

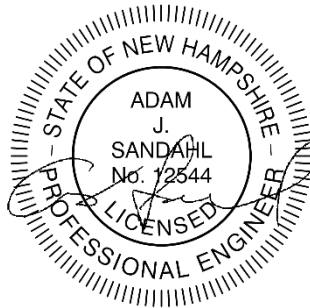


**NHDES Waste Management Division
29 Hazen Drive; PO Box 95
Concord, NH 03302-0095**



**Standard Permit for Solid Waste Landfill
Granite State Landfill
Douglas Drive
Dalton, NH 03598
NHDES Site #: TBD
Project Type: SW-LNDFILL
Project Number: TBD
Permit: DES-SW-SP-XX-XXX (TBD)
Volume4
Operating Plan**

Prepared For:
Granite State Landfill, LLC
1855 VT Route 100
Hyde Park, VT 05655
Phone Number (802) 651-5454
RP Contact Name: John Gay
RP Contact Email: john.gay@casella.com



Prepared By:
CMA Engineers, Inc.
35 Bow Street
Portsmouth, NH 03801
Phone Number: (603) 431-6196
Contact Name: Adam Sandahl, P.E.
Contact Email: asandahl@cmaengineers.com

Date of Report: October 16, 2023

Cover Sheet for Reports Template - Revised December 2020

Section VII
Operating Plan

FACILITY OPERATING PLAN

Granite State Landfill
Dalton, New Hampshire

October 2023

Prepared by:
Granite State Landfill, LLC
1855 Vermont Route 100
Hyde Park, VT 05655

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FACILITY OPERATING PLAN

This Facility Operating Plan (Plan) is for the Granite State Landfill, LLC (GSL) landfill facility located on Douglas Drive in Dalton, New Hampshire. The purpose of this Plan is to describe the operating requirements for the facility in accordance with the New Hampshire Solid Waste Rules. A copy of this Plan is to be maintained at the facility.

1.0 FACILITY IDENTIFICATION

Name: Granite State Landfill

Street Address: Granite State Landfill, LLC
Douglas Drive
Dalton, NH 03598
Telephone (603) 361-6477

Facility Type: SW-Landfill

Capacity of the Facility: (+/-) 10,750,000 cy

Permit #: tbd

Facility Service Type: Unlimited

Service Area: Northeast States

Street Address & Municipality: 172 Douglas Drive; Facility located in Dalton, NH

Tax Map & Lot #: 2 lots total - 406/2.1 & 406/3

Deed Reference County & Page #: Coos County Registry of Deeds book 787 page 584, corrected by book 999 page 313

USGS Topographical Map: Attached as Exhibit #1

Latitude & Longitude: Lat 44°-21'-05.85", Lon 071°-41'-54.47"

Written Directions: Traveling west on NH 116, 5.4 miles from the blinking yellow light in the village of Whitefield, turn right onto Douglas Drive.

Permittee and Property Owner: Granite State Landfill, LLC
1855 VT Route 100
Hyde Park, VT 05655
Telephone (802) 651-5454

Operator: Granite State Landfill, LLC
Douglas Drive
Dalton, NH 03598
Telephone (603) 361-6477

Haulers are required to access the facility via Douglas Drive from the east on NH Route 116 (from Whitefield) unless they are local traffic from Littleton. Reported haulers that do not access the site from Whitefield may be banned from the facility. Hauler agreements shall require a designated truck route.

2.0 AUTHORIZED AND PROHIBITED WASTES

2.1 Authorized Wastes

1. Solid Waste as defined by Env-Sw 103.47,
2. Construction & Demolition debris as defined by Env-Sw 102.42,
3. Other solid wastes, as listed below, subject to the special waste profiling and acceptance procedures provided in the Approved Operating Plan of Record. These wastes include and are not limited to:
 - Waste from industrial processes;
 - Waste from pollution control processes including but not limited to water and wastewater treatment sludges and air pollution control residues;
 - Residue from a spill of a chemical substance or commercial chemical product or a waste listed above;
 - Commercial products which are off-specification, outdated, or unused;
 - Waste produced during the demolition or dismantling of industrial process equipment;
 - Waste produced during the demolition or dismantling of automobiles (auto fluff);
 - Ash managed in accordance with the requirements of Env-Sw 902;
 - Contaminated soils and media managed in accordance with Env-Sw 903;
 - Contaminated residuals from the clean-up of a facility generating, storing, treating, recycling, or disposing wastes, chemical substances or commercial products listed above;
 - Treated infectious waste which has been autoclaved, or otherwise treated and disinfected in accordance with the requirements of Env-Sw 904; and
 - Other non-hazardous solid waste that requires special containerizing, shipment and handling prior to disposal or acceptance such as asbestos containing materials as defined by Env-Sw 102.14 or lead containing material.
4. NHDES Certified Waste Derived Products as follows;
 - CWDP #21 – MSW Incinerator Ash from Wheelabrator (N. Andover)
 - CWDP #14 - Auto Shredder Alternative Daily Cover (ADC)
 - CWDP #13 – Biosolids Incinerator Ash ADC
 - CWDP #11 – Crushed Glass
 - CWDP #10 - Bottom Ash from Wood Fired Boilers ADC

- CWDP #6 - C&D & Soil Mixture ADC
- Any other Certified Waste Derived Products approved by NHDES

NHDES Certified Waste Derived Product requirements for the CWDPs listed above are provided on the NHDES website at this URL:

<https://www.des.nh.gov/waste/solid-waste>

5. Other ADC previously approved for the North Country Environmental Services (NCES) Landfill carried over to GSL;
 - Airspace Saver Synthetic Tarps (Type III Permit Modification 09/09/02)
 - Processing C&D to Produce a Waste Derived Product as ADC (Type I-B Permit Modification 12/27/01)
 - Geosynthetic Tarps (Type III Permit Modification 02/12/98)
 - Casting Sands (Type III Permit Modification 02/12/98)
 - Contaminated Soils Meeting Env-Sw 806.03(b) & Env-Sw 903.05(b)(2)
 - ERRCO-Epping C&D Processing Residuals (Type III Permit Modification 02/12/98)

2.2 Prohibited Wastes

Wastes which are prohibited from disposal at the facility and shall not be knowingly accepted by GSL, include the following:

- Sludges not treated for odors;
- Hazardous wastes as defined by RSA 147-A and the New Hampshire Hazardous Waste Rules, Env-Hw 100 et seq.;
- Untreated infectious waste;
- Contained gaseous wastes;
- Liquid wastes (i.e., waste material that is determined to contain “free liquids” as defined by Method 9095 Paint Filter Liquids Test as described in “Test Methods for Evaluating Solid Wastes, Physical/Chemical Methods” [USEPA Pub. No. SW-846]);
- Wet cell batteries;
- Leaf and yard wastes;
- White goods;
- Whole tires;
- Radioactive materials as defined and regulated by the New Hampshire rules for the control of radiation, He-P 4000;
- Solid wastes identified in 2.1(3) above that have not received prior approval from GSL;
- Wastes which, based on quantity, condition or other specific characteristics, the

facility operator determines are unsuitable or inappropriate for landfilling at this facility;

- Mercury added products;
- Computers and peripherals;
- Video Display Devices;
- Rechargeable Batteries; and
- Any other waste that is prohibited from disposal in a solid waste landfill under RSA-M, Env-Sw 806.12, or any other state or federal regulation.

Incoming waste is to be monitored in accordance with the procedures outlined in Section 3.3. Those materials which are specified as unacceptable for disposal are to be rejected as described in Section 6.6.

3.0 ROUTINE OPERATIONS PLAN

3.1 Hours of Operation

Hours the facility accepts waste (gate hours) are 6:00 a.m. to 6:00 p.m. Monday through Friday, 7:00 a.m. to 4:00 p.m. on Saturday. Gate hours can be adjusted as necessary to meet actual disposal requirements of facility users and can only be adjusted within the hours bracketed above. Leachate removal may occur outside of these hours under the extenuating circumstances described in Section 6.9.

All routine landfill operations and inspections, maintenance, repairs, and monitoring under non-emergency circumstances are to be conducted between the hours of 6:00 a.m. and 6:00 p.m. unless otherwise approved by NHDES. Snow removal can occur at any time to keep main access points accessible for emergencies.

Staging of trucks is allowed on Douglas Drive outside of facility gate hours. Leachate or Renewable Natural Gas is generally removed from the facility during routine operating hours; however, it may be necessary to remove leachate from the site during evening and early morning hours.

The facility may be closed on New Years Day, Memorial Day, July 4, Labor Day, Thanksgiving Day and Christmas Day.

3.2 Facility Access Control and On-Site Traffic Patterns

Access to the landfill is restricted by an electronically operated locking gate located on the access road to the scale house from Douglas Drive. Other access points are controlled by manually operated lockable gates. Otherwise natural barriers prevent unauthorized facility access.

On site traffic patterns are standardized by road marking, signage, scale location and controlled access. Facility personnel monitor and control drivers by use of CB radio which is mandatory at the site.

The scales and scale building are located at the entrance to the site. Incoming waste hauling vehicles stop at the scale and are weighed, then proceed to the landfill tipping area. The scale operator and equipment operators on the working face use the CB and/or a two-way radio to communicate.

After discharging loads, drivers return to the scale and are weighed to determine the empty weight. A weight ticket may then be printed by the scale house operator and signed by the vehicle driver and the scale operator. Electronic signature and transactions are also utilized at the site to minimize contact for safety purposes.

Traffic Pattern & Waste Fill Sequencing Plans are provided as Exhibit A.

The facility employs a recordable video monitoring system at the facility and includes surveillance of; the main entrance, scales, leachate load out area and the landfill gas collection blower station.

3.3 Waste Acceptance and Rejection Procedures

3.3.1 Waste Review

All waste delivery vehicles stop at the scale prior to proceeding into the landfill. The scale operator identifies the customer and queries the customer's account in the facility's computer system or manually enters a customer's information. The driver of the vehicle identifies the type and origin of waste which is entered into the facility's computer system by the scale house operator prior to allowing the vehicle to proceed to the active working area.

Loads identified as having prohibited wastes are to be rejected at the scales and documented on a Load Rejection & Waste Inspection Form (Exhibit B).

In addition, trucks delivering Non-Hazardous Special Waste are not allowed beyond the scale area unless written approval has been issued by GSL in accordance with section 3.3.2 detailed below.

GSL may segregate certain materials for on or off-site management. Materials which may be segregated include wood waste, metals, and cardboard. Incoming loads of C&D that have a large quantity of uncontaminated materials which may be recycled for further processing will be directed to discharge the load in a segregated area within the landfill. The materials

may be utilized on-site (wood waste only material to be used on site) or transported off-site for recycle would have the following storage limitations.:

- Wood waste not to exceed 3,000 cubic yards
- Scrap metal not to exceed 80 cubic yards
- Cardboard not to exceed 80 cubic yards
- Tires not to exceed 40 cubic yards
- Electronic waste not to exceed 40 cubic yards

It may be necessary to perform some hand sorting of materials to meet quality standards. Loads that will be removed from the site are to be directed over the scales to track quantity and destination of material.

3.3.2 Special Waste Requiring Case by Case Profiling & Approval

The facility has a comprehensive program for management and handling of Special Waste. Special Waste is defined as:

A non-hazardous waste, as defined by the New Hampshire Hazardous Waste Rules, which because of the process generating the waste or its physical, chemical and/or biological characteristics potentially requires special testing and/or handling.

3.3.2.1 Special Waste Acceptance

The evaluation of Special Waste is conducted by an GSL technical representative(s) and includes the following.

- After the initial waste evaluation, the Special Waste Generator must complete an GSL Special Waste Characterization Profile Form, which characterizes the waste to be disposed and includes a certification statement declaring the waste is not hazardous.
- Requests for the approval of Special Waste are to be reviewed by the Special Waste technical staff to check that the wastes are non-hazardous and may be accepted under the facility permit. Waste streams are either approved by GSL, with or without special conditions for management of the material, or approval is denied.
- Odor generating potential will be assessed when Special Waste streams such as sludges are considered for disposal at the facility. GSL will impose as a condition of approval for special wastes (including wastewater treatment plant sludge) delivered to the facility that the generator shall provide odor control measures as necessary. GSL will also include as a condition of special waste approval that loads with unacceptable odors may be rejected at the discretion of landfill operating staff.

- In addition to evaluating new waste streams, the waste streams of existing customers are also to be reviewed periodically. This review may involve site visits, review of Safety Data Sheets (SDS), waste stream analysis, load inspections, or the re-evaluation of special waste management decisions.
- The Special Waste Characterization Profile Form and approval documentation are maintained on file at the landfill. If the approval is conditional on tonnage or testing, the approval limitations are entered into the scale system at the scale house and tracked with each incoming load.
- Each Special Waste delivery will be required to have a waste tracking document (i.e., non-hazardous manifest or bill of lading) used to track the waste from the point of generation through transportation, to disposal. The waste tracking document contains the customer / generator information, a description of the waste, the transporter information, and the approved disposal facility (destination).
- A copy of the waste tracking document is attached to the scale ticket and maintained on file at the Facility.

3.3.2.2 Special Waste Handling

- Upon arrival at the facility, the driver will present the required waste tracking document to the scale attendant. The scale attendant will review the documentation and verify the waste approval number and limitations (e.g. tonnage, handling requirements, etc.) have been satisfied. Once the paperwork has been checked and verified, the scale operator will notify the Operations Manager or their designee that the Special Waste load is proceeding to the working face.
- The GSL staff will visually inspect the Special Waste for consistency with the description provided by the generator on the Special Waste Characterization Profile Form as the material is unloaded. This confirmation will include comparing the physical state of the waste with those characteristics as described in the Special Waste Characterization Profile Form and the waste tracking document.

NOTE: If a discrepancy is found during the visual inspection, the Landfill Manager or their designee can reject the load. Procedures for rejecting a load are outlined in Section 6.6.

- After the visual inspection is performed and the load is verified, if applicable, GSL staff must sign the waste tracking document for the approved acceptable (if one-time event generated waste) load and return a copy of the signed document to the Transporter.
- The completed documentation will be filed at the facility office.

3.3.3 Asbestos Containing Material Management

GSL will conduct asbestos disposal operations in compliance with applicable rules and regulations, including Sections Env-Sw 901 and Env-A 1800.

GSL requires that any Asbestos Containing Material (ACM) be pre-authorized by the GSL Special Waste review process and requires a 24 hour advanced notice prior to delivery.

Asbestos is a naturally occurring mineral that can break apart into fibers. It has been used in building materials, paper products, plastics, and other products. Asbestos containing waste material is likely to be present in the debris from demolition, renovation or remediation sites and from certain industrial processes. EPA has classified asbestos as a known human carcinogen and regulated under Toxic Substances Control Act (TSCA) at 40 CFR Part 61.

Asbestos waste received at the facility shall be packaged and clearly labeled as asbestos containing materials. Friable asbestos waste shall be packaged in bags with a minimum thickness of 6 mils or a functional equivalent. Containers receiving bulk unwrapped asbestos shall be lined with at least 20 mil polyethylene or its functional equivalent. Waste haulers shall notify facility staff upon arrival at the scale house that they are hauling asbestos waste.

Once the ACM has arrived at the facility, weighed and the manifesting confirmed to be accurate by the GSL scale attendant, the driver will proceed to the landfill tip area. GSL shall dispose of the ACM in an area pre-determined by the landfill operations team and have an area pre excavated and ready for disposal.

Facility personnel handling asbestos waste shall be trained and equipped as required by 29 CFR 1910 and Env-A 1800.

Disposal will managed as follows:

- Disposal will be conducted 100' away from the active disposal area,
- Two signs will be placed at the entrance of the ACM tip area to warn GSL personnel, other personnel, and drivers of the ACM tip area and the requirement to stay back 100' if not authorized to be the ACM tip area, signage shall be moveable and will be relocated periodically with the tip area development,
- A water truck or other device capable of spraying the load as it is discharged shall be available and positioned next to the fill location,
- Any operator or truck driver within the defined tip area will wear a respirator until they exit the tip area,
- The ACM material will not be placed within 10' of an outer slope,

- The ACM will be discharged to minimize to the greatest extent practicable, damage to the concealed ACM material,
- If during offloading, the ACM material concealment wrapping becomes damaged, the operator shall spray the load and also spray the immediate area with water until the ACM material is buried,
- The ACM will be covered immediately and with a minimum of 3' of municipal solid waste and/or a minimum of 18" of soil cover material or ADC,
- The load will be located by GPS survey and be tagged with the Special Waste Identification number and mapped electronically.

3.3.4 Customer Education

Customer Education will be consistent with the NHDES approved GSL Public Benefit Determination.

3.3.5 Facility Signs

A facility welcome sign is posted at the entrance of the facility. The entrance sign shall have the facility name, address and phone number, permit number and hours of operation.

Additional signage adjacent to the scales will identify acceptable and unacceptable wastes consistent with this Facility Operating Plan and a statement that unlawful discharge of waste shall be subject to fine and prosecution.

3.3.6 Waste Unloading & Routine Inspection

Once vehicles are in the disposal area, equipment operators visually inspect the waste for unacceptable materials as refuse is spread at the working face.

3.3.7 Random Load Inspection

In addition to the routine visual inspection of the waste as it is unloaded at the working face, at least one load per day is randomly chosen to be inspected more thoroughly. Consideration for random inspection is given based on the type of waste, accounts serviced, and whether the hauler has a record of disposing unauthorized wastes at the facility.

Random load inspections are performed by GSL personnel with NHDES Solid Waste Operator Certification training.

Random Load Inspection:

- A. An GSL representative will randomly select a hauler at the scale or the working face;
- B. The GSL representative will notify the hauler of the random load inspection program

that they has been selected for an inspection;

- C. If the hauler will not allow the inspection, they will not be permitted to unload at the site;
- D. The load will be discharged in an area where it can be spread and visually inspected for unauthorized waste. The GSL representative shall not handle the waste. A Load Rejection & Waste Inspection Form (Appendix B) will be completed;
- E. Any unauthorized waste as identified in Section 2.2 of this document will be handled in accordance with Section 6.6. The hauler will be given a copy of the inspection form if they request it;
- F. Photographs may be taken of the unauthorized waste, truck or its contents;
- G. Any load identified as having a confirmable or suspected unauthorized waste will be documented on the Load Inspection Form. The hauler shall be sent a letter and may include photographs and an invoice for expenses associated with the management and proper disposal of any confirmed unauthorized waste. The hauler may be banned from future use of the facility;
- H. Site personnel will file the completed Load Rejection & Waste Inspection Form at the site where it will be available for NHDES review and will consist of:
 - 1) The completed form,
 - 2) Any photos taken, and
 - 3) A copy of the scale ticket.
- I. Personal Protective Equipment appropriate for Random Load Inspections will be provided by GSL.

3.4 Method for Tracking Waste Quantities and Sources of Waste

Waste haulers transporting waste materials to the facility are required to stop at the facility scale for weighing. After weighing, waste haulers proceed into the landfill for tipping. Waste haulers then return to the scale for re-weighing to determine the weight of the delivered waste. A scale ticket is generated and signed by the scale house operator and the driver of the vehicle.

Waste quantity tracking records are to be maintained at the facility until such time as approval to move or destroy the records is granted by NHDES.

3.5 Procedure for Tracking Outgoing Waste or Certified Waste-Derived Products

Leachate is collected at the facility and transported off-site for disposal in accordance with the procedures outlined in Section 4.0. Any vehicle hauling leachate off-site is

weighed prior to and after loading to determine the outbound volume.

3.6 Waste Storage Time and Capacity Limits

Authorized waste materials delivered to the facility will be disposed within the lined landfill and covered at the end of each operating day.

Contaminated soil, crushed glass, clean wood, processed C&D debris and certified waste derived products may be stored within the lined footprint of the landfill for operational or construction use.

Capacity limitations are a function of available working space within the lined limit of the landfill.

3.7 Waste Management Following Receipt (Waste Fill Sequence Plan)

A minimum of 4 feet of cover is to be provided over the anchor trench and the landfill liner system in areas where wheeled vehicles would travel. In addition, stormwater diversion swales and down chutes may be constructed on slopes to divert stormwater runoff away from the landfill. Roads inside the landfill may be developed to safely provide access at the discretion of landfill management.

The filling of the landfill will be consistent with the Traffic Pattern & Waste Fill Sequencing Plans (Exhibit A) and always subject to the discretion of the landfill general and operations manager. Seasonal weather variation, storms, changes in equipment, final capping, interim capping, new cell construction, other construction, and other circumstances could alter the approved fill sequencing plan.

3.7.1 Initial Lift in Base Areas

An initial six-foot lift of select refuse (typically bagged household trash) is to be placed above the liner system. Care is to be taken during initial refuse placement in these areas to remove items from the waste that could damage the liner system. During placement of the initial lift in the base areas, a full-time spotter is to observe the placement of refuse onto the base area of the landfill and remove items such as poles, pipes, and steel rods. Compaction of the initial lift in the base area will be performed with a bulldozer or similar equipment to avoid damage to the liner system.

These measures are taken to maintain the integrity of the lined collection system.

3.7.2 Subsequent Lifts

Once the initial lift is placed, additional waste is spread and compacted in shallow layers generally about 2 feet thick with a landfill compactor. Following placement of the initial

lift, fill placement shall proceed in daily cells built in successive compacted layers to a height typically between 6 and 15 feet depending upon the incoming refuse volume. Once filling proceeds above perimeter anchor trench grades, lifts will be graded to drain to the perimeter slopes to promote run-off to the perimeter swale. Grading of the top of each daily cell is to slope away from the active face to direct run-off away from the operating area.

The actual day-to-day operations are left to the discretion of the Landfill General Manager. The fill sequencing and lift development outlined above may be adjusted based on actual operating conditions including waste volumes and weather conditions.

3.7.3 Landfill Cover

Daily cover consisting of soil or an Alternative Daily Cover (ADC) material listed in this Facility Operating Plan is to be applied to the working face at the conclusion of each working day. Twelve inches of intermediate cover soil or geomembrane liners (temporary cap) are to be applied in areas where active filling will not occur for a period of six months or more.

The purpose of the daily and intermediate cover is to limit odors from the site, limit the potential to attract vectors, promote drainage of surface water, limit windblown litter, reduce the potential for fire, provide stability, and to serve as subgrade for the capping system. Cover material is to be applied and graded to direct runoff away from the filled area and limit leachate production. Silt fence and/or hay bales, or stone check dams are to be used as necessary to filter suspended soil particles within the runoff from areas which have received soil cover.

This facility may utilize the following ADC;

- Tarps;
- Spray on ADC;
- Petroleum Contaminated Soils;
- Crushed Glass;
- Cover Chip (mixture of soil and wood or pole chips/shavings);
- CWDP Listed in Section 2.1; and
- Other ADC pre-approved by the NHDES.

When utilizing the tarps, soil or embedded chains shall be placed on the edges so the tarp resists wind lift. Additionally, an increased overlap of tarp over tarp may be utilized to improve coverage.

The facility may utilize a blend of wood chips/shaving and soil at a 50/50 mixture rate

(CWDP #6) as an alternate daily cover product. C&D debris that arrives at the site processed (chipped up by a chipper) or that is chipped on site is blended with soil at a ratio of 50/50 by volume.

Removal of temporary geomembrane liners for intermediate cover and final caps can occur at the facility.

Temporary capping can be removed by cutting the restrained edges and pipe penetrations with a utility knife and carefully detaching the geosynthetics. Intermediate cover beneath the geosynthetic will remain in place. The geosynthetics will be removed from the cap area rolled up for reuse or taken to the landfill disposal area and disposed of. Any landfill gas collection piping above the synthetic membrane will be temporarily disconnected until the cap has been removed and then the piping replaced to the original position and reconnected.

4.0 RESIDUAL WASTE MANAGEMENT

4.1 Leachate Management Plan

The leachate collection system for the GSL facility consists of a double liner system with primary and secondary liquid collection. Each system consists of a series of piping, stone, sand and a composite geonet system that rapidly conveys leachate to the sump of the landfill and the pumps designed to remove the leachate from the landfill.

4.1.1 Anticipated Leachate Generation Quantities

The quantity of leachate generated varies and is a function of weather conditions, (temperature and precipitation); the amount of waste in place, how long the cell has been open, whether the fill has progressed above grade so that runoff may occur, and the landfill cover condition.

Based on operating experience at the facility, the long-term average leachate generation during operation ranges from about 250 to 650 gallons per acre per day (g/a/d). Following the installation of a new landfill cell, leachate generation rates are expected to increase with the new landfill cell floor exposed to runoff. Following construction of a final capping system, leachate generation rates are expected to gradually diminish with time.

4.1.2 Phasing and Cell Development

To limit leachate quantities, the GSL facility has been developed in phases and will be completed in accordance with the waste fill sequencing plan.

4.1.3 Pumping/Removal Schedule

Leachate is automatically pumped from collection sumps through double walled piping

to a double walled above ground storage tank. Leachate is pumped to a leachate load out facility where leachate tankers will be loaded.

Sump liquid levels are monitored with a supervisory control and data acquisition (SCADA) system. The pump controls are designed to activate the pumps when the leachate level is approximately equivalent to the liner grade adjacent to the sump.

Liquids collected from the secondary systems will be pumped automatically, measured, and consolidated with primary leachate. Quantities pumped are measured to about 90% accuracy using flow meters.

A leachate loadout facility is located adjacent to the above ground storage tank.

Facility staff calculates the liquid infiltration rates into the secondary detection system. If it is determined that the calculated rolling 30 day average rate exceeds 25 gallons per contributory acre per day, it is to be reported to NHDES within one week of the rate identification except for flow which the NHDES agrees is the result of dewatering or a construction project. If the rate exceeds 100 gallons per contributory acre per day, GSL is to file an investigative report consistent with Env-Sw 806.09 unless the NHDES agrees the rate is the result of a dewatering activity or a construction related project.

Leachate which is pumped into tankers for off-site disposal will be disposed of at one or more of the permitted facilities listed below.

FACILITY
Concord, New Hampshire
Franklin, New Hampshire
Plattsburgh, New York

The SCADA system shall control the process of transferring liquids from the sumps to the above ground tank. The SCADA system is configured such that pumps will not activate when the above ground storage tank is full and an alarm text and email are sent to site staff. While the leachate sump to storage tank transfer system is designed to operate automatically, it may also be operated manually. Pumping leachate to a tanker truck at the leachate loadout facility is a manual operation.

4.1.4 Leachate Contingency Considerations

In the event of a power outage, automatic back-up power systems will energize all site electrical needs.

Should the contingency or other large storm occur, and the leachate exceeds the capacity available in the facility's leachate storage tanks, additional storage is available on the liner system. As discussed in Section 6.1, operations staff is to take steps to remove leachate to increase storage capacity when severe weather is predicted. GSL is to implement measures to remove the additional leachate from the site in an expeditious manner using additional tank trucks to haul the excess leachate to the treatment plants indicated in Section 4.1.3. Under no circumstance will GSL allow temporary storage on the liner to last for more than seven days.

4.1.5 Record Keeping and Monitoring

The facility is to maintain records for each load of leachate shipped, identifying the quantity of leachate shipped, the date shipped, and the name of the wastewater treatment facility receiving the leachate.

GSL is to sample the leachate consistent with the requirements of the NHDES Rules, the facility permit, and the requirements of the various disposal facilities.

4.2 Landfill Gas Condensate Management

Landfill gas condensate generated by the landfill and the gas management system blower is designed to flow by gravity or be pumped into the leachate collection system.

4.3 Landfill Gas Management

Landfill gas is generated from the decomposition of organic matter discarded in the landfill. Landfill gas can create nuisance odor conditions and includes methane, which is a greenhouse gas. The landfill gas generated at GSL will be actively collected and destructed using an engineered gas collection and control system (GCCS). The GCCS will be regularly expanded and will include a combination of vertical landfill gas extraction wells (vertical wells), perforated landfill gas collection trenches (horizontal collectors), and leachate collection pipes where accessible along the perimeter of the landfill. The GCCS is regularly expanded in order to keep pace with gas generation, address surface emissions (if detected), and control odors at the site.

The facility is or will be subject to a State of New Hampshire Air Resource Division Temporary (Construction) Permit and/or Title V Operating Permit. Systems to collect and destruct the landfill gas will be designed in accordance with those quantities and as required by the above referenced air permits.

5.0 FACILITY MAINTENANCE, INSPECTION, AND MONITORING PLAN

The areas in and around the vicinity of the landfill are to be monitored to limit spontaneous combustion, vectors, landfill gas migration, odors, litter, dust, stormwater system damage and

accidental spillage.

5.1 Spontaneous Combustion and Other Fire Hazards

Loads that have arrived at the site when positioned on the inbound scale will be visually scanned by use of a video camera for evidence of smoke or abnormal condition caused by heat. If these characteristics are observed, the truck will be directed to the hot load staging area.

Buildings will be monitored for the presence of landfill gas using a device designed to collect ambient air samples and detect the presence of explosive gas (methane and hydrogen sulfide in landfill gas have explosive characteristic and can be ignitable), fire extinguishers will be available for landfill staff, safety standards will be followed for paint and shop chemical usage and storage, the fire department will be provided periodic access to review safety procedures.

The facility will also file any emergency planning and community right to know report annually.

In addition to fire extinguishers, the facility has a water truck available for any incidental on site fire control or use of soil application until the fire department can respond.

5.2 Vector Control

Compaction, the use of cover material including synthetic membrane can limit vector access. Other methods such as laser technology, audible deterrence's, NH Department of Fish & Wildlife assistance, depredation permits, contracting with a professional exterminator could also be utilized.

5.3 Generation of Methane, Hazardous and/or Explosive Gases

Methane or other dangerous gas produced by the decomposition of solid waste can migrate if not effectively controlled by engineered systems that are effectively monitored and maintained. An active landfill gas collection and control system (GCCS) is the primary engineered system at GSL to control the migration of landfill gas. The GCCS consists of a combination of drilled vertical landfill gas extraction wells, horizontal gas collection trenches and leachate collection system piping which are connected to a network of solid pipes under vacuum. Multi-stage centrifugal gas blowers generate the system vacuum used to extract the landfill gas, and various control devices are used to destruct the gas consistent with the facility's NH Air Resource Division Permit.

Monitoring for landfill gas outside the limits of the landfill footprint will involve sampling at gas monitoring probes and buildings. A landfill perimeter monitoring plan is included

in Exhibit D. The perimeter monitoring plan outlines monitoring for explosive gas at the facility boundary using a dual-range natural gas indicator such as a Gas Tech Model NP-204 or equivalent.

The following steps are to be implemented in the event that monitoring results indicate combustible gas concentrations in the soil exceed 50 percent of the lower explosive limit (LEL) at the property boundary or 25 percent of the LEL in on-site buildings excluding leachate collection and gas recovery components (note that the LEL defined above corresponds to 5 percent methane by volume in air):

- Take necessary steps to protect human health and notify NHDES [This notification shall be deemed to have taken place when the Department's Project Manager in the Solid Waste Compliance Section 603-271-2925 is notified.];
- Within seven (7) days of detection, place in the operating record the methane gas levels detected, and a description of the steps taken to protect human health; and
- Within sixty (60) days of detection, implement a remediation plan for the methane gas release, place a copy of the plan in the operating record, and notify the NHDES that the plan has been implemented. The plan shall describe the nature and extent of the problem and the proposed remedy.

Locations where gas concentrations exceed 50 percent of the LEL at the property line are to be identified in a separate report which is to be forwarded to NHDES pursuant to Env-Sw 1005.09(a).

Should the combustible gas concentrations be determined to exceed 50 percent of the LEL at any permanent perimeter probe location, an evaluation is to be made to determine whether the frequency of monitoring should be increased, and whether the monitoring network and type of monitoring should be modified to enhance detection. If continued monitoring indicates elevated levels of landfill gas at the property line, an appropriate plan to control gas concentrations, such as further expansion of the active gas system, is to be developed and submitted to NHDES for review.

5.4 Odor Control

The application of daily, intermediate and final landfill cover; the installation of temporary caps; the operation and expansion of the active GCCS and responding to surface scan findings are the primary mechanisms that provide effective odor control.

A facility Compliance Technician will have responsibility for odor management at the

facility.

On site odor control techniques include;

- On-site odor evaluation loops consisting of odor trained staff driving a vehicle around facility roads to detect any landfill related odor;
- Misting bodies of waste hauling units by top application of odor spray neutralizing agents;
- Deployment of odor control pellets;
- Deployment of a high-pressure atomizing odor control system applied in areas within the landfill where odors are noted; and
- Checking that there is adequate daily or intermediate cover on the waste at the end of each operating day.

Off-site odor control technique includes;

- Sludges that are not treated may not utilize this facility for disposal;
- For waste streams that are identified which routinely exhibit unacceptable odor shall be addressed by generator. If this cannot be accomplished, the generator's waste stream will not be accepted at the facility;
- Off-site odor evaluation loops consisting of odor trained staff driving a vehicle around local roads to detect any landfill related odor; and
- Outreach with neighbors to evaluate if any patterns of odor detection exist.

Items to check during routine inspections include:

- The active gas collection system records to observe that gas is being extracted effectively from the various collection locations;
- That there is adequate daily or intermediate cover on the waste; and
- That odor neutralizing products or misting agents are being deployed properly, if in use.

When the facility receives a contemporaneous report of an off-site odor it must implement an odor inspection to attempt to confirm the odors at the alleged source, if possible, identify the source of the odor and complete a Nuisance Complaint Form (Exhibit E). For odor reports that are not contemporaneous, the facility must complete those portions of the form that apply to all odor reports.

Facility personnel who are likely to receive such odor reports will be trained in proper completion of the form. For those persons who may be calling during hours when the facility is not open, the call is automatically forwarded to an answering service which will

contact an GSL representative. The facility will maintain the original report forms at the facility and will promptly submit a copy of each form to NHDES.

5.5 Dust Control

Dust control procedures include proper maintenance of vegetated, gravel & paved road surfaces. Paved areas can be swept to reduce dust.

The facility will have a truck dedicated to on site water servicing needs including dust control. Other dust control techniques such as application of environmentally safe liquids may be used, planting of vegetation in strategic areas or other approved techniques as necessary.

5.6 Windblown Litter Control

Blowing litter is to be minimized by limiting the active working face, applying daily cover or alternate daily cover to the active fill areas and fencing. Other methods, such as the utilization of litter pickers, portable fencing and permanent perimeter fencing shall be used. Any windblown litter must be collected promptly and taken back to the active disposal area.

Litter will also be collected along the entrance of Douglas Drive and along the access road into the landfill. Refuse hauling trucks are required to have their loads tarped or use closed containers/truck bodies to reduce windblown litter.

5.7 Leachate Management

Leachate is collected on the uppermost component of the landfill containment system, known as the primary collection system. Leachate initially drains by gravity across the primary collection system where it accumulates in the sump of the landfill by gravity. From there the leachate is pumped by a submersible pump through a piping network out of the landfill to temporary storage tanks, then eventually pumped again into mobile leachate tankers for transportation off site.

Similar to the double lined landfill system, components that convey or store leachate outside the limits of waste are comprised of a primary conveyance/storage system with a repetitive (secondary) back-up system in the event the primary system was to develop a leak.

All leachate systems are monitored through the SCADA system. The quantity of liquid pumped from the primary and secondary collection systems is recorded along with the volumes of leachate removed from the site. These values are provided to the NHDES. Leachate sideriser buildings where the submersible pumps in the sumps are accessed for

maintenance and replacement are equipped with leak detection devices.

The GSL is equipped with a leachate loadout building with spill containment systems and provides safe transfer of leachate from the leachate storage systems to the leachate tanker. The tanker will transport the leachate to a treatment facility.

5.8 General Spill Management

GSL has a Spill Prevention Control & Countermeasure Plan for the facility. Employees will be trained on SPCC plan implementation. A spill of greater than 25 gallons or any spill contacting a drainage feature with direct connection to waters of the state must be reported to the NHDES by using the spill hotline (603) 271-3899.

5.9 Stormwater Management Systems

The surface water management systems are comprehensive and managed in accordance with the site's Stormwater Pollution Prevention Plan (SWPPP).

Quarterly outfall sampling is conducted at the site to document stormwater discharges are compliant with federal stormwater discharge standards for quality and clarity. All stormwater management systems are comprehensively inspected once annually in accordance with SWPPP.

5.10 Groundwater and Surface Water Monitoring

Sampling and analyses of groundwater and surface water is performed in accordance with a NHDES Groundwater Release Detection Permit. Permanent groundwater monitoring wells are installed to monitor groundwater quality at the site and are located throughout the facility. Surface water quality sampling locations have been established downstream of the facility.

5.11 Leachate Breakout Management

Inspections are to include observations of landfill side slopes for evidence of leachate breakouts. Breakouts are to be repaired promptly. Methods to repair breakouts may include excavation of the breakout and backfill with free draining material to promote drainage into the landfill. Leachate breakout locations are recorded on a field sketch and submitted with the monthly facility report. A copy of the leachate breakout and repair log is included as Exhibit D.

5.12 Bird Control

GSL performs bird control by utilizing dispersal techniques such as Wastack© that utilizes a combination of laser and sound through an algorithm, whistlers (bottle-rocket style), inflatable predators and a federal depredation permit. The on-site Compliance Technician will have responsibility to manage any nuisance condition relative to bird control.

5.13 Snow and Ice Control

GSL will control snow and ice on the facility's roads by plowing and the use of sand, small stone or other inert grit to increase traction. If roads are too dangerous for vehicular travel, site management can temporarily close the landfill at its discretion.

5.14 Extreme Cold Weather

GSL will utilize equipment equipped with functional cab heating systems appropriate for winter conditions. GSL staff will be provided cold weather hats, jackets, gloves, coveralls, pants and boots to stay warm. GSL will also be given additional breaks to warm up inside heated buildings.

Fuel additive will be used so that equipment can operate in extreme cold temperatures. Block heaters will be installed in equipment and plugged in overnight to improve engine starting function in extreme cold temperatures. In the most extreme cases, equipment may idle overnight to keep the vehicle operating.

The facility will have a generator and thermal frost blankets that can be used to keep strategic areas from freezing, such as the scales or manhole access points. Landfill management has the authority to temporarily close the facility at its discretion.

6.0 CONTINGENCY PLAN

Specific actions to be taken in the event of severe storm, fire, operator injury, spills and receipt of prohibited wastes are described in the following section. A list of emergency phone numbers is provided below. For police, fire and medical emergencies, 911 may be dialed.

List of Emergency Organizations		
Type of Service	Name of Organization	Telephone Number
Fire	Dalton Fire Department	(603) 837-2092 In Emergency: Dial 911
Poison Center	Northern New England Poison Center	1-800-222-1222
Hospital	Littleton Regional Hospital	(603) 444-9000
Spill Notification	NHDES (M-F, 8AM-4PM)	(603) 271-3899
Spill Notification	NH State Police (Nights – Weekends – Holidays)	(800) 346-4009 Out of State (603) 271-3636

6.1 Severe Storm

If severe weather is predicted including the potential for a large amount of precipitation or high winds, GSL staff are to evaluate if the facility should be closed.

A preemptive closure may allow GSL staff more time to cover the refuse, secure equipment, and secure the facility.

6.2 Fire and Accumulation of LFG

Fire - The Dalton Fire Department will be contacted in the event of a fire at the facility by dialing 1- (603) 837-2092.

Loads of refuse which are suspected to be burning will not be disposed in the active disposal area. Instead, such loads will be dumped in the hot load area. If an incoming load of refuse is suspected of being on fire, the haul vehicle will be directed immediately to the hot load area. The hot load will be monitored, allowed to cool and possibly quenched with water (if necessary) prior to disposal in the active area.

Soil may also be used to smother fires in support of the Fire Department at the working face.

Fire extinguishers are affixed to the facility's heavy equipment and available to extinguish fires. Fire-fighting will not be done by employees at the risk of personal injury.

Accumulation of combustible gas - The following steps are to be implemented in the event that monitoring results indicate combustible gas concentrations in the soil exceed 50 percent of the lower explosive limit (LEL) at the property line or 25 percent of the LEL in on-site structures excluding leachate collection and gas recovery components (note that the LEL defined above corresponds to 5 percent methane by volume in air):

- Take all necessary steps to protect human health and notify NHDES. This notification shall be deemed to have taken place when the Department's Project Manager in the Solid Waste Compliance Section 603-271-5185 is notified. Notification shall be made to the Department verbally as soon as practicable with a written report submitted within 5 days of the incident or situation in compliance with Section Env-Sw 1005.09 of the Solid Waste Rules;
- Within seven (7) days of detection, place in the operating record the methane gas levels detected, and a description of the steps taken to protect human health; and
- Within sixty (60) days of detection, implement a remediation plan for the methane gas release, place a copy of the plan in the operating record, and notify the NHDES that the plan has been implemented. The plan shall describe the nature and extent of the problem and the proposed remedy.

6.3 Injury

In the event of personal injury, first aid should be administered, and an assessment should be made as to whether emergency (ambulance) care is required.

6.4 Petroleum Spills

Please refer to the SPCC (Spill Prevention Control & Countermeasures Plan) and SWPPP (Stormwater Pollution and Prevention Plan) plans.

6.5 Leachate Spills

When a leachate release or spill occurs, a determination is to be made as to:

- the location of the release, or spill;
- Source of the leachate;

- An estimate of any quantity released;
- The direction in which any spill or release is heading; and/or
- The possibility of fire and/or explosion.

The following are general procedures that are to be followed in the event of a spill at the facility:

1. **Control** – The first task should be to stop the release of leachate, if possible, by such actions as shutting off pumps, placing soil against a leak, or diverting flow to a collection point. If the release of leachate cannot be controlled, begin the second step (transfer) immediately.

If a spill occurs on the ground surface, use absorbents if the spill is relatively small. Otherwise, use dirt, sand, or other relatively impervious material to dam the spill and prevent flow. Plug any drains in the area of the spill as soon as possible after a spill has occurred.

If the spill has reached a body of water the entire body of water must be considered leachate until such time analytical testing establishes that impact has been remediated.

2. **Transfer** – Once a spill is contained, the spilled material must be transferred to appropriate storage containers before disposal. If a spill is small and absorbents are used, they may be manually placed in waste containers and transported to the landfill workface for disposal at the facility. Collected liquids are to be transported off-Site for disposal at an appropriate wastewater treatment facility or discharged back to the landfill.

Leachate should be pumped into an appropriate bulk tank truck or to a container or tank suitable for storage of the material. Handling of spilled material is not to be done at the risk of personal injury.

3. **Disposal** – The disposal alternatives are the landfill or a permitted wastewater treatment facility.

6.6 Receipt of Prohibited Waste

When a prohibited waste stream is discovered, the procedure outlined below shall be followed:

- Special Waste that has not been approved in accordance with Section 3.3.2.1 or other prohibited waste which is deposited on the working face and which does not appear to GSL personnel to be an immediate threat to health or safety (e.g., whole tires, white goods, etc.) is to be isolated by the landfill equipment operator. The customer is to be identified and will be responsible for removing the waste. If the source of the

waste or hauler cannot be identified, GSL will evaluate the situation and implement appropriate procedures for the management of the waste. GSL staff will notify the landfill manager and/or the company's Permits, Compliance and Engineering personnel immediately. The unauthorized waste will be separated and if appropriate, placed in a secure container. The unauthorized waste will be evaluated by trained personnel and characterized for proper disposal. If the waste is identified to be potentially hazardous, GSL will contact an authorized hazardous waste company as identified in Section 2.2. GSL will utilize one of the following companies (or similar qualified firms) for removal and disposal of unauthorized waste:

CYN Environmental
8 Progress Drive
Dover, NH 03820
1-603-749-4969

Clean Harbors Environmental Services, Inc.
20 Dunklee Road
Bow, NH
1-603-224-6626

- In the event a waste disposed on the working face is believed to present an immediate threat to health and safety (e.g., reactive chemicals, ruptured drums containing liquids), the waste is to be left in place undisturbed and GSL staff will immediately notify the landfill manager. The NHDES will also be notified. The waste is to be evaluated and characterized for proper handling and transportation. Such waste is to be weighed and promptly transferred using licensed waste transporters and transported to a licensed disposal facility.

6.7 Spare Pumps and Related Mechanicals

Back up pumping & controls equipment is inventoried and available on site. Each pump station has a back-up pump and flow monitoring device. The facility also has a back-up blower. Most pump and control devices can also be ordered and available within 24 hours.

6.8 Back Up Power Plan

Back-up power is available at the site for all essential operating systems.

6.9 Extenuating Leachate Management

Leachate removal may occur outside of the normal operating hours of 6 a.m. to 6 p.m. for extenuating circumstances beyond control of GSL personnel, such as:

- WWTPs being closed for an extended duration
- Lack of availability of waste haulers

- Extended period of time that roads are impassible
- Inclement weather creating unsafe transportation conditions
- Hours bracketing holidays when WWTPs are closed

These leachate removal events are allowed within NHDES Rules (Env-Sw 1105.08)(b) as they can affect the successful operation of the facility if leachate cannot be removed from the site due to the conditions described above.

7.0 EMPLOYEE TRAINING PROGRAM

GSL's operations supervisor must be an NHDES-certified principal operator under Env-Sw 1600.

The on-site Compliance Technician and GSL staff responding to odor complaints will be trained in detecting odors, identifying potential sources of odors and how to document the odor complaint as well as documenting response actions by a third-party consultant.

GSL provides training to staff on job responsibilities, human resource matters, operations/equipment, health and safety, and environmental compliance. Training is primarily done by qualified internal staff, third party consultants may also be used.

Training includes:

1. Health and Safety

Training on a variety of health and safety related topics is provided primarily by on-site management. Generally training occurs once per month and ranges from one half hour to one hour sessions depending on the topic.

2. Specific Technical Training on Operating Equipment and Procedures

The landfill manager will ensure employees are technically trained in proper equipment use prior to operation. On-site and off-site training is provided for staff and management on specific equipment from suppliers.

3. Facility Operating Plan

The FOP is reviewed annually by the landfill manager and/or Compliance Staff. Facility operations staff is trained annually on the FOP or more frequently if the FOP was revised.

Within thirty days of NHDES approval of any changes to the Facility Operating Plan, each

employee will receive training with respect to any change related to the employee's responsibilities. Each training session will require attendees to sign a log specifying the sections of the FOP on which the operator received training. Employee familiarity with the FOP is monitored through interaction with the instructor during training.

a. Identification of Acceptable and Unacceptable Waste

Annual training is provided to equipment/compactor operators in identification of acceptable and unacceptable waste (Hazardous waste, CFC's, asbestos, etc.). Training topics may include: definitions, what is unacceptable, identification practices, load inspection, handling procedures, and procedures for unapproved or unacceptable deliveries and contact information.

b. Special Waste Training

Annual training is provided to the landfill manager, sales representative, and equipment/compactor operators, involved in the management of Special Wastes, as applicable to their related duties. Additional training may be required when there are new handling requirements, new rules or policies, or new waste streams. Training topics may include: definitions, examples of Special Wastes, identification of Special Waste, Special Waste approval process, load inspection, handling procedures, and procedures for unapproved or unacceptable deliveries and contact information.

c. Emergency and Contingency Plan Procedures

The emergency and contingency plan procedures are reviewed annually by the landfill manager. Facility operations staff are trained regularly and as necessary on various components of the Plan.

d. Odor Identification

Facility personnel who receive and respond to odor complaints shall be trained in detecting odors, identifying potential sources of odors, and documenting the odor complaint and GSL's response actions. Such training shall be provided by a qualified third-party and renewed annually.

4. Spill Prevention Control and Countermeasures (SPCC)

The facility is required to have a SPCC Plan under 40 CFR 112. Annual training is held for employees on the SPCC Plan and emergency response procedures. In addition, the training

includes a review of the NHDES criteria for reporting petroleum discharges and emergency contact information.

5. Storm Water Pollution Prevention Plan (SWPPP)

The Facility is required to have a SWPPP by the US EPA National Pollution Discharge Elimination System (NPDES) Program storm water pollution prevention training is conducted for operational employees annually.

8.0 RECORD KEEPING AND REPORTING

The following records are to be maintained at the facility as well as the GSL's Permitting and Compliance office:

- Copies of facility permits and approvals;
- Quantity, type, and origin of waste received by the facility;
- Quantity and destination of leachate generated by the facility;
- Quantity, type and destination of certified waste-derived products used or produced by the facility, if any;
- Record of inspections, maintenance, and repairs;
- Record of accidents, violations, remedial and emergency event response actions;
- Record of complaints received and related response actions;
- Data from all environmental monitoring performed at or for the facility, whether required by the Solid Waste Rules or the permit or undertaken voluntarily;
- Documentation of contact with the waste management district(s) served by the facility as required by Env-Sw 1105.06 (11);
- The facility design reports;
- Hydrogeologic reports;
- Special Waste profile documentation and analysis, as applicable, for all Special Waste delivered to the site;
- Other record keeping information and documentation required by the Solid Waste Rules; and
- Other information and documentation as required by the terms and conditions of the facility permits and approvals.

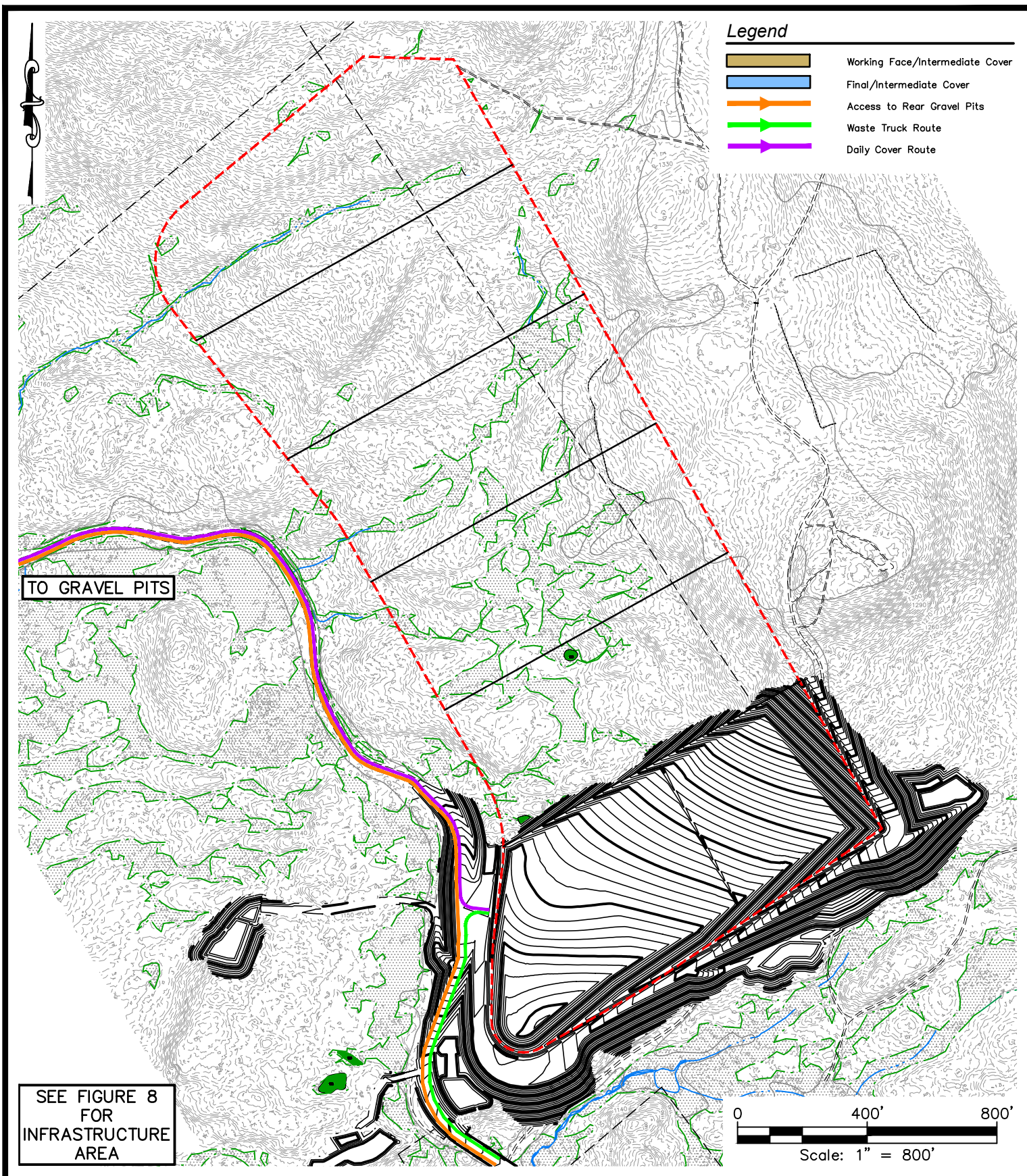
The operating records identified above are maintained at the facility at all times during the active life of the facility, unless approval is granted to relocate or destroy the records pursuant to a Type V permit modification or a waiver. Operating records are to be made available for NHDES inspection and copies provided to the department pursuant to Env-Sw 2000. Following closure of the facility, the operating records are to be maintained at a location approved by NHDES in the

Closure Plan, unless destruction of the records is approved pursuant to a Type V permit modification.

GSL will notify the department in writing within thirty (30) calendar days of any change in the facility address, telephone number, key operators or contact person(s).

Appendix A

Traffic Pattern & Waste Fill Sequencing Plans



CMA
ENGINEERS

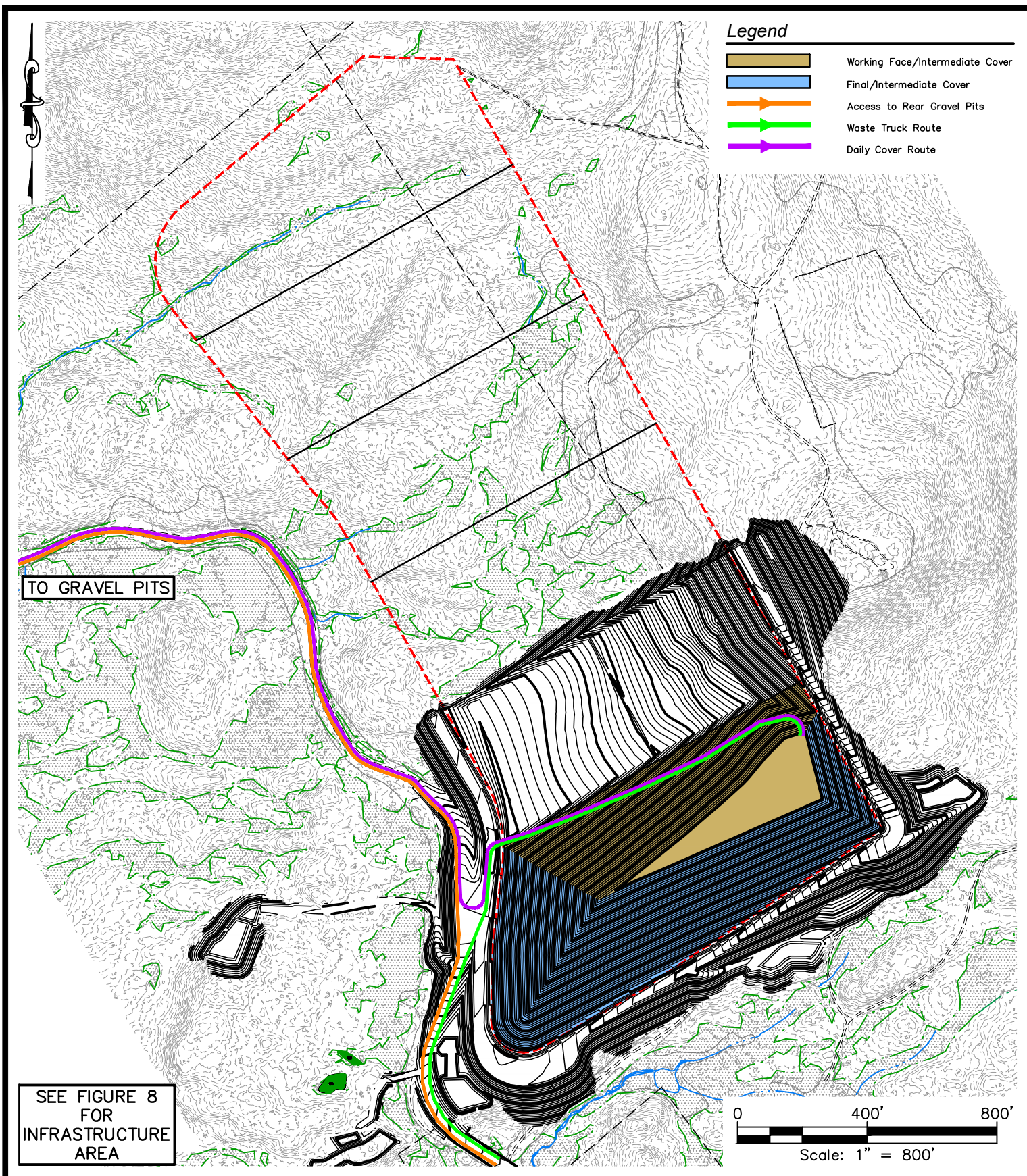
CIVIL/ENVIRONMENTAL/STRUCTURAL

Portsmouth, NH • Manchester, NH • Portland, ME
603/431-6196 • 603/627-0708 • 207/541-4223
cmaengineers.com

Granite State Landfill, LLC
Dalton, New Hampshire
NHDES Standard Permit for
Solid Waste Landfill

Traffic Pattern & Waste Fill Sequencing Plan

Figure 1 - Stage 1 Cell 1



CMA
ENGINEERS

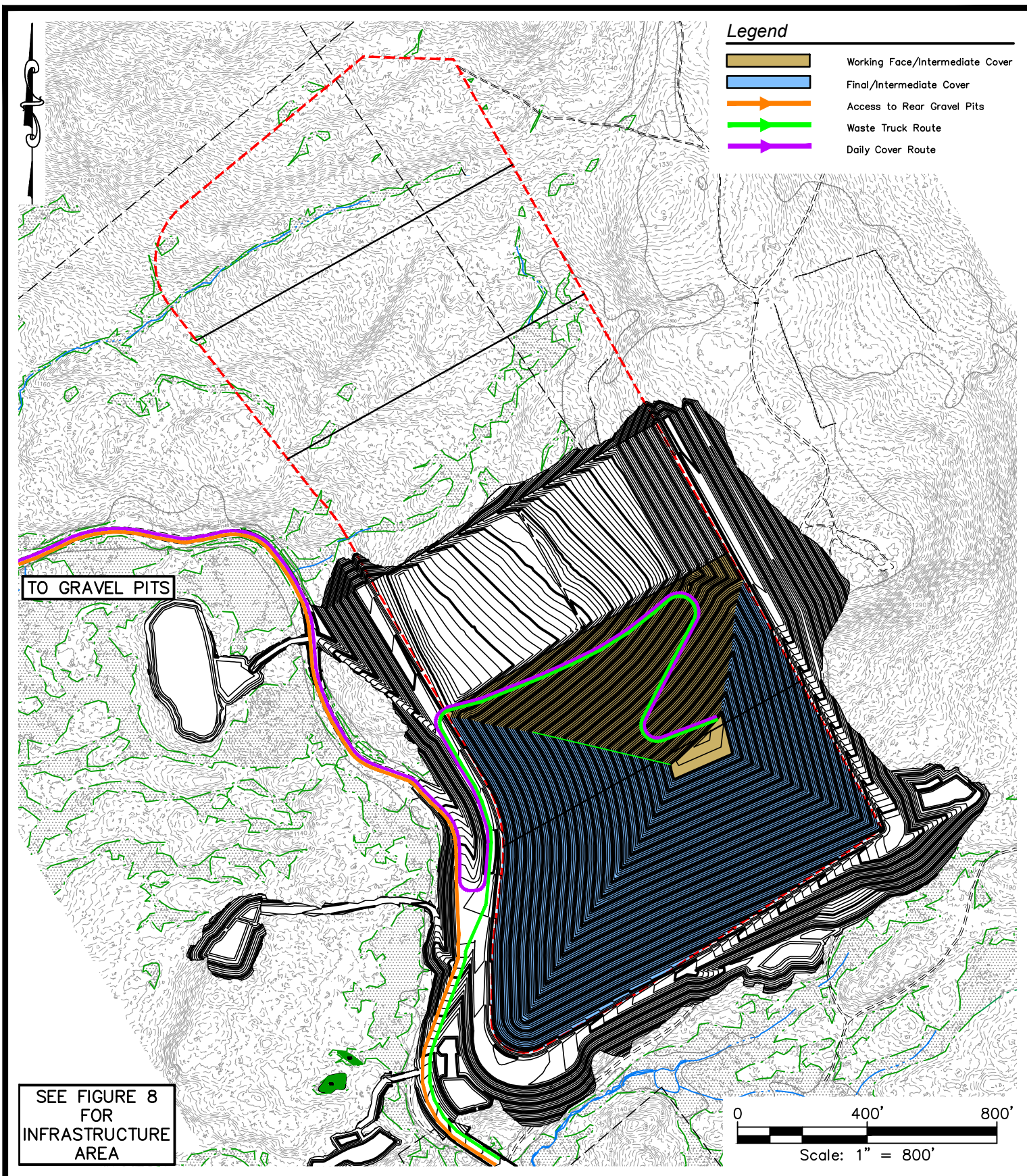
CIVIL/ENVIRONMENTAL/STRUCTURAL

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Dalton, New Hampshire
NHDES Standard Permit for
Solid Waste Landfill

Traffic Pattern & Waste Fill Sequencing Plan

Figure 2 - Stage 1 Cell 2



CMA
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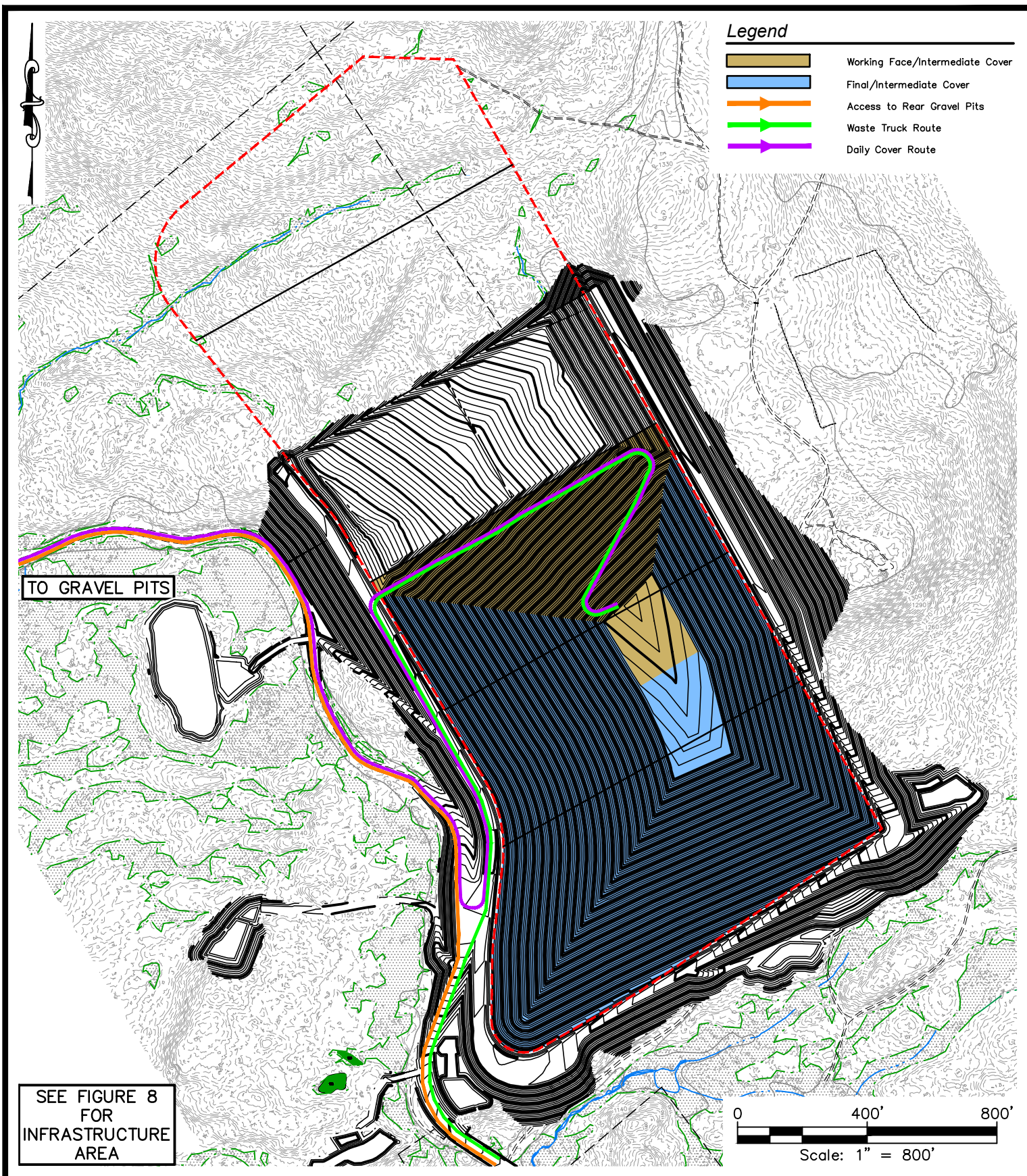
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Granite State Landfill, LLC
Dalton, New Hampshire
NHDES Standard Permit for
Solid Waste Landfill

Traffic Pattern & Waste Fill Sequencing Plan

Figure 3 - Stage 1 Cell 3



CMA
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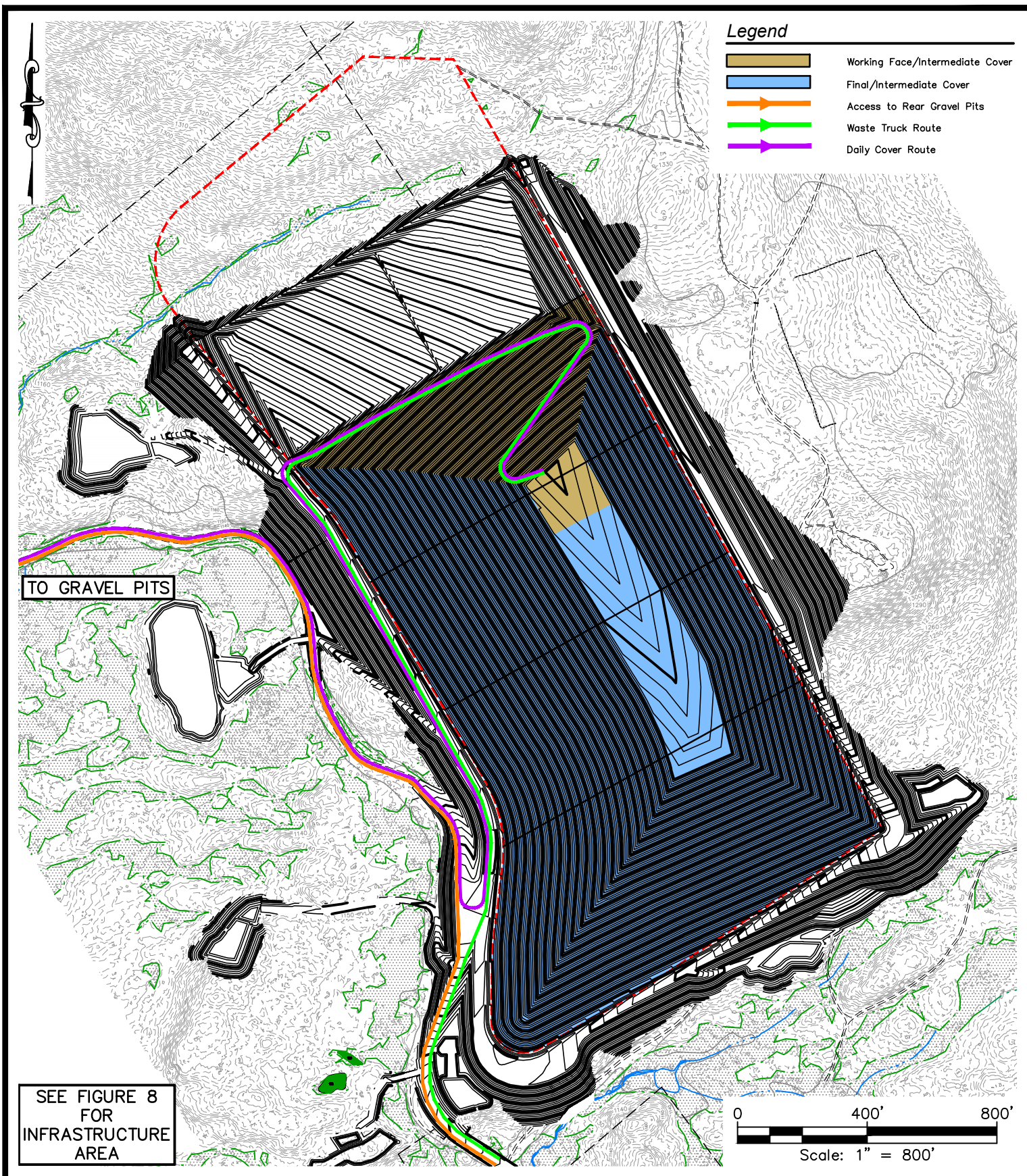
CIVIL/ENVIRONMENTAL/STRUCTURAL

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cmaengineers.com

Granite State Landfill, LLC
Dalton, New Hampshire
NHDES Standard Permit for
Solid Waste Landfill

Traffic Pattern & Waste Fill Sequencing Plan

Figure 4 - Stage 2 Cell 1



CMA
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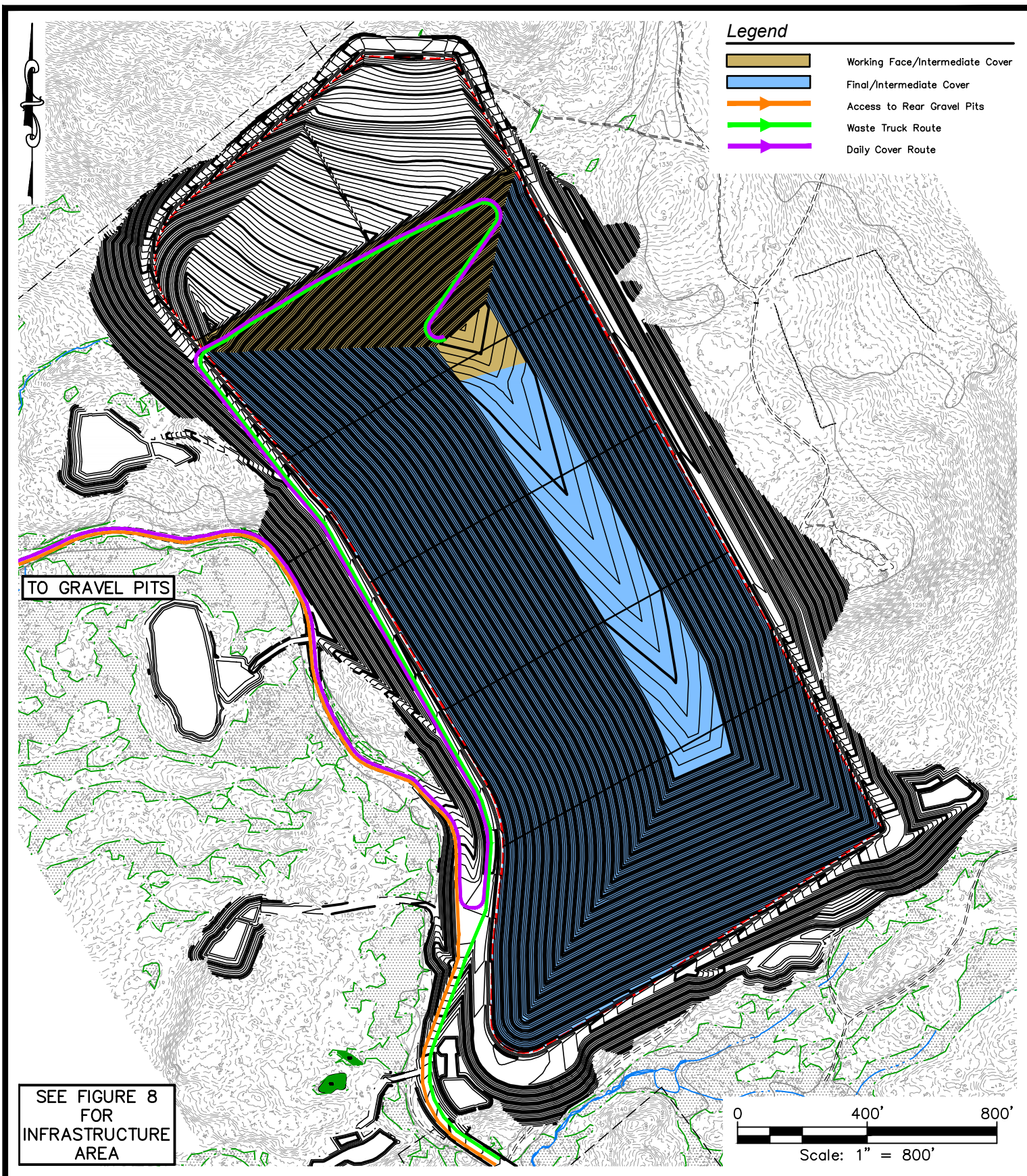
CIVIL/ENVIRONMENTAL/STRUCTURAL

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cmaengineers.com

Granite State Landfill, LLC
Dalton, New Hampshire
NHDES Standard Permit for
Solid Waste Landfill

Traffic Pattern & Waste Fill Sequencing Plan

Figure 5 - Stage 2 Cell 2



CMA
ENGINEERS

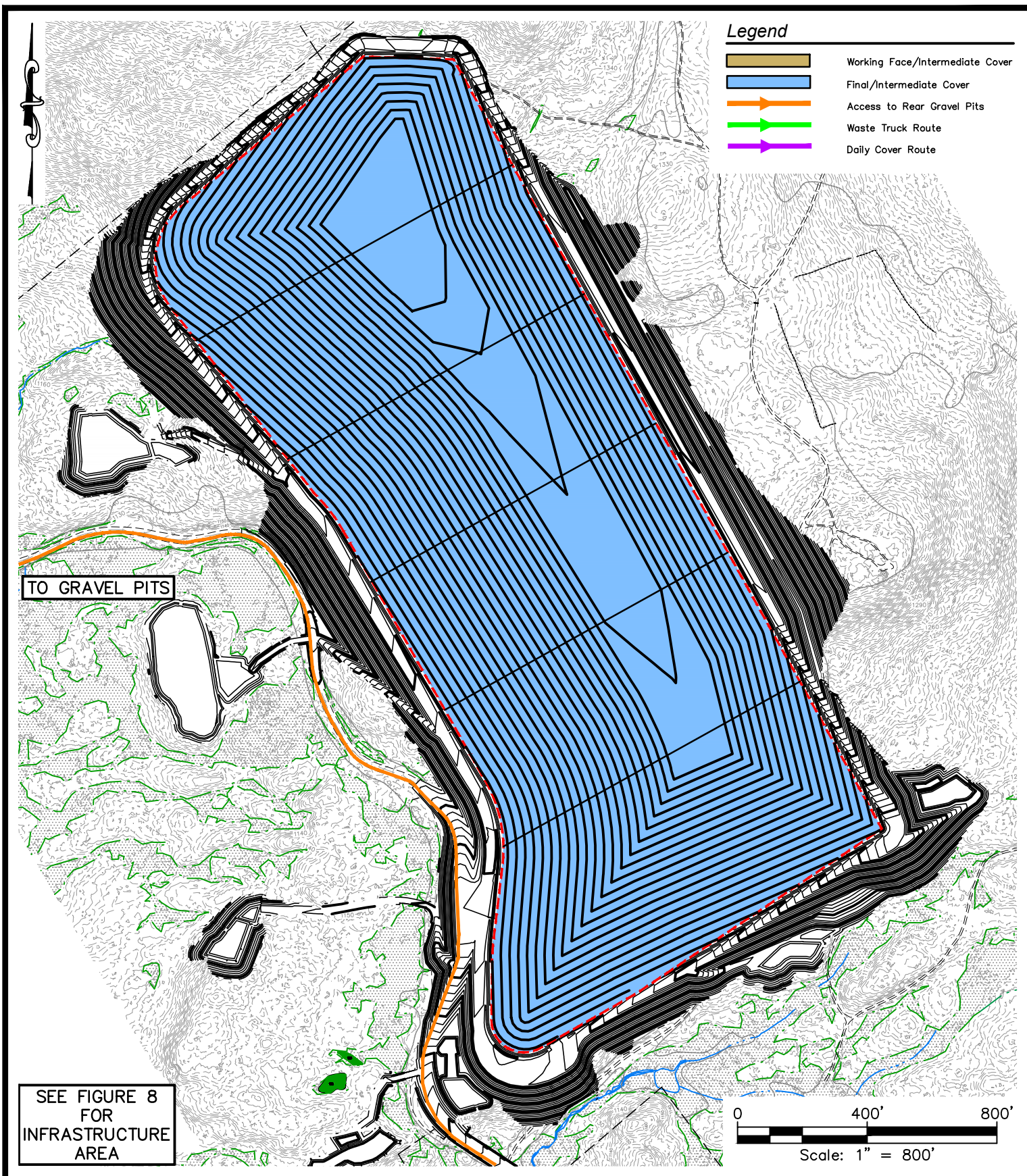
CIVIL/ENVIRONMENTAL/STRUCTURAL

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Granite State Landfill, LLC
Dalton, New Hampshire
NHDES Standard Permit for
Solid Waste Landfill

Traffic Pattern & Waste Fill Sequencing Plan

Figure 6 - Stage 2 Cell 3



CMA
ENGINEERS

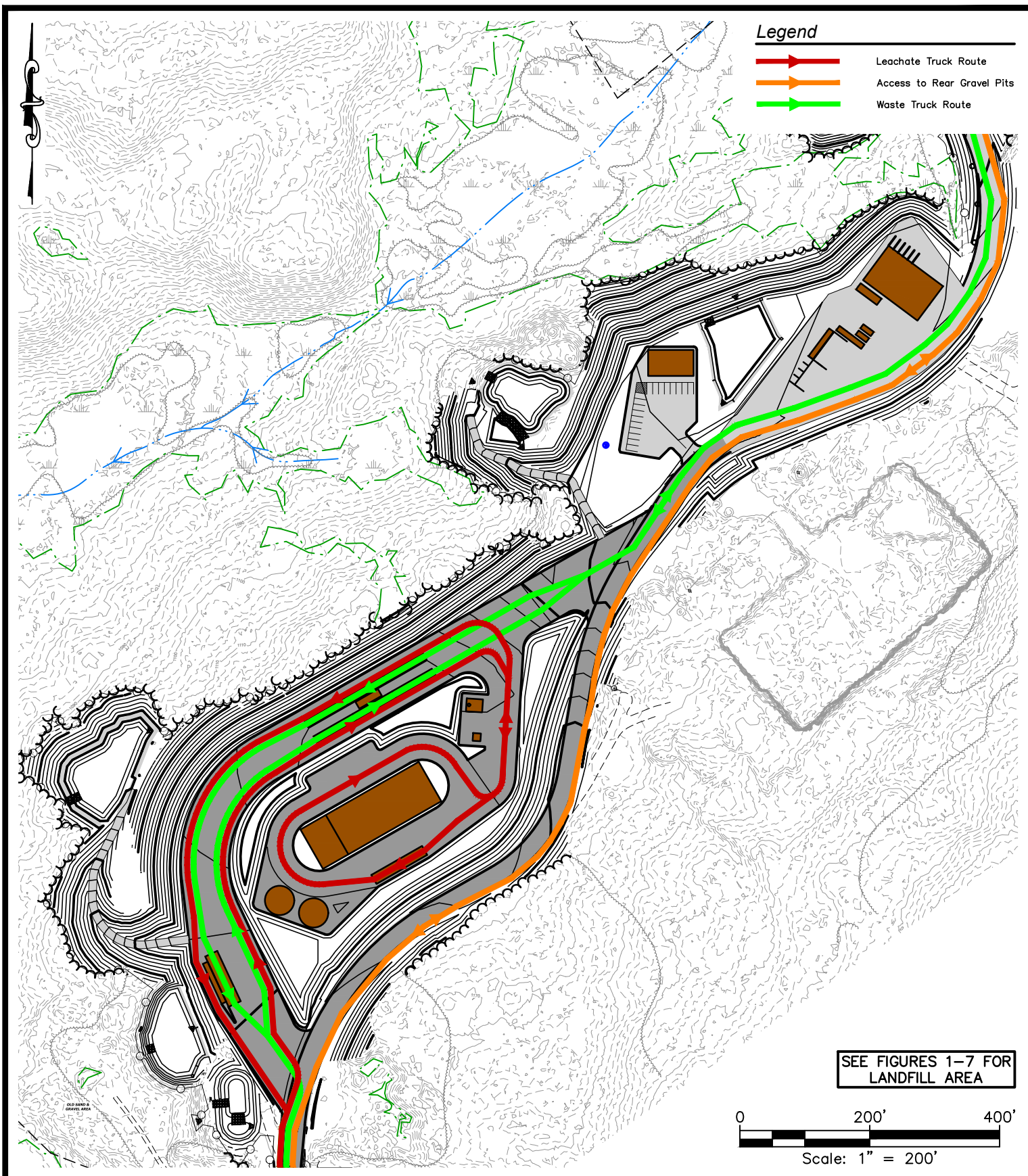
CIVIL/ENVIRONMENTAL/STRUCTURAL

Portsmouth, NH • Manchester, NH • Portland, ME
603/431-6196 • 603/627-0708 • 207/541-4223
cmaengineers.com

Granite State Landfill, LLC
Dalton, New Hampshire
NHDES Standard Permit for
Solid Waste Landfill

Traffic Pattern & Waste Fill Sequencing Plan

Figure 7 - Final Grade



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Granite State Landfill, LLC
Dalton, New Hampshire
NHDES Standard Permit for
Solid Waste Landfill

Traffic Pattern & Waste Fill Sequencing Plan

Figure 8 - Infrastructure Area

Appendix B

Load Rejection & Waste Inspection Form

GRANITE STATE LANDFILL, LLC
Load Rejection & Waste Inspection Form

DATE:			Circle if Load was Rejected Notes Area at the Bottom of the page)	(Use
CUSTOMER:	TIME:			
LOAD ORIGIN:	TRANSFER STATION	PERMANENT CAN		
	LOCAL ROUTE	SPOT PLACEMENT		
REMARKS:	TRAILER DUMP	MUNICIPAL SOLID WASTE		
	TRAILER	CONTRCUCTION DEBRIS		
	ROLL-OFF	MIXED M.S.W. & C.D.		
	PACKER	SPECIAL WASTE		
	PICK-UP	OTHER		
Notes:				

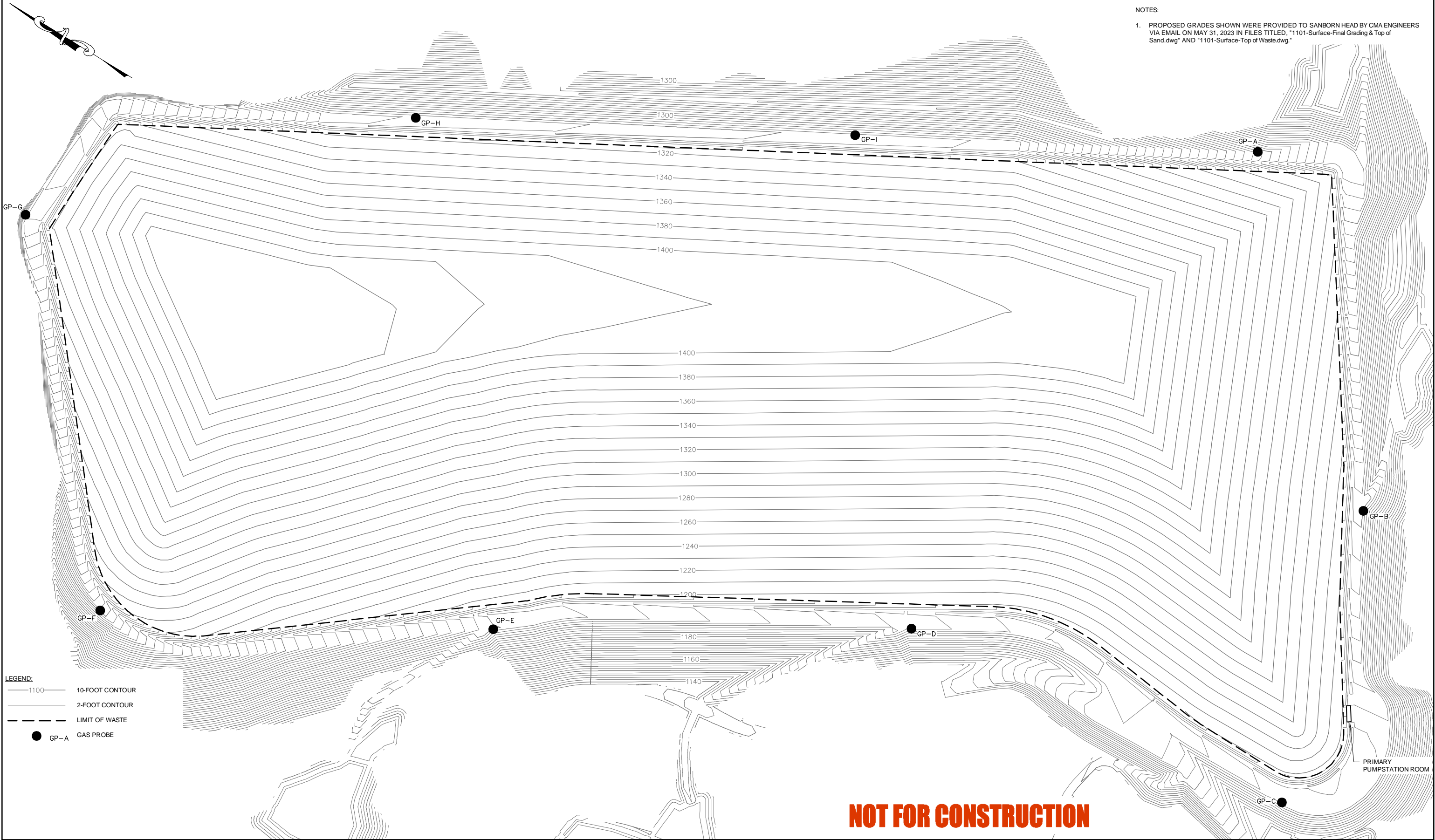
DATE:			Circle if Load was Rejected Notes Area at the Bottom of the page)	(Use
CUSTOMER:	TIME:			
LOAD ORIGIN:	TRANSFER STATION	PERMANENT CAN		
	LOCAL ROUTE	SPOT PLACEMENT		
REMARKS:	TRAILER DUMP	MUNICIPAL SOLID WASTE		
	TRAILER	CONTRCUCTION DEBRIS		
	ROLL-OFF	MIXED M.S.W. & C.D.		
	PACKER	SPECIAL WASTE		
	PICK-UP	OTHER		
Notes:				

DATE:			Circle if Load was Rejected Notes Area at the Bottom of the page)	(Use
CUSTOMER:	TIME:			
LOAD ORIGIN:	TRANSFER STATION	PERMANENT CAN		
	LOCAL ROUTE	SPOT PLACEMENT		
REMARKS:	TRAILER DUMP	MUNICIPAL SOLID WASTE		
	TRAILER	CONTRCUCTION DEBRIS		
	ROLL-OFF	MIXED M.S.W. & C.D.		
	PACKER	SPECIAL WASTE		
	PICK-UP	OTHER		
Notes:				

Appendix C

Perimeter Gas Probe Plan

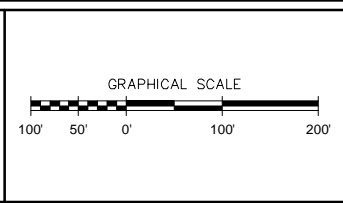
NOTES:
1. PROPOSED GRADES SHOWN WERE PROVIDED TO SANBORN HEAD BY CMA ENGINEERS VIA EMAIL ON MAY 31, 2023 IN FILES TITLED, "1101-Surface-Final Grading & Top of Sand.dwg" AND "1101-Surface-Top of Waste.dwg."



LEGEND:
1100 10-FOOT CONTOUR
2-FOOT CONTOUR
LIMIT OF WASTE
GP-A GAS PROBE

SANBORN

HEAD



DRAFT

NO.	DATE	DESCRIPTION	BY

DRAWN BY: O. HERNANDEZ
DESIGNED BY: O. HERNANDEZ
REVIEWED BY: R. CLAY
PROJECT MGR: T. WHITE
PIC: B. BEAUDOIN
DATE: JUNE 2023

GAS COLLECTION & CONTROL SYSTEM
NORTH COUNTRY ENVIRONMENTAL SERVICES, INC.
GRANITE STATE LANDFILL
DALTON, NEW HAMPSHIRE

PROJECT NUMBER:
1003.24

GAS PROBE LOCATIONS PLAN

FIGURE NUMBER:
A-1

Appendix D

Leachate Breakout Repair Log and Field Sketch

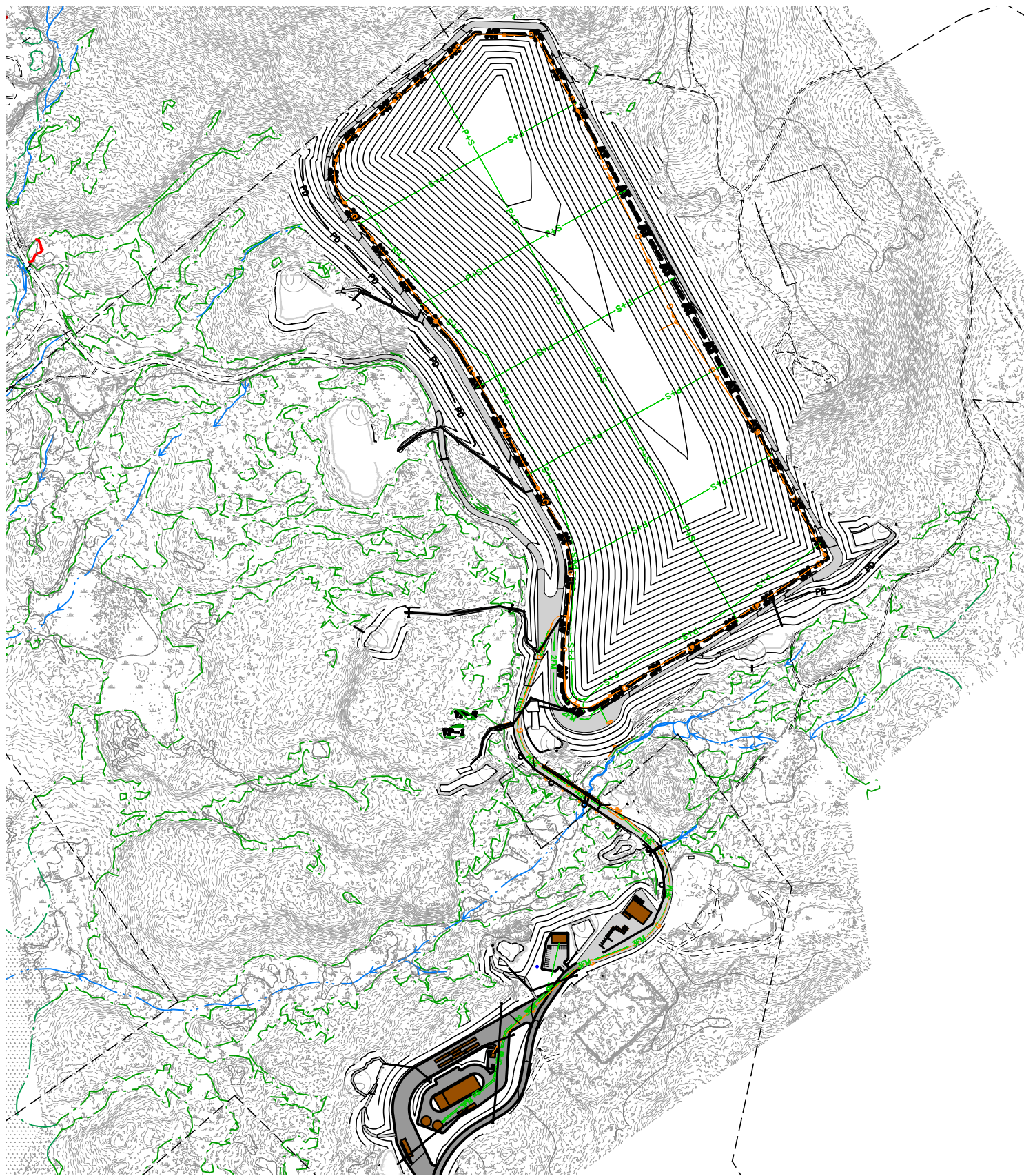
BREAKOUT REPAIR LOG
Granite State Landfill
Dalton, NH

Date: _____

Description of Breakout (Site and Location): _____

Steps to Repair Breakout: _____

Granite State Landfill Representative: _____
Signature



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Granite State Landfill, LLC
Dalton, New Hampshire
NHDES Standard Permit for
Solid Waste Landfill

GSL Leachate Breakout Field Sketch

Figure 1

Appendix E

Nuisance Complaint Form

GRANITE STATE LANDFILL, LLC
Facility Nuisance Complaint Form

Rev. January 11, 2021

Complaint

Name of Complainant: _____ Phone # (if given): _____

Location of reported event (if given): _____

Date of reported event: _____ Day of Week: Mon. Tues. Wed. Thurs. Fri. Sat. Sun. (circle)

Time of Event as reported to NCES: _____

Type of Complaint: Odor Noise (circle)

Description of Complaint (type, intensity, other reported details): _____

NCES Investigation of Complaint

Date NCES Received Complaint: _____ Time NCES Received Complaint: _____

FOR ALL CONTEMPORANEOUS COMPLAINTS:

Responder: _____ Date: _____ Time: _____

Complaint Confirmed: YES NO (circle) Type of Noise or Odor: _____

FOR ALL COMPLAINTS:

Weather Info at Time of Event: _____ Wind Out Of: _____ Temp: _____

Barometric Pressure: _____ Humidity: High or Low (circle)

Source of Weather Data: _____

At reported time of event:

Facility Open? YES NO (circle)

Construction Activities On Site? YES NO (circle)

Any Waste Excavations? YES NO (circle)

Landfill Operating? YES NO (circle)

Daily Working Area Covered from Prior Day? YES NO (circle)

Flare Operating? YES NO (circle) Gas Collection System Operating Normal? YES NO (circle)

If No, Explain: _____

Was Leachate Being Loaded at Time of Complaint? YES NO (circle)

Odor Control Misting System Operating? YES NO (circle)

Odor Neutralizing Pellets Utilized? YES NO (circle)

NCES Follow-Up / Notes:

Signature of Employee Completing Form: