



Conservation

Environmental Stewardship Division
Environmental Assessment and Licensing Branch
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T 204 945-7100 F 204 945-5229
www.gov.mb.ca/conservation/envapprovals

FAXED

CLIENT FILE NO.: 5280.00

September 27, 2007

Henry Sawatsky
Gem Meadows Inc.
Box 477
MacGregor MB R0H 0R0

Dear Mr. Sawatsky:

Enclosed is Environment Act **Licence No. 2784** dated September 27, 2007 issued in accordance with The Environment Act to **Gem Meadows Inc.** for the construction and operation of the Development being an irrigation system in the Rural Municipality of Westbourne, with water intakes and reservoirs on Old Squirrel Creek in SW 22-13-10W and on Pine Creek in SE 25-13-11W, in accordance with the Proposal filed under The Environment Act dated July 20, 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, Central Regional Director
Raymond Reichelt, EO
Millennium Public Library/Manitoba Eco-Network/Portage la Prairie City Library
R.M. of Westbourne
Jodine MacDuff

NOTE: Confirmation of Receipt of this Licence No. 2784 (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 back to the Department by October 3, 2007.

On behalf of Gem Meadows Inc.

Date

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

LICENCE

Licence No. / Licence n° 2784

Issue Date / Date de délivrance September 27, 2007

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 :

GEM MEADOWS INC.;
"the Licencee"

for the construction and operation of the Development being an irrigation system in the Rural Municipality of Westbourne, with water intakes and reservoirs on Old Squirrel Creek in SW 22-13-10W and on Pine Creek in SE 25-13-11W, in accordance with the Proposal filed under The Environment Act dated July 20, 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 Licence. Portions of Field 8 in SE 21-13-10W with Land Suitability for Irrigated Potato Production rated as Class 5 are excluded from the project unless specifically approved by the Director in writing. 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, prior to beginning construction of the Development, obtain an agreement with the Watermud Watershed Conservation District Board for the use and crossings of District rights-of-way.
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 Old Squirrel Creek and Pine Creek.
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 Old Squirrel Creek and Pine Creek.
15. The Licencee shall, during construction of the pipelines of the Development, construct the crossings of Old Squirrel Creek and Pine Creek by augering, tunneling or boring. An open cut crossing shall not be made unless prior consultation with the Whitemud Watershed Conservation District and Department of Fisheries and Oceans staff has occurred and the prior written approvals of the Conservation District and the Director have 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 location 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 design 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 Old Squirrel Creek in SW 22-13-10W and on Pine Creek in SE 25-13-11W 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 Old Squirrel Creek and/or Pine Creek or reduce the diversion rate if the minimum instream flows provided for in Clause 23 of this Licence are not equaled or exceeded.
25. The Licencee shall limit the pumping rate at the water diversion points of the Development on Old Squirrel Creek in SW 22-13-10W and on Pine Creek in SE 25-13-11W to 130 litres per second at each site or as specified in a Water Rights Licence issued for the Development by Manitoba Water Stewardship.
26. The Licencee shall, on a daily basis 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 March 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.

27. 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.
28. 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.

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) Section 4.2 of the report “Gem Meadows Inc. Irrigation Project: Environment Act Proposal” prepared by Golder Associates, July, 2007;
 - (b) Sections 5 and 6 of the report “Soil Survey Report, and Land and Agronomic Assessment for the Gem Meadows Irrigation Project” prepared by AXYS Agronomics, June 2007; and
 - (c) “Draft Best Management Practices Manual 1999” by the Central Manitoba Irrigators Association and Central Manitoba Resource Management Ltd., concerning general agronomic practices, or future versions thereof.

Monitoring

32. 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.
33. 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

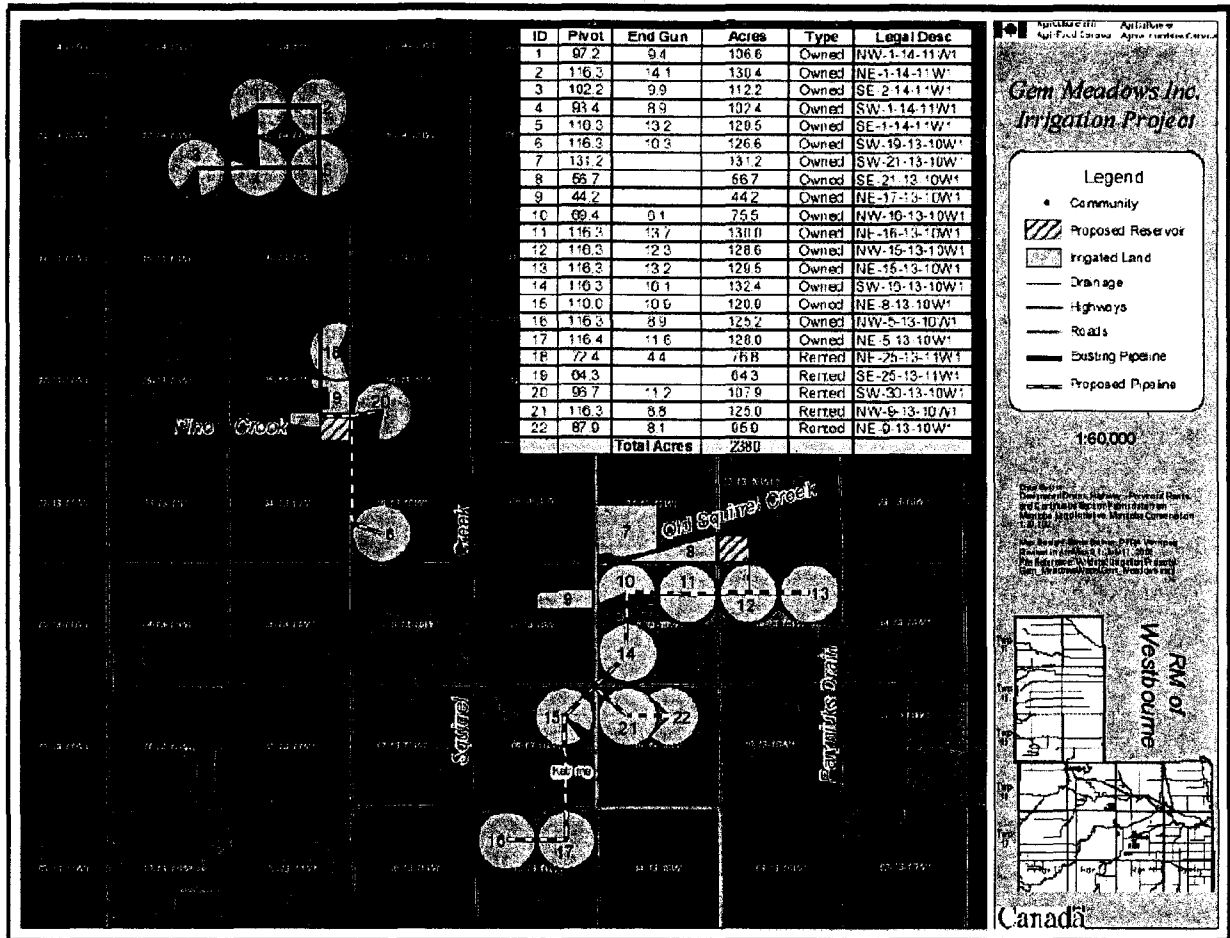
- A. If, in the opinion of the Director, the Licencee has exceeded or is exceeding or has or is failing to meet the specifications, limits, terms, or conditions set out in this Licence, the Director may, temporarily or permanently, revoke this Licence.
- B. If construction of the development has not commenced within three years of the date of this Licence, the Licence is revoked.
- C. 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.

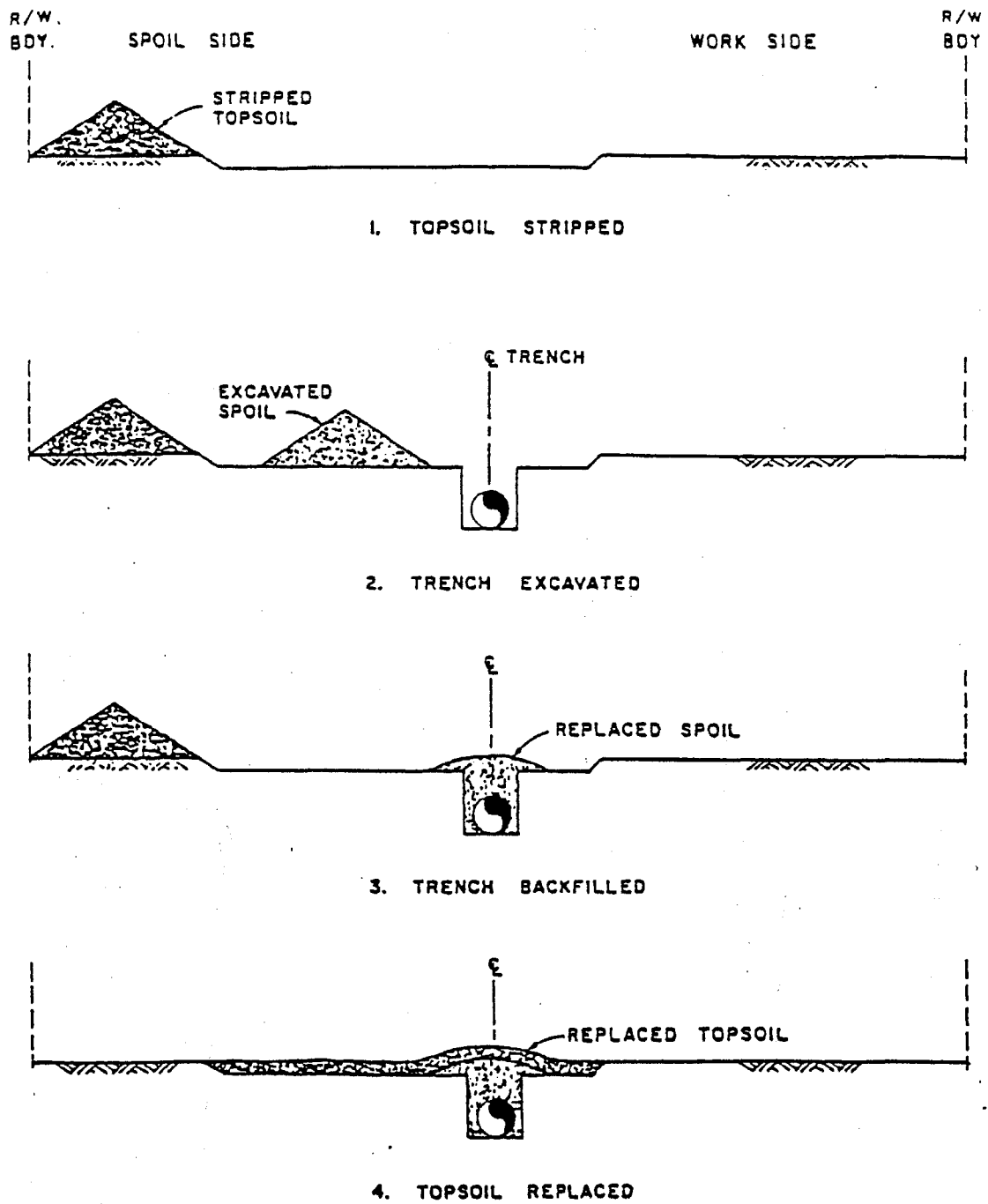


Tracey Braun, M. Sc.
Director
Environment Act

Client File: 5280.00

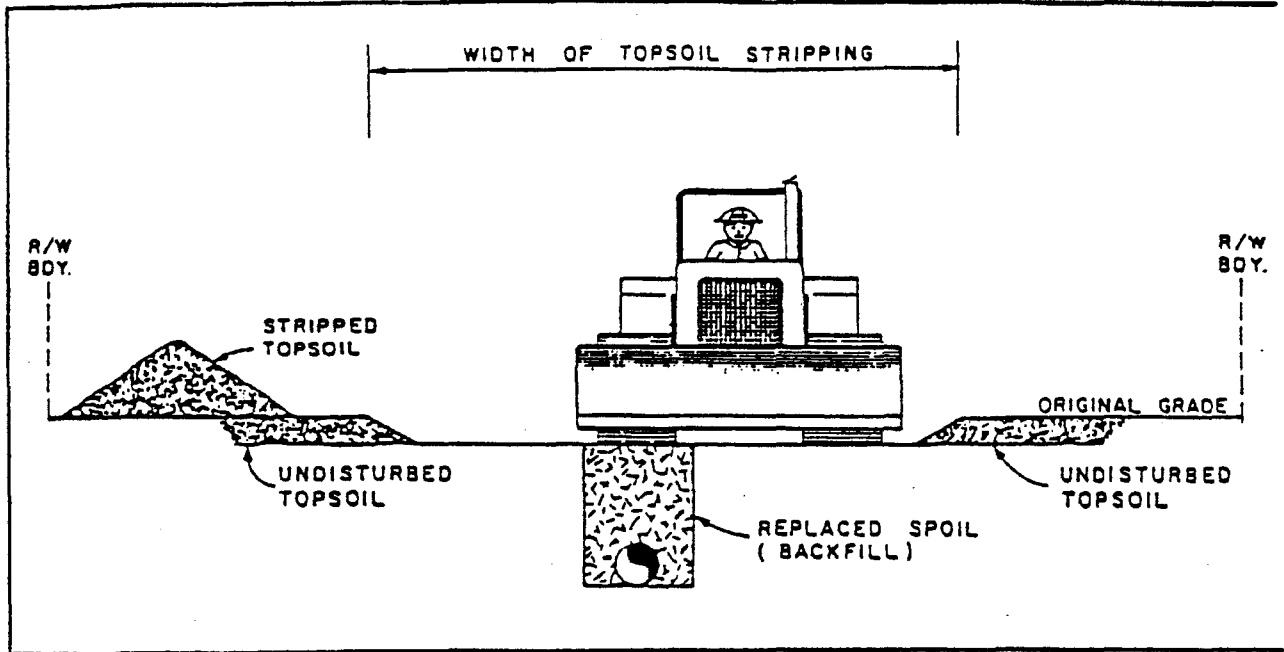
**FIGURE 1 TO ENVIRONMENT ACT LICENCE NO. 2784
GEM MEADOWS INC. IRRIGATION PROJECT**





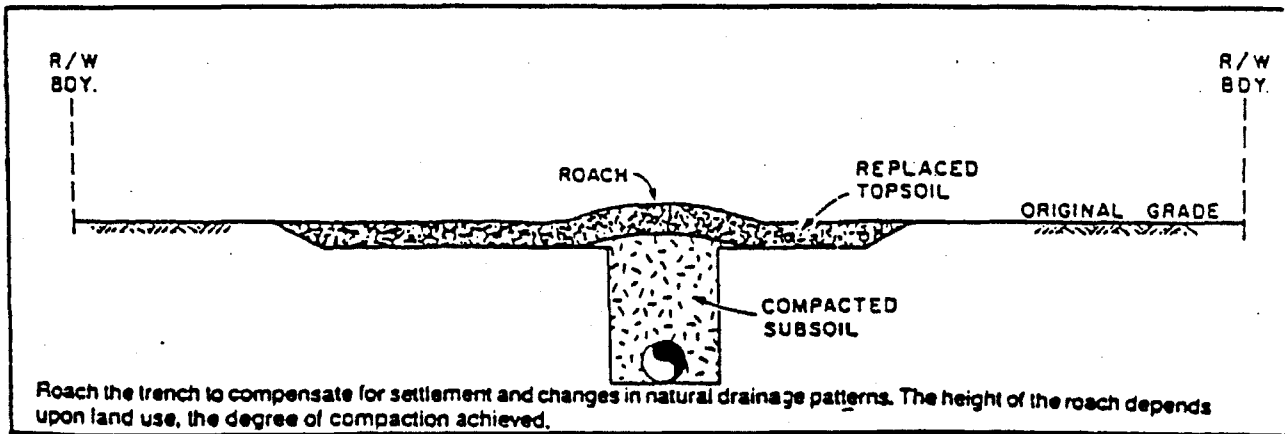
SEQUENCE OF TOPSOIL HANDLING

Figure 2



COMPACTION OF BACKFILL

Figure 3



Roach the trench to compensate for settlement and changes in natural drainage patterns. The height of the roach depends upon land use, the degree of compaction achieved.

ROACHING THE TRENCH

Figure 4

TABLE 1 TO ENVIRONMENT ACT LICENCE NO. 2784

Gem Meadows Inc. Irrigation Project Reservoir in SE 25-13-11W					
				Year:	
Dugout capacity: _____ dam ³ or acre-feet					
Pump Capacities: Filling from Pine Creek: _____ m ³ /s or cfs					
Irrigation: _____ m ³ /s or cfs					
Minimum instream flow: _____ m ³ /s			MIF Monitoring Location: _____		
Notes:					
1. d/s Q - Flow measured at downstream point of interest (specify _____) or downstream of pump intake _____					
2. Elevation - dugout elevation (Geodetic - metres)					
3. Volume Pumped - as measured by change in reservoir elevation _____ or pumping rate x time pumped _____					
1. Filling					
From Pine Creek in SE 25-13-11W					
Day	Date	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					
Total				0.00	0.00

(Con't) Table 1

2. Use					
Day	Date		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					
Total				0.00	0.00