



Department of
**Environment &
Conservation**

Public Hearing

Draft Permit Modification SNL530000203

Loudon County Landfill Class I Disposal Facility

November 21, 2024

5:30-6:00 pm – Informational Session

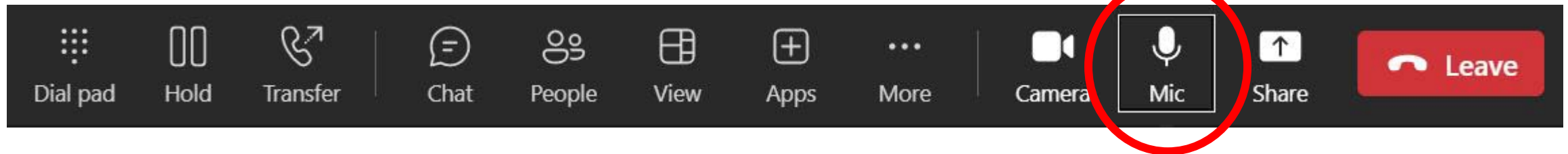
6:00 pm – Public Hearing

Questions? Open Question and Answer Period Until 6:00 pm

- Virtual Participate Questions

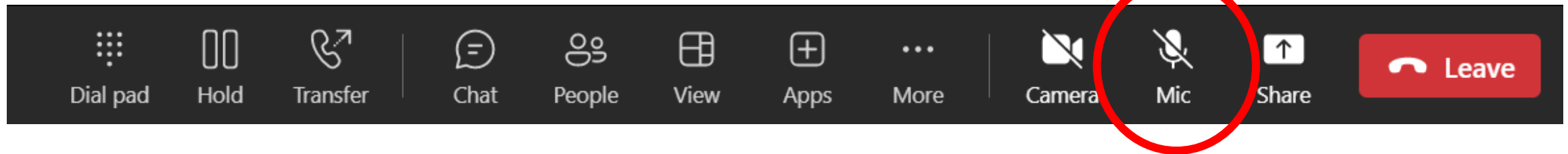
- Un-mute yourself to talk

- If calling in, unmute by dialing *6
 - If using the Microsoft Teams application, use the microphone icon to mute/un-mute yourself



- Please mute yourself after discussion to reduce background noise.

- Dial *6 to mute or make sure the microphone icon has a slash through it (muted)



Hearing Format

- The public hearing will also be presented via a Microsoft Teams Teleconference.
 - **5:15 pm** - The video-teleconference will open to participants
 - **5:30 pm** - The informational session will begin with a question-and-answer period until 6:00 pm.
 - **6:00 pm** - The formal hearing will begin at 6:00 pm. During this time, the Division will accept verbal comments for the record. Comments received during the Public Hearing will be responded to in writing in the formal response to comments and Notice of Determination.
 - Individuals who cannot attend the public hearing online or by phone may request for their written comments to be read into the record during the public hearing. Written comments do not need to be read during the hearing to be part of the record.
- Participants may join online, via the MS Teams app available to iPhone and Android phones, or by phone call. Participants are highly encouraged to join online or with the MS Teams app to view maps, pictures, and other content which will be shared by the Division.

Sign-in Form

- Please complete sign-in using the following link:
- <https://www.tn.gov/environment/notices/loudon-county-landfill>

Why Sign-in?

- The purpose of the survey is to provide TDEC with contact information in order to send participants the permit decision with a response to comments and the Notice of Determination.
- Please indicate whether or not you would like to make a public comment to ensure your name is called. If you select no, you will still be provided an opportunity to comment at the end of the hearing.



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Informational Session

Draft Permit Modification SNL530000203

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5:30-6:00 pm

Agenda

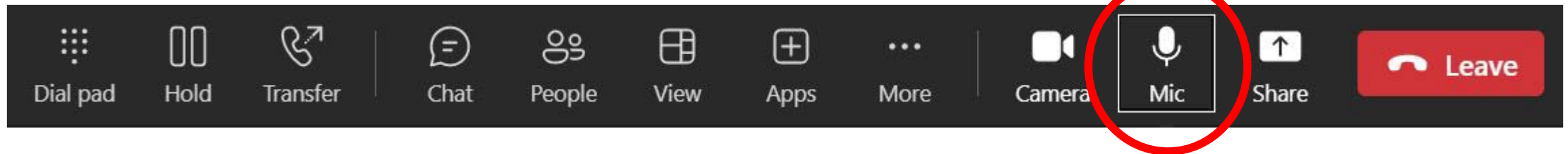
- **5:30 p.m. Informational Session Begins**
 - Review the Draft Permit, Fact Sheet, application, and plans
 - Visit the TDEC and Loudon County Landfill tables to discuss your questions one-on-one prior to the start of the formal hearing.
 - Write down or record your comments during this time; sign up at the Registration Table
 - If you're joining us on MS Teams, please type your questions into the chat box. Instructions on using the chat box will be posted within the chat box.
- **6:00 p.m. Public Hearing Begins**
 - i. Welcome and Overview
John LeCroy, Moderator
 - ii. Presentation from TDEC
Nick Lytle, Division of Solid Waste Management
 - iii. Presentation from Applicant
Tim Mitchell, P.E. & Michael Yacyshyn, P.E., Civil & Environmental Consultants, Inc.
 - iv. Receipt of Public Comments
 - v. Closing

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- Virtual Participate Questions

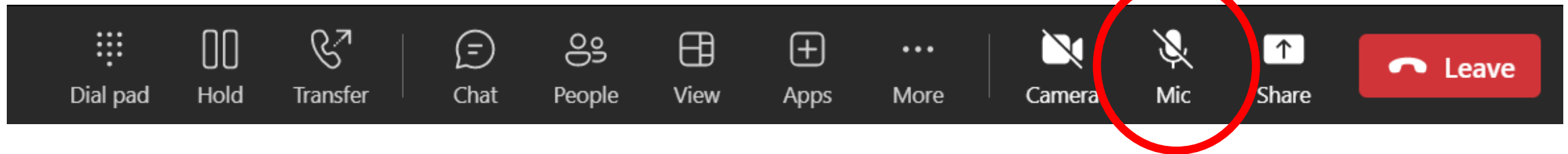
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Loudon County Landfill Class I Disposal Facility

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- To provide TDEC with contact information in order to send participants the permit decision with a response to comments and the Notice of Determination.
- Indicate whether or not you would like to make a public comment to ensure your name is called.
- If you select no, you will still be provided an opportunity to comment at the end of the hearing.

Presenters

- TDEC Staff member presenter:
 - Nick Lytle, TDEC Solid Waste Permits Manager
- Loudon County Landfill presenters:
 - Tim Mitchell, P.E., Civil & Environmental Consultants, Inc.
 - Michael Yacyshyn, P.E., Civil & Environmental Consultants, Inc.

Introductions

- Loudon County Landfill staff members present:

Loudon County Solid Waste Disposal Commission:

- Adam Waller, Chair
- Monty Ross, Vice Chair
- Gary Busch, Secretary
- Gary Hendrix
- Larry Jameson
- Andy Lawson
- Elizabeth Murphy, Attorney
- Chris Cline, Consultant

- TDEC, DSWM staff members present:

- Nick Lytle, Solid Waste Permits Manager
- Brian Wolf, Solid Waste Program Manager
- Rob Burnette, Solid Waste Chief Engineer
- Revendra Awasthi, Knoxville Environmental Field Office Manager
- Lew Haynes, Knoxville Environmental Field Office Environmental Protection Specialist

Republic Services:

- Luke Cunningham
- Teresa Fox
- Mike Classen
- Holly Van Kirk

Civil & Environmental Consultants, Inc.:

- Tim Mitchell
- Michael Yacyshyn
- Mike Johnson

- Molly Stanford, Knoxville Environmental Field Office Environmental Scientist
- Abigail Moseley, Solid Waste Permitting
- Brianna Rives, Solid Waste Permitting
- Breanna Couey, Public Participation Officer

Purpose of Hearing

- To receive public comments on the proposal by the Division of Solid Waste Management to issue a new solid waste disposal facility permit major modification to the applicant.

Permit Applicant: Loudon County Solid Waste Disposal Commission
Facility Name: Loudon County Class I Landfill (a.k.a. Matlock Bend)
Permit Number: SNL530000203
County: Loudon County

Purpose of Hearing

- This permit would allow
 - Construction, operation, closure, and post-closure care of the Class I disposal facility for the disposal of domestic wastes, commercial wastes, institutional wastes, municipal solid wastes, bulky wastes, landscaping and land clearing wastes, industrial wastes, construction/demolition wastes, farming wastes, shredded automotive tires, dead animals, and/or certain wastes having similar characteristics that are approved in writing by the Department.

TDEC DSWM's Tentative Decision

- In-depth review of the application
 - The application meets the applicable requirements of the Tennessee Solid Waste Disposal Act and Rules promulgated pursuant to the Act.
- The Division of Solid Waste Management intent that this permit be issued.
 - Pending consideration of any contrary technical information received during the public comment period ending on Monday, December 23, 2024.

Notice of this Tentative Decision

- The November 6, 2024, edition of the *News-Herald*
- Mail & Email
 - Sent to the solid waste mail and email list for Loudon County or occurring statewide.
- Department's website
 - Under the Public Participation Opportunities section.
- TDEC Knoxville EFO, Loudon Public Library, & the Division's Data Viewer
 - Copies of the application, plans, fact sheet, and draft permit have been and are available for public inspection.

Decision Process

- Response to Comments
 - This will address all significant comments received by 4:30 p.m., November 21, 2024.
- Reviewed by the Division Director
 - The draft Response to Comments and written comments received
 - Audio recording of this hearing
- Final Response to Comments Issued
 - If a permit is issued, the Response to Comments will also specify which provisions, if any, of the draft permit have been changed in the final permit decision and the reasons for the change.

Notice of Final Decision & Response to Comments

- Receive notice of the final decision
 - By Mail
 - Selection option on the sign-in form.
 - By E-mail
 - Please be sure to provide us your e-mail address.
 - Everyone who comments orally tonight or submits written comments and who has provided a legible, complete mailing address will automatically be sent a copy of the Public Notice of Final Decision and the Response to Comments.
- Posted on the Department's website.

Hearing Procedure

- Nick Lytle will explain the Division's proposal to issue the solid waste disposal facility permit.
- Tim Mitchell and Michael Yacyshyn will provide some general background information on the proposed facility.
- Receive comments
 - Through the computer and app chat function
 - Verbal comments



Department of
**Environment &
Conservation**

**Loudon County Landfill Class I Disposal Facility
Major Modification
Loudon, TN
Public Hearing**

Thursday, November 21, 2024– 6:00PM

Technical Contact on Draft Permit

Contact: Nick Lytle

Email: Nickolaus.Lytle@tn.gov

Phone: 615-854-4581

**Mail: Division of Solid Waste Management
Davy Crockett Tower
500 James Robertson Parkway, 7th Floor,
Nashville, TN 37243**

Environmental Field Office Contact

Contact: Revendra Awasthi

Email: Revendra.Awasthi@tn.gov

Phone: 865-306-1862

**Mail: Division of Solid Waste Management
Knoxville Environmental Field Office
3711 Middlebrook Pike
Knoxville, TN 37921**

Facility Info

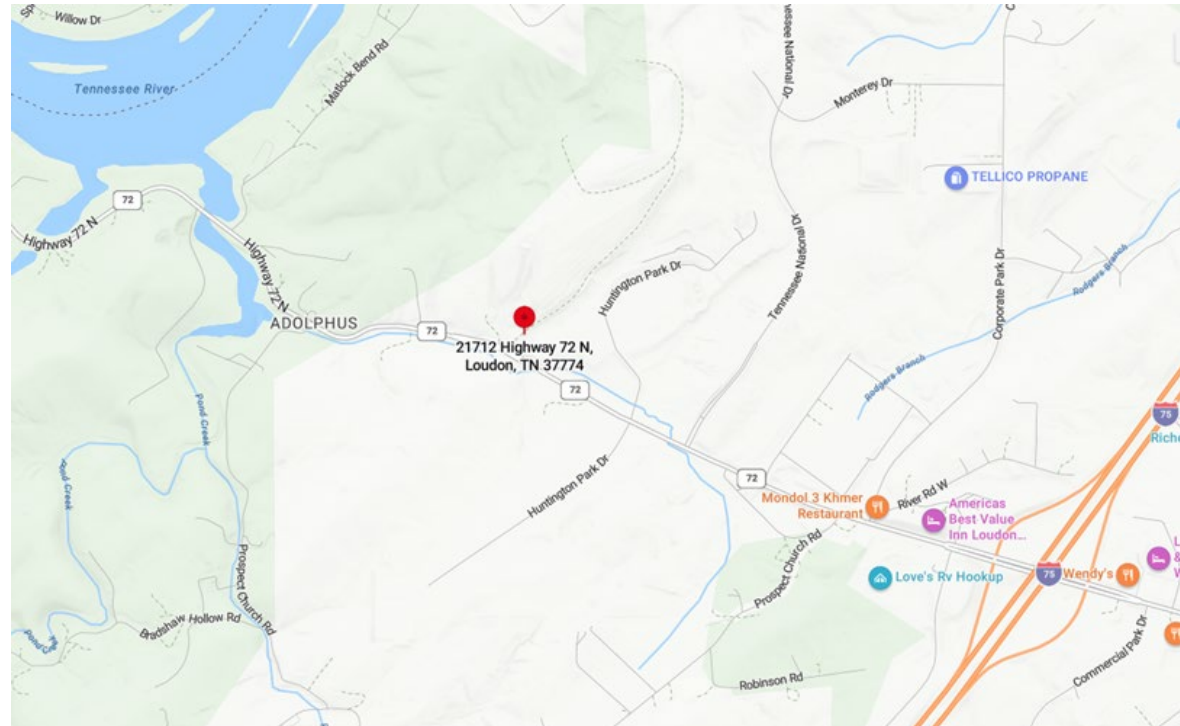
- Existing Class I Solid Waste Disposal Facility
- The Facility is located at 21712 Highway 72 North, Loudon, Tennessee (latitude 35.748033 N/longitude -84.411731 W)
- The currently proposed expansion increases the waste fill area by 7 acres from the currently permitted 40.6 acres
- Total projected volume of 7,161,910 cubic yards. This is an increase of 2,413,800 cubic yards from the previously approved permit

Facility Info

- The type of waste accepted at the Loudon County Class I Landfill includes domestic wastes, commercial wastes, institutional wastes, municipal solid wastes, bulky wastes, landscaping and land clearing wastes, industrial wastes, construction/demolition wastes, farming wastes, shredded automotive tires, dead animals, and/or certain wastes having similar characteristics that are approved in writing by the Department.

Facility Size and Location

- The landfill is located on approximately 152 acres of land
- Total Permitted Disposal Area is 47.6 Acres
- 21712 Highway 72 North, Loudon, TN 37921



Permitting Process

- Subject to Tennessee Rule Chapter 0400-11-01
- Regulations enforce or implement the Solid Waste Disposal Act – T.C.A. 68-211 Part 1
- Apply to New and Existing Solid Waste Facilities
- Outlines steps to follow when issuing a new permit

Permitting Process

Part I Application: A completed application which includes

- The name, address and phone numbers of the owner(s);
- Proposed activities to be conducted at the facility;
- A statement regarding whether the facility is subject to local approval and county approval, if necessary;
- A topographic map showing the facility, property boundaries to 1/2 mile past the boundaries, each waste processing or disposal unit, wells, springs, and other surface water bodies within 1/4 mile of the property boundaries;
- A disclosure statement.

Permitting Process

- Complete Part I received on 6/20/2023
- Revised Part I received on 7/26/2023
- Preliminary Notice Published in the *News-Herald* on 8/2/2023

Permitting Process

Part II Permit Application

Hydrological Report, Operational Manual, and Engineering Plans

- Required to demonstrate and describe how the new site will meet the standards of the regulations
- Includes:
 - Hydrogeological Report (approved under prior permit)
 - Engineering Drawings/Plans
 - Operations Manual with Written Narrative
 - Ground Water Monitoring Plan
 - Closure/Post-Closure Plan

Permitting Process

Part IIa Permit Application ***Hydrogeological Report***

- The Part II permit application must include a report assessing the hydrogeological characteristics of the site and must be prepared and certified by a State registered geologist
- Contains:
 - Characterization of underlying soils at the site.
 - Water table elevations and aquifer information
 - Locations of all springs and well in the area
 - Narrative summary of site suitability

Permitting Process

Part IIb Permit Application ***Operational Manual and Engineering Plans***

- Initial Review is a non-technical completeness review to make sure the applicant has addressed each and every requirement that needs to be addressed. If deficiencies are found, a notice of incompleteness is issued. These steps are repeated until the application is determined to be complete.
- Once determined to be complete, an in-depth technical review is performed to ensure that the applicant adequately addressed each regulatory requirement. This technical review also includes a Peer review by another technical staff member to ensure consistency and thoroughness. If deficiencies are found, a notice of deficiency is sent to the applicant. Applicant must revise and resubmit to continue.
- Final review step – permit application is presented at the Permit Review Committee Meeting with Division Director and technical staff.

Permitting Process

- Combined Part II A&B received on 9/27/2023
- Part II A deemed complete on 10/4/2023
- Part II B Notice of incompleteness issued on 10/24/2023
- Complete Part II B received on 11/7/2023
- Notice of technical deficiency issued to applicant on 2/9/2024
 - Response received on 4/11/2024

Permitting Process

- TDEC permit review committee conducted final review on 6/14/2024
- 2nd Notice of technical deficiency issued to applicant on 7/5/2024
 - Response received on 8/23/2024
- Presented to Division Director on 9/11/2024
- 9/19 through 10/30 final draft permit documents are drafted

Permitting Process

- Public Notice prepared for local newspaper (*News-Herald*)
- Fact Sheet and Draft Permit with specific conditions
- Applicant published combined Public Notice including notice for Public Hearing – November 6, 2024
- Public Comment Period lasts 45 days
- Ends December 23, 2024 - 4:30 PM
- Public Display of Documents during Comment Period
- Public Hearing is held
- At end of public comment period, evaluate all comments
- Final Permit Decision to Approve or Deny with response to comments

Facility Variances/Waivers

1. Rule 0400-11-01-.04(2)(i)2 requires that the operator must design, construct, operate, and maintain a run-off management system to collect and control at least the peak flow volume resulting from a 24-hour, 25-year storm.

The runoff from east and south drainage areas exits the fill area through a culvert under the access road into a natural channel. This channel exits the landfill property and continues across the adjoining property for approximately 500 feet before reentering the landfill property near sediment basin 2. The property owner, Monterey Mushrooms, Inc., has provided written permission for the runoff from the landfill to cross their property prior to entering the sediment treatment basin. The permittee is responsible for any required maintenance of this channel during the operational and post-closure life of the facility.

Facility Specific Permit Conditions

1. Prior to accepting any waste in a newly constructed module, on or after the effective date of this Permit, the Permittee must submit to the Division of Solid Waste Management for review and acceptance, a Construction Quality Assurance (CQA) Report that includes the following information at a minimum:
 - a. As-built surveys of the top of the geologic buffer, top of the clay liner, geomembrane panel layout, and top of the drainage/protection layers.
 - b. The top of the geologic buffer survey must demonstrate compliance with buffer requirements to the seasonal high groundwater elevation.
 - c. The top of the drainage/protection layer survey must include the as-built location for the leachate lines and any leachate transportation piping or storage outside of the permitted cells.
 - d. Provide limits of certified cell construction and proposed limits of waste placement on the drainage/protective layer survey for each constructed module in accordance with the engineering plans.

Facility Specific Permit Conditions

2. The permitted facility shall keep records of compliance with the Leachate Management System Maintenance and Inspection Schedule included within the Operations Plan.
3. This permit includes the construction of a sedimentation basin within a TVA transmission line easement. A copy of TVA's approval for the construction of the basin is included in the Operations Plan. The issuance of this solid waste permit does not authorize interference or the potential for interference with TVA's property rights or operations.

Comments

**Send comments to Brianna Rives
by Monday, December 23, 2024**

Email: Brianna.Rives@tn.gov

Phone: 615-308-0104

**Mail: Division of Solid Waste Management
Davy Crocket Tower
500 James Robertson Parkway, 7th Floor
Nashville, TN 37243**

Thank You



THANK YOU



Civil & Environmental
Consultants, Inc.

Matlock Bend Landfill Permit Application

Loudon County Municipal Building

November 21, 2024

Agenda

- Landfill Background
- Proposed Expansion Area
- Environmental Protection Systems
- Environmental Impact Evaluations Performed
- Engineering Evaluations Performed
- Environmental Protection Systems
 - Base (Bottom) Liner System
 - Final Grades with Final Cover System
- Landfill Sequencing
- Construction Schedule
- Questions (Please hold questions until the end...)



Landfill Background

- Site is owned by the Loudon County Solid Waste Disposal Commission
- Site is operated by Santek Environmental, LLC
- Facility is a Class I Landfill for disposal of non-hazardous solid waste materials
- Current permitted active disposal area = 40.6 acres



Landfill Background

REASON FOR THE PROPOSED EXPANSION:

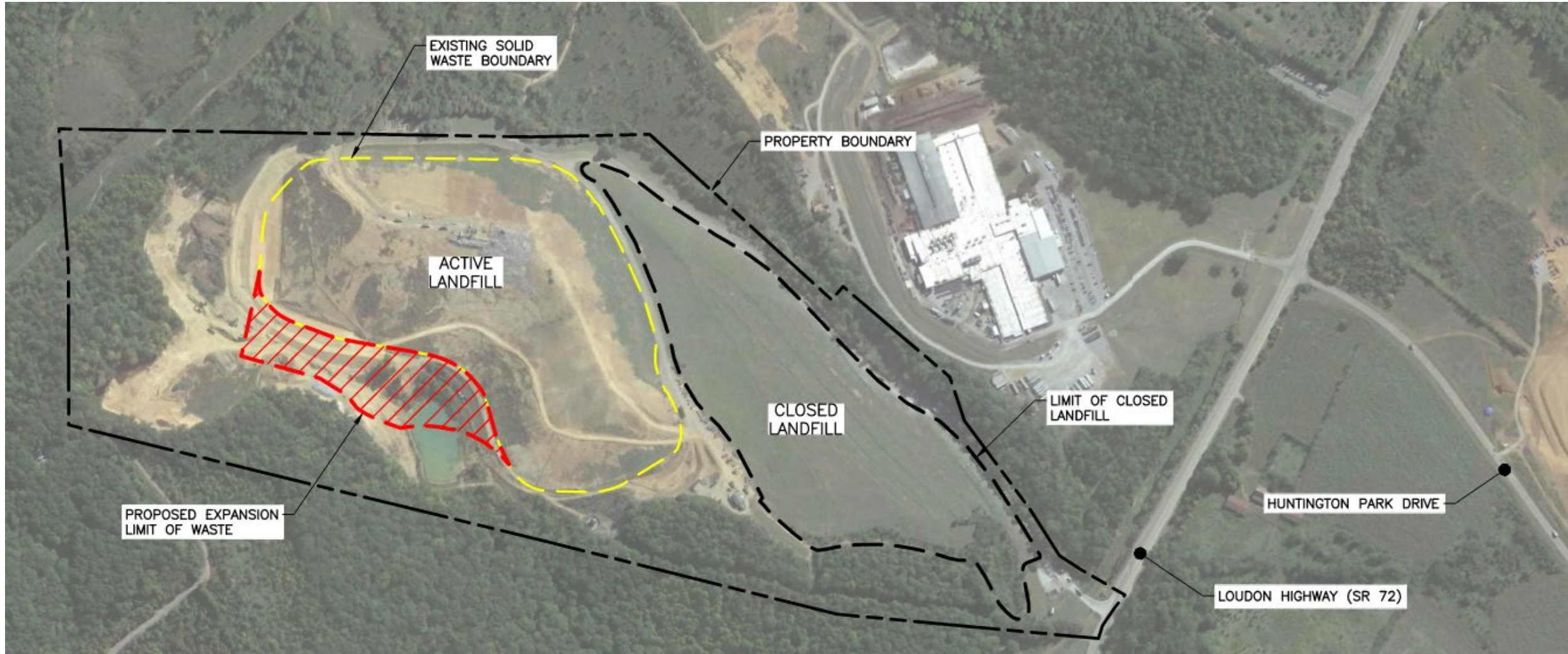
- Provide additional permitted landfill capacity for continued operation of the existing landfill, while ensuring the proposed landfill expansion meets or exceeds TDEC regulatory requirements.
- This will be done by expanding the landfill footprint laterally to the west with new landfill footprint totaling 7.0 additional acres.
 - Note with the proposed expansion, there will be 47.6 acres of active disposal area...
 - This does not include previously closed landfill (Approximately 28.4 acres)



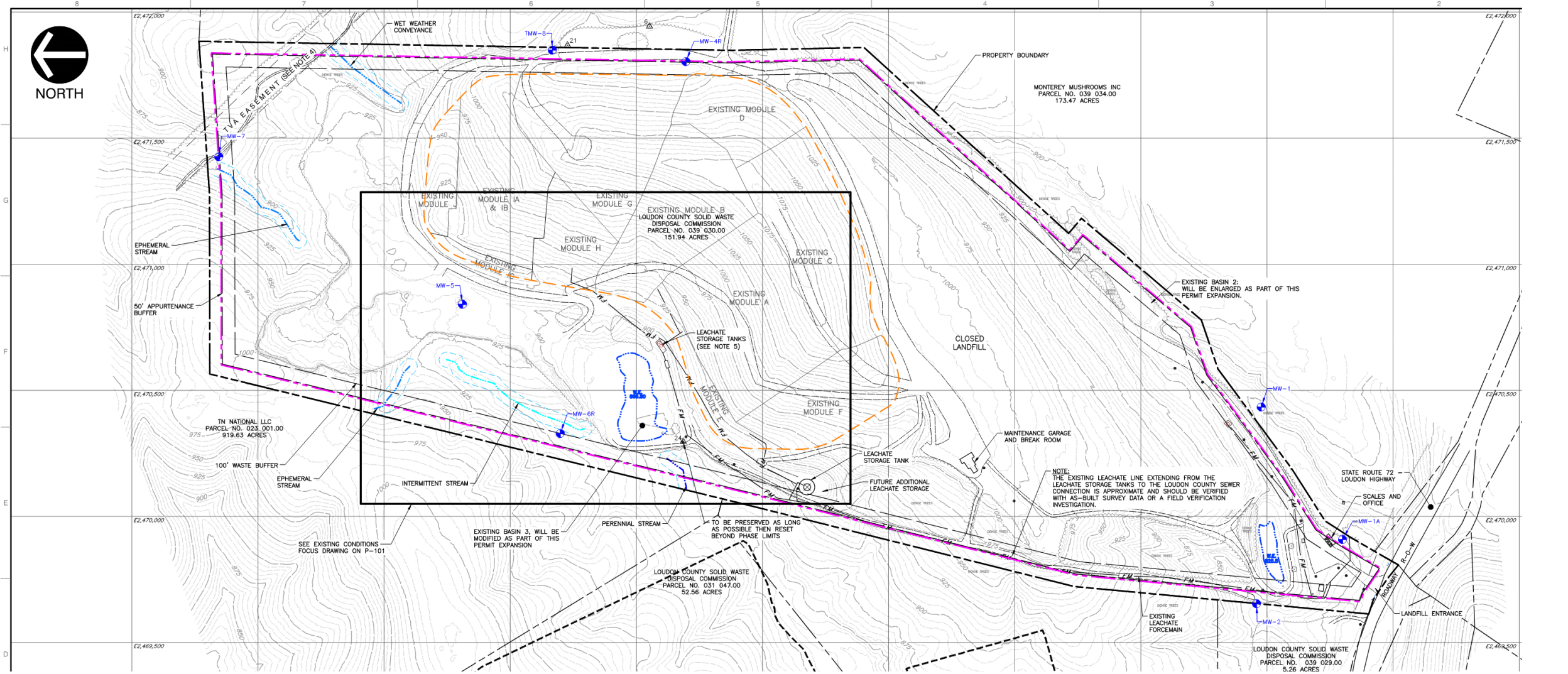
Proposed Expansion Area



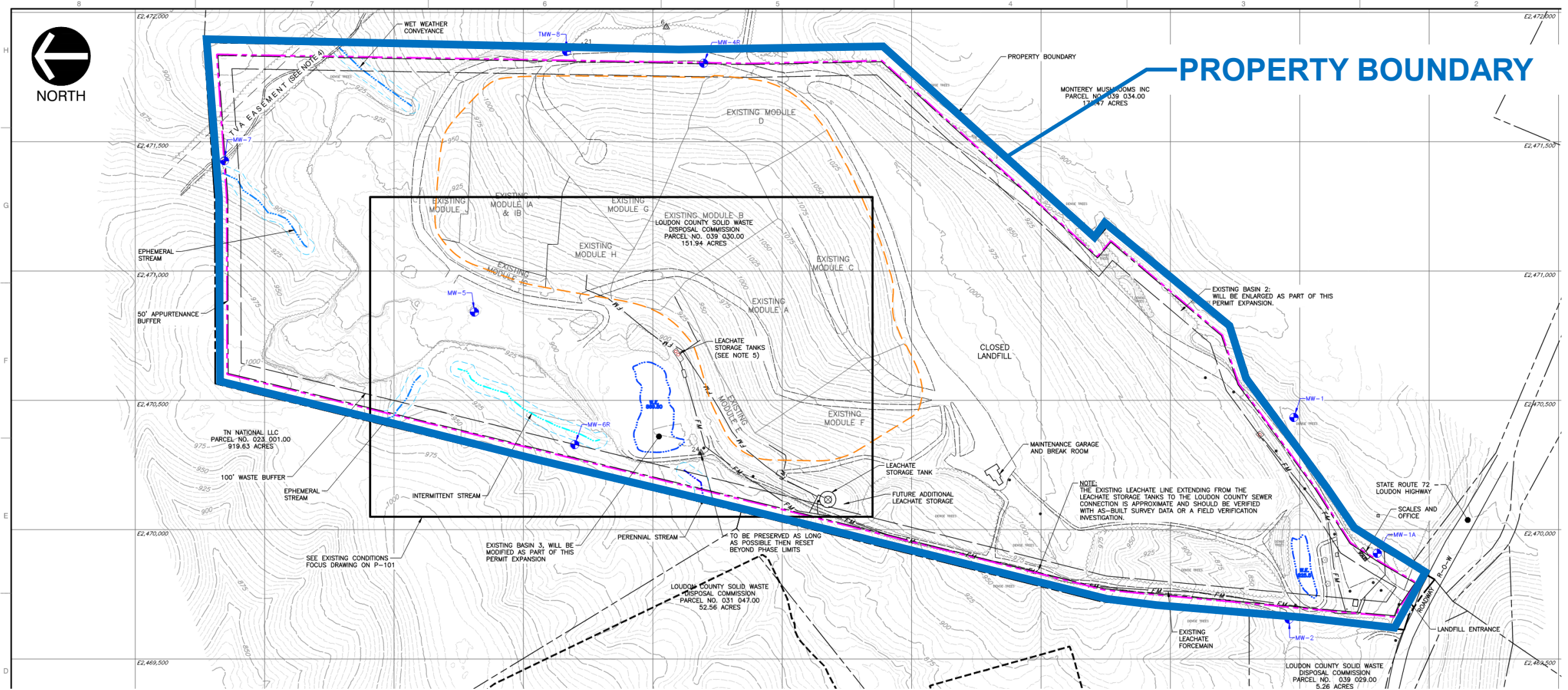
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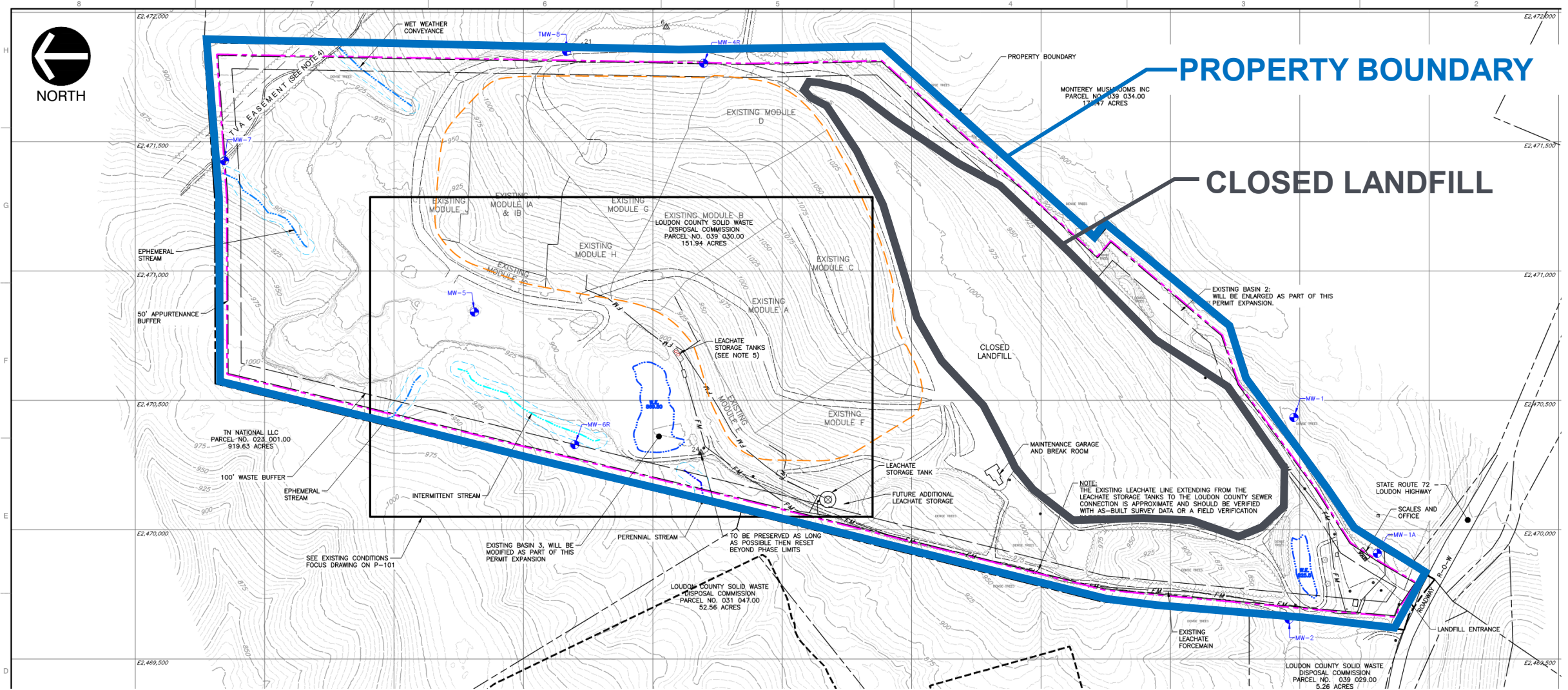
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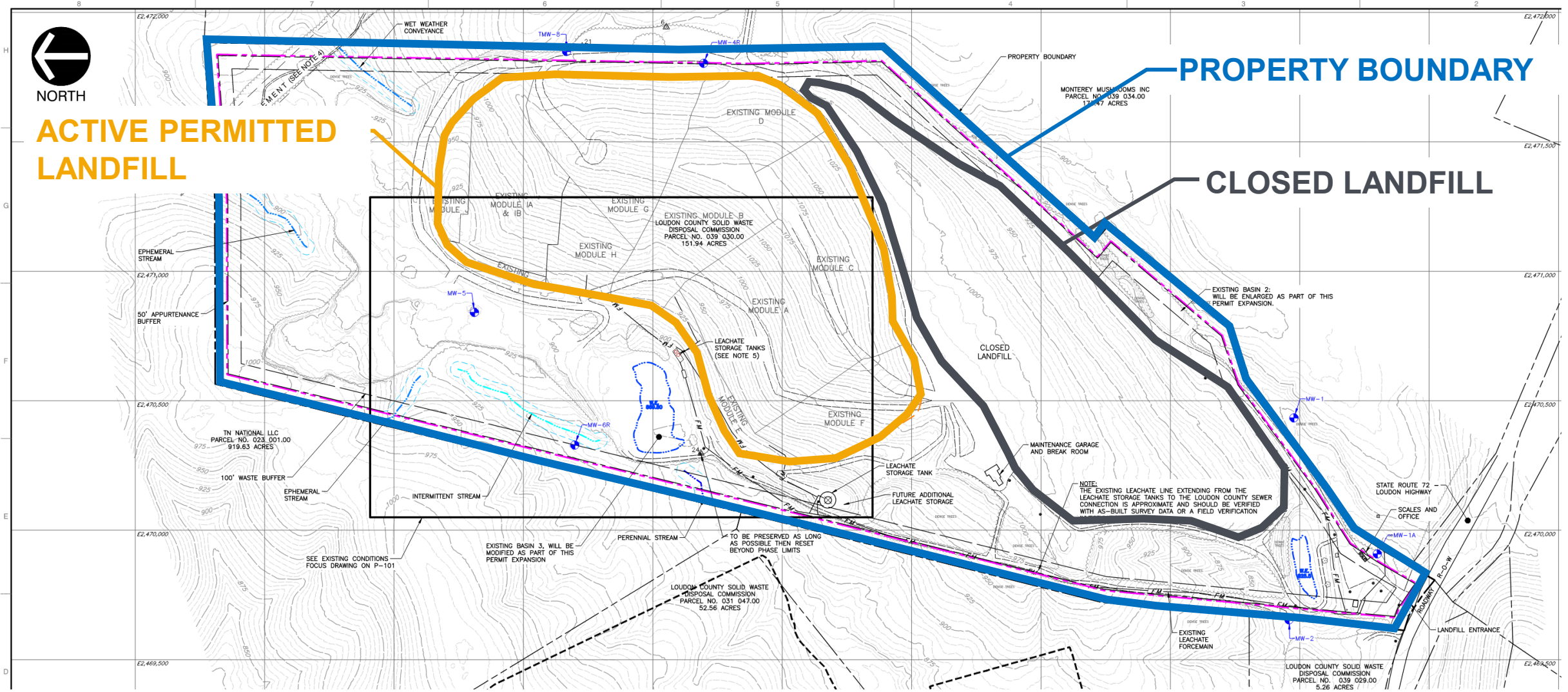
Landfill Background



Landfill Background



**ACTIVE PERMITTED
LANDFILL**

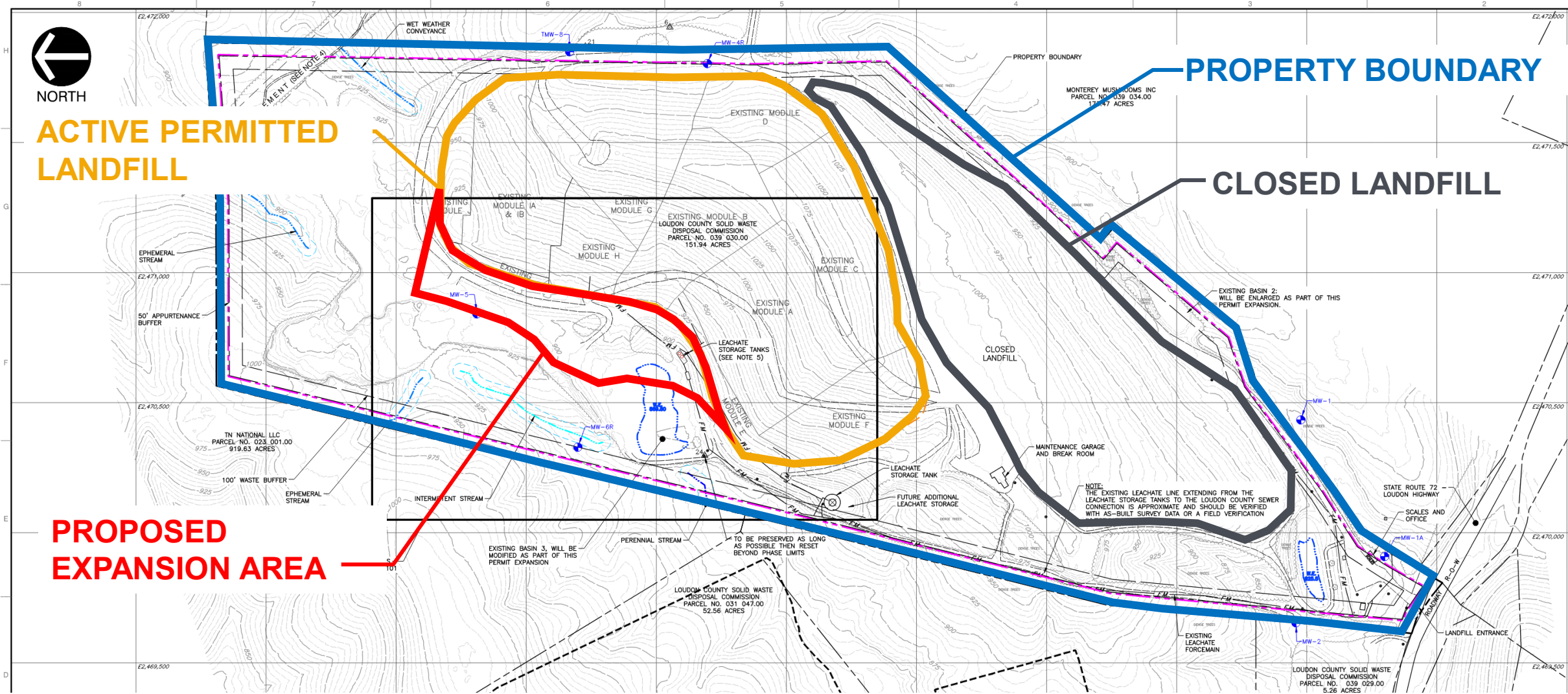


PROPERTY BOUNDARY

CLOSED LANDFILL



Proposed Expansion Area



Proposed Expansion Area

- Additional airspace = 2,413,800 cubic yards (1,938,300 tons)
 - Useable Airspace = 2,051,700 cy (1,647,500 tons)
 - Assumed 15% of gross airspace is used for daily cover soil
- This volume is anticipated to extend site life by approximately 10 years
 - Assumes a projected waste acceptance rate of 160,000 tons per year



Supporting Studies Performed

- **Hydrogeologic Investigation**

- Subsurface borings and test pits

- **Geotechnical Investigation**

- Laboratory testing of collected subsurface materials

- **Ecological Investigation**

- Wetlands and streams evaluation
- Preliminary Jurisdictional Determination received from Army Corps of Engineers and Tennessee Department of Environmental Conservation (TDEC)



Engineering Evaluations Performed

- **Geotechnical Evaluations**
 - Static and seismic slope stability evaluations
 - Settlement evaluations
- **Leachate Management Design**
 - Less than 1' of head (liquid) on liner system
 - Pipe structural integrity
 - Pump sizing
- **Erosion and Sedimentation Control Calculations**
 - Collection and conveyance features (i.e., channels and culverts)
 - Sedimentation basins (i.e., ponds)

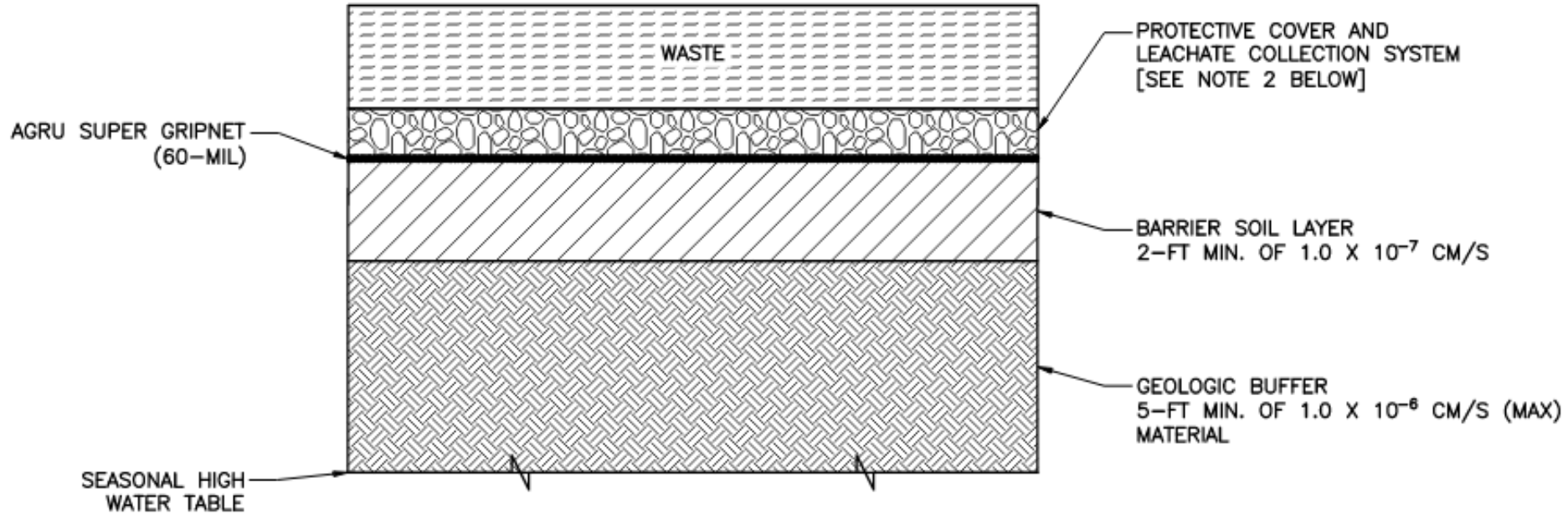


Environmental Protection Systems

- **Groundwater and Leachate Monitoring Program**
- **Base (Bottom) Liner System**
- **Leachate Collection and Control System**
- **Closure and Post-Closure Care Plan**
- **Landfill Gas Control and Monitoring Plan**
- **Erosion and Sedimentation Control**
- **Construction Quality Assurance and Quality Control Plan**



Base (Bottom) Liner System



3

OPTION 3 BASE LINER SYSTEM

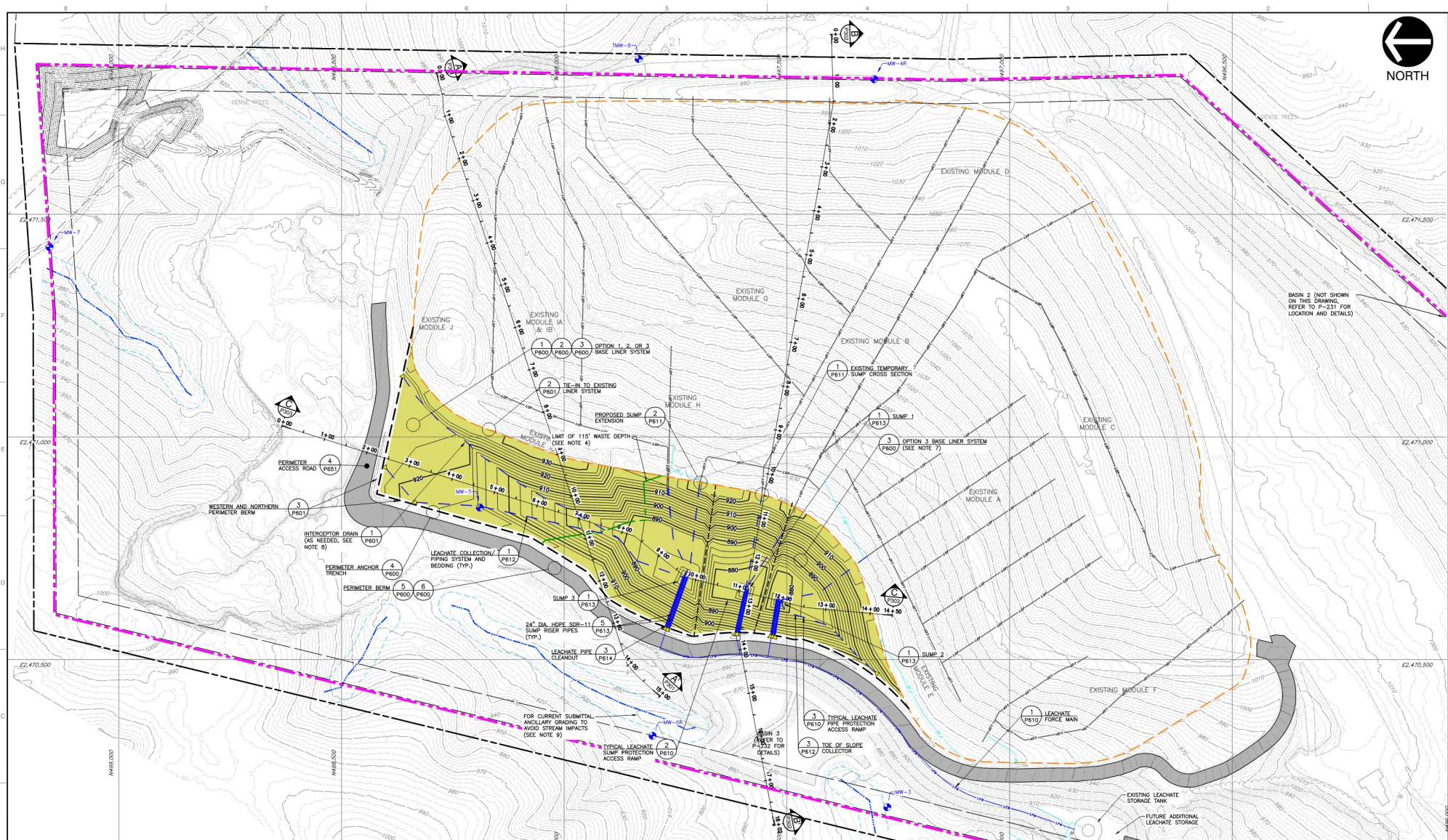
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NOTES:

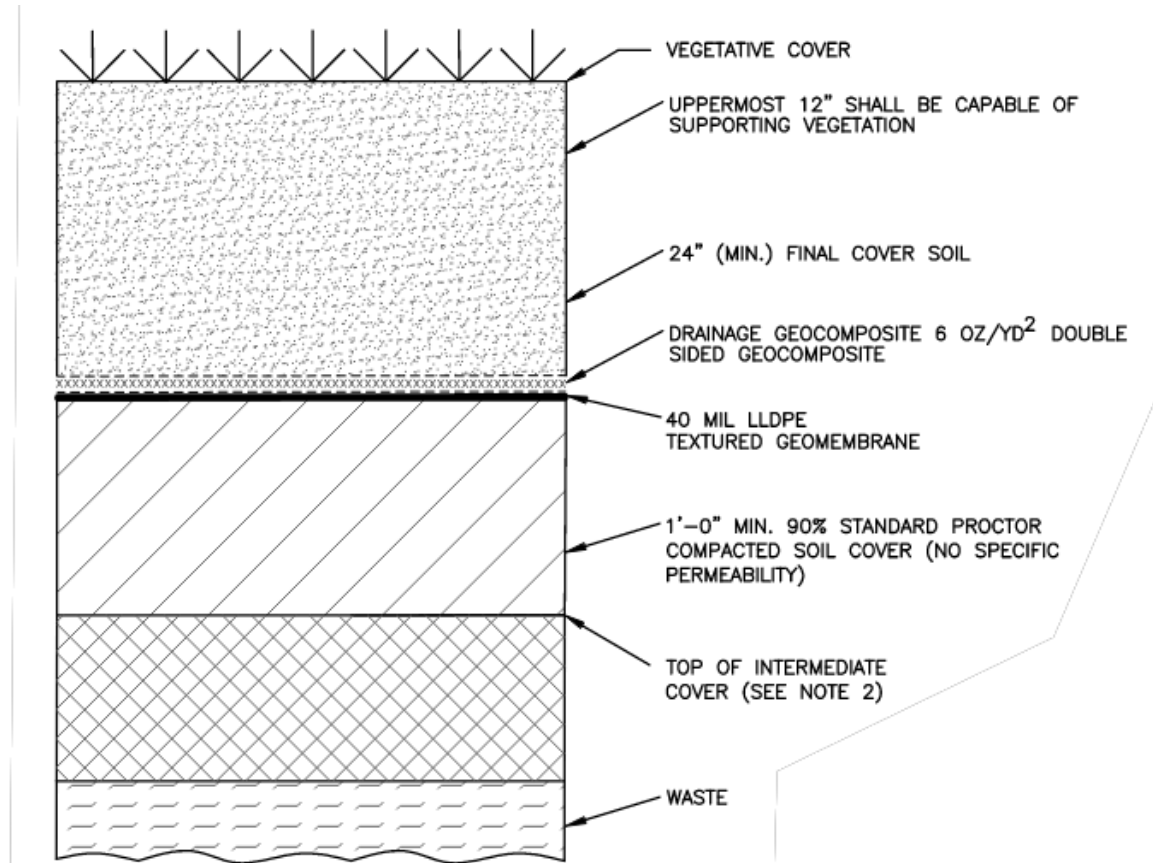
1. AGRU SUPER GRIPNET LINER SYSTEM SHALL BE INSTALLED IN MODULES 1, 2, AND 3 IN THE APPROXIMATE LOCATIONS SHOWN ON DRAWING P201.
2. 1-FT MIN. DRAINAGE LAYER - AASHTO #57 (1"φ) WASHED NON-CALCAREOUS LIMESTONE OR ON-SITE SOILS (ON SIDE SLOPES ONLY) WITH 16 OZ/SY NON-WOVEN GEOTEXTILE FABRIC ON BOTTOM. SIDE SLOPES ARE DEFINED AS SLOPES WITH A 3H:1V GRADIENT OR GREATER.



Base (Bottom) Liner System



Final Grades with Final Cover System



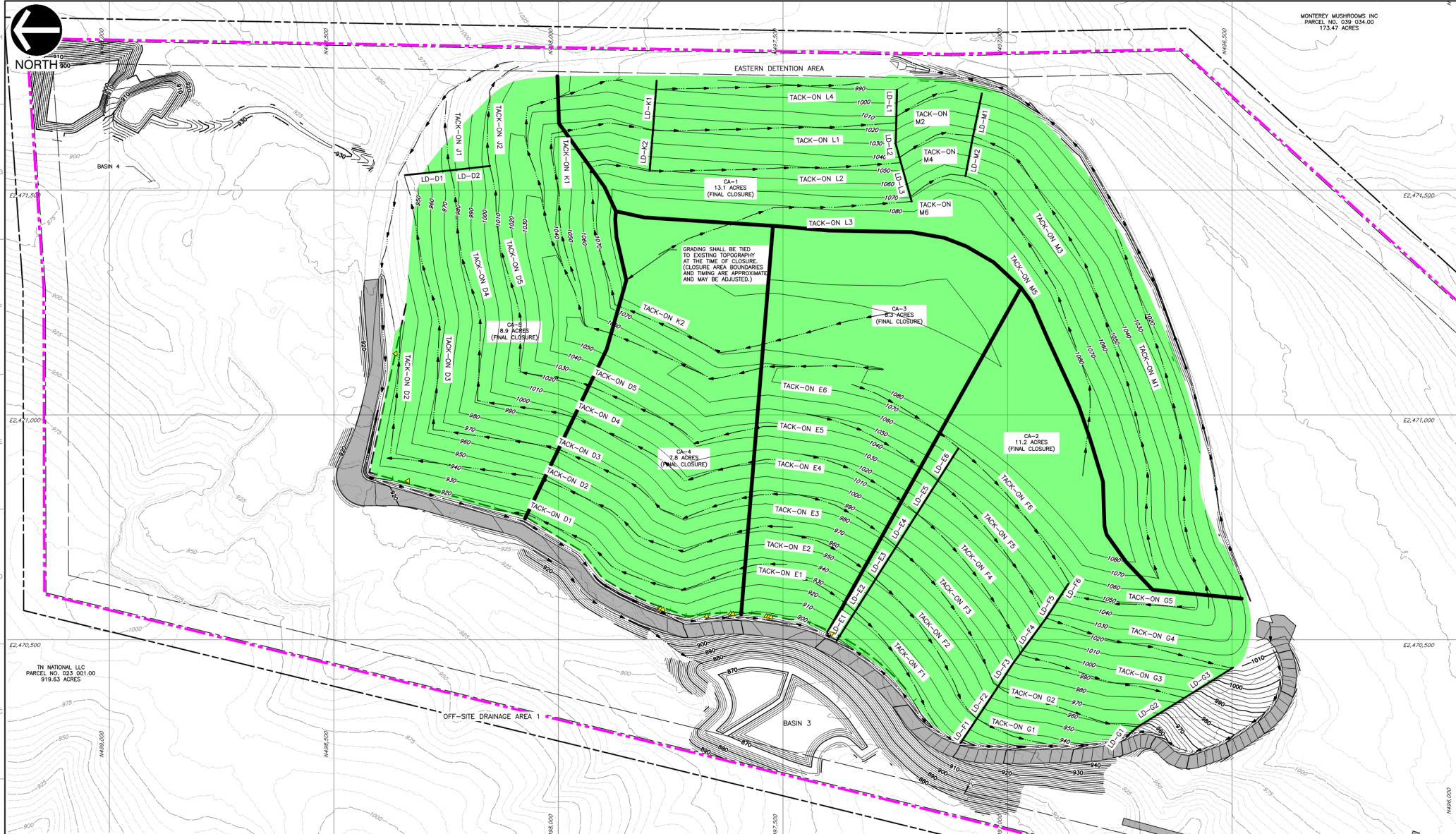
NOTES:

1. GAS COLLECTION TRENCHES TO BE INSTALLED IN WASTE. SEE THE GAS COLLECTION TRENCH DETAILS ON DRAWING P-630.
2. INTERMEDIATE SHALL BE SOIL OR SOIL-LIKE. INTERMEDIATE COVER SHALL BE 12 INCH THICK UNCOMPACTED.

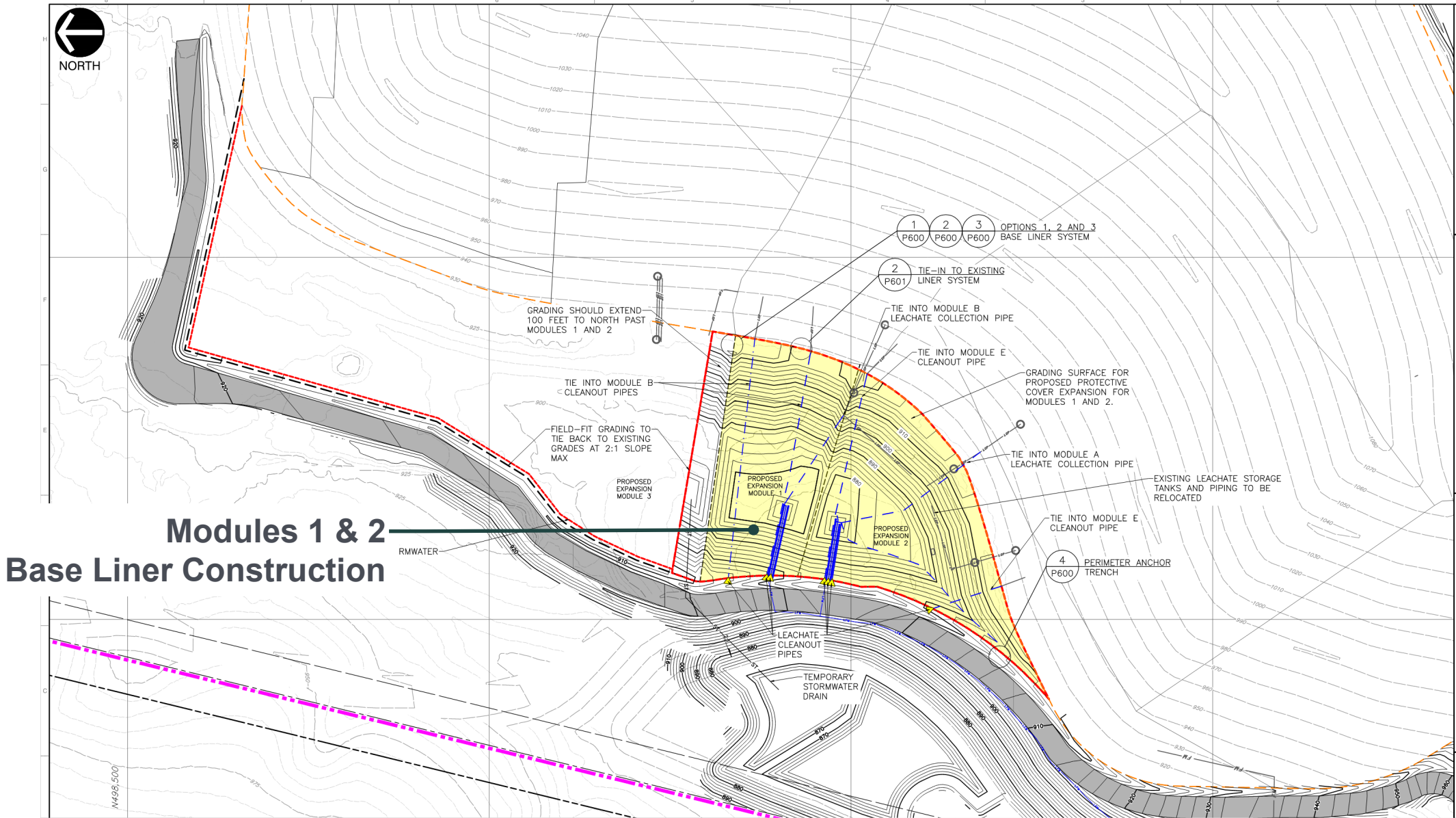
1 FINAL COVER SYSTEM
NOT TO SCALE



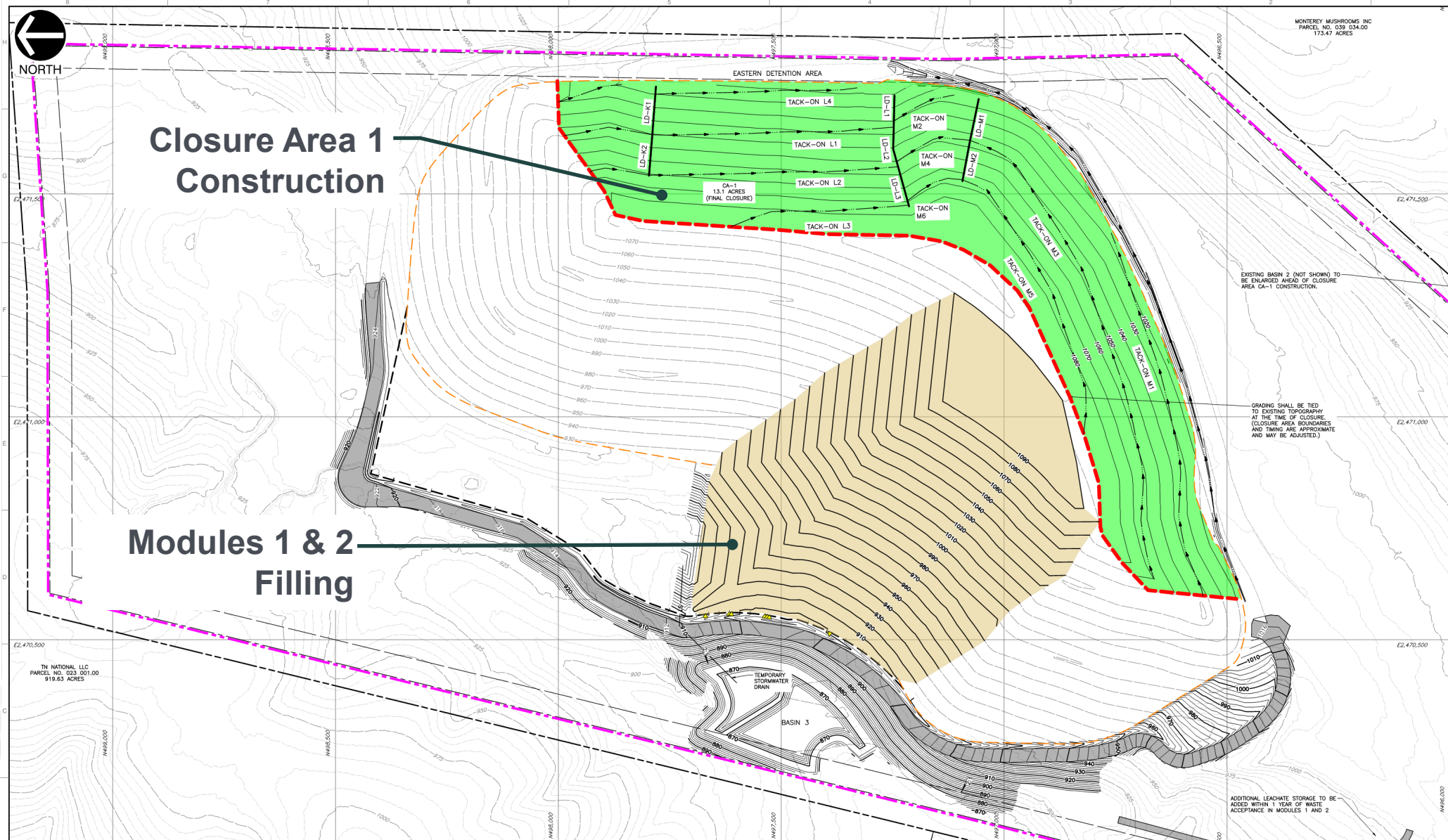
Final Grades with Final Cover System



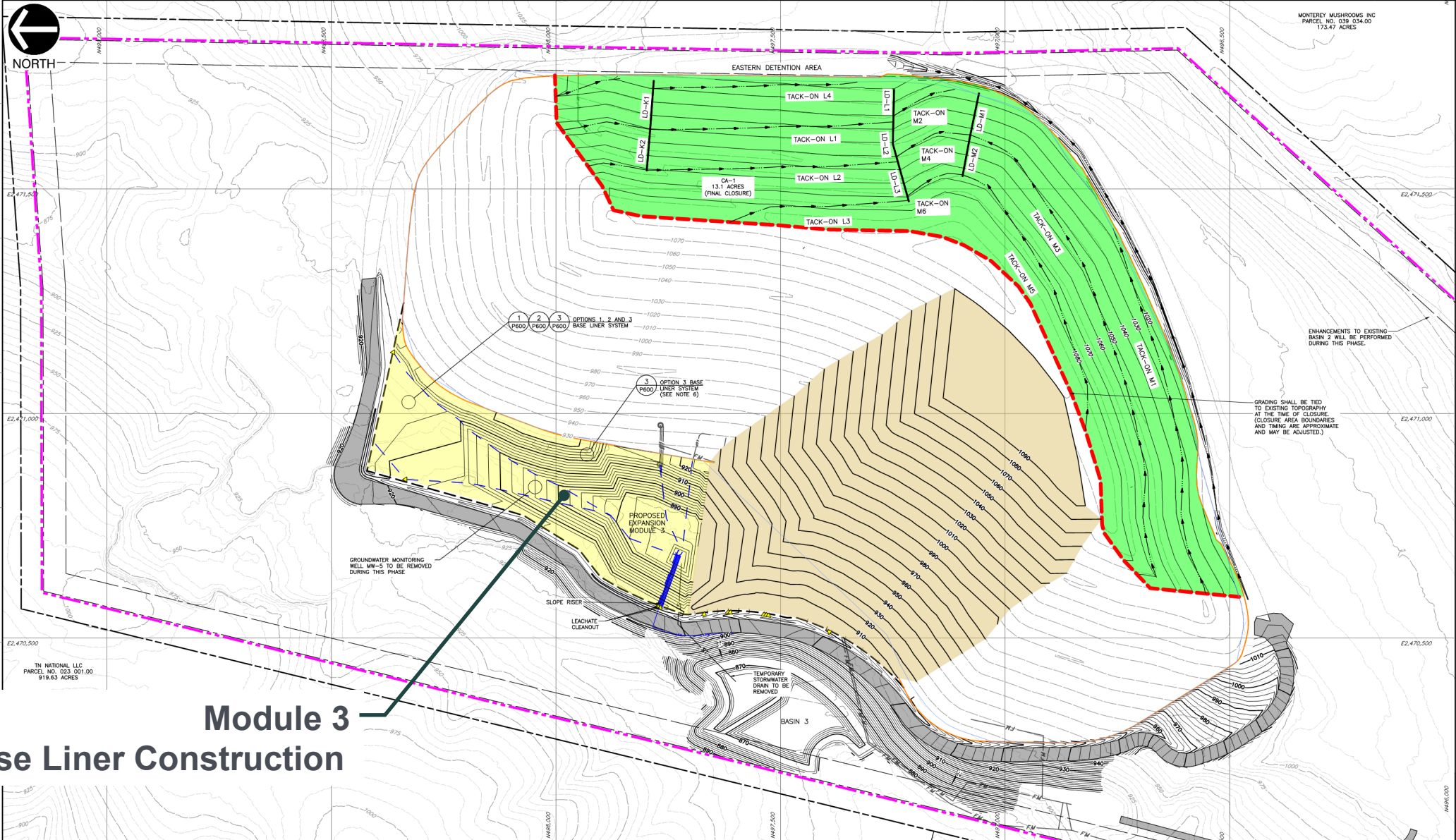
Landfill Sequencing



Landfill Sequencing



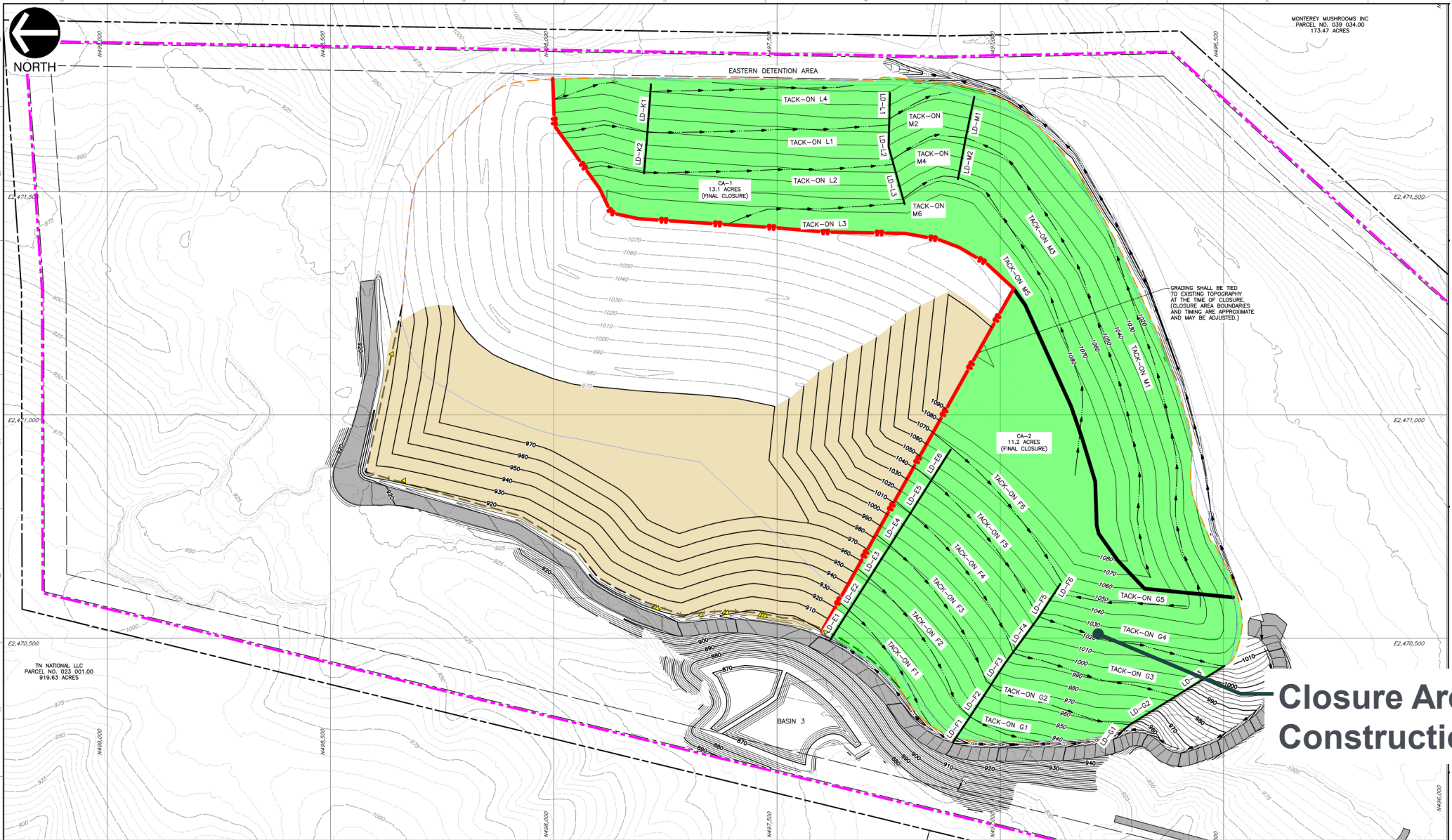
Landfill Sequencing



Module 3
Base Liner Construction



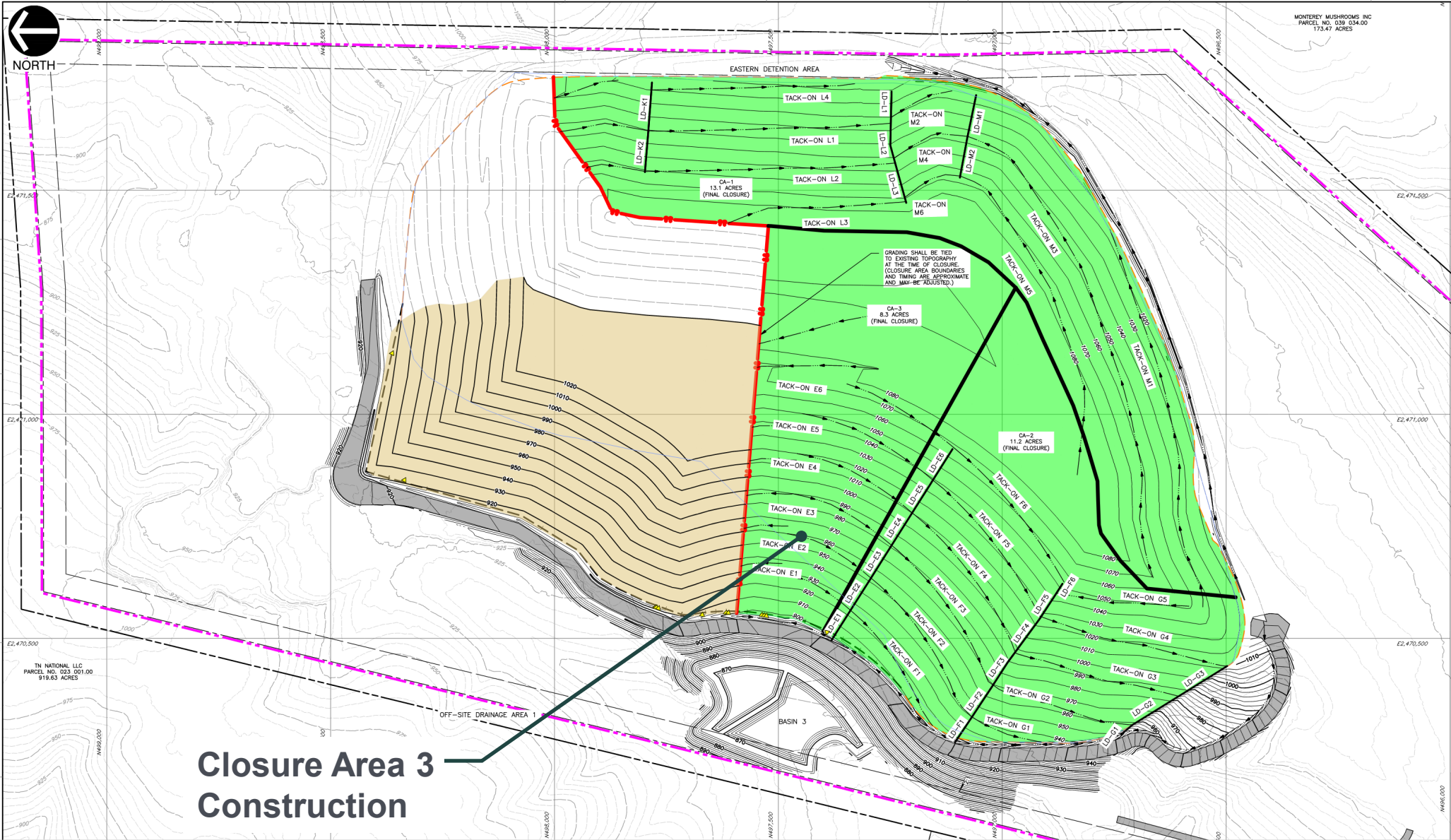
Landfill Sequencing



**Closure Area 2
Construction**



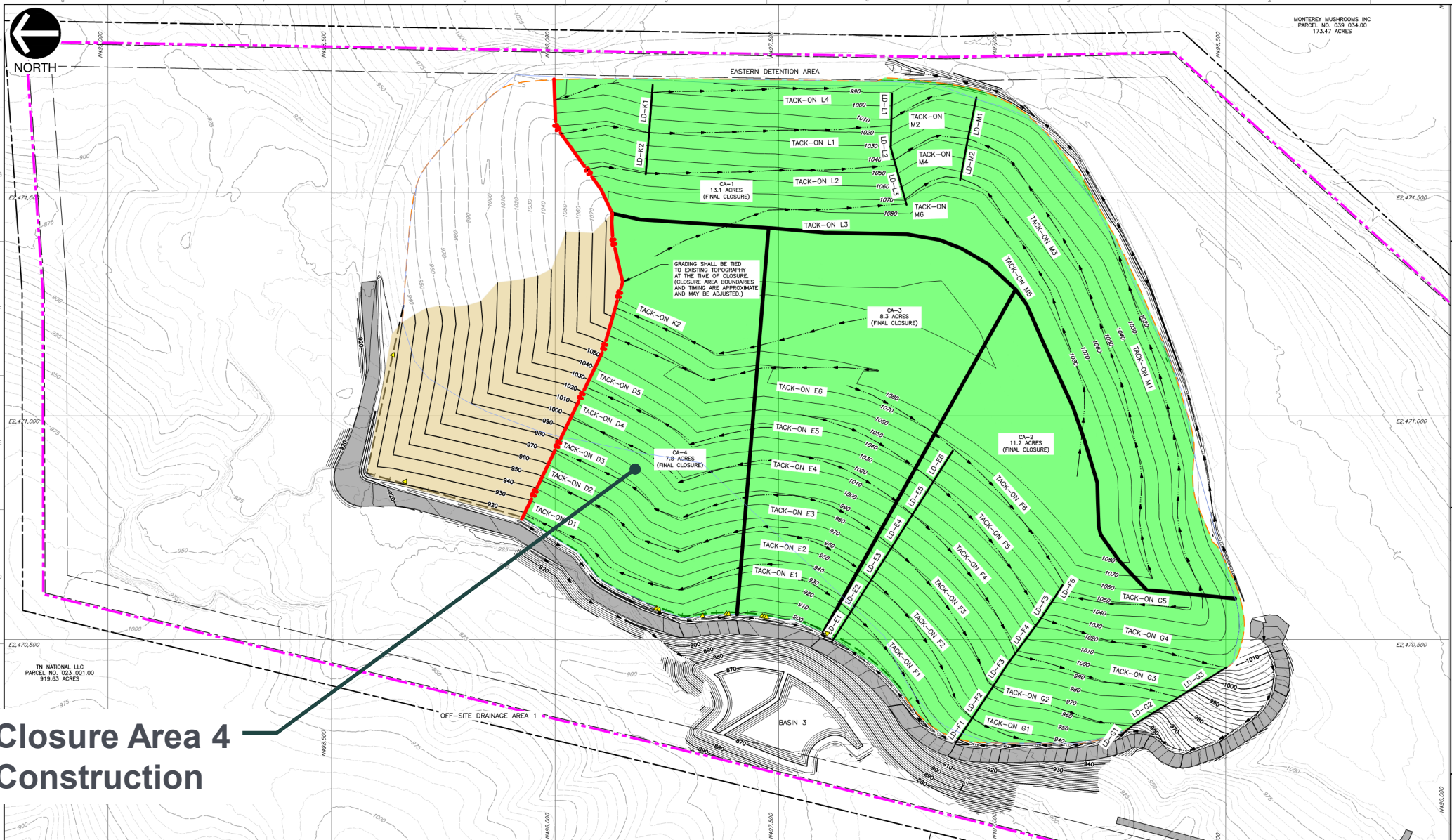
Landfill Sequencing



**Closure Area 3
Construction**



Landfill Sequencing

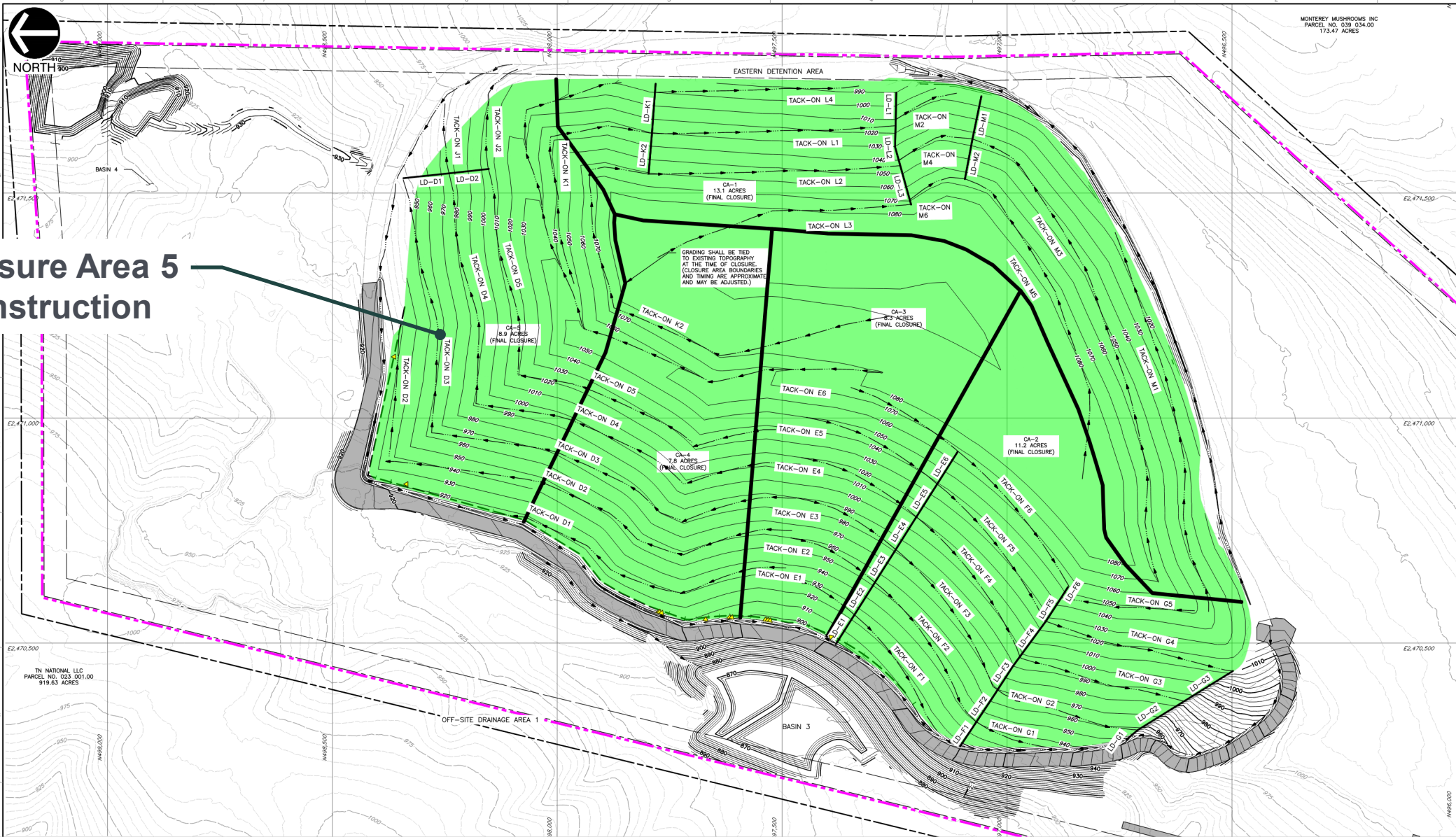


**Closure Area 4
Construction**



Landfill Sequencing

Closure Area 5
Construction



Conclusion

- Upon permit approval, the Loudon County Solid Waste Disposal Commission will have 10 years of additional disposal capacity in a TDEC-compliant landfill.



Questions?



Public Comment Guidelines

- Pertinent Comments
 - The State is limited by Statute and Regulations in what it can consider in making its final permit decision.
 - The State can only consider the factual and pertinent comments that relate to the requirements of the State (Solid / Hazardous) Waste Management Act and Regulations.
 - Require that all testimony be relevant to solid waste disposal facility-related issues.
 - Avoid undue repetition in oral presentations.

Comments: Equal Opportunity

- Comments limited to three (3) minutes.
 - Strictly enforced
- Timer beep
 - To advise you have 1-minute remaining.
- At the 3-minute limit, TDEC may mute the online participants.
- Disruptive participants, may be re-muted by the host, or removed from the Teams Meeting.
- Written comments will be accepted at the hearing and by TDEC until **Monday, December 23, 2024.**
 - Written comments will be afforded the same consideration as verbal testimony.

Public Comment Procedure

- Comment Order
 1. Participants who stated they wished to comment via the survey or sign-in sheet.
 2. Additional comments from people participating by:
 - i. Computer
 - ii. App
 - iii. Phone
 3. Comments from those who could not attend
- Staff cannot answer questions during the formal hearing

All questions or comments will be responded to in writing.

Comments?

- Is there any one left who would like to make a comment for the record that has yet to do so?
- TDEC will read comments from persons unable to attend the hearing in person and who indicated they wished their comments would be read.
- Written comments do not need to be read at the hearing to be part of the record

Decision Processes

- We will review all your comments, oral and written, and make our decision. Based on the comments and evaluation, we can issue, modify, revise, extend the hearing, or deny the application. We can also ask for additional information and data from the applicant, if needed, to complete the decision process.
- A copy of our permit decision with a response to comments and the Notice of Determination will be mailed or emailed to those in our record of attendance and will also be uploaded to TDEC's public dataviewer.

Closing

- You may submit written comments until **December 23, 2024.**

Division of Solid Waste Management

500 James Robertson Parkway, 7th Floor, Nashville, TN 37243

Brianna.Rives@tn.gov

- All comments received by the deadline will be reviewed by the Division in order to make the best possible permit decision.



Department of
**Environment &
Conservation**

Thank you!