36-6-7 W1	774	74.9	0.0	74.9
Total		3213.3	238.2	3451.5

Notes:

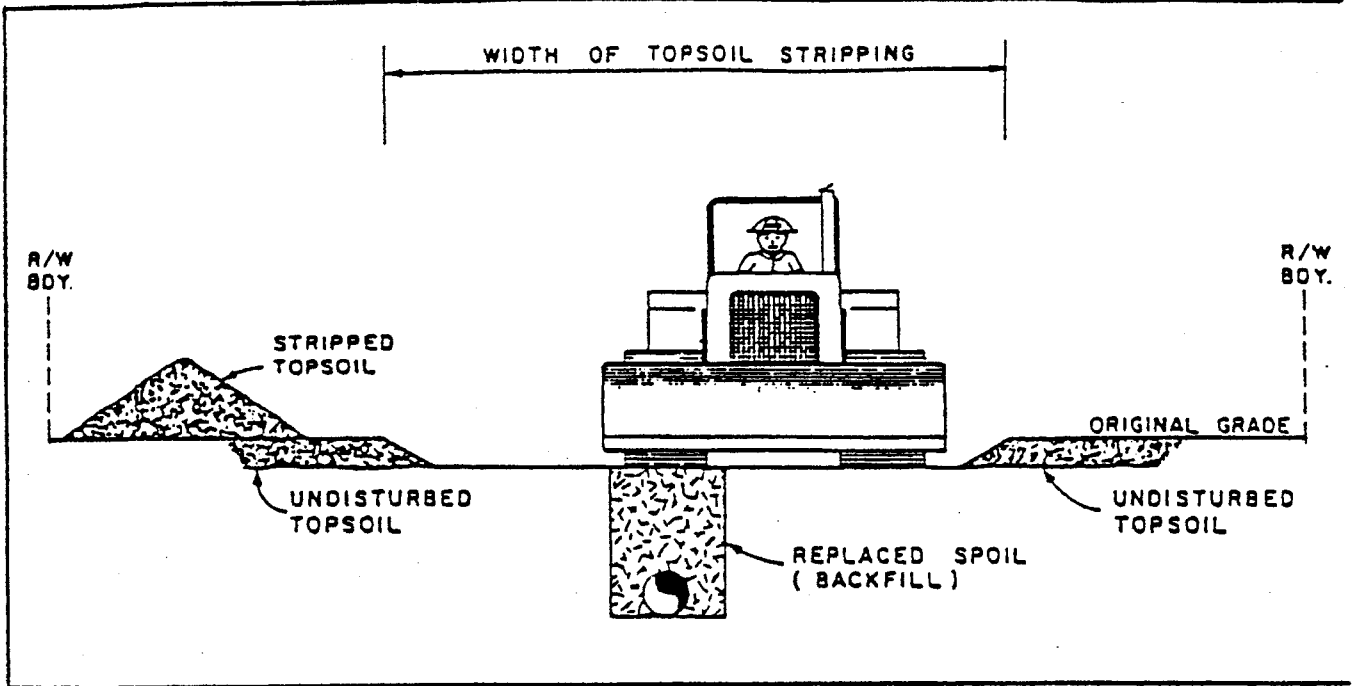
Fields 775 & 776 will be irrigated with laterals.

All other fields not irrigated by pivots will be irrigated with guns.



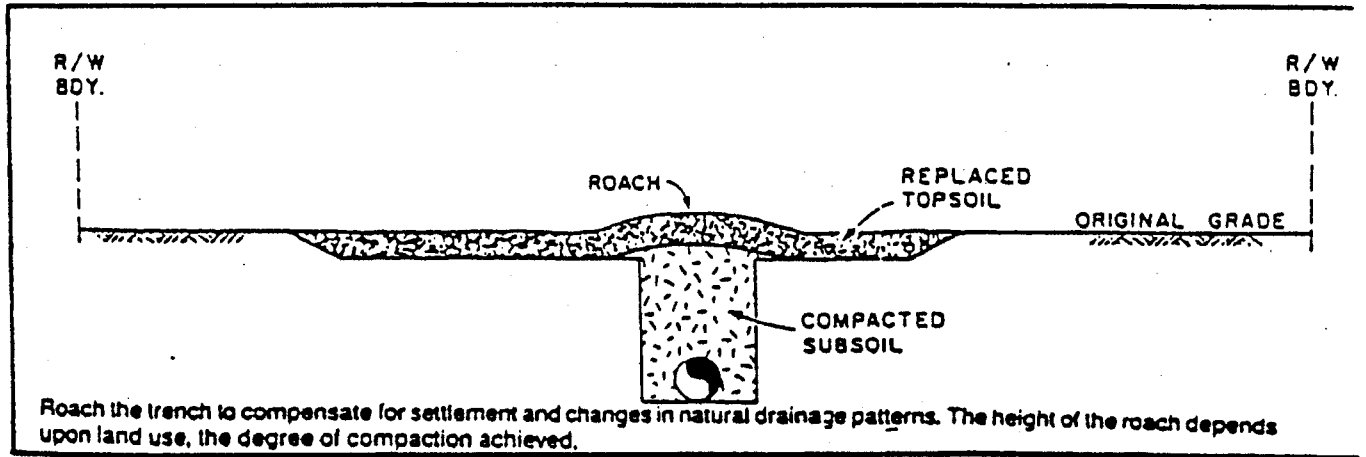
SEQUENCE OF TOPSOIL HANDLING

Figure 2



COMPACTION OF BACKFILL

Figure 3



ROACHING THE TRENCH

Figure 4

Annual Water Use Report for 20_____

Manitoba Conservation
 Environmental Assessment & Licensing Branch
 160-123 Main Street
 Winnipeg MB R3C 1A5



Pursuant to *The Environmental Act*

TABLE 1 TO ENVIRONMENT ACT LICENCE NO. 2843

Report Type PUMPING FROM A STREAM, WELL OR RESERVOIR OR FILLING A RESERVOIR FROM A STREAM

Project Name

LICENSEE MUST COMPLETE ONE "ANNUAL WATER USE REPORT" FOR EACH PUMP (AND ONE FOR FILLING OF EACH RESERVOIR IF APPLICABLE) FOR EACH CALENDAR YEAR AND FORWARD THE REPORT TO THE ENVIRONMENTAL ASSESSMENT & LICENSING BRANCH AT THE ABOVE ADDRESS **NOT LATER THAN THE DUE DATE** INDICATED IN THE ENVIRONMENT ACT LICENCE

Contact: Name
 Address
 Phone No.

Licence Numbers:
 Env. Act
 Water Rights

	Reservoir	Pump (Water Source)
Location	<input type="text"/>	<input type="text"/>
Capacity	dam ³ <input type="text"/> or acre-feet <input type="text"/>	m ³ /s <input type="text"/> or cfs <input type="text"/>

Minimum instream flow (MIF):
 MIF m³/s
 Monitor Location

NOTES

1. d/s Q - Flow measured at downstream point of interest or downstream of pump intake
2. Elevation - reservoir elevation (Geodetic - metres)
3. Volume Pumped - as measured by change in reservoir elevation or pumping rate x time pumped

DAY OF MONTH	APRIL				MAY			
	d/s Q (1)	Elevation (2)	Hours Pumped	Vol Pumped (3)	d/s Q (1)	Elevation (2)	Hours Pumped	Vol Pumped (3)
1								
2								
3								
4								
5								
6								
7								
8								
9								
10								
11								
12								
13								
14								
15								
16								
17								
18								
19								
20								
21								
22								
23								
24								
25								
26								
27								
28								
29								
30								
31								
TOTAL			0	0			0	0

DAY OF MONTH	JUNE				JULY			
	d/s Q (1)	Elevation (2)	Hours Pumped	Vol Pumped (3)	d/s Q (1)	Elevation (2)	Hours Pumped	Vol Pumped (3)
1								
2								
3								
4								
5								
6								
7								
8								
9								
10								
11								
12								
13								
14								
15								
16								
17								
18								
19								
20								
21								
22								
23								
24								
25								
26								
27								
28								
29								
30								
31								
TOTAL			0	0			0	0

DAY OF MONTH	AUGUST				SEPTEMBER			
	d/s Q (1)	Elevation (2)	Hours Pumped	Vol Pumped (3)	d/s Q (1)	Elevation (2)	Hours Pumped	Vol Pumped (3)
1								
2								
3								
4								
5								
6								
7								
8								
9								
10								
11								
12								
13								
14								
15								
16								
17								
18								
19								
20								
21								
22								
23								
24								
25								
26								
27								
28								
29								
30								
31								
TOTAL			0	0			0	0

TOTAL VOLUME PUMPED FOR YEAR: 0 (insert unit measurement)