

Michigan Department of Natural Resources and Environment  
Environmental Resource Management Division

**SOLID WASTE DISPOSAL AREA OPERATING LICENSE**

This license is issued under the provisions of Part 115, Solid Waste Management, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended, MCL 324.11501 *et seq.*, and authorizes the operation of this solid waste disposal area (Facility) in the state of Michigan. This license does not obviate the need to obtain other authorizations as may be required by state law.

FACILITY NAME: Granger Grand River Avenue Landfill

LICENSEE/OPERATOR: Granger III and Associates, LLC

FACILITY OWNER: Granger Land Development Company

PROPERTY OWNER: Granger Land Development Company

FACILITY TYPE(S): Municipal Solid Waste Landfill

FACILITY ID NUMBER: 397449

COUNTY: Clinton

LICENSE NUMBER: 9286

ISSUE DATE: September 23, 2010

EXPIRATION DATE: September 23, 2015

FACILITY DESCRIPTION: The Granger Grand River Avenue Landfill, a municipal solid waste landfill, consists of 181.00 acres located in Section 29 T 5N, R 3W, Watertown Township, Clinton County, Michigan, as identified in Attachment A, Pages 1 and 2, and fully described in this license.


AREA AUTHORIZED FOR DISPOSAL OF SOLID WASTE: Identified in Item 2 of this license and Attachments A-1 and A-2.

RESPONSIBLE PARTY: Mr. Ralph Nuerenberg  
Granger Land Development Company  
16980 Wood Road  
Lansing, Michigan 48906  
517-371-9729

**RENEWAL OPERATING LICENSE:** This License Number 9286 supersedes and replaces Solid Waste Disposal Area Operating License Number 9222 issued to Granger Land Development Company on July 14, 2009.

This license is subject to revocation by the Director of the Michigan Department of Natural Resources and Environment, if the Director finds that this Facility is not being constructed or operated in accordance with the approved plans, the conditions of a permit or license, Part 115, or the rules promulgated under Part 115. Failure to comply with the terms and provisions of this license may result in legal action leading to civil and/or criminal penalties pursuant to Part 115. This license shall be available through the licensee during its term and remains the property of the Director.

**THIS LICENSE IS NOT TRANSFERABLE.**



Steven R. Sliver, Chief, Solid Waste and Land Application Section  
Environmental Resource Management Division

Licensee: Granger III and Associates, LLC  
Facility Name: Granger Grand River Avenue Landfill  
Operating License Number: 9286  
Issue Date: September 23, 2010

The licensee shall comply with all terms of this license and the provisions of Part 115 and the administrative rules implementing Part 115 (Part 115 Rules). This license includes the license application and any attachments to this license.

1. The licensee shall operate the Facility in a manner that will prevent violations of any state or federal law.
2. The following portions of the Facility are authorized to receive solid waste by this license:

**ACTIVE PORTIONS NOT AT FINAL GRADE:** The area(s) identified as the 16-acre area, Cells 1-86, 2-87, 3-88, 4-89, 5-90, 6-94, and 7-02 were authorized to receive waste by the previous license. This area's total acreage is 59.5 acres.

3. The following portions of the Facility **WILL BE** authorized to receive solid waste by this license following approval by the Michigan Department of Natural Resources and Environment (DNRE) of construction certification:

**UNCONSTRUCTED AREA(S) WITH FINANCIAL ASSURANCE:** The area(s) identified as Cell 8-10, totaling 5.1 acres, are included in the calculation of financial assurance as required by Section 11523 of Part 115. This portion(s) of the Facility shall be authorized to receive waste, as part of this license, when acceptable certification is submitted to the DNRE, as required by Section 11516(5) of Part 115, and determined by the DNRE to be consistent with Part 115 and the Part 115 Rules. The certification shall verify that construction of this area(s) was in accordance with the Construction Permit(s) listed in Item 8 of this license, Part 115, and the Part 115 Rules.

4. The following portions of the Facility are **NOT** authorized to receive solid waste by this license:

- a. **UNCONSTRUCTED AREA(S) WITHOUT FINANCIAL ASSURANCE:** The area(s) identified as Unconstructed cells East of Cell 7-02 and 8-10 are not constructed and are not included in the calculation of financial assurance as required by Section 11523 of Part 115. This area's total acreage is 17.9 acres.

- b. **CLOSED UNIT(S) OR A PORTION OF A UNIT WHERE THE FINAL COVER HAS BEEN CERTIFIED CLOSED AND ACCEPTED BY THE DNRE:** The following unit(s) and/or portion(s) are closed:

- i. **EXISTING UNIT(S):** The unit(s) identified as the west slope of the 16-acre area had final closure certified on January 28, 2009. This certification was reviewed and approved by the DNRE on April 21, 2009. This area's total acreage is 3.2 acres.
- ii. **OTHER DISPOSAL AREAS:** A closed Part III area (see Item 20.d.)

5. The attached map (Attachment A, Pages 1 and 2) shows the Facility, the area permitted for construction, monitoring points, leachate storage units, site roads, other disposal areas, and related appurtenances.
6. Issuance of this license is conditioned on the accuracy of the information submitted by the Applicant in the Application for License to Operate a Solid Waste Disposal Area (Application) received by the DNRE on July 19, 2010, and any subsequent amendments. Any material or intentional inaccuracies found in that information is grounds for the revocation or modification of this license and may be grounds for enforcement action. The licensee shall inform the DNRE's Environmental Resource Management Division (ERMD), Lansing District Supervisor, of any inaccuracies in the information in the Application upon discovery.

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7. This license is issued based on the DNRE's review of the Application, submitted by Granger Land Development Company, for the Granger Grand River Avenue Landfill, dated July 8, 2010, revised August 2, 2010. The Application consists of the following:

- a. Application Form EQP 5507.
- b. Application fee in the amount of \$1,250.00.
- c. Certification of construction by N/A.
- d. Waste Characterization: N/A.
- e. Restrictive Covenant:

The declaration of restrictive covenant on 112.53 acres is on file at the Clinton County Register of Deeds recorded on July 25, 1995, as Liber 667 pages 411 - 413. A copy is on file with the DNRE.

- f. Perpetual Care Fund Agreement, established as an escrow account, signed by Mr. Dennis Doolen, Granger Land Development, on January 22, 1997, was executed by the DNRE on January 31, 1997.
- g. Financial Assurance.

i. Financial Assurance Required:

The amount of financial assurance required for this Facility was calculated based on the calculation worksheet form EQP 5507A entitled, "Form A, Financial Assurance Required," and is \$6,414,720.00.

The Facility has provided financial assurance totaling \$6,476,976.80, based on the requirements of Section 11523 of Part 115, consisting of a combination of the Perpetual Care Fund established under Section 11525 of Part 115, bonds, and the financial capability of the Applicant as evidenced by a financial test. The financial assurance mechanisms used by the Facility are summarized below in Items ii, iii, and iv, respectively.

ii. Financial Assurance Provided Via a Perpetual Care Fund:

- (1) The amount of the required financial assurance can be reduced pursuant to Section 11524 of Part 115, if the amount of money in the Perpetual Care Fund plus the amount of the reduced financial assurance equals the amount of financial assurance required in Section 11523 of Part 115 and is approved by the DNRE.
- (2) The Perpetual Care Fund Agreement statement showed a balance of \$1,948,456.55 in the Facility's Perpetual Care Fund as of June 30, 2010. Of this amount, the DNRE has granted the request to use \$1,948,456.80 toward the total amount of financial assurance required.

iii. Financial Assurance Provided Via Bond:

The following financial assurance has been received from the Applicant to meet the amount of financial assurance required:

Irrevocable Letter of Credit	\$72,000.00
Total Amount Received:	\$72,000.00

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iv. Financial Assurance Provided Via a Financial Test for a Type II Landfill:

A financial test may be used by the owner of a Type II landfill as a means to meet an amount up to, but not exceeding, 70 percent of the closure, postclosure, and corrective action cost estimate pursuant to Section 11523a of Part 115. This Facility has provided a financial test in the amount of \$4,456,520.25. Financial capability demonstrated by a financial test must be updated each fiscal year. The next update is due March 31, 2011, and each year thereafter. If the owner/operator fails to update the test, or is no longer able to satisfy the test, the owner/operator must obtain alternate financial assurance within 210 days following the close of the owner/operator's fiscal year.

v. Financial Assurance Updates Required:

For Type II landfills, the financial assurance cost estimates of closure and postclosure activities must be updated annually and the corresponding requisite amount of financial assurance must be adjusted annually for the costs of inflation. The corresponding financial assurance, as adjusted for inflation and other factors, is due on September 23, 2011, and each year thereafter.

8. The following documents approved with Construction Permit Number(s) 0059 issued to Granger Land Development on November 6, 1981, are incorporated in this license by reference:
- a. "Hydrogeologic Investigation of the Grand River Landfill in Watertown Township, Clinton County," by A. G. Ostrander, dated 1977.
  - b. "Hydrogeologic Investigation, Granger Landfill Expansion, Section 29, T5N, R3W, Watertown Township, Clinton County, Michigan," by Keck Consulting Services, Inc., dated 1981.
  - c. "Hydrogeologic Investigation, Modification of Existing Facility, Granger Landfill, Section 29, T5N, R3W, Watertown Township, Clinton County, Michigan," by Keck Consulting Services, Inc., dated 1981.
9. The following additional documents, approved since the issuance of the construction permit(s) referenced in Item 8, are incorporated in this license by reference:
- a. "Granger Grand River Landfill Hydrogeological Monitoring Plan," prepared by Granger Land Development Company, dated October 6, 1999, revised November 9, 1999.
  - b. Leachate Recirculation Plan dated September 1999.
10. Consent Order/Judgment Number: N/A.
11. The licensee shall repair any portion of the certified liner or leachate collection system that is found to be deficient or damaged during the term of this license unless determined otherwise by the DNRE.
12. The licensee shall have repairs to any portion of the certified liner or leachate collection system recertified by a registered professional engineer in accordance with R 299.4921 of the Part 115 Rules and approved by the DNRE before receiving waste in that portion of the certified liner or leachate collection system. The licensee shall submit the recertification to the DNRE's ERMD, Lansing District Supervisor, for review and approval.
13. The licensee shall conduct hydrogeological monitoring in accordance with the approved hydrogeological monitoring plan, dated October 6, 1999, and revised November 9, 1999. The sampling analytical results shall be submitted to the DNRE's ERMD, Lansing District Office.
14. Modifications to the approved hydrogeological monitoring plan referenced in Item 13 may be approved, in writing, by the ERMD, Lansing District Supervisor. Proposed revisions must be submitted in a format specified by the DNRE.

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15. Leachate may be recirculated if a leachate recirculation plan has been approved, in writing, by the ERMD, Lansing District Supervisor.
16. Modifications to approved engineering plans that constitute an upgrading, as defined in R 299.4106a(l) of the Part 115 Rules, may be approved, in writing, by the ERMD, Lansing District Supervisor.
17. Requests for alternate daily cover may be approved, in writing, by the ERMD, Lansing District Supervisor.
18. Leakage Control Criteria:
  - a. The active portions (except Cell 7 and beyond) authorized to receive waste by this license are monitorable units that are located over a natural soil barrier that is in compliance with the provisions of R 299.4422(2) of the Part 115 Rules.
  - b. The active portions (Cell 7 and beyond) authorized to receive waste by this license are monitorable units designed with a double-liner system that is in compliance with the provisions of R 299.4422(3) of the Part 115 Rules and that is capable of detecting and collecting leakage through the primary composite liner. The action flow rate for each unit containing a secondary collection system is 25 gallons/acre/day.
19. **VARIANCES:** None.
20. **SPECIAL CONDITIONS:**
  - a. The licensee shall place a compacted layer of not less than six inches of earthen material, unless an exemption is granted, of suitable cover material on all exposed solid waste by the end of each working day, as required by R 299.4429(1) of the Part 115 Rules. Suitable cover shall be either uncontaminated soil or an alternate cover approved by the ERMD, listed in Item i, below. Alternate cover shall be restricted as indicated in Item ii and applied as per the approved operational plan submitted by the licensee.
    - i. Approved alternate cover shall be any of the following:

Product/Waste Material

      - (1) Sanicover 250 or equivalent geotextile cover;
      - (2) Tire chips;
      - (3) Composted yard waste;
      - (4) Sure Cover Corporation's Land Cover Formula 480;
      - (5) Inert concrete and brick rubble;
      - (6) Bottom ash, which must be stockpiled in the active landfill cell and must be covered with clean soil, a geotextile, or an approved dust control product, prior to use as an alternate daily cover;
      - (7) Sure Cover Corporation's Clay Emulsion Coating;
      - (8) Landfill Service Corporation's Posi-Shell Cover System;
      - (9) Alum Sludge, from municipally owned water treatment facilities;
      - (10) Ground shingles and other roofing materials, which do not contain friable asbestos;
      - (11) Chipped wood;
      - (12) Incidental waste wood from construction and demolition sites;
      - (13) ConCover product SB;
      - (14) Hydro Green Hydro Seeding Mulch; and
      - (15) Filter cake from the wastewater treatment facility at the GMC, Lansing Center, approved for use on September 15, 2003
    - ii. The above materials are approved for daily cover when used in the following manner:
      - (1) The licensee shall use the material as daily cover only. The material cannot be used for road building or fill in other areas of the Facility's operation.

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- (2) The licensee shall maintain copies of the testing performed on Class B and Class C materials in the facility operating record.
  - (3) The licensee shall only stockpile material in a secure manner within the active cell.
  - (4) This approval does not preclude the licensee from disposing of the material as waste in the active fill area instead of using the material as daily cover.
  - (5) This approval shall immediately become void upon documentation by the DNRE that the alternative cover is not being used in accordance with listed conditions, that the alternative cover is not providing the necessary protection, that the material no longer meets the alternative daily cover guidelines, or that the process producing the waste material has changed.
  - (6) If the material does not meet the guidelines from Attachment 2 of Operational Memo 115-10, Revision 2, for nonvolatiles, the licensee shall ensure that fugitive dust emissions from this material do not occur. Acceptable methods to ensure fugitive emissions do not occur are:
    - (a) Implement a schedule to wet down material; or
    - (b) Cover the material with a tarp; or
    - (c) Apply an approved foam or other appropriate commercial dust control product.
  - (7) This approval to use alternative cover shall expire on the expiration date of this license.
- b. The licensee shall dispose of large and bulky items in compliance with the plan, dated November 27, 1990.
- c. The licensee shall store white goods and other recyclable metals, which are not source separated in accordance with the plan dated November 26, 1990, and letters dated November 27, 1990, and November 28, 1990, and in accordance with R 299.4315(11). The licensee may only store such material for up to one year.
- d. Based upon information supplied by the licensee to date, the area originally defined in Construction Permit 0059, has been determined to be composed of two separate and discreet areas with regulation under their respective part of Part 115, Solid Waste Management, and Part 111, Hazardous Waste Management of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (NREPA), and relevant administrative rules. Therefore, financial assurance, hydrogeological monitoring plans, and licensing, are separate for each of the areas, with the only exception that some monitoring wells are identified in both hydrogeological monitoring plans due to the fact that there is contiguous waste in a portion of both areas. Thus, some discretion by the DNRE is inherent as to which Part of the NREPA and rules pertinent to that Part (Part 111 vs. Part 115) apply to a release condition, to the extent of the area encompassed by the common monitoring wells. Otherwise, mention of the closed Part 111 area in this license is for reference purposes only.
- e. Electrical Generation:
- (i) A registered professional engineer has certified that the electrical generation plant was constructed in accordance with all applicable building codes.
  - (ii) The licensee shall operate and maintain the electrical generation plant in accordance with Part 115 of the NREPA and its administrative rules.
  - (iii) The electrical generation plant is located within the area described in the Declaration of Restrictive Covenant, signed by the licensee on February 14, 1989, and recorded by the Register of Deeds of Clinton County on January 9, 1990. The operation of the electrical generation plant is in compliance with this restrictive covenant.

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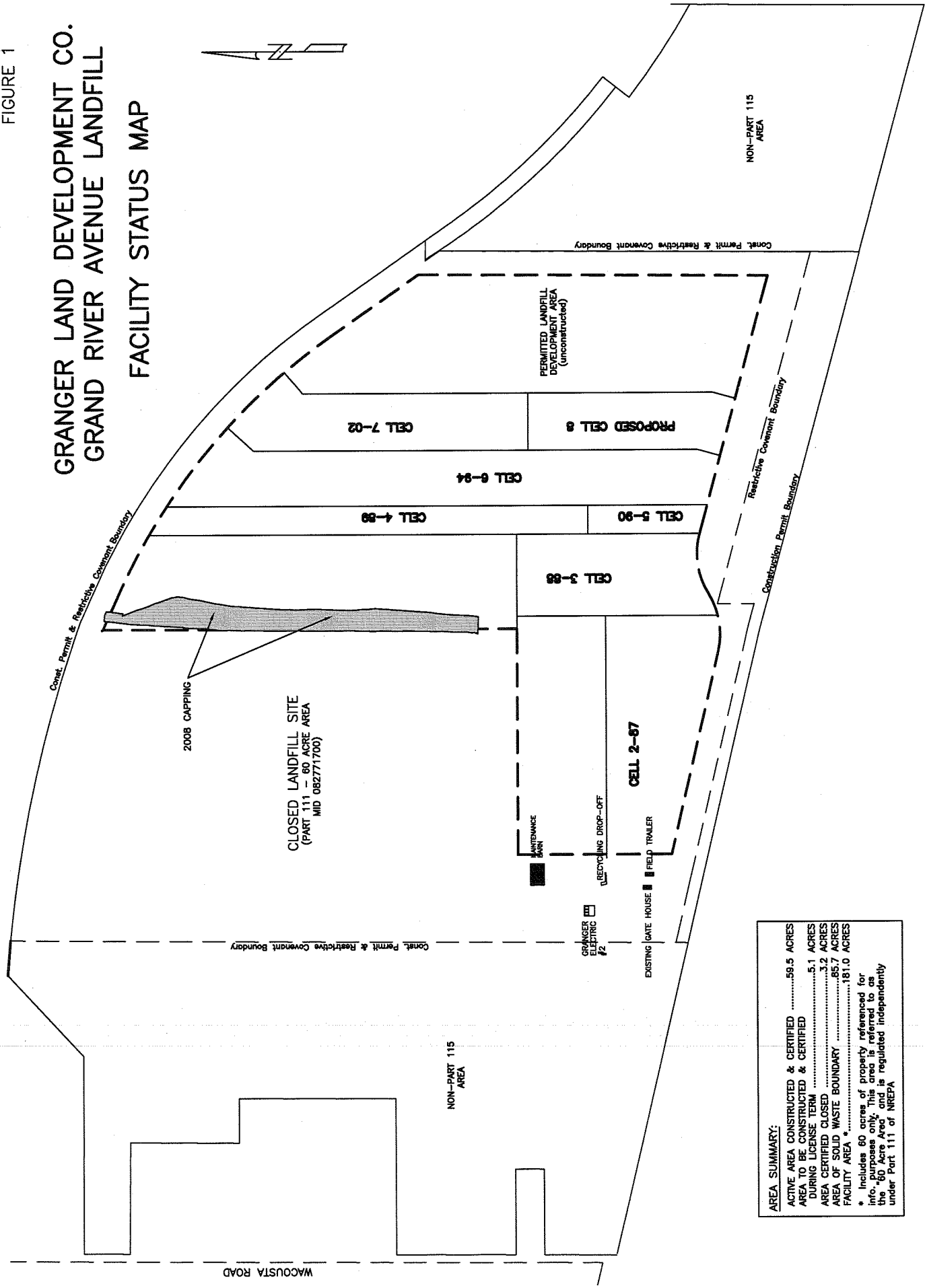
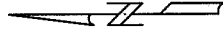
- (iv) The licensee shall operate the electrical generation plant, shown in as built drawings, transmitted to the Department of Environmental Quality (DEQ), on February 20, 1991, and February 25, 1991, in a manner consistent with the operations outlined in the licensee's August 1, 1991, letter to the DEQ.
- (v) The licensee shall operate the electrical generation plant so that noise is controlled, in compliance with R 299.4305(15) of Part 115.
- (vi) The licensee shall discharge all gas condensate from the generator station to the sanitary sewer system through the leachate collection system. This discharge shall comply with applicable discharge regulations. Leachate from the leachate wet well shall not be reintroduced to the landfill area without the DNRE's approval.

21. **TERM:** This license shall remain in effect until its expiration date, unless revoked or continued in effect, as provided by, the Administrative Procedures Act, 1969 PA 306, as amended, or unless superseded by the issuance of a subsequent license.

**END OF LICENSE**

FIGURE 1

**GRANGER LAND DEVELOPMENT CO.  
GRAND RIVER AVENUE LANDFILL  
FACILITY STATUS MAP**



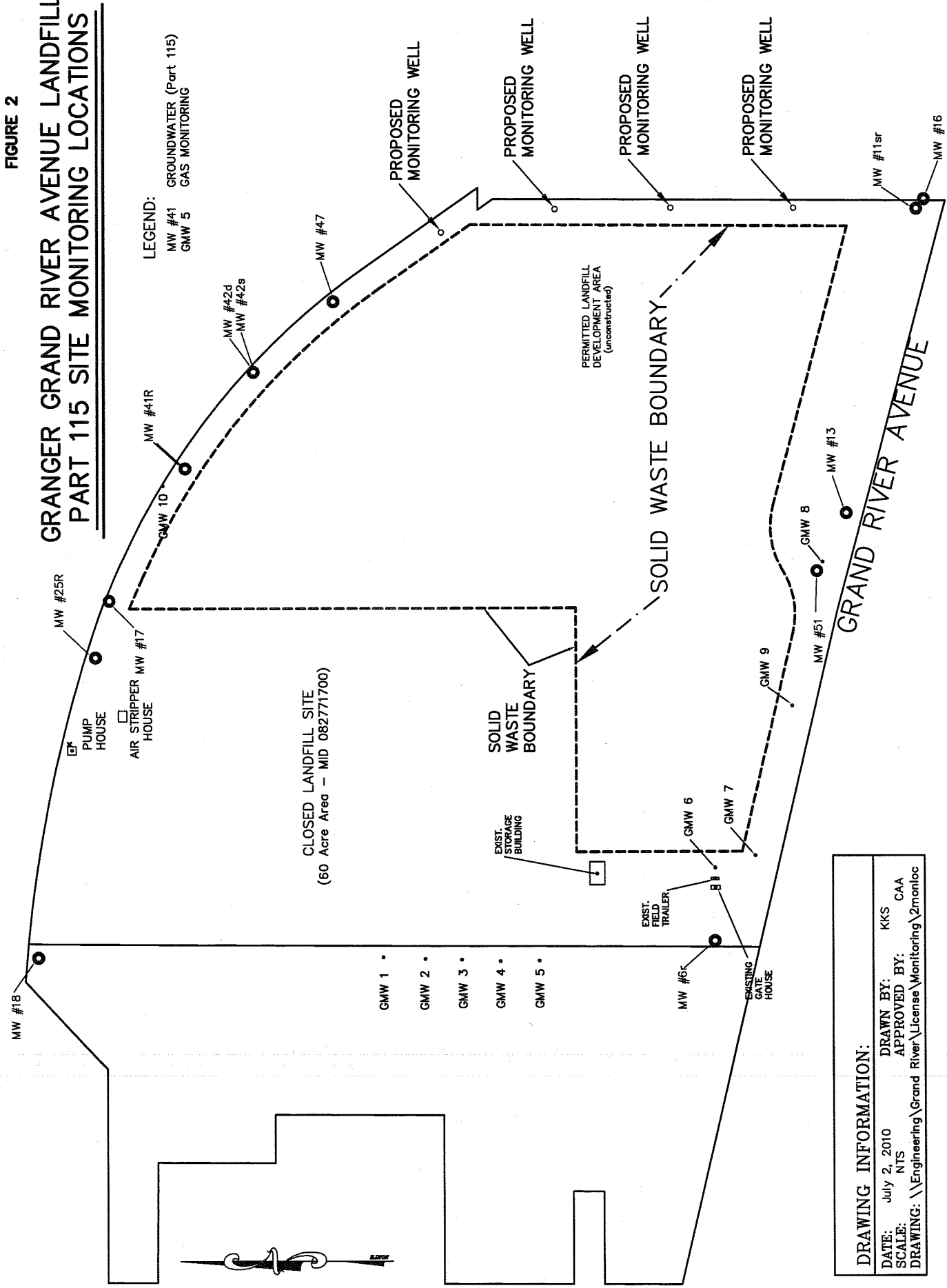
**AREA SUMMARY:**

ACTIVE AREA CONSTRUCTED & CERTIFIED	58.5 ACRES
AREA TO BE CONSTRUCTED & CERTIFIED DURING LICENSE TERM	5.1 ACRES
AREA CERTIFIED CLOSED	3.2 ACRES
AREA OF SOLID WASTE BOUNDARY	85.7 ACRES
FACILITY AREA *	181.0 ACRES

\* Includes 60 acres of property referenced for info. purposes only. This area is referred to as the "60 Acre Area" and is regulated independently under Part 111 of NREPA

FIGURE 2

**GRANGER GRAND RIVER AVENUE LANDFILL  
PART 115 SITE MONITORING LOCATIONS**



LEGEND:  
 MW #41 GROUNDWATER (Part 115)  
 GMW 5 GAS MONITORING

- GMW 1 •
- GMW 2 •
- GMW 3 •
- GMW 4 •
- GMW 5 •

<b>DRAWING INFORMATION:</b>	
DATE: July 2, 2010	DRAWN BY: KKS
SCALE: NTS	APPROVED BY: CAA
DRAWING: \\Engineering\Grand River\License\Monitoring\2monloc	